MANATŪ HAUORA
MINISTRY OF HEALTH

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14 March 2024

Eric Crampton

By email: eric.crampton@nzinitiative.org.nz
Ref: CASE-004003

Tēnā koe Eric

Your request for official information

I refer to your request under the Official Information Act 1982 (the Act) to the Ministry of Health – Manatū Hauora (the Ministry) on 6 September 2023 for information regarding the Independent Review of the Alcohol Levy. You specifically requested:

> *"1. All early and working drafts produced by NZIER;*
>
> *2. Correspondence, as well as notes from any phone conversations or meetings, between the Ministry of Health, the Health Promotion Agency's staff (including but not limited to Amanda Jones) and both Allen + Clarke and NZIER regarding NZIER's analysis of the existing data and evidence. This should include all correspondence regarding initial scoping, direction or advice along the way, comments and review of early drafts, and comments on and review of NZIER's final draft;*
>
> *3. Any peer review of the report."*

On 15 September 2023, you were contacted by Manatū Hauora in accordance with section 18B of the Act to refine your request. You were advised that your request requires a search through a very large volume of information including email correspondence and that each piece of correspondence between the relevant team and NZIER would need to be individually reviewed to determine whether it falls within scope of your request. You were also advised that your request may be refused under section 18(f) of the Act as the information requested cannot be made available without substantial collation or research.

On the same day you refined your request requesting:

> *Please prioritise delivery of early and working drafts requested in (1), and any peer review in (3).*
>
> *If it's the correspondence with NZIER that's causing the current problem, please prioritise, in (2), correspondence and relevant notes from meetings between and among MoH, HPA, and Allen + Clarke regarding the NZIER report.*

On 17 October 2023, the Ministry responded to your request and withheld the identified documents in their entirety under section 9(2)(g)(i) of the Act, to maintain the effective conduct

of public affairs through the free and frank expression of opinions by or between or to Ministers and Officers and employees of any public service agency. However, we did note that majority of our written communications with NZIER are administrative in nature and asked you to advise us if you were interested in receiving this information.

On 16 November 2023, you made a complaint to the Office of the Ombudsman regarding the Ministry's decision. Subsequently, on 12 March 2024, the Chief Ombudsman formed his final opinion on the matter and recommended that the Ministry release the later drafts.

In light of this, the Ministry has reconsidered its decision and is releasing five drafts of the Independent Review of the Alcohol Levy Stage 1 report that were exchanged with external consultants during the review and feedback process. The documents are itemised in Appendix 1 and copies of the documents are enclosed. Where information is withheld under section 9 of the Act, I have considered the countervailing public interest in release in making this decision and consider that it does not outweigh the need to withhold at this time.

It is important to note that the documents we are releasing are draft versions and contain some unformed and, at times, imprecise content which was later refined and corrected throughout the feedback and review process.

The Ministry recognises that there was a significant delay in providing a reconsidered decision on your request. On behalf of the Ministry, I apologise for this delay and for any inconvenience this may have caused.

If you wish to discuss any aspect of your request with us, including this decision, please feel free to contact the OIA Services Team on: oiagr@health.govt.nz.

Under section 28(3) of the Act, you have the right to ask the Ombudsman to review any decisions made under this request. The Ombudsman may be contacted by email at: info@ombudsman.parliament.nz or by calling 0800 802 602.

Nāku noa, nā

Ross Bell
Group Manager, Public Health Strategy & Engagement
Public Health Agency | Te Pou Hauora Tūmatanui

Appendix 1: List of documents for release

#	Document details	Decision on release
1	FINAL DRAFT – Phase 1 Report comments included	Some information withheld under the following sections of the Act: • 9(2)(g)(i) to maintain the effective conduct of public affairs through the free and frank expression of opinions by or between or to Ministers and officers and employees of any public service agency; and • 9(2)(a) to protect the privacy of natural persons.
2	FINAL DRAFT – Phase 1 Report comments included – KT comments	
3	FINAL DRAFT – Phase 1 Report 09042923	Released in full.
4	FINAL DRAFT – Phase 1 Report 09042923 Te Whatu Ora feedback	Some information withheld under section 9(2)(g)(i) to maintain the effective conduct of public affairs through the free and frank expression of opinions by or between or to Ministers and officers and employees of any public service agency.
5	270323 FINAL DRAFT – STAGE 1	Released in full.

Independent Review of the Alcohol Levy

Phase 1 rapid review
26 March 2023

ALLEN + CLARKE

NZIER
NEW ZEALAND INSTITUTE OF ECONOMIC RESEARCH

Prepared for Manatū Hauora by *Allen + Clarke* and the New Zealand Institute of Economic Research.

Citation: *Allen + Clarke*, NZIER (2023), *Interim Report of Independent Review of the Alcohol Levy*. Wellington: Manatū Hauora

Acknowledgements

Allen + Clarke and NZIER recognise the substantial efforts of individuals and organisations involved in addressing alcohol related harm in Aotearoa New Zealand. This phase of the review was undertaken under extremely tight time constraints to enable interim findings to inform the levy setting process for 2023/24. We would like to thank all the people that contributed to this review for their time and input in a short space of time. We would particularly like to acknowledge the participation of individuals that we interviewed and officials from Manatū Hauora, Te Whatu Ora, and Te Aka Whai Ora (both individually and jointly as members of the Alcohol Levy Working Group which was established to support this review).

Copyright

Disclaimer

This review was undertaken by independent parties under contract to Manatū Hauora. The views, observations, and analysis expressed in this interim report are those of the authors and not to be attributed to Manatū Hauora.

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Allen + Clarke has been independently certified as compliant with ISO9001:2015 Quality Management Systems

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EXECUTIVE SUMMARY

Since 1977, a levy has been raised on alcohol produced or imported for sale in Aotearoa New Zealand. The alcohol levy is hypothecated (i.e., directed to a specific use). It has been used to undertake activities to reduce alcohol-related harm. The current Alcohol levy is approximately $11.5 million per annum.

In 2022 the Pae Ora (Healthy Futures) Act (Pae Ora Act) changed the way in which the levy would be collected and potentially the scope of activities for which it could be used. This change places the levy within a different context, as the scope of the costs incurred by Manatū Hauora under the Pae Ora Act are wider than those previously identified for Te Hiringa Hauora. The opportunities for alcohol-related harm reduction activities are also broadened.

Allen + Clarke and the New Zealand Institute of Economic Research (NZIER) conducted a rapid review of the the alcohol levy within the new Pae Ora context to provide short term recommendations to inform decisions relating to the 2023/24 financial year. This report will be followed by the second stage of the review, which consists of a more in-depth stakeholder engagement, research, and analysis, and will result in medium-and-long term recommendations for the alcohol levy. Stage 2 is likely to continue through to November 2023.

Key Findings

Our stage 1 rapid review has demonstrated that:

- the alcohol levy is disproportionately small relative to even the most conservative estimates of the cost of alcohol related harm in New Zealand, but the published research on alcohol costs does not indicate any particular relationship between costs of harms and costs of addressing harms
- alcohol related harm is more prevalent in some sub-populations
- structural interventions may have the greatest potential to reduce alcohol related harm
- the Pae Ora Act specifies the purpose of the levy as a cost recovery instrument, making it inappropriate for the levy to be used as a demand modifying intervention, unlike the excise tax which can be used in this way
- it was not possible to quantify to what extent current levy investments reduce alcohol related harm in the timeframe and with the material made available
- it may not be possible to quantify the cumulative level of harm reduction that levy investments may have, or will, achieve in the timeframe and with the material made available
- more New Zealand specific data on alcohol-related harm and the effectiveness of interventions would be useful to be able to provide strong evidence-based conclusions

- there is a greater amount of overseas evidence on the effectiveness of harm reduction interventions compared to New Zealand specific evidence
- among those that we engaged, some participants perceived that the lack of a clear National alcohol-related harm reduction strategy may lead to inefficiencies in the investment of the levy
- among those that we engaged, some participants perceived that the Government is not doing enough to reduce alcohol related harm
- the Pae Ora Act has potentially broadened the scope of possible areas of levy investments
- the Pae Ora Act anticipates the alcohol levy being used across health entities
- the alcohol levy rates are very low in proportion to prices and the excise tax on alcohol products, so even a substantial increase in the alcohol levy is unlikely to have an impact on alcohol sales

Our evidence review showed the cost of alcohol-related harms is substantial even if significant uncertainty exists as to the total amount of that cost. A high cost of alcohol-related harms provides a strong incentive to find cost-effective investment opportunities. Unfortunately, the magnitude of alcohol-related harm costs does not provide any indication of the size of investment needed to address those harms. Our review of the evidence did not reveal any known relationship between the cost of harm and the cost of addressing harm. Additionally, our evidence review did not reveal any clear evidence of increasing costs associated with alcohol-related harms.

Nevertheless, the gulf between the costs of alcohol-related harm and the cost-recovery function of the alcohol levy remains significant. This could suggest that the existing levy fund is insufficient, and/or the activities and programmes being funded by the alcohol levy are having limited impact on the level of harm. We heard that for Māori, the alcohol levy fund has done little, if anything, to address the disproportionate impact of alcohol-related harms in their communities.

Because the alcohol levy is a cost recovery mechanism, an increase in the levy should consider factors that increase the cost of alcohol harm reduction activities funded by the levy. The timeframes and available material for stage one has precluded us from conducting a deeper assessment of existing or proposed investments, making it difficult to provide an evidence-based assessment of what the quantum of the alcohol levy should be at this time. We are also hindered by the fact that for the most part, the 2023/24 levy has been committed. This means that existing interventions would not be subject to the same assessment as any new initiatives.

Furthermore, consideration of the cost of addressing alcohol-related harm and other alcohol related activities in line with the Pae Ora Act requires further investigation into the relationship between core government activities and the levy fund. As the alcohol levy is now administered by a government agency rather than an independent entity, the landscape has changed.

Noting the constraints above we have concluded that there are three options to consider in regard to setting the quantum of the alcohol levy in 2023/24.

- Status quo
- Inflationary adjustment
- Increase based on actual cost of a set of recommended evidence-based investments. These investments include expansion of existing programmes where the evidence of effectiveness was available and new interventions based on international research, New Zealand research, and feedback from communities.

Maintain status quo

Given the constraints within stage 1 of this review we lack the evidence to be able to comfortably recommend moving beyond the status quo for the 2023/24 financial year. Stage 2 of this review will provide the opportunity to better engage with communities and consider fundamental questions relating the role, scope, and purpose of the levy. Answers to these questions are needed to fully assess the appropriate levy quantum.

Inflationary adjustment

Key costs involved in both administering the levy and delivering harm reduction interventions are likely to have increased since the levy was last adjusted. However, it is unclear what adjustment should be made, if any. One option is to adjust the levy quantum based on the CPI. As with maintaining the status quo, this approach does not consider whether current investment is the right investment, is delivering effective return, and is in line with the Pae Ora Act. As noted above, more investigation needs to be undertaken at stage 2 of this review to determine this.

Increase to fund specific investments

To meaningfully reduce alcohol-related harm, the government must commit to a long term, consistent, and strategic programme of interventions that induces trust between government and non-government stakeholders. Aligning the levy fund to the cost of specific, needed investments would be consistent with its cost recovery mandate and is the option which is best aligned with the Pae Ora Act and principles. However, it is difficult at this stage to provide a robust analysis as to what programmes or activities should (or should not) be included. This assessment is also muddied by the current allocation of funding to existing programmes and operational functions.

Recommendations

On balance **we recommend:**

A. The status quo remains for 2023/24

B. No commitments of levy funding are made either internally or externally beyond June 2024 until stage 2 of this review is complete and any recommendations regarding the future, scope and application of the fund are considered.

INTRODUCTION

1. In Aotearoa New Zealand a levy is raised on alcohol produced or imported for sale. The levy is collected by Customs NZ. The current total levy figure is approximately $11.5 million per year, with minor fluctuations annually depending on alcohol production and sales. The alcohol levy is collected at different rates for different classes of alcoholic beverages. The levy is calculated at a cost per litre of alcohol for each class. The relative total collected has not been increased since 2013. The levy was originally created by the Alcohol Advisory Council Act 1976[1] to fund the newly established Alcohol Advisory Council of New Zealand[2] (Alcohol Advisory Council Act 1976, s.20).

2. The alcohol levy is hypothecated (ie, directed to a specific use). Prior to the commencement of the Pae Ora (Healthy Futures) Act 2022 (the Pae Ora Act), Te Hiringa Hauora | Health Promotion Agency received the total levy fund under the New Zealand Public Health and Disability Act 2000 (Health and Disability Act), for the purpose of enabling the agency to recover costs incurred in addressing alcohol-related harm, and in its other alcohol-related activities (New Zealand Public Health and Disability Act 2000, s. 59AA). Section 58 of the Health and Disability Act set out the functions, duties, and powers of Te Hiringa Hauora. It states (New Zealand Public Health and Disability Act 200, s58):

   (1) HPA must lead and support activities for the following purposes:
   - *a. promoting health and wellbeing and encouraging healthy lifestyles*
   - *b. preventing disease, illness, and injury*
   - *c. enabling environments that support health and wellbeing and healthy lifestyles*
   - *d. reducing personal, social, and economic harm.*

   (2) HPA has the following alcohol-specific functions:
   - *a. giving advice and making recommendations to government, government agencies, industry, non-government bodies, communities, health professionals, and others on the sale, supply, consumption, misuse, and harm of alcohol so far as those matters relate to HPA's general functions:*
   - *b. undertaking or working with others to research the use of alcohol in New Zealand, public attitudes towards alcohol, and problems associated with, or consequent on, the misuse of alcohol.*

[1] The name of the original Act, the Alcoholic Liquor Advisory Council Act was amended in 2000.
[2] The original name, the Alcoholic Liquor Advisory Council was amended in 2000.

3. The Pae Ora Act came into force on 1 July 2022 and is the legislative basis for the reform of the health system. Through the Pae Ora Act, Te Hiringa Hauora was disestablished, and its functions were placed within Te Whatu Ora.

4. Manatū Hauora now receives the levy fund collected via the Vote Health appropriation and has responsibility for distributing the levy across the Health entities - Manatū Hauora, Te Whatu Ora and Te Aka Whai Ora (Pae Ora (Healthy Futures Act 2022, s.101).

5. All aspects of the Pae Ora Act must be read in light of its purpose, which is to provide for the public funding and provision of services in order to (Pae Ora (Healthy Futures) Act 2022, s. 3):

    a. *protect, promote, and improve the health of all New Zealanders; and*
    b. *achieve equity in health outcomes among Aotearoa New Zealand's population groups, including striving to eliminate health disparities, in particular for Māori; and*
    c. *build towards pae ora (healthy futures) for all New Zealanders.*

6. The Pae Ora Act uses wording nearly identical to the New Zealand Public Health and Disability Act 2022, but now states that the levy is for the purpose of Manatū Hauora recovering costs it incurs in addressing alcohol-related harm, and in its other alcohol-related activities.

7. This change places the levy within a different context, as the scope of the costs incurred by Manatū Hauora under the Pae Ora Act are wider than those previously identified for Te Hiringa Hauora. The opportunities for alcohol-related harm reduction activities are also broadened.

Purpose

8. Through an open market process, *Allen + Clarke* and the New Zealand Institute of Economic Research (NZIER) were commissioned by the Public Health Agency (within Manatū Hauora) to undertake an independent review of the alcohol levy settings, and funding allocations and programmes in Aotearoa New Zealand.

9. The initial stage, of which this report is a product of, is a rapid review of the current state of the alcohol levy in Aotearoa New Zealand with short-term recommendations that can inform the 2023/24 financial year. This report (the interim report) will be followed by the second stage of the review, which consists of a more in-depth stakeholder engagement, research, and analysis, and will result in medium-and-long term recommendations for the alcohol levy (the final report). Stage 2 is likely to continue through to November 2023.

Scope of rapid review

10. Stage 1 of the review is focused on a rapid review of the current state of the levy fund.

The stage 1 rapid review focused on 7 key areas of inquiry as specified in the Request for Proposals (RFP) and contract of services:

1. the current evidence on the cost of alcohol related harm
2. the total levy fund collected and how that compares with other levies collected within Aotearoa.
3. how the total fund collected compares to alcohol levies collected in other relevant jurisdictions
4. the total levy fund and its impact on alcohol-related harm generally
5. the current focus of levy funding and whether it takes a 'for Māori, by Māori approach'
6. the potential positive impact of an increase in the levy on Māori and other at-risk communities
7. significant gaps in funding, or areas for expenditure that could be prioritized in 2023/24

11. The output for stage 1 is interim recommendations to inform the levy setting for the 2023/24 financial year, pending the full review findings at the end of stage 2.

Approach

12. *Allen + Clarke* undertook the stage 1 review between 3 February and 15 March 2023. This involved an initial, fast-paced review of the current state of the alcohol levy.

13. In total 16 interviews were undertaken with people who are involved with the administration, distribution, use, or oversight of the alcohol levy fund including representatives from:

- The Health Promotion Directorate (formerly Te Hiringa Hauora)
- Other divisions of Te Whatu Ora
- Te Aka Whai Ora
- Manatū Hauora
- Hāpai Te Hauora
- Academia
- Non-Government Organisations

We also interviewed three alcohol industry representatives.

14. The interviews were intended to serve the purpose of whakawhanaungatanga (establishing strong relationships) and helping the review team understand the current levy settings, as well as previous investment decisions. They were also used to inform a stakeholder engagement plan for the second stage of the project.

15. Initial discovery documents were provided by Manatū Hauora, the Health Promotion Directorate (Te Whatu Ora) and other stakeholders. These documents were supplemented by *Allen + Clarke's* desk-based review and NZIER's analysis of existing data and evidence.

16. An alcohol levy working group (ALWG) was established to support this review. The ALWG was made up of officials from Manatū Hauora, Te Whatu Ora, and Te Aka Whai Ora. The ALWG met with the review team regularly and provided oversight and feedback throughout the stage 1 review process.

17. This report was provided in draft form to Manatū Hauora and the ALWG on 16 March 2023 for review and feedback. It was then finalised on X 2023.

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Limitations

18. The findings of this rapid review should be considered in the context of the approach and timeframes:

- This rapid review was undertaken in 6 weeks to inform decisions relating to the quantum of the levy fund for the 2023/24 financial year. Therefore, timeframes in this stage of the review did not allow for detailed analysis of the effectiveness of activities currently funded by the alcohol levy, nor did it allow for the collection of detailed qualitative or quantitative data.

- A small number of non-government stakeholders were interviewed to gain contextual information and anecdotal evidence on the impact of alcohol-related harm reduction interventions, the quantum of the levy, and its distribution. However, given time constraints, the breadth and depth of these conversations were limited and key priority groups including Māori, Pacific, and Disabled people need to be further engaged. Given the small number of interviews that were able to be completed in stage 1, they can not be considered representative. These interviews were designed to simply elicit initial inputs into the review and to help identify areas for further inquiry in stage 2.

- Due to the timeframes for stage 1, the Māori stream of knowledge was limited. A detailed methodology will be developed to ensure he awa whiria is entrenched across all aspects of stage 2.

- This stage of the review was also limited by the documentation and data made available. Gaps in data and evidence have been identified in this report and will be explored further in stage 2. Due to the timeframes for stage 1, detailed health data from National Collections were not analysed. An urgent data request was made to Te Whatu Ora but the data is not expected to be supplied until stage 2 is underway.

THE ALCOHOL LEVY

19. This section provides an overview of the levy fund, how it is set and how it compares to other levies in New Zealand and overseas. We also consider the relationship between the levy and excise tax.

Historical background

20. Since 1977, a levy has been used to undertake activities to reduce alcohol related harm. The levy fund was created to fund the Alcoholic Liquor Advisory Council (ALAC) which had a legislative mandate to encourage and promote moderation in the use of liquor, reduce and discourage the misuse of liquor, and minimise the personal, social, and economic harm resulting from the misuse of liquor (Alcohol Advisory Council Act 1976, s. 7).

21. In 2012, the functions of ALAC were transferred to a new Crown entity, the Health Promotion Agency (HPA). The Health and Disability Act 2000 (as amended in 2012) sets out the functions of the HPA relating to alcohol as (Health and Disability Act 2000, s. 58(2)):

    - *giving advice and making recommendations to government, government agencies, industry, non-government bodies, communities, health professionals, and others on the sale, supply, consumption, misuse, and harm of alcohol so far as those matters relate to HPA's general functions*

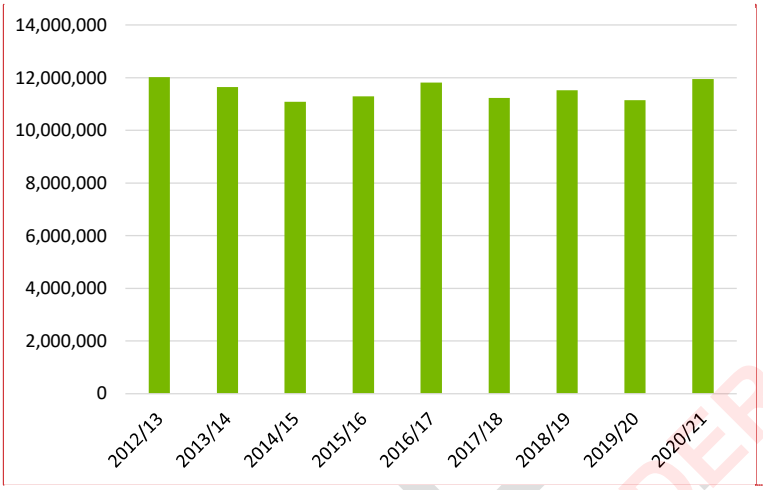
    - *undertaking or working with others to research the use of alcohol in New Zealand, public attitudes towards alcohol, and problems associated with, or consequent on, the misuse of alcohol*

22. The alcohol levy was set to recover costs by the HPA for exercising its alcohol related functions described above. The HPA was not required to give effect to government policy in the same way other Crown agents are. It was however, required to have regard to government policy in exercising its functions if so directed by the Minister (Health and Disability Act 2000, s. 58(3)). Te Hiringa Hauora was adopted as an official name for the HPA on 16 March 2020 (Te Hiringa Hauora, 2020).

The Alcohol Levy Fund

23. The Alcohol Levy Fund amount is reported annually. Since 2013/14, there has been little change in the size of the Fund with the fund remaining relatively constant between $11.2million and $12million (Figure 1: Total Levy Fund, 2012/13 to 2020/21).

Figure 1: Total Levy Fund, 2012/13 to 2020/21



Source: Te Hiringa Hauora

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Impact of the alcohol levy on prices

24. Table 1 below presents the levy rates in cents per litre for different beverage types and alcohol content.

25. The levy rates applied to alcoholic beverages are related to the type of beverage and tiers of alcohol content for that beverage type; thus, the levy is a 'tiered' volumetric tax based on the beverage-specific alcohol content tier. Other types of volumetric taxes or levies can be based on the volume of beverage with no consideration for the alcohol content.

26. Volumetric taxes linked to the alcohol content have the potential to shift consumer behaviour toward lower alcohol content beverages. However, this shift is dependent on whether the rate of the tax is high enough to be 'potent' for the consumer to notice and change their behaviour (the current levy rates are likely too small to influence consumer behaviour).

27. Another dependency is that the beverage-specific alcohol content tiers must be designed in a way that consistently increases the price of higher alcohol content beverages and has smaller increases in the price of lower alcohol content beverages.

28. Currently, the levy rate system is flawed when considering beverage-specific alcohol content tiers, and do not reflect the present-day alcohol product offerings. For example, the alcohol content of beer has been increasing with the proliferation of craft beers. However, the current levy rates only have two tiers for beer, meaning that any beer of at least 2.5% alcohol will have the same rate regardless of whether the product has 2.5% alcohol or 7% alcohol. If this flawed design was fixed, a further benefit would be

that the higher alcohol content beer would be taxed at a higher rate, thus increasing the total levy fund.

29. A close review of the levy rates in the context of current alcohol beverage offerings is needed so that design flaws can be addressed. This will be explored further in stage 2.

30. While the total levy fund collected has not increased in recent years, there was an increase in *rates* of the levy in June 2022. Table 1 below collates data from Te Hiringa Hauora to show the impact of the levy on the cost of alcohol. It reports two levy rates: the rates from 1 July 2021 and the more recent rates from 1 July 2022. The table also shows the difference between these rates (i.e., the 2022 increase in cents per litre). As can be seen, the impact of the levy on the actual cost of alcohol per litre is very small - from 0.5594 cents per litre on beverages with the lowest alcohol content, like low alcohol beer, to 14.4172 cents per litre on beverages with the highest alcohol content, like spirits with over 23 percent alcohol content (Table 1: Alcohol levy in cents per litre by beverage type and alcohol content, 2021 and 2022).

Commented s 9(2)(a) @s 9(2)(a) is this correct?

Table 1: Alcohol levy in cents per litre by beverage type and alcohol content, 2021 and 2022

Alcohol type	Alcohol content more than (%)	Alcohol content not more than (%)	From1 July 2021 (cents per litre)	From 30 June 2022 (cents per litre)	2022 increase (cents litre)
Beer	1.15	2.5	0.5116	0.5594	0.0478
	2.5		1.5058	1.6282	0.1224
Wine of fresh grapes (fortified by the addition of spirits or any substance containing spirits)	14		5.9181	6.3343	0.4162
Wine of fresh grapes (other)			3.4104	3.7291	0.3187
Vermouth and other wine of fresh grapes flavoured with plants or aromatic substances (fortified by the addition of spirits or any substance containing spirits)	14		5.9181	6.3343	0.4162
Vermouth and other wine of fresh grapes flavoured with plants or aromatic substances (other)			3.4104	3.7291	0.3187
Other fermented beverages (such as cider, perry, mead)	1.15	2.5	0.5116	0.5594	0.0478
	2.5	6	1.5058	1.6282	0.1224
	6	9	2.7283	2.9833	0.255
	9	14	3.4104	3.7291	0.3187
	14	23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296

Spirits and spirituous beverages the strength of which can be ascertained by OIML hydrometer (brandy, whisky, rum and tafia, gin and, vodka)			12.7876	14.4172	1.6296
Spirits and spirituous beverages (other)	1.15	2.5	0.5116	0.5594	0.0478
	2.5	6	1.5058	1.6282	0.1224
	6	9	2.7283	2.9833	0.255
	9	14	3.4104	3.7291	0.3187
	14	23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296
Bitters		23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296
Liqueurs and cordials	1.15	2.5	0.5116	0.5594	0.0478
	2.5	6	1.5058	1.6282	0.1224
	6	9	2.7283	2.9833	0.255
	9	14	3.4104	3.7291	0.3187
	14	23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296

Source: Te Hiringa Hauora

The levy setting process

31. In the new Pae Ora context, the process for setting the levy is similar to when the levy was established in 1976. Schedule 6, s.2 of the Pae Ora Act states:

> *(1) For each financial year, the Minister, acting with the concurrence of the Minister of Finance, must assess the aggregate expenditure figure for that year that, in his or her opinion, would be reasonable for the Ministry to spend during that year—*
>
> *(a) in addressing alcohol-related harm; and*
>
> *(b) in meeting its operating costs that are attributable to alcohol-related activities.*
>
> *(2) After assessing the aggregate expenditure figure for a financial year, the Minister must determine the aggregate levy figure for that year.*

32. Once the total levy figure has been determined for any financial year, the Minister must determine the amounts of the levies payable in respect of each class of alcohol, in order to yield an amount equivalent to the total levy figure (The Pae Ora (Healthy Futures Act) 2022, Schedule 6, s3).

Key implications of the levy setting process

33. Levy rates applied to alcoholic beverages are a function of the intended total levy fund; thus, there is flexibility to adjust the rates to meet funding needs. Any intervention that meaningfully reduces the total quantity of alcoholic beverages purchased in New Zealand will reduce the total levy fund unless the rates are modified. Accordingly, when setting the levy fund, consideration should be taken around existing factors that potentially influence the total quantity of alcoholic beverages purchased in New Zealand. In setting the amount for the total levy fund, Manatū Hauora should have full information on:

- the level of need for alcohol-relevant programmes and services
- the cost of delivering alcohol-relevant programmes and services, and any expected increase in costs
- the quantities of different classes of alcoholic beverages sold in the previous year (i.e., beverage types and alcohol content), as well as any temporal trends
- any substantial change to be made to the alcohol excise tax, the GST, or the regulatory context that is likely to affect the purchase demand for alcohol.

Other hypothecated levies

34. New Zealand has several other hypothecated levies (i.e., directed at a specific use) including:

- The Problem Gambling levy - a levy on the profits of the New Zealand Racing Board, the New Zealand Lotteries Commission, gaming machine operators, and casino operators (Department of Internal Affairs, 2004).

Problem Gambling Levy

Gambling harm is widespread within Aotearoa and disproportionately affects many of the same community groups as alcohol related harm, namely, Māori, Pacific Peoples, and people with lower socio-economic status. New Zealanders lose around $2.6 billion per annum on gambling. The current Problem Gambling levy is set at $76.123 million over a three-year period, this equates to just less than 1% of total gambling losses per annum (Ministry of Health, 2022).

Manatū Hauora is responsible for the prevention and treatment of problem gambling, including the funding and co-ordination of problem gambling services. Problem gambling services are funded through the levy on gambling operators. The levy is collected from the profits of New Zealand's four main gambling operators: gaming machines in pubs and clubs (pokies); casinos; the New Zealand Racing Board; and the New Zealand Lotteries Commission. The levy is also used to recover the costs of developing and managing a problem gambling strategy focused on public health (Ministry of Health, 2022).

The Gambling Commission, in its report to Ministers, advocated for a major strategic review of the problem gambling strategy. It argued Manatū Hauora should not be constrained by a historic budget envelope, and argued future costings

should be based on a comprehensive public health strategy to address gambling harm (Gambling Commission, 2022). It is possible that a similar argument could be advanced regarding the alcohol levy. This is particularly the case considering the Pae Ora Principles. However, any strategy must ensure appropriate Māori leadership and governance.

- The ACC Levies, including Earner's Levy, Work levy, and Working Safer levy - a suite of levies ranging from $0.08 to $1.27 per $100 of liable payroll or income, collected by ACC from employers, shareholder-employees, contractors, and self-employed people (and supplemented by Vote Government funding for those who are not employed) to cover the cost of injuries caused by accidents and injuries and accidents that happen at work or are work-related (ACC, 2023).
- Other levies, specifically the waste disposal levy (Grant Thornton, 2020), the International Visitor Conservation and Tourism Levy (MBIE, 2021), and the immigration levy on visa applications (MBIE, 2022).

Levies, duties, and taxes on alcohol in other jurisdictions

35. Taxes on goods that have an adverse effect on health ('sin taxes' or 'public health taxes') are widely used overseas but are more likely to provide general tax revenue than to provide funding for specific programmes. Some such taxes are designed to use price as a means of shifting consumption.

36. Any revenue, or portion of revenue, can be hypothecated and used to fund specific programmes. For example, a percentage of alcohol excise tax could be directed to alcohol programmes without the need for a specific alcohol levy like New Zealand's. Similarly, a percentage of income tax or general tax revenue can be hypothecated for alcohol programmes. These examples, however, have the disadvantage of tying revenue to economic cyclicality, resulting in the amount available for funding fluctuating more over time. A hypothecated tax on alcohol could also be earmarked for other areas in the health system other than alcohol-specific programmes.

37. Internationally, hypothecated taxes are common and exist in numerous forms. Cashin et al (2017) identified over 80 countries with hypothecated taxes for health. The World Bank noted in 2020 that this number was likely higher (World Bank Group, 2020). Nine countries were identified where all or a portion of some tax revenue from alcohol sales is earmarked for particular activities (Cashin et al, 2017) (Table 2: Countries using hypothecated taxes for health around the world).

Table 2: Countries using hypothecated taxes for health around the world.

Type of hypothecation	Number of countries
Portion of revenues from tobacco taxes earmarked for health	35
Revenue from taxes on other goods that negatively impact health earmarked for health	10

Portion of value-added tax (VAT) earmarked for health	5
All or a portion of revenues from taxes on alcohol sales earmarked for health	9
All or a portion of revenues generated from lotteries earmarked for health	2
Portion of general revenues earmarked for health causes	5
Portion of Income tax earmarked to fund health care for the population or a selection of the population (eg, formal-sector workers in a public scheme)	62

Source: Cashin et al. (2017)
Note: Cashin et al also identifies countries that use levies on money transfers and mobile phone company revenue. These are not included in Table 2.

38. Most countries that have an excise tax on alcohol do not also have a separate hypothecated tax on alcohol, although some do hypothecate a portion of alcohol excise revenue for health. Our rapid review of national approaches did not find any instance of a hypothecated tax that is designed in the same way as the alcohol levy – a hypothecated tax on alcohol, strictly for alcohol-related activity, levied in addition to an alcohol excise tax and set as a pre-determined fund rather than a fund that fluctuates with pre-determined rates. This will be explored further in stage 2.

39. Based on data for 2014, 18 countries used hypothecated taxes to fund programmes for the prevention and treatment of substance abuse disorders relating to alcohol (WHO,2017), including:

- Denmark: In Denmark, a national 8 percent income tax is levied and hypothecated for health services, including but not limited to alcohol programmes (Cashin et al. 2017).
- Switzerland: Switzerland imposes a duty on spirits (CHF 29 per litre of pure alcohol), the net revenue of which is divided 90%/10% respectively between the federal government and the regions (cantons) every year. The cantons' share is used to fund programmes and services that address the causes and effects of abuse of alcohol and other substances. The cantons provide an annual report on the activities financed through by the duty (FOCBS, n.d.). In 2021 total revenue generated for the cantons equated to $47 million compared to New Zealand's $11 million (2022) (FOCBS, n.d.). On a per capita basis this equates to $5.4 per capita compared to New Zealand's $2.1 per capita for the alcohol levy.

40. Internationally, tobacco taxes are more likely than alcohol taxes to be hypothecated for health. Chaloupka (2012) identified that 38 countries earmark part, or all, of their tobacco tax revenue for specific programmes. However, this revenue was rarely allocated directly to tobacco control efforts (Chaloupka 2012). This suggests a similar disconnect between the source of funds and the use of funds as is observed in alcohol taxation.

41. From a purely economic perspective, levy-setting methodology in New Zealand avoids a key disadvantage of hypothecated taxes, which is the cyclicality of revenue. But the inflexibility of strong hypothecation to alcohol-related activity means the funds cannot be diverted when alternative uses offer better investment value. This is a key reason for such taxes being less popular than non-hypothecated taxes or 'wide' hypothecation, in which the funds are typically directed towards the health system but not towards any particular programmes or services.

The excise tax on alcohol

42. Unlike the alcohol levy, the excise tax on alcohol in New Zealand raises revenue that is not hypothecated and, therefore, contributes to general tax revenue. Excise tax is a more common instrument used internationally to collect general revenue, to modulate demand for alcohol, and as a source of hypothecated funds for health programmes and services.

43. The excise tax in New Zealand constitutes a much greater share of the price of alcohol products than the alcohol levy. Based on typical prices of common alcohol products identified by Alcohol Healthwatch, on 30 June 2022, the alcohol levy accounted for between 0.2 percent and 1.3 percent of the price of alcoholic beverages. This is substantially less than the excise tax, which accounted for between 20.7 percent and 55.9 percent of the price of alcoholic beverages (Table 3: Alcohol levy and excise tax as a percent of typical prices of alcoholic beverages).

Table 3: Alcohol levy and excise tax as a percent of typical prices of alcoholic beverages

	Volume (litres)	Price ($)	Price per litre ($)	Excise % of price	Levy % of price
Beer	0.33	1.80	5.45	22.8%	0.9%
RTD	0.25	2.25	9.00	27.6%	1.3%
Wine	0.75	15.00	20.00	20.7%	0.2%
Spirits	1.00	37.99	37.99	55.9%	0.4%

Source: Alcohol Healthwatch 2021

44. When looking at the role of the levy in reducing alcohol related harm and the interventions/activities that can be undertaken within the Pae Ora context, the relationship with the excise tax (and any associated reduction in consumption, and therefore alcohol-related harm due to the tax settings) is a key consideration. This will be explored further in stage 2 of the review.

ALCOHOL CONSUMPTION IN AOTEAROA NEW ZEALAND

45. The purpose of this section is to present the current state of alcohol consumption within its historical context. This provides an indication of the drivers of consumption which may in some cases lead to alcohol related harm and a contextualisation of the social environment in which activities to reduce alcohol related harm operate.

Pre-1840

46. Prior to Europeans arriving in Aotearoa New Zealand there is no evidence of Māori having developed alcoholic beverages of their own (Alcohol Healthwatch, 2012). Alcohol was introduced to Aotearoa New Zealand with the arrival of European settlers and explorers. While alcohol and drunkenness were common amongst Europeans at this time, there is evidence to suggest that Māori did not show an interest in alcohol. Some commentators indicate that Māori generally had an aversion to alcohol (Alcohol Healthwatch, 2012). The general lack in interest in alcohol amongst Māori at this time can be further seen in the fact that alcohol was not used to advance European interests in the same way blankets, pipes, and tobacco were. At the signings of Te Tiriti o Waitangi alcohol was not allowed (Alcohol Healthwatch, 2012).

Post 1840

47. In the years following the signings of Te Tiriti o Waitangi some Māori leaders began to voice concerns about the impact of alcohol on their communities. They began to take action in an attempt to curb the harm that alcohol posed to their whānau. Sir Mason Durie notes that iwi, hapū, and marae sought to enforce their own controls over alcohol and cites bans on alcohol at many marae, the aukati within the limits of the King Country, the codes at Parihaka which included forbidding drunkenness, and Māori councils making informal bylaws (Durie, 1998; Durie 2001). Attempts were also made to encourage support nationally for reform. For example, in 1874 a petition to Parliament by Whanganui Māori stated (House of Representatives, 1874):

> *[Liquor] impoverishes us; our children are not born healthy because the parents drink to excess, and the child suffers; it muddles men's brains, and they in ignorance sign important documents, and get into trouble thereby; grog also turns the intelligent men of the Maori race into fools ... grog is the cause of various diseases which afflict us. We are also liable to accidents, such as tumbling off horses and falling into the water; these things occur through drunkenness. It also leads on men to take improper liberties with other people's wives*

48. Between 1847 and 1904 the Government passed a number of laws that had the effect of limiting alcohol consumption by Māori. However, these laws suggest that although the government was acknowledging that alcohol was an issue in society, they were (at least in a legislative sense) attributing the harm solely to Māori. These laws also

inhibited Māori rights to exercise autonomy over issues arising from alcohol and develop their own tikanga to manage alcohol in their communities.

49. Many of these laws remained in place until after the Second World War when the Licensing Amendment Act 1948 removed many of the controls on Māori access to alcohol. While many marae continued to be alcohol-free, consumption amongst Māori started to increase significantly. In 2021/22 about 80% of Māori indicated that they had drunk alcohol in the past year (New Zealand Health Survey, 2022).

Current State

50. Below we provide a summary of available data on a range of measures, or proxy measures, for analysing trends in alcohol consumption. The purpose of this summary is to provide a snapshot of the how people are currently consuming alcohol in Aotearoa New Zealand, any visible trends over time, and how this compares internationally. We acknowledge that there are other measures that could be used to measure alcohol consumption over time and that statistical testing is required to validate the observations from existing data presented in this interim report. This will be a core component of stage 2 of the review.

Alcohol available for sale

51. Actual alcohol sales data is not publicly available, being an industry data set. However, alcohol sales are expected to track along a similar trend to alcohol that is made available for sale. Statistics NZ has collected and reported data on alcohol available for sale quarterly since 1985 Q2.

52. The Statistics New Zealand Retail Trade Survey indicates that the volume of pure alcohol available for sale is consistently increasing year to year (Statistics NZ) It also suggests a seasonal trend in alcohol available for sale with a clear spike in the fourth quarter of every year (1 October to 31 December), reflecting pre-Christmas and New Year sales volumes (Figure 2: Alcohol available for sale: Quarterly volume of pure alcohol). The impact of COVID-19 and associated restrictions had an effect of the availability of alcohol in 2020/2021. BERLI notes in an article from August 2020 that "the availability of alcoholic beverages decreased 5.4 percent between the Q1 and Q2 of 2020 to 7.3 million litres (BERL, 2020).

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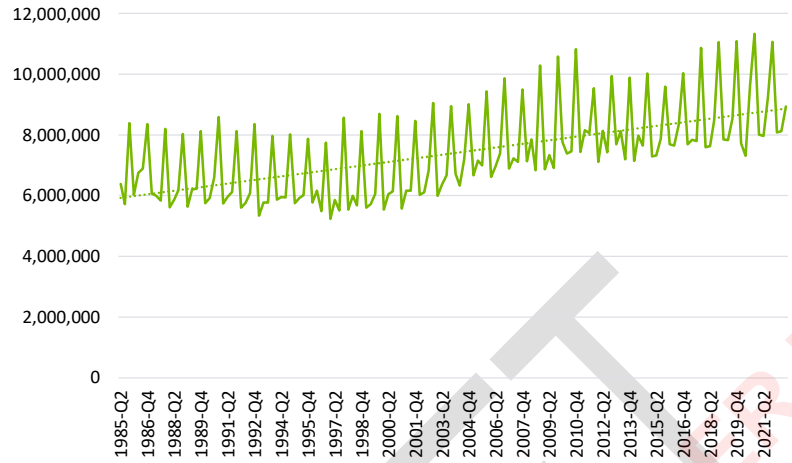
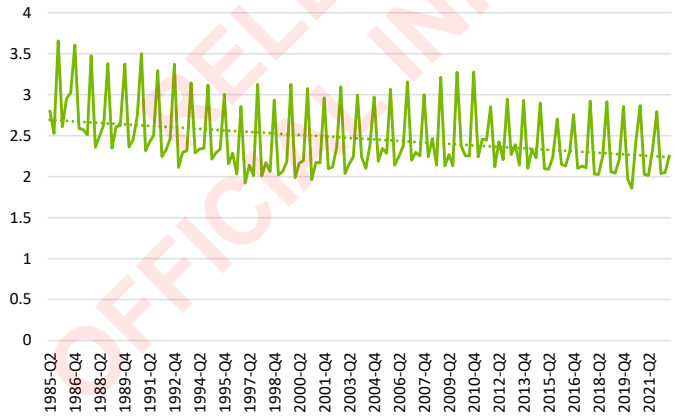
Figure 2: Alcohol available for sale: Quarterly volume of pure alcohol



Source: Statistics NZ

53. Drawing any strong conclusions from this trend is problematic for two reasons. First, underlying the increased volume of pure alcohol available for sale is an increase in the volumes of pure alcohol from wine and spirits and a slight decrease in the volume of pure alcohol from beer. Secondly, while the amount of alcohol available for sale has increased, population has also increased. Over the last ten years, these factors have come together to create a slight decline in the amount of pure alcohol available for sale per head of adult population (aged 18+) (Figure 3: Alcohol available for sale: Quarterly volume of pure alcohol for sale per head of population aged 18+).

Figure 3: Alcohol available for sale: Quarterly volume of pure alcohol for sale per head of population aged 18+



Source: Statistics NZ

54. Not surprisingly the value of alcohol sales follows a similar trend to the volume of alcohol available. The Statistics New Zealand Retail Trade Survey shows an increase in the total value of alcohol sold through retail outlets, with the trend indicating a 95 percent increase in the value of alcohol sales from 1995 to 2019 when measured in constant (2010) prices (Statistics NZ)[3]

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Affordability of alcohol

55. The Law Commission's 2010 review of New Zealand's laws regarding the sale and supply of alcohol concluded that the price of alcohol was a "critical factor in moderating demand for alcohol" (Law Commission, 2010).

56. Notwithstanding the importance of affordability in moderating demand for alcohol, we note that affordability is only one driver of demand. Consumer preferences and the availability and acceptability of substitutes are also important drivers. Over time, it is not only the price of alcohol that will impact on affordability. Household incomes and the distribution of incomes, as well as other household expenditure requirements, impact on the resources available for households to purchase alcohol products. Over a period of time, demand drivers unrelated to affordability may also change, potentially even in offsetting ways (e.g., while alcohol may become more affordable, substitutes may also become more available, more affordable and more acceptable).

57. In 2021, HPA published a report on the affordability of alcohol in New Zealand (Health Promotion Agency, 2021). The report noted that between 2017 and 2020:

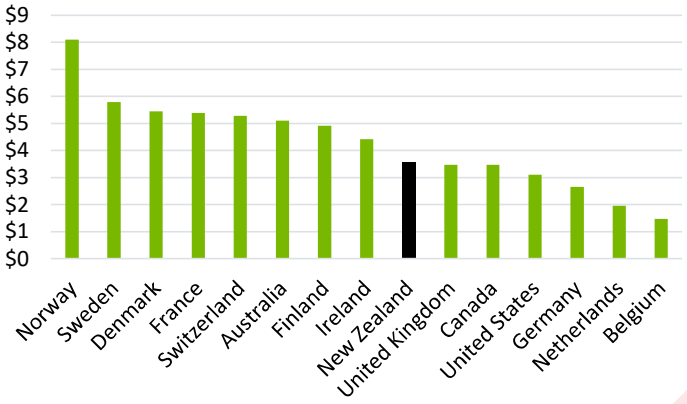
- the average price per standard drink increased for all alcoholic beverage types
- the real price (inflation-adjusted) of beer increased
- the real price (inflation-adjusted) of wine and spirits and liqueurs had dropped
- all alcoholic beverage types were more affordable in 2020

58. Over the five-year period 2017 – 2022, median household income has risen more than the average prices of alcoholic beverages, making alcoholic beverages more affordable in 2022 than in 2017 (Statistics NZ, 2022).

59. The World Health Organization (WHO) publishes the price of 500ml of the three major categories of alcoholic beverages (beer, wine, and spirits) in US dollars for a range of countries. Compared with a comparison set of OECD countries the price of beer in New Zealand is a little below average at US$3.58 per 500ml (average US$4.27 per 50ml) (Figure 4: Average price of beer in selected OECD countries).

[3] Note this does not reflect any impact of the COVID-19 pandemic or pandemic restrictions which would have impacted on retail sales and the share of alcohol sales that occurred through retail outlets versus hospitality venues or other from 2020 onwards, although the effects of the pandemic are observable in 2020 and 2021.

Figure 4: Average price of beer in selected OECD countries (USD per 500ml)



Source: World Health Organization

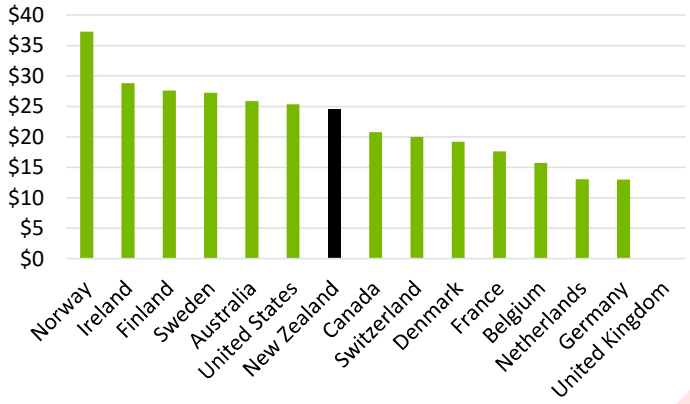
60. Compared with the comparison set of OECD countries, the price of wine in New Zealand is a little above average at US$24.6 per 500ml (average US$22.58 per 50ml) (Figure 5: Average price of wine in selected OECD countries).

Figure 5: Average price of wine in selected OECD countries (USD per 500ml)

Source: World Health Organization

61. Compared with the comparison set of OECD countries, the price of spirits in New Zealand is a little above average at US$24.6 per 500ml (average US$22.58 per 50ml) (Figure 6: Average price of spirits in selected OECD countries).

Figure 6: Average price of spirits in selected OECD countries* (USD per 500ml)



Note: Data not available for the United Kingdom.

Source: World Health Organization

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62. A long international time series of alcohol expenditure as a percentage of total household expenditure indicates that Aotearoa New Zealand does not stand out from comparator countries, although the time series for New Zealand is not as long as for others. Alcohol expenditure in Aotearoa New Zealand is a higher share of total household expenditure than in the United States, Canada, and the Netherlands, similar to Sweden and Denmark, and lower than Norway, Australia, Ireland, Finland and the United Kingdom (Our World in data).

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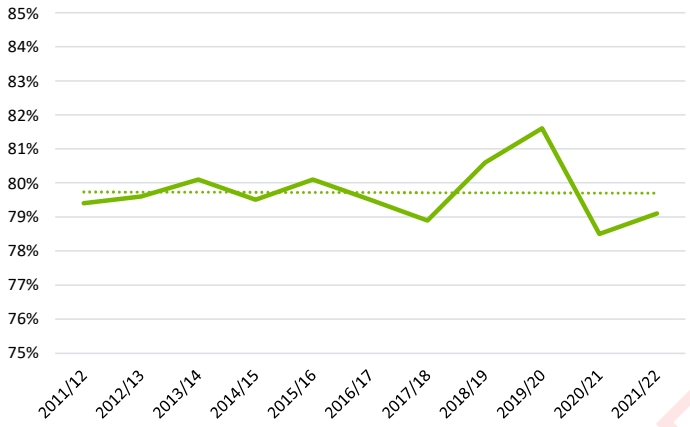
63. While affordability and household expenditure on alcohol provides some indication of the level of consumption, it is important to note that these measures are not a proxy measure for alcohol demand.

Past-year drinkers

64. Past-year drinkers is a measure of alcohol consumption reported through the NZHS. It represents the percentage of adults (aged 15+) who report having had a drink containing alcohol in the past year. While this is a useful indication of the extent of alcohol consumption in Aotearoa New Zealand, it has its obvious limitations as it relies on recollection and self-reporting. It also does not distinguish between the amount or type of alcohol being consumed.

65. In 2020/21 78.5% if New Zealander adults reported that they had had a drink containing alcohol in the past year (NZHS, 2020/21). Men were 9% more likely to have been past-year drinkers than women (NZHS 2020/21). The percentage of past year drinkers has been fairly constant over the past ten years. However, it remains high varying between 78 and 82 percent (Figure 7: Past year drinker: 2011/12 to 2021/22).

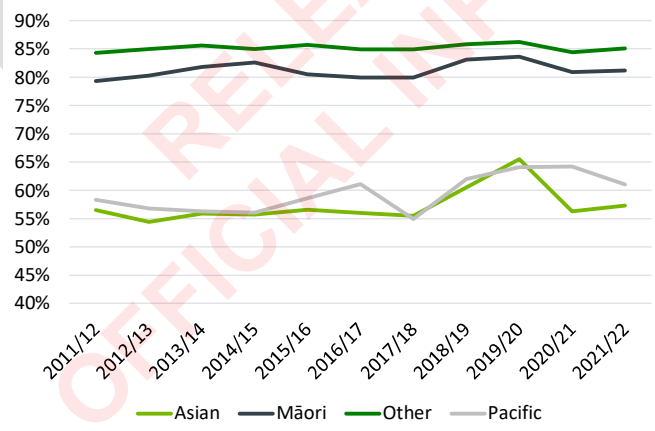
Figure 7: Past year drinkers: 2011/12 to 2021/22



Source: NZHS data

66. When broken down by ethnicity, the highest rates of reporting being a past drinker are seen amongst Māori and Other (non-Māori, non-Pacific, non-Asian) New Zealanders. While rates are fairly constant over time for Māori and Other New Zealanders, the recently higher rates amongst Pacific and Asian New Zealanders could be an early indication of an increasing trend, although the volatility in the data make this unclear (Figure 8: Past year drinkers by ethnicity, 2011/12 to 2021/22).

Figure 8: Past year drinkers by ethnicity, 2011/12 to 2021/22



Source: NZHS data

67. Disability status has only been reported since 2018/19 and is based on self-reported disability status. This factor impacts on the likelihood of reporting past-year drinking, with people who identify as disabled having a significantly lower probability of reporting being a past-year drinker. Since 2018 between 67 percent and 73 percent of people who identify as disabled reported being a past-year drinker, compared with 80 to 82 percent of people who identify as non-disabled (NZHS, 2018/19 to 2020/21).

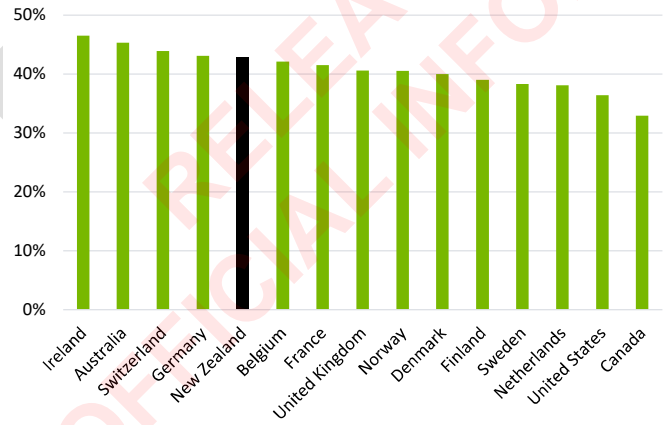
Hazardous and heavy episodic drinking

68. The NZHS has collected and reported on data that identifies hazardous drinking and heavy episodic drinking since 2015/16. Hazardous drinkers are defined as drinkers who obtained an Alcohol Use Disorders Identification Score (AUDIT) score of eight or more. Heavy episodic drinking is defined as consuming six or more alcoholic drinks on one occasion at least weekly (heavy episodic drinking, weekly) or at least monthly (heavy episodic drinking, monthly).

69. In 2021/22, approximately 19 percent of the adult population met the criteria for hazardous drinking. Māori experience higher rates of hazardous drinking than other ethnicities. In 2021/22, 33 percent of Māori met the criteria for hazardous drinking (NZHS, 2022).

70. International data shows that New Zealand's drinking culture involves more than an average frequency of heavy drinking as measured by self-reported experience of heavy drinking in the past 30 days for adults aged 15+ (Figure 9: Heavy drinking in the past 30 days (adults aged 15+).

Figure 9: Heavy drinking in the past 30 days (adults aged 15+)



Source: Our World in Data

71. International data based on a longer time series confirms that New Zealand's current prevalence of hazardous and heavy episodic drinking ranks amongst the highest in our selected group of OECD countries. This is in stark contrast to ten years ago when New Zealand's prevalence of hazardous and heavy episodic drinking ranked in the bottom half for the same set of countries. (Our World in Data, date)

Summary

72. Our review of data from a range of sources has provided no clear indication that alcohol consumption is increasing overall. We note that there are important gaps in the data and evidence on alcohol consumption. While the limited data indicate that Māori are more likely than non-Māori to engage in heavy or binge drinking, it is unclear whether this has worsened. Some evidence indicates a possible improvement such as the NZHS which indicates the percentage of Māori who are heavy drinkers fell from 47.9 in 2012 to 43.2 in 2016 and to 31.0 percent in 2020. However, 2020 data may not be reflective of a downward trend in heavy drinking in Māori due to the potential impact of the COVID-19 pandemic and associated restrictions. Prior to 2020 data on Māori who are heavy drinkers showed a small but steady trend upwards since 2017 (New Zealand Health Survey, 2016/17 to 2021/22). Additionally, much of the recent evidence regarding consumption patterns within population sub-groups is derived from the NZHS and the Alcohol Use in New Zealand Survey (AUiNZ) which rely on self-reported alcohol consumption which is impacted by social desirability and recall biases.

73. However, the consumption of alcohol in Aotearoa New Zealand remains high. Furthermore, the instance of hazardous or heavy episodic drinking in Aotearoa New Zealand has shown little sign of decreasing as has been seen in comparative OECD countries.

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ALCOHOL-RELATED HARM

74. Understanding the scope of alcohol related harms and their prevalence is important to be able to consider the role of the levy fund within the broader public sector framework. This section provides a snapshot of the breadth and scope of alcohol related harms in Aotearoa New Zealand. We do not attempt to quantify all alcohol related harm in this section. Rather we seek to reflect the well-established health and broader societal harms that alcohol contributes to. Stage 2 of this review will provide a deeper analysis of the extent of harm across society and include further qualitative insights from Māori.

75. A broad indicator of experience of harm is provided by the AUiNZ which showed that in 2020, 25.9 percent of New Zealanders said that they had experienced harm from their own drinking and 37.7 percent of New Zealanders had experienced harm from someone else's drinking (AUiNZ, 2020).

76. The AUiNZ also revealed that while males are more likely to report experiencing harms from their own drinking, women are more likely to report experiencing harms from others' drinking (AUiNZ, 2020).

Alcohol use and health

77. Alcohol use is a significant and modifiable risk factor for a wide range of non-communicable diseases. A systemic analysis published in the Lancet in 2018 found that the risk of all-cause mortality rises with increasing levels of consumption, and the level of consumption that minimises health loss is zero (Griswold et al, 2018). Despite earlier research to the contrary it is now widely accepted that alcohol in any quantity is not a therapeutic agent. The WHO said in 2007 that "from both the public health and clinical viewpoints, there is no merit in promoting alcohol as a preventive strategy" (WHO, 2007).

78. It is important to note that evidence indicates that individuals with low socioeconomic status experience disproportionately greater alcohol attributable harm than individuals with high socioeconomic status from similar or lower amounts of alcohol consumption (Probst et al, 2020). This must be borne in mind when considering our analysis of alcohol harms to follow.

79. Disability-adjusted life years (DALYs) are a measure of overall disease burden, expressed as the number of years lost due to ill-health, disability, or early death. DALYs attributable to alcohol in New Zealand show that the early 2000s represented a period of relatively low DALYs which was followed by a period of increasing DALYs to around 2014, followed by a stable level of DALYs since 2014. (Our World in Data, Premature deaths due to alcohol (age standardized rate per 100,000 people)

80. International and New Zealand evidence unequivocally shows that alcohol use has been causally linked to a range of diseases and injuries, including:

    - Cancer; Rumgay et al found, in a population-based study published in Lancet Oncology, that globally 4.1% of all new cases of cancer in 2020 were

attributable to alcohol consumption (Rumgay et al., 2020) . The WHO estimated that in 2020, almost 7% of the total cancer burden in New Zealand was attributable to alcohol (WHO, 2020). Our literature review indicated that it is likely that, in New Zealand, alcohol attributable cancers make up a larger proportion of cancer cases than the global average. The Cancer Control Agency noted that in New Zealand in 2020 alcohol caused 39 percent of new bowel cancer cases and 28 percent of new breast cancer cases (Cancer Control Agency, 2020).

- Stroke; Feigin et al, in a systematic analysis for the Global Burden of Disease Study published in 2016 in Lancet Neurology found that 7% of the global stroke burden was attributable to any amount of alcohol use (Feigin et al., 2016).
- Heart disease; there is a large body of evidence that links alcohol consumption to ischaemic heart disease (Mente et al., 2009).
- Fetal Alcohol Spectrum Disorder (FASD); Although there is limited data on the prevalence of FASD in Aotearoa New Zealand, Manatū Hauora estimates that between three to five percent of people may be affected by alcohol exposure before birth. On this basis they suggest that around 1800 -3000 babies may be born with FASD per year (Manatū Hauora, 2023).
- Suicide; A 2022 study from the University of Otago showed that 26 percent of all suicides in Aotearoa New Zealand involve acute alcohol use. This is higher than the WHO global estimate of 19 percent. (Crossin R et al., 2022).

Alcohol and violence

81. Alcohol has a significant effect on the level of violence in Aotearoa New Zealand. In 2009 the New Zealand Police National Alcohol Assessment showed that alcohol is responsible for (New Zealand Police, 2009):

    - A third of all violence
    - A third of all family violence
    - Half of sexual assaults
    - Half of homicides

    While these data are now outdated, there is no indication that there has been any significant decrease in the extent to which alcohol is responsible for violent crimes in Aotearoa New Zealand. Due to time constraints in stage 1 of this review we were unable to gather and analyse up to date raw data from New Zealand Police. This analysis will be included in stage 2 of the review.

82. A recent study into the relationship between child maltreatment and alcohol in Aotearoa New Zealand estimated that in 2017 between 11 and 14 percent of

documented cases of child maltreatment could be attributable to exposure to parents with severe or hazardous consumption (Huckle and Romeo, 2022).

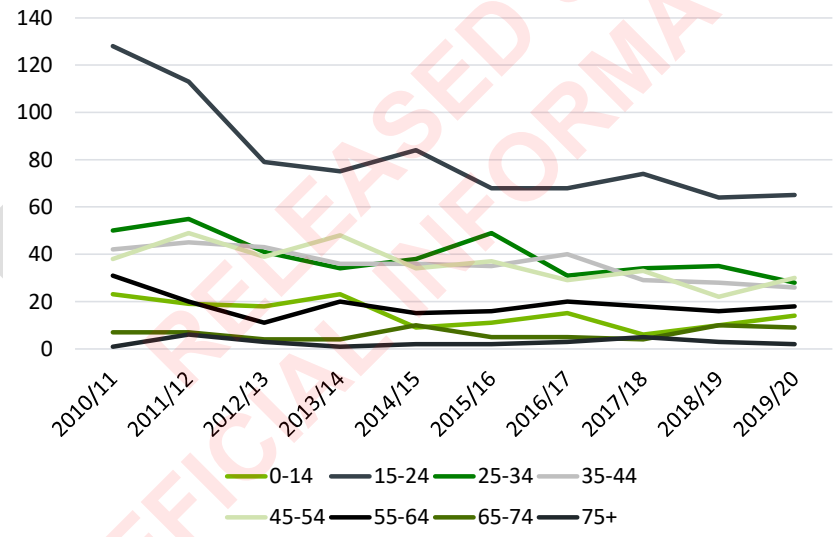
Other indicators of alcohol-related harm

83. Other indicators of alcohol-related harm include:

- Hospitalisations wholly attributable to alcohol
- Alcohol-related motor vehicle crashes
- Alcohol related calls to police

84. The National Minimum Data Set (Te Whatu Ora, 2023) contains data on public hospital discharges, including discharges with a primary diagnosis of 'toxic effect of alcohol'. These data indicate a decline in the number of these discharges over the last ten years. Across age groups, the group most likely to experience hospitalisation due to toxic effects of alcohol is 15–24-year-olds. This group has also seen a decline in these events over the last ten years (Figure 10: Public hospital discharges with a primary diagnosis of "toxic effect of alcohol".

Figure 10: Public hospital discharges with a primary diagnosis of "toxic effect of alcohol" (number per year, by age group)

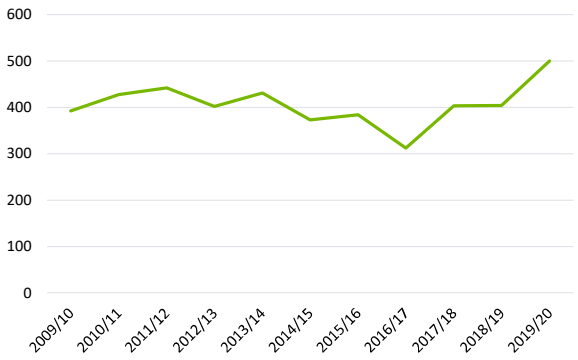


Source: Te Whatu Ora

85. Alcoholic liver disease is a condition caused by heavy use of alcohol and tends to occur after many years of heavy drinking and is, therefore, not highly prevalent amongst young people. Data on hospital discharges shows a fairly constant number of

discharges with a primary diagnosis of alcoholic liver disease, with a spike in 2019/20 (Figure 11: Discharges from publicly funded hospitals with a primary diagnosis of alcoholic liver disease).

Figure 11: Discharges from publicly funded hospitals with a primary diagnosis of alcoholic liver disease



Source: Te Whatu Ora

86. The New Zealand Transport Agency (NZTA) tracks the percentage of deaths and serious injuries from road crashes that are alcohol-related. These data show a decline in this percentage since data started being collected in 2008. However, the number remains high (NZTA, 2023).

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87. NZ Police recorded and published data on alcohol-related calls to police between 2008 and 2012. This data shows a roughly constant number of calls to police that are alcohol related: between 120,000 and 126,000 calls per year (NZ Police, 2012).

Alcohol related-harm and Māori

88. In 2010 the Law Commission highlighted the negative impact that alcohol has on health and social issues for Māori. It noted that (Law Commission, 2010):

- Māori were more likely to die of alcohol related causes
- Māori were more likely to experience harm from alcohol consumption in areas such as work, study, and employment
- Māori women suffered more harm as a result of other people's drinking
- Alcohol may be actively contributing to inequalities

89. In 2015 a policy briefing from the New Zealand Medical Association provided a useful overview of the disproportionate impact of alcohol on Māori. It found (New Zealand Medical Association, 2015):

- Māori were 2.5 times more likely to die from an alcohol-attributable death when compared to non-Māori
- Māori were twice as likely as non-Māori to die from cardiovascular disease, a disease linked to alcohol consumption.
- Māori women were more likely to suffer from breast cancer than non-Māori, a disease linked to alcohol consumption;.

90. There has been very little, if any, shift in the disproportionate harm that Māori experience from alcohol. A key issue in addressing this inequity is enabling Māori to exercise tino rangatiratanga over their health in relation to alcohol. This will be a key question in stage 2 of this review.

Summary

91. As can be seen from the evidence summarised above, alcohol causes significant harm across communities in Aotearoa New Zealand. While there have been some improvements across some indicators, overall, the level of harm caused by alcohol remains unacceptably high. Māori remain disproportionately affected by alcohol-related harm.

COST OF ALCOHOL-RELATED HARM

92. The cost of alcohol-related harm to New Zealand society is significant. This section provides a summary of existing estimates of the cost of alcohol-related harm in Aotearoa New Zealand.

93. The most recent study to quantify the social cost of alcohol in Aotearoa New Zealand was conducted by BERL in 2009. Commissioned by ACC and the Ministry of Heath, the report aimed to quantify the social cost of alcohol and drug related harm looking at the personal, economic, and social impacts. While the estimate of the social cost of alcohol-related harm in Aotearoa New Zealand published by BERL in 2009 and updated in 2018, or rather the methods used to generate it, have been criticised by some commentators, it has been widely cited in the alcohol-harm research and policy space in New Zealand over the last 14 years (BERL, 2009; Nana, 2018).

94. In 2018, an updated estimate based on the BERL methodology was calculated to be $7.85 billion per year (Nana, 2018). The 2018 estimate included costs resulting from justice, health, ACC, social services, unemployment, and lost productivity. Intangible costs such as years of life lost from premature death, lost quality of life, child abuse, sexual abuse, and impacts on victims of alcohol-caused crime are also relevant to assessing the overall impact of alcohol related harm on society. A recent Australian Study found that in Australia $48.6 billion AUD of intangible costs could be attributable to alcohol (National Drug Research Institute, Curtin University, 2021).

Evidence from other countries

95. A literature review was conducted to identify other estimates of the social cost of alcohol related harm that have been published since the BERL report was published in 2009. The literature review focused on studies that represent the social cost of alcohol at a national-level and consider costs of both the consumers of alcohol and society in general. Where more than one study of the same country has been published since 2009, the most recent publication was included. The United States, Australia, and Canada were the focus of the literature search given the higher generalisability of results to an Aotearoa New Zealand setting.

96. The table below summaries the three international studies relating to the social cost of alcohol-related harm that were identified in this literature review and compares them to the New Zealand study conducted by BERL in 2009 (Table 4: Summary of selected international studies reporting on the social cost of alcohol related harms).

Table 3: Summary of selected international studies reporting on the social cost of alcohol-related harms.

Country (Author, date)	Year of study costs	Total Social cost of alcohol (Local currency and cost estimate year, millions)	Total Social cost of alcohol (2023 NZD millions)	Social cost of alcohol per person (b, c)	Social cost of alcohol per person (c, d)	Social cost of alcohol as a % of GDP (e)	Tangible Costs (% of total costs)	Intangible (% of total costs)
New Zealand (BERL et al 2009)	2006	NZ$4,7934 (a)	$7,260	NZ$1,146	$1,735	2.79%	NZ$3,231.6 million (67%)	NZ$1,561.9 million (33%)
Australia (Whetton et al 2021)	2017/18	AU$66,817	$85,459	AU$2,676	$3,475	3.80%	AU$18,165 million (27%)	AU$48,651 million (73%)
Canada∞ (CSUCH 2020)	2017	CAN$16,625	$23,803	CAD$454.92	$651	0.78%	CAN$16.625 million (100%)	Not included
US∞ (Sacks et al 2015)	2010	US$ 49,026	$561,727	US$805.06	$1,816	1.65%	US$249,026 million (100%)	Not included

(a)Figure reported in BERL 2009 for alcohol only. It does not include expenditure that could not be separated between alcohol and other drugs which is listed separately in the report

(b) Local currency and cost estimate year

(c) Denominator is total population for noted country in year of study data soured from the World Bank

(d) 2023 NZD, population study year

(e) Denominator is GDP in current local currency unit for year of study data soured from the World Bank

∞ Analysis is an update of previous analysis

97. These four studies were conducted in Aotearoa New Zealand (2005/6 costs), Australia (2017/18 costs), Canada (2017 costs), and the US (2010 costs) and differed significantly in their findings (BERL, 2009; Canadian Substance Use Costs and Harms Scientific Working Group, 2020; Sacks et al., 2015; Whetton et al., 2021). To compare the relative value of each of four identified studies, all total costs were converted to 2023 NZD using the Consumer Price Index (CPI) and currency exchange rates and divided by the total population size of the country during the year considered in the study to account for large differences in population size contributing to the cost.

98. In this comparison, the social cost of alcohol appears highest in Australia with an estimated cost of $3,343 per person (Whetton et al., 2021). Aotearoa New Zealand and the US follow with a cost per person of $1,392 and $1,655 respectively (BERL, 2009; Sacks et al., 2015). Canada's estimate of the social cost of alcohol was the lowest of the four studies observed with the social cost of alcohol estimated to be $651 per person (Canadian Substance Use Costs and Harms Scientific Working Group, 2020). A key point to note in comparing the 4 studies we analysed is that the US and Canadian estimates do not consider the intangible costs of alcohol where the Australian and New Zealand estimates do.

Relevance to the alcohol levy

99. It is unclear whether the BERL 2009 report (or any other evidence regarding the burden of alcohol related harm) was used previously to determine the alcohol levy or even the excise tax. However, we note that the BERL report was cited in the Law Commission's 2010 report on the review of the regulatory framework for the sale and supply of liquor, so it may have been influential.

Commented [S 9(2)(a) s 9(2)(g)(i)]: it is the 2010 report?

100. While evidence on the costs of alcohol-related harms cannot be directly related to the cost of addressing harms, it can be used to motivate investment in addressing alcohol-related harms – if cost-effective interventions exist, it can also be used to:

- motivate research investment to identify cost-effective interventions
- motivate investment in interventions to reduce alcohol use
- better understand the key areas of alcohol-related harms to prioritise investment.

Summary

101. Methodologies used to quantify the cost of alcohol-related harm vary internationally. This makes direct comparisons difficult. There also remains debate about the types of costs and harms that should be included. Nevertheless, we know that the cost is significant and potentially much higher than existing estimates (i.e., we heard from ACC

that they estimate a cost of approximately $600 million annually for alcohol related injuries).[4]

102. Notwithstanding differing views on the methodological approach that led to the BERL estimate (and the 2018 update), it was based on 2005/06 data, and in 2023 the data landscape has changed. It is timely to undertake an updated analysis, and particularly relevant in the context of this review of the alcohol levy. In stage 2 we will undertake an up-to-date cost of alcohol harms study that clearly outlines the relevant costs from both an economics perspective and a public health perspective, to support better-informed decision-making across a range of purposes and contexts.

[4] Further inquiries and engagement with ACC will be part of stage 2 of this review to better understand and quantify this figure.

CONSIDERATIONS FOR INCREASING THE ALCOHOL LEVY

103. The alcohol levy has not increased since 2013. During this time the real cost of harm reduction interventions has increased, and the levy appears to remain insufficient to address alcohol-related harms across society (ie, there has been little, if any, shift in the extent of alcohol-related harm across communities in Aotearoa New Zealand). Furthermore, the levy now sits within a different legislative context. The Pae Ora framework potentially opens new opportunities for investment in harm reduction activities across health entities.

104. A range of factors should be taken into account when considering a potential increase in the alcohol levy, including:

- the regulatory context of the levy
- the strategic context of the levy
- the potential impact of price change on demand for alcohol
- the potential regressive effects of levy-induced price change
- costs of alcohol-related activity funded by the levy, which may increase due to
    - inflation
    - patterns of alcohol consumption and alcohol-related harms
    - unmet need
    - the costs of alcohol-related harms
- new opportunities for investment
- the size of the levy fund and proportionality considerations
- the effectiveness and cost-effectiveness of interventions to reduce alcohol-related harms
- Te Tiriti o Waitangi.[5]

Regulatory context of the levy

The Pae Ora (Healthy Futures) Act 2022 states that (Pae Ora (Healthy Futures Act 2022, s.101):

> *levies may be imposed for the purpose of enabling the Ministry to recover costs it incurs -*
> *(a) in addressing alcohol-related harm;*

[5] Note this is not addressed in detail in Stage 1 given time constraints and the limited ability to engage with Māori. This will be a core focus of Stage 2 of the review.

(b) in its other alcohol-related activities

105. In other words, the Act explicitly identifies the primary (and potentially only) purpose of the levy as a cost recovery mechanism, rather than a demand modifying instrument or as Pigouvian tax (a tax intended to internalise any externality associated with alcohol consumption). However, we do consider the potential for the levy to have a demand modifying effect which may result from partial or complete internalisation of externalities.

106. The Pae Ora context expands the scope of the levy due to now being a broader cost recovery for Manatū Hauora rather than Te Hiringa Hauora. However, what remains unclear is the breadth of the application of section 101 of the Pae Ora Act and what activities can and should fall within its ambit. Consideration of this issue needs to take into account the clear distinction that must be drawn between core government activities and responsibilities and the role of the levy fund. Further investigation into this question will be undertaken during stage 2 of this review. This may require legal advice to clarify any uncertainties in interpretation.

Strategic context of the levy

107. The purpose of the Pae Ora Act is to build healthy futures for all New Zealanders and to eliminate health disparities, in particular for Māori. Section 7 of the Act sets out principles which are to underpin the functions of health entities. Of particular relevance to this review are those principles that relate to engaging, resourcing and empowering Māori. These include:

- the health sector should engage with Māori, other population groups, and other people to develop and deliver services and programmes that reflect their needs and aspirations, for example, by engaging with Māori to develop, deliver, and monitor services and programmes designed to improve hauora Māori outcomes (7(1)(b))
- the health sector should provide opportunities for Māori to exercise decision-making authority on matters of importance to Māori (7(1)(c))
- the health sector should provide choice of quality services to Māori and other population groups, including by resourcing services to meet the needs and aspirations of iwi, hapū, and whānau, and Māori (for example, kaupapa Māori and whānau-centered services) (7(1)(d)(i)

108. The levy is now administered in this new context and there is an opportunity to reconsider activities in light of these obligations and to expand by Māori for Māori interventions.

109. Engaging with Māori communities to develop, deliver, and monitor programmes and resourcing services to meet the needs of iwi, hapū, and whānau, are practices intended to increase the effectiveness of services and programmes in delivering equitable outcomes for Māori. Some services and programmes may achieve effectiveness in Māori and Pacific communities through added investment to support these needs. To give effect to the Pae Ora Act principles through the application of the levy fund, a key focus needs to be empowering Māori to determine and deliver the initiatives most

appropriate for their communities. Stage 2 of this review will provide the opportunity for extensive engagement with Māori to build relationships and explore these opportunities when considering the future of the levy fund.

Impacts of alcohol price on consumption

110. Theoretically, as a price-altering mechanism, the alcohol levy does have the potential to have a demand modifying effect which could, in turn, reduce the levy revenue.

111. However, the potential for an increase in the alcohol levy to impact on alcohol demand is modulated by consumer opportunities for substitution to lower priced alcoholic beverages.

112. An additional concern related to the potential of the levy to modulate demand is that impacts of price changes on demand are likely to affect different groups differently. There is potential for any reduction in demand to be concentrated in groups with already relatively low alcohol consumption, groups with low rates of binge or harmful drinking, and groups that experience lower levels of alcohol-related harms. A proportionate reduction in alcohol-related harms is not guaranteed by reductions in alcohol sales.

113. Substitutes and their prices are important because where consumers have the option of switching to acceptable substitutes, the impact of a price change will be greater. However, alcoholic beverages are not a homogenous good. There are many different alcoholic beverage options at different price points. This means substitution within the category of alcoholic beverages is likely to be an attractive option for many consumers: If the cost of a favourite alcoholic beverage increases due to a tax or levy increase, in addition to reducing alcohol consumption, consumers have a range of options, including:

- switching to a cheaper beverage type
- switching to a cheaper brand
- switching to large containers that are associated with a lower cost per volume
- switching to multi-packs that are associated with a lower price per unit
- purchasing alcoholic beverages that are subject to price promotion
- purchasing alcoholic beverages from different outlets
- changing the balance of on-licence to off-licence consumption to favour more off-licence consumption.

114. The range of options for within-category substitution and the ultimate choice consumers make is determined by individual consumer preferences. For example, some consumers may reduce total alcohol consumption rather than switch from on-licence to off-licence consumption when on-licence consumption reaches an unacceptable cost. For others, a perverse effect can occur where alcohol consumed may increase due to substitution from on-licence to off-licence consumption if the cost

savings per unit more than offset increases in price, allowing a greater volume of alcohol to be purchased within the same budget.

115. As noted by the Tax Working Group (Tax Working Group Secretariat, 2018), published research indicates that alcohol excise (and therefore the combination of alcohol excise and alcohol levy) are likely to be effective in discouraging harmful behaviour. This means that on the whole, an increase in prices of alcoholic beverages is likely to result in a reduction in the amount of alcohol consumed for at least those consumers who engage in harmful drinking. But the Tax Working Group also acknowledged the considerable uncertainty around demand response to potential increases in tax and indicated that further research would be unlikely to resolve these issues sufficiently to indicate an optimal tax on alcohol.

116. Despite the uncertainties as to the specific elasticities, broad conclusions can be drawn from the evidence, including:

- price elasticity of demand for alcoholic beverages is not insignificant: a significant increase in price is expected to result in a proportionately smaller but not insignificant decrease in quantity demanded
- price elasticity of demand in groups that engage in heavy and harmful drinking are likely to be the least responsive to a price increase: while a sufficiently large price increase may reduce sales of alcohol, a less than proportionate reduction in alcohol-related harms is to be expected.

117. The alcohol levy is small in proportion to price and in proportion to the alcohol excise tax, so an increase in the levy itself – indeed even a doubling of the levy – is unlikely to have a noticeable impact on alcohol demand, so the levy revenue is unlikely to be negatively affected by the increase in the levy.

118. On the other hand, the alcohol excise tax represents a significant portion of the price of alcohol and making a change in the excise tax is most likely to result in a change in quantity demanded. It is unclear whether the objective of the alcohol excise tax is to raise revenue, in which case increases in the tax will be introduced slowly, or to modulate demand for alcohol (or indeed whether the objective of the tax is shifting over time). Due to its relative size, and in the absence of other regulatory interventions, the excise tax is likely to be the primary price-based lever through which government can influence demand for alcohol and, therefore, potentially reduce alcohol-related harms.

119. The relationship between the excise tax and the alcohol levy will be explored further in stage 2 of this review.

Regressivity of the levy

120. Price policies, including the alcohol levy, the excise tax on alcohol and even the GST, tend to be seen as potentially regressive. That is, lower income households are believed to pay a higher proportion of their incomes when they pay these taxes than higher income households because they spend a higher proportion on the taxed goods. However, in considering the evidence on corrective taxes, the Tax Working Group

found that the alcohol excise tax (and by extension the alcohol levy) appears to be slightly progressive, in contrast to tobacco taxes which are regressive.

121. This means an increase in the levy is unlikely to cause disproportionate harm to lower income households.

Costs of alcohol-related activity

122. Because the alcohol levy is a cost recovery mechanism, an increase in the levy should consider factors that increase the cost of alcohol harm reduction activities funded by the levy. Cost increases may be expected to occur if:

- there is inflation
- there has been an increase in alcohol-related harms
- there is unmet need that the agency has plans to address
- there are new opportunities for investment in cost-effective ways of addressing alcohol-related harms.

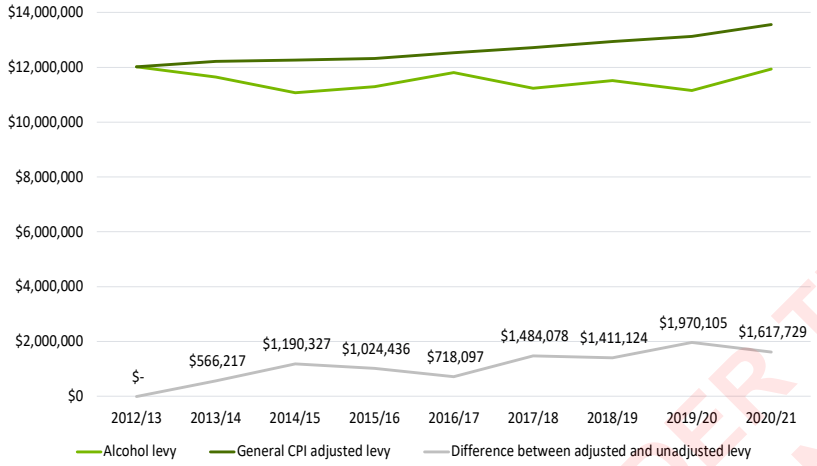
Inflation

123. Indexing to inflation is justified due to the use of the levy fund as a cost recovery mechanism. The services and programmes and other alcohol-related activity undertaken through levy funding are labour intensive. Employment contracts often include an inflation adjustment to wages and salaries, and where they do not, adjustments to wages and salaries to reflect inflation are made periodically to avoid labour shortages. The CPI is the most common measure of inflation that drives adjustments to labour costs and is, therefore, the most justified measure of inflation for the levy to be indexed to (as opposed to the alcohol CPI which would be more appropriate if the alcohol levy purpose was as a demand modulating instrument).

124. If the levy fund had been adjusted using the CPI, it would have generated between $566,217 and $1,970,105 in additional revenue each year since 2012/13 (Figure 12: Levy fund with and without CPR adjustment, and actual levy shortfall relative to adjusted levy).

125. Based on this adjustment, the cumulative levy shortfall due to a lack of adjustment over the past nine years is approximately $10 million.

Figure 12: Levy fund with and without CPI adjustment, and actual levy shortfall relative to adjusted levy



Source: CPI data from Stats NZ

Increase in alcohol consumption and harms

126. Our review of data from a broad range of sources indicates that:

- the amount of alcohol available for sale has increased on a per capita (aged 18+) basis over the last 10 years while actual sales have remained constant, suggesting more variety may be on shelves with intensifying competition in the industry
- growth in the industry is observed mainly in the liquor retailing sector rather than in manufacturing
- imports continue to rise consistent with previous trends
- all forms of alcohol have become more affordable in New Zealand, with households spending a similar share of total expenditure on alcohol regardless of household income level. Internationally, alcohol is not likely to be more affordable in New Zealand than in the average of high-income OECD countries
- New Zealanders drinking habits have not changed significantly over the last 10 years, with the possible exception of Pacific people, in particular Pacific women who appear to be more likely to drink alcohol now than 10 years ago
- consumption of beer continues to decline while consumption of spirits and wine remains fairly constant
- New Zealand is either in the middle or at the bottom of a set of high-income OECD countries in terms of alcohol consumption per capita, depending on the measure used

- the COVID-19 pandemic and restrictions have likely impacted on alcohol consumption in different ways, but no increasing trend in hazardous drinking was observed before or after the pandemic, except for Pacific people who appeared to have an increasing trend towards hazardous drinking prior to the COVID-19 pandemic
- younger New Zealanders are showing a slight trend towards less hazardous drinking and less alcohol-related harm
- international data suggests the prevalence of alcohol use disorders in New Zealand has increased in the last 10 years
- there is no clear evidence of increasing alcohol-related harms, although limited data is available on harms so there is potential for harms to be increasing in areas where data was not readily available
- a key outcome of interest is that New Zealand continues to have a very low rate of premature deaths associated with alcohol compared with similar high income OECD countries. It is unclear how appropriate international comparisons may be (e.g., whether different definitions or data collection may be contributing to this result).

127. We note that there are important gaps in the data and evidence on alcohol consumption and experience of alcohol-related harms. While the limited data indicate that Māori are more likely than non-Māori to engage in heavy or binge drinking, it is unclear whether this has worsened over time. Some evidence indicates a possible improvement (e.g., the percentage of Māori who are heavy drinkers fell from 47.9 in 2012 to 43.2 in 2016 and to 31.0 in 2020), although 2020-2022 data is also muddied by the impact of the COVID-19 pandemic and associated restrictions (NZHS, 2016, 2022). Additionally, much of the recent evidence regarding consumption patterns within population sub-groups is derived from the NZHS and the AUiNZ which rely on self-reported alcohol consumption which is impacted by social desirability and recall biases.

128. Nevertheless, the level of alcohol consumption and the rate of alcohol-related harm across Aotearoa New Zealand remains high.

Unmet need

129. It is important to note that the total levy fund has remained quite constant despite increasing population. Unless the determination of the levy fund has been made taking population growth and measures of unmet need into account, it is possible that the relatively constant levy fund over the last 9 years has been increasingly insufficient to meet population need. However, we were unable to conclude through the analysis of programme data that was made available whether this might be the case. We will consider this further in stage 2 of the review.

The cost of alcohol-related harms

130. We found no evidence that the cost of alcohol-related harms is or has been considered directly in the setting of the levy fund.

131. Our evidence review clearly shows the cost of alcohol-related harms is substantial even if significant uncertainty exists as to the total amount of that cost. A high cost of alcohol-related harms provides a strong incentive to find cost-effective investment opportunities. Unfortunately, the magnitude of alcohol-related harm costs does not provide any indication of the size of investment needed to address those harms. Our review of the evidence did not reveal any known relationship between the cost of harm and the cost of addressing harm. Additionally, our evidence review did not reveal any clear evidence of increasing costs associated with alcohol-related harms.

132. Nevertheless, the gulf between the costs of alcohol-related harm and the cost-recovery function of the alcohol levy remains significant. This could suggest that the existing levy fund is insufficient, and/or the activities and programmes being funded by the alcohol levy are having limited impact on the level of harm. We heard that for Māori, the alcohol levy fund has done little, if anything, to address the disproportionate impact of alcohol-related harms in their communities. More needs to be done to address this significant gap and this will be a core focus of stage 2 of this review.

The effectiveness of interventions

133. In September 2019, the World Health Organization (WHO) launched the SAFER initiative. SAFER promotes the implementation of interventions in five strategic areas, based on evidence of their impact on public health and their cost-benefit analysis.

The SAFER interventions				
STRENGTHEN restrictions on alcohol availability	**ADVANCE** and enforce drink-driving countermeasures	**FACILITATE** access to screening, brief interventions, and treatment	**ENFORCE** bans or comprehensive restrictions on alcohol advertising, sponsorship, and promotion	**RAISE** prices on alcohol through excise taxes and other pricing policies

134. Our interviews and literature review indicated that investments that align with the health sector principles and the WHO SAFER framework are, in the long term, likely to lead to reductions in alcohol-related harm. Almost all the SAFER interventions focus on measures that limit the physical, social, and psychological availability of alcohol. These measures are by far the most successful in reducing alcohol related harm.

135. Many of the interventions funded by the alcohol levy are grounded in the SAFER framework and international good practice. However, due to time constraints and available evidence at stage 1 we were unable to assess the effectiveness of these interventions in reducing alcohol-related harms. In the new Pae Ora context any argument to increase the alcohol levy would need to be supported by robust evidence on how that increase could be spent to effectively reduce alcohol-related harms. We note the importance of the alcohol levy fund being transparent and that Manatū Hauora

is accountable for any expenditure from the levy fund to those who pay the levy as well as the New Zealand public more generally.

136. Most stakeholders interviewed during stage 1 of our work mentioned community investment as an impactful use of alcohol levy funding. However, some felt that the community voice has not been strong enough to date for decisions made about how the alcohol levy fund is spent. In particular, some stakeholders felt that the levy fund should be given to kaupapa Māori organisations first given that Māori have a higher proportion of alcohol-related harm and use in New Zealand in comparison to other population groups. This can be exemplified by the Health Coalition of Aotearoa Roopuu Apaarangi Waipiro (Expert Alcohol Panel) submitting to the Health Select Committee (during the examination of the Pae Ora Bill) that 80% of the alcohol levy should be allocated to Te Aka Whai Ora (Māori Health Authority) as Te Aka Whai Ora has the commissioning capability to empower communities to create healthier environments (Health Coalition of Aotearoa Roopuu Apaarangi Waipiro, 2021). Internationally, Muhunthan et al., found that indigenous-led policies that are developed or implemented by communities can be effective at improving health and social outcomes (Muhunthan et al., 2017).

New opportunities for investment

137. New interventions to improve health and reduce harms associated with unhealthy lifestyles emerge frequently, and evidence on the cost-effectiveness of programmes and services evolves over time. While the alcohol levy revenue is hypothecated for alcohol-related activity, the range of potential activity and the investment opportunity of activity may increase. The broadening of the levy's scope under the Pae Ora Act provides an opportunity to explore new activities and interventions.

CURRENT SETTINGS

138. The current alcohol levy is approximately $11.5 million per annum.

139. For the 2022/2023 year the total levy was allocated between the Public Health Agency and Te Whatu Ora. The Public Health Agency received $979,881 with the balance of approximately $10.5 million allocated to the Health Promotion Directorate within Te Whatu Ora, to fund its alcohol harm reduction activities. From this the Health Promotion Directorate allocated $5.46 million to externally funded programmes. These programmes are delivered with community partners, sector partners, and external technical experts. We were told that the balance of the levy supports internal FTE and operational functions, including the relational capability that is required to deliver the programme of work.

140. For 2023/24 approximately $3.7 million is currently committed to external funding. An additional $5.095 million is anticipated for staff costs and ongoing overheads. We have been advised that additional programme allocations are yet to be finalised and will be confirmed through completed negotiations.

141. Investments are generally grounded in international research, New Zealand research and reflect the WHO SAFER framework. They are focused on achieving long-term value and system shifts to address alcohol related harm.

142. The current levy investment decisions are also underpinned by a logic model found in the National Alcohol Harm Minimisation Framework (HPA, 2022) which is focused on achieving a reduction in alcohol related harms over the long term through:

- Effective policy and regulation
- Environments that are supportive of non-drinking
- Improved drinking cultures/social norms

These changes are considered by the Health Promotion Directorate to be fundamental to decrease alcohol related harm in Aotearoa New Zealand, especially for Māori. However, we were not provided with the detail required to assess the relativity of spend on by Māori for Māori activities or the effectiveness of these activities. This will be a focus of stage 2 of the review.

143. We reviewed three project plans for FY2022/2023 investments, for Community Social Movement, Sport and Alcohol, and the Alcohol Research programme. These documents were high level. For example, the Alcohol Research programme project plan set out names and broad budgets of funded research projects but did not include detailed information about why each research project was funded or what the specific deliverables of a given project were.

144. The Alcohol Research programme plan stated:

The Alcohol Research Programme consists of numerous component projects. The documentation associated with these projects provides greater details than what is included in this programme plan. Please see the section 'Supporting Documents' for an evolving list of associated project plans and other supporting documents.

145. The largest line-item in the Alcohol Research programme plan was 'Alcohol research funding investment (balance of $850,000)', with $529,787 of the Alcohol Research programme budget allocated to this. We were unable to determine what projects were funded or considered for funding under this line item.

146. In the time available for our initial review, we were therefore unable to analyse the rationale, deliverables, monitoring, or evaluation of recent levy investments to identify how they relate to each other, and broader alcohol-related harm reduction work carried out by communities or the government. Further, we were not able to assess in detail how or why any of these investments could or should be expanded if additional levy funds were available. We were also unable to identify how any of these programmes may fulfil research gaps that were identified by stakeholders in our qualitative interviews.

147. Finally, we were unable to assess the appropriateness of more than $5m of the levy being spend on internal FTE and operational functions (including the relational capability that is required to deliver the programme of work) and whether this continues to be appropriate in the new Pae Ora settings where the fund is no longer administered by an independent Crown Entity. This is a key question for stage 2 of the review.

FY2022/2023

148. The table below sets out how the Health Promotion Directorate planned to allocate the $10.5m of accessible levy funding in FY2022/2023 (Table 4: Planned spend in FY 2022/2023).

Table 4: Planned spend in FY2022/2023

Investment	$
Alcohol research	$850,000
Supporting law change	$300,000
Sport and alcohol – breaking the link	$500,000
Alcohol attributable fractions	$50,000
Digital and non-digital resources	$320,000
Kaupapa Māori Health Needs Assessment	$500,000
Community Social Movement	$500,000

Regional Manager Activity	$700,000
Amohia Te Waiora	$551,000
Pasifika Alcohol Harm Minimisation	$725,000
Youth and 1st 2000 Days	$489,000
Direct staff, enabling staff, and overhead costs	$5,095,000

FY 2023/2024

149. The table below sets out the information that the Health Promotion Directorate made available to us regarding known and expected committed spend in FY2023/2024. We were not provided with sufficient information to determine what proportion of the totals has in fact been committed through contracts (Table 5: Committed spend in FY 2023/2024).

Table 5: Committed spend in FY2023/2024

Investment	$
Culture change and targeted community led partnership programmes	$1,900,000
Regulatory stewardship programmes and research	$1,300,000
Kaupapa Māori regulatory policy change	$500,000

150. An additional $5.095 million is anticipated for Staff costs, ongoing overheads and the internal capability that is required to deliver the programme of work. Additional programme allocations are yet to be finalised and will be confirmed through contract negotiations. It is anticipated that the current levy fund of $11.5 million will or has been allocated for the 2023/24 year.

What we heard

151. Our interviews identified that individuals, organisations, and communities with an interest in reducing alcohol-related harm felt that there was a lack of coordination, both within government and between government and non-government stakeholders, in determining how interventions are identified, developed, and delivered. Interviewees were of the view that this lack of coordination leads to significant inefficiencies that could be avoided if all stakeholders were working according to a clear strategy. During our interviews, we also heard concerns from some community stakeholders that too high a proportion of the levy fund is spent on administering the

levy fund, and that as a result, too small a proportion is distributed to the community organisations who are delivering harm reduction programmes.

152. Our interviews indicated that structural interventions such as regulation and tax, and price-based mechanisms are perceived to result in the greatest reduction in alcohol-related harms. The relationship between the levy and excise tax, the ACC levy and broader government revenue collection needs to be explored further in stage 2 of this review to determine the ongoing role and utility of the levy in the new Pae Ora context.

153. By contrast, outside of some specific contexts non-structural interventions such as social media campaigns and marketing activities were generally perceived by stakeholders we interviewed as being either largely, or totally, ineffective at reducing alcohol-related harms. Similarly, our literature review found that structural interventions are consistently rated as being significantly more effective at reducing harm than non-structural interventions. However, our analysis indicates that non-structural interventions designed to de-normalise alcohol use in certain contexts are likely to indirectly contribute to a policy environment, and public discourse, that is more supportive of change. The Law Commission noted (Law Commission, 2010):

> *We can recommend changes to the law but we are under no illusion that this will be sufficient….. To bed in enduring change the need for it has to be reflected in the hearts and minds of the community and that requires an attitudinal shift and a new drinking culture.*

We note that Te Hiringa Hauora has had a particular focus on interventions to shift attitudes around alcohol consumption. These interventions are long-term in nature and from the information available in the short timeframes of stage 1 we were unable to analyse their impact. Stage 2 will provide an opportunity to consider these type of interventions more fully.

Summary

154. While we note that external investments are grounded in international research and reflect the WHO SAFER framework, we have had limited time to engage widely with Māori to provide a considered assessment of the extent to which existing investments align with the principles of the Pae Ora Act and the new operating context as set out above. Further qualitative evidence is required with a particular focus on Māori communities and their expectations. This will be a key focus of stage 2 of the review.

155. Furthermore, the evidence available for the stage 1 rapid review did not enable a robust assessment of the effectiveness of particular activities in reducing alcohol-related harm and more generally their overall cost effectiveness. We acknowledge there are some limitations in undertaking these types of assessments given the nature of the activities and their long-term strategic focus. However, this is an important part of the analysis that will need to be undertaken as part of stage 2 to inform any assessment of current allocations of the levy fund in light of the new context.

ANALYSIS AND RECOMMENDATIONS

Context

156. Our stage 1 rapid review has demonstrated that:

- the alcohol levy is disproportionately small relative to even the most conservative estimates of the cost of alcohol related harm in New Zealand, but the published research on alcohol costs does not indicate any particular relationship between costs of harms and costs of addressing harms
- alcohol related harm is more prevalent in some sub-populations
- structural interventions may have the greatest potential to reduce alcohol related harm
- the Pae Ora Act specifies the purpose of the levy as a cost recovery instrument, making it inappropriate for the levy to be used as a demand modifying intervention, unlike the excise tax which can be used in this way
- it was not possible to quantify to what extent current levy investments reduce alcohol related harm in the timeframe and with the material made available
- it may not be possible to quantify the cumulative level of harm reduction that levy investments may have, or will, achieve in the timeframe and with the material made available
- more New Zealand specific data on alcohol-related harm and the effectiveness of interventions would be useful to be able to provide strong evidence-based conclusions
- there is a greater amount of overseas evidence on the effectiveness of harm reduction interventions compared to New Zealand specific evidence
- among those that we engaged, some participants perceived that the lack of a clear national alcohol-related harm reduction strategy may lead to inefficiencies in the investment of the levy
- among those that we engaged, some participants perceived that the Government is not doing enough to reduce alcohol related harm
- the Act has potentially broadened the scope of possible areas of levy investments
- the alcohol levy rates are very low in proportion to prices and the excise tax on alcohol products, so even a substantial increase in the alcohol levy is unlikely to have an impact on alcohol sales

Quantum

157. As a cost recovery mechanism, the levy has previously been set according to expectations with regards to the cost of delivering programmes and services to address alcohol-related harm. Even with the Pae Ora Act, the levy is still hypothecated, but broadened to include other alcohol-related activities across Health entities, which could

include funding research to fill evidence gaps for example or funding to support the development of a cross agency alcohol strategy and action plan.

158. Even without expansion of activity to 'other alcohol-related activities' across the Health entities, an increase in the levy fund could be needed to address any current unmet need for programmes and services to address alcohol-related harms, and/or the effective decrease in the real value of the levy fund over time.

159. Consideration of the cost of addressing alcohol-related harm and other alcohol related activities in line with the Pae Ora Act requires further investigation into the relationship between core government activities and the levy fund. Activities that might have been appropriate for an independent agency may no longer fit within the context of a core government agency, which is required to give effect to government policy. While we acknowledge that there are some internal FTE and operational costs in administering the levy fund and associated activities, the integrity of the levy fund is potentially at risk if almost half of the fund continues to be used for these functions in the medium to long term. As the levy fund is now held and administered by a government agency rather than an independent body, the appropriateness of using the fund in this way will need to be carefully considered through stage 2 of this review.

160. There is an expectation from communities that the levy is spent on effective and appropriate interventions and that there is transparency and accountability across this spend. Similarly, industry representatives indicated that the amount of alcohol levy that they were required to pay was of limited concern to them, particularly when put in the context of the amount of excise tax which is paid. However, they were clear that they would not support an increase unless evidence is provided of effective levy funded activities that reduces harmful drinking, and that there is greater transparency and accountability surrounding the use of the levy fund. In this context, it is important to note that industry representatives did not consider all drinking to be harmful.

161. Engaging with Māori and Pacific communities to develop, deliver and monitor programmes, and resourcing services to meet the needs of iwi, hapū, and whānau, are practices intended to increase the effectiveness of health services and programmes to contribute to equitable outcomes for Māori and Pacific peoples. Despite the current National Alcohol Harm Minimisation Framework being grounded in Te Tiriti, there is significant opportunity to expand by Māori for Māori activities to address alcohol related harms. The role of Te Aka Whai Ora in this space needs to also be carefully considered as a Pae Ora partner.

162. Raawiri Ratuu, a key stakeholder and kaiarahi of the Kōkiri ki Tāmaki Makarau Trust, asked that we strongly impress on the government the need to make no changes to the levy until thorough engagement with Māori is undertaken. Mr Ratuu considered that before engagement, time must be taken to support Māori communities to understand how the levy came to be, why the levy exists, what the levy is used for, and how the levy is set. Mr Ratuu did not consider that the time allocated for our initial stage of the review would allow for adequate engagement with Māori.

Determining the cost of addressing alcohol-related harms and alcohol related activities

163. Because the alcohol levy is a cost recovery mechanism, an increase in the levy should consider factors that increase the cost of alcohol harm reduction activities funded by the levy.

164. The timeframes and available material for stage one has precluded us from conducting a deeper assessment of existing or proposed investments, making it difficult to provide an evidence-based assessment of what the quantum of the alcohol levy should be at this time. We are also hindered by the fact that for the most part, the 2023/24 levy has been committed. This means that existing interventions would not be subject to the same assessment as any new initiatives.

Options

165. Noting the constraints above we have concluded that there are three options to consider in regard to setting the quantum of the alcohol levy in 2023/24.

- Status quo
- Inflationary adjustment
- Increase based on actual cost of a set of recommended evidence-based investments. These investments include expansion of existing programmes where the evidence of effectiveness was available and new interventions based on international research, New Zealand research, and feedback from communities.

166. Table 6 below sets out the anticipated total levy quantum for each option, as well as the associated increase per unit of alcohol. Table 7 on the following pages summarises the costs and benefits of each option.

167. All options are presented on the assumption that no ongoing financial commitments will be made past June 2024 for any of the proposed interventions listed, and that the outcomes of stage 2 of this review will inform the role, function, and quantum of the levy beyond June 2024 – as well as future funding commitments. This will include consideration of the relationship between the levy and the excise tax in the new operating context. As discussed, (in section 2 of this report) the excise tax, not the levy, is likely to continue to be the primary lever through which government can influence demand for and consumption of alcohol and, therefore, potentially reduce alcohol-related harms.

Table 6: Cost of options

Option	Levy Quantum	Increase of	Class of alcohol	Current rate for 2022/23 (cents per litre)	New rate for 2023/24 (cents per litre)	Increase in rate (cents per litre)
Status Quo	$11.5 million	Nil				Nil
			A	0.5594	0.5594	0
			B	1.6282	1.6282	0
			C	2.9833	2.9833	0
			D	3.7291	3.7291	0
			E	6.3343	6.3343	0
			F	14.4172	14.4172	0
CPI adjustment	$21.5 million	Approx. $10 million				Between 0.4065 cents and 9.7312 cents per litre depending on alcohol content
			A	0.5594	0.9659	0.4065
			B	1.6282	2.8463	1.2181
			C	2.9833	5.1517	2.1684

			D	3.7291	6.4396	2.7105
			E	6.3343	11.1727	4.8384
			F	14.4172	24.1484	9.7312
Programme cost recovery assessment and adjustment	$ 16 million	$5.5 million (For new initiatives)				Between 0.1594 cents and 3.5537 cents per litre depending on alcohol content
			A	0.5594	0.7188	0.1594
			B	1.6282	2.1182	0.4900
			C	2.9833	3.8338	0.8505
			D	3.7291	4.7922	1.0631
			E	6.3343	8.3145	1.9802
			F	14.4172	17.9709	3.5537
	$21 million	$9.5 million (Expansion of priority existing initiatives)				Between 0.3841 cents and 9.1696 cents per litre depending on alcohol content
			A	0.5594	0.9435	0.3841
			B	1.6282	2.7801	1.1519

			C	2.9833	5.0319	2.0486
			D	3.7291	6.2898	2.5607
			E	6.3343	10.9128	4.5785
			F	14.4172	23.5868	9.1696
	$ 26.5 million	$15 million (For expansion of existing and standing up of new initiatives)				Between 0.6312 cents and 15.3471 cents per litre depending on alcohol content
			A	0.5594	1.1906	0.6312
			B	1.6282	3.5082	1.8800
			C	2.9833	6.3497	3.3664
			D	3.7291	7.9372	4.2081
			E	6.3343	13.7710	7.4367
			F	14.4172	29.7643	15.3471

Maintain status quo

168. The current Alcohol levy is approximately $11.5 million per annum.

169. Given the constraints within stage 1 of this review we lack the evidence to be able to comfortably recommend moving beyond the status quo for the 2023/24 financial year. Stage 2 of this review will provide the opportunity to better engage with communities and consider fundamental questions relating the role, scope, and purpose of the levy. Answers to these questions are needed to fully assess the appropriate levy quantum.

170. Maintaining the status quo ensures continuity of existing commitments pending the outcomes of stage 2 of this review. However, there are risks with maintaining the status quo. We found that the levy quantum has remained constant over a period of 9 years, despite population growth which would have increased the need for programmes and services to address alcohol-related harms even without the prevalence of alcohol-related harms increasing. In other words, the aggregate cost to the system of addressing alcohol-related harm has likely increased, even if the average level of alcohol-related harm experienced by individuals has remained steady. We also found that if the new health sector principles translate into increased costs per service user or require services being made acceptable and appropriate to a wider range of users, then there is a justification for an increase in the levy fund to cover these costs.

171. Furthermore, our interviews indicated that stakeholders do not think that the government is taking adequate action to reduce alcohol-related harm. Maintaining the status quo could also be seen as a signal that existing spending is sufficient to enable Te Whatu Ora to comply with the Pae Ora Act. This is a question that needs to be addressed in stage 2 of the review.

Inflationary adjustment

172. Key costs involved in both administering the levy and delivering harm reduction interventions are likely to have increased since the levy was last adjusted. However, it is unclear what adjustment should be made, if any.

173. One option is to adjust the levy quantum based on the CPI. The general Consumer Price Index (CPI) is the most appropriate measure of inflation in this context due to it underpinning many employment agreements and wage negotiations, and the likely labour intensity of harm reduction interventions. As discussed in section 7, if the levy fund had been adjusted using the CPI, it would have generated between $566,217 and $1,970,105 in additional revenue each year since 2012/13. Based on this adjustment, the cumulative levy shortfall due to a lack of adjustment over the past nine years is approximately $10 million.

174. However, there are some risks with this approach.

- it is unclear whether a CPI increase would accurately reflect the increase in actual costs of existing programmes

- a single-year CPI adjustment may not meet the increased costs of on-going programmes. This also limits the potential for levy investments in new or expanded activities
- decision-makers must agree to the start date of a multi-year CPI increase, which may be difficult to determine and justify, given the levy could have been, but was not, adjusted based on the CPI in any of the last nine years
- an expectation may be created that the levy will continue to be adjusted on this basis annually.

175. As with maintaining the status quo, this approach does not consider whether current investment is the right investment, is delivering effective return, and is in line with the Pae Ora Act. As noted above, more investigation needs to be undertaken at stage 2 of this review to determine this.

Increase to fund specific investments

176. All interviewees agreed that to meaningfully reduce alcohol-related harm, the government must commit to a long term, consistent, and strategic programme of interventions that induces trust between government and non-government stakeholders.

177. Aligning the levy fund to the cost of specific, needed investments would be consistent with its cost recovery mandate and is the option which is best aligned with the Pae Ora Act and principles. However, it is difficult at this stage to provide a robust analysis as to what programmes or activities should (or should not) be included. This assessment is also muddied by the current allocation of funding to existing programmes and, in particular, internal FTE and operational functions for the Health Promotion Directorate and the question as to whether these are still appropriate uses of the fund in the new settings.

Preferred option

178. Any increase in line with Option 2 or 3 proceeds on the presumption that the current allocation is appropriate and consistent with Pae Ora and expectations from communities. Although there may be elements of existing activities that meet these criteria, we are not in a position at this stage of the review to support that conclusion.

179. **We therefore recommend:**

C. The status quo remains for 2023/24

D. No commitments of levy funding are made either internally or externally beyond June 2024 until stage 2 of this review is complete and any recommendations regarding the future, scope and application of the fund are considered.

Alternative option

180. If there were, however, to be an increase in the levy fund for 2023/24, **we recommend:**

A. Any increase is calculated on the actual increase in the cost of ongoing interventions as well as the actual cost of additional interventions to be undertaken. In other words, the interventions need to be determined and agreed before calculating the quantum of any increase. This is in line with the cost recovery requirements of the Pae Ora Act.

B. No commitments of levy funding are made either internally or externally beyond June 2024 until stage 2 of this review is complete and any recommendations regarding the future, scope and application of the fund are considered.

178. While the available evidence is limited at this stage of the review, we have identified some key existing programmes which could be extended and some new initiatives that could be implemented in 2023/24. We expect that if a decision was made to proceed with increasing the levy quantum for FY2023/24, then the most effective uses of the levy fund in FY2023/24 are likely to be:

- coordinating and supporting all-of-sector strategic alignment between government and communities; and
- coordinating and supporting the development of systems that ensure clear and relevant evidence of the effectiveness of harm reduction interventions is available to individuals and communities.

179. Te Hiringa Hauora's National Alcohol Harm Minimisation Framework (the Framework) has guided the development of existing programmes. Our analysis indicates that the Framework is based on the best available national and international evidence and recommendations, including the WHO SAFER framework. Further, our analysis indicates a sufficient level of alignment between the Framework and the new requirements for health entities under the Act. While we have recommended awaiting the findings of stage 2 of the review, this gives us a higher level of confidence that increasing the levy to provide additional funds to these programmes for FY2023/24 would be expected to deliver benefit. We have also identified some additional activities that align with Pae Ora outcomes and international good practice examples.

180. On this basis, we have identified that, to fund certain additional investments in FY2023/24, the levy could be increased by an additional $5.5m to $15m. These investments are set out below. It is important to note that this increase would have a relatively small impact on the price of alcohol, as set out in table 7 above.

Allocate additional funding in relation to sports sponsorship and advertising

181. In FY 2023/24, additional levy funding could be allocated to the sports sponsorship removal demonstration projects and associated monitoring and evaluation.

182. Of the non-structural interventions we discussed in our interviews, the removal of alcohol sponsorship and advertising from sports was perceived to be the most effective at reducing alcohol harm. Our literature review found some evidence that restricting alcohol marketing is likely to influence the climate of tolerance around alcohol and alcohol policies. Further, many interviewees commented positively on the

effectiveness of similar initiatives in relation to tobacco sponsorship and advertising and believed that a similar approach should be taken in relation to alcohol. However, we are conscious that some interviewees held this view primarily on the basis of evidence from overseas jurisdictions, which as we have discussed, may not be entirely applicable in Aotearoa New Zealand.

183. We understand that, in FY 2022/2023, the Health Promotion Directorate invested $500k in demonstration projects to gain evidence of the effectiveness of this intervention in New Zealand contexts. We also understand that an expansion of this programme has been costed and could be implemented relatively quickly.

184. We have found sufficient evidence to warrant immediate investigation to support communities to decide whether this is an appropriate long-term intervention. Accordingly, $5 - 10m of additional levy funding could be allocated to delivering The Health Directorate's expanded programme.

Fund priority research

185. It was apparent from our literature review that there is a large body of international evidence on alcohol harm and harm reduction, but a relatively smaller body of evidence that is specific to New Zealand contexts. Some stakeholders cautioned us that policy makers could not necessarily rely on findings from international research applying in New Zealand. Our analysis indicates that it is essential for communities to be able to access robust and applicable research findings to inform their ongoing participation in alcohol harm related activities and licensing decision-making, policy-making, monitoring, and reporting.

186. We understand that Te Hiringa Hauora developed an Alcohol Research Programme, and that $850,000 of the levy fund was allocated to carrying out that programme. There remain significant research gaps in the New Zealand context. We estimate that $0.5 - $2m of any additional levy funding could be allocated to fund research projects to address some of the highest priority research projects.

Data collection

187. In FY 2023/2024, we recommend increased investment of levy funds in the collection of data on the cost of alcohol harm and the effectiveness of various interventions in relation to Māori, Pacific, and rural communities. Our review has identified a need to collect time-series data to begin to support communities to understand alcohol harm and the impact of the range of previous and potential interventions in the long term. In particular, data should be collected on any unmet need for programmes and services to address alcohol harms, to enable communities to effectively advocate for increased investment in the future. This data must be disaggregated and collected from a variety of sources including qualitative data from communities and whānau.

188. While some interviewees were of the view that there is already sufficient international data to inform decisions about particular harm reduction interventions, other interviewees impressed on us that that data collected in overseas jurisdictions cannot necessarily be assumed to apply in the Aotearoa New Zealand context. We are particularly conscious that Aotearoa New Zealand has a number of unique

constitutional arrangements in relation to specific sub-populations that may affect the applicability of overseas data on the effect of alcohol and associated interventions on certain sub-populations. We estimate that $1 -$2m could be invested in improving data collection over FY 2023/24.

Support community participation in licence hearings

189. We understand that Te Hiringa Hauora was providing some funding to Community Law Centres Aotearoa to support communities' participation in local decision making on alcohol.

190. Our interviews indicated that participation in district licence hearings is perceived to be one of the few opportunities available to communities to carry out a health protection activity, namely reducing the availability of alcohol in their environment. We heard that it is difficult, for several reasons, for communities to meaningfully participate in licensing hearings. One of the primary concerns raised was that community members seeking to oppose a license are often under-resourced compared to the business applying for a licence.

191. A review of the Community Law Alcohol Harm Reduction Project found that project improved the quality and effectiveness of community participation in licensing hearings and that overall participation in licencing hearings appeared to be increasing with the support of the project (Allen + Clarke, 2021).

192. We estimate $1.25m of additional levy funding could be allocated to expand the geographical coverage of this initiative with a particular focus on those areas and regions of high deprivation.

Continue and increase funding for regional community initiatives aimed at reducing alcohol related harm

193. We recommend increased investment in community initiatives aimed at reducing alcohol related harm. Most interviewees strongly impressed on us that community organisations have both the best understanding of alcohol harm in their environments and the best understanding of how to reduce that harm within the constraints of the present legislative regime.

194. In particular, we recommend that additional levy funds be allocated for the development of further capacity amongst iwi, hapū, hapori, whānau, Māori authorities, and health providers to contribute to alcohol harm reduction. We consider that Te Aka Whai Ora would be best placed to be responsible for monitoring and evaluating the effectiveness of investments made in this regard. We note that Te Aka Whai Ora will require additional levy funding to provide secretariat and administrative support to this initiative and to distribute funds to iwi, hapū, hapori, whānau, Māori authorities, and health providers to deliver initiatives and activities designed by and delivered by them.

195. The risks and benefits of the options discussed above is summarised at Table 8 below (Table 7: Costs and benefits of levy quantum options).

Table 7: Costs and benefits of levy quantum options

Levy Quantum	Benefits	Risks	Consistency with Pae Ora	Consistency with Te Tiriti Obligations	Ability to be implemented quickly
Status Quo	• Simple, easy to implement. • Builds on momentum of independent evidence and research aligned to Pae Ora. • Allows full review to be completed before any change-decision made.	• Due to pre-existing commitments, limits scope for a health-agency partnership approach to work programme development in a manner consistent with Pae Ora Act. • Communities may perceive status quo as government inaction. • Limited scope for new/expanded initiatives.	**Moderate**	**Moderate**	**High**
CPI increase	• Clear and proven method • Enables existing on-going programmes to receive an uplift if needed [note: it would be difficult to ensure increased funding accurately reflects actual costs – see risks] • If CPI increase applied across multiple years, provides additional funding to cover new or expanded initiatives. • Scope to expand joint entity initiatives across Te Aka Whai Ora and the Public Health Agency.	• If single year CPI adjustment made unlikely to accurately meet increased costs of existing programmes (may still result in real-terms cuts) and limited (if any) scope for new/expanded initiatives. • Multi-year CPI adjustment requires agreement as to start date for calculation (decision makers' time is constrained) and harder to justify as opportunity to make this adjustment has been available each year. • Perception that current spending is what is required and in line with Pae Ora Act.	**Moderate**	**Moderate**	**Low**

Levy Quantum	Benefits	Risks	Consistency with Pae Ora	Consistency with Te Tiriti Obligations	Ability to be implemented quickly
		• Potential perception CPI adjustments will be ongoing year on year (notwithstanding full review of Levy not due until Q4 2023).			
Increase based on cost of existing programmes and cost of expanding existing and/or standing up new programmes / interventions	• Creates opportunities to be more transparent around spend and reason for increase. • Based on cost of interventions as envisaged by Pae Ora Act. • Good transition year option (lower likelihood of appearing to set the pattern for future years). • Allows for innovation and partnership (health-agencies partnership, and increased partnership with communities), and increased research and data collection. • Can clearly identify new work that will create broader stakeholder engagement (mitigating risk of ongoing perception of lack of transparency) • Capacity to invest in improved data collection (and sharing), providing a stronger evidence base for work programmes.	• Requires management of expectations around the time it takes to see effects from interventions. • Difficult to assess programmes in short period of time. There is a degree of risk in assuming that expanding existing-funded (or implementing new) programmes will have a positive impact based on their alignment with good practice in other areas • Total agreed increase requires justification to demonstrate alignment with Pae Ora Act.	**High**	**High**	**Moderate**

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Independent Review of the Alcohol Levy

Phase 1 rapid review
26 March 2023

ALLEN + CLARKE

NZIER
NEW ZEALAND INSTITUTE OF ECONOMIC RESEARCH

Prepared for Manatū Hauora by *Allen + Clarke* and the New Zealand Institute of Economic Research.

Citation: *Allen + Clarke*, NZIER (2023), *Interim Report of Independent Review of the Alcohol Levy*. Wellington: Manatū Hauora

Acknowledgements

Allen + Clarke and NZIER recognise the substantial efforts of individuals and organisations involved in addressing alcohol related harm in Aotearoa New Zealand. This phase of the review was undertaken under extremely tight time constraints to enable interim findings to inform the levy setting process for 2023/24. We would like to thank all the people that contributed to this review for their time and input in a short space of time. We would particularly like to acknowledge the participation of individuals that we interviewed and officials from Manatū Hauora, Te Whatu Ora, and Te Aka Whai Ora (both individually and jointly as members of the Alcohol Levy Working Group which was established to support this review).

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EXECUTIVE SUMMARY

Since 1977, a levy has been raised on alcohol produced or imported for sale in Aotearoa New Zealand. The alcohol levy is hypothecated (i.e., directed to a specific use). It has been used to undertake activities to reduce alcohol-related harm. The current Alcohol levy is approximately $11.5 million per annum.

In 2022 the Pae Ora (Healthy Futures) Act (Pae Ora Act) changed the way in which the levy would be collected and potentially the scope of activities for which it could be used. This change places the levy within a different context, as the scope of the costs incurred by Manatū Hauora under the Pae Ora Act are wider than those previously identified for Te Hiringa Hauora. The opportunities for alcohol-related harm reduction activities are also broadened.

Commented [KT1]: Still collected same way – (visa Customs) but directed via Vote Health to Manatū Hauora – to be allocated across the health entities.

Allen + Clarke and the New Zealand Institute of Economic Research (NZIER) conducted a rapid review of the ~~the~~ alcohol levy within the new Pae Ora context to provide short term recommendations to inform decisions relating to the 2023/24 financial year. This report will be followed by the second stage of the review, which consists of ~~a~~ more in-depth stakeholder engagement, research, and analysis, and will result in medium-and-long term recommendations for the alcohol levy. Stage 2 is likely to continue through to November 2023.

Key Findings

Our stage 1 rapid review has demonstrated that:

- the alcohol levy is disproportionately small relative to even the most conservative estimates of the cost of alcohol related harm in New Zealand, but the published research on alcohol costs does not indicate any particular relationship between costs of harms and costs of addressing harms
- alcohol related harm is more prevalent in some sub-populations
- structural interventions may have the greatest potential to reduce alcohol related harm
- the Pae Ora Act specifies the purpose of the levy as a cost recovery instrument, making it inappropriate for the levy to be used as a demand modifying intervention, unlike the excise tax which can be used in this way
- it was not possible to quantify to what extent current levy investments reduce alcohol related harm in the timeframe and with the material made available
- it may not be possible to quantify the cumulative level of harm reduction that levy investments may have, or will~~,~~ achieve in the timeframe and with the material made available
- more New Zealand specific data on alcohol-related harm and the effectiveness of interventions would be useful to be able to provide strong evidence-based conclusions

- there is a greater amount of overseas evidence on the effectiveness of harm reduction interventions compared to New Zealand specific evidence
- among those that we engaged with, some participants perceived that the lack of a clear National alcohol-related harm reduction strategy may lead to inefficiencies in the investment of the levy
- among those that we engaged with, some participants perceived that the Government is not doing enough to reduce alcohol related harm
- the Pae Ora Act has potentially broadened the scope of possible areas of levy investments
- the Pae Ora Act anticipates the alcohol levy being used across health entities
- the alcohol levy rates are very low in proportion to prices and the excise tax on alcohol products, so even a substantial increase in the alcohol levy is unlikely to have an impact on alcohol sales.

Our evidence review showed the cost of alcohol-related harms is substantial even if significant uncertainty exists as to the total amount of that cost. A high cost of alcohol-related harms provides a strong incentive to find cost-effective investment opportunities. Unfortunately, the magnitude of alcohol-related harm costs does not provide any indication of the size of investment needed to address those harms. Our review of the evidence did not reveal any known relationship between the cost of harm and the cost of addressing or preventing harm. Additionally, our evidence review did not reveal any clear evidence of increasing costs associated with alcohol-related harms.

Nevertheless, the gulf between the costs of alcohol-related harm and the cost-recovery function of the alcohol levy remains significant. This could suggest that the existing levy fund is insufficient, and/or the activities and programmes being funded by the alcohol levy are having limited impact on the level of harm. We heard that for Māori, the alcohol levy fund has done little, if anything, to address the disproportionate impact of alcohol-related harms in their communities.

Because the alcohol levy is a cost recovery mechanism, an increase in the levy should consider factors that increase the cost of alcohol harm reduction activities funded by the levy. The timeframes and available material for stage one has precluded us from conducting a deeper assessment of existing or proposed investments, making it difficult to provide an evidence-based assessment of what the quantum of the alcohol levy should be at this time. We are also hindered by the fact that for the most part, the 2023/24 levy has been committed. This means that existing interventions would not be subject to the same assessment as any new initiatives.

Furthermore, consideration of the cost of addressing alcohol-related harm and other alcohol related activities in line with the Pae Ora Act requires further investigation into the relationship between core government activities and the levy fund. As the alcohol levy is now administered by a government agency rather than an independent entity, the landscape has changed.

Noting the constraints above we have concluded that there are three options to consider in regard to setting the quantum of the alcohol levy in 2023/24.

- Status quo
- Inflationary adjustment
- Increase based on actual cost of a set of recommended evidence-based investments. These investments include expansion of existing programmes where the evidence of effectiveness was available and new interventions based on international research, New Zealand research, and feedback from communities.

Maintain status quo

Given the constraints within stage 1 of this review we lack the evidence to be able to comfortably recommend moving beyond the status quo for the 2023/24 financial year. Stage 2 of this review will provide the opportunity to better engage with communities and consider fundamental questions relating the role, scope, and purpose of the levy. Answers to these questions are needed to fully assess the appropriate levy quantum.

Inflationary adjustment

Key costs involved in both administering the levy and delivering harm reduction interventions are likely to have increased since the levy was last adjusted. However, it is unclear what adjustment should be made, if any. One option is to adjust the levy quantum based on the CPI. As with maintaining the status quo, this approach does not consider whether current investment is the right investment, is delivering effective return, and is in line with the Pae Ora Act. As noted above, more investigation needs to be undertaken at stage 2 of this review to determine this.

Increase to fund specific investments

To meaningfully reduce alcohol-related harm, the government must commit to a long term, consistent, and strategic programme of interventions that induces trust between government and non-government stakeholders. Aligning the levy fund to the cost of specific, needed investments would be consistent with its cost recovery mandate and is the option which is best aligned with the Pae Ora Act and principles. However, it is difficult at this stage to provide a robust analysis as to what programmes or activities should (or should not) be included. This assessment is also muddied by the current allocation of funding to existing programmes and operational functions.

Recommendations

On balance **we recommend:**

A. The status quo remains for 2023/24

B. No commitments of levy funding are made either internally or externally beyond June 2024 until stage 2 of this review is complete and any recommendations regarding the future, scope and application of the fund are considered.

INTRODUCTION

1. In Aotearoa New Zealand a levy is raised on alcohol produced or imported for sale. The levy is collected by Customs NZ. The current total levy figure is approximately $11.5 million per year, with minor fluctuations annually depending on alcohol production and sales. The alcohol levy is collected at different rates for different classes of alcoholic beverages. The levy is calculated at a cost per litre of alcohol for each class. The relative total collected has not been increased since 2013. The levy was originally created by the Alcohol Advisory Council Act 1976[1] to fund the newly established Alcohol Advisory Council of New Zealand[2] (Alcohol Advisory Council Act 1976, s.20).

2. The alcohol levy is hypothecated (ie, directed to a specific use). Prior to the commencement of the Pae Ora (Healthy Futures) Act 2022 (the Pae Ora Act), Te Hiringa Hauora | Health Promotion Agency received the total levy fund under the New Zealand Public Health and Disability Act 2000 (Health and Disability Act), for the purpose of enabling the agency to recover costs incurred in addressing alcohol-related harm, and in its other alcohol-related activities (New Zealand Public Health and Disability Act 2000, s. 59AA). Section 58 of the Health and Disability Act set out the functions, duties, and powers of Te Hiringa Hauora. It states (New Zealand Public Health and Disability Act 200, s58):

   (1) HPA must lead and support activities for the following purposes:
   - *a. promoting health and wellbeing and encouraging healthy lifestyles*
   - *b. preventing disease, illness, and injury*
   - *c. enabling environments that support health and wellbeing and healthy lifestyles*
   - *d. reducing personal, social, and economic harm.*

   (2) HPA has the following alcohol-specific functions:
   - *a. giving advice and making recommendations to government, government agencies, industry, non-government bodies, communities, health professionals, and others on the sale, supply, consumption, misuse, and harm of alcohol so far as those matters relate to HPA's general functions:*
   - *b. undertaking or working with others to research the use of alcohol in New Zealand, public attitudes towards alcohol, and problems associated with, or consequent on, the misuse of alcohol.*

[1] The name of the original Act, the Alcoholic Liquor Advisory Council Act was amended in 2000.
[2] The original name, the Alcoholic Liquor Advisory Council was amended in 2000.

3. The Pae Ora Act came into force on 1 July 2022 and is the legislative basis for the reform of the health system. Through the Pae Ora Act, Te Hiringa Hauora was disestablished, and its functions were placed within Te Whatu Ora.

4. Manatū Hauora now receives the levy fund collected via the Vote Health appropriation and has responsibility for distributing the levy across the Health entities - Manatū Hauora, Te Whatu Ora and Te Aka Whai Ora (Pae Ora (Healthy Futures Act 2022, s.101).

5. All aspects of the Pae Ora Act must be read in light of its purpose, which is to provide for the public funding and provision of services in order to (Pae Ora (Healthy Futures) Act 2022, s. 3):

    a. *protect, promote, and improve the health of all New Zealanders; and*
    b. *achieve equity in health outcomes among Aotearoa New Zealand's population groups, including striving to eliminate health disparities, in particular for Māori; and*
    c. *build towards pae ora (healthy futures) for all New Zealanders.*

6. The Pae Ora Act uses wording nearly identical to the New Zealand Public Health and Disability Act 2022, but now states that the levy is for the purpose of Manatū Hauora recovering costs it incurs in addressing alcohol-related harm, and in its other alcohol-related activities.

7. This change places the levy within a different context, as the scope of the costs incurred by Manatū Hauora under the Pae Ora Act are wider than those previously identified for Te Hiringa Hauora. The opportunities for alcohol-related harm reduction activities are also broadened.

Purpose

8. Through an open market process, *Allen + Clarke* and the New Zealand Institute of Economic Research (NZIER) were commissioned by the Public Health Agency (within Manatū Hauora) to undertake an independent review of the alcohol levy settings, and funding allocations and programmes in Aotearoa New Zealand.

9. The initial stage, of which this report is a product of, is a rapid review of the current state of the alcohol levy in Aotearoa New Zealand with short-term recommendations that can inform the 2023/24 financial year. This report (the interim report) will be followed by the second stage of the review, which consists of a more in-depth stakeholder engagement, research, and analysis, and will result in medium-and-long term recommendations for the alcohol levy (the final report). Stage 2 is likely to continue through to November 2023.

Scope of rapid review

10. Stage 1 of the review is focused on a rapid review of the current state of the levy fund.

The stage 1 rapid review focused on 7 key areas of inquiry as specified in the Request for Proposals (RFP) and contract of services:

1. the current evidence on the cost of alcohol related harm
2. the total levy fund collected and how that compares with other levies collected within Aotearoa.
3. how the total fund collected compares to alcohol levies collected in other relevant jurisdictions
4. the total levy fund and its impact on alcohol-related harm generally
5. the current focus of levy funding and whether it takes a 'for Māori, by Māori approach'
6. the potential positive impact of an increase in the levy on Māori and other at-risk communities
7. significant gaps in funding, or areas for expenditure that could be prioritized in 2023/24

11. The output for stage 1 is interim recommendations to inform the levy setting for the 2023/24 financial year, pending the full review findings at the end of stage 2.

Approach

12. *Allen + Clarke* undertook the stage 1 review between 3 February and 15 March 2023. This involved an initial, fast-paced review of the current state of the alcohol levy.

13. In total 16 interviews were undertaken with people who are involved with the administration, distribution, use, or oversight of the alcohol levy fund including representatives from:

    - The Health Promotion Directorate (formerly Te Hiringa Hauora)
    - Other divisions of Te Whatu Ora
    - Te Aka Whai Ora
    - Manatū Hauora
    - Hāpai Te Hauora
    - Academia
    - Non-Government Organisations

    We also interviewed three alcohol industry representatives.

14. The interviews were intended to serve the purpose of whakawhanaungatanga (establishing strong relationships) and helping the review team understand the current levy settings, as well as previous investment decisions. They were also used to inform a stakeholder engagement plan for the second stage of the project.

15. Initial discovery documents were provided by Manatū Hauora, the Health Promotion Directorate (Te Whatu Ora) and other stakeholders. These documents were supplemented by *Allen + Clarke's* desk-based review and NZIER's analysis of existing data and evidence.

16. An alcohol levy working group (ALWG) was established to support this review. The ALWG was made up of officials from Manatū Hauora, Te Whatu Ora, and Te Aka Whai Ora. The ALWG met with the review team regularly and provided oversight and feedback throughout the stage 1 review process.

17. This report was provided in draft form to Manatū Hauora and the ALWG on 16 March 2023 for review and feedback. It was then finalised on X 2023.

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Limitations

18. The findings of this rapid review should be considered in the context of the approach and timeframes:

- This rapid review was undertaken in 6 weeks to inform decisions relating to the quantum of the levy fund for the 2023/24 financial year. Therefore, timeframes in this stage of the review did not allow for detailed analysis of the effectiveness of activities currently funded by the alcohol levy, nor did it allow for the collection of detailed qualitative or quantitative data.

- A small number of non-government stakeholders were interviewed to gain contextual information and anecdotal evidence on the impact of alcohol-related harm reduction interventions, the quantum of the levy, and its distribution. However, given time constraints, the breadth and depth of these conversations were limited and key priority groups including Māori, Pacific, and Disabled people need to be further engaged. Given the small number of interviews that were able to be completed in stage 1, they can not be considered representative. These interviews were designed to simply elicit initial inputs into the review and to help identify areas for further inquiry in stage 2.

- Due to the timeframes for stage 1, the Māori stream of knowledge was limited. A detailed methodology will be developed to ensure he awa whiria is entrenched across all aspects of stage 2.

- This stage of the review was also limited by the documentation and data made available. Gaps in data and evidence have been identified in this report and will be explored further in stage 2. Due to the timeframes for stage 1, detailed health data from National Collections were not analysed. An urgent data request was made to Te Whatu Ora but the data is not expected to be supplied until stage 2 is underway.

THE ALCOHOL LEVY

19. This section provides an overview of the levy fund, how it is set and how it compares to other levies in New Zealand and overseas. We also consider the relationship between the levy and excise tax.

Historical background

20. Since 1977, a levy has been used to undertake activities to reduce alcohol related harm. The levy fund was created to fund the Alcoholic Liquor Advisory Council (ALAC) which had a legislative mandate to encourage and promote moderation in the use of liquor, reduce and discourage the misuse of liquor, and minimise the personal, social, and economic harm resulting from the misuse of liquor (Alcohol Advisory Council Act 1976, s. 7).

21. In 2012, the functions of ALAC were transferred to a new Crown entity, the Health Promotion Agency (HPA). The Health and Disability Act 2000 (as amended in 2012) sets out the functions of the HPA relating to alcohol as (Health and Disability Act 2000, s. 58(2)):

    - *giving advice and making recommendations to government, government agencies, industry, non-government bodies, communities, health professionals, and others on the sale, supply, consumption, misuse, and harm of alcohol so far as those matters relate to HPA's general functions*

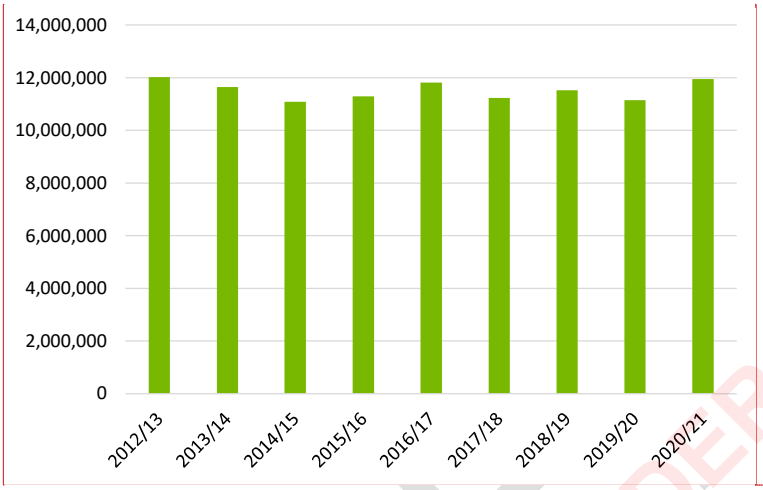
    - *undertaking or working with others to research the use of alcohol in New Zealand, public attitudes towards alcohol, and problems associated with, or consequent on, the misuse of alcohol*

22. The alcohol levy was set to recover costs by the HPA for exercising its alcohol related functions described above. The HPA was not required to give effect to government policy in the same way other Crown agents are. It was however, required to have regard to government policy in exercising its functions if so directed by the Minister (Health and Disability Act 2000, s. 58(3)). Te Hiringa Hauora was adopted as an official name for the HPA on 16 March 2020 (Te Hiringa Hauora, 2020).

The Alcohol Levy Fund

23. The Alcohol Levy Fund amount is reported annually. Since 2013/14, there has been little change in the size of the Fund with the fund remaining relatively constant between $11.2million and $12million (Figure 1: Total Levy Fund, 2012/13 to 2020/21).

Figure 1: Total Levy Fund, 2012/13 to 2020/21



Source: Te Hiringa Hauora

Commented [MW3]: Need to define units on y-axis. What is this? NZ dollars? (and what financial year(s) were the amounts measured in? Are they standardised?)

Commented [MW4R3]: This is comment from Te Whatu Ora - s 9(2)(g)(i) is this possible for the figures throughout?

Impact of the alcohol levy on prices

24. Table 1 below presents the levy rates in cents per litre for different beverage types and alcohol content.

25. The levy rates applied to alcoholic beverages are related to the type of beverage and tiers of alcohol content for that beverage type; thus, the levy is a 'tiered' volumetric tax based on the beverage-specific alcohol content tier. Other types of volumetric taxes or levies can be based on the volume of beverage with no consideration for the alcohol content.

26. Volumetric taxes linked to the alcohol content have the potential to shift consumer behaviour toward lower alcohol content beverages. However, this shift is dependent on whether the rate of the tax is high enough to be 'potent' for the consumer to notice and change their behaviour (the current levy rates are likely too small to influence consumer behaviour).

27. Another dependency is that the beverage-specific alcohol content tiers must be designed in a way that consistently increases the price of higher alcohol content beverages and has smaller increases in the price of lower alcohol content beverages.

28. Currently, the levy rate system is flawed when considering beverage-specific alcohol content tiers, and do not reflect the present-day alcohol product offerings. For example, the alcohol content of beer has been increasing with the proliferation of craft beers. However, the current levy rates only have two tiers for beer, meaning that any beer of at least 2.5% alcohol will have the same rate regardless of whether the product has 2.5% alcohol or 7% alcohol. If this flawed design was fixed, a further benefit would be

that the higher alcohol content beer would be taxed at a higher rate, thus increasing the total levy fund.

29. A close review of the levy rates in the context of current alcohol beverage offerings is needed so that design flaws can be addressed. This will be explored further in stage 2.

30. While the total levy fund collected has not increased in recent years, there was an increase in *rates* of the levy in June 2022. Table 1 below collates data from Te Hiringa Hauora to show the impact of the levy on the cost of alcohol. It reports two levy rates: the rates from 1 July 2021 and the more recent rates from 1 July 2022. The table also shows the difference between these rates (i.e., the 2022 increase in cents per litre). As can be seen, the impact of the levy on the actual cost of alcohol per litre is very small - from 0.5594 cents per litre on beverages with the lowest alcohol content, like low alcohol beer, to 14.4172 cents per litre on beverages with the highest alcohol content, like spirits with over 23 percent alcohol content (Table 1: Alcohol levy in cents per litre by beverage type and alcohol content, 2021 and 2022).

Commented [MW5]: @s 9(2)(a)(i) is this correct?

Table 1: Alcohol levy in cents per litre by beverage type and alcohol content, 2021 and 2022

Alcohol type	Alcohol content more than (%)	Alcohol content not more than (%)	From1 July 2021 (cents per litre)	From 30 June 2022 (cents per litre)	2022 increase (cents litre)
Beer	1.15	2.5	0.5116	0.5594	0.0478
	2.5		1.5058	1.6282	0.1224
Wine of fresh grapes (fortified by the addition of spirits or any substance containing spirits)	14		5.9181	6.3343	0.4162
Wine of fresh grapes (other)			3.4104	3.7291	0.3187
Vermouth and other wine of fresh grapes flavoured with plants or aromatic substances (fortified by the addition of spirits or any substance containing spirits)	14		5.9181	6.3343	0.4162
Vermouth and other wine of fresh grapes flavoured with plants or aromatic substances (other)			3.4104	3.7291	0.3187
Other fermented beverages (such as cider, perry, mead)	1.15	2.5	0.5116	0.5594	0.0478
	2.5	6	1.5058	1.6282	0.1224
	6	9	2.7283	2.9833	0.255
	9	14	3.4104	3.7291	0.3187
	14	23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296

Spirits and spirituous beverages the strength of which can be ascertained by OIML hydrometer (brandy, whisky, rum and tafia, gin and, vodka)			12.7876	14.4172	1.6296
Spirits and spirituous beverages (other)	1.15	2.5	0.5116	0.5594	0.0478
	2.5	6	1.5058	1.6282	0.1224
	6	9	2.7283	2.9833	0.255
	9	14	3.4104	3.7291	0.3187
	14	23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296
Bitters		23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296
Liqueurs and cordials	1.15	2.5	0.5116	0.5594	0.0478
	2.5	6	1.5058	1.6282	0.1224
	6	9	2.7283	2.9833	0.255
	9	14	3.4104	3.7291	0.3187
	14	23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296

Source: Te Hiringa Hauora

The levy setting process

31. In the new Pae Ora context, the process for setting the levy is similar to when the levy was established in 1976. Schedule 6, s.2 of the Pae Ora Act states:

> *(1) For each financial year, the Minister, acting with the concurrence of the Minister of Finance, must assess the aggregate expenditure figure for that year that, in his or her opinion, would be reasonable for the Ministry to spend during that year—*
>
> *(a) in addressing alcohol-related harm; and*
>
> *(b) in meeting its operating costs that are attributable to alcohol-related activities.*
>
> *(2) After assessing the aggregate expenditure figure for a financial year, the Minister must determine the aggregate levy figure for that year.*

32. Once the total levy figure has been determined for any financial year, the Minister must determine the amounts of the levies payable in respect of each class of alcohol, in order to yield an amount equivalent to the total levy figure (The Pae Ora (Healthy Futures Act) 2022, Schedule 6, s3).

Key implications of the levy setting process

33. Levy rates applied to alcoholic beverages are a function of the intended total levy fund; thus, there is flexibility to adjust the rates to meet funding needs. Any intervention that meaningfully reduces the total quantity of alcoholic beverages purchased in New Zealand will reduce the total levy fund unless the rates are modified. Accordingly, when setting the levy fund, consideration should be taken around existing factors that potentially influence the total quantity of alcoholic beverages purchased in New Zealand. In setting the amount for the total levy fund, Manatū Hauora should have full information on:

- the level of need for alcohol-relevant programmes and services
- the cost of delivering alcohol-relevant programmes and services, and any expected increase in costs
- the quantities of different classes of alcoholic beverages sold in the previous year (i.e., beverage types and alcohol content), as well as any temporal trends
- any substantial change to be made to the alcohol excise tax, the GST, or the regulatory context that is likely to affect the purchase demand for alcohol.

Other hypothecated levies

34. New Zealand has several other hypothecated levies (i.e., directed at a specific use) including:

- The Problem Gambling levy - a levy on the profits of the New Zealand Racing Board, the New Zealand Lotteries Commission, gaming machine operators, and casino operators (Department of Internal Affairs, 2004).

Problem Gambling Levy

Gambling harm is widespread within Aotearoa and disproportionately affects many of the same community groups as alcohol related harm, namely, Māori, Pacific Peoples, and people with lower socio-economic status. New Zealanders lose around $2.6 billion per annum on gambling. The current Problem Gambling levy is set at $76.123 million over a three-year period, this equates to just less than 1% of total gambling losses per annum (Ministry of Health, 2022).

Manatū Hauora is responsible for the prevention and treatment of problem gambling, including the funding and co-ordination of problem gambling services. Problem gambling services are funded through the levy on gambling operators. The levy is collected from the profits of New Zealand's four main gambling operators: gaming machines in pubs and clubs (pokies); casinos; the New Zealand Racing Board; and the New Zealand Lotteries Commission. The levy is also used to recover the costs of developing and managing a problem gambling strategy focused on public health (Ministry of Health, 2022).

The Gambling Commission, in its report to Ministers, advocated for a major strategic review of the problem gambling strategy. It argued Manatū Hauora should not be constrained by a historic budget envelope, and argued future costings

should be based on a comprehensive public health strategy to address gambling harm (Gambling Commission, 2022). It is possible that a similar argument could be advanced regarding the alcohol levy. This is particularly the case considering the Pae Ora Principles. However, any strategy must ensure appropriate Māori leadership and governance.

- The ACC Levies, including Earner's Levy, Work levy, and Working Safer levy - a suite of levies ranging from $0.08 to $1.27 per $100 of liable payroll or income, collected by ACC from employers, shareholder-employees, contractors, and self-employed people (and supplemented by Vote Government funding for those who are not employed) to cover the cost of injuries caused by accidents and injuries and accidents that happen at work or are work-related (ACC, 2023).
- Other levies, specifically the waste disposal levy (Grant Thornton, 2020), the International Visitor Conservation and Tourism Levy (MBIE, 2021), and the immigration levy on visa applications (MBIE, 2022).

Levies, duties, and taxes on alcohol in other jurisdictions

35. Taxes on goods that have an adverse effect on health ('sin taxes' or 'public health taxes') are widely used overseas but are more likely to provide general tax revenue than to provide funding for specific programmes. Some such taxes are designed to use price as a means of shifting consumption.

36. Any revenue, or portion of revenue, can be hypothecated and used to fund specific programmes. For example, a percentage of alcohol excise tax could be directed to alcohol programmes without the need for a specific alcohol levy like New Zealand's. Similarly, a percentage of income tax or general tax revenue can be hypothecated for alcohol programmes. These examples, however, have the disadvantage of tying revenue to economic cyclicality, resulting in the amount available for funding fluctuating more over time. A hypothecated tax on alcohol could also be earmarked for other areas in the health system other than alcohol-specific programmes.

37. Internationally, hypothecated taxes are common and exist in numerous forms. Cashin et al (2017) identified over 80 countries with hypothecated taxes for health. The World Bank noted in 2020 that this number was likely higher (World Bank Group, 2020). Nine countries were identified where all or a portion of some tax revenue from alcohol sales is earmarked for particular activities (Cashin et al, 2017) (Table 2: Countries using hypothecated taxes for health around the world).

Table 2: Countries using hypothecated taxes for health around the world.

Type of hypothecation	Number of countries
Portion of revenues from tobacco taxes earmarked for health	35
Revenue from taxes on other goods that negatively impact health earmarked for health	10

Portion of value-added tax (VAT) earmarked for health	5
All or a portion of revenues from taxes on alcohol sales earmarked for health	9
All or a portion of revenues generated from lotteries earmarked for health	2
Portion of general revenues earmarked for health causes	5
Portion of Income tax earmarked to fund health care for the population or a selection of the population (eg, formal-sector workers in a public scheme)	62

Source: Cashin et al. (2017)
Note: Cashin et al also identifies countries that use levies on money transfers and mobile phone company revenue. These are not included in Table 2.

38. Most countries that have an excise tax on alcohol do not also have a separate hypothecated tax on alcohol, although some do hypothecate a portion of alcohol excise revenue for health. Our rapid review of international approaches did not find any instance of a hypothecated tax that is designed in the same way as the alcohol levy – a hypothecated tax on alcohol, strictly for alcohol-related activity, levied in addition to an alcohol excise tax and set as a pre-determined fund rather than a fund that fluctuates with pre-determined rates. This will be explored further in stage 2.

39. Based on data for 2014, 18 countries used hypothecated taxes to fund programmes for the prevention and treatment of substance abuse disorders relating to alcohol (WHO,2017), including:

- Denmark: In Denmark, a national 8 percent income tax is levied and hypothecated for health services, including but not limited to alcohol programmes (Cashin et al. 2017).
- Switzerland: Switzerland imposes a duty on spirits (CHF 29 per litre of pure alcohol), the net revenue of which is divided 90%/10% respectively between the federal government and the regions (cantons) every year. The cantons' share is used to fund programmes and services that address the causes and effects of abuse of alcohol and other substances. The cantons provide an annual report on the activities financed through by the duty (FOCBS, n.d.). In 2021 total revenue generated for the cantons equated to $47 million compared to New Zealand's $11 million (2022) (FOCBS, n.d.). On a per capita basis this equates to $5.4 per capita compared to New Zealand's $2.1 per capita for the alcohol levy.

40. Internationally, tobacco taxes are more likely than alcohol taxes to be hypothecated for health. Chaloupka (2012) identified that 38 countries earmark part, or all, of their tobacco tax revenue for specific programmes. However, this revenue was rarely allocated directly to tobacco control efforts (Chaloupka 2012). This suggests a similar disconnect between the source of funds and the use of funds as is observed in alcohol taxation.

41. From a purely economic perspective, levy-setting methodology in New Zealand avoids a key disadvantage of hypothecated taxes, which is the cyclicality of revenue. But the inflexibility of strong hypothecation to alcohol-related activity means the funds cannot be diverted when alternative uses offer better investment value. This is a key reason for such taxes being less popular than non-hypothecated taxes or 'wide' hypothecation, in which the funds are typically directed towards the health system but not towards any particular programmes or services.

The excise tax on alcohol

42. Unlike the alcohol levy, the excise tax on alcohol in New Zealand raises revenue that is not hypothecated and, therefore, contributes to general tax revenue. Excise tax is a more common instrument used internationally to collect general revenue, to modulate demand for alcohol, and as a source of hypothecated funds for health programmes and services.

43. The excise tax in New Zealand constitutes a much greater share of the price of alcohol products than the alcohol levy. Based on typical prices of common alcohol products identified by Alcohol Healthwatch, on 30 June 2022, the alcohol levy accounted for between 0.2 percent and 1.3 percent of the price of alcoholic beverages. This is substantially less than the excise tax, which accounted for between 20.7 percent and 55.9 percent of the price of alcoholic beverages (Table 3: Alcohol levy and excise tax as a percent of typical prices of alcoholic beverages).

Table 3: Alcohol levy and excise tax as a percent of typical prices of alcoholic beverages

	Volume (litres)	Price ($)	Price per litre ($)	Excise % of price	Levy % of price
Beer	0.33	1.80	5.45	22.8%	0.9%
RTD	0.25	2.25	9.00	27.6%	1.3%
Wine	0.75	15.00	20.00	20.7%	0.2%
Spirits	1.00	37.99	37.99	55.9%	0.4%

Source: Alcohol Healthwatch 2021

44. When looking at the role of the levy in reducing alcohol related harm and the interventions/activities that can be undertaken within the Pae Ora context, the relationship with the excise tax (and any associated reduction in consumption, and therefore alcohol-related harm due to the tax settings) is a key consideration. This will be explored further in stage 2 of the review.

ALCOHOL CONSUMPTION IN AOTEAROA NEW ZEALAND

45. The purpose of this section is to present the current state of alcohol consumption within its historical context. This provides an indication of the drivers of consumption which ~~may in some cases~~ can lead to alcohol related harm and a contextualisation of the social environment in which activities to reduce alcohol related harm operate.

Pre-1840

46. Prior to Europeans arriving in Aotearoa New Zealand there is no evidence of Māori having developed alcoholic beverages of their own (Alcohol Healthwatch, 2012). Alcohol was introduced to Aotearoa New Zealand with the arrival of European settlers and explorers. While alcohol and drunkenness were common amongst Europeans at this time, there is evidence to suggest that Māori did not show an interest in alcohol. Some commentators indicate that Māori generally had an aversion to alcohol (Alcohol Healthwatch, 2012). The general lack in interest in alcohol amongst Māori at this time can be further seen in the fact that alcohol was not used to advance European interests in the same way blankets, pipes, and tobacco were. At the signings of Te Tiriti o Waitangi alcohol was not allowed (Alcohol Healthwatch, 2012).

Post 1840

47. In the years following the signings of Te Tiriti o Waitangi some Māori leaders began to voice concerns about the impact of alcohol on their communities. They began to take action in an attempt to curb the harm that alcohol posed to their whānau. Sir Mason Durie notes that iwi, hapū, and marae sought to enforce their own controls over alcohol and cites bans on alcohol at many marae, the aukati within the limits of the King Country, the codes at Parihaka which included forbidding drunkenness, and Māori councils making informal bylaws (Durie, 1998; Durie 2001). Attempts were also made to encourage support nationally for reform. For example, in 1874 a petition to Parliament by Whanganui Māori stated (House of Representatives, 1874):

> *[Liquor] impoverishes us; our children are not born healthy because the parents drink to excess, and the child suffers; it muddles men's brains, and they in ignorance sign important documents, and get into trouble thereby; grog also turns the intelligent men of the Maori race into fools ... grog is the cause of various diseases which afflict us. We are also liable to accidents, such as tumbling off horses and falling into the water; these things occur through drunkenness. It also leads on men to take improper liberties with other people's wives*

48. Between 1847 and 1904 the Government passed a number of laws that had the effect of limiting alcohol consumption by Māori. However, these laws suggest that although the government was acknowledging that alcohol was an issue in society, they were (at least in a legislative sense) attributing the harm solely to Māori. These laws also

inhibited Māori rights to exercise autonomy over issues arising from alcohol and develop their own tikanga to manage alcohol in their communities.

49. Many of these laws remained in place until after the Second World War when the Licensing Amendment Act 1948 removed many of the controls on Māori access to alcohol. While many marae continued to be alcohol-free, consumption amongst Māori started to increase significantly. In 2021/22 about 80% of Māori indicated that they had drunk alcohol in the past year (New Zealand Health Survey, 2022).

Current State

50. Below we provide a summary of available data on a range of measures, or proxy measures, for analysing trends in alcohol consumption. The purpose of this summary is to provide a snapshot of the how people are currently consuming alcohol in Aotearoa New Zealand, any visible trends over time, and how this compares internationally. We acknowledge that there are other measures that could be used to measure alcohol consumption over time and that statistical testing is required to validate the observations from existing data presented in this interim report. This will be a core component of stage 2 of the review.

Alcohol available for sale

51. Actual alcohol sales data is not publicly available, being an industry data set. However, alcohol sales are expected to track along a similar trend to alcohol that is made available for sale. Statistics NZ has collected and reported data on alcohol available for sale quarterly since 1985 Q2.

52. The Statistics New Zealand Retail Trade Survey indicates that the volume of pure alcohol available for sale is consistently increasing year to year (Statistics NZ) It also suggests a seasonal trend in alcohol available for sale with a clear spike in the fourth quarter of every year (1 October to 31 December), reflecting pre-Christmas and New Year sales volumes (Figure 2: Alcohol available for sale: Quarterly volume of pure alcohol). The impact of COVID-19 and associated restrictions had an effect of the availability of alcohol in 2020/2021. BERLI notes in an article from August 2020 that "the availability of alcoholic beverages decreased 5.4 percent between the Q1 and Q2 of 2020 to 7.3 million litres (BERL, 2020).

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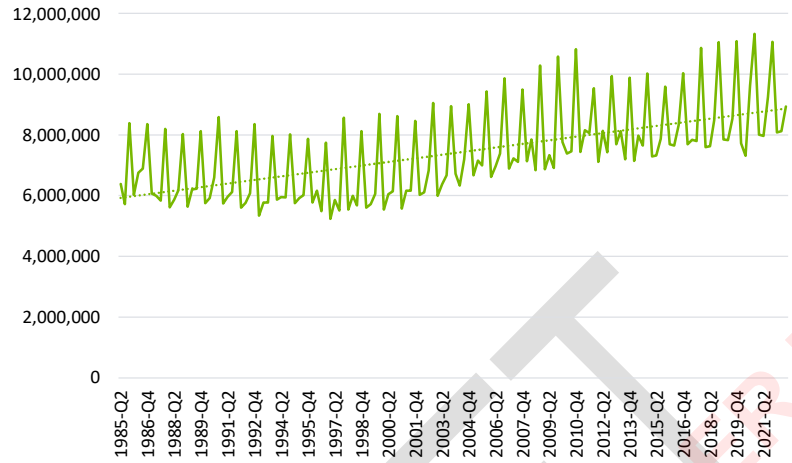
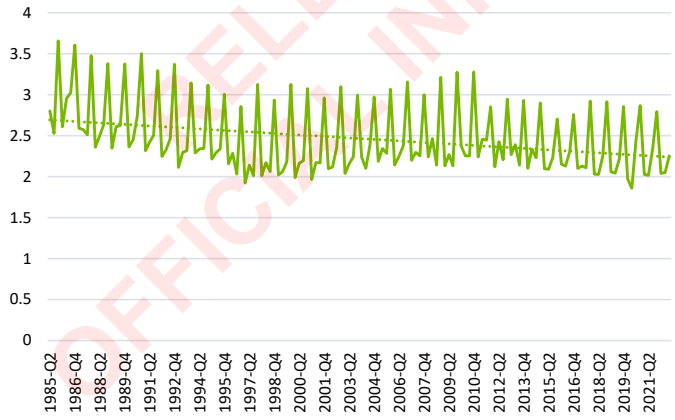
Figure 2: Alcohol available for sale: Quarterly volume of pure alcohol



Source: Statistics NZ

53. Drawing any strong conclusions from this trend is problematic for two reasons. First, underlying the increased volume of pure alcohol available for sale is an increase in the volumes of pure alcohol from wine and spirits and a slight decrease in the volume of pure alcohol from beer. Secondly, while the amount of alcohol available for sale has increased, population has also increased. Over the last ten years, these factors have come together to create a slight decline in the amount of pure alcohol available for sale per head of adult population (aged 18+) (Figure 3: Alcohol available for sale: Quarterly volume of pure alcohol for sale per head of population aged 18+).

Figure 3: Alcohol available for sale: Quarterly volume of pure alcohol for sale per head of population aged 18+



Source: Statistics NZ

54. Not surprisingly the value of alcohol sales follows a similar trend to the volume of alcohol available. The Statistics New Zealand Retail Trade Survey shows an increase in the total value of alcohol sold through retail outlets, with the trend indicating a 95 percent increase in the value of alcohol sales from 1995 to 2019 when measured in constant (2010) prices (Statistics NZ)[3]

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Affordability of alcohol

55. The Law Commission's 2010 review of New Zealand's laws regarding the sale and supply of alcohol concluded that the price of alcohol was a "critical factor in moderating demand for alcohol" (Law Commission, 2010).

56. Notwithstanding the importance of affordability in moderating demand for alcohol, we note that affordability is only one driver of demand. Consumer preferences and the availability and acceptability of substitutes are also important drivers. Over time, it is not only the price of alcohol that will impact on affordability. Household incomes and the distribution of incomes, as well as other household expenditure requirements, impact on the resources available for households to purchase alcohol products. Over a period of time, demand drivers unrelated to affordability may also change, potentially even in offsetting ways (e.g., while alcohol may become more affordable, substitutes may also become more available, more affordable and more acceptable).

57. In 2021, HPA published a report on the affordability of alcohol in New Zealand (Health Promotion Agency, 2021). The report noted that between 2017 and 2020:

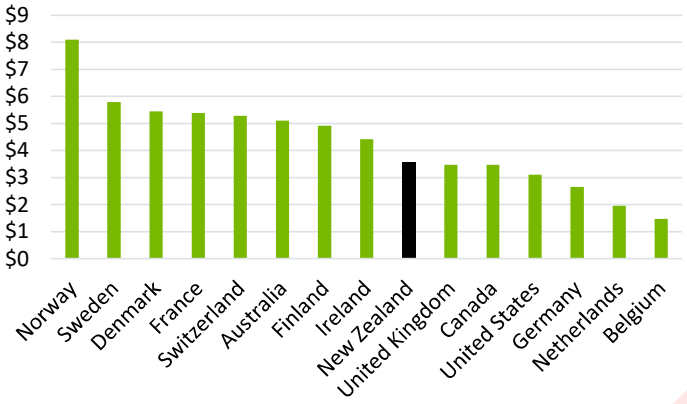
- the average price per standard drink increased for all alcoholic beverage types
- the real price (inflation-adjusted) of beer increased
- the real price (inflation-adjusted) of wine and spirits and liqueurs had dropped
- all alcoholic beverage types were more affordable in 2020

58. Over the five-year period 2017 – 2022, median household income has risen more than the average prices of alcoholic beverages, making alcoholic beverages more affordable in 2022 than in 2017 (Statistics NZ, 2022).

59. The World Health Organization (WHO) publishes the price of 500ml of the three major categories of alcoholic beverages (beer, wine, and spirits) in US dollars for a range of countries. Compared with a comparison set of OECD countries the price of beer in New Zealand is a little below average at US$3.58 per 500ml (average US$4.27 per 50ml) (Figure 4: Average price of beer in selected OECD countries).

[3] Note this does not reflect any impact of the COVID-19 pandemic or pandemic restrictions which would have impacted on retail sales and the share of alcohol sales that occurred through retail outlets versus hospitality venues or other from 2020 onwards, although the effects of the pandemic are observable in 2020 and 2021.

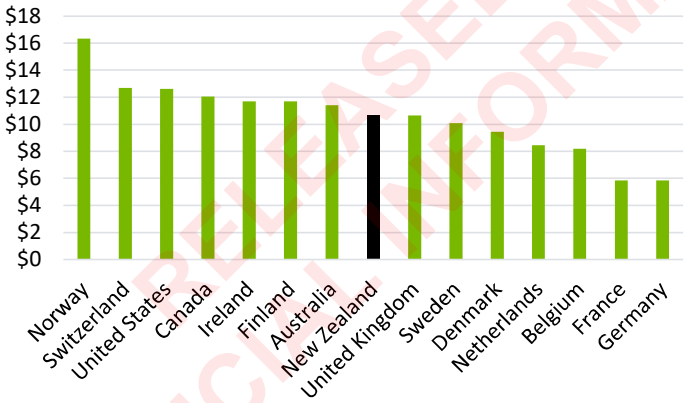
Figure 4: Average price of beer in selected OECD countries (USD per 500ml)



Source: World Health Organization

60. Compared with the comparison set of OECD countries, the price of wine in New Zealand is a little above average at US$24.6 per 500ml (average US$22.58 per 50ml) (Figure 5: Average price of wine in selected OECD countries).

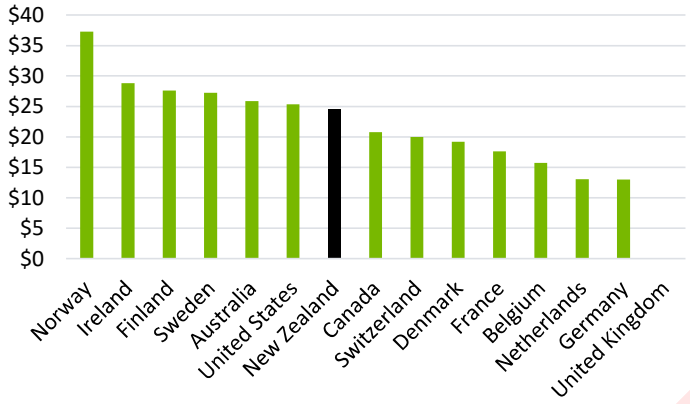
Figure 5: Average price of wine in selected OECD countries (USD per 500ml)



Source: World Health Organization

61. Compared with the comparison set of OECD countries, the price of spirits in New Zealand is a little above average at US$24.6 per 500ml (average US$22.58 per 50ml) (Figure 6: Average price of spirits in selected OECD countries).

Figure 6: Average price of spirits in selected OECD countries* (USD per 500ml)



Note: Data not available for the United Kingdom.

Source: World Health Organization

Commented [MW8]: 9(2)(i) - full reference

62. A long international time series of alcohol expenditure as a percentage of total household expenditure indicates that Aotearoa New Zealand does not stand out from comparator countries, although the time series for New Zealand is not as long as for others. Alcohol expenditure in Aotearoa New Zealand is a higher share of total household expenditure than in the United States, Canada, and the Netherlands, similar to Sweden and Denmark, and lower than Norway, Australia, Ireland, Finland and the United Kingdom (Our World in data).

Commented [MW9]: @9(2)(i) what is the reference for this one?

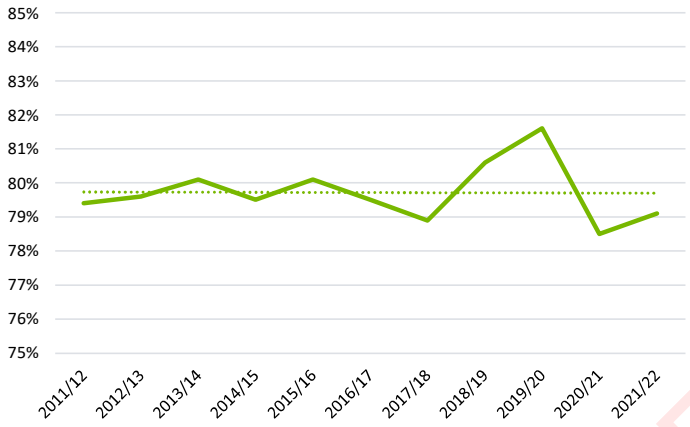
63. While affordability and household expenditure on alcohol provides some indication of the level of consumption, it is important to note that these measures are not a proxy measure for alcohol demand.

Past-year drinkers

64. Past-year drinkers is a measure of alcohol consumption reported through the NZHS. It represents the percentage of adults (aged 15+) who report having had a drink containing alcohol in the past year. While this is a useful indication of the extent of alcohol consumption in Aotearoa New Zealand, it has its obvious limitations as it relies on recollection and self-reporting. It also does not distinguish between the amount or type of alcohol being consumed.

65. In 2020/21 78.5% if New Zealander adults reported that they had had a drink containing alcohol in the past year (NZHS, 2020/21). Men were 9% more likely to have been past-year drinkers than women (NZHS 2020/21). The percentage of past year drinkers has been fairly constant over the past ten years. However, it remains high varying between 78 and 82 percent (Figure 7: Past year drinker: 2011/12 to 2021/22).

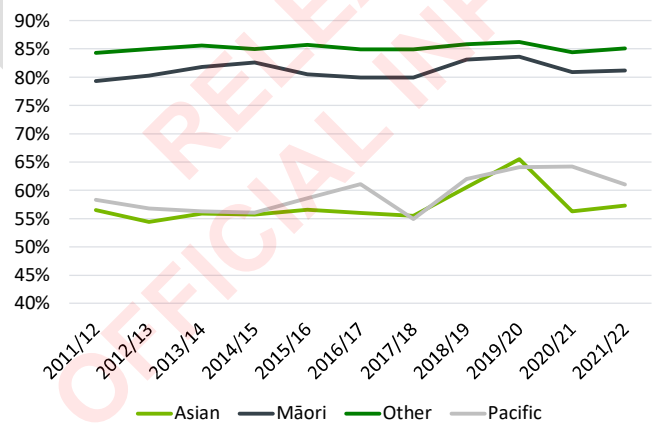
Figure 7: Past year drinkers: 2011/12 to 2021/22



Source: NZHS data

66. When broken down by ethnicity, the highest rates of reporting being a past drinker are seen amongst Māori and Other (non-Māori, non-Pacific, non-Asian) New Zealanders. While rates are fairly constant over time for Māori and Other New Zealanders, the recently higher rates amongst Pacific and Asian New Zealanders could be an early indication of an increasing trend, although the volatility in the data make this unclear (Figure 8: Past year drinkers by ethnicity, 2011/12 to 2021/22).

Figure 8: Past year drinkers by ethnicity, 2011/12 to 2021/22



Source: NZHS data

67. Disability status has only been reported since 2018/19 and is based on self-reported disability status. This factor impacts on the likelihood of reporting past-year drinking, with people who identify as disabled having a significantly lower probability of reporting being a past-year drinker. Since 2018 between 67 percent and 73 percent of people who identify as disabled reported being a past-year drinker, compared with 80 to 82 percent of people who identify as non-disabled (NZHS, 2018/19 to 2020/21).

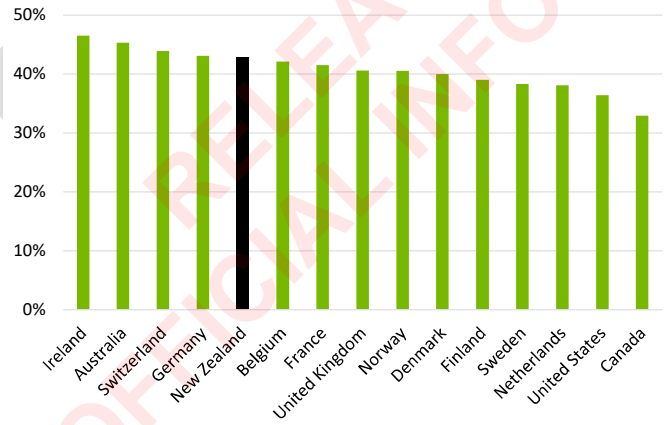
Hazardous and heavy episodic drinking

68. The NZHS has collected and reported on data that identifies hazardous drinking and heavy episodic drinking since 2015/16. Hazardous drinkers are defined as drinkers who obtained an Alcohol Use Disorders Identification Score (AUDIT) score of eight or more. Heavy episodic drinking is defined as consuming six or more alcoholic drinks on one occasion at least weekly (heavy episodic drinking, weekly) or at least monthly (heavy episodic drinking, monthly).

69. In 2021/22, approximately 19 percent of the adult population met the criteria for hazardous drinking. Māori experience higher rates of hazardous drinking than other ethnicities. In 2021/22, 33 percent of Māori met the criteria for hazardous drinking (NZHS, 2022).

70. International data shows that New Zealand's drinking culture involves more than an average frequency of heavy drinking as measured by self-reported experience of heavy drinking in the past 30 days for adults aged 15+ (Figure 9: Heavy drinking in the past 30 days (adults aged 15+).

Figure 9: Heavy drinking in the past 30 days (adults aged 15+)



Source: Our World in Data

71. International data based on a longer time series confirms that New Zealand's current prevalence of hazardous and heavy episodic drinking ranks amongst the highest in our selected group of OECD countries. This is in stark contrast to ten years ago when New Zealand's prevalence of hazardous and heavy episodic drinking ranked in the bottom half for the same set of countries. (Our World in Data, date)

Summary

72. Our review of data from a range of sources has provided no clear indication that alcohol consumption is increasing overall. We note that there are important gaps in the data and evidence on alcohol consumption. While the limited data indicate that Māori are more likely than non-Māori to engage in heavy or binge drinking, it is unclear whether this has worsened. Some evidence indicates a possible improvement such as the NZHS which indicates the percentage of Māori who are heavy drinkers fell from 47.9 in 2012 to 43.2 in 2016 and to 31.0 percent in 2020. However, 2020 data may not be reflective of a downward trend in heavy drinking in Māori due to the potential impact of the COVID-19 pandemic and associated restrictions. Prior to 2020 data on Māori who are heavy drinkers showed a small but steady trend upwards since 2017 (New Zealand Health Survey, 2016/17 to 2021/22). Additionally, much of the recent evidence regarding consumption patterns within population sub-groups is derived from the NZHS and the Alcohol Use in New Zealand Survey (AUiNZ) which rely on self-reported alcohol consumption which is impacted by social desirability and recall biases.

73. However, the consumption of alcohol in Aotearoa New Zealand remains high. Furthermore, the instance of hazardous or heavy episodic drinking in Aotearoa New Zealand has shown little sign of decreasing as has been seen in comparative OECD countries.

Commented [MW10]: s 9(2)(g)(i) Should this be the NZHS not AUiNZ - s 9(2)(g)(i) indicated that the AUinZ was not done in

Commented [MW11R10]: Not done in 2012

ALCOHOL-RELATED HARM

74. Understanding the scope of alcohol related harms and their prevalence is important to be able to consider the role of the levy fund within the broader public sector framework. This section provides a snapshot of the breadth and scope of alcohol related harms in Aotearoa New Zealand. We do not attempt to quantify all alcohol related harm in this section. Rather we seek to reflect the well-established health and broader societal harms that alcohol contributes to. Stage 2 of this review will provide a deeper analysis of the extent of harm across society and include further qualitative insights from Māori.

75. A broad indicator of experience of harm is provided by the AUiNZ which showed that in 2020, 25.9 percent of New Zealanders said that they had experienced harm from their own drinking and 37.7 percent of New Zealanders had experienced harm from someone else's drinking (AUiNZ, 2020).

76. The AUiNZ also revealed that while males are more likely to report experiencing harms from their own drinking, women are more likely to report experiencing harms from others' drinking (AUiNZ, 2020).

Alcohol use and health

77. Alcohol use is a significant and modifiable risk factor for a wide range of non-communicable diseases. A systemic analysis published in the Lancet in 2018 found that the risk of all-cause mortality rises with increasing levels of consumption, and the level of consumption that minimises health loss is zero (Griswold et al, 2018). Despite earlier research to the contrary it is now widely accepted that alcohol in any quantity is not a therapeutic agent. The WHO said in 2007 that "from both the public health and clinical viewpoints, there is no merit in promoting alcohol as a preventive strategy" (WHO, 2007).

78. It is important to note that evidence indicates that individuals with low socioeconomic status experience disproportionately greater alcohol attributable harm than individuals with high socioeconomic status from similar or lower amounts of alcohol consumption (Probst et al, 2020). This must be borne in mind when considering our analysis of alcohol harms to follow.

79. Disability-adjusted life years (DALYs) are a measure of overall disease burden, expressed as the number of years lost due to ill-health, disability, or early death. DALYs attributable to alcohol in New Zealand show that the early 2000s represented a period of relatively low DALYs which was followed by a period of increasing DALYs to around 2014, followed by a stable level of DALYs since 2014. (Our World in Data, Premature deaths due to alcohol (age standardized rate per 100,000 people)

80. International and New Zealand evidence unequivocally shows that alcohol use has been causally linked to a range of diseases and injuries, including:

    - Cancer; Rumgay et al found, in a population-based study published in Lancet Oncology, that globally 4.1% of all new cases of cancer in 2020 were

attributable to alcohol consumption (Rumgay et al., 2020) . The WHO estimated that in 2020, almost 7% of the total cancer burden in New Zealand was attributable to alcohol (WHO, 2020). Our literature review indicated that it is likely that, in New Zealand, alcohol attributable cancers make up a larger proportion of cancer cases than the global average. The Cancer Control Agency noted that in New Zealand in 2020 alcohol caused 39 percent of new bowel cancer cases and 28 percent of new breast cancer cases (Cancer Control Agency, 2020).

- Stroke; Feigin et al, in a systematic analysis for the Global Burden of Disease Study published in 2016 in Lancet Neurology found that 7% of the global stroke burden was attributable to any amount of alcohol use (Feigin et al., 2016).
- Heart disease; there is a large body of evidence that links alcohol consumption to ischaemic heart disease (Mente et al., 2009).
- Fetal Alcohol Spectrum Disorder (FASD); Although there is limited data on the prevalence of FASD in Aotearoa New Zealand, Manatū Hauora estimates that between three to five percent of people may be affected by alcohol exposure before birth. On this basis they suggest that around 1800 -3000 babies may be born with FASD per year (Manatū Hauora, 2023).
- Suicide; A 2022 study from the University of Otago showed that 26 percent of all suicides in Aotearoa New Zealand involve acute alcohol use. This is higher than the WHO global estimate of 19 percent. (Crossin R et al., 2022).
-

Commented [KT12]: Do we have stats from ACC on injuries related to alcohol? And can we add a line or 2 for diabetes connection (NZ has high rates of diabetes including in M & P populations.

Commented [KT13R12]: Can we also add a line or 2 on the connection with dementia – increasing population with dementia in NZ (and everywhere)

Alcohol and violence

81. Alcohol has a significant effect on the level of violence in Aotearoa New Zealand. In 2009 the New Zealand Police National Alcohol Assessment showed that alcohol is responsible for (New Zealand Police, 2009):

- A third of all violence
- A third of all family violence
- Half of sexual assaults
- Half of homicides

While these data are now outdated, there is no indication that there has been any significant decrease in the extent to which alcohol is responsible for violent crimes in Aotearoa New Zealand. Due to time constraints in stage 1 of this review we were unable to gather and analyse up to date raw data from New Zealand Police. This analysis will be included in stage 2 of the review.

82. A recent study into the relationship between child maltreatment and alcohol in Aotearoa New Zealand estimated that in 2017 between 11 and 14 percent of documented cases of child maltreatment could be attributable to exposure to parents with severe or hazardous consumption (Huckle and Romeo, 2022).

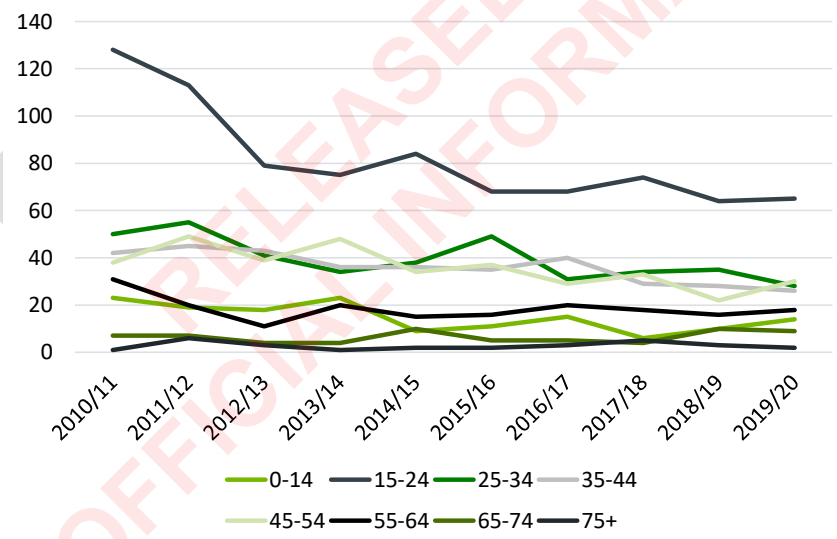
Other indicators of alcohol-related harm

83. Other indicators of alcohol-related harm include:

- Hospitalisations wholly attributable to alcohol
- Alcohol-related motor vehicle crashes
- Alcohol related calls to police

84. The National Minimum Data Set (Te Whatu Ora, 2023) contains data on public hospital discharges, including discharges with a primary diagnosis of 'toxic effect of alcohol'. These data indicate a decline in the number of these discharges over the last ten years. Across age groups, the group most likely to experience hospitalisation due to toxic effects of alcohol is 15–24-year-olds. This group has also seen a decline in these events over the last ten years (Figure 10: Public hospital discharges with a primary diagnosis of "toxic effect of alcohol".

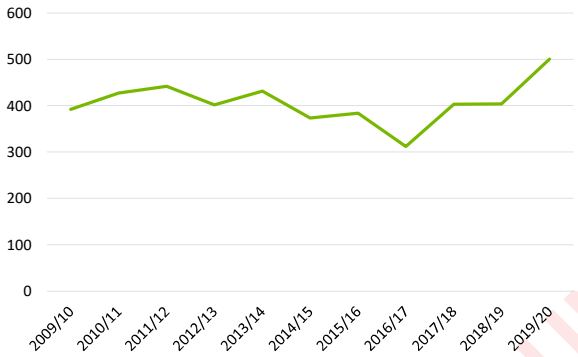
Figure 10: Public hospital discharges with a primary diagnosis of "toxic effect of alcohol" (number per year, by age group)



Source: Te Whatu Ora

85. Alcoholic liver disease is a condition caused by heavy use of alcohol and tends to occur after many years of heavy drinking and is, therefore, not highly prevalent amongst young people. Data on hospital discharges shows a fairly constant number of discharges with a primary diagnosis of alcoholic liver disease, with a spike in 2019/20 (Figure 11: Discharges from publicly funded hospitals with a primary diagnosis of alcoholic liver disease).

Figure 11: Discharges from publicly funded hospitals with a primary diagnosis of alcoholic liver disease



Source: Te Whatu Ora

86. The New Zealand Transport Agency (NZTA) tracks the percentage of deaths and serious injuries from road crashes that are alcohol-related. These data show a decline in this percentage since data started being collected in 2008. However, the number remains high (NZTA, 2023).

87. NZ Police recorded and published data on alcohol-related calls to police between 2008 and 2012. This data shows a roughly constant number of calls to police that are alcohol related: between 120,000 and 126,000 calls per year (NZ Police, 2012).

Alcohol related-harm and Māori

88. In 2010 the Law Commission highlighted the negative impact that alcohol has on health and social issues for Māori. It noted that (Law Commission, 2010):

- Māori were more likely to die of alcohol related causes
- Māori were more likely to experience harm from alcohol consumption in areas such as work, study, and employment
- Māori women suffered more harm as a result of other people's drinking
- Alcohol may be actively contributing to inequalities.

Commented [KT14]: Can we state the percentages to show the decline?

Commented [MW15]: s 9(2)(g)(i) is this the right reference

89. In 2015 a policy briefing from the New Zealand Medical Association provided a useful overview of the disproportionate impact of alcohol on Māori. It found (New Zealand Medical Association, 2015):

- Māori were 2.5 times more likely to die from an alcohol-attributable death when compared to non-Māori
- Māori were twice as likely as non-Māori to die from cardiovascular disease, a disease linked to alcohol consumption.
- Māori women were more likely to suffer from breast cancer than non-Māori, a disease linked to alcohol consumption~~,~~.

90. There has been very little, if any, shift in the disproportionate harm that Māori experience from alcohol. A key issue in addressing this inequity is enabling Māori to exercise tino rangatiratanga over their health in relation to alcohol. This will be a key question in stage 2 of this review.

Summary

91. As can be seen from the evidence summarised above, alcohol causes significant harm across all communities in Aotearoa New Zealand. While there have been some improvements across some indicators, overall, the level of harm caused by alcohol remains unacceptably high. Māori remain disproportionately affected by alcohol-related harm.

COST OF ALCOHOL-RELATED HARM

92. The cost of alcohol-related harm to New Zealand society is significant. This section provides a summary of existing estimates of the cost of alcohol-related harm in Aotearoa New Zealand.

93. The most recent study to quantify the social cost of alcohol in Aotearoa New Zealand was conducted by BERL in 2009. Commissioned by ACC and the Ministry of Heath, the report aimed to quantify the social cost of alcohol and drug related harm looking at the personal, economic, and social impacts. While the estimate of the social cost of alcohol-related harm in Aotearoa New Zealand published by BERL in 2009 and updated in 2018, or rather the methods used to generate it, have been criticised by some commentators, it has been widely cited in the alcohol-harm research and policy space in New Zealand over the last 14 years (BERL, 2009; Nana, 2018).

94. In 2018, an updated estimate based on the BERL methodology was calculated to be $7.85 billion per year (Nana, 2018). The 2018 estimate included costs resulting from justice, health, ACC, social services, unemployment, and lost productivity. Intangible costs such as years of life lost from premature death, lost quality of life, child abuse, sexual abuse, and impacts on victims of alcohol-caused crime are also relevant to assessing the overall impact of alcohol related harm on society. A recent Australian Study found that in Australia $48.6 billion AUD of intangible costs could be attributable to alcohol (National Drug Research Institute, Curtin University, 2021).

Evidence from other countries

95. A literature review was conducted to identify other estimates of the social cost of alcohol related harm that have been published since the BERL report was published in 2009. The literature review focused on studies that represent the social cost of alcohol at a national-level and consider costs of both the consumers of alcohol and society in general. Where more than one study of the same country has been published since 2009, the most recent publication was included. The United States, Australia, and Canada were the focus of the literature search given the higher generalisability of results to an Aotearoa New Zealand setting.

96. The table below summaries the three international studies relating to the social cost of alcohol-related harm that were identified in this literature review and compares them to the New Zealand study conducted by BERL in 2009 (Table 4: Summary of selected international studies reporting on the social cost of alcohol related harms).

Table 3: Summary of selected international studies reporting on the social cost of alcohol-related harms.

Country (Author, date)	Year of study costs	Total Social cost of alcohol (Local currency and cost estimate year, millions)	Total Social cost of alcohol (2023 NZD millions)	Social cost of alcohol per person (b, c)	Social cost of alcohol per person (c, d)	Social cost of alcohol as a % of GDP (e)	Tangible Costs (% of total costs)	Intangible (% of total costs)
New Zealand (BERL et al 2009)	2006	NZ$4,7934 (a)	$7,260	NZ$1,146	$1,735	2.79%	NZ$3,231.6 million (67%)	NZ$1,561.9 million (33%)
Australia (Whetton et al 2021)	2017/18	AU$66,817	$85,459	AU$2,676	$3,475	3.80%	AU$18,165 million (27%)	AU$48,651 million (73%)
Canada∞ (CSUCH 2020)	2017	CAN$16,625	$23,803	CAD$454.92	$651	0.78%	CAN$16.625 million (100%)	Not included
US∞ (Sacks et al 2015)	2010	US$ 49,026	$561,727	US$805.06	$1,816	1.65%	US$249,026 million (100%)	Not included

(a)Figure reported in BERL 2009 for alcohol only. It does not include expenditure that could not be separated between alcohol and other drugs which is listed separately in the report

(b) Local currency and cost estimate year

(c) Denominator is total population for noted country in year of study data soured from the World Bank

(d) 2023 NZD, population study year

(e) Denominator is GDP in current local currency unit for year of study data soured from the World Bank

∞ Analysis is an update of previous analysis

97. These four studies were conducted in Aotearoa New Zealand (2005/6 costs), Australia (2017/18 costs), Canada (2017 costs), and the US (2010 costs) and differed significantly in their findings (BERL, 2009; Canadian Substance Use Costs and Harms Scientific Working Group, 2020; Sacks et al., 2015; Whetton et al., 2021). To compare the relative value of each of four identified studies, all total costs were converted to 2023 NZD using the Consumer Price Index (CPI) and currency exchange rates and divided by the total population size of the country during the year considered in the study to account for large differences in population size contributing to the cost.

98. In this comparison, the social cost of alcohol appears highest in Australia with an estimated cost of $3,343 per person (Whetton et al., 2021). Aotearoa New Zealand and the US follow with a cost per person of $1,392 and $1,655 respectively (BERL, 2009; Sacks et al., 2015). Canada's estimate of the social cost of alcohol was the lowest of the four studies observed with the social cost of alcohol estimated to be $651 per person (Canadian Substance Use Costs and Harms Scientific Working Group, 2020). A key point to note in comparing the 4 studies we analysed is that the US and Canadian estimates do not consider the intangible costs of alcohol where the Australian and New Zealand estimates do.

Relevance to the alcohol levy

99. It is unclear whether the BERL 2009 report (or any other evidence regarding the burden of alcohol related harm) was used previously to determine the alcohol levy or even the excise tax. However, we note that the BERL report was cited in the Law Commission's 2010 report on the review of the regulatory framework for the sale and supply of liquor, so it may have been influential.

Commented [MW16]: s9(2)(g)(i) it is the 2010 report?

100. While evidence on the costs of alcohol-related harms cannot be directly related to the cost of addressing harms, it can be used to motivate investment in addressing alcohol-related harms – if cost-effective interventions exist, it can also be used to:

- motivate research investment to identify cost-effective interventions
- motivate investment in interventions to reduce alcohol use
- better understand the key areas of alcohol-related harms to prioritise investment.

Summary

101. Methodologies used to quantify the cost of alcohol-related harm vary internationally. This makes direct comparisons difficult. There also remains debate about the types of costs and harms that should be included. Nevertheless, we know that the cost is significant and potentially much higher than existing estimates (i.e., we heard from ACC

that they estimate a cost of approximately $600 million annually for alcohol related injuries).[4]

Commented [KT17]: Can we add this stat up in the harms section

102. Notwithstanding differing views on the methodological approach that led to the BERL estimate (and the 2018 update), it was based on 2005/06 data, and in 2023 the data landscape has changed. It is timely to undertake an updated analysis, and particularly relevant in the context of this review of the alcohol levy. In stage 2 we will undertake an up-to-date cost of alcohol harms study that clearly outlines the relevant costs from both an economics perspective and a public health perspective, to support better-informed decision-making across a range of purposes and contexts.

[4] Further inquiries and engagement with ACC will be part of stage 2 of this review to better understand and quantify this figure.

CONSIDERATIONS FOR INCREASING THE ALCOHOL LEVY

103. The alcohol levy has not increased since 2013. During this time the real cost of harm reduction interventions has increased, and the levy appears to remain insufficient to address alcohol-related harms across society (ie, there has been little, if any, shift in the extent of alcohol-related harm across communities in Aotearoa New Zealand). Furthermore, the levy now sits within a different legislative context. The Pae Ora framework potentially opens new opportunities for investment in harm reduction activities across health entities.

104. A range of factors should be taken into account when considering a potential increase in the alcohol levy, including:

- the regulatory context of the levy
- the strategic context of the levy
- the potential impact of price change on demand for alcohol
- the potential regressive effects of levy-induced price change
- costs of alcohol-related activity funded by the levy, which may increase due to
    - inflation
    - patterns of alcohol consumption and alcohol-related harms
    - unmet need
    - the costs of alcohol-related harms
- new opportunities for investment
- the size of the levy fund and proportionality considerations
- the effectiveness and cost-effectiveness of interventions to reduce alcohol-related harms
- Te Tiriti o Waitangi.[5]

Regulatory context of the levy

The Pae Ora (Healthy Futures) Act 2022 states that (Pae Ora (Healthy Futures Act 2022, s.101):

> *levies may be imposed for the purpose of enabling the Ministry to recover costs it incurs -*
> *(a) in addressing alcohol-related harm;*

[5] Note this is not addressed in detail in Stage 1 given time constraints and the limited ability to engage with Māori. This will be a core focus of Stage 2 of the review.

(b) in its other alcohol-related activities

105. In other words, the Act explicitly identifies the primary (and potentially only) purpose of the levy as a cost recovery mechanism, rather than a demand modifying instrument or as Pigouvian tax (a tax intended to internalise any externality associated with alcohol consumption). However, we do consider the potential for the levy to have a demand modifying effect which may result from partial or complete internalisation of externalities.

106. The Pae Ora context expands the scope of the levy due to now being a broader cost recovery for Manatū Hauora rather than Te Hiringa Hauora. However, what remains unclear is the breadth of the application of section 101 of the Pae Ora Act and what activities can and should fall within its ambit. Consideration of this issue needs to take into account the clear distinction that must be drawn between core government activities and responsibilities and the role of the levy fund. Further investigation into this question will be undertaken during stage 2 of this review. This may require legal advice to clarify any uncertainties in interpretation.

Strategic context of the levy

107. The purpose of the Pae Ora Act is to build healthy futures for all New Zealanders and to eliminate health disparities, in particular for Māori. Section 7 of the Act sets out principles which are to underpin the functions of health entities. Of particular relevance to this review are those principles that relate to engaging, resourcing and empowering Māori. These include:

- the health sector should engage with Māori, other population groups, and other people to develop and deliver services and programmes that reflect their needs and aspirations, for example, by engaging with Māori to develop, deliver, and monitor services and programmes designed to improve hauora Māori outcomes (7(1)(b))
- the health sector should provide opportunities for Māori to exercise decision-making authority on matters of importance to Māori (7(1)(c))
- the health sector should provide choice of quality services to Māori and other population groups, including by resourcing services to meet the needs and aspirations of iwi, hapū, and whānau, and Māori (for example, kaupapa Māori and whānau-centered services) (7(1)(d)(i)

108. The levy is now administered in this new context and there is an opportunity to reconsider activities in light of these obligations and to expand by Māori for Māori interventions.

109. Engaging with Māori communities to develop, deliver, and monitor programmes and resourcing services to meet the needs of iwi, hapū, and whānau, are practices intended to increase the effectiveness of services and programmes in delivering equitable outcomes for Māori. Some services and programmes may achieve effectiveness in Māori and Pacific communities through added investment to support these needs. To give effect to the Pae Ora Act principles through the application of the levy fund, a key focus needs to be empowering Māori to determine and deliver the initiatives most

appropriate for their communities. Stage 2 of this review will provide the opportunity for extensive engagement with Māori to build relationships and explore these opportunities when considering the future of the levy fund.

Impacts of alcohol price on consumption

110. Theoretically, as a price-altering mechanism, the alcohol levy does have the potential to have a demand modifying effect which could, in turn, reduce the levy revenue.

111. However, the potential for an increase in the alcohol levy to impact on alcohol demand is modulated by consumer opportunities for substitution to lower priced alcoholic beverages.

112. An additional concern related to the potential of the levy to modulate demand is that impacts of price changes on demand are likely to affect different groups differently. There is potential for any reduction in demand to be concentrated in groups with already relatively low alcohol consumption, groups with low rates of binge or harmful drinking, and groups that experience lower levels of alcohol-related harms. A proportionate reduction in alcohol-related harms is not guaranteed by reductions in alcohol sales.

113. Substitutes and their prices are important because where consumers have the option of switching to acceptable substitutes, the impact of a price change will be greater. However, alcoholic beverages are not a homogenous good. There are many different alcoholic beverage options at different price points. This means substitution within the category of alcoholic beverages is likely to be an attractive option for many consumers: If the cost of a favourite alcoholic beverage increases due to a tax or levy increase, in addition to reducing alcohol consumption, consumers have a range of options, including:

- switching to a cheaper beverage type
- switching to a cheaper brand
- switching to large containers that are associated with a lower cost per volume
- switching to multi-packs that are associated with a lower price per unit
- purchasing alcoholic beverages that are subject to price promotion
- purchasing alcoholic beverages from different outlets
- changing the balance of on-licence to off-licence consumption to favour more off-licence consumption.

114. The range of options for within-category substitution and the ultimate choice consumers make is determined by individual consumer preferences. For example, some consumers may reduce total alcohol consumption rather than switch from on-licence to off-licence consumption when on-licence consumption reaches an unacceptable cost. For others, a perverse effect can occur where alcohol consumed may increase due to substitution from on-licence to off-licence consumption if the cost

savings per unit more than offset increases in price, allowing a greater volume of alcohol to be purchased within the same budget.

115. As noted by the Tax Working Group (Tax Working Group Secretariat, 2018), published research indicates that alcohol excise (and therefore the combination of alcohol excise and alcohol levy) are likely to be effective in discouraging harmful behaviour. This means that on the whole, an increase in prices of alcoholic beverages is likely to result in a reduction in the amount of alcohol consumed for at least those consumers who engage in harmful drinking. But the Tax Working Group also acknowledged the considerable uncertainty around demand response to potential increases in tax and indicated that further research would be unlikely to resolve these issues sufficiently to indicate an optimal tax on alcohol.

116. Despite the uncertainties as to the specific elasticities, broad conclusions can be drawn from the evidence, including:

- price elasticity of demand for alcoholic beverages is not insignificant: a significant increase in price is expected to result in a proportionately smaller but not insignificant decrease in quantity demanded
- price elasticity of demand in groups that engage in heavy and harmful drinking are likely to be the least responsive to a price increase: while a sufficiently large price increase may reduce sales of alcohol, a less than proportionate reduction in alcohol-related harms is to be expected.

117. The alcohol levy is small in proportion to price and in proportion to the alcohol excise tax, so an increase in the levy itself – indeed even a doubling of the levy – is unlikely to have a noticeable impact on alcohol demand, so the levy revenue is unlikely to be negatively affected by the increase in the levy.

118. On the other hand, the alcohol excise tax represents a significant portion of the price of alcohol and making a change in the excise tax is most likely to result in a change in quantity demanded. It is unclear whether the objective of the alcohol excise tax is to raise revenue, in which case increases in the tax will be introduced slowly, or to modulate demand for alcohol (or indeed whether the objective of the tax is shifting over time). Due to its relative size, and in the absence of other regulatory interventions, the excise tax is likely to be the primary price-based lever through which government can influence demand for alcohol and, therefore, potentially reduce alcohol-related harms.

119. The relationship between the excise tax and the alcohol levy will be explored further in stage 2 of this review.

Regressivity of the levy

120. Price policies, including the alcohol levy, the excise tax on alcohol and even the GST, tend to be seen as potentially regressive. That is, lower income households are believed to pay a higher proportion of their incomes when they pay these taxes than higher income households because they spend a higher proportion on the taxed goods. However, in considering the evidence on corrective taxes, the Tax Working Group

found that the alcohol excise tax (and by extension the alcohol levy) appears to be slightly progressive, in contrast to tobacco taxes which are regressive.

121. This means an increase in the levy is unlikely to cause disproportionate harm to lower income households.

Costs of alcohol-related activity

122. Because the alcohol levy is a cost recovery mechanism, an increase in the levy should consider factors that increase the cost of alcohol harm reduction activities funded by the levy. Cost increases may be expected to occur if:

- there is inflation
- there has been an increase in alcohol-related harms
- there is unmet need that the agency has plans to address
- there are new opportunities for investment in cost-effective ways of addressing alcohol-related harms.

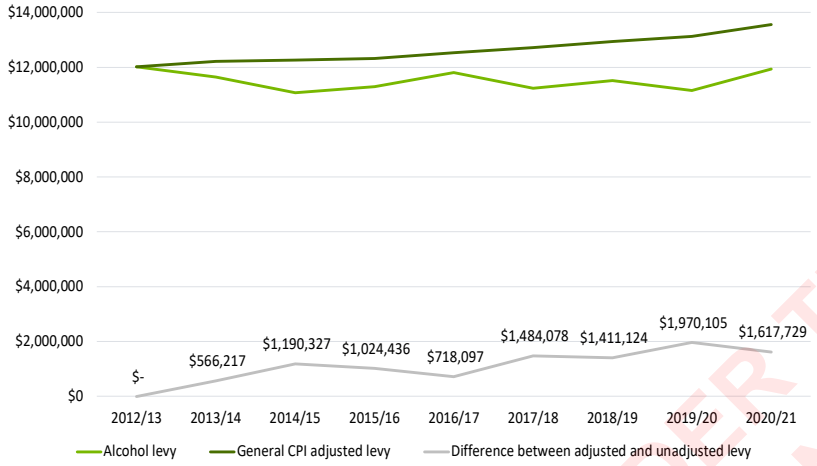
Inflation

123. Indexing to inflation is justified due to the use of the levy fund as a cost recovery mechanism. The services and programmes and other alcohol-related activity undertaken through levy funding are labour intensive. Employment contracts often include an inflation adjustment to wages and salaries, and where they do not, adjustments to wages and salaries to reflect inflation are made periodically to avoid labour shortages. The CPI is the most common measure of inflation that drives adjustments to labour costs and is, therefore, the most justified measure of inflation for the levy to be indexed to (as opposed to the alcohol CPI which would be more appropriate if the alcohol levy purpose was as a demand modulating instrument).

124. If the levy fund had been adjusted using the CPI, it would have generated between $566,217 and $1,970,105 in additional revenue each year since 2012/13 (Figure 12: Levy fund with and without CPR adjustment, and actual levy shortfall relative to adjusted levy).

125. Based on this adjustment, the cumulative levy shortfall due to a lack of adjustment over the past nine years is approximately $10 million.

Figure 12: Levy fund with and without CPI adjustment, and actual levy shortfall relative to adjusted levy



Source: CPI data from Stats NZ

Increase in alcohol consumption and harms

126. Our review of data from a broad range of sources indicates that:

- the amount of alcohol available for sale has increased on a per capita (aged 18+) basis over the last 10 years while actual sales have remained constant, suggesting more variety may be on shelves with intensifying competition in the industry
- growth in the industry is observed mainly in the liquor retailing sector rather than in manufacturing
- imports continue to rise consistent with previous trends
- all forms of alcohol have become more affordable in New Zealand, with households spending a similar share of total expenditure on alcohol regardless of household income level. Internationally, alcohol is not likely to be more affordable in New Zealand than in the average of high-income OECD countries
- New Zealanders drinking habits have not changed significantly over the last 10 years, with the possible exception of Pacific people, in particular Pacific women who appear to be more likely to drink alcohol now than 10 years ago
- consumption of beer continues to decline while consumption of spirits and wine remains fairly constant
- New Zealand is either in the middle or at the bottom of a set of high-income OECD countries in terms of alcohol consumption per capita, depending on the measure used

- the COVID-19 pandemic and restrictions have likely impacted on alcohol consumption in different ways, but no increasing trend in hazardous drinking was observed before or after the pandemic, except for Pacific people who appeared to have an increasing trend towards hazardous drinking prior to the COVID-19 pandemic
- younger New Zealanders are showing a slight trend towards less hazardous drinking and less alcohol-related harm
- international data suggests the prevalence of alcohol use disorders in New Zealand has increased in the last 10 years
- there is no clear evidence of increasing alcohol-related harms, although limited data is available on harms so there is potential for harms to be increasing in areas where data was not readily available
- a key outcome of interest is that New Zealand continues to have a very low rate of premature deaths associated with alcohol compared with similar high income OECD countries. It is unclear how appropriate international comparisons may be (e.g., whether different definitions or data collection may be contributing to this result).

127. We note that there are important gaps in the data and evidence on alcohol consumption and experience of alcohol-related harms. While the limited data indicate that Māori are more likely than non-Māori to engage in heavy or binge drinking, it is unclear whether this has worsened over time. Some evidence indicates a possible improvement (e.g., the percentage of Māori who are heavy drinkers fell from 47.9 in 2012 to 43.2 in 2016 and to 31.0 in 2020), although 2020-2022 data is also muddied by the impact of the COVID-19 pandemic and associated restrictions (NZHS, 2016, 2022). Additionally, much of the recent evidence regarding consumption patterns within population sub-groups is derived from the NZHS and the AUiNZ which rely on self-reported alcohol consumption which is impacted by social desirability and recall biases.

128. Nevertheless, the level of alcohol consumption and the rate of alcohol-related harm across Aotearoa New Zealand remains high.

Unmet need

129. It is important to note that the total levy fund has remained quite constant despite increasing population. Unless the determination of the levy fund has been made taking population growth and measures of unmet need into account, it is possible that the relatively constant levy fund over the last 9 years has been increasingly insufficient to meet population need. However, we were unable to conclude through the analysis of programme data that was made available whether this might be the case. We will consider this further in stage 2 of the review.

The cost of alcohol-related harms

130. We found no evidence that the cost of alcohol-related harms is or has been considered directly in the setting of the levy fund.

131. Our evidence review clearly shows the cost of alcohol-related harms is substantial even if significant uncertainty exists as to the total amount of that cost. A high cost of alcohol-related harms provides a strong incentive to find cost-effective investment opportunities. Unfortunately, the magnitude of alcohol-related harm costs does not provide any indication of the size of investment needed to address those harms. Our review of the evidence did not reveal any known relationship between the cost of harm and the cost of addressing harm. Additionally, our evidence review did not reveal any clear evidence of increasing costs associated with alcohol-related harms.

132. Nevertheless, the gulf between the costs of alcohol-related harm and the cost-recovery function of the alcohol levy remains significant. This could suggest that the existing levy fund is insufficient, and/or the activities and programmes being funded by the alcohol levy are having limited impact on the level of harm. We heard that for Māori, the alcohol levy fund has done little, if anything, to address the disproportionate impact of alcohol-related harms in their communities. More needs to be done to address this significant gap and this will be a core focus of stage 2 of this review.

The effectiveness of interventions

133. In September 2019, the World Health Organization (WHO) launched the SAFER initiative. SAFER promotes the implementation of interventions in five strategic areas, based on evidence of their impact on public health and their cost-benefit analysis.

The SAFER interventions				
STRENGTHEN	**ADVANCE**	**FACILITATE**	**ENFORCE**	**RAISE**
restrictions on alcohol availability	and enforce drink-driving countermeasures	access to screening, brief interventions, and treatment	bans or comprehensive restrictions on alcohol advertising, sponsorship, and promotion	prices on alcohol through excise taxes and other pricing policies

134. Our interviews and literature review indicated that investments that align with the health sector principles and the WHO SAFER framework are, in the long term, likely to lead to reductions in alcohol-related harm. Almost all the SAFER interventions focus on measures that limit the physical, social, and psychological availability of alcohol. These measures are by far the most successful in reducing alcohol related harm.

135. Many of the interventions funded by the alcohol levy are grounded in the SAFER framework and international good practice. However, due to time constraints and available evidence at stage 1 we were unable to assess the effectiveness of these interventions in reducing alcohol-related harms. In the new Pae Ora context any argument to increase the alcohol levy would need to be supported by robust evidence on how that increase could be spent to effectively reduce alcohol-related harms. We note the importance of the alcohol levy fund being transparent and that Manatū Hauora

is accountable for any expenditure from the levy fund to those who pay the levy as well as the New Zealand public more generally.

136. Most stakeholders interviewed during stage 1 of our work mentioned community investment as an impactful use of alcohol levy funding. However, some felt that the community voice has not been strong enough to date for decisions made about how the alcohol levy fund is spent. In particular, some stakeholders felt that the levy fund should be given to kaupapa Māori organisations first given that Māori have a higher proportion of alcohol-related harm and use in New Zealand in comparison to other population groups. This can be exemplified by the Health Coalition of Aotearoa Roopuu Apaarangi Waipiro (Expert Alcohol Panel) submitting to the Health Select Committee (during the examination of the Pae Ora Bill) that 80% of the alcohol levy should be allocated to Te Aka Whai Ora (Māori Health Authority) as Te Aka Whai Ora has the commissioning capability to empower communities to create healthier environments (Health Coalition of Aotearoa Roopuu Apaarangi Waipiro, 2021). Internationally, Muhunthan et al., found that indigenous-led policies that are developed or implemented by communities can be effective at improving health and social outcomes (Muhunthan et al., 2017).

New opportunities for investment

137. New interventions to improve health and reduce harms associated with unhealthy lifestyles emerge frequently, and evidence on the cost-effectiveness of programmes and services evolves over time. While the alcohol levy revenue is hypothecated for alcohol-related activity, the range of potential activity and the investment opportunity of activity may increase. The broadening of the levy's scope under the Pae Ora Act provides an opportunity to explore new activities and interventions.

CURRENT SETTINGS

138. The current alcohol levy is approximately $11.5 million per annum.

139. For the 2022/2023 year the total levy was allocated between the Public Health Agency and Te Whatu Ora. The Public Health Agency received $979,881 with the balance of approximately $10.5 million allocated to the Health Promotion Directorate within Te Whatu Ora, to fund its alcohol harm reduction activities. From this the Health Promotion Directorate allocated $5.46 million to externally funded programmes. These programmes are delivered with community partners, sector partners, and external technical experts. We were told that the balance of the levy supports internal FTE and operational functions, including the relational capability that is required to deliver the programme of work.

140. For 2023/24 approximately $3.7 million is currently committed to external funding. An additional $5.095 million is anticipated for staff costs and ongoing overheads. We have been advised that additional programme allocations are yet to be finalised and will be confirmed through completed negotiations.

141. Investments are generally grounded in international research, New Zealand research and reflect the WHO SAFER framework. They are focused on achieving long-term value and system shifts to address alcohol related harm.

142. The current levy investment decisions are also underpinned by a logic model found in the National Alcohol Harm Minimisation Framework (HPA, 2022) which is focused on achieving a reduction in alcohol related harms over the long term through:

- Effective policy and regulation
- Environments that are supportive of non-drinking
- Improved drinking cultures/social norms

These changes are considered by the Health Promotion Directorate to be fundamental to decrease alcohol related harm in Aotearoa New Zealand, especially for Māori. However, we were not provided with the detail required to assess the relativity of spend on by Māori for Māori activities or the effectiveness of these activities. This will be a focus of stage 2 of the review.

143. We reviewed three project plans for FY2022/2023 investments, for Community Social Movement, Sport and Alcohol, and the Alcohol Research programme. These documents were high level. For example, the Alcohol Research programme project plan set out names and broad budgets of funded research projects but did not include detailed information about why each research project was funded or what the specific deliverables of a given project were.

144. The Alcohol Research programme plan stated:

The Alcohol Research Programme consists of numerous component projects. The documentation associated with these projects provides greater details than what is included in this programme plan. Please see the section 'Supporting Documents' for an evolving list of associated project plans and other supporting documents.

145. The largest line-item in the Alcohol Research programme plan was 'Alcohol research funding investment (balance of $850,000)', with $529,787 of the Alcohol Research programme budget allocated to this. We were unable to determine what projects were funded or considered for funding under this line item.

146. In the time available for our initial review, we were therefore unable to analyse the rationale, deliverables, monitoring, or evaluation of recent levy investments to identify how they relate to each other, and broader alcohol-related harm reduction work carried out by communities or the government. Further, we were not able to assess in detail how or why any of these investments could or should be expanded if additional levy funds were available. We were also unable to identify how any of these programmes may fulfil research gaps that were identified by stakeholders in our qualitative interviews.

147. Finally, we were unable to assess the appropriateness of more than $5m of the levy being spend on internal FTE and operational functions (including the relational capability that is required to deliver the programme of work) and whether this continues to be appropriate in the new Pae Ora settings where the fund is no longer administered by an independent Crown Entity. This is a key question for stage 2 of the review.

FY2022/2023

148. The table below sets out how the Health Promotion Directorate planned to allocate the $10.5m of accessible levy funding in FY2022/2023 (Table 4: Planned spend in FY 2022/2023).

Table 4: Planned spend in FY2022/2023

Investment	$
Alcohol research	$850,000
Supporting law change	$300,000
Sport and alcohol – breaking the link	$500,000
Alcohol attributable fractions	$50,000
Digital and non-digital resources	$320,000
Kaupapa Māori Health Needs Assessment	$500,000
Community Social Movement	$500,000

Regional Manager Activity	$700,000
Amohia Te Waiora	$551,000
Pasifika Alcohol Harm Minimisation	$725,000
Youth and 1st 2000 Days	$489,000
Direct staff, enabling staff, and overhead costs	$5,095,000

FY 2023/2024

149. The table below sets out the information that the Health Promotion Directorate made available to us regarding known and expected committed spend in FY2023/2024. We were not provided with sufficient information to determine what proportion of the totals has in fact been committed through contracts (Table 5: Committed spend in FY 2023/2024).

Table 5: Committed spend in FY2023/2024

Investment	$
Culture change and targeted community led partnership programmes	$1,900,000
Regulatory stewardship programmes and research	$1,300,000
Kaupapa Māori regulatory policy change	$500,000

150. An additional $5.095 million is anticipated for Staff costs, ongoing overheads and the internal capability that is required to deliver the programme of work. Additional programme allocations are yet to be finalised and will be confirmed through contract negotiations. It is anticipated that the current levy fund of $11.5 million will or has been allocated for the 2023/24 year.

What we heard

151. Our interviews identified that individuals, organisations, and communities with an interest in reducing alcohol-related harm felt that there was a lack of coordination, both within government and between government and non-government stakeholders, in determining how interventions are identified, developed, and delivered. Interviewees were of the view that this lack of coordination leads to significant inefficiencies that could be avoided if all stakeholders were working according to a clear strategy. During our interviews, we also heard concerns from some community stakeholders that too high a proportion of the levy fund is spent on administering the

levy fund, and that as a result, too small a proportion is distributed to the community organisations who are delivering harm reduction programmes.

152. Our interviews indicated that structural interventions such as regulation and tax, and price-based mechanisms are perceived to result in the greatest reduction in alcohol-related harms. The relationship between the levy and excise tax, the ACC levy and broader government revenue collection needs to be explored further in stage 2 of this review to determine the ongoing role and utility of the levy in the new Pae Ora context.

153. By contrast, outside of some specific contexts non-structural interventions such as social media campaigns and marketing activities were generally perceived by stakeholders we interviewed as being either largely, or totally, ineffective at reducing alcohol-related harms. Similarly, our literature review found that structural interventions are consistently rated as being significantly more effective at reducing harm than non-structural interventions. However, our analysis indicates that non-structural interventions designed to de-normalise alcohol use in certain contexts are likely to indirectly contribute to a policy environment, and public discourse, that is more supportive of change. The Law Commission noted (Law Commission, 2010):

> *We can recommend changes to the law but we are under no illusion that this will be sufficient….. To bed in enduring change the need for it has to be reflected in the hearts and minds of the community and that requires an attitudinal shift and a new drinking culture.*

We note that Te Hiringa Hauora has had a particular focus on interventions to shift attitudes around alcohol consumption. These interventions are long-term in nature and from the information available in the short timeframes of stage 1 we were unable to analyse their impact. Stage 2 will provide an opportunity to consider these type of interventions more fully.

Summary

154. While we note that external investments are grounded in international research and reflect the WHO SAFER framework, we have had limited time to engage widely with Māori to provide a considered assessment of the extent to which existing investments align with the principles of the Pae Ora Act and the new operating context as set out above. Further qualitative evidence is required with a particular focus on Māori communities and their expectations. This will be a key focus of stage 2 of the review.

155. Furthermore, the evidence available for the stage 1 rapid review did not enable a robust assessment of the effectiveness of particular activities in reducing alcohol-related harm and more generally their overall cost effectiveness. We acknowledge there are some limitations in undertaking these types of assessments given the nature of the activities and their long-term strategic focus. However, this is an important part of the analysis that will need to be undertaken as part of stage 2 to inform any assessment of current allocations of the levy fund in light of the new context.

ANALYSIS AND RECOMMENDATIONS

Context

156. Our stage 1 rapid review has demonstrated that:

- the alcohol levy is disproportionately small relative to even the most conservative estimates of the cost of alcohol related harm in New Zealand, but the published research on alcohol costs does not indicate any particular relationship between costs of harms and costs of addressing harms
- alcohol related harm is more prevalent in some sub-populations
- structural interventions may have the greatest potential to reduce alcohol related harm
- the Pae Ora Act specifies the purpose of the levy as a cost recovery instrument, making it inappropriate for the levy to be used as a demand modifying intervention, unlike the excise tax which can be used in this way
- it was not possible to quantify to what extent current levy investments reduce alcohol related harm in the timeframe and with the material made available
- it may not be possible to quantify the cumulative level of harm reduction that levy investments may have, or will, achieve in the timeframe and with the material made available
- more New Zealand specific data on alcohol-related harm and the effectiveness of interventions would be useful to be able to provide strong evidence-based conclusions
- there is a greater amount of overseas evidence on the effectiveness of harm reduction interventions compared to New Zealand specific evidence
- among those that we engaged, some participants perceived that the lack of a clear national alcohol-related harm reduction strategy may lead to inefficiencies in the investment of the levy
- among those that we engaged, some participants perceived that the Government is not doing enough to reduce alcohol related harm
- the Act has potentially broadened the scope of possible areas of levy investments
- the alcohol levy rates are very low in proportion to prices and the excise tax on alcohol products, so even a substantial increase in the alcohol levy is unlikely to have an impact on alcohol sales

Quantum

157. As a cost recovery mechanism, the levy has previously been set according to expectations with regards to the cost of delivering programmes and services to address alcohol-related harm. Even with the Pae Ora Act, the levy is still hypothecated, but broadened to include other alcohol-related activities across Health entities, which could

include funding research to fill evidence gaps for example or funding to support the development of a cross agency alcohol strategy and action plan.

158. Even without expansion of activity to 'other alcohol-related activities' across the Health entities, an increase in the levy fund could be needed to address any current unmet need for programmes and services to address alcohol-related harms, and/or the effective decrease in the real value of the levy fund over time.

159. Consideration of the cost of addressing alcohol-related harm and other alcohol related activities in line with the Pae Ora Act requires further investigation into the relationship between core government activities and the levy fund. Activities that might have been appropriate for an independent agency may no longer fit within the context of a core government agency, which is required to give effect to government policy. While we acknowledge that there are some internal FTE and operational costs in administering the levy fund and associated activities, the integrity of the levy fund is potentially at risk if almost half of the fund continues to be used for these functions in the medium to long term. As the levy fund is now held and administered by a government agency rather than an independent body, the appropriateness of using the fund in this way will need to be carefully considered through stage 2 of this review.

160. There is an expectation from communities that the levy is spent on effective and appropriate interventions and that there is transparency and accountability across this spend. Similarly, industry representatives indicated that the amount of alcohol levy that they were required to pay was of limited concern to them, particularly when put in the context of the amount of excise tax which is paid. However, they were clear that they would not support an increase unless evidence is provided of effective levy funded activities that reduces harmful drinking, and that there is greater transparency and accountability surrounding the use of the levy fund. In this context, it is important to note that industry representatives did not consider all drinking to be harmful.

161. Engaging with Māori and Pacific communities to develop, deliver and monitor programmes, and resourcing services to meet the needs of iwi, hapū, and whānau, are practices intended to increase the effectiveness of health services and programmes to contribute to equitable outcomes for Māori and Pacific peoples. Despite the current National Alcohol Harm Minimisation Framework being grounded in Te Tiriti, there is significant opportunity to expand by Māori for Māori activities to address alcohol related harms. The role of Te Aka Whai Ora in this space needs to also be carefully considered as a Pae Ora partner.

162. Raawiri Ratuu, a key stakeholder and kaiarahi of the Kōkiri ki Tāmaki Makarau Trust, asked that we strongly impress on the government the need to make no changes to the levy until thorough engagement with Māori is undertaken. Mr Ratuu considered that before engagement, time must be taken to support Māori communities to understand how the levy came to be, why the levy exists, what the levy is used for, and how the levy is set. Mr Ratuu did not consider that the time allocated for our initial stage of the review would allow for adequate engagement with Māori.

Determining the cost of addressing alcohol-related harms and alcohol related activities

163. Because the alcohol levy is a cost recovery mechanism, an increase in the levy should consider factors that increase the cost of alcohol harm reduction activities funded by the levy.

164. The timeframes and available material for stage one has precluded us from conducting a deeper assessment of existing or proposed investments, making it difficult to provide an evidence-based assessment of what the quantum of the alcohol levy should be at this time. We are also hindered by the fact that for the most part, the 2023/24 levy has been committed. This means that existing interventions would not be subject to the same assessment as any new initiatives.

Options

165. Noting the constraints above we have concluded that there are three options to consider in regard to setting the quantum of the alcohol levy in 2023/24.

- Status quo
- Inflationary adjustment
- Increase based on actual cost of a set of recommended evidence-based investments. These investments include expansion of existing programmes where the evidence of effectiveness was available and new interventions based on international research, New Zealand research, and feedback from communities.

166. Table 6 below sets out the anticipated total levy quantum for each option, as well as the associated increase per unit of alcohol. Table 7 on the following pages summarises the costs and benefits of each option.

167. All options are presented on the assumption that no ongoing financial commitments will be made past June 2024 for any of the proposed interventions listed, and that the outcomes of stage 2 of this review will inform the role, function, and quantum of the levy beyond June 2024 – as well as future funding commitments. This will include consideration of the relationship between the levy and the excise tax in the new operating context. As discussed, (in section 2 of this report) the excise tax, not the levy, is likely to continue to be the primary lever through which government can influence demand for and consumption of alcohol and, therefore, potentially reduce alcohol-related harms.

Table 6: Cost of options

Option	Levy Quantum	Increase of	Class of alcohol	Current rate for 2022/23 (cents per litre)	New rate for 2023/24 (cents per litre)	Increase in rate (cents per litre)
Status Quo	$11.5 million	Nil				Nil
			A	0.5594	0.5594	0
			B	1.6282	1.6282	0
			C	2.9833	2.9833	0
			D	3.7291	3.7291	0
			E	6.3343	6.3343	0
			F	14.4172	14.4172	0
CPI adjustment	$21.5 million	Approx. $10 million				Between 0.4065 cents and 9.7312 cents per litre depending on alcohol content
			A	0.5594	0.9659	0.4065
			B	1.6282	2.8463	1.2181
			C	2.9833	5.1517	2.1684

			D	3.7291	6.4396	2.7105
			E	6.3343	11.1727	4.8384
			F	14.4172	24.1484	9.7312
Programme cost recovery assessment and adjustment	$ 16 million	$5.5 million (For new initiatives)				Between 0.1594 cents and 3.5537 cents per litre depending on alcohol content
			A	0.5594	0.7188	0.1594
			B	1.6282	2.1182	0.4900
			C	2.9833	3.8338	0.8505
			D	3.7291	4.7922	1.0631
			E	6.3343	8.3145	1.9802
			F	14.4172	17.9709	3.5537
	$21 million	$9.5 million (Expansion of priority existing initiatives)				Between 0.3841 cents and 9.1696 cents per litre depending on alcohol content
			A	0.5594	0.9435	0.3841
			B	1.6282	2.7801	1.1519

			C	2.9833	5.0319	2.0486
			D	3.7291	6.2898	2.5607
			E	6.3343	10.9128	4.5785
			F	14.4172	23.5868	9.1696
	$ 26.5 million	$15 million (For expansion of existing and standing up of new initiatives)				Between 0.6312 cents and 15.3471 cents per litre depending on alcohol content
			A	0.5594	1.1906	0.6312
			B	1.6282	3.5082	1.8800
			C	2.9833	6.3497	3.3664
			D	3.7291	7.9372	4.2081
			E	6.3343	13.7710	7.4367
			F	14.4172	29.7643	15.3471

Maintain status quo

168. The current Alcohol levy is approximately $11.5 million per annum.

169. Given the constraints within stage 1 of this review we lack the evidence to be able to comfortably recommend moving beyond the status quo for the 2023/24 financial year. Stage 2 of this review will provide the opportunity to better engage with communities and consider fundamental questions relating the role, scope, and purpose of the levy. Answers to these questions are needed to fully assess the appropriate levy quantum.

170. Maintaining the status quo ensures continuity of existing commitments pending the outcomes of stage 2 of this review. However, there are risks with maintaining the status quo. We found that the levy quantum has remained constant over a period of 9 years, despite population growth which would have increased the need for programmes and services to address alcohol-related harms even without the prevalence of alcohol-related harms increasing. In other words, the aggregate cost to the system of addressing alcohol-related harm has likely increased, even if the average level of alcohol-related harm experienced by individuals has remained steady. We also found that if the new health sector principles translate into increased costs per service user or require services being made acceptable and appropriate to a wider range of users, then there is a justification for an increase in the levy fund to cover these costs.

171. Furthermore, our interviews indicated that stakeholders do not think that the government is taking adequate action to reduce alcohol-related harm. Maintaining the status quo could also be seen as a signal that existing spending is sufficient to enable Te Whatu Ora to comply with the Pae Ora Act. This is a question that needs to be addressed in stage 2 of the review.

Inflationary adjustment

172. Key costs involved in both administering the levy and delivering harm reduction interventions are likely to have increased since the levy was last adjusted. However, it is unclear what adjustment should be made, if any.

173. One option is to adjust the levy quantum based on the CPI. The general Consumer Price Index (CPI) is the most appropriate measure of inflation in this context due to it underpinning many employment agreements and wage negotiations, and the likely labour intensity of harm reduction interventions. As discussed in section 7, if the levy fund had been adjusted using the CPI, it would have generated between $566,217 and $1,970,105 in additional revenue each year since 2012/13. Based on this adjustment, the cumulative levy shortfall due to a lack of adjustment over the past nine years is approximately $10 million.

174. However, there are some risks with this approach.

- it is unclear whether a CPI increase would accurately reflect the increase in actual costs of existing programmes

- a single-year CPI adjustment may not meet the increased costs of on-going programmes. This also limits the potential for levy investments in new or expanded activities
- decision-makers must agree to the start date of a multi-year CPI increase, which may be difficult to determine and justify, given the levy could have been, but was not, adjusted based on the CPI in any of the last nine years
- an expectation may be created that the levy will continue to be adjusted on this basis annually.

175. As with maintaining the status quo, this approach does not consider whether current investment is the right investment, is delivering effective return, and is in line with the Pae Ora Act. As noted above, more investigation needs to be undertaken at stage 2 of this review to determine this.

Increase to fund specific investments

176. All interviewees agreed that to meaningfully reduce alcohol-related harm, the government must commit to a long term, consistent, and strategic programme of interventions that induces trust between government and non-government stakeholders.

177. Aligning the levy fund to the cost of specific, needed investments would be consistent with its cost recovery mandate and is the option which is best aligned with the Pae Ora Act and principles. However, it is difficult at this stage to provide a robust analysis as to what programmes or activities should (or should not) be included. This assessment is also muddied by the current allocation of funding to existing programmes and, in particular, internal FTE and operational functions for the Health Promotion Directorate and the question as to whether these are still appropriate uses of the fund in the new settings.

Preferred option

178. Any increase in line with Option 2 or 3 proceeds on the presumption that the current allocation is appropriate and consistent with Pae Ora and expectations from communities. Although there may be elements of existing activities that meet these criteria, we are not in a position at this stage of the review to support that conclusion.

179. **We therefore recommend:**

C. The status quo remains for 2023/24

D. No commitments of levy funding are made either internally or externally beyond June 2024 until stage 2 of this review is complete and any recommendations regarding the future, scope and application of the fund are considered.

Alternative option

180. If there were, however, to be an increase in the levy fund for 2023/24, **we recommend:**

A. Any increase is calculated on the actual increase in the cost of ongoing interventions as well as the actual cost of additional interventions to be undertaken. In other words, the interventions need to be determined and agreed before calculating the quantum of any increase. This is in line with the cost recovery requirements of the Pae Ora Act.

B. No commitments of levy funding are made either internally or externally beyond June 2024 until stage 2 of this review is complete and any recommendations regarding the future, scope and application of the fund are considered.

178. While the available evidence is limited at this stage of the review, we have identified some key existing programmes which could be extended and some new initiatives that could be implemented in 2023/24. We expect that if a decision was made to proceed with increasing the levy quantum for FY2023/24, then the most effective uses of the levy fund in FY2023/24 are likely to be:

- coordinating and supporting all-of-sector strategic alignment between government and communities; and
- coordinating and supporting the development of systems that ensure clear and relevant evidence of the effectiveness of harm reduction interventions is available to individuals and communities.

179. Te Hiringa Hauora's National Alcohol Harm Minimisation Framework (the Framework) has guided the development of existing programmes. Our analysis indicates that the Framework is based on the best available national and international evidence and recommendations, including the WHO SAFER framework. Further, our analysis indicates a sufficient level of alignment between the Framework and the new requirements for health entities under the Act. While we have recommended awaiting the findings of stage 2 of the review, this gives us a higher level of confidence that increasing the levy to provide additional funds to these programmes for FY2023/24 would be expected to deliver benefit. We have also identified some additional activities that align with Pae Ora outcomes and international good practice examples.

180. On this basis, we have identified that, to fund certain additional investments in FY2023/24, the levy could be increased by an additional $5.5m to $15m. These investments are set out below. It is important to note that this increase would have a relatively small impact on the price of alcohol, as set out in table 7 above.

Allocate additional funding in relation to sports sponsorship and advertising

181. In FY 2023/24, additional levy funding could be allocated to the sports sponsorship removal demonstration projects and associated monitoring and evaluation.

182. Of the non-structural interventions we discussed in our interviews, the removal of alcohol sponsorship and advertising from sports was perceived to be the most effective at reducing alcohol harm. Our literature review found some evidence that restricting alcohol marketing is likely to influence the climate of tolerance around alcohol and alcohol policies. Further, many interviewees commented positively on the

effectiveness of similar initiatives in relation to tobacco sponsorship and advertising and believed that a similar approach should be taken in relation to alcohol. However, we are conscious that some interviewees held this view primarily on the basis of evidence from overseas jurisdictions, which as we have discussed, may not be entirely applicable in Aotearoa New Zealand.

183. We understand that, in FY 2022/2023, the Health Promotion Directorate invested $500k in demonstration projects to gain evidence of the effectiveness of this intervention in New Zealand contexts. We also understand that an expansion of this programme has been costed and could be implemented relatively quickly.

184. We have found sufficient evidence to warrant immediate investigation to support communities to decide whether this is an appropriate long-term intervention. Accordingly, $5 - 10m of additional levy funding could be allocated to delivering The Health Directorate's expanded programme.

Fund priority research

185. It was apparent from our literature review that there is a large body of international evidence on alcohol harm and harm reduction, but a relatively smaller body of evidence that is specific to New Zealand contexts. Some stakeholders cautioned us that policy makers could not necessarily rely on findings from international research applying in New Zealand. Our analysis indicates that it is essential for communities to be able to access robust and applicable research findings to inform their ongoing participation in alcohol harm related activities and licensing decision-making, policy-making, monitoring, and reporting.

186. We understand that Te Hiringa Hauora developed an Alcohol Research Programme, and that $850,000 of the levy fund was allocated to carrying out that programme. There remain significant research gaps in the New Zealand context. We estimate that $0.5 - $2m of any additional levy funding could be allocated to fund research projects to address some of the highest priority research projects.

Data collection

187. In FY 2023/2024, we recommend increased investment of levy funds in the collection of data on the cost of alcohol harm and the effectiveness of various interventions in relation to Māori, Pacific, and rural communities. Our review has identified a need to collect time-series data to begin to support communities to understand alcohol harm and the impact of the range of previous and potential interventions in the long term. In particular, data should be collected on any unmet need for programmes and services to address alcohol harms, to enable communities to effectively advocate for increased investment in the future. This data must be disaggregated and collected from a variety of sources including qualitative data from communities and whānau.

188. While some interviewees were of the view that there is already sufficient international data to inform decisions about particular harm reduction interventions, other interviewees impressed on us that that data collected in overseas jurisdictions cannot necessarily be assumed to apply in the Aotearoa New Zealand context. We are particularly conscious that Aotearoa New Zealand has a number of unique

constitutional arrangements in relation to specific sub-populations that may affect the applicability of overseas data on the effect of alcohol and associated interventions on certain sub-populations. We estimate that $1 -$2m could be invested in improving data collection over FY 2023/24.

Support community participation in licence hearings

189. We understand that Te Hiringa Hauora was providing some funding to Community Law Centres Aotearoa to support communities' participation in local decision making on alcohol.

190. Our interviews indicated that participation in district licence hearings is perceived to be one of the few opportunities available to communities to carry out a health protection activity, namely reducing the availability of alcohol in their environment. We heard that it is difficult, for several reasons, for communities to meaningfully participate in licensing hearings. One of the primary concerns raised was that community members seeking to oppose a license are often under-resourced compared to the business applying for a licence.

191. A review of the Community Law Alcohol Harm Reduction Project found that project improved the quality and effectiveness of community participation in licensing hearings and that overall participation in licencing hearings appeared to be increasing with the support of the project (Allen + Clarke, 2021).

192. We estimate $1.25m of additional levy funding could be allocated to expand the geographical coverage of this initiative with a particular focus on those areas and regions of high deprivation.

Continue and increase funding for regional community initiatives aimed at reducing alcohol related harm

193. We recommend increased investment in community initiatives aimed at reducing alcohol related harm. Most interviewees strongly impressed on us that community organisations have both the best understanding of alcohol harm in their environments and the best understanding of how to reduce that harm within the constraints of the present legislative regime.

194. In particular, we recommend that additional levy funds be allocated for the development of further capacity amongst iwi, hapū, hapori, whānau, Māori authorities, and health providers to contribute to alcohol harm reduction. We consider that Te Aka Whai Ora would be best placed to be responsible for monitoring and evaluating the effectiveness of investments made in this regard. We note that Te Aka Whai Ora will require additional levy funding to provide secretariat and administrative support to this initiative and to distribute funds to iwi, hapū, hapori, whānau, Māori authorities, and health providers to deliver initiatives and activities designed by and delivered by them.

195. The risks and benefits of the options discussed above is summarised at Table 8 below (Table 7: Costs and benefits of levy quantum options).

Table 7: Costs and benefits of levy quantum options

Levy Quantum	Benefits	Risks	Consistency with Pae Ora	Consistency with Te Tiriti Obligations	Ability to be implemented quickly
Status Quo	• Simple, easy to implement. • Builds on momentum of independent evidence and research aligned to Pae Ora. • Allows full review to be completed before any change-decision made.	• Due to pre-existing commitments, limits scope for a health-agency partnership approach to work programme development in a manner consistent with Pae Ora Act. • Communities may perceive status quo as government inaction. • Limited scope for new/expanded initiatives.	**Moderate**	**Moderate**	**High**
CPI increase	• Clear and proven method • Enables existing on-going programmes to receive an uplift if needed [note: it would be difficult to ensure increased funding accurately reflects actual costs – see risks] • If CPI increase applied across multiple years, provides additional funding to cover new or expanded initiatives. • Scope to expand joint entity initiatives across Te Aka Whai Ora and the Public Health Agency.	• If single year CPI adjustment made unlikely to accurately meet increased costs of existing programmes (may still result in real-terms cuts) and limited (if any) scope for new/expanded initiatives. • Multi-year CPI adjustment requires agreement as to start date for calculation (decision makers' time is constrained) and harder to justify as opportunity to make this adjustment has been available each year. • Perception that current spending is what is required and in line with Pae Ora Act.	**Moderate**	**Moderate**	**Low**

Levy Quantum	Benefits	Risks	Consistency with Pae Ora	Consistency with Te Tiriti Obligations	Ability to be implemented quickly
		• Potential perception CPI adjustments will be ongoing year on year (notwithstanding full review of Levy not due until Q4 2023).			
Increase based on cost of existing programmes and cost of expanding existing and/or standing up new programmes / interventions	• Creates opportunities to be more transparent around spend and reason for increase. • Based on cost of interventions as envisaged by Pae Ora Act. • Good transition year option (lower likelihood of appearing to set the pattern for future years). • Allows for innovation and partnership (health-agencies partnership, and increased partnership with communities), and increased research and data collection. • Can clearly identify new work that will create broader stakeholder engagement (mitigating risk of ongoing perception of lack of transparency) • Capacity to invest in improved data collection (and sharing), providing a stronger evidence base for work programmes.	• Requires management of expectations around the time it takes to see effects from interventions. • Difficult to assess programmes in short period of time. There is a degree of risk in assuming that expanding existing-funded (or implementing new) programmes will have a positive impact based on their alignment with good practice in other areas • Total agreed increase requires justification to demonstrate alignment with Pae Ora Act.	**High**	**High**	**Moderate**

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Independent Review of the Alcohol Levy

Stage 1: Rapid Review

9 April 2023

ALLEN + CLARKE

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Prepared for Manatū Hauora by *Allen + Clarke* and the New Zealand Institute of Economic Research.

Citation: *Allen + Clarke*, NZIER (2023), *Interim Report of Independent Review of the Alcohol Levy*. Wellington: Manatū Hauora

Acknowledgements

Allen + Clarke and NZIER recognise the substantial efforts of individuals and organisations involved in addressing alcohol-related harm in Aotearoa New Zealand. This stage of the review was undertaken under extremely tight time constraints to enable interim findings to inform the levy setting process for 2023/24. This report will be followed by the second stage of the review, which consists of a more in-depth stakeholder engagement, research, and analysis, and will result in medium-and-long term recommendations for the alcohol levy. We would like to thank all the people that contributed to this review for their time and input in a short space of time. We would particularly like to acknowledge the participation of individuals that we interviewed and officials from Manatū Hauora, Te Whatu Ora, and Te Aka Whai Ora (both individually and jointly as members of the Alcohol Levy Working Group which was established to support this review).

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EXECUTIVE SUMMARY

Since 1978, a levy has been raised on alcohol produced or imported for sale in Aotearoa New Zealand. The alcohol levy is hypothecated (i.e., directed to a specific use). It has been used to undertake activities to reduce alcohol-related harm. The current Alcohol levy is approximately $11.5 million per annum.

Prior to the commencement of the Pae Ora (Healthy Futures) Act 2022 (the Pae Ora Act), Te Hiringa Hauora | Health Promotion Agency received the total levy fund under the New Zealand Health and Disability Act 2000 (the Health and Disability Act), for the purpose of enabling the agency to recover costs incurred in addressing alcohol-related harm, and in its other alcohol-related activities. In 2022 the Pae Ora Act repealed the alcohol provisions of the Health and Disability Act and disestablished Te Hiringa Hauora, placing it within the National Public Health Service, part of Te Whatu Ora. This change places the levy within a different context, as the scope of the costs incurred by Manatū Hauora under the Pae Ora Act are wider than those previously identified for Te Hiringa Hauora. The scope of alcohol-related harm-reduction activities are also potentially broadened.

Allen + Clarke and the New Zealand Institute of Economic Research (NZIER) conducted a rapid review of the alcohol levy within the new Pae Ora context to provide short term recommendations to inform decisions relating to the 2023/24 financial year. This report will be followed by the second stage of the review, which consists of a more in-depth stakeholder engagement, research, and analysis, and will result in medium-and-long term recommendations for the alcohol levy. Stage 2 of this review is likely to continue through to November 2023.

Key Findings

Our stage 1 rapid review has demonstrated that:

- the alcohol levy is disproportionately small relative to even the most conservative estimates of the cost of alcohol-related harm in New Zealand, but the published research on alcohol costs does not indicate any particular relationship between costs of harms and costs of addressing harms
- alcohol-related harm is more prevalent in some sub-populations
- structural interventions may have the greatest potential to reduce alcohol-related harm
- the Pae Ora Act specifies the purpose of the levy as a cost recovery instrument, making it inappropriate for the levy to be used as a demand modifying intervention, unlike the excise tax which can be used in this way
- it was not possible to quantify to what extent current levy investments reduce alcohol-related harm in the timeframe and with the material made available
- it may not be possible to quantify the cumulative level of harm-reduction that levy investments may have, or will achieve, in the timeframe and with the material made available

- more New Zealand specific data on alcohol-related harm and the effectiveness of interventions would be useful to be able to provide strong evidence-based conclusions
- there is a greater amount of overseas evidence on the effectiveness of harm-reduction interventions compared to New Zealand specific evidence
- among those that we engaged with, some participants perceived that the lack of a clear national alcohol-related harm-reduction strategy may lead to inefficiencies in the investment of the levy
- among those that we engaged, some participants perceived that the government is not doing enough to reduce alcohol-related harm
- the Pae Ora Act has potentially broadened the scope of possible areas of levy investments
- the Pae Ora Act anticipates the alcohol levy being used across health entities
- the alcohol levy rates are very low in proportion to alcohol prices and the excise tax on alcohol products, so even a substantial increase in the alcohol levy is unlikely to have an impact on alcohol sales

Our review of available evidence showed the cost of alcohol-related harms is substantial even if significant uncertainty exists as to the total amount of that cost. A high cost of alcohol-related harms provides a strong incentive to find cost-effective harm-reduction investment opportunities. Unfortunately, the magnitude of alcohol-related harm costs does not provide any indication of the size of investment needed to address those harms. Our review did not reveal any known relationship between the cost of harm and the cost of addressing or preventing harm. Additionally, our review did not reveal any clear evidence of increasing costs associated with alcohol-related harms.

Nevertheless, the gulf between the costs of alcohol-related harm and the cost-recovery function of the alcohol levy remains significant. This could suggest that the existing levy fund is insufficient, and/or the activities and programmes being funded by the alcohol levy are having limited impact on the level of harm. We note that we were unable to undertake extensive engagement with Māori due to the time constraints with this stage of the review. The small number of Māori that we spoke to felt that the alcohol levy fund had done little, if anything, to address the disproportionate impact of alcohol-related harms on Māori. However, a review of existing programmatic documentation that was made available to us by Te Whatu Ora indicated that activities were grounded in Takoha: A Health Promotion Framework to align work with the articles of Te Tiriti o Waitangi, and to equity and community-centred approaches, in order to achieve Pae Ora (healthy futures) for Māori and all New Zealanders. Further analysis of the effectiveness of currently funded (and potential future) activities for Māori will be a key focus of stage 2 of this review.

Because the alcohol levy is a cost recovery mechanism, an increase in the levy should consider factors that increase the cost of alcohol harm-reduction activities funded by the levy. The timeframes and material reviewed for stage 1 did not enable us to conduct a deeper assessment of existing or proposed investments, making it difficult to provide an evidence-based assessment of what the quantum of the alcohol levy should be at this time. Alcohol levy funding activities have also generally been based on achieving long-term value and system shifts to address alcohol-related harm. Therefore, the programme of work anticipated for 2023/24 included multi-year activities and was mostly committed.

Furthermore, consideration of the cost of addressing alcohol-related harm and other alcohol-related activities in line with the Pae Ora Act requires further investigation into the relationship between core government activities and the alcohol levy fund. As the alcohol levy is now administered by a government agency rather than an independent entity, the landscape has potentially changed.

Noting the constraints above we have concluded that there are three options to consider in regard to setting the quantum of the alcohol levy in 2023/24.

- Status quo
- Inflationary adjustment
- Increase based on actual cost of a set of recommended evidence-based investments. These investments include expansion of existing programmes where the evidence of effectiveness was available and new interventions based on international research, New Zealand research, and feedback from communities.

Maintain status quo

Given the constraints within stage 1 of this review we lack the evidence to be able to comfortably recommend moving beyond the status quo for the 2023/24 financial year. Stage 2 of this review will provide the opportunity to better engage with communities and consider fundamental questions relating to the role, scope, and purpose of the levy. Answers to these questions are needed to fully assess the appropriate levy quantum.

Inflationary adjustment

Key costs involved in both administering the levy and delivering harm-reduction interventions are likely to have increased since the levy was last adjusted. However, it is unclear what adjustment should be made, if any. One option is to adjust the levy quantum based on the CPI. As with maintaining the status quo, this approach does not consider whether current investment is the right investment, is delivering effective return, and is in line with the Pae Ora Act. More investigation needs to be undertaken at stage 2 of this review to determine this.

Increase to fund specific investments

To meaningfully reduce alcohol-related harm, the government must commit to a long term, consistent, and strategic programme of interventions that induces trust between government and non-government stakeholders. Aligning the levy fund to the cost of specific, needed investments would be consistent with its cost recovery mandate and is the option which is best aligned with the Pae Ora Act and principles. However, it is difficult at this stage to provide a robust analysis as to what programmes or activities should (or should not) be included. More investigation, and engagement with Māori and communities needs to be undertaken at stage 2 of this review to provide this analysis.

Recommendations

On balance **we recommend:**

A. The status quo remains for 2023/24

B. No commitments of levy funding are made either internally or externally beyond June 2024 until stage 2 of this review is complete and any recommendations regarding the future, scope and application of the fund are considered.

INTRODUCTION

1. In Aotearoa New Zealand a levy is raised on alcohol produced or imported for sale. The levy is collected by Customs NZ. The current total levy figure is approximately $11.5 million per year, with minor fluctuations annually depending on alcohol production and sales. The alcohol levy is collected at different rates for different classes of alcoholic beverages. The levy is calculated at a cost per litre of alcohol for each class. The relative total collected has not increased since 2013. The levy was originally created by the Alcohol Advisory Council Act 1976[1] to fund the newly established Alcohol Advisory Council of New Zealand[2] (Alcohol Advisory Council Act 1976, s.20).

2. The alcohol levy is hypothecated (i.e., directed to a specific use). Prior to the commencement of the Pae Ora Act, Te Hiringa Hauora | Health Promotion Agency received the total levy fund under the Health and Disability Act, for the purpose of enabling the agency to recover costs incurred in addressing alcohol-related harm, and in its other alcohol-related activities (New Zealand Public Health and Disability Act 2000, s. 59AA). Section 58 of the Health and Disability Act set out the functions, duties, and powers of Te Hiringa Hauora. It states (New Zealand Public Health and Disability Act 2000, s58):

   (1) HPA must lead and support activities for the following purposes:
   - *a. promoting health and wellbeing and encouraging healthy lifestyles*
   - *b. preventing disease, illness, and injury*
   - *c. enabling environments that support health and wellbeing and healthy lifestyles*
   - *d. reducing personal, social, and economic harm.*

   (2) HPA has the following alcohol-specific functions:
   - *a. giving advice and making recommendations to government, government agencies, industry, non-government bodies, communities, health professionals, and others on the sale, supply, consumption, misuse, and harm of alcohol so far as those matters relate to HPA's general functions:*
   - *b. undertaking or working with others to research the use of alcohol in New Zealand, public attitudes towards alcohol, and problems associated with, or consequent on, the misuse of alcohol.*

3. The Pae Ora Act came into force on 1 July 2022 and is the legislative basis for the reform of the health system. The Pae Ora Act disestablished Te Hiringa Hauora and its functions were placed within Te Whatu Ora.

[1] The name of the original Act, the Alcoholic Liquor Advisory Council Act was amended in 2000.
[2] The original name, the Alcoholic Liquor Advisory Council was amended in 2000.

4. Manatū Hauora now receives the levy fund collected via the Vote Health appropriation and has responsibility for distributing the levy across the Health entities - Manatū Hauora, Te Whatu Ora and Te Aka Whai Ora (Pae Ora (Healthy Futures) Act 2022, s.101).

5. All aspects of the Pae Ora Act must be read in light of its purpose, which is to provide for the public funding and provision of services in order to (Pae Ora (Healthy Futures) Act 2022, s. 3):

   (a) protect, promote, and improve the health of all New Zealanders; and

   (b) achieve equity in health outcomes among Aotearoa New Zealand's population groups, including striving to eliminate health disparities, in particular for Māori; and

   (c) build towards pae ora (healthy futures) for all New Zealanders.

6. The Pae Ora Act uses wording nearly identical to the Public Health and Disability Act 2022, but now states that the levy is for the purpose of Manatū Hauora recovering costs it incurs in addressing alcohol-related harm, and in its other alcohol-related activities.

7. This change places the levy within a different context, as the scope of the costs incurred by Manatū Hauora under the Pae Ora Act are wider than those previously identified for Te Hiringa Hauora. The opportunities for alcohol-related harm-reduction activities are also broadened.

Purpose

8. Through an All of Government panel procurement process, *Allen + Clarke* and the New Zealand Institute of Economic Research (NZIER) were commissioned by the Public Health Agency (within Manatū Hauora) to undertake an independent review of the alcohol levy settings, and funding allocations and programmes in Aotearoa New Zealand.

9. The initial stage, of which this report is a product of, is a rapid review of the current state of the alcohol levy in Aotearoa New Zealand with short-term recommendations that can inform the 2023/24 financial year. This report (the interim report) will be followed by the second stage of the review, which consists of a more in-depth stakeholder engagement, research, and analysis, and will result in medium-and-long term recommendations for the alcohol levy (the final report). Stage 2 is likely to continue through to November 2023.

Scope of rapid review

10. Stage 1 of the review is focused on a rapid review of the current state of the levy fund.

The stage 1 rapid review focused on 7 key areas of inquiry as specified in the Request for Proposals (RFP) and contract of services:

1. the current evidence on the cost of alcohol-related harm
2. the total levy fund collected and how that compares with other levies collected within Aotearoa.
3. how the total fund collected compares to alcohol levies collected in other relevant jurisdictions
4. the total levy fund and its impact on alcohol-related harm generally
5. the current focus of levy funding and whether it takes a 'for Māori, by Māori approach'
6. the potential positive impact of an increase in the levy on Māori and other at-risk communities
7. significant gaps in funding, or areas for expenditure that could be prioritized in 2023/24

11. The output for stage 1 is interim recommendations to inform the levy setting for the 2023/24 financial year, pending the full review findings at the end of stage 2.

Approach

12. *Allen + Clarke* undertook the stage 1 review between 3 February and 15 March 2023. This involved an initial, fast-paced review of the current state of the alcohol levy.

13. In total 16 interviews were undertaken with people who are involved with the administration, distribution, use, or oversight of the alcohol levy fund including representatives from:

- The Health Promotion Directorate (formerly Te Hiringa Hauora)
- Other divisions of Te Whatu Ora
- Te Aka Whai Ora
- Manatū Hauora
- Hāpai Te Hauora
- Academia
- Non-Government Organisations
- Alcohol industry representatives.

14. The interviews were intended to serve the purpose of whakawhanaungatanga (establishing strong relationships) and helping the review team understand the current levy settings, as well as previous investment decisions. They were also used to inform a stakeholder engagement plan for the second stage of the project.

15. Initial discovery documents were provided by Manatū Hauora, the Health Promotion Directorate (Te Whatu Ora) and other stakeholders. These documents were

supplemented by *Allen + Clarke's* desk-based review and NZIER's analysis of existing data and evidence.

16. An alcohol levy working group (ALWG) was established to support this review. The ALWG was made up of officials from Manatū Hauora, Te Whatu Ora, and Te Aka Whai Ora. The ALWG met with the review team regularly and provided oversight and feedback throughout the stage 1 review process.

17. This report was provided in draft form to Manatū Hauora and the ALWG on 16 March 2023 for review and feedback. It was then finalised on 9 April 2023.

Limitations

18. The findings of this rapid review should be considered in the context of the approach and timeframes:

- This rapid review was undertaken in 6 weeks to inform decisions relating to the quantum of the levy fund for the 2023/24 financial year. Therefore, timeframes in this stage of the review did not allow for detailed analysis of the effectiveness of activities currently funded by the alcohol levy, nor did it allow for the collection of detailed qualitative or quantitative data.

- A small number of non-government stakeholders were interviewed to gain contextual information and anecdotal evidence on the impact of alcohol-related harm-reduction interventions, the quantum of the levy, and its distribution. However, given time constraints, the breadth and depth of these conversations were limited and key priority groups including Māori, Pacific, and Disabled people need to be further engaged. Given the small number of interviews that were able to be completed in stage 1, they cannot be considered representative. These interviews were designed to simply elicit initial inputs into the review and to help identify areas for further inquiry in stage 2.

- Due to the timeframes for stage 1, the Māori stream of knowledge was limited. A detailed methodology will be developed to ensure he awa whiria is entrenched across all aspects of stage 2.

- This stage of the review was also limited by the documentation and data available for review. Gaps in data and evidence have been identified in this report and will be explored further in stage 2. Due to the timeframes for stage 1, detailed health data from National Collections were not analysed. An urgent data request was made to Te Whatu Ora but the data is not expected to be supplied until stage 2 is underway.

THE ALCOHOL LEVY

19. This section provides an overview of the levy fund, how it is set and how it compares to other levies in New Zealand and overseas. We also consider the relationship between the levy and excise tax.

Historical background

20. Since 1978, a levy has been used to undertake activities to reduce alcohol-related harm. The levy fund was created to fund the Alcoholic Liquor Advisory Council (ALAC) which had a legislative mandate to encourage and promote moderation in the use of liquor, reduce and discourage the misuse of liquor, and minimise the personal, social, and economic harm resulting from the misuse of liquor (Alcohol Advisory Council Act 1976, s. 7).

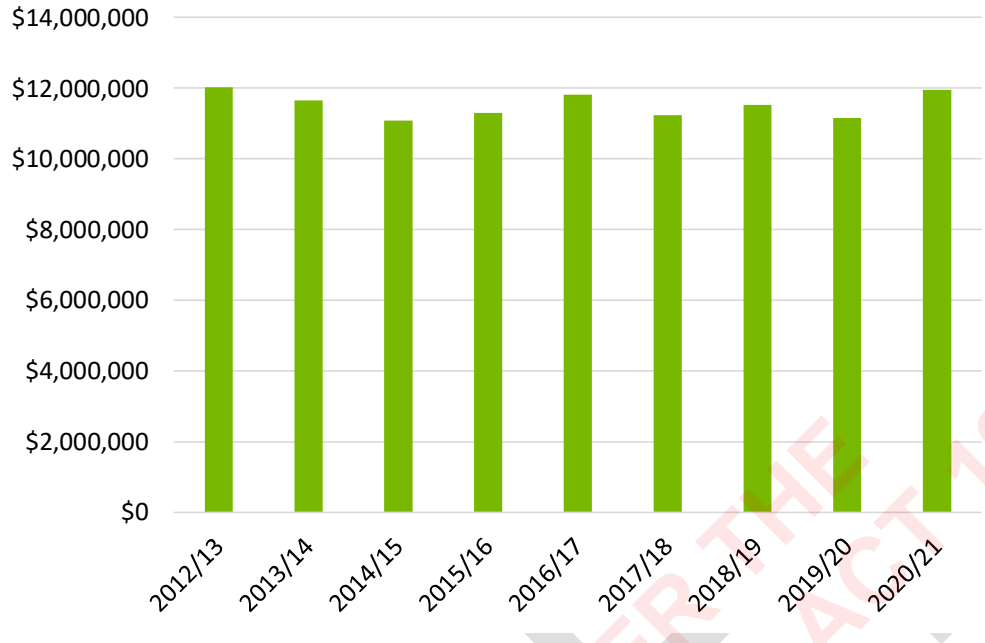
21. In 2012, the functions of ALAC were transferred to a new Crown entity, the Health Promotion Agency (HPA). The alcohol levy was set to recover costs by the HPA for exercising its alcohol-related functions described above. The HPA was not required to give effect to government policy in the same way other Crown agents are. It was however, required to have regard to government policy in exercising its functions if so directed by the Minister (Health and Disability Act 2000, s. 58(3)). Te Hiringa Hauora was adopted as an official name for the HPA on 16 March 2020 (Te Hiringa Hauora, 2020).

The Alcohol Levy Fund

22. The alcohol levy is based on the amount of alcohol imported into and manufactured in New Zealand in the preceding year. It is collected at different rates for different classes of alcoholic beverages. This means that total levy fund received can vary year to year based on demand and consumption in total, and by class of alcohol.

23. The alcohol levy amount is reported annually. Since 2013/14, there has been little change in the size of the total levy received. It has remained relatively constant between $11.2million and $12million (Figure 1: Total Levy Fund Received, 2012/13 to 2020/21 (nominal values, NZD)).

Figure 1: Total Levy Fund Received, 2012/13 to 2020/21 (nominal values, NZD)



Source: Te Hiringa Hauora

Impact of the alcohol levy on prices

24. Table 1 below presents the levy rates in cents per litre for different beverage types and alcohol content.

25. The levy rates applied to alcoholic beverages are related to the type of beverage and tiers of alcohol content for that beverage type; thus, the levy is a 'tiered' volumetric tax based on the beverage-specific alcohol content tier(Other types of volumetric taxes or levies can be based on the volume of beverage with no consideration for the alcohol content).

26. Volumetric taxes linked to the alcohol content have the potential to shift consumer behaviour toward lower alcohol content beverages. However, this shift is dependent on whether the rate of the tax is high enough to be 'potent' for the consumer to notice and change their behaviour (the current levy rates are likely too small to influence consumer behaviour).

27. Another dependency is that the beverage-specific alcohol content tiers must be designed in a way that consistently increases the price of higher alcohol content beverages and has smaller increases in the price of lower alcohol content beverages.

28. Currently, the levy rate system is flawed when considering beverage-specific alcohol content tiers and does not reflect the present-day alcohol product offerings. For example, the alcohol content of beer has been increasing with the proliferation of craft beers. However, the current levy rates only have two tiers for beer, meaning that any beer of at least 2.5% alcohol will have the same rate regardless of whether the product has 2.5% alcohol or 7% alcohol. If this flawed design was fixed, a further benefit would

be that the higher alcohol content beer would be taxed at a higher rate, thus increasing the total levy fund.

29. A close review of the levy rates in the context of current alcohol beverage offerings is needed so that design flaws can be addressed. This will be explored further in stage 2.

30. Table 1 below collates data from Te Hiringa Hauora to show the impact of the levy on the cost of alcohol. It reports two levy rates: the rates from 1 July 2021 and the more recent rates from 1 July 2022. The table also shows the difference between these rates (i.e., the 2022 increase in cents per litre). As can be seen, the impact of the levy on the actual cost of alcohol per litre is very small - from 0.5594 cents per litre on beverages with the lowest alcohol content, like low alcohol beer, to 14.4172 cents per litre on beverages with the highest alcohol content, like spirits with over 23 percent alcohol content (Table 1: Alcohol levy in cents per litre by beverage type and alcohol content, 2021 and 2022).

Table 1: Alcohol levy in cents per litre by beverage type and alcohol content, 2021 and 2022

Alcohol type	Alcohol content more than (%)	Alcohol content not more than (%)	From1 July 2021 (cents per litre)	From 30 June 2022 (cents per litre)	2022 increase (cents litre)
Beer	1.15	2.5	0.5116	0.5594	0.0478
	2.5		1.5058	1.6282	0.1224
Wine of fresh grapes (fortified by the addition of spirits or any substance containing spirits)	14		5.9181	6.3343	0.4162
Wine of fresh grapes (other)			3.4104	3.7291	0.3187
Vermouth and other wine of fresh grapes flavoured with plants or aromatic substances (fortified by the addition of spirits or any substance containing spirits)	14		5.9181	6.3343	0.4162
Vermouth and other wine of fresh grapes flavoured with plants or aromatic substances (other)			3.4104	3.7291	0.3187
Other fermented beverages (such as cider, perry, mead)	1.15	2.5	0.5116	0.5594	0.0478

	2.5	6	1.5058	1.6282	0.1224
	6	9	2.7283	2.9833	0.255
	9	14	3.4104	3.7291	0.3187
	14	23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296
Spirits and spirituous beverages the strength of which can be ascertained by OIML hydrometer (brandy, whisky, rum and tafia, gin and, vodka)			12.7876	14.4172	1.6296
Spirits and spirituous beverages (other)	1.15	2.5	0.5116	0.5594	0.0478
	2.5	6	1.5058	1.6282	0.1224
	6	9	2.7283	2.9833	0.255
	9	14	3.4104	3.7291	0.3187
	14	23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296
Bitters		23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296
Liqueurs and cordials	1.15	2.5	0.5116	0.5594	0.0478
	2.5	6	1.5058	1.6282	0.1224
	6	9	2.7283	2.9833	0.255
	9	14	3.4104	3.7291	0.3187
	14	23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296

Source: Te Hiringa Hauora

The levy setting process

31. In the new Pae Ora context, the process for setting the levy is similar to when the levy was established in 1976. Schedule 6, c.2 of the Pae Ora Act states:

> *(1) For each financial year, the Minister, acting with the concurrence of the Minister of Finance, must assess the aggregate expenditure figure for that year that, in his or her opinion, would be reasonable for the Ministry to spend during that year—*
>
> *(a) in addressing alcohol-related harm; and*
>
> *(b) in meeting its operating costs that are attributable to alcohol-related activities.*

(2) After assessing the aggregate expenditure figure for a financial year, the Minister must determine the aggregate levy figure for that year.

32. Once the total levy figure has been determined for any financial year, the Minister must determine the amounts of the levies payable in respect of each class of alcohol, to yield an amount equivalent to the total levy figure (The Pae Ora (Healthy Futures Act) 2022, Schedule 6, c3).

Key implications of the levy setting process

33. Levy rates applied to alcoholic beverages are a function of the intended total levy fund; thus, there is flexibility to adjust the rates to meet funding needs. Any intervention that meaningfully reduces the total quantity of alcoholic beverages purchased in New Zealand will reduce the total levy fund unless the rates are modified. Accordingly, when setting the levy fund, consideration should be taken around existing factors that potentially influence the total quantity of alcoholic beverages purchased in New Zealand. In setting the amount for the total levy fund, Manatū Hauora should have full information on:

- the level of need for alcohol-harm reducing programmes and services
- the cost of delivering alcohol-harm reducing programmes and services, and any expected increase in costs
- the quantities of different classes of alcoholic beverages sold in the previous year (i.e., beverage types and alcohol content), as well as any temporal trends
- any substantial change to be made to the alcohol excise tax, Goods and Services Tax, or the regulatory context that is likely to affect the purchase demand for alcohol.

Other hypothecated levies

34. New Zealand has several other hypothecated levies (i.e., directed at a specific use) including:

- The Problem Gambling levy - a levy on the profits of the New Zealand Racing Board, the New Zealand Lotteries Commission, gaming machine operators, and casino operators (Department of Internal Affairs, 2004).
- The ACC Levies, including Earner's Levy, Work levy, and Working Safer levy - a suite of levies ranging from $0.08 to $1.27 per $100 of liable payroll or income, collected by ACC from employers, shareholder-employees, contractors, and self-employed people (and supplemented by Vote Government funding for those who are not employed) to cover the cost of injuries caused by accidents and injuries and accidents that happen at work or are work-related (ACC, 2023).
- Other levies, specifically the waste disposal levy (Grant Thornton, 2020), the International Visitor Conservation and Tourism Levy (MBIE, 2021), and the immigration levy on visa applications (MBIE, 2022).

Problem Gambling Levy

Gambling harm is widespread within Aotearoa and disproportionately affects many of the same community groups as alcohol-related harm, namely, Māori, Pacific Peoples, and people with lower socio-economic status. New Zealanders lose around $2.6 billion per annum on gambling. The current Problem Gambling levy is set at $76.123 million over a three-year period, this equates to just less than 1% of total gambling losses per annum (Ministry of Health, 2022).

Manatū Hauora is responsible for the prevention and treatment of problem gambling, including the funding and co-ordination of problem gambling services. Problem gambling services are funded through the levy on gambling operators. The levy is collected from the profits of New Zealand's four main gambling operators: gaming machines in pubs and clubs (pokies); casinos; the New Zealand Racing Board; and the New Zealand Lotteries Commission. The levy is also used to recover the costs of developing and managing a problem gambling strategy focused on public health (Ministry of Health, 2022).

The Gambling Commission, in its report to Ministers, advocated for a major strategic review of the problem gambling strategy. It argued Manatū Hauora should not be constrained by a historic budget envelope, and argued future costings should be based on a comprehensive public health strategy to address gambling harm (Gambling Commission, 2022). It is possible that a similar argument could be advanced regarding the alcohol levy. This is particularly the case considering the Pae Ora Principles. However, any strategy must ensure appropriate Māori leadership and governance.

Levies, duties, and taxes on alcohol in other jurisdictions

35. Any revenue, or portion of revenue, can be hypothecated and used to fund specific programmes. For example, a percentage of alcohol excise tax could be directed to alcohol programmes without the need for a specific alcohol levy like New Zealand's. Similarly, a percentage of income tax or general tax revenue can be hypothecated for alcohol programmes. These examples, however, have the disadvantage of tying revenue to economic cyclicality, resulting in the amount available for funding fluctuating more over time. A hypothecated tax on alcohol could also be earmarked for other areas in the health system other than alcohol-specific programmes.

36. Internationally, hypothecated taxes are common and exist in numerous forms. Cashin et al (2017) identified over 80 countries with hypothecated taxes for health. The World Bank noted in 2020 that this number was likely higher (World Bank Group, 2020). Nine countries were identified where all or a portion of some tax revenue from alcohol sales is earmarked for particular activities (Cashin et al, 2017) (Table 2: Countries using hypothecated taxes for health around the world).

Table 2: Countries using hypothecated taxes for health around the world.

Type of hypothecation	Number of countries
Portion of revenues from tobacco taxes earmarked for health	35
Revenue from taxes on other goods that negatively impact health earmarked for health	10
Portion of value-added tax (VAT) earmarked for health	5
All or a portion of revenues from taxes on alcohol sales earmarked for health	9
All or a portion of revenues generated from lotteries earmarked for health	2
Portion of general revenues earmarked for health causes	5
Portion of Income tax earmarked to fund health care for the population or a selection of the population (e.g., formal-sector workers in a public scheme)	62

Source: Cashin et al. (2017)
Note: Cashin et al also identifies countries that use levies on money transfers and mobile phone company revenue. These are not included in Table 2.

37. Most countries that have an excise tax on alcohol do not also have a separate hypothecated tax on alcohol, although some do hypothecate a portion of alcohol excise revenue for health. Our rapid review of international approaches did not find any instance of a hypothecated tax that is designed in the same way as the alcohol levy – a hypothecated tax on alcohol, strictly for alcohol-related activity, levied in addition to an alcohol excise tax and set as a pre-determined fund rather than a fund that fluctuates with pre-determined rates. This will be explored further in stage 2.

38. Based on data for 2014, 18 countries used hypothecated taxes to fund programmes for the prevention and treatment of substance abuse disorders relating to alcohol (WHO,2017), including:

- Denmark: In Denmark, a national 8 percent income tax is levied and hypothecated for health services, including but not limited to alcohol programmes (Cashin et al. 2017).

- Switzerland: Switzerland imposes a duty on spirits (CHF 29 per litre of pure alcohol), the net revenue of which is divided 90%/10% respectively between the federal government and the regions (cantons) every year. The cantons' share is used to fund programmes and services that address the causes and effects of abuse of alcohol and other substances. The cantons provide an annual report on

the activities financed through by the duty (FOCBS, n.d.). In 2021 total revenue generated for the cantons equated to $47 million compared to New Zealand's $11 million (2022) (FOCBS, n.d.). On a per capita basis this equates to $5.4 per capita compared to New Zealand's $2.1 per capita for the alcohol levy.

39. Internationally, tobacco taxes are more likely than alcohol taxes to be hypothecated for health. Chaloupka (2012) identified that 38 countries earmark part, or all, of their tobacco tax revenue for specific programmes. However, this revenue was rarely allocated directly to tobacco control efforts (Chaloupka 2012). This suggests a similar disconnect between the source of funds and the use of funds as is observed in alcohol taxation.

40. From a purely economic perspective, levy-setting methodology in New Zealand avoids a key disadvantage of hypothecated taxes, which is the cyclicality of revenue. But the inflexibility of strong hypothecation to alcohol-related activity means the funds cannot be diverted when alternative uses offer better investment value. This is a key reason for such taxes being less popular than non-hypothecated taxes or 'wide' hypothecation, in which the funds are typically directed towards the health system but not towards any particular programmes or services.

The excise tax on alcohol

41. Unlike the alcohol levy, the excise tax on alcohol in New Zealand raises revenue that is not hypothecated and, therefore, contributes to general tax revenue. Excise tax is a more common instrument used internationally to collect general revenue, to modulate demand for alcohol, and as a source of hypothecated funds for health programmes and services.

42. The excise tax in New Zealand constitutes a much greater share of the price of alcohol products than the alcohol levy. Based on typical prices of common alcohol products identified by Alcohol Healthwatch, on 30 June 2022, the alcohol levy accounted for between 0.2 percent and 1.3 percent of the price of alcoholic beverages. This is substantially less than the excise tax, which accounted for between 20.7 percent and 55.9 percent of the price of alcoholic beverages (Table 3: Alcohol levy and excise tax as a percent of typical prices of alcoholic beverages).

Table 3: Alcohol levy and excise tax as a percent of typical prices of alcoholic beverages

	Volume (litres)	Price ($)	Price per litre ($)	Excise % of price	Levy % of price
Beer	**0.33**	**1.80**	**5.45**	**22.8%**	**0.9%**
RTD	0.25	2.25	9.00	27.6%	1.3%
Wine	0.75	15.00	20.00	20.7%	0.2%
Spirits	1.00	37.99	37.99	55.9%	0.4%

Source: Alcohol Healthwatch 2021

43. When looking at the role of the levy in reducing alcohol-related harm and the interventions/activities that can be undertaken within the Pae Ora context, the relationship with the excise tax (and any associated reduction in consumption, and therefore alcohol-related harm due to the tax settings) is a key consideration. This will be explored further in stage 2 of the review.

ALCOHOL CONSUMPTION IN AOTEAROA NEW ZEALAND

44. The purpose of this section is to present the current state of alcohol consumption within its historical context. This provides an indication of the drivers of consumption which can lead to alcohol-related harm and a contextualisation of the social environment in which activities to reduce alcohol-related harm operate.

Pre-1840

45. Prior to Europeans arriving in Aotearoa New Zealand there is no evidence of Māori having developed alcoholic beverages of their own (Alcohol Healthwatch, 2012). Alcohol was introduced to Aotearoa New Zealand with the arrival of European settlers and explorers. While alcohol and drunkenness were common amongst Europeans at this time, there is evidence to suggest that Māori did not show an interest in alcohol. Some commentators indicate that Māori generally had an aversion to alcohol (Alcohol Healthwatch, 2012). The general lack in interest in alcohol amongst Māori at this time can be further seen in the fact that alcohol was not used to advance European interests in the same way blankets, pipes, and tobacco were. At the signings of Te Tiriti o Waitangi alcohol was not allowed (Alcohol Healthwatch, 2012).

Post 1840

46. In the years following the signings of Te Tiriti o Waitangi some Māori leaders began to voice concerns about the impact of alcohol on their communities. They began to take action in an attempt to curb the harm that alcohol posed to their whānau. Sir Mason Durie notes that iwi, hapū, and marae sought to enforce their own controls over alcohol and cites bans on alcohol at many marae, the aukati within the limits of the King Country, the codes at Parihaka which included forbidding drunkenness, and Māori councils making informal bylaws (Durie, 1998; Durie 2001). Attempts were also made to encourage support nationally for reform. For example, in 1874 a petition to Parliament by Whanganui Māori stated (House of Representatives, 1874):

> *[Liquor] impoverishes us; our children are not born healthy because the parents drink to excess, and the child suffers; it muddles men's brains, and they in ignorance sign important documents, and get into trouble thereby; grog also turns the intelligent men of the Maori race into fools ... grog is the cause of various diseases which afflict us.*

47. Between 1847 and 1904 the Government passed a number of laws that had the effect of limiting alcohol consumption by Māori. However, these laws suggest that although the government was acknowledging that alcohol was an issue in society, they were (at least in a legislative sense) attributing the harm solely to Māori. These laws also inhibited Māori rights to exercise autonomy over issues arising from alcohol and develop their own tikanga to manage alcohol in their communities.

48. Many of these laws remained in place until after the Second World War when the Licensing Amendment Act 1948 removed many of the controls on Māori access to alcohol. While many marae continued to be alcohol-free, consumption amongst Māori started to increase significantly. In 2021/22 about 80% of Māori indicated that they had drunk alcohol in the past year (New Zealand Health Survey, 2022).

Current State

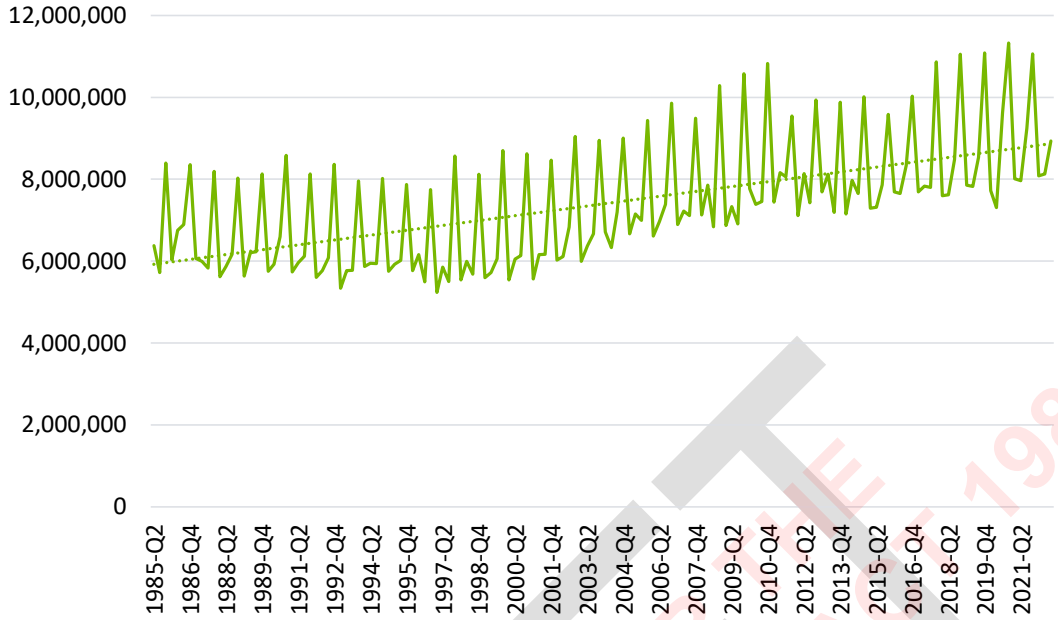
49. Below we provide a summary of available data on a range of measures, or proxy measures, for analysing trends in alcohol consumption. The purpose of this summary is to provide a snapshot of how people are currently consuming alcohol in Aotearoa New Zealand, any visible trends over time, and how this compares internationally. We acknowledge that there are other measures that could be used to measure alcohol consumption over time and that statistical testing is required to validate the observations from existing data presented in this interim report. This will be a core component of stage 2 of the review.

Alcohol available for sale

50. Actual alcohol sales data is not publicly available, being an industry data set. However, alcohol sales are expected to track along a similar trend to alcohol that is made available for sale. Statistics NZ has collected and reported data on alcohol available for sale quarterly since 1985 Q2.

51. The Statistics New Zealand Retail Trade Survey indicates that the volume of pure alcohol available for sale is consistently increasing year to year. It also suggests a seasonal trend in alcohol available for sale with a clear spike in the fourth quarter of every year (1 October to 31 December), reflecting pre-Christmas and New Year sales volumes (Figure 2: Alcohol available for sale: Quarterly volume of pure alcohol (litres)). The impact of COVID-19 and associated restrictions had an effect of the availability of alcohol in 2020/2021. BERL notes in an article from August 2020 that “the availability of alcoholic beverages decreased 5.4 percent between the Q1 and Q2 of 2020 to 7.3 million litres (BERL, 2020).

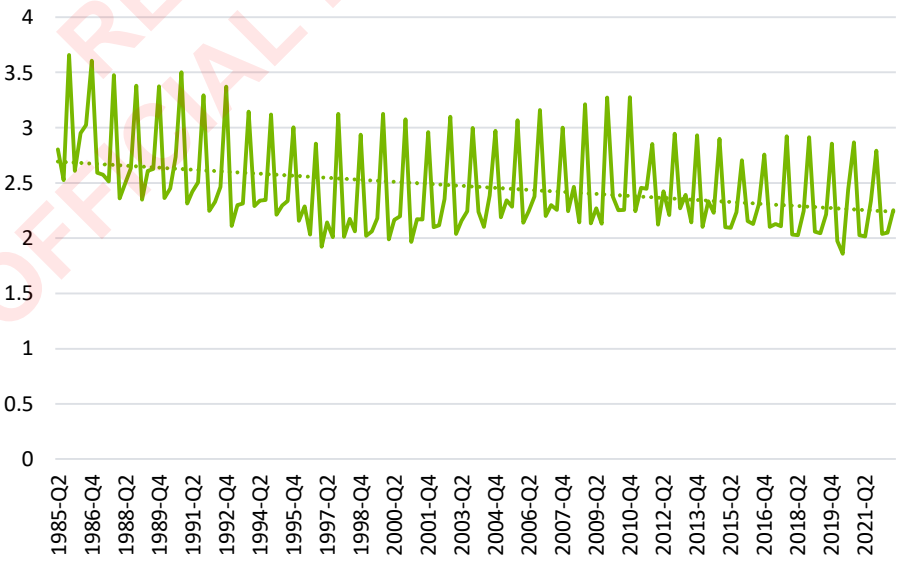
Figure 2: Alcohol available for sale: Quarterly volume of pure alcohol (litres)



Source: Statistics NZ

52. Drawing any strong conclusions from this trend is problematic for two reasons. First, underlying the increased volume of pure alcohol available for sale is an increase in the volumes of pure alcohol from wine and spirits and a slight decrease in the volume of pure alcohol from beer. Secondly, while the amount of alcohol available for sale has increased, population has also increased. Over the last ten years, these factors have come together to create a slight decline in the amount of pure alcohol available for sale per head of adult population (aged 18+) (Figure 3: Alcohol available for sale: Quarterly volume of pure alcohol for sale per head of population aged 18+ (litres)).

Figure 3: Alcohol available for sale: Quarterly volume of pure alcohol for sale per head of population aged 18+ (litres)



Source: Statistics NZ

53. Not surprisingly the value of alcohol sales follows a similar trend to the volume of alcohol available. The Statistics New Zealand Retail Trade Survey shows an increase in the total value of alcohol sold through retail outlets, with the trend indicating a 95 percent increase in the value of alcohol sales from 1995 to 2019 when measured in constant (2010) prices.[3]

Affordability of alcohol

54. The Law Commission's 2010 review of New Zealand's laws regarding the sale and supply of alcohol concluded that the price of alcohol was a "critical factor in moderating demand for alcohol" (Law Commission, 2010).

55. Notwithstanding the importance of affordability in moderating demand for alcohol, we note that affordability is only one driver of demand. Consumer preferences and the availability and acceptability of substitutes are also important drivers. Over time, it is not only the price of alcohol that will impact on affordability. Household incomes and the distribution of incomes, as well as other household expenditure requirements, impact on the resources available for households to purchase alcohol products. Over a period of time, demand drivers unrelated to affordability may also change, potentially even in offsetting ways (e.g., while alcohol may become more affordable, substitutes may also become more available, more affordable and more acceptable).

56. In 2021, HPA published a report on the affordability of alcohol in New Zealand (Health Promotion Agency, 2021). The report noted that between 2017 and 2020:

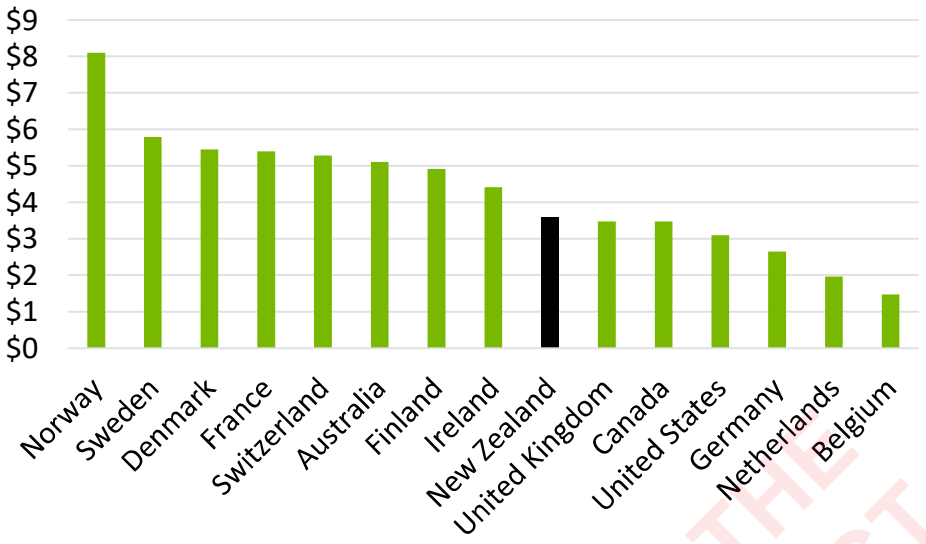
- the average price per standard drink increased for all alcoholic beverage types
- the real price (inflation-adjusted) of beer increased
- the real price (inflation-adjusted) of wine and spirits and liqueurs had dropped
- all alcoholic beverage types were more affordable in 2020

57. Over the five-year period 2017 – 2022, median household income has risen more than the average prices of alcoholic beverages, making alcoholic beverages more affordable in 2022 than in 2017 (Statistics NZ, 2022).

58. The World Health Organization (WHO) publishes the price of 500ml of the three major categories of alcoholic beverages (beer, wine, and spirits) in US dollars for a range of countries. Compared with a comparison set of OECD countries the price of beer in New Zealand is a little below average at US$3.58 per 500ml (average US$4.27 per 50ml) (Figure 4: Average price of beer in selected OECD countries).

[3] Note this does not reflect any impact of the COVID-19 pandemic or pandemic restrictions which would have impacted on retail sales and the share of alcohol sales that occurred through retail outlets versus hospitality venues or other from 2020 onwards, although the effects of the pandemic are observable in 2020 and 2021.

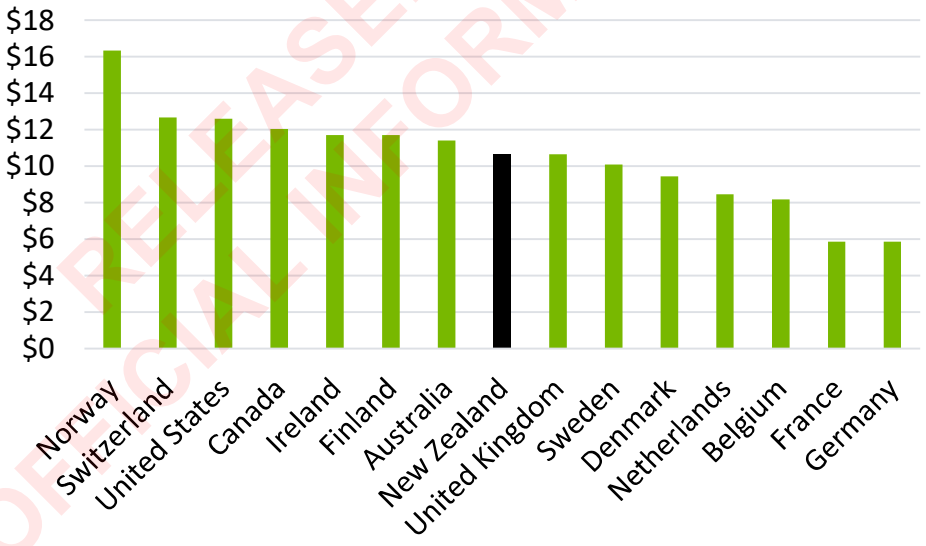
Figure 4: Average price of beer in selected OECD countries (USD per 500ml)



Source: World Health Organization, Global Health Observation

59. Compared with the comparison set of OECD countries, the price of wine in New Zealand is a little above average at US$24.6 per 500ml (average US$22.58 per 50ml) (Figure 5: Average price of wine in selected OECD countries).

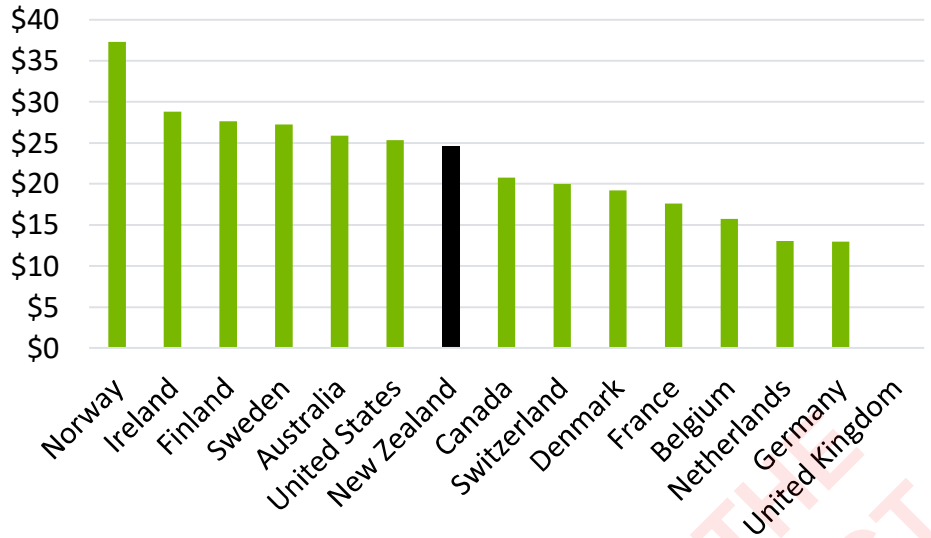
Figure 5: Average price of wine in selected OECD countries (USD per 750ml)



Source: World Health Organization, Global Health Observation

60. Compared with the comparison set of OECD countries, the price of spirits in New Zealand is a little above average at US$24.6 per 500ml (average US$22.58 per 50ml) (Figure 6: Average price of spirits in selected OECD countries).

Figure 6: Average price of spirits in selected OECD countries* (USD per 500ml)



Note: Data not available for the United Kingdom.

Source: World Health Organization, Global Health observation

61. A long international time series of alcohol expenditure as a percentage of total household expenditure indicates that Aotearoa New Zealand does not stand out from comparator countries, although the time series for New Zealand is not as long as for others. Alcohol expenditure in Aotearoa New Zealand is a higher share of total household expenditure than in the United States, Canada, and the Netherlands, similar to Sweden and Denmark, and lower than Norway, Australia, Ireland, Finland and the United Kingdom (Our World in data, 2022).

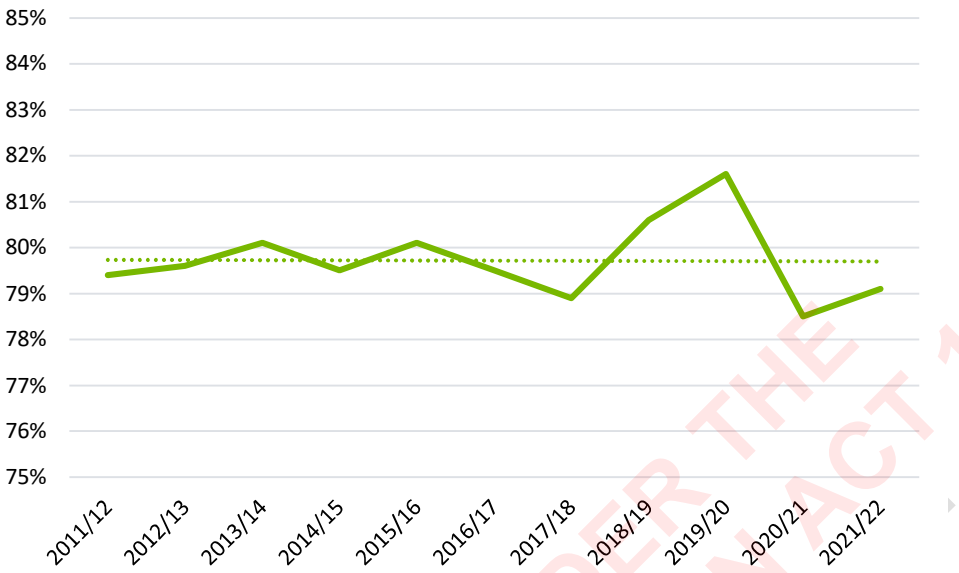
62. While affordability and household expenditure on alcohol provides some indication of the level of consumption, it is important to note that these measures are not a proxy measure for alcohol demand.

Past-year drinkers

63. Past-year drinkers is a measure of alcohol consumption reported through the NZHS. It represents the percentage of adults (aged 15+) who report having had a drink containing alcohol in the past year. While this is a useful indication of the extent of alcohol consumption in Aotearoa New Zealand, it has its obvious limitations as it relies on recollection and self-reporting. It also does not distinguish between the amount or type of alcohol being consumed.

64. In 2020/21 78.5% if New Zealander adults reported that they had had a drink containing alcohol in the past year (NZHS, 2020/21). Men were 9% more likely to have been past-year drinkers than women (NZHS 2020/21). The percentage of past year drinkers has been fairly constant over the past ten years. However, it remains high varying between 78 and 82 percent (Figure 7: Past year drinker: 2011/12 to 2021/22 (percent of survey participants aged 15+)).

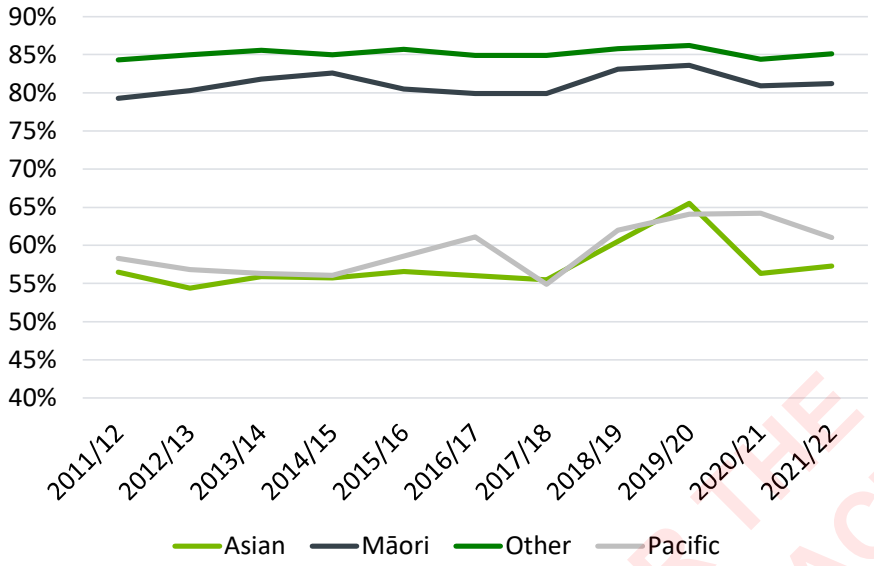
Figure 7: Past year drinkers: 2011/12 to 2021/22 (percent of survey participants aged 15+)



Source: NZHS data

65. When broken down by ethnicity, the highest rates of reporting being a past drinker are seen amongst Māori and Other (non-Māori, non-Pacific, non-Asian) New Zealanders. While rates are fairly constant over time for Māori and Other New Zealanders, the recently higher rates amongst Pacific and Asian New Zealanders could be an early indication of an increasing trend, although the volatility in the data make this unclear (Figure 8: Past year drinkers by ethnicity, 2011/12 to 2021/22 (percent of survey participants aged 15+)).

Figure 8: Past year drinkers by ethnicity, 2011/12 to 2021/22 (percent of survey participants aged 15+)



Source: NZHS data

66. Disability status has only been reported since 2018/19 and is based on self-reported disability status. This factor impacts on the likelihood of reporting past-year drinking, with people who identify as disabled having a significantly lower probability of reporting being a past-year drinker. Since 2018 between 67 percent and 73 percent of people who identify as disabled reported being a past-year drinker, compared with 80 to 82 percent of people who identify as non-disabled (NZHS, 2018/19 to 2020/21).

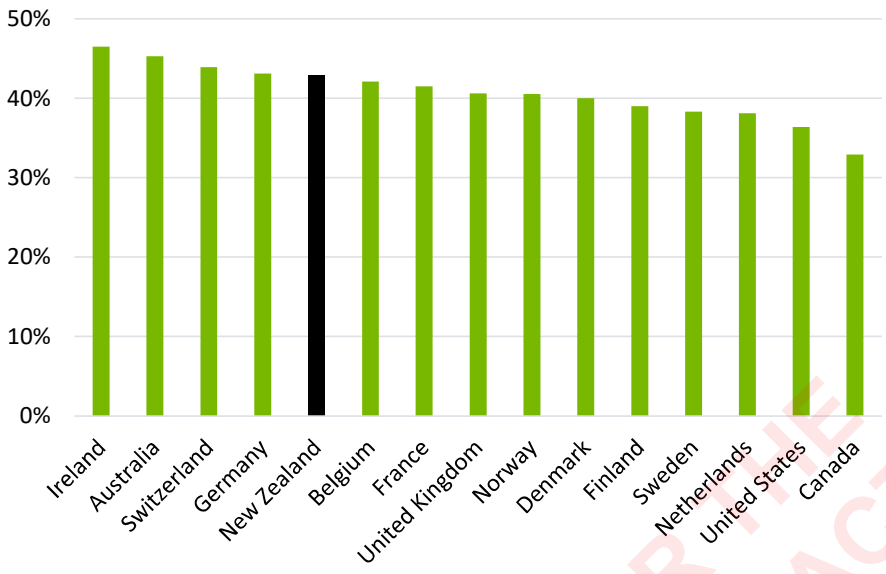
Hazardous and heavy episodic drinking

67. The NZHS has collected and reported on data that identifies hazardous drinking and heavy episodic drinking since 2015/16. Hazardous drinkers are defined as drinkers who obtained an Alcohol Use Disorders Identification Score (AUDIT) score of eight or more. Heavy episodic drinking is defined as consuming six or more alcoholic drinks on one occasion at least weekly (heavy episodic drinking, weekly) or at least monthly (heavy episodic drinking, monthly).

68. In 2021/22, approximately 19 percent of the adult population met the criteria for hazardous drinking. Māori experience higher rates of hazardous drinking than other ethnicities. In 2021/22, 33 percent of Māori met the criteria for hazardous drinking (NZHS, 2022).

69. International data shows that New Zealand's drinking culture involves more than an average frequency of heavy drinking as measured by self-reported experience of heavy drinking in the past 30 days for adults aged 15+ (Figure 9: Heavy drinking in the past 30 days (percent of survey participants aged 15+).

Figure 9: Heavy drinking in the past 30 days (percent of survey participants aged 15+)



Source: Our World in Data

70. International data based on a longer time series confirms that New Zealand's current prevalence of hazardous and heavy episodic drinking ranks amongst the highest in our selected group of OECD countries. This is in stark contrast to ten years ago when New Zealand's prevalence of hazardous and heavy episodic drinking ranked in the bottom half for the same set of countries (Our World in Data, 2023) This could suggest the New Zealand has made little inroads to improve hazardous drinking while comparable OECD countries have. This will be explored further in stage 2 of this review.

Summary

71. Our review of data from a range of sources has provided no clear indication that alcohol consumption is increasing overall. We note that there are important gaps in the data and evidence on alcohol consumption. While the limited data indicate that Māori are more likely than non-Māori to engage in heavy or binge drinking, it is unclear whether this has worsened. Some evidence indicates a possible improvement such as the New Zealand Health and Lifestyles Survey which indicates the percentage of Māori who are heavy drinkers fell from 47.9 in 2012 to 43.2 in 2016 and to 31.0 percent in 2020. However, 2020 data may not be reflective of a downward trend in heavy drinking in Māori due to the potential impact of the COVID-19 pandemic and associated restrictions. Prior to 2020 data on Māori who are heavy drinkers showed a small but steady trend upwards since 2017 (New Zealand Health Survey, 2016/17 to 2021/22). Additionally, much of the recent evidence regarding consumption patterns within population sub-groups is derived from the NZHS and the Alcohol Use in New Zealand Survey (AUiNZ) which rely on self-reported alcohol consumption which is impacted by social desirability and recall biases.

72. However, the consumption of alcohol in Aotearoa New Zealand remains high. Furthermore, the instance of hazardous or heavy episodic drinking in Aotearoa New

Zealand has shown little sign of decreasing as has been seen in comparative OECD countries.

ALCOHOL-RELATED HARM

73. Understanding the scope of alcohol-related harms and their prevalence is important to be able to consider the role of the levy fund within the broader public sector framework. This section provides a snapshot of the breadth and scope of alcohol-related harms in Aotearoa New Zealand. We do not attempt to quantify all alcohol-related harm in this section. Rather we seek to reflect the well-established health and broader societal harms that alcohol contributes to. Stage 2 of this review will provide a deeper analysis of the extent of harm across society and include further qualitative insights from Māori.

74. A broad indicator of experience of harm is provided by the AUiNZ which showed that in 2020, 25.9 percent of New Zealanders said that they had experienced harm from their own drinking and 37.7 percent of New Zealanders had experienced harm from someone else's drinking (AUiNZ, 2020).

75. The AUiNZ also revealed that while males are more likely to report experiencing harms from their own drinking, women are more likely to report experiencing harms from others' drinking (AUiNZ, 2020).

Alcohol use and health

76. Alcohol use is a significant and modifiable risk factor for a wide range of non-communicable diseases. A systemic analysis published in the Lancet in 2018 found that the risk of all-cause mortality rises with increasing levels of consumption, and the level of consumption that minimises health loss is zero (Griswold et al, 2018). Despite earlier research to the contrary it is now widely accepted that alcohol in any quantity is not a therapeutic agent. The WHO said in 2007 that "from both the public health and clinical viewpoints, there is no merit in promoting alcohol as a preventive strategy" (WHO, 2007).

77. It is important to note that evidence indicates that individuals with low socioeconomic status experience disproportionately greater alcohol attributable harm than individuals with high socioeconomic status from similar or lower amounts of alcohol consumption (Probst et al, 2020). This must be borne in mind when considering our analysis of alcohol harms to follow.

78. Disability-adjusted life years (DALYs) are a measure of overall disease burden, expressed as the number of years lost due to ill-health, disability, or early death. DALYs attributable to alcohol in New Zealand show that the early 2000s represented a period of relatively low DALYs which was followed by a period of increasing DALYs to around 2014, followed by a stable level of DALYs since 2014. (Our World in Data, Premature deaths due to alcohol (age standardized rate per 100,000 people)

79. International and New Zealand evidence unequivocally shows that alcohol use has been causally linked to a range of diseases and injuries, including:

    - Cancer; Rumgay et al found, in a population-based study published in Lancet Oncology, that globally 4.1% of all new cases of cancer in 2020 were

attributable to alcohol consumption (Rumgay et al., 2020) . The WHO estimated that in 2020, almost 7% of the total cancer burden in New Zealand was attributable to alcohol (WHO, 2020). Our literature review indicated that it is likely that, in New Zealand, alcohol attributable cancers make up a larger proportion of cancer cases than the global average. The Cancer Control Agency noted that in New Zealand in 2020 alcohol caused “32 percent of oral cavity and pharyngeal cancers, 23 percent of liver and laryngeal cancers, 16 percent of oesophageal cancers, 11 percent of bowel cancers and 7 percent of breast cancers in Aotearoa”(Cancer Control Agency, 2020).

- Stroke; Feigin et al, in a systematic analysis for the Global Burden of Disease Study published in 2016 in Lancet Neurology found that 7% of the global stroke burden was attributable to any amount of alcohol use (Feigin et al., 2016).

- Heart disease; there is a large body of evidence that links alcohol consumption to ischaemic heart disease (Mente et al., 2009).

- Fetal Alcohol Spectrum Disorder (FASD); Although there is limited data on the prevalence of FASD in Aotearoa New Zealand, Manatū Hauora estimates that between three to five percent of people may be affected by alcohol exposure before birth. On this basis they suggest that around 1800 -3000 babies may be born with FASD per year (Manatū Hauora, 2023).

- Diabetes; Excess alcohol consumption is associated with an increased risk of type 2 diabetes. Te Whatu Ora estimates that over 250,000 people have diabetes in Aotearoa New Zealand (predominantly type 2) (Te Whatu Ora, 2023). The prevalence of diabetes within Maori and Pacific populations is approximately three times higher than for other New Zealanders (Te Whatu Ora, 2023).

- Suicide; A 2022 study from the University of Otago showed that 26 percent of all suicides in Aotearoa New Zealand involve acute alcohol use. This is higher than the WHO global estimate of 19 percent. (Crossin R et al., 2022).

- Alcohol Related injuries; The Accident Compensation Corporation (ACC) reported in 2019 that 3427 new alcohol related injury claims were lodged at a cost of approximately $3.7 million per week (ACC, 2020). We note that there are limitations with this data as it is reliant on the information provided on the ACC45 injury claim form which is completed by the person seeking treatment for the injury. Furthermore, some costs covered by ACC fall under bulk funded service agreements (for example, emergency treatment at public hospitals and the use of ambulance services). Data on the amount of bulk funded services spent on alcohol related injuries is not readily available (ACC, 2020).

- Dementia; Dementia is an increasing health issue globally. In Aotearoa New Zealand, approximately 70,000 people are living with dementia (Alzheimers NZ, 2020). Alzheimers NZ estimates that this number will increase to around 170,000 in 2050 (Alzheimers NZ, 2020). Alcohol consumption is the leading

non-genetic risk factor for dementia. A recent European study found that those who regularly had more than four drinks in a single day for men or three in a single day for women, were three times more likely to develop dementia than others (Rehm, 2019).

Alcohol and violence

80. Alcohol has a significant effect on the level of violence in Aotearoa New Zealand. In 2009 the New Zealand Police National Alcohol Assessment showed that alcohol is responsible for (New Zealand Police, 2009):

- A third of all violence
- A third of all family violence
- Half of sexual assaults
- Half of homicides

While these data are now outdated, there is no indication that there has been any significant decrease in the extent to which alcohol is responsible for violent crimes in Aotearoa New Zealand. Due to time constraints in stage 1 of this review we were unable to gather and analyse up to date raw data from New Zealand Police. This analysis will be included in stage 2 of the review.

81. A recent study into the relationship between child maltreatment and alcohol in Aotearoa New Zealand estimated that in 2017 between 11 and 14 percent of documented cases of child maltreatment could be attributable to exposure to parents with severe or hazardous consumption (Huckle and Romeo, 2022).

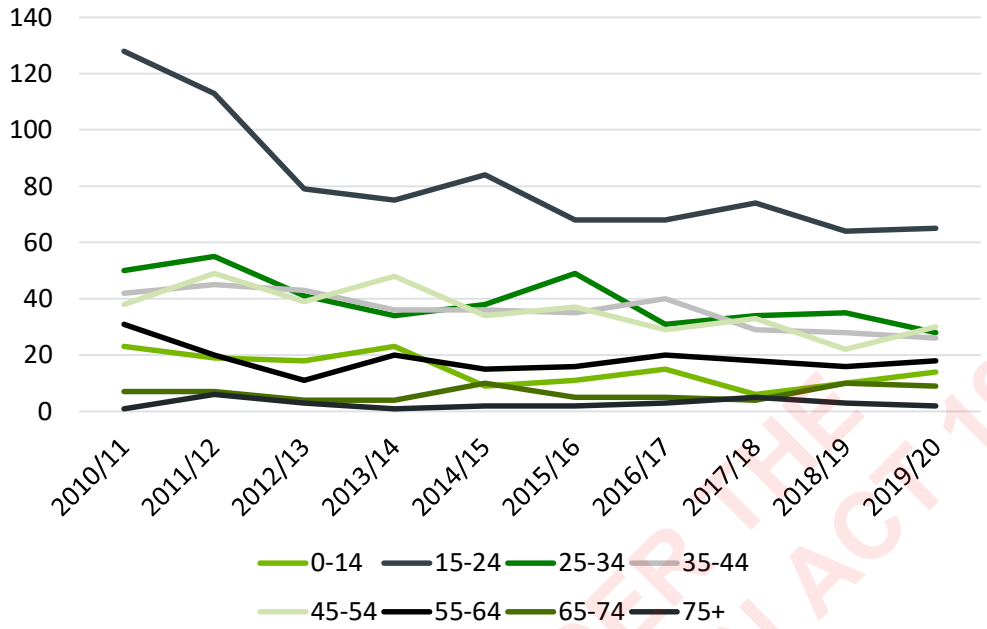
Other indicators of alcohol-related harm

82. Other indicators of alcohol-related harm include:

- Hospitalisations wholly attributable to alcohol
- Alcohol-related motor vehicle crashes
- Alcohol-related calls to police

83. The National Minimum Data Set (Te Whatu Ora, 2023) contains data on public hospital discharges, including discharges with a primary diagnosis of ‘toxic effect of alcohol’. These data indicate a decline in the number of these discharges over the last ten years. Across age groups, the group most likely to experience hospitalisation due to toxic effects of alcohol is 15–24-year-olds. This group has also seen a decline in these events over the last ten years (Figure 10: Public hospital discharges with a primary diagnosis of “toxic effect of alcohol”.

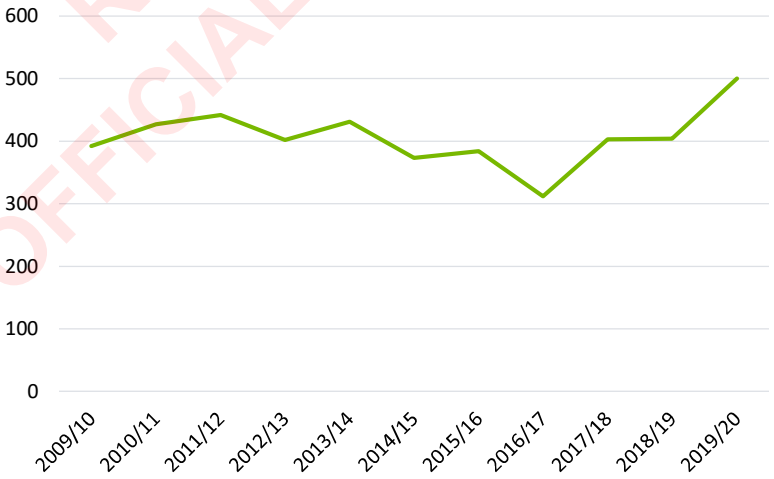
Figure 10: Public hospital discharges with a primary diagnosis of "toxic effect of alcohol" (number per year, by age group)



Source: Te Whatu Ora

84. Alcoholic liver disease is a condition caused by heavy use of alcohol and tends to occur after many years of heavy drinking and is, therefore, not highly prevalent amongst young people. Data on hospital discharges shows a fairly constant number of discharges with a primary diagnosis of alcoholic liver disease, with a spike in 2019/20 (Figure 11: Discharges from publicly funded hospitals with a primary diagnosis of alcoholic liver disease).

Figure 11: Discharges from publicly funded hospitals with a primary diagnosis of alcoholic liver disease



Source: Te Whatu Ora

85. The New Zealand Transport Agency (NZTA) tracks the percentage of deaths and serious injuries from road crashes that are alcohol-related. These data show a decline in this percentage since data started being collected in 2008. However, the number remains high (NZTA, 2023). Between 2019 and 2021 alcohol was a contributing factor in 43 percent of fatal crashes, 11 percent of serious injury crashes and 14 percent of minor injury crashes (NZTA, 2023).

86. NZ Police recorded and published data on alcohol-related calls to police between 2008 and 2012. This data shows a roughly constant number of calls to police that are alcohol-related: between 120,000 and 126,000 calls per year (NZ Police, 2012).

Alcohol-related-harm and Māori

87. In 2010 the Law Commission highlighted the negative impact that alcohol has on health and social issues for Māori. It noted that (Law Commission, 2010):

- Māori were more likely to die of alcohol-related causes
- Māori were more likely to experience harm from alcohol consumption in areas such as work, study, and employment
- Māori women suffered more harm as a result of other people's drinking
- Alcohol may be actively contributing to inequalities.

88. In 2015 a policy briefing from the New Zealand Medical Association provided a useful overview of the disproportionate impact of alcohol on Māori. It found (New Zealand Medical Association, 2015):

- Māori were 2.5 times more likely to die from an alcohol-attributable death when compared to non-Māori
- Māori were twice as likely as non-Māori to die from cardiovascular disease, a disease linked to alcohol consumption.
- Māori women were more likely to suffer from breast cancer than non-Māori, a disease linked to alcohol consumption.

89. There has been very little, if any, shift in the disproportionate harm that Māori experience from alcohol. A key issue in addressing this inequity is enabling Māori to exercise tino rangatiratanga over their health in relation to alcohol. This will be a key question in stage 2 of this review.

Summary

90. As can be seen from the evidence summarised above, alcohol causes significant harm across all communities in Aotearoa New Zealand. While there have been some improvements across some indicators, overall, the level of harm caused by alcohol

remains unacceptably high. Māori remain disproportionately affected by alcohol-related harm.

COST OF ALCOHOL-RELATED HARM

91. The cost of alcohol-related harm to New Zealand society is significant. This section provides a summary of existing estimates of the cost of alcohol-related harm in Aotearoa New Zealand.

92. The most recent study to quantify the social cost of alcohol in Aotearoa New Zealand was conducted by BERL in 2009. Commissioned by ACC and the Ministry of Heath, the report aimed to quantify the social cost of alcohol and drug related harm looking at the personal, economic, and social impacts. While the estimate of the social cost of alcohol-related harm in Aotearoa New Zealand published by BERL in 2009 and updated in 2018, or rather the methods used to generate it, have been criticised by some commentators, it has been widely cited in the alcohol-harm research and policy space in New Zealand over the last 14 years (BERL, 2009; Nana, 2018).

93. In 2018, an updated estimate based on the BERL methodology was calculated to be $7.85 billion per year (Nana, 2018). The 2018 estimate included costs resulting from justice, health, ACC, social services, unemployment, and lost productivity. Intangible costs such as years of life lost from premature death, lost quality of life, child abuse, sexual abuse, and impacts on victims of alcohol-caused crime are also relevant to assessing the overall impact of alcohol-related harm on society. A recent Australian Study found that in Australia $48.6 billion AUD of intangible costs could be attributable to alcohol (National Drug Research Institute, Curtin University, 2021).

Evidence from other countries

94. A literature review was conducted to identify other estimates of the social cost of alcohol-related harm that have been published since the BERL report was published in 2009. The literature review focused on studies that represent the social cost of alcohol at a national-level and consider costs of both the consumers of alcohol and society in general. Where more than one study of the same country has been published since 2009, the most recent publication was included. The United States, Australia, and Canada were the focus of the literature search given the higher generalisability of results to an Aotearoa New Zealand setting.

95. The table below summarises the three international studies relating to the social cost of alcohol-related harm that were identified in this literature review and compares them to the New Zealand study conducted by BERL in 2009 (Table 4: Summary of selected international studies reporting on the social cost of alcohol-related harms).

Table 3: Summary of selected international studies reporting on the social cost of alcohol-related harms.

Country (Author, date)	Year of study costs	Total Social cost of alcohol (Local currency and cost estimate year, millions)	Total Social cost of alcohol (2023 NZD millions)	Social cost of alcohol per person (b, c)	Social cost of alcohol per person (c, d)	Social cost of alcohol as a % of GDP (e)	Tangible Costs (% of total costs)	Intangible (% of total costs)
New Zealand (BERL et al 2009)	2006	NZ$4,7934 (a)	$7,260	NZ$1,146	$1,735	2.79%	NZ$3,231.6 million (67%)	NZ$1,561.9 million (33%)
Australia (Whetton et al 2021)	2017/18	AU$66,817	$85,459	AU$2,676	$3,475	3.80%	AU$18,165 million (27%)	AU$48,651 million (73%)
Canada∞ (CSUCH 2020)	2017	CAN$16,625	$23,803	CAD$454.92	$651	0.78%	CAN$16.625 million (100%)	Not included
US∞ (Sacks et al 2015)	2010	US$ 49,026	$561,727	US$805.06	$1,816	1.65%	US$249,026 million (100%)	Not included

(a)Figure reported in BERL 2009 for alcohol only. It does not include expenditure that could not be separated between alcohol and other drugs which is listed separately in the report

(b) Local currency and cost estimate year

(c) Denominator is total population for noted country in year of study data soured from the World Bank

(d) 2023 NZD, population study year

(e) Denominator is GDP in current local currency unit for year of study data soured from the World Bank

∞ Analysis is an update of previous analysis

96. These four studies were conducted in Aotearoa New Zealand (2005/6 costs), Australia (2017/18 costs), Canada (2017 costs), and the US (2010 costs) and differed significantly in their findings (BERL, 2009; Canadian Substance Use Costs and Harms Scientific Working Group, 2020; Sacks et al., 2015; Whetton et al., 2021). To compare the relative value of each of the four identified studies, all total costs were converted to 2023 NZD using the Consumer Price Index (CPI) and currency exchange rates and divided by the total population size of the country during the year considered in the study to account for large differences in population size contributing to the cost.

97. In this comparison, the social cost of alcohol appears highest in Australia with an estimated cost of $3,343 per person (Whetton et al., 2021). Aotearoa New Zealand and the US follow with a cost per person of $1,392 and $1,655 respectively (BERL, 2009; Sacks et al., 2015). Canada's estimate of the social cost of alcohol was the lowest of the four studies observed with the social cost of alcohol estimated to be $651 per person (Canadian Substance Use Costs and Harms Scientific Working Group, 2020). A key point to note in comparing the 4 studies we analysed is that the US and Canadian estimates do not consider the intangible costs of alcohol where the Australian and New Zealand estimates do.

Relevance to the alcohol levy

98. It is unclear whether the BERL 2009 report (or any other evidence regarding the burden of alcohol-related harm) was used previously to determine the alcohol levy or even the excise tax. However, we note that the BERL report was cited in the Law Commission's 2010 report on the review of the regulatory framework for the sale and supply of liquor, so it may have had some influence.

99. While evidence on the costs of alcohol-related harms cannot be directly related to the cost of addressing harms, it can be used to motivate investment in addressing alcohol-related harms – if cost-effective interventions exist, it can also be used to:

- motivate research investment to identify cost-effective interventions
- motivate investment in interventions to reduce alcohol use
- better understand the key areas of alcohol-related harms to prioritise investment.

Summary

100. Methodologies used to quantify the cost of alcohol-related harm vary internationally. This makes direct comparisons difficult. There also remains debate about the types of costs and harms that should be included. Nevertheless, we know that the cost is significant and potentially much higher than existing estimates (i.e., we heard from ACC that they estimate a cost of approximately $600 million annually for alcohol-related injuries).[4]

[4] Further inquiries and engagement with ACC will be part of stage 2 of this review to better understand and quantify this figure.

101. Notwithstanding differing views on the methodological approach that led to the BERL estimate (and the 2018 update), it was based on 2005/06 data, and in 2023 the data landscape has changed. It is timely to undertake an updated analysis, and particularly relevant in the context of this review of the alcohol levy. In stage 2 we will undertake an up-to-date cost of alcohol harms study that clearly outlines the relevant costs from both an economics perspective and a public health perspective, to support better-informed decision-making across a range of purposes and contexts.

CONSIDERATIONS FOR INCREASING THE ALCOHOL LEVY

102. The alcohol levy has not increased since 2013. During this time the real cost of harm-reduction interventions has increased, and the levy appears to remain insufficient to address alcohol-related harms across society (i.e., there has been little, if any, shift in the extent of alcohol-related harm across communities in Aotearoa New Zealand). Furthermore, the levy now sits within a different legislative context. The Pae Ora framework potentially opens new opportunities for investment in harm-reduction activities across health entities.

103. A range of factors should be taken into account when considering a potential increase in the alcohol levy, including:

- the regulatory context of the levy
- the strategic context of the levy
- the potential impact of price change on demand for alcohol
- the potential regressive effects of levy-induced price change
- costs of alcohol-related activity funded by the levy, which may increase due to
    - inflation
    - patterns of alcohol consumption and alcohol-related harms
    - unmet need
    - the costs of alcohol-related harms
- new opportunities for investment
- the size of the levy fund and proportionality considerations
- the effectiveness and cost-effectiveness of interventions to reduce alcohol-related harms
- Te Tiriti o Waitangi.[5]

Regulatory context of the levy

104. The Pae Ora Act states that (Pae Ora (Healthy Futures Act 2022, s.101):

> *levies may be imposed for the purpose of enabling the Ministry to recover costs it incurs -*
>
> *(a) in addressing alcohol-related harm; and*
>
> *(b) in its other alcohol-related activities*

[5] Note this is not addressed in detail in Stage 1 given time constraints and the limited ability to engage with Māori. This will be a core focus of Stage 2 of the review.

105. In other words, the Act explicitly identifies the primary (and potentially only) purpose of the levy as a cost recovery mechanism, rather than a demand modifying instrument or as Pigouvian tax (a tax intended to internalise any externality associated with alcohol consumption). However, we do consider the potential for the levy to have a demand modifying effect which may result from partial or complete internalisation of externalities.

106. The Pae Ora context expands the scope of the levy due to now being a broader cost recovery for Manatū Hauora rather than Te Hiringa Hauora. However, what remains unclear is the breadth of the application of section 101 of the Pae Ora Act and what activities can and should fall within its ambit. Consideration of this issue needs to take into account the clear distinction that must be drawn between core government activities and responsibilities and the role of the levy fund. Further investigation into this question will be undertaken during stage 2 of this review. This may require legal advice to clarify any uncertainties in interpretation.

Strategic context of the levy

107. The purpose of the Pae Ora Act is to build healthy futures for all New Zealanders and to eliminate health disparities, in particular for Māori. Section 7 of the Pae Ora Act sets out principles which are to underpin the functions of health entities. Of particular relevance to this review are those principles that relate to engaging, resourcing and empowering Māori. These include:

- the health sector should engage with Māori, other population groups, and other people to develop and deliver services and programmes that reflect their needs and aspirations, for example, by engaging with Māori to develop, deliver, and monitor services and programmes designed to improve hauora Māori outcomes (7(1)(b))
- the health sector should provide opportunities for Māori to exercise decision-making authority on matters of importance to Māori (7(1)(c))
- the health sector should provide choice of quality services to Māori and other population groups, including by resourcing services to meet the needs and aspirations of iwi, hapū, and whānau, and Māori (for example, kaupapa Māori and whānau-centered services) (7(1)(d)(i)

108. The levy is now administered in this new context and there is an opportunity to reconsider activities in light of these obligations and to expand by Māori for Māori interventions.

109. Engaging with Māori communities to develop, deliver, and monitor programmes and resourcing services to meet the needs of iwi, hapū, and whānau, are practices intended to increase the effectiveness of services and programmes in delivering equitable outcomes for Māori. Some services and programmes may achieve effectiveness in Māori and Pacific communities through added investment to support these needs. To give effect to the Pae Ora Act principles through the application of the levy fund, a key focus needs to be empowering Māori to determine and deliver the initiatives most appropriate for their communities. Stage 2 of this review will provide the opportunity for

extensive engagement with Māori to build relationships and explore these opportunities when considering the future of the levy fund.

Impacts of alcohol levy on price and consumption

110. Theoretically, as a price-altering mechanism, the alcohol levy does have the potential to have a demand modifying effect which could, in turn, reduce the levy revenue.

111. However, the potential for an increase in the alcohol levy to impact on alcohol demand is modulated by consumer opportunities for substitution to lower priced alcoholic beverages.

112. An additional concern related to the potential of the levy to modulate demand is that impacts of price changes on demand are likely to affect different groups differently. There is potential for any reduction in demand to be concentrated in groups with already relatively low alcohol consumption, groups with low rates of binge or harmful drinking, and groups that experience lower levels of alcohol-related harms. A proportionate reduction in alcohol-related harms is not guaranteed by reductions in alcohol sales.

113. Substitutes and their prices are important because where consumers have the option of switching to acceptable substitutes, the impact of a price change will be greater. However, alcoholic beverages are not a homogenous good. There are many different alcoholic beverage options at different price points. This means substitution within the category of alcoholic beverages is likely to be an attractive option for many consumers: If the cost of a favourite alcoholic beverage increases due to a tax or levy increase, in addition to reducing alcohol consumption, consumers have a range of options, including:

- switching to a cheaper beverage type
- switching to a cheaper brand
- switching to large containers that are associated with a lower cost per volume
- switching to multi-packs that are associated with a lower price per unit
- purchasing alcoholic beverages that are subject to price promotion
- purchasing alcoholic beverages from different outlets
- changing the balance of on-licence to off-licence consumption to favour more off-licence consumption.

114. The range of options for within-category substitution and the ultimate choice consumers make is determined by individual consumer preferences. For example, some consumers may reduce total alcohol consumption rather than switch from on-licence to off-licence consumption when on-licence consumption reaches an unacceptable cost. For others, a perverse effect can occur where alcohol consumed may increase due to substitution from on-licence to off-licence consumption if the cost

savings per unit more than offset increases in price, allowing a greater volume of alcohol to be purchased within the same budget.

115. As noted by the Tax Working Group (Tax Working Group Secretariat, 2018), published research indicates that alcohol excise (and therefore the combination of alcohol excise and alcohol levy) are likely to be effective in discouraging harmful behaviour. This means that on the whole, an increase in prices of alcoholic beverages is likely to result in a reduction in the amount of alcohol consumed for at least those consumers who engage in harmful drinking. But the Tax Working Group also acknowledged the considerable uncertainty around demand response to potential increases in tax and indicated that further research would be unlikely to resolve these issues sufficiently to indicate an optimal tax on alcohol.

116. Despite the uncertainties as to the specific elasticities, broad conclusions can be drawn from the evidence, including:

- price elasticity of demand for alcoholic beverages is not insignificant: a significant increase in price is expected to result in a proportionately smaller but not insignificant decrease in quantity demanded
- price elasticity of demand in groups that engage in heavy and harmful drinking are likely to be the least responsive to a price increase: while a sufficiently large price increase may reduce sales of alcohol, a less than proportionate reduction in alcohol-related harms is to be expected.

117. The alcohol levy is small in proportion to price and in proportion to the alcohol excise tax, so an increase in the levy itself – indeed even a doubling of the levy – is unlikely to have a noticeable impact on alcohol demand, so the levy revenue is unlikely to be negatively affected by the increase in the levy.

118. On the other hand, the alcohol excise tax represents a significant portion of the price of alcohol and making a change in the excise tax is most likely to result in a change in quantity demanded. It is unclear whether the objective of the alcohol excise tax is to raise revenue, in which case increases in the tax will be introduced slowly, or to modulate demand for alcohol (or indeed whether the objective of the tax is shifting over time). Due to its relative size, and in the absence of other regulatory interventions, the excise tax is likely to be the primary price-based lever through which government can influence demand for alcohol and, therefore, potentially reduce alcohol-related harms.

119. The relationship between the excise tax and the alcohol levy will be explored further in stage 2 of this review.

Regressivity of the levy

120. Price policies, including the alcohol levy, the excise tax on alcohol and even the GST, tend to be seen as potentially regressive. That is, lower income households are believed to pay a higher proportion of their incomes when they pay these taxes than higher income households because they spend a higher proportion on the taxed goods. However, in considering the evidence on corrective taxes, the Tax Working Group

found that the alcohol excise tax (and by extension the alcohol levy) appears to be slightly progressive, in contrast to tobacco taxes which are regressive.

121. This means an increase in the levy is unlikely to cause disproportionate harm to lower income households.

Costs of alcohol-related activity

122. Because the alcohol levy is a cost recovery mechanism, an increase in the levy should consider factors that increase the cost of alcohol harm-reduction activities funded by the levy. Cost increases may be expected to occur if:

- there is inflation
- there has been an increase in alcohol-related harms
- there is unmet need that the agency has plans to address
- there are new opportunities for investment in cost-effective ways of addressing alcohol-related harms.

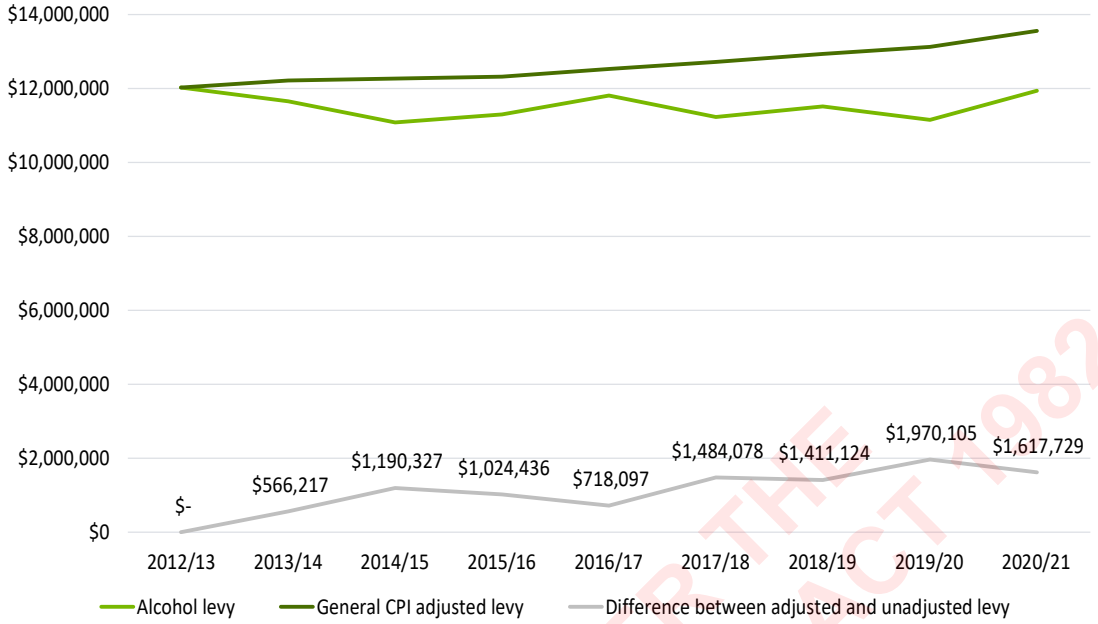
Inflation

123. Indexing to inflation is justified due to the use of the levy fund as a cost recovery mechanism. The services and programmes and other alcohol-related activity undertaken through levy funding are labour intensive. Employment contracts often include an inflation adjustment to wages and salaries, and where they do not, adjustments to wages and salaries to reflect inflation are made periodically to avoid labour shortages. The CPI is the most common measure of inflation that drives adjustments to labour costs and is, therefore, the most justified measure of inflation for the levy to be indexed to (as opposed to the alcohol CPI which would be more appropriate if the alcohol levy purpose was as a demand modulating instrument).

124. If the levy fund had been adjusted using the CPI, it would have generated between $566,217 and $1,970,105 in additional revenue each year since 2012/13 (Figure 12: Levy fund with and without CPI adjustment, and actual levy shortfall relative to adjusted levy).

125. Based on this adjustment, the cumulative levy shortfall due to a lack of adjustment over the past nine years is approximately $10 million.

Figure 12: Levy fund with and without CPI adjustment, and actual levy shortfall relative to adjusted levy



Source: CPI data from Stats NZ

Increase in alcohol consumption and harms

126. Our review of data from a broad range of sources indicates that:

- the amount of alcohol available for sale has increased on a per capita (aged 18+) basis over the last 10 years while actual sales have remained constant, suggesting more variety may be on shelves with intensifying competition in the industry
- growth in the industry is observed mainly in the liquor retailing sector rather than in manufacturing
- imports continue to rise consistent with previous trends
- all forms of alcohol have become more affordable in New Zealand, with households spending a similar share of total expenditure on alcohol regardless of household income level. Internationally, alcohol is not likely to be more affordable in New Zealand than in the average of high-income OECD countries
- New Zealanders drinking habits have not changed significantly over the last 10 years, with the possible exception of Pacific people, in particular Pacific women who appear to be more likely to drink alcohol now than 10 years ago
- consumption of beer continues to decline while consumption of spirits and wine remains fairly constant
- New Zealand is either in the middle or at the bottom of a set of high-income OECD countries in terms of alcohol consumption per capita, depending on the measure used

- the COVID-19 pandemic and restrictions have likely impacted on alcohol consumption in different ways, but no increasing trend in hazardous drinking was observed before or after the pandemic, except for Pacific people who appeared to have an increasing trend towards hazardous drinking prior to the COVID-19 pandemic
- younger New Zealanders are showing a slight trend towards less hazardous drinking and less alcohol-related harm
- international data suggests the prevalence of alcohol use disorders in New Zealand has increased in the last 10 years
- there is no clear evidence of increasing alcohol-related harms, although limited data is available on harms so there is potential for harms to be increasing in areas where data was not readily available
- a key outcome of interest is that New Zealand continues to have a very low rate of premature deaths associated with alcohol compared with similar high income OECD countries. It is unclear how appropriate international comparisons may be (e.g., whether different definitions or data collection may be contributing to this result).

127. We note that there are important gaps in the data and evidence on alcohol consumption and experience of alcohol-related harms. While the limited data indicate that Māori are more likely than non-Māori to engage in heavy or binge drinking, it is unclear whether this has worsened over time. Some evidence indicates a possible improvement (e.g., the percentage of Māori who are heavy drinkers fell from 47.9 in 2012 to 43.2 in 2016 and to 31.0 in 2020), although 2020-2022 data is also muddied by the impact of the COVID-19 pandemic and associated restrictions (NZHS, 2016, 2022). Additionally, much of the recent evidence regarding consumption patterns within population sub-groups is derived from the NZHS and the AUiNZ which rely on self-reported alcohol consumption which is impacted by social desirability and recall biases.

128. Nevertheless, the level of alcohol consumption and the rate of alcohol-related harm across Aotearoa New Zealand remains high.

Unmet need

129. It is important to note that the total levy fund has remained quite constant despite increasing population. Unless the determination of the levy fund has been made taking population growth and measures of unmet need into account, it is possible that the relatively constant levy fund over the last 9 years has been increasingly insufficient to meet population need. However, we were unable to conclude through the analysis of programme data that was made available whether this might be the case. We will consider this further in stage 2 of the review.

The cost of alcohol-related harms

130. We found no evidence that the cost of alcohol-related harms is or has been considered directly in the setting of the levy fund.

131. Our evidence review clearly shows the cost of alcohol-related harms is substantial even if significant uncertainty exists as to the total amount of that cost. A high cost of alcohol-related harms provides a strong incentive to find cost-effective investment opportunities. Unfortunately, the magnitude of alcohol-related harm costs does not provide any indication of the size of investment needed to address those harms. Our review of the evidence did not reveal any known relationship between the cost of harm and the cost of addressing harm. Additionally, our evidence review did not reveal any clear evidence of increasing costs associated with alcohol-related harms.

132. Nevertheless, the gulf between the costs of alcohol-related harm and the cost-recovery function of the alcohol levy remains significant. This could suggest that the existing levy fund is insufficient, and/or the activities and programmes being funded by the alcohol levy are having limited impact on the level of harm. We heard that for Māori, the alcohol levy fund has done little, if anything, to address the disproportionate impact of alcohol-related harms in their communities. More needs to be done to address this significant gap and this will be a core focus of stage 2 of this review.

The effectiveness of interventions

133. In 2018, the WHO launched the SAFER initiative. SAFER promotes the implementation of interventions in five strategic areas, based on evidence of their impact on public health and their cost-benefit analysis.

The SAFER interventions				
STRENGTHEN	**ADVANCE**	**FACILITATE**	**ENFORCE**	**RAISE**
restrictions on alcohol availability	and enforce drink-driving countermeasures	access to screening, brief interventions, and treatment	bans or comprehensive restrictions on alcohol advertising, sponsorship, and promotion	prices on alcohol through excise taxes and other pricing policies

134. Our interviews and literature review indicated that investments that align with the health sector principles and the WHO SAFER framework are, in the long term, likely to lead to reductions in alcohol-related harm. Almost all the SAFER interventions focus on measures that limit the physical, social, and psychological availability of alcohol. These measures are by far the most successful in reducing alcohol-related harm.

Summary of best practice interventions

135. A 2022 research paper providesa useful summary of interventions that are considered to be best practice. The table below is reproduced from this paper showing best practices, good practices and ineffective practices to reduce alcohol-related harm (Borbor et al., 2022.)

Table 4: Interventions considered to be best practices, good practices or ineffective practices

Policy area	Best practice	Good practices	Ineffective practices	Comments
Pricing and taxation policies	Alcohol taxes that decrease affordability	Minimum unit price; differential price by beverage; special taxes on youth-orientated beverages	Policies that increase the affordability of alcohol	When alcohol becomes less affordable, people drink less and experience fewer problems; when affordability increases, so does drinking and harm. Increased taxes reduce alcohol consumption and harm for the whole society, including heavy drinkers and adolescents. The government also receives tax revenues to compensate society for the costs of treatment, prevention, and enforcement. Alcohol taxes need to be substantial to be effective.
Regulating physical availability	Limiting hours and places of sale; public welfare orientated alcohol monopoly; minimum purchase age laws	Rationing systems; restricting outlet density; individualized permit systems; post-conviction preventive bans; encouraging lower-alcohol beverages; sales restrictions; total bans where supported by religious or social norms	Policies that increase outlet density and temporal and spatial availability	Regulating who can consume alcohol, or the places, times, and contexts of availability, increases the economic and opportunity costs of obtaining alcohol. Limitations on physical availability, including convenience and legal access (e.g., age restrictions), reduce alcohol consumption and harms. Controls on availability can be imposed at a population level (e.g., hours of sale) or at an individual level (e.g., as directed by a court order). Availability restrictions can have significant impact if enforced consistently.
Restrictions on alcohol marketing	Complete ban on alcohol marketing	Partial bans on alcohol marketing	Industry voluntary self-	Exposure to alcohol marketing increases the attractiveness of alcohol and the likelihood of drinking by young people; restrictions on marketing

Policy area	Best practice	Good practices	Ineffective practices	Comments
			regulation of marketing	are likely to deter youth from early onset of drinking and from binge drinking. Exposure to alcohol images and messages can precipitate craving and relapse in people with alcohol dependence. Extensive evidence of impacts on drinking, and experience from tobacco advertising bans. The World Health Organization considers restricting alcohol advertising and sponsorship as one of the most cost-effective measures to reduce alcohol-related harm.
Education and persuasion	?	Anti-drink-driving campaigns; targeted prevention programmes; family inclusive intervention; some interventions with undergraduate students; brief motivational interventions in school settings; computer-based interventions with selective subpopulations of heavier drinkers	Industry-sponsored programmes and campaigns; information only programmes	Interventions that focus on high-risk youth and involve the family are more likely to deter youth drinking. Impact generally evaluated in terms of knowledge and attitudes; effect on onset age of drinking and drinking problems is equivocal or minimal. Information based educational messages are unlikely to change drinking behaviour or prevent alcohol problems. However, when led by communities and targeted to priority populations there is more success. with some targeted programmes showing more success (Lammers J, 2019). Programmes led by communities to build support for public health-orientated alcohol policies have also shown more impact (Rise J, 2002). These initiatives

Policy area	Best practice	Good practices	Ineffective practices	Comments
				in turn can build the capacity and the support for structural changes at a legislative and policy level. There is little evidence that mass media campaigns have reduced alcohol consumption or alcohol related harms.
Drink-driving countermeasures	Low BAC levels for young drivers; intensive breath testing, random where possible; intensive supervision programmes	Low or lowered BAC levels (0.00–0.05%); graduated licensing for young and novice drivers; sobriety check points; administrative license suspension; comprehensive mandatory sanctions; DUI-specific courts; interlock devices	Severe punishment; designated driver programmes; safe ride services; education programmes; victim impact panels	A high likelihood of being caught and facing consequences quickly are effective in reducing alcohol-impaired driving, but severe penalties are likely to reduce celerity and certainty of punishment. Surveillance measures and limitations on driving (e.g., license removal) are effective measures
Modifying the drinking environment	?	Training to better manage aggression; enhanced enforcement of on premises laws and legal requirements and proactive policing; targeted policing; legal liability of servers, managers, and owners of licensed premises; community approaches	Training and house policies relating to responsible beverage service (RBS); interventions to address drinking at sports venues and at festivals; voluntary	Generally evaluated in terms of how interventions affect intermediate outcomes (e.g., bar staff knowledge and behaviour), and alcohol related problems such as drink driving and violence, although some evaluations measure impact on consumption in specific settings

Policy area	Best practice	Good practices	Ineffective practices	Comments
		focused on specific target populations	regulation or coordination	
Treatment and early intervention	?	Brief interventions for nondependent high-risk drinkers; behavioural and psychosocial therapies; pharmacological treatment; mutual help interventions	Some types of coercive treatment	Usually evaluated in terms of days or months of abstinence, reduced intensity and volume of drinking, and improvements in health and life functioning. The target population is harmful and dependent drinkers, unless otherwise noted.

Aotearoa New Zealand

136. Modifying the price and availability of alcohol are seen as the most effective measures to reduce consumption and therefore alcohol-related harms. Research in Aotearoa New Zealand has shown that when the real price of alcohol decreases, consumption levels go up. (Wall M, Casswell S. 2013). As noted above the real price of alcohol for most alcohol beverage types has increased slightly in recent years. However, consumption remains high suggesting that the increase in price has not been at a significant level to modify consumption.

137. The New Zealand Law Commission made strong recommendations in 2010 (Law Commission, 2010) for stronger restrictions on alcohol advertising and sponsorship. This was followed by the Ministerial Forum on Alcohol Advertising and Sponsorship in 2014 which noted (Ministerial Forum on Alcohol Advertising and Sponsorship):

> *As a Forum, we think the total cost of alcohol-related harm is enough to justify further restrictions on alcohol advertising and sponsorship. We feel that, however complex the task, there is a need to change attitudes and behaviours associated with alcohol consumption in New Zealand. We believe that the current level of exposure of young people to alcohol advertising and sponsorship is unacceptable and that this exposure can be reduced. With these factors in mind our recommendations are focused on reducing the exposure of young people to alcohol advertising and sponsorship. Specifically, our focus is protecting minors.*

138. In Aotearoa New Zealand, there are more places to buy alcohol in our most socio-economically deprived communities (Pearce J, Day P, Witten K. 2009). Communities have long voiced their concern about their inability to influence decisions about where alcohol is sold in their communities. This sentiment was echoed in our stakeholder interviews where this was consistently identified as a priority issue.

139. Acknowledging this, a priority objective of Aotearoa New Zealand's liquor law reforms in 2012 was to "improve community input into local alcohol licensing decisions" (New Zealand Parliament, 2010). However, little has been done in the intervening years. The 2021 Alcohol Regulatory and Licensing Authority annual report noted that (Alcohol Regulatory and Licensing Authority, 2021):

> *As we reported last year, the Authority notes that District Licensing Committees are refusing very few applications for new licenses, licence renewals and managers' certificates. The extent and any reasons for this may be worthy of investigation in any future review of the Act.*

143. Activities funded through the alcohol levy are unable to directly influence many of the levers that have been shown to be effective in reducing alcohol-related harms (the structural interventions). They have therefore been primarily focused on supporting communities to create the will to shift the dial in these areas. Activities have also focused on research, changing attitudes and supporting communities to engage in

decisions that affect them. Operating within this context has been a potential barrier for for the success of alcohol levy funded activities reducing alcohol-related harms. This will be explored further in stage 2 of the review.

140. Many of the interventions funded by the alcohol levy are grounded in the SAFER framework and international good practice. In the new Pae Ora context any argument to increase the alcohol levy would need to be supported by robust evidence on how that increase could be spent to effectively reduce alcohol-related harms. We note the importance of the alcohol levy fund being transparent and that Manatū Hauora is accountable for any expenditure from the levy fund to those who pay the levy as well as the New Zealand public more generally.

141. Most stakeholders interviewed during stage 1 of our work mentioned community investment as an impactful use of alcohol levy funding. However, some felt that the community voice has not been strong enough to date for decisions made about how the alcohol levy fund is spent. In particular, some stakeholders felt that the levy fund should be given to kaupapa Māori organisations first given that Māori have a higher proportion of alcohol-related harm and use in New Zealand in comparison to other population groups. This can be exemplified by the Health Coalition of Aotearoa Roopuu Apaarangi Waipiro (Expert Alcohol Panel) submitting to the Health Select Committee (during the examination of the Pae Ora Bill) that 80% of the alcohol levy should be allocated to Te Aka Whai Ora (Māori Health Authority) as Te Aka Whai Ora has the commissioning capability to empower communities to create healthier environments (Health Coalition of Aotearoa Roopuu Apaarangi Waipiro, 2021). Internationally, Muhunthan et al., found that indigenous-led policies that are developed or implemented by communities can be effective at improving health and social outcomes (Muhunthan et al., 2017).

New opportunities for investment

142. New interventions to improve health and reduce harms associated with unhealthy lifestyles emerge frequently, and evidence on the cost-effectiveness of programmes and services evolves over time. While the alcohol levy revenue is hypothecated for alcohol-related activity, the range of potential activity and the investment opportunity of activity may increase. The broadening of the levy's scope under the Pae Ora Act provides an opportunity to explore new activities and interventions.

CURRENT SETTINGS

143. The current alcohol levy is approximately $11.5 million per annum.

144. For the 2022/2023 year the total levy was allocated between the Public Health Agency and Te Whatu Ora. The Public Health Agency received $979,881 with the balance of approximately $10.5 million allocated to the Health Promotion Directorate within Te Whatu Ora, to fund its alcohol harm-reduction activities. From this the Health Promotion Directorate allocated $5.46 million to externally funded programmes. These programmes are delivered with community partners, sector partners, and external technical experts. We were told that the balance of the levy supports internal FTE and operational functions, including the relational capability that is required to deliver the programme of work.

145. For 2023/24 approximately $3.7 million is currently committed to external funding. An additional $5.095 million is anticipated for staff costs and ongoing overheads. We have been advised that additional programme allocations are yet to be finalised and will be confirmed through completed negotiations.

146. Investments are generally grounded in international research, New Zealand research and reflect the WHO SAFER framework. They are focused on achieving long-term value and system shifts to address alcohol-related harm.

147. The current levy investment decisions are also underpinned by a logic model found in the National Alcohol Harm Minimisation Framework (HPA, 2022) which is focused on achieving a reduction in alcohol-related harms over the long term through:

- Effective policy and regulation
- Environments that are supportive of non-drinking
- Improved drinking cultures/social norms

These changes are considered by the Health Promotion Directorate to be fundamental to decrease alcohol-related harm in Aotearoa New Zealand, especially for Māori.

148. We reviewed three project plans for FY2022/2023 investments, for Community Social Movement, Sport and Alcohol, and the Alcohol Research programme. The activities set out in these plans are grounded in Takoha: A Health Promotion Framework to align work with the articles of Te Tiriti o Waitangi, and to equity and community-centred approaches, in order to achieve Pae Ora (healthy futures) for Māori and all New Zealanders. However, we were unable in stage 1 to assess the relativity of spend on by Māori for Māori activities or the effectiveness of these activities. This will be a focus of stage 2 of the review.

149. In the time available for our initial rapid review, we were unable to analyse the rationale, deliverables, monitoring, or evaluation of recent levy investments to identify how they relate to each other, and broader alcohol-related harm-reduction work carried out by communities or the government. Further, we were not able to assess in detail how or

why any of these investments could or should be expanded if additional levy funds were available. We were also unable to identify how any of these programmes may fill research gaps that were identified by stakeholders in our qualitative interviews.

150. Finally, while we acknowledge that there is an administrative cost to delivering programmes funded by the alcohol levy, we were unable to assess the appropriateness of the $5m of the levy being spend on internal FTE and operational functions (including the relational capability that is required to deliver the programme of work) and whether this continues to be appropriate in the new Pae Ora settings where the fund is no longer administered by an independent Crown Entity. This is a key question for stage 2 of the review.

FY2022/2023

151. The table below sets out how the Health Promotion Directorate planned to allocate the $10.5m of accessible levy funding in FY2022/2023 (Table 4: Planned spend in FY 2022/2023).

Table 4: Planned spend in FY2022/2023

Investment	$
Alcohol research	$850,000
Supporting law change	$300,000
Sport and alcohol – breaking the link	$500,000
Alcohol attributable fractions	$50,000
Digital and non-digital resources	$320,000
Kaupapa Māori Health Needs Assessment	$500,000
Community Social Movement	$500,000
Regional Manager Activity	$700,000
Amohia Te Waiora	$551,000
Pasifika Alcohol Harm Minimisation	$725,000
Youth and 1st 2000 Days	$489,000
Direct staff, enabling staff, and overhead costs	$5,095,000

FY 2023/2024

152. The table below sets out the information that the Health Promotion Directorate made available to us regarding known and expected committed spend in FY2023/2024. We

were not provided with sufficient information to determine what proportion of the totals has in fact been committed through contracts (Table 5: Committed spend in FY 2023/2024).

Table 5: Committed spend in FY2023/2024

Investment	$
Culture change and targeted community led partnership programmes	$1,900,000
Regulatory stewardship programmes and research	$1,300,000
Kaupapa Māori regulatory policy change	$500,000

153. An additional $5.095 million is anticipated for Staff costs, ongoing overheads and the internal capability that is required to deliver the programme of work. Additional programme allocations are yet to be finalised and will be confirmed through contract negotiations. It is anticipated that the current levy fund of $11.5 million will or has been budgeted and committed by the Health Promotion Directorate for the 2023/24 year.

What we heard

154. Our interviews identified that individuals, organisations, and communities with an interest in reducing alcohol-related harm felt that there was a lack of coordination, both within government and between government and non-government stakeholders, in determining how interventions are identified, developed, and delivered. Interviewees were of the view that this lack of coordination leads to significant inefficiencies that could be avoided if all stakeholders were working according to a clear strategy. During our interviews, we also heard concerns from some community stakeholders that too high a proportion of the levy fund is spent on administering the levy fund, and that as a result, too small a proportion is distributed to the community organisations who are delivering harm-reduction programmes.

155. Our interviews indicated that structural interventions such as regulation and tax, and price-based mechanisms are perceived to result in the greatest reduction in alcohol-related harms. The relationship between the levy and excise tax, the ACC levy and broader government revenue collection needs to be explored further in stage 2 of this review to determine the ongoing role and utility of the levy in the new Pae Ora context.

156. By contrast, outside of some specific contexts non-structural interventions such as social media campaigns and marketing activities were generally perceived by stakeholders we interviewed as being either largely, or totally, ineffective at reducing alcohol-related harms. Similarly, our literature review found that structural interventions are consistently rated as being significantly more effective at reducing harm than non-structural interventions. However, our analysis indicates that non-structural interventions designed to de-normalise alcohol use in certain contexts are

likely to indirectly contribute to a policy environment, and public discourse, that is more supportive of change. The Law Commission noted (Law Commission, 2010):

> *We can recommend changes to the law but we are under no illusion that this will be sufficient….. To bed in enduring change the need for it has to be reflected in the hearts and minds of the community and that requires an attitudinal shift and a new drinking culture.*

We note that Te Hiringa Hauora has had a particular focus on interventions to shift attitudes around alcohol consumption. These interventions are long-term in nature and from the information available in the short timeframes of stage 1 we were unable to analyse their impact. Stage 2 will provide an opportunity to consider these types of interventions more fully.

Summary

157. While we note that external investments are grounded in international research and reflect the WHO SAFER framework, we have had limited time to engage widely with Māori to provide a considered assessment of the extent to which existing investments align with the principles of the Pae Ora Act and the new operating context as set out above. Further qualitative evidence is required with a particular focus on Māori communities and their expectations. This will be a key focus of stage 2 of the review.

158. Furthermore, the evidence available for the stage 1 rapid review did not enable a robust assessment of the effectiveness of particular activities in reducing alcohol-related harm and more generally their overall cost effectiveness. We acknowledge there are some limitations in undertaking these types of assessments given the nature of the activities and their long-term strategic focus. However, this is an important part of the analysis that will need to be undertaken as part of stage 2 to inform any assessment of current allocations of the levy fund in light of the new context.

ANALYSIS AND RECOMMENDATIONS

Context

159. Our stage 1 rapid review has demonstrated that:

- the alcohol levy is disproportionately small relative to even the most conservative estimates of the cost of alcohol-related harm in New Zealand, but the published research on alcohol costs does not indicate any particular relationship between costs of harms and costs of addressing harms
- alcohol-related harm is more prevalent in some sub-populations
- structural interventions may have the greatest potential to reduce alcohol-related harm
- the Pae Ora Act specifies the purpose of the levy as a cost recovery instrument, making it inappropriate for the levy to be used as a demand modifying intervention, unlike the excise tax which can be used in this way
- it was not possible to quantify to what extent current levy investments reduce alcohol-related harm in the timeframe and with the material made available
- it may not be possible to quantify the cumulative level of harm-reduction that levy investments may have, or will, achieve in the timeframe and with the material made available
- more New Zealand specific data on alcohol-related harm and the effectiveness of interventions would be useful to be able to provide strong evidence-based conclusions
- there is a greater amount of overseas evidence on the effectiveness of harm-reduction interventions compared to New Zealand specific evidence
- among those that we engaged, some participants perceived that the lack of a clear national alcohol-related harm-reduction strategy may lead to inefficiencies in the investment of the levy
- among those that we engaged, some participants perceived that the Government is not doing enough to reduce alcohol-related harm
- the Act has potentially broadened the scope of possible areas of levy investments
- the alcohol levy rates are very low in proportion to prices and the excise tax on alcohol products, so even a substantial increase in the alcohol levy is unlikely to have an impact on alcohol sales

Quantum

160. As a cost recovery mechanism, the levy has previously been set according to expectations with regards to the cost of delivering programmes and services to address alcohol-related harm. Even with the Pae Ora Act, the levy is still hypothecated, but broadened to include other alcohol-related activities across Health entities, which could

include funding research to fill evidence gaps for example or funding to support the development of a cross agency alcohol strategy and action plan.

161. Even without expansion of activity to 'other alcohol-related activities' across the Health entities, an increase in the levy fund could be needed to address any current unmet need for programmes and services to address alcohol-related harms, and/or the effective decrease in the real value of the levy fund over time.

162. Consideration of the cost of addressing alcohol-related harm and other alcohol-related activities in line with the Pae Ora Act requires further investigation into the relationship between core government activities and the levy fund. Activities that might have been appropriate for an independent agency may no longer fit within the context of a core government agency, which is required to give effect to government policy. While we acknowledge that there are some internal FTE and operational costs in administering the levy fund and associated activities, the integrity of the levy fund is potentially at risk if almost half of the fund continues to be used for these functions in the medium to long term. As the levy fund is now held and administered by a government agency rather than an independent body, the appropriateness of using the fund in this way will need to be carefully considered through stage 2 of this review.

163. There is an expectation from communities that the levy is spent on effective and appropriate interventions and that there is transparency and accountability across this spend. Similarly, industry representatives indicated that the amount of alcohol levy that they were required to pay was of limited concern to them, particularly when put in the context of the amount of excise tax which is paid. However, they were clear that they would not support an increase unless evidence is provided of effective levy funded activities that reduces harmful drinking, and that there is greater transparency and accountability surrounding the use of the levy fund. In this context, it is important to note that industry representatives did not consider all drinking to be harmful.

164. Engaging with Māori and Pacific communities to develop, deliver and monitor programmes, and resourcing services to meet the needs of iwi, hapū, and whānau, are practices intended to increase the effectiveness of health services and programmes to contribute to equitable outcomes for Māori and Pacific peoples. Despite the current National Alcohol Harm Minimisation Framework being grounded in Te Tiriti, there is significant opportunity to expand by Māori for Māori activities to address alcohol-related harms. The role of Te Aka Whai Ora in this space needs to also be carefully considered as a Pae Ora partner.

165. Raawiri Ratu, a key stakeholder and kaiarahi of the Kōkiri ki Tāmaki Makarau Trust, asked that we strongly impress on the government the need to make no changes to the levy until thorough engagement with Māori is undertaken. Mr Ratu considered that before engagement, time must be taken to support Māori communities to understand how the levy came to be, why the levy exists, what the levy is used for, and how the levy is set. Mr Ratu did not consider that the time allocated for our initial stage of the review would allow for adequate engagement with Māori.

Determining the cost of addressing alcohol-related harms and alcohol-related activities

166. Because the alcohol levy is a cost recovery mechanism, an increase in the levy should consider factors that increase the cost of alcohol harm-reduction activities funded by the levy.

167. The timeframes and available material for stage one has precluded us from conducting a deeper assessment of existing or proposed investments, making it difficult to provide an evidence-based assessment of what the quantum of the alcohol levy should be at this time. We are also hindered by the fact that for the most part, the 2023/24 levy has been committed. This means that existing interventions would not be subject to the same assessment as any new initiatives.

Options

168. Noting the constraints above we have concluded that there are three options to consider in regard to setting the quantum of the alcohol levy in 2023/24.

- Status quo
- Inflationary adjustment
- Increase based on actual cost of a set of recommended evidence-based investments. These investments include expansion of existing programmes where the evidence of effectiveness was available and new interventions based on international research, New Zealand research, and feedback from communities.

169. Table 6 below sets out the anticipated total levy quantum for each option, as well as the associated increase per unit of alcohol. Table 7 on the following pages summarises the costs and benefits of each option.

170. All options are presented on the assumption that no ongoing financial commitments will be made past June 2024 for any of the proposed interventions listed, and that the outcomes of stage 2 of this review will inform the role, function, and quantum of the levy beyond June 2024 – as well as future funding commitments. This will include consideration of the relationship between the levy and the excise tax in the new operating context. As discussed, (in section 2 of this report) the excise tax, not the levy, is likely to continue to be the primary lever through which government can influence demand for and consumption of alcohol and, therefore, potentially reduce alcohol-related harms.

Table 6: Cost of options

Option	Levy Quantum	Increase of	Class of alcohol	Current rate for 2022/23 (cents per litre)	New rate for 2023/24 (cents per litre)	Increase in rate (cents per litre)
Status Quo	$11.5 million	Nil				Nil
			A	0.5594	0.5594	0
			B	1.6282	1.6282	0
			C	2.9833	2.9833	0
			D	3.7291	3.7291	0
			E	6.3343	6.3343	0
			F	14.4172	14.4172	0
CPI adjustment	$21.5 million	Approx. $10 million				Between 0.4065 cents and 9.7312 cents per litre depending on alcohol content
			A	0.5594	0.9659	0.4065
			B	1.6282	2.8463	1.2181
			C	2.9833	5.1517	2.1684

			D	3.7291	6.4396	2.7105
			E	6.3343	11.1727	4.8384
			F	14.4172	24.1484	9.7312
Programme cost recovery assessment and adjustment	$ 16 million	$5.5 million (For new initiatives)				Between 0.1594 cents and 3.5537 cents per litre depending on alcohol content
			A	0.5594	0.7188	0.1594
			B	1.6282	2.1182	0.4900
			C	2.9833	3.8338	0.8505
			D	3.7291	4.7922	1.0631
			E	6.3343	8.3145	1.9802
			F	14.4172	17.9709	3.5537
	$21 million	$9.5 million (Expansion of priority existing initiatives)				Between 0.3841 cents and 9.1696 cents per litre depending on alcohol content
			A	0.5594	0.9435	0.3841

			B	1.6282	2.7801	1.1519
			C	2.9833	5.0319	2.0486
			D	3.7291	6.2898	2.5607
			E	6.3343	10.9128	4.5785
			F	14.4172	23.5868	9.1696
	$ 26.5 million	$15 million (For expansion of existing and standing up of new initiatives)				Between 0.6312 cents and 15.3471 cents per litre depending on alcohol content
			A	0.5594	1.1906	0.6312
			B	1.6282	3.5082	1.8800
			C	2.9833	6.3497	3.3664
			D	3.7291	7.9372	4.2081
			E	6.3343	13.7710	7.4367
			F	14.4172	29.7643	15.3471

Maintain status quo

171. The current Alcohol levy is approximately $11.5 million per annum.

172. Given the constraints within stage 1 of this review we lack the evidence to be able to comfortably recommend moving beyond the status quo for the 2023/24 financial year. Stage 2 of this review will provide the opportunity to better engage with communities and consider fundamental questions relating the role, scope, and purpose of the levy. Answers to these questions are needed to fully assess the appropriate levy quantum.

173. Maintaining the status quo ensures continuity of existing commitments pending the outcomes of stage 2 of this review. However, there are risks with maintaining the status quo. We found that the levy quantum has remained constant over a period of 9 years, despite population growth which would have increased the need for programmes and services to address alcohol-related harms even without the prevalence of alcohol-related harms increasing. In other words, the aggregate cost to the system of addressing alcohol-related harm has likely increased, even if the average level of alcohol-related harm experienced by individuals has remained steady. We also found that if the new health sector principles translate into increased costs per service user or require services being made acceptable and appropriate to a wider range of users, then there is a justification for an increase in the levy fund to cover these costs.

174. Furthermore, our interviews indicated that stakeholders do not think that the government is taking adequate action to reduce alcohol-related harm. Maintaining the status quo could also be seen as a signal that existing spending is sufficient to enable Te Whatu Ora to comply with the Pae Ora Act. This is a question that needs to be addressed in stage 2 of the review.

Inflationary adjustment

175. Key costs involved in both administering the levy and delivering harm-reduction interventions are likely to have increased since the levy was last adjusted. However, it is unclear what adjustment should be made, if any.

176. One option is to adjust the levy quantum based on the CPI. The general Consumer Price Index (CPI) is the most appropriate measure of inflation in this context due to it underpinning many employment agreements and wage negotiations, and the likely labour intensity of harm-reduction interventions. As discussed in section 7, if the levy fund had been adjusted using the CPI, it would have generated between $566,217 and $1,970,105 in additional revenue each year since 2012/13. Based on this adjustment, the cumulative levy shortfall due to a lack of adjustment over the past nine years is approximately $10 million.

177. However, there are some risks with this approach.

- it is unclear whether a CPI increase would accurately reflect the increase in actual costs of existing programmes

- a single-year CPI adjustment may not meet the increased costs of on-going programmes. This also limits the potential for levy investments in new or expanded activities

- decision-makers must agree to the start date of a multi-year CPI increase, which may be difficult to determine and justify, given the levy could have been, but was not, adjusted based on the CPI in any of the last nine years

- an expectation may be created that the levy will continue to be adjusted on this basis annually.

178. As with maintaining the status quo, this approach does not consider whether current investment is the right investment, is delivering effective return, and is in line with the Pae Ora Act. As noted above, more investigation needs to be undertaken at stage 2 of this review to determine this.

Increase to fund specific investments

179. All interviewees agreed that to meaningfully reduce alcohol-related harm, the government must commit to a long term, consistent, and strategic programme of interventions that induces trust between government and non-government stakeholders.

180. Aligning the levy fund to the cost of specific, needed investments would be consistent with its cost recovery mandate and is the option which is best aligned with the Pae Ora Act and principles. However, it is difficult at this stage to provide a robust analysis as to what programmes or activities should (or should not) be included. This assessment is also muddied by the current allocation of funding to existing programmes and, in particular, internal FTE and operational functions for the Health Promotion Directorate and the question as to whether these are still appropriate uses of the fund in the new settings.

Preferred option

181. Any increase in line with Option 2 or 3 proceeds on the presumption that the current allocation is appropriate and consistent with Pae Ora and expectations from communities. Although there may be elements of existing activities that meet these criteria, we are not in a position at this stage of the review to support that conclusion.

182. **We therefore recommend:**

C. The status quo remains for 2023/24

D. No commitments of levy funding are made either internally or externally beyond June 2024 until stage 2 of this review is complete and any recommendations regarding the future, scope and application of the fund are considered.

Alternative option

183. If there were, however, to be an increase in the levy fund for 2023/24, **we recommend:**

A. Any increase is calculated on the actual increase in the cost of ongoing interventions as well as the actual cost of additional interventions to be undertaken. In other words, the interventions need to be determined and agreed before calculating the quantum of any increase. This is in line with the cost recovery requirements of the Pae Ora Act.

B. No commitments of levy funding are made either internally or externally beyond June 2024 until stage 2 of this review is complete and any recommendations regarding the future, scope and application of the fund are considered.

178. While the available evidence is limited at this stage of the review, we have identified some key existing programmes which could be extended and some new initiatives that could be implemented in 2023/24. We expect that if a decision was made to proceed with increasing the levy quantum for FY2023/24, then the most effective uses of the levy fund in FY2023/24 are likely to be:

- coordinating and supporting all-of-sector strategic alignment between government and communities; and
- coordinating and supporting the development of systems that ensure clear and relevant evidence of the effectiveness of harm-reduction interventions is available to individuals and communities.

179. Te Hiringa Hauora's National Alcohol Harm Minimisation Framework (the Framework) has guided the development of existing programmes. Our analysis indicates that the Framework is based on the best available national and international evidence and recommendations, including the WHO SAFER framework. Further, our analysis indicates a sufficient level of alignment between the Framework and the new requirements for health entities under the Act. While we have recommended awaiting the findings of stage 2 of the review, this gives us a higher level of confidence that increasing the levy to provide additional funds to these programmes for FY2023/24 would be expected to deliver benefit. We have also identified some additional activities that align with Pae Ora outcomes and international good practice examples.

180. On this basis, we have identified that, to fund certain additional investments in FY2023/24, the levy could be increased by an additional $5.5m to $15m. These investments are set out below. It is important to note that this increase would have a relatively small impact on the price of alcohol, as set out in table 7 above.

Allocate additional funding in relation to sports sponsorship and advertising

181. In FY 2023/24, additional levy funding could be allocated to the sports sponsorship removal demonstration projects and associated monitoring and evaluation.

182. Of the non-structural interventions we discussed in our interviews, the removal of alcohol sponsorship and advertising from sports was perceived to be the most effective at reducing alcohol harm. Our literature review found some evidence that restricting alcohol marketing is likely to influence the climate of tolerance around alcohol and alcohol policies. Further, many interviewees commented positively on the

effectiveness of similar initiatives in relation to tobacco sponsorship and advertising and believed that a similar approach should be taken in relation to alcohol. However, we are conscious that some interviewees held this view primarily on the basis of evidence from overseas jurisdictions, which as we have discussed, may not be entirely applicable in Aotearoa New Zealand.

183. We understand that, in FY 2022/2023, the Health Promotion Directorate invested $500k in demonstration projects to gain evidence of the effectiveness of this intervention in New Zealand contexts. We also understand that an expansion of this programme has been costed and could be implemented relatively quickly.

184. We have found sufficient evidence to warrant immediate investigation to support communities to decide whether this is an appropriate long-term intervention. Accordingly, $5 - 10m of additional levy funding could be allocated to delivering The Health Directorate's expanded programme.

Fund priority research

185. It was apparent from our literature review that there is a large body of international evidence on alcohol harm and harm-reduction, but a relatively smaller body of evidence that is specific to New Zealand contexts. Some stakeholders cautioned us that policy makers could not necessarily rely on findings from international research applying in New Zealand. Our analysis indicates that it is essential for communities to be able to access robust and applicable research findings to inform their ongoing participation in alcohol harm related activities and licensing decision-making, policy-making, monitoring, and reporting.

186. We understand that Te Hiringa Hauora developed an Alcohol Research Programme, and that $850,000 of the levy fund was allocated to carrying out that programme. There remain significant research gaps in the New Zealand context. We estimate that $0.5 - $2m of any additional levy funding could be allocated to fund research projects to address some of the highest priority research projects.

Data collection

187. In FY 2023/2024, increased investment of levy funds could be focused on the collection of data on the cost of alcohol harm and the effectiveness of various interventions in relation to Māori, Pacific, and rural communities. Our review has identified a need to collect time-series data to begin to support communities to understand alcohol harm and the impact of the range of previous and potential interventions in the long term. In particular, data should be collected on any unmet need for programmes and services to address alcohol harms, to enable communities to effectively advocate for increased investment in the future. This data must be disaggregated and collected from a variety of sources including qualitative data from communities and whānau.

188. While some interviewees were of the view that there is already sufficient international data to inform decisions about particular harm-reduction interventions, other interviewees impressed on us that that data collected in overseas jurisdictions cannot necessarily be assumed to apply in the Aotearoa New Zealand context. We are particularly conscious that Aotearoa New Zealand has a number of unique

constitutional arrangements in relation to specific sub-populations that may affect the applicability of overseas data on the effect of alcohol and associated interventions on certain sub-populations. We estimate that $1 -$2m could be invested in improving data collection over FY 2023/24.

Support community participation in licence hearings

189. We understand that Te Hiringa Hauora was providing some funding to Community Law Centres Aotearoa to support communities' participation in local decision making on alcohol.

190. Our interviews indicated that participation in district licence hearings is perceived to be one of the few opportunities available to communities to carry out a health protection activity, namely reducing the availability of alcohol in their environment. We heard that it is difficult, for several reasons, for communities to meaningfully participate in licensing hearings. One of the primary concerns raised was that community members seeking to oppose a license are often under-resourced compared to the business applying for a licence.

191. A review of the Community Law Alcohol Harm-reduction Project found that project improved the quality and effectiveness of community participation in licensing hearings and that overall participation in licensing hearings appeared to be increasing with the support of the project (Allen + Clarke, 2021).

192. We estimate $1.25m of additional levy funding could be allocated to expand the geographical coverage of this initiative with a particular focus on those areas and regions of high deprivation.

Continue and increase funding for regional community initiatives aimed at reducing alcohol-related harm

193. We have identified that increased investment in community initiatives aimed at reducing alcohol-related harm might also deliver benefit. Most interviewees strongly impressed on us that community organisations have both the best understanding of alcohol harm in their environments and the best understanding of how to reduce that harm within the constraints of the present legislative regime.

194. In particular, additional levy funds could be allocated for the development of further capacity amongst iwi, hapū, hapori, whānau, Māori authorities, and health providers to contribute to alcohol harm-reduction. We consider that Te Aka Whai Ora would be best placed to be responsible for monitoring and evaluating the effectiveness of investments made in this regard. We note that Te Aka Whai Ora would require additional levy funding to provide secretariat and administrative support to this initiative and to distribute funds to iwi, hapū, hapori, whānau, Māori authorities, and health providers to deliver initiatives and activities designed by and delivered by them.

195. The risks and benefits of the options discussed above are summarised in table 7 below.

Table 7: Costs and benefits of levy quantum options

Levy Quantum	Benefits	Risks	Consistency with Pae Ora	Consistency with Te Tiriti Obligations	Ability to be implemented quickly
Status Quo	Simple, easy to implement. Builds on momentum of independent evidence and research aligned to Pae Ora. Allows full review to be completed before any change-decision made.	Due to pre-existing commitments, limits scope for a health-agency partnership approach to work programme development in a manner consistent with Pae Ora Act. Communities may perceive status quo as government inaction. Limited scope for new/expanded initiatives.	**Moderate**	**Moderate**	**High**
CPI increase	Clear and proven method. Enables existing on-going programmes to receive an uplift if needed [note: it would be difficult to ensure increased funding accurately reflects actual costs – see risks]. If CPI increase applied across multiple years, provides additional funding to cover new or expanded initiatives. Scope to expand joint entity initiatives across Te Aka Whai Ora and the Public Health Agency.	If a single year CPI adjustment was made, it is unlikely to accurately meet increased costs of existing. programmes (may still result in real-terms cuts) and limited (if any) scope for new/expanded initiatives. Multi-year CPI adjustment requires agreement as to start date for calculation (decision makers' time is constrained) and harder to justify as opportunity to make this adjustment has been available each year. Perception that current spending is what is required and in line with Pae Ora Act.	**Moderate**	**Moderate**	**Low**

Levy Quantum	Benefits	Risks	Consistency with Pae Ora	Consistency with Te Tiriti Obligations	Ability to be implemented quickly
		Potential perception CPI adjustments will be ongoing year on year. (notwithstanding full review of Levy not due until Q4 2023).			
Increase based on cost of existing programmes and cost of expanding existing and/or standing up new programmes / interventions	Creates opportunities to be more transparent around spend and reason for increase. Based on cost of interventions as envisaged by Pae Ora Act. Good transition year option (lower likelihood of appearing to set the pattern for future years). Allows for innovation and partnership (health-agencies partnership, and increased partnership with communities), and increased research and data collection. Can clearly identify new work that will create broader stakeholder engagement (mitigating risk of ongoing perception of lack of transparency). Capacity to invest in improved data collection (and sharing), providing a stronger evidence base for work programmes.	Requires management of expectations around the time it takes to see effects from interventions. Difficult to assess programmes in short period of time. There is a degree of risk in assuming that expanding existing-funded (or implementing new) programmes will have a positive impact based on their alignment with good practice in other areas. Total agreed increase requires justification to demonstrate alignment with Pae Ora Act.	**High**	**High**	**Moderate**

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Independent Review of the Alcohol Levy

Stage 1: Rapid Review

9 April 2023

ALLEN + CLARKE

NZIER
NEW ZEALAND INSTITUTE OF ECONOMIC RESEARCH

Prepared for Manatū Hauora by *Allen + Clarke* and the New Zealand Institute of Economic Research.

Citation: *Allen + Clarke*, NZIER (2023), *Interim Report of Independent Review of the Alcohol Levy*. Wellington: Manatū Hauora

Acknowledgements

Allen + Clarke and NZIER recognise the substantial efforts of individuals and organisations involved in addressing alcohol-related harm in Aotearoa New Zealand. This stage of the review was undertaken under extremely tight time constraints to enable interim findings to inform the levy setting process for 2023/24. This report will be followed by the second stage of the review, which consists of a more in-depth stakeholder engagement, research, and analysis, and will result in medium- and long-term recommendations for the alcohol levy. We would like to thank all the people that contributed to this review for their time and input in a short space of time. We would particularly like to acknowledge the participation of individuals that we interviewed and officials from Manatū Hauora, Te Whatu Ora, and Te Aka Whai Ora (both individually and jointly as members of the Alcohol Levy Working Group which was established to support this review).

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This review was undertaken by independent parties under contract to Manatū Hauora. The views, observations, and analysis expressed in this interim report are those of the authors and not to be attributed to Manatū Hauora.

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EXECUTIVE SUMMARY

Since 1978, a levy has been raised on alcohol produced or imported for sale in Aotearoa New Zealand. The alcohol levy is hypothecated (i.e., directed to a specific use). It has been used to undertake activities to reduce alcohol-related harm. The current aAlcohol levy is approximately $11.5 million per annum.

Prior to the commencement of the Pae Ora (Healthy Futures) Act 2022 (the Pae Ora Act), Te Hiringa Hauora | Health Promotion Agency received the total levy fund under the New Zealand Health and Disability Act 2000 (the Health and Disability Act), for the purpose of enabling the agency to recover costs incurred in addressing alcohol-related harm, and in its other alcohol-related activities. In 2022, the Pae Ora Act repealed the alcohol provisions of the Health and Disability Act and disestablished Te Hiringa Hauora, placing it within the National Public Health Service and as part of Te Whatu Ora. This change places the levy within a different context, as the scope of the costs incurred by Manatū Hauora under the Pae Ora Act are wider than those previously identified for Te Hiringa Hauora. The scope of alcohol-related harm reduction activities are also potentially broadened.

Allen + Clarke and the New Zealand Institute of Economic Research (NZIER) conducted a rapid review of the alcohol levy within the new Pae Ora context to provide short term recommendations to inform decisions relating to the 2023/24 financial year. This report will be followed by the second stage of the review, which consists of a more in-depth stakeholder engagement, research, and analysis, and will result in medium- and long-term recommendations for the alcohol levy. Stage 2 of this review is likely to continue through to November 2023.

KEY FINDINGS

Our stage 1 rapid review has demonstrated that:

- the alcohol levy is disproportionately small relative to even the most conservative estimates of the cost of alcohol-related harm in New Zealand, but the published research on alcohol costs does not indicate any particular relationship between costs of harms and costs of addressing harms
- alcohol-related harm is more prevalent in some sub-populations
- structural interventions may have the greatest potential to reduce alcohol-related harm
- the Pae Ora Act specifies the purpose of the levy as a cost recovery instrument, making it inappropriate for the levy to be used as a demand modifying intervention, unlike the excise tax which can be used in this way
- it was not possible to quantify to what extent current levy investments reduce alcohol-related harm in the timeframe and with the material made available
- it may not be possible to quantify the cumulative level of harm reduction that levy investments may have, or will achieve, in the timeframe and with the material made available

Commented [A1]: Is it 'alcohol levy' or 'Alcohol Levy' (ie, is it a proper noun or not?) Review throughout to ensure consistent capitalisation. Would not recommendation that is 'Alcohol levy'.

Commented [A2]: Apart from the 'alcohol levy' what was rapidly reviewed? What information was gathered? What methods were used?

Commented [A3]: This isn't really something that would be a priority for researchers to investigate, unless you count all the health economic research that looks at the cost-effectiveness and cost-savings of alcohol interventions. This is a substantial body of literature.

Commented [A4]: Isn't this obvious? Is there a more useful conclusion or observation that could be made?

Commented [A5]: Lots of excise taxes are used as a cost recovery mechanism and are not intended to modify demand

Commented [A6]: Check throughout and fix – 'harm reduction' should not have a hyphen.

Commented [A7]: Unclear if this is for Phase 1 Interim report or full report in Phase 2

- more New Zealand specific data on alcohol-related harm and the effectiveness of interventions would be useful to be able to provide strong evidence-based conclusions
- there is a greater amount of overseas evidence on the effectiveness of harm-reduction interventions compared to New Zealand specific evidence
- among those that we engaged with, some participants perceived that the lack of a clear national alcohol-related harm-reduction strategy may lead to inefficiencies in the investment of the levy
- among those that we engaged with, some participants perceived that the government is not doing enough to reduce alcohol-related harm
- the Pae Ora Act has potentially broadened the scope of possible areas of levy investments
- the Pae Ora Act anticipates the alcohol levy being used across health entities
- the alcohol levy rates are very low in proportion to alcohol prices and the excise tax on alcohol products, so even a substantial increase in the alcohol levy is unlikely to have an impact on alcohol sales.

Our review of available evidence showed the cost of alcohol-related harms is substantial even if significant uncertainty exists as to the total amount of that cost. A high cost of alcohol-related harms provides a strong incentive to find cost-effective harm-reduction investment opportunities. Unfortunately, the magnitude of alcohol-related harm costs does not provide any indication of the size of investment needed to address those harms. Our review did not reveal any known relationship between the cost of harm and the cost of addressing or preventing harm. Additionally, our review did not reveal any clear evidence of increasing costs associated with alcohol-related harms.

Nevertheless, the gulf between the costs of alcohol-related harm and the cost-recovery function of the alcohol levy remains significant. This could suggest that the existing levy fund is insufficient, and/or the activities and programmes being funded by the alcohol levy are having limited impact on the level of harm. We note that we were unable to undertake extensive engagement with Māori due to the time constraints with this stage of the review. The small number of Māori that we spoke to felt that the alcohol levy fund had done little, if anything, to address the disproportionate impact of alcohol-related harms on Māori. However, a review of existing programmatic documentation that was made available to us by Te Whatu Ora indicated that activities were grounded in Takoha: A Health Promotion Framework to align work with the articles of Te Tiriti o Waitangi, and to equity and community-centred approaches, in order to achieve Pae Ora (healthy futures) for Māori and all New Zealanders. Further analysis of the effectiveness of currently funded (and potential future) activities for Māori will be a key focus of stage 2 of this review.

Because the alcohol levy is a cost recovery mechanism, an increase in the levy should consider factors that increase the cost of alcohol harm-reduction activities funded by the levy. The timeframes and material reviewed for stage 1 did not enable us to conduct a deeper assessment of existing or proposed investments, making it difficult to provide an evidence-based assessment of what the quantum of the alcohol levy should be at this time. Alcohol levy funding activities have also generally been based on achieving long-term value and system shifts to address alcohol-related harm. Therefore, the programme of work anticipated for 2023/24 included multi-year activities and was mostly committed.

Furthermore, consideration of the cost of addressing alcohol-related harm and other alcohol-related activities in line with the Pae Ora Act requires further investigation into the relationship between core government activities and the alcohol levy fund. As the alcohol levy is now administered by a government agency rather than an independent entity, the landscape has potentially changed.

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Commented [A9R8]: note NZ specific evidence base is growing see recent BODE3 modelling study, that was shared, as an example.

Commented [A10]: It's odd that this statement is made in the introductory paragraphs (which assumes that it's a fact and key rationale for the review), and then it is mentioned here as a key finding (ie something new). Is this key finding confirming something that may have been assumed earlier?

Commented [A11]: The following paragraphs…I'm not sure what the relationship of them is to the above bullet points. Some content completely overlaps; some content is new. Hard for the reader to know what to do with this info after reading the bullet points.

See comments and edits for relevant above bullet points.

Commented [A12]: s 9(2)(g)(i) [redacted] Apart from basic assumptions like larger population size, larger investment in health funding, I'm not sure why there would be a relationship between the cost of harm and the cost of addressing harm. It really depends on what activities of addressing harm are – and the type of intervention could be a confounding variable. … [1]

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Commented [A15]: Be more precise than 'and/or' given the importance of this statement. Is it 'and' or is it 'or'?

Commented [A16]: I don't understand the reasoning behind this statement, especially when the 'Acknowledgements' states that there wasn't suffic … [2]

Commented [A17]: Implies that there was 'extensive engagement' with other stakeholders. Statement s … [3]

Commented [A18]: s 9(2)(g)(i) [redacted] … [4]

Commented [A19]: s 9(2)(g)(i) [redacted]

Commented [A20]: s 9(2)(g)(i) [redacted]. Assumes that the levy is sufficient, and alcohol harm prevention work is sufficient. … [5]

Commented [A21R20]: agree assumption implied that the existing levy quantum is considered appropriate. neither does it consider or discuss investment into … [6]

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Noting the constraints above we have concluded that there are three options to consider in regard to setting the quantum of the alcohol levy in 2023/24.

- Maintain ~~S~~status quo
- Inflationary adjustment
- Increase based on actual cost of a set of recommended evidence-based investments. These investments include expansion of existing programmes where the evidence of effectiveness was available and new interventions based on international research, New Zealand research, and feedback from communities.

Maintain status quo

Given the constraints within stage 1 of this review we lack the evidence to be able to comfortably recommend moving beyond the status quo for the 2023/24 financial year. Stage 2 of this review will provide the opportunity to better engage with communities and consider fundamental questions relating to the role, scope, and purpose of the levy. Answers to these questions are needed to fully assess the appropriate levy quantum.

Inflationary adjustment

Key costs involved in both administering the levy and delivering harm-reduction interventions are likely to have increased since the levy was last adjusted. However, it is unclear what adjustment should be made, if any. One option is to adjust the levy quantum based on the CPI. As with maintaining the status quo, this approach does not consider whether current investment is the right investment, is delivering effective return, and is in line with the Pae Ora Act. More investigation needs to be undertaken at stage 2 of this review to determine this.

Increase to fund specific investments

To meaningfully reduce alcohol-related harm, the Ggovernment must commit to a long-term, consistent, and strategic programme of interventions that induces trust between government and non-government stakeholders. Aligning the levy fund to the cost of specific, needed investments would be consistent with its cost recovery mandate and is the option which is best aligned with the Pae Ora Act and principles. However, it is difficult at this stage to provide a robust analysis as to what programmes or activities should (or should not) be included. More investigation, and engagement with Māori and communities needs to be undertaken at stage 2 of this review to provide this analysis.

RECOMMENDATIONS

On balance **we recommend:**

A. The status quo remains for 2023/24

B. No further commitments of levy funding are made either internally or externally beyond June 2024 until stage 2 of this review is complete and any recommendations regarding the future, scope and application of the fund are considered.

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Commented [A24]: 'are likely'. Isn't inflation a fact? Shouldn't this be simply 'have increased'?

Commented [A25]: Shouldn't this be already happening?

Commented [A26]: Ensuring alignment (current statement presumes that the existing use is not aligned)

Commented [A27R26]: would be better to say " Aligning the levy fund to the cost of specific, additional needed investments ..."

Commented [A28]: This assumes that the existing use of programmes is not aligned with Pae Ora.

INTRODUCTION

1. In Aotearoa New Zealand, a levy is raised on alcohol produced or imported for sale. The levy is collected by Customs NZ. The current total levy figure is approximately $11.5 million per year, with minor fluctuations annually depending on alcohol production and sales. The alcohol levy is collected at different rates for different classes of alcoholic beverages. The levy is calculated at a cost per litre of alcohol for each class. The relative total collected has not increased since 2013. The levy was originally created by the Alcohol Advisory Council Act 1976[1] to fund the newly established Alcohol Advisory Council of New Zealand[2] (Alcohol Advisory Council Act 1976, s.20).

2. The alcohol levy is hypothecated (i.e., directed to a specific use). Prior to the commencement of the Pae Ora Act, Te Hiringa Hauora | Health Promotion Agency received the total levy fund under the Health and Disability Act, for the purpose of enabling the agency to recover costs incurred in addressing alcohol-related harm, and in its other alcohol-related activities (New Zealand Public Health and Disability Act 2000, s. 59AA). Section 58 of the Health and Disability Act set out the functions, duties, and powers of Te Hiringa Hauora. It stateds (New Zealand Public Health and Disability Act 2000, s58):

   (1) HPA must lead and support activities for the following purposes:
   - *a. promoting health and wellbeing and encouraging healthy lifestyles*
   - *b. preventing disease, illness, and injury*
   - *c. enabling environments that support health and wellbeing and healthy lifestyles*
   - *d. reducing personal, social, and economic harm.*

   (2) HPA has the following alcohol-specific functions:
   - *a. giving advice and making recommendations to government, government agencies, industry, non-government bodies, communities, health professionals, and others on the sale, supply, consumption, misuse, and harm of alcohol so far as those matters relate to HPA's general functions:*
   - *b. undertaking or working with others to research the use of alcohol in New Zealand, public attitudes towards alcohol, and problems associated with, or consequent on, the misuse of alcohol.*

3. The Pae Ora Act came into force on 1 July 2022 and is the legislative basis for the reform of the health system. The Pae Ora Act disestablished Te Hiringa Hauora and its functions were placed within Te Whatu Ora.

Commented [A29]: Should follow up this section by including the text used in the NZ Public Health and Disability Act 2000 to describe and specify the levy

[1] The name of the original Act, the Alcoholic Liquor Advisory Council Act was amended in 2000.
[2] The original name, the Alcoholic Liquor Advisory Council was amended in 2000.

4. Through the Pae Ora Act, Manatū Hauora now receives the levy fund collected via the Vote Health appropriation and has responsibility for distributing the levy across the Health entities - Manatū Hauora, Te Whatu Ora and Te Aka Whai Ora (Pae Ora (Healthy Futures) Act 2022, s.101).

5. All aspects of the Pae Ora Act must be read in light of its overarching purpose, which is to provide for the public funding and provision of services in order to (Pae Ora (Healthy Futures) Act 2022, s. 3):

   (a) protect, promote, and improve the health of all New Zealanders; and

   (b) achieve equity in health outcomes among Aotearoa New Zealand's population groups, including striving to eliminate health disparities, in particular for Māori; and

   (c) build towards pae ora (healthy futures) for all New Zealanders.

6. In regards to the use of the alcohol levy, tThe Pae Ora Act uses wording nearly identical to the Public Health and Disability Act 2022, but now states that the levy is for the purpose of *Manatū Hauora* (rather than *HPA*) recovering costs it incurs in addressing alcohol-related harm, and in its other alcohol-related activities.

7. This change places the levy within a different context, as the scope of the costs incurred by Manatū Hauora under the Pae Ora Act ~~are~~ is wider than those previously identified for Te Hiringa Hauora. The opportunities for alcohol-related harm-reduction activities are also broadened.

PURPOSE

8. Through an All of Government panel procurement process, *Allen + Clarke* and the New Zealand Institute of Economic Research (NZIER) were commissioned by the Public Health Agency (within Manatū Hauora) to undertake an independent review of the alcohol levy settings, and funding allocations and programmes in Aotearoa New Zealand.

9. The initial stage, ~~of~~ which this report is a product of, is a rapid review of the current state of the alcohol levy in Aotearoa New Zealand with short-term recommendations that can inform the 2023/24 financial year. This report (the interim report) will be followed by the second stage of the review, which consists of a more in-depth stakeholder engagement, research, and analysis, and will result in medium-and-long term recommendations for the alcohol levy (the final report). Stage 2 is likely to continue through to November 2023.

SCOPE OF RAPID REVIEW

10. Stage 1 of the review is focused on a rapid review of the current state of the levy fund.

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Commented [A30]: Refers to 'scope', which is singular

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Commented [A32]: s9(2)(g)(i) [redacted]

The stage 1 rapid review focused on 7 key areas of inquiry as specified in the Request for Proposals (RFP) and contract of services:

1. the current evidence on the cost of alcohol-related harm
2. the total levy fund collected and how that compares with other levies collected within Aotearoa.
3. how the total fund collected compares to alcohol levies collected in other relevant jurisdictions
4. the total levy fund and its impact on alcohol-related harm generally
5. the current focus of levy funding and whether it takes a 'for Māori, by Māori approach'
6. the potential positive impact of an increase in the levy on Māori and other at-risk communities
7. significant gaps in funding, or areas for expenditure that could be prioritized in 2023/24.

11. The output for stage 1 is ~~interim~~ recommendations to inform the levy setting for the 2023/24 financial year; stage 2 will produce a full report with recommendations related to the longer term use of the levy.~~, pending the full review findings at the end of stage 2.~~

APPROACH

12. *Allen + Clarke* undertook the stage 1 review between 3 February and 15 March 2023. This involved an initial, fast-paced review of the current state of the alcohol levy.

13. In total 16 interviews were undertaken with people who are involved with the administration, distribution, use, or oversight of the alcohol levy fund including representatives from:

- The Health Promotion Directorate (formerly Te Hiringa Hauora)
- Other divisions of Te Whatu Ora
- Te Aka Whai Ora
- Manatū Hauora
- Hāpai Te Hauora
- Academia
- Non-Government Organisations
- Alcohol industry representatives.

14. The interviews were intended to serve the purpose of whakawhanaungatanga (establishing strong relationships) and helping the review team understand the current

Commented [A33]: No mention of the Expert Advisory Group – was this intentional?

Commented [A34]: s 9(2)(g)(i) [redacted]

Commented [A35]: There was someone from ACC, but I don't see ACC (or a wider category) mentioned

Commented [A36]: I don't know how this description ('administration, distribution, use, or oversight') fits with anyone who is not PHA or Health Promotion Directorate, unless perhaps people involved in the one of our advisory groups (eg, 'oversight').

Aren't a lot of these people perhaps from organisation that:
Receive funding from Te Hiringa Hauora through the levy fund (Hāpai, academia, NGOs?)
Are in the alcohol levy working group and might be a future recipient of the fund (eg, Te Aka Whai Ora)
Are legally required to pay the fund (alcohol industry)

levy settings, as well as previous investment decisions. They were also used to inform a stakeholder engagement plan for the second stage of the project.

15. Initial discovery documents were provided by Manatū Hauora, the Health Promotion Directorate (Te Whatu Ora) and other stakeholders. These documents were supplemented by *Allen + Clarke's* desk-based review and NZIER's analysis of existing data and evidence.

16. An alcohol levy working group (ALWG) was established to support this review. The ALWG was made up of officials from Manatū Hauora, Te Whatu Ora, and Te Aka Whai Ora. The ALWG met with the review team regularly and provided oversight and feedback throughout the stage 1 review process.

17. This report was provided in draft form to Manatū Hauora and the ALWG on 16 March 2023 for review and feedback. It was then finalised on 9 April 2023.

LIMITATIONS

18. The findings of this rapid review should be considered in the context of the approach and timeframes:

- This rapid review was undertaken in 6 weeks to inform decisions relating to the quantum of the levy fund for the 2023/24 financial year. Therefore, timeframes in this stage of the review did not allow for detailed analysis of the effectiveness of activities currently funded by the alcohol levy, nor did it allow for the collection of detailed qualitative or quantitative data.
- A small number of non-government stakeholders were interviewed to gain contextual information and anecdotal evidence on the impact of alcohol-related harm-reduction interventions, the quantum of the levy, and its distribution. However, given time constraints, the breadth and depth of these conversations were limited and key priority groups including Māori, Pacific, and Disabled people need to be further engaged. Given the small number of interviews that were able to be completed in stage 1, they cannot be considered representative. These interviews were designed to simply elicit initial inputs into the review and to help identify areas for further inquiry in stage 2.
- Due to the timeframes for stage 1, the Māori stream of knowledge was limited. A detailed methodology will be developed to ensure he awa whiria is entrenched across all aspects of stage 2.
- This stage of the review was also limited by the documentation and data available for review. Gaps in data and evidence have been identified in this report and will be explored further in stage 2. Due to the timeframes for stage 1, detailed health data from National Collections were not analysed. An urgent data request was made to Te Whatu Ora but the data is not expected to be supplied until stage 2 is underway.

Commented [A37]: Would be more transparent to describe what type of documents were reviewed. Eg, how much was journal articles; how much was grey literature research reports; how much was HPA website materials, annual reports, contracts, project plans, research outputs; how much was material from other websites.

Commented [A38]: Recommend that 'people first' language was used. 'Persons with disabilities' or 'people with disabilities'

Commented [A39]: s 9(2)(g)(i) [redacted]

THE ALCOHOL LEVY

19. This section provides an overview of the levy fund, how it is set and how it compares to other levies in New Zealand and overseas. We also consider the relationship between the levy and excise tax.

HISTORICAL BACKGROUND

20. Since 1978, a levy has been used to undertake activities to reduce alcohol-related harm. The levy fund was created to fund the Alcoholic Liquor Advisory Council (ALAC) which had a legislative mandate to encourage and promote moderation in the use of liquor, reduce and discourage the misuse of liquor, and minimise the personal, social, and economic harm resulting from the misuse of liquor (Alcohol Advisory Council Act 1976, s. 7).

21. In 2012, the functions of ALAC were transferred to a new Crown entity, the Health Promotion Agency (HPA). The alcohol levy was set to recover costs by the HPA for exercising its alcohol-related functions described above. The HPA was not required to give effect to government policy in the same way other Crown agents are. It was however, required to have regard to government policy in exercising its functions if so directed by the Minister (Health and Disability Act 2000, s. 58(3)). Te Hiringa Hauora was adopted as an official name for the HPA on 16 March 2020 (Te Hiringa Hauora, 2020).

Commented [A40]: Could refer to paragraph number as there are 12 pages of information above)

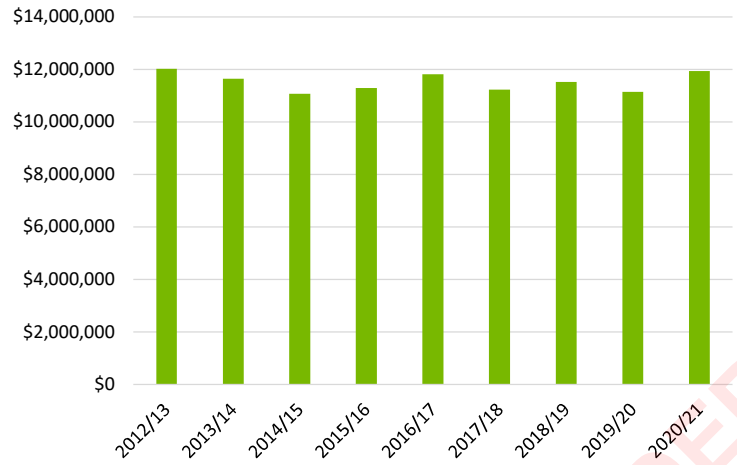
Commented [A41]: In terms of it's alcohol functions, it kept it's autonomous functions - the rest of HPA was required to give effect to Govt policy

THE ALCOHOL LEVY FUND

22. The alcohol levy is based on the amount of alcohol imported into and manufactured in New Zealand in the preceding year. It is collected at different rates for different classes of alcoholic beverages. This means that total levy fund received can vary year to year based on demand and consumption in total, and by class of alcohol.

23. The alcohol levy amount is reported annually. Since 2013/14, there has been little change in the size of the total levy received. It has remained relatively constant between $11.2million and $12million (Figure 1: Total Levy Fund Received, 2012/13 to 2020/21 (nominal values, NZD)).

Figure 1: Total Levy Fund Received, 2012/13 to 2020/21 (nominal values, NZD)



Source: Te Hiringa Hauora

IMPACT OF THE ALCOHOL LEVY ON PRICES

24. Table 1 below presents the levy rates in cents per litre for different beverage types and alcohol content.

25. The levy rates applied to alcoholic beverages are related to the type of beverage and tiers of alcohol content for that beverage type; thus, the levy is a 'tiered' volumetric tax based on the beverage-specific alcohol content tier. (Other types of volumetric taxes or levies can be based on the volume of beverage with no consideration for the alcohol content).

26. Volumetric taxes linked to the alcohol content have the potential to shift consumer behaviour toward lower alcohol content beverages. However, this shift is dependent on whether the rate of the tax is high enough to be 'potent' for the consumer to notice and change their ~~behaviour~~behavior. T~~(t~~he current levy rates are likely too small to influence consumer behaviour~~)~~.

27. Another dependency for a potential shift in consumer behaviour is the design of the alcohol content tiers. T~~ that t~~he beverage-specific alcohol content tiers must be designed in a way that consistently increases the price of higher alcohol content beverages and has smaller increases in the price of lower alcohol content beverages.

28. Currently, the levy rate system is flawed when considering beverage-specific alcohol content tiers and does not reflect the present-day alcohol product offerings. For example, the alcohol content of beer has been increasing with the proliferation of craft beers. However, the current levy rates only have two tiers for beer, meaning that any beer of at least 2.5% alcohol will have the same rate regardless of whether the product

has 2.5% alcohol or 7% alcohol. If this flawed design was fixed, a further benefit would be that the higher alcohol content beer would be taxed at a higher rate, thus increasing the total levy fund.

29. A close review of the levy rates in the context of current alcohol beverage offerings is needed so that design flaws can be addressed. This will be explored further in stage 2.

30. Table 1 below collates data from Te Hiringa Hauora to show the impact of the levy on the ~~cost~~ price of alcohol. It reports two levy rates: the rates from 1 July 2021 and the more recent rates from 1 July 2022. The table also shows the difference between these rates (i.e., the 2022 increase in cents per litre). As can be seen, the impact of the levy on the actual cost of alcohol per litre is very small - from 0.5594 cents per litre on beverages with the lowest alcohol content, like low alcohol beer, to 14.4172 cents per litre on beverages with the highest alcohol content, like spirits with over 23 percent alcohol content (Table 1: Alcohol levy in cents per litre by beverage type and alcohol content, 2021 and 2022).

Commented [A42]: Cost and price are not the same thing.

Table 1: Alcohol levy in cents per litre by beverage type and alcohol content, 2021 and 2022

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Alcohol type	Alcohol content more than (%)	Alcohol content not more than (%)	From1 July 2021 (cents per litre)	From 30 June 2022 (cents per litre)	2022 increase (cents litre)
Beer	1.15	2.5	0.5116	0.5594	0.0478
	2.5		1.5058	1.6282	0.1224
Wine of fresh grapes (fortified by the addition of spirits or any substance containing spirits)	14		5.9181	6.3343	0.4162
Wine of fresh grapes (other)			3.4104	3.7291	0.3187
Vermouth and other wine of fresh grapes flavoured with plants or aromatic substances (fortified by the addition of spirits or any substance containing spirits)	14		5.9181	6.3343	0.4162
Vermouth and other wine of fresh grapes flavoured with plants or aromatic substances (other)			3.4104	3.7291	0.3187
Other fermented beverages (such as cider, perry, mead)	1.15	2.5	0.5116	0.5594	0.0478

	2.5	6	1.5058	1.6282	0.1224
	6	9	2.7283	2.9833	0.255
	9	14	3.4104	3.7291	0.3187
	14	23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296
Spirits and spirituous beverages the strength of which can be ascertained by OIML hydrometer (brandy, whisky, rum and tafia, gin and, vodka)			12.7876	14.4172	1.6296
Spirits and spirituous beverages (other)	1.15	2.5	0.5116	0.5594	0.0478
	2.5	6	1.5058	1.6282	0.1224
	6	9	2.7283	2.9833	0.255
	9	14	3.4104	3.7291	0.3187
	14	23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296
Bitters		23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296
Liqueurs and cordials	1.15	2.5	0.5116	0.5594	0.0478
	2.5	6	1.5058	1.6282	0.1224
	6	9	2.7283	2.9833	0.255
	9	14	3.4104	3.7291	0.3187
	14	23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296

Source: Te Hiringa Hauora

THE LEVY SETTING PROCESS

31. In the ~~new~~ Pae Ora context, the process for setting the levy is similar to when the levy was established in 1976. Schedule 6, c.2 of the Pae Ora Act states:

> *(1) For each financial year, the Minister, acting with the concurrence of the Minister of Finance, must assess the aggregate expenditure figure for that year that, in his or her opinion, would be reasonable for the Ministry to spend during that year—*
>
> *(a) in addressing alcohol-related harm; and*
>
> *(b) in meeting its operating costs that are attributable to alcohol-related activities.*

(2) After assessing the aggregate expenditure figure for a financial year, the Minister must determine the aggregate levy figure for that year.

32. Once the total levy figure has been determined for any financial year, the Minister must determine the amounts of the levies payable in respect of each class of alcohol, to yield an amount equivalent to the total levy figure (The Pae Ora (Healthy Futures Act) 2022, Schedule 6, c3).

Key implications of the levy setting process

33. Levy rates applied to alcoholic beverages are a function of the intended total levy fund; thus, there is flexibility to adjust the rates to meet funding needs. Any intervention that meaningfully reduces the total quantity of alcoholic beverages purchased in New Zealand will reduce the total levy fund unless the rates are modified. Accordingly, when setting the levy fund, consideration should be taken around existing factors that potentially influence the total quantity of alcoholic beverages purchased in New Zealand. In setting the amount for the total levy fund, Manatū Hauora should have full information on:

- the level of need for alcohol-harm reducing programmes and services
- the cost of delivering alcohol-harm reducing programmes and services, and any expected increase in costs
- the quantities of different classes of alcoholic beverages sold in the previous year (i.e., beverage types and alcohol content), as well as any temporal trends
- any substantial change to be made to the alcohol excise tax, Goods and Services Tax, or the regulatory context that is likely to affect the purchase demand for alcohol.

OTHER HYPOTHECATED LEVIES

34. New Zealand has several other hypothecated levies (i.e., directed at a specific use) including:

- The Problem Gambling levy - a levy on the profits of the New Zealand Racing Board, the New Zealand Lotteries Commission, gaming machine operators, and casino operators (Department of Internal Affairs, 2004).
- The ACC Levies, including Earner's Levy, Work levy, and Working Safer levy - a suite of levies ranging from $0.08 to $1.27 per $100 of liable payroll or income, collected by ACC from employers, shareholder-employees, contractors, and self-employed people (and supplemented by Vote Government funding for those who are not employed) to cover the cost of injuries caused by accidents and injuries and accidents that happen at work or are work-related (ACC, 2023).
- Other levies, specifically the waste disposal levy (Grant Thornton, 2020), the International Visitor Conservation and Tourism Levy (MBIE, 2021), and the immigration levy on visa applications (MBIE, 2022).

Problem Gambling Levy

Commented [A44]: I'm just wondering how feasible this is. 'full information on' would include understanding:
-All the regional alcohol work, including the cost of delivering it
-All the ambulance callouts, and cost of delivering
-All the ACC claims, and cost of delivering
-All the addiction services, cancer treatments, mention health services, etc and cos
-All the community grants and other community supports related to alcohol
-All the health education programmes
-Etc
-Etc
-Etc

Essentially, this is an entire mapping, detailing and costing of alcohol-related work in NZ (with perhaps a focus on health). If this is what is being proposed, that the Phase 2 review need to be pretty massive. And anytime the levy is re-examined, the scope would be massive.

Commented [A45]: I would use the terminology of the Pae Ora Act. There's no mention of 'programmes and services' in Pae Ora.

Commented [A46]: A general comment regarding the report s 9(2)(g)(i) [redacted] The hurdle is not so much 'cost of interventions', one hurdle is having Ministers who are willing to review and improve existing legislation (ie, the deferred SSAA Phase 2 review) and introduce new strong legislation (eg, desperate need for mandatory alcohol advertising and marketing legislation).

What can the levy be doing to help make progress that will encourage more action by key decision makers, as well as reduce harm and shift norms through other avenues?

Commented [A47R46]: I agree, - it seems not to focus on the bigger picture. Having a dedicated team of alcohol expertise has allowed that wider approach to minimising the harm from alcohol.

Gambling harm is widespread within Aotearoa and disproportionately affects many of the same community groups as alcohol-related harm, namely, Māori, Pacific Peoples, and people with lower socio-economic status. New Zealanders lose around $2.6 billion per annum on gambling. The current Problem Gambling levy is set at $76.123 million over a three-year period, this equates to just less than 1% of total gambling losses per annum (Ministry of Health, 2022).

Manatū Hauora is responsible for the prevention and treatment of problem gambling, including the funding and co-ordination of problem gambling services. Problem gambling services are funded through the levy on gambling operators. The levy is collected from the profits of New Zealand's four main gambling operators: gaming machines in pubs and clubs (pokies); casinos; the New Zealand Racing Board; and the New Zealand Lotteries Commission. The levy is also used to recover the costs of developing and managing a problem gambling strategy focused on public health (Ministry of Health, 2022).

The Gambling Commission, in its report to Ministers, advocated for a major strategic review of the problem gambling strategy. It argued Manatū Hauora should not be constrained by a historic budget envelope, and argued future costings should be based on a comprehensive public health strategy to address gambling harm (Gambling Commission, 2022). It is possible that a similar argument could be advanced regarding the alcohol levy. This is particularly the case considering the Pae Ora pPrinciples. However, any strategy must ensure appropriate Māori leadership and governance.

Commented [A48]: Key point of interest is what is not stated i.e. prevalence studies in NZ indicate problem gambling addiction to be 1.7% of total population with approx a further 12% gambling at a harmful rate. This is a stark contrast when considering population prevalence of alcohol dependency and hazardous drinking in NZ which is much greater than Gambling

LEVIES, DUTIES, AND TAXES ON ALCOHOL IN OTHER JURISDICTIONS

35. Any revenue, or portion of revenue, can be hypothecated and used to fund specific programmes. For example, a percentage of alcohol excise tax could be directed to alcohol programmes without the need for a specific alcohol levy like New Zealand's. Similarly, a percentage of income tax or general tax revenue can be hypothecated for alcohol programmes. These examples, however, have the disadvantage of tying revenue to economic cyclicality, resulting in the amount available for funding fluctuating more over time. A hypothecated tax on alcohol could also be earmarked for other areas in the health system other than alcohol-specific programmes.

Commented [A49]: This seems like a pretty minor concern given that the entire funding of government activities and services works based on this 'disadvantage'.

Commented [A50]: Would be on more solid ground if just referred back to what the wording actually is in Pae Ora.

36. Internationally, hypothecated taxes are common and exist in numerous forms. Cashin et al (2017) identified over 80 countries with hypothecated taxes for health. The World Bank noted in 2020 that this number was likely higher (World Bank Group, 2020). Nine countries were identified where all or a portion of some tax revenue from alcohol sales is earmarked for particular activities (Cashin et al, 2017) (Table 2: Countries using hypothecated taxes for health around the world).

Table 2: Countries using hypothecated taxes for health around the world.

Type of hypothecation	Number of countries
Portion of revenues from tobacco taxes earmarked for health	35
Revenue from taxes on other goods that negatively impact health earmarked for health	10
Portion of value-added tax (VAT) earmarked for health	5
All or a portion of revenues from taxes on alcohol sales earmarked for health	9
All or a portion of revenues generated from lotteries earmarked for health	2
Portion of general revenues earmarked for health causes	5
Portion of income tax earmarked to fund health care for the population or a selection of the population (e.g., formal-sector workers in a public scheme)	62

Source: Cashin et al. (2017)
Note: Cashin et al also identifies countries that use levies on money transfers and mobile phone company revenue. These are not included in Table 2.

37. Most countries that have an excise tax on alcohol do not also have a separate hypothecated tax on alcohol, although some do hypothecate a portion of alcohol excise revenue for health. Our rapid review of international approaches did not find any instances of a hypothecated tax that is designed in the same way as the alcohol levy – a hypothecated tax on alcohol, strictly for alcohol-related activity, levied in addition to an alcohol excise tax and set as a pre-determined fund rather than a fund that fluctuates with pre-determined rates. This will be explored further in stage 2.

38. Based on data for 2014, 18 countries used hypothecated taxes to fund programmes for the prevention and treatment of substance abuse disorders relating to alcohol (WHO,2017), including:

- Denmark: In Denmark, a national 8 percent income tax is levied and hypothecated for health services, including but not limited to alcohol programmes (Cashin et al. 2017).
- Switzerland: Switzerland imposes a duty on spirits (CHF 29 per litre of pure alcohol), the net revenue of which is divided 90%/10% respectively between the federal government and the regions (cantons) every year. The cantons' share is used to fund programmes and services that address the causes and effects of abuse of alcohol and other substances. The cantons provide an annual report on the activities financed through by the duty (FOCBS, n.d.). In 2021 total revenue

generated for the cantons equated to $47 million compared to New Zealand's $11 million (2022) (FOCBS, n.d.). On a per capita basis this equates to $5.4 per capita compared to New Zealand's $2.1 per capita for the alcohol levy.

39. Internationally, tobacco taxes are more likely than alcohol taxes to be hypothecated for health. Chaloupka (2012) identified that 38 countries earmark part, or all, of their tobacco tax revenue for specific programmes. However, this revenue was rarely allocated directly to tobacco control efforts (Chaloupka 2012). This suggests a similar disconnect between the source of funds and the use of funds as is observed in alcohol taxation.

40. From a purely economic perspective, the levy-setting methodology in New Zealand avoids a key disadvantage of hypothecated taxes, which is the cyclicality of revenue. But the inflexibility of strong hypothecation to alcohol-related activity means the funds cannot be diverted when alternative uses offer better investment value. This is a key reason for such taxes being less popular than non-hypothecated taxes or 'wide' hypothecation, in which the funds are typically directed towards the health system but not towards any particular programmes or services.

Commented [A51]: The line of thinking here is that there could be 'better investment value' in using alcohol sales money for activities other than alcohol-related harm prevention. If this is the case, there need to be some examples how what this would look like and supporting literature to back it up. Also, it's inconsistent with the Pae Ora Act statements about the alcohol levy.

Commented [A52]: Supporting evidence for this? And who is not favourable? The Chaloupka article cited above (which is public health economists) recommends hypothecation.

THE EXCISE TAX ON ALCOHOL

41. Unlike the alcohol levy, the excise tax on alcohol in New Zealand raises revenue that is not hypothecated and, therefore, contributes to general tax revenue. Excise tax is a more common instrument used internationally to collect general revenue, to modulate demand for alcohol, and as a source of hypothecated funds for health programmes and services.

42. The excise tax in New Zealand constitutes a much greater share of the price of alcohol products than the alcohol levy. Based on typical prices of common alcohol products identified by Alcohol Healthwatch, on 30 June 2022, the alcohol levy accounted for between 0.2 percent and 1.3 percent of the price of alcoholic beverages. This is substantially less than the excise tax, which accounted for between 20.7 percent and 55.9 percent of the price of alcoholic beverages (Table 3: Alcohol levy and excise tax as a percent of typical prices of alcoholic beverages).

Table 3: Alcohol levy and excise tax as a percent of typical prices of alcoholic beverages

	Volume (litres)	Price ($)	Price per litre ($)	Excise % of price	Levy % of price
Beer	0.33	1.80	5.45	22.8%	0.9%
RTD	0.25	2.25	9.00	27.6%	1.3%
Wine	0.75	15.00	20.00	20.7%	0.2%
Spirits	1.00	37.99	37.99	55.9%	0.4%

Source: Alcohol Healthwatch 2021

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43. When looking at the role of the levy in reducing alcohol-related harm and the ~~interventions/~~activities that can be undertaken within the Pae Ora context, the relationship with the excise tax (and any associated reduction in consumption, and therefore alcohol-related harm due to the tax settings) is a key consideration. This will be explored further in stage 2 of the review.

Commented [A53]: I'm not really sure that it is. There are so many complexities and considerations about the excise tax on alcohol. Those are much more of an issue, more than 'relationship' with the levy.

ALCOHOL CONSUMPTION IN AOTEAROA NEW ZEALAND

44. The purpose of this section is to present the current state of alcohol consumption within its historical context. This provides an indication of the drivers of consumption which can lead to alcohol-related harm and a contextualisation of the social environment in which activities to reduce alcohol-related harm operate.

Commented [A54]: 'social and policy environments'

PRE-1840

Commented [A55]: Have your Māori alcohol experts provided feedback on this section and 'Post 1840'?

45. Prior to Europeans arriving in Aotearoa New Zealand, there is no evidence of Māori having developed alcoholic beverages of their own (Alcohol Healthwatch, 2012). Alcohol was introduced to Aotearoa New Zealand with the arrival of European settlers and explorers. While alcohol and drunkenness were common amongst Europeans at this time, there is evidence to suggest that Māori did not show an interest in alcohol. Some commentators indicate that Māori generally had an aversion to alcohol (Alcohol Healthwatch, 2012). The general lack in interest in alcohol amongst Māori at this time can be further seen in the fact that alcohol was not used to advance European interests in the same way blankets, pipes, and tobacco were. At the signings of Te Tiriti o Waitangi alcohol was not allowed (Alcohol Healthwatch, 2012).

POST 1840

46. In the years following the signings of Te Tiriti o Waitangi, some Māori leaders began to voice concerns about the impact of alcohol on their communities. They began to take action in an attempt to curb the harm that alcohol posed to their whānau. Sir Mason Durie noteds that iwi, hapū, and marae sought to enforce their own controls over alcohol and cites bans on alcohol at many marae, the aukati within the limits of the King Country, the codes at Parihaka which included forbidding drunkenness, and Māori councils making informal bylaws (Durie, 1998; Durie 2001). Attempts were also made to encourage support nationally for reform. For example, in 1874 a petition to Parliament by Whanganui Māori stated (House of Representatives, 1874):

> *[Liquor] impoverishes us; our children are not born healthy because the parents drink to excess, and the child suffers; it muddles men's brains, and they in ignorance sign important documents, and get into trouble thereby; grog also turns the intelligent men of the Maori race into fools ... grog is the cause of various diseases which afflict us.*

47. Between 1847 and 1904 the Government passed a number of laws that had the effect of limiting alcohol consumption by Māori. However, these laws suggest that although the government was acknowledging that alcohol was an issue in society, they were (at least in a legislative sense) attributing the harm solely to Māori. These laws also inhibited Māori rights to exercise autonomy over issues arising from alcohol and develop their own tikanga to manage alcohol in their communities.

48. Many of these laws remained in place until after the Second World War when the Licensing Amendment Act 1948 removed many of the controls on Māori access to

alcohol. While many marae continued to be alcohol-free, consumption amongst Māori started to increase significantly. In 2021/22 about 80% of Māori indicated that they had drunk alcohol in the past year (New Zealand Health Survey, 2022).

Commented [A56]: s 9(2)(g)(i) the current policy environment is not described here, including past legislative changes, strengths/weaknesses in policy, legality of alcohol use, etc.

CURRENT STATE

49. Below we provide a summary of available data on a range of measures, or proxy measures, for analysing trends in alcohol consumption. The purpose of this summary is to provide a snapshot of how people are currently consuming alcohol in Aotearoa New Zealand, any visible trends over time, and how ~~this~~ these consumption patterns compare~~s~~ internationally. We acknowledge that there are other measures that could be used to measure alcohol consumption over time and that statistical testing (that also controls of confounding variables) is required to validate the observations from existing data presented in this interim report. ~~This~~ Revisiting these measures, using statistical tests, and re-examining untested observations of 'visible trends over time' will be a core component of stage 2 of the review.

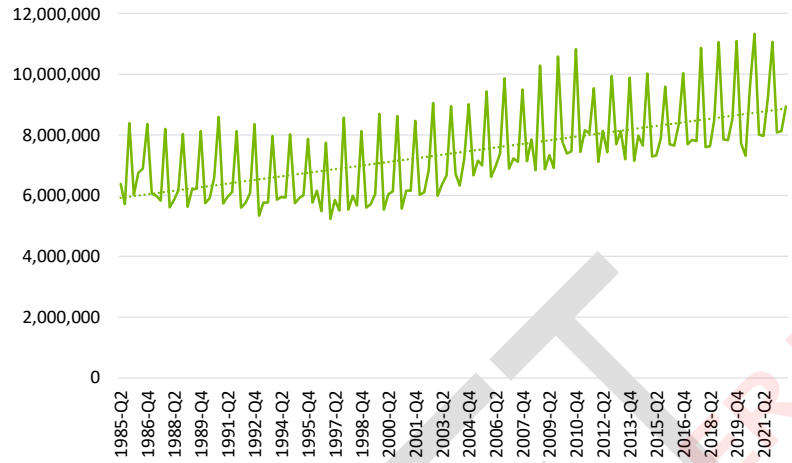
Commented [A57]: Test. 'Validate' wouldn't be the word we would use. Validation is a very specific practice in research, and it's not this.

Alcohol available for sale

50. Actual alcohol sales data are~~is~~ not publicly available, as this data are an ~~being an~~ industry data set. However, alcohol sales are expected to track along a similar trend to alcohol that is made available for sale. Statistics NZ has collected and reported data on alcohol available for sale quarterly since 1985 Q2.

51. The Statistics New Zealand Retail Trade Survey indicates that the volume of pure alcohol available for sale is consistently increasing year to year. It also suggests a seasonal trend in alcohol available for sale with a clear spike in the fourth quarter of every year (1 October to 31 December), reflecting pre-Christmas and New Year sales volumes (Figure 2: Alcohol available for sale: Quarterly volume of pure alcohol (litres)). The impact of COVID-19 and associated restrictions had an effect of the availability of alcohol in 2020/2021. BERL notes in an article from August 2020 that "the availability of alcoholic beverages decreased 5.4 percent between the Q1 and Q2 of 2020 to 7.3 million litres" (BERL, 2020).

Figure 2: Alcohol available for sale: Quarterly volume of pure alcohol (litres)



Source: Statistics NZ

52. Drawing any strong conclusions from this trend is problematic for two reasons. First, underlying the increased volume of pure alcohol available for sale is an increase in the volumes of pure alcohol from wine and spirits and a slight decrease in the volume of pure alcohol from beer. Secondly, while the amount of alcohol available for sale has increased, population has also increased. Over the last ten years, these factors have come together to create a slight decline in the amount of pure alcohol available for sale per head of adult population (aged 18+) (Figure 3: Alcohol available for sale: Quarterly volume of pure alcohol for sale per head of population aged 18+ (litres)).

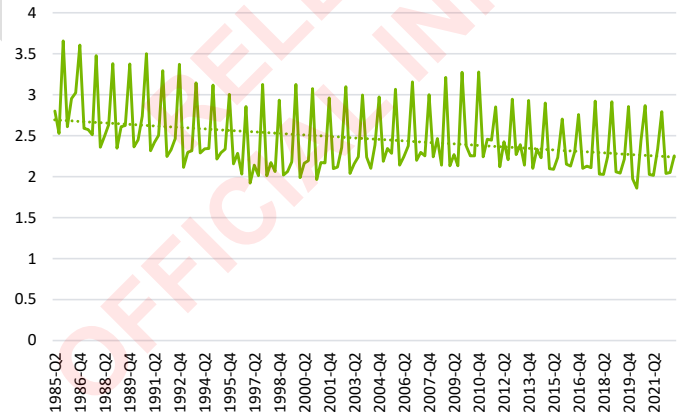
Commented [A58]: Unclear what 'trend' is being referred to. The COVID trend? The long term on pure alcohol volume? The quarterly fluctuations?

Commented [A59]: Not explained and not self-evident why this matters.

Perhaps what is really being said here is that while Figure 2 is all beverages, there are apparent fluctuations according to beverage category.

Commented [A60]: Another confounder is the impact of closed borders and lack of international travel during 2020-2022. NZ has a huge tourism industry, so all those tourists where not contributing to alcohol consumption. Also, NZers were not traveling abroad, where they may have been consuming more (or less) than what they'd consume here.

Figure 3: Alcohol available for sale: Quarterly volume of pure alcohol for sale per head of population aged 18+ (litres)



Source: Statistics NZ

53. Not surprisingly the value of alcohol sales follows a similar trend to the volume of alcohol available. The Statistics New Zealand Retail Trade Survey shows an increase in the total value of alcohol sold through retail outlets, with the trend indicating a 95 percent increase in the value of alcohol sales from 1995 to 2019 when measured in constant (2010) prices.[3]

Affordability of alcohol

54. The Law Commission's 2010 review of New Zealand's laws regarding the sale and supply of alcohol concluded that the price of alcohol was a "critical factor in moderating demand for alcohol" (Law Commission, 2010).

55. Notwithstanding the importance of affordability in moderating demand for alcohol, we note that affordability is only one driver of demand. Consumer preferences, addictive behaviours, and the availability and acceptability of substitutes are also important drivers. Over time, it is not only the price of alcohol that will impact on affordability. Household incomes and the distribution of incomes, as well as other household expenditure requirements, impact on the resources available for households to purchase alcohol products. Over a period of time, demand drivers unrelated to affordability may also change, potentially even in offsetting ways (e.g., while alcohol may become more affordable, substitutes may also become more available, more affordable and more acceptable).

56. In 2021, HPA published a report on the affordability of alcohol in New Zealand (Health Promotion Agency, 2021). The report noted that between 2017 and 2020:

- the average price per standard drink increased for all alcoholic beverage types
- the real price (inflation-adjusted) of beer increased
- the real price (inflation-adjusted) of wine and spirits and liqueurs had dropped
- all alcoholic beverage types were more affordable in 2020

57. Over the five-year period 2017–2022, median household income has risen more than the average prices of alcoholic beverages, making alcoholic beverages more affordable in 2022 than in 2017 (Statistics NZ, 2022).

58. The World Health Organization (WHO) publisheds the price of 500ml for 2016 of the three major categories of alcoholic beverages (beer, wine, and spirits) in US dollars for a range of countries. Compared with a comparison set of some OECD countries, the price of beer in New Zealand is a little below average at US$3.58 per 500ml (average US$4.27 per 50ml) (Figure 4: Average price of beer in selected OECD countries). However, this comparison is from 2016, is based on one beverage type, and is not adjusted for differences in costs of living between countries.

Commented [A61]: Would be more accurate to say that 'total value of alcohol sold' has also increased, just as pure alcohol total volume has. However, the total value has increased at what appears to be a much greater rate.

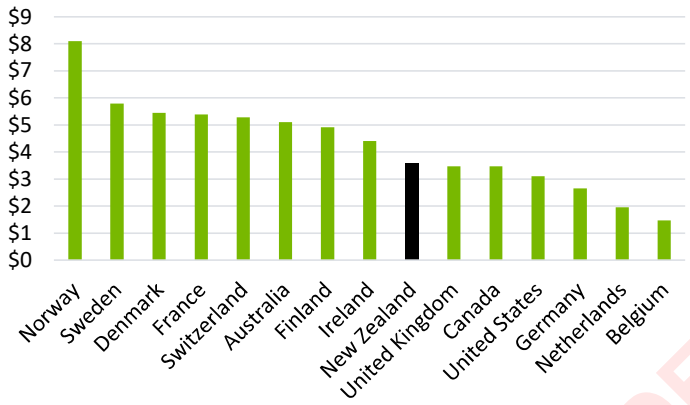
Commented [A62]: Typically should include page number when using a direct quote.

Commented [A63]: This section would be strengthened through integration of peer reviewed literature, especially as relates to alcohol and public health economics.

[3] Note this does not reflect any impact of the COVID-19 pandemic or pandemic restrictions which would have impacted on retail sales and the share of alcohol sales that occurred through retail outlets versus hospitality venues or other from 2020 onwards, although the effects of the pandemic are observable in 2020 and 2021.

Figure 4: Average price of beer in selected OECD countries (USD per 500ml)

Commented [A64]: How were these countries 'selected'? Why not include all?



Source: World Health Organization, Global Health Observation

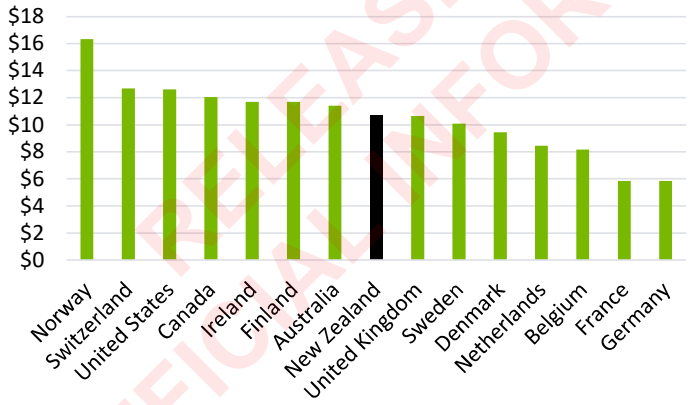
Commented [A65]: Incorrect citation. Should be either 'Global Health Observatory' or 'Global Information System on Alcohol and Health'

Fix this throughout following figure sources

59. Compared with the comparison set of OECD countries, the price of wine in New Zealand is a little above average at US$24.6 per 500ml (average US$22.58 per 50ml) (Figure 5: Average price of wine in selected OECD countries).

Commented [A66]: Carry over edits and comments from above paragraph and figure

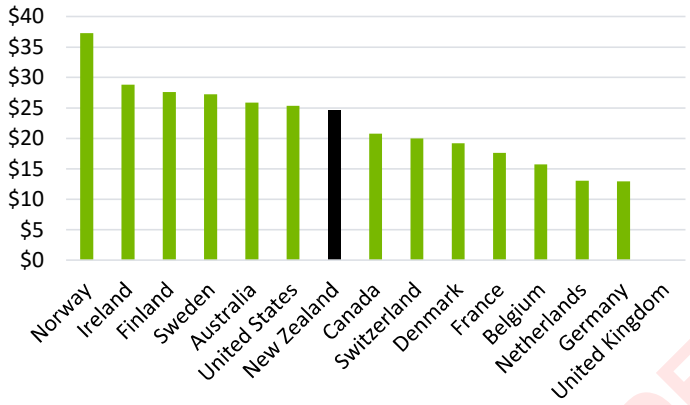
Figure 5: Average price of wine in selected OECD countries (USD per 750ml)



Source: World Health Organization, Global Health Observation

60. Compared with the comparison set of OECD countries, the price of spirits in New Zealand is a little above average at US$24.6 per 500ml (average US$22.58 per 50ml) (Figure 6: Average price of spirits in selected OECD countries).

Figure 6: Average price of spirits in selected OECD countries* (USD per 500ml)



*Note: Data not available for the United Kingdom.

Source: World Health Organization, Global Health observation

61. A long international time series of alcohol expenditure as a percentage of total household expenditure indicates that Aotearoa New Zealand does not stand out from comparator countries, although the time series for New Zealand is not as long as for others. The most recent available data for New Zealand is from the year 2015. Alcohol expenditure in Aotearoa New Zealand is a higher share of total household expenditure than in the United States, Canada, and the Netherlands, similar to Sweden and Denmark, and lower than Norway, Australia, Ireland, Finland and the United Kingdom (Our World in Data, 2022).

62. While affordability and household expenditure on alcohol provides some indication of the level of consumption, it is important to note that these measures are not a proxy measure for alcohol demand.

Past-year drinkers

63. Past-year drinkers is a measure of alcohol consumption reported through the New Zealand Health Survey (NZHS). It represents the percentage of adults (aged 15+) who report having had a drink containing alcohol in the past year. ~~While this is a useful indication of the extent of alcohol consumption in Aotearoa New Zealand, it has its obvious limitations as it relies on recollection and self-reporting. It also does not distinguish between the amount or type of alcoholalcoholic beverages being consumed.~~

64. In 2020/21 78.5% of New Zealander adults reported that they had had a drink containing alcohol in the past year (NZHS, 2020/21). Men were 9% more likely to have been past-year drinkers than women (NZHS 2020/21). The percentage of past year

Commented [A67]: Wrong citation. This information is originally from GHO or GISAH (depending on what citation you use above). Our World in Data reproduced it.

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Commented [A68]: This is kind of an odd statement as in terms of bias from recollection and self-reporting, 'past year alcohol use' has a very high recall accuracy. Ie, most people can accurately recall if they've had a drink in the last 12 months. It has high validity. s 9(2)(g)(i) [redacted]

Plus, what would be the alternative to this type of measure? Not feasible to follow around 10,000 New Zealanders for 12 months to see whether or not they drink?

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Commented [A69]: s 9(2)(g)(i) [redacted] What would be measured?
'How much alcohol did you consume in the last year?'
'What are all the drinks that you consumed in the last year?'

Understanding the volume of alcohol and the types of beverages are captured through other measures, some of which are in the NZHS or other surveys and data sources.

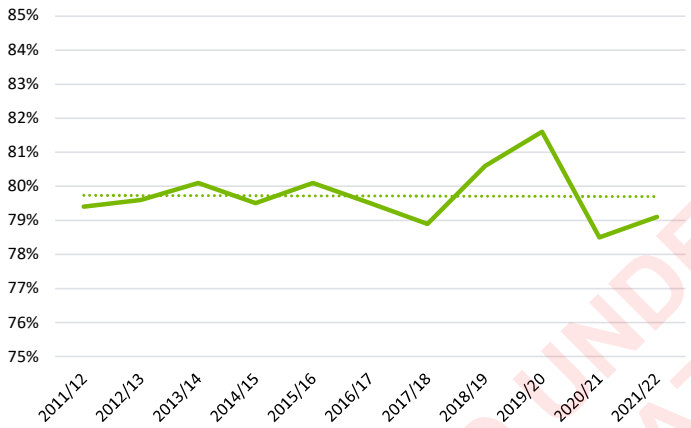
Commented [A70]: Sometimes comma, sometimes no comma. Standardise reference formatting throughout doc.

Commented [A71]: Where did this number come from? It's not right, and also it's not described correctly.

It should be:
'Adjusting for differences in age, men were 1.1 times as likely as women to report being past-year drinkers.'

drinkers has been fairly constant over the past ten years. ~~However, i~~It remains high varying between 78 and 82 percent (Figure 7: Past year drinker: 2011/12 to 2021/22 (percent of survey participants aged 15+)).

Figure 7: Past year drinkers: 2011/12 to 2021/22 (percent of survey participants aged 15+)

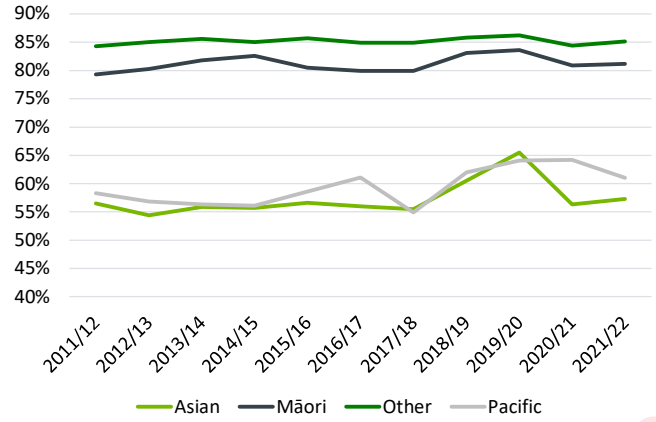


Source: NZHS data

65. When ~~broken down~~examined by ethnicity, the ~~highest rates~~ prevalence of ~~reporting being a~~ past drinking in 2021/22 is: European/Other (85.1%; [95% confidence interval (CI) 83.4%-86.6%]), Māori (81.2; 77.3-84.8), Pacific (61.0; 52.8-68.7), and Asian (57.3; 51.2-63.2). ~~er are seen amongst Māori and Other (non-Māori, non-Pacific, non-Asian) New Zealanders.~~ While rates are fairly constant over time for Māori and ~~Other~~ European/Other~~New Zealanders~~, the recently higher rates amongst Pacific and Asian New Zealanders could be an early indication of an increasing trend, although the volatility in the data make this unclear and small sample sizes contribute to the analyses being underpowered to detect statistically significant changes (Figure 8: Past year drinkers by ethnicity, 2011/12 to 2021/22 (percent of survey participants aged 15+)).

Commented [A72]: You should just use the category labels used in NZHS (and by Stats NZ).

Figure 8: Past year drinkers by ethnicity, 2011/12 to 2021/22 (percent of survey participants aged 15+)



Source: NZHS data

66. Disability status has only been reported since 2018/19 and is based on self-reported disability status. This factor impacts on the likelihood of reporting past-year drinking, with people who identify as disabled having a significantly lower probability of reporting being a past-year drinker. Since 2018, between 67 percent and 73 percent of people who identify as having a disabilityled reported being a past-year drinker, compared with 80 to 82 percent of people who identify as non-disabled (NZHS, 2018/19 to 2020/21).

Hazardous and heavy episodic drinking

67. The NZHS has collected and reported on data that identifies hazardous drinking and heavy episodic drinking since 2015/16. Hazardous drinkers are defined as drinkers who obtained an Alcohol Use Disorders Identification Score (AUDIT) score of eight or more. Heavy episodic drinking is defined as consuming six or more alcoholic standard drinks on one occasion ~~'at least weekly~~ monthly' (heavy episodic drinking, monthly), 'weekly' (heavy episodic drinking, weekly), or 'daily or almost daily' (not reported here). ~~or at least monthly (heavy episodic drinking, monthly).~~

68. In 2021/22, approximately 19 percent of the adult (aged 15+) population met the criteria for hazardous drinking. Māori experienced higher rates of hazardous drinking than other ethnicities.~~–~~ In 2021/22, 33 percent of Māori met the criteria for hazardous drinking (NZHS, 2022).

69. Compared to some OECD countries, New Zealand had a higher prevalence of ~~International data shows that New Zealand's drinking culture involves more than an average frequency of~~ heavy drinking than some other countries ~~as measured by self-reported experience of heavy drinking in the past 30 days for adults aged 15+~~ (Figure 9: Heavy drinking in the past 30 days (percent of survey participants aged 15+).

Commented [A73]: See comment above about labelling

Commented [A74]: Not sure what this sentence is saying. What 'factor' – the self-reporting of disability status? Do you mean that those with a disability are less likely to be a past year drinker than those who don't have a disability?

Commented [A75]: Why not just use the statistical test that is in NZHS Annual Data Explorer. The statement would be:

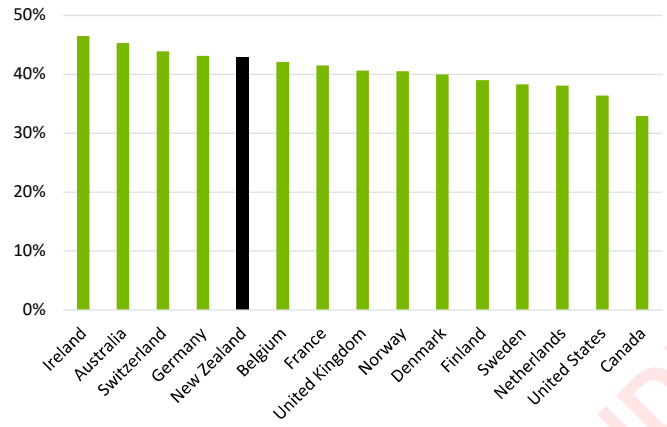
In 2021/22, when adjusting for differences in age and gender, persons with disabilities were 0.94 times as likely as persons without disabilities to report drinking in the past year; however, this was not a statistically significant difference.

When examining trends in recent years, there are no statistically significant changes for persons with disability, except for from 2020/21 and 2021/22, when there was a significant increase in men with disabilities who reported past year drinking (74.0% increased to 81.0%; p-value <0.01).

Commented [A76]: Could repeat the format for paragraph 65 regarding reporting of prevalence by ethnicity. Useful to include confidence intervals.

Commented [A77]: What year?

Figure 9: Heavy drinking in the past 30 days (percent of survey participants aged 15+)



Source: Our World in Data

70. International data based on a longer time series confirms that New Zealand's current prevalence of hazardous and heavy episodic drinking ranks amongst the highest in our selected group of OECD countries. This is in stark contrast to ten years ago when New Zealand's prevalence of hazardous and heavy episodic drinking ranked in the bottom half for the same set of countries (Our World in Data, 2023) This could suggest the New Zealand has made little inroads to ~~improve~~ reduce hazardous drinking while comparable OECD countries have. This will be explored further in stage 2 of this review.

SUMMARY

71. Our review of data from a range of sources has provided no clear indication that alcohol consumption is increasing or decreasing overall. We note that there are important gaps in the data and evidence on alcohol consumption. While the limited data indicate that Māori are more likely than non-Māori to engage in heavy or binge drinking, it is unclear whether this has worsened. Some evidence indicates a possible improvement such as the New Zealand Health and Lifestyles Survey which indicates the percentage of Māori who are heavy drinkers fell from 47.9 in 2012 to 43.2 in 2016 and to 31.0 percent in 2020. However, 2020 data may not be reflective of a downward trend in heavy drinking in Māori due to the potential impact of the COVID-19 pandemic and associated restrictions. Prior to 2020, data on Māori who are heavy drinkers showed a small but steady trend upwards since 2017 (New Zealand Health Survey, 2016/17 to 2021/22). Additionally, much of the recent evidence regarding consumption patterns within population sub-groups is derived from the NZHS and the Alcohol Use in New Zealand Survey (AUiNZ) which rely on self-reported alcohol consumption which is impacted by social desirability and recall biases.

Commented [A78]: Align format of figure title with other figures using (selected) OECD comparisons

Commented [A79]: See note above about using the correct citation

Commented [A80]: Really need to explain what countries were selected and why, especially because this comparison is the basis for findings. Would be better to be comparing to an average of all OCED countries as well.

What years are used here?

Commented [A81]: Actually, the above did not really show this. There were unadjusted prevalences mentioned for Māori and the whole population around *hazardous* drinking (not heavy or binge drinking), but nothing that actually used the statistically tested findings available from the NZHS Annual Data Explorer.

s 9(2)(g)(i) [redacted]

Commented [A82]: Please use 'people first' language. These terms are very stigmatising.

Commented [A83]: Typically, new data would not be presented in a summary. A summary is usually a summary of what had already been said.

Commented [A84]: Yes, but what is the alternative?

72. ~~However~~T~~,~~ ~~t~~he consumption of alcohol in Aotearoa New Zealand remains high. Furthermore, the instance of hazardous or heavy episodic drinking in Aotearoa New Zealand has shown little sign of decreasing as has been seen in comparative OECD countries.

ALCOHOL-RELATED HARM

73. Understanding the scope of alcohol-related harms and their prevalence is important to be able to consider the role of the levy fund within the broader public sector framework. This section provides a snapshot of the breadth and scope of alcohol-related harms in Aotearoa New Zealand. In this section, wWe do not attempt to quantify all alcohol-related harm ~~in this section~~. Rather we seek to reflect the well-established health and broader societal harms that alcohol contributes to. Stage 2 of this review will provide a deeper analysis of the extent of harm across society and include further qualitative insights from Māori.

74. A broad indicator of experience of harm is provided by the AUiNZ which showed that in 2020, 25.9 percent of New Zealanders said that they had experienced harm from their own drinking and 37.7 percent of New Zealanders had experienced harm from someone else's drinking (AUiNZ, 2020).

75. The AUiNZ also revealed that while males are more likely to report experiencing harms from their own drinking, women are more likely to report experiencing harms from others' drinking (AUiNZ, 2020).

ALCOHOL USE AND HEALTH

76. Alcohol use is a significant and modifiable risk factor for a wide range of non-communicable diseases. A systemic analysis published in the Lancet in 2018 found that the risk of all-cause mortality rises with increasing levels of consumption, and the level of consumption that minimises health loss is zero (Griswold et al, 2018). Despite earlier research to the contrary, it is now widely accepted that alcohol in any quantity is not beneficial to health and is actually harmful to healtha ~~therapeutic agent~~. The WHO said in 2007 that "from both the public health and clinical viewpoints, there is no merit in promoting alcohol as a preventive strategy" (WHO, 2007).

77. It is important to note that evidence indicates that individuals with low socioeconomic status experience disproportionately greater alcohol attributable harm than individuals with high socioeconomic status from similar or lower amounts of alcohol consumption (Probst et al, 2020). This must be borne in mind when considering our analysis of alcohol harms to follow.

78. Disability-adjusted life years (DALYs) are a measure of overall disease burden, expressed as the number of years lost due to ill-health, disability, or early death. DALYs attributable to alcohol in New Zealand show that the early 2000s represented a period of relatively low DALYs which was followed by a period of increasing DALYs to around 2014, followed by a stable level of DALYs since 2014. (Our World in Data, Premature deaths due to alcohol (age standardized rate per 100,000 people)

79. A substantial body of research unequivocally shows that alcohol use increases the risk of numerous diseases and inquiries. International and New Zealand evidence ~~unequivocally shows that alcohol use has been causally linked to a range of diseases~~

Commented [A85]: 'therapeutic agent' This is an extremely odd term to use here.

Commented [A86]: s 9(2)(g)(i) [redacted] With different content, this paragraph could be doing a better job of communicating more recent research s 9(2)(g)(i) [redacted].

Commented [A87]: Fix this citation so that using original data source and owners of the data.

Commented [A88]: I'm confused about this citation – doesn't match the content in the paragraph above. Premature deaths are a different thing than DALYs. Is this the wrong citation?

Commented [A89]: injuries?

~~and injuries, including~~report estimates of harmful health conditions directly or indirectly attributable to alcohol use:

- Cancer~~:~~: Rumgay et al found, in a population-based study published in Lancet Oncology, that globally 4.1% of all new cases of cancer in 2020 were attributable to alcohol consumption (Rumgay et al., 2020)~~.~~. The WHO estimated that in 2020, almost 7% of the total cancer burden in New Zealand was attributable to alcohol (WHO, 2020). Our literature review indicated that it is likely that, in New Zealand, alcohol attributable cancers make up a larger proportion of cancer cases than the global average. The Cancer Control Agency noted that in New Zealand in 2020 alcohol caused "32 percent of oral cavity and pharyngeal cancers, 23 percent of liver and laryngeal cancers, 16 percent of oesophageal cancers, 11 percent of bowel cancers and 7 percent of breast cancers in Aotearoa" (Cancer Control Agency, 2020).

- Stroke~~:~~: Feigin et al, in a systematic analysis for the Global Burden of Disease Study published in 2016 in Lancet Neurology found that 7% of the global stroke burden was attributable to any amount of alcohol use (Feigin et al., 2016).

- Heart disease~~:~~: there is a large body of evidence that links alcohol consumption to the increased risk of ischaemic heart disease (Mente et al., 2009).

- Fetal Alcohol Spectrum Disorder (FASD)~~:~~: Although there is limited data on the prevalence of FASD in Aotearoa New Zealand, Manatū Hauora estimates that between three to five percent of people may be affected by alcohol exposure before birth. On this basis they suggest that around 1800–3000 babies may be born with FASD per year (Manatū Hauora, 2023).

- Diabetes~~:~~: Excess alcohol consumption is associated with an increased risk of type 2 diabetes. Te Whatu Ora estimates that over 250,000 people have diabetes in Aotearoa New Zealand (predominantly type 2) (Te Whatu Ora, 2023). The prevalence of diabetes within Māaori and Pacific populations is approximately three times higher than for other New Zealanders (Te Whatu Ora, 2023).

- Suicide~~:~~: A 2022 study from the University of Otago showed that 26 percent of all suicides in Aotearoa New Zealand involve acute alcohol use. ~~This~~ Though the methods differ, this prevalence is higher than the WHO global estimate of 19 percent. (Crossin R et al., 2022).

- Alcohol-r ~~R~~elated injuries~~:~~: The Accident Compensation Corporation (ACC) reported in 2019 that 3,427 new alcohol related injury claims were lodged at a cost of approximately $3.7 million per week (ACC, 2020). We note that there are limitations with this data as it is reliant on the information provided on the ACC45 injury claim form which is completed by the person seeking treatment for the injury. Furthermore, some costs covered by ACC fall under bulk funded service agreements (for example, emergency treatment at public hospitals and

Commented [A90]: s 9(2)(g)(i) in the below list:
Alcohol use diseases
Cirrhosis and other chronic liver diseases
Pancreatitis – truly horrific, debilitating disease
Lower respiratory track infections

Commented [A91]: Page number for this quote

Commented [A92]: See also recent study by Romeo et al.

the use of ambulance services). Data on the amount of bulk funded services spent on alcohol related injuries is not readily available (ACC, 2020).

- Dementia~~,~~ : Dementia is an increasing health issue globally. In Aotearoa New Zealand, approximately 70,000 people are living with dementia (Alzheimers NZ, 2020). Alzheimers NZ estimates that this number will increase to around 170,000 in 2050 (Alzheimers NZ, 2020). Alcohol consumption is the leading non-genetic risk factor for dementia. A recent European study found that those who regularly had more than four drinks in a single day for men or three in a single day for women, were three times more likely to develop dementia than others (Rehm, 2019).

ALCOHOL AND VIOLENCE

80. Alcohol ~~has a significant effect on the~~ is associated with a substantial amount of ~~level of~~ violence in Aotearoa New Zealand. In 2009, the New Zealand Police National Alcohol Assessment showed that alcohol is ~~responsible for~~involved in (New Zealand Police, 2009):

- A third of all Police-recorded ~~violence~~violence offences
- A third of all recorded family violence
- Half of sexual assaults
- Half of homicides

~~While these data are now outdated, there is no indication that there has been any significant decrease in the extent to which alcohol is responsible for violent crimes in Aotearoa New Zealand. Due to time constraints in stage 1 of this review we were unable to gather and analyse up to date raw data from New Zealand Police. This analysis will be included in stage 2 of the review.~~

81. A recent study into the relationship between child maltreatment and alcohol in Aotearoa New Zealand estimated that in 2017 between 11 and 14 percent of documented cases of child maltreatment could be attributable to exposure to parents with severe or hazardous consumption (Huckle and Romeo, 2022).

OTHER INDICATORS OF ALCOHOL-RELATED HARM

82. Other indicators of alcohol-related harm include:

- Hospitalisations wholly attributable to alcohol
- Alcohol-related motor vehicle crashes
- Alcohol-related calls to police

Commented [A93]: I don't think that all the below data is for the year 2009.

Commented [A94]: I thought this publication was 2010, not 2009.

Commented [A95]: This data is misinterpreted. I've rewritten.

Association does not equate to causation.

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Commented [A96]: Unsubstantiated conclusion

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Commented [A97]: The data is really poor quality. I spoke with the Police recently and they do not recommend using the alcohol flag. Would not commit to this.

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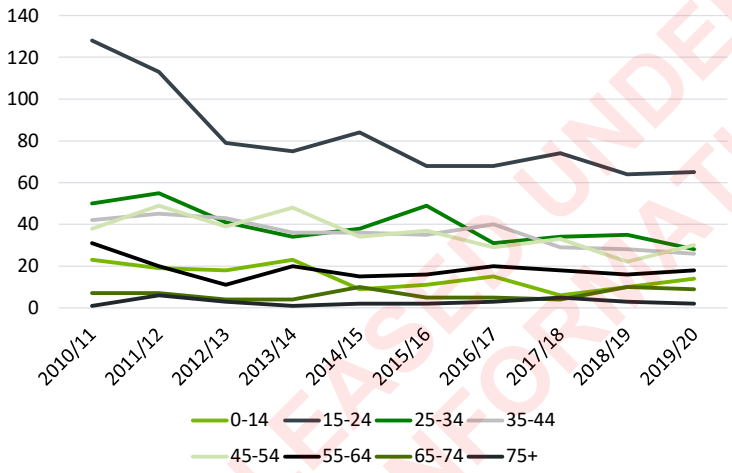
Might also include alcohol-related ambulance callouts

83. The National Minimum Data Set (Te Whatu Ora, 2023) contains data on public hospital discharges, including discharges with a primary diagnosis of 'toxic effect of alcohol'. These data indicate a possible decline in the number of these discharges over the last ten years. Across age groups, 15–24-year-olds appear to have the highest number of discharges ~~the group most likely to experience hospitalisation~~ due to toxic effects of alcohol u~~i~~se ~~15–24-year-olds~~. Over the last ten years, t~~T~~his group ~~has~~ appears to have a decrease in the number of discharges; however, it is unknown to what degree changes in hospital administration data coding may have contributed to this trend~~also seen a decline in these events over the last ten years~~ (Figure 10: Public hospital discharges with a primary diagnosis of "toxic effect of alcohol".

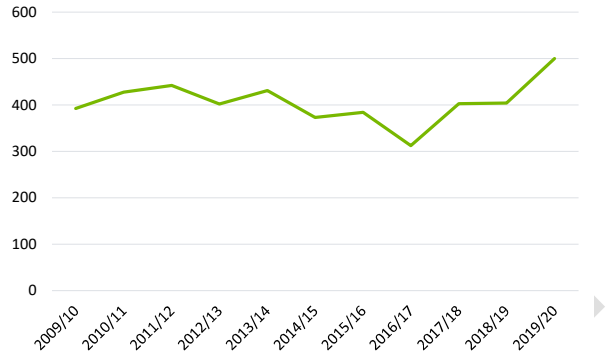
Figure 10: Public hospital discharges with a primary diagnosis of "toxic effect of alcohol" (number per year, by age group)



Source: Te Whatu Ora

84. Alcoholic liver disease is a condition caused by heavy use of alcohol. It ~~and~~ tends to occur after many years of heavy drinking and is, therefore, not highly prevalent amongst young people. Data on hospital discharges shows over time a fairly constant number of discharges with a primary diagnosis of alcoholic liver disease, with a spike in 2019/20 (Figure 11: Discharges from publicly funded hospitals with a primary diagnosis of alcoholic liver disease).

Figure 11: Discharges from publicly funded hospitals with a primary diagnosis of alcoholic liver disease



Source: Te Whatu Ora

85. The New Zealand Transport Agency (NZTA) tracks the percentage of deaths and serious injuries from road crashes that are alcohol-~~related~~involved. These data show a decline in this percentage since data started being collected in 2008. However, the number remains high (NZTA, 2023). Between 2019 and 2021, alcohol was a contributing factor in 43 percent of fatal crashes, 11 percent of serious injury crashes and 14 percent of minor injury crashes (NZTA, 2023).

86. NZ Police recorded and published data on alcohol-related calls to police between 2008 and 2012. This data shows a roughly constant number of calls to police that are alcohol-related: between 120,000 and 126,000 calls per year (NZ Police, 2012).

ALCOHOL-RELATED-HARM AND MĀORI

Commented [A99]: Just noting that there's no mention of the Treaty of Waitangi claims related to alcohol.

87. In 2010 the Law Commission highlighted the negative impact that alcohol has on health and social issues for Māori. It noted that (Law Commission, 2010):

- Māori were more likely to die of alcohol-related causes
- Māori were more likely to experience harm from alcohol consumption in areas such as work, study, and employment
- Māori women suffered more harm as a result of other people's drinking
- Alcohol may be actively contributing to inequalities.

Commented [A100]: More harm than who? Māori men? Non Māori women?

88. In 2015, a policy briefing from the New Zealand Medical Association provided a useful overview of the disproportionate impact of alcohol on Māori. It ~~found~~ reported (New Zealand Medical Association, 2015):

- Māori were 2.5 times more likely to die from an alcohol-attributable death when compared to non-Māori

- Māori were twice as likely as non-Māori to die from cardiovascular disease, a disease linked to alcohol consumption.
- Māori women were more likely to suffer from breast cancer than non-Māori, a disease linked to alcohol consumption.

89. There has been very little, if any, shift in the disproportionate harm that Māori experience from alcohol. A key issue in addressing this inequity is enabling Māori to exercise tino rangatiratanga over their health in relation to alcohol. This will be a key question in stage 2 of this review.

SUMMARY

90. As can be seen from the evidence ~~summarised~~ above, alcohol causes significant harm across all communities in Aotearoa New Zealand. While there have been some improvements across some indicators, overall, the level of harm caused by alcohol remains unacceptably high. Māori remain disproportionately affected by alcohol-related harm.

Commented [A101]: I think this is Jennie Connor's report. Would be best to cite the primary source.

Commented [A102]: I feel like there are a lot more nuanced ways to make this statement. For example:

The causes of alcohol-related health inequities for Māori are multiple and complex. Much work remains to be done for preventing these inequities.

Commented [A103]: Not really sure that this is the case. If so, specifically state which ones. But the converse should also be made, which is that we've seen some worsening indicators.

COST OF ALCOHOL-RELATED HARM

91. The cost of alcohol-related harm to New Zealand society is significant. This section provides a summary of existing estimates of the cost of alcohol-related harm in Aotearoa New Zealand.

92. The most recent study to quantify the social cost of alcohol in Aotearoa New Zealand was conducted by BERL in 2009. Commissioned by ACC and the Ministry of Heath, the report aimed to quantify the social cost of alcohol- and drug- related harm looking at the personal, economic, and social impacts. While Tthise estimate of the social cost of alcohol-related harm in Aotearoa New Zealand published by BERL in 2009 and updated in 2018, or rather the methods used to generate it, have been criticised by some commentators, it has been widely cited in the alcohol-harm research and policy space in New Zealand over the last 14 years (BERL, 2009; Nana, 2018). The Law Commission's 2010 report on the review of the regulatory framework for the sale and supply of liquor also cited the BERL 2009 report.

93. In 2018, an the updated estimate of the social cost of alcohol, based on the BERL methodology, was calculated to be $7.85 billion per year (Nana, 2018). The 2018This estimate included costs resulting from justice, health, ACC, social services, unemployment, and lost productivity. Intangible costs such as years of life lost from premature death, lost quality of life, child abuse, sexual abuse, and impacts on victims of alcohol-caused crime are also relevant to assessing the overall impact of alcohol-related harm on society. A recent Australian Study found that in Australia $48.6 billion AUD of intangible costs could be attributable to alcohol (National Drug Research Institute, Curtin University, 2021).

EVIDENCE FROM OTHER COUNTRIES

94. A literature review search was conducted to identify other estimates of the social cost of alcohol-related harm that have been published since the 2009 BERL report was published in 2009. The literature review search focused on studies that represented the social cost of alcohol at a national-level and considered costs of both the consumers of alcohol and and to society in general. Where more than one study of the same country has beenwas published since 2009, the most recent publication was included. The United States, Australia, and Canada were the focus of the literature search given the higher generalisability of results to an Aotearoa New Zealand setting.

95. The table below summarises the three international studies relating to the social cost of alcohol-related harm that were identified in this literature review search. The tableand compares them to the New Zealand study conducted by BERL in 2009 (Table 4: Summary of selected international studies reporting on the social cost of alcohol-related harms).

Commented [A104]: Comments about any criticisms can come later, where there's more space to explain what may have motivated those criticisms and whether or not they are valid and carry weight.

Commented [A105]: Not sure what this sentence is saying in the context of the BERL 2018 update. Is it:

The BERL 2018 update did not include intangible costs (eg, ….); these costs are relevant when assessing the overall impact of alcohol-related harm on society.

Commented [A106]: Per year?

Commented [A107]: Was it a search or a review? These are different things.

Commented [A108]: s 9(2)(g)(i) [redacted] Really should examine the methods and determine which one would be most appropriate to include.

Commented [A109]: Since only three studies were found, would have been good to expand to more countries, eg, UK, Ireland, different European countries, etc.

Table 3: Summary of selected international studies reporting on the social cost of alcohol-related harms

Country (Author, date)	Year of study costs	Total Social cost of alcohol (Local currency and cost estimate year, millions)	Total Social cost of alcohol (2023 NZD millions)	Social cost of alcohol per person (b, c)	Social cost of alcohol per person (c, d)	Social cost of alcohol as a % of GDP (e)	Tangible Costs (% of total costs)	Intangible (% of total costs)
New Zealand (BERL et al 2009)	2006	NZ$4,7934 (a)	$7,260	NZ$1,146	$1,735	2.79%	NZ$3,231.6 million (67%)	NZ$1,561.9 million (33%)
Australia (Whetton et al 2021)	2017/18	AU$66,817	$85,459	AU$2,676	$3,475	3.80%	AU$18,165 million (27%)	AU$48,651 million (73%)
Canada∞ (CSUCH 2020)	2017	CAN$16,625	$23,803	CAD$454.92	$651	0.78%	CAN$16.625 million (100%)	Not included
US∞ (Sacks et al 2015)	2010	US$ 49,026	$561,727	US$805.06	$1,816	1.65%	US$249,026 million (100%)	Not included

(a)Figure reported in BERL 2009 for alcohol only. It does not include expenditure that could not be separated between alcohol and other drugs which is listed separately in the report

(b) Local currency and cost estimate year

(c) Denominator is total population for noted country in year of study data sourced from the World Bank

(d) 2023 NZD, population study year

(e) Denominator is GDP in current local currency unit for year of study data sourced from the World Bank

∞ Analysis is an update of previous analysis

Commented [A110]: 'that reported'

Commented [A111]: There's some weird line spacing going on in this row.

Commented [A112]: What stands out to me is that when intangible costs are included, the 'social cost of alcohol as a % GDP' increases. There can be wide variation in what % of total costs, intangible costs make up. BERL was a lower amount (33%), Whetton et al was a higher amount (73%).

Commented [A113]: This is confusing. The social costs were converted into 2023 NZD, but somehow these costs are both '2023' and 'population study year' costs? What does 'population study year' mean?

Commented [A114]: 'year of study' (as in publication year) or cost estimate year?

Commented [A115]: Is this font intentionally different?

96. These four studies were conducted in Aotearoa New Zealand (2005/6 costs), Australia (2017/18 costs), Canada (2017 costs), and the US (2010 costs), used different methods, and differed ~~significantly~~ in their findings (BERL, 2009; Canadian Substance Use Costs and Harms Scientific Working Group, 2020; Sacks et al., 2015; Whetton et al., 2021). To compare the relative value of each of the four identified studies, all total costs were converted to 2023 NZD using the Consumer Price Index (CPI) and currency exchange rates and divided by the total population size of the country during the year considered in the study to account for large differences in population size contributing to the cost.

97. In this comparison, the social cost of alcohol appears highest in Australia with an estimated cost of 2023 NZ$3,343 per person (Whetton et al., 2021). Aotearoa New Zealand and the US follow with a cost per person of $1,392 and $1,655 respectively (BERL, 2009; Sacks et al., 2015). Canada's estimate of the social cost of alcohol was the lowest of the four studies observed with the social cost of alcohol estimated to be $651 per person (Canadian Substance Use Costs and Harms Scientific Working Group, 2020). A key point to note in comparing the 4 studies we analysed is that the US and Canadian estimates do not consider the intangible costs of alcohol, ~~where~~ while the Australian and New Zealand estimates do.

RELEVANCE TO THE ALCOHOL LEVY

~~98. It is unclear whether the BERL 2009 report (or any other evidence regarding the burden of alcohol-related harm) was used previously to determine the alcohol levy or even the excise tax. However, we note that the BERL report was cited in the Law Commission's 2010 report on the review of the regulatory framework for the sale and supply of liquor, so it may have had some influence.~~

~~99. While evidence on the costs of alcohol-related harms cannot be directly related to the cost of addressing harms, it can be used to motivate investment in addressing alcohol-related harms – if cost-effective interventions exist, it can also be used to:~~

- ~~motivate research investment to identify cost-effective interventions~~
- ~~motivate investment in interventions to reduce alcohol use~~
- ~~better understand the key areas of alcohol-related harms to prioritise investment~~.

SUMMARY

100. ~~Methodologies~~ The methods used to quantify the cost of alcohol-related harm vary internationally. This makes direct comparisons difficult. There also remains debate about the types of costs and harms that should be included. Nevertheless, we know that the cost is significant, and is potentially much higher than existing estimates (i.e.,

Commented [A116]: Tthe statements in here do not account for differences in methods. The differences in methods are what influences the findings to a substantial degree. For example, 'the social cost of alcohol appears highest in Australia' could simply be because of how the authors defined intangible costs.

Anything said in this paragraph should be about 'estimates'. 'The authors estimated' and 'based on the authors' methods, ….'

Commented [A117]: s 9(2)(g)(i) [redacted]

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Commented [A118]: s 9(2)(g)(i) [redacted]

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Commented [A119]: This should be clearer in the above content, rather than just coming up in the summary.

Commented [A120]: s 9(2)(g)(i) [redacted]

Commented [A121]: Which estimates? The BERL report? ACC's interview? These international studies?

we heard from ACC that they estimate a cost of approximately $600 million annually for alcohol-related injuries).[4]

101. ~~Notwithstanding differing views on the methodological approach that led to the BERL estimate (and the 2018 update), it was based on 2005/06 data, and in 2023 the data landscape has changed.~~ It is timely to undertake an updated analysis of alcohol-related costs, and particularly relevant in the context of this review of the alcohol levy. In stage 2, we will undertake an up-to-date cost of alcohol harms study that clearly outlines the relevant costs from both an economics perspective and a public health perspective, to support better-informed decision-making across a range of purposes and contexts.

Commented [A122]: Weak rationale given how much will change in the methods and data between BERL and what will be the NZIER update. Suggest just cut this sentence and jump straight to the point.

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[4] Further inquiries and engagement with ACC will be part of stage 2 of this review to better understand and quantify this figure.

CONSIDERATIONS FOR INCREASING THE ALCOHOL LEVY

102. The alcohol levy has not increased since 2013. During this time the real cost of harm-reduction interventions has increased, and the levy appears to remain insufficient to address alcohol-related harms across society (i.e., there has been little, if any, shift in the extent of alcohol-related harm across communities in Aotearoa New Zealand). Furthermore, the levy now sits within a different legislative context. The Pae Ora framework potentially opens new opportunities for investment in harm-reduction activities across health entities.

103. A range of factors should be taken into account when considering a potential increase in the alcohol levy, including:

- the regulatory context of the levy
- the strategic context of the levy
- the potential impact of price change on demand for alcohol
- the potential regressive effects of levy-induced price change, as most taxes or levies are fiscally regressive (but have the potential to be progressive for health)
- costs of alcohol-related activity funded by the levy, which may increase due to
    - inflation
    - patterns of alcohol consumption and alcohol-related harms
    - unmet need
    - the costs of alcohol-related harms
- new opportunities for investment
- the size of the levy fund and proportionality considerations
- the effectiveness and cost-effectiveness of interventions to reduce alcohol-related harms
- Te Tiriti o Waitangi.[5]

REGULATORY CONTEXT OF THE LEVY

104. The Pae Ora Act states that (Pae Ora (Healthy Futures Act 2022, s.101):

> *levies may be imposed for the purpose of enabling the Ministry to recover costs it incurs -*
>
> *(a) in addressing alcohol-related harm; and*
>
> *(b) in its other alcohol-related activities*

105. In other words, the Act explicitly identifies the primary (and potentially only) purpose of the levy as a cost recovery mechanism, rather than a demand modifying instrument or as Pigouvian tax (a tax intended to internalise any externality associated with alcohol

Commented [A123]: s 9(2)(g)(i)
Assumes that the levy ever *was* sufficient to address alcohol related harms across society.

Also does not account for all the other activities not funded by the levy, nor whether those activities are 'best buys' or less impactful/most expensive activities.

Commented [A124]: Not sure what this is referring to. Just the legislation that establishes the levy? Or the *alcohol* regulatory context

Commented [A125]: Similar comment as above

[5] Note this is not addressed in detail in Stage 1 given time constraints and the limited ability to engage with Māori. This will be a core focus of Stage 2 of the review.

consumption). However, we do consider the potential for the levy to have a demand modifying effect which may result from partial or complete internalisation of externalities.

106. The Pae Ora context expands the scope of the levy due to now being a broader cost recovery for Manatū Hauora rather than Te Hiringa Hauora. However, what remains unclear is the breadth of the application of section 101 of the Pae Ora Act and what activities can and should fall within its ambit. Consideration of this issue needs to take into account the clear distinction that must be drawn between core government activities, and responsibilities and the role of the levy fund. Further investigation into this question will be undertaken during stage 2 of this review. This may require legal advice to clarify any uncertainties in interpretation.

STRATEGIC CONTEXT OF THE LEVY

107. The purpose of the Pae Ora Act is to build healthy futures for all New Zealanders and to eliminate health disparities, in particular for Māori. Section 7 of the Pae Ora Act sets out principles which are to underpin the functions of health entities. Of particular relevance to this review are those principles that relate to engaging, resourcing and empowering Māori. These include:

- the health sector should engage with Māori, other population groups, and other people to develop and deliver services and programmes that reflect their needs and aspirations, for example, by engaging with Māori to develop, deliver, and monitor services and programmes designed to improve hauora Māori outcomes (7(1)(b))
- the health sector should provide opportunities for Māori to exercise decision-making authority on matters of importance to Māori (7(1)(c))
- the health sector should provide choice of quality services to Māori and other population groups, including by resourcing services to meet the needs and aspirations of iwi, hapū, and whānau, and Māori (for example, kaupapa Māori and whānau-centered services) (7(1)(d)(i)

108. The levy is now administered in this new context and there is an opportunity to reconsider activities in light of these obligations and to expand by Māori for Māori interventions.

109. Engaging with Māori communities to develop, deliver, and monitor programmes and resourcing services to meet the needs of iwi, hapū, and whānau, are practices intended to increase the effectiveness of services and programmes in delivering equitable outcomes for Māori. Some services and programmes may achieve effectiveness in Māori and Pacific communities through added investment to support these needs. To give effect to the Pae Ora Act principles through the application of the levy fund, a key focus needs to be empowering Māori to determine and deliver the initiatives most appropriate for their communities. Stage 2 of this review will provide the opportunity for extensive engagement with Māori to build relationships and explore these opportunities when considering the future of the levy fund.

Commented [A126]: Theoretically, yes. But the levy is so incredibly small that it would have to be hugely increased before it would be potent enough to modify demand. s 9(2)(g)(i) [redacted]

Commented [A127]: I feel like something that is not emphasised enough are the outcomes intended by Pae Ora. There's one sentence about 'build health futures'. But I don't see much about what we are trying to ultimately achieve. Need some content on that.

Commented [A128]: This is potentially misleading given that The Act is much broader than part 1 of the Act which includes section 7 outline principles for engaging with Māori. But the Act in Part 2 also establishes a range of agencies, outlines their functionality (including joint agency roles), then describes how the health system would function to achieve section 7 and part 1 of the Act.
There is no discussion of how the new health system intends to address the principles in section 7 there are functions and roles at Ministry of Health, Public Health Agency Te Aka Whai Ora and Iwi Māori Partnership Boards. Not to mention Part 2 of the Act also describes key documents required by the Act e.g. Government Policy Statement NZ Health Plan and key Strategies including a Hauora Māori Strategy.

Recommend adding additional paragraph referencing how the health sector under the Pae Ora Act is designed to address these principles through key agency roles and key guiding documents as outlined in part 2 of the Act

Commented [A129]: Would it be useful to explain what is meant by this as I am concerned different people will interpret it differently.

Commented [A130R129]: Yes, and also relates to longer comment above about Pae Ora and how the agencies are to work together.

IMPACTS OF ALCOHOL LEVY ON PRICE AND CONSUMPTION

110. Theoretically, as a price-altering mechanism, the alcohol levy does have the potential to have a demand modifying effect which could, in turn, reduce the levy revenue.

111. However, the potential for an increase in the alcohol levy to impact on alcohol demand is modulated by consumer opportunities for substitution to lower priced alcoholic beverages.

112. ~~An additional concern related to the potential of the levy to modulate~~New Zealand and international evidence shows that different groups respond to differing extents to price changes. Thus, there ~~demand is that impacts of price changes on demand are likely to affect different groups differently. There~~ is potential for any reduction in demand to be concentrated in groups with already relatively low alcohol consumption, groups with low rates of binge or harmful drinking, and groups that experience lower levels of alcohol-related harms. A proportionate reduction in alcohol-related harms across all consumers of alcohol is not guaranteed by reductions in alcohol sales.

113. Substitutes and their prices are important because where consumers have the option of switching to acceptable substitutes, the impact of a price change will be greater. However, alcoholic beverages are not a homogenous good. There are many different alcoholic beverage options at different price points. This means substitution within the category of alcoholic beverages is likely to be an attractive option for many consumers.~~:~~ If the cost of a favourite alcoholic beverage increases due to a tax or levy increase, in addition to reducing alcohol consumption, consumers have a range of options, including:

- switching to a cheaper beverage type
- switching to a cheaper brand
- switching to large containers that are associated with a lower cost per volume
- switching to multi-packs that are associated with a lower price per unit
- purchasing alcoholic beverages that are subject to price promotion
- purchasing alcoholic beverages from different outlets
- changing the balance of on-licence to off-licence consumption to favour more off-licence consumption.

114. The range of options for within-category substitution and the ultimate choice consumers make is determined by individual consumer preferences. For example, some consumers may reduce total alcohol consumption rather than switch from on-licence to off-licence consumption when on-licence consumption reaches an unacceptable cost. For others, a perverse effect can occur where alcohol consumed may increase due to substitution from on-licence to off-licence consumption if the cost savings per unit more than offset increases in price, allowing a greater volume of alcohol to be purchased within the same budget.

115. As noted by the Tax Working Group (Tax Working Group Secretariat, 2018), published research indicates that alcohol excise (and therefore the combination of alcohol excise

Commented [A131]: Yes, theoretically. But, as mentioned in other content, levy is so small per standard drink.

Instead, what we've been seeing is any 'potency' of the levy waning because of not matching inflation.

Commented [A132]: This is not consistent with para 117 below

Commented [A133]: See earlier comments. s 9(2)(g)(i) [redacted]

The authors need to consider the difference between 'possible' and 'probable'. Yes, it is 'possible' that the levy could modify demand but it is highly improbable because it is so small per standard drink and it would need to increase substantially (eg, 100x) before it would actually result in a change in consumer behaviour.

Commented [A134]: s 9(2)(g)(i) [redacted]

Would only be relevant if we were looking at situations where other factors were going to significantly impact the demand for alcohol, availability of alcohol, and/or the affordability:
Eg. Substantial changes in income
Alcohol excise tax decreasing
Number of alcohol outlets decreasing by half
etc

Commented [A135]: s 9(2)(g)(i) [redacted]

Additionally, the levy and tax system has flaws that could be fixed that would reduce this switching.

Commented [A136]: This isn't really a public health perspective. Public health (and also marketing research) would point to the influence of the alcohol environments around us, the proliferation of alcohol outlets, the predominance of alcohol advertising in digital and non-digital spaces, the myths that we're sold through advertising, etc. Plus there's the whole addiction aspect of it.

s 9(2)(g)(i) [redacted]

Commented [A137]: Should be flagging how small/large the levy and excise tax are to each other.

s 9(2)(g)(i) [redacted]

and alcohol levy) are likely to be effective in discouraging harmful behaviour. This means that on the whole, an increase in prices of alcoholic beverages is likely to result in a reduction in the amount of alcohol consumed for at least those consumers who engage in harmful drinking. But the Tax Working Group also acknowledged the considerable uncertainty around demand response to potential increases in tax and indicated that further research would be unlikely to resolve these issues sufficiently to indicate an optimal tax on alcohol.

116. Despite the uncertainties as to the specific elasticities, broad conclusions can be drawn from the evidence, including:

- price elasticity of demand for alcoholic beverages is not insignificant: a significant increase in price is expected to result in a proportionately smaller but not insignificant decrease in quantity demanded
- price elasticity of demand in groups that engage in heavy and harmful drinking are likely to be the least responsive to a price increase: while a sufficiently large price increase may reduce sales of alcohol, a less than proportionate reduction in alcohol-related harms is to be expected.

117. The alcohol levy is very ~~small in proportion to price and in proportion~~ to the alcohol excise tax., ~~so~~ Aan increase in the levy itself ~~indeed~~ even a doubling of the levy is very unlikely to have a noticeable impact on alcohol demand. ~~so the~~Accordingly, the levy revenue is unlikely to be negatively affected by the increase in the levy.

118. On the other hand, the alcohol excise tax represents a significant portion of the price of alcohol and making a change in the excise tax is most likely to result in a change in quantity demanded. It is unclear whether the objective of the alcohol excise tax is to raise revenue, in which case increases in the tax will be introduced slowly, or to modulate demand for alcohol (or indeed whether the objective of the tax is shifting over time). Due to its relative size, and in the absence of other regulatory interventions, the excise tax is likely to be the primary price-based lever through which government can influence demand for alcohol and, therefore, potentially reduce alcohol-related harms.

119. The relationship between the excise tax and the alcohol levy will be explored further in stage 2 of this review.

REGRESSIVITY OF THE LEVY

120. Most ~~p~~Price policies, including the alcohol levy, the excise tax on alcohol and even the GST, tend to be seen as potentially regressive. That is, lower income households are believed to pay a higher proportion of their incomes when they pay these taxes than higher income households because they spend a higher proportion on the taxed goods. However, in considering the evidence on corrective taxes, the Tax Working Group found that the alcohol excise tax (and by extension the alcohol levy) appears to be slightly progressive, in contrast to tobacco taxes which are regressive.

121. This means an increase in the levy is unlikely to cause disproportionate harm to lower income households.

Commented [A138]: This issue is seen the world over and across research literature. There are some 'big picture' consistencies, but there will also be some level of variation between estimates (due to all the usual reasons – differences in methods, populations, time points, measures, models, etc).

Commented [A139]: Should explain or define elasticities if going to mention this technical term

Commented [A140]: Where are the citations?

Commented [A141]: Should be a more specific statement than this. Currently, reads as 'even a teeny tiny change in the excise tax is going to change demand', which is not necessarily the case. Really, it's about 'meaningful' changes in the excise tax.

Commented [A142]: s 9(2)(g)(i) . Also, please identify reference the objective of the alcohol excise tax.

Commented [A143]: Other price regulatory measures? There's the SSAA – it may cover things other than price, but it is a regulatory intervention.

Commented [A144]: s 9(2)(g)(i) I would have liked to see more of the health economic public health literature incorporated. There is rich research around how taxes and levies can be regressive financially but progressive for health (and cost-savings at a population level)

Commented [A145]: So, it is it progressive or regressive? Is it fiscally regressive and progressive for health?

Commented [A146]: And the levy is so small. Like, on average, $2.50 per person per year.

COSTS OF ALCOHOL-RELATED ACTIVITY

122. Because the alcohol levy is a cost recovery mechanism, an increase in the levy should consider factors that increase the cost of alcohol harm-reduction activities funded by the levy. Cost increases may be expected to occur if:

- there is inflation
- there has been an increase in alcohol-related harms
- there is unmet need that the agency has plans to address
- there are new opportunities for investment in cost-effective ways of addressing alcohol-related harms.

Inflation

123. Indexing to inflation is justified due to the use of the levy fund as a cost recovery mechanism. The services and programmes and other alcohol-related activity undertaken through levy funding are labour intensive. Employment contracts often include an inflation adjustment to wages and salaries, and where they do not, adjustments to wages and salaries to reflect inflation are made periodically to avoid labour shortages. The CPI is the most common measure of inflation that drives adjustments to labour costs and is, therefore, the most justified measure of inflation for the levy to be indexed to (as opposed to the alcohol CPI which would be more appropriate if the alcohol levy purpose was as a demand modulating instrument).

124. If the levy fund had been adjusted using the CPI, it would have generated ~~between $566,217 and~~as much as $1,970,105 per year in additional revenue ~~each year~~ since 2012/13 (Figure 12: Levy fund with and without CPI adjustment, and actual levy shortfall relative to adjusted levy). A limitation is that the authors did not examine the value of the levy and impact of possible CPI adjustments prior to the establishment of the Health Promotion Agency (ie, during the decades when the levy was used to fund ALAC).

125. Based on this adjustment, the cumulative levy shortfall due to a lack of adjustment over the past nine years is approximately $10 million.

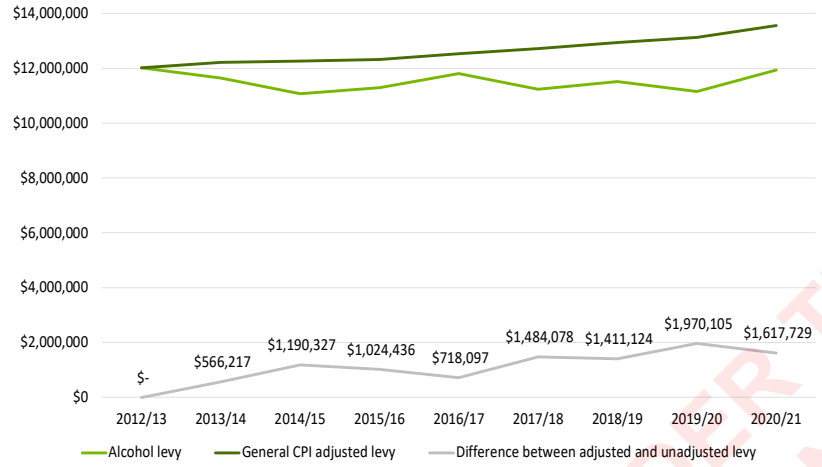
Commented [A147]: Avoid starting sentences with 'because'.

Commented [A148]: Also, see earlier comments about whether the levy was even set at an appropriate amount to achieve cost recovery (if this was a goal). The levy was originally set up to fund ALAC, and then merged into HPA when ALAC was disestablished. I would feel more confident following this 'cost recovery mechanism' line of argument if there had been a long-term examination of to what extent ALAC and HPA were funded by the levy, and what that funding enabled (or didn't enable) and how it relates to inflation, etc.

Commented [A149]: s 9(2)(g)(i) better to say "include labour elements" rather than 'are labour intensive'.

Commented [A150]: Citation please.

Figure 12: Levy fund with and without CPI adjustment, and actual levy shortfall relative to adjusted levy



Source: CPI data from Stats NZ

Increase in alcohol consumption and harms

126. Our review of data from a broad range of sources indicates that:

- the amount of alcohol available for sale has increased on a per capita (aged 18+) basis over the last 10 years while actual sales have remained constant, suggesting more variety may be on shelves with intensifying competition in the industry
- growth in the industry is observed mainly in the liquor retailing sector rather than in manufacturing
- imports continue to rise consistent with previous trends
- all forms of alcohol have become more affordable in New Zealand, with households spending a similar share of total expenditure on alcohol regardless of household income level. Internationally, alcohol is not likely to be more affordable in New Zealand than in the average of high-income OECD countries
- New Zealanders' drinking ~~habits~~ patterns have not changed significantly over the last 10 years, with the possible exception of Pacific people, in particular Pacific women who appear to be more likely to drink alcohol now than 10 years ago
- consumption of beer continues to decline while consumption of spirits and wine remains fairly constant
- New Zealand is either in the middle or at the bottom of a set of high-income OECD countries in terms of alcohol consumption per capita, depending on the measure used
- prthe COVID-19 pandemic and restrictions have likely impacted on alcohol consumption in different ways, but no increasing trend in hazardous drinking was observed before or after the pandemic, except for Pacific people who appeared

Commented [A151]: Where are the citations for this section? Is this all opinion?

s 9(2)(g)(i) [redacted]

Commented [A152]: Not clear to me what this means

Commented [A153]: Recall that this data was super old and not a very nuanced measure

Commented [A154]: This should have been explored in a more considered way in the earlier sections. The current framing here is very stigmatising. This is a problem.

Commented [A155]: Isn't this data about 'availability' rather than what has actually been consumption. It is 'alcohol available for consumption'. Language needs to be an accurate reflection of the data.

Commented [A156]: I didn't see any data in the report that showed all OCED countries, just a 'selection'. How is the reader to know. Also, what is meant by 'middle or bottom' – is bottom good? Bad? About volume? About low consumption? About harms? s 9(2)(g)(i) [redacted]

Commented [A157]: The measure wasn't alcohol consumption.

to have an increasing trend towards hazardous drinking prior to the COVID-19 pandemic

- younger New Zealanders are showing a slight trend towards less hazardous drinking and less alcohol-related harm
- international data suggests the prevalence of alcohol use disorders in New Zealand has increased in the last 10 years
- there is no clear evidence of increasing alcohol-related harms, although limited data is available on harms so there is potential for harms to be increasing in areas where data was not readily available
- a key outcome of interest is that New Zealand continues to have a very low rate of premature deaths associated with alcohol compared with similar high income OECD countries. It is unclear how appropriate international comparisons may be (e.g., whether different definitions or data collection may be contributing to this result).

127. We note that there are important gaps in the data and evidence on alcohol consumption and experience of alcohol-related harms. While the limited data indicate that Māori are more likely than non-Māori to engage in heavy ~~or binge~~episodic drinking, it is unclear whether this has worsened over time. Some evidence indicates a possible ~~improvement~~ improvement for Māori (e.g., the percentage of Māori who are heavy drinkers fell from 47.9 in 2012 to 43.2 in 2016 and to 31.0 in 2020), although 2020-2022 data is also muddied by the impact of the COVID-19 pandemic and associated restrictions (NZHS, 2016, 2022). Additionally, much of the recent evidence regarding consumption patterns within population sub-groups is derived from the NZHS and the AUiNZ which rely on self-reported alcohol consumption which is impacted by social desirability and recall biases.

128. Nevertheless, the level of alcohol consumption and the rate of alcohol-related harm across Aotearoa New Zealand remains high.

Unmet need

129. It is important to note that the total levy fund has remained quite constant despite increasing population. Unless the determination of the levy fund has been made taking population growth and measures of unmet need into account, it is possible that the relatively constant levy fund over the last 9 years has been increasingly insufficient to meet population need. However, we were unable to conclude through the analysis of programme data that was made available whether this might be the case. We will consider this further in stage 2 of the review.

The cost of alcohol-related harms

130. We found no evidence that the cost of alcohol-related harms is or has been considered directly in the setting of the levy fund.

131. Our evidence review clearly shows the cost of alcohol-related harms in New Zealand is substantial even if ~~significant~~ substantial uncertainty exists as to the total amount of that cost. A high cost of alcohol-related harms provides a strong incentive to find cost-effective investment opportunities. Unfortunately, the magnitude of alcohol-related harm costs does not provide any indication of the size of investment needed to address

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Commented [A159]: Couldn't the opposite be said too?

Commented [A160]: Even though it may be 'less bad' than other countries, bad is still bad.

we are not very confident about the quality of these measures, nor the utility of the comparison.

Commented [A161]: s 9(2)(g)(i) [redacted]

Commented [A162]: See earlier comments about these self-reporting statements.

Commented [A163]: Did you review the ALAC/HPA documentation from previous levy reviews? I'm not sure what evidence was reviewed to support this conclusion. Also, was this even a requirement or consideration in the previous levy legislation?

Commented [A164]: s 9(2)(g)(i) [redacted]

those harms. Our review of the evidence did not reveal any known relationship between the cost of harm and the cost of addressing harm. Additionally, our evidence review did not reveal any clear evidence of increasing costs associated with alcohol-related harms.

132. Nevertheless, the gulf between the costs of alcohol-related harm and the cost-recovery function of the alcohol levy remains significant. This could suggest that the existing levy fund is insufficient, and/or the activities and programmes being funded by the alcohol levy are having limited impact on the level of harm. We heard that for Māori, the alcohol levy fund has done little, if anything, to address the disproportionate impact of alcohol-related harms in their communities. More needs to be done to address this significant gap and this will be a core focus of stage 2 of this review.

The effectiveness of interventions

133. In 2018, the WHO launched the SAFER initiative. SAFER promotes the implementation of interventions in five strategic areas, based on evidence of their impact on public health and their cost-benefit analysis.

The SAFER interventions				
STRENGTHEN	**ADVANCE**	**FACILITATE**	**ENFORCE**	**RAISE**
restrictions on alcohol availability	and enforce drink-driving countermeasures	access to screening, brief interventions, and treatment	bans or comprehensive restrictions on alcohol advertising, sponsorship, and promotion	prices on alcohol through excise taxes and other pricing policies

134. Our interviews and literature review indicated that investments that align with the health sector principles and the WHO SAFER framework are, in the long term, likely to lead to reductions in alcohol-related harm. Almost all the SAFER interventions focus on measures that limit the physical, social, and psychological availability of alcohol. These measures are by far the most successful in reducing alcohol-related harm.

Summary of best practice interventions

135. In 2022, the 3rd edition of the landmark book *Alcohol: No Ordinary Commodity* was published. The book's authors conducted an extensive review of international research evidence since the 2nd edition; the 3rd edition incorporates updates based on the latest available research. A summary of the book's findings was published in a 2022 research paper; this situation included evidence-based recommendations around the effectiveness of alcohol interventions ~~provides a useful summary of interventions that are considered to be best practice~~. The table below is reproduced from this paper showing best practices, good practices and ineffective practices to reduce alcohol-related harm (Borbor et al., 2022.) A limitation of the book is that it lacked any specific focused examination of Indigenous-led research or Indigenous-led alcohol

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Commented [A166]: s 9(2)(g)(i) [redacted]

Commented [A167]: We also need to be very realistic about whether the levy would ever be increased enough to cover all the costs of addressing alcohol-related harm and other alcohol-related activities. This would be hundreds of millions of dollars (at least!). s 9(2)(g)(i) [redacted] So, based on that, what is the way forward?

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Commented [A169]: s 9(2)(g)(i) [redacted]

Also, this statement could be made about almost any part of the health system.

Commented [A170]: This might be better explored in phase 2 given the small number of interviews in phase 1

Commented [A171]: A huge gap in this section is around the factors necessary to even make the SAFER possible. What does it require to put SAFER into action? What attempts have been made in New Zealand over the past 20 or so years? What does this tell us about the reality of the alcohol intervention context?

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Commented [A173]: Where are the literature citations to support this statement?

Commented [A174]: What are the 'health sector principles'?

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2.What is 'psychological availability of alcohol' meant to refer to?

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interventions. It also takes a strongly 'western-led' approach toward research assessment.

Table 4: Interventions considered to be best practices, good practices or ineffective practices

Policy area	Best practice	Good practices	Ineffective practices	Comments
Pricing and taxation policies	Alcohol taxes that decrease affordability	Minimum unit price; differential price by beverage; special taxes on youth-orientated beverages	Policies that increase the affordability of alcohol	When alcohol becomes less affordable, people drink less and experience fewer problems; when affordability increases, so does drinking and harm. Increased taxes reduce alcohol consumption and harm for the whole society, including heavy drinkers and adolescents. The government also receives tax revenues to compensate society for the costs of treatment, prevention, and enforcement. Alcohol taxes need to be substantial to be effective.
Regulating physical availability	Limiting hours and places of sale; public welfare orientated alcohol monopoly; minimum purchase age laws	Rationing systems; restricting outlet density; individualized permit systems; post-conviction preventive bans; encouraging lower-alcohol beverages; sales restrictions; total bans where supported by religious or social norms	Policies that increase outlet density and temporal and spatial availability	Regulating who can consume alcohol, or the places, times, and contexts of availability, increases the economic and opportunity costs of obtaining alcohol. Limitations on physical availability, including convenience and legal access (e.g., age restrictions), reduce alcohol consumption and harms. Controls on availability can be imposed at a population level (e.g., hours of sale) or at an individual level (e.g., as directed by a court order). Availability restrictions can have significant impact if enforced consistently.
Restrictions on alcohol marketing	Complete ban on alcohol marketing	Partial bans on alcohol marketing	Industry voluntary self-	Exposure to alcohol marketing increases the attractiveness of alcohol and the likelihood of drinking by young people; restrictions on marketing

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Policy area	Best practice	Good practices	Ineffective practices	Comments
			regulation of marketing	are likely to deter youth from early onset of drinking and from binge drinking. Exposure to alcohol images and messages can precipitate craving and relapse in people with alcohol dependence. Extensive evidence of impacts on drinking, and experience from tobacco advertising bans suggests a complete ban is likely to be a best practice despite lack of evaluated examples. ~~The World Health Organization considers restricting alcohol advertising and sponsorship as one of the most cost-effective measures to reduce alcohol-related harm.~~
Education and persuasion	~~?~~	Anti-drink-driving campaigns; targeted prevention programmes; family inclusive intervention; some interventions with undergraduate students; brief motivational interventions in school settings; computer-based interventions with selective subpopulations of heavier drinkers	Industry-sponsored programmes and campaigns; information only programmes	Interventions that focus on high-risk youth and involve the family are more likely to deter youth drinking. Impact generally evaluated in terms of knowledge and attitudes; effect on onset age of drinking and drinking problems is equivocal or minimal. Information based educational messages are unlikely to change drinking behaviour or prevent alcohol problems. ~~However, when led by communities and targeted to priority populations there is more success. with some targeted programmes showing more success (Lammers J, 2019).~~ ~~Programmes led by communities to build support for public health orientated alcohol policies have also~~

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Policy area	Best practice	Good practices	Ineffective practices	Comments
				~~shown more impact (Rise J, 2002). These initiatives in turn can build the capacity and the support for structural changes at a legislative and policy level.~~ ~~There is little evidence that mass media campaigns have reduced alcohol consumption or alcohol related harms.~~
Drink-driving countermeasures	Low BAC levels for young drivers; intensive breath testing, random where possible; intensive supervision programmes	Low or lowered BAC levels (0.00–0.05%); graduated licensing for young and novice drivers; sobriety check points; administrative license suspension; comprehensive mandatory sanctions; DUI-specific courts; interlock devices	Severe punishment; designated driver programmes; safe ride services; education programmes; victim impact panels	A high likelihood of being caught and facing consequences quickly are effective in reducing alcohol-impaired driving, but severe penalties are likely to reduce celerity and certainty of punishment. Surveillance measures and limitations on driving (e.g., license removal) are effective measures
Modifying the drinking environment	~~2~~	Training to better manage aggression; enhanced enforcement of on-premises laws and legal requirements and proactive policing; targeted policing; legal liability of servers, managers, and owners of licensed premises; community approaches	Training and house policies relating to responsible beverage service (RBS); interventions to address drinking at sports venues and at festivals;	Generally evaluated in terms of how interventions affect intermediate outcomes (e.g., bar staff knowledge and behaviour), and alcohol related problems such as drink driving and violence, although some evaluations measure impact on consumption in specific settings

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Policy area	Best practice	Good practices	Ineffective practices	Comments
		focused on specific target populations	voluntary regulation or coordination	
Treatment and early intervention	2	Brief interventions for nondependent high-risk drinkers; behavioural and psychosocial therapies; pharmacological treatment; mutual help interventions	Some types of coercive treatment	Usually evaluated in terms of days or months of abstinence, reduced intensity and volume of drinking, and improvements in health and life functioning. The target population is harmful and dependent drinkers, unless otherwise noted.

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Aotearoa New Zealand

136. Modifying the price and availability of alcohol are seen as the most effective measures to reduce consumption and therefore alcohol-related harms. Research in Aotearoa New Zealand has shown that when the real price of alcohol decreases, consumption levels go up. (Wall M, Casswell S. 2013). As noted above the real price of alcohol for most alcohol beverage types has increased slightly in recent years. However, consumption remains high suggesting that the increase in price has not been at a significant level to modify consumption.

137. The New Zealand Law Commission made strong recommendations in 2010 (Law Commission, 2010) for stronger restrictions on alcohol advertising and sponsorship. This was followed by the Ministerial Forum on Alcohol Advertising and Sponsorship in 2014 which noted (Ministerial Forum on Alcohol Advertising and Sponsorship):

> *As a Forum, we think the total cost of alcohol-related harm is enough to justify further restrictions on alcohol advertising and sponsorship. We feel that, however complex the task, there is a need to change attitudes and behaviours associated with alcohol consumption in New Zealand. We believe that the current level of exposure of young people to alcohol advertising and sponsorship is unacceptable and that this exposure can be reduced. With these factors in mind our recommendations are focused on reducing the exposure of young people to alcohol advertising and sponsorship. Specifically, our focus is protecting minors.*

138. In Aotearoa New Zealand, there are more places to buy alcohol in our most socio-economically deprived communities (Pearce J, Day P, Witten K. 2009). Communities have long voiced their concern about their inability to influence decisions about where alcohol is sold in their communities. This sentiment was echoed in our stakeholder interviews where this was consistently identified as a priority issue.

139. Acknowledging this, a priority objective of Aotearoa New Zealand's liquor law reforms in 2012 was to "improve community input into local alcohol licensing decisions" (New Zealand Parliament, 2010). However, little has been done in the intervening years. The 2021 Alcohol Regulatory and Licensing Authority annual report noted that (Alcohol Regulatory and Licensing Authority, 2021):

> *As we reported last year, the Authority notes that District Licensing Committees are refusing very few applications for new licenses, licence renewals and managers' certificates. The extent and any reasons for this may be worthy of investigation in any future review of the Act.*

143. Activities funded through the alcohol levy are unable to directly influence many of the levers that have been shown to be effective in reducing alcohol-related harms (the structural interventions). They have therefore been primarily focused on supporting communities to create the will to shift the dial in these areas. Activities have also focused on research, changing attitudes and supporting communities to engage in

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Commented [A185]: When talking about these interventions, also need to describe who is responsible for them in the NZ context and recent efforts to modify them, including reports.

s 9(2)(g)(i) [redacted]

No mention in the first paragraph about the NZ Law Commission recommendations about price, what came out of it (or didn't come out of it), how even in the recent announcements about SSAA review considerations, the Government excluded price, etc.

Commented [A186]: This odd citation format has been used in parts throughout the report. I'm sure what citation style would incorporate initials from first names. Very unusual.

Commented [A187]: This comment is separate from all the other evidence about affordability. s 9(2)(g)(i) [redacted]

Commented [A188]: This is a reflection of the wider alcohol harm minimisation space, not just the alcohol levy. This is why the SSAA Community Participation Bill has been created. Also, there's lots of evidence showing this, including work funded by HPA.

Commented [A189]: s 9(2)(g)(i) [redacted]

Commented [A190]: s 9(2)(g)(i) [redacted] Communities and Māori have been *very* active. The issue is that the law was not well designed and gave the balance of power to other actors agents.

Commented [A191]: I would check to see what definition of 'structural interventions' is being used here. Structural intervention is a very wide approach, related to the social determinants of health. The levy has most definitely been used for work related to the social determinants of health, and therefore has indeed been used for 'structural interventions'. Check the use of this term throughout the document.

Commented [A192]: s 9(2)(g)(i) [redacted]

decisions that affect them. Operating within this context has been a potential barrier ~~for~~ for the success of alcohol levy funded activities reducing alcohol-related harms. This will be explored further in stage 2 of the review.

140. Many of the interventions funded by the alcohol levy are grounded in the SAFER framework and international good practice. In the new Pae Ora context, any argument to increase the alcohol levy would need to be supported by robust evidence on how that increase could be spent to effectively reduce alcohol-related harms. We note the importance of the alcohol levy fund being transparent and that Manatū Hauora is accountable for any expenditure from the levy fund to those who pay the levy, as well as the New Zealand public more generally.

141. Most stakeholders interviewed during stage 1 of our work mentioned community investment as an impactful use of alcohol levy funding. However, some felt that the community voice has not been strong enough to date for decisions made about how the alcohol levy fund is spent. In particular, some stakeholders felt that the levy fund should be given to kaupapa Māori organisations first given that Māori have a higher proportion of alcohol-related harm and use in New Zealand in comparison to other population groups. This can be exemplified by the Health Coalition of Aotearoa Roopuu Apaarangi Waipiro (Expert Alcohol Panel) submitting to the Health Select Committee (during the examination of the Pae Ora Bill) that 80% of the alcohol levy should be allocated to Te Aka Whai Ora (Māori Health Authority) as Te Aka Whai Ora has the commissioning capability to empower communities to create healthier environments (Health Coalition of Aotearoa Roopuu Apaarangi Waipiro, 2021). Internationally, Muhunthan et al., found that indigenous-led policies that are developed or implemented by communities can be effective at improving health and social outcomes (Muhunthan et al., 2017).

NEW OPPORTUNITIES FOR INVESTMENT

142. New interventions to improve health and reduce harms associated with unhealthy lifestyles emerge frequently, and evidence on the cost-effectiveness of programmes and services evolves over time. While the alcohol levy ~~revenue~~ is hypothecated for alcohol-related activity, the range of potential activity and the investment opportunity of activity may increase. The broadening of the levy's scope under the Pae Ora Act provides an opportunity to explore new activities and interventions.

Commented [A193]: s 9(2)(g)(i) [redacted]

Commented [A194]: And how this work relates to the wider alcohol-harm minimisation sector.

Commented [A195]: Phase or stage?

Commented [A196]: What does impactful mean?

Commented [A197]: We're concerned about just how much exposure to the alcohol levy administration these participants actually had. s 9(2)(g)(i) [redacted]

Commented [A198]: Note that any conclusions about these statements need to be grounded in Pae Ora, and the outcomes intended to be achieved through Pae Ora, and how the health system agencies are supposed to work together.

HPA/Te Hiringa Hauora also has decades of experience working with communities, including provision of funding. Lots of learnings have been gained. s 9(2)(g)(i) [redacted]

Commented [A199]: Why aren't other submissions also examined, if you are going to be examining submissions to HSC regarding the alcohol levy?

Commented [A200]: What's the evidence for this statement?

Commented [A201]: Yes and no. Most of the recommendations between the book Alcohol: No Ordinary Commodity 2nd edition and 3rd edition *did not change*.

Commented [A202]: In this section, would be good to flag again the need to understand what should be funded by Vote Health, how much activity is happening in that space, and what is the effectiveness of it.

CURRENT SETTINGS

143. The current alcohol levy is approximately $11.5 million per annum.

144. For the 2022/2023 year the total levy was allocated between the Public Health Agency and Te Whatu Ora. The Public Health Agency received $979,881; ~~with~~ the balance of approximately $10.5 million was allocated to the Health Promotion Directorate within Te Whatu Ora~~,~~ to fund its alcohol harm-reduction activities. From this, the Health Promotion Directorate allocated $5.46 million to externally-conducted ~~funded~~ programmes. ~~. These programmes are~~including those delivered with community partners, sector partners, and external technical experts. We were told that the balance of the levy supports internal FTE and operational functions, including the relational capability that is required to deliver the programme of work. This activities are also undertaken through engagement with community partners, sector partners, and external technical experts.

145. For 2023/24 approximately $3.7 million is currently committed to external funding. An additional $5.095 million is anticipated for staff costs and ongoing overheads. We have been advised that additional programme allocations are yet to be finalised and will be confirmed through completed negotiations.

146. Investments are generally grounded in international research, New Zealand research, and reflect the WHO SAFER framework. They are focused on achieving long-term value and system shifts to address alcohol-related harm. Te Hiringa Hauora has championed a Tiriti dynamic approach. As part of this, all programmatic work conducted by the Health Promotion Directorate is required to align with Takoha, a Tiriti based health promotion framework. The Takoha enablers are Te Tiriti o Waitangi (applying the articles), Ngā Manukura and Te Mana Whakahaera (community leadership and self determination), Māori Mai Ai (decolonizing and indigenising processes), Mahi Tahi (strategic partnerships and collaboration), Mātauranga (applying Māori and Pacific knowledge systems), and Matatau (health promotion and cultural safety competencies, high Māori and Pacific workforce capacity).

147. The current levy investment decisions are also underpinned by a logic model found in the National Alcohol Harm Minimisation Framework (HPA, 2022). The Framework is designed to be aligned with Te Tiriti o Waitangi, and identifies the principles and obligations of Te Tiriti. It also draws on recommendation of WHO SAFER and previous government reviews. It is ~~which is~~ focused on achieving a reduction in alcohol-related harms over the long term through:

- Effective policy and regulation
- Environments that are supportive of non-drinking
- Improved drinking cultures/social norms

These changes are considered by the Health Promotion Directorate to be fundamental to decrease alcohol-related harm in Aotearoa New Zealand, especially for Māori.

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148. We reviewed three project plans for FY2022/2023 investments, for Community Social Movement, Sport and Alcohol, and the Alcohol Research Pprogramme. The activities set out in these plans are grounded in Takoha: A Health Promotion Framework to align work with the articles of Te Tiriti o Waitangi, and to equity and community-centred approaches, in order to achieve Pae Ora (healthy futures) for Māori and all New Zealanders. However, we were unable in stage 1 to assess the relativity of spend on by Māori for Māori activities or the effectiveness of these activities. This will be a focus of stage 2 of the review.

149. In the time available for our initial rapid review, we were unable to analyse the rationale, deliverables, monitoring, or evaluation of recent levy investments to identify how they relate to each other, and broader alcohol-related harm-reduction work carried out by communities or the government. We were provided with multiple HPA annual reports, but did not incorporate this content into this interim report. Further, we were not able to assess in detail how or why any of these investments could or should be expanded if additional levy funds were available. We were also unable to identify how any of these programmes may fill research gaps that were identified by stakeholders in our qualitative interviews.

150. Finally, while we acknowledge that there is an administrative cost to delivering programmes funded by the alcohol levy, we were unable to assess the appropriateness of the $5m of the levy being spend on internal FTE and operational functions (including the relational capability that is required to deliver the programme of work) and whether this continues to be appropriate in the new Pae Ora settings where the fund is no longer administered by an independent Crown Entity. As noted, we have not reviewed and included HPA annual reports (or ALAC annual reports), which provide detailed descriptions or programmatic activities, staffing, and financial statements for all years previous to 1 July 2022. This is a key question for stage 2 of the review.

FY2022/2023

151. The table below sets out how the Health Promotion Directorate planned to allocate the $10.5m of accessible levy funding in FY2022/2023 (Table 4: Planned spend in FY 2022/2023).

Table 4: Planned spend in FY2022/2023

Investment	$
Alcohol research	$850,000
Supporting law change	$300,000
Sport and alcohol – breaking the link	$500,000
Alcohol attributable fractions	$50,000
Digital and non-digital resources	$320,000
Kaupapa Māori Health Needs Assessment	$500,000

Commented [A207]: See earlier comment about what this means, and whether this is what the focus should be (ie, should the focus be about achieving outcomes)

Commented [A208]: Suggest deleting sentence as research gaps mentioned have not been identified. Could be picked up in more detail in phase two of the review s 9(2)(g)(i) [redacted]

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Community Social Movement	$500,000
Regional Manager Activity	$700,000
Amohia Te Waiora	$551,000
Pasifika Alcohol Harm Minimisation	$725,000
Youth and 1st 2000 Days	$489,000
Direct staff, enabling staff, and overhead costs	$5,095,000

FY 2023/2024

152. The table below sets out the information that the Health Promotion Directorate made available to us regarding known and expected committed spend in FY2023/2024. We did not follow-up asking for more information that could determine what ~~We were not provided with sufficient information to determine what~~ proportion of the totals has ~~in fact~~ been committed through contracts (Table 5: Committed spend in FY 2023/2024).

Table 5: Committed spend in FY2023/2024

Investment	$
Culture change and targeted community led partnership programmes	$1,900,000
Regulatory stewardship programmes and research	$1,300,000
Kaupapa Māori regulatory policy change	$500,000

153. An additional $5.095 million is anticipated for Staff costs, ongoing overheads and the internal capability that is required to deliver the programme of work. Additional programme allocations are yet to be finalised and will be confirmed through contract negotiations. It is anticipated that the current levy fund of $11.5 million will or has been budgeted and committed by the Health Promotion Directorate for the 2023/24 year.

What we heard

154. ~~Our~~ Some of our interviewees described their perception of the wider alcohol harm minimisation sector. ~~s~~ They felt~~identified~~ that other individuals, organisations, and communities with an interest in reducing alcohol-related harm felt that there was a lack of coordination, both within government and between government and non-government stakeholders, in determining how interventions are identified, developed, and delivered. Interviewees were of the view that this lack of coordination leads to significant inefficiencies that could be avoided if all stakeholders were working according to a clear strategy. During our interviews, we also heard concerns from

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Commented [A212]: Inaccurate as we only receive $10.5m of the Levy, unless you are noting we will receive $11.5M

Commented [A213]: s 9(2)(g)(i) [redacted]

Commented [A214]: Did they know that coordination sits with the Ministry of Health?

some community stakeholders that too high a proportion of the levy fund is spent on administering the levy fund, and that as a result, too small a proportion is distributed to the community organisations who are delivering harm-reduction programmes.

155. ~~Our~~ Some of our interview~~sees~~ indicated that structural interventions such as regulation and tax, and price-based mechanisms are perceived to result in the greatest reduction in alcohol-related harms. The relationship between the levy and excise tax, the ACC levy and broader government revenue collection needs to be explored further in stage 2 of this review to determine the ongoing role and utility of the levy in the new Pae Ora context.

156. By contrast, outside of some specific contexts non-structural interventions such as social media campaigns and marketing activities were generally perceived by ~~stakeholders~~ interviewees ~~we interviewed~~ as being either largely, or totally, ineffective at reducing alcohol-related harms. However, we did not ask participants what social media campaigns and marketing activities they were considering when making these statements. We also did not ask them which, if any, Te Hiringa Hauora harm-reduction platforms they were familiar with (eg, Amohia Te Waiora: We're Stronger Without Alcohol). Nor did we ask how participants would feel about harm-reduction platforms that were created in response to feedback from communities and Māori. ~~Similarly,~~ Oour literature review found that structural interventions are consistently rated as being significantly more effective at reducing harm than non-structural interventions. However, our analysis indicates that non-structural interventions designed to de-normalise alcohol use in certain contexts are likely to indirectly contribute to a policy environment, and public discourse, that is more supportive of change. The Law Commission noted (Law Commission, 2010):

> *We can recommend changes to the law but we are under no illusion that this will be sufficient….. To bed in enduring change the need for it has to be reflected in the hearts and minds of the community and that requires an attitudinal shift and a new drinking culture.*

We note that among the portfolio of initiatives undertaken by Te Hiringa Hauora, there is work on undertaking ~~has had a particular focus on~~ interventions to shift attitudes and norms around alcohol consumption, and how this de-normalisation of alcohol can lead to future strengthening in alcohol control policies. These interventions are long-term in nature and from the information available in the short timeframes of stage 1 we were unable to analyse their impact. Stage 2 will provide an opportunity to consider these types of interventions more fully.

Summary

157. While we note that external investments are grounded in international research and reflect the WHO SAFER framework, we ~~have~~ had limited time to engage widely with Māori or other ~~stakeholders~~i to provide a considered assessment of the extent to which existing investments align with the principles of the Pae Ora Act and the new operating context as set out above. Further qualitative evidence is required with a particular focus on Māori communities and their expectations. This will be a key focus of stage 2 of the review.

Commented [A215]: Would communities want to stop the support provided by staff members for license hearings, data requests, new research, grant applications, etc?

s 9(2)(g)(i) [redacted]

s 9(2)(g)(i) [redacted]

Commented [A216]: Incorrect use of the term 'structural interventions'. Please fix this throughout the document.

Commented [A217]: What type of regulation?

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158. Furthermore, the evidence and timeframe available for the stage 1 rapid review did not enable a robust assessment to richly describe past and present activities, nor to examine the potential ~~of the~~ effectiveness of ~~particular~~ activities in reducing alcohol-related harm and more generally their overall cost~~-~~ effectiveness. We acknowledge there are some limitations in undertaking these types of assessments given the nature of the activities and their long-term strategic focus. However, this is an important part of the analysis that will need to be undertaken as part of stage 2 to inform any assessment of current allocations of the levy fund in light of the new context.

ANALYSIS AND RECOMMENDATIONS

CONTEXT

159. Our stage 1 rapid review has demonstrated that:

- the alcohol levy is disproportionately small relative to even the most conservative estimates of the cost of alcohol-related harm in New Zealand, but the published research on alcohol costs does not indicate any particular relationship between costs of harms and costs of addressing harms
- alcohol-related harm is more prevalent in some sub-populations
- structural interventions may have the greatest potential to reduce alcohol-related harm
- the Pae Ora Act specifies the purpose of the levy as a cost recovery instrument, making it inappropriate for the levy to be used as a demand modifying intervention, unlike the excise tax which can be used in this way
- it was not possible to quantify to what extent current levy investments reduce alcohol-related harm in the timeframe and with the material made available
- it may not be possible to quantify the cumulative level of harm-reduction that levy investments may have, or will, achieve in the timeframe and with the material made available
- more New Zealand specific data on alcohol-related harm and the effectiveness of interventions would be useful to be able to provide strong evidence-based conclusions
- there is a greater amount of overseas evidence on the effectiveness of harm-reduction interventions compared to New Zealand specific evidence
- among those that we engaged, some participants perceived that the lack of a clear national alcohol-related harm-reduction strategy may lead to inefficiencies in the investment of the levy
- among those that we engaged, some participants perceived that the Government is not doing enough to reduce alcohol-related harm
- the Act has potentially broadened the scope of possible areas of levy investments
- the alcohol levy rates are very low in proportion to prices and the excise tax on alcohol products, so even a substantial increase in the alcohol levy is unlikely to have an impact on alcohol sales.

Commented [A223]: Some of these bullet points are not very accurate and need to be revised, as shown in all the above provided feedback. Please make edits to the report and then revise these bullet points accordingly.

QUANTUM

160. As a cost recovery mechanism, the levy has previously been set according to expectations with regards to the cost of delivering programmes and services to address alcohol-related harm. Even with the Pae Ora Act, the levy is still hypothecated, but broadened to include other alcohol-related activities across Health entities, which could include funding research to fill evidence gaps for example or funding to support the development of a cross agency alcohol strategy and action plan.

Commented [A224]: s 9(2)(g)(i) [redacted]

Commented [A225]: This is an assumption. It assumes that the levy was intentionally set at this amount because that's what it cost. In reality, it was the result of political processes.

Commented [A226]: What is the basis for including these here? Who recommended these? They should be presented in a more detailed, evidence-based section.

161. Even without expansion of activity ~~to 'other alcohol-related activities'~~ across the Health entities, an increase in the levy fund could be needed to address any current unmet need for programmes and services to address alcohol-related harms, and~~and/or~~ the effective decrease in the real value of the levy fund over time (ie, the effects of inflation).

162. Consideration of the cost of addressing alcohol-related harm and other alcohol-related activities in line with the Pae Ora Act requires further investigation into the relationship between core government activities and the levy fund. Activities that might have been appropriate for an independent agency may no longer fit within the context of a core government agency, which is required to give effect to government policy. While we acknowledge that there are some internal FTE and operational costs in administering the levy fund and associated activities, the integrity of the levy fund is potentially at risk if almost half of the fund continues to be used for these functions in the medium~~-~~ to long~~-~~term. As the levy fund is now held and administered by a government agency rather than an independent body, the appropriateness of using the fund in this way will need to be carefully considered through stage 2 of this review.

163. There is an expectation from communities that the levy is spent on effective and appropriate interventions and that there is transparency and accountability across this spend. ~~Similarly, I~~industry representatives indicated that the amount of alcohol levy that they were required to pay was of limited concern to them, particularly when put in the context of the amount of excise tax which is paid. However, they were clear that they would not support an increase unless evidence is provided of effective levy funded activities that reduces harmful drinking, and that there is greater transparency and accountability surrounding the use of the levy fund. In this context, it is important to note that industry representatives did not consider all drinking to be harmful. It was not confirmed how much communities or industry representatives have used previous publications that describe ALAC and HPA organizational activities (ie, annual reports).

164. Engaging with Māori and Pacific communities to develop, deliver and monitor programmes, and resourcing services to meet the needs of iwi, hapū, and whānau~~,~~ are practices intended to increase the effectiveness of health services and programmes to contribute to equitable outcomes for Māori and Pacific peoples. Despite the current National Alcohol Harm Minimisation Framework being grounded in Te Tiriti, there is significant opportunity to expand by Māori for Māori activities to address alcohol-related harms. The role of Te Aka Whai Ora in this space needs to also be carefully considered as a Pae Ora partner.

165. Raawiri Ratu, a key stakeholder and kaiarahi of the Kōkiri ki Tāmaki Makarau Trust, asked that we strongly impress on the government the need to make no changes to the levy until thorough engagement with Māori is undertaken. Mr Ratu considered that before engagement, time must be taken to support Māori communities to understand how the levy came to be, why the levy exists, what the levy is used for, and how the levy is set. Mr Ratu did not consider that the time allocated for our initial stage of the review would allow for adequate engagement with Māori.

Commented [A227]: s 9(2)(g)(i) [redacted]

Commented [A228]: Information about programmatic activities was available for years in ALAC and HPA annual reports. Additionally, the levy is part of law. There is an implication here that the utility of the funding is not appropriate when in fact it is a core part of accelerating and driving alcohol harm reduction.

Commented [A229]: How do you define harmful drinking? We know all drinking is harmful to some degree s 9(2)(g)(i) [redacted] and suggests there is a level of drinking that is okay?

Commented [A230]: See earlier comments. We want to make sure that we are actually aligned with Pae Ora and how the agencies are supposed to be working.

Determining the cost of addressing alcohol-related harms and alcohol-related activities

166. Because the alcohol levy is a cost recovery mechanism, an increase in the levy should consider factors that increase the cost of alcohol harm-reduction activities funded by the levy.

Commented [A231]: See earlier comments about the assumption that the levy ever was the right amount.

167. The timeframes and available material for stage one haves precluded us from conducting a deeper assessment of existing or proposed investments, making it difficult to provide an evidence-based assessment of what the quantum of the alcohol levy should be at this time. We are also hindered by the fact that for the most part, the 2023/24 levy has been committed. This means that existing interventions would not be subject to the same assessment as any new initiatives.

Options

168. Noting the constraints above we have concluded that there are three options to consider in regard to setting the quantum of the alcohol levy in 2023/24.

- Status quo
- Inflationary adjustment
- Increase based on actual cost of a set of recommended evidence-based investments. These investments include expansion of existing programmes where the evidence of effectiveness was available and new interventions based on international research, New Zealand research, and feedback from communities.

169. Table 6 below sets out the anticipated total levy quantum for each option, as well as the associated increase per unit of alcohol. Table 7 on the following pages summarises the costs and benefits of each option.

170. All options are presented on the assumption that no ongoing financial commitments will be made past June 2024 for any of the proposed interventions listed, and that the outcomes of stage 2 of this review will inform the role, function, and quantum of the levy beyond June 2024, as well as future funding commitments. This will include consideration of the relationship between the levy and the excise tax in the new operating context. As discussed, (in section 2 of this report) the excise tax, not the levy, is likely to continue to be the primary lever through which government can influence demand for and consumption of alcohol and, therefore, potentially reduce alcohol-related harms.

Table 6: Cost of options

Commented [A232]: Column alignment in this table is inconsistent and odd

Option	Levy Quantum	Increase of	Class of alcohol	Current rate for 2022/23 (cents per litre)	New rate for 2023/24 (cents per litre)	Increase in rate (cents per litre)
Status Quo	$11.5 million	Nil				Nil
			A	0.5594	0.5594	0
			B	1.6282	1.6282	0
			C	2.9833	2.9833	0
			D	3.7291	3.7291	0
			E	6.3343	6.3343	0
			F	14.4172	14.4172	0
CPI adjustment	$21.5 million	Approx. $10 million				Between 0.4065 cents and 9.7312 cents per litre depending on alcohol content
			A	0.5594	0.9659	0.4065
			B	1.6282	2.8463	1.2181
			C	2.9833	5.1517	2.1684

			D	3.7291	6.4396	2.7105
			E	6.3343	11.1727	4.8384
			F	14.4172	24.1484	9.7312
Programme cost recovery assessment and adjustment	$ 16 million	$5.5 million (For new initiatives)				Between 0.1594 cents and 3.5537 cents per litre depending on alcohol content
			A	0.5594	0.7188	0.1594
			B	1.6282	2.1182	0.4900
			C	2.9833	3.8338	0.8505
			D	3.7291	4.7922	1.0631
			E	6.3343	8.3145	1.9802
			F	14.4172	17.9709	3.5537
	$21 million	$9.5 million (Expansion of priority existing initiatives)				Between 0.3841 cents and 9.1696 cents per litre depending on alcohol content
			A	0.5594	0.9435	0.3841

			B	1.6282	2.7801	1.1519
			C	2.9833	5.0319	2.0486
			D	3.7291	6.2898	2.5607
			E	6.3343	10.9128	4.5785
			F	14.4172	23.5868	9.1696
	$ 26.5 million	$15 million (For expansion of existing and standing up of new initiatives)				Between 0.6312 cents and 15.3471 cents per litre depending on alcohol content
			A	0.5594	1.1906	0.6312
			B	1.6282	3.5082	1.8800
			C	2.9833	6.3497	3.3664
			D	3.7291	7.9372	4.2081
			E	6.3343	13.7710	7.4367
			F	14.4172	29.7643	15.3471

Maintain status quo

171. The current Alcohol levy is approximately $11.5 million per annum.

172. Given the constraints within stage 1 of this review, we lack the evidence to be able to comfortably recommend moving beyond the status quo for the 2023/24 financial year. Stage 2 of this review will provide the opportunity to better engage with communities and consider fundamental questions relating the role, scope, and purpose of the levy. Answers to these questions are needed to fully assess the appropriate levy quantum.

173. Maintaining the status quo ensures continuity of existing commitments pending the outcomes of stage 2 of this review. However, there are risks with maintaining the status quo. We found that the levy quantum has remained constant over a period of 9 years, despite population growth which would have increased the need for programmes and services to address alcohol-related harms even without the prevalence of alcohol-related harms increasing. In other words, the aggregate cost to the system of addressing alcohol-related harm has likely increased, even if the average level of alcohol-related harm experienced by individuals has remained steady. We also found that if the new health sector principles translate into increased costs per service user or require services being made acceptable and appropriate to a wider range of users, then there is a justification for an increase in the levy fund to cover these costs.

174. Furthermore, ~~our~~ some of our interviewees ~~indicated that stakeholders~~ do not think that the government is taking adequate action to reduce alcohol-related harm. Maintaining the status quo could also be seen as a signal that existing spending is sufficient to enable Te Whatu Ora and the Public Health Agency to comply with the Pae Ora Act. This is a question that needs to be addressed in stage 2 of the review.

Inflationary adjustment

Commented [A233]: See earlier comments in report about this content; please revise here accordingly.

175. Key costs involved in both administering the levy and delivering harm-reduction interventions are likely to have increased since the levy was last adjusted. However, it is unclear what adjustment should be made, if any.

176. One option is to adjust the levy quantum based on the CPI. The general Consumer Price Index (CPI) is the most appropriate measure of inflation in this context due to it underpinning many employment agreements and wage negotiations, and the likely labour intensity of harm-reduction interventions. As discussed in section 7, if the levy fund had been adjusted using the CPI, it would have generated between $566,217 and $1,970,105 each year in additional revenue ~~each year~~ since 2012/13. Based on this adjustment, the cumulative levy shortfall due to a lack of adjustment over the past nine years is approximately $10 million.

177. However, there are some risks with this approach.

- it is unclear whether a CPI increase would accurately reflect the increase in actual costs of existing programmes

- a single-year CPI adjustment may not meet the increased costs of on-going programmes. This also limits the potential for levy investments in new or expanded activities
- decision-makers must agree to the start date of a multi-year CPI increase, which may be difficult to determine and justify, given the levy could have been, but was not, adjusted based on the CPI in any of the last nine years
- an expectation may be created that the levy will continue to be adjusted on this basis annually.

178. As with maintaining the status quo, this approach does not consider whether current investment is the right investment, is delivering effective return, and is in line with the Pae Ora Act. As noted above, more investigation needs to be undertaken at stage 2 of this review to determine this.

Increase to fund specific investments

179. All interviewees agreed that to meaningfully reduce alcohol-related harm, the government must commit to a long-term, consistent, and strategic programme of interventions that induces trust between government and non-government stakeholders.

180. Aligning the levy fund to the cost of specific, needed investments would be consistent with its cost recovery mandate and is the option which is best aligned with the Pae Ora Act and principles. However, it is difficult at this stage to provide a robust analysis as to what programmes or activities should (or should not) be included. This assessment is also muddied by the current allocation of funding to existing programmes and, in particular, internal FTE and operational functions for the Health Promotion Directorate and the question as to whether these are still appropriate uses of the fund in the new settings.

Commented [A234]: Also, does not actually date back to ALAC days (1976)

Commented [A235]: s 9(2)(g)(i) [redacted]

PREFERRED OPTION

181. Any increase in line with Option 2 or 3 proceeds on the presumption that the current allocation is appropriate and consistent with Pae Ora and expectations from communities. Although there may be elements of existing activities that meet these criteria, we are not in a position at this stage of the review to support that conclusion.

182. **We therefore recommend:**

C. The status quo remains for 2023/24

D. No commitments of levy funding are made either internally or externally beyond June 2024 until stage 2 of this review is complete and any recommendations regarding the future, scope and application of the fund are considered.

ALTERNATIVE OPTION

183. If there were, however, to be an increase in the levy fund for 2023/24, **we recommend:**

A. Any increase is calculated on the actual increase in the cost of ongoing interventions as well as the actual cost of additional interventions to be undertaken. In other words, the interventions need to be determined and agreed before calculating the quantum of any increase. This is in line with the cost recovery requirements of the Pae Ora Act.

B. No commitments of levy funding are made either internally or externally beyond June 2024 until stage 2 of this review is complete and any recommendations regarding the future, scope and application of the fund are considered.

178. While the available evidence is limited at this stage of the review, we have identified some key existing programmes which could be extended and some new initiatives that could be implemented in 2023/24. We expect that if a decision was made to proceed with increasing the levy quantum for FY2023/24, then the most effective uses of the levy fund in FY2023/24 are likely to be:

- coordinating and supporting all-of-sector strategic alignment between government and communities; and
- coordinating and supporting the development of systems that ensure clear and relevant evidence of the effectiveness of harm-reduction interventions is available to individuals and communities.

179. Te Hiringa Hauora's National Alcohol Harm Minimisation Framework (the Framework) has guided the development of existing programmes. Our analysis indicates that the Framework is based on the best available national and international evidence and recommendations, including the WHO SAFER framework. Further, our analysis indicates a sufficient level of alignment between the Framework and the new requirements for health entities under the Act. While we have recommended awaiting the findings of stage 2 of the review, this gives us a higher level of confidence that increasing the levy to provide additional funds to these programmes for FY2023/24 would be expected to deliver benefit. We have also identified some additional activities that align with Pae Ora outcomes and international good practice examples.

180. On this basis, we have identified that, to fund certain additional investments in FY2023/24, the levy could be increased by an additional $5.5m to $15m. These investments are set out below. It is important to note that this increase would have a relatively small impact on the price of alcohol, as set out in table 7 above.

Allocate additional funding in relation to sports sponsorship and advertising

181. In FY 2023/24, additional levy funding could be allocated to the sports sponsorship removal demonstration projects and associated monitoring and evaluation, which is innovated and led by the Health Promotion Directorate.

182. Of the non-structural interventions we discussed in our interviews, the removal of alcohol sponsorship and advertising from sports was perceived to be the most effective

Commented [A236]: s 9(2)(g)(i) [redacted]

Commented [A237]: Takoha should be mentioned also

Commented [A238]: I may have missed something but existing 11.5 plus 5.5 equals $17M not $15m

Commented [A239]: I'm confused. Paragraph 178 identified other things that could be funded with more levy money.

Commented [A240]: Wrong use of this term.

at reducing alcohol harm. However, interviewees did not demonstrate a strong understanding of how the levy was spent, and are thus unaware of other programmatic work that is evidence-based and effective. Our literature review found some evidence that restricting alcohol marketing is likely to influence the climate of tolerance around alcohol and alcohol policies. Further, many interviewees commented positively on the effectiveness of similar initiatives in relation to tobacco sponsorship and advertising and believed that a similar approach should be taken in relation to alcohol. However, we are conscious that some interviewees held this view primarily on the basis of evidence from overseas jurisdictions, which as we have discussed, may not be entirely applicable in Aotearoa New Zealand.

183. We understand that, in FY 2022/2023, the Health Promotion Directorate invested $500k in demonstration projects to gain evidence of the effectiveness of this intervention in New Zealand contexts. We also understand that an expansion of this programme has been costed and could be implemented relatively quickly, as dependent on community interest and priorities.

184. We have found sufficient evidence to warrant immediate investigation to support communities to decide whether this is an appropriate long-term intervention. Accordingly, $5--10m of additional levy funding could be allocated to delivering t~~T~~he Health Directorate's expanded programme.

Fund priority research

185. It was apparent from our literature review that there is a large body of international evidence on alcohol harm and harm-reduction, but a relatively smaller body of evidence that is specific to New Zealand contexts. Some stakeholders cautioned us that policy makers could not necessarily rely on findings from international research applying in New Zealand. Our analysis indicates that it is essential for communities to be able to access robust and applicable research findings to inform their ongoing participation in alcohol harm related activities and licensing decision-making, policy-making, monitoring, and reporting.

186. We understand that Te Hiringa Hauora developed an Alcohol Research Programme, and that $850,000 of the levy fund was allocated to carrying out that programme. There remain significant research gaps in the New Zealand context. We estimate that $0.5--$2m of any additional levy funding could be allocated to continue to fund research projects ~~to address~~that help address some of the highest priority research projects.

Data collection

187. In FY 2023/2024, increased investment of levy funds could be focused on the collection of data on the cost of alcohol harm and the effectiveness of various interventions in relation to Māori, Pacific, and rural communities. Our review has identified a need to collect time-series data to begin to support communities to understand alcohol harm and the impact of the range of previous and potential interventions in the long term. In particular, data should be collected on any unmet need for programmes and services to address alcohol harms, to enable communities to effectively advocate for increased investment in the future. This data must be disaggregated and collected from a variety of sources including qualitative data from communities and whānau.

Commented [A241]: Revise. We should be tolerating alcohol *and* not tolerating alcohol policies?

Commented [A242]: Also, bans on tobacco advertising happened in a very different advertising environment (ie before social media, online advertising, gamified advertising etc).

Paragraph 182 is not a good representation of the evidence related to alcohol advertising and marketing, nor the role of sports sponsorship (which is a *small* part of the alcohol advertising that we're exposed to).

Commented [A243]: s 9(2)(g)(i) [redacted]

Commented [A244]: This was also a recommendation from the Health Promotion Directorate

Commented [A245]: Maybe disabled people could be included here

Commented [A246]: s 9(2)(g)(i) [redacted] Also, the heading is 'data collection' but describes activities a lot more complex that data collection.

Additionally, this paragraph does not account for the existing health system structure, and the role of other parts of Te Whatu Ora.

188. While some interviewees were of the view that there is already sufficient international data to inform decisions about particular harm-reduction interventions, other interviewees impressed on us that that data collected in overseas jurisdictions cannot necessarily be assumed to apply in the Aotearoa New Zealand context. We are particularly conscious that Aotearoa New Zealand has a number of unique constitutional arrangements in relation to specific sub-populations that may affect the applicability of overseas data on the effect of alcohol and associated interventions on certain sub-populations. We estimate that $1–$2m could be invested in improving data collection over FY 2023/24.

Support community participation in licence hearings

189. We understand that Te Hiringa Hauora was providing some funding to Community Law Centres Aotearoa to support communities' participation in local decision making on alcohol.

190. Our interviews indicated that participation in district licensingce hearings is perceived to be one of the few opportunities available to communities to carry out a health protection activity, namely reducing the availability of alcohol in their environment. We heard that it is difficult, for several reasons, for communities to meaningfully participate in licensing hearings. One of the primary concerns raised was that community members seeking to ~~oppose~~ object to a licencse are often under-resourced compared to the business applying for a licence.

191. A review of the Community Law Alcohol Harm-reduction Project found that project improved the quality and effectiveness of community participation in licensing hearings and that overall participation in licensing hearings appeared to be increasing with the support of the project (Allen + Clarke, 2021).

192. We estimate $1.25m of additional levy funding could be allocated to expand the geographical coverage of this initiative with a particular focus on those areas and regions of high deprivation.

Continue and increase funding for regional community initiatives aimed at reducing alcohol-related harm

193. We have identified that increased investment in community initiatives aimed at reducing alcohol-related harm might also deliver benefit. Most interviewees strongly impressed on us that community organisations have both the best understanding of alcohol harm in their environments and the best understanding of how to reduce that harm within the constraints of the present legislative regime.

194. In particular, additional levy funds could be allocated for the development of further capacity amongst iwi, hapū, hapori, whānau, Māori authorities, and health providers to contribute to alcohol harm-reduction. We consider that Te Aka Whai Ora would be best placed to be responsible for monitoring and evaluating the effectiveness of investments made in this regard. We note that Te Aka Whai Ora would require additional levy funding to provide secretariat and administrative support to this initiative and to distribute funds to iwi, hapū, hapori, whānau, Māori authorities, and health providers to deliver initiatives and activities designed by and delivered by them.

Commented [A247]: s 9(2)(g)(i) [redacted]

Commented [A248]: Can you provide some examples?

Commented [A249]: There no mention in here for SSAA Community Participation Bill?

s 9(2)(g)(i) [redacted]

Commented [A250]: Oppose is what the regulatory agencies do not community objectors

Commented [A251]: Just a note that these approaches need to be evidence-based, and that the opportunity cost of funding this work, versus other work, needs to be identified and considered.

Commented [A252]: Note Te Hiringa Hauora has been providing community grants for years. Hopefully our experiences, including those of our regional managers, will be helpful for your consideration in the next part of the review.

195. The risks and benefits of the options discussed above are summarised in table 7 below.

Table 7: Costs and benefits of levy quantum options

Levy Quantum	Benefits	Risks	Consistency with Pae Ora	Consistency with Te Tiriti Obligations	Ability to be implemented quickly
Status Quo	Simple, easy to implement. Builds on momentum of independent evidence and research aligned to Pae Ora. Allows full review to be completed before any change-decision made.	Due to pre-existing commitments, limits scope for a health-agency partnership approach to work programme development in a manner consistent with Pae Ora Act. Communities may perceive status quo as government inaction. Limited scope for new/expanded initiatives.	**Moderate**	**Moderate**	**High**
CPI increase	Clear and proven method. Enables existing on-going programmes to receive an uplift if needed [note: it would be difficult to ensure increased funding accurately reflects actual costs – see risks]. If CPI increase applied across multiple years, provides additional funding to cover new or expanded initiatives. Scope to expand joint entity initiatives across Te Aka Whai Ora and the Public Health Agency.	If a single year CPI adjustment was made, it is unlikely to accurately meet increased costs of existing. programmes (may still result in real-terms cuts) and limited (if any) scope for new/expanded initiatives. Multi-year CPI adjustment requires agreement as to start date for calculation (decision makers' time is constrained) and harder to justify as opportunity to make this adjustment has been available each year. Perception that current spending is what is required and in line with Pae Ora Act.	**Moderate**	**Moderate**	**Low**

Commented [A253]: s 9(2)(g)(i) [redacted]

Commented [A254R253]: Agreed.

Levy Quantum	Benefits	Risks	Consistency with Pae Ora	Consistency with Te Tiriti Obligations	Ability to be implemented quickly
		Potential perception CPI adjustments will be ongoing year on year. (notwithstanding full review of Levy not due until Q4 2023).			
Increase based on cost of existing programmes and cost of expanding existing and/or standing up new programmes / interventions	Creates opportunities to be more transparent around spend and reason for increase. Based on cost of interventions as envisaged by Pae Ora Act. Good transition year option (lower likelihood of appearing to set the pattern for future years). Allows for innovation and partnership (health-agencies partnership, and increased partnership with communities), and increased research and data collection. Can clearly identify new work that will create broader stakeholder engagement (mitigating risk of ongoing perception of lack of transparency). Capacity to invest in improved data collection (and sharing), providing a stronger evidence base for work programmes.	Requires management of expectations around the time it takes to see effects from interventions. Difficult to assess programmes in short period of time. There is a degree of risk in assuming that expanding existing-funded (or implementing new) programmes will have a positive impact based on their alignment with good practice in other areas. Total agreed increase requires justification to demonstrate alignment with Pae Ora Act.	**High**	**High**	**Moderate**

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Page 6: [1] Commented [A12] Author

s 9(2)(g)(i) Apart from basic assumptions like larger population size, larger investment in health funding, I'm not sure why there would be a relationship between the cost of harm and the cost of addressing harm. It really depends on what activities of addressing harm are – and the type of intervention could be a confounding variable.

For example, health care services are super expensive. If an 'ambulance at the bottom of the cliff approach' is taken toward alcohol harm, the cost of this 'intervention' (ie, health services treatment) will be huge. Thus, it will seem like alcohol costs and alcohol interventions are highly correlated.

Conversely, if we have political leaders who are willing to progress strong regulation on alcohol advertising and will increase excise taxes, these interventions are very cheap compared to health care services. Plus increased excise taxes will be cost savings. Thus, it will seem like alcohol costs and alcohol interventions are *not* highly correlated.

s 9(2)(g)(i) .

Page 6: [2] Commented [A16] Author

I don't understand the reasoning behind this statement, especially when the 'Acknowledgements' states that there wasn't sufficient time to look at this in-depth. I haven't even seen a sufficient description of the activities currently funded, so how can the reviewers even know if the 'activities and programmes being funded by the alcohol levy are having limited impact on the level of harm'.

Page 6: [3] Commented [A17] Author

Implies that there was 'extensive engagement' with other stakeholders. Statement should be that there wasn't extensive stakeholder engagement, including with Māori.

Page 6: [4] Commented [A18] Author

s 9(2)(g)(i)

Page 6: [5] Commented [A20] Author

s 9(2)(g)(i) Assumes that the levy is sufficient, and alcohol harm prevention work is sufficient.

In fact, the levy has been doing less and less each year due to rising costs.

Page 6: [6] Commented [A21R20] Author

agree assumption implied that the existing levy quantum is considered appropriate. neither does it consider or discuss investment into harm reduction services from other sources, even if out of scope for this process

Draft not for distribution

Independent Review of the Alcohol Levy

Stage 1: Rapid Review

27 April 2023

ALLEN + CLARKE

NZIER
NEW ZEALAND INSTITUTE OF ECONOMIC RESEARCH

Prepared for Manatū Hauora by *Allen + Clarke* and the New Zealand Institute of Economic Research.

Citation: *Allen + Clarke*, NZIER (2023), *Interim Report of Independent Review of the Alcohol Levy*. Wellington: Manatū Hauora

Acknowledgements

Allen + Clarke and NZIER recognise the substantial efforts of individuals and organisations involved in addressing alcohol-related harm in Aotearoa New Zealand. This stage of the review was undertaken under extremely tight time constraints to enable interim findings to inform the levy setting process for 2023/24. This report will be followed by the second stage of the review, which consists of a more in-depth stakeholder engagement, research, and analysis, and will result in medium and long-term recommendations for the alcohol levy. We would like to thank all the people that contributed to this review for their time and input in a short space of time. We would particularly like to acknowledge the participation of individuals that we interviewed and officials from Manatū Hauora, Te Whatu Ora, and Te Aka Whai Ora (both individually and jointly as members of the Alcohol Levy Working Group which was established to support this review).

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This review was undertaken by independent parties under contract to Manatū Hauora. The views, observations, and analysis expressed in this interim report are those of the authors and not to be attributed to Manatū Hauora.

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EXECUTIVE SUMMARY

Since 1978, a levy has been raised on alcohol produced or imported for sale in Aotearoa New Zealand. The alcohol levy is hypothecated (i.e., directed to a specific use). It has been used to undertake activities to reduce alcohol-related harm. The current alcohol levy is approximately $11.5 million per annum.

Prior to the commencement of the Pae Ora (Healthy Futures) Act 2022 (the Pae Ora Act), Te Hiringa Hauora | Health Promotion Agency received the total levy fund under the New Zealand Public Health and Disability Act 2000 (the Health and Disability Act), for the purpose of enabling the agency to recover costs incurred in addressing alcohol-related harm, and in its other alcohol-related activities. In 2022 the Pae Ora Act repealed the alcohol provisions of the Health and Disability Act and disestablished Te Hiringa Hauora, placing it within the National Public Health Service and as, part of Te Whatu Ora. This change places the levy within a different context, as the scope of the costs incurred by Manatū Hauora under the Pae Ora Act are wider than those previously identified for Te Hiringa Hauora. The scope of alcohol-related harm reduction activities are also potentially broadened.

Allen + Clarke and the New Zealand Institute of Economic Research (NZIER) conducted a rapid review of the alcohol levy within the new Pae Ora context to provide short term recommendations to inform decisions relating to the 2023/24 financial year. This report will be followed by the second stage of the review, which consists of a more in-depth stakeholder engagement, research, and analysis, and will result in medium and long term recommendations for the alcohol levy. Stage 2 of this review is likely to continue through to November 2023.

Key findings

Our stage 1 rapid review has demonstrated that:

- The alcohol levy is disproportionately small relative to even the most conservative estimates of the cost of alcohol-related harm in New Zealand, but the published research on alcohol costs does not indicate any particular relationship between costs of harms and costs of addressing harms
- Alcohol-related harm is more prevalent in some sub-populations
- Structural interventions may have the greatest potential to reduce alcohol-related harm
- The Pae Ora Act specifies the purpose of the levy as a cost recovery instrument, making it inappropriate for the levy to be used as a demand modifying intervention, unlike the excise tax which could be used in this way
- It was not possible to quantify to what extent current levy investments reduce alcohol-related harm in the timeframe and with the material made available in stage 1 of this review
- It was not possible to quantify the cumulative level of harm reduction that levy investments may have, or will achieve, in the timeframe and with the material made available in stage 1 of this review

- More New Zealand specific data on alcohol-related harm and the effectiveness of interventions would be useful to be able to provide strong evidence-based conclusions
- There is a greater amount of overseas evidence on the effectiveness of harm reduction interventions compared to New Zealand specific evidence
- Among those that we engaged with, some participants perceived that the lack of a clear national alcohol-related harm reduction strategy may lead to inefficiencies in the investment of the levy
- Among those that we engaged, some participants perceived that the government is not doing enough to reduce alcohol-related harm
- The Pae Ora Act anticipates the alcohol levy being used across health entities
- The alcohol levy rates are very low in proportion to alcohol prices and the excise tax on alcohol products, so even a substantial increase in the alcohol levy is unlikely to have an impact on alcohol sales.

Our review of available evidence showed the cost of alcohol-related harms is substantial even if significant uncertainty exists as to the total amount of that cost. A high cost of alcohol-related harms provides a strong incentive to find cost-effective harm reduction investment opportunities. However, our review did not reveal any known relationship between the cost of harm and the cost of addressing or preventing harm.

Nevertheless, the gulf between the costs of alcohol-related harm and the cost-recovery function of the alcohol levy remains significant. This could suggest that the existing levy fund is insufficient, and/or the activities and programmes being funded by the alcohol levy are having limited impact on the level of harm. We note that we were unable to undertake extensive engagement with stakeholders including with Māori due to the time constraints with this stage of the review. The small number of Māori that we spoke to felt that the alcohol levy fund had done little, if anything, to address the disproportionate impact of alcohol-related harms on Māori. However, a review of existing programmatic documentation that was made available to us by Te Whatu Ora indicated that activities were grounded in Takoha: A Health Promotion Framework to align work with the articles of Te Tiriti o Waitangi, and to equity and community-centred approaches, in order to achieve Pae Ora (healthy futures) for Māori and all New Zealanders. Further analysis of the effectiveness of currently funded (and potential future) activities for Māori will be a key focus of stage 2 of this review.

Because the alcohol levy is a cost recovery mechanism, an increase in the levy should consider factors that increase the cost of alcohol harm reduction activities funded by the levy. The timeframes and material reviewed for stage 1 did not enable us to conduct a deeper assessment of existing or proposed investments, making it difficult to provide an evidence-based assessment of what the quantum of the alcohol levy should be at this time. Alcohol levy funding activities have also generally been based on achieving long-term value and system shifts to address alcohol-related harm. Therefore, the programme of work anticipated for 2023/24 included multi-year activities and was mostly committed.

Furthermore, consideration of the cost of addressing alcohol-related harm and other alcohol-related activities in line with the Pae Ora Act requires further investigation into the relationship between core government activities and the alcohol levy fund. As the alcohol levy is now administered by a government agency rather than a Crown Entity, the landscape has potentially changed.

Noting the constraints above we have concluded that there are three options to consider in regard to setting the quantum of the alcohol levy in 2023/24.

- Maintain Status quo
- Inflationary adjustment
- Increase based on actual cost of a set of recommended evidence-based investments. These investments include expansion of existing programmes where the evidence of effectiveness was available and new interventions based on international research, New Zealand research, and feedback from communities.

Maintain status quo

Given the constraints within stage 1 of this review we lack the evidence to be able to comfortably recommend moving beyond the status quo for the 2023/24 financial year. Stage 2 of this review will provide the opportunity to better engage with communities and consider fundamental questions relating to the role, scope, and purpose of the levy. Answers to these questions are needed to fully assess the appropriate levy quantum.

Inflationary adjustment

Key costs involved in both administering the levy and delivering harm reduction interventions are likely to have increased since the levy was last adjusted. However, it is unclear what adjustment should be made, if any. One option is to adjust the levy quantum based on the Consumer Price Index (CPI). As with maintaining the status quo, this approach does not consider whether current investment is the right investment, is delivering effective return, and is in line with the Pae Ora Act. More investigation needs to be undertaken at stage 2 of this review to determine this.

Increase to fund specific investments

To meaningfully reduce alcohol-related harm, the Government must commit to a long term, consistent, and strategic programme of interventions that induces trust between government and non-government stakeholders. Aligning the levy fund to the cost of specific, needed investments would be consistent with its cost recovery mandate and is the option which is best aligned with the Pae Ora Act and principles. However, it is difficult at this stage to provide a robust analysis as to what programmes or activities should (or should not) be included. More investigation, and engagement with Māori and communities needs to be undertaken at stage 2 of this review to provide this analysis.

Recommendations

On balance **we recommend:**

A. The status quo remains for 2023/24

B. No commitments of levy funding are made either internally or externally beyond June 2024 until stage 2 of this review is complete and any recommendations regarding the future, scope and application of the fund are considered.

INTRODUCTION

1. In Aotearoa New Zealand, a levy is raised on alcohol produced or imported for sale. The levy is collected by Customs NZ. The current total levy figure is approximately $11.5 million per year, with minor fluctuations annually depending on alcohol production and sales. The alcohol levy is collected at different rates for different classes of alcoholic beverages. The levy is calculated at a cost per litre of alcohol for each class. The relative total collected has not increased since 2013. The levy was originally created by the Alcohol Advisory Council Act 1976[1] to fund the newly established Alcohol Advisory Council of New Zealand[2] (Alcohol Advisory Council Act 1976, s.20).

2. The alcohol levy is hypothecated (i.e., directed to a specific use). Prior to the commencement of the Pae Ora Act, Te Hiringa Hauora | Health Promotion Agency received the total levy fund under the Health and Disability Act, for the purpose of enabling the agency to recover costs incurred in addressing alcohol-related harm, and in its other alcohol-related activities (New Zealand Public Health and Disability Act 2000, s. 59AA). Section 58 of the Health and Disability Act set out the functions, duties, and powers of Te Hiringa Hauora. It stated (New Zealand Public Health and Disability Act 2000, s58):

   (1) HPA must lead and support activities for the following purposes:
   - *a. promoting health and wellbeing and encouraging healthy lifestyles*
   - *b. preventing disease, illness, and injury*
   - *c. enabling environments that support health and wellbeing and healthy lifestyles*
   - *d. reducing personal, social, and economic harm.*

   (2) HPA has the following alcohol-specific functions:
   - *a. giving advice and making recommendations to government, government agencies, industry, non-government bodies, communities, health professionals, and others on the sale, supply, consumption, misuse, and harm of alcohol so far as those matters relate to HPA's general functions:*
   - *b. undertaking or working with others to research the use of alcohol in New Zealand, public attitudes towards alcohol, and problems associated with, or consequent on, the misuse of alcohol.*

   The Pae Ora Act came into force on 1 July 2022 and is the legislative basis for the reform of the health system. The Pae Ora Act disestablished Te Hiringa Hauora and its functions were placed within Te Whatu Ora.

[1] The name of the original Act, the Alcoholic Liquor Advisory Council Act was amended in 2000.
[2] The original name, the Alcoholic Liquor Advisory Council was amended in 2000.

3. Through the Pae Ora Act Manatū Hauora now receives the levy fund collected via the Vote Health appropriation and has responsibility for distributing the levy across the Health entities - Manatū Hauora, Te Whatu Ora and Te Aka Whai Ora (Pae Ora (Healthy Futures) Act 2022, s.101).

4. All aspects of the Pae Ora Act must be read in light of its overarching purpose, which is to provide for the public funding and provision of services in order to (Pae Ora (Healthy Futures) Act 2022, s. 3):

   (a) protect, promote, and improve the health of all New Zealanders; and

   (b) achieve equity in health outcomes among Aotearoa New Zealand's population groups, including striving to eliminate health disparities, in particular for Māori; and

   (c) build towards pae ora (healthy futures) for all New Zealanders.

5. The Pae Ora Act uses wording nearly identical to the Public Health and Disability Act 2022, but now states that the levy is for the purpose of Manatū Hauora (rather than Te Hiringa Hauora) recovering costs it incurs in addressing alcohol-related harm, and in its other alcohol-related activities.

6. This change places the levy within a different context, as the scope of the costs incurred by Manatū Hauora under the Pae Ora Act is wider than those previously identified for Te Hiringa Hauora. The opportunities for alcohol-related harm reduction activities are also broadened.

Purpose

7. Through an All of Government panel procurement process, *Allen + Clarke* and the New Zealand Institute of Economic Research (NZIER) were commissioned by the Public Health Agency (within Manatū Hauora) to undertake an independent review of the alcohol levy settings, and funding allocations and programmes in Aotearoa New Zealand.

8. The initial stage, which this report is a product of, is a rapid review of the current state of the alcohol levy in Aotearoa New Zealand with short-term recommendations that can inform the 2023/24 financial year. This report (the interim report) will be followed by the second stage of the review, which consists of a more in-depth stakeholder engagement, research, and analysis, and will result in medium and long term recommendations for the alcohol levy (the final report). Stage 2 is likely to continue through to November 2023.

Scope of rapid review

9. Stage 1 of the review is focused on a rapid review of the current state of the levy fund.

The stage 1 rapid review focused on 7 key areas of inquiry as specified in the Request for Proposals (RFP) and contract of services:

1. the current evidence on the cost of alcohol-related harm
2. the total levy fund collected and how that compares with other levies collected within Aotearoa.
3. how the total fund collected compares to alcohol levies collected in other relevant jurisdictions
4. the total levy fund and its impact on alcohol-related harm generally
5. the current focus of levy funding and whether it takes a 'for Māori, by Māori approach'
6. the potential positive impact of an increase in the levy on Māori and other at-risk communities
7. significant gaps in funding, or areas for expenditure that could be prioritized in 2023/24

10. The output for stage 1 is recommendations to inform the levy setting for the 2023/24 financial year, pending the full review findings at the end of stage 2.

Approach

11. *Allen + Clarke* undertook the stage 1 review between 3 February and 15 March 2023.

12. In total 16 interviews were undertaken with people who are involved with the administration, distribution, use, or oversight of the alcohol levy fund including representatives from:

- The Health Promotion Directorate (formerly Te Hiringa Hauora)
- Other divisions of Te Whatu Ora
- Te Aka Whai Ora
- Manatū Hauora
- ACC
- Hāpai Te Hauora
- Academia
- Non-Government Organisations
- Alcohol industry representatives.

13. The interviews were intended to serve the purpose of whakawhanaungatanga (establishing strong relationships) and helping the review team understand the current levy settings, as well as previous investment decisions. They were also used to inform a stakeholder engagement plan for the second stage of the project.

14. Initial discovery documents were provided by Manatū Hauora, the Health Promotion Directorate (Te Whatu Ora) and other stakeholders. These documents were supplemented by *Allen + Clarke's* desk-based review and NZIER's analysis of existing data and evidence.

15. An alcohol levy working group (ALWG) was established to support this review. The ALWG was made up of officials from Manatū Hauora, Te Whatu Ora, and Te Aka Whai Ora. The ALWG met with the review team regularly and provided oversight and feedback throughout the stage 1 review process.

16. This report was provided in draft form to Manatū Hauora and the ALWG on 16 March 2023 for review and feedback. It was then finalised on 27 April 2023.

Limitations

17. The findings of this rapid review should be considered in the context of the approach and timeframes:

- This rapid review was undertaken in 6 weeks to inform decisions relating to the quantum of the levy fund for the 2023/24 financial year. Therefore, timeframes in this stage of the review did not allow for detailed analysis of the effectiveness of activities currently funded by the alcohol levy, nor did it allow for the collection of detailed qualitative or quantitative data.

- This rapid review presents a summary of available evidence and data to provide recommendations to inform the levy setting for 2023/24. It does not seek to provide an academic review or analysis of the available literature and data.

- A small number of non-government stakeholders were interviewed to gain contextual information and anecdotal evidence on the impact of alcohol-related harm reduction interventions, the quantum of the levy, and its distribution. However, given time constraints, the breadth and depth of these conversations were limited and key priority groups including Māori, Pacific, and people with disabilities need to be further engaged. Given the small number of interviews that were able to be completed in stage 1, they cannot be considered representative. These interviews were designed to simply elicit initial inputs into the review and to help identify areas for further inquiry in stage 2.

- Due to the timeframes for stage 1, the Māori stream of knowledge was limited. A detailed methodology will be developed to ensure he awa whiria is entrenched across all aspects of stage 2.

- This stage of the review was also limited by the documentation and data available for review. Gaps in data and evidence have been identified in this report and will be explored further in stage 2. Due to the timeframes for stage 1, detailed health data from National Collections were not analysed. An urgent data request was made to Te Whatu Ora but the data is not expected to be supplied until stage 2 is underway.

THE ALCOHOL LEVY

18. This section provides an overview of the levy fund, how it is set and how it compares to other levies in New Zealand and overseas. We also consider the relationship between the levy and excise tax.

Historical background

19. Since 1978, a levy has been used to undertake activities to reduce alcohol-related harm. The levy fund was created to fund the Alcoholic Liquor Advisory Council (ALAC) which had a legislative mandate to encourage and promote moderation in the use of liquor, reduce and discourage the misuse of liquor, and minimise the personal, social, and economic harm resulting from the misuse of liquor (Alcohol Advisory Council Act 1976, s. 7).

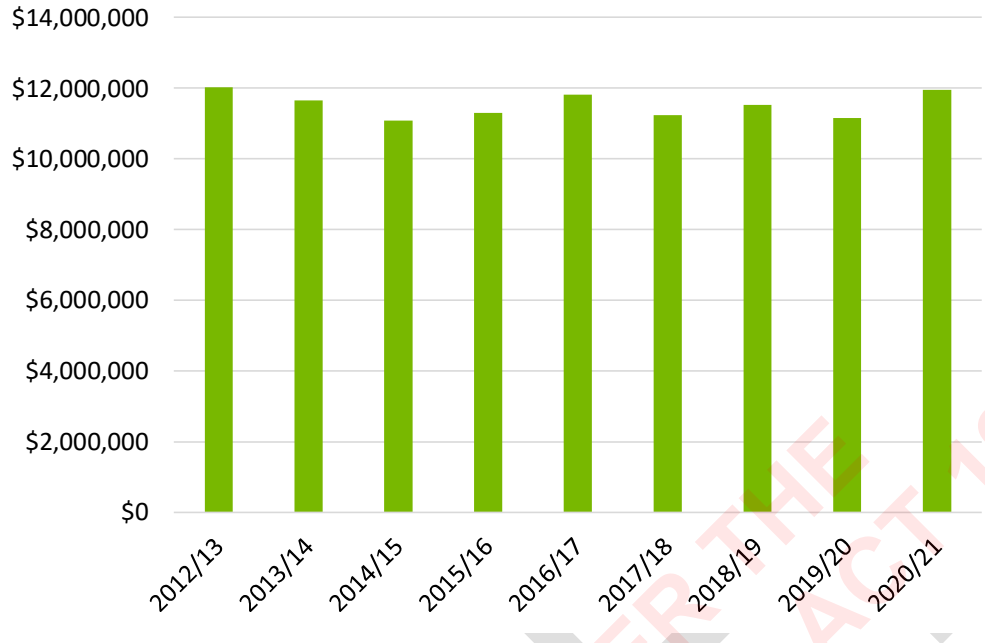
20. In 2012, the functions of ALAC were transferred to a new Crown entity, the Health Promotion Agency (HPA). The alcohol levy was set to recover costs by the HPA for exercising its alcohol-related functions described above at paragraph 2. The HPA was not required to give effect to government policy in the same way other Crown agents are. It was however, required to have regard to government policy in exercising its functions if so directed by the Minister (Health and Disability Act 2000, s. 58(3)). Te Hiringa Hauora was adopted as an official name for the HPA on 16 March 2020 (Te Hiringa Hauora, 2020).

The Alcohol Levy Fund

21. The alcohol levy is based on the amount of alcohol imported into and manufactured in New Zealand in the preceding year. It is collected at different rates for different classes of alcoholic beverages. This means that total levy fund received can vary year to year based on demand and consumption in total, and by class of alcohol.

22. The alcohol levy amount is reported annually. Since 2013/14, there has been little change in the size of the total levy received. It has remained relatively constant between $11.2million and $12million (Figure 1: Total Levy Fund Received, 2012/13 to 2020/21 (nominal values, NZD)).

Figure 1: Total Levy Fund Received, 2012/13 to 2020/21 (nominal values, NZD)



Source: Te Hiringa Hauora

Impact of the alcohol levy on prices

23. Table 1 below presents the levy rates in cents per litre for different beverage types and alcohol content.

24. The levy rates applied to alcoholic beverages are related to the type of beverage and tiers of alcohol content for that beverage type; thus, the levy is a 'tiered' volumetric tax based on the beverage-specific alcohol content tier (Other types of volumetric taxes or levies can be based on the volume of beverage with no consideration for the alcohol content).

25. Volumetric taxes linked to the alcohol content have the potential to shift consumer behaviour toward lower alcohol content beverages. However, this shift is dependent on whether the rate of the tax is high enough to be 'potent' for the consumer to notice and change their behaviour. The current levy rates are likely too small to influence consumer behaviour.

26. Another dependency for a potential shift in consumer behaviour is the design of the alcohol content tiers. The beverage-specific alcohol content tiers must be designed in a way that consistently increases the price of higher alcohol content beverages and has smaller increases in the price of lower alcohol content beverages.

27. Currently, the levy rate system is flawed when considering beverage-specific alcohol content tiers and does not reflect the present-day alcohol product offerings. For example, the alcohol content of beer has been increasing with the proliferation of craft beers. However, the current levy rates only have two tiers for beer, meaning that any beer of at least 2.5% alcohol will have the same rate regardless of whether the product

has 2.5% alcohol or 7% alcohol. If this flawed design was fixed, a further benefit would be that the higher alcohol content beer would be taxed at a higher rate, thus increasing the total levy fund.

28. A close review of the levy rates in the context of current alcohol beverage offerings is needed so that design flaws can be addressed. This will be explored further in stage 2.

29. Table 1 below collates data from Te Hiringa Hauora to show the impact of the levy on the price of alcohol. It reports two levy rates: the rates from 1 July 2021 and the more recent rates from 1 July 2022. The table also shows the difference between these rates (i.e., the 2022 increase in cents per litre). As can be seen, the impact of the levy on the actual cost of alcohol per litre is very small - from 0.5594 cents per litre on beverages with the lowest alcohol content, like low alcohol beer, to 14.4172 cents per litre on beverages with the highest alcohol content, like spirits with over 23 percent alcohol content (Table 1: Alcohol levy in cents per litre by beverage type and alcohol content, 2021 and 2022).

Table 1: Alcohol levy in cents per litre by beverage type and alcohol content, 2021 and 2022

Alcohol type	Alcohol content more than (%)	Alcohol content not more than (%)	From1 July 2021 (cents per litre)	From 30 June 2022 (cents per litre)	2022 increase (cents litre)
Beer	1.15	2.5	0.5116	0.5594	0.0478
	2.5		1.5058	1.6282	0.1224
Wine of fresh grapes (fortified by the addition of spirits or any substance containing spirits)	14		5.9181	6.3343	0.4162
Wine of fresh grapes (other)			3.4104	3.7291	0.3187
Vermouth and other wine of fresh grapes flavoured with plants or aromatic substances (fortified by the addition of spirits or any substance containing spirits)	14		5.9181	6.3343	0.4162
Vermouth and other wine of fresh grapes flavoured with plants or aromatic substances (other)			3.4104	3.7291	0.3187
Other fermented beverages (such as cider, perry, mead)	1.15	2.5	0.5116	0.5594	0.0478

Alcohol type	Alcohol content more than (%)	Alcohol content not more than (%)	From1 July 2021 (cents per litre)	From 30 June 2022 (cents per litre)	2022 increase (cents litre)
	2.5	6	1.5058	1.6282	0.1224
	6	9	2.7283	2.9833	0.255
	9	14	3.4104	3.7291	0.3187
	14	23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296
Spirits and spirituous beverages the strength of which can be ascertained by OIML hydrometer (brandy, whisky, rum and tafia, gin and, vodka)			12.7876	14.4172	1.6296
Spirits and spirituous beverages (other)	1.15	2.5	0.5116	0.5594	0.0478
	2.5	6	1.5058	1.6282	0.1224
	6	9	2.7283	2.9833	0.255
	9	14	3.4104	3.7291	0.3187
	14	23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296
Bitters		23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296
Liqueurs and cordials	1.15	2.5	0.5116	0.5594	0.0478
	2.5	6	1.5058	1.6282	0.1224
	6	9	2.7283	2.9833	0.255
	9	14	3.4104	3.7291	0.3187
	14	23	5.9181	6.3343	0.4162
	23		12.7876	14.4172	1.6296

Source: Te Hiringa Hauora

The levy setting process

30. In the Pae Ora context, the process for setting the levy is similar to when the levy was established in 1976. Schedule 6, c.2 of the Pae Ora Act states:

> *(1) For each financial year, the Minister, acting with the concurrence of the Minister of Finance, must assess the aggregate expenditure figure for that year that, in his or her opinion, would be reasonable for the Ministry to spend during that year—*

(a) in addressing alcohol-related harm; and

(b) in meeting its operating costs that are attributable to alcohol-related activities.

(2) After assessing the aggregate expenditure figure for a financial year, the Minister must determine the aggregate levy figure for that year.

31. Once the total levy figure has been determined for any financial year, the Minister must determine the amounts of the levies payable in respect of each class of alcohol, to yield an amount equivalent to the total levy figure (The Pae Ora (Healthy Futures Act) 2022, Schedule 6, c3).

Key implications of the levy setting process

32. Levy rates applied to alcoholic beverages are a function of the intended total levy fund; thus, there is flexibility to adjust the rates to meet funding needs. Any intervention that meaningfully reduces the total quantity of alcoholic beverages purchased in New Zealand will reduce the total levy fund unless the rates are modified. Accordingly, when setting the levy fund, consideration should be taken around existing factors that potentially influence the total quantity of alcoholic beverages purchased in New Zealand. In setting the amount for the total levy fund, Manatū Hauora should have full information on:

- The level of need to address alcohol-related harm
- The cost of delivering alcohol-related activities, and any expected increase in costs
- The quantities of different classes of alcoholic beverages sold in the previous year (i.e., beverage types and alcohol content), as well as any temporal trends
- Any substantial change to be made to the alcohol excise tax, Goods and Services Tax, or the regulatory context that is likely to affect the purchase demand for alcohol.

Other hypothecated levies

33. New Zealand has several other hypothecated levies (i.e., directed at a specific use) including:

- The Problem Gambling levy - a levy on the profits of the New Zealand Racing Board, the New Zealand Lotteries Commission, gaming machine operators, and casino operators (Department of Internal Affairs, 2004).
- The ACC Levies, including Earner's Levy, Work levy, and Working Safer levy - a suite of levies ranging from $0.08 to $1.27 per $100 of liable payroll or income, collected by ACC from employers, shareholder-employees, contractors, and self-employed people (and supplemented by Vote Government funding for those who are not employed) to cover the cost of injuries caused by accidents and injuries and accidents that happen at work or are work-related (ACC, 2023).

- Other levies, specifically the waste disposal levy (Grant Thornton, 2020), the International Visitor Conservation and Tourism Levy (MBIE, 2021), and the immigration levy on visa applications (MBIE, 2022).

Problem Gambling Levy

Gambling harm is widespread within Aotearoa and disproportionately affects many of the same community groups as alcohol-related harm, namely, Māori, Pacific Peoples, and people with lower socio-economic status. New Zealanders lose around $2.6 billion per annum on gambling. The current Problem Gambling levy is set at $76.123 million over a three-year period, this equates to just less than 1% of total gambling losses per annum (Ministry of Health, 2022).

Manatū Hauora is responsible for the prevention and treatment of problem gambling, including the funding and co-ordination of problem gambling services. Problem gambling services are funded through the levy on gambling operators. The levy is collected from the profits of New Zealand's four main gambling operators: gaming machines in pubs and clubs (pokies); casinos; the New Zealand Racing Board; and the New Zealand Lotteries Commission. The levy is also used to recover the costs of developing and managing a problem gambling strategy focused on public health (Ministry of Health, 2022).

The Gambling Commission, in its report to Ministers, advocated for a major strategic review of the problem gambling strategy. It argued Manatū Hauora should not be constrained by a historic budget envelope, and argued future costings should be based on a comprehensive public health strategy to address gambling harm (Gambling Commission, 2022). It is possible that a similar argument could be advanced regarding the alcohol levy. This is particularly the case considering the Pae Ora principles. However, any strategy must ensure appropriate Māori leadership and governance.

Levies, duties, and taxes on alcohol in other jurisdictions

34. Any revenue, or portion of revenue, can be hypothecated and used to fund specific programmes. For example, a percentage of alcohol excise tax could be directed to alcohol programmes without the need for a specific alcohol levy like New Zealand's. Similarly, a percentage of income tax or general tax revenue can be hypothecated for alcohol programmes. These examples, however, have the disadvantage of tying revenue to economic cyclicality, resulting in the amount available for funding fluctuating more over time. A hypothecated tax on alcohol could also be earmarked for other areas in the health system other than alcohol-specific programmes.

35. Internationally, hypothecated taxes are common and exist in numerous forms. Cashin et al. (2017) identified over 80 countries with hypothecated taxes for health. The World Bank noted in 2020 that this number was likely higher (World Bank Group, 2020). Nine countries were identified where all or a portion of some tax revenue from alcohol sales is earmarked for particular activities (Cashin et al., 2017) (Table 2: Countries using hypothecated taxes for health around the world).

Table 2: Countries using hypothecated taxes for health around the world.

Type of hypothecation	Number of countries
Portion of revenues from tobacco taxes earmarked for health	35
Revenue from taxes on other goods that negatively impact health earmarked for health	10
Portion of value-added tax (VAT) earmarked for health	5
All or a portion of revenues from taxes on alcohol sales earmarked for health	9
All or a portion of revenues generated from lotteries earmarked for health	2
Portion of general revenues earmarked for health causes	5
Portion of income tax earmarked to fund health care for the population or a selection of the population (e.g., formal-sector workers in a public scheme)	62

Source: Cashin et al. (2017)
Note: Cashin et al also identifies countries that use levies on money transfers and mobile phone company revenue. These are not included in Table 2.

36. Most countries that have an excise tax on alcohol do not also have a separate hypothecated tax on alcohol, although some do hypothecate a portion of alcohol excise revenue for health. Our rapid review of international approaches did not find any instance of a hypothecated tax that is designed in the same way as the alcohol levy – a hypothecated tax on alcohol, strictly for alcohol-related activity, levied in addition to an alcohol excise tax and set as a pre-determined fund rather than a fund that fluctuates with pre-determined rates. This will be explored further in stage 2.

37. Based on data for 2014, 18 countries used hypothecated taxes to fund programmes for the prevention and treatment of substance abuse disorders relating to alcohol (WHO,2017), including:

- Denmark: In Denmark, a national 8 percent income tax is levied and hypothecated for health services, including but not limited to alcohol programmes (Cashin et al., 2017).

- Switzerland: Switzerland imposes a duty on spirits (CHF 29 per litre of pure alcohol), the net revenue of which is divided 90%/10% respectively between the federal government and the regions (cantons) every year. The cantons' share is used to fund programmes and services that address the causes and effects of abuse of alcohol and other substances. The cantons provide an annual report on

the activities financed through by the duty (FOCBS, n.d.). In 2021 total revenue generated for the cantons equated to $47 million compared to New Zealand's $11 million (2022) (FOCBS, n.d.). On a per capita basis this equates to $5.4 per capita compared to New Zealand's $2.1 per capita for the alcohol levy.

38. Internationally, tobacco taxes are more likely than alcohol taxes to be hypothecated for health. Chaloupka (2012) identified that 38 countries earmark part, or all, of their tobacco tax revenue for specific programmes. However, this revenue was rarely allocated directly to tobacco control efforts (Chaloupka, 2012). This suggests a similar disconnect between the source of funds and the use of funds as is observed in alcohol taxation.

39. From a purely economic perspective, levy-setting methodology in New Zealand avoids a key disadvantage of hypothecated taxes, which is the cyclicality of revenue. But the inflexibility of strong hypothecation to alcohol-related activity means the funds cannot be diverted when alternative uses offer better investment value to reduce alcohol-related harms. This is one reason for such taxes being less popular than non-hypothecated taxes or 'wide' hypothecation, in which the funds are typically directed towards the health system but not towards any particular programmes or services.

The excise tax on alcohol

40. Unlike the alcohol levy, the excise tax on alcohol in New Zealand raises revenue that is not hypothecated and, therefore, contributes to general tax revenue. Excise tax is a more common instrument used internationally to collect general revenue, to modulate demand for alcohol, and as a source of hypothecated funds for health programmes and services.

41. The excise tax in New Zealand constitutes a much greater share of the price of alcohol products than the alcohol levy. Based on typical prices of common alcohol products identified by Alcohol Healthwatch, on 30 June 2022, the alcohol levy accounted for between 0.2 percent and 1.3 percent of the price of alcoholic beverages. This is substantially less than the excise tax, which accounted for between 20.7 percent and 55.9 percent of the price of alcoholic beverages (Table 3: Alcohol levy and excise tax as a percent of typical prices of alcoholic beverages).

Table 3: Alcohol levy and excise tax as a percent of typical prices of alcoholic beverages

	Volume (litres)	Price ($)	Price per litre ($)	Excise % of price	Levy % of price
Beer	**0.33**	**1.80**	**5.45**	**22.8%**	**0.9%**
RTD	0.25	2.25	9.00	27.6%	1.3%
Wine	0.75	15.00	20.00	20.7%	0.2%
Spirits	1.00	37.99	37.99	55.9%	0.4%

Source: Alcohol Healthwatch 2021

42. When looking at the role of the levy in reducing alcohol-related harm and the activities that can be undertaken within the Pae Ora context, the relationship with the excise tax (and any associated reduction in consumption, and therefore alcohol-related harm due to the tax settings) is a key consideration. This will be explored further in stage 2 of the review.

ALCOHOL CONSUMPTION IN AOTEAROA NEW ZEALAND

43. The purpose of this section is to present the current state of alcohol consumption within its historical context. This provides an indication of the drivers of consumption which can lead to alcohol-related harm and a contextualisation of the social and policy environment in which activities to reduce alcohol-related harm operate.

Pre-1840

44. Prior to Europeans arriving in Aotearoa New Zealand there is no evidence of Māori having developed alcoholic beverages of their own (Alcohol Healthwatch, 2012). Alcohol was introduced to Aotearoa New Zealand with the arrival of European settlers and explorers. While alcohol and drunkenness were common amongst Europeans at this time, there is evidence to suggest that Māori did not show an interest in alcohol. Some commentators indicate that Māori generally had an aversion to alcohol (Alcohol Healthwatch, 2012). The general lack in interest in alcohol amongst Māori at this time can be further seen in the fact that alcohol was not used to advance European interests in the same way blankets, pipes, and tobacco were. At the signings of Te Tiriti o Waitangi alcohol was not allowed (Alcohol Healthwatch, 2012).

Post-1840

45. In the years following the signings of Te Tiriti o Waitangi some Māori leaders began to voice concerns about the impact of alcohol on their communities. They began to take action in an attempt to curb the harm that alcohol posed to their whānau. Sir Mason Durie notes that iwi, hapū, and marae sought to enforce their own controls over alcohol and cites bans on alcohol at many marae, the aukati within the limits of the King Country, the codes at Parihaka which included forbidding drunkenness, and Māori councils making informal bylaws (Durie, 1998; Durie 2001). Attempts were also made to encourage support nationally for reform. For example, in 1874 a petition to Parliament by Whanganui Māori stated (House of Representatives, 1874):

> *[Liquor] impoverishes us; our children are not born healthy because the parents drink to excess, and the child suffers; it muddles men's brains, and they in ignorance sign important documents, and get into trouble thereby; grog also turns the intelligent men of the Maori race into fools ... grog is the cause of various diseases which afflict us.*

46. Between 1847 and 1904 the Government passed a number of laws that had the effect of limiting alcohol consumption by Māori. However, these laws suggest that although the government was acknowledging that alcohol was an issue in society, they were (at least in a legislative sense) attributing the harm solely to Māori. These laws also inhibited Māori rights to exercise autonomy over issues arising from alcohol and develop their own tikanga to manage alcohol in their communities.

47. Many of these laws remained in place until after the Second World War when the Licensing Amendment Act 1948 removed many of the controls on Māori access to alcohol. While many marae continued to be alcohol-free, consumption amongst Māori started to increase significantly. In 2021/22 about 80% of Māori indicated that they had drunk alcohol in the past year (New Zealand Health Survey, 2022).

Current State

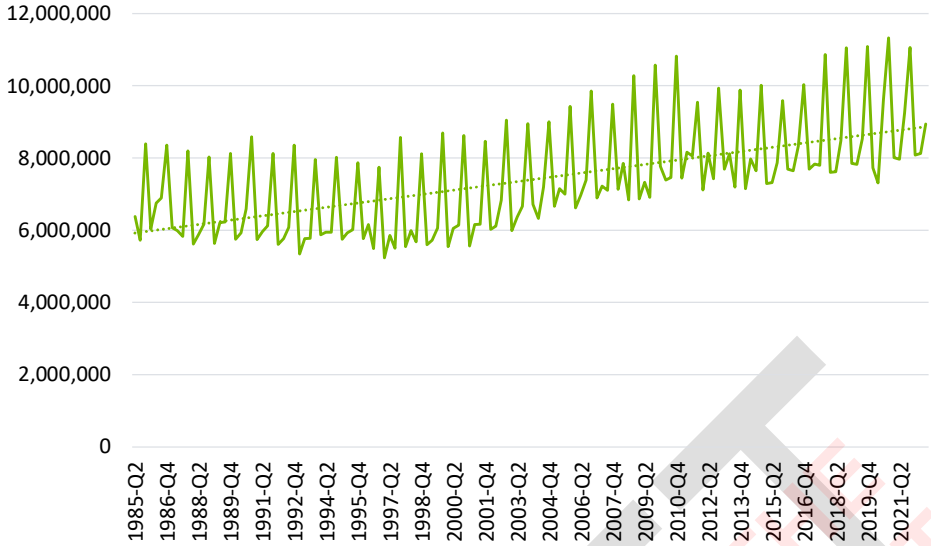
48. Below we provide a summary of available data on a range of measures, or proxy measures, for analysing trends in alcohol consumption. The purpose of this summary is to provide a snapshot of how people are currently consuming alcohol in Aotearoa New Zealand, any visible trends over time, and how these consumption patterns compare internationally. We acknowledge that there are other measures that could be used to measure alcohol consumption over time and that statistical testing is required to test the observations from existing data presented in this interim report. This will be a core component of stage 2 of the review.

Alcohol available for sale

49. Actual alcohol sales data are not publicly available, as this data are an industry data set. However, alcohol sales are expected to track along a similar trend to alcohol that is made available for sale. Statistics NZ has collected and reported data on alcohol available for sale quarterly since 1985 Q2.

50. The Statistics New Zealand Retail Trade Survey indicates that the volume of pure alcohol available for sale is consistently increasing year to year. It also suggests a seasonal trend in alcohol available for sale with a clear spike in the fourth quarter of every year (1 October to 31 December), reflecting pre-Christmas and New Year sales volumes (Figure 2: Alcohol available for sale: Quarterly volume of pure alcohol (litres)). The impact of COVID-19 and associated restrictions had an effect of the availability of alcohol in 2020/2021. BERL notes in an article from August 2020 that “the availability of alcoholic beverages decreased 5.4 percent between the Q1 and Q2 of 2020 to 7.3 million litres (BERL, 2020).

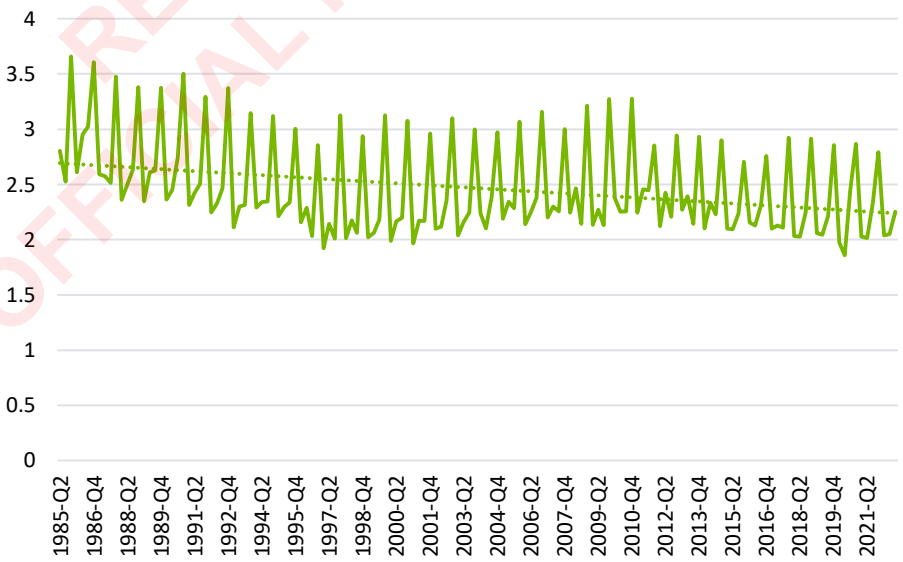
Figure 2: Alcohol available for sale: Quarterly volume of pure alcohol (litres)



Source: Statistics NZ

51. Drawing any strong conclusions from this upward trend in alcohol available for sale is problematic for two reasons. First, underlying the increased volume of pure alcohol available for sale is an increase in the volumes of pure alcohol from wine and spirits and a slight decrease in the volume of pure alcohol from beer. Secondly, while the amount of alcohol available for sale has increased, population has also increased. Over the last ten years, these factors have come together to create a slight decline in the amount of pure alcohol available for sale per head of adult population (aged 18+) (Figure 3: Alcohol available for sale: Quarterly volume of pure alcohol for sale per head of population aged 18+ (litres)).

Figure 3: Alcohol available for sale: Quarterly volume of pure alcohol for sale per head of population aged 18+ (litres)



Source: Statistics NZ

52. Not surprisingly the total value of alcohol sales follows a similar trend to the volume of alcohol available. However, the total value of alcohol sales has increased at what appears to be a much greater rate. The Statistics New Zealand Retail Trade Survey shows an increase in the total value of alcohol sold through retail outlets, with the trend indicating a 95 percent increase in the value of alcohol sales from 1995 to 2019 when measured in constant (2010) prices.[3]

Affordability of alcohol

53. The Law Commission's 2010 review of New Zealand's laws regarding the sale and supply of alcohol concluded that the price of alcohol was a "critical factor in moderating demand for alcohol" (Law Commission, 2010).

54. Notwithstanding the importance of affordability in moderating demand for alcohol, we note that affordability is only one driver of demand. Consumer preferences and the availability and acceptability of substitutes are also important drivers. Over time, it is not only the price of alcohol that will impact on affordability. Household incomes and the distribution of incomes, as well as other household expenditure requirements, impact on the resources available for households to purchase alcohol products. Over a period of time, demand drivers unrelated to affordability may also change, potentially even in offsetting ways (e.g., while alcohol may become more affordable, substitutes may also become more available, more affordable and more acceptable).

55. In 2021, Te Hiringa Hauora published a report on the affordability of alcohol in New Zealand (Health Promotion Agency, 2021). The report noted that between 2017 and 2020:

- The average price per standard drink increased for all alcoholic beverage types
- The real price (inflation-adjusted) of beer increased
- The real price (inflation-adjusted) of wine and spirits and liqueurs had dropped
- All alcoholic beverage types were more affordable in 2020.

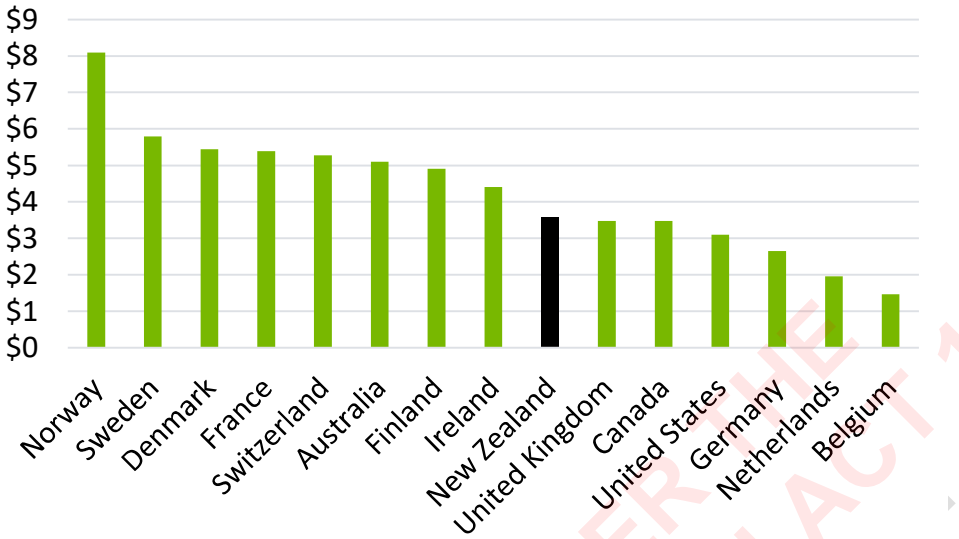
56. Over the five-year period 2017 – 2022, median household income has risen more than the average prices of alcoholic beverages, making alcoholic beverages more affordable in 2022 than in 2017 (Statistics NZ, 2022).

57. The World Health Organization (WHO) published the price for 2016 of 500ml of the three major categories of alcoholic beverages (beer, wine, and spirits) in US dollars for a range of countries. Compared with a comparison set of some OECD countries the price of beer in New Zealand is a little below average at US$3.58 per 500ml (average US$4.27 per 50ml) (Figure 4: Average price of beer in selected OECD countries).

[3] Note this does not reflect any impact of the COVID-19 pandemic or pandemic restrictions which would have impacted on retail sales and the share of alcohol sales that occurred through retail outlets versus hospitality venues or other from 2020 onwards, although the effects of the pandemic are observable in 2020 and 2021.

However, the comparison is from 2016, is based on one beverage type, and is not adjusted for differences in cost of living between countries.

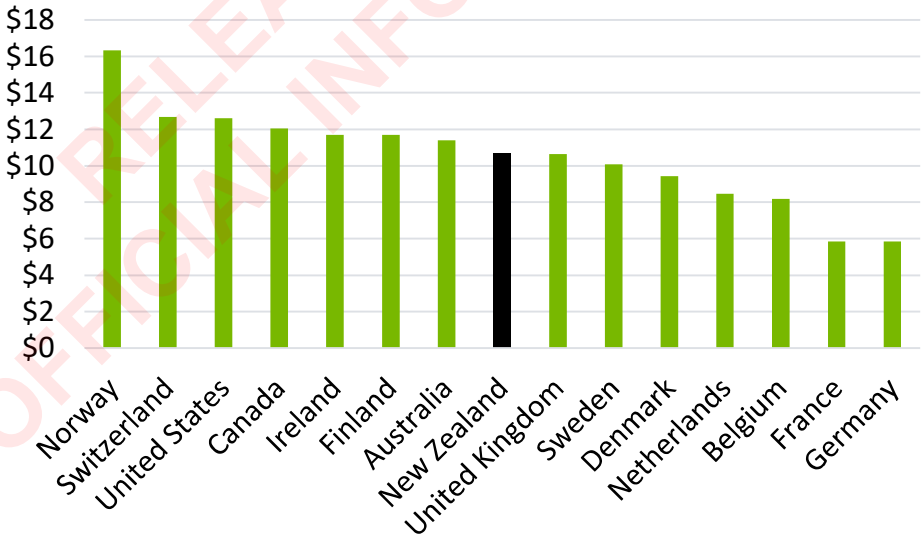
Figure 4: Average price of beer in selected OECD countries (USD per 500ml)



Source: World Health Organization, Global Health Observatory

58. Compared with the comparison set of OECD countries, the price of wine in New Zealand is a little above average at US$24.6 per 500ml (average US$22.58 per 50ml) (Figure 5: Average price of wine in selected OECD countries).

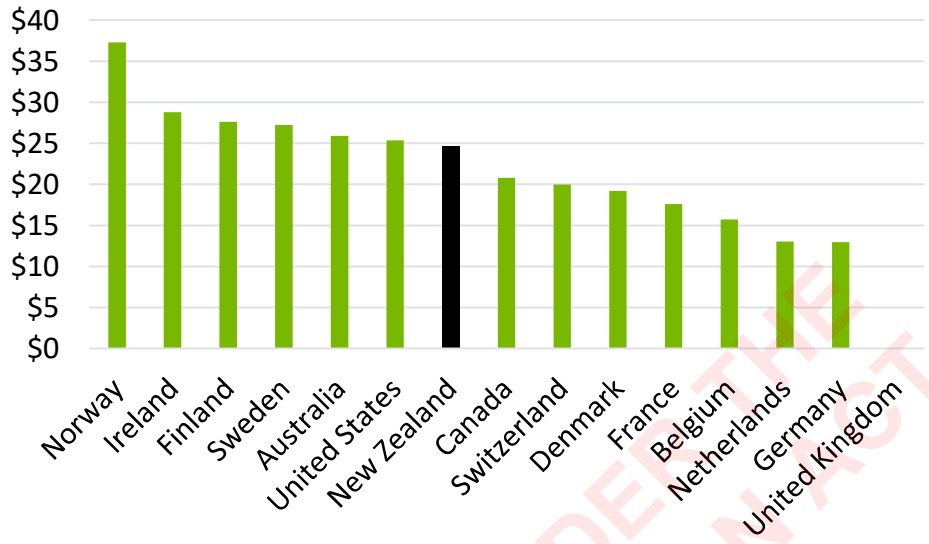
Figure 5: Average price of wine in selected OECD countries (USD per 750ml)



Source: World Health Organization, Global Health Observatory

59. Compared with the comparison set of OECD countries, the price of spirits in New Zealand is a little above average at US$24.6 per 500ml (average US$22.58 per 50ml) (Figure 6: Average price of spirits in selected OECD countries).

Figure 6: Average price of spirits in selected OECD countries* (USD per 500ml)



Note: Data not available for the United Kingdom.

Source: World Health Organization, Global Health observatory

60. A long international time series of alcohol expenditure as a percentage of total household expenditure indicates that Aotearoa New Zealand does not stand out from comparator countries, although the time series for New Zealand is not as long as for others. The most recent available data for New Zealand are from 2015. Alcohol expenditure in Aotearoa New Zealand is a higher share of total household expenditure than in the United States, Canada, and the Netherlands, similar to Sweden and Denmark, and lower than Norway, Australia, Ireland, Finland and the United Kingdom (Our World in Data, 2022).

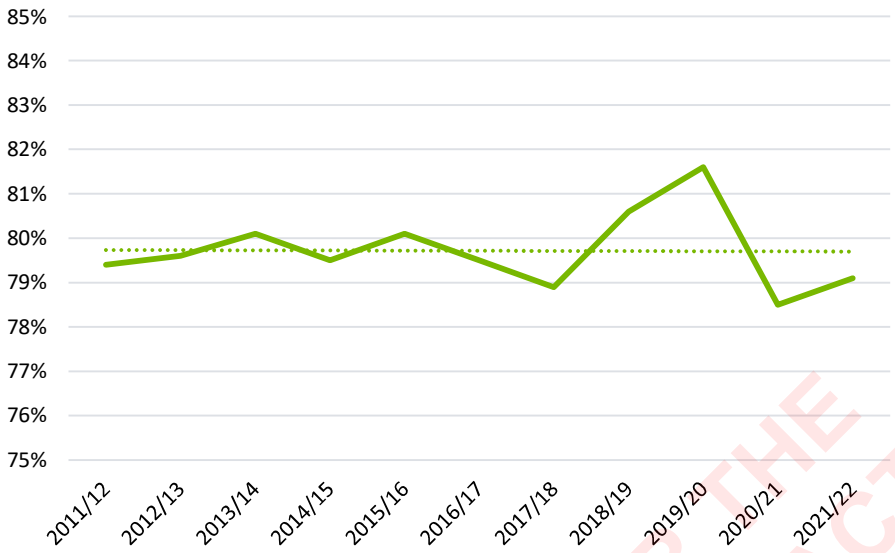
61. While affordability and household expenditure on alcohol provides some indication of the level of consumption, it is important to note that these measures are not a proxy measure for alcohol demand.

Past-year drinkers

62. Past-year drinkers is a measure of alcohol consumption reported through the New Zealand Health Survey (NZHS). It represents the percentage of adults (aged 15+) who report having had a drink containing alcohol in the past year.

63. In 2020/21 78.5% if New Zealander adults reported that they had had a drink containing alcohol in the past year (NZHS, 2020/21). The percentage of past year drinkers has been fairly constant over the past ten years. It remains high varying between 78 and 82 percent (Figure 7: Past year drinker: 2011/12 to 2021/22 (percent of survey participants aged 15+)).

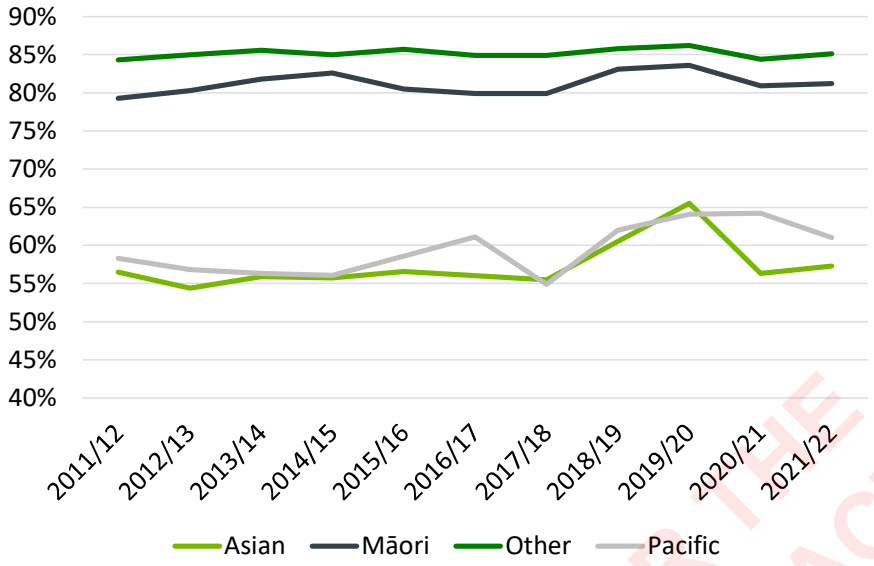
Figure 7: Past year drinkers: 2011/12 to 2021/22 (percent of survey participants aged 15+)



Source: NZHS data

64. When examined by ethnicity, the prevalence of past drinking in 2021/22 is: European/Other (85.1%; [95% confidence interval (CI) 83.4%-86.6%]), Māori (81.2; 77.3-84.8), Pacific (61.0; 52.8-68.7), and Asian (57.3; 51.2-63.2). While rates are fairly constant over time for Māori and European/Other, the recently higher rates amongst Pacific and Asian New Zealanders could be an early indication of an increasing trend, although the volatility in the data make this unclear and small sample sizes contribute to the analyses being underpowered to detect statistically significant changes (Figure 8: Past year drinkers by ethnicity, 2011/12 to 2021/22 (percent of survey participants aged 15+)).

Figure 8: Past year drinkers by ethnicity, 2011/12 to 2021/22 (percent of survey participants aged 15+)



Source: NZHS data

65. Disability status has only been reported since 2018/19 and is based on self-reported disability status. In 2021/22, when adjusting for differences in age and gender, persons with disabilities were 0.94 times as likely as persons without disabilities to report drinking in the past year; however, this was not a statistically significant difference. When examining trends in recent years, there are no statistically significant changes for persons with disability, except for from 2020/21 and 2021/22, when there was a significant increase in men with disabilities who reported past year drinking (74.0% increased to 81.0%; p-value <0.01) (NZHS, 2022).

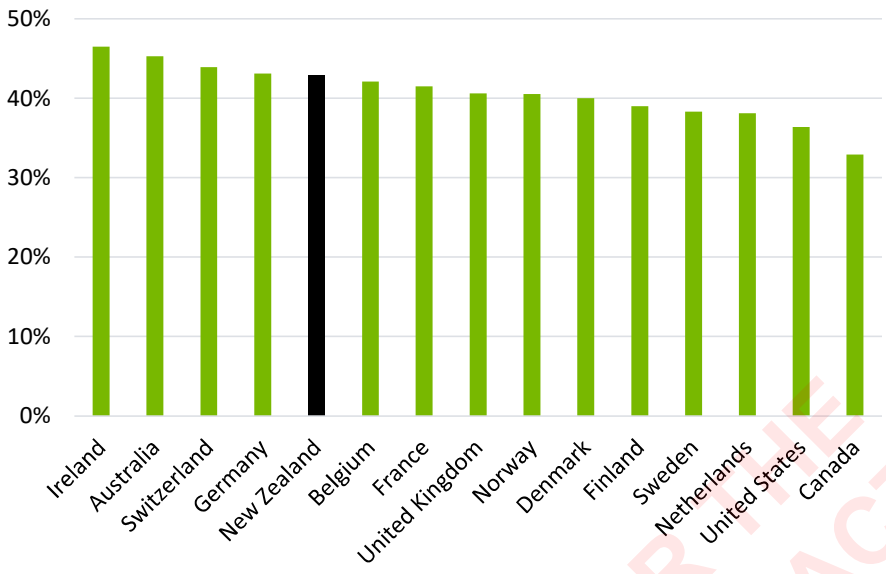
Hazardous and heavy episodic drinking

66. The NZHS has collected and reported on data that identifies hazardous drinking and heavy episodic drinking since 2015/16. Hazardous drinkers are defined as drinkers who obtained an Alcohol Use Disorders Identification Score (AUDIT) score of eight or more. Heavy episodic drinking is defined as consuming six or more standard alcoholic drinks on one occasion 'monthly' (heavy episodic drinking, monthly) 'weekly' (heavy episodic drinking, weekly) or 'daily or almost daily' (not reported here).

67. In 2021/22, approximately 19 percent of the adult population (aged 15+) met the criteria for hazardous drinking. Māori experienced higher rates of hazardous drinking than other ethnicities. In 2021/22, 33 percent of Māori met the criteria for hazardous drinking (NZHS, 2022).

68. Compared to some OECD countries New Zealand has a higher prevalence of heavy drinking (Figure 9: Heavy drinking in the past 30 days in selected OECD countries' (percent of survey participants aged 15+).

Figure 9: Heavy drinking in the past 30 days in selected OECD countries' (percent of survey participants aged 15+)



Source: Our World in Data

69. International data based on a longer time series confirms that New Zealand's current prevalence of hazardous and heavy episodic drinking ranks amongst the highest in our selected group of OECD countries. This is in stark contrast to ten years ago when New Zealand's prevalence of hazardous and heavy episodic drinking ranked in the bottom half for the same set of countries (Our World in Data, 2023) This could suggest the New Zealand has made little inroads to reduce hazardous drinking while comparable OECD countries have. This will be explored further in stage 2 of this review.

Summary

70. Our review of data from a range of sources has provided no clear indication that alcohol consumption is increasing or decreasing overall. We note that there are important gaps in the data and evidence on alcohol consumption. While the limited data indicate that Māori are more likely than non-Māori to engage in heavy or binge drinking, it is unclear whether this has worsened. Some evidence indicates a possible improvement such as the New Zealand Health and Lifestyles Survey which indicates the percentage of Māori who are heavy drinkers fell from 47.9 in 2012 to 43.2 in 2016 and to 31.0 percent in 2020. However, 2020 data may not be reflective of a downward trend in heavy drinking in Māori due to the potential impact of the COVID-19 pandemic and associated restrictions. Prior to 2020 data on Māori who are heavy drinkers showed a small but steady trend upwards since 2017 (New Zealand Health Survey, 2016/17 to 2021/22). Additionally, much of the recent evidence regarding consumption patterns within population sub-groups is derived from the NZHS and the Alcohol Use in New Zealand Survey (AUiNZ) which rely on self-reported alcohol consumption which is impacted by social desirability and recall biases.

71. The consumption of alcohol in Aotearoa New Zealand remains high. Furthermore, the instance of hazardous or heavy episodic drinking in Aotearoa New Zealand has shown little sign of decreasing as has been seen in comparative OECD countries.

ALCOHOL-RELATED HARM

72. Understanding the scope of alcohol-related harms and their prevalence is important to be able to consider the role of the levy fund within the broader public sector framework. This section provides a snapshot of the breadth and scope of alcohol-related harms in Aotearoa New Zealand. In this section, we do not attempt to quantify all alcohol-related harm. Rather we seek to reflect the well-established health and broader societal harms that alcohol contributes to. Stage 2 of this review will provide a deeper analysis of the extent of harm across society and include further qualitative insights from Māori.

73. A broad indicator of experience of harm is provided by the AUiNZ which showed that in 2020, 25.9 percent of New Zealanders said that they had experienced harm from their own drinking and 37.7 percent of New Zealanders had experienced harm from someone else's drinking (AUiNZ, 2020).

74. The AUiNZ also revealed that while males are more likely to report experiencing harms from their own drinking, women are more likely to report experiencing harms from others' drinking (AUiNZ, 2020).

Alcohol use and health

75. Alcohol use is a significant and modifiable risk factor for a wide range of non-communicable diseases. A systemic analysis published in the Lancet in 2018 found that the risk of all-cause mortality rises with increasing levels of consumption, and the level of consumption that minimises health loss is zero (Griswold et al, 2018). Despite earlier research to the contrary, it is now widely accepted that alcohol in any quantity is not beneficial to health and is actually harmful to health.

76. It is important to note that evidence indicates that individuals with low socioeconomic status experience disproportionately greater alcohol attributable harm than individuals with high socioeconomic status from similar or lower amounts of alcohol consumption (Probst et al, 2020). This must be borne in mind when considering our analysis of alcohol harms to follow.

77. Disability-adjusted life years (DALYs) are a measure of overall disease burden, expressed as the number of years lost due to ill-health, disability, or early death. DALYs attributable to alcohol in New Zealand show that the early 2000s represented a period of relatively low DALYs which was followed by a period of increasing DALYs to around 2014, followed by a stable level of DALYs since 2014. (Our World in Data, Premature deaths due to alcohol (age standardized rate per 100,000 people))

78. A substantial body of research unequivocally shows that alcohol use increases the risk of numerous diseases and injuries. International and New Zealand evidence report estimates of harmful health conditions directly or indirectly attributable to alcohol including:

- Cancer - Rumgay et al found, in a population-based study published in Lancet Oncology, that globally 4.1% of all new cases of cancer in 2020 were attributable

to alcohol consumption (Rumgay et al., 2020). The WHO estimated that in 2020, almost 7% of the total cancer burden in New Zealand was attributable to alcohol (WHO, 2020). Our literature review indicated that it is likely that, in New Zealand, alcohol attributable cancers make up a larger proportion of cancer cases than the global average. The Cancer Control Agency noted that in New Zealand in 2020 alcohol caused "32 percent of oral cavity and pharyngeal cancers, 23 percent of liver and laryngeal cancers, 16 percent of oesophageal cancers, 11 percent of bowel cancers and 7 percent of breast cancers in Aotearoa"(Cancer Control Agency, 2020).

- Stroke - Feigin et al, in a systematic analysis for the Global Burden of Disease Study published in 2016 in Lancet Neurology found that 7% of the global stroke burden was attributable to any amount of alcohol use (Feigin et al., 2016).

- Heart disease - there is a large body of evidence that links alcohol consumption to the increased risk of ischaemic heart disease (Mente et al., 2009).

- Fetal Alcohol Spectrum Disorder (FASD) - Although there is limited data on the prevalence of FASD in Aotearoa New Zealand, Manatū Hauora estimates that between three to five percent of people may be affected by alcohol exposure before birth. On this basis they suggest that around 1800 -3000 babies may be born with FASD per year (Manatū Hauora, 2023).

- Diabetes - Excess alcohol consumption is associated with an increased risk of type 2 diabetes. Te Whatu Ora estimates that over 250,000 people have diabetes in Aotearoa New Zealand (predominantly type 2) (Te Whatu Ora, 2023). The prevalence of diabetes within Māori and Pacific populations is approximately three times higher than for other New Zealanders (Te Whatu Ora, 2023).

- Suicide - A 2022 study from the University of Otago showed that 26 percent of all suicides in Aotearoa New Zealand involve acute alcohol use. Though the methods differ, this prevalence is higher than the WHO global estimate of 19 percent. (Crossin et al., 2022). The study also found that population groups that already have disproportionately higher suicide rates, including Māori and Pacific populations have a higher proportion of suicide deaths involving alcohol (34 percent and 35 percent respectively).

- Alcohol related injuries - The Accident Compensation Corporation (ACC) reported in 2019 that 3427 new alcohol related injury claims were lodged at a cost of approximately $3.7 million per week (ACC, 2020). We note that there are limitations with this data as it is reliant on the information provided on the ACC45 injury claim form which is completed by the person seeking treatment for the injury. Furthermore, some costs covered by ACC fall under bulk funded service agreements (for example, emergency treatment at public hospitals and the use of ambulance services). Data on the amount of bulk funded services spent on alcohol related injuries is not readily available (ACC, 2020).

- Dementia - Dementia is an increasing health issue globally. In Aotearoa New Zealand, approximately 70,000 people are living with dementia (Alzheimers NZ, 2020). Alzheimers NZ estimates that this number will increase to around 170,000 in 2050 (Alzheimers NZ, 2020). Alcohol consumption is the leading non-genetic risk factor for dementia. A recent European study found that those who regularly had more than four drinks in a single day for men or three in a single day for women, were three times more likely to develop dementia than others (Rehm, 2019).

Alcohol and violence

79. is associated with a substantial amount of violence in Aotearoa New Zealand. In 2009, the New Zealand Police National Alcohol Assessment showed that alcohol is involved in (New Zealand Police, 2009):

- A third of all Police-recorded violence offences
- A third of all recorded family violence
- Half of sexual assaults
- Half of homicides.

80. A recent study into the relationship between child maltreatment and alcohol in Aotearoa New Zealand estimated that in 2017 between 11 and 14 percent of documented cases of child maltreatment could be attributable to exposure to parents with severe or hazardous consumption (Huckle and Romeo, 2022).

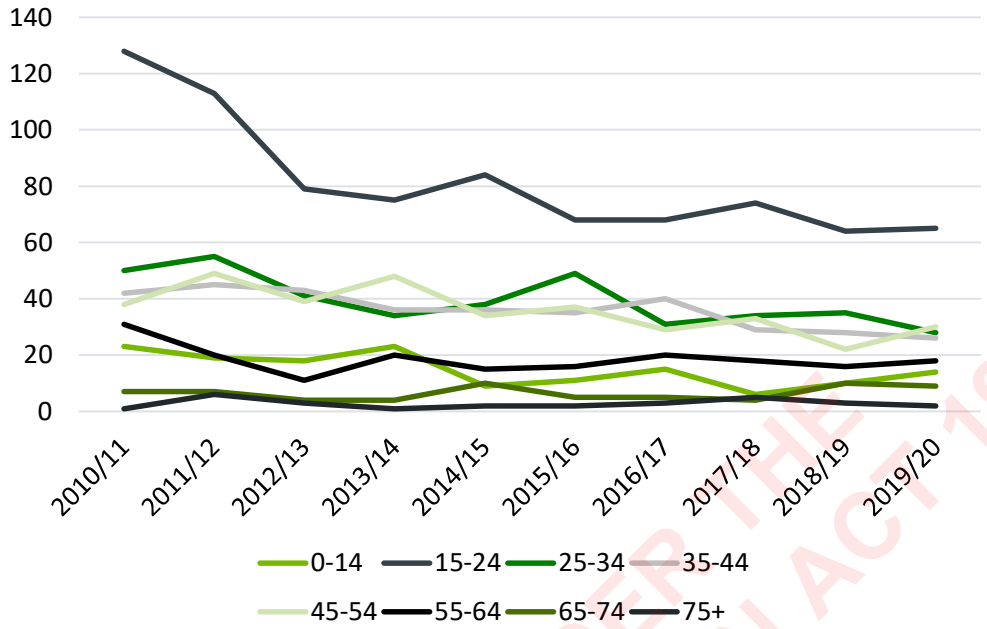
Other indicators of alcohol-related harm

81. Other indicators of alcohol-related harm include:

- Hospitalisations wholly attributable to alcohol
- Alcohol-related motor vehicle crashes
- Alcohol-related calls to police.

82. The National Minimum Data Set (Te Whatu Ora, 2023) contains data on public hospital discharges, including discharges with a primary diagnosis of ‘toxic effect of alcohol’. These data indicate a possible decline in the number of these discharges over the last ten years. Across age groups, 15–24-year-olds appear to have the highest number of discharges due to toxic effects of alcohol use. Over the last ten years, this group appears to have a decrease in the number of discharges; however, it is unknown to what degree changes in hospital administration data coding may have contributed to this trend (Figure 10: Public hospital discharges with a primary diagnosis of “toxic effect of alcohol”).

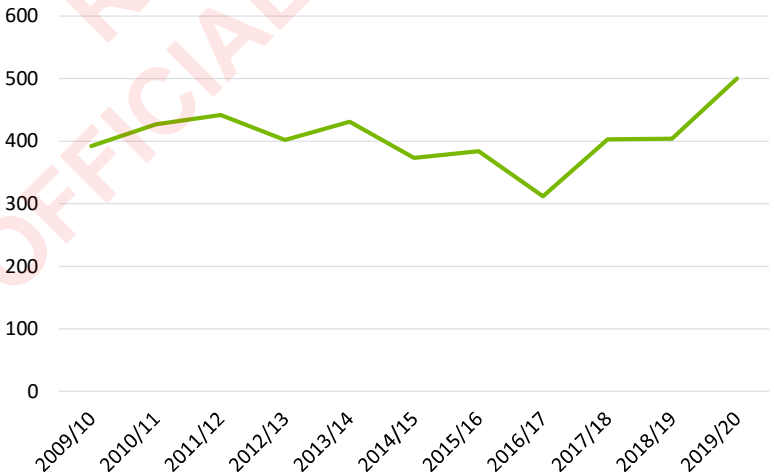
Figure 10: Public hospital discharges with a primary diagnosis of "toxic effect of alcohol" (number per year, by age group)



Source: Te Whatu Ora

83. Alcoholic liver disease is a condition caused by heavy use of alcohol. It tends to occur after many years of heavy drinking and is, therefore, not highly prevalent amongst young people. Data on hospital discharges shows over time a fairly constant number of discharges with a primary diagnosis of alcoholic liver disease, with a spike in 2019/20 (Figure 11: Discharges from publicly funded hospitals with a primary diagnosis of alcoholic liver disease).

Figure 11: Discharges from publicly funded hospitals with a primary diagnosis of alcoholic liver disease



Source: Te Whatu Ora

84. The New Zealand Transport Agency (NZTA) tracks the percentage of deaths and serious injuries from road crashes that involve alcohol. These data show a decline in this percentage since data started being collected in 2008. However, the number remains high (NZTA, 2023). Between 2019 and 2021 alcohol was a contributing factor in 43 percent of fatal crashes, 11 percent of serious injury crashes and 14 percent of minor injury crashes (NZTA, 2023).

85. NZ Police recorded and published data on alcohol-related calls to police between 2008 and 2012. This data shows a roughly constant number of calls to police that are alcohol-related: between 120,000 and 126,000 calls per year (NZ Police, 2012).

Alcohol-related-harm and Māori

86. In 2010 the Law Commission highlighted the negative impact that alcohol has on health and social issues for Māori. It noted that (Law Commission, 2010):

- Māori were more likely to die of alcohol-related causes
- Māori were more likely to experience harm from alcohol consumption in areas such as work, study, and employment
- Māori women suffered more harm than other women as a result of other people's drinking
- Alcohol may be actively contributing to inequalities.

87. In 2015 a policy briefing from the New Zealand Medical Association provided a useful overview of the disproportionate impact of alcohol on Māori. It reported (New Zealand Medical Association, 2015):

- Māori were 2.5 times more likely to die from an alcohol-attributable death when compared to non-Māori
- Māori were twice as likely as non-Māori to die from cardiovascular disease, a disease linked to alcohol consumption.
- Māori women were more likely to suffer from breast cancer than non-Māori, a disease linked to alcohol consumption.

88. There has been very little, if any, shift in the disproportionate harm that Māori experience from alcohol. The causes of alcohol-related health inequities for Māori are multiple and complex. Much work remains to be done for preventing these inequities. A key issue in addressing this inequity is enabling Māori to exercise tino rangatiratanga over their health in relation to alcohol. This will be a key question in stage 2 of this review.

Summary

89. As can be seen from the evidence above, alcohol causes significant harm across all communities in Aotearoa New Zealand. Overall, the level of harm caused by alcohol remains unacceptably high. Māori remain disproportionately affected by alcohol-related harm.

COST OF ALCOHOL-RELATED HARM

90. The cost of alcohol-related harm to New Zealand society is significant. This section provides a summary of existing estimates of the cost of alcohol-related harm in Aotearoa New Zealand.

91. The most recent study to quantify the social cost of alcohol in Aotearoa New Zealand was conducted by BERL in 2009. Commissioned by ACC and the Ministry of Heath, the report aimed to quantify the social cost of alcohol and drug related harm looking at the personal, economic, and social impacts. While the estimate of the social cost of alcohol-related harm in Aotearoa New Zealand published by BERL in 2009 and updated in 2018, or rather the methods used to generate it, have been criticised by some commentators, it has been widely cited in the alcohol-harm research and policy space in New Zealand over the last 14 years (BERL, 2009; Nana, 2018). The Law Commission's 2010 report on the review of the regulatory framework for the sale and supply of liquor also cited the BERL 2009 report.

92. In 2018, the updated estimate of the social cost of alcohol, based on the BERL methodology, was calculated to be $7.85 billion per year (Nana, 2018). This estimate included costs resulting from justice, health, ACC, social services, unemployment, and lost productivity. Intangible costs such as years of life lost from premature death, lost quality of life, child abuse, sexual abuse, and impacts on victims of alcohol-caused crime are also relevant to assessing the overall impact of alcohol-related harm on society. The 2018 update did not include intangible costs. A recent Australian Study found that in Australia $48.6 billion AUD of intangible costs could be attributable to alcohol (National Drug Research Institute, Curtin University, 2021).

Evidence from other countries

93. A literature search was conducted to identify other estimates of the social cost of alcohol-related harm that have been published since the 2009 BERL report. The literature search focused on studies that represented the social cost of alcohol at a national-level and considered costs of both the consumers of alcohol and to society in general. Where more than one study of the same country was published since 2009, the most recent publication was included. The United States, Australia, and Canada were the focus of the literature search given the higher generalisability of results to an Aotearoa New Zealand setting.

94. The table below summarises the three international studies relating to the social cost of alcohol-related harm that were identified in this literature search. The table compares them to the New Zealand study conducted by BERL in 2009 (Table 4: Summary of selected international studies that reported on the social cost of alcohol-related harms).

Table 4: Summary of selected international studies that reported on the social cost of alcohol-related harms.

Country (Author, date)	Year of study costs	Total Social cost of alcohol (Local currency and cost estimate year, millions)	Total Social cost of alcohol (2023 NZD millions)	Social cost of alcohol per person (b, c)	Social cost of alcohol per person (c, d)	Social cost of alcohol as a % of GDP (e)	Tangible Costs (% of total costs)	Intangible (% of total costs)
New Zealand (BERL et al 2009)	2006	NZ$4,7934 (a)	$7,260	NZ$1,146	$1,735	2.79%	NZ$3,231.6 million (67%)	NZ$1,561.9 million (33%)
Australia (Whetton et al 2021)	2017/18	AU$66,817	$85,459	AU$2,676	$3,475	3.80%	AU$18,165 million (27%)	AU$48,651 million (73%)
Canada∞ (CSUCH 2020)	2017	CAN$16,625	$23,803	CAD$454.92	$651	0.78%	CAN$16.625 million (100%)	Not included
US∞ (Sacks et al 2015)	2010	US$ 49,026	$561,727	US$805.06	$1,816	1.65%	US$249,026 million (100%)	Not included

(a)Figure reported in BERL 2009 for alcohol only. It does not include expenditure that could not be separated between alcohol and other drugs which is listed separately in the report

(b) Local currency and cost estimate year

(c) Denominator is total population for noted country in year of study data soured from the World Bank

(d) 2023 NZD, population year of study

(e) Denominator is GDP in current local currency unit for year of study data soured from the World Bank

∞ Analysis is an update of previous analysis

95. These four studies were conducted in Aotearoa New Zealand (2005/6 costs), Australia (2017/18 costs), Canada (2017 costs), and the US (2010 costs) used different methods and differed in their findings (BERL, 2009; Canadian Substance Use Costs and Harms Scientific Working Group, 2020; Sacks et al., 2015; Whetton et al., 2021). To compare the relative value of each of the four identified studies, all total costs were converted to 2023 NZD using the Consumer Price Index (CPI) and currency exchange rates and divided by the total population size of the country during the year considered in the study to account for large differences in population size contributing to the cost.

96. Based on the authors' methods, the social cost of alcohol appears highest in Australia with an estimated cost of $3,343 per person (Whetton et al., 2021). Aotearoa New Zealand and the US follow with an estimated cost per person of $1,392 and $1,655 respectively (BERL, 2009; Sacks et al., 2015). Canada's estimate of the social cost of alcohol was the lowest of the four studies observed with the social cost of alcohol estimated to be $651 per person (Canadian Substance Use Costs and Harms Scientific Working Group, 2020). A key point to note in comparing the 4 studies we analysed is that the US and Canadian estimates do not consider the intangible costs of alcohol while the Australian and New Zealand estimates do.

Relevance to the alcohol levy

97. While evidence on the costs of alcohol-related harms cannot be directly related to the cost of addressing harms, it can be used to motivate investment in addressing alcohol-related harms – if cost-effective interventions exist, it can also be used to:

- Motivate research investment to identify cost-effective interventions
- Motivate investment in interventions to reduce alcohol use
- Better understand the key areas of alcohol-related harms to prioritise investment.

Summary

98. The methods used to quantify the cost of alcohol-related harm vary internationally. This makes direct comparisons difficult. There also remains debate about the types of costs and harms that should be included. Nevertheless, we know that the cost is significant, and is potentially much higher than existing estimates (i.e., we heard from ACC that they estimate a cost of approximately $600 million annually for alcohol-related injuries).[4]

99. Notwithstanding differing views on the methodological approach that led to the BERL estimate (and the 2018 update), it was based on 2005/06 data, and in 2023 the data landscape has changed. It is timely to undertake an updated analysis of alcohol-related costs, and particularly relevant in the context of this review of the alcohol levy. In stage 2, we will undertake an up-to-date cost of alcohol harms study that clearly outlines the

[4] Further inquiries and engagement with ACC will be part of stage 2 of this review to better understand and quantify this figure.

relevant costs from both an economics perspective and a public health perspective, to support better-informed decision-making across a range of purposes and contexts.

CONSIDERATIONS FOR INCREASING THE ALCOHOL LEVY

100. The alcohol levy has not increased since 2013. During this time the real cost of harm reduction interventions has increased, and the levy appears to remain insufficient to address alcohol-related harms across society (i.e., there has been little, if any, shift in the extent of alcohol-related harm across communities in Aotearoa New Zealand). Furthermore, the levy now sits within a different legislative context. The Pae Ora framework potentially opens new opportunities for investment in harm reduction activities across health entities.

101. A range of factors should be taken into account when considering a potential increase in the alcohol levy, including:

- The regulatory context of the levy
- The strategic context of the levy
- The potential impact of price change on demand for alcohol
- The potential regressive effects of levy-induced price change, as most taxes or levies are fiscally regressive (but have the potential to be progressive for health)
- Costs of alcohol-related activity funded by the levy, which may increase due to
    - inflation
    - patterns of alcohol consumption and alcohol-related harms
    - unmet need
    - the costs of alcohol-related harms
- New opportunities for investment
- The size of the levy fund and proportionality considerations
- The effectiveness and cost-effectiveness of interventions to reduce alcohol-related harms
- Te Tiriti o Waitangi.[5]

Regulatory context of the levy

102. The Pae Ora Act states that (Pae Ora (Healthy Futures Act 2022, s.101):

> *levies may be imposed for the purpose of enabling the Ministry to recover costs it incurs -*
>
> *(a) in addressing alcohol-related harm; and*
>
> *(b) in its other alcohol-related activities*

[5] Note this is not addressed in detail in Stage 1 given time constraints and the limited ability to engage with Māori. This will be a core focus of Stage 2 of the review.

103. In other words, the Act explicitly identifies the primary (and potentially only) purpose of the levy as a cost recovery mechanism, rather than a demand modifying instrument or as Pigouvian tax (a tax intended to internalise any externality associated with alcohol consumption). However, we do consider the potential for the levy to have a demand modifying effect which may result from partial or complete internalisation of externalities.

104. The Pae Ora context expands the scope of the levy due to now being a broader cost recovery for Manatū Hauora rather than Te Hiringa Hauora. However, what remains unclear is the breadth of the application of section 101 of the Pae Ora Act and what activities can and should fall within its ambit. Consideration of this issue needs to take into account the clear distinction that must be drawn between core government activities and responsibilities and the role of the levy fund. Further investigation into this question will be undertaken during stage 2 of this review. This may require legal advice to clarify any uncertainties in interpretation.

Strategic context of the levy

105. The purpose of the Pae Ora Act is to build healthy futures for all New Zealanders and to eliminate health disparities, in particular for Māori. Section 7 of the Pae Ora Act sets out principles which are to underpin the functions of health entities. Of particular relevance to this review are those principles that relate to engaging, resourcing and empowering Māori. These include:

- the health sector should engage with Māori, other population groups, and other people to develop and deliver services and programmes that reflect their needs and aspirations, for example, by engaging with Māori to develop, deliver, and monitor services and programmes designed to improve hauora Māori outcomes (7(1)(b))
- the health sector should provide opportunities for Māori to exercise decision-making authority on matters of importance to Māori (7(1)(c))
- the health sector should provide choice of quality services to Māori and other population groups, including by resourcing services to meet the needs and aspirations of iwi, hapū, and whānau, and Māori (for example, kaupapa Māori and whānau-centered services) (7(1)(d)(i)

106. The levy is now administered in this new context and there is an opportunity to reconsider activities in light of these obligations and to expand by Māori for Māori interventions.

107. Engaging with Māori communities to develop, deliver, and monitor programmes and resourcing services to meet the needs of iwi, hapū, and whānau, are practices intended to increase the effectiveness of services and programmes in delivering equitable outcomes for Māori. Some services and programmes may achieve effectiveness in Māori and Pacific communities through added investment to support these needs. To give effect to the Pae Ora Act principles through the application of the levy fund, a key focus needs to be empowering Māori to determine and deliver the initiatives most appropriate for their communities. Stage 2 of this review will provide the opportunity for

extensive engagement with Māori to build relationships and explore these opportunities when considering the future of the levy fund.

Impacts of alcohol levy on price and consumption

108. Theoretically, as a price-altering mechanism, the alcohol levy does have the potential to have a demand modifying effect which could, in turn, reduce the levy revenue.

109. However, the potential for an increase in the alcohol levy to impact on alcohol demand is modulated by consumer opportunities for substitution to lower priced alcoholic beverages.

110. New Zealand and international evidence shows that different groups respond to differing extents to price changes. Thus, there is potential for any reduction in demand to be concentrated in groups with already relatively low alcohol consumption, groups with low rates of binge or harmful drinking, and groups that experience lower levels of alcohol-related harms. A proportionate reduction in alcohol-related harms across all consumers of alcohol is not guaranteed by reductions in alcohol sales.

111. Substitutes and their prices are important because where consumers have the option of switching to acceptable substitutes, the impact of a price change will be greater. However, alcoholic beverages are not a homogenous good. There are many different alcoholic beverage options at different price points. This means substitution within the category of alcoholic beverages is likely to be an attractive option for many consumers: If the cost of a favourite alcoholic beverage increases due to a tax or levy increase, in addition to reducing alcohol consumption, consumers have a range of options, including:

- Switching to a cheaper beverage type
- Switching to a cheaper brand
- Switching to large containers that are associated with a lower cost per volume
- Switching to multi-packs that are associated with a lower price per unit
- Purchasing alcoholic beverages that are subject to price promotion
- Purchasing alcoholic beverages from different outlets
- Changing the balance of on-licence to off-licence consumption to favour more off-licence consumption.

112. The range of options for within-category substitution and the ultimate choice consumers make is determined by individual consumer preferences. For example, some consumers may reduce total alcohol consumption rather than switch from on-licence to off-licence consumption when on-licence consumption reaches an unacceptable cost. For others, a perverse effect can occur where alcohol consumed may increase due to substitution from on-licence to off-licence consumption if the cost savings per unit more than offset increases in price, allowing a greater volume of alcohol to be purchased within the same budget.

113. As noted by the Tax Working Group (Tax Working Group Secretariat, 2018), published research indicates that alcohol excise (and therefore the combination of alcohol excise and alcohol levy) are likely to be effective in discouraging harmful behaviour. This means that on the whole, an increase in prices of alcoholic beverages is likely to result in a reduction in the amount of alcohol consumed for at least those consumers who engage in harmful drinking. But the Tax Working Group also acknowledged the considerable uncertainty around demand response to potential increases in tax and indicated that further research would be unlikely to resolve these issues sufficiently to indicate an optimal tax on alcohol.

114. Despite the uncertainties as to the specific elasticities[6], broad conclusions can be drawn from the evidence, including:

- Price elasticity of demand for alcoholic beverages is not insignificant: a significant increase in price is expected to result in a proportionately smaller but not insignificant decrease in quantity demanded
- Price elasticity of demand in groups that engage in heavy and harmful drinking are likely to be the least responsive to a price increase: while a sufficiently large price increase may reduce sales of alcohol, a less than proportionate reduction in alcohol-related harms is to be expected.

115. The alcohol levy is very small in proportion to price and to the alcohol excise tax. An increase in the levy itself, even a doubling of the levy, is unlikely to have a noticeable impact on alcohol demand. Accordingly, the levy revenue is unlikely to be negatively affected by the increase in the levy.

116. On the other hand, the alcohol excise tax represents a significant portion of the price of alcohol and making a change in the excise tax is most likely to result in a change in quantity demanded. It is unclear whether the objective of the alcohol excise tax is to raise revenue, in which case increases in the tax will be introduced slowly, or to modulate demand for alcohol (or indeed whether the objective of the tax is shifting over time). Due to its relative size the excise tax is likely to be the primary price-based lever through which government can influence demand for alcohol and, therefore, potentially reduce alcohol-related harms.

117. The relationship between the excise tax and the alcohol levy will be explored further in stage 2 of this review.

Regressivity of the levy

118. Most price policies, including the alcohol levy, the excise tax on alcohol and even the GST, tend to be seen as potentially regressive. That is, lower income households are believed to pay a higher proportion of their incomes when they pay these taxes than higher income households because they spend a higher proportion on the taxed goods. However, in considering the evidence on corrective taxes, the Tax Working Group

[6] Price elasticity refers to the degree to which individuals, consumers, or producers change their demand or the amount supplied in response to price or income changes.

found that the alcohol excise tax (and by extension the alcohol levy) appears to be slightly progressive, in contrast to tobacco taxes which are regressive.

119. This means an increase in the levy is unlikely to cause disproportionate harm to lower income households.

Costs of alcohol-related activity

120. The alcohol levy is a cost recovery mechanism. Therefore, an increase in the levy should consider factors that increase the cost of alcohol harm reduction activities funded by the levy. Cost increases may be expected to occur if:

- There is inflation
- There has been an increase in alcohol-related harms
- There is unmet need that the agency has plans to address
- There are new opportunities for investment in cost-effective ways of addressing alcohol-related harms.

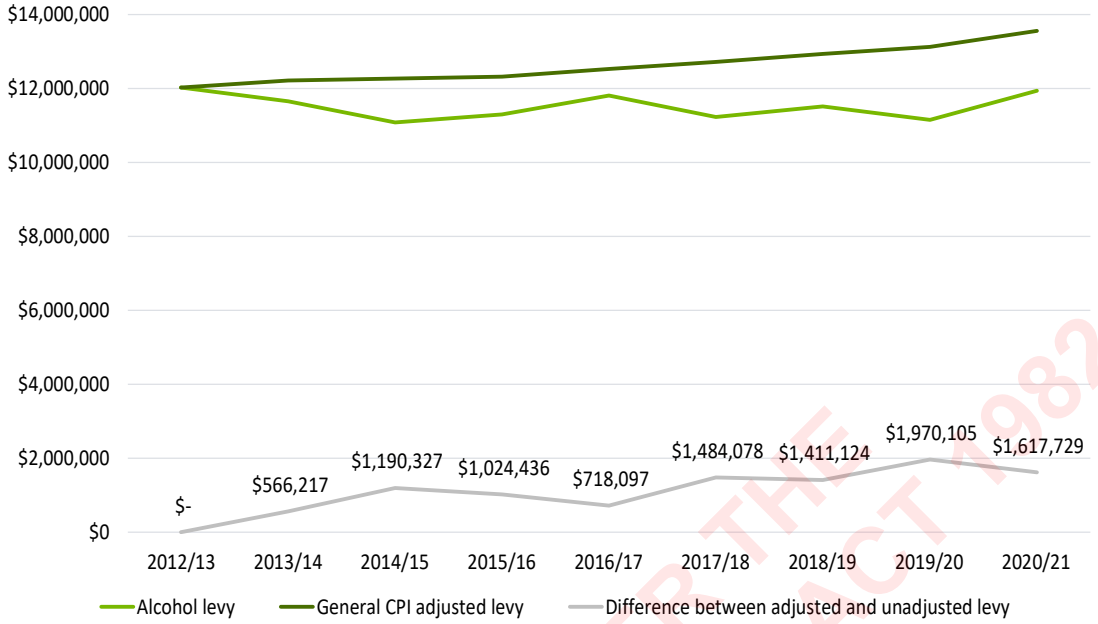
Inflation

121. Indexing to inflation is justified due to the use of the levy fund as a cost recovery mechanism. The services and programmes and other alcohol-related activity undertaken through levy funding are labour intensive. Employment contracts often include an inflation adjustment to wages and salaries, and where they do not, adjustments to wages and salaries to reflect inflation are made periodically to avoid labour shortages. The CPI is the most common measure of inflation that drives adjustments to labour costs and is, therefore, the most justified measure of inflation for the levy to be indexed to (as opposed to the alcohol CPI which would be more appropriate if the alcohol levy purpose was as a demand modulating instrument).

122. If the levy fund had been adjusted using the CPI, it would have generated between $566,217 and $1,970,105 in additional revenue each year since 2012/13 (Figure 12: Levy fund with and without CPI adjustment, and actual levy shortfall relative to adjusted levy). We note this estimate does not include an assessment of the impact of possible CPI adjustments prior to the establishment of Te Hiringa Hauora (ie, during the period when the levy was collected and administered by ALAC).

123. Based on the above estimate, the cumulative levy shortfall due to a lack of adjustment over the past nine years is approximately $10 million.

Figure 12: Levy fund with and without CPI adjustment, and actual levy shortfall relative to adjusted levy



Source: CPI data from Stats NZ

Increase in alcohol consumption and harms

124. Our review of data from a broad range of sources indicates that:

- The amount of alcohol available for sale has increased on a per capita (aged 18+) basis over the last 10 years while actual sales have remained constant, suggesting more variety may be on shelves with intensifying competition in the industry (Statistics NZ, 2022)
- All forms of alcohol have become more affordable in New Zealand, with households spending a similar share of total expenditure on alcohol regardless of household income level (Statistics NZ, 2022). Internationally, alcohol is not likely to be more affordable in New Zealand than in the average of high-income OECD countries
- New Zealanders drinking patterns have not changed significantly over the last 10 years, with the possible exception of Pacific people, in particular Pacific women who appear to be more likely to drink alcohol now than 10 years ago (NZHS, 2020/21)
- New Zealand is either in the middle or at the bottom of a set of high-income OECD countries in terms of alcohol consumption per capita, depending on the measure used (Our World in Data, 2022)
- Younger New Zealanders are showing a slight trend towards less hazardous drinking and less alcohol-related harm (NZHS, 2022)

- There is no clear evidence of increasing alcohol-related harms, although limited data is available on harms so there is potential for harms to be increasing in areas where data was not readily available
- A key outcome of interest is that New Zealand continues to have a very low rate of premature deaths associated with alcohol compared with similar high income OECD countries (Our World in Data, Premature deaths due to alcohol (age standardized rate per 100,000 people)). It is unclear how appropriate international comparisons may be (e.g., whether different definitions or data collection may be contributing to this result).

125. We note that there are important gaps in the data and evidence on alcohol consumption and experience of alcohol-related harms. While the limited data indicate that Māori are more likely than non-Māori to engage in heavy or EPISODIC drinking, it is unclear whether this has worsened over time. Some evidence indicates a possible improvement for Māori (e.g., the percentage of Māori who are heavy drinkers fell from 47.9 in 2012 to 43.2 in 2016 and to 31.0 in 2020), although 2020-2022 data is also muddied by the impact of the COVID-19 pandemic and associated restrictions (NZHS, 2016, 2022).

126. Nevertheless, the level of alcohol consumption and the rate of alcohol-related harm across Aotearoa New Zealand remains high.

Unmet need

127. It is important to note that the total levy fund has remained quite constant despite increasing population. Unless the determination of the levy fund has been made taking population growth and measures of unmet need into account, it is possible that the relatively constant levy fund over the last 9 years has been increasingly insufficient to meet population need. However, we were unable to conclude through the analysis of programme data that was made available whether this might be the case. We will consider this further in stage 2 of the review.

The cost of alcohol-related harms

128. We found no evidence that the cost of alcohol-related harms is or has been considered directly in the setting of the levy fund.

129. Our evidence review clearly shows the cost of alcohol-related harms in Aotearoa New Zealand is substantial even if uncertainty exists as to the total amount of that cost. A high cost of alcohol-related harms provides a strong incentive to find cost-effective investment opportunities. Unfortunately, the magnitude of alcohol-related harm costs does not provide any indication of the size of investment needed to address those harms. Our review of the evidence did not reveal any known relationship between the cost of harm and the cost of addressing harm. Additionally, our evidence review did not reveal any clear evidence of increasing costs associated with alcohol-related harms.

130. Nevertheless, the gulf between the costs of alcohol-related harm and the cost-recovery function of the alcohol levy remains significant. This could suggest that the existing levy

fund is insufficient, and/or the activities and programmes being funded by the alcohol levy are having limited impact on the level of harm. We heard that for Māori, the alcohol levy fund has done little, if anything, to address the disproportionate impact of alcohol-related harms in their communities. More needs to be done to address this significant gap and this will be a core focus of stage 2 of this review.

The effectiveness of interventions

131. In 2018, the WHO launched the SAFER initiative. SAFER promotes the implementation of interventions in five strategic areas, based on evidence of their impact on public health and their cost-benefit analysis.

The SAFER interventions				
STRENGTHEN	**ADVANCE**	**FACILITATE**	**ENFORCE**	**RAISE**
restrictions on alcohol availability	and enforce drink-driving countermeasures	access to screening, brief interventions, and treatment	bans or comprehensive restrictions on alcohol advertising, sponsorship, and promotion	prices on alcohol through excise taxes and other pricing policies

132. Our interviews and literature review indicated that investments that align with the Pae Ora principles and the WHO SAFER framework are, in the long term, likely to lead to reductions in alcohol-related harm. Many of the SAFER interventions focus on measures that limit the physical, social, and psychological availability of alcohol. These measures are by far the most successful in reducing alcohol-related harm.

Summary of best practice interventions

133. In 2022, the 3rd edition of the landmark book *Alcohol: No Ordinary Commodity* was published. The book's authors conducted an extensive review of international research evidence since the 2nd edition; the 3rd edition incorporates updates based on the latest available research. A summary of the book's findings was published in a 2022 research paper. The table below is reproduced from this paper showing best practices, good practices and ineffective practices to reduce alcohol-related harm (Borbor et al., 2022.)

Table 5: Interventions considered to be best practices, good practices or ineffective practices

Policy area	Best practice	Good practices	Ineffective practices	Comments
Pricing and taxation policies	Alcohol taxes that decrease affordability	Minimum unit price; differential price by beverage; special taxes on youth-orientated beverages	Policies that increase the affordability of alcohol	When alcohol becomes less affordable, people drink less and experience fewer problems; when affordability increases, so does drinking and harm. Increased taxes reduce alcohol consumption and harm for the whole society, including heavy drinkers and adolescents. The government also receives tax revenues to compensate society for the costs of treatment, prevention, and enforcement. Alcohol taxes need to be substantial to be effective.
Regulating physical availability	Limiting hours and places of sale; public welfare orientated alcohol monopoly; minimum purchase age laws	Rationing systems; restricting outlet density; individualized permit systems; post-conviction preventive bans; encouraging lower-alcohol beverages; sales restrictions; total bans where supported by religious or social norms	Policies that increase outlet density and temporal and spatial availability	Regulating who can consume alcohol, or the places, times, and contexts of availability, increases the economic and opportunity costs of obtaining alcohol. Limitations on physical availability, including convenience and legal access (e.g., age restrictions), reduce alcohol consumption and harms. Controls on availability can be imposed at a population level (e.g., hours of sale) or at an individual level (e.g., as directed by a court order). Availability restrictions can have significant impact if enforced consistently.
Restrictions on alcohol marketing	Complete ban on alcohol marketing	Partial bans on alcohol marketing	Industry voluntary self-	Exposure to alcohol marketing increases the attractiveness of alcohol and the likelihood of drinking by young people; restrictions on marketing

Policy area	Best practice	Good practices	Ineffective practices	Comments
			regulation of marketing	are likely to deter youth from early onset of drinking and from binge drinking. Exposure to alcohol images and messages can precipitate craving and relapse in people with alcohol dependence. Extensive evidence of impacts on drinking, and experience from tobacco advertising bans suggests a complete ban is likely to be a best practice despite lack of evaluated examples.
Education and persuasion		Anti-drink-driving campaigns; targeted prevention programmes; family inclusive intervention; some interventions with undergraduate students; brief motivational interventions in school settings; computer-based interventions with selective subpopulations of heavier drinkers	Industry-sponsored programmes and campaigns; information only programmes	Interventions that focus on high-risk youth and involve the family are more likely to deter youth drinking. Impact generally evaluated in terms of knowledge and attitudes; effect on onset age of drinking and drinking problems is equivocal or minimal. Information based educational messages are unlikely to change drinking behaviour or prevent alcohol problems. However, when led by communities and targeted to priority populations there is more success. with some targeted programmes showing more success (Lammers J, 2019). Programmes led by communities to build support for public health-orientated alcohol policies have also shown more impact (Rise J, 2002). These initiatives in turn can build the capacity and the support for structural changes at a legislative and policy level.

Policy area	Best practice	Good practices	Ineffective practices	Comments
				There is little evidence that mass media campaigns have reduced alcohol consumption or alcohol related harms.
Drink-driving countermeasures	Low BAC levels for young drivers; intensive breath testing, random where possible; intensive supervision programmes	Low or lowered BAC levels (0.00–0.05%); graduated licensing for young and novice drivers; sobriety check points; administrative license suspension; comprehensive mandatory sanctions; DUI-specific courts; interlock devices	Severe punishment; designated driver programmes; safe ride services; education programmes; victim impact panels	A high likelihood of being caught and facing consequences quickly are effective in reducing alcohol-impaired driving, but severe penalties are likely to reduce celerity and certainty of punishment. Surveillance measures and limitations on driving (e.g., license removal) are effective measures
Modifying the drinking environment		Training to better manage aggression; enhanced enforcement of on premises laws and legal requirements and proactive policing; targeted policing; legal liability of servers, managers, and owners of licensed premises; community approaches focused on specific target populations	Training and house policies relating to responsible beverage service (RBS); interventions to address drinking at sports venues and at festivals; voluntary regulation or coordination	Generally evaluated in terms of how interventions affect intermediate outcomes (e.g., bar staff knowledge and behaviour), and alcohol related problems such as drink driving and violence, although some evaluations measure impact on consumption in specific settings

Policy area	Best practice	Good practices	Ineffective practices	Comments
Treatment and early intervention		Brief interventions for nondependent high-risk drinkers; behavioural and psychosocial therapies; pharmacological treatment; mutual help interventions	Some types of coercive treatment	Usually evaluated in terms of days or months of abstinence, reduced intensity and volume of drinking, and improvements in health and life functioning. The target population is harmful and dependent drinkers, unless otherwise noted.

Source: Borbor et al., 2022

Aotearoa New Zealand policy interventions

134. Broadly speaking New Zealand's policy interventions are limited in terms of what is considered best or good practice. Many of the current policy settings can be classified as ineffective practice based on the categorisation set out above from Barbor et al. 2022.

135. Modifying the price and availability of alcohol are seen as the most effective measures to reduce consumption and therefore alcohol-related harms. Research in Aotearoa New Zealand has shown that when the real price of alcohol increases, consumption levels go down. (Wall and Casswell, 2013). As noted above the average price of alcohol has increased slightly in recent years. However, consumption remains high suggesting that the increase in price has not been at a significant level to modify consumption.

136. The New Zealand Law Commission made strong recommendations in 2010 (Law Commission, 2010) for stronger restrictions on alcohol advertising and sponsorship. This was followed by the Ministerial Forum on Alcohol Advertising and Sponsorship in 2014 which noted (Ministerial Forum on Alcohol Advertising and Sponsorship, 2014):

> *As a Forum, we think the total cost of alcohol-related harm is enough to justify further restrictions on alcohol advertising and sponsorship. We feel that, however complex the task, there is a need to change attitudes and behaviours associated with alcohol consumption in New Zealand. We believe that the current level of exposure of young people to alcohol advertising and sponsorship is unacceptable and that this exposure can be reduced. With these factors in mind our recommendations are focused on reducing the exposure of young people to alcohol advertising and sponsorship. Specifically, our focus is protecting minors.*

137. In Aotearoa New Zealand, there are more places to buy alcohol in our most socio-economically deprived communities (Pearce, Day and Witten, 2009). The Law Commission in its 2010 report note that "because the 1989 Act relaxed the criteria for granting licences there has been a proliferation of liquor outlets, with the number of licences more than doubling from 6,295 in 1990 to 14,424 in February 2010" (Law Commission, 2010, at 2.11). Communities have long voiced their concern about their inability to influence decisions about where alcohol is sold in their communities. This sentiment was echoed in our stakeholder interviews where this was consistently identified as a priority issue.

138. Acknowledging this, a priority objective of Aotearoa New Zealand's liquor law reforms in 2012 was to "improve community input into local alcohol licensing decisions" (New Zealand Parliament, 2010). However, little has been done in the intervening years. The 2021 Alcohol Regulatory and Licensing Authority annual report noted that (Alcohol Regulatory and Licensing Authority, 2022, at p.6):

As we reported last year, the Authority notes that District Licensing Committees are refusing very few applications for new licences, licence renewals and managers' certificates. The extent and any reasons for this may be worthy of investigation in any future review of the Act.

Available data from local authorities websites confirms that very few licence applications have been declined over the last 5 years. For example:

- Auckland has granted 5704 new licences and declined 10
- Wellington has granted 431 new licences and declined 5
- Christchurch has granted 663 new licences and declined 7
- Invercargill has granted 54 new licences and declined 0
- Porirua has granted 78 new licences and declined 1.

139. On 7 December 2022 the Sale and Supply of Alcohol (Community Participation) Amendment Bill was introduced to Parliament. The bill aims to improve communities' ability to influence alcohol regulation in their area by:

- Amending the Act so that parties can no longer appeal provisional local alcohol policies
- Allowing district licensing committees to decline to renew a licence if they consider that the licence would be inconsistent with conditions on location or licence density in the relevant local alcohol policy
- Changing who can object to licensing applications
- Changing the way that licensing hearings are conducted.

The bill has passed its first reading and has been referred to the Justice Select Committee. The Select Committee is due to report back to Parliament on 13 June 2023.

Activities funded through the alcohol levy

140. Activities funded through the alcohol levy are unable to directly influence many of the levers that have been shown to be effective in reducing alcohol-related harms (the structural interventions). They have therefore been primarily focused on supporting communities to create the will to shift the dial in these areas. Activities have also focused on research, changing attitudes and supporting communities to engage in decisions that affect them. Operating within this context has been a potential barrier for for the success of alcohol levy funded activities reducing alcohol-related harms. This will be explored further in stage 2 of the review.Many of the interventions funded by the alcohol levy are grounded in the SAFER framework and international good practice. In the new Pae Ora context any argument to increase the alcohol levy would need to be supported by robust evidence on how that increase could be spent to effectively reduce alcohol-related harms and how any expenditure relates to the wider alcohol-harm minimization sector. We note the importance of the alcohol levy fund being transparent

and that Manatū Hauora is accountable for any expenditure from the levy fund to those who pay the levy as well as the New Zealand public more generally.

141. Most stakeholders interviewed during stage 1 of our work mentioned community investment as an impactful use of alcohol levy funding. However, some felt that the community voice has not been strong enough to date for decisions made about how the alcohol levy fund is spent. In particular, some stakeholders felt that the levy fund should be given to kaupapa Māori organisations first given that Māori have a higher proportion of alcohol-related harm and use in New Zealand in comparison to other population groups. This can be exemplified by the Health Coalition of Aotearoa Roopuu Apaarangi Waipiro (Expert Alcohol Panel) submitting to the Health Select Committee (during the examination of the Pae Ora Bill) that 80% of the alcohol levy should be allocated to Te Aka Whai Ora (Māori Health Authority) as Te Aka Whai Ora has the commissioning capability to empower communities to create healthier environments (Health Coalition of Aotearoa Roopuu Apaarangi Waipiro, 2021). Internationally, Muhunthan et al., found that indigenous-led policies that are developed or implemented by communities can be effective at improving health and social outcomes (Muhunthan et al., 2017).

New opportunities for investment

142. New interventions to improve health and reduce harms associated with unhealthy lifestyles emerge frequently, and evidence on the cost-effectiveness of programmes and services evolves over time. While the alcohol levy is hypothecated for alcohol-related activity, the range of potential activity and the investment opportunity of activity may increase. The broadening of the levy's scope under the Pae Ora Act provides an opportunity to explore new activities and interventions. Consideration of any new activities and interventions needs to take into account the clear distinction that must be drawn between core government activities and responsibilities funded through Vote Health, and the role of the levy fund. Further investigation into this question will be undertaken during stage 2 of this review.

CURRENT SETTINGS

143. The current alcohol levy is approximately $11.5 million per annum.

144. For the 2022/2023 year the total levy was allocated between the Public Health Agency and Te Whatu Ora. The Public Health Agency received $979,881, the balance of approximately $10.5 million allocated to the Health Promotion Directorate within Te Whatu Ora, to fund its alcohol harm reduction activities. From this the Health Promotion Directorate allocated $5.46 million to external programmes including those delivered with community partners, sector partners, and external technical experts. We were told that the balance of the levy supports internal FTE and operational functions, including the relational capability that is required to deliver the programme of work.

145. For 2023/24 approximately $3.7 million is currently committed to external funding. An additional $5.095 million is anticipated for staff costs and ongoing overheads. We have been advised that additional programme allocations are yet to be finalised and will be confirmed through completed negotiations.

146. Investments are generally grounded in international research, New Zealand research and reflect the WHO SAFER framework. They are focused on achieving long-term value and system shifts to address alcohol-related harm. Investments are aligned with Takoha, a Tiriti based health promotion framework. The Takoha enablers are Te Tiriti o Waitangi (applying the articles), Ngā Manukura and Te Mana Whakahaera (community leadership and self determination), Māori Mai Ai (decolonizing and indigenising processes), Mahi Tahi (strategic partnerships and collaboration), Mātauranga (applying Māori and Pacific knowledge systems), and Matatau (health promotion and cultural safety competencies, high Māori and Pacific workforce capacity).

147. The current levy investment decisions are also underpinned by the National Alcohol Harm Minimisation Framework (HPA, 2022) which is focused on achieving a reduction in alcohol-related harms over the long term through:

- Effective policy and regulation
- Environments that are supportive of non-drinking
- Improved drinking cultures/social norms.

These changes are considered by the Health Promotion Directorate to be fundamental to decrease alcohol-related harm in Aotearoa New Zealand, especially for Māori.

148. We reviewed three project plans for FY2022/2023 investments, for Community Social Movement, Sport and Alcohol, and the Alcohol Research Programme. The activities set out in these plans are grounded in Takoha: A Health Promotion Framework to align work with the articles of Te Tiriti o Waitangi, and to equity and community-centred approaches, in order to achieve Pae Ora (healthy futures) for Māori and all New Zealanders. However, we were unable in stage 1 to assess the relativity of spend on

by Māori for Māori activities or the effectiveness of these activities. This will be a focus of stage 2 of the review.

149. In the time available for our initial rapid review, we were unable to analyse the rationale, deliverables, monitoring, or evaluation of recent levy investments to identify how they relate to each other, and broader alcohol-related harm reduction work carried out by communities or the government. Further, we were not able to assess in detail how or why any of these investments could or should be expanded if additional levy funds were available. We were also unable to identify how any of these programmes may fill research gaps that were identified by stakeholders in our qualitative interviews.

150. Finally, while we acknowledge that there is an administrative cost to delivering programmes funded by the alcohol levy, we were unable to assess the appropriateness of the $5m of the levy being spend on internal FTE and operational functions (including the relational capability that is required to deliver the programme of work) and whether this continues to be appropriate in the new Pae Ora settings where the fund is no longer administered by an independent Crown Entity. This is a key question for stage 2 of the review.

FY2022/2023

151. The table below sets out how the Health Promotion Directorate planned to allocate the $10.5m of accessible levy funding in FY2022/2023 (Table 6: Planned spend in FY 2022/2023).

Table 6: Planned spend in FY2022/2023

Investment	$
Alcohol research	$850,000
Supporting law change	$300,000
Sport and alcohol – breaking the link	$500,000
Alcohol attributable fractions	$50,000
Digital and non-digital resources	$320,000
Kaupapa Māori Health Needs Assessment	$500,000
Community Social Movement	$500,000
Regional Manager Activity	$700,000
Amohia Te Waiora	$551,000
Pasifika Alcohol Harm Minimisation	$725,000
Youth and 1st 2000 Days	$489,000

Investment	$
Direct staff, enabling staff, and overhead costs	$5,095,000

FY 2023/2024

152. The table below sets out the information that the Health Promotion Directorate made available to us regarding known and expected committed spend in FY2023/2024. We were not provided with sufficient information to determine what proportion of the totals has in fact been committed through contracts (Table 7: Committed spend in FY 2023/2024).

Table 7: Committed spend in FY2023/2024

Investment	$
Culture change and targeted community led partnership programmes	$1,900,000
Regulatory stewardship programmes and research	$1,300,000
Kaupapa Māori regulatory policy change	$500,000

153. An additional $5.095 million is anticipated for Staff costs, ongoing overheads and the internal capability that is required to deliver the programme of work. Additional programme allocations are yet to be finalised and will be confirmed through contract negotiations. It is anticipated that the current levy fund of $11.5 million will or has been budgeted and committed by the Health Promotion Directorate for the 2023/24 year.

What we heard

154. Many of our interviewees perceived that there was a lack of coordination, both within government and between government and non-government stakeholders, in determining how interventions are identified, developed, and delivered. Interviewees were of the view that this lack of coordination leads to significant inefficiencies that could be avoided if all stakeholders were working according to a clear strategy. During our interviews, we also heard concerns from some community stakeholders that too high a proportion of the levy fund is spent on administering the levy fund, and that as a result, too small a proportion is distributed to the community organisations who are delivering harm reduction programmes.

155. Some interviewees indicated that interventions such as regulation and tax, and price-based mechanisms are perceived to result in the greatest reduction in alcohol-related harms. The relationship between the levy and excise tax, the ACC levy and broader

government revenue collection needs to be explored further in stage 2 of this review to determine the ongoing role and utility of the levy in the new Pae Ora context.

156. By contrast, outside of some specific contexts interventions such as social media campaigns and marketing activities were generally perceived by stakeholders we interviewed as being either largely, or totally, ineffective at reducing alcohol-related harms. However, our analysis indicates that interventions designed to de-normalise alcohol use in certain contexts are likely to indirectly contribute to a policy environment, and public discourse, that is more supportive of change. The Law Commission noted (Law Commission, 2010):

We can recommend changes to the law but we are under no illusion that this will be sufficient….. To bed in enduring change the need for it has to be reflected in the hearts and minds of the community and that requires an attitudinal shift and a new drinking culture.

We note that Te Hiringa Hauora has had a particular focus on interventions to shift attitudes around alcohol consumption. These interventions are long-term in nature and from the information available in the short timeframes of stage 1 we were unable to analyse their impact. Stage 2 will provide an opportunity to consider these types of intervention more fully.

Summary

157. While we note that external investments are grounded in international research and reflect the WHO SAFER framework, we had limited time to engage widely with Māori and other stakeholders to provide a considered assessment of the extent to which existing investments align with the principles of the Pae Ora Act and the new operating context as set out above. Further qualitative evidence is required with a particular focus on Māori communities and their expectations. This will be a key focus of stage 2 of the review.

158. Furthermore, the evidence and timeframe available for the stage 1 rapid review did not enable a robust assessment of the effectiveness of particular activities in reducing alcohol-related harm and more generally their overall cost effectiveness. We acknowledge there are some limitations in undertaking these types of assessments given the nature of the activities and their long-term strategic focus. However, this is an important part of the analysis that will need to be undertaken as part of stage 2 to inform any assessment of current allocations of the levy fund in light of the new context.

ANALYSIS AND RECOMMENDATIONS

Context

159. Our stage 1 rapid review has demonstrated that:

- The alcohol levy is disproportionately small relative to even the most conservative estimates of the cost of alcohol-related harm in New Zealand, but the published research on alcohol costs does not indicate any particular relationship between costs of harms and costs of addressing harms
- Alcohol-related harm is more prevalent in some sub-populations
- Structural interventions may have the greatest potential to reduce alcohol-related harm
- The Pae Ora Act specifies the purpose of the levy as a cost recovery instrument, making it inappropriate for the levy to be used as a demand modifying intervention, unlike the excise tax which could be used in this way
- It was not possible to quantify to what extent current levy investments reduce alcohol-related harm in the timeframe and with the material made available in stage 1 of this review
- It was not possible to quantify the cumulative level of harm reduction that levy investments may have, or will achieve, in the timeframe and with the material made available in stage 1 of this review
- More New Zealand specific data on alcohol-related harm and the effectiveness of interventions would be useful to be able to provide strong evidence-based conclusions
- There is a greater amount of overseas evidence on the effectiveness of harm reduction interventions compared to New Zealand specific evidence
- Among those that we engaged with, some participants perceived that the lack of a clear national alcohol-related harm reduction strategy may lead to inefficiencies in the investment of the levy
- Among those that we engaged, some participants perceived that the government is not doing enough to reduce alcohol-related harm
- The Pae Ora Act anticipates the alcohol levy being used across health entities
- The alcohol levy rates are very low in proportion to alcohol prices and the excise tax on alcohol products, so even a substantial increase in the alcohol levy is unlikely to have an impact on alcohol sales.

Quantum

160. As a cost recovery mechanism, the levy has previously been set according to expectations with regards to the cost of delivering programmes and services to address alcohol-related harm. Even with the Pae Ora Act, the levy is still hypothecated, but broadened to include other alcohol-related activities across Health entities, which could include funding research to fill evidence gaps for example or funding to support the development of a cross agency alcohol strategy and action plan.

161. Even without expansion of activities across the Health entities, an increase in the levy fund could be needed to address any current unmet need for programmes and services to address alcohol-related harms, and/or the effective decrease in the real value of the levy fund over time.

162. Consideration of the cost of addressing alcohol-related harm and other alcohol-related activities in line with the Pae Ora Act requires further investigation into the relationship between core government activities and the levy fund. Activities that might have been appropriate for an independent agency may no longer fit within the context of a core government agency, which is required to give effect to government policy. While we acknowledge that there are some internal FTE and operational costs in administering the levy fund and associated activities, the integrity of the levy fund is potentially at risk if almost half of the fund continues to be used for these functions in the medium to long term. As the levy fund is now held and administered by a government agency rather than an independent body, the appropriateness of using the fund in this way will need to be carefully considered through stage 2 of this review.

163. There is an expectation from communities that the levy is spent on effective and appropriate interventions and that there is transparency and accountability across this spend. Similarly, industry representatives indicated that the amount of alcohol levy that they were required to pay was of limited concern to them, particularly when put in the context of the amount of excise tax which is paid. However, they were clear that they would not support an increase unless evidence is provided of effective levy funded activities that reduces alcohol-related harm, and that there is greater transparency and accountability surrounding the use of the levy fund. In this context, it is important to note that industry representatives did not consider all drinking to be harmful.

164. Engaging with Māori and Pacific communities to develop, deliver and monitor programmes, and resourcing services to meet the needs of iwi, hapū, and whānau, are practices intended to increase the effectiveness of health services and programmes to contribute to equitable outcomes for Māori and Pacific peoples. Despite the current National Alcohol Harm Minimisation Framework being grounded in Te Tiriti, there is significant opportunity to expand by Māori for Māori activities to address alcohol-related harms. The role of Te Aka Whai Ora in this space needs to also be carefully considered as a Pae Ora partner.

165. Raawiri Ratu, a key stakeholder and kaiarahi of the Kōkiri ki Tāmaki Makarau Trust, asked that we strongly impress on the government the need to make no changes to the levy until thorough engagement with Māori is undertaken. Mr Ratu considered that before engagement, time must be taken to support Māori communities to understand how the levy came to be, why the levy exists, what the levy is used for, and how the levy is set. Mr Ratu did not consider that the time allocated for our initial stage of the review would allow for adequate engagement with Māori.

Determining the cost of addressing alcohol-related harms and alcohol-related activities

166. Because the alcohol levy is a cost recovery mechanism, an increase in the levy should consider factors that increase the cost of alcohol harm reduction activities funded by the levy.

167. The timeframes and available material for stage one have precluded us from conducting a deeper assessment of existing or proposed investments, making it difficult to provide an evidence-based assessment of what the quantum of the alcohol levy should be at this time. We are also hindered by the fact that for the most part, the 2023/24 levy has been committed. This means that existing interventions would not be subject to the same assessment as any new initiatives.

Options

168. Noting the constraints above we have concluded that there are three options to consider in regard to setting the quantum of the alcohol levy in 2023/24.

- Maintain Status quo
- Inflationary adjustment
- Increase based on actual cost of a set of recommended evidence-based investments. These investments include expansion of existing programmes where the evidence of effectiveness was available and new interventions based on international research, New Zealand research, and feedback from communities.

169. Table 8 below sets out the anticipated total levy quantum for each option, as well as the associated increase per unit of alcohol. Table 7 on the following pages summarises the costs and benefits of each option.

170. All options are presented on the assumption that no ongoing financial commitments will be made past June 2024 for any of the proposed interventions listed, and that the outcomes of stage 2 of this review will inform the role, function, and quantum of the levy beyond June 2024 – as well as future funding commitments. This will include consideration of the relationship between the levy and the excise tax in the new operating context. As discussed, (in section 2 of this report) the excise tax, not the levy, is likely to continue to be the primary lever through which government can influence demand for and consumption of alcohol and, therefore, potentially reduce alcohol-related harms.

Table 8: Cost of options

Option	Levy Quantum	Increase of	Class of alcohol	Current rate for 2022/23 (cents per litre)	New rate for 2023/24 (cents per litre)	Increase in rate (cents per litre)
Status Quo	$11.5 million	Nil				Nil
			A	0.5594	0.5594	0
			B	1.6282	1.6282	0
			C	2.9833	2.9833	0
			D	3.7291	3.7291	0
			E	6.3343	6.3343	0
			F	14.4172	14.4172	0
CPI adjustment	$21.5 million	Approx. $10 million				Between 0.4065 cents and 9.7312 cents per litre depending on alcohol content
			A	0.5594	0.9659	0.4065
			B	1.6282	2.8463	1.2181
			C	2.9833	5.1517	2.1684

Option	Levy Quantum	Increase of	Class of alcohol	Current rate for 2022/23 (cents per litre)	New rate for 2023/24 (cents per litre)	Increase in rate (cents per litre)
			D	3.7291	6.4396	2.7105
			E	6.3343	11.1727	4.8384
			F	14.4172	24.1484	9.7312
Programme cost recovery assessment and adjustment	$ 16 million	$5.5 million (For new initiatives)				Between 0.1594 cents and 3.5537 cents per litre depending on alcohol content
			A	0.5594	0.7188	0.1594
			B	1.6282	2.1182	0.4900
			C	2.9833	3.8338	0.8505
			D	3.7291	4.7922	1.0631
			E	6.3343	8.3145	1.9802
			F	14.4172	17.9709	3.5537
	$21 million	$9.5 million (Expansion of priority existing initiatives)				Between 0.3841 cents and 9.1696 cents per litre

Option	Levy Quantum	Increase of	Class of alcohol	Current rate for 2022/23 (cents per litre)	New rate for 2023/24 (cents per litre)	Increase in rate (cents per litre)
						depending on alcohol content
			A	0.5594	0.9435	0.3841
			B	1.6282	2.7801	1.1519
			C	2.9833	5.0319	2.0486
			D	3.7291	6.2898	2.5607
			E	6.3343	10.9128	4.5785
			F	14.4172	23.5868	9.1696
	$ 26.5 million	$15 million (For expansion of existing and standing up of new initiatives)				Between 0.6312 cents and 15.3471 cents per litre depending on alcohol content
			A	0.5594	1.1906	0.6312
			B	1.6282	3.5082	1.8800
			C	2.9833	6.3497	3.3664
			D	3.7291	7.9372	4.2081

Option	Levy Quantum	Increase of	Class of alcohol	Current rate for 2022/23 (cents per litre)	New rate for 2023/24 (cents per litre)	Increase in rate (cents per litre)
			E	6.3343	13.7710	7.4367
			F	14.4172	29.7643	15.3471

Maintain status quo

171. The current alcohol levy is approximately $11.5 million per annum.

172. Given the constraints within stage 1 of this review we lack the evidence to be able to comfortably recommend moving beyond the status quo for the 2023/24 financial year. Stage 2 of this review will provide the opportunity to better engage with communities and consider fundamental questions relating the role, scope, and purpose of the levy. Answers to these questions are needed to fully assess the appropriate levy quantum.

173. Maintaining the status quo ensures continuity of existing commitments pending the outcomes of stage 2 of this review. However, there are risks with maintaining the status quo. We found that the levy quantum has remained constant over a period of 9 years, despite population growth which would have increased the need for programmes and services to address alcohol-related harms even without the prevalence of alcohol-related harms increasing. In other words, the aggregate cost to the system of addressing alcohol-related harm has likely increased, even if the average level of alcohol-related harm experienced by individuals has remained steady. We also found that if the new health sector principles translate into increased costs per service user or require services being made acceptable and appropriate to a wider range of users, then there is a justification for an increase in the levy fund to cover these costs.

174. Furthermore, our interviews indicated that stakeholders do not think that the government is taking adequate action to reduce alcohol-related harm. Maintaining the status quo could also be seen as a signal that existing spending is sufficient to enable Te Whatu Ora to comply with the Pae Ora Act. This is a question that needs to be addressed in stage 2 of the review.

Inflationary adjustment

175. Key costs involved in both administering the levy and delivering harm reduction interventions are likely to have increased since the levy was last adjusted. However, it is unclear what adjustment should be made, if any.

176. One option is to adjust the levy quantum based on the CPI. The general CPI is the most appropriate measure of inflation in this context due to it underpinning many employment agreements and wage negotiations, and the likely labour intensity of harm reduction interventions. As discussed above, if the levy fund had been adjusted using the CPI, it would have generated between $566,217 and $1,970,105 in additional revenue each year since 2012/13. Based on this adjustment, the cumulative levy shortfall due to a lack of adjustment over the past nine years is approximately $10 million. We note this estimate does not include an assessment of the impact of possible CPI adjustments prior to the establishment of Te Hiringa Hauora (ie, during the period when the levy was collected and administered by ALAC).

177. However, there are some risks with this approach.

- It is unclear whether a CPI increase would accurately reflect the increase in actual costs of existing programmes

- A single-year CPI adjustment may not meet the increased costs of on-going programmes. This also limits the potential for levy investments in new or expanded activities

- Decision-makers must agree to the start date of a multi-year CPI increase, which may be difficult to determine and justify, given the levy could have been, but was not, adjusted based on the CPI previously

- An expectation may be created that the levy will continue to be adjusted on this basis annually.

178. As with maintaining the status quo, this approach does not consider whether current investment is the right investment, is delivering effective return, and is in line with the Pae Ora Act. As noted above, more investigation needs to be undertaken at stage 2 of this review to determine this.

Increase to fund specific investments

179. All interviewees agreed that to meaningfully reduce alcohol-related harm, the government must commit to a long term, consistent, and strategic programme of interventions that induces trust between government and non-government stakeholders.

180. Aligning the levy fund to the cost of specific, needed investments would be consistent with its cost recovery mandate and is the option which is best aligned with the Pae Ora Act and principles. However, it is difficult at this stage to provide a robust analysis as to what programmes or activities should (or should not) be included. This assessment is also muddied by the current allocation of funding to existing programmes and, in particular, internal FTE and operational functions for the Health Promotion Directorate and the question as to whether these are still appropriate uses of the fund in the new settings.

Preferred option

181. Any increase in line with Option 2 or 3 proceeds on the presumption that the current allocation is appropriate and consistent with Pae Ora and expectations from communities. Although there may be elements of existing activities that meet these criteria, we are not in a position at this stage of the review to support that conclusion.

182. **We therefore recommend:**

C. The status quo remains for 2023/24

D. No commitments of levy funding are made either internally or externally beyond June 2024 until stage 2 of this review is complete and any recommendations regarding the future, scope and application of the fund are considered.

Alternative option

183. If there were, however, to be an increase in the levy fund for 2023/24, **we recommend:**

A. Any increase is calculated on the actual increase in the cost of ongoing interventions as well as the actual cost of additional interventions to be undertaken. In other words, the interventions need to be determined and agreed before calculating the quantum of any increase. This is in line with the cost recovery requirements of the Pae Ora Act.

B. No commitments of levy funding are made either internally or externally beyond June 2024 until stage 2 of this review is complete and any recommendations regarding the future, scope and application of the fund are considered.

178. While the available evidence is limited at this stage of the review, we have identified some key existing programmes which could be extended and some new initiatives that could be implemented in 2023/24.

179. Te Hiringa Hauora's National Alcohol Harm Minimisation Framework and Takoha have guided the development of existing programmes. Our analysis indicates that the Framework is based on the best available national and international evidence and recommendations, including the WHO SAFER framework. Further, our analysis indicates a sufficient level of alignment between the Framework and the new requirements for health entities under the Act. While we have recommended awaiting the findings of stage 2 of the review, this gives us a higher level of confidence that increasing the levy to provide additional funds to these programmes for FY2023/24 would be expected to deliver benefit. We have also identified some additional activities that align with Pae Ora outcomes and international good practice examples.

180. On this basis, we have identified that, to fund certain additional investments in FY2023/24, the levy could be increased by an additional $5.5m to $15m. These investments are set out below. It is important to note that this increase would have a relatively small impact on the price of alcohol, as set out in table 7 above.

Allocate additional funding in relation to sports sponsorship and advertising

181. In FY 2023/24, additional levy funding could be allocated to the sports sponsorship removal demonstration projects and associated monitoring and evaluation.

182. Of the non-structural interventions we discussed in our interviews, the removal of alcohol sponsorship and advertising from sports was perceived to be the most effective at reducing alcohol harm. Our literature review found some evidence that restricting alcohol marketing is likely to influence the climate of tolerance around alcohol and alcohol policies. Further, many interviewees commented positively on the effectiveness of similar initiatives in relation to tobacco sponsorship and advertising and believed that a similar approach should be taken in relation to alcohol. However, we are conscious that some interviewees held this view primarily on the basis of evidence from overseas jurisdictions, which as we have discussed, may not be entirely applicable in Aotearoa New Zealand.

183. We understand that, in FY 2022/2023, the Health Promotion Directorate invested $500k in demonstration projects to gain evidence of the effectiveness of this

intervention in New Zealand contexts. We also understand that an expansion of this programme has been costed and could be implemented relatively quickly.

184. We have found sufficient evidence to warrant immediate investigation to support communities to decide whether this is an appropriate long-term intervention. Accordingly, $5 - 10m of additional levy funding could be allocated to delivering The Health Directorate's expanded programme.

Fund priority research

185. It was apparent from our literature review that there is a large body of international evidence on alcohol harm and harm reduction, but a relatively smaller body of evidence that is specific to New Zealand contexts. Some stakeholders cautioned us that policy makers could not necessarily rely on findings from international research applying in New Zealand. Our analysis indicates that it is essential for communities to be able to access robust and applicable research findings to inform their ongoing participation in alcohol harm related activities and licensing decision-making, policy-making, monitoring, and reporting.

186. We understand that Te Hiringa Hauora developed an Alcohol Research Programme, and that $850,000 of the levy fund was allocated to carrying out that programme. There remain significant research gaps in the New Zealand context. We estimate that $0.5 - $2m of any additional levy funding could be allocated to fund additional research projects to address some of the highest priority research projects.

Data collection

187. In FY 2023/2024, increased investment of levy funds could be focused on the collection of data on the cost of alcohol harm and the effectiveness of various interventions in relation to Māori, Pacific, people with disabilities and rural communities. Our review has identified a need to collect time-series data to begin to support communities to understand alcohol harm and the impact of the range of previous and potential interventions in the long term. In particular, data should be collected on any unmet need for programmes and services to address alcohol harms, to enable communities to effectively advocate for increased investment in the future. This data must be disaggregated and collected from a variety of sources including qualitative data from communities and whānau.

188. While some interviewees were of the view that there is already sufficient international data to inform decisions about particular harm reduction interventions, other interviewees impressed on us that that data collected in overseas jurisdictions cannot necessarily be assumed to apply in the Aotearoa New Zealand context. We are particularly conscious that Aotearoa New Zealand has a number of unique constitutional arrangements in relation to specific sub-populations that may affect the applicability of overseas data on the effect of alcohol and associated interventions on certain sub-populations. We estimate that $1 -$2m could be invested in improving data collection over FY 2023/24.

Support community participation in licence hearings

189. We understand that Te Hiringa Hauora was providing some funding to Community Law Centres Aotearoa to support communities' participation in local decision making on alcohol.

190. Our interviews indicated that participation in district licensing hearings is perceived to be one of the few opportunities available to communities to carry out a health protection activity, namely reducing the availability of alcohol in their environment. We heard that it is difficult, for several reasons, for communities to meaningfully participate in licensing hearings. One of the primary concerns raised was that community members seeking to object to a licence are often under-resourced compared to the business applying for a licence.

191. A review of the Community Law Alcohol Harm reduction Project found that project improved the quality and effectiveness of community participation in licensing hearings and that overall participation in licensing hearings appeared to be increasing with the support of the project (Allen + Clarke, 2021).

192. We estimate $1.25m of additional levy funding could be allocated to expand the geographical coverage of this initiative with a particular focus on those areas and regions of high deprivation.

Continue and increase funding for regional community initiatives aimed at reducing alcohol-related harm

193. We have identified that increased investment in community initiatives aimed at reducing alcohol-related harm might also deliver benefit. Most interviewees strongly impressed on us that community organisations have both the best understanding of alcohol harm in their environments and the best understanding of how to reduce that harm within the constraints of the present legislative regime.

194. In particular, additional levy funds could be allocated for the development of further capacity amongst iwi, hapū, hapori, whānau, Māori authorities, and health providers to contribute to alcohol harm reduction. We consider that Te Aka Whai Ora would be best placed to be responsible for monitoring and evaluating the effectiveness of investments made in this regard. We note that Te Aka Whai Ora would require additional levy funding to provide secretariat and administrative support to this initiative and to distribute funds to iwi, hapū, hapori, whānau, Māori authorities, and health providers to deliver initiatives and activities designed by and delivered by them.

195. The risks and benefits of the options discussed above are summarised in table 9 below.

Table 9: Costs and benefits of levy quantum options

Levy Quantum	Benefits	Risks	Consistency with Pae Ora	Consistency with Te Tiriti Obligations	Ability to be implemented quickly
Status Quo	• Simple, easy to implement. • Builds on momentum of independent evidence and research aligned to Pae Ora. • Allows full review to be completed before any change-decision made.	• Due to pre-existing commitments, limits scope for a health-agency partnership approach to work programme development in a manner consistent with Pae Ora Act. • Communities may perceive status quo as government inaction. • Limited scope for new/expanded initiatives.	**Moderate**	**Moderate**	**High**
CPI increase	• Clear and proven method. • Enables existing on-going programmes to receive an uplift if needed [note: it would be difficult to ensure increased funding accurately reflects actual costs – see risks]. • If CPI increase applied across multiple years, provides additional funding to cover new or expanded initiatives. • Scope to expand joint entity initiatives across Te Aka Whai Ora and the Public Health Agency.	• If a single year CPI adjustment was made, it is unlikely to accurately meet increased costs of existing. programmes (may still result in real-terms cuts) and limited (if any) scope for new/expanded initiatives. • Multi-year CPI adjustment requires agreement as to start date for calculation (decision makers' time is constrained) and harder to justify as opportunity to make this adjustment has been available each year. • Perception that current spending is what is required and in line with Pae Ora Act.	**Moderate**	**Moderate**	**Low**

Levy Quantum	Benefits	Risks	Consistency with Pae Ora	Consistency with Te Tiriti Obligations	Ability to be implemented quickly
		• Potential perception CPI adjustments will be ongoing year on year. (notwithstanding full review of Levy not due until Q4 2023).			
Increase based on cost of existing programmes and cost of expanding existing and/or standing up new programmes / interventions	• Creates opportunities to be more transparent around spend and reason for increase. • Based on cost of interventions as envisaged by Pae Ora Act. • Good transition year option (lower likelihood of appearing to set the pattern for future years). • Allows for innovation and partnership (health-agencies partnership, and increased partnership with communities), and increased research and data collection. • Can clearly identify new work that will create broader stakeholder engagement (mitigating risk of ongoing perception of lack of transparency). • Capacity to invest in improved data collection (and sharing),	• Requires management of expectations around the time it takes to see effects from interventions. • Difficult to assess programmes in short period of time. There is a degree of risk in assuming that expanding existing-funded (or implementing new) programmes will have a positive impact based on their alignment with good practice in other areas. • Total agreed increase requires justification to demonstrate alignment with Pae Ora Act.	**High**	**High**	**Moderate**

Levy Quantum	Benefits	Risks	Consistency with Pae Ora	Consistency with Te Tiriti Obligations	Ability to be implemented quickly
	providing a stronger evidence base for work programmes.				

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