



# Taeao Malama

## Alcohol use among Pacific peoples

Results from the New Zealand Health Survey &  
Attitudes and Behaviour towards Alcohol Survey

July 2020





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**ISBN:** 978-0-478-44994-5

**Citation:** Ataera-Minster, J., Guiney, H., & Cook, S. (2020). Taeao Malama: Alcohol use in Pacific peoples. Results from the New Zealand Health Survey & Attitudes and Behaviour towards Alcohol Survey. Wellington: Te Hiringa Hauora/Health Promotion Agency.

Cover art: '*Orange Hibiscus*' (Oils on linen) by Joanna Ataera-Minster

## Acknowledgements

Te Hiringa Hauora acknowledges and thanks the following people involved in the development of this report:

- Dr. Vili Nosa and his colleagues at the University of Auckland for their earlier work on Pasifika alcohol use which informed some of this report.
- All those respondents who took the time to participate in the surveys that informed this research.
- Philip Siataga for the insightful external peer review and gifting the Pacific name for the report.
- Falenaoti Mokalagi Tamapeau (Senior Advisor Pacific, Te Hiringa Hauora) for providing cultural advice throughout the development of this report and supporting the external peer review process.
- Te Hiringa Hauora Research and Evaluation Team for peer reviewing the methods, statistical analyses and results and the draft report, and project management of the report work.

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**NZBN** 9429041905333

July 2020

## FOREWORD – BY PHILIP SIATAGA

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*Taeao Malama* is a Samoan expression meaning ‘in the light of morning’. The expression is befitting of this research, particularly given that much of alcohol is consumed in the evening and its ravages and regrets felt more acutely in the morning light. The phrase, however, is a hopeful one – pointing to a new day, a new beginning, and like the song of birds as day is breaking, calls us to wake up. I highly commend this document as a poignant contribution to Pacific alcohol research to date.

The research artfully weaves the prevalence of Pacific peoples’ drinking and non-drinking patterns, behaviour and attitudes with insightful analysis. It prompts a call to further exercise our sociological imagination, deepen our understanding of the multifaceted ‘influences’ on drinking behaviour and attitudes, and creatively consider how to enhance protective factors in light of shifting socio-cultural norms. The research presents a positive picture – at least for Pacific youth who are more likely to be non-drinkers – and suggests that social, family, and religious expectations factor strongly. However, it also highlights as a matter of significant concern that the general social acceptability of drunkenness appears to be growing among Pacific young people. This is significant as the early age of onset of drinking has been associated with higher likelihood of problem drinking in adulthood. We would do well to consider this research with the findings of the New Zealand Law Commission’s report: ‘*Alcohol in the our lives: curbing the harm*’ (2010, p. 23) which concluded that “Marketing to young people undoubtedly contributes to the ongoing recruitment of young people to replace drinkers lost to the industry by attrition in mature markets and to expand the drinking population in emerging markets.”

Importantly, *Taeao Malama* acknowledges the concerns of many Pacific peoples about the density of alcohol outlets in their communities. It raises questions that researchers and social policy makers ought to vigorously pursue. While this report concentrates on recent drinking patterns, it also notes the introduction of alcohol to Pacific peoples, which is a critical component of a broader socio-historical colonisation narrative. To echo the voices of Pacific researchers from three decades ago:

“For us this journey has been defined by the winds of colonialism, New Zealand winds that have left weeping wounds in ourselves, our children and our communities” (Tamasese et al., 1998).

Alcohol is “no ordinary commodity” because of its potential to cause serious harm (Babor et al, 2010). It has blown chilling winds through the lives of many Pacific peoples with lived experience of harmful use. That has been my personal experience, my observation, and a deeply felt concern as a counsellor in the addiction field, a community worker, a researcher, and health promoter. The harmful effects of hazardous and heavy drinking can be immediate and also long-term, casting longer shadows of interpersonal anguish and mental distress over the life course for our own and future generations. The harms can, and often are, socially, spiritually, psychologically and physically devastating.

The resounding question is: how does alcohol really enhance or diminish our social and cultural prosperity? This report brings a fresh wave of knowledge to that multifaceted question. For many years I often said in community and education spaces that Pacific peoples are beautiful and more so when we look in the mirror of non-intoxication. Alcohol use impairment blurs the true reflection of our best selves and slurs the expression of our aspirations for personal, family, and social well-

being. Our common destiny is to experience freedom from drug-related harm, and to fully enjoy life. The good news is that much of the alcohol-related suffering is preventable.

**“E vave taunu’u le malaga pe tātou alo va’a fa’atasi”  
Our destiny is within sight when we paddle our canoe together.**

Paddling a canoe is difficult under the influence of alcohol.

Philip Siataga

Counsellor and Wellbeing Promoter

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# EXECUTIVE SUMMARY

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## INTRODUCTION

This report, *Taeao Malama*, presents a brief literature review and information on alcohol use and alcohol-related attitudes in Pacific peoples from two national surveys: (1) New Zealand Health Survey (NZHS); and (2) Attitudes and Behaviour towards Alcohol Survey (ABAS). The purpose of *Taeao Malama* is to provide an updated overview of alcohol use in Pacific peoples and look at drinking patterns and attitudes in various Pacific subpopulations.

## METHODS

The NZHS and ABAS are both nationwide surveys of adults aged 15 years and over, with the NZHS being conducted through face-to-face interviews and the ABAS over the telephone. For this report, survey data from the 2012/13 to 2015/16 NZHS and 2013/14 to 2015/16 ABAS were combined into two separate pooled datasets. The two pooled datasets produced a total of 3,306 NZHS Pacific respondents and 1,030 ABAS Pacific respondents. The analyses explored differences between ethnic groups and various Pacific subgroups including Pacific Realm country affiliation.

## KEY FINDINGS

### **Pacific adults report low levels of alcohol consumption in the past year**

In the NZHS, 57% of Pacific adults consumed alcohol in the past year ('past-year drinkers') - 43% did not ('non-drinkers'). The prevalence of past-year drinking was significantly lower than in non-Māori non-Pacific (nMnP) - 81%.

Pacific non-drinkers in the ABAS were more likely to say they don't drink because of religious reasons (21%) and family reasons or commitments (10%) compared to nMnP non-drinkers (11% and 7.0% respectively).

### **Pacific adults drink more harmfully than non-Māori non-Pacific adults**

Among Pacific adult past-year drinkers in the NZHS:

- 36% were classified as 'hazardous drinkers' (ie, had an established pattern of drinking that carries a high risk of future damage to physical or mental health) – a significantly higher proportion than in nMnP (18%)
- the prevalence of hazardous drinking was significantly higher compared to nMnP in every age group between 18 and 64-years-old .

Half of Pacific adults in the ABAS who drank alcohol in the past month (49%) engaged in heavy drinking (ie, consumed five or more alcoholic drinks on one occasion for those aged 15 to 17 years and seven or more drinks for those aged 18 years and over) – a significantly higher proportion than in nMnP (23%). A higher percentage of Pacific adults also reported having one or more harmful experiences after drinking alcohol (37%), compared with 18% for nMnP.

## **Pacific youth show very similar drinking patterns to Pacific adults**

In the NZHS, 56% of Pacific youth (aged 15 to 24 years) were past-year drinkers, significantly lower than in nMnP youth (78%). Almost half (45%) of Pacific youth who drank alcohol in the past year were hazardous drinkers, compared to 30% of nMnP youth (30%).

## **Characteristics of Pacific drinkers**

Of all Pacific adults in the NZHS, the prevalence of past-year drinking was higher in:

- males (66%) than females (49%)
- those born in New Zealand ('NZ-born'; 69%) than those born overseas ('overseas-born'; 45%)
- those who were employed (66%) compared to those who were unemployed (45%).

Hazardous drinking among past-year drinkers was higher in males (44%) than in females (26%).

In the ABAS, males were also more likely to report having had one or more harmful experience after drinking alcohol - 40% compared to 25% for females.

## **Lower levels of hazardous drinking occur in the most deprived areas**

Of all Pacific adults in the NZHS:

- hazardous drinking was less prevalent in high deprivation areas (18% in the most deprived areas compared to 31% in the least deprived areas). This is a unique pattern compared to what is seen in other populations, where hazardous drinking rates are highest in the most deprived areas.
- Pacific adults living in the least deprived areas were 1.8 times more likely to drink hazariously than those living in most deprived areas.

## **There are some differences in alcohol use between the Pacific ethnic groups and various Pacific subgroups**

In the NZHS, adult past-year drinking was higher in Cook Islands Māori (67%) and Niueans (68%) and significantly lower in Tongans (43%) than in Samoans (55%). However, past-year drinking was still relatively lower in all the Pacific ethnic groups than in nMnP (81%).

Hazardous drinking was significantly higher in New Zealand-born (27%) than in overseas-born (15%); and in females from the Pacific Realm countries (Cook Islands and Niue - 21%) than females from non-Realm countries (10%).

A similar pattern can be seen for hazardous drinking for youth but these differences were not statistically significant.

Of all Pacific adults in the ABAS:

- non-drinking was significantly lower in New Zealand-born (35%) than in overseas-born (56%)
- more New Zealand-born (43%) than overseas-born (33%) agreed that binge drinking was a part of Kiwi culture



- those who migrated to New Zealand as children aged 0 to 15 years (39%) were more likely to agree that binge drinking was a part of Kiwi culture compared to those who migrated as adults aged 16 to 25 years (29%) and 25 years and over (28%).

### **Pacific adults consumed on average a higher number of drinks in the last drinking occasion**

Of those Pacific adults in the ABAS who reported they had consumed two or more drinks on one occasion in the past three months:

- the most common last drinking occasions were: catching up with friends/family (19%); a party, celebration or event (17%); someone's birthday (12%); a dinner, lunch, breakfast or BBQ (12%); and Christmas/New Year's (11%)
- a higher number of drinks were consumed on average in the last drinking occasion (9.2 drinks) compared to nMnP (4.7 drinks).

### **Pacific adults have greater concerns about alcohol in their communities**

In the ABAS, 42% of Pacific adults agreed that the bars/pubs had a good reputation in their community and 54% agreed there were good places to drink alcohol in their community. These proportions were significantly lower than for nMnP (50% and 67% respectively). Also 44% agreed that some licensed premises were too close to public facilities like schools – a significantly higher proportion than for nMnP (31%).

Almost half (48%) agreed that offensive behavior by drunk people was a problem and 40% agreed that damage to property by drunk people was a problem in their communities. These proportions were significantly higher than for nMnP (34% and 31% respectively).

### **Being drunk is more acceptable to Pacific youth and Pacific men**

Pacific youth aged 15 to 24 years in the ABAS reported consuming a higher number of drinks, on average, in the last drinking occasion (12.0 drinks) than older Pacific adults aged 35 to 44 years (8.6 drinks), 45 to 54 years (6.9 drinks) and 55 years and over (6.0 drinks).

Pacific youth and Pacific men were more likely to agree that "It's ok to get drunk as long as it's not every day" and "Drunkenness is acceptable in some situations".

## **CONCLUSIONS**

Many of the results on Pacific peoples' use of alcohol presented in this report affirm those seen in the literature. In particular, the overall low levels of drinking in Pacific adults but higher levels of harmful drinking among those that do consume alcohol is consistently observed in studies on Pacific alcohol use. This pattern was evident in both the NZHS and ABAS analyses. In the NZHS, Pacific adults were more likely to drink hazardously than nMnP adults in all age groups between 18 and 64-years-old, with particularly high levels among younger Pacific adults (aged 15 to 34 years).

Both the NZHS and ABAS showed the burden of harmful drinking was mostly experienced by Pacific men and Pacific of younger ages. The patterns of harmful drinking warrant more targeted health promotion approaches for these groups, particularly given the ABAS results showed Pacific

men and younger Pacific adults had attitudes that were more accepting of being drunk and drunkenness.

When the analysis of the NZHS was restricted to Pacific youth aged 15 to 24 years, the same 'all or none' pattern of low levels of drinking but significantly higher levels of harmful drinking than nMnP youth was visible. While this contrasts with results from the school-based Youth'12 survey, which showed Pacific students were less likely to engage in binge drinking than New Zealand European students (Fa'alili-Fidow et al., 2016), it should be noted that the NZHS is a home-based survey and most likely includes a wider range of school- and non-school attendees in the sample.

While the high levels of harmful drinking in Pacific youth and adults point to a need for health promotion initiatives for Pacific peoples overall, more research is needed to better understand the contexts in which they drink harmfully. From the results included in this report and in the literature, it is unclear how frequently Pacific peoples engage in harmful drinking and in what contexts they do so. Although the ABAS results hint that Pacific peoples might be drinking larger volumes of alcohol and doing so in special/celebratory occasions, better and more in-depth information is needed to understand exactly what harmful drinking looks like and what the main issues are. This will enable health promotion messaging to target the key drivers of Pacific harmful drinking.

The lower levels of harmful drinking seen in Pacific peoples living in the most deprived areas is a unique pattern and is the reverse of what is commonly seen in other populations in New Zealand. This is a positive finding as it suggests harmful use of alcohol is less of an issue among poorer Pacific families. The finding that Pacific peoples from both medium and least deprived areas are more likely to drink hazardously also corroborates the literature that suggests harmful drinking in New Zealand may be due to Pacific peoples having more disposable income.

Consistent with the literature, several results in this report support theories of general cultural shifts in Pacific peoples' use of alcohol in New Zealand. These include: the higher prevalence of hazardous drinking in New Zealand-born Pacific adults; the higher prevalence of past-year drinking in Cook Islands and Niuean Pacific groups; the unique pattern of lower levels of hazardous drinking in the most deprived areas; and even the higher percentage of New Zealand-born and younger-aged migrants who agreed that "Binge drinking was a part of Kiwi culture". Further research is needed to unpack how cultural attitudes and drinking behaviours have changed over generations in New Zealand as this may also illuminate potential cultural protective factors for Pacific peoples.

A novel finding was that Pacific females of the Pacific Realm countries were more likely to drink hazardously than those from non-Realm Pacific countries. To our knowledge, this has not been demonstrated in the research literature. This finding supports the qualitative research on a cultural shift in the gendered use of alcohol, which was traditionally an activity reserved for Pacific males. This finding also suggests specific health promotion activities for females from Cook Islands and Niuean groups should be explored.

While the ABAS results suggested Pacific adults held poorer opinions about alcohol outlets and the behaviour of drunk people in their communities, it is unclear how this relates to alcohol use, particularly given the unique patterning of hazardous drinking by deprivation in Pacific adults. Further research is needed to explore the relationships between socio-economic deprivation and culture and the combined impact these factors have on Pacific peoples' use of alcohol.

# 1. INTRODUCTION

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## 1.1 BACKGROUND

### **Pacific peoples in New Zealand**

'Pacific peoples' are a diverse New Zealand population group whose individuals have ancestors originating from various Pacific Island nations in the South Pacific and Melanesia (Bisley, 2008). Pacific peoples currently make up 8% of the total New Zealand population (Statistics New Zealand [SNZ], 2019). Most Pacific peoples in New Zealand identify themselves as Samoan (49% of Pacific peoples), Cook Islands Māori (21%), Tongan (20%) and Niuean (8%), although Fijians have been the fastest growing Pacific ethnic group in recent years (SNZ, 2014). Although each Pacific ethnic group maintains its distinct cultural identity in New Zealand, they share many common histories, worldviews and values, hence their well-established collective identity as Pacific peoples.

Pacific peoples are characterised by a history of migration and an ongoing transnational relationship with New Zealand and the Pacific Island nations. Large numbers of Pacific peoples migrated to New Zealand from the mid-1950s to fill post-war industrial labour shortages and a second wave of Pacific migration occurred again in the 1990s (MacPherson, et al., 2001; Callister and Didham, 2008). Although almost two-thirds (62%) of Pacific peoples are now born in New Zealand (SNZ, 2014), they are described as being a transnational population because they maintain social and economic relationships with relatives in their Pacific homelands and move constantly between New Zealand and the Pacific Islands (Lee, 2009).

### **Demographic and cultural features of Pacific peoples**

There are several important demographic and cultural features of Pacific peoples. First, Pacific peoples are a youthful population and have the highest proportion of children aged 0 to 14 years of all ethnic groups in New Zealand (SNZ, 2014). Pacific peoples have a median age of 23.4 years at the time of the previous census (SNZ, 2019). Second, the large proportion of Pacific peoples born in New Zealand means that many Pacific peoples grow up exposed to New Zealand cultural norms. This, in turn, influences how traditional Pacific cultures shift over time and the way that Pacific peoples relate to their extended families and kin in their Pacific Island nations. Third, Pacific peoples are a heterogeneous population and this is visible in population-level differences between the Pacific ethnic groups. For example, Cook Islands, Niue and Tokelau all have higher proportions of New Zealand-born and multi-ethnic<sup>1</sup> Pacific individuals, as well as much lower proportions of Pacific language speakers, than in Samoan and Tongan populations (see Ataera-Minster and Trowland, 2018).

There is significant diversity in health outcomes, behaviours, and attitudes between various Pacific demographic and cultural subgroups *within* the Pacific population. For example, in *Te Rau Hinengaro* (New Zealand Mental Health Survey), the 12-month prevalence of mental disorders was higher in Pacific peoples who were New Zealand-born or migrated to New Zealand as children compared to those who migrated as adults (Kokaua et al., 2009). In *Te Kaveinga* (a report on the New Zealand Mental Health Monitor and the Health and Lifestyles Survey), Pacific peoples

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<sup>1</sup> 'Multi-ethnic' is a term for those who identify with Pacific peoples and at least one other ethnic group.

affiliated with the Pacific Realm<sup>2</sup> countries were less likely to agree that maintaining a connection to their culture was important to them compared to those affiliated with non-Realm Pacific countries (Ataera-Minster and Trowland, 2018).

Such within-Pacific diversity means health promotion needs to be informed by research that considers and investigates health behaviours and outcomes in different Pacific subgroups. Pacific researchers often talk about these Pacific subgroups in terms of different 'Pacific identities' because one's lived experience of being a New Zealand-born Pacific person, for example, plays an important role in one's sense of belonging to their Pacific group/s which, in turn, has an impact on one's wellbeing.<sup>3</sup> Understanding the complex interplay of these diverse intra-Pacific identities and their relationship to health behaviours and attitudes is particularly important for health promotion in Pacific youth. This is because their wellbeing requires learning to navigate these identities that also cut across social dimensions of age, gender, ethnicity and socio-economic status (Manuela and Anae, 2017).

## 1.2 THIS REPORT

This report, *Taeao Malama*, presents a brief literature review on alcohol use in New Zealand Pacific peoples, together with results on alcohol use in Pacific peoples from the New Zealand Health Survey (NZHS) and the Attitudes and Behaviour towards Alcohol Survey (ABAS).

*Taeao Malama* is framed within an ecological perspective of health promotion. This means alcohol use in Pacific peoples is discussed and interpreted with the view that drinking behaviours and attitudes are influenced by multiple underlying factors, ranging from the historical and cultural determinants of health (eg, colonisation and migration) to the current environmental, political, social and economic context, and individual biological and psychological factors (see Sallis et al., 2008). Together, these interpersonal, environmental and intra-personal factors all influence Pacific peoples' use of alcohol in complex ways.

### Purpose and aims

The purpose of *Taeao Malama* is to provide up-to-date information on Pacific peoples' use of alcohol in New Zealand as well as a more in-depth look at drinking patterns and attitudes in different Pacific subpopulations. Previous national-level alcohol survey data shows that Pacific peoples drink alcohol differently compared to non-Pacific, with particularly low levels of consumption overall but high levels of harmful drinking among those that do drink (Te Hīringa Hauora/Health Promotion Agency, 2018; Ministry of Health (MoH), 2015). There is also an

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<sup>2</sup> The Cook Islands, Niue and Tokelau are also known as Pacific 'Realm countries' because they are part of the Realm of New Zealand. Both the Cook Islands and Niue are self-governing in free association with New Zealand, whereas Tokelau is a non-self-governing territory of New Zealand (see <https://www.hrc.co.nz/files/3714/2398/5045/Commission-role-in-Pacific-realm-nations-for-web.doc>). Pacific Realm countries share the same Head of State under the New Zealand constitution (Her Majesty the Queen in Right of New Zealand) and Pacific peoples from these countries are New Zealand citizens. For more information about the relationships between New Zealand and countries in the wider Pacific region see: <https://www.mfat.govt.nz/en/countries-and-regions/pacific/>.

<sup>3</sup> While discussion of the mechanisms underlying how Pacific identity influences wellbeing is outside the scope of this report, Manuela and Anae (2017) summarises some of the international research on the relationship between ethnic identity and wellbeing in terms of Pacific youth in New Zealand. Also see Mila-Schaaf (2013) and Taumoevalua (2013) for discussion on how navigating the NZ-born Pacific identity impacts the wellbeing of young Pacific peoples.

increasing need for information on alcohol use in Pacific subpopulations because there is some evidence that alcohol use varies between the different Pacific ethnic groups, with more harmful drinking patterns seen in Cook Islanders and, to some extent, in Niueans (Fa'alili-Fidow et al., 2016; Sundborn et al., 2009; Schaaf and Scragg, 2004; Schaaf, 2005). Similarly, drinking patterns have been shown to vary by sociodemographic factors such as place of birth. For example, in a study of Auckland secondary school students, New Zealand-born Pacific students tended to drink more frequently than those born overseas (Schaaf and Scragg, 2004).

The aims of this report are to investigate:

- key characteristics of Pacific alcohol use and examine how they differ in Pacific subgroups (by age, sex and Pacific ethnic group)
- attitudes towards alcohol use in Pacific peoples
- social and cultural factors associated with alcohol use in Pacific peoples.

### 1.3 TERMINOLOGY

A number of different terms are used in this report to describe alcohol use, depending on the survey used to obtain the result.

The term '**Hazardous drinking**' is defined in the NZHS as an established drinking pattern that carries a high risk of future damage to physical or mental health. Hazardous drinking is measured in the NZHS with the Alcohol Use Disorders Identification Test (AUDIT) and is indicated when a respondent scores eight or more (MoH, 2019; See section 3.2 of the Methods chapter for further details).

'**Heavy drinking**' is a measure of alcohol use derived from the ABAS, defined as consuming five or more alcoholic drinks for 15 to 17-year-olds and seven or more drinks on any one occasion for those aged 18 years and over.

The term '**Harmful drinking**' is used throughout the report to refer collectively to hazardous drinking and heavy drinking as defined in the NZHS and ABAS, as well as binge drinking, drinking large quantities per occasion, or experiencing harm from drinking.

All other terms for alcohol use referred to in the research presented in the literature review are defined in the footnotes.

Ethnic group comparisons of the Pacific responses were made against a **non-Māori non-Pacific (nMnP)** reference group. Using a non-Māori non-Pacific (nMnP) reference group removes Māori from the ethnic group comparisons. This provides a more accurate picture of alcohol use inequities because Māori show similar patterns of harmful drinking to Pacific peoples. 'Any Pacific' ethnicity classification was used for all ethnic group comparisons. This means those who identified as both Māori and Pacific (n=157) were included in the Pacific ethnic group for this report but are included in the Māori ethnic group for all other NZHS and ABAS reports.

The **Pacific Realm countries** include Cook Islands, Niue and Tokelau and non-Realm countries are Samoa, Tonga and Other Pacific. Although Tokelau is by definition a Pacific Realm country, in this report Tokelauan NZHS respondents were not able to be identified from the 'Other Pacific' group in the pooled dataset and, therefore, were included in the 'non-Realm' group for the analysis.



Tokelauans are a small Pacific group of 7,176 people (5% of the total Pacific population in New Zealand) at the time of the previous published census (StatsNZ, 2014a). Including Tokelauans in the non-Realm group, therefore, probably had minimal influence on the significance of the results.

## 1.4 LIMITATIONS

The NZHS and ABAS collect data on respondents' self-reported use of alcohol. As with other surveys based on self-reported measures of behavior, there is always the possibility of bias due to 'social desirability' – where participants respond to questions about their behaviour in a certain way because they feel it is more socially acceptable to others.

Pooling data across survey years treats the responses as if they were from one survey. This means the estimates obtained for the survey items are, in effect, averages across the time period of the pooled dataset. This can introduce some error if there are differences in the responses to items between each survey wave. Restricting the number of survey waves included in the pooled datasets for this report helped minimise this error.

Results from the ABAS rely on telephone-based survey methods, whereas the NZHS uses face-to-face interview methods. The ABAS yields lower response rates than the NZHS; for example, the 2015/15 ABAS response rate was 31.5% (Te Hīringa Hauora/Health Promotion Agency, 2016) whereas the final response rate for the 2015/16 NZHS was 80% (MoH, 2016). Because of these methodological differences, the NZHS generally produces more robust results as the ABAS is more prone to selection and response biases. For this reason, where the statistical significance of the ABAS and NZHS results differed in the analysis for this report, only the NZHS results were presented.

Although using pooled datasets increase the precision of estimates of alcohol use in specific Pacific ethnic groups (eg, Samoan Cook Islands Māori, Tongan and Niuean) and Pacific subgroups (eg, New Zealand-born/overseas-born and Realm/non-Realm), some of the Pacific ethnic and subgroup differences presented in this report were based on small numbers partly because alcohol use is relatively low in Pacific peoples. While these Pacific group differences were statistically significant, there are still large errors around the estimates and these results should be interpreted with some caution. The base numbers used to calculate the prevalence estimates for each Pacific group are provided with the results presented throughout the report.

## 2. LITERATURE REVIEW: PACIFIC PEOPLES' USE OF ALCOHOL IN NEW ZEALAND

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### **Alcohol use in Pacific adults**

#### ***Prevalence of drinking***

New Zealand surveys consistently find that, while the prevalence of drinking alcohol is relatively low in Pacific peoples, those who do drink tend to do so more harmfully (Huakau et al., 2005; Sundborn et al., 2009; MoH, 2019). This pattern has not appeared to change over time. In the 2018/19 New Zealand Health Survey (NZHS), fewer Pacific adults (61%) aged 15 years and over reported they had drunk alcohol in the past year ('past-year drinkers') than in the total population (80%); however, Pacific past-year drinkers were significantly more likely to engage in hazardous drinking behaviour than non-Pacific past-year drinkers (MoH, 2019).

There are notable differences in alcohol use between Pacific males and females. In 2018/19, the risk of hazardous drinking was 34% higher in Pacific adults than in non-Pacific. However, when analysed by sex, risk of hazardous drinking was only significantly higher in Pacific men compared to non-Pacific men; whereas the risk of hazardous drinking was the same in Pacific and non-Pacific women. Taken together, these results suggest much of the burden of harmful drinking in Pacific adults is experienced by Pacific men.

Surveys investigating alcohol-related harm in Pacific peoples show mixed results. In a descriptive comparison between results from the Pacific Drugs and Alcohol Consumption Survey and the National Alcohol Survey, Huakau et al. (2005) reported Pacific peoples experienced more alcohol-related harm than the total New Zealand population across a wide variety of domains.<sup>4</sup> However, a more recent and nationally-representative in-depth analysis of alcohol use from the 2012/13 NZHS found Pacific adults were equally as likely to report experiencing physical, mental and social harms from drinking as non-Pacific adults, but were less likely to report experiencing some kind of violent harm from other people's drinking. The only alcohol-related harm that Pacific adults were at higher risk of experiencing were absences from work or school (MoH, 2015).

Although Pacific peoples' drinking pattern can be described as harmful, surveys demonstrate that Pacific drinkers do not drink alcohol any more frequently than drinkers the New Zealand population (Huakau et al., 2005), or that Pacific drinkers may even drink significantly less frequently than New Zealand European drinkers (Sundborn et al., 2009). This is supported by results from the 2012/13 NZHS which found a markedly greater proportion of European/Others (35%) consumed alcohol with high frequency (at least 3-4 times per week) than in Pacific peoples (9%). However, Pacific drinkers were more likely than non-Pacific drinkers to report that they drank to intoxication at least

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<sup>4</sup> Huakau et al. (2005) compared results on Pacific respondent's alcohol use from the 2003 Pacific Alcohol and Drugs Consumption Survey against results on alcohol use in the total New Zealand population from the 2000 National Alcohol Survey. The authors found that, compared to drinkers in the total New Zealand population, higher proportions of Pacific drinkers reported: being involved in motor vehicle accidents, other accidents that caused serious injury, being physically assaulted or having physical fights because of drinking, having serious arguments after drinking, staying intoxicated for several days, and getting drunk when there was an important reason to stay sober. These results should be interpreted with some caution because of the different survey methodologies and the basic descriptive nature of the comparative analysis.

once a week (MoH, 2015). These results, together with the high prevalence of hazardous drinking, suggest that overall Pacific adults do not seem to drink in moderation.

## **Alcohol use in Pacific youth**

### ***Prevalence of drinking***

The prevalence of alcohol use in Pacific youth, as with Pacific adults, is relatively low compared to other ethnic groups. In the Youth'12 survey, most Pacific secondary school students aged 12 to 18 years did not drink alcohol. Less than one-third (29%) of Pacific students were classified as current drinkers<sup>5</sup> in 2012 compared to 45% in the total population (Ameratunga et al., 2018). Pacific students were also less likely to drink weekly (6%) or report binge drinking in the past four weeks<sup>6</sup> (18%) than New Zealand European students (10% and 25% respectively) (Fa'alili-Fidow et al 2016, 2016a). Results across the Youth2000 survey series indicate there have been some improvements in Pacific students' use of alcohol over time. In 2012, about half as many Pacific students reported consuming alcohol weekly or binge drinking than in 2001 (Fa'alili-Fidow et al 2016).

It should be noted that the low prevalence of binge drinking among Pacific students in 2012 may not be representative of the total Pacific youth population. It is possible that Pacific youth engaging in binge drinking are not attending school and were not captured in this school-based survey. Similarly, it is possible that drinking larger volumes of alcohol in one sitting becomes more common among older Pacific youth after leaving school. Indeed, Teevale et al. (2012) showed there was a significant association between age and binge drinking in Pacific, with almost one-half (47%) of older Pacific students aged 17 years reporting binge drinking compared to only 15% of younger Pacific students aged 13 years.

### ***Influence of peers and families on alcohol use in Pacific youth***

Survey results demonstrate that Pacific youth tend to drink alcohol with their peers and in social contexts away from their parents or caregivers. Among Year 10 students who drink alcohol, Pacific students (70%) are more likely than New Zealand European/Others (57%) to report consuming alcohol without their parents or caregivers knowing about it (White, 2013). In the Youth'07 survey, drinking with friends was the most common context for consuming alcohol, reported by 88% of Pacific students; and most Pacific students who reported binge drinking (71%) got their alcohol from friends (Teevale et al., 2012). The finding that participating in sports teams or sports clubs outside of school increased Pacific students' risk of binge drinking (Teevale et al., 2012) also suggests that harmful drinking is a social peer group activity for Pacific youth.

The risk of harmful drinking in Pacific youth seems to be lower when their parents are more aware of their children's activities. In the Youth'07 survey, Pacific students were less likely to report binge drinking in the past four weeks if their parents knew where they were after school or at night (Teevale et al., 2012). Similarly, Year 10 Pacific students who had never engaged in 'risky

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<sup>5</sup> 'Current drinkers' was defined as those students who, at the time of the survey, had continued to drink beyond their first experience of drinking.

<sup>6</sup> 'Binge drinking' was defined as those students who reported they consumed 5+ drinks in one session (within four hours).

drinking<sup>7</sup> were more likely than risky drinkers to have parents who knew where they were when they were not at home and knew what they spent their money on (White and Newcombe, 2014).

## **Social and community factors that influence Pacific alcohol use**

### ***Socio-economic deprivation***

The pattern of harmful alcohol use by socio-economic status is different in Pacific peoples than in the total population. Among all adults, those living in the most deprived areas report higher rates of hazardous drinking than those living in the least deprived areas (MoH, 2019). However, in surveys of Pacific subpopulations, those in the mid and least deprived areas show higher rates of harmful drinking. For example, in an Auckland study of Pacific adults aged over 35 years, drinkers in the middle deprivation quintiles consumed on average more drinks per drinking occasion than those living in either the high or low deprivation quintiles (Sundborn et al, 2009). Similarly, in the Youth'07 survey, Pacific students living in low and medium deprived areas were more likely to binge drink than those living in the most deprived areas (Teevale et al., 2012).

### ***Supply of alcohol in the community***

Research on the New Zealand population consistently shows alcohol outlets tend to be concentrated in greater numbers in areas of high social deprivation. While there is no published research on the distribution of alcohol outlets by social deprivation in Pacific adults, a geospatial analysis of alcohol outlets in urban areas from the 2012/13 NZHS showed that, although most adults in the total population (85%) lived close (within 2 minutes' drive) to alcohol outlets, more adults in high deprivation areas lived close to alcohol outlets than those in low deprivation areas. The density of alcohol outlets was also greater in more deprived areas (MoH, 2015).

Overall, research shows the density of alcohol outlets is associated with alcohol-related harm but this varies depending on type of outlet, the harm or outcome investigated and sociodemographic factors of the local environment (Cameron et al., 2013). Generally, higher alcohol outlet density<sup>8</sup> is associated with consuming higher numbers of drinks per occasion (Huckle et al., 2008; Kypri et al., 2008; Connor et al., 2011). The relationship between high volumes of alcohol consumption and alcohol outlet density appears to be most visible in areas with a high density of off-license alcohol outlets (bottle stores and supermarkets) (Kypri et al., 2008; Connor et al., 2011). Results from the 2012/13 NZHS showed that off-license alcohol outlet density was highest in the most deprived urban areas; and hazardous drinkers living in the most deprived areas were 1.4 times more likely to live within two minutes' drive of 1-2 off-license alcohol outlets than hazardous drinkers living in the least deprived areas (MoH, 2015).

Although research shows consistent positive associations between harmful drinking, density of alcohol outlets and social deprivation, there is no published research to date investigating how alcohol outlet density affects Pacific peoples' drinking behaviours. This is surprising given many Pacific peoples live in deprived areas and experience high rates of hazardous drinking. Ayuka et al.'s (2014) analysis of 2006/07 NZHS data found no association between hazardous drinking and proximity to alcohol outlets at a national level. However, in specific groups, including young Māori and Pacific males aged 15 to 24 years, those who lived closer to alcohol outlets were more likely to

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<sup>7</sup> 'Risky drinking' was defined as consuming five or more alcoholic drinks in one session. Te Hīringa Hauora now uses the term 'heavy drinking' instead of the term 'risky drinking'.

<sup>8</sup> Alcohol outlet density is often defined as the number of outlets within a given distance from the participants' homes, with that distance varying between studies.

be hazardous drinkers. This suggests the density of alcohol outlets predominantly influences harmful drinking in young Pacific males. There is also some qualitative evidence that the high density of alcohol outlets in communities is concerning to Pacific peoples. In interviews with Pacific families about the impact of alcohol on wellbeing, many participants felt alcohol consumption had become worse over the years because of the increased numbers of liquor outlets and a lack of licensing regulation which has made alcohol cheaper and more readily available compared to when they were younger (Kāhui Tautoko Consulting Ltd, 2020).

## **Cultural factors influencing Pacific alcohol use**

### ***Protective aspects of Pacific culture***

There is some evidence that aspects of traditional Pacific culture can be protective against harmful drinking. For example, Pacific students in the Youth'07 survey were less likely to report binge drinking if they attended a place of worship regularly or had parents that could speak a Pacific language (Teevale et al., 2012). Similarly, in qualitative studies, Pacific participants describe how traditional cultural values, beliefs and practices help them choose to drink more responsibly and abstain from drinking (Suaalii-Sauni et al., 2012; Samu et al., 2009; Kāhui Tautoko Consulting Ltd, 2020).

Spirituality, religion and attending church are regularly cited protective elements of Pacific culture. Many Pacific peoples are affiliated with religion and church and, in New Zealand, churches provide important cultural spaces for Pacific families and communities to congregate (Ministry for Pacific Peoples, 2018). Drinking alcohol is strongly discouraged and seen as socially unacceptable in Pacific church communities (Gray and Nosa, 2009; Nosa, 2005; Lima, 2005). In interviews with Pacific youth, attending church was identified as a key factor that helped support abstinence and responsible drinking. For these young Pacific participants, drinking responsibly was necessary to meet their weekend church responsibilities and the expectations of their parents and elders, for whom church was a central part of life. Those who were strongly affiliated with church also described how the ministers and church members actively discouraged drinking and taught them about the risks associated with alcohol use (Suaalii-Sauni et al., 2012).

Traditional cultural family values and the close ties between extended Pacific families and community networks are also important for supporting abstinence and responsible drinking. In Suaalii-Sauni et al. (2012), Pacific youth chose to drink responsibly to protect their family name and prevent embarrassing their parents in the wider Pacific community. Tongan participants, for example, described how everyone knew each other in the wider Tongan community; this meant there was always a risk that excessive drinking would result in them not being able to meet important family responsibilities, or a risk of bringing social shame to their family name if their drinking was witnessed by other community members. Social and family reasons were the most common reasons for stopping drinking reported by Pacific adults in Sundborn et al. (2009). The researchers suggested this could be due to family expectations as well as cultural/religious norms around alcohol use and its negative stigma in Pacific communities.

It is important to note that the protective role of the church and Pacific family values in preventing harmful drinking is not straightforward. Not all those with strong Pacific family values and religious affiliation drink responsibly and some hide their drinking to avoid the consequences of deviating from cultural traditions. Qualitative studies provide evidence that Pacific youth engage in covert drinking behaviours because of their cultural values and beliefs. For example, Manuopangai (2012) investigated alcohol use in Tongan females aged 16 to 25 years who attended a Tongan Methodist



Church in Auckland. In interviews, participants described how church disapproval of drinking did not lessen or restrict their alcohol use; instead, they actively hid their drinking from the church community and noted how attending church with a hangover from the night before was common, as was missing church services due to being hungover. Actively hiding one's drinking because Pacific family values and religious beliefs do not condone alcohol use is also noted in other qualitative studies with Pacific peoples (Sector Analysis, MoH, 1997; Kāhui Tautoko Consulting Ltd, 2020).

Ameratunga et al. (2018) showed that Pacific (and Māori) students in 2012 were more likely than New Zealand European students to report they were concerned about their drinking, but their level of concern was not due to higher levels of alcohol-related harm. The researchers suggested the increased concern may be due to earlier onset of drinking in Pacific and Māori youth; however, NZHS results show that only Māori report an earlier age of drinking compared to other ethnic groups<sup>9</sup> (MoH, 2015). This means there are probably other factors driving Pacific young peoples' elevated concern about their drinking. It is possible their increased concern may reflect Pacific cultural attitudes towards drinking being socially unacceptable, both in the church and in wider Pacific family and community circles. This may also explain why Pacific youth tend to drink in places away from their parents, caregivers and church communities.

### ***Cultural shifts in Pacific alcohol use in New Zealand***

Alcohol was not a part of traditional Pacific society and was introduced through contact with European sailors, traders, and whalers in the early nineteenth century (Cagney and Alliston, 2009; Warren et al., 2006). The uptake of drinking in the Pacific was slow, partly because the Christian missionaries introduced the churches, and religious doctrine around alcohol being unacceptable became widespread (Cagney and Alliston, 2009). After migrations to New Zealand from the late-1950s, Pacific peoples' use of alcohol gradually shifted, with heavy episodic drinking and drinking to intoxication becoming increasingly more prevalent (Cagney and Alliston, 2009). Researchers suggest these shifts are the complex result of multiple factors, including Pacific peoples' exposure to, and adoption of, New Zealand drinking norms; the increased availability of alcohol and urbanisation in New Zealand; increased disposable income among New Zealand Pacific peoples; and acculturation (Cagney and Alliston, 2009; Gray and Nosa, 2009; Huakau et al., 2005; Schaaf and Scragg, 2004; Warren et al., 2006).

The shifts in Pacific alcohol use are visible in the way Pacific peoples' drinking behaviours are patterned by socio-economic status, place of birth and gender. No research to date has specifically investigated the underlying reasons for the high prevalence of harmful drinking observed in the least deprived Pacific communities – a pattern of alcohol use that is unique to Pacific peoples. Researchers have suggested this pattern may reflect the transitional nature of the Pacific population in New Zealand which is partly comprised of new migrants as well as those with a longer history of migration (Teevale et al., 2012; Sundborn et al., 2009). This means a large proportion of the Pacific population have grown up in New Zealand and are characterised by higher

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<sup>9</sup> Adults in the 2012/13 NZHS who had ever drunk alcohol were asked what age they were when they first tried an alcoholic drink. Māori adults were 1.5 times more likely to have first tried an alcoholic drink before age 15 years compared to non-Māori, whereas there were no significant differences between Pacific non-Pacific adults. In total, 43% of Māori adults who had ever drunk alcohol recalled starting to drink before age 15 years, compared to 18% of Pacific and 29% of European/Other adults (MoH, 2015).

levels of education and income. It is these more affluent and middle-class Pacific peoples who are thought to have adopted many of New Zealand's cultural norms, including the drinking culture.

Cultural shifts in the way Pacific peoples use alcohol in New Zealand are also evident in the patterning of their drinking behaviour by place of birth. Research shows New Zealand-born Pacific peoples drink more frequently and harmfully than those who were born in the Pacific Islands. For example, in a study of Auckland high school students, New Zealand-born Pacific students tended to drink more frequently than those born in the Pacific Islands (Schaaf and Scragg, 2004).

Similarly, in qualitative studies, Pacific peoples note how successive generations of New Zealand migrants have adopted styles of alcohol use, such as binge drinking and drinking to intoxication, that were not seen in older generations of Pacific peoples. This is suggested to be a result of alcohol being more affordable and readily available in New Zealand compared to the Pacific Islands (Kāhui Tautoko Consulting Ltd, 2020; Sector Analysis, MoH, 1997).

A cultural shift in the gendered nature of Pacific peoples' drinking is also shown in the literature. In Pacific countries, drinking alcohol has traditionally been a social activity carried out by Pacific men who held drinking sessions away from women and children in designated drinking places outside of the home (Cagney and Alliston, 2009; Sector Analysis, MoH, 1997). In a review of alcohol use surveys from 22 Pacific Island nations across the Pacific region, this gendered pattern of alcohol use was still evident. Results showed Pacific men engaged in heavy drinking and consumed alcohol more frequently than Pacific women, with similar patterns in youth (Kessaram et al., 2016). There is some concern that increasingly more Pacific females in New Zealand appear to be consuming alcohol (Warren et al., 2006). This is supported by national data showing an increase in the proportion of Pacific women (aged 16 to 65 years) drinking in the past year and in drinking frequency between 2003 and 2011 (Huckle et al., 2013). Furthermore, in qualitative research with young Pacific females in New Zealand, participants described drinking socially and consuming enough drinks to get a buzz or intentionally get drunk (Gray and Nosa, 2009; Hutton and Wright, 2015). Interestingly, Pacific female drinkers continue to adhere to some traditional norms around drinking. For example, in qualitative studies Pacific female drinkers describe purposefully drinking with groups of other females and in contexts away from Pacific male relatives and their elders. This is out of respect for traditional cultural values around alcohol being a social activity restricted to men (Gray and Nosa, 2009; Hutton and Wright, 2015; Manuopangai, 2012; Suaalii-Sauni et al., 2012).

### ***Pacific social values and traditional drinking practices***

It has been suggested in the literature on Pacific alcohol use that Pacific social values and ceremonial kava drinking practices could explain the high volume per occasion drinking style of Pacific peoples. Some studies note that drinking high volumes per occasion among New Zealand Pacific peoples may have evolved from traditional Pacific social values and conventions.

Generosity is an important cultural value for Pacific peoples and alcohol can be viewed like a food that brings people together socially and is traditionally provided to guests in large amounts. When hosts provide large amounts of alcohol, they are seen to be generous to their guests, whereas providing moderate amounts is seen as being stingy and mean (Huakau et al., 2005; Cagney and Alliston, 2009; Sector Analysis, MoH, 1997). The traditional practice of drinking each cup of kava in one go and continuing drinking until all the kava is finished has been suggested as an explanation for why Pacific men in particular drink large quantities of alcohol in each sitting (Sector Analysis, MoH, 1997). However, this view is contested because kava is not universally used by all Pacific ethnic groups (Cagney and Alliston, 2009).

## **Variation in alcohol use between Pacific ethnic groups**

There is some evidence from studies suggesting alcohol use varies between the different Pacific ethnic groups. Although these studies should be interpreted with caution because of small numbers, a consistent pattern of harmful drinking in Cook Islands Māori (and to some extent Niueans) is seen across the studies. For example, in the Pacific Islands Family study, Cook Islands Māori mothers and fathers had significantly higher rates of hazardous drinking (as measured by AUDIT-C) than Samoan and Tongan parents (Schluter et al, 2013). This pattern of harmful drinking in Cook Islands Māori is also visible in Pacific youth. In the Youth '12 study, Cook Islands students were more likely to report binge drinking than Samoan and Tongan students (Fa'alili-Fidow et al., 2016). Similarly, in a study of Auckland high school students, Cook Islands and Niuean students were more likely than Samoans to report they consumed alcohol weekly and a higher proportion of Cook Islands students started drinking at earlier ages (Schaaf and Scragg, 2004; Schaaf, 2005).

Variation in harmful drinking between Pacific groups is also evident in qualitative research with Pacific peoples. For example, in interviews with young Pacific high school and university students aged 15 to 25 years, a number of participants noted that the excessive drinking they saw among Cook Islanders were because Cook Islands cultural drinking norms were more liberal compared to other Pacific groups such as Tongans and Samoans (Samu et al., 2009). Comparatively liberal drinking norms have also been noted in a qualitative study with New Zealand-born Niueans (Gray and Nosa, 2009).

It has been suggested that the more harmful drinking patterns in Cook Islanders and Niueans is because both countries have a longer migration history with New Zealand (Sundborn et al., 2009). Pacific peoples from the Cook Islands, Niue and Tokelau began migrating to New Zealand during the Second World War years in the 1940s after their Pacific Island nations became part of the wider Realm of New Zealand. Pacific peoples from these Pacific 'Realm' countries hold New Zealand citizenship and have open entry into New Zealand. The longer migration history and New Zealand citizenship rights shared by those from Pacific Realm countries means they have been more exposed to the New Zealand culture and are more likely to have adopted New Zealand cultural drinking norms. Recent evidence, showing Pacific peoples affiliated with the Realm countries were less likely than those from non-Realm countries to agree that maintaining a connection to their culture was important, provides some support for this theory (Ataera-Minster and Trowland, 2018).

### 3. METHODS

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Data for this report were sourced from the New Zealand Health Survey (NZHS) and the Attitudes and Behaviour towards Alcohol Survey (ABAS). The NZHS is a national Ministry of Health (MoH) survey run continuously to gather and provide updated information on the health and wellbeing of New Zealanders (MoH, 2019a). The NZHS collects information annually on a set of core questions; this includes a module on health behaviours and risk factors, within which sits a series of questions on tobacco, alcohol and drug use (MoH, 2018). The ABAS was a nationwide survey administered annually by Te Hīringa Hauora/Health Promotion Agency up to 2015/16. The ABAS collected information on New Zealand adults' alcohol consumption, alcohol-related attitudes and behaviours, and consequences of alcohol use.

Data were pooled from multiple survey waves for both the NZHS and ABAS<sup>10</sup>, keeping the datasets for each survey separate. Pooling data creates larger sample sizes and increases the statistical precision of estimates of alcohol use for various subpopulation groups. This enables a more detailed and reliable analysis of Pacific ethnic groups and Pacific youth<sup>11</sup>.

Further information on the NZHS and ABAS content are provided in the survey questionnaires; and details on ethics, sampling frames/recruitment, data collection and response rates are provided in the survey methodology reports, available at:

- NZHS: <https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/surveys/new-zealand-health-survey>
- ABAS: <http://www.hpa.org.nz/research-library/research-publications>.

#### 3.1 SAMPLING, RECRUITMENT AND DATA COLLECTION

The NZHS is a face-to-face interview survey of usually resident New Zealanders of all ages. Each survey had an annual sample size of approximately 14,000 adults and 5,000 children (2019b). For further details of the NZHS sampling design, recruitment and data collection refer to MoH (2019b).

The ABAS is a telephone survey of all usually resident New Zealanders aged 15 years and over. Approximately 4,000 people aged 15 years and over were surveyed for each survey wave, using Computer-Assisted Telephone Interviewing (CATI) over the four months from November to February. In addition, an extra 196 Pacific respondents were surveyed in February 2016 to boost the Pacific sample in the 2015/16 ABAS (Te Hīringa Hauora/Health Promotion Agency, 2016).

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<sup>10</sup> .Survey data were pooled from the NZHS 2012/13 to 2015/16 survey waves and the 2013/14 to 2015/16 ABAS survey waves.

<sup>11</sup> Relying on data from one survey wave generally produces insufficient numbers of observations to investigate differences in alcohol use between Pacific ethnic groups and sociodemographic subgroups because the prevalence of drinking in the Pacific population is relatively low.

## 3.2 POOLED DATASETS

### **NZHS pooled dataset and Alcohol Use Disorders Identification Test (AUDIT)**

The NZHS pooled dataset used for this report was created by combining data on alcohol use from the 2012/13, 2013/14, 2014/15 and 2015/16 NZHS datasets. The NZHS questions on alcohol use come from the Alcohol Use Disorders Identification Test (AUDIT) – a questionnaire containing 10 items on alcohol consumption, dependence and adverse consequences. An AUDIT score of 8 or more is classified as ‘hazardous drinking’.

In the 2015/16 NZHS, the two AUDIT questions on typical quantity and frequency of heavy drinking were revised. The previous questions, which did not include a definition of ‘drinks’, were changed to refer to a ‘standard drink’ of 10g of alcohol and a show-card illustrating the number of ‘standard drinks’ for various common beverages was included. This new version of the AUDIT was tested on approximately half of the sample, while the other half answered the previous version (MoH, 2018). To ensure the measures were consistent across the combined datasets for this report, the pooled dataset included the full sample of respondents from 2012/13, 2013/14 and 2014/15, but only those 2015/16 respondents who answered the previous version of AUDIT. See MoH (2019) for a detailed explanation of the AUDIT currently used in the NZHS.

### **ABAS pooled dataset**

The 2013/14, 2014/15, and 2015/16 ABAS datasets were combined to create the pooled dataset. These three surveys were suitable for pooling because the methods, design and questionnaire remained the same over the three years. A full description of the methods used to create the pooled dataset is available at: <http://www.hpa.org.nz/research-library/research-publications>.

## 3.3 DATA ANALYSIS

Data were analysed using Stata IC/14.2 and Stata MP/16.0. All NZHS and ABAS analyses were run using the full datasets of respondents aged 15 years and over. Therefore, the results presented in this report are for the total ‘adult’ population aged 15 years and over, unless otherwise specified. Results are presented as weighted<sup>12</sup> prevalence estimates with error bars representing 95% confidence intervals<sup>13</sup>.

Only statistically significant differences between groups are included in this report – presented as risk ratios (RRs). All ABAS ethnic group and Pacific subgroup comparisons were adjusted for age and sex; and sex comparisons were adjusted for age. Significant ABAS results were calculated using predictive margins and are presented as adjusted RRs and prevalence estimates, unless otherwise specified. All NZHS ethnic group comparisons were adjusted for age and sex; and

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<sup>12</sup> ABAS data were weighted (adjusted) so the sample reflects the makeup of the New Zealand population at the 2013 Census. NZHS data were weighted using the weighting variables supplied with the datasets. See the survey methodology reports for further details on weighting (NZHS: <https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/surveys/new-zealand-health-survey>; ABAS: <http://www.hpa.org.nz/research-library/research-publications>).

<sup>13</sup> Generalized linear models with poisson regression were used to compare responses and estimate RRs between groups, with 95% confidence intervals generated using linearised methods for both the ABAS and NZHS analyses.



Pacific subgroup comparisons were adjusted for age only. Significant NZHS results are presented as adjusted RRs and unadjusted prevalence estimates.<sup>14</sup>

## Ethnic group and Pacific subgroup comparisons

Ethnic group comparisons were made against a non-Māori non-Pacific (nMnP) reference group. Removing Māori from the reference group provides the most accurate estimates of any Pacific inequities in alcohol use because Māori show similar patterns of alcohol-related harm to Pacific peoples (see MoH, 2019). While total response ethnicity<sup>15</sup> was used for weighted proportions in this report, 'any Pacific' ethnicity classification was used for ethnic group comparisons whereby those identifying with multiple ethnic groups, of which at least one was Pacific, were included in the Pacific ethnic group.<sup>16</sup> This means those who identified as both Māori and Pacific (n=157) were included in the Pacific group for this report but are included in the Māori group for all other NZHS<sup>17</sup> and ABAS reports.

All comparisons between Pacific ethnic groups used a Samoan reference and tested for other differences through post hoc analysis. Those with multiple Pacific ethnicities were allocated to one Pacific ethnic group by prioritising from the smallest to largest of the four main Pacific ethnic groups in the population, then allocating the remainder to a residual 'Other Pacific' group. The priority order used was: Niuean, Tongan, Cook Islands Māori, Samoan.

## ABAS and NZHS Pacific respondents

There were 3,306 Pacific respondents in the 2012/13 to 2015/16 NZHS pooled dataset and 1,030 Pacific respondents in the 2013/14 to 2015/16 ABAS pooled dataset.

A demographic profile of the Pacific respondents included in the NZHS and ABAS pooled datasets is presented in Table 1. A breakdown of the survey respondents in the NZHS and ABAS pooled datasets by ethnicity is presented in Table 2.

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<sup>14</sup> The NZHS and ABAS analyses were performed by two different data analysts, hence the slightly different methods used to obtain and present the results.

<sup>15</sup> Total response ethnicity is a way of classifying ethnicity data in which respondents who self-identify with multiple ethnic groups are included in all those ethnic groups. This means they may be counted more than once (in every ethnic group they identified with) in survey analyses (see MoH, 2017).

<sup>16</sup> Using prioritised ethnicity output in accordance with the *Ethnicity Data Protocols* results in significant losses of Pacific respondents to the Māori ethnic group, particularly children and young people (Didham & Callister, 2012).

<sup>17</sup> The NZHS uses total response ethnicity and compares against a non-Pacific or a non-Māori comparison group for Pacific and Māori ethnic group comparisons respectively. This means those identifying with *both* Pacific and Māori ethnicities would be included in the numerators of the RRs for the Pacific and Māori ethnic group comparisons in MoH NZHS reports.

**Table 1: Demographic profile of Pacific\* survey respondents in the NZHS and ABAS pooled datasets**

Demographics	NZHS 2012/13 to 2015/16 (n=3,306)		ABAS 2013/14 to 2015/16 (n=1,030)	
	n	%	n	%
<b>Sex</b>				
Female	1,919	58.0	589	57.2
Male	1,387	42.0	441	42.8
<b>Age group (years)</b>				
15-24	742	22.4	275	26.7
25-44	1,431	43.3	445	43.2
45-64	821	24.8	239	23.2
65+	312	9.4	71	6.9

\*Total response ethnicity.

Note: Proportions are not survey weighted.

**Table 2: Survey respondents (aged 15+ years) in the NZHS and ABAS pooled datasets, by ethnicity\***

Ethnicity	NZHS 2012/13 to 2015/16	ABAS 2013/14 to 2015/16
<b>Pacific</b>	3,306	1,030
<b>Samoan</b>	1,426	303
<b>Cook Islands Māori</b>	746	207
<b>Tongan</b>	561	144
<b>Niuean</b>	230	106
<b>Other Pacific</b>	343	270
<b>non-Māori non-Pacific (nMnP)</b>	39,254	9,325
<b>Māori</b>	11,410	2,008
<b>Total</b>	53,563	12,206

\*All numbers reported are total response ethnicity except the Pacific ethnic subgroup numbers which were derived from a prioritised Pacific classification scheme (see Section 3.3: Data Analysis).

Note: Numbers of respondents in the main ethnic groups do not sum to the total number of survey respondents because these numbers were obtained using Total response ethnicity output (see MoH, 2017). This means those respondents identifying with multiple ethnic groups may be counted more than once (in each of the ethnic groups they identified with).

### 3.4 PRESENTATION OF RESULTS

The results in this report are presented in three different ways according to the various analytical approaches used. These include:

1. Weighted responses<sup>18</sup> to survey items for the Total Pacific sample, presented as basic proportions.
2. Ethnic group comparisons of the Pacific responses versus a non-Māori non-Pacific (nMnP) reference group, presented as risk ratios (RRs).
3. Pacific subgroup comparisons, presented as RRs for:
  - a. the four largest Pacific ethnic groups (Samoan, Cook Islands Māori, Tongan, Niuean) and an 'Other Pacific' residual group.
  - b. Pacific subgroups defined by various social and cultural factors (eg, socio-economic deprivation, place of birth, migration status and Pacific Realm country affiliation).

Only statistically significant differences are presented for the ethnic group and Pacific subgroup comparisons. Descriptive statistics for additional key results that were not statistically significant are presented in Table 12, Appendix 3.

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<sup>18</sup> Survey data were weighted to reflect the New Zealand population. See the NZHS and ABAS methodology reports for further details on weighting.

## 4. RESULTS FROM THE NEW ZEALAND HEALTH SURVEY (NZHS)

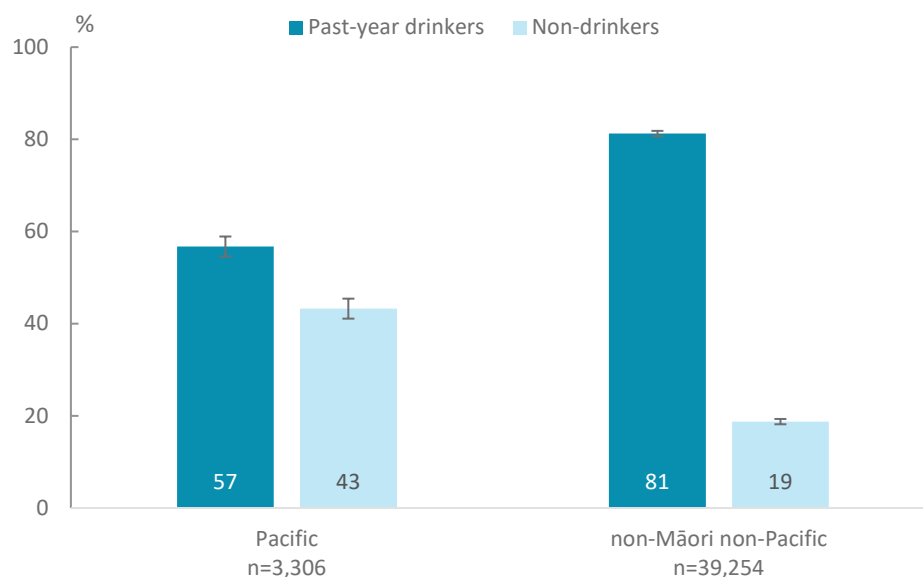
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### 4.1 PAST-YEAR DRINKING

#### **Pacific adults report low levels of alcohol consumption in the past year**

The prevalence of drinking alcohol in the past 12 months ('past-year drinking') was significantly lower in Pacific adults than in non-Māori non-Pacific adults (nMnP) (Figure 1). Pacific peoples were 2.4 times more likely to be non-drinkers than nMnP (see Appendix 1 for RRs of all statistically significant NZHS results).

**Figure 1: Percentage of adults who had an alcoholic drink in the past 12 months ('past-year drinkers'), by ethnicity**

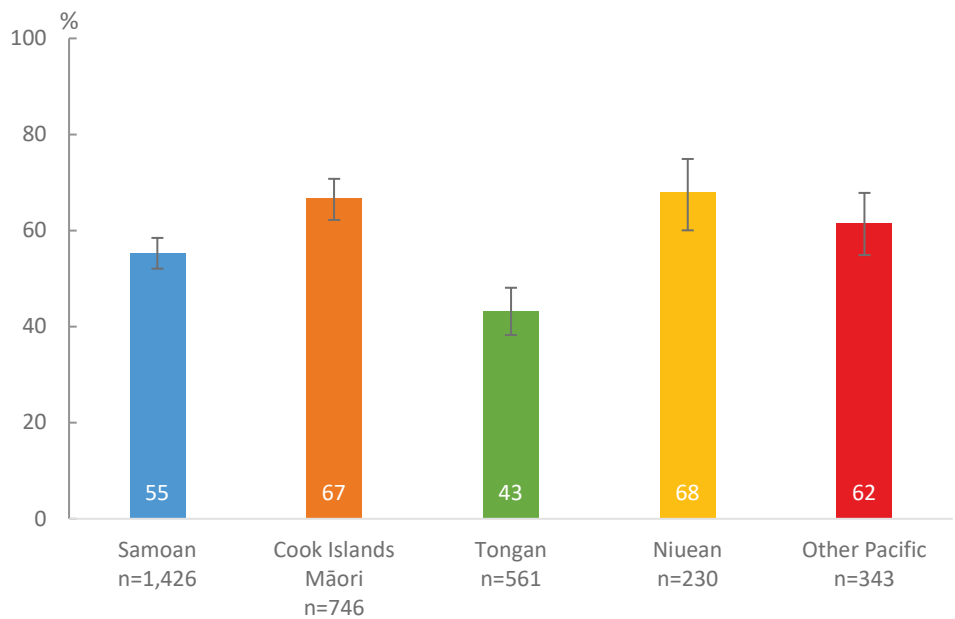


Base: All respondents (aged 15+ years); pooled NZHS 2013/14 to 2015/16

The prevalence of drinking alcohol over the past year was significantly higher in Cook Islands Māori and Niueans than in Samoans. The prevalence was not significantly different between Samoans and Other Pacific. Past-year drinking was the lowest in Tongans (Figure 2).

Although there were some differences between the Pacific ethnic groups, it should be noted that the prevalence of past-year drinking was still relatively low in each Pacific group compared to nMnP.

**Figure 2: Percentage of Pacific adults who had an alcoholic drink in the past 12 months, by Pacific ethnic groups**



Base: All Pacific respondents (aged 15+ years); pooled NZHS 2013/14 to 2015/16

## Past-year drinkers are more likely to be Pacific men, New Zealand-born or employed

The prevalence of drinking alcohol in the past 12 months was 1.3 times higher in Pacific males than in Pacific females (Table 3).

It was also higher in Pacific adults who were New Zealand-born compared to those born overseas – 1.5 times higher.

Past-year drinking was 1.3 times more prevalent in Pacific adults who were employed than those unemployed.

**Table 3: Percentage of Pacific adults who had an alcoholic drink in the past 12 months, by sociodemographic characteristics**

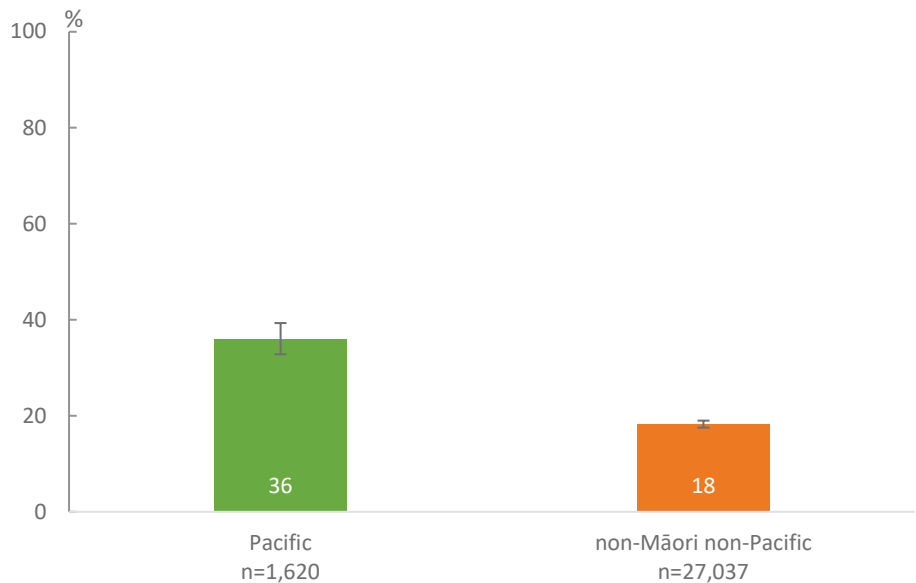
Sociodemographic characteristic		Prevalence (%) (95% CI)	Risk Ratio (RR) (95% CI)
Sex	Female	48.9 (45.9, 51.9)	1
	Male	65.7 (62.6, 68.8)	1.32* (1.23, 1.42)
Place of birth	NZ-born	69.3 (66.2, 72.2)	1.53* (1.41, 1.66)
	Overseas-born	44.8 (42.0, 47.6)	1
Employment	Employed	65.8 (63.1, 68.4)	1.28* (1.17, 1.40)
	Not employed	45.0 (41.5, 48.5)	1

## 4.2 HAZARDOUS DRINKING

### Pacific adults drink more hazardously than non-Māori non-Pacific adults

Just over a third of Pacific adults aged 15 years and over who had consumed alcohol in the past year were classified as hazardous drinkers – a significantly higher proportion than in nMnP (Figure 3). Pacific adult past-year drinkers were 1.7 times more likely to drink hazardously than nMnP drinkers.

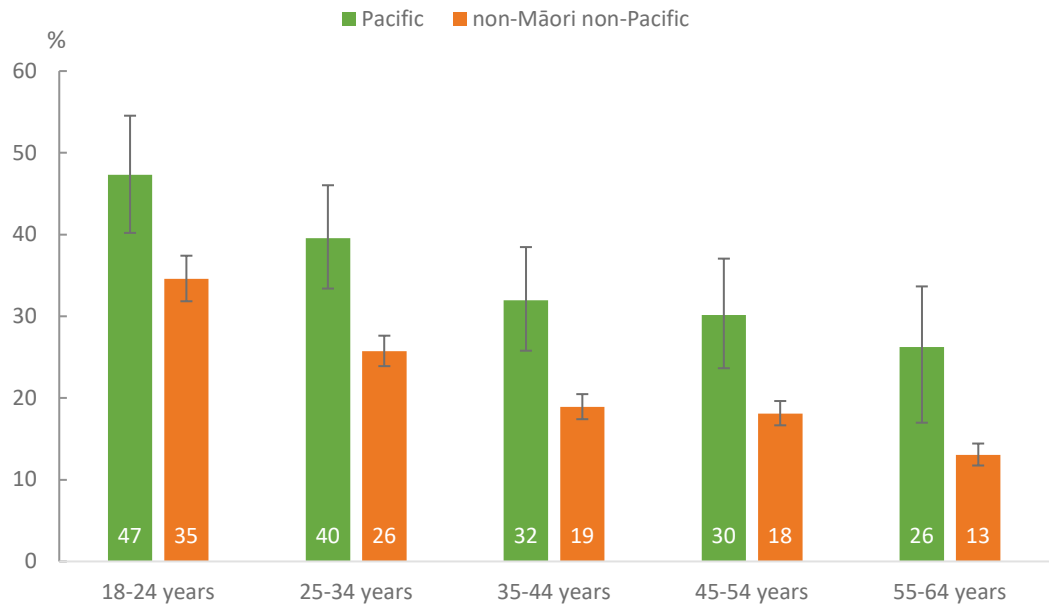
Figure 3: Percentage of adults (aged 15+ years) who were hazardous drinkers, by ethnicity



Base: Past-year drinkers (aged 15+ years); pooled NZHS 2013/14 to 2015/16

For every age group between 18 and 64–years-old<sup>19</sup>, hazardous drinking was significantly higher in Pacific adults compared to nMnP adults (Figure 4). For both Pacific and nMnP adults, hazardous drinking was more prevalent in the younger age groups.

**Figure 4: Percentage of Pacific and non-Māori non-Pacific adults (aged 18–64 years) who were hazardous drinkers, by age group**



Base: Past-year drinkers (aged 18-64 years); pooled NZHS 2013/14 to 2015/16

There were no significant differences between the Pacific ethnic groups, with similar levels of hazardous drinking seen in Samoan (36%), Cook Islands Māori (40%), Tongan (33%), Niuean (42%) and Other Pacific (29%) (see Appendix 3).

<sup>19</sup> Numbers were too small to reliably analyse hazardous drinking for Pacific vs nMnP aged 15-17 years and 65+ years.

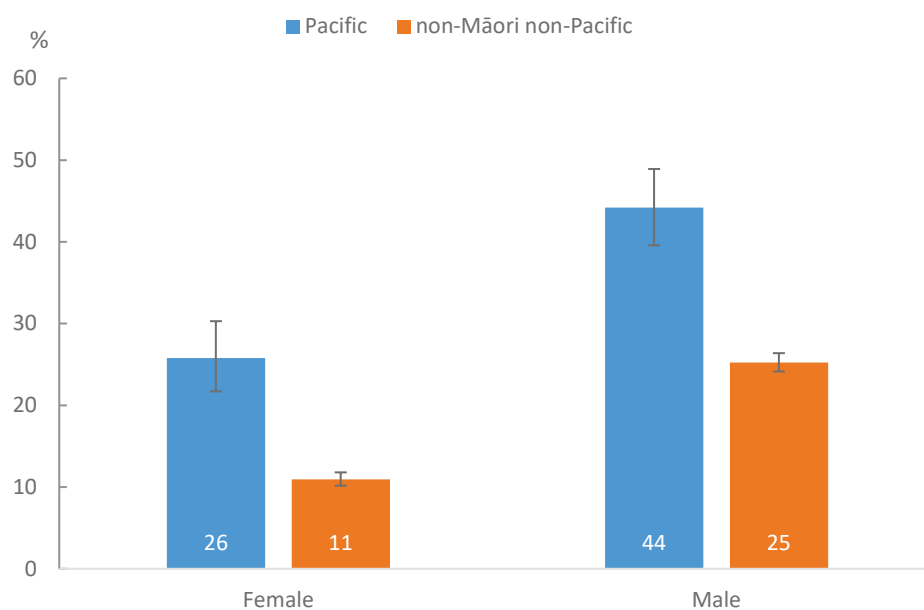


## Pacific men drink more hazardously than Pacific women

Hazardous drinking in adults who had consumed alcohol in the past year was significantly higher in both Pacific males and females (Figure 5). Pacific males were 1.8 times more likely to engage in hazardous drinking than nMnP males; and Pacific females were 2.4 times more likely to engage in hazardous drinking than nMnP females.

The prevalence of hazardous drinking was 1.7 times higher in Pacific males than in Pacific females.

**Figure 5: Percentage of adults (aged 15+ years) who were hazardous drinkers, by ethnicity and sex**



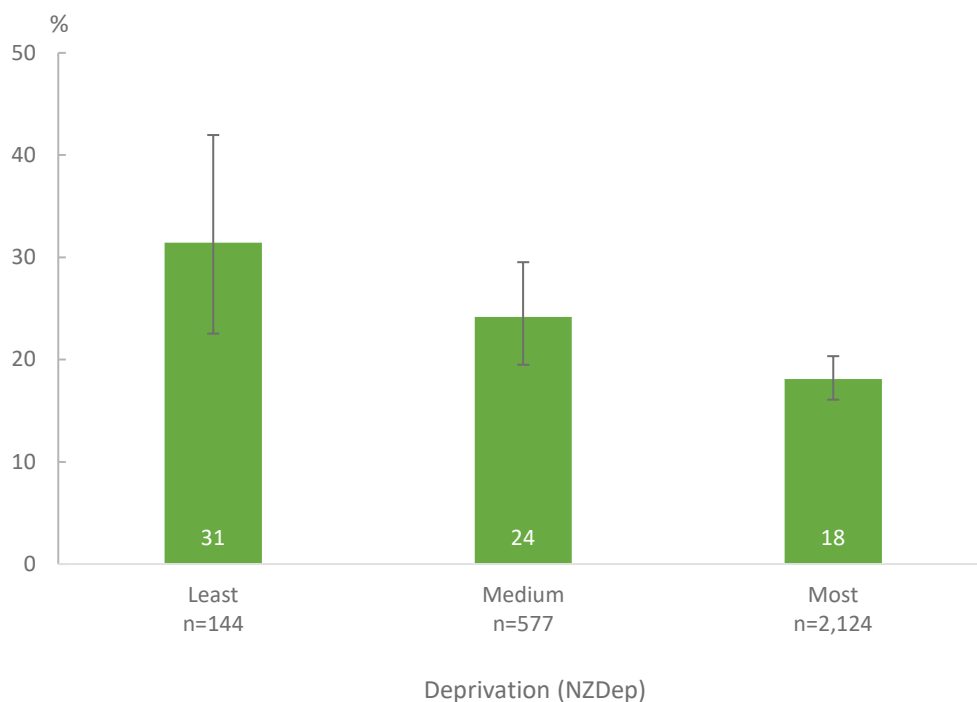
Base: Past-year drinkers (aged 15+ years); pooled NZHS 2013/14 to 2015/16

### Lower levels of hazardous drinking occur in the most deprived<sup>20</sup> areas

Hazardous drinking prevalence was significantly lower in Pacific adults (aged 15 years and over) living in the most deprived areas, compared to those living in medium and least deprived areas (Figure 6).

Hazardous drinking rates are 1.8 times higher in the least deprived areas compared to the most deprived areas.

**Figure 6: Percentage of Pacific adults who were hazardous drinkers, by deprivation**



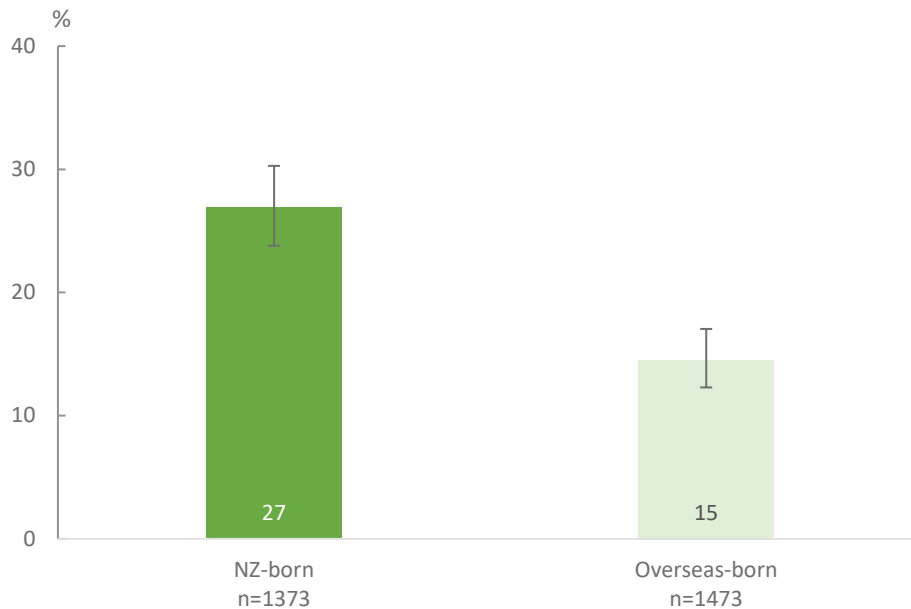
Base: All Pacific respondents (aged 15+ years); pooled NZHS 2013/14 to 2015/16

<sup>20</sup> Based on the New Zealand Deprivation Index (NZDep), 2013 (see Atkinson, Salmond & Crampton, 2014). Least deprived is deciles 1-3; medium deprived is deciles 4-7; and most deprived is deciles 8-10)

## Hazardous drinking is more prevalent in New Zealand-born Pacific adults

The prevalence of hazardous drinking was significantly higher in New Zealand-born Pacific adults than in Pacific adults born overseas (Figure 7). New Zealand-born were 1.6 times more likely than overseas-born to drink hazardously.

**Figure 7: Percentage of Pacific adults who were hazardous drinkers, by place of birth**



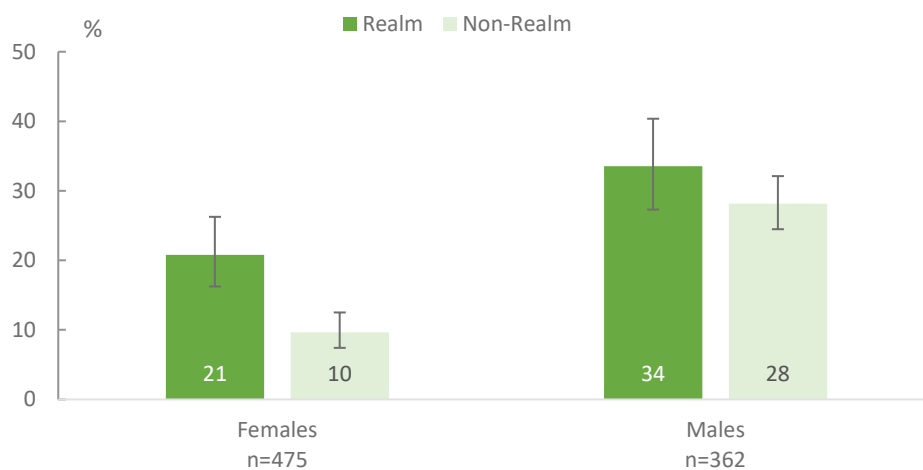
Base: All Pacific respondents (aged 15+ years); pooled NZHS 2013/14 to 2015/16

## Pacific women of the Realm countries<sup>21</sup> drink more hazardously than Pacific women of the non-Realm countries

Hazardous drinking was significantly higher in Pacific females affiliated with the Realm countries than those affiliated with the non-Realm countries (Figure 8). In other words, the prevalence of hazardous drinking was higher in Cook Islands Māori and Niuean females together than those of the other Pacific ethnic groups combined (Samoan, Tongan and Other Pacific females). Pacific females from the Realm countries were twice as likely to drink hazardously as Pacific females from non-Realm countries.

There were no significant differences in hazardous drinking between Pacific males from the Realm and non-Realm countries. The prevalence of hazardous drinking was higher in Pacific males compared to Pacific females regardless of Realm country status.

**Figure 8: Percentage of Pacific females and males who were hazardous drinkers, by Pacific Realm country affiliation**



Base: All Pacific respondents (aged 15+ years); pooled NZHS 2013/14 to 2015/16

<sup>21</sup> Although Tokelau is by definition a Realm country, Tokelauan respondents were not able to be identified from the 'Other Pacific' group in the pooled dataset and, therefore, were included in the non-Realm group for this analysis.

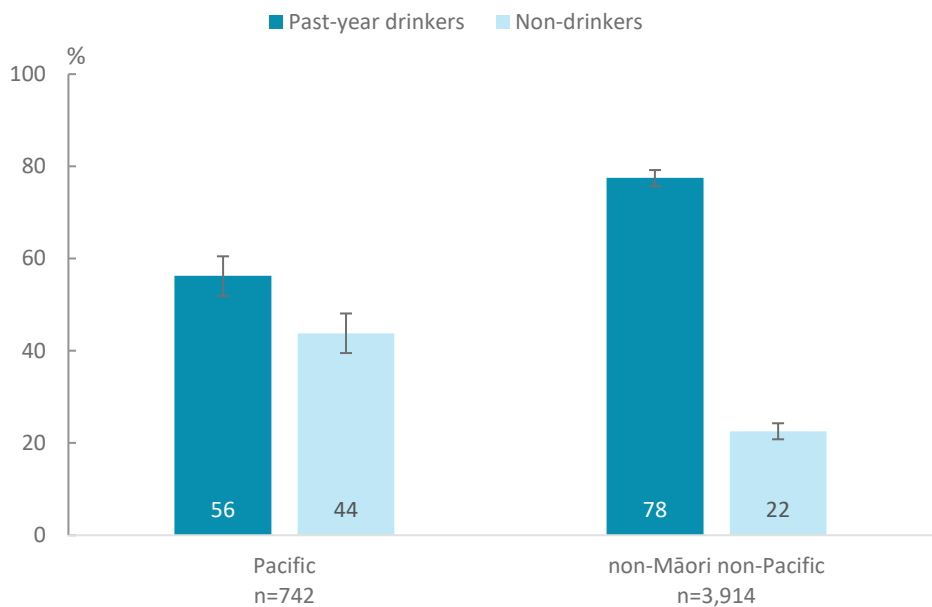
### 4.3 PACIFIC YOUTH

#### Pacific youth show very similar drinking patterns to Pacific adults

Patterns of alcohol use in Pacific youth aged 15 to 24 years were very similar to those of Pacific adults, with a relatively low prevalence of past-year drinking and high prevalence of hazardous drinking seen in Pacific youth compared to nMnP youth.

The prevalence of drinking alcohol in the past 12 months ('past-year drinking') was significantly lower in Pacific youth than in nMnP youth (Figure 9). Pacific youth were 1.9 times more likely to not drink alcohol in the past 12 months ('non-drinkers') than nMnP youth.

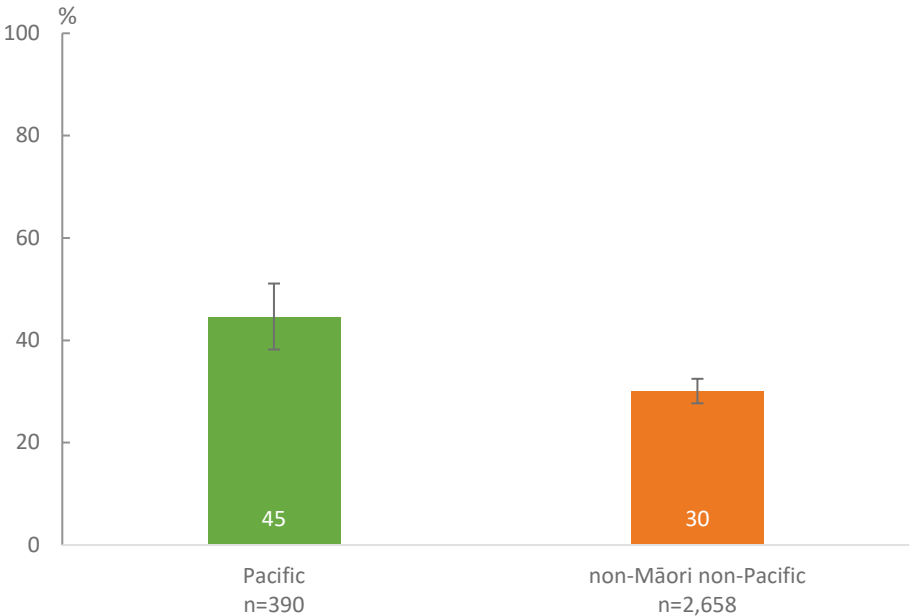
**Figure 9: Percentage of youth (aged 15-24 years) who had an alcoholic drink in the past 12 months (past-year drinkers), by ethnicity**



Base: All respondents (aged 15-24 years); pooled NZHS 2013/14 to 2015/16

Hazardous drinking was significantly more prevalent in Pacific than in nMnP (Figure 10). Pacific youth were 1.5 times more likely to drink hazardously than nMnP youth.

**Figure 10: Percentage of youth (aged 15-24 years) who were hazardous drinkers, by ethnicity**



Base: Past-year drinkers (aged 15+ years); pooled NZHS 2013/14 to 2015/16

## 5. RESULTS FROM THE ATTITUDES AND BEHAVIOUR TOWARDS ALCOHOL SURVEY (ABAS)

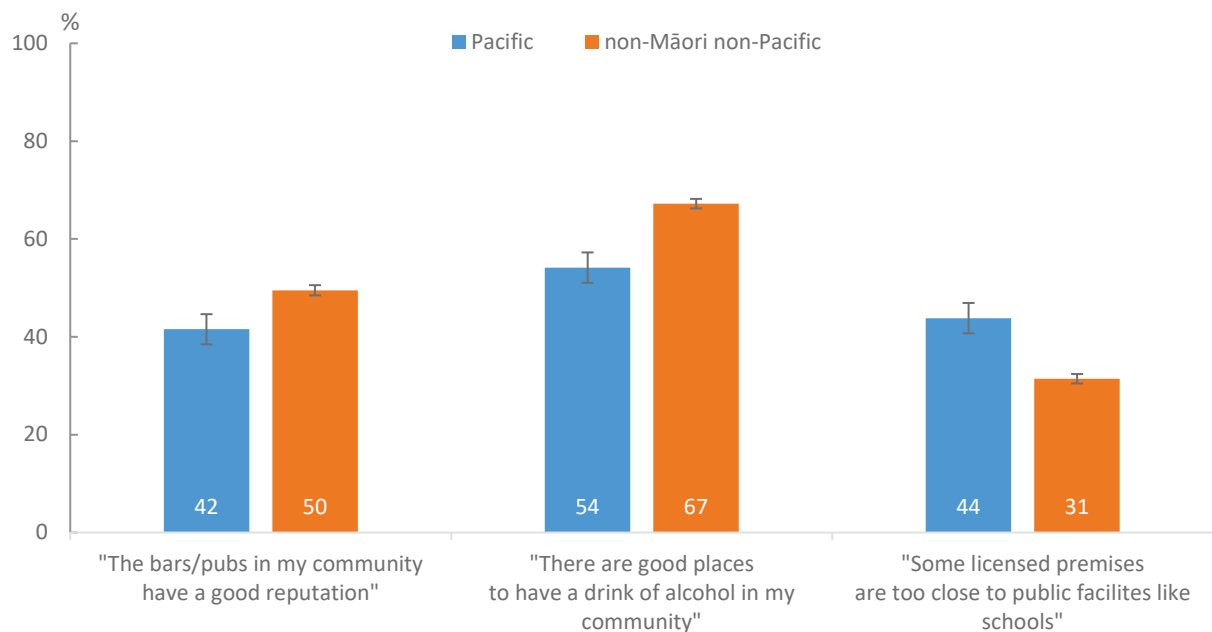
### 5.1 ATTITUDES AND OPINIONS ABOUT ALCOHOL

#### Opinions about alcohol outlets in Pacific communities varied

The percentage of Pacific respondents who agreed that the bars/pubs had a good reputation in their community or that there were good places to drink alcohol in their community was significantly lower than in nMnP.

Pacific respondents who agreed that some licensed premises were too close to public facilities like schools was also significantly higher than in nMnP (Figure 11). Pacific peoples were 1.5 times more likely than nMnP to agree with the statement (see Appendix 2 for risk ratios of all statistically significant ABAS results).

Figure 11: Agreement (%) with statements about alcohol outlets in the community, by ethnicity



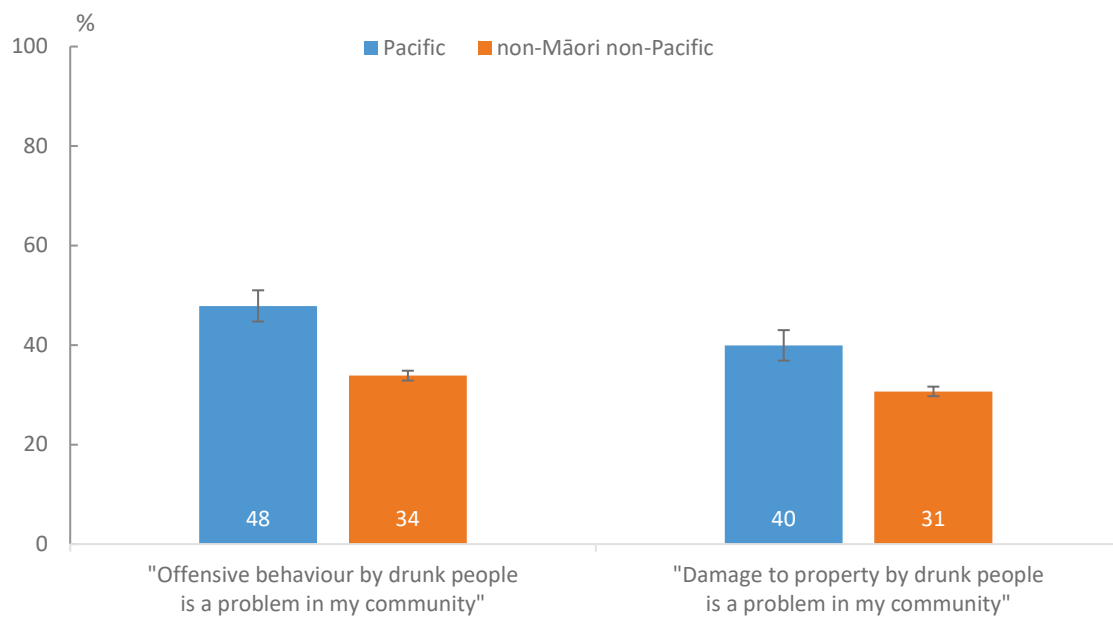
Base: All respondents (aged 15+ years); pooled ABAS 2013/14 to 2015/16

## More Pacific peoples report problems from drunk people in their communities

Almost half of Pacific respondents agreed that offensive behaviour by drunk people was a problem in their community, and this was significantly higher compared to nMnP.

Similarly, Pacific respondents who agreed that damage to property by drunk people was a problem in their community was significantly higher than in nMnP (Figure 12).

**Figure 12: Agreement (%) with statements about drunk people in the community, by ethnicity**



Base: All respondents (aged 15+ years); pooled ABAS 2013/14 to 2015/16



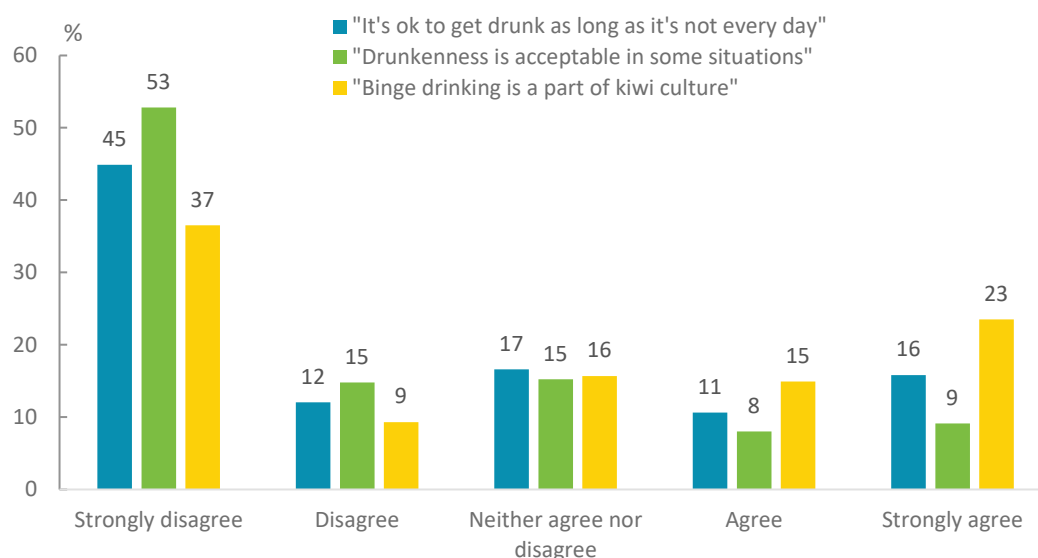
## Pacific peoples often had strong attitudes towards alcohol use

The most common response to three statements on attitudes towards alcohol among Pacific respondents was 'strongly disagree'.

Over half of Pacific respondents strongly disagreed with the statement "Drunkenness is acceptable in some situations" and 45% strongly disagreed that "It's ok to get drunk as long as it's not every day". Over a third of Pacific respondents strongly disagreed with the statement "Binge drinking is a part of Kiwi culture" (Figure 13).

The distributions of Pacific responses were similar for all the three attitude statements, with the exception of a slightly higher percentage of Pacific respondents who strongly agreed that binge drinking was a part of Kiwi culture.

**Figure 13: Pacific agreement and disagreement (%) with statements on attitudes towards alcohol**



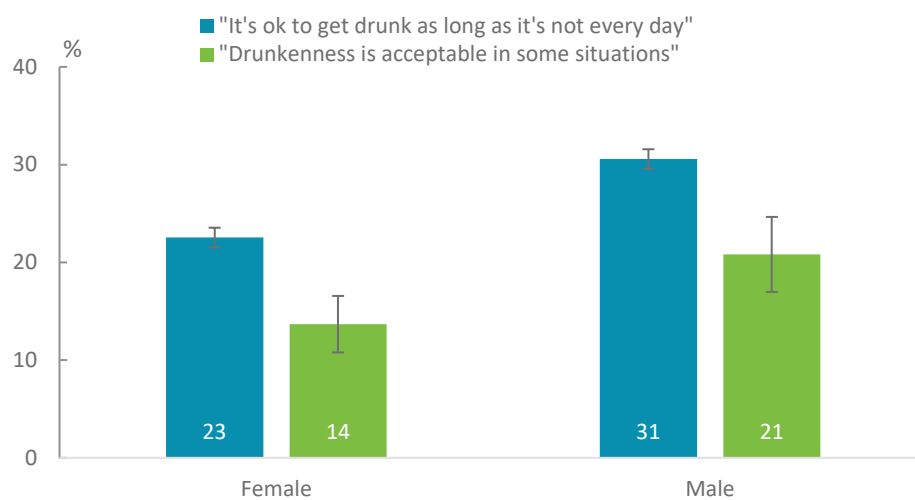
Base: All Pacific respondents (aged 15+ years); pooled ABAS 2013/14 to 2015/16

## Being drunk is more acceptable to Pacific men and younger Pacific

Pacific male respondents were significantly more likely than Pacific females to agree with statements about being drunk.

- Three in ten Pacific males, compared to two in ten Pacific females, agreed with the statement “It’s ok to get drunk as long as it’s not every day”.
- One-fifth of Pacific males compared to 14% of Pacific females agreed that “Drunkenness is acceptable in some situations” (Figure 14).

**Figure 14: Pacific agreement (%) with statements on attitudes towards alcohol, by sex**

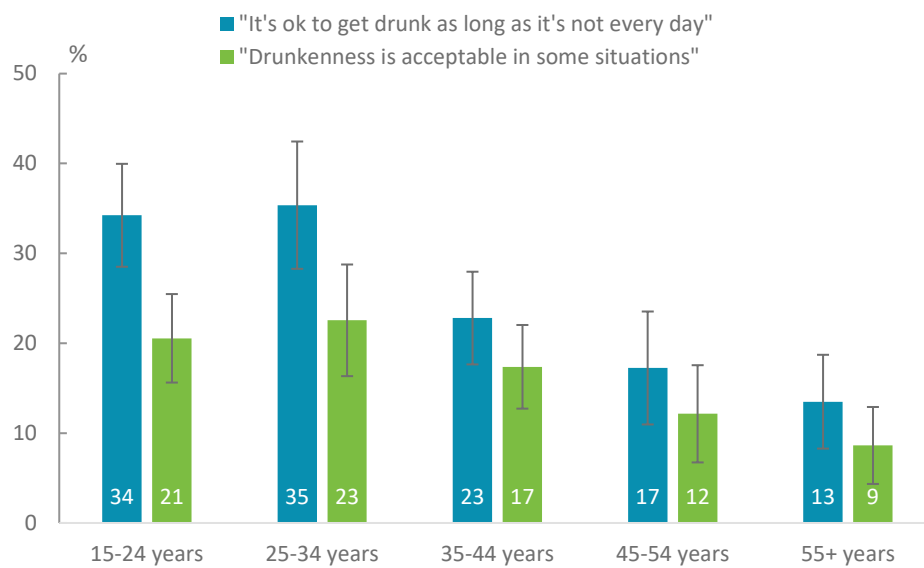


Base: All Pacific respondents (aged 15+ years); pooled ABAS 2013/14 to 2015/16

Over a third of Pacific respondents aged 15 to 24 years and 25 to 34 years agreed with the statement “It’s ok to get drunk as long as it’s not every day”.

One-fifth of Pacific respondents aged 15 to 24 years and 25 to 34 years agreed with the statement “Drunkenness is acceptable in some situations” (Figure 15).

**Figure 15: Pacific agreement (%) with statements on attitudes towards alcohol, by age group**

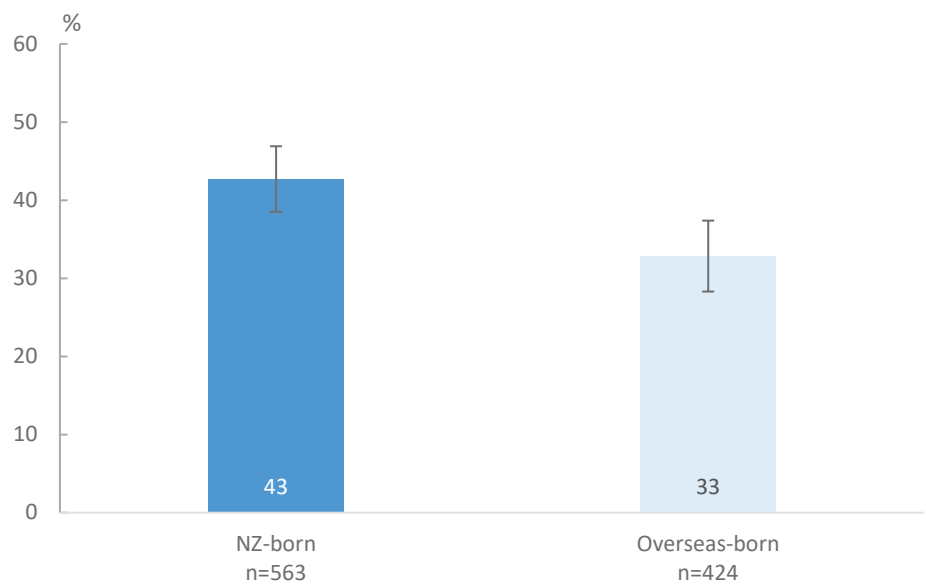


Base: All Pacific respondents (aged 15+ years); pooled ABAS 2013/14 to 2015/16

**More New Zealand-born and young Pacific migrants think that binge drinking is a part of Kiwi culture**

Agreement with the statement “Binge drinking is a part of Kiwi culture” was higher in New Zealand-born Pacific than in overseas-born (Figure 16). New Zealand-born Pacific were 1.4 times more likely to agree that binge drinking was a part of Kiwi culture than overseas-born.

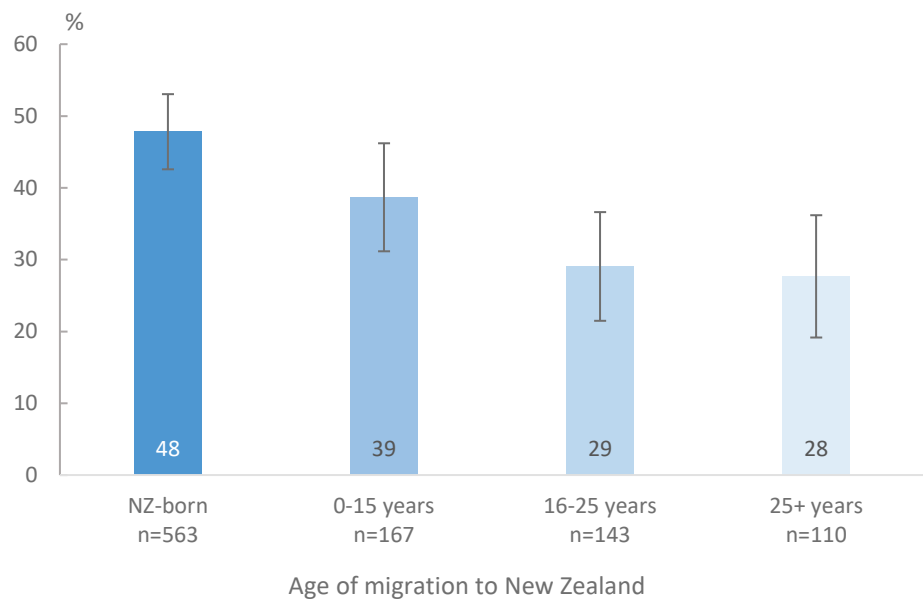
**Figure 16: Pacific agreement (%) with the statement: “Binge drinking is a part of Kiwi culture”, by place of birth**



Base: All Pacific respondents (aged 15+ years); pooled ABAS 2013/14 to 2015/16

The proportion who agreed with the statement “Binge drinking is a part of Kiwi culture” was significantly lower in Pacific migrants who came to New Zealand aged 16 to 25 years and 25 years and over, compared to New Zealand-born and those who migrated to New Zealand aged 0 to 15 years (Figure 17).

**Figure 17: Pacific agreement (%) with the statement: “Binge drinking is a part of Kiwi culture”, by age of migration to New Zealand**



Base: All Pacific respondents (aged 15+ years); pooled ABAS 2013/14 to 2015/16

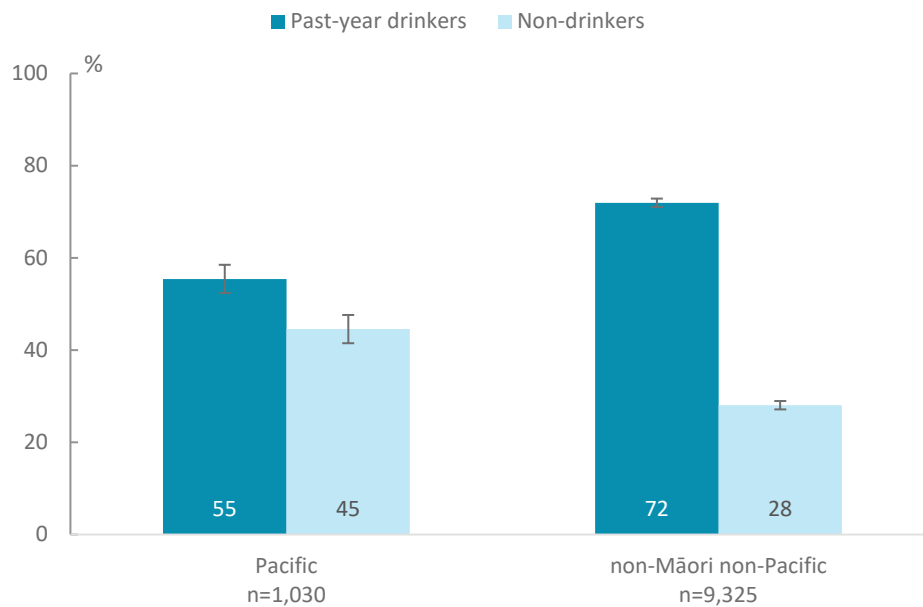
## 5.2 PAST-YEAR DRINKING

### Pacific adults report low levels of alcohol consumption in the past year

The prevalence of Pacific adults who had a drink containing alcohol in the past 12 months ('past-year drinking') was significantly lower than in nMnP adults (Figure 18). Pacific peoples were 1.5 times more likely to be non-drinkers than nMnP.

This pattern of high levels of non-drinking in Pacific peoples was also evident in the NZHS results presented in Chapter 4 (see Figure 1).

**Figure 18: Percentage of adults who had a drink containing alcohol in the past 12 months ('past-year drinkers'), by ethnicity**



Base: All respondents (aged 15+ years); pooled ABAS 2013/14 to 2015/16

## 5.3 NON-DRINKING

### Pacific adults who are female, born overseas, unemployed, or have no formal qualifications are more likely to be non-drinkers

Half of Pacific females were non-drinkers - significantly higher than Pacific males. The prevalence of non-drinking was 1.6 times higher in overseas-born than in New Zealand-born.

Non-drinking was also more prevalent in unemployed Pacific adults than in employed Pacific. Pacific adults with secondary school qualifications and degree/postgraduate qualifications were less likely to be non-drinkers than those with no formal qualifications (Table 4).

**Table 4: Percentage of Pacific adults who did not have a drink containing alcohol in the past 12 months ('non-drinkers'), by sociodemographic characteristics**

Sociodemographic characteristic		Prevalence (%) (95% CI)	Risk Ratio (RR) (95% CI)
Sex	Female	52.3 (47.8, 56.8)	1.34* (1.16, 1.55)
	Male	39.1 (34.3, 43.8)	1
Place of birth	NZ-born	35.0 (30.7, 39.3)	1
	Overseas-born	55.7 (51.2, 60.3)	1.63* (1.41, 1.88)
Employment	Employed	39.1 (35.3, 42.9)	0.70* (0.60, 0.81)
	Unemployed	60.5 (54.2, 66.7)	1
Education	No formal qualification	57.5 (48.1, 66.9)	1
	Secondary school	46.0 (41.1, 50.9)	0.81* (0.66, 0.98)
	Trade certificate/ Professional/ Undergraduate	46.2 (38.2, 54.2)	0.85 (0.67, 1.07)
	Degree/Postgraduate	37.0 (30.4, 43.5)	0.69* (0.53, 0.88)

Base: Pacific respondents (aged 15+ years) who did not drink alcohol in past 12 months; pooled ABAS 2013/14 to 2015/16

### **Pacific non-drinkers are more likely to say they don't drink because of religious or family reasons**

The top reasons for not drinking cited by Pacific non-drinkers were: religious (21%); not interested/it is not part of their life (18%); health-related reasons (15%); don't like the way it tastes/the way it makes them feel (11%); and family reasons or commitments (10%). 16% did not give a reason for not drinking.

Pacific non-drinkers were significantly more likely than nMnP non-drinkers (11%) to say they did not drink because of religious reasons. They were also significantly more likely than nMnP non-drinkers (7%) to say they did not drink because of family reasons or commitments.

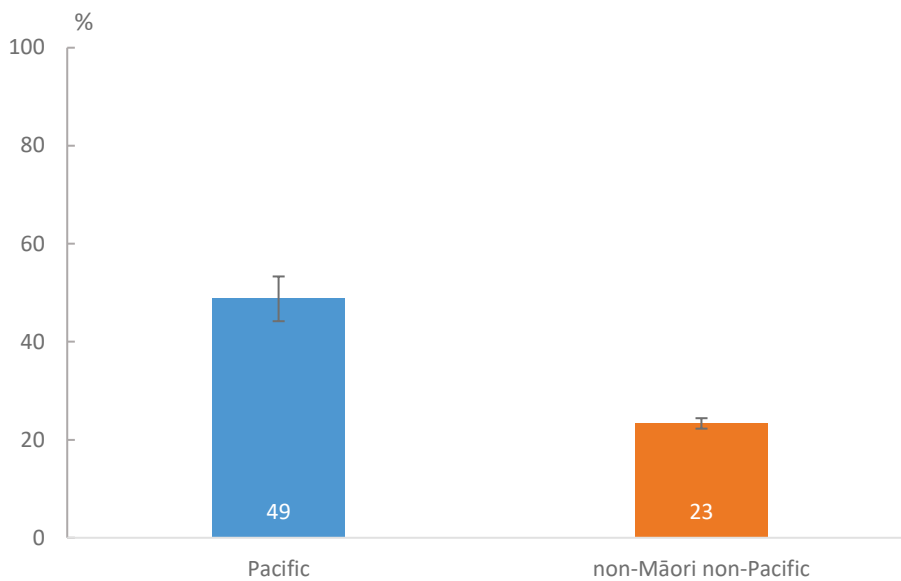


## 5.4 PAST-MONTH DRINKING

### Pacific drinkers are more likely to engage in heavy drinking

Almost half of Pacific respondents who drank alcohol in the past month engaged in 'heavy drinking'<sup>22</sup> – a significantly higher proportion than nMnP (Figure 19). Pacific past-month drinkers were 1.6 times more likely to be heavy drinkers than nMnP.

**Figure 19: Percentage of adults who consumed alcohol in the past month that were heavy drinkers, by ethnicity**



Base: Past-month drinkers (aged 15+ years); pooled ABAS 2013/14 to 2015/16

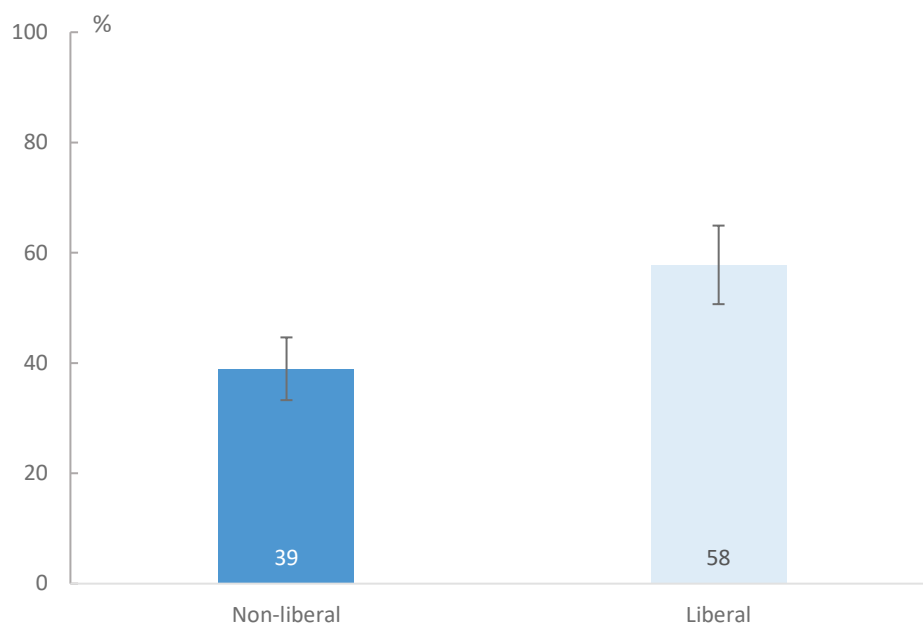
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<sup>22</sup> 'Heavy drinking' is defined as having 5 or more drinks of alcohol on any one occasion for those aged 15-17 years and 7 or more drinks of alcohol for those aged 18 years and over.

To investigate the relationship between attitudes towards alcohol and heavy drinking behaviour, a composite variable called 'liberal attitudes' was created. 'Liberal attitudes' was defined as those who agreed with *at least one* of the three attitude statements: "It's ok to get drunk as long as it's not every day", "Drunkenness is acceptable in some situations", and "Binge drinking is a part of Kiwi culture".

The prevalence of heavy drinking was significantly higher among Pacific past-month drinkers with liberal attitudes than those with non-liberal attitudes (Figure 20). Pacific past-month drinkers who had liberal attitudes were 1.3 times more likely to engage in heavy drinking than those who had non-liberal attitudes.

**Figure 20: Percentage of Pacific adults who consumed alcohol in the past month that were heavy drinkers, by liberal attitudes status**



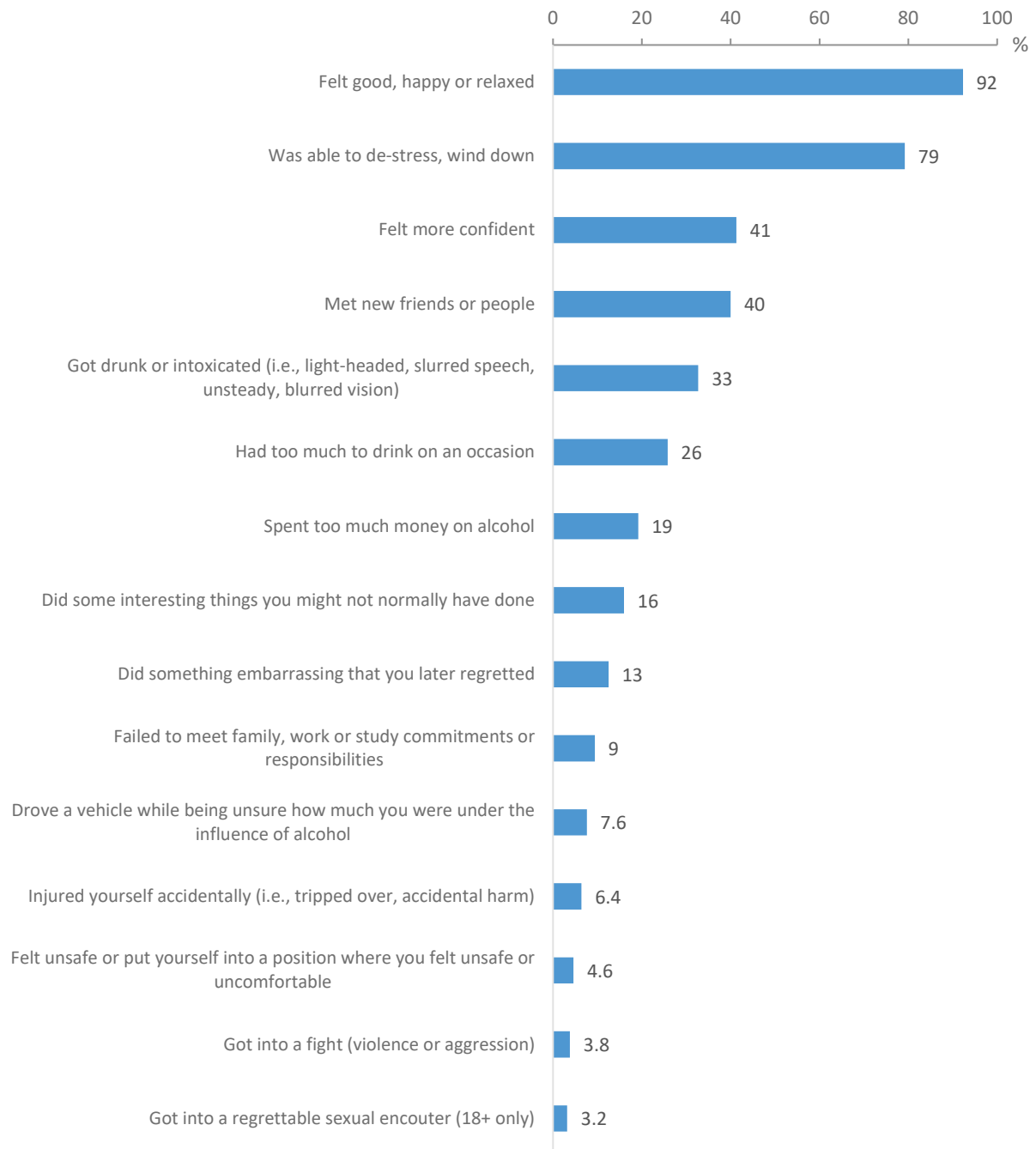
Base: Pacific past-month drinkers (aged 15+ years); pooled ABAS 2013/14 to 2015/16

### **Pacific adults have mostly positive experiences when drinking but they are more likely to report harmful experiences**

The most frequent experiences reported by Pacific past-month adults were they: felt good/happy/relaxed; were able to de-stress, wind down; felt more confident; and met new friends or people (Figure 21).

A third reported that they got drunk or intoxicated (ie, light-headed, slurred speech, unsteady, blurred vision); and just over a quarter reported that they had too much to drink on one occasion. Less than 5% of Pacific drinkers reported they: felt unsafe or put themselves into a position where they felt unsafe or uncomfortable; got into a fight (violence or aggression); or had a regrettable sexual encounter (18 years and over).

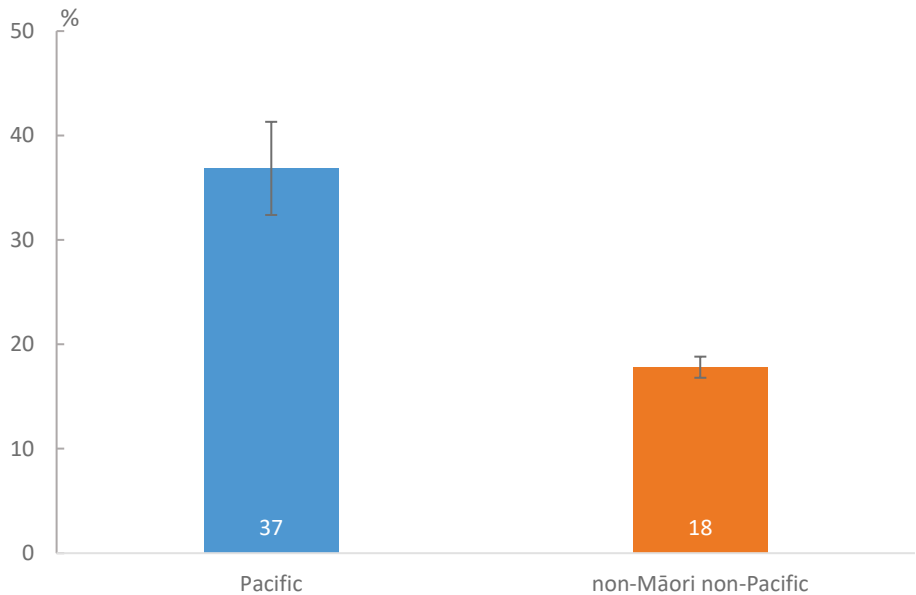
**Figure 21: Experiences of Pacific adults who drank alcohol in the past month**



Base: Pacific past-month drinkers (aged 15+ years); pooled ABAS 2013/14 to 2015/16

Pacific past-month drinkers were significantly more likely to report having one or more harmful experience<sup>23</sup> than nMnP (Figure 22). Pacific drinkers were 1.7 times more likely than nMnP to report having one or more harmful experience.

**Figure 22: Had one or more harmful experience after drinking alcohol in the past month, by ethnicity**



Base: Past-month drinkers (aged 15+ years); pooled ABAS 2013/14 to 2015/16

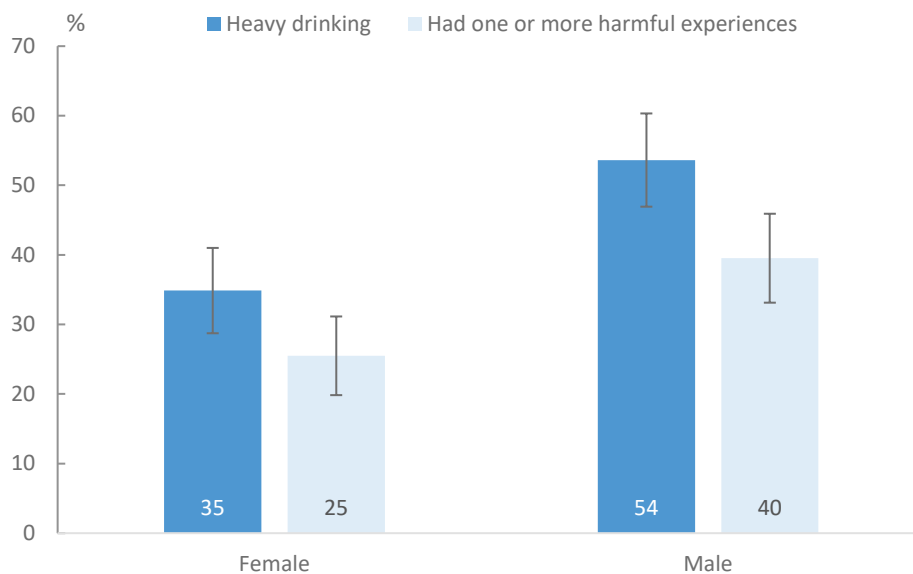
<sup>23</sup> One or more harmful experiences was defined as those who reported one or more of the following experiences after drinking alcohol in the past month: had too much to drink on one occasion; spent too much money on alcohol; did something embarrassing that you later regretted; failed to meet family, work or study commitments or responsibilities; injured yourself accidentally (that is, tripped over, accidental harm); felt unsafe or put yourself into a position where you felt unsafe or uncomfortable; got into a fight (violence or aggression); drove a vehicle while being unsure of how much you were under the influence of alcohol; and got into a regrettable sexual encounter (18+ only).

## Heavy drinking and harmful experiences are more common in Pacific men

The prevalence of heavy drinking in the past month was significantly higher in Pacific males than in Pacific females. Having had one or more harmful experiences after drinking was also significantly higher in Pacific males than Pacific females (Figure 23).

Compared to Pacific females, Pacific males were 1.5 times more likely to engage in heavy drinking and 1.5 times more likely to have one or more harmful experience.

**Figure 23: Percentage of Pacific adults who engaged in heavy drinking or had one or more harmful experience after drinking alcohol in the past month, by sex**



Base: Past-month drinkers (aged 15+ years); pooled ABAS 2013/14 to 2015/16

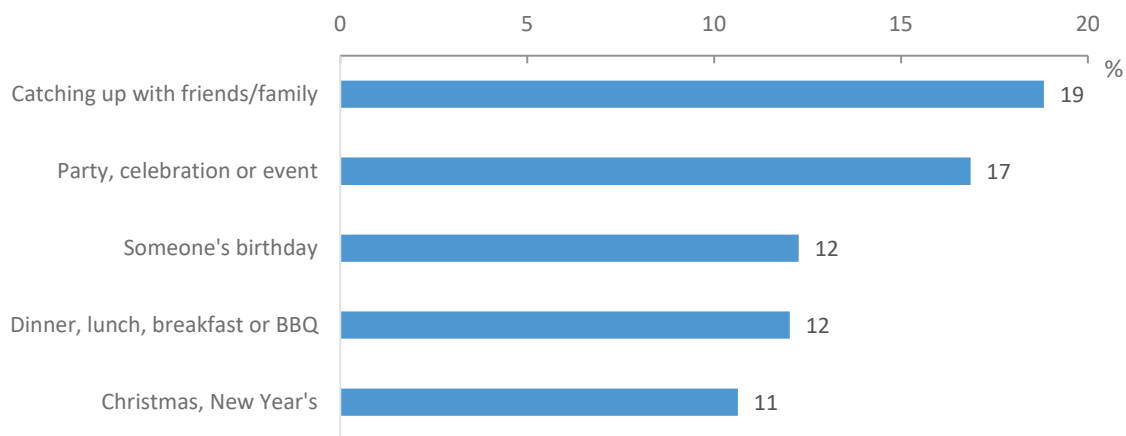
## 5.5 LAST DRINKING OCCASION

The following section presents the results from a subset of the ABAS sample that includes all respondents who consumed two or more drinks of alcohol on one occasion in the past three months. These respondents were asked a series of questions about the 'last drinking occasion' in which they had two or more drinks.

### **Social and celebratory events were common occasions for drinking**

The most frequently reported last drinking occasions were: catching up with friends/family; a party, celebration or event; someone's birthday; a dinner, lunch, breakfast or BBQ; and Christmas/New Year's (Figure 24).

**Figure 24: Top 5 occasions where Pacific adults last consumed 2+ drinks in the past three months**

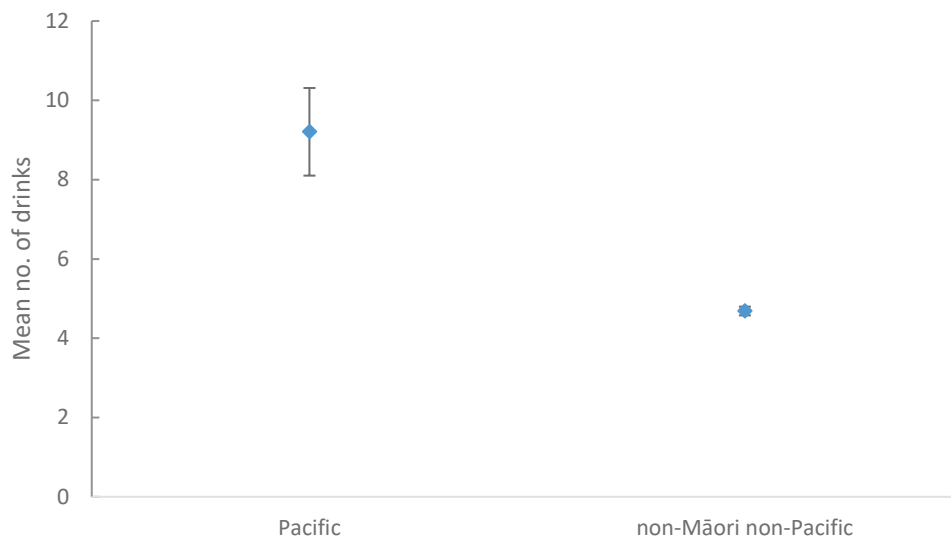


Base: Pacific drinkers (aged 15+ years) who consumed 2+ drinks of alcohol on one occasion in the past three months; pooled ABAS 2013/14 to 2015/16

## Pacific adults consumed more drinks on average in the last occasion

On average, Pacific adults consumed 9.2 drinks on the last drinking occasion. This was a significantly higher than the average number of drinks for nMnP (4.7 drinks) (Figure 25).

**Figure 25: Mean number of drinks consumed in the last drinking occasion, by ethnicity**

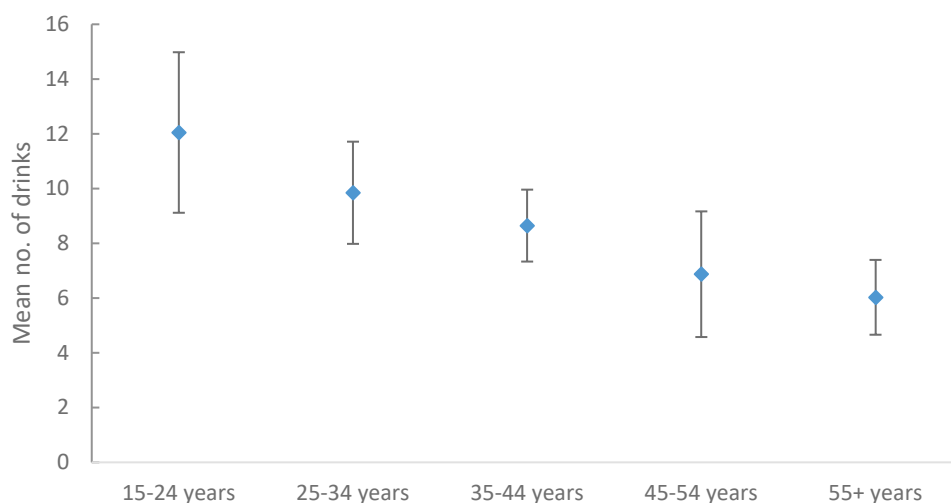


Base: Drinkers (aged 15+ years) who consumed 2+ drinks of alcohol on one occasion in the past three months; pooled ABAS 2013/14 to 2015/16

## Pacific of younger ages consumed more drinks on average in the last drinking occasion

On average, young Pacific aged 15 to 24 years reported consuming a significantly higher number of drinks (12 drinks) on the last drinking occasion than older Pacific adults aged 35 to 44 years (8.6 drinks), 45 to 54 years (6.9 drinks) and 55 years and over (6.0 drinks) (Figure 26).

**Figure 26: Pacific mean number of drinks consumed in the last drinking occasion, by age group**



Base: Pacific drinkers (aged 15+ years) who consumed 2+ drinks of alcohol on one occasion in the past three months; pooled ABAS 2013/14 to 2015/16

## 6. DISCUSSION AND CONCLUSIONS

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### **Low levels of drinking, but more harmful drinking**

Results from both the NZHS and ABAS demonstrate low levels of drinking in Pacific adults, with just over half of Pacific adults reporting they consumed alcohol in the past year. The almost even split between drinkers and non-drinkers in Pacific adults was not evident in nMnP adults, with a markedly higher prevalence of past-year drinking in nMnP.

Although low levels of alcohol use were shown among Pacific adults, the patterns of drinking were more harmful among those that did drink. This was evident in Pacific adults' higher rates of hazardous drinking in the NZHS and heavy drinking in the ABAS, compared to nMnP. Similarly, Pacific adult respondents in the ABAS reported experiencing significantly more harm than nMnP after drinking alcohol.

These patterns of alcohol use are consistent with the 'all or none' drinking approach described in the literature – that is, Pacific peoples are more likely to abstain from drinking but, when they do drink, they tend to consume higher volumes and are more likely to have harmful experiences than non-Pacific drinkers (Huakau et al., 2005; Sundborn et al., 2009). This 'all or none' drinking pattern was also visible in Pacific youth aged 15 to 24 years. Together, this consistent pattern of alcohol use highlights a need for health promotion initiatives to reduce harmful drinking in Pacific peoples. In particular, these results suggest a need for health promotion initiatives for Pacific youth that aim to prevent harmful drinking patterns from becoming established in adulthood.

### **Harmful use of alcohol in Pacific men**

The NZHS and ABAS show the burden of harmful drinking is greater among Pacific men. In the NZHS, 44% of Pacific men who drank alcohol in the past year were classified as hazardous drinkers compared to 26% of Pacific females. In the ABAS, over half (54%) of Pacific men engaged in heavy drinking and 40% had one or more harmful experiences after drinking alcohol in the past month (compared to 35% and 25% of Pacific women respectively). Not only were Pacific men more likely to be drinkers than Pacific women, but being drunk was also more acceptable to Pacific men.

Together, these results support the gendered nature of alcohol-related harm in Pacific peoples described in the literature review, and suggest health promotion interventions specifically targeted towards reducing harmful drinking in Pacific men are warranted. However, Pacific females were more likely to engage in hazardous drinking than nMnP females so they warrant some attention as well.

### **Harmful use of alcohol in Pacific young peoples**

The NZHS results showed that Pacific youth (aged 15 to 24 years) had higher levels of hazardous drinking than nMnP youth. This result differs from the Youth'12 survey results which showed Pacific students were less likely to binge drink compared to New Zealand European students (Fa'alili-Fidow et al 2016). As discussed in the literature review, the Youth'12 survey may not be representative of the total Pacific youth population because it only captures information on alcohol use for Pacific youth attending secondary school. In contrast, the NZHS is a home-based survey



with respondents aged 15 years and over, and most likely includes a wider range of school- and non-school attenders in the sample.

Although numbers were too small to reliably look at heavy drinking among Pacific youth in the ABAS, two related findings in Pacific youth aged 15 to 24 years were: (1) they consumed, on average, a higher number of drinks in the last occasion than Pacific of all age groups 35 years and over; and (2) they were more likely to agree that “It’s ok to get drunk as long as it’s not every day” and “Drunkenness is acceptable in some situations” than Pacific of all age groups 35 years and over. Together, these findings suggest that Pacific youth are more accepting of being drunk and tend to consume higher volumes per drinking occasion compared to Pacific of older ages.

### **The need to better understand Pacific people’s harmful drinking contexts**

Further research is needed to better understand the contexts in which Pacific adults drink alcohol harmfully. Although no data on drinking frequency were available for this report, as noted in the literature review chapter, Pacific adults do not seem to drink in moderation and may even drink less frequently than non-Pacific adults (Huakau et al., 2005; MoH, 2015). This, together with the consistent high levels of harmful drinking, could mean that Pacific adults reserve their drinking for special/celebratory social occasions in which larger amounts of alcohol are consumed. Indeed, results from the ABAS showed social celebratory events (party celebration or event, Christmas/New Year’s, someone’s birthday) were among the most common drinking occasions where Pacific adults had two or more drinks.

It is unclear whether the high levels of hazardous drinking shown in the Pacific NZHS results are driven by high volumes of alcohol being consumed per drinking occasion and/or higher levels of alcohol-related harmful experiences. This is because respondents can score high enough on the AUDIT to be classified as hazardous drinkers from drinking high volumes of alcohol per occasion alone (Babor et al., 2001). The literature review noted that a previous NZHS report on alcohol use found most of the harmful alcohol-related experiences were no more likely to occur in Pacific adults than Europeans. This, taken together with the high levels of hazardous drinking seen in Pacific adults and youth, as well as the higher mean number of drinks consumed on the last drinking occasion compared to nMnP, suggests that consuming high volumes of alcohol per occasion may be of more concern for Pacific peoples.

Only further research exploring the relationships between drinking frequency, volume and harmful experiences in Pacific peoples can confirm what the main issues are for their hazardous drinking. To be able to develop better health promotion initiatives, more information is needed about the occasions and contexts under which Pacific peoples tend to consume larger volumes of alcohol and drink more harmfully.

### **Relationships between attitudes towards alcohol and drinking behaviours**

A high percentage of Pacific adults strongly disagreed with the statements: “Drunkenness is acceptable in some situations” (53%); “It’s ok to get drunk as long as it’s not every day” (45%); and “Binge drinking is a part of Kiwi culture” (37%). When these three ABAS survey items were combined into a measure of ‘liberal attitudes’, results showed the risk of hazardous drinking was 30% higher in Pacific adults who held liberal attitudes than in those with non-liberal attitudes. This demonstrates a link between attitudes and drinking behaviours; however, it is worth noting that these individual-level factors were only tested with simple statistical models, adjusted for age and

sex. Further research should investigate the complex relationships between attitudes, harmful drinking and other key socio-cultural factors (eg, place of birth) shown in this report to be associated with harmful alcohol use in Pacific peoples. These important socio-cultural factors are discussed in the next section.

## **Cultural shifts in Pacific alcohol use in New Zealand**

### ***Patterns of alcohol use by place of birth and migration age***

There is evidence of some cultural shifts in Pacific peoples' use of alcohol. Consistent with the literature, the NZHS results showed New Zealand-born Pacific adults were more likely to drink alcohol in the past year and to engage in hazardous drinking than overseas-born Pacific adults. The results on alcohol-related attitudes from the ABAS revealed that more New Zealand-born Pacific adults agreed that binge drinking was a part of Kiwi culture compared to overseas-born and Pacific adults who migrated to New Zealand at older ages. Together, these findings suggest New Zealand-born Pacific adults, as well as those who migrated as children, are more aware of and inclined to adopt New Zealand cultural norms around drinking.

The ABAS contained a very limited number of questions on alcohol-related attitudes, so no solid conclusions can be drawn about why New Zealand-born Pacific adults drink more harmfully than overseas-born Pacific adults. Further qualitative research is needed to specifically investigate how cultural shifts in attitudes towards alcohol have changed over generations since Pacific migrations to New Zealand increased.

### ***Pacific Realm countries: Cook Islands and Niuean women***

The NZHS result showing women of the Pacific Realm countries (Cook Islands and Niuean women) were more likely to drink hazardously than those of non-Realm countries supports qualitative research suggesting a shift in the gendered use of alcohol – that is, increasing harmful drinking among some Pacific women in New Zealand (Gray and Nosa, 2009; Hutton and Wright, 2015; Warren et al., 2006). Together with the qualitative research, this NZHS result points to a need for more targeted alcohol health promotion activities for Cook Islands and Niuean women – there also needs to better understand hazardous drinking in Pacific women.

The NZHS result showing higher levels of hazardous drinking in Pacific women affiliated with the Realm countries also partially supports the research showing more harmful use of alcohol in some Cook Islands and Niuean Pacific subpopulations (Fa'alili-Fidow et al., 2016; Schaaf and Scragg, 2004; Schaaf, 2005; Schluter et al, 2013). Together, these indicate Cook Islanders and Niueans may be drinking differently in New Zealand than other Pacific ethnic groups. Both the Cook Islands and Niue, as Pacific Realm countries, have a longer migration history with New Zealand and people affiliated with these Pacific groups have likely had more exposure to New Zealand cultural norms. Indeed, the NZHS result showing higher levels of past-year drinking in Cook Islanders and Niueans provides some support that Pacific peoples affiliated with the Pacific Realm countries have adopted New Zealand cultural drinking norms.

## **Lower levels of harmful drinking in most deprived areas**

Results from the NZHS showed the same unique pattern in Pacific peoples' alcohol use by socio-economic deprivation seen in the literature: hazardous drinking was significantly higher in Pacific adults living in the least and medium deprived areas, rather than the classic pattern seen in other populations where hazardous drinking is highest in the most deprived areas (MoH, 2019). This result further supports theories suggested by Pacific researchers of a cultural shift towards harmful drinking in New Zealand because Pacific middle and upper income earners have more disposable income for purchasing alcohol (Sundborn et al, 2009; Teevale et al., 2012).

## **Aspects of Pacific culture that support abstinence: Family and religion**

The ABAS results demonstrate that family reasons or commitments and religious reasons were among the most common reasons why Pacific adults did not drink alcohol. These findings support the qualitative literature in which Pacific peoples describe how they do not drink alcohol so they can continue to meet their church and family obligations, and also avoid bringing shame to their family names (Suaalii-Sauni et al., 2012; Samu et al., 2009; Kāhui Tautoko Consulting Ltd, 2020). These findings also highlight the protective nature of aspects of Pacific culture (ie, extended families and Pacific churches). These elements of Pacific culture may act as community- and individual-level deterrents against alcohol use in Pacific peoples.

## **Opinions about alcohol outlets and drinking in the community**

The ABAS results demonstrate that Pacific adults shared relatively poorer opinions about the alcohol outlets and the behavior of drunk people in their communities compared to nMnP adults. Although the ABAS did not collect any specific information on alcohol outlet density, the finding that a larger proportion of Pacific adults thought some outlets were too close to public facilities like schools suggests they live in communities with a high density of alcohol outlets. Some of the Pacific opinions about alcohol outlets and drinking in the community are probably explained by the higher proportion of Pacific peoples living in the most deprived areas. As highlighted in the literature review chapter, most deprived areas tend to have a higher density of off-license alcohol outlets in particular and these outlets tend to be associated with more harmful alcohol use. Further research is needed to unpack the relationships between deprivation and alcohol outlet density in Pacific communities, particularly given the unique pattern of low levels of hazardous drinking observed in Pacific peoples in the most deprived areas.

## **Conclusions**

This report provides an updated and in-depth understanding of Pacific peoples' use of alcohol in New Zealand. By combining survey results across multiple years, researchers can gather a more nuanced picture of drinking in the different Pacific ethnic groups and various Pacific subpopulations defined by key Pacific social and cultural factors (eg, place of birth and migration age).

Overall, the results emphasise that researchers and policymakers need to be aware that broader socio-cultural factors (eg, migration history) and personal factors (eg, attitudes) play a role in Pacific peoples' alcohol use. These factors should be considered during the development of health promotion initiatives, and also when looking at differences between various Pacific subgroups.

The Realm country affiliation analysis in particular demonstrates that any interpretation of Pacific subgroup differences could be more cognisant of the different relationships Pacific countries have

with New Zealand, and that these relationships influence the movement of Pacific peoples between the Pacific and New Zealand. It is these 'transnational' movements that may have played a role in cultural shifts in Pacific alcohol use in New Zealand; and these shifts may, in turn be contributing to different drinking behaviours within the Pacific population.

An important limitation also highlighted from the Realm country analysis was the inability to separate out the Tokelauans from the 'Other Pacific' ethnic group. Future surveys in New Zealand need to ensure the ethnicity of respondents from the smaller Pacific ethnic groups – often combined to form the 'Other Pacific' group – are recorded and readily available for researchers to use. This would enable researchers to more accurately look at Pacific subgroups by important sociodemographic characteristics, such as Realm country affiliation. This will also enable health promotion to be better informed about the diverse patterns of alcohol use in smaller Pacific subpopulations.

## REFERENCES

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- Ameratunga, S., Jackson, N., Peris-John, R., Sheridan, J., Moselen, E., & Clark, T. (2018). New Zealand adolescents' concerns about their alcohol use and access to services: Associations with ethnicity and other factors. *Journal of Ethnicity in Substance Abuse*, DOI: [10.1080/15332640.2018.1428710](https://doi.org/10.1080/15332640.2018.1428710).
- Ataera-Minster, J., & Trowland, H. (2018). *Te Kaveinga: Mental health and wellbeing of Pacific peoples. Results from the New Zealand Mental Health Monitor & Health and Lifestyles Survey*. Wellington: Health Promotion Agency.
- Atkinson, J., Salmond, C., & Crampton, P. (2014). *NZDep2013 Index of Deprivation*. URL: <https://www.otago.ac.nz/wellington/otago069936.pdf>. Wellington: Department of Public Health, University of Otago, Wellington. Accessed 1 November, 2019.
- Ayuka, F., Barnett, R., & Pearce, J. (2014). Neighbourhood availability of alcohol outlets and hazardous alcohol consumption in New Zealand. *Health & Place*, 29, 186-189.
- Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., Grube, J., Gruenewald, P., Hill, L., Holder, H., Homel, R., Osterberg, E., Rehm, J., Room, R., & Rossow, I. (2010). *Alcohol: No ordinary commodity. Research and public policy (2nd ed.)*. 10.1093/acprof:oso/9780199551149.001.0001.
- Babor, T., Higgins-Biddle, J.C., Saunders, J.B., Monteiro, M.G. (2001). *AUDIT: The Alcohol Use Disorders Identification Test: Guidelines for use in primary care*. Second edition. Geneva: World Health Organization. URL: [https://www.who.int/substance\\_abuse/publications/audit/en/](https://www.who.int/substance_abuse/publications/audit/en/)
- Bisley, A. (2008). Introduction. In A. Bisley (Ed.), *Pacific interactions: Pasifika in New Zealand - New Zealand in Pasifika* (pp. 1-12). Wellington: Institute of Policy Studies, Victoria University of Wellington.
- Cagney, P. & Alliston L. (2009). *Pearls unlimited: Pacific Peoples and alcohol*. Wellington: Alcohol Advisory Council of New Zealand.
- Callister, P., & Didham, R. (2008). Emerging demographic and features of the Pacific population in New Zealand. In A. Bisley (Ed.), *Pacific interactions: Pasifika in New Zealand - New Zealand in Pasifika* (pp. 13-40). Wellington: Institute of Policy Studies, Victoria University of Wellington.
- Cameron, M.P., Cochrane, W., Gordon, C., & Livingston, M. (2013). *The locally-specific impacts of alcohol outlet density in the North Island of New Zealand, 2006-2011. Research report commissioned by the Health Promotion Agency*. Wellington: Health Promotion Agency.
- Connor, J.L., Kypri, K., Bell, M.L., & Cousins, K. (2011). Alcohol outlet density, levels of drinking and alcohol-related harm in New Zealand: a national study. *Journal of Epidemiology and Community Health*, 65, 841-846.

- Fa'alili-Fidow, J., Moselen, E., Denny, S., Dixon, R., Teevale, T., Ikihele, A., Adolescent Health Research Group, Clark, & T.C. (2016). *Youth'12 The Health and Wellbeing of Secondary School Students in New Zealand: Results for Pacific young people*. Auckland: The University of Auckland.
- Fa'alili-Fidow, J., Moselen, E., Denny, S., Dixon, R., Teevale, T., Ikihele, A., Adolescent Health Research Group, Clark, & T.C. (2016a). *Youth'12 The Health and Wellbeing of Secondary School Students in New Zealand: Appendices for Pacific young people report*. Auckland: The University of Auckland.
- Gray, J., & Nosa, V. (2009). Tau Fifine Fiafia: the binge drinking behaviours of nine New Zealand born Niuean women living in Auckland. *Pacific Health Dialog*, 15(1), 104-12.
- Te Hiringa Hauora/Health Promotion Agency. (2016). *HPA Attitudes and Behaviour towards Alcohol Survey 2015/16: Methodology report*. Wellington: Health Promotion Agency.
- Te Hiringa Hauora/Health Promotion Agency. (2016a). *Attitudes and Behaviour towards Alcohol Survey 2013/14 to 2015/16: Methods report for the combination of three survey datasets*. Wellington: Health Promotion Agency.
- Te Hiringa Hauora/Health Promotion Agency. (2018). *Key Results: Adults. Attitudes and Behaviour towards Alcohol Survey 2013/14 to 2015/16*. Wellington: Health Promotion Agency.
- Huakau, J., Asiasiga, L., Ford, M., Pledger, M., Casswell, S., Sualii-Sauni, T., & Lima, I. (2005). New Zealand Pacific peoples' drinking style: too much or nothing at all? *New Zealand Medical Journal*, 118(1216), U1491.
- Huckle, T., Haukau, J., Sweetsur, P., Huisman, O., & Casswell, S. (2008). Density of alcohol outlets and teenage drinking: living in an alcogenic environment is associated with higher consumption in a metropolitan setting. *Addiction*, 103(10), 1614-1621.
- Huckle, T., Yeh, L.C., Lin, J., & Jensen, V. (2013). *Trends in alcohol consumption and alcohol-related harms among females in New Zealand: Research report commissioned by the Health Promotion Agency*. Wellington: Health Promotion Agency.
- Hutton, F., & Wright, S. (2015). 'You don't ditch your girls': young Māori and Pacific women and the culture of intoxication. *Critical Public Health*, 25(1), 101-119.
- Kāhui Tautoko Consulting Ltd. (2020). *Research into the impact of alcohol use on Pasifika wellbeing*. Internal Te Hiringa Hauora/Health Promotion Agency report: unpublished.
- Kessaram, T., McKenzie, J., Girin, N., Roth, A., Vivili, P., Williams, G., & Hoy, D. (2016). Alcohol use in the Pacific region: Results from the STEPwise approach to surveillance, Global School-based Student Health Survey and Youth Risk Behavior Surveillance System. *Drug and Alcohol Review*, 35, 412-423.

Kokaua, J., Schaaf, D., Wells, J.E., & Foliaki, S.A. (2009). Twelve-month prevalence, severity, and treatment contact of mental disorders in New Zealand born and migrant Pacific participants in Te Rau Hinengaro: The New Zealand Mental Health Survey. *Pacific Health Dialog*, 15(1), 9-17.

Kypri, K., Bell, M.L., Hay, G.C., & Baxter, J. (2008). Alcohol outlet density and university student drinking: a national study. *Addiction*, 103(7), 1131-1138.

Lee, H. (2009). Pacific migration and transnationalism: Historical perspectives. In H. Lee & S. T. Francis (Eds.), *Migration and transnationalism [electronic resource]: Pacific perspectives* (pp. 7-41). Canberra, Australia: ANU E Press, Australian National University.

Lima I. (2005). *Alcohol in Samoa: A social history*. Christchurch: Macmillan Brown Centre for Pacific Studies, University of Canterbury.

Macpherson, C., Spoonley, P., & Anae, M. (2001). Pacific peoples in Aotearoa: Introduction. In C. Macpherson, P. Spoonley, & M. Anae (Eds.), *Tangata o te moana nui: The evolving identities of Pacific peoples in Aotearoa/New Zealand* (pp. 11-20). Palmerston North: Dunmore Press.

Manuela, S., & Anae, M. (2017). Pacific youth, acculturation and identity: the relationship between ethnic identity and well-being - new directions for research. *Pacific Dynamics: Journal of Interdisciplinary Research*, 1(1), 129-147.

Manuopangai, S. (2012). Exploring alcohol consumption patterns and drinking behaviour of Tongan youth females affiliated to the Tongan Methodist churches of Auckland. (Unpublished Masters thesis), University of Auckland, New Zealand.

Mila-Schaaf, K. (2013). Not another New Zealand-born identity crisis: Wellbeing and the politics of belonging. In M. N. Agee, T. McIntosh, P. Culbertson, & C. O. Makasiale (Eds.), *Pacific identities and wellbeing: Cross-cultural perspectives* (pp. 49-64). Otago: Otago University Press.

Ministry for Pacific Peoples. (2018). *Pacific Aotearoa: Lalanga Fou*. Wellington: Ministry for Pacific Peoples. Available at: [www.pacificaotearoa.org.nz](http://www.pacificaotearoa.org.nz)

Ministry of Health. (2015). *Alcohol Use 2012/13: New Zealand Health Survey*. Wellington: Ministry of Health.

Ministry of Health. (2016). *Methodology Report 2015/16: New Zealand Health Survey*. Wellington: Ministry of Health

Ministry of Health. (2017). *HISO 10001:2017 Ethnicity Data Protocols*. Wellington: Ministry of Health.

Ministry of Health. (2018). *Content guide 2017/18: New Zealand Health Survey*. Wellington: Ministry of Health.

Ministry of Health. (2019). *New Zealand Health Survey: Annual data explorer, April 2019*. Wellington: Ministry of Health. URL: <https://minhealthnz.shinyapps.io/nz-health-survey-2017-18-annual-data-explorer/ w 0811ceee/ w 00f6a0be/ w fa85a3ee/#!/home>

Ministry of Health. (2019a). *New Zealand Health Survey*. Wellington: Ministry of Health. URL: <https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/surveys/new-zealand-health-survey#method>

New Zealand Law Commission. (2010). *Alcohol in our lives: Curbing the harm*. Wellington: Law Commission. Available at: [www.lawcom.govt.nz](http://www.lawcom.govt.nz)

Nosa V, H. (2005). *The perceptions and use of alcohol among Niuean men living in Auckland*. (Unpublished PhD thesis), University of Auckland, New Zealand.

Sallis, J. F., Owen, N., & Fisher, E.B. (2008). Ecological models of health behavior. In K. Glanz, B.K. Rimer, & K. Viswanath (Eds.), *Health behavior and health education: Theory, research and practice* (pp. 465-485). San Francisco, CA: Jossey-Bass.

Samu, K. S., Suaalii-Sauni, T., Pulford, J. & Wheeler, A. (2009). *Pacific Abstinence & Responsible Drinking study (PARDY): A qualitative investigation into factors that support abstinence or responsible drinking amongst Pacific youth*. Auckland: Clinical Research and Resource Centre, Waitemata District Health Board.

Schaaf, D., & Scragg, R. (2004). *Alcohol consumption and associated risk factors in Auckland Pacific Island students: Final report*. Auckland: Auckland Uniservices Limited. Available at: <https://www.hpa.org.nz/research-library/research-publications/alcohol-consumption-and-associated-risk-factors-auckland--0>

Schaaf, D. (2005). *Cardiovascular disease risk factors in Pacific adolescents: The Auckland High School Heart Survey*. (Unpublished PhD thesis), University of Auckland, New Zealand.

Schluter, P. J., Tautolo, E-S., Taylor, S. & Paterson, J. (2013). Alcohol consumption by parents of Pacific families residing in New Zealand: findings from the Pacific Islands Families Study. *Alcohol*, 47(3), 241-248.

Sector Analysis, Ministry of Health. (1997). *The place of alcohol in the lives of people from Tokelau, Fiji, Niue, Tonga, Cook Islands and Samoa living in New Zealand: an overview*. Wellington: Alcohol Advisory Council of New Zealand.

Statistics New Zealand. (2014). *2013 Census QuickStats about culture and identity*. Wellington: Statistics New Zealand. Retrieved from: <http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-culture-identity.aspx>.

Statistics New Zealand. (2014a). *2013 Census ethnic group population profiles: Tokelauan*. Wellington: Statistics New Zealand. Retrieved from: [http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/ethnic-profiles.aspx?request\\_value=24713&tabname=Keyfacts#](http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/ethnic-profiles.aspx?request_value=24713&tabname=Keyfacts#)



Statistics New Zealand. (2019). 2018 Census population and dwelling counts. Wellington: Statistics New Zealand. Retrieved from: <https://www.stats.govt.nz/information-releases/2018-census-population-and-dwelling-counts>

Suaalii-Sauni, T., Samu, K.S., Dunbar, L., Pulford, J., & Wheeler, A. (2012). A qualitative investigation into key cultural factors that support abstinence or responsible drinking amongst some Pacific youth living in New Zealand. *Harm Reduction Journal*, 9(1), 36.

Sundborn, G., Metcalf, P.A., Gentles, D., Scragg, R., Schaaf, D., Dyll, L., & Jackson, R. (2009). 'From kava to lager' – alcohol consumption and drinking patterns for older adults of Pacific ethnic groups, and Europeans in the Diabetes Heart and Health Study (DHAHS) 2002-2003, Auckland New Zealand. *Pacific Health Dialog*, 15(1), 47-54.

Tamasese, K., Masoe-Clifford, P., & Ne'emias Garwood, S. (1998). Pacific Island People's Perspectives, in The Royal Commission on Social Policy's April Report, Volume IV Social Perspectives, pp 588-590.

Taumoeofolau, M. (2013). Respect, solidarity, and resilience in Pacific worldviews: A counselling perspective In M. N. Agee, T. McIntosh, P. Culbertson, & C. O. Makasiale (Eds.), *Pacific identities and wellbeing: Cross-cultural perspectives* (pp. 131-145). Otago: Otago University Press.

Teevale, T., Robinson, E., Duffy, S., Utter, J., Nosa, V., Clark, T., Sheridan, J., & Ameratunga S. (2012). Binge drinking and alcohol-related behaviours amongst Pacific youth: a national survey of secondary school students. *New Zealand Medical Journal*, 125(1352), 60-70.

Warren, H., Kirk, R., Lima, L., & Siataga, P. (2006). *Alcohol community interventions and services for Pacific peoples: Literature review*. Wellington: Alcohol Advisory Council of New Zealand, Health Research Council and Accident compensation Corporation.

White, J. (2013). *Use of alcohol among Year 10 students. [In Fact]*. Wellington: Health Promotion Agency, Research and Evaluation Unit.

White, J., & Newcombe, R. (2014). *Parental monitoring and substance use among Pacific youth. [In Fact]*. Wellington: Health Promotion Agency, Research and Evaluation Unit.

## APPENDIX 1: NZHS TABLES, 2012/13 TO 2014/15

**Table 5: Statistically significant results in adults (aged 15+ years) from the NZHS 2012/13 to 2015/16, by ethnicity**

NZHS results		Prevalence (%) (95% CI)	Risk Ratio (RR) (95% CI)
Past-year drinking	Pacific	56.8 (54.6, 58.9)	0.68* (0.65, 0.71)
	non-Māori non-Pacific	81.3 (80.7, 81.8)	1
Non-drinking <sup>a</sup>	Pacific	43.2 (41.1, 45.4)	2.38* (2.24, 2.54)
	non-Māori non-Pacific	18.7 (18.2, 19.3)	1
Hazardous drinking <sup>ab</sup>	Pacific	36.0 (32.8, 39.3)	1.67* (1.49, 1.85)
	non-Māori non-Pacific	18.3 (17.5, 19.0)	1
Hazardous drinking, by sex and ethnicity <sup>bc</sup>	Pacific females	25.8 (21.7, 30.3)	2.35* (1.96, 2.82)
	non-Māori non-Pacific females	11.0 (10.2, 11.8)	1
	Pacific males	44.2 (39.6, 48.9)	1.75* (1.56, 1.96)
	non-Māori non-Pacific males	25.2 (24.1, 26.4)	1

\*p < .05

<sup>a</sup>RRs are adjusted for age and sex.

<sup>b</sup>Hazardous drinking in past-year drinkers.

<sup>c</sup>RRs are adjusted for age.

For all base n figures refer to the results presented in Chapter 4.

**Table 6: Statistically significant results in Pacific adults (aged 15+ years) from the NZHS 2012/13 to 2015/16, by sociodemographic variables and Pacific subgroups**

NZHS results		Prevalence (%) (95% CI)	Risk Ratio (RR) (95% CI)
Pacific Past-year drinking, by Pacific ethnic groups <sup>a</sup>	Samoan	55.3 (52.1, 58.5)	1
	Cook Islands Māori	66.6 (62.2, 70.8)	1.21* (1.11, 1.30)
	Tongan	43.1 (38.3, 48.1)	0.73* (0.63, 0.84)
	Niuean	67.9 (60.0, 74.9)	1.23* (1.07, 1.37)
	Other Pacific	61.6 (54.9, 67.8)	1.09 (0.95, 1.23)
Pacific hazardous drinking, by sex <sup>bc</sup>	Pacific females	25.8 (21.7, 30.3)	1
	Pacific males	44.2 (39.6, 48.9)	1.72* (1.41, 2.09)
Pacific hazardous drinking, by deprivation (NZDep 2013) <sup>b</sup>	Least (deciles 1–3)	31.4 (22.5, 42.0)	1.79* (1.30, 2.48)
	Medium (deciles 4–7)	24.2 (19.5, 29.5)	1.37* (1.09, 1.73)
	Most (deciles 8–10)	18.1 (16.1, 20.3)	1
Pacific hazardous drinking, by place of birth <sup>b</sup>	NZ-born	26.9 (23.8, 30.3)	1.58* (1.28, 1.94)
	Overseas-born	14.5 (12.3, 17.0)	1
Pacific hazardous drinking, by Pacific Realm/non-Realm country affiliation and sex <sup>a</sup>	Realm country females	20.8 (16.2, 26.3)	1.97* (1.36, 2.85)
	non-Realm country females	9.7 (7.4, 12.5)	1
	Realm country males	33.5 (27.3, 40.3)	1.15 (0.92, 1.45)
	non-Realm country males	28.1 (24.5, 32.1)	1

\*p < .05

<sup>a</sup>RRs are adjusted for age and sex.

<sup>b</sup>RRs are adjusted for age.

<sup>c</sup>Hazardous drinking in past-year drinkers.

For all base n figures refer to the results presented in Chapter 4.

**Table 7: Statistically significant results in youth (aged 15-24 years) from the NZHS 2012/13 to 2015/16, by ethnicity**

NZHS results		Prevalence (%) (95% CI)	Risk Ratio (RR) (95% CI)
Past-year drinking	Pacific	56.2 (51.9, 60.5)	0.73* (0.67, 0.79)
	non-Māori non-Pacific	77.5 (75.7, 79.2)	1
Non-drinking	Pacific	43.8 (39.5, 48.1)	1.95* (1.72, 2.20)
	non-Māori non-Pacific	22.5 (20.8, 24.3)	1
Hazardous drinking <sup>a</sup>	Pacific	44.6 (38.2, 51.1)	1.48* (1.26, 1.75)
	non-Māori non-Pacific	30.0 (27.7, 32.5)	1

\*p < .05

All RRs are adjusted for age and sex.

<sup>a</sup>Hazardous drinking in past-year drinkers.

For all base n figures refer to the results presented in Chapter 4.

## APPENDIX 2: ABAS TABLES, 2013/14 TO 2015/16

Table 8: Statistically significant results on attitudes towards alcohol in adults (aged 15+ years) from the ABAS 2013/14 to 2015/16, by ethnicity

ABAS attitude statements		Percentage agreement (%) (95% CI)	Risk Ratio (RR) (95% CI)
<i>“The bars/pubs in my community have a good reputation”</i>	Pacific	41.6 (38.5, 44.6)	0.81* (0.75, 0.87)
	non-Māori non-Pacific	49.5 (48.5, 50.6)	1
<i>“There are good places to have a drink of alcohol in my community”</i>	Pacific	54.1 (51.0, 57.3)	0.80* (0.76, 0.85)
	non-Māori non-Pacific	67.2 (66.2, 68.2)	1
<i>“Some licensed premises are too close to public facilities like schools”</i>	Pacific	43.8 (40.7, 46.9)	1.48* (1.37, 1.60)
	non-Māori non-Pacific	31.4 (30.5, 32.4)	1
<i>“Offensive behavior by drunk people is a problem in my community”</i>	Pacific	47.9 (44.7, 51.0)	1.45* (1.34, 1.56)
	non-Māori non-Pacific	33.9 (32.9, 34.8)	1
<i>“Damage to property by drunk people is a problem in my community”</i>	Pacific	39.9 (36.9, 43.0)	1.34* (1.23, 1.46)
	non-Māori non-Pacific	30.7 (29.7, 31.6)	1

\*p < .05

All RRs are adjusted for age and sex.

For all base n figures refer to the results presented in Chapter 5.

Table 9: Statistically significant results on attitudes towards alcohol in Pacific adults (aged 15+ years) from the ABAS 2013/14 to 2015/16, by sociodemographic variables and Pacific subgroups

ABAS attitude statements		Percentage agreement (%) (95% CI)	Risk Ratio (RR) (95% CI)
<i>"It's ok to get drunk as long as it's not every day"</i>  (by sex) <sup>a</sup>	Female	22.5 (19.1, 26.0)	1
	Male	30.1 (26.3, 34.9)	1.34* (1.09, 1.66)
<i>"It's ok to get drunk as long as it's not every day"</i>  (by age)	15-24 years	34.2 (28.5, 40.0)	1
	25-34 years	35.4 (28.3, 42.4)	1.03 (0.80, 1.34)
	35-44 years	22.8 (17.6, 28.0)	0.67* (0.50, 0.88)
	45-54 years	17.2 (11.0, 23.5)	0.50* (0.34, 0.75)
	55+ years	13.5 (8.3, 18.7)	0.39* (0.26, 0.60)
<i>"Drunkenness is acceptable in some situations"</i>  (by sex) <sup>a</sup>	Female	13.7 (10.8, 16.6)	1
	Male	20.8 (17.0, 24.7)	1.51* (1.14, 2.00)
<i>"Drunkenness is acceptable in some situations"</i>  (by age)	15-24 years	20.5 (15.6, 25.5)	1
	25-34 years	22.5 (16.3, 28.8)	1.01 (0.76, 1.58)
	35-44 years	17.4 (12.7, 22.0)	0.85 (0.59, 1.21)
	45-54 years	12.1 (6.7, 17.6)	0.59* (0.36, 0.98)
	55+ years	8.6 (4.3, 12.9)	0.42* (0.24, 0.73)

<b><i>“Binge drinking is a part of Kiwi culture”</i></b>  <b>(by place of birth)<sup>b</sup></b>	<b>NZ-born</b>	42.7 (38.5, 46.9)	1.42* (1.19, 1.70)
	<b>Overseas-born</b>	32.8 (28.3, 37.4)	1
<b><i>“Binge drinking is a part of Kiwi culture”</i></b>  <b>(by age of migration to NZ)<sup>b</sup></b>	<b>NZ-born</b>	47.8 (42.5, 53.0)	1
	<b>0-15 years</b>	38.7 (31.2, 46.2)	0.88 (0.71, 1.10)
	<b>16-25 years</b>	29.0 (21.5, 36.6)	0.59* (0.45, 0.79)
	<b>25+ years</b>	27.7 (19.2, 36.2)	0.54* (0.39, 0.75)

\*p < .05

<sup>a</sup>RRs are adjusted for age.

<sup>b</sup>RRs are adjusted for age and sex.

For all base n figures refer to the results presented in Chapter 5.



**Table 10: Statistically significant results on drinking behaviours in adults (aged 15+ years) from the ABAS, 2013/14 to 2015/16, by ethnicity**

ABAS results		Prevalence (%) (95% CI)	Risk Ratio (RR) (95% CI)
Past-year drinking	Pacific	55.4 (52.4, 58.5)	0.78* (0.74, 0.83)
	non-Māori non-Pacific	72.0 (71.0, 72.9)	1
Non-drinking	Pacific	44.6 (41.5, 47.6)	1.54* (1.42, 1.66)
	non-Māori non-Pacific	28.0 (27.1, 29.0)	1
Heavy drinking <sup>a</sup>	Pacific	48.8 (44.2, 53.3)	1.62* (1.45, 1.79)
	non-Māori non-Pacific	23.3 (22.2, 24.4)	1
Had one or more harmful experiences <sup>a</sup>	Pacific	36.9 (32.4, 41.3)	1.68* (1.47, 1.92)
	non-Māori non-Pacific	17.8 (16.8, 18.8)	1

\*p < .05

All RRs are adjusted for age and sex.

<sup>a</sup>Results are for past-month drinkers.

For all base n figures refer to the results presented in Chapter 5.

**Table 11: Statistically significant results on drinking behaviours in Pacific adults (aged 15+ years) from the ABAS, 2013/14 to 2015/16**

ABAS results		Prevalence (%) (95% CI)	Risk Ratio (RR) (95% CI)
Pacific heavy drinking, by sex <sup>a</sup>	Females	34.9 (28.7, 41.0)	1
	Males	53.6 (46.9, 60.3)	1.32* (1.25, 1.86)
Pacific heavy drinking, by liberal attitudes status <sup>b</sup>	Liberal attitudes	57.8 (50.7, 64.9)	1.32* (1.11, 1.58)
	Non-liberal attitudes	39.0 (33.3, 44.7)	1
Pacific who had one or more harmful experiences, by sex <sup>a</sup>	Females	25.5 (19.8, 31.1)	1
	Males	39.5 (33.1, 45.9)	1.53* (1.19, 1.97)

\*p < .05

<sup>a</sup>RRs are adjusted for age.

<sup>b</sup>RRs are adjusted for age and sex.

All results are for past-month drinkers.

For all base n figures refer to the results presented in Chapter 5.

## APPENDIX 3: KEY NON-SIGNIFICANT RESULTS (NZHS & ABAS)

Table 12: Key non-significant results in Pacific adults (aged 15+ years) from the NZHS 2012/13 to 2015/16 and ABAS 2013/14 to 2015/16

Results		Prevalence (%) (95% CI)	Risk Ratio (RR) (95% CI)
Pacific past-year drinking, by deprivation (NZDep 2013) <sup>a</sup>  (NZHS)	Least (deciles 1–3)	40.4 (29.5, 52.3)	1.19 (0.88, 1.61)
	Medium (deciles 4–7)	36.8 (30.3, 43.9)	1.01 (0.82, 1.23)
	Most (deciles 8–10)	36.9 (33.2, 40.7)	1
Pacific hazardous drinking, by Pacific ethnic groups <sup>bc</sup>  (NZHS)	Samoan	36.0 (31.2, 41.1)	1
	Cook Islands Māori	39.7 (33.6, 46.1)	1.10 (0.89, 1.36)
	Tongan	32.7 (24.8, 41.7)	0.91 (0.68, 1.22)
	Niuean	41.8 (30.9, 53.6)	1.16 (0.85, 1.57)
	Other Pacific	28.8 (20.8, 38.5)	0.80 (0.57, 1.12)
Pacific heavy drinking, by Pacific ethnic groups <sup>bd</sup>  (ABAS)	Samoan	53.2 (45.0, 61.5)	1
	Cook Islands Māori	48.1 (37.8, 58.3)	0.93 (0.72, 1.21)
	Tongan	47.2 (34.4, 60.0)	0.86 (0.63, 1.17)
	Niuean	48.0 (35.5, 60.4)	0.91 (0.68, 1.22)
	Other Pacific	44.4 (35.2, 53.5)	0.82 (0.64, 1.06)

<sup>a</sup>RRs are adjusted for age.

<sup>b</sup>RRs are adjusted for age and sex.

<sup>c</sup>Hazardous drinking in past-year drinkers.

<sup>d</sup>Heavy drinking in past-month drinkers.