Independent Review of the Alcohol Levy

Stage 1: Rapid Review





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

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+64 4 890 7300 office@allenandclarke.co.nz www.allenandclarke.co.nz



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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 In 2022 the Pae Ora Act repealed the alcohol provisions of the Health and Disability Act and disestablished Te Hiringa Hauora, placing it within the National Public Health Service and as, part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 alcoholrelated 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 alcoholrelated 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

- 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 1976¹ to fund the newly established Alcohol Advisory Council of New Zealand² (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)).





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.

- 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).

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 increas e (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

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 increas e (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 alcoholrelated 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).

	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%

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

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

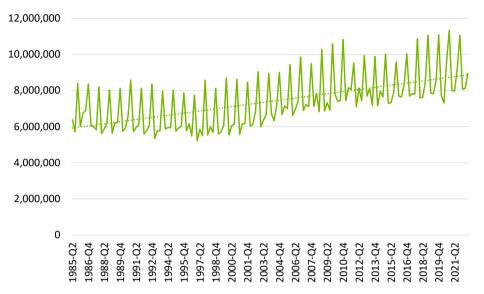
48. Below we provide a summary of available data on a range of measures, or proxy measures, for analysing trends in alcohol consumption. The purpose of this summary is to provide a snapshot of how people are currently consuming alcohol in Aotearoa New Zealand, any visible trends over time, and how these 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).



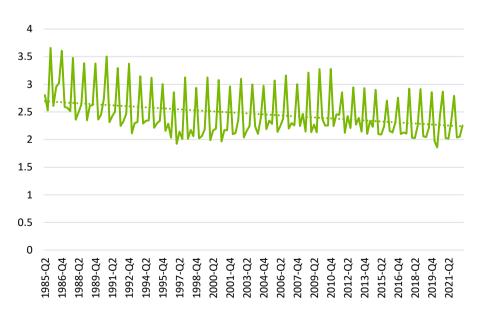
Figure 2: Alcohol available for sale: Quarterly volume of pure alcohol (litres)



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.

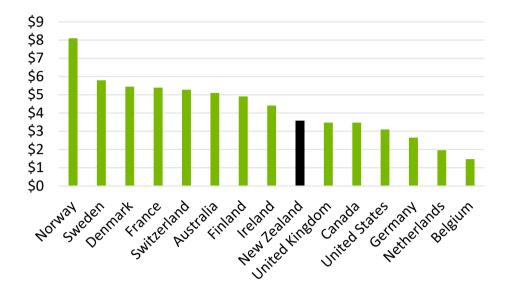


Figure 4: Average price of beer in selected OECD countries (USD per 500ml)

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).

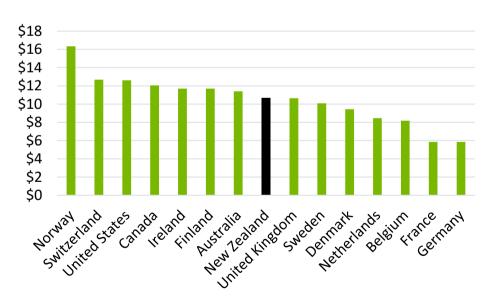


Figure 5: Average price of wine in selected OECD countries (USD per 750ml)

Source: World Health Organization, Global Health Observatory



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).

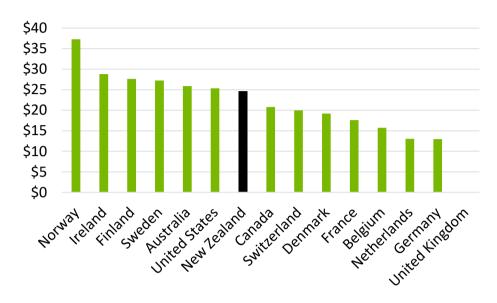


Figure 6: Average price of spirits in selected OECD countries* (USD per 500ml)

Note: Data not available for the United Kingdom.

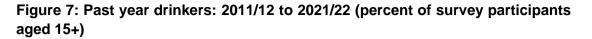
Source: World Health Organization, Global Health observatory

- 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+)).





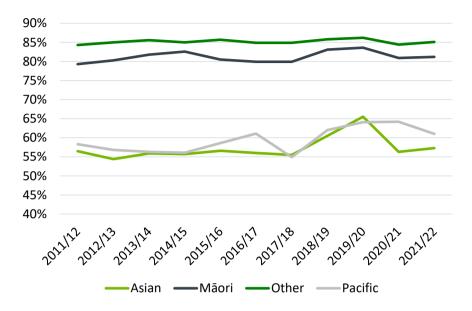


Source: NZHS data

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

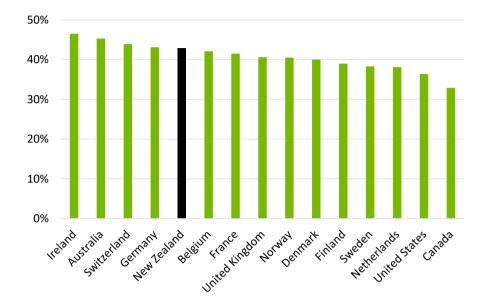
65. Disability status has only been reported since 2018/19 and is based on self-reported disability status. In 2021/22, when adjusting for differences in age and gender, persons with disabilities were 0.94 times as likely as persons without disabilities to report drinking in the past year; however, this 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).</p>

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).
- 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 Maori 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 noncommunicable 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).

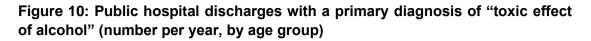
Alcohol and violence

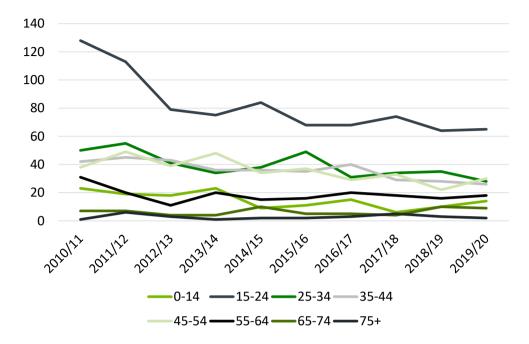
- 79. is associated with a substantial amount of violence in Aotearoa New Zealand. In 2009, the New Zealand Police National Alcohol Assessment showed that alcohol is involved in (New Zealand Police, 2009):
 - A third of all Police-recorded violence offences
 - A third of all recorded family violence
 - 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").



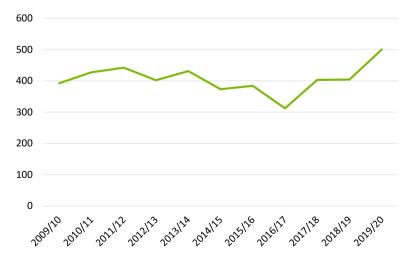




Source: Te Whatu Ora

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).

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

Table 4: Summary of selected international studies that reported on the social cost of alcohol-related harms.

(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
 - \circ inflation
 - o patterns of alcohol consumption and alcohol-related harms
 - o 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 decisionmaking 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 offlicence 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 elasticities⁶, 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.



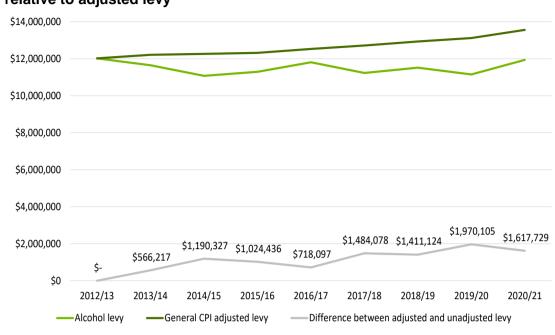


Figure 12: Levy fund with and without CPI adjustment, and actual levy shortfall relative to adjusted levy

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 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,	RAISE prices on alcohol through excise taxes and other pricing			
			and promotion	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 socioeconomically 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

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- 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).

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 1 st 2000 Days	\$489,000		

Table 6: Planned spend in FY2022/2023



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 pricebased 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 alcoholrelated 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	2022/23 (cents per	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
			В	1.6282	1.6282	0
			С	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
			В	1.6282	2.8463	1.2181
			с	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
	\$ 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
Programme cost			В	1.6282	2.1182	0.4900
recovery assessment and			С	2.9833	3.8338	0.8505
adjustment			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	2022/23 (cents per	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
			В	1.6282	2.7801	1.1519
			С	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
			В	1.6282	3.5082	1.8800
			С	2.9833	6.3497	3.3664
			D	3.7291	7.9372	4.2081

Option	Levy Quantum	Increase of		2022/23 (cents per	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 muddled 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.	 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
	 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), 				

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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