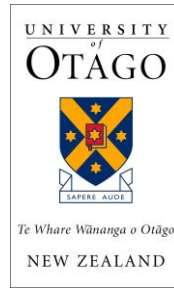




# **Reducing Alcohol-Related Harm in Wellington's Entertainment Precinct**



## Competing interests

The authors have no competing interests.

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# 1. Executive Summary

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## 1.1 Introduction

This report investigates the causes and practicable interventions regarding alcohol related harm (ARH) in the Wellington entertainment precinct (WEP). Alcohol related harm was defined as a range of detrimental effects resulting from alcohol consumption, including long term health effects, anti-social behavior, criminal behavior, accidents, reduced productivity and failure to meet responsibilities. ARH has detrimental effects on a myriad of people involved with or who frequent the WEP and therefore is an important public health issue. The renowned vibrancy of Wellington City was considered in the writing of this report, with recognition that it is an important factor of Wellington's culture.

The WEP has been defined as the area enclosed by Blair and Allen St and continuing onto Courtenay Place from Kent Terrace to Taranaki St. It is apparent that the majority of ARH occurs in this area. For that reason, it is necessary to consider practical interventions that can be implemented effectively to reduce ARH within the precinct. This study aimed to determine the causes of ARH, current interventions used locally or internationally and the applicability of these interventions.

## 1.2 Methods

A review of the literature on potential interventions to reduce harm in an entertainment precinct was undertaken. An online survey and key informant interviews were used to investigate potential interventions and gauge support for these interventions.

### 1.2.1 Survey

An online survey aimed at Wellington's 18-30 year old population was used to assess their drinking habits, their use of Wellington's entertainment precinct, and their opinions on possible interventions for reducing ARH. The AUDIT-C questionnaire was used to evaluate the respondents' risks when it came to their drinking habits. A Likert scale was used to gather information on the respondents' attitudes on 4 main categories; atmosphere, harms, enforcement and interventions. Respondents were given statements and were asked to respond on scale of strongly disagree, disagree, undecided, agree or strongly agree.

### 1.2.2 Interview

We attempted to contact 22 key stakeholders associated with the WEP. Eighteen interviews were carried out in total and included 8 health professionals, 3 police officers, 6 business owners/staff and 5 Wellington city council members. The questions aimed to determine the stakeholders' stance on ARH in the WEP and their thoughts on current and possible interventions that could be put into effect. We conducted thematic analysis of the interviews.

## 1.3 Results

### 1.3.1 Survey

Of the 202 respondents, 61.9% were 'female', 36.6% 'male', 1.5% 'other' gender, 73.3% 'NZ European', 8.4% 'Māori', 4% 'Asian', 1% 'Pacific Islander' and 13.3% 'other' ethnicity. The survey identified that majority of the respondents (94%) consumed alcohol in the precinct. However, of those who purchased alcohol from on-licence premises, with majority consuming 1-2 drinks within the precinct. The survey also identified that majority of the respondents were AUDIT-C positive meaning they had a moderate to high risk associated with their drinking habits. These results suggest there is a pre-loading drinking culture within the 18-30 year old age range. This conclusion is backed up by the finding that 60.9% of respondents either "always" or "almost always" pre-loaded before heading into Wellington's entertainment precinct.

The most significant harms identified in the survey were; violence/fighting, unwanted sexual advances, and drinking to the point of needing medical attention. In terms of preventing hazardous drinking habits, the survey indicated that cheaper alcoholic drinks available from on-licence premises would make participants less likely to pre-load and that taxation was not likely to deter the participants from drinking.

Interventions that were highly supported by the survey participants were increased police and ambulance staff presence. Participants were unsupportive of early closure of premises, reducing alcohol content in alcoholic drinks and raising the legal drinking age.

By ethnicity, Maori participants were in more support of raising the legal drinking age, reducing alcohol content in drinks after 2am and using plasticware as effective interventions compared to non-Maori.

When the responses to the statements were stratified by the AUDIT-C scores, it showed dose response trends in attitudes to the statements. For example, those who had a low AUDIT-C score (low risk from their drinking) were more likely to agree or strongly agree with the statement "binge drinking is a problem in Wellington's entertainment precinct" whereas those who had a high AUDIT-C score (high risk from their drinking) were more likely to be undecided. Those with mid AUDIT-C scores sat in between.

### 1.3.2 Interview

In terms of ARH, most interviewees focused on health-related effect, with less mention of economic harms. 'Drinking culture' was identified as a major contributor to ARH and a change in attitude towards alcohol would supposedly result in a reduction in ARH. It was noted that environments outside bars played a role in ARH in the WEP and that altering the environment could result in a reduction of ARH. Law and policy changes addressing cost of alcohol, raising the minimum legal drinking age and introducing a minimum cost were highly discussed with a consensus of support for the proposed policy changes. Suggestions were made addressing these possible interventions. It was noted that an increase in communication between stakeholders could help address ARH and the implementation of interventions.

## 1.4 Recommendations

We have developed some recommendations on interventions that could be implemented to reduce the level of ARH in the WEP. Recommendations were formulated based on our assessment of the evidence base of interventions from the literature; identification of any key drivers of harm from the literature and the surveys/interviews; the public and key stakeholders' opinion of the intervention effectiveness and their level of support for implementation.

Upon writing this report it was recognised that implementation of interventions in combination with each other would present an appropriate approach to the reduction of ARH. However, we recommend that the Wellington provisional local alcohol authority policy be reviewed, updated and implemented.

Recommendations were separated into local and national level interventions. The recommendations are listed below,

### Local level strategies:

- Local policy changes that would address reducing density of off-licence premises and staggering closing times for on-licence premises in the precinct. This could be achieved in collaboration with stakeholders working towards implementing a local alcohol policy.
- Review of the effectiveness of enforcement of Wellington Liquor Bylaw such as infringement notice for those in breach,
- Review the optimal level of police presence in the WEP to reduce ARH (especially at peak times) and strengthen host responsibility along with encouraged use of plasticware on licenced premises within the precinct,
- Research the effectiveness of the presence of Māori wardens in reducing ARH and subsequently establish the willingness of Maori wardens to participate and implement the warden system. Include local iwi representatives in the Alcohol Forum and council decisions regarding local alcohol regulation.
- Consider changes to the urban design including improved lighting, increased number of toilets, improve transport options late at night, and consider closing Blair and Allen streets to road traffic after 10pm on weekends or 'busy' nights.
- Improve communication between key stakeholders groups by; holding more regular and frequent meetings, increasing stakeholder participation in the Alcohol Forum, and encouraging the collection and dissemination of data regarding alcohol related harm within the precinct.

### National level strategies:

- Increased advocacy for increasing the minimum legal drinking age,
- Increase advocacy regarding the minimum unit price for alcohol in order to reduce price discrepancies between on- and off-licence premises
- Further research around the effectiveness of ARH interventions, with the results stratifying for Māori and non-Māori data.
- Research targeted educational campaigns for reducing hazardous drinking behaviours, for example directed at masculine gender roles and/or Māori

## 2. Background and Objectives

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### 2.1 Purpose

The overall purpose of this report is to provide a comprehensive investigation into alcohol-related harm (ARH) that occurs in Wellington's entertainment precinct (WEP) as well as the potential feasibility and efficacy of key interventions that may be implemented to reduce this harm whilst maintaining the vibrancy of the precinct.

### 2.2 Background

#### 2.2.1 Alcohol-Related Harm

ARH broadly encompasses a range of detrimental effects resulting from alcohol consumption, including long term health effects, anti-social behaviour, criminal behaviour, accidents, reduced productivity and failure to meet responsibilities. These effects include but are not limited to:

- unintentional injury
- intentional self-harm
- road traffic crashes
- feelings of depression
- aggression and fighting
- anti-social/criminal behaviour
- unwanted sexual encounters and sexual abuse
- damaged relationships
- financial impact and inability to meet social, family and work responsibilities
- health consequences of long-term excessive drinking, including increased risk for a variety of cancers, cardiovascular disease, and liver disease (1–6).

These harms are not limited to the individual consuming the alcohol, but have widespread implications for general society. This due to the cost of resources and the harms experienced by the people that the consumer comes into contact with. These people include other members of the public, authorities, and health professionals (1–3,7). For example, in the 2012/13 New Zealand Health survey 17% of males and 13% of females reported experiencing physical harm as a result of someone else's drinking (2).

##### 2.2.1.1 Incidence

The incidence of ARH is significant. Estimates from police state that a third of all criminal offending in New Zealand is alcohol-related. This includes 49.5% of homicides, 34% of family violence incidents and 20% of sexual offences (8).

Road traffic injuries, self-inflicted injuries, and other unintentional injuries are all recognised in the top five causes of alcohol-attributable deaths in New Zealand men (9). The literature features violence and unintentional injury as prominent examples of ARH (2).



A large scale study found one in six presentations to the emergency department (ED) on a weekend nightshift in New Zealand were related to alcohol consumption (10). Another New Zealand hospital found as much as one in four presentations on a Saturday night shift were directly as a result of alcohol consumption (11). The most common reasons for these presentations were unintentional injury, violence, alcohol excess and intentional self-harm. Furthermore, alcohol has been found to have contributed to 79% of violence related injuries (with violence contributing a total of 17% of total injuries) in an Auckland emergency department (12). Injury from violence was also reported to occur most often in a public place or licensed outlets thus identifying that there is something about these environments that foster violence (12).

The 16–25 year age group is heavily overrepresented throughout the literature for ARH in New Zealand from both their own alcohol use and harm from others' alcohol use (1,2,11). They are also more likely to engage in risky behaviours such as driving whilst under the influence of alcohol (2). As this age group are high users of the entertainment precinct, further emphasis is placed on the 16-25 age group as a focus for reducing ARH.

Although less likely to consume alcohol, people of lower socioeconomic status have higher rates of hazardous drinking (2,13).

### 2.2.1.2 Māori

There are significant disparities between ethnicities in New Zealand for ARH and hazardous drinking behaviours. The Wellington region exemplifies this; data from the Māori Health Profile for Capital and Coast DHB (14) shows Māori females are 1.6 times as likely to be admitted to hospital in the Capital and Coast DHB for alcohol-related causes compared with non-Māori females (95% CI: 1.23-2.08) (14). Māori males were 2.18 times as likely to be admitted for alcohol-related causes compared to non-Māori males (95% CI: 1.75-2.71) (14). Māori were nearly 2 times as likely to be admitted to hospital in the CCDHB for alcohol abuse problems than non-Māori in the 2011-13 period (14). Māori also had a higher rate of hospitalisation for injury with leading causes being falls, assault and intentional self-harm, all of which have been shown to have high correlations with alcohol use (10–12).

The World Health Organisation has identified alcohol as one of the ten most significant social determinants of health contributing to inequality that can be influenced by public policy (15). Therefore, it is imperative that research is undertaken to address the issue of ARH, as it is a factor that may be widening the health disparities between Māori and non-Māori in New Zealand. We are obliged to take steps towards eradicating health inequities in order to honour the principles of Te Tiriti o Waitangi. This includes ensuring the needs of Māori are being met, and that in the event they are not (such as their higher burden of ARH) steps must be taken to meet this need (16).

### 2.2.1.3 Effect on health services

ARH has broader societal effects, negatively impacting on the mental and physical health of emergency staff as well as compromising the care of the general public. The impact that intoxicated individuals have on Wellington Hospital ED staff was identified in a study conducted by Gunasekara Imlach et al. (7). It was found that more than half the staff interviewed had experienced some form of assault from inebriated individuals, and nearly all of them acknowledged an increased workload from alcohol-related presentations (7).

The study's findings also supports the idea that patients presenting for ARH have a wider impact on those presenting to the ED for unrelated alcohol presentations. An ED registrar was quoted as saying "you've got potentially worse people in the waiting room, and they cannot get into the department to be seen because of somebody who's pissed" (7). In addition 37 out of 47 of the study's participants identified an increased wait time for other patients due to intoxicated people (7).

There is also a problem with diversion of healthcare resources (i.e. the health budget) to help curb ARH. The cost of ARH that can be attributed to health care has been estimated at \$343 million annually (17). Of this figure, approximately one third is due to inpatient hospital costs (17).

#### 2.2.1.4 Cost to society

The economic burden of ARH is significant and acts as a political incentive to solve this substantial problem in New Zealand. An economic report presented to the Ministry of Health in 2009 attempted to quantify this cost (17). It was discovered that \$4,437 million was dedicated to the harms associated with alcohol misuse in the 2005/06 year (17). This includes the tangible cost of labour cost/unemployment (\$1,763.6m), crime (\$716.5m), drug production (\$342.2m), health care (\$343m) and road crashes (\$204.5m) (17). The figures become even more significant if the intangible costs of alcohol harms are also included. It was estimated that an additional 14,250 people would have been alive if there had been no alcohol misuse (17). With the assumption that one life is valued at \$106,600 this adds \$1,520m to this value (17).

Another paper attempted to quantify the global cost of alcohol fuelled harm (18). The major players identified in this study were, in order of highest economic burden; public order and safety cost, health care cost, drink driving cost and criminal damage cost (18). By analysing the most robust studies internationally, a rough estimate of 0.6-2% of total global GDP was suggested as being attributable to ARH (17). Although an older paper, this dramatic estimate gives us a good idea about the huge economic burden ARH has on our society.

The current literature base surrounding ARH tends to focus solely on individual harms, such as hangover and accidental injury. There is a large deficit in data on the more indiscriminate harms experienced as a result of others drinking. This makes it particularly hard to account for interpersonal issues such as relationship violence, concerns about safety, property damage and environmental effects such as broken glass and vomit on the street (8). Nevertheless, the ubiquitous nature of ARH shows the importance of implementing social interventions in order to mitigate harm towards both the drinking individual and society as a whole.

### 2.2.2 National and historical context

New Zealand's alcohol consumption is well-documented and the binge-drinking culture widely recognized. The 2011/12 New Zealand Health survey found that the majority of adults (80%) had consumed alcohol within a 12 month period and 1 in 5 were classified as having a hazardous drinking pattern (13). Of these, men were more likely to exhibit this behaviour than women, and those in the 18-34 age range had the highest rates of hazardous drinking (13).

Excessive alcohol consumption and related harms are not a new issue in NZ, in fact we had an international reputation for drunkenness and lawlessness as a fledgling colony in the 1830s (19). Laws

surrounding alcohol and its use have existed since 1842, when one of the first acts of Governor Captain William Hobson was to prohibit the distillation of spirits for drinking (19). The laws in NZ only became consistent nationwide in 1881 when the Licensing Act was passed (20). The Licensing Act made opening new bars and liquor stores harder, it also restricted the hours premises could be open for and set a “drinking age” (20).

Our heavy alcohol intake and its associated problems created a strong temperance movement, which gained influence from the late 1800s, with resulting responsive government action (19). 1910 saw the drinking age rise to 21 (19). In the 16 years previous to this raise of the drinking age, some general electorates banned liquor sales in their area (19). In response to the temperance movement and as a wartime measure the government implemented a 6pm closing time for bars in 1917, which led to people attempting to drink as much as possible before closing time, known colloquially as the “6 o’clock swill” (19).

Legislation in the years following led to looser restrictions around the sale of alcohol (19). Some of these restrictions included the extension of opening hours, an increase in the number and types of outlets allowed to sell, a decrease in the minimum drinking age from 20 to 18 years of age, and a decrease in the restrictions placed on on-licensed 24 hour trading, BYO restaurants, et cetera. (19).

Although there were benefits to be gained from the liberalisation of alcohol law, by the early 21st century, general opinion was that the pendulum had swung too far, and reform was needed (21). Prior to the latest review and reforms, the most recent legislation was the Sale of Liquor Act 1989 (21). In 2010, the Law Commission undertook a systematic review, reform and development of new law for NZ concerning alcohol sales, supply and consumption (21). The resulting document called “Alcohol in our lives: curbing the harm” included 153 recommendations (21). Key policy recommendations included:

- A new Alcohol Harm Reduction Act to replace the 1989 act
- Increasing price of alcohol through taxation to decrease consumption
- Regulating promotions that encourage increased consumption or purchase of alcohol and moving over time to regulating advertising and sponsorship
- Increase minimum purchase age of alcohol to 20 years
- Strengthen responsibility of parents in regard to supplying minors
- Increase personal responsibility for harmful behaviours related to alcohol
- Reducing maximum licensed opening hours
- Introduce new grounds whereby alcohol licences can be declined
- Increase local input into licensing decisions via Local Alcohol Policies and District Licensing Committees
- Improve systems to treat people with alcohol problems (21)

Subsequently, the Sale and Supply of Alcohol Act 2012 was passed in order to reduce the burden of ARH in New Zealand (22). This act allowed local governments to develop their own Local Alcohol Policies (LAP) that regulate the sale of alcohol in their own district - including regulating the opening hours of both off-licensed and on-licensed premises (22).

The 2012 Act requires on-licence and club licences to be responsible hosts (22). They are required to encourage the responsible consumption of alcohol by offering low alcohol and non alcoholic drinks as well as free water and food (22). As transport away from a licensed premise can be an important issue for patrons, staff are required to offer help and information on possible transportation options (22). To achieve this, management and staff should be well trained and keep their skills updated (22).

A number of the recommendations made by the Law Commission, which had the greatest evidence to support efficacy, were not included in the 2012 Act (23). Excise tax, increasing minimum purchasing ages, restricting exposure and content of promotion were rejected by NZ government (23). Modifications to the suggested changes were made regarding restrictions on trading hours, one way door policies and voluntariness of local authorities to develop LAPs as well as restrictions on outlet density (23).

### 2.2.3 Local legislative context

The Wellington City Council (WCC) understands that Wellington City is an important entertainment destination for the region and New Zealand as a whole but excessive alcohol consumption and related harms threaten the vibrancy of the city (24).

As part of the outcome of the 2012 changes, WCC elected to develop a provisional LAP with the aim of reducing ARH in Wellington City, and the entertainment precinct in particular (24). The main intended outcome of this provisional policy was reduced harm caused by excessive alcohol consumption, while increasing the vibrancy in the central city at night. It had the aim of a reduced focus on alcohol within the precinct and a greater focus on personal responsibility for safe alcohol consumption (24).

In 2015, the provisional LAP was appealed to the Alcohol Regulatory and Licensing Authority by eight parties on a number of issues. The key issues in contention related to licence hours for the central area (and off-licences generally), and what were described as “compulsory licence conditions” relating to on-licences which authorised trading hours beyond 3.00am. The Authority ruled that the provisional LAP needed to be recast and resubmitted, which has not transpired (25).

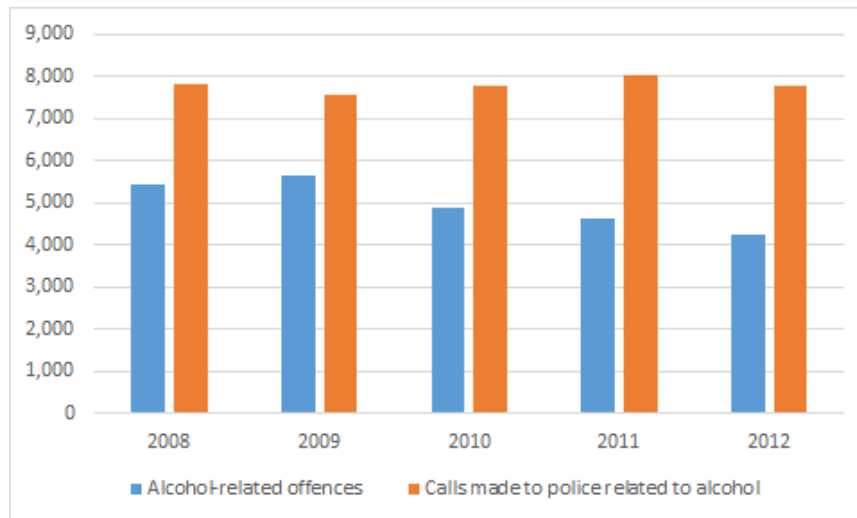
The WCC also has an overarching strategic document, the Alcohol Management Strategy. The suggestions made in the document include but are not limited to:

- Creating an off-license group with the aim of increasing corporate responsibility for the sale of alcohol
- Trialling a reduction in off-license hours
- Advocating for the government to increase minimum the price of alcohol
- Working with the Health Promotion Agency on social marketing campaigns for behavioural and attitude changes around drinking habits
- Widening and strengthening the central city liquor ban
- Introducing automatic hearings for proximity and density matters
- Improving late-night transport options - e.g. fixed-price taxis from venues, late night buses
- Developing designs to promote safe streets, footpaths and open spaces by using lights to give a safer look
- Creating a ‘chillout zone’ on Courtenay Place for excessively intoxicated patrons
- Increasing cross-sector collaboration (24,26).

### 2.2.4 Wellington’s entertainment precinct

Wellington has one of the largest entertainment precincts in the country and its role as a desired tourist destination with a dynamic nightlife makes the area significant to the New Zealand economy. Wellington has a higher number of restaurants and bars with 25.7 licences per 10,000 people compared to 18.5 for all New Zealand (27). Geographically, licensed premises are densely packed. 71% of licensed premises are located in the Lambton Ward with 79% of these being bars, nightclubs and restaurants (26). There are also several large tertiary student accommodation halls of residence nearby, enabling students to have easy accessibility to town through public transport or walking.

*Table 1 Police statistics for alcohol-related incidents in Wellington (28,29)*



As shown in Table 1, police data show that alcohol-related offences in the Wellington region have been trending downwards, but that rates of calls made to police involving alcohol have remained consistent over the period 2008-2012 (28,29). Their data also show that these alcohol-related incidents are predominantly localised around the eastern end of Courtenay Place (28,29). This is shown in the featured heat map (figure x), which highlights the areas of Courtenay Place from Blair to Taranaki street as having the highest prevalence of alcohol-related harm in Wellington (30).



Figure 1 (30)

In addition to this geographical concentration of alcohol-related harm, there is a temporal trend in its occurrence. Alcohol-related harm increases as the night goes on, particularly from 1am onwards and is highest between the hours of 3-4am (28,29). Those most at risk are the 18-24y old age group (28,29).

Police and WCC have identified pre-loading and side-loading as key contributing factors to excessive alcohol intake and its associated harm (24,29). Pre-loading is when an individual purchases alcohol from off-licence premises and consumes that alcohol prior to travelling to the centre city (24). Side-loading is when an individual purchase alcohol from off-licence premises and consume that alcohol on-route to or while queuing for on-licence premises (24). Both of these methods enable individuals to cheaply consume large quantities of alcohol prior to entering licenced premises, which generally have expensive beverage prices.

## 2.2.5 Possible solutions to address ARH

During our literature review we came across multiple different interventions to reduce alcohol related harm. The most prominent ones are discussed below.

### 2.2.5.1 Taxation

Increasing taxation on alcohol has been shown to be a cheap and effective way to reduce ARH whilst targeting the entire population (31). Taxation based on alcohol percentage has also been successful in other countries, however since NZ taxation is banded, manufacturers produce cheap but high alcohol products in order to maximise the taxation (31). It is important to note that New Zealand's tax on beer as a percentage of retail price (10%) is lower than that of several comparable countries including the Netherlands (20%), Ireland (20%), Denmark (34%) and Australia (24%) (32). An increase in this tax is

supported by a report commissioned by the Alcohol Advisory Council of New Zealand (ALAC) (33). This report assessed that the revenue generated from the alcohol excise tax in New Zealand (approximately \$500m) does not cover the public health costs of ARH, let alone the enormous social costs (33). It was consequently recommended that the excise tax be increased to at least cover external costs (33).

#### 2.2.5.2 Earlier closing times

Earlier closing times for both on- and off-licence outlets have been implemented extensively internationally in an attempt to curb the effects of alcohol availability on ARH. In regards to earlier closing times for licensed outlets, research has been mixed regarding whether a blanket closing time is an effective strategy to reduce harm. A study in Australia looked at the effect of extended trading hours on ARH compared with standard hours (34). It was found that for each bar with extended trading hours in a defined area, there was a significant 4.6% increase in the number of night time injuries in that area (34). In contrast to this, here in New Zealand, an introduction of a blanket closing time for all on licence premises in Auckland in 2013 may have contributed to an increase in alcohol related injuries (35). This may be due to the idea of a 'peak-density' time following the closure of many bars at the same time leading to crowds of patrons leaving bars all at once. Evidence for this includes the data from the Police Monthly Statistical Indicators which shows that there was a significant increase in serious assaults resulting in injury from May 2013 - May 2014 after the introduction of the blanket closing times (35).

Restricting the times of the sale of alcohol from off licensed premises is another strategy has been implemented to reduce ARHs. In New Zealand, the 2012 Sale and Supply of Alcohol act restricted the hours in which alcohol could be sold from off-licenses to between 7am and 11pm (22). Other countries have shown a more drastic approach, which includes the introduction of a policy in Switzerland that stipulated a ban of alcohol sales between the hours of 9pm and 7am (36). A study that looked at the effectiveness of this policy found that there was a statistically significant drop in the number of hospital admissions that were attributed to alcohol intoxication after the introduction of the policy (36).

#### 2.2.5.3 Raising minimum purchase age

Perhaps one of the most widely debated interventions is raising the minimum purchase age of alcohol. This is supported by the consequences of lowering the legal drinking age from 20 to 18 in 1999, which resulted in a significant increase in alcohol-related hospitalizations among young people in New Zealand (21). Both US and Australian data show this is the most effective measure to reduce ARH (31,37,38). The US's historical data supports this intervention in particular. When the minimum purchase age was reduced in the US in the 1970's there was an increase in alcohol consumption and ARH, however this decreased when the age was raised again to 21 in 1984 (37,38). This evidence is all in favour of raising the minimum purchase age to reduce ARH.

It is important to note that with so many competing interests from stakeholders, policy interventions are difficult to implement and face considerable resistance from stakeholders and the public alike. Thus we also chose to explore non-policy interventions aimed at reducing the short-term/immediate ARHs experienced by consumers in a social environment. From the literature we came up with multiple interventions:

#### 2.2.5.4 Increased police presence in Courtenay Place

In Wellington, police regularly visit licenced premises at night-time to ensure hosts are complying with the

Sale of Liquor Act - i.e. underage and intoxicated patrons are not being served (39). New Zealand's *National Alcohol Strategy* (6) has three broad strategies for reducing ARH which mainly focus on licensed premises - one of these is 'supply control'. Supply control initiatives are further divided into three types, one of which is 'enforcement approaches' involving police and other regulatory agencies (such as district licensing agencies). A Wellington study looking at the impact of enforcement on intoxication and ARH (39) found that during the period of heightened enforcement of liquor licensing laws via increased police presence in the entertainment precinct there were:

- decreased number of 'highly intoxicated' people
- decreased violence and disorder offences
- less ambulance attendances to assault-related and alcohol-related incidents
- observable changes in bar staff behaviour, including bar staff being more attentive to customers as well as an increase in visibility of bar signage relating to serving underage or intoxicated patrons
- stricter bar entry requirements

This suggests that increased police presence in the WEP may be an effective solution for reducing ARH.

#### 2.2.5.5 Street hospital/triage - Medics in Courtenay Place

Prehospital treatment and triage facilities have been trialled in Wellington previously during Wellington Sevens tournament and the Rugby World Cup quarter final weekend in 2011 (40). These were located both at the venue and, after the event, in Courtenay Place (40). This was found to reduce the workload for the ambulance service and ED as less patients were required to be transported to hospital (40). Cost savings for the ambulance service and ED during the rugby world cup and 2012 Sevens weekend were estimated at NZ\$70,000, with the service provided by the street hospital costing approximately 70-80% less than sending these patients to hospital (40). As well as the advantage of keeping beds free in ED, it also provided a safe place for overly intoxicated individuals, thus preventing them from coming to any harm or causing harm to others.

#### 2.2.5.6 Less alcohol advertising in CBD

There appears to be a link between advertising and increased consumption of alcohol by young people (41,42). Having a specific brand preference including preference for brands aligning with 'traditional' kiwi values (masculinity, hard physical activity) has been found to be associated with consumption of larger volumes of alcohol (43). However, In Australia, the United States, and other countries, regulations governing the promotion of alcohol have been relatively ineffective at reducing ARH (44,45). These studies do not look at alcohol advertising in specific areas and therefore may not necessarily be applicable to restricting advertisement in entertainment precincts.

#### 2.2.5.7 Reduce alcohol content

An Australian study identified that reduced alcohol content within beverages moderately reduced alcohol consumption and intoxication, and ARH (46). During June, 2016, Queensland brought into action new drinking laws aimed to ARH (47). A section of these laws banned serving alcoholic drinks 'shots' containing more than 45mL of spirits after 12 am, however, spirits or liqueurs under 45ml of alcohol (such as gin and tonic, rum and cola, neat whisky) were exempt (47). The implementation of these new laws saw opposition from members of the community through protest (47). There is no data discussing the effects of this intervention in Queensland at the time of this report.



#### 2.2.5.8 Reusable Plasticware

Following the introduction of a bylaw by the Glasgow City Council in 2006, the use of glassware by nightclubs was banned (48). A study observed the amount of violence in the nightclubs which began to use plasticware compared with nightclubs that were exempt from the bylaw (48). The severity of violence and presence of disorderly conduct were both greatly reduced in the nightclubs using plasticware instead of glass (48). The study also interviewed patrons and staff finding that a higher feeling of safety was present in the plasticware only venues (48).

#### 2.2.5.9 Staff training (bar, management and security staff)

An English study identified the entry point into venues as a 'flashpoint' for violence and aggression from those who had 'pre-loaded' due to being denied access to a venue (49). Other possible interventions can target elements of the drinking environment that contribute to the development of ARH. Such elements can include bar designs which lead to overcrowding and discomfort, staff who are unequipped to deal with intoxicated clients, an aggressive approach taken towards remaining clients by bar staff and police at closing-time, and serving practices that promote inebriation (50). An example of an intervention addressing some of these elements is the Safer Bars program implemented in Canada (51). This program aimed to reduce alcohol-related aggression in bars by encouraging bar staff and managers to complete a workbook and 3 hour training program (51). The workbook and training program enabled staff and managers to identify some of the elements previously mentioned and learn ways to reduce these elements and subsequent alcohol related aggression (51). A randomised control trial found that this program was effective in reducing the frequency and severity of moderate and severe alcohol related aggression in bars (51). This intervention could be used as a possible model for stand alone interventions which target the drinking environment to reduce ARH.

#### 2.2.5.10 Increased Māori Warden presence

Māori Wardens are a volunteer organisation unique to New Zealand. They are not police but aim to create safer communities by providing a presence to: diffuse tensions and manage disorderly behaviour, provide security at events and in public places, carry out street patrols, and conduct walk-throughs at licensed premises (52,53) There is no literature on the efficacy of Māori Wardens for reducing ARH or crime, however it is a possible alternative to police for reducing violence and aggression outside bars, ensuring the safety of overly intoxicated patrons, as well as providing a means of surveillance to help reduce crime in the entertainment precinct.

## 2.3 Research stages

The research project was conducted over a six-week period between April and May 2017. A three-stage approach was utilised in this project which combined qualitative and quantitative methodologies. These included:

1. An initial investigation phase to define our scope - involving a literature review and document analysis.
2. Quantitative research - involving an online survey of 202 Wellington residents between the ages of 18-30, conducted in April 2017.
3. Qualitative research - involving 18 open-style key informant interviews with stakeholders of Wellington's entertainment precinct.

The full report on methodologies can be found in section 3.

## 2.4 Rationale

Our research is focused on reducing alcohol-related harm in Wellington's entertainment precinct while attempting to maintain the vibrancy of Wellington's nightlife and culture. Thus, while we have established the views of stakeholders on issues and effectiveness of taxation, reducing the legal drinking age and closing bars earlier, we have also attempted to look at other alternative, less documented strategies for reducing ARH.

Our methodology is based largely on previously explored, evidence-based interventions, and we developed both our survey and key informant questions based on our literature review. However an exception to this is in regards to Māori wardens which are unique to New Zealand and thus has had little in the way of literature exploring their effectiveness.

## 2.5 Overall Objective

**The overall purpose of this project was to gain a better understanding of alcohol-related harm within the Wellington's entertainment precinct and to explore interventions that could successfully be implemented in order to reduce alcohol-related harm.**

This report was designed in order to help inform interested and invested parties in Wellington City regarding possible strategies to reduce ARH in the entertainment district (i.e. on-licence premises) in addition to what is currently implemented. In order to do this we collected information regarding:

1. The strength of evidence around the effectiveness of various strategies
2. Public opinion on the nature of alcohol-related harm in the entertainment precinct, and receptiveness and support for possible interventions aimed at reducing these harms
3. Various stakeholder's opinions on the nature of alcohol-related harm in the entertainment precinct, the underlying cause of these harms and possible strategies that may be implemented to mitigate them.

We aim to develop recommendations for a collaborative strategy that is both effective at reducing harm and acceptable to stakeholders and the public. Our recommendations are to take into consideration the importance of maintaining the vibrancy of the nightlife, as well as aiming to increase the amenity of the centre city at night.

## 2.6 Research Objectives

In order to meet the overall objective we aimed to:

- Determine the main types and level of alcohol-related harm in Wellington's entertainment precinct.
- Identify evidence-based interventions both nationally and internationally aimed at reducing alcohol-related harm within entertainment districts in order to come up with possible interventions that could feasibly be implemented in Wellington's entertainment precinct.
- Assess the receptiveness to, and support for, these approaches from stakeholders in Wellington's entertainment precinct and entertainment precinct users living in Wellington.

## 3. Methodology

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### 3.1 Quantitative Methodology

#### 3.1.1 Online survey design and sampling

We conducted an online survey to assess participants' drinking habits, their use of Wellington's entertainment precinct (WEP) and their opinions on interventions that could reduce ARH (see Appendix 1 for full survey questions). The survey was carried out from the 21st April to the 1st May, 2017. We aimed to collect 200 survey respondents. To be included in the survey, respondents had to live in the Wellington area and be aged 18-30 years at the time of the survey. The survey was delivered via an online forum; 'Vic Deals', a free trading and discussion Facebook forum targeting students and young Wellington residents.

#### 3.1.2 Survey Questions

Questions on drinking habits and use of the WEP were mostly multiple-choice precoded questions. The AUDIT-C questionnaire was incorporated to identify participants at risk of hazardous drinking (for analysis), while a Likert scale question style was used for opinions on interventions. A final open ended question was used to ask participants for any further suggestions for reducing ARH. A copy of the survey questionnaire is included in appendix 1.

Participants were asked the AUDIT-C questionnaire: a three question survey that can help identify individuals at risk of alcohol misuse (54). It is a modified version of the ten question AUDIT instrument. Each question is scored out of a possible 4 points and an aggregated score of all three questions is placed on the scale of 0-12 points. A total of 0 reflects that no alcohol has been used in the past year.

In men, a score  $\geq 4$  is considered positive for alcohol misuse whilst for females there is a lower threshold with a  $\geq 3$  being considered as positive. The higher the score, the greater the health risks, and the more likely the person's alcohol use will be affecting their health and safety. A score of 8 or above has been shown to greatly increase risks for complications of drinking, as well as giving relatively high rates of alcohol dependence.

Using a five-level Likert Scale, participants were asked about their attitudes to the following statements:

- a. I feel safe at night in the Wellington entertainment precinct
- b. I like the atmosphere of the Wellington entertainment precinct
- c. I will be allowed into licensed premises if I'm intoxicated
- d. I notice the police presence in the Wellington entertainment precinct
- e. Cheaper drinks in bars/restaurants would make me less likely to pre-load
- f. I think alcohol-related harm is getting worse in Wellington's entertainment precinct
- g. Violence, assaults and fighting that occurs within the Wellington entertainment precinct usually involves drunk people
- h. Increasing taxation on all alcohol (making drinks more expensive) will make me drink less

- i. I always adhere to liquor ban areas
- j. Having cheaper non-alcoholic drinks available will make me less likely to consume alcohol
- k. Binge drinking is a problem in the Wellington entertainment precinct

### 3.1.3 Pilot Study

A pilot study was carried out with approximately ten respondents from the Wellington region before the main data collection was undertaken. The purpose of the pilot was to determine average survey timings as well as refining the questions if they were difficult to interpret. No substantial changes were made to the survey apart from eliminating a few questions to help maintain the five minute time constraint, and formatting for easier reading. Due to the changes made, we didn't use any data gathered from these participants.

### 3.1.4 Quantitative Analysis

A general descriptive analysis was undertaken and the variations in respondents' gender, ethnicity, drinking habits and use of WEP were presented in graphic form.

Responses for the Likert scale were divided into three aggregated responses for analysis. "Agree", which included both strongly agree and agree, "disagree", which included strongly disagree and disagree and "undecided." The variations were presented in a Likert scale bar chart. Google docs survey software was used for analysis.

## 3.2 Qualitative Methodology

### 3.2.1 Key informant interviews design

A total of 18 key informant interviews with 21 stakeholders in WEP were conducted between Monday 24th April and Tuesday 2nd May 2017. Of those interviewed, 15 interviews were held face-to-face at convenient locations for the interviewee and a further three interviewed via a phone call. Interviews were expected to run for 30 minutes. However there was large variation in length interviews running between 20 minutes and 90 minutes

### 3.2.2 Qualitative Sampling Structure

#### Recruitment

Invited stakeholders were identified via a variety of sources (including recommendations by Regional Public Health, and direct contact of businesses, health professionals and police) and grouped in accordance with their relationship with WEP and included; Business staff (including hospitality workers,

security staff, business owners or managers) whose businesses or places of work are located on Courtenay Place (from Kent Terrace to Taranaki Street), Blair Street or Allen Street, Wellington City Council staff, Health Professionals (including Regional Public Health staff, Emergency Department staff, Ambulance Officers and Academics), and police officers, all of which work within the Wellington region. The personal identity of stakeholders was kept anonymous, they were only identified through their relationship to WEP.

There were a total of 21 participants, with three of the four Wellington City Council staff and two of the three police officers being interviewed at the same time in their respective groups. In total there were six business staff, four Wellington City Council staff, eight health professionals and three police officers interviewed.

51 stakeholders were contacted via email, phone or facebook message. Of these stakeholders, 32 were business members within the precinct (map outlined in Appendix xxx), eight council workers, eight health professionals and three police. Of those contacted, 28 stakeholders did not respond and a further two refused or were unavailable during the study period.

### Interview Questions

During the interview, stakeholders were asked to give their opinion on alcohol-related harm in WEP as well as on interventions to reduce these harms. The interview questions were designed to guide conversation and were not an exhaustive list of potential topics that was able to be covered during the interview. The structure of the questions were organised to firstly determine the stakeholders perception of the nature of the harms in WEP and secondly, to discuss potential interventions to address these harms. The questions related to alcohol-related harms looked at what the stakeholder believed the harms were, the contributing factors to these harms and whether or not they have changed over time. The questions addressing potential interventions looked at stakeholders thoughts on current known interventions, coordination of invested groups towards reducing alcohol-related harm and the specific interventions that could be applied with focus on the barriers to their implementation. Full list of interview questions can be found in the Appendix 2.

### Qualitative Analysis

During interviews, both written notes and audio recordings were taken. All audio recordings were later transcribed to enable thematic analysis to be completed. Thematic analysis was conducted by six of the researchers who each coded three interviews. Themes were coordinated by the researchers after grouping the key informants into the four groups; business staff, health professionals, Wellington city council workers and police. Each theme was derived from the perceived harms and causes as well as the interventions that were proposed during the interviews, with the viewpoint of each of the four groups being taken into consideration when evaluating the themes.

### Ethical Approval

The University of Otago Human Ethics Committee granted approval for this project (reference number D17/123), having met the University of Otago policies of research validity and being ethically sound.



## 4. Results for Survey

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### 4.1 General Participant Information

Those who responded to the survey were predominantly female, at 61.9% of the entire participant population. NZ European were the most represented ethnicity followed by NZ Māori as shown in Table 4.1.1.

*Table 4.1.1. Self-reported demographic information from participants. There were 202 responses for the survey all aged between 18-30 years old.*

Gender	(n)	%
Female	125	61.9
Male	74	36.6
Other	3	1.5
Prefer not to say	0	0
Total	202	100

Ethnicity	(n)	%
NZ European	148	73.3
NZ Maori	17	8.4
Pacific Islander	2	1.0
Asian	8	4.0
European Other	15	7.4
Other	12	5.9
Total	202	100

### 4.2 Participant Drinking Habits using AUDIT-C Scores

The majority of the participant population were AUDIT-C positive, as shown in the 'totals' of Table 4.2.1. As the AUDIT-C tool is a brief alcohol screen that can identify those who are hazardous drinkers or have active alcohol use disorders, most of our survey participants were classified as relatively hazardous to very hazardous drinkers. For all respondents, 10.9% had negative scores, while 89.1% had positive scores indicating alcohol misuse.



When separated by gender (Table 4.2.1), the majority of all groups had a positive AUDIT-C score ( $\geq 3$  or 4). Whilst there were similar levels of positive scores by gender, when compared to females, males had a higher percentage of scores of 8+ with 48.7% of males compared with 32% of females.

*Table 4.2.1. AUDIT-C scores separated out by gender. Those who classed themselves as 'other' in the gender category have no specified cut off score within the AUDIT-C criteria, so the cut off was set at the lower AUDIT-C negative score with AUDIT-C negative  $<3$ . However, those who identified as 'other' and fell in the 3-7 Audit C positive group both had raw data numbers of 6.*

	AUDIT-C Negative	AUDIT-C Positive	
	0-2	3-7	8+
<b>Females n/125 (%)</b>	12 (9.6%)	73 (58.4%)	40 (32%)
	0-3	4-7	8+
<b>Males n/74 (%)</b>	10 (13.5%)	28 (37.8%)	36 (48.7%)
	0-2	3-7	8+
<b>Other n/3 (%)</b>	0 (0%)	2 (66.7%)	1 (33.3%)
<b>Totals</b>	22 (10.9%)	103 (51%)	77 (38.1%)

### 4.3 Use of Wellington's entertainment precinct, alcohol consumption and alcohol purchase within the precinct

The majority of participants went out to Wellington's entertainment precinct (WEP) after 7pm 2-4 times a month, 2-3 times a week or almost weekly within the last year (Figure 4.3.1). During times that participants visited the precinct after 7pm it was very likely that alcohol was consumed, with 83.6% of respondents indicating that they always (26.2%), most of the time (35.6%) or some of the time (21.8%) consume alcohol whilst in the precinct (Figure 4.3.2).

Of the 202 participants, 190 responded that they consumed alcohol within the precinct. This group was then asked where they were purchased this alcohol (with the ability to select multiple locations of purchase). 163/190 (86%) indicated that they purchased alcohol within licensed premises, 80/190 (42%)

purchased from supermarkets or liquor stores within the precinct, 38/190 (20%) brought in alcohol from outside the precinct for consumption, and 5/190 (3%) chose the 'other' option (Figure 4.3.3). Of those that purchased within the licensed premises, 52% only bought 1 or 2 drinks (Figure 4.3.4).

On average within the last year, how often do you go out to Wellington's entertainment precinct (as shown within the circle) after 7pm?

202 responses

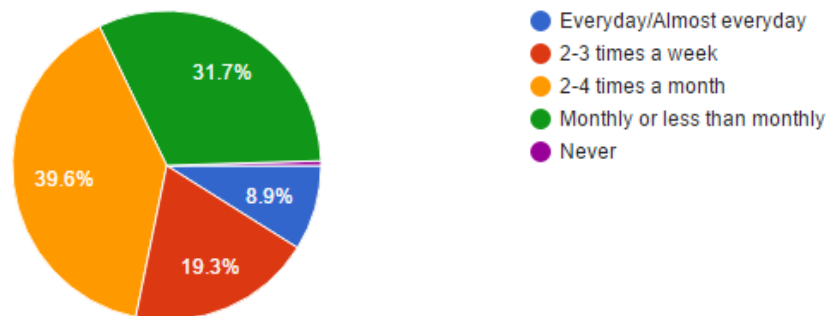


Figure 4.3.1. Use frequency of Wellington's entertainment precinct after 7pm within the last year.

During those times, how often would you consume alcohol whilst in the precinct?

(202 responses)

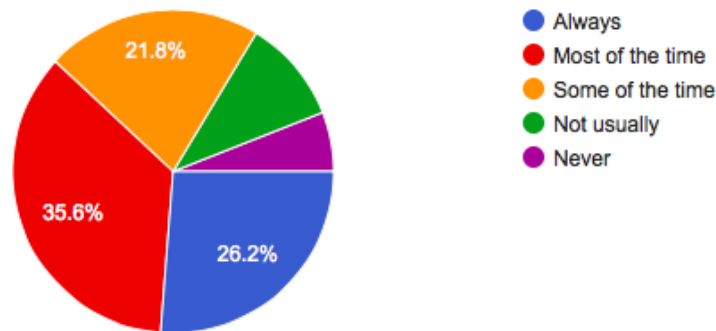


Figure 4.3.2. Rate of alcohol consumption when using Wellington's entertainment precinct

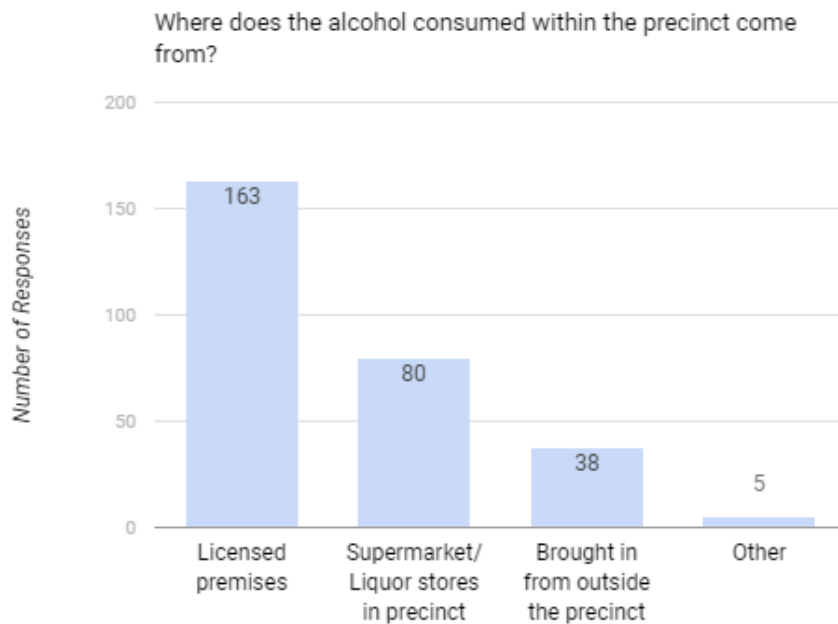


Figure 4.3.3. The source(s) of alcohol consumed within Wellington's entertainment precinct for those who previously stated that they consume alcohol in the precinct. Participants were given the option of choosing multiple places that they purchase alcohol whilst in the precinct so number of responses represented n/190.

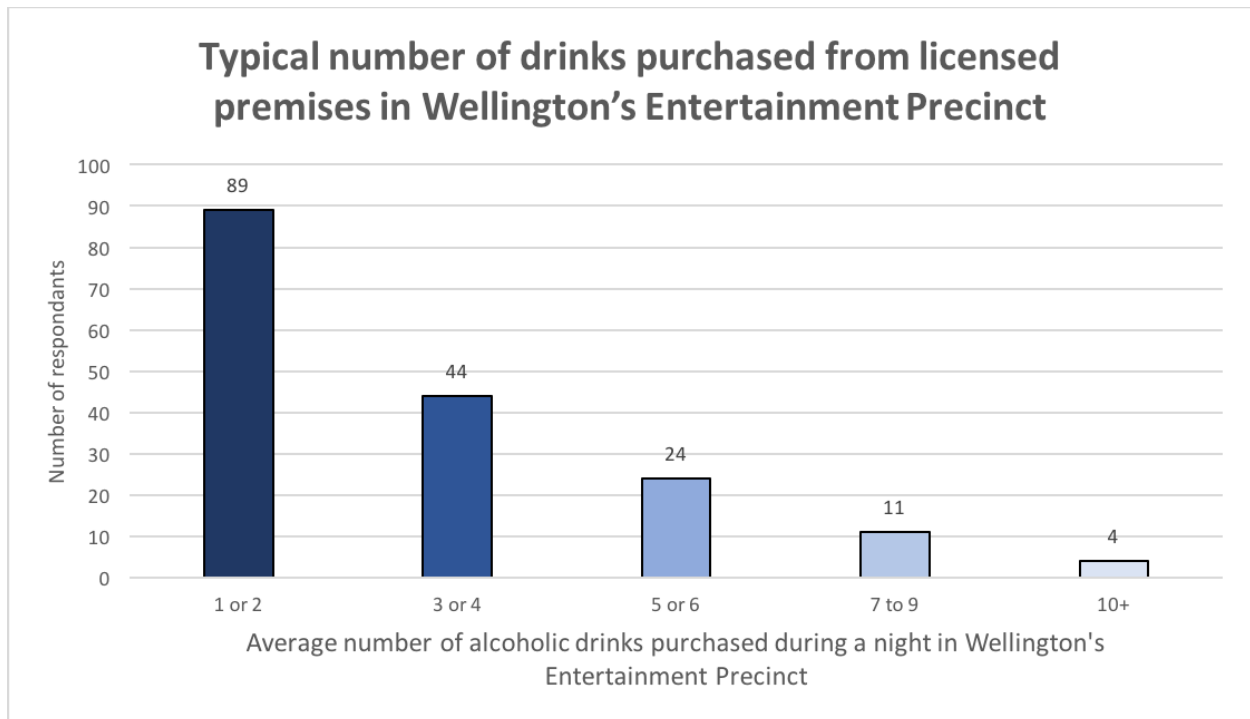


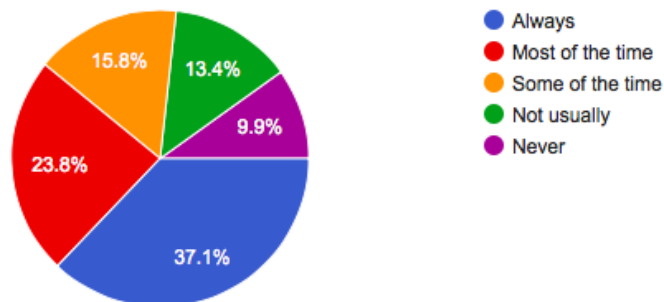
Figure 4.3.4. Typical number of drinks purchased from licensed premises in Wellington's entertainment precinct. If participants responded that they bought alcohol from licensed premises, they were asked how many drinks they would purchase on an average night within the precinct.

## 4.4 Pre-loading and side-loading before and during use of Wellington's entertainment precinct

Levels of pre-loading were relatively high within our participant population with 37.1% of participants saying that they would 'always' pre-load (Figure 4.4.1). 76.7% of respondents said they pre-loaded either always, most of the time or some of the time whilst only 23.3% said they don't usually, or never, consume alcohol before going into the precinct.

Side-loading (Figure 4.4.2) however was less common in respondents than pre-loading with 67.8% admitting they don't usually or never purchase alcohol from an off-licence premises en route to or whilst queuing for a licensed premise.

**How often would you consume alcohol before going into the precinct?**  
**(pre-loading)**  
(202 responses)



*Figure 4.4.1. Frequency of consuming alcohol before visiting Wellington's entertainment precinct after 7pm (pre-loading).*

How often would you consume alcohol purchased from an off-licensed premises (supermarket or liquor store) en route to, or while queueing for, a licensed premises? (side-loading)

(202 responses)

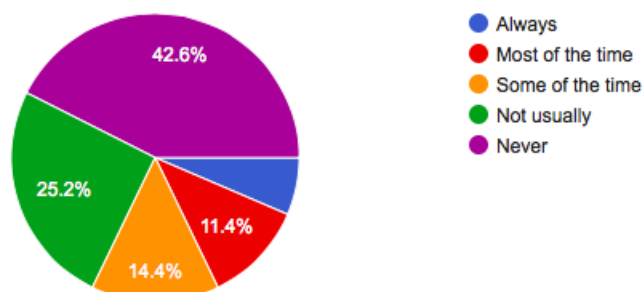


Figure 4.4.2. Frequency of purchasing alcohol from off-licence premises while using Wellington's entertainment precinct after 7pm (side-loading).

## 4.5 Respondents' opinions on given statements about Wellington's entertainment precinct and alcohol consumption

Participants were given a list of statements and asked, via a Likert scale, to give their attitudes on them. We have separated the eleven statements into the following categories: Atmosphere (Figure 4.5.1), Harms (Figure 4.5.2), Enforcement (Figure 4.5.3), and Interventions (Figure 4.5.4).

In regards to 'Atmosphere' (Figure 4.5.1), there was higher agreement that people like the atmosphere of the precinct, as well as them feeling safe within it.

Only 11% of people disagreed with the statement that binge drinking is a problem within WEP (Figure 4.5.2). There was also low disagreement, at 3%, that violence, assaults and fighting, that occurs within WEP, usually involves drunk people. 88% of people agreed with this statement on violence. 45% respondents were unsure if the harms were getting better or worse.

49% of respondents indicated that they always adhere to liquor ban areas and 52% of people indicated that they notice the police presence within the precinct (Figure 4.5.3). In regards to being able to enter licensed premises intoxicated, 40% of respondents agreed that they would be allowed into licenced premises when they're intoxicated, 32% disagreed that they would, and 28% were unsure.

"Having cheaper non-alcoholic drinks available will make me less likely to consume alcohol" was a statement that had a general disagreement, with 63% of participants disagreeing (Figure 4.5.4). "Increasing taxation on all alcohol (making drinks more expensive) will make me drink less" also had 57% of respondents disagree. There was a strong agreement however, with 73% of participants agreeing, that having cheaper drinks in restaurants/bars would make people less likely to preload.

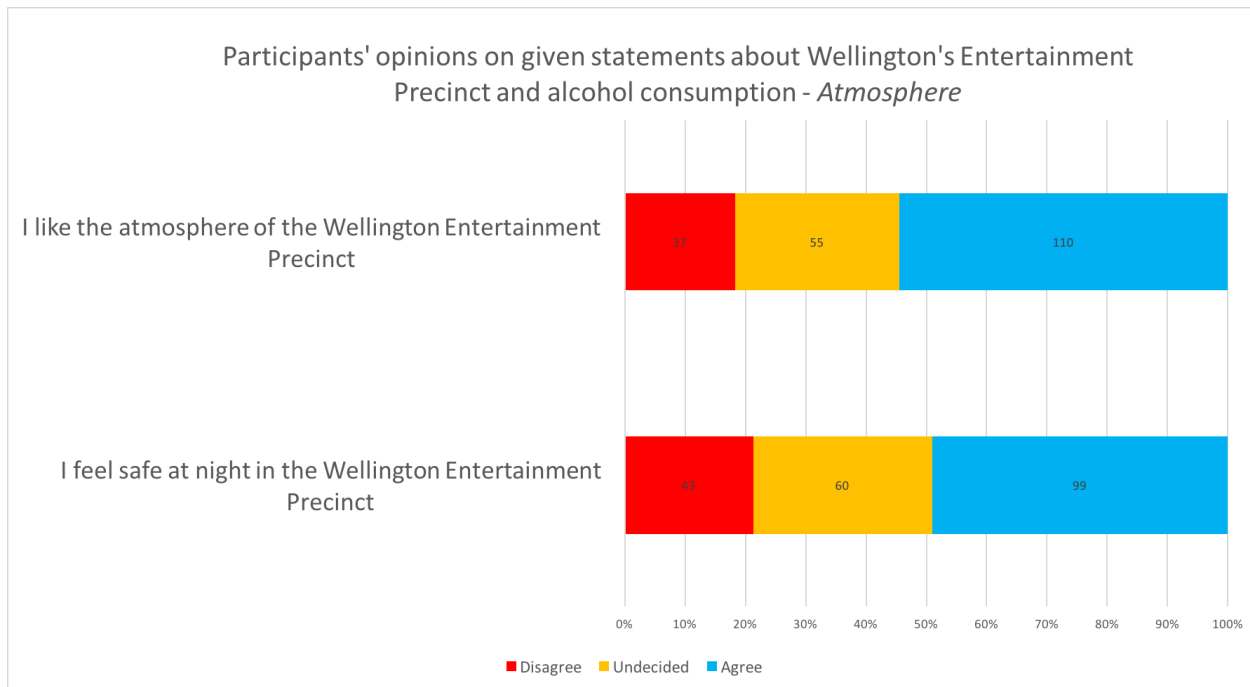


Figure 4.5.1. Participants' opinions on given statements regarding the 'Atmosphere' within Wellington's entertainment precinct and alcohol consumption. Strongly agree and agree were aggregated together as well as strongly disagree and disagree for analysis.

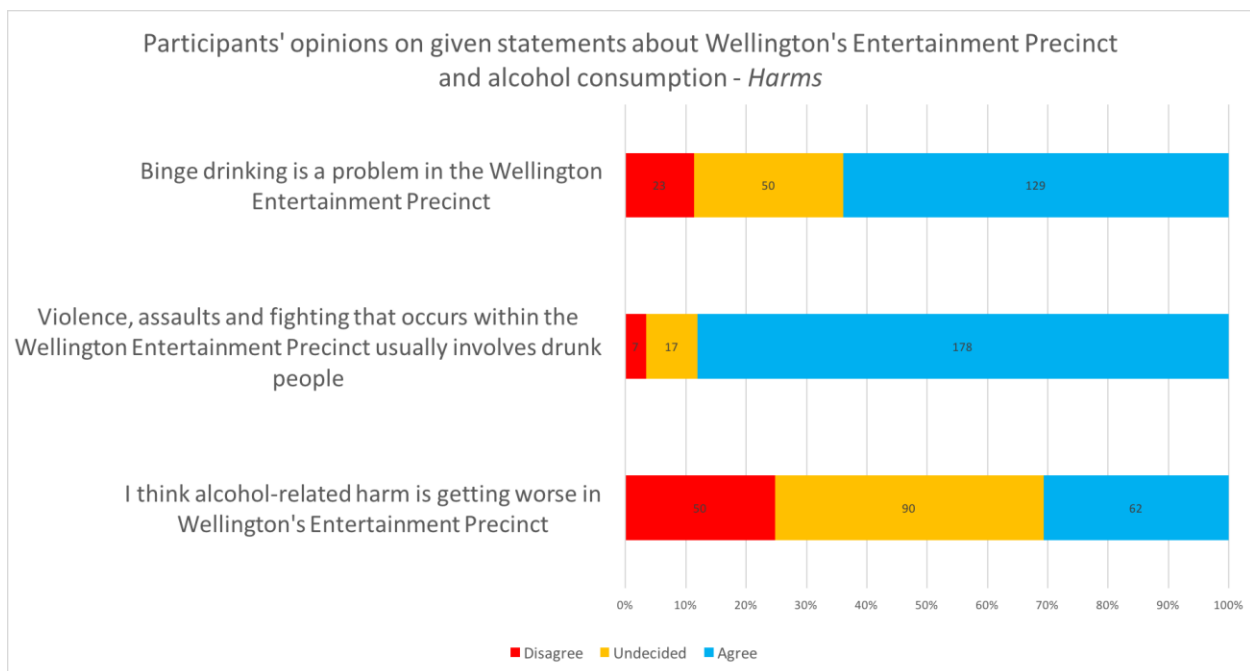


Figure 4.5.2. Participants' opinions on given statements regarding the 'alcohol-related harms' within Wellington's entertainment precinct and alcohol consumption. Strongly agree and agree were aggregated together as well as strongly disagree and disagree for analysis.

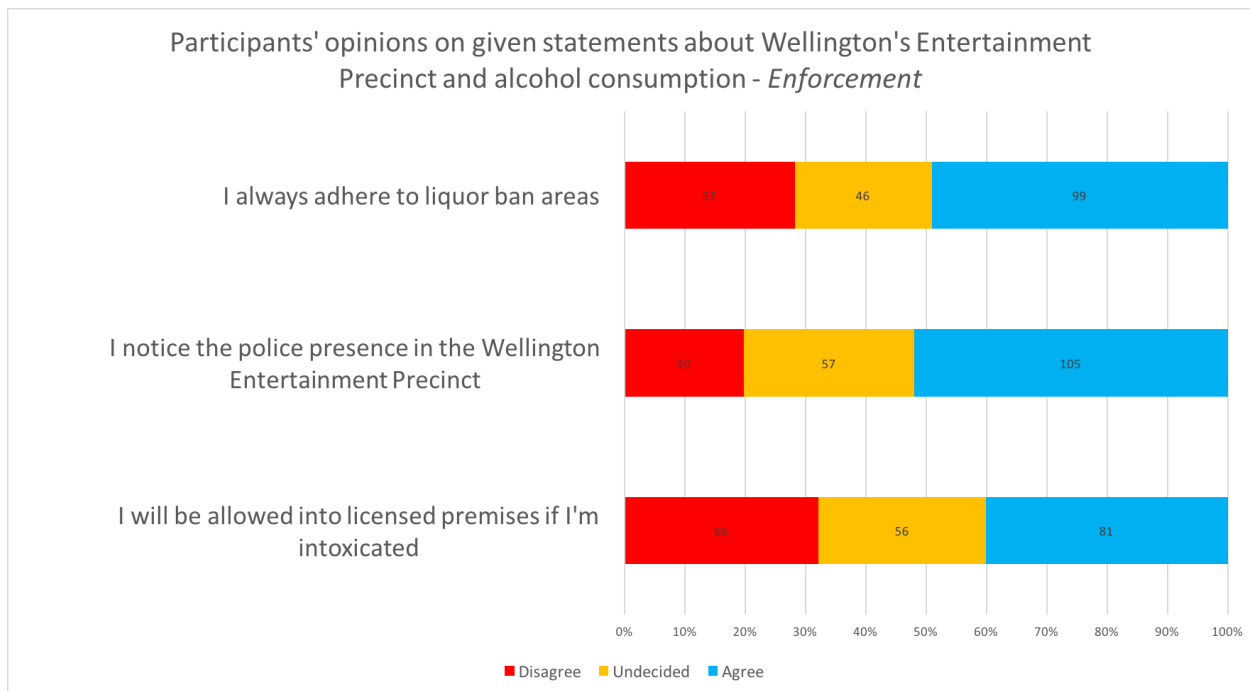


Figure 4.5.3. Participants' opinions on given statements regarding 'Enforcement' within Wellington's entertainment precinct and alcohol consumption. Strongly agree and agree were aggregated together as well as strongly disagree and disagree for analysis.

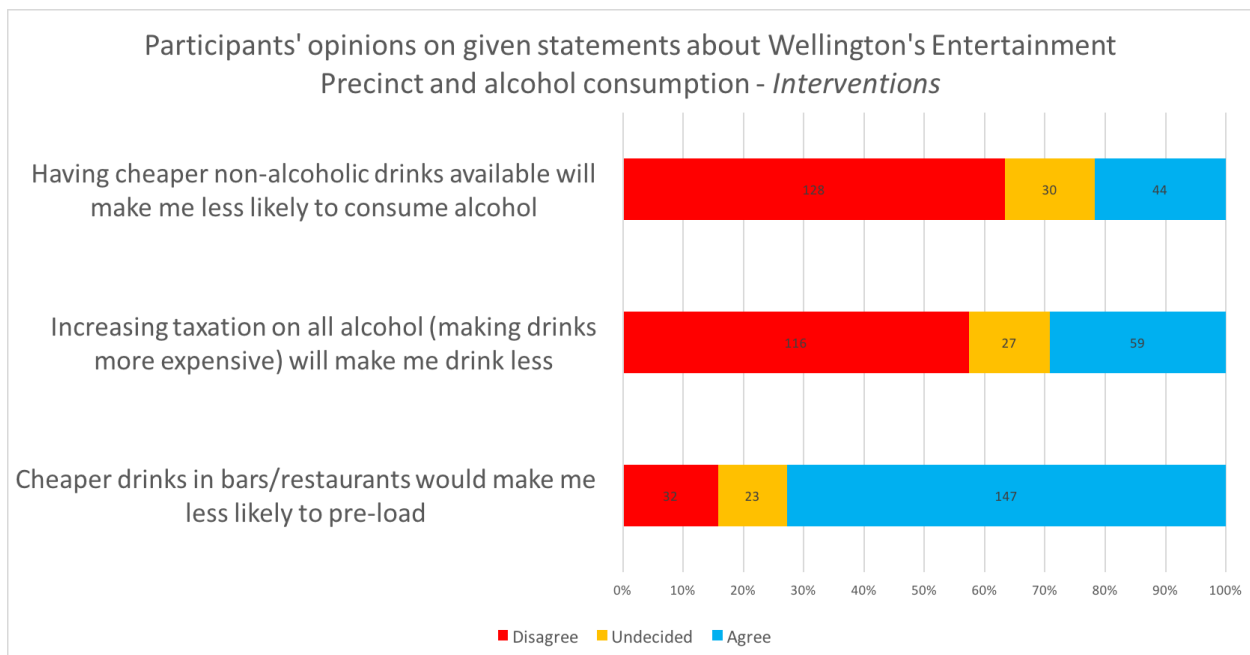


Figure 4.5.4. Participants' opinions on given statements regarding 'Interventions' within Wellington's entertainment precinct and alcohol consumption. Strongly agree and agree were aggregated together as well as strongly disagree and disagree for analysis.

#### 4.5.1 Attitudes of participants based on drinking status

The aforementioned results from the Likert scale attitude scoring have been stratified by their AUDIT-C scores. This was to determine if there is a correlation between a) drinking behaviours and b) attitudes around Wellington's entertainment precinct and alcohol consumption. AUDIT-C scores were grouped as in Section 4.2 where 0-3 was a negative AUDIT-C score, indicating no hazardous drinking, 4-7 having somewhat hazardous drinking, and 8+ being very hazardous drinking with greater consequences from consumption. The male AUDIT-C negative category was used in this part of the analysis.

Statements (a), (b), (c) and (e) all show a positive trend. Those with a higher AUDIT-C score were more likely to agree with these statements. Statements (f), (g), (h), (i), (j) and (k) all show a negative trend, with a higher AUDIT-C score increasing the likelihood of disagreeing with the statement offered. (d) was the only one of these statements which did not show an obvious trend when stratified by AUDIT-C score.

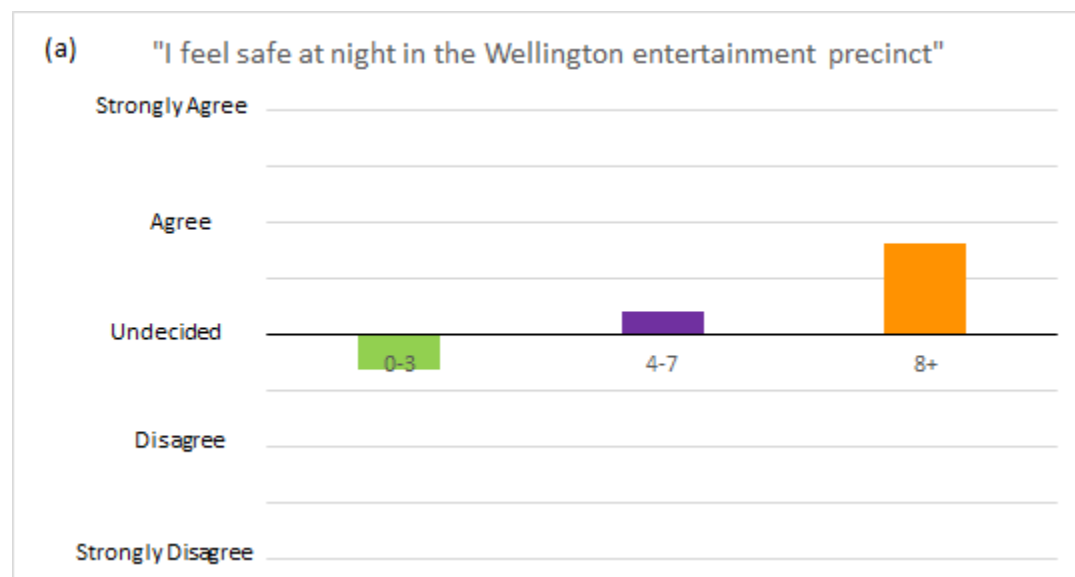
#### 4.5.2 Atmosphere

(a) "I feel safe at night in the Wellington entertainment precinct"

Those with a low AUDIT-C score and hence not identified as a hazardous drinker, fell below the midline indicating they had a higher disagreement with this statement. This contrasts with those who had an AUDIT-C positive score, who were more agreeable to this statement, particularly those who had a score of 8+.

(b) "I like the atmosphere of the Wellington entertainment precinct"

This showed a similar trend to (a), with low AUDIT-C score participants disagreeing with the statement, and higher score respondents tending towards agreement. The 4-7 score group showed a stronger degree of agreement than in (a).





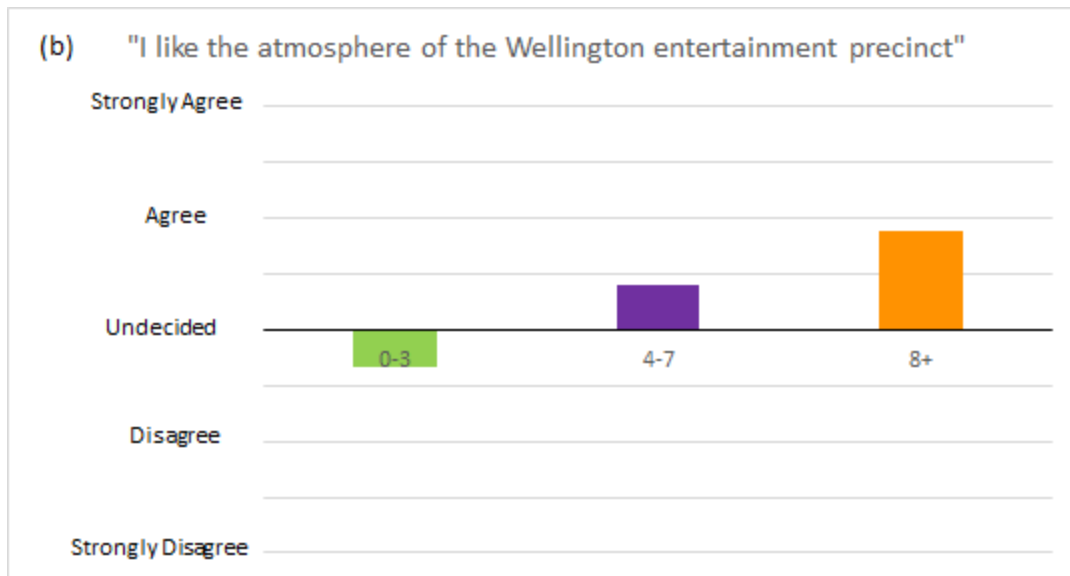


Figure 4.5.5 (a, b). Participants' opinions on given statements regarding the 'Atmosphere' within Wellington's entertainment precinct and alcohol consumption stratified by AUDIT-C score. The level of deviation from the midline indicates the degree of agreement or disagreement with the statement.

#### 4.5.3 Harms

(k) "Binge drinking is a problem in the Wellington entertainment precinct"

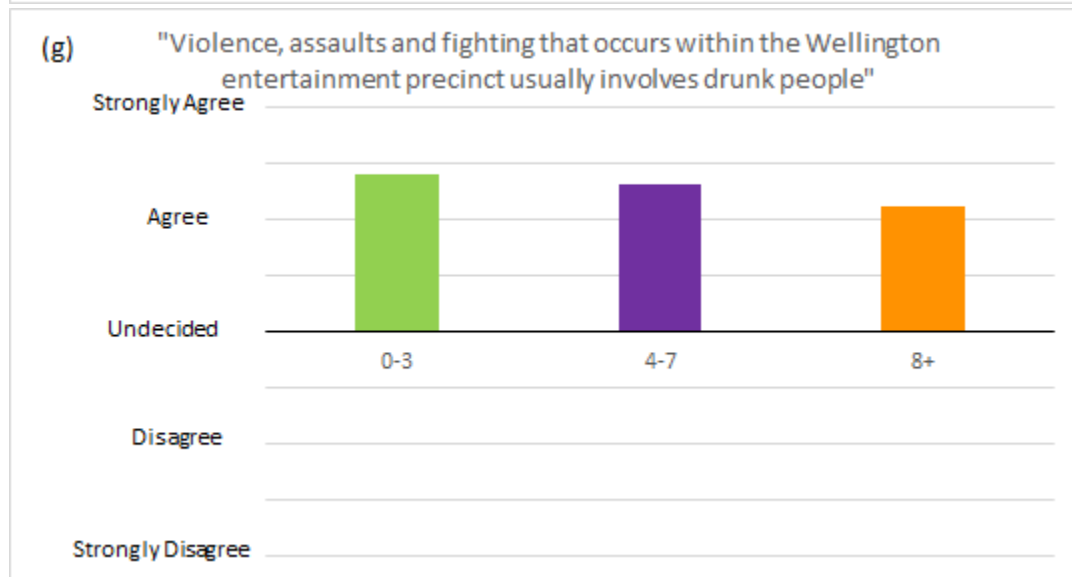
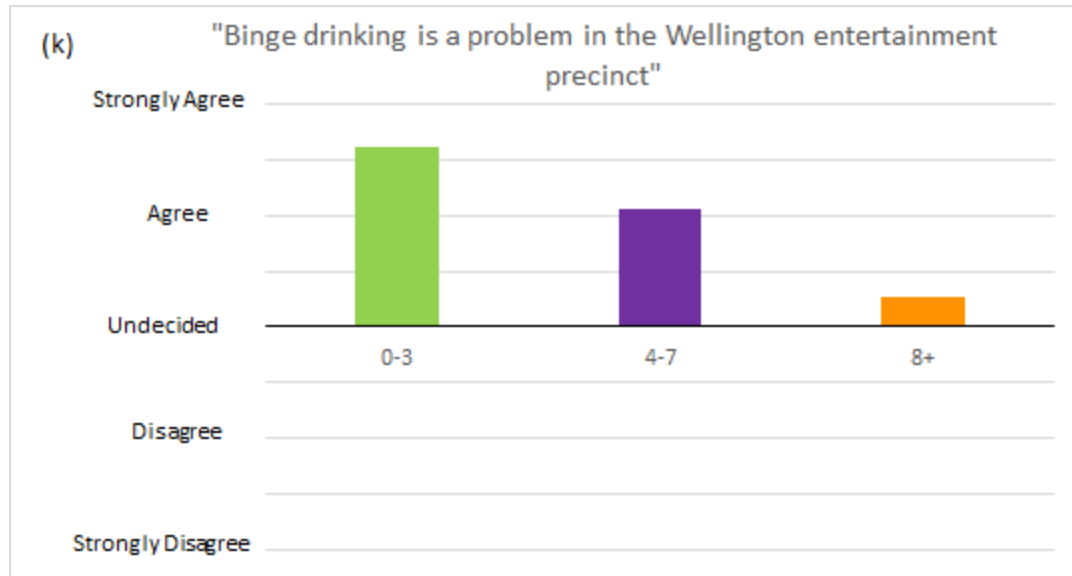
All groups agreed with this statement, however there is a noticeable negative trend. Those with an AUDIT-C score of 0-3 were very likely to agree, falling closer to 'Strongly Agree' than to 'Agree'. Those with a score of 4-7 sat just over 'Agree', while those at the highest risk of hazardous drinking behaviour and an AUDIT-C score of 8+ showed an agreeance fairly close to the midline.

(g) "Violence, assaults and fighting that occurs within the Wellington entertainment precinct usually involves drunk people"

All strata were in strong agreeance with this statement, with all groups falling between 'Agree' and 'Strongly Agree' on the Likert scale. There is a slight negative trend as AUDIT-C store increases.

(f) "I think alcohol-related harm is getting worse in Wellington's entertainment precinct"

Those with an AUDIT-C score between 0-3 or 4-7 both showed agreement with this statement. There is a negative trend, however, as low scoring individuals showed the greatest degree of agreeance, and the high scoring group (8+) disagreed with this statement, falling below the midline.



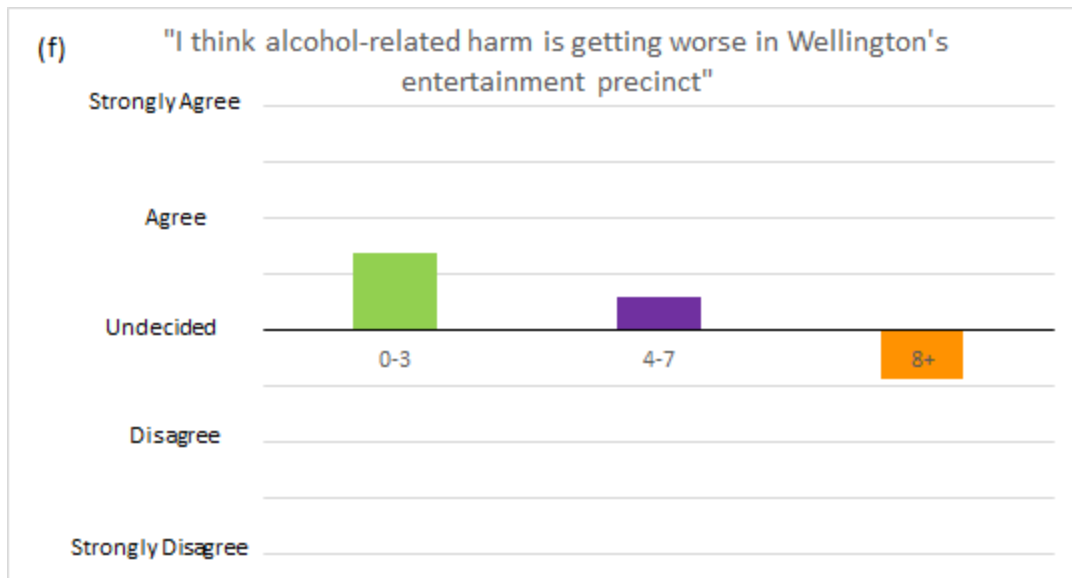


Figure 4.5.6 (k, g, f). Participants' opinions on given statements regarding the alcohol-related harms within Wellington's entertainment precinct and alcohol consumption stratified by AUDIT-C score. The level of deviation from the midline indicates the degree of agreement or disagreement with the statement.

#### 4.5.4 Enforcement

(i) "I always adhere to liquor ban areas"

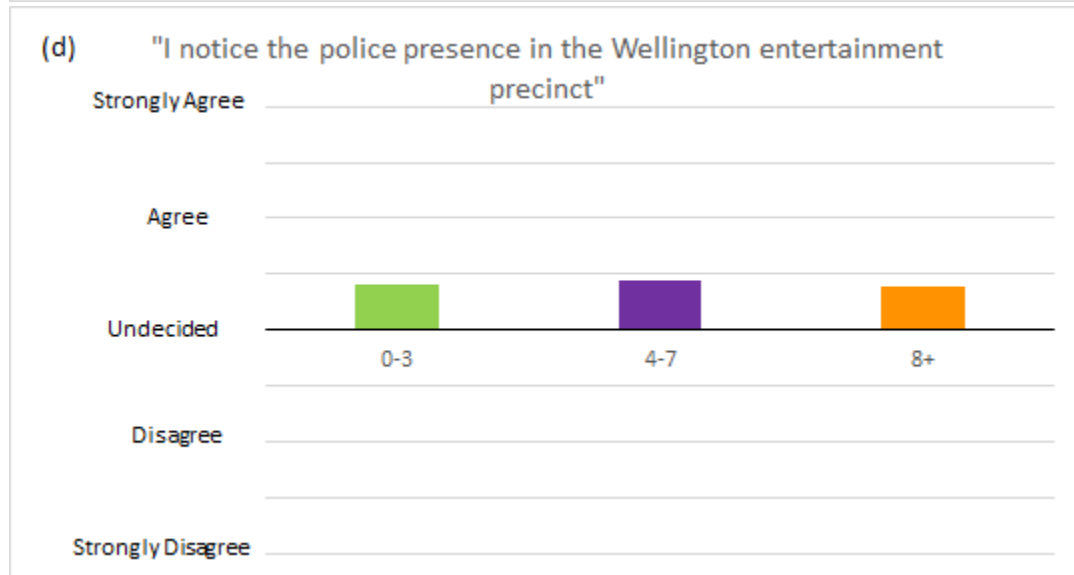
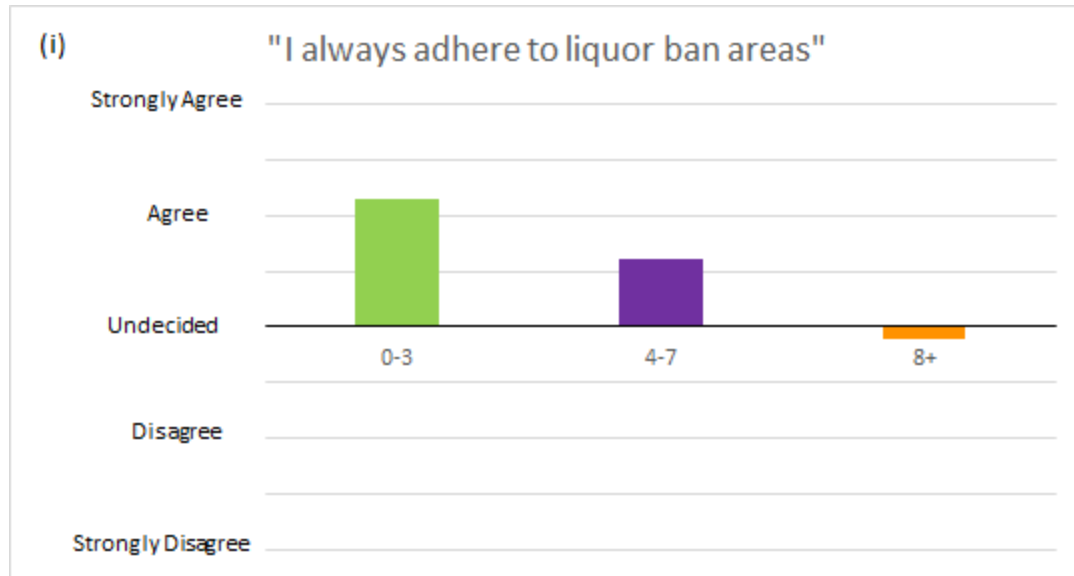
This statement also shows a negative trend, with agreement from the lower two AUDIT-C scoring groups, and disagreement from the high scoring group. The 0-3 scoring group were above the 'Agree' line, with the 4-7 group falling closer to the midline. Those with a high AUDIT-C score of 8+, at most risk of hazardous drinking, showed slight disagreement with this statement.

(d) "I notice the police presence in the Wellington entertainment precinct"

There is no clear trend with these data, as all levels of AUDIT-C score stratification show a similar level of agreement with this statement.

(c) "I will be allowed into licensed premises if I'm intoxicated"

Low AUDIT-C scoring individuals showed a stronger level of disagreement with this statement than the previous two. Similarly, agreement was not as marked in the AUDIT-C positive participants, however there is still a positive trend.



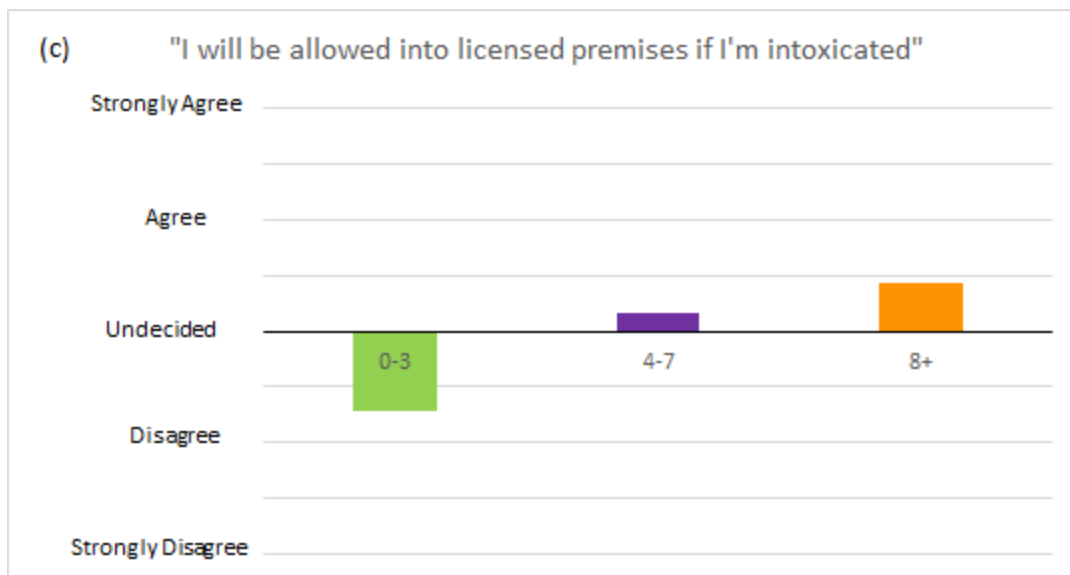


Figure 4.5.7 (i, d, c). Participants' opinions on given statements regarding 'Enforcement' within Wellington's entertainment precinct and alcohol consumption stratified by AUDIT-C score. The level of deviation from the midline indicates the degree of agreement or disagreement with the statement.

#### 4.5.5 Interventions

(j) "Having cheaper non-alcoholic drinks available will make me less likely to consume alcohol"

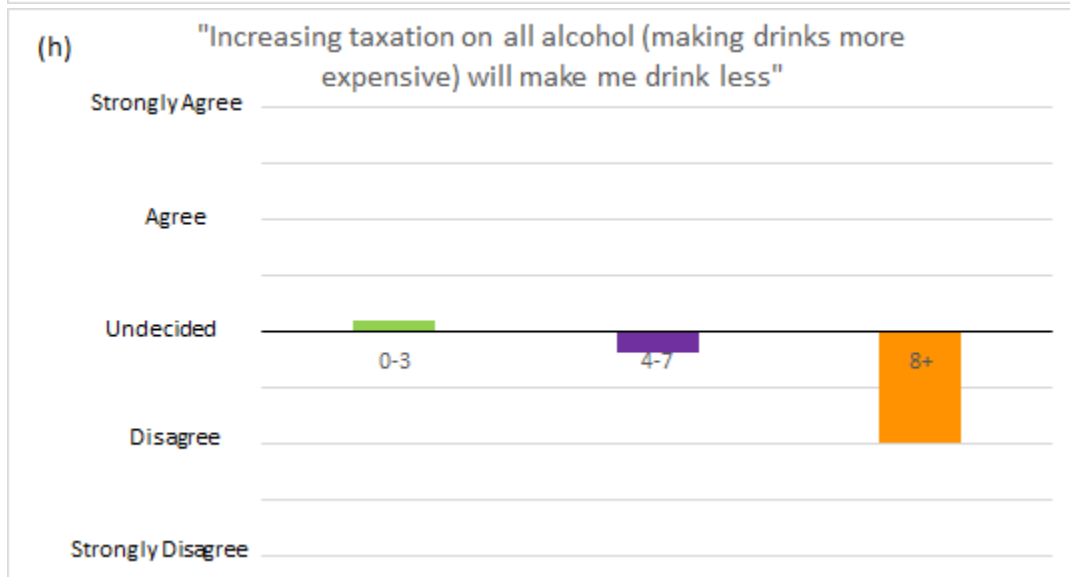
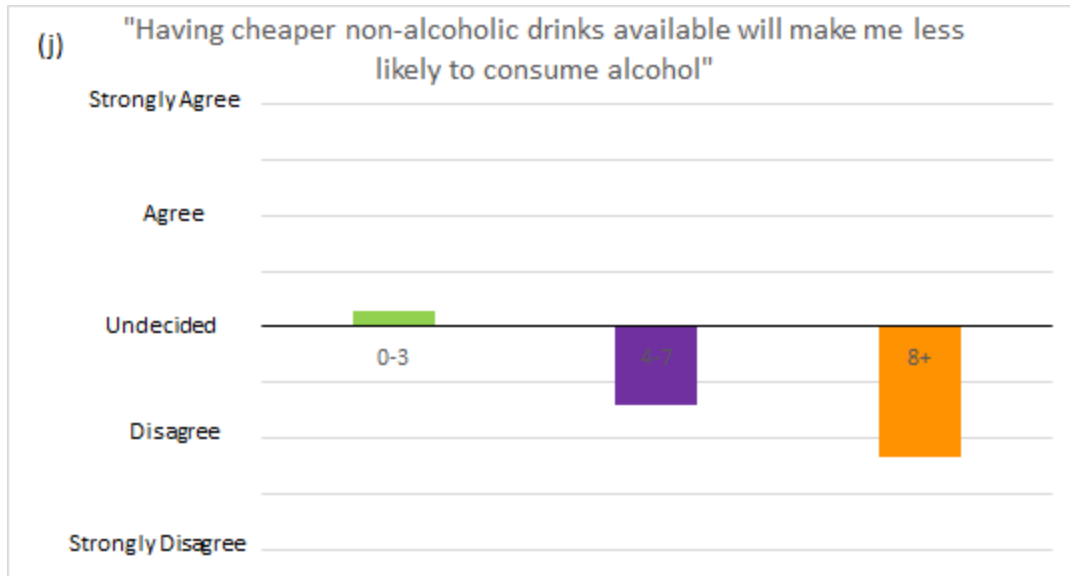
These results are very similar to (h), but with a greater degree of disagreement from the 4-7 AUDIT-C score group. A similar negative trend is seen.

(h) "Increasing taxation on all alcohol (making drinks more expensive) will make me drink less"

Participants with a low AUDIT-C score were the only stratum in agreement with this statement, and only to a small degree. Those who scored between 4-7 and 8+ showed disagreement with the statement, the 8+ group particularly so, indicating a negative trend overall.

(e) "Cheaper drinks in bars/restaurants would make me less likely to pre-load"

All participant groups when stratified by AUDIT-C score show agreement with this statement. There is a positive trend evident, where having a higher AUDIT-C score (and hence higher risk of hazardous drinking) correlates with agreeing more strongly that cheaper drinks would make them less likely to pre-load.



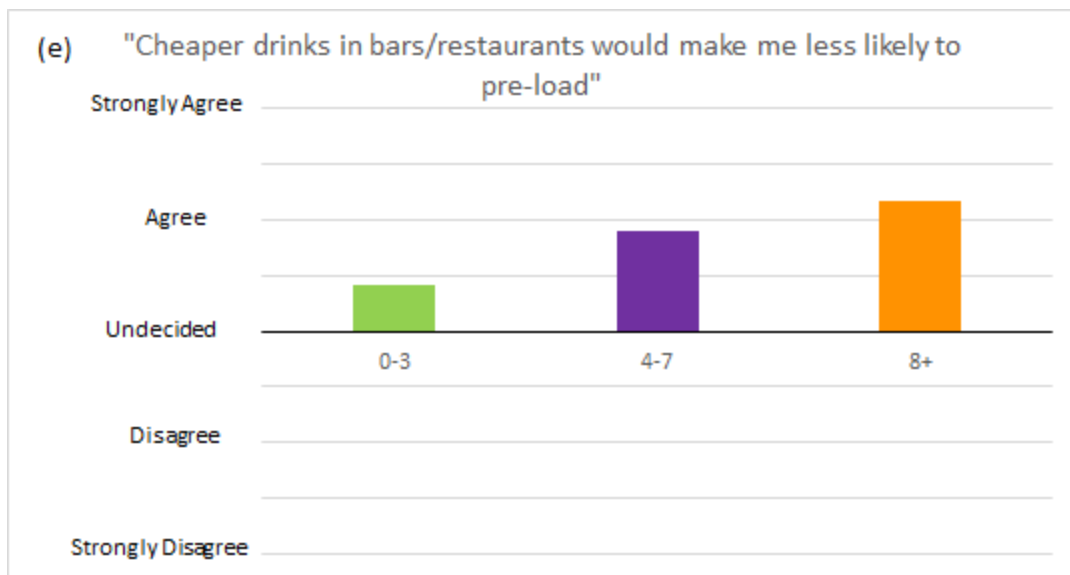


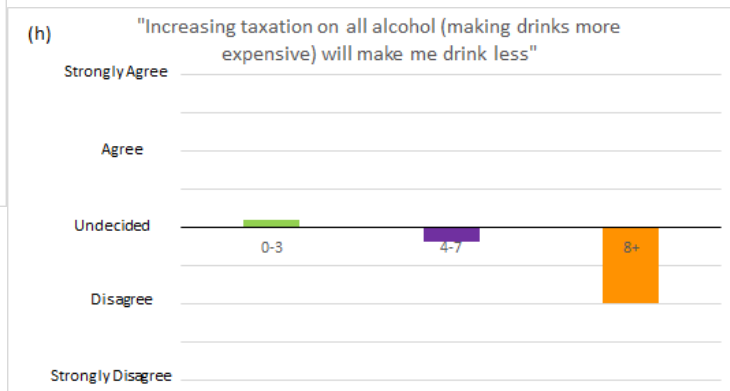
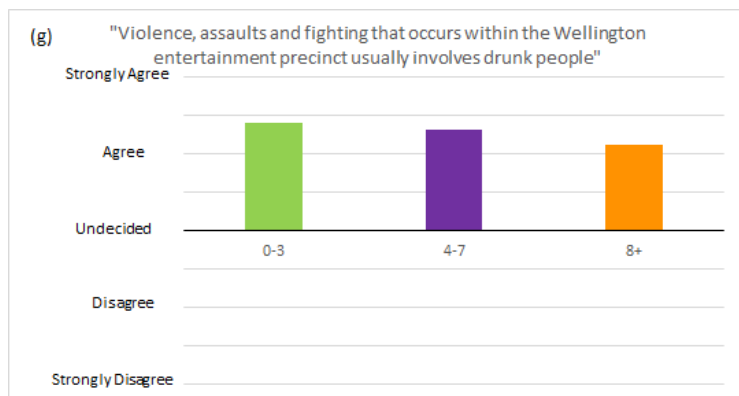
Figure 4.5.8. (j, h, e). Participants' opinions on given statements regarding 'Enforcement' within Wellington's entertainment precinct and alcohol consumption stratified by AUDIT-C score. The level of deviation from the midline indicates the degree of agreement or disagreement with the statement.

## 4.6 What alcohol-related harms have been observed or experienced within Wellington's entertainment precinct

Participants were given a list of potential alcohol-related harms (ARH) and asked to choose all those that they had observed or experienced within the past six months when in Wellington's entertainment precinct (Figure 4.6.1). They could choose multiple options and then answer a follow-up question, shown in Figure 4.6.2, which asked them to choose the one that they thought was the most significant of all those given.

Dropping rubbish, verbal abuse, and, violence and fighting, were the three alcohol-related harms most observed or experienced by our survey population. 62% had observed or experienced dropping rubbish, 58% had observed or experienced verbal abuse, and 53% had observed or experienced violence and fighting. Less than 50% of respondents had observed or experienced the other ARHs listed.

In regards to what participants thought was the most significant harm (Figure 4.6.2), violence and fighting was selected as the most significant harm that could be experienced or observed, with 26.2% of the participant population selecting this option. Although 'unwanted sexual advances' were experienced or observed less in the precinct than five other ARHs



(Figure 4.6.1), it was selected as the next most significant harm (Figure 4.6.2) followed by getting intoxicated to the point of needing medical attention and then verbal abuse.

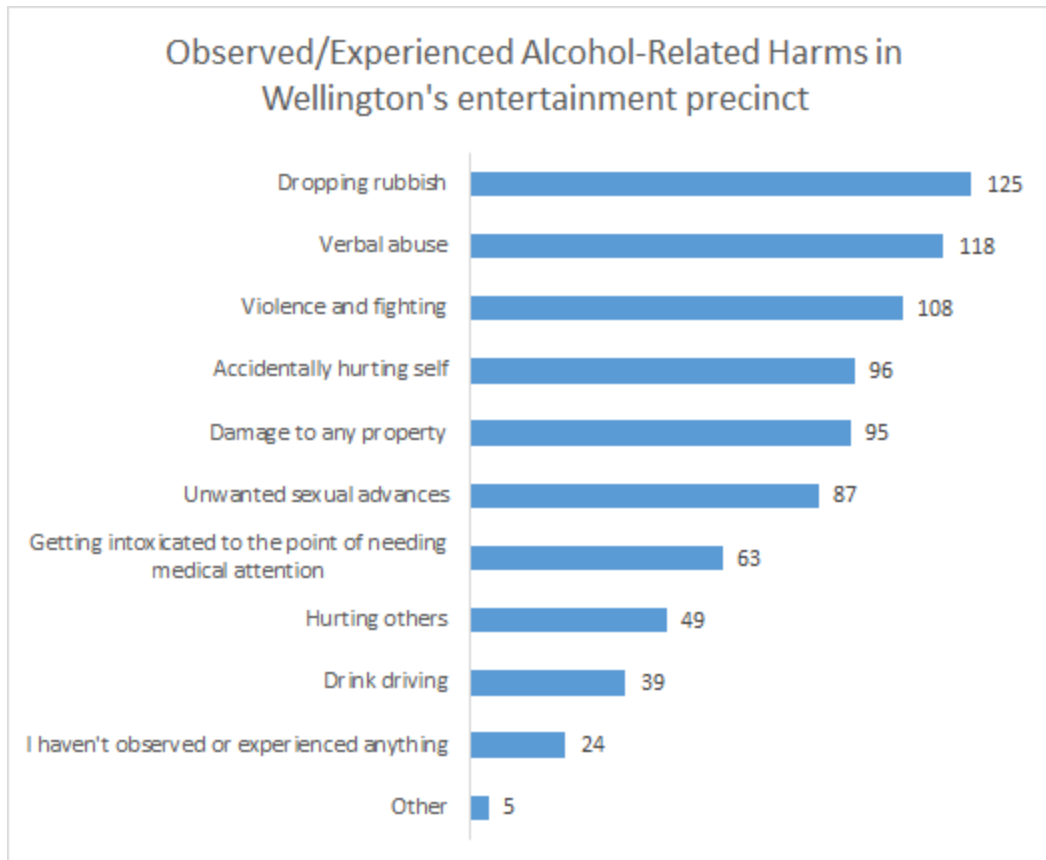


Figure 4.6.1. Alcohol-related harms observed/experienced in Wellington's entertainment precinct in the past six months ( $n=202$ ). Participants were asked to select all alcohol-related harms that they had observed or experienced, therefore each bar represents how many participants out of the total 202 had observed or experienced each harm.



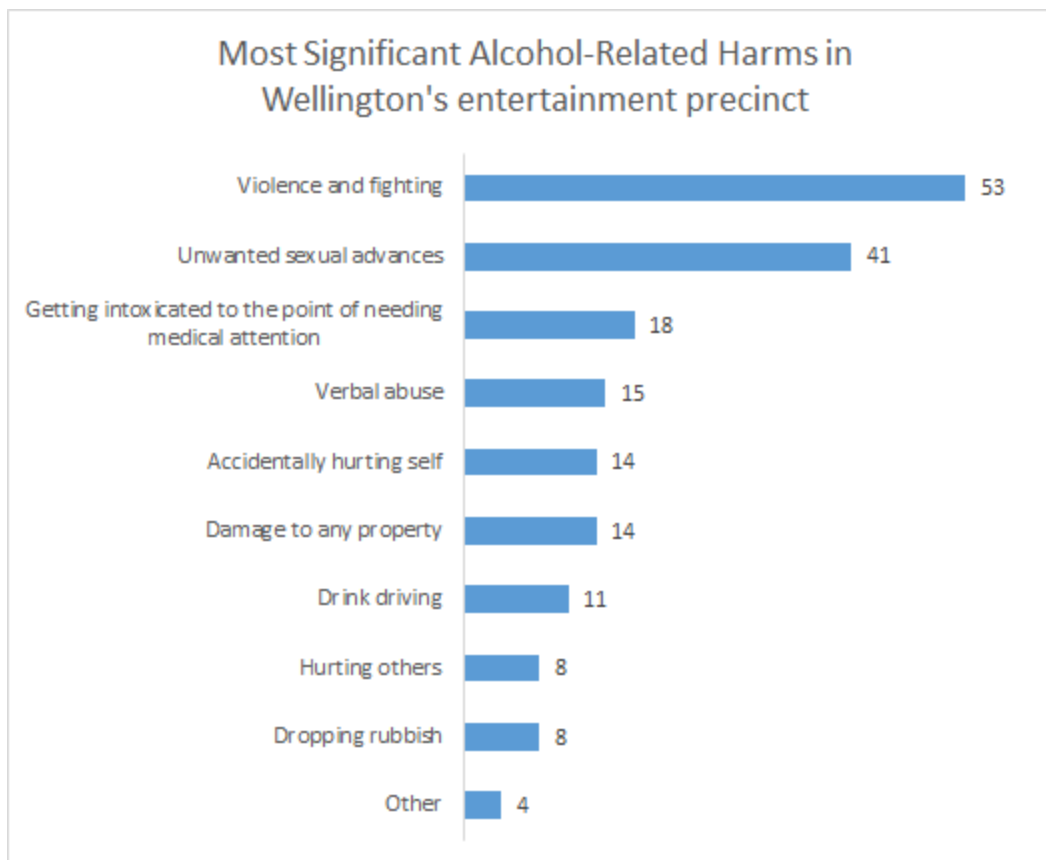


Figure 4.6.2. Participants' opinions when asked what the most significant alcohol-related harm observed/experienced within Wellington's entertainment precinct. 16 respondents (7.9%) indicated that they had not experienced/observed any alcohol-related harms. Each bar represents how many of the 202 respondents identified a given harm as the most significant.

## 4.7 Ideas on effectiveness and support for specific interventions to reduce Alcohol-related harms in Wellington's entertainment precinct

On eight specific interventions, participants were asked their opinion on how effective they thought each intervention would be to reduce ARH, as well as how supportive they would be for potential implementation. It was specified that what they thought effective didn't necessarily need to match what they would support.

### 4.7.1 Effectiveness of interventions:

Figure 4.7.1 shows how effective the participants thought the eight specific interventions would be. The results showed that in general, participants thought that having an increased police presence in the precinct would be effective in reducing ARH with 59% thinking it would be effective, 28% unsure, and 13% thinking it wouldn't be effective. Similarly it was thought that having increased ambulance medic

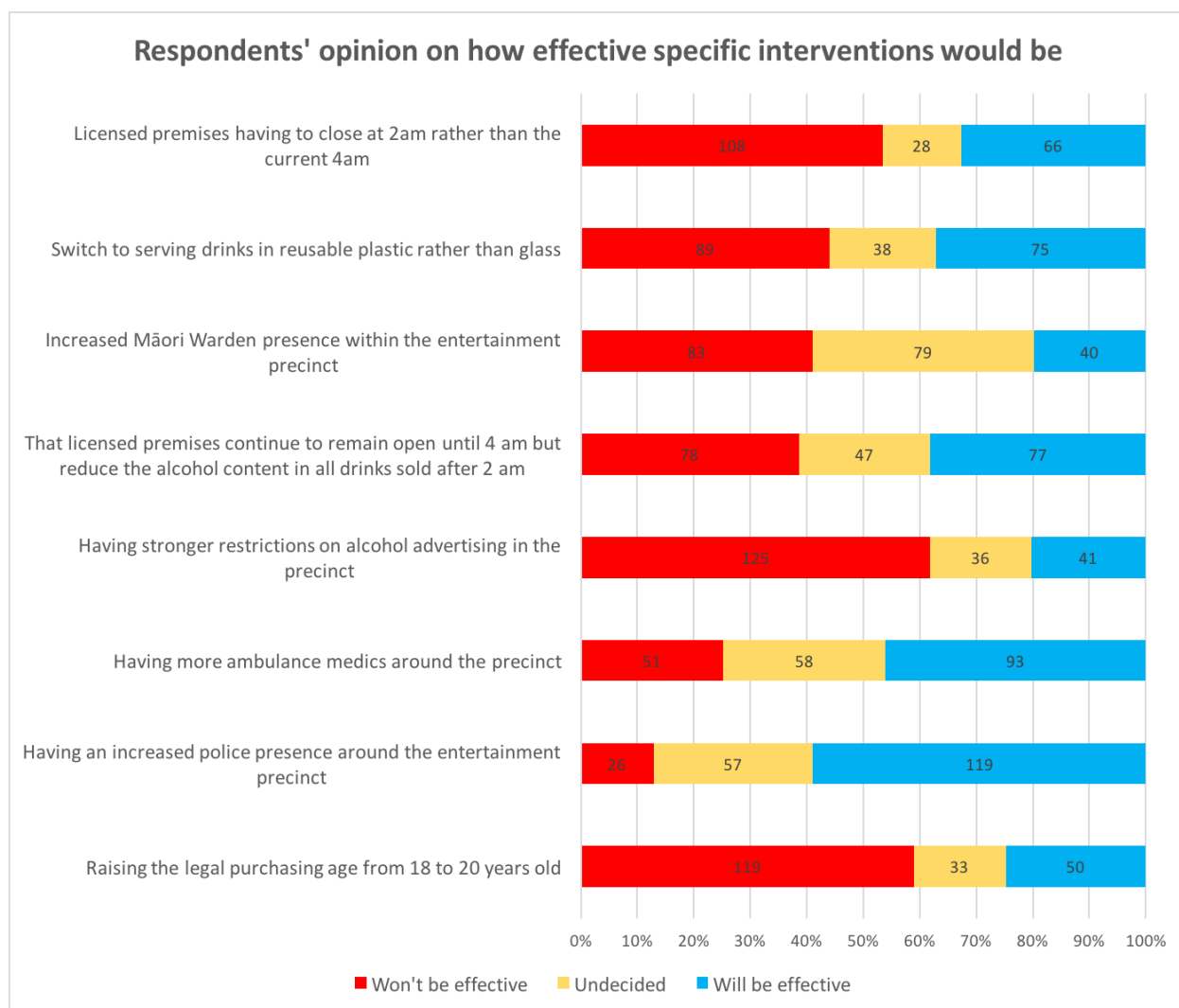
presence in the precinct would also be effective, with 46% agreeing in it's effectiveness against 25% disagreeing.

62% of people thought that having stronger restrictions on alcohol advertising in the precinct would not be very effective at reducing ARH. Over half of the participants (53%) didn't think early closure at 2am would be effective.

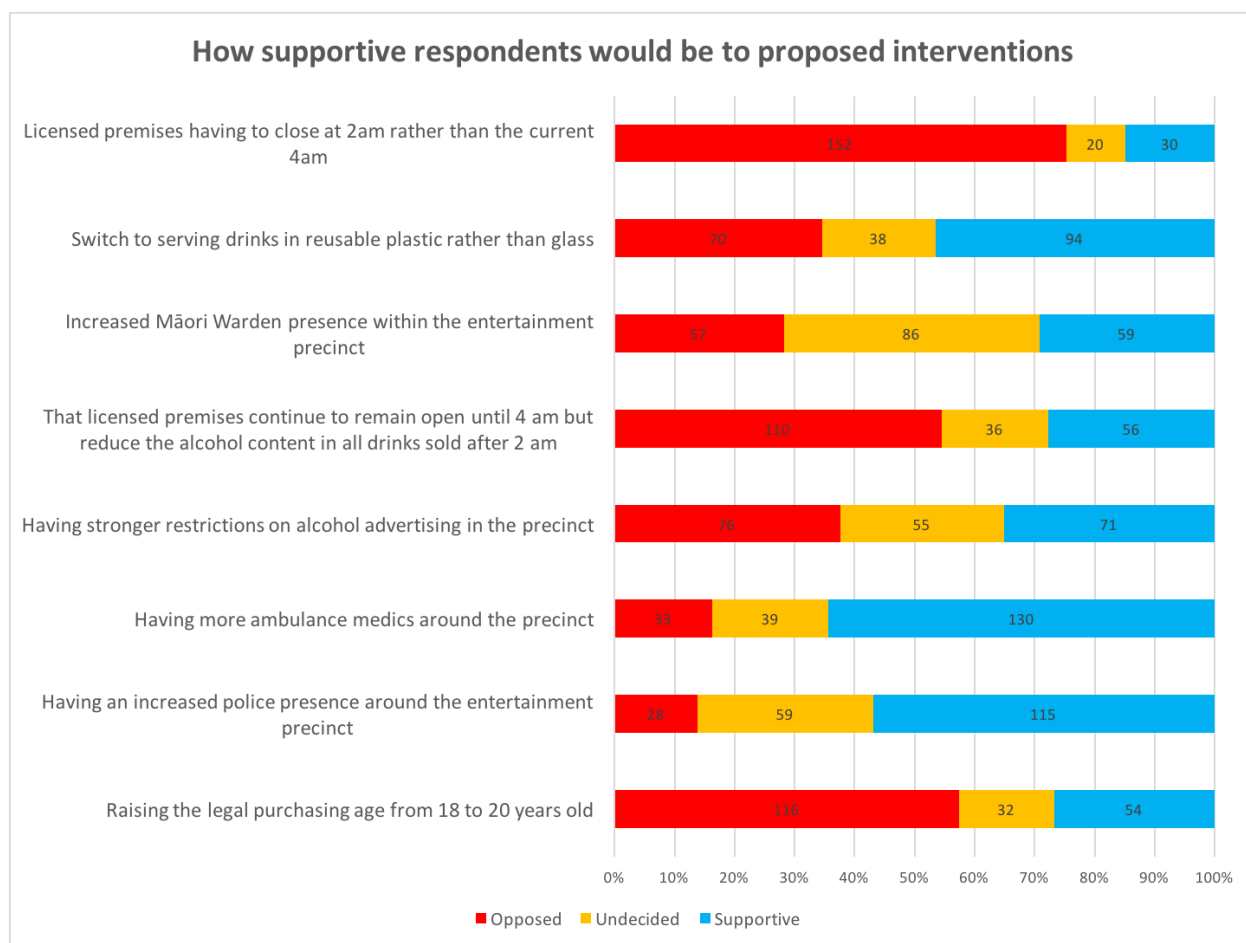
There were mixed reactions to changing from glass to plasticware, having Māori wardens present, or reducing alcohol content in drinks from 2am. However when given the opportunity to suggest possible interventions one said: *"Most bars switch over to plastic on Fridays/Saturdays anyway because glasses always get smashed, but if there are any bars that don't, this is very effective at reducing the amount of people getting injured by glasses/bottles."*

#### 4.7.2 Support for interventions:

Participants were asked whether they would support, oppose or if they were unsure how supportive they would be for the eight interventions proposed to them. Figure 4.7.2 shows that the majority of people, 75%, would not support closure of licensed premises at 2am rather than the current 4am. As well as this, 57% would be opposed to raising the legal purchasing age from 18 to 20 years old. More people supported, 64%, than opposed, 16%, an intervention of having increased ambulance medics within the precinct. Similarly, more people supported, 57%, than opposed, 14%, increased police presence within the precinct. Increased Māori Warden presence and stronger restrictions on alcohol advertising within the precinct didn't have strong support or opposition to it.



*Figure 4.7.1. Respondents' opinion on effectiveness of proposed interventions to reduce alcohol-related harm in Wellington's entertainment precinct.*



*Figure 4.7.2. Respondents' support for proposed interventions to reduce alcohol-related harm in Wellington's entertainment precinct*

## 4.8 Māori respondents' perspectives on interventions to reduce alcohol-related harm in Wellington's entertainment precinct

In this section, data gathered from the survey has been stratified into two groups. Participants were asked to identify their ethnicity from a list earlier in the survey, and this analysis involves comparing Likert scale data from those who self-identified as NZ Māori (n=17) with data from all other participants in the survey population. The small number of Māori respondents may influence the differences seen between these two groups and decreases the generalisability that we can give any trends found.

### 4.8.1 Effectiveness of Interventions:

Figure 4.8.1 shows Māori vs. Non-Māori mean Likert scale ratings of how effective they think the eight proposed interventions would be. This is presented similar to Figures 4.5.5-8 (a-k) where further deviation from the midline indicates a greater degree of agreement or disagreement. The main differences between the two groups were shown in how effective: changing the purchasing age, the use of advertising,

reducing alcohol content from 2am, changing to plasticware from glass, and having an earlier closure time.

There is clear discrepancy between opinions of raising the alcohol purchasing age from 18 to 20 between Māori and Non-Māori. Those who self-identified as Māori were in agreement about this being an effective intervention, while Non-Māori collectively disagreed with this intervention.

There is also a discrepancy between the opinions of how effective reducing the alcohol content in drinks from 2am would be. Compared with a slight disagreement by Non-Māori, there is an overall agreement amongst self-identified Māori that it would be effective to reduce ARH. Similarly, where there is slight disagreement of how effective switching to plastic rather than glassware would be in Non-Māori respondents, Māori were in favour of this as an effective option. Neither group demonstrated a strong opinion in either direction, however.

Furthermore, there is a reasonable discrepancy between opinions on the effectiveness of closing licensed premises at 2am instead of the current 4am. Māori were slightly in agreement with it as being an effective intervention, while the Non-Māori group were reasonably in disagreement.

The effectiveness on precinct advertising was an area that showed a difference between the two groups. Neither group, on average, believed that stronger restrictions on alcohol advertising in the precinct would be an effective intervention, but, Māori were much closer to the undecided line than Non-Māori.

There is consensus between the two groups that an increased police presence could be effective, although Māori did not deem it to be quite as effective as non-Māori. Similarly, both groups were in favour of having more ambulance medics around Wellington's entertainment precinct as a potential intervention to reduce ARH. However, there was not a strong agreement from either group, with Māori falling particularly close to the midline indicating the perceived effect is low.

Increasing the Māori Warden presence in Wellington's entertainment precinct was not seen as likely to be effective by either group, though the disagreement was stronger in the Non-Māori respondents.

#### 4.8.2 Support of Interventions:

Differences in support of each of the eight interventions was also evaluated between Māori and Non-Māori (Figure 4.8.2).

Māori respondents on average were reasonably in favour of raising the alcohol purchasing age from 18 to 20. This contrasts with Non-Māori participants who were more strongly in opposition of this intervention.

Increased Māori Warden presence also had significant discrepancy in support between the two groups. Māori indicated that they were more likely to support this intervention being introduced, whereas Non-Māori participants on average did not support this.

Both groups showed support of having an increased police presence around Wellington's entertainment precinct, although Māori were only somewhat in support of this, compared to a reasonable level of support from the Non-Māori surveyed. Similarly, both groups were reasonably in favour of an increased

number of ambulance medics being present in the precinct to reduce ARH. This agreement was only slightly lower in the Māori participants than for Non-Māori.

Māori were more in support of stricter regulations on alcohol advertising within the precinct, as their average response contrasted with the very slight movement below the midline, suggesting disagreement, from Non-Māori. There was poor support for reducing alcohol content in drinks after 2am from both groups when stratified, although Non-Māori were slightly stronger in their disagreement as a group.

Even though Non-Māori have a stronger disagreement, both groups do not support closing the licenced premises at 2am instead of the current 4am.

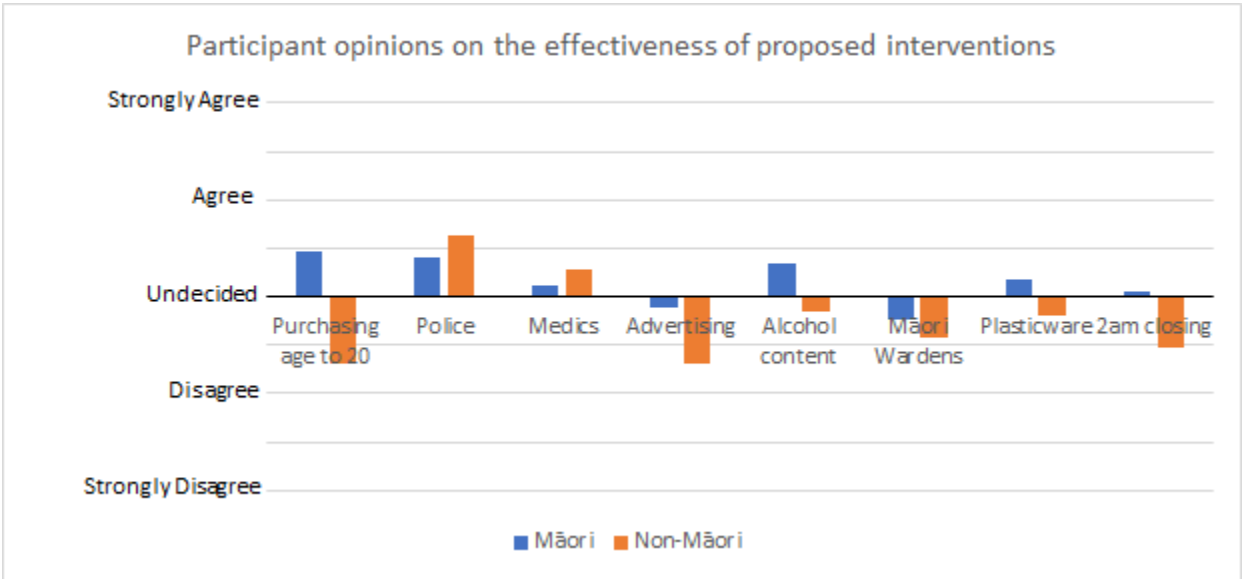


Figure 4.8.1. Perceived effectiveness of proposed interventions to reduce alcohol-related harm in Wellington’s entertainment precinct, separated by those who self-identified as Māori or otherwise.

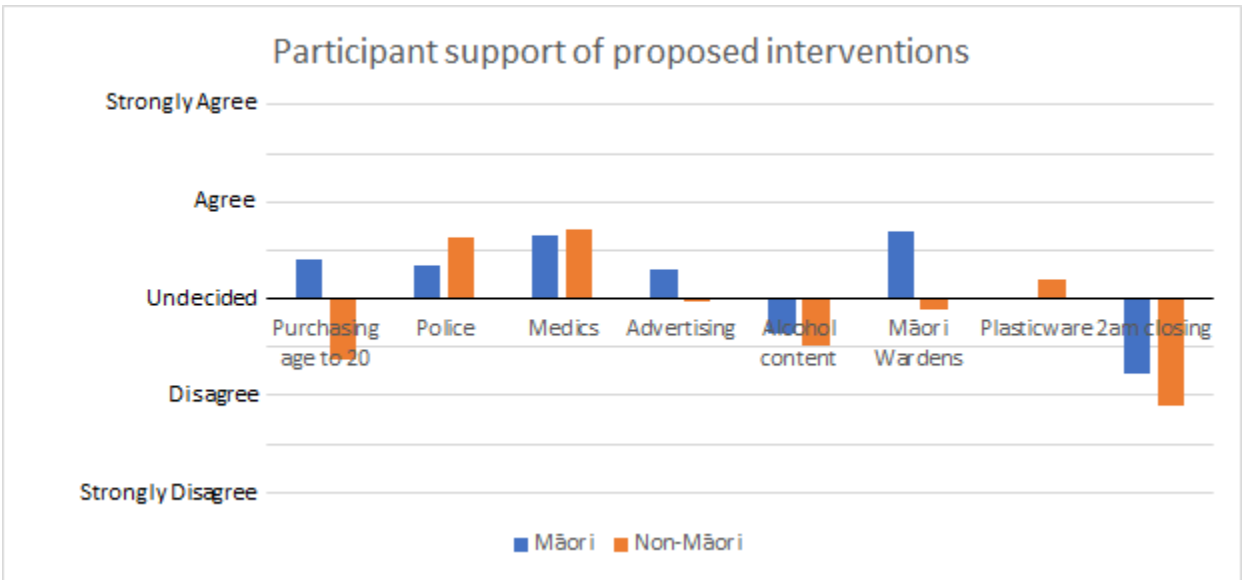


Figure 4.8.2. Support of proposed interventions to reduce alcohol-related harm in Wellington’s entertainment precinct, separated by those who self-identified as Māori or otherwise.

## 4.9 Respondents' suggestions for possible interventions

Table 4.9.1. Alternative suggestions offered by respondents to reduce alcohol-related harm in Wellington's entertainment precinct

Respondents' Suggestions for Interventions	
<b>Precinct-specific</b>	<ul style="list-style-type: none"> <li>• Free shuttles home</li> <li>• Higher density of police/ambulance medics during peak times - e.g. University orientation week</li> <li>• Designated, supervised area for 'sobering up'</li> <li>• Precinct ban for repeat offenders</li> </ul>
<b>Licensed premises-specific</b>	<ul style="list-style-type: none"> <li>• Stricter treatment for intoxicated patrons - sale of alcohol and admittance to bars</li> <li>• Cease serving alcohol from 2am onwards</li> <li>• Reduce alcohol content of drinks from 12am</li> <li>• Decrease alcohol price in licensed premises</li> <li>• Having water available without having to ask at the bar</li> <li>• Limit the selection of drinks for 18 to 20-year-olds</li> <li>• Alcohol breath testing at the door</li> <li>• Stagger licensed premises' closing times</li> <li>• Communication network for bouncers between bars to identify problem patrons</li> <li>• Stronger regulations on BYO premises</li> </ul>
<b>Society/ Policy-related</b>	<ul style="list-style-type: none"> <li>• Education about alcohol-related harm, particularly suggested in schools and community clubs</li> <li>• Minimum drinking age of 22 years old</li> <li>• Legalise cannabis</li> <li>• Have a minimum price per unit of alcohol</li> <li>• Harsher punishments for being intoxicated in public</li> <li>• Adapt alcohol prices to encourage drinking at licensed premises</li> <li>• Relaxing alcohol constraints</li> </ul>

In the survey, participants were asked if they had any other suggestions for interventions to reduce ARH in Wellington's entertainment precinct. Table 4.9.1 above identifies what was suggested across all of the responses. We found that these suggestions could be grouped into three categories - the first 'Precinct-specific' group included interventions localised to Wellington's entertainment precinct, but do not directly involve licensees and instead tend to involve police and other organisations operating within the area. The 'Licensed premises-specific' group of interventions are those that require action from the licensees themselves, although they may be coordinated between multiple premises and/or become a licensing requirement enforced by the Wellington City Council. Lastly, the 'Society/Policy-related' suggestions are those we have grouped because they require high level intervention, often policy changes from the government, which aren't necessarily specific to Wellington's entertainment precinct but are expected to have an effect there.

Multiple respondents stated "stop letting drunk people into bars" or similar, indicating that interventions surrounding stricter refusal of entry and/or sale of alcohol to intoxicated patrons could be helpful. A particular strategy discussed by some is to breathalyse individuals as they are entering the bar, and having an established cut-off reading over which they will be refused entry. Alongside these suggestions is a common theme that bouncers are not effective enough in deciphering who should be refused entry

based on intoxication levels. The ability of underage patrons to enter licensed premises was also identified, with one participant stating “there are always heaps of 15 to 18 year olds in the clubs, and they’re always the fighters.”

The price of alcohol was frequently mentioned, with various suggestions given for how to change this.

A couple of responses discussed limiting the range of alcoholic drinks available, with one in the context of those sold at off-licence outlets, and another specifically relating to 18 to 20 year olds purchasing alcohol at licensed premises.

Commonly suggested by respondents is a move to having stronger consequences for individuals who are “the minority of terrible, abusive drunks” rather than making more widespread restrictions which “will only lead to negative behaviour.” Some of these suggestions (along with others) refer to “England and Western Europe for examples” of where lighter restrictions on alcohol allow for a “culture of casual drinking.” Also suggested is involving police or security when patrons are not compliant when refused service of alcohol or refused entry into a licensed premises.

A common thread was to reduce the price differential between on-licence premises and off-licence outlets. A specific response explaining this called to “reduce [the] price of alcohol in bars so people don’t need to preload as much and be too drunk before they even get into the entertainment precinct” (Survey Participant). This statement relates to Figure 4.4.1 which demonstrates that 76.7% of patrons will always, usually, or sometimes drink alcohol before coming into Wellington’s entertainment precinct. The converse is also suggested, that having it “harder to buy from supermarkets” (survey participant) could decrease ARH due to pre-loading with alcohol purchased from off-licence distributors.

Water availability was a final point that featured in a handful of suggestions. Respondents expressed that having water readily available for patrons rather than having to ask for it at the bar and “ensuring people who are drinking are offered [it] when getting drinks” could reduce the effects of alcohol consumption, and hence ARH.

Education was the main suggested higher-level intervention, with many believing that this could change the “culture of binge drinking”. This was specified as “educating teenagers in schools and community clubs i.e. rugby etc how to drink responsibly”, and programs like “Alcohol&Me” being used to deliver information about the “dangers of alcohol abuse to primary, intermediate and secondary youth.”



## 5. Key informant interviews

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For analysis of key informant interviews, we grouped the stakeholders into four groups:

1. **Business staff**
2. **Council workers**
3. **Health professionals**
4. **Police**

A total of 21 participants took part in our key informant interviews. The business staff interview group consisted of six interviewees. This included hospitality workers, security staff, business owners or managers whose businesses or places of work are located within the precinct. Council workers consisted of four Wellington City Council staff. Our eight Health Professional interviewees included Regional Public Health staff, Emergency Department staff, Ambulance Officers and Academics. Finally, police consisted of three police officers, all of whom work within the Wellington region. Further information on the recruitment of stakeholders can be found in the qualitative methodology in section 3.3.

The interviews with stakeholders revealed a range of opinions regarding the various ARHs, their causes, and solutions for mitigating them. Many key themes have been identified, each with a different focus on harms and prevention. These have been divided into seven categories:

1. **The nature and extent of alcohol-related harms**
2. **Culture's strong influence on behaviour**
3. **Causes and solutions outside bars**
4. **Causes and solutions inside bars**
5. **The role of law enforcement in the precinct**
6. **Law and policy changes at a local and national level**
7. **The importance of communication between agencies**

### 5.1 The nature and extent of alcohol-related harms

Alcohol-related harms (ARH) were a significant focus of interviews with stakeholders. Discussion on the types of harms and their severity was the starting point in most talks.

#### Health harms

When asked about the harms caused by alcohol in Wellington's entertainment precinct (WEP), interviewees, regardless of their background, described the problems in terms of health-related issues rather than economic costs. The most commonly given answer for harms was physical injury, either intentional (i.e. fighting) or accidental (e.g. falls). A lot of the fighting was said to be on the streets rather than inside bars. Injuries due to smashed glass was brought up by one business staff member but one health professional did not believe it was a significant problem. Sexual assault was another common

response across the majority of the stakeholder groups, with one council worker saying that they are underreported.

- *“Looking from a harm [the most significant cause] would be violence and then probably I would say decision making, wrongful decision making because they were under the influence of alcohol which leads to the other incidences like, I suppose, sexual assaults.”*

**- Police**

- *“I could say three kinds of varieties of alcohol-related cases in the CBD on your Friday, Saturday nights... one is that someone has just had too much to drink... one is someone who has either been injured by someone in a fight... and the third most common is someone who has gotten an injury, y'know they've rolled their ankle.”*

**- Health Professional**

Although less common, there were a range of other health effects stated. Direct effects of drinking alcohol in reference to the acute and chronic effects of binge drinking were mentioned such as alcohol poisoning. An indirect impact of alcohol mentioned by police was domestic violence once patrons returned home. Drunk driving and getting hit by cars in the packed area were additional concerns raised by two health professionals.

### Economic harms

When describing the economic costs of alcohol-fuelled behaviour, the police and council workers discussed vandalism in terms of property destruction and graffiti being the primary harm.

### Change over time

There was no clear consensus from the different parties whether the alcohol problem in WEP was improving or worsening. One business worker felt that the issue hadn't changed in many years, another mentioned that it may even be getting better and a third said that it is noticeably worse. One person working for the council felt that the issues were the same but that they just happened later at night, whereas one felt that the evidence was anecdotal, therefore a conclusion could not be reached on a trend. Similarly, health professionals and police reported that the problem was hard to measure in full. One health professional suggested that the problem was being exaggerated by the media.

- *“It is so anecdotal at the moment, what is the truth?... what is the fundamental issue?”*

**- Council Worker**

## 5.2 Culture's strong influence on behaviour

A prominent theme throughout interviews was the influence of culture on drinking behaviours and how important, yet difficult, it is to change. Stakeholders from different parties all expressed an issue with the way that New Zealanders drink alcohol. They mentioned that in the past, people were able to come together and drink large quantities, but that they still maintained responsibility for their own actions. Now values about alcohol have shifted towards drinking being the primary focus of social occasions, rather than having a more passive role. It was stated that people now aim to drink as much as possible and if they get very drunk, it means they had a good time. Moderation for drinking was said to have been lost and that now people do not think about the consequences of their actions.

- *"The days where you almost showed your mana by being able to drink fairly decent volumes but slow and steady... it's now the other way. If you're the one on the ground vomiting and doing spinny helicopters you're somehow a hero. Like really?"*

- Health Professional

- *"It shouldn't be a rite of passage to be able to go into Wellington and get absolutely pissed. But it seems to be, suddenly you turn 18 and 'oh, I can get into Courtenay Place.' That's what Courtenay Place is all about... Getting written off, not knowing what you did and saying 'shit I had a good night'."*

- Health Professional

### Pre-loading and side-loading

Two significant behaviours associated with the aforementioned change in culture and its accompanied harms were unanimously said to be pre-loading and side-loading. Interviewees explained that people going into town would quickly drink a lot of alcohol before leaving and then would continue to drink outside of bars while in town. These behaviours were linked to an increase in accessing cheap alcohol at off-licence premises.

- *"People are absolutely pre-loading, it's the biggest problem we have, it's a well developed culture."*

- Business Staff

### Age and Gender

While the majority of interviewees talked about there being a pervasive drinking culture in Wellington, a lot of focus was put on younger people and men. Interviewees referred to young people or students as those most affected when discussing alcohol issues in the area. Youth behaviours are different because they are new to it, one health professional said. Alcohol was described as appealing to young people, some of whom are under the legal drinking age, because it makes them more of an adult. Participants stated they believed young people pre-load a considerable amount, fail to look after themselves or each other and then end up in trouble because of how alcohol is regarded in their age group.

- *"You are still getting this big influx of young people who are pre-loading, some of whom are too*

*young to even get into a bar but they want to get into town because that's where it's all happening."*

**- Health Professional**

Gender roles also had an impact on the way people acted. Business staff noted that men were expected to drink more and encouraged to be aggressive towards others.

- *"It's all about how brave and tough and manly you are and alcohol accelerates that."*

**- Business Staff**

### Effecting change

There was a common consensus that changing the way people think about alcohol and their actions would be important but very difficult. Solving the causes of ARH would require multiple different interventions and none would be an instant fix, interviewees said. Their reasoning for this difficulty was that it would need a change in people's entire mindsets about what is a good night. The aim of these solutions was intended to make people more responsible for their own actions and not to remove their enjoyment.

- *"We do have a culture which supports the way we drink currently and if we want to change that it is not going to be easy."*

**- Health Professional**

## 5.3 Causes and solutions outside bars

Through analysing the ideas developed by stakeholders, it was soon found that a common theme was that many of the causes and solutions to ARH in the precinct were based in the environment outside of bars. A few interviewees saw this area as the most dangerous in the precinct with most of the violent harms occurring here.

### 5.3.1 Causes of ARH related to the environment outside of bars

Crowding in the streets was highlighted by all groups as a significant factor contributing to violence and assaults. Each of the participants outlined different factors they thought to be causing this. It was suggested that some regions of the streets may be contributing to heavy pedestrian flow such as physical obstructions or the lack of open areas. Particular amenities in the precinct were seen to be adding to crowding such as toilets, takeaways and bars themselves with disorders within queues outlined as a significant contributor to harms. Aggregations around bars can also be seen at closing times from the mass exit of patrons. A lack of transport options late at night was seen as forcing people to remain in the precinct, which can be particularly problematic for people wandering the streets after they have been denied entry or those who have lost their friends. Another point that was raised is that there are some people or groups who particularly come into the precinct to look for trouble and cause violence which is also a concerning contributor that is complicated to control.

- “When bars close, people spill out on the street... Often get a lot of violence fuelled by alcohol at that time. Mingling with the people already on the streets... Should be fine but it’s not always because of this mix of alcohol.”

**- Health Professional**

Every group also identified side-loading as a major cause of ARH. Interviewees noted that people are consuming alcohol within their cars or on the street before or between going to on-licence premises. Side-loading is seen as a cheap way to achieve a desired level of intoxication. The availability of relatively cheap alcohol from off-licences until 11pm is seen as an aspect contributing to this as well as more expensive drinks within on-licence premises. At least one person from all groups also commented that Allen and Blair Streets are hot spots for this kind of behaviour.

Business owners and council workers commented that Wellington is a student city containing two universities within a relatively small population and that there has been an increase in the density of students seen within the precinct as the number of hostels in the CBD has risen considerably in the recent years. It was also noted that there is currently no dedicated bar or area for them. This age group and binge drinking were seen as a possible factor contributing to ARH.

### 5.3.2 Proposed interventions related to the environment outside of bars

#### Urban design

As the urban design was seen as an issue in the precinct, all of the groups except bar owners suggested changes to this as a way of reducing ARH. These changes were seen as a way of reducing the aggregation of people in the streets through improving pedestrian flow and encouraging people to move into bars or out of the precinct itself. Some examples included removing physical barriers that cause obstructions to the flow of pedestrians to reduce walking collisions or close contacts as well as creating more open spaces about the precinct. As crowding around toilets was seen as a possible issue there could be an increase in the availability of bathrooms. Having more transport options was also acknowledged as a way to make it easier for people to get home from the precinct to keep people safe and reduce overcrowding.

- *“Physical design is a huge thing. Fights at the BK [Burger King] on the corner of Courtenay and Tory, that was because they were the latest open toilets at one stage. So people weren’t even buying burgers they were just going there to have a piss... So they changed the time of the automatic toilets that were down a bit further and again the problem kind of resolved itself.”*

**- Health Professional**

#### One-way door policy and closing times

Multiple interviewees showed interest in a one-way door policy as a means to reduce queueing disorder and crowding on streets as people would be more likely to enter a premise or leave the precinct all together. The police and health professionals supported this idea while the council workers and business

staff generally did not believe this to be effective or anticipated a poor public response. A business owner, a council worker and a health professional all suggested staggered closing times of bars as an alternative way of reducing the crowding of streets outside during mass exits but police preferred the blanket earlier closing time. Some ideas of achieving this involved having fees for bars to remain open after 2am or rotating turns at closing times. A business owner also suggested closing different parts of town at different times (Cuba Street followed by Upper Courtenay to Lower Courtenay) which would filter people out slowly over 4-6am as opposed to the current mass exit at 4am without restricting opening hours.

- *“Doing the one way door policy thing won't work because that will just piss people off... So maybe if you did the Cuba Street at 4am and then the beginning of Courtenay Place 5 and then end of Courtenay 6 so letting that filter through... And people will drop off. They will just catch taxis and go home if they can't be bothered which they will but then you are not penalising other venues and restricting them because it is not their fault. People who already have a 4am licence have the right to be able to keep it.”*

**- Business Owner**

### Other interventions

All groups showed support for the closure of both Allen and Blair Streets to traffic during late nights on Friday and Saturday as a means of preventing either side-loading or traffic accident risks and promote better queue formation for bars. It was even suggested that these streets could be made pedestrian-only like Cuba Street, although one business owner believed this would not be effective. Two health professionals also showed interest in increasing the lighting of the streets and increasing the presence of surveillance or to give the illusion of surveillance through cameras. More lighting and surveillance were thought to adjust the environment in a way that discouraged bad behaviour and encouraged people to keep moving or enter a premise, therefore reducing the risk of violence and assault.

- *“Being lit is really interesting, it improves safety for women and so on. The other thing is that it keeps people moving. People actually don't want to stay still when it's almost like midday level of sunlight when you... so it makes them tend to move on back to premises and stuff.”*

**- Health Professional**

### Support areas and personnel

Both members of the council and the police suggested creating 'support zones' or detox centres in the precinct. These would be safe areas where people could go when they are overly intoxicated to access support, free water and some food. This would also work as an alternative place for those not needing medical attention in ED and who were not aggressive enough for police cells. More free water and cheap food options were also highlighted by some health professionals, bar owners and the council as a way to encourage people to eat more and perhaps control their level of intoxication which could be implemented outside or bars.

- *“Putting the likes of food carts.... throwing some of those around on a Friday or Saturday night on Courtenay Place. If food is cheap enough people will buy it.”*

**- Health Professional**

Two of the health professionals interviewed proposed that a 'street hospital' could be focused around events and busy nights and used as a way to reduce the load at the emergency department at the hospital. This was noted to be a success during previous events and busy nights. A similar idea to this was increasing the medical staff presence in the precinct. Multiple bar owners showed support for this, while there was mixed reviews from other health professionals and the council mostly due to resource limitations.

Increasing the police presence in the precinct was a popular intervention from both health professionals and business staff but this lacked support from the council and the police themselves as they believe they are already allocating a significant amount of their resources to the area and so further investment could compromise the care of suburban areas.

- *"You shouldn't have to have police down on Courtenay Place, you should have police out there doing actual crime work... rather than stand around and babysitting drunks."*

**- Police**

## 5.4 Causes and solutions inside bars

Upon interviewing a variety of key stakeholders, we identified some causes and solutions for ARH that pertained specifically to the environment within bars in the precinct.

### 5.4.1 Causes of ARH relating to the internal bar environment

Three causes of ARH were identified, by business staff and police, in relation to the bar environment itself: use of glassware/bottles as this can lead to broken glass; poor bar policy such as allowing overcrowding within their bar and staying open too far into the morning i.e. 4am; and commercial interest - bar owners letting their own commercial interest supercede any efforts towards improving the problems regarding alcohol-related harm in Wellington's entertainment precinct.

- *"Don't allow glass on the street, change it all to plastic. Cut feet disappeared. We used to get a plague of cut feet over that weekend [the Sevens weekend] because they're all wearing... no shoes and standing on glass. It just disappeared the year after Courtenay Place put that if you stepped outside the door it had to be in plastic. Brilliant!"*

**- Health Professional**

- *"What it feels like is that the industry is fighting to maintain the status quo. They only want harm reduction that maintains their ability to maintain the status quo... It did end up being industry versus anybody else trying to achieve a goal of harm reduction. Can we have industry at the table when we want to make great change? Only with great difficulty. The industry is only happy if we tinker at the edges."*

**- Health Professional**

## 5.4.2 Proposed interventions related to the internal bar environment

Thirteen solutions that involve the internal bar environment were suggested and discussed during the key informant interviews. Only one solution was supported by members of all four stakeholder groups: training of bar staff in detecting and dealing with intoxicated people. Relating to staff training, one business staff member suggested comprehensive and mandatory training of security staff. A business staff member and a health professional both thought that installing security cameras (including GoPro cameras on staff) in the bars would also help deter and reduce aggression in queues and within the bars as it can hold both patrons and staff accountable for their actions.

- *“Without training you’re left with guess work.”*

**- Business Staff**

There was strong support from business staff, council workers and health professionals for strengthening host responsibility plans and action. These plans could include offering cheaper or free food, making free water more accessible and serving drinks in plastic vessels. However, apprehension about the use of plastic vessels was raised by a health professional claiming that they degrade the nature of the venue.

- *“The licenced premises have picked up their game. The licenced premises are taking a lot more responsibility now than they did when I started in this role. They are acknowledging that this is happening. They up security, they up their duty manager to monitor for intoxication. They push for low alcohol beverages as well, and non-alcoholic beverages. They have definitely upped the way they are operating.”*

**- Health Professional**

Council workers, business staff and health professionals showed support for education initiatives that teach people about safe drinking and looking after themselves (an example of this is the ‘Check Yourself’ campaign in Wellington). Health professionals and police strongly supported restricting on-license opening hours (including business owners voluntarily choosing to limit hours) but there was also strong opposition from health professionals, business owners and a council worker.

- *“Closing the bars early is not going to eliminate the problem by any stretch. People might see it as a race to drink as much as possible.”*

**- Health Professional**

Restricting access to drinks above a certain alcohol content (i.e. spirits and/or shots) after a specific time received only opposition (from a health professional and two business staff). One business staff member pointed out that some bars would be unfairly affected by a solution such as this due to the nature of their business (primarily selling fine, quality spirits). Other solutions that were suggested and were met with weak levels of support include staggered closing times of on-licence premises, reducing alcohol advertising in bars, and use of an app that would help staff (bar and security) from different bars communicate with each other about certain high risk patrons (app currently in development).

- *“There is a network between retailers and police to deal with/address shoplifting etc... can we adapt that model to bars... have bars looking out for each other... pass on information via text messaging”*

**- Council Worker**



## 5.5 The role of law enforcement within the precinct

Another prevalent theme from the thematic analysis was the role of law enforcement in preventing ARH in the precinct. Some groups felt that a failure of law enforcement has also resulted in some of the harms observed.

### 5.5.1 Causes of ARH related to law enforcement

Throughout the 18 stakeholder interviews, two causes of ARH as a result of inadequate law enforcement were reported. Firstly, one business staff expressed the view that the police were failing to adequately enforce drinking in liquor ban areas and in cars - a major cause of side- and pre-loading. Many interviewees felt this pre-loading was a significant contributor to the ARH witnessed in the precinct.

Secondly, several business staff members also reported police were blaming them and expressed they felt the off-licences were causing much of the problem and they are just being left to deal with the intoxication. Business staff members felt that the effects of interventions being designed to reduce ARH in the precinct were unfairly falling on on-licence businesses and not the off-licence businesses or individuals actually responsible.

- *“You can get somebody turn up to come into your venue and they are absolutely fine and then half an hour later they might have had one drink in your premise and would be absolutely smashed [due to pre-loading]...but because they are here it’s our responsibility to look after them and I think a lot of places feel like the police bully you a little in terms of that.”*

**- Business Staff**

These views were restricted to only a portion of the business staff members interviewed and were not expressed by the other stakeholder groups.

### 5.5.2 Proposed interventions related to law enforcement

Subsets of three of the four groups interviewed supported the introduction of fines for excessive intoxication in public. This included the police, health professionals and business staff members. Several interviewees thought this would make people more accountable for their own actions and think twice before drinking too much and causing disorder in public.

- *“Maybe you need to fine... That guy that gets put in the bus stop... What kick back is there on him... None. ‘Yeah i’ve spewed on the bench and made a mess in public. So what? I still go home and get up tomorrow and no consequences’. Maybe they do need to have consequences.”*

**- Police**

No interviewees from the council expressed their view on this. It was also raised by one health professional that 30 years ago it was in fact illegal to be intoxicated in public. However this interviewee also discussed that police may be under-resourced to implement this effectively.

- *“30 years ago it used to be an offence to be intoxicated in a public place, and the police could give you a fine basically for that... Sometimes what hits your pocket can make a difference in terms of behaviour...I think the police will say that they don’t have the resources to do that because that is something they would have to do... it would have to be a police driven thing and I think their resources are stretched already.”*

**- Health Professional**

One business staff member expressed concerns that fines don’t affect an individual enough to change their behavior and would not change the outcomes on the night of excess intoxication. They instead suggested a 24-hour lock up for a consequence as they felt being in a police cell for 24 hours would have a greater impact on their life.

- *“If you really want to reduce alcohol-related harm on Courtenay Place make the people who are getting intoxicated responsible for their actions. And not just ‘naughty, here’s a \$200 fine’, stick them in the cell for 24 hours, make it impact their world outside of when they were drinking.”*

**- Business Staff**

However the views raised by the police oppose this, stating that a night in the cells for one intoxicated individual can cost up to \$300-400 in police time, administration etc. Following on from this it was suggested by the police group that people should be billed for ambulance rides and nights spent in police cells as a result of excessive intoxication. It was expressed this may be required due to the high demand on government resources created by intoxicated people which could be reinvested elsewhere in a more equitable way.

- *“We’re not babysitters. You get drunk, you come into the police station you’re held here, you’ve got to have a police officer watch you. How much is that costing us as well as the taxpayer to have a drunk cared for for the night. He gets out and is probably cost about 300-400 hundred bucks just for a bit of care. There’s no consequence to them. They say ‘thanks so much, see ya tomorrow because I’m getting pissed tonight anyway’ and the circle continues. You kinda think, here is the bill for us looking after you. Maybe that might change their mind.”*

**- Police**

Finally, along these lines one business staff member suggested police need to have a no tolerance policy. The interviewee felt there needs be consistent enforcement, that nobody should be given warnings and the police need to follow through on threats.

## 5.6 Law and policy changes at a local and national level

Local and national law and policy changes were identified as being a theme from the stakeholder interviews. A number of causes of ARH were relevant to this theme along with a number of proposed solutions to mitigate these causes.

### 5.6.1 Causes of ARH related to proposed law and policy changes

The most commonly identified causes of ARH were pre-loading and side-loading. The majority of stakeholders mentioned that pre-loading was a prominent cause of ARH, with a third also acknowledging the contribution of side-loading. As mentioned previously, both of these were a common consideration among all stakeholder groups. Business staff suggested pre-loading and side-loading the most across all interview groups, with five staff members mentioning pre-loading and two mentioning side-loading.

The mass emptying of bars at closing time and the density of patrons on the street in the late hours were other causes that could potentially be addressed through effective policy. This cause was identified by a third of stakeholders in total across three of the four stakeholder groups.

A large presence of young people in the precinct was mentioned as a cause of ARH by five stakeholders across three of the four interview groups.

- *“They [youth] turn up in town but they’re already grossly intoxicated. And that’s from the significantly cheaper alcohol that’s available at off-licence. And then they go into town and they purchase very little.”*

**- Health Professional**

The contribution of cheap and accessible alcohol at off-licence premises specifically was brought up by three health professionals but none of the other groups. Cheap alcohol and its ready availability in general was also mentioned by three business staff members. Poor role-modelling and media influence was mentioned by one health professional and two business staff. Finally, the density of alcohol supplying outlets and alcohol marketing was mentioned by a single interviewee each, both of which were members of the police force. The lack of alcohol-related education was mentioned by one business owner as a cause of ARH within the precinct.

- *“One of the major issues is people preloading before they come into town. Drinks are expensive in bars, people have limited incomes, it’s easier for people to go to off-licences or supermarkets and buying RTDs.”*

**- Health Professional**

### 5.6.2 Proposed interventions involving law and policy changes

A number of law and policy-related solutions were suggested. Restriction of licenced premises’ opening hours and raising the legal drinking age were the interventions mentioned the most in stakeholder interviews. A restriction of opening hours for on-licence premises was identified and supported by police and three health professionals. This idea was opposed by an individual from the council who believed it would merely shift the alcohol-related problems to earlier in the night. The restriction of open hours for on-licence premises was also opposed by two health professionals, and two business staff members.

Restriction of opening hours for off-licence premises specifically was supported by three health professionals, the police and a business owner. This restriction of opening hours was opposed by one business owner. The general idea behind restricting opening hours was an attempt to entice patrons to

head into the controlled town environment earlier in the night to help limit the level of pre-drinking before doing so.

- *“If you can control pre-loading by making bars close earlier. If they all close at 2[am] people wouldn’t drink to 12 and go to town. They’d drink till 10 and then go to town, so you’d have two hours less time at the front end [to pre-load].”*

**- Police**

Raising the legal drinking age was suggested and supported by three individuals, one each from the business staff, police and health professional groups. The police rationale for this was that it would increase barriers to school-aged drinking and the healthcare perspective was that it would reduce future implications of alcohol abuse as well as limiting drinking to a more mature age group. It was further supported by another business owner but for off-licence premises only. Raising the legal drinking age was opposed by one business staff member and one council worker.

- *“We know that the younger the onset of initial drinking the more likely you are to have ongoing significant alcohol problems, getting into the alcohol abuse territory. And it is directly related to the age of initiation. The later the age of initiation, the smaller the risk of developing alcohol abuse disorder.”*

**- Health Professional**

The cost-gap between alcohol pricing at on-licence and off-licence premises was identified as another area of focus of potential policy intervention for harm-reduction. A stakeholder each from the health professionals, the police and the business staff groups supported increasing the cost of alcohol at off-licence premises to reduce this cost gap. It was suggested by one police interviewee and a health professional that having minimum pricing would be the best way to achieve this. One business owner was against this idea. Two stakeholders from the police supported finding a balance between decreasing the cost of on-licence purchasing and increasing the cost of off-licence purchasing to address this cost gap however, one council worker and one business owner were against this idea. Another police stakeholder and a health professional suggested targeting this cost gap in general would be helpful. One business owner also suggested raising the price of alcohol in general as a proposed solution (on and off-licence).

- *“Minimum pricing was one of the recommendations of the alcohol harm commission but it wasn’t adopted... this would’ve had the biggest effect on off-licences... if you made it more expensive at the place where it’s the cheapest, i.e. supermarkets and off-licences you reduce the amount of consumption that some people can engage in.”*

**- Police**

- *“The problems is the prices at the off-licences. A minimum price would make a lot of a difference. People wouldn’t pre-load as much”.*

**- Health Professional**

- *“There needs to be greater emphasis on for example closing the cost gap, between off-licence and on-licence.”*

**- Health Professional**

It was suggested by a business owner that restricting the number of off-licence premises within an area would help to reduce ARH in Wellington. A number of suggestions were further put forward by health professionals including new local alcohol policy, removing alcohol from supermarkets and reducing

alcohol advertising. The latter two suggestions were opposed by a different health professional and removing alcohol from supermarkets was opposed by one business owner.

## 5.7 The importance of communication between agencies

Key informant interviewees suggested solutions that spanned across all areas of society, requiring several different groups to be active and engaged with one another. These groups included; health professionals, the police, local business staff, and policymakers, both local and national.

### 5.7.1 Communication between stakeholder groups

Agencies varied on how they described their current communication and relationships with other groups. One view expressed from a health professional is that relationships between industry and agencies has been better in the past. However, another maintained that good collaboration does occur between the agencies. An informant from the council mentioned that a key objective to reduce ARH while maintaining vibrancy is to increase collaboration. A unified approach to reducing ARH was also seen as important from health professionals.

- *“If we oppose a licence, it looks far better if the police, health [professionals] and council do it rather than just police or just health. That’s a unified approach.”*

– Health Professional

Another point raised by key informants was the inclusion of more stakeholders into the discussion of ARH. An opinion shared from a health professional is that previously, the at-risk demographic (18-25 year olds) have been excluded from this discussion. Furthermore, it was mentioned that the alcohol industry themselves haven’t been working in a unified way with agencies.

- *“And there’s just no doubt about it, if you want some of these things to happen then you’ve got to involve everyone. And if that means involving the alcohol industry then that’s actually what you’ve got to do.”*

– Health Professional

### 5.7.2 Differing views between stakeholder groups

Opinions from business staff towards police, shed light on a potential conflict. A shared view from these informants is that police and health professionals place a lot of expectations on business owners. A widespread view from health professionals however described how licenced premises are a lot more responsible than they once were. One view from business staff was that the police go after business owners because it is easy, suggesting that the police get a poor return from fining individual people. Distrust towards the police was outlined by security staff as well as bar staff. The police themselves also mentioned that they feel that business owners appear to fear them. However one business manager accepted the police presence and respects both the police and the regulations that they are enforcing. This same police presence was described by another informant with a feeling of frustration.

- *“Police do walk through bars, which is fine, but then 20 minutes later they come back again even if everything was fine.”*

– **Business Staff**

An area of conflicting agendas was brought to attention by some health professionals in regards to their interactions with the Wellington City Council. From their perspective, the relationship between the two agencies is not as strong as it was in the past, that there lacks a working relationship. A barrier that was identified by a health professional is that the council does not see how Courtenay Place is operating as an issue. A reason for why this is, explained by the same interviewee, is that the council prioritises the vibrancy of the city over risks ARH. The Wellington City Council has identified that vibrancy of the city is an important point to consider when implementing ARH reducing actions.

- *“...But if we can see harms and police can see harms, it makes you wonder why others can’t and why they don’t raise it to the table.”*

– **Health Professional**

Table 1.1 Summary of interventions from key informant interviews.

Proposed Interventions	Support by group			
	Police	Business	Health	Council
<b>Outside Bars</b>				
Urban design	+	0	++	++
One way door policy	+	+/- -	+	-
Staggered exits*	-	+	+	+
Closing Allen & Blair St.	+	++/-	+	++
Surveillance & lighting	0	0	++	0
Support/detox centre	+	0	0	++
Cheap food/free water*	0	+++	+	++
Street hospital	0	0	++	0
☐ Medical presence	0	++	+/-	-
☐ Police presence	-	++	+++	-
<b>Inside Bars</b>				
Hospitality staff training	+/-	+++++	++	++
Security cameras	0	+	+	0
Host responsibility	0	+++	+	++
Use of plasticware	0	+	++/-	0
Education	0	+	+++	++
Restrict on-licence hours**	+++	--	+++/- -	-
Restrict alcohol content	0	--	-	0
☐ αλχοηολ advertising**	0	0	+/-	0
Inter-premises communication app	0	+/-	0	+
<b>Law Enforcement</b>				
Fines for intoxication	++	+/-	+	0
24-hour lock up	0	+	0	0
No tolerance policy	0	+	0	0
<b>National and Local Law Policy</b>				
Raising drinking age	+	++/-	0	-
Restrict off-licence hours	++	+/-	+++	0
Reducing cost-gap	++++	+/- -	++	-
Restrict off-licence density	0	+	0	0
New local alcohol policy	0	0	+	0
Remove alcohol in grocers	0	+	+/-	0

**Key:**

+ = interview showing support for the intervention

- = interview showing opposition against the intervention

0 = intervention was not mentioned in the interviews for that stakeholder group

\* Staggered exits and cheap food/free water were also considered within 'Inside Bars'

\*\* Restrict on-licence hours and reducing alcohol advertising were also considered within 'National and Local Law Policy'

## 6. Discussion

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### 6.1 Summary of findings

#### 6.1.1 Survey

##### 6.1.1.1 Drinking behaviours

A survey of 18-30 year olds in the Wellington Region indicated that when participants go to Wellington's entertainment precinct (WEP) after 7pm at night, they usually consume alcohol within the precinct. The alcohol consumed most often comes from licensed premises. Approximately 42% of participants also buy their alcohol from supermarkets and liquor stores (note that survey participants could select multiple places of alcohol purchase). Of those that consume alcohol from licensed premises, the majority only tend to have 1-2 drinks on average within WEP in a night. This doesn't appear to fit with the levels of intoxication anecdotally reported in relation to WEP.

The average AUDIT-C score of the population was relatively high, within the range of hazardous drinking. Although participants drink relatively heavily, they aren't consuming many drinks from the licensed premises on any one occasion (fig 4.3.4). Results from the survey also showed that there isn't high rates of self-reported side-loading as well. Pre-loading, is therefore likely to be one of the main reasons for the levels of intoxication within Wellington's entertainment precinct with more than a third of respondents indicated that they would 'always' pre-load before heading into WEP. In compiling results, 60.9% of people said they would always/most of the time pre-load. This reinforces potential areas to target such as the price difference between on-licensed premises and off-licensed premises, and the location and numbers of these off-licence premises.

##### 6.1.1.2 Harms

The top 3 alcohol-related harms (ARH) observed or experienced in WEP were 1) dropping rubbish, 2) verbal abuse and 3) violence/fighting. When asked specifically, what is the one most *significant* ARH within the precinct, the top 3 were 1) violence/fighting, 2) unwanted sexual advances, and 3) getting intoxicated to the point of needing medical attention.

##### 6.1.1.3 Attitudes

In regards to survey participants' attitudes towards WEP, more people agreed that: binge drinking is a problem; violence/fighting/assaults mainly involve drunk people; and that cheaper drinks in bars would make them less likely to pre-load. Proportionally, more people disagreed that: cheaper non-alcoholic drinks would make them less likely to consume alcohol; and that an increase in taxation will decrease their alcohol consumption.



When stratifying attitudes based on AUDIT-C scores, those with the most hazardous drinking usually had a different attitude to those with less hazardous drinking. Those with more hazardous drinking were more agreeable that:

- They felt safe in Wellington's entertainment precinct
- They liked the atmosphere of the precinct
- They would be allowed into licensed premises even when intoxicated
- Cheaper drinks at licensed premises would make them less likely to pre-load

They were more disagreeable however that:

- An increase in taxation, and thus more expensive alcohol, would make them consume less alcohol
- Alcohol-related harms are getting worse

On the other hand, the non-hazardous drinkers were more agreeable that:

- They adhered to liquor bans

#### 6.1.1.4 Interventions

Upon assessing the predicted effectiveness and support for certain interventions from respondents, those that came up as having the potential to be effective were: increased police presence and increased ambulance staff within the precinct. These two strategies also had a good amount of support for them to be introduced as interventions. Participants were less likely however to support early closure of premises from 4am to 2am, raising the legal purchasing age from 18-20, or reducing the alcohol content in drinks from 2am.

Māori are overrepresented in the consequences of ARH (10–12,14) therefore we need to identify whether or not interventions can decrease disparities between Māori and Non-Māori. Although we had a very small sample size of Māori participants, on stratifying our results by Māori versus Non-Māori responses, there was a clear discrepancy between some opinions (see *figure 4.8.1*). Self-identified Māori thought that raising the purchasing age to 20; reducing alcohol content in drinks after 2am; using plasticware; and having an earlier closure time would all be more effective than Non-Māori participants. Although there was consensus between the two groups that an increased police presence could be effective, Māori did not deem it to be quite as effective as Non-Māori. Furthermore, Māori participants' support was higher than Non-Māori support for increasing medics; increasing Māori Warden presence; and increasing the purchasing age to 20 years old.

#### 6.1.2 Key Informant Interviews

The major types of ARH described in the key informant interviews regarded health-related effects rather than economic losses. The most common and significant of these health harms named by interviewees were accidental and intentional injuries, followed by sexual assault. While stakeholders agreed on the manner of harms present in the precinct, they were unable to reach a clear consensus on whether the problem was getting better or worse with many saying that more measurements were required to make a judgement.

Cultural impacts on alcohol-related behaviour was a common focus during interviews. Interviewees believed that a shift in values had occurred that meant drinking alcohol was a primary focus of social gatherings. Furthermore, they explained that individuals no longer regarded themselves responsible for their own actions. Pre-loading and side-loading are two behaviours that were associated with our drinking culture. Both were a result of greater access to cheap alcohol outside of bars. Although it was clear that drinking culture was believed to be a significant factor in ARH, some interviewees expressed that changing people's mind-sets would be incredibly difficult.

Many of the causes and potential solutions for ARH related to the environment outside of the bars. This environment was seen as the most common place for assaults as it lacks the controls seen within bars, combined with issues of overcrowding. Interventions to combat this involved changing the urban design to reduce the density of people, allow better flow of pedestrians and encourage people to either remain within bars or get home safely. Stakeholders described multiple ways to introduce more support on the streets as a way of reducing harms. This included the increased presence of police and medical staff as well as introducing safe zones and street hospitals during events and busy nights. Any resistance to these interventions from stakeholders mostly stemmed from a lack of resources to meet this need.

It was recognised that causes and solutions for ARH could also be associated with the environment inside bars. Three causes for how bars contributed to harms were the presence of glass, ineffective bar policy for reducing harm and the influence of commercial interests over decision making. The most strongly supported intervention was to increase business staff training to improve identification and reduction of ARH. Another favourable solution was to ensure good access to cheap (or free) food and free water, and replacing glassware with plasticware.

The role of law enforcement in the precinct is important to consider. A small proportion of business staff placed some blame for ARH on police for their failure to effectively monitor problems such as drinking in liquor ban areas. Some on-licence business staff also felt they were being unfairly targeted despite most of the drinking occurring from off-licences through pre-loading behaviors. The most supported intervention in this category was fining people for being excessively intoxicated in public.

Reducing ARH with law and policy changes at a local and national level formed a large component of discussion around interventions. The causes of ARH that would be targeted by these wider changes are pre-loading, side-loading, the large presence of youth in the area and high numbers of patrons leaving bars when they close. The aim of suggested policies is to reduce the availability of alcohol to people, especially at off-licence premises. One such solution was to reduce the opening hours of on- and off-licensed premises, with more opposition for closing on-licences early. Respondents also commented on raising the drinking age, with more support for raising it but still some opposition. Addressing the cost of alcohol in both on- and off-licensed premises was brought up frequently during the interviews. Specific responses included reducing on-licence prices, raising off-licence prices and increasing overall prices or setting a minimum price.

Communication between different stakeholder groups was often said to be crucial in order for solutions to move forward and be effective. The current state of inter-agency relationships had a mix of responses, some saying that they were good but others stating that they had been better in the past. Additionally, some business staff felt that they did not have a good relationship with the police. Another communication barrier outlined within the interviews was that different groups held different opinions on what objectives are important for the city.



## 6.2 Discussion of Interventions

### 6.2.1 Pricing

#### 6.2.1.1 Taxation

Increased taxation as a method of reducing alcohol consumption has been successfully used in many countries overseas such as Sweden and Thailand (55,56). New Zealand currently has a relatively low taxation on alcohol at 10% on beer (24% in Australia) (57). hence is a possible target to reduce alcohol consumption and consequently ARH.

The benefits of increasing taxation is that it is relatively cheap and easy to administer while being highly effective (31). We have seen taxation used in other demerit goods in New Zealand, such as cigarettes, with great success. The greater cost to the consumer not only reduces the demand for alcohol but also generates revenue which can help offset the expense of ARH. The revenue generated can also be 'tied' and utilised for other interventions aimed at reducing ARH.

Although there are many benefits to an alcohol taxation, there are several disadvantages to it. Unlike cigarettes, there is a safe level of consumption which a significant proportion of the population may fit into. Since taxation affects all consumers, the population of people who consume alcohol safely are unfairly disadvantaged. We also need to take into account that increased taxation affects consumers of lower socioeconomic status (SES) more so than those of higher SES thus may increase disparities between lower and higher income groups (58). Also taking into account that a significant proportion of Māori living in Wellington belong to a lower income group, increased tax may also increase ethnic disparities if Māori continued to drink at the same rates (59). On the other hand taxation has the potential to decrease disparities if it has the intended consequence of decreasing the purchase of alcohol. Thus due to the complex nature of alcohol, increased taxation may reduce overall consumption however does not specifically target the issue of New Zealanders' drinking behaviour.

Another issue with taxation is that it may lead to activities to circumvent the effects of the taxation. There can be methods employed by industries to minimise the effect of taxation. For example, the current method of taxation which New Zealand and most countries employ is an Ad Valorem tax which is a fixed tax depending on the particular range of alcohol percentage for each beverage (beer, wine or spirits) (57). Given that the taxation is the same at the lower end of the range as well as the higher end, manufacturers tend to produce beverages at the higher end of the range to minimise the effect of the tax and maximise profit. Another form of taxation which can reduce this problem is a specific alcohol percentage tax based on the percentage of alcohol in a beverage which discourages production of high alcohol content beverages. However, this encourages the production of cheap, low alcohol-content beverages which are a significant contributor to binge-drinking culture (57). A taxation system that utilises both taxation methods could reduce production of both high and low alcohol-content beverages. Such a system was implemented in Thailand which applied the higher of an ad valorem tax or a specific percentage tax to each beverage and had been deemed relatively successful at controlling consumption of alcohol (56).

#### 6.2.1.2 Minimum Price

The issue of price-differences between on and off-licences has been raised throughout this investigation, as has the availability of very low cost alcohol.

These issues have been identified as part of the underlying cause of pre-loading. There has been some work done, mostly in the UK and US looking at causes and consequences of pre-loading. It was found that pricing of alcohol was the main factor influencing the decision to drink at home before going out. Pre-loading was correlated with more alcohol consumed over the night, higher levels of intoxication and greater risk of harm, particularly of violence/assault, injury and sexual assault (60).

Having a minimum pricing policy would reduce price discrepancies between on and off-licences, thereby potentially reducing pre-loading. The drinks that will be most affected would be the cheapest with the highest alcohol content. Having a minimum unit price on alcohol has been found to be effective at reducing both overall consumption and negative health effects of alcohol. These benefits are seen predominantly in the most hazardous drinkers and those of lowest SES (61,62). This shows that minimum pricing can reduce the inequalities seen in ARH. It has been found to achieve this to a greater extent than universal taxation (63).

Our survey identified that the public believe if the price of alcohol at on-licensed premises was reduced, they would be less likely to preload (fig 4.5.4). This is a sensible argument, however there is no evidence available as to whether this would be the case in practice or not. Given the strength of evidence to say that increasing pricing reduces harm, it would be nonsensical to reduce the price of alcohol in any way, shape or form. Rather, it is more important to address pricing discrepancies, which would be possible via minimum unit pricing.

## 6.2.2 Earlier closing times

One option that has been suggested to reduce ARH is reducing the hours in which licenced premises are allowed to operate. Currently, bars are limited to a 4am closing time in WEP. Options to change this limit include reducing this closing time to a blanket 2am, or to introduce a staggered closing time system by which some bars begin closing at 2am while the final bars close at 4am.

### 6.2.2.1 Reducing operating hours for all bars

Earlier closing times are associated with reduced ARH (34). This is possibly due to reduced pre-loading as town-goers may go to town earlier if bars close at 2am rather than 4am. This may also be due to the fact that less alcohol is consumed overall due to reduced operating hours of bars. Reduced operating hours could also have downsides, including the possibility of overcrowding and a 'peak-density' time immediately after bars close at a defined time. This could promote aggression and frustration about having to leave town abruptly along with all other town goers. This is supported by a New Zealand example in which serious assault numbers actually increased in Auckland after the introduction of a blanket closing time rule in 2013 (35). Another problem with this suggestion is that it may shift the problem to earlier in the night and not actually diminish the problem. This was supported by some of our key informants, including a council member. Additionally, the Wellington night-time economy is significant, and earlier closing times could result in decreased transactions overall, as well as reducing the 'vibrancy' of WEP.

### 6.2.2.2 Staggering operating hours for all bars

Staggering closing times for bars in WEP was an idea discussed in many of our key informant interviews. Support for this strategy includes the fact that it could mitigate some of the overcrowding problems that

could result from the alternative earlier closing time. A staggered approach would mean that at no point during the night would crowds of people be exiting the bars at one time. This approach would also mean that better monitoring of bars that are still open would be possible between 2am - 4am and resources would be less stretched. From our research it was suggested that this could be implemented by having a fee for bars wishing to stay open past 2am or closing different areas of town incrementally in the hope that some patrons would go home instead of moving on to a new bar.

In regards to some of the problems that may arise when implementing this strategy, incremental closing of bars from 2-4am may actually cause an increase in foot traffic from people moving from bar to bar as each bar closes. This may actually increase violence and criminal behaviour if more people are on the street throughout the night. Closing the bars incrementally based on its area may also cause problems due to increasing the popularity of the bars that are in the area that is open the latest. This could promote crowding in this area and difficulties in monitoring. A police officer interviewed was not supportive of the idea of staggering closing hours which could indicate that it may be difficult to implement on a practical level.

It is likely that an earlier blanket closing time or a staggered closing time for bars would reduce ARHs in the entertainment precinct. However, there would be some challenges to implementing these strategies and New Zealand based research needs to be conducted exploring these. Key informant support was mixed in regards to blanket earlier closing times, however our research is encouraging in the fact that multiple key informants suggested on their own accord that a staggered closing time would be effective. Staggered closing times could be a good compromise to reduce ARH while also limiting the negative impacts that closing bars earlier may have on Wellington's vibrant nightlife.

### 6.2.3 Raising minimum legal drinking age

Increases in a variety of ARHs among young people were noted when the minimum legal drinking age (MLDA) in New Zealand was dropped in 1999 from 20 years to 18 years of age (64,65). These included, but were not limited to: road traffic crash injuries and presentations to ED by ethanol intoxicated eighteen and nineteen year old patients (52,65). A higher MLDA could therefore be effective at reducing ARH among young people in New Zealand.

As mentioned earlier in the report, the 18-30 age group has been identified as a high risk group for ARH. A healthcare professional interviewed stated that the 18-24 year old age group had more alcohol-related visits to ED due to ethanol intoxication than any other age group. Therefore preventing more youth from purchasing alcohol would likely result in a significant reduction in ARH.

Unlike other policy changes such as taxation, increasing the minimum legal drinking age will only have a direct effect on those that are younger than the proposed MLDA. This is a benefit of this intervention as it is imposed on only a small proportion of those that purchase alcohol, and in particular a proportion with more hazardous drinking behaviours.

Furthermore, there would likely be long-term health benefits for those affected by an increased MLDA. One police officer interviewed stated their support for increasing the MLDA, with rationale being that it would increase barriers to school-aged drinking. Furthermore a healthcare professional stated that *"We know that the younger the onset of initial drinking, the more likely you are to have ongoing significant alcohol problems"*.

Unfortunately, raising the MLDA is a politically unpopular decision and thus liable to change with changes in political leadership. Currently it is illegal in New Zealand for anyone other than a parent/guardian (or

someone given the express permission of parent/guardian) to purchase alcohol for anyone under the MLDA (66). However this law is difficult to enforce, and likely does not act strongly enough to prevent the consumption of alcohol by those under the MLDA. Therefore raising the MLDA would likely have only a limited effect on this population.

There would also be a clear economic disadvantage to bars and restaurants if their customer base is decreased - a commercial downside of raising the MLDA. Furthermore it would decrease tax revenue from the sale of alcohol which may impact on government spending where this tax is utilised. It has been noted that the Wellington City Council aims to maintain the vibrancy of WEP. This is an intervention that would likely decrease the vibrancy of all entertainment precincts in the country. Therefore careful discussion with all relevant stakeholders would be necessary to fully evaluate the benefits and negative effects of an increase in MLDA.

## 6.2.4 Consequences for excessive intoxication in public

Harsher consequences (e.g. fines, community service) for people excessively intoxicated in public was a common theme in interviews and was also commonly suggested by the general public in the survey. Several stakeholders expressed that interventions being implemented to tackle ARH in WEP were unfairly targeting their businesses, despite a majority of the ARH being due to preloading and not on-licence consumption of alcohol. Harsher consequences for excessive public intoxication holds the individual accountable for their actions, something most interventions fail to do.

Under current law an officer who finds an intoxicated person in public place is able to detain the person and take them into custody under certain circumstances (67). However the police officer must release them once they are sober and they can not be in custody longer than 12 hours. In interviews police stated that this can cost up to \$300-400 of taxpayers money and can effectively take two police officers off the street. Multiple stakeholders raised the issue of what happens when they are released. They wake up in the morning sobered up and there are no further consequences so they are unlikely to change their behaviour. Therefore they stress the need for something more to be put in place.

It was an offence to be drunk in a public place until it was repealed in 1981. One of the main reasons for this was because it was resource intensive to process drunk people through the court system despite only small penalties being imposed (68). It is likely that time and money enforcing this may be better spent on more serious offences. However hospitality NZ has suggested an infringement regime (instant fines) for low level offences which would not tie up the court system (69). One business owner also expressed his view that the fine is unlikely to change the intoxicated person's action on the night, which is when the ARH is likely to occur. The police are likely to still have to take the intoxicated individual home or to the cells for the night to sober up. The same business owner suggested that a monetary fine was simply not enough to change someone's behaviour.

A benefit for fining people for excessive public intoxication would be targeting high risk individuals that cause most of the ARH, rather than blanket restrictions or interventions that affect everyone. This was raised by both survey participants and by stakeholders who felt they were being unfairly disadvantaged due to a small portion of individuals' behaviour. Business owners argue that licensee's are currently fined for having intoxicated people on their premises but no ownership falls on the intoxicated individual.

Another argument for fines is that they are likely to change the individual's behaviours as it encourages personal responsibility rather than just changing the environment to reduce harm. Finally revenue from fines could be reinvested into resources used to manage ARH.

One major problem with this intervention is defining public intoxication. This is quite a subjective measurement and if left to the police discretion to give out fines people may think they will get away with a warning and not change their behavior. It has been suggested to use a blood alcohol measurement to make this less subjective however people respond differently to the effects of alcohol and may not be causing disorder on the streets. Hospitality NZ therefore argues that a drunken nuisance offence may be more useful (69).

Another issue raised was that fines for excessive intoxication could increase inequalities as people from low socioeconomic backgrounds are likely to be affected disproportionately by these fines despite committing the same offence. For this reason it was suggested community service may be more appropriate. Another thing to consider is the possibility of racial profiling by authorities leading to increased targeting of Maori thus perpetuating inequities in the justice system. Finally, it could prevent people who are severely intoxicated from seeking help for fear of being fined for intoxication.

In conclusion despite the advantages of targeting the individuals causing the harm and making them personally accountable for their drinking behaviors, the issues with implementation and the resource intensiveness of fines for public intoxication most likely outweigh these potential benefits. However one suggestion raised by the police interviewees, which may be more feasible, was billing people for the resources used during their time spent in the cells due to intoxication.

## 6.2.5 Increasing police presence in Courtenay Place

Another possible intervention to reduce ARH in WEP is increasing police presence in Courtenay Place. This intervention has several advantages. ARH makes up a large proportion of criminal offenses in New Zealand so is an issue that requires police involvement (8). As previously mentioned, police data shows alcohol-related incidents are localised around the eastern end of Courtenay Place, so it makes intuitive sense that increasing the amount of police presence in this area could counter this (28,29).

This intervention would enable stricter enforcement of components of the Alcohol Sale and Supply Act 2012, such as liquor ban areas and ensuring licensed premises operate a 'wind down' protocol at the end of the night (24). The need for this enforcement is supported by a stakeholder's statement that current enforcement was inadequate. As suggested in our interviews this increased enforcement could also extend to newly implemented interventions such as previously outlined law and policy changes. Overall this enforcement, in combination with the increased surveillance of ARH it would provide, would promote a safer drinking culture within the precinct. Furthermore, it enables a more rapid response to ARH in the area, which would reduce its impact on victims and prevent inflictors from fleeing the scene.

As outlined in our results section, this intervention has strong support among the survey participants and some of the stakeholders. While it is difficult to ascertain from our survey results the level of awareness of current police presence in the area, 59% of participants thought that increasing police presence would be an effective way of reducing ARH. In fact this intervention received the largest amount of support for its effectiveness out of all the interventions that we asked about, and was supported by participants who identified as Māori and non-Māori. In addition, increasing police presence during peak times of ARH



occurrence was an intervention suggested by respondents. Of our interviewees, health professionals and business staff were also in favour of this intervention. These results all support the implementation of this intervention.

However some of our results did not support this implementation. From our interviews it was found that police and council members were mainly opposed to this intervention as they believed they were already allocating a large amount of resources to this area and further allocation would compromise responsiveness to suburban areas. In addition it was suggested that these resources may be better spent addressing other equally (if not more) important issues. Some police interviewed also felt that “stand[ing] around and babysitting drunks” wasn’t their responsibility and that the issue of ARH would be better dealt with with an approach focused more on prevention rather than response.

Another disadvantage of this intervention is that it may create or increase animosity between the police and business owners and staff of licensed premises. In our interviews it was found that some business owners and staff of licensed premises felt that the police were unfairly blaming them for the consequences of off-licensed purchasing and consumption. This potential conflict detected would undermine the unity of support among stakeholders for interventions which was acknowledged by interviewees as a key component for intervention effectiveness.

As an aside, while it was noted that overall the majority of survey participants were in favour of increasing police presence in Courtenay Place, more individuals who identified as non-Māori were in favour of this than Māori. This may be due to the presence of underlying bias within the police force, which was detected in a longitudinal study conducted by Fergusson et al. (70). This bias was shown to lead to Māori having a higher likelihood of conviction than non-Māori for similar offences (70). A disadvantage of increasing police presence may be an increase in this conviction disparity between Māori and non-Māori.

In conclusion we feel that we support the implementation of other interventions in preference to this intervention. While it must be acknowledged that based on our results this intervention would likely be effective, its disadvantages outweigh its strength as an intervention. Most notably the disadvantage of the increased strain that it would place on the police force’s available resources.

## 6.2.6 Stricter enforcement of Wellington Liquor Bylaw

It was identified in our survey of the general public that it is those who have the highest alcohol intake who are most likely to breach the Wellington Liquor Bylaw in WEP (Fig 4.5.7). If the assumption is made that these are the people most at risk of ARH, then targeting those breaching the ban would effectively target this group.

There is a wide scope for increasing enforcement. With the bylaw in place, police are able to exercise powers that allow them to search containers or vehicles, seize and remove liquor held in breach of the bylaw, and arrest people in breach of the bylaw. Currently, individual police members are expected to be able to exercise discretion in the way in which they apply these powers and potentially seize liquor but choose not to arrest or prosecute people in breach of the liquor ban (71).

However, the issue of enforcement of the liquor ban is related to the issues outlined above with the costs involved in increasing police presence and the use of the police force to target ARH.

## 6.2.7 Street hospital/triage - Medics in Courtenay Place

Both members of the public and stakeholders have expressed support for having a medic presence and/or a street hospital in the entertainment precinct. Specifically it was proposed that a street hospital be set-up during events and busy nights to provide prehospital treatment and triage facilities for injured or overly intoxicated individuals. This has proven to be successful in the past when Wellington Free Ambulance provided a street hospital during the rugby world cup and 2012 Sevens weekends (40). This was effective at reducing ambulance transfers to hospital and reducing ED presentations due to ARH.

Some stakeholders were opposed to implementing a street hospital due to unavailability of resources as both ambulances and medical equipment would be required. In the past however, volunteer ambulance officers and paramedicine students have manned the street-hospital thus having the benefit of both cutting cost and providing important clinical experience for these officers and students. Furthermore, over the two weekends studied there was an estimated saving of NZ\$70,000 from a decreased number of ambulance transfers and ED admissions (40). Thus saving money in the healthcare budget and reducing demand on resources created by intoxicated people. Another concern is that there may not be enough ARH occurring on any regular weekend night to justify diverting resources to the entertainment precinct on a regular basis. In response to this health professionals suggested having a street hospital during events and busy nights.

Another suggestion to help reduce ARH were 'support zones' or detox centres in the precinct. These are designated areas for overly intoxicated people to access support, free water and food in order to prevent them coming to any harm or causing harm to others. A similar initiative has been established in Queensland (72). These are called 'Chill Out Zones' which provide welfare and first aid assistance, timeout space and drinking water for intoxicated individuals. This initiative also has a foot patrol in the precinct to help identify anyone who may need assistance and to monitor known problem areas. It is hard to say whether an intervention like this would be successful in Wellington as it would require people to either present themselves to the support zone (i.e. recognise that they are overly intoxicated) or have people patrolling the area in order to send people there. In either case, people who are more likely to cause harm to others through acts of aggressions or criminal behaviours are probably not likely to present themselves, or go to the 'support zone' if directed there by someone else. However it may provide a safe place for overly intoxicated people to be monitored who would otherwise require medical attention.

In conclusion, a street hospital may be an effective measure to help reduce ED admissions due to ARH, however doesn't necessarily prevent the harm from occurring in the first place. It would be feasible and useful to do this during events or on busy nights but not necessarily on a regular basis.

## 6.2.8 Less alcohol advertising in CBD

Several pieces of literature suggest there is a link between advertising and increased consumption of alcohol by young people (41,42). The police also raised the issue that alcohol companies are marketing their high percent RTDs etc to young individuals - who also happen to be the group most at risk of ARHs in the precinct. It was also found that preference for brands that aligned with traditional kiwi values such as masculinity and hard physical activity were associated with greater alcohol consumption (43). Therefore in theory restricting alcohol advertising in the CBD could reduce alcohol consumption and therefore ARH.

However, regulations governing the promotion of alcohol have been found to be relatively ineffective at reducing ARHs in several countries (44,45). These countries include Australia and the United States whose drinking behaviors and attitudes towards alcohol are likely to be similar to New Zealand, therefore these results may be generalisable to New Zealand. One stakeholder also said that there are already restrictions on alcohol marketing in the CBD, so further restrictions are unlikely to have a dramatic effect on ARH. The interviewee also raised a further point that more indirect forms of marketing such as sponsorship (e.g. an alcohol company sponsoring a rugby team) has a much greater impact on individuals' alcohol consumption, therefore might be a better place to target.

In conclusion while alcohol advertising and increased consumption of alcohol in young people has been shown to be linked in several pieces of literature, restricting alcohol advertising in the CBD further is unlikely to have much of an impact on ARH. Instead we should be focusing our attention on alcohol sponsorship.

## 6.2.9 Reduction in alcohol content

There is limited literature on this intervention and thus a slim understanding on its effectiveness. It has been suggested that drinks with a high alcohol content (for example, shots and spirits) should not be sold after a certain time.

The survey asked participants about the reduction of alcohol content in drinks after 2am. Results showed participants didn't support this intervention and believed it wouldn't be effective. When stratified to Māori and Non-Māori, it shows that Māori believe that this intervention would be slightly effective.

The key informant interviews also showed no support for reducing the alcohol content in drinks within premises. One point raised by an interviewee is that a blanket ban on a certain level of alcohol will unfairly affect bars that sell high-alcohol drinks, such as cocktail bars, but have minimal problems with ARH due to the nature of their business. This may be avoided through certain exemptions similar to the law implemented in Queensland, Australia, where casinos were exempt from the ban on selling 'shots' after midnight (47). However, there is no data discussing the effects of this intervention in Queensland at the time of this report.

## 6.2.10 Plasticware use in bars

The replacement of glassware with plasticware in the entertainment precinct received mixed support from the survey and key informant interviews. The survey showed minor support from Māori, but Non-Māori respondents remained in slight disagreement with the intervention. This may be explained by a lack of clarity regarding plasticware and questions surrounding what it means within a bar environment. For example: whether plasticware is reusable or disposable; whether all beverages are served in plastic; and if plasticware is to be used during all opening hours or just after a certain time. The answers to these questions would lead to a more accurate understanding of the public's opinion on the use of plasticware.

Some of the previous questions were asked by key informants during interviews and some described the

negative connotations associated with plasticware, saying that using plastic cups degrades the image of bars. One key informant described how some bars have implemented their own policy to use plasticware after 12am in response to glassware related harm. Another informant discussed how removing glassware from outdoor areas within premises saw a disappearance of cut feet.

Research conducted in Glasgow showed strong support of the use of plasticware by both patrons and bar staff (48). The strength of this study was the interviews conducted with patrons who described an increased feeling of safety within the premises that used plasticware (48). This is because, reportedly, the most highly used weapon within bars in Glasgow is the glass beer mug (48). Differences between Wellington and Glasgow may explain why this feeling of safety was not described by the public or bar staff.

Interviewees seemed to have an overall positive view towards the use of plasticware, together with the public who didn't strongly oppose this intervention. It is possible that implementing the voluntary removal of glassware after a certain time would be beneficial.

## 6.2.11 Increased staff training

The district licensing committee requires licensees to have a host responsibility plan that is included in management and staff training. This plan must include identifying and responsibly dealing with intoxicated people (26). If implemented to a high standard, an advantage of this strategy is that if patrons were aware of or had experience of increased training and enforcement of host responsibility policy, this would ideally act as a deterrent to pre-loading.

However, Wellington-specific evidence around the enforcement of these host responsibility plans suggests that this is poorly implemented, particularly in busy bars where the environment is not conducive to staff being able to accurately assess levels of intoxication (39). This was a common finding amongst the interviews as well. All four stakeholder groups interviewed identified that there needs to be more training and support for staff working in this area. One stakeholder identified the difficulty in making a judgement call on somebody's level of intoxication based on a very limited interaction within a timeframe of a few seconds. Another stakeholder suggested there be a minimum mandatory training standard for security staff that is monitored and enforced. This suggestion could also apply to bar staff and management. The general public also identified this as an issue, adding 'stricter treatment for intoxicated patrons - sale of alcohol and admittance to bar' as a comment for further suggestions for possible interventions.

The idea of breathalysing patrons was also raised in interviews. This would provide a more objective measure of intoxication, however, is a highly paternalistic approach, may result in economic losses for businesses and may be met by public resistance. It may be more feasible if public intoxication was also to be a police offence (discussed above), and a pre-defined limit or definition of intoxication existed.

There are resources already available, produced by the Health Promotion Agency around training for host responsibility and assessing intoxication (73). It would be a relatively straight-forward process to ensure these resources, or a specific alternative was included as standard practice for all bar staff training, and to specify this within the LAP. This should not come at any extra cost to businesses, as staff should be receiving training on a regular basis to meet licensing requirements.

However, it was also identified in an interview with a stakeholder that it is the people who are turned away at the door due to intoxication that are most involved in ARH. This strategy would need to be linked in with other recommendations in order to avoid exacerbating the issue. This may include:

- having a 'safe zone' or 'detox centre' for these people to go to
- increased access to public transport so they can exit the precinct
- increased communication between businesses to identify patrons who have already been refused entry or service at other businesses
- Increased consequences of public intoxication and links with police

## 6.2.12 Māori warden presence in Courtenay Place

Although there is limited evidence surrounding the impact of Māori wardens on ARH, it would be reasonable to assume that they could assist police to reduce harm and crime in WEP. This would rely on wardens having had suitable training and productive attitudes towards reducing ARH. As they provide a voluntary service, introducing the Māori wardens would be a cost effective way of supporting police and medics, though it relies on the willingness of volunteers to implement. As they are not police, they may be able to assist in maintaining safety without damaging the vibrancy of WEP. Māori being most at risk of ARH may benefit most due to the community connectedness of the wardens, reducing the inequalities of ARH (10–12,14). This being said, although Māori were slightly supportive of this intervention they also disagreed that it would be effective in reducing ARH from the survey data. The role of Māori wardens may be seen to uphold the treaty principle that Māori maintain authority over their affairs, or seen as discriminatory as it targets Māori. More research is required to determine the effectiveness of increasing Māori warden presence, assess the willingness of Māori wardens, and get a more accurate idea of the opinions of Māori about this intervention from a larger sample.

## 6.2.13 Urban design

Changing the urban design of the city is one broad solution worth considering. Improving transport options, reducing footpath obstructions, increasing the availability of toilets, and removing traffic from Allen and Blair Streets may reduce street crowding, which was linked to violence in stakeholder interviews. Better transport could include having more late night buses and having fixed-price taxis from bars. Interviewed health professionals, police and council workers supported making changes in the environment to reduce queues and congestion. These groups, along with interviewed staff from businesses, additionally supported closing Allen and Blair Streets to traffic, which has already been proposed by the council (74). Having less cars on these streets would also limit people side-loading within town and becoming more intoxicated.

Additional changes include increasing the amount of street lighting and surveillance cameras in the area - an idea supported by interviewed health professionals. The intention of having these extra features would be to create an environment that promotes safety, and reduces loitering and crime. Systematic reviews of the effects of increased lighting and surveillance on crime found that cameras were only significantly effective when placed in car parks but that improved street lighting was shown to reduce the amount of street crime by 27% (75,76).

These solutions are also part of the official Wellington city council alcohol management strategy,

containing suggestions for better transport, improved lighting and safer street design (24,26). The strategy also states that on-licence premises should be responsible for maintaining safe queues and monitoring the areas outside their venue. What does need to be considered is the economic cost of implementing these measures and possible business lost by reducing the number of cars that can park on Allen and Blair Streets. It is recommended that the council continue with their plans to close Blair and Allen Streets to cars on the weekend nights, increase the amount of lighting and toilets in WEP and investigate late night transport options if they can be shown to be cost-effective.

## 6.2.14 Communication between stakeholder groups

The key informant interviews gave insight into the differing interests and distrust between stakeholder groups. Improved communication between the groups could lead to improved compromise and mutual understanding. This would better align interests so much greater and more effective responses to issues can take place.

In particular, there was a theme of distrust between bar owners and police identified in interviews. Most of the intoxication and resulting harms is due to pre-loading. These intoxicated people come to on-licences and cause trouble such as violence. Bar owners are reluctant to effectively work with police to deal with the intoxicated people as it means that their business name becomes associated with intoxication and this affects their ability to keep and renew their licence.

However, this lack of communication has been shown to have negative effects. In the Likert scale attitude it showed that 137 respondents to the survey did not disagree with the statement “I will be allowed into licensed premises if I am intoxicated” meaning they either agreed (81 respondents) or were undecided (56 respondents). When this data was stratified by the AUDIT-C results it showed that there was a correlation between the group with hazardous drinking patterns (score of 8+) and agreement with that statement. This means that people who exhibit hazardous drinking behaviours believe that their regularity and severity of intoxication is not an obstacle to being allowed into on-licence premises. This shows a lack of a “no tolerance policy” for intoxication in the precinct. Perhaps this is a result of lack of communication between groups. It is also an opportunity for an intervention to improve this communication. A proposed intervention that is still in the formation stage is an app that allows communication between security door staff. It would work by sharing information and photos of intoxicated people that have been rejected or removed from one on-licensed premise so that security door staff at other on-licensed premises can reject them also. This would create a hostile environment for the intoxicated person and a “no tolerance” policy for intoxication.

This intervention is favourable to council and police but unfavourable to bar-owners and the security staff themselves. Bar owners consider it unfavourable because of the uncertainty of how the information gathered could be used. If the information gathered by the app could implicate them, as hot-spot areas for trouble for example, this could lessen the likelihood of renewal of licence if police were able to use this information against them. Security door staff consider it unfavourable because of the extra workload it would entail; if there was information posted on every person rejected then a lot of time would be used up by sorting through this information. There needs to be increased trust and communication between groups so that compromise can be reached over their differing interests. Perhaps incentives for participation of bar owners in harm-reduction interventions such as this app are a good idea, such as an official recognition of participation which helps with renewal of license.

## 6.2.15 Education

A particular intervention where there was wide support from stakeholders and the survey population was increased education and public health campaigns related to alcohol consumption and ARH. This was particularly identified by survey respondents as a beneficial, higher level intervention which would impact on the “culture of binge drinking”, with most benefit coming from targeting youth. These thoughts were also seen in key informant interviews where there was support for initiatives that teach people about safe drinking and looking after themselves.

The high palatability of education and public health campaigns is an advantage for the implementation of this intervention. However, it is evident that there is a lack of evidence to support the effectiveness of this intervention. The ineffectiveness of education as an intervention is identified in a systematic review by Martineau et al. which focused on policies aimed at intervening in higher level education settings (77). It is also seen in two studies focusing on school based programmes, where it was clear they produced no lasting effects on drinking behaviour and programmes were costly to implement (78,79). There is some evidence to suggest well designed peer-led preventions and brief targeted interventions aimed at high risk students may produce some alterations in drinking behaviour but this is not substantial (80,81).

In conclusion, while there is strong public support for the use of education and public health campaigns, without supporting evidence for the effectiveness of its implementation on reducing alcohol-related harms, we are unable to recommend it.

## 6.2.16 Inequities

It is known that ethnic disparities for ARH and hazardous drinking behaviours are present in New Zealand. Māori are over-represented in ARH statistics such as alcohol-related hospital admissions (10–12,14). In light of this, we need to take careful consideration of these disparities when planning and implementing interventions targeted at ARH. We must also be mindful that alcohol itself has been shown to be a major contributor to inequalities that can be influenced by public policy (15,82). Therefore, we need to consider interventions that will not widen the health disparity between Māori and non-Māori and ideally narrow it.

Knowing whether the suggested interventions will narrow or widen the ethnic disparity, or leave it unchanged is difficult to predict and it is hard to understand any intended/unintended consequences of any intervention until they arise. We can however comment on the receptiveness of suggested interventions using our survey responses and ethnic data. Analysis showed that self-reported Māori rated the effectiveness of certain interventions higher than non-Māori. These included raising the purchasing age to 20, reducing alcohol content in drinks after 2am, using plasticware and having an earlier closure time. Māori also supported certain interventions more than non-Māori, including increasing medics, increasing Māori Warden presence, and increasing the purchasing age to 20 years old.

Any number of these interventions may affect the health disparity in ways that cannot be quantified. However, it makes sense that Māori Wardens might be more trusted among Māori patrons and therefore have a higher effectiveness in reducing ARH by diffusing violence and aggression outside bars and ensuring the safety of intoxicated patrons. The interventions supported and/or deemed effective by Māori could be the subject of further research. It is important to consider that only 8.1% of survey respondents

identified as Māori which is 4.3% less than the proportion of Māori in the Wellington region so therefore the results may not be representative of the population that access WEP. This could be due to the limited sample size of 202 participants.

Another important consideration is that Māori living in Wellington have a lower median income than non-Māori which has implications when alcohol taxation is to be considered. Increasing the tax on alcohol results in a higher proportion of an alcohol purchaser's income being spent on alcohol (59). This could have the effect of reducing the purchase and consumption of alcohol or conversely the purchase will remain the same leaving an individual with less income for other everyday purchases. The latter would affect those of lower income disproportionately which could increase the health disparity between Māori and Non-Māori further.

Gender inequities as a topic came up at various points of our analysis with male gender stereotypes being a recurring theme. Stakeholder interviewees thought that men were expected and encouraged to drink excessively. The desire to be perceived as brave and tough was accentuated by the excessive drinking, leading to violence and risk-taking behaviours. These were identified as large contributors to the total ARH observed in WEP which can then be targeted through our interventions. Changing the culture around drinking or the male mentality would be a difficult task but an understanding of existing gender inequities is nonetheless important.

In light of the identified inequities, any educational campaigns or initiatives could be targeted at the addressing the male mentality around drinking. To address the ethnic disparity, culturally appropriate methodology, again in terms of education campaigns or initiatives should also be considered. It would be difficult to address these inequities through any of the broader law, policy and environment related interventions without further study.

## 6.2.17 Reducing the density of Liquor outlets in surrounding areas

Research suggests that with an increased density of liquor outlets there is an increased likelihood of binge drinking (83). With pre-loading being a significant factor in ARH in WEP, it is necessary to consider the role of off-licence liquor outlets. Therefore an intervention such as legislation that outlines guidelines for liquor outlet density in WEP's surrounding suburbs, (e.g. Mt Cook, the Terrace, Te Aro) could play a crucial role in the reduction of ARH in WEP. Research also suggests that socioeconomic status plays no role in the relationship between binge drinking and the density of liquor outlets according to a study carried out by *Cousins et al.* (83) For that reason, policy and legislation that reduces liquor outlet density would be effective across all socioeconomic groups hopefully resulting in a general reduction in ARH.

## 6.3 Strengths and Limitations

### 6.3.1 Strengths

#### 6.3.1.1 Strengths of survey

The survey was posted on the Facebook page 'Vic Deals' which has around 80,000 members with age demographics mainly in the 18-35 age group. All members of this page were able to access the survey



and participate so long as they met the inclusion criteria stated on page one of the survey (see appendix 1 for full survey). While it is impossible to calculate a response rate, 202 individuals participated in the survey and we consider this to be a reasonable sample size.

We mostly used closed responses to keep the survey short. We aimed at getting a large number of responses in a short period of time due to our time constraint hence we thought this would be the most effective way of accomplishing this. The survey also took into account ethnic demographics and from this we were able to identify the acknowledged ethnic disparities as mentioned in Section 2.2.

The survey took into consideration a wide array of variables, including personal drinking habits; observed drinking behaviours; use of WEP; observed and experienced ARH; and ideas on effectiveness and support for interventions to reduce ARH. From this, we were able to extract a lot of data from the survey results and draw possible relationships between variables. This is important as it revealed possible trends that were not apparent to us before we conducted the survey.

One section of the survey focused on respondents opinions on the effectiveness of a proposed intervention and their support of the same proposed intervention. This allowed the respondents to differentiate between perceived efficacy and palatability of interventions. This is an important distinction to make as the effectiveness of an intervention may be reduced if palatability is limited, and allowed us to come to more informed conclusions about proposed interventions.

AUDIT-C is a validated method which has been widely used to assess drinking behaviours of individuals and whether they are considered hazardous or not. The survey incorporated the AUDIT-C questions allowing us to stratify drinking behaviours as per the AUDIT-C results. This gave us a greater level of depth in our analysis as we were able to look at relationships between drinking habits and other variables such as harms.

The survey included an open box for participants to give us alternative suggestions to reduce ARH. This gave us insight into the respondents thoughts and proved useful in gathering a greater depth and breadth of information that could not have been attained through closed questioning only.

### 6.3.1.2 Strengths of the interviews

Eighteen interviews with a total of 21 participants were conducted with a wide variety of key informants. We considered this a very good sample size for key informant interviews and we were able to gather a plethora of opinions from various stakeholders with differing interests in WEP. The benefits of having face-to-face or phone interviews meant we could obtain more personalised experiences and discuss complex issues more easily than by other means. The information obtained from these interviews was of greater richness and depth than that from the survey, and enhanced the results and discussion.

A semi-structured approach to the interview was taken, with interviewers given a leaflet with suggested questions and topics to discuss (appendix 2). This led to a reasonable level of consistency between interviews, even throughout the diverse range of interviewees. Therefore we were able to successfully carry out a thematic analysis given concordance between interviews. The potential for recall bias was minimised by transcribing interviews, improving the validity of the findings.

Interviewees were anonymised to one of four stakeholder groups, with no attribution to their name or business. This, as well as the fact the interviewers were medical students who were a neutral party in this context, meant the interviewees tended to be willing and open to discuss these topics. The information

gathered was insightful and useful for the analysis and discussion. The interviewees had no fear of repercussions because they knew their viewpoint would be valued and not directly attributed to them.

#### 6.3.1.3 Strengths of the mixed method

ARH is a complicated issue which is difficult to assess by quantitative methods alone. A qualitative method was employed to gather ideas and opinions from the public and targeted key informants. The qualitative method also allowed our research to be dynamic and adapt to differing contexts. Therefore there were fewer restrictions placed on the information able to be gathered, allowing for rich, diverse data. Furthermore the qualitative method enabled a holistic approach in addressing the complexities of this issue, an approach which is difficult to achieve using quantitative methods.

### 6.3.2 Limitations

#### 6.3.2.1 Limitations of the survey

Selection bias may limit the validity of the survey results. As this survey was posted on 'Vic Deals' the respondents were limited to those who had a Facebook account, were members of Vic Deals and who actually saw the post for the survey. Therefore the sample population was not necessarily representative of the population that uses WEP.

Another possible bias is the over-representation of participants who were more likely to express an opinion on ARH in WEP. This may be because this population had more interest in completing the survey. This may have resulted in stronger opinions regarding interventions when compared with the general population that accessed WEP which could have the effect of skewing our results to either extreme (favouring intervention or anti-intervention) when the true result is likely less radical.

The survey was relatively simplistic. This was purposeful so as to reduce the time taken to complete the survey but as a result caused some limitations. For instance there were no explanations alongside the proposed interventions, so participants had to take these at face value and respondents may have interpreted the interventions differently. Specifically, questions regarding interventions such as the use of plastic cups and presence of Māori Wardens may not have had enough information to convey their intended meaning. Respondents of the pilot study assumed plastic cups would be similar to those given at sports stadiums, which had negative connotations associated with them. Many respondents may not be aware of what Māori Wardens are and what they do. Understanding of the intervention may have influenced the attitude and/or support of respondents.

A further limitation of the survey may be that falsified opinions and ideas were submitted as there was no negative consequence for false responses. A few open box comments suggest that some respondents did not take the survey seriously, however these seemed to be the minority. This may have reduced the real-world validity of our results.

61.9% of respondents identified as 'female', 36.6% as 'male', 1.5% as 'other' gender. This is not representative of the gender demographics of the Wellington Region which are more closely aligned with 50% female and 50% male (34). 8.1% of respondents self-identified as Māori, which is lower than the proportion of Māori in the Wellington region at 12.4% (34). Furthermore we cannot be certain that people outside the specified age range did not complete the survey. These demographic differences mean that the results we obtained may not be representative of the population that access WEP.

#### 6.3.2.2 Limitations of interviews

Although a wide variety of key informants were interviewed, some groups with interest in WEP were not included or declined to participate. The main group not included were off-licensed premises. Off-licensed premises play a large part in the culture of pre-loading and influence ARH in a way that would be valuable to understand. Therefore significant information may have been omitted because not all viewpoints from stakeholders in WEP were included. Therefore the findings may be biased toward the groups that did participate.

Given time constraints, nine interviewer groups conducted the eighteen interviews. There may have been variation between how the interviews were conducted, the quality of information and the depth of information obtained. Bias is another issue that is encountered with the interviews. Interviewers may have asked slightly different questions and taken interviews in different directions. This may have influenced the validity of the thematic analysis if certain interviewees were represented more than others.

#### 6.3.2.3 Limitations of the mixed method

The qualitative method proved very time consuming and resource intensive. As a result, the number of interviews conducted were limited due to the amount of time available. Off-licensed premises were deliberately excluded due to time constraints, and no more than 18 interviews were conducted for the same reason. Although rich and valuable information was obtained, the quantity of the information obtained was limited due to only having 18 sources. Therefore it is difficult to assess the statistical or real world significance of these results.

## 7. Recommendations

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We recommend that the Wellington provisional local alcohol policy be reviewed, updated and implemented.

We acknowledge that, to be effective in combating alcohol-related harm in Wellington's entertainment precinct, multiple interventions must be implemented in combination with each other. The recommendations that follow come from careful consideration of the literature reviewed, responses from the survey and responses from the key informant interviews.

We recommend that the following strategies be implemented:

### Local policy:

- Introduce policy that reduces density of off-licence premises in the Wellington region, especially in the areas and suburbs surrounding the Wellington Entertainment Precinct. One method to achieve this is via the local alcohol policy.
- Implement staggered closing times for on-licence premises in the entertainment precinct. With a need for more research to be completed on what method of staggering is most effective and acceptable to business owners.

### Enforcement and licensing approaches:

- Introduce greater consequences for excessive public intoxication in the form of fines, community service or similar. We cannot recommend which specific consequence will be the most feasible and effective thus further research needs to be done on this.
- Review the effectiveness of enforcement of Wellington Liquor Bylaw such as infringement notice for those in breach.
- Review the optimal level of police presence in the WEP to reduce ARH, especially at peak times.
- Encourage voluntary use of plasticware in on-licensed premises in WEP.
- Strengthen current host responsibility, including aggression management, for all staff working in hospitality in WEP.

### Interventions to meet Te Tiriti O Waitangi obligations:

- Include local iwi representatives in the Alcohol Forum and council decisions regarding local alcohol regulation.
- Discuss with Māori wardens to determine whether they would be willing to provide a presence in WEP. We also recommend further research to assess the effectiveness of the presence of Māori wardens in WEP at reducing ARH.

### Urban planning and support services:

- Consider changes to the urban design of WEP by improving lighting, increasing the number of toilets, improving late night transport options and a trial-period of closing Allen and Blair streets to traffic after 10pm on weekends.

- Implement street hospitals in WEP during events and on busy nights. ‘Support zones’ may be a feasible and less resource intensive intervention therefore we recommend a trial period to evaluate the effectiveness of this intervention.

### Communication/collaboration

- Increase and improve communication between stakeholder groups by:
  - Holding more regular and frequent Alcohol Forums
  - Increased stakeholder participation in the Alcohol Forum, including off-licence, alcohol production industry representatives and iwi as previously mentioned.
  - Universal data collection and dissemination around the rates and nature of alcohol-related harms

On a more national level we recommend:

- That WCC advocate for a minimum unit price for alcohol in order to reduce price discrepancies between on- and off-licence premises, and to target harm reduction for those at highest risk.
- For the WCC to consider advocating for raising the minimum legal drinking age.
- That further research around the effectiveness of ARH interventions is undertaken with the results stratifying for Māori and non-Māori data.
- That research is undertaken into targeted educational campaigns for reducing hazardous drinking behaviours, for example directed at masculine gender roles and/or Māori.

## 8. References & Bibliography

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1. Health Promotion Agency. Alcohol Off-licence Purchases and Subsequent Harm. Wellington; 2017.
2. Ministry of Health. Alcohol Use 2012/13: New Zealand Health Survey. [Internet]. Wellington: Ministry of Health; 2015. Available from: <http://www.health.govt.nz/publication/alcohol-use-2012-13-new-zealand-health-survey>
3. Hart E, Burns S. The relationship between alcohol consumption and related harm among young university students. *Health Promot J Austr* [Internet]. 2016;15–20. Available from: [http://www.publish.csiro.au/view/journals/dsp\\_journal\\_fulltext.cfm?nid=292&f=HE15086](http://www.publish.csiro.au/view/journals/dsp_journal_fulltext.cfm?nid=292&f=HE15086)
4. Chelimo C, Casswell S. Effect of alcohol consumption on cancer risk: A review of metaanalyses (2007-2013). Auckland; 2013.
5. Ronksley PE, Brien SE, Turner BJ, Mukamal KJ, Ghali W a. Association of alcohol consumption with selected cardiovascular disease outcomes: a systematic review and meta-analysis. *BMJ*. 2011;342(February):d671.
6. Ministry of Health. National alcohol strategy, 2000-2003 [Internet]. Wellington: ALAC and Ministry of Health; 2001. Available from: <http://www.moh.govt.nz/notebook/nbbooks.nsf/0/EB0AAAE4199644FFCC256A5500818969?OpenDocument>
7. Imlach Gunasekara F, Butler S, Cech T, Curtis E, Douglas M, Emmerson L, et al. How do intoxicated patients impact staff in the emergency department? An exploratory study. *N Z Med J*. 2011;124(1336):14–23.
8. Connor J, Casswell S. Alcohol-related harm to others in New Zealand: Evidence of the burden and gaps in knowledge. *N Z Med J*. 2012;125(1360):11–27.
9. Connor J, Kydd R, Shield K, Rehm J. The burden of disease and injury attributable to alcohol in New Zealanders under 80 years of age: marked disparities by ethnicity and sex. *N Z Med J* [Internet]. 2015 Feb 20;128(1409):15–28. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25721958>
10. Egerton-Warburton D, Gosbell A, Wadsworth A, Fatovich DM, Richardson DB. Survey of alcohol-related presentations to Australasian emergency departments. *Med J Aust*. 2014;201(10):584–7.
11. Stewart R, Das M, Ardagh M, Deely JM, Dodd S, Bartholomew N, et al. The impact of alcohol-related presentations on a New Zealand hospital emergency department. *N Z Med J*. 2014;127(1401):23–39.
12. Humphrey G, Casswell S, Han DY. Alcohol and injury among attendees at a New Zealand emergency department. *N Z Med J*. 2003;116(1168).
13. Ministry of Health. Hazardous drinking in 2011/12: Findings from the New Zealand Health Survey. Wellington; 2013.
14. Te Rōpū Rangahau Hauora a Eru Pōmare. Capital and Coast District Health Board Māori Health Profile 2015 [Internet]. Wellington; 2015. Available from: [www.chimat.org.uk/resource/view.aspx?RID=273462](http://www.chimat.org.uk/resource/view.aspx?RID=273462)
15. Wilkinson R, Marmont M, editors. Social determinants of health: the solid facts. 2nd edition. 2nd ed. Denmark: World Health Organization; 2003.
16. Ministry of Justice. Waitangi Tribunal; The Treaty of Waitangi/Te Tiriti O Waitangi [Internet]. 2016 [cited 2017 May 10]. Available from: <https://www.waitangitribunal.govt.nz/treaty-of-waitangi/principles-of-the-treaty/>
17. Slack A, Nana G, Webster M, Stokes F, Wu J. Costs of harmful alcohol and other drug

- use [Internet]. Berl economics. 2009. Available from: [http://www.justice.govt.nz/justice-sector/drivers-of-crime/documents/BERL\\_-July\\_2009-\\_Costs\\_of\\_Harmful\\_Alcohol\\_and\\_Other\\_Drug\\_Use-1.pdf](http://www.justice.govt.nz/justice-sector/drivers-of-crime/documents/BERL_-July_2009-_Costs_of_Harmful_Alcohol_and_Other_Drug_Use-1.pdf)
18. Baumberg B. The global economic burden of alcohol: a review and some suggestions. *Drug Alcohol Rev.* 2006;25(6):537–51.
  19. McEwan B, Campbell M, Swain D. New Zealand culture of intoxication: Local and global influences. *New Zeal Sociol.* 2010;25(2):15–37.
  20. Christoffel P. Liquor laws [Internet]. Te Ara- the Encyclopedia of New Zealand. 2014 [cited 2017 Apr 28]. Available from: <http://www.teara.govt.nz/en/liquor-laws>
  21. New Zealand Law Commission. NZLC R114 [Internet]. Vol. 31. Wellington; 2010. Available from: <http://www.lawcom.govt.nz/ProjectReport.aspx?ProjectID=154>
  22. New Zealand Government. Sale and supply of alcohol act 2012 [Internet]. New Zealand: <http://www.legislation.govt.nz/act/public/2012/0120/latest/DLM3339333.html>; 2012. Available from: <http://www.legislation.govt.nz/act/public/2012/0120/latest/DLM3339333.html>
  23. Kypri K, MacLennan B, Langley JD, Connor JL. The Alcohol Reform Bill: more tinkering than reform in response to the New Zealand public's demand for better liquor laws. *Drug Alcohol Rev* [Internet]. 2011 Jul;30(4):428–33. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/21518047>
  24. Wellington City Council. The Right Mix: Provisional Local Alcohol Policy. Wellington;
  25. Welsh J. False start for Wellington City Council's Local Alcohol Policy [Internet]. ChanceryGreen. 2015 [cited 2017 May 11]. Available from: <http://www.chancerygreen.com/articles/2015/4/10/false-start-for-wellington-city-councils-local-alcohol-policy>
  26. Wellington City Council. The Right Mix: Alcohol management Strategy. Wellington;
  27. Wellington Government. Did you know? [Internet]. Wellington; [cited 2017 May 10]. Available from: <http://wellington.govt.nz/have-your-say/public-input/public-inputs/feedback/closed/~media/5A982F76B3D5438CAB53719A1E63D247.ashx>
  28. New Zealand Police. Calls to Police related to alcohol. Wellington; 2013.
  29. New Zealand Police. Offences related to alcohol. Wellington; 2013.
  30. Coding and Analysis Regional Public Health. Assault Heat Map. Wellington; 2017.
  31. Casswell S, Maxwell A. What Works to Reduce Alcohol-Related Harm and why aren't The Policies More Popular? *Soc Policy J New Zeal.* 2005;(25).
  32. World Health Organization. WHO Global Status Report on Alcohol 2004. Geneva; 2004.
  33. Easton B. Taxing harm: modernising alcohol excise duties. 2002.
  34. Statistics New Zealand. 2013 Census QuickStats about a place: Wellington Region. Wellington; 2013.
  35. New Zealand Police. Last Monthly Statistical Indicators [Internet]. 2016 [cited 2017 May 10]. Available from: <http://www.police.govt.nz/about-us/publications-statistics/statistics/monthly-statistics>
  36. Wicki M, Gmel G. Hospital admission rates for alcoholic intoxication after policy changes in the canton of Geneva, Switzerland. *Drug Alcohol Depend* [Internet]. 2011 Nov 1;118(2–3):209–15. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/21515005>
  37. Wagenaar A. Effects of an increase in the legal minimum drinking age. *J Public Health Policy.* 1981;2(3):206–25.
  38. O'Malley PM, Wagenaar AC. Effects of minimum drinking age laws on alcohol use, related behaviors and traffic crash involvement among American youth: 1976-1987. *J Stud Alcohol* [Internet]. 1991 Sep;52(5):478–91. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/1943105>
  39. Sim M, Morgan E, Batchelor J. The Impact of Enforcement On Intoxication and Alcohol Related Harm Final Report [Internet]. Wellington; 2005. Available from:

- <http://www.police.govt.nz/resources/2005/wgtn-city-alcohol-enforcement-report/wgtn-city-alcohol-enforcement-report.pdf>
40. Swain AH, Weaver A, Gray AJ, Bailey M, Palmer SG. Ambulance triage and treatment zones at major rugby events in Wellington, New Zealand: a sobering experience. *N Z Med J*. 2013;126(1372):12–24.
  41. Hastings G, Anderson S, Cooke E, Gordon R. Alcohol marketing and young people's drinking: a review of the research. *J Public Health Policy* [Internet]. 2005;26(3):296–311. Available from: [http://search.proquest.com/docview/59943861?accountid=15172%5Cnhttp://sfx.library.yale.edu/sfx\\_local?url\\_ver=Z39.88-2004&rft\\_val\\_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&sid=ProQ:ProQ:pais&atitle=Alcohol+marketing+and+young+people's+drinking:+a+revi](http://search.proquest.com/docview/59943861?accountid=15172%5Cnhttp://sfx.library.yale.edu/sfx_local?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&sid=ProQ:ProQ:pais&atitle=Alcohol+marketing+and+young+people's+drinking:+a+revi)
  42. Wyllie A, Zhang JF, Casswell S. Responses to televised alcohol advertisements associated with drinking behaviour of 10-17-year-olds. *Addiction* [Internet]. 1998 Mar;93(3):361–71. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/10328044>
  43. Casswell S, Zhang JF. Impact of liking for advertising and brand allegiance on drinking and alcohol-related aggression: a longitudinal study. *Addiction* [Internet]. 1998 Aug;93(8):1209–17. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/9813902>
  44. Donovan R, Henley N. *Social marketing: Principles and practice*. Melbourne: IP Communications; 2003.
  45. Roberts G. *Analysis of alcohol promotion and advertising*. Melbourne; 2002.
  46. Miller P, Curtis A, Chikritzhs T, Toumbourou JW. *Interventions for reducing alcohol supply, alcohol demand and alcohol-related harm; Final Report* [Internet]. Canberra; 2015. Available from: <http://www.ndlrf.gov.au/sites/default/files/publication-documents/monographs/monograph-57.pdf>
  47. Earlier last drinks and no shots after midnight under new Queensland drinking laws [Internet]. ABC News. 2016 [cited 2017 May 10]. Available from: <http://www.abc.net.au/news/2016-06-30/queensland-lockout-laws-come-into-force/7551904>
  48. Forsyth AJM. Banning glassware from nightclubs in Glasgow (Scotland): Observed impacts, compliance and patron's views. *Alcohol Alcohol* [Internet]. 2007 Oct 8;43(1):111–7. Available from: <https://academic.oup.com/alcalc/article-lookup/doi/10.1093/alcalc/agm142>
  49. Barton A, Husk K. Controlling pre-loaders: alcohol related violence in an English night time economy. *Drugs and Alcohol Today* [Internet]. 2012 Jun 8;12(2):89–97. Available from: <http://dx.doi.org/10.1108/17459261211235119>
  50. World Health Organization Regional Office for Europe. *Evidence for the effectiveness and cost-effectiveness of interventions to reduce alcohol-related harm* [Internet]. Copenhagen; 2009 [cited 2017 Apr 28]. Available from: [www.euro.who.int](http://www.euro.who.int)
  51. Graham K, Osgood W, Zibrowski E, Purcell J, Gliksman L, Leonard K, et al. The effect of the Safer Bars programme on physical aggression in bars: results of a randomized controlled trial. *Drug Alcohol Rev* [Internet]. 2004 Mar 1;23(1):31–41. Available from: <http://doi.wiley.com/10.1080/09595230410001645538>
  52. New Zealand Police. *Maori and Police working together* [Internet]. [cited 2017 May 10]. Available from: <http://www.police.govt.nz/about-us/maori-police/working-together>
  53. Te Puni Kokiri. *Maori Wardens* [Internet]. [cited 2017 May 10]. Available from: <https://www.tpk.govt.nz/en/whakamahia/maori-wardens/>
  54. Babor TF, Higgins-biddle JC, Saunders JB, Monteiro MG. *AUDIT. The Alcohol Use Disorders Identification Test. Guidelines for use in primary care*. World Health Organization. 2001. 1-41 p.
  55. Nordblom K. The complex attitudes to alcohol taxation. *Appl Econ* [Internet]. 2011 Sep



- 1;43(24):3355–64. Available from: <http://dx.doi.org/10.1080/00036841003636276>
56. Sornpaisarn B, Shield KD, Rehm J. Alcohol taxation policy in Thailand: Implications for other low- to middle-income countries. *Addiction*. 2012;107(8):1372–84.
57. Alcohol Healthwatch. Information Sheet: Tax on Alcohol [Internet]. 2009. Available from: <http://www.ahw.org.nz/resources/Fact Sheet/Info Sheet Alcohol and Tax Final 09.pdf>
58. Nelson JP. Meta-analysis of alcohol price and income elasticities – with corrections for publication bias. *Health Econ Rev* [Internet]. 2013;3(1):17. Available from: <http://healtheconomicsreview.springeropen.com/articles/10.1186/2191-1991-3-17>
59. Statistics New Zealand. 2013 Census QuickStats about a place: Wellington Region [Internet]. stats.govt.nz. 2013 [cited 2017 May 10]. Available from: [http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request\\_value=14322&tabname=Income&as\\_qdr=y15](http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request_value=14322&tabname=Income&as_qdr=y15)
60. Foster JH, Ferguson CS. Home Drinking in the UK: Trends and Causes. *Alcohol Alcohol* [Internet]. 2012 May 1;47(3):355–8. Available from: <https://academic.oup.com/alcalc/article-lookup/doi/10.1093/alcalc/ags020>
61. Stockwell T, Auld MC, Zhao J, Martin G. Does minimum pricing reduce alcohol consumption? The experience of a Canadian province. *Addiction*. 2012;107(5):912–20.
62. Holmes J, Meng Y, Meier PS, Brennan A, Angus C, Campbell-Burton A, et al. Effects of minimum unit pricing for alcohol on different income and socioeconomic groups: A modelling study. *Lancet*. 2014;383(9929):1655–64.
63. Sharma A, Vandenberg B, Hollingsworth B. Minimum pricing of alcohol versus volumetric taxation: Which policy will reduce heavy consumption without adversely affecting light and moderate consumers? *PLoS One*. 2014;9(1).
64. Kypri K, Voas RB, Langley JD, Stephenson SCR, Begg DJ, Tippetts AS, et al. Minimum Purchasing Age for Alcohol and Traffic Crash Injuries Among 15- to 19-Year-Olds in New Zealand. *Am J Public Health* [Internet]. 2006 Jan;96(1):126–31. Available from: <http://ajph.aphapublications.org/doi/10.2105/AJPH.2005.073122>
65. Everitt R, Jones P. Changing the minimum legal drinking age--its effect on a central city emergency department. *N Z Med J* [Internet]. 2002 Jan 25;115(1146):9–11. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/11936350>
66. Health Promotion Agency. Age & the law. *Alcohol.org.nz*. 2017.
67. New Zealand Government. Policing Act 2008. 72 New Zealand; 2008.
68. New Zealand Law Commission. Alcohol in our lives curbing the harm : a report on the review of the regulatory framework for the sale and supply of liquor. Wellington; 2010.
69. Hospitality NZ. An alternative: Personal Responsibility Model Q&A [Internet]. *hospitalitynz.org.nz*. 2012 [cited 2017 May 9]. p. 1. Available from: [http://www.hospitalitynz.org.nz/~downloads/Wellington\\_CC\\_LAP\\_Personal\\_Responsibility\\_Model\\_Q&A.pdf](http://www.hospitalitynz.org.nz/~downloads/Wellington_CC_LAP_Personal_Responsibility_Model_Q&A.pdf)
70. Fergusson DM, Horwood LJ, Swain-Campbell N. Ethnicity and Criminal Convictions: Results of a 21-year Longitudinal Study. *Aust New Zeal J Criminol* [Internet]. 2003 Dec;36(3):354–67. Available from: <http://anj.sagepub.com/lookup/doi/10.1375/acri.36.3.354>
71. Sim M, Morgan E, Batchelor J. Wellington City Liquor Control Bylaw Evaluation Report [Internet]. Wellington; 2005. Available from: [http://s3.amazonaws.com/zanran\\_storage/www.nzhis.govt.nz/ContentPages/1158049334.pdf](http://s3.amazonaws.com/zanran_storage/www.nzhis.govt.nz/ContentPages/1158049334.pdf)
72. Department of the Premier and Cabinet. Drink Safe Precincts- Final evaluation: 24 months of the trial. Queensland; 2013.
73. Alcohol Advisory Council of New Zealand. Host Responsibility Guidelines for Licensed Premises 2008 [Internet]. Wellington; 2008. Available from: [http://www.hpa.org.nz/sites/default/files/imported/field\\_publication\\_file/Host Responsibility](http://www.hpa.org.nz/sites/default/files/imported/field_publication_file/Host Responsibility)

- Resource\_JAN12\_LR.pdf
74. Devlin C. Plans to close two Wellington streets to prevent alcohol pre-loading. The Dominion Post [Internet]. 2017 Apr 26; Available from: <http://www.stuff.co.nz/dominion-post/news/91881527/Plans-to-close-two-Wellington-streets-to-prevent-alcohol-pre-loading>
  75. Farrington DP, Welsh BC. Effects of improved street lighting on crime: a systematic review. Campbell Syst Rev [Internet]. 2008;(13):59. Available from: [www.homeoffice.gov.uk/rds/index.htm](http://www.homeoffice.gov.uk/rds/index.htm)
  76. Welsh BC, Farrington DP. Public Area CCTV and Crime Prevention: An Updated Systematic Review and Meta-Analysis. Justice Q. 2009;26(4):716–45.
  77. Martineau F, Tyner E, Lorenc T, Petticrew M, Lock K. Population-level interventions to reduce alcohol-related harm: An overview of systematic reviews. Prev Med (Baltim) [Internet]. 2013 Oct;57(4):278–96. Available from: <http://linkinghub.elsevier.com/retrieve/pii/S0091743513002119>
  78. Babor TF, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K, et al. Alcohol: No Ordinary Commodity: Research and Public Policy [Internet]. Oxford: Oxford University Press; 2003. Available from: <http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780199551149.001.0001/acprof-9780199551149>
  79. Foxcroft DR, Lister-Sharp D, Lowe G. Alcohol misuse prevention for young people: a systematic review reveals methodological concerns and lack of reliable evidence of effectiveness. Addiction [Internet]. 1997 May;92(5):531–7. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/9219376>
  80. Giesbrecht N. Reducing alcohol-related damage in populations: rethinking the roles of education and persuasion interventions. Addiction [Internet]. 2007 Sep;102(9):1345–9. Available from: <http://doi.wiley.com/10.1111/j.1360-0443.2007.01903.x>
  81. Baer JS, Kivlahan DR, Blume AW, McKnight P, Marlatt GA. Brief intervention for heavy-drinking college students: 4-Year follow-up and natural history. Am J Public Health. 2001;91(8):1310–6.
  82. Connor J, Broad J, Rehm J, Hoorn S Vander, Jackson RT. The burden of death, disease, and disability due to alcohol in New Zealand. N Z Med J. 2005;118(1213).
  83. Connor JL, Kypri K, Bell ML, Cousins K. Alcohol outlet density, levels of drinking and alcohol-related harm in New Zealand: a national study. J Epidemiol Community Heal [Internet]. 2011 Oct 1;65(10):841–6. Available from: <http://jech.bmj.com/cgi/doi/10.1136/jech.2009.104935>

# Appendix 1

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## Survey Questions

Gender

- ☐ Female
- ☐ Male
- ☐ Other
- ☐ Prefer not to say

Which ethnicity do you predominantly identify with?

- ☐ Asian
- ☐ European Other
- ☐ NZ European
- ☐ NZ Maori
- ☐ Pacific Islander
- ☐ Other

On average within the last year, how often do you go out to 'Wellington's Entertainment Precinct' (as shown within the circle) after 7pm?

- ☐ Everyday/Almost everyday
- ☐ 2-3 times a week
- ☐ 2-4 times a month
- ☐ Monthly or less than monthly
- ☐ Never

During those times, how often would you consume alcohol whilst in the precinct?

- ☐ Everyday/Almost everyday
- ☐ 2-3 times a week
- ☐ 2-4 times a month
- ☐ Monthly or less than monthly
- ☐ Never

If you answered that you consume alcohol in the precinct, where does this alcohol come from?

- ☐ Licensed Premises (eg. bars, clubs, restaurants)
- ☐ Supermarket/liquor stores in the precinct
- ☐ Brought in from outside the precinct

If you answered "Licensed Premises", how many standard drinks of alcohol would you buy within the Entertainment Precinct on an average night?

- ☐ 1 or 2
- ☐ 3 or 4
- ☐ 5 or 6
- ☐ 7 to 9
- ☐ 10 or more

How often would you consume alcohol before going into the precinct? (pre-loading)

- ☐ Almost
- ☐ Most of the time
- ☐ Some of the time
- ☐ Not usually
- ☐ Never

How often would you consume alcohol purchased from an off-licensed premises (supermarket or liquor store) en route to, or while queueing for, a licensed premises? (side-loading)

- ☐ Almost
- ☐ Most of the time
- ☐ Some of the time
- ☐ Not usually
- ☐ Never

### **Usual Drinking Habits**

How often do you have a drink containing alcohol?

- ☐ Never
- ☐ Monthly or less than monthly
- ☐ 2-4 times a month
- ☐ 2-3 times a week
- ☐ 4 or more times a week

How many standard drinks containing alcohol do you have in a typical period of drinking?

- ☐ I don't drink alcohol
- ☐ 1 or 2
- ☐ 3 or 4
- ☐ 5 or 6
- ☐ 7 to 9
- ☐ 10 or more

How often do you have more than the recommended amount of standard drinks on one occasion?  
(More than 4 for women and more than 5 for men)

- ☐ Never
- ☐ Less than monthly
- ☐ Monthly
- ☐ Weekly
- ☐ Daily/Almost Daily

### **Alcohol Related Harms that occur in the Wellington Entertainment Precinct**

In the past 6 months, what alcohol related harms have you observed or experienced whilst in Wellington's Entertainment Precinct (*please tick all that apply*)

- ☐ Accidentally hurting self
- ☐ Hurting others
- ☐ Violence and fighting
- ☐ Damage to any property
- ☐ Dropping rubbish
- ☐ Unwanted sexual advances
- ☐ Verbal abuse
- ☐ Getting intoxicated to the point of needing medical attention
- ☐ Drink driving

- I haven't observed or experienced anything

Of all those mentioned above, what do you think is the most significant alcohol related harm that you have observed or experienced within the precinct?

- Accidentally hurting self
- Hurting others
- Violence and fighting
- Damage to any property
- Dropping rubbish
- Unwanted sexual advances
- Verbal abuse
- Getting intoxicated to the point of needing medical attention
- Drink driving
- I haven't observed or experienced anything

### **Effectiveness of possible interventions**

*We want to know what you think could realistically reduce alcohol related harms in Wellington. We also want to know which ones you would support.*

*Please be aware that what you think could be effective, you don't necessarily have to support.*

#### **A) Effectiveness**

- 1 = Will not be effective
- 2 = Probably won't be effective
- 3 = Unsure
- 4 = Probably will be effective
- 5 = Will absolutely be effective

#### **B) Your support**

- 1 = Strongly opposed
- 2 = Opposed
- 3 = Undecided
- 4 = Support
- 5 = Strongly support

Raising the legal purchasing age from 18 to 20 years old

	1	2	3	4	5	
Won't be effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Will be effective

	1	2	3	4	5	
Opposed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Supportive

Having an increased police presence around the entertainment precinct

	1	2	3	4	5	
Won't be effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Will be effective

	1	2	3	4	5	
Opposed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Supportive

Having more ambulance medics around the precinct

	1	2	3	4	5	
Won't be effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Will be effective

	1	2	3	4	5	
Opposed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Supportive

Having stronger restrictions on alcohol advertising in the precinct

	1	2	3	4	5	
Won't be effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Will be effective

	1	2	3	4	5	
Opposed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Supportive

That licensed premises continue to remain open until 4 am but reduce the alcohol content in all drinks sold after 2 am

	1	2	3	4	5	
Won't be effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Will be effective

	1	2	3	4	5	
Opposed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Supportive

Increased Māori Warden presence within the entertainment precinct

	1	2	3	4	5	
Won't be effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Will be effective

	1	2	3	4	5	
Opposed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Supportive

Switch to serving drinks in reusable plastic rather than glass

	1	2	3	4	5	
Won't be effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Will be effective

	1	2	3	4	5	
Opposed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Supportive

Licensed premises having to close at 2am rather than the current 4am

	1	2	3	4	5	
Won't be effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Will be effective

	1	2	3	4	5	
Opposed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Supportive

### Your suggestions

Do you have any further ideas for reducing alcohol related harms in the Wellington Entertainment Precinct?

### Agree vs Disagree statements

Please indicate whether you agree or disagree with the following statements

- 1: Strongly Disagree
- 2: Disagree
- 3: Neither agree or disagree
- 4: Agree
- 5: Strongly Agree

I feel safe at night in the Wellington Entertainment Precinct

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I like the atmosphere of the Wellington Entertainment Precinct

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I will be allowed into licensed premises if I'm intoxicated



	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I notice the police presence in the Wellington Entertainment Precinct

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

Cheaper drinks in bars/restaurants would make me less likely to pre-load

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I think alcohol-related harm is getting worse in Wellington's Entertainment Precinct

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

Violence, assaults and fighting that occurs within the Wellington Entertainment Precinct usually involves drunk people

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

Increasing taxation on all alcohol (making drinks more expensive) will make me drink less

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I always adhere to liquor ban areas

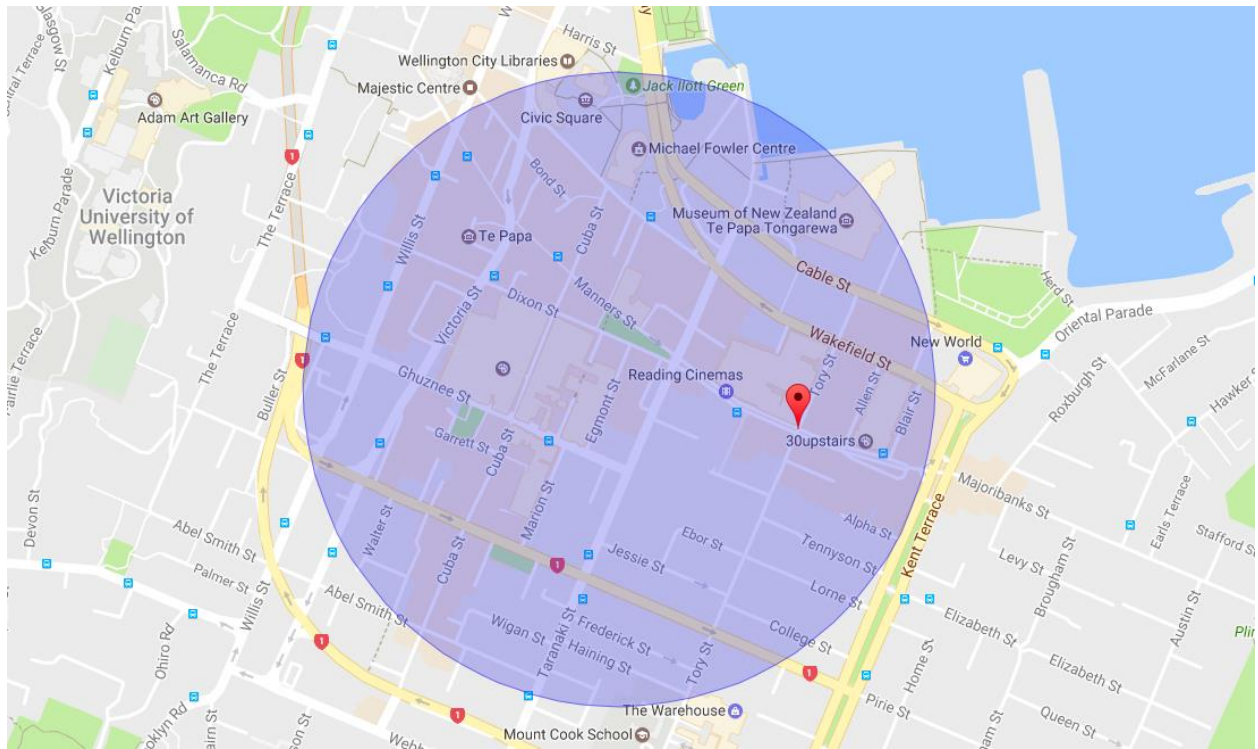
	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

Having cheaper non-alcoholic drinks available will make me less likely to consume alcohol

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

Binge drinking is a problem in the Wellington Entertainment Precinct

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree



# Appendix 2

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## Questions for stakeholders

**Introductions** – greetings, names, any questions, consent, purpose of interview etc.

We are interested in the causes and extent of alcohol related harm in the Wellington Entertainment Precinct as well as solutions that aim to reduce this harm. We're hoping to have a half an hour chat about some of your feelings about these topics and what can be done about them.

Is it alright if we record the interview and/or take notes? What you say is kept anonymous and will only be identified by your relationship to the entertainment precinct i.e. business owner/first responders, police.

Do you have any questions you want to ask before we start?

### **Problems**

1. From your experience what do you think is the most significant harm or harms in the WEP?
2. What do you think contributes to or causes these harms/this harm?
3. In your opinion, is the problem getting better or worse? Why/why not?

### **Solutions**

1. Do you know of any actions that have been taken to try reducing harm in the area? Do you think they work? Why/why not?
2. What do you think could/should be done to reduce the harm? Why?
3. In what way could different groups work together to reduce alcohol related harm?
4. Which specific solutions would you personally be interested in applying?
5. What do you think are barriers to the application of this/these intervention(s)?

Optional topic of discussion depending on the time and context: Are your personal ideas/opinions different to those of the organisation for which you work? If so, how?

Offer some options/solutions if they can't think of any/many: raising legal age, more police, more medics, less advertising, reduce alcohol content after 2am, more Māori wardens, reusable plastic cups, earlier closing times, more taxation, more bar staff/security staff training for not letting drunk people in/reducing aggression