National Alcohol Strategy 2000–2003

Jointly published in March 2001 by the
Alcohol Advisory Council of New Zealand
Kaunihera Whakatupato Waipiro o Aotearoa
PO Box 5023, Wellington, New Zealand
and the
Ministry of Health
Manatū Hauora
PO Box 5013 Wellington, New Zealand
ISBN 0-478- 24308-1 (Book)
ISBN 0-478-24309-X (Internet)
HP 3417

This document is available on the Alcohol Advisory Council's Web site:

http://www.alcohol.org.nz

and on the

Ministry of Health's Web site:

http://www.moh.govt.nz

Cover picture: white rata

Foreword

In all the debates we hear about drugs in New Zealand, it is sometimes possible to lose sight of the fact that the two drugs that cause the most harm to the most people in this country are legally available – tobacco and alcohol.

This document, New Zealand's *National Alcohol Strategy 2000–2003*, helps us to put things back into perspective.

By focusing on alcohol-related harm, and by providing a context for our policies around making alcohol available, this Strategy allows us to start thinking about the types of steps we can take to prevent or reduce such alcohol-related problems.

Although a range of strategies are mentioned, it is important to recognise that the list here is not a prescriptive one, nor is it meant to be exhaustive. There is always room for new ideas and new approaches, and we should not be afraid to try different ways of doing things if we find that 'business as usual' no longer works.

It is also important to put this document into its own context.

In a formal sense, the National Alcohol Strategy sits under the New Zealand Health Strategy and the *National Drug Policy*. The New Zealand Health Strategy sets the platform for change and identifies key priority areas, the *National Drug Policy* sets out the Government's commitment to minimise all drug-related harm; and identifies various priority areas and desired outcomes towards this end. The National Alcohol Strategy is more specific: it develops a set of strategies by which to achieve the alcohol-related targets that are listed in the *National Drug Policy*.

In other words, The New Zealand Health Strategy sets the focus, the *National Drug Policy* tells us where we want to get to, while the National Alcohol Strategy is a more detailed 'road map' of how to get there for alcohol.

The overall goal of the National Alcohol Strategy is to help minimise alcohol-related harm to individuals, family/whānau, the community, and New Zealand society. While progress has been made in reducing alcohol-related harm, the costs remain high.

We should also remember that, in order to be effective, the National Alcohol Strategy will require effort by government and non-government agencies, the wider community, and also individuals. Everyone has a stake in making the Strategy work, and everyone can benefit if it does.

It simply remains for me to endorse this document, and to encourage people to work together to bring it to life.

Hon Annette King Minister of Health

Contents

Foreword	iii
Part One: Introduction	1
Alcohol	1
Alcohol in New Zealand	1
National policy on alcohol-related harm	2
The relationship of the National Alcohol Strategy to the National Drug Policy	2
Implementation, monitoring and review	
Overview of the National Alcohol Strategy	4
Part Two: Key Issues	5
Total consumption	5
Patterns of consumption	7
Types of alcohol-related harm	
High-risk groups	
Emerging awareness of other groups at risk	
High-risk environments and events	17
Part Three: Priorities And Outcomes	19
Part Four: Strategies	21
Overall approach	21
The Treaty of Waitangi	22
Principles	
Supply control strategies	
Demand reduction strategies	
Problem limitation strategies	35
Part Five: Workforce Development	43
Broadening the base of education and training	43
Education and training for alcohol treatment specialists	44
Education and training for those working to prevent harm	
Depth and breadth of education and training	
Content of education and training programmes	
Effectiveness of education and training	
Wider issues for the specialist workforce	47
Part Six: The Monitoring Framework	
Targets and indicators	
Reporting Going beyond the framework	
•	
References	64

List of Figures

Figure 1:	Structure for implementation, monitoring and review of the National Alcohol Strategy	. 3
Figure 2:	Alcohol available for consumption, per head of population aged 15 and above, 1950–1999	. 5
Figure 3:	Number and type of licensed premises, 1990 versus 2000	. 6
Figure 4:	Median quantity of alcohol consumed on a typical occasion, 1995	. 7
Figure 5:	Typical quantities of alcohol consumed by people aged 14–19 and 20–65 years, 1990–1996	. 8
Figure 6:	Deaths due to alcohol-related (primary cause) conditions, by sex and ethnicity, 1980–1993	. 9
Figure 7:	Deaths where driver alcohol was a contributing factor 1985–1999	11
Figure 8:	Proportion of people who drink five or more drinks on a typical day when drinking, by age and sex	14
Figure 9:	Alcohol-related problems and associated responses	39

Part One: Introduction

Alcohol

'Alcohol' is a generic name given to series of organic compounds, most of which are highly toxic to humans. Only one type of alcohol – ethanol, or ethyl alcohol (C_2H_5OH) – is fermented or distilled for use in beverages that are meant for human consumption.

While alcohol works at the cellular and systemic level in the human body, its most immediate and readily apparent effects are on the brain. Alcohol is a psychoactive (mind-altering) drug, and is one of the most widely used drugs in the world.

Alcohol in New Zealand

The desire to make and consume intoxicating drink is a long-standing one, dating back to pre-literate times (Musto 1997). Despite the spread of alcohol in most other parts of the world, pre-European New Zealand was one of the few places that alcohol-containing drinks were not developed (Hutt 1999), prompting one observer to comment that: 'The white man and the whisky bottle came to New Zealand together' (Williams 1930). Within a fairly short time of European contact, though, alcohol had assumed a significant role, leading some to describe this period of the nation's history as 'baptised in alcohol' (McNeish 1984), and New Zealand as 'Grog's Own Country' (Bollinger 1967).

While much has changed in attitudes to and practices around alcohol these days, alcohol certainly remains part of contemporary New Zealand society. It is a legal, regulated and widely available product, and the large majority of adults drink at least occasionally. Alcohol is a feature of New Zealand life. For many it is a symbol of hospitality, and is used on occasions to celebrate important events in people's lives.

Used in moderation, alcohol can reduce the risk of certain illnesses for some groups. The alcohol and hospitality industries also contribute significantly to New Zealand's economy. Excise tax on alcohol alone raises about \$440 million each year (The Treasury 1999).

However, when alcohol is misused the resulting harms can be considerable. These harms include physical and mental health problems, injury and death on the roads, drownings, violence, fetal abnormalities, absenteeism and impaired work performance. In annual terms, the social costs of alcohol misuse in New Zealand have been estimated as being between \$1.5 billion and \$2.4 billion (Devlin et al 1996).¹

This estimate, expressed in 1991 dollar terms, includes direct costs such as hospital expenses, accident compensation payments, police and justice system costs; and indirect costs like lost production resulting from premature death and sickness, lost working efficiency and excess unemployment. (Of the total amounts, direct costs were estimated to be between \$345 million and \$592 million each year; indirect costs were estimated to be between \$1.1 billion and \$1.8 billion.) Other authors (notably Easton 1997) have estimated the social costs of alcohol misuse in New Zealand to be even higher.

National policy on alcohol-related harm

In recognition of the health, social and economic costs of harmful alcohol use, the Government released a national policy statement on alcohol in mid 1996, as one part of its combined *National Drug Policy* (Ministry of Health 1998a).² It recognised that, on the one hand, when used in moderation and in non-hazardous situations, alcohol can provide personal and social benefits; but on the other hand, when it is misused, or is used in risky situations, alcohol can also cause great damage to individual drinkers, their families and to the wider community. The national policy approach to alcohol, therefore, was not to try to prevent its use altogether, but rather to minimise the harm associated with alcohol.

The relationship of the National Alcohol Strategy to the *National Drug Policy*

This National Alcohol Strategy both complements and extends the Government's *National Drug Policy*. As a subset of the *National Drug Policy*, the Strategy provides:

- a framework for action on alcohol issues
- a balanced approach to the task of reducing alcohol-related harm, including the three pillars of supply control, demand reduction and problem limitation strategies
- an intersectoral and co-ordinated approach to tackling alcohol-related harm, thus avoiding unnecessary duplication of effort, and helping to ensure that resources are used as effectively and efficiently as possible
- a formal structure for evaluating the success of the Strategy, through the existing Inter-Agency Committee on Drugs and the Ministerial Committee on Drug Policy.

The goal of the National Alcohol Strategy is to minimise alcohol-related harm to individuals, families and society.

Implementation, monitoring and review

The *National Drug Policy* establishes a structure for the implementation, monitoring and review of strategies to reduce drug-related harm, including alcohol-related harm.

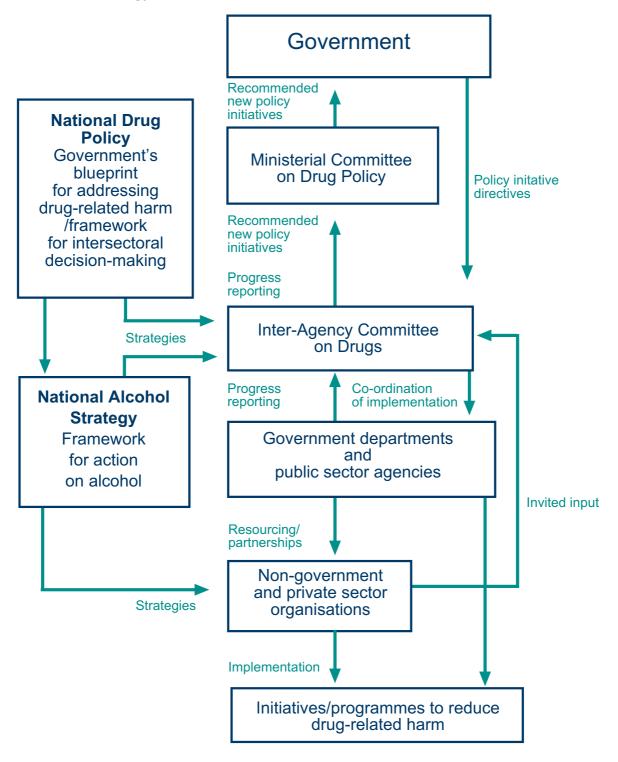
- A group of Ministers, the Ministerial Committee on Drug Policy (MCDP), meets at least twice a year
 to review progress and determine which new policy initiatives should be recommended to the
 Government. The MCDP is chaired by the Minister of Health, and made up of the Ministers of
 Education, Transport, Māori Affairs, Police, Justice, Corrections, Customs and Youth Affairs.
- A group of officials, the Inter-Agency Committee on Drugs (IACD), monitors and receives reports
 on progress made in implementing the *Policy*, ensures that policies and programmes throughout
 government are consistent and mutually supportive, and recommends new policy initiatives to the
 MCDP. The IACD is chaired by a representative from the Ministry of Health, and is made up of
 officials from the Ministries of Education, Justice, Transport and Youth Affairs, as well as from the
 Department of Corrections, Te Puni Kōkiri, the Police, the Land Transport Safety Authority, Customs
 Service and Alcohol Advisory Council of New Zealand.

² A national policy on alcohol and other drugs was one of five strategic directions listed in the Government's national mental health strategy, *Looking Forward* (Ministry of Health 1994).

Public sector agencies with responsibility for drug-related policy report to the IACD every six months.
 When needed, other agencies, including non-governmental organisations, are invited to work with or make representations to the IACD.

As a subset of the *National Drug Policy*, the National Alcohol Strategy will be implemented, monitored and reviewed within the same structure (see Figure 1 below).

Figure 1: Structure for implementation, monitoring and review of the National Alcohol Strategy



Overview of the National Alcohol Strategy

Part one	Introduction
Part two	provides a discussion and overview of key alcohol issues. It covers patterns of consumption, types of alcohol-related harm, and groups at risk of harm, as well as high-risk environments and events.
Part three	lists the alcohol-related priorities for action, and the desired outcomes for each priority, as specified by the <i>National Drug Policy</i> .
Part four	presents a range of strategies for addressing alcohol-related harm. The strategies are grouped into three broad categories – supply control, demand reduction and problem limitation.
Part five	emphasises the importance of professional education in effectively addressing alcohol-related harm and outlines a range of strategies for workforce development.
Part six	outlines a framework for monitoring and measuring progress towards the <i>National Drug Policy</i> 's alcohol-related outcomes, and presents a number of possibilities for future research.

Part Two: Key Issues

Alcohol-related harm is not distributed evenly throughout the community. Patterns of alcohol consumption vary, and the personal, social and economics costs of the misuse of alcohol are borne by some groups more than by others.

In this part, patterns of alcohol consumption and significant alcohol-related harms are discussed. Groups whose patterns of consumption place them most at risk are identified, as are the environments in which alcohol-related harm is most likely to occur.

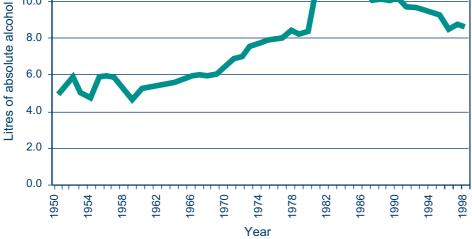
Total consumption

Discussions about trends in alcohol consumption often use small windows of time as the basis for comparison. Even the choice of quarterly statistical data within a year can affect such comparisons, as there are seasonal variations each year in the amount of alcohol available for consumption. When viewed over a longer term, it is possible to see that consumption 'spikes' in either an upward or downward direction are often event-specific, and are not very long-lasting. Thus, before discussing recent trends in alcohol consumption, it is useful to look at trends over a longer period.

Historically, the story of alcohol consumption in New Zealand is one of relatively stable consumption levels from 1880-1935 (with annual consumption levels around 1-2 litres of absolute alcohol per person over 15 years of age); steadily increasing consumption for the next 15 years or so (with annual consumption levels rising from around 2 litres in 1935 to just under 5 litres in 1950); ups and downs for the next decade; rising consumption for the next 20 years, with a steep jump in the early 1980s (with annual consumption levels increasing from just over 5 litres in 1960 to a high-point of just under 12 litres in 1982-83); followed by a gradual decline in consumption from the mid 1980s to the late 1990s (hitting a low-point thus far of some 8.3 litres during 1997). Figure 2 focuses on the trends of the last 50 years.

above, 1950-1999 12.0 10.0 8.0

Figure 2: Alcohol available for consumption, per head of population aged 15 and



Source: Statistics New Zealand 2000.

Based on current levels, New Zealand is ranked 20th in the world in terms of per capita alcohol consumption, one place below Australia, and one above the United Kingdom (Productschap voor Gedistilleerde Dranken 1999).

Before describing the most recent consumption data, which appear to indicate that the downward trend of the last 15 years has plateaued, it is worthwhile recalling the significant changes in how alcohol is made available for consumption, which occurred during this same period.

Following the introduction of the Sale of Liquor Act 1989, the number of liquor licences almost doubled during the 1990s (Figure 3). In addition there was a significant increase in the range of places from which alcohol could be sold. Supermarkets and cafes are just two kinds of outlets that now sell alcohol, in addition to the traditional on- and off-licensed premises such as taverns, restaurants and wholesale outlets.

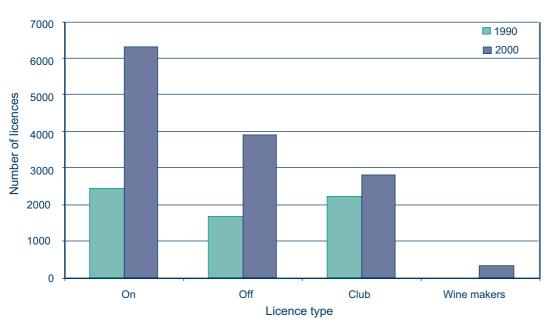


Figure 3: Number and type of licensed premises, 1990 versus 2000

Source: Liquor Licensing Authority 2000.

The 1989 Act also made alcohol much more readily available by removing many of the former restrictions on opening hours, and allowing hours of trading to be set by licence rather than by imposing the same conditions on all. Recent amendments to the Act have further increased availability. These included lowering the minimum legal drinking age to 18 years, removing restrictions on the sale of alcohol on Sunday, and allowing beer to be sold in supermarkets.

Despite its increased availability, as previously discussed, New Zealand has seen a steady reduction in the overall consumption of alcohol, at least until the last few years. In the two years from December 1997 to December 1999 the volume of spirit-based drinks available for consumption more than doubled, reflecting the increased availability of ready-to-drink combinations of spirits and mixers. This, combined with a slight increase in the volume of wine available and a growth in demand for beer with a higher alcohol content, increased the total volume of alcoholic beverages available for consumption from 401.921 million litres in 1997 to 418.029 million litres in 1999 (Statistics New Zealand 1999, 2000). Again, though, it is yet to be seen if this marks the start of a new trend or is another example of a short-

term 'blip'. The year-on-year increase from 1998 to 1999, for example, has been attributed to the changes in the liquor laws, as well as celebrations associated with the new millennium and America's Cup yachting regatta in Auckland (Statistics New Zealand 2000).

The most common reasons people give for drinking less are concerns about drinking and driving, a desire to maintain or increase physical fitness, and a perception that it has become more acceptable to drink less. Amongst younger people, having less money to spend on alcohol is also given as a reason for cutting down (Wyllie et al 1996; Grossman et al 1994).

Patterns of consumption

Although total consumption has declined considerably over the past 15–20 years, and in 1996 dropped below the Ministry of Health's target of 8.7 litres by the year 2000, there is still considerable variation in the amount of alcohol consumed by New Zealanders.

A national survey in 1995 (Figure 4) found that 10% of drinkers drank almost half of the total amount of alcohol consumed – the equivalent of 31 cans of beer each a week (Wyllie et al 1996).³ This level of consumption is well in excess of the Alcohol Advisory Council's recommended upper limits for responsible drinking.⁴ The heaviest 5% of drinkers alone were responsible for drinking a third of all alcohol consumed, each one drinking an equivalent of 63 cans of beer a week. These heavier drinkers were predominantly men, in particular young men.

The same survey found that those most likely to consume large quantities of alcohol are the young: 38% of males aged 18–24 years and 20% of females aged 16–24 years drank at or above the Alcohol Advisory Council's recommended upper limits for responsible drinking on at least a weekly basis (six standard drinks for men and four for women on any one occasion).

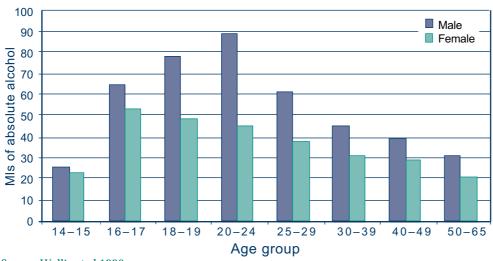


Figure 4: Median quantity of alcohol consumed on a typical occasion, 1995

Source: Wyllie et al 1996.

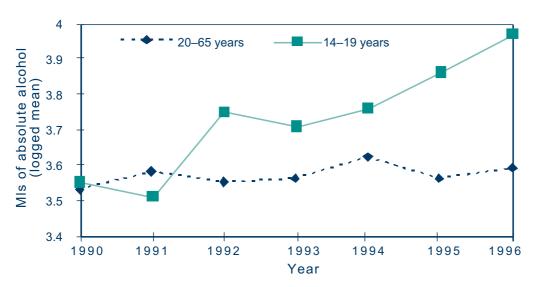
³ This national alcohol use survey is due to be repeated during 2000/01. For a recent 'snapshot' survey that monitored alcohol intake, see Ministry of Health 1999a.

The Alcohol Advisory Council of New Zealand recommends against drinking more than 21 standard drinks per week for men and 14 standard drinks per week for women. A 'standard drink' is any drink containing 10 grams of alcohol. Using this definition, one can of beer that contains 5% alcohol by volume is roughly equivalent to 1.5 standard drinks. For the Alcohol Advisory Council's guidelines, see Working Party on Upper Limits for Responsible Drinking 1995; compare Inter-Departmental Working Group on Sensible Drinking 1995 (United Kingdom); and National Health and Medical Research Council 2000 (Australia).

Recent survey findings indicate that while between 1994 and 1997 there was a notable decrease in the proportion of young people aged 14–19 who drank alcohol, there was a marked upward trend in the quantity consumed on each typical drinking occasion.

There was also a rise in the frequency of consuming larger quantities, as reported by those aged 14–19 years, accompanied by an increase in problems associated with their drinking (Figure 5) (Alcohol Advisory Council 1997).

Figure 5: Typical quantities of alcohol consumed by people aged 14–19 and 20–65 years, 1990–1996



Source: Alcohol and Public Health Research Unit 1998.

Types of alcohol-related harm

While alcohol is embedded in New Zealand culture, and most people manage to drink without harming themselves or others, the fact remains that misuse of alcohol results in considerable health, social and economic costs, which are borne by individuals, families and the wider community. The most significant types of alcohol-related harm include:

- · deaths and physical health problems from alcohol-related conditions
- · alcohol dependence and other mental health problems
- · effects on unborn children
- drink-driving fatalities and injuries
- drownings
- · violence both within and beyond the home
- · workplace injuries and lost productivity.

Deaths and physical health problems from alcohol-related conditions

Ministry of Health figures indicate that from 1988 to 1996 there were between 130 and 150 deaths each year from alcohol-related conditions. These conditions include heart and liver damage, high blood pressure, some types of cancer and digestive disorders (Ministry of Health 1999b). It is estimated that alcohol-related conditions account for 3.1% of all male deaths and 1.4% of all female deaths in New Zealand (Figure 6).

30 Māori male Māori female Non-Māori male 25 Non-Māori female Age standardised rate* 20 15 5 0 989 1980 1985 986 988 992 982 983 984 0661 1993 991 98 98

Figure 6: Deaths due to alcohol-related (primary cause) conditions, by sex and ethnicity, 1980–1993

*per 100,000 using Segi's world population

Source: Ministry of Health 1997.

As well as directly causing deaths, alcohol-related health problems cause distress and disability, and result in a significant and costly use of health services. Alcohol-related hospitalisations are estimated to cost New Zealand more than \$74 million each year (Devlin et al 1996).

Some of the most chronic health problems associated with alcohol affect those who consistently drink at hazardous levels. One of the most debilitating of these conditions – Wernicke-Korsakof Syndrome (WKS) – results from a lack of thiamine in the person's diet, and those who regularly drink at excessive levels are at greater risk of such nutritional deficiencies. Characterised by tiny brain haemorrhages, WKS leaves some affected individuals unable to function independently and in need of long-term institutional care. Fortifying alcoholic beverages, in particular beer, with thiamine has been suggested as one possible means of minimising harm in this at-risk group (Drew and Trusswell 1998; Trusswell 2000).

Besides being more vulnerable to its effects, women are also at risk of additional health problems from alcohol. There is, for example, an increasing body of empirical research linking alcohol with breast cancer, (Smith-Warner et al 1998) and a recent meta-analysis concluded that there is now sufficient evidence to consider alcohol as a cause of breast cancer (Single et al 1999).

Alcohol dependence and other mental health problems

Alcohol is a causative factor in a number of mental health conditions, ranging from episodes of alcohol-induced psychosis to far more long-term alcohol-related dementia.

Dependence on alcohol constitutes a diagnosable mental disorder in its own right.⁵ Some overseas studies have estimated that around half of all costs attributed to alcohol involve people who meet international classifications as alcohol dependent (Single et al 1999; Rehm 1999).

When talking about alcohol-related mental health problems, it is important to note that alcohol dependence exists along a continuum, from mild to severe; and that it is not uncommon to find some degree of dependence in the New Zealand population. Studies have found that 5% to 9% of men, and 1% to 2% of women 'take an alcoholic drink first thing in the morning', and 'have hands shake after drinking' (Wyllie and Casswell 1989; Wyllie et al 1993, 1996). Another study found that 32% of men and 6% of women will meet clinical criteria for alcohol abuse or alcohol dependence over the course of their lifetime (Wells et al 1989). Expressed as a proportion of the total population, this latter study found that almost one in every five people (19%) will fit criteria for alcohol abuse or alcohol dependence during the course of their lives.

In 1997, there were 158 treatment services throughout New Zealand for people experiencing problems with their drinking. In terms of service utilisation, the highest rates of new admissions to outpatient treatment centres are from the 20–24 and 25–29 age groups. In 1990, 74% of the new admissions to these agencies were male (Hughes 1992).

Although problematic alcohol use is known to co-exist with other mental health problems, very little is known about the prevalence of such 'dual diagnoses'. One New Zealand study found that people with alcohol disorders were 1.9 times more likely than other people to have another mental disorder. The conditions most frequently associated with alcohol use disorders were antisocial personality disorders and abuse of other substances. Other disorders associated with alcohol abuse include major depression and schizophrenia (Wells et al 1992; Bushnell et al 1994). Anxiety disorders have also been found to be more prevalent among people with alcohol problems than within the population as a whole (Schuckit and Hesselbroack 1994).

Another more recent New Zealand study identified alcohol and/or drug abuse as one of the factors that predispose young people to suicide (Beautrais et al 1996). This finding is consistent with the results of studies conducted overseas (Romelsjo 1995).

Since the opening of casinos in New Zealand there has also been growing interest in the relationship between alcohol and gambling. Two New Zealand studies have confirmed high rates of hazardous or harmful alcohol use amongst problem gamblers, particularly pathological gamblers (Abbott and Volberg 1992, 1996; Sullivan et al 1998). Amongst gamblers identified as pathological, 48% drank in a hazardous or harmful manner, compared with 19% of those whose gambling was considered less serious (Abbott and Volberg 1996). The public health and policy implications of such findings are likely to be more significant if, as some researchers have suggested, expansion of gaming opportunities sees a rise in the number of problem gamblers (New Zealand Gaming Survey 1999; Abbott and Volberg 2000).

Effects on unborn children

Excessive alcohol consumption during pregnancy, particularly during the first trimester, is known to contribute to birth abnormalities such as foetal alcohol syndrome and foetal alcohol effects (FAS/FAE).

Although women who drink heavily while pregnant are more likely than other mothers to have extra risk factors that may affect foetal development (such as poor nutrition and smoking), there is considerable evidence that immoderate maternal alcohol intake can sometimes cause both physical disability and intellectual impairment in newborns (Abel and Hanningan 1995; Larkby and Day 1997; Jacobson 1997; Jacobson et al 1998; Ministry of Health 2000).

⁵ For a useful New Zealand overview, see Stewart 1998.

It is important to note here, too, that such alcohol-related birth defects can irreversibly reduce a child's potential. Not only are there abnormalities early in life for a child who suffers from FAS/FAE, but his or her ability to learn, concentrate, remember and exercise sound judgement throughout life can also be impaired. Indeed, there is mounting concern that the long-term harm resulting from prenatal exposure to alcohol may be seen in the educational and correctional systems as well as in the health arena.

The prevalence of FAS/FAE amongst children born in New Zealand is not well known. One report estimates that each year in New Zealand there are up to 360 births of children whose development has been affected by their mother's drinking during pregnancy (Curtis 1994). This is more than the combined annual total of all children born with cystic fibrosis, cerebral palsy and Down's Syndrome.

A recent survey of nutrition during pregnancy found that amongst those women who drank alcohol, over a third continued to drink at least weekly during their pregnancies. Of those who continued to drink, a small proportion were drinking at hazardous levels (Watson and McDonald 1999).

Drink-driving fatalities and injuries

Alcohol remains a major factor in road crashes, particularly fatal accidents (Figure 7). Although progress has been made in bringing down the number of crashes that involve drivers affected by alcohol, in the year to December 1999 drinking drivers still contributed to 23% of all fatal motor vehicle accidents and 14% of all injury motor vehicle accidents (Land Transport Safety Authority 2000).⁶

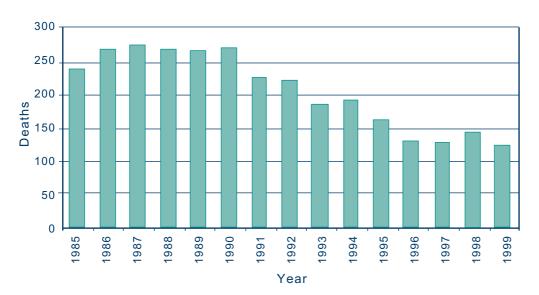


Figure 7: Deaths where driver alcohol was a contributing factor 1985–1999

Source: Land Transport Safety Authority 1997, 2000.

⁶ Illustrating how much progress has been made, drinking drivers contributed to 42% of fatal crashes and 22% of all injury crashes in 1990.

Drownings

A number of overseas studies have suggested that alcohol is a significant factor in boating fatalities and other drownings. Until recently, however, there was no research on the extent of alcohol-related drownings in New Zealand.

A retrospective study of drownings that occurred in the Auckland area between 1988 and 1997 found that over 80% of people between 15–64 years who drowned had had their blood alcohol level tested as part of the post mortem. Of this group, 40.5% had a positive blood alcohol level, and 31% had a blood alcohol level over 80mg/100mls (the legal limit for adults operating a motor vehicle). An examination of boating-related drownings yielded similar findings. Of those aged 15–64 years for whom blood alcohol levels could be reliably measured, 40% had positive levels, and 24% had levels over 100mg/100mls. Based on these findings, although the raw numbers involved with drownings are fewer, the researchers concluded that the role of alcohol in water-related fatalities is just as important as, if not more important, than the role that alcohol plays in deaths on the roads (Smith et al 1999).

Violence

There is increasing evidence that alcohol is a major contributor to injury through interpersonal violence, especially assaults, violence against partners, and child abuse. Victims can also be more vulnerable to such violence if they are intoxicated themselves.

To take one example, estimates suggest that alcohol contributes to between 25% and 50% of physical assaults against spouses (Department of Justice 1987). Although the majority of perpetrators reject the possibility that alcohol was a contributor to their violence, it is interesting that those surveyed later typically mention it in the explanations they give for such incidents (Leibrich et al 1995). Hence, the *Women's Safety Survey 1996* found that 'partner's drinking' was the most commonly cited trigger for a partner to act violently towards the female respondents (Morris 1997).

Alcohol-related violence also occurs outside the home. A recent representative survey of New Zealanders found that, in the previous 12 months, 10% of men and 5% of women had been assaulted by someone who had been drinking. For young people, the problem was even greater. In one 12-month period almost a quarter of men aged 16–24 years reported that they had been assaulted in an alcohol-related incident (Wyllie et al 1996).

Several studies have gone further and pointed out that greater violence is associated with drinking in bars and other licensed premises, than it is in other types of venues (Homel et al 1991, 1992; Ireland and Thommeny 1993; Stockwell et al 1993).

Such research has emphasised that situational factors play an important role in alcohol-related violence, and that there is a complex relationship between aggressive acts and expectations about the effects of alcohol and the social contexts of drinking (Graham et al 1998; Turning Point 1998).

Accepting that such situational factors appear to have an influence means recognising that there is unlikely to be any direct pharmacological link between alcohol and violence. Rather, from this viewpoint it is suggested that alcohol is more likely to increase aggression by influencing people's social and cognitive processes, and allowing lesser incidents to escalate into violence Bushman 1997; Deehan 1999).

Workplace injuries and lost productivity

Alcohol misuse manifests itself in a variety of ways in the workplace. These range from the residual effects of use at weekends or after hours, such as hangovers and general fatigue, to intoxication at work due to excessive consumption during working hours.

The degree and significance of impaired job performance due to alcohol misuse will relate both to the effects of drinking and the specific tasks required of the employee (Wiese et al 2000). In safety-sensitive occupations like forestry, for example, even small intakes of alcohol could have a significant impact on performance, and serious implications for safety.

In New Zealand, data are not kept about the role of alcohol in accidents at work. However, with the strengthened legal obligations on employers to provide a safe environment for workers, the inappropriate use of alcohol has been highlighted as one of a number of preventable causes of workplace accidents (Occupational Safety and Health 1996).

Reduced productivity in the workplace due to alcohol misuse represents a significant cost to industry. Based on a study of almost 5,000 Aucklanders, which included about half who were drinkers in paid employment, the cost of alcohol-related lost productivity among the working population of New Zealand was estimated to be \$57 million per year. Foremost amongst the costs was the cost of impaired work performance (estimated to be \$41 million nationally). Absenteeism accounted for the remaining \$16 million (Jones et al 1995). Other research suggests a much higher annual cost, by factoring in 'downstream' costs such as loss of production caused by alcohol-related premature deaths, alcohol-related unemployment, and temporary removal from the workforce for treatment for alcohol-related problems or imprisonment for alcohol-related offences (Devlin et al 1996; Easton 1997; Crofton 1987; Single et al 1998; Collins and Lapsley 1996; Stockwell 1998).

High-risk groups

It is clear that alcohol-related harm is greater amongst some groups than amongst others. As people go through life there are stages at which they seem to be more at risk. The teenage years, young adulthood and later life are all stages at which people are particularly vulnerable. If they also come from the more marginalised groups in New Zealand society, for instance Māori, then their risk factors are compounded.

The underlying and/or presenting reasons why people use alcohol in harmful ways are often complex, but they must not be ignored. While strategies to minimise alcohol-related harm should not be confined to high-risk groups, the significant levels of harm caused by and to these groups, suggest that they are important audiences to target.

Youth

A nationally representative survey of 14 to 18 year olds conducted in March–April 2000 found that almost half of those surveyed had consumed 5 or more glasses of alcohol last time they drank (46%), and half of these – nearly a fifth of all young drinkers – said they drank 9 or more glasses of alcohol last time they drank. Almost two-fifths of all young drinkers (39%) reported that their last binge had been in the previous fortnight (Alcohol Advisory Council 2000).

These latest survey results reflect a deterioration from benchmark figures derived in 1997, at which time nearly all the heavier drinkers and three-quarters of the lighter drinkers had experienced a range of adverse effects from their drinking:

- · over half had vomited after drinking
- · a third had hurt themselves after drinking
- · almost a quarter had got into a fight or an argument
- · one in eight had got into a sexual situation they were not happy with
- one in 11 had got into trouble with the law because of drinking (Alcohol Advisory Council 1997).

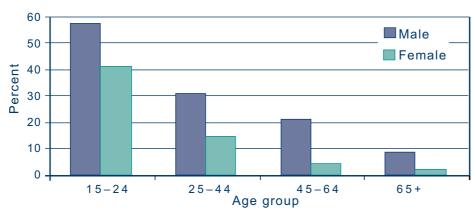
Another study found that adolescents who reported misusing alcohol were more likely to engage in sexual intercourse at an earlier age, and to have unprotected intercourse, than was the sample as a whole – even when account was taken of risk factors common to both alcohol misuse and early sexual activity. The correlation between alcohol misuse and early sexual activity was found to be particularly strong for girls (Fergusson and Lynskey 1996).

Two other areas of concern regarding youth drinking should be noted. First, a New Zealand study of young people aged between 13 and 24 years who had made a serious suicide attempt revealed that 31% had a history of alcohol abuse or dependence (Beautrais et al, 1996, 1998). Second, a longitudinal study drawing upon over 20 years' worth of data found that same-sex-attracted young people are at greater risk of experiencing substance abuse problems, including alcohol problems (Fergusson et al 1999).

Young men

In a recent New Zealand health survey, more than 50% of men aged 15 to 24 years reported drinking in a hazardous manner.⁷

Figure 8: Proportion of people who drink five or more drinks on a typical day when drinking, by age and sex



Source: Ministry of Health 1999b.

Hazardous drinking' is defined as an established pattern of drinking that carries with it a high risk of future damage to physical or mental health. See Ministry of Health 1999b.

These findings are consistent with earlier studies that showed 70% of men aged between 18 and 24 had exceeded the equivalent of six cans of beer on one drinking occasion at least once a month. Thirty-eight percent reported doing so at least once a week. Overall, this survey found that 10% of drinkers consumed almost half of the total alcohol available for consumption, and that young men aged 18–24 accounted for half of this group of heavier drinkers. As young men aged 18–24 comprise only 9% of the population, they are clearly over-represented amongst heavier drinkers (Figure 8).

Given their typically excessive levels of consumption, it is not surprising that young men report problems with alcohol. In a recent national survey almost a third of men aged between 18 and 24 reported that they felt drunk at least once a week. Over half the men in this age group also reported frequently experiencing other alcohol-related problems including memory loss, getting into fights, having arguments, being absent from work, driving drunk, and feeling ashamed of their behaviour while drunk (Wyllie et al 1996).

Māori

Although the proportion of Māori who drink is lower than that of the population as a whole, and those who do drink do so less frequently, the median annual volume of absolute alcohol consumed by Māori men is greater, at 9.2 litres, than the 7.4 litres consumed by men in the general population (Wyllie et al 1996; Dacey 1997).

A recent national survey found that 44% of Māori male drinkers and 29% of Māori female drinkers consumed alcohol at hazardous levels. Māori drinkers were also more likely than most to drink 5 or more drinks on one occasion (Ministry of Health 1999b).

Māori also reported a higher incidence of problems arising from their own drinking and the drinking of others than did the population as a whole.

One in five Māori men considered their drinking was harming their health to a large or medium extent, and a similar proportion mentioned negative effects on their home life and financial position (Wyllie et al 1996; Dacey 1997).

Alcohol dependence or abuse is the leading cause of admission to psychiatric institutions for Māori men, and the second most common cause of admission for Māori women (Pomare et al 1995). Māori men are 2.7 times more likely to die of an alcohol-related problem than are non-Māori men (Te Puni Kōkiri and Kaunihera Whakatupato Waipiro o Aotearoa 1995).

Offenders

There is increasing evidence that misuse of alcohol features in the lives of a significant proportion of the populations within prisons and in community corrections (All Party Group on Alcohol Misuse 1995; Deehan 1999). For example, a recent national study of the incidence of mental health problems amongst prison inmates found that almost 70% of female inmates, and about 75% of male inmates, had suffered from alcohol abuse or dependence problems at some point in their lives (Simpson et al 1999; Brinded et al 1996).

Screening of 100 new arrivals to a minimum/medium security prison in New Zealand revealed that more than 80% of the prisoners met the criteria for lifetime alcohol abuse or dependence disorder. A high proportion of these offenders also reported problems relating to their alcohol use (Bushnell et al 1994).

There has been little research on the relationship between offenders' alcohol use and their offending, although some studies indicate that the two are linked (Brown 1986; Welte and Miller 1987; Kerner et al 1997). One New Zealand study of offenders found that 84% had been drinking prior to a violent

incident, and of those almost three-quarters had been drinking either at the time of the incident or within the previous half hour (Bradbury 1984).

A Christchurch study found that young people who misused alcohol had significantly higher rates of both violent and property offences. While in part this association reflected the shared risk factors for alcohol misuse and offending, the findings suggest a cause-and-effect relationship between alcohol misuse and greater risk of offending (Fergusson et al 1996).

Emerging awareness of other groups at risk

The higher risk of alcohol-related problems among young people, Māori and offenders has been known for some time. More recent evidence, however, indicates that not only are some other groups in the population, such as young women and older people, at increased risk, but still other groups face particular challenges in relation to alcohol.

Young women

Evidence suggests that there has been an increase in the prevalence of excessive drinking amongst women, especially young women (Aotearoa Women's Consultancy Group on Alcohol and Other Drugs 1993). There is now a markedly smaller difference between the amount of alcohol consumed by young men and that consumed by young women on a typical occasion. Young women, it appears, may be adopting drinking patterns akin to those of their male counterparts. Consequently, young women are at greater risk of experiencing the alcohol-related problems typically reported by young men (Wyllie et al 1996).

A 1998 national survey found that almost a quarter of women aged 18–19 years who identified themselves as drinkers reported drinking enough to feel drunk at least once a week. The proportion of women who reported feeling drunk once a week in 1998 had increased significantly from 1995 (Field and Casswell 1999a).

Older people

Few reliable data exist on alcohol use amongst older people in New Zealand. According to recent overseas studies, however, one-fifth of older people regularly exceed recommended alcohol consumption limits (National Advisory Committee on Core Health and Disability Support Services 1995; Dent et al 2000).

There are specific features about the way that alcohol interacts with the metabolisms of older people that make this group more vulnerable to its effects. Coupled with the greater use of prescription medicines by senior citizens, such interactive features mean that drinking alcohol at even fairly moderate levels may cause problems for some older people (Khan 1998).

For instance, a significant proportion of injuries to older people result from falls; there is evidence suggesting that heavy alcohol intake among older people leads to a marked increase in falls (Ziring and Adler 1991). The implications of such findings are likely to be greater as New Zealand's population undergoes rapid structural ageing in the decades ahead.

Pacific peoples

Regrettably, there are also large gaps in our knowledge base about Pacific peoples and alcohol. The lack of meaningful data has often hampered efforts to tailor specific strategies for minimising alcohol-related harm, to meet the needs of Pacific communities.

Nevertheless, some information is beginning to emerge. For example, research that recently examined the place of alcohol in the lives of Tokelauan, Fijian, Niuean, Tongan, Cook Island and Samoan people living in New Zealand revealed hazardous drinking patterns amongst those surveyed:

For most of the participants, the concept of being a drinker related to drinking enough to get drunk. The concept of being a non-drinker included people who never drank and people who drink occasionally. This meant there was less scope for an 'in between' kind of drinking; that is, the concept of moderate drinking (Alcohol Advisory Council 1997b).

A 1996/97 health survey found that over half of all Pacific adults reported no alcohol intake in the 12 months prior to the survey. However, among the drinkers, more than a third drank in a manner that put them at risk of future physical or mental health problems. Pacific drinkers (along with Māori) were more likely than other drinkers to have five or more drinks on one occasion (Ministry of Health 1999b).

An earlier study of hospital admissions between 1987 and 1991 found that alcohol and drug abuse or dependence were the most common reasons for the admission of Pacific men, and the third most common reason for the admission of Pacific women (Bathgate et al 1994).

Polydrug users and people with co-existing disorders

People who use more than one drug at a time – for example, people who drink alcohol and take benzodiazepines; or people who drink alcohol and take hallucinogens – often suffer or cause the most serious drug-related harm (Feigelman et al 1998; Marsden et al 2000). The available evidence suggests that alcohol is typically one of the substances consumed in such situations of polydrug use.

For instance, 18% of those sampled in the 1998 National Drug Survey said that their use of cannabis was 'always' combined with alcohol, 16% said that it 'mostly' was, and a further 25% said that it 'sometimes' was (Field and Casswell 1999a).8

There is also an increasing awareness that alcohol abuse or dependence problems often co-occur with other mental health disorders, although the exact prevalence of such 'dual diagnoses' is difficult to estimate (Todd et al 1999). In particular, there is thought to be a significant association between depression and certain patterns of alcohol use, and depression is a leading factor for increased risk of suicide by alcoholics (Murphy and Wetzel 1990). Indeed, the weight of international evidence indicates that heavy drinking is a major risk factor for suicidal ideation, suicide attempts and completed suicide amongst youth and adults (Barraclough 1987; Beautrais 2000; Coggan et al 1997; Ministry of Health 1998b).

High-risk environments and events

Just as some groups are more at risk of alcohol-related harm, so some drinking environments appear riskier than others. Identifying locations in which problems are most likely to occur enables better targeting of strategies to reduce such problems.

Interestingly, the number of respondents who said they solely used alcohol fell from 49% in 1990 to 43% in 1998 (Field and Casswell 1999b).

Licensed venues and other social settings

New Zealanders drink most frequently in their own homes, but research indicates that men drink more heavily in other locations, notably pubs/hotels/taverns, other people's homes, nightclubs and at sports events. Women drink most heavily in nightclubs (Wyllie et al 1996; Dacey 1997).⁹

In line with these consumption trends, there is evidence to suggest a disproportionate number of alcohol-related problems are linked to heavy drinking in licensed premises. Although New Zealand has moved away from the notorious 'booze barns' of the past, studies of drinking environments have found that typically drinking larger amounts of alcohol in hotels, taverns or clubs is a behaviour predictive of alcohol-related problems, including physical ill-effects, fighting, motor vehicle crashes, and absence from work (Casswell et al 1993).

Public events and activities

Large-scale public events where alcohol is available do not always run smoothly. Ineffective management of alcohol at such events, particularly irresponsible serving of alcohol, can be accompanied by highrisk behaviours like drink-driving, and greater risks of disorderly behaviour, property damage and physical violence. There are steps organisers can take at some controlled events – like sporting fixtures, outdoor concerts and some types of New Year's Eve celebrations – that can help to minimise such risks (Alcohol Advisory Council 1999). But there will not always be the opportunity to manage alcohol misuse at such events, certainly not at spontaneous events, so there will always be the potential for trouble when alcohol and large numbers of people are together in one place.

Other activities for which drinking alcohol can be a problem include those linked with the traditional New Zealand summer pursuits of boating and swimming. Increased concern is being expressed about the involvement of alcohol in boating accidents, and each year a number of people drown while swimming after drinking.

Note, however, that this same survey revealed that Māori drank less in their own homes and hardly at all in restaurants. The greater proportion of the alcohol drunk by Māori was consumed at hotels, sports clubs and places of work.

Part Three: Priorities And Outcomes

The *National Drug Policy* identifies five priorities for action on drug problems. Two of the priorities require a reduction in alcohol-related harm. For each of these priorities the *Policy* specifies a number of desired outcomes.

National Drug Policy Priority One:

To enable New Zealanders to increase control over and improve their health by limiting the harms and hazards of alcohol use.

Outcome 1: Government staff and agencies

General acceptance by government staff of harm minimisation as an effective approach to reducing alcohol-related harm; and ongoing co-operation and collaboration amongst agencies involved in alcohol issues.

Outcome 2: Community involvement

Increased involvement of the community and particular subgroups within the community in reducing alcohol-related harm.

Outcome 3: School policies and education

More effective school policies and education in the school setting about healthy attitudes and practices to alcohol use.

Outcome 4: Workplace injury and productivity

Reduction in injury and loss of productivity in the workplace, linked to the use of alcohol.

Outcome 5: Treatment

Improved range, quality and accessibility of treatment options for people with alcohol problems.

Outcome 6: Expertise of health workers

Improved expertise of health workers in the alcohol field.

National Drug Policy Priority Three:

To reduce the hazardous and excessive consumption of alcohol, and the associated injury, violence and other harm, particularly on the roads, in the workplace, in and around drinking environments, and at home.

Outcome 1: Responsible drinking levels

Increase in the proportion of the population who do not exceed maximum responsible drinking levels.

Outcome 2: Alcohol and pregnancy

Reduction in the prevalence of drinking amongst pregnant women and women planning pregnancy.

Outcome 3: Drinking and young people

Reduction in the prevalence of binge drinking and other harmful drinking patterns among young people, including young Māori and young Pacific peoples.

Outcome 4: Alcohol and road crashes

Reduction in the rate of road crashes involving drivers who have consumed alcohol beyond prescribed blood alcohol content levels.

Outcome 5: Māori, alcohol and road crashes

Reduction in the rate of Māori death and injury caused by alcohol-related motor vehicle crashes.

Outcome 6: Alcohol-related crimes

Reduction in the rate of alcohol-related crimes, including criminal assaults and public order offences.

Outcome 7: Alcohol-related drownings and injuries

Reduction in the rate of alcohol-related drownings and alcohol-related injuries.

Part Four: Strategies

Overall approach

Like the *National Drug Policy*, the National Alcohol Strategy recognises that there is a continuum of harm associated with the misuse of alcohol, and that no single approach or set of strategies can adequately address this entire range of alcohol-related harm.

The strategies outlined in this section are of three kinds:

- **supply control** strategies that control the availability of alcohol (for example, regulation and enforcement)
- **demand reduction** strategies that encourage reduced and responsible use of alcohol (for example, education campaigns and the provision of information)
- **problem limitation** strategies that are aimed at reducing the problems stemming from the use of alcohol (for example, provision of treatment services, and initiatives designed to reduce alcohol-related road crashes and fatalities).

Within these broad categorisations, some of the strategies focus on drinkers, and others on the environment in which drinking occurs or where the impact of drinking manifests itself, while still others focus more on alcohol itself. Taken as a whole, the strategies aim to ensure that all types of alcohol-related harm are comprehensively addressed.

Although some of the strategies are specific, in that they address particular harms or particular groups at risk of experiencing harm, others are more general. This mix of strategies reflects the fact that the causes of alcohol-related harm are complex and multiple, and that both broad and specific strategies are needed to ensure that those causes are effectively addressed. For this reason, certain strategies have been included that do not focus specifically on the harm, population group or concern identified in the desired outcomes specified in the *National Drug Policy*. These strategies are, nevertheless, expected to make a significant contribution to the achievement of those outcomes.

By adopting a comprehensive approach, the National Alcohol Strategy seeks to address all significant forms of alcohol-related harm, not just those highlighted by the *National Drug Policy*.

It is also important to note that many of the strategies listed are not new. Some are already in place and known to be effective. While innovation is to be encouraged, it should not be at the expense of worthwhile initiatives being undertaken now, including those being implemented at a community level by committed groups and individuals.

Indeed, resourcing local communities to work on reducing alcohol-related harm can be a potent way to change potentially harmful attitudes and behaviours around alcohol. The community development approach, as outlined in the *Ottawa Charter for Health Promotion* (1986), and built upon by the *Jakarta Declaration on Health Promotion into the 21st Century* (1996), can be used to empower local communities to tackle alcohol issues in ways that suit their particular physical, social and cultural environment. Moreover, community development projects that seek to empower local communities, build skills and capacity, and strengthen social networks, can also lead to unintended or 'knock on' benefits, such as a decrease in some types of alcohol-related problems.

As such, the strategies detailed in this section recognise that communities need to be able to address alcohol issues at a local level, and they seek to support communities in doing so.

Finally, the strategies outlined in this part are not described in detail. This reflects the intention behind the strategies, which is to guide action, not to prescribe it.

The Treaty of Waitangi

Beyond this general approach to minimising alcohol-related harm, the National Alcohol Strategy also recognises the Crown's obligations arising from the Treaty of Waitangi.

In broad terms, Article One of the Treaty (Kawanatanga) places responsibility on government to protect the health of Māori; Article Two (Tino Rangatiratanga) provides for Māori to exercise authority in the development and delivery of initiatives designed to improve their health and Article Three (Oritetanga) requires that Māori be given the opportunity to enjoy a health status at least as good as that enjoyed by non-Māori.

Specific strategies for addressing alcohol-related harm experienced by Māori are threaded through the different groups of strategies outlined in this part.

Principles

The following principles underpin the strategies, and reflect the Crown's obligations under the Treaty. While each principle is important in its own right, one principle may sometimes be in conflict with another. A demand reduction approach proven to be 'effective', for example, may not be 'efficient'. Taken as a whole, however, the strategies aim to reflect a balanced application of the different principles.

Appropriateness

Appropriateness involves the development of strategies that are consistent with people's culture, values and behaviour. Appropriateness also means the development of strategies that are consistent with Māori norms, values and beliefs, and that recognise diverse Māori realities.

Effectiveness

Effectiveness is achieved by employing strategies most likely to reduce harm caused by the misuse of alcohol. Effective strategies include those that are targeted, employ evidence-based practice, and have been soundly evaluated. Effectiveness also means using strategies likely to result in a tangible reduction in alcohol-related harm to Māori.

Efficiency

Efficiency recognises that resources are limited and that choices have to be made. Making choices involves a careful examination of the relative costs and benefits of interventions, and attention to where research or evidence indicates that harm can be most effectively reduced with available resources. Efficiency for Māori may involve culturally-specific interpretations of costs and benefits.

Empowerment

Empowerment involves resourcing people to assume greater control over their health. Empowerment for Māori is achieved by Māori being resourced to reduce alcohol-related harm through their own efforts.

Equity

Equity means fairness. It means directing more resources to the areas of greatest need in order that no one group suffers a disproportionate amount of alcohol-related harm. Equity means giving priority to reducing the disproportionate levels of alcohol-related harm experienced by Māori.

Innovation

Innovation recognises that problems are constantly changing. Harm minimisation strategies need to be innovative and responsive to that change. Innovation recognises also that conventional approaches are sometimes no longer sufficient, and that new approaches are needed to tackle old problems.

Innovation also means recognising the value of strategies to reduce harm that have been developed by Māori for Māori.

Working together

Responding well to alcohol issues requires a co-ordinated approach involving a range of participants. Collaboration by health workers in government and non-government agencies, the alcohol and hospitality industries, community groups and individuals is essential to the development, implementation and monitoring of effective strategies. Working together also means ensuring that Māori are involved at all levels in deciding, developing, implementing and evaluating strategies to minimise alcohol-related harm.

Supply control strategies

Supply control strategies attempt to reduce alcohol-related harm by placing restrictions on the availability of alcohol. Whereas in the past, controlling supply was often seen as the best way of minimising harm, more recently supply control strategies have been considered most effective when adopted in conjunction with demand reduction strategies and problem limitation initiatives.

Legislation

Access to alcohol has long been controlled by legislation in New Zealand (Dormer et al 1990; Hill and Stewart 1998). The Sale of Liquor Act 1989 is the primary legislation dealing with issues surrounding the sale, purchase and consumption of alcohol. The primary objective of the Act is:

To establish a reasonable system of control over the sale and supply of liquor to the public with the aim of contributing to the reduction of liquor abuse, so far as that can be achieved by legislative means.

While the purpose of the Act is straightforward and centres on establishing a system of control over the sale and supply of alcohol, the provisions of the Act have not always been well understood, nor enforced to an extent sufficient to ensure their optimal effect.

It is thus important that the good intentions of licensees and host responsibility training are given appropriate backing. Moreover, it has been found that areas in which the licensing inspector, licensing sergeant and public health officer work closely together as a team, are associated with 'rationalisation of effort and resources, more routine inspections, a greater focus on host responsibility practices, a proactive approach with licensees and a united response to incidents or poorly managed premises' (Hill and Stewart 1996).

The Resource Management Act 1991 also has a potential role to play in controlling the availability of alcohol in New Zealand. One aim of the Act is to minimise the adverse effects of land use. A Certificate

of Compliance issued under the Act is required before an application under the Sale of Liquor Act can proceed. The Certificate ensures that the proposed use of the land meets the requirements of the Resource Management Act, and that any conditions or restrictions on that use are made explicit.

The Resource Management Act is administered by local authorities. District Licensing Agencies (DLAs) set up under the Sale of Liquor Act are also part of local authorities, but they are not empowered to determine Resource Management Act issues, and their statutory role and licensing criteria are closely governed by the Sale of Liquor Act. Hence, in granting licences, currently DLAs or the central Liquor Licensing Authority may only consider neighbouring land use in relation to setting hours of trade.

Objectives: legislation	Supply control strategies
Ensure that the provisions of the Sale of Liquor Act 1989 are well understood.	1.1 Provide clear, comprehensible information on the provisions of the Act to members of the public, alcohol retailers, the hospitality industry, and agencies/officials responsible for administering it.
Improve monitoring of compliance with the Sale of Liquor Act by licensees and their employees.	2.1 Support the establishment and/or maintenance of intersectoral groups at a local level to monitor compliance with the Sale of Liquor Act.
Ensure the provisions of the Sale of Liquor Act are effectively and consistently enforced.	3.1 Actively enforce the minimum legal age for the purchase, sale and consumption of alcohol on and from licensed premises, and for the consumption of alcohol in public places.
	3.2 Ensure adherence to a 'no card – no service' policy for young drinkers.
	3.3 Actively enforce measures aimed at discouraging promotions on licensed premises that encourage excessive or otherwise irresponsible drinking.
	3.4 Actively enforce provisions in the Act relating to the sale and supply of alcohol to intoxicated persons.
	3.5 Encourage, where applicable, the issuing of infringement notices for offences under the Act.
	3.6 Actively publicise the provisions of the Act relating to purchase on behalf of, or supply to, underage drinkers (other than by a parent or legal guardian).
	3.7 Ensure effective and consistent sanctioning of those violating the provisions of the Act.
Gather information on the impact of the changes introduced by the	4.1 Support research on the impact of a reduced legal drinking age on alcohol-related harm.
1999 amendments to the Sale of Liquor Act on alcohol-related harm.	4.2 Support research on the impact of the increased availability of alcohol on alcohol-related harm.
	4.3 Support research on the administration of the licensing system, following further devolution of decision-making power to District Licensing Agencies.

Objectives: legislation	Supply control strategies
5. Encourage local bodies to better address alcohol issues by effective use of legislation, bylaws, policies and plans.	 5.1 Encourage local authorities to address alcohol issues via the development of comprehensive local alcohol policies. 5.2 Encourage better co-ordination between planners and District Licensing Agencies on alcohol issues. 5.3 Encourage local authorities to consider the appropriate location of licensed venues and retail alcohol outlets in their District Plans. 5.4 Encourage local authorities to make the sale of liquor a notifiable land use, so that the likely impacts of licensed premises on particular sites may be considered. 5.5 Encourage local authorities to support strategies for minimising alcohol-related harm, which have been developed by Māori community service providers and marae-based committees.

Demand reduction strategies

Demand reduction strategies are designed to prevent alcohol-related harm from occurring by ensuring that those who choose to drink do so in a responsible manner.

Such strategies include providing accurate information on the effects of alcohol, and developing education programmes to encourage moderation in the use of alcohol.

Demand reduction strategies also include taking initiatives to encourage the responsible promotion of alcohol in both on- and off-licence premises, monitoring new marketing strategies (particularly those targeting youth), and using different tax levers to vary or maintain the price of alcohol products relative to the price of other consumer products.

Information

People need reliable information to develop the knowledge and skills they require to make responsible decisions about their use or non-use of alcohol. They need to know, for example, what effects it will have on their health and behaviour, and how much they can responsibly drink under what circumstances. Furthermore, those who decide not to drink should feel comfortable in the knowledge that this is an acceptable option.

Objectives: information	Demand reduction strategies
6. Increase knowledge about risk factors associated with alcohol.	 6.1 Provide clear and accurate information about alcohol and its effects. 6.2 Widely disseminate the nationally agreed upper limits for responsible drinking. 6.3 Make information available in a wide variety of settings and through a range of media (eg, Internet). 6.4 Convey information in ways that reflect the needs and realities of the audiences being targeted. 6.5 Promote public discussion and debate about the place of alcohol in New Zealand society, and the best ways of minimising alcohol-related harm.
7. Provide consumers with accurate and clear information on alcoholic drink containers.	 7.1 Introduce standard drinks labelling. 7.2 Increase public awareness and understanding of the standard drinks concept. 7.3 Support further examination of the benefits and costs of including additional product information on alcoholic drink containers (eg, health warnings).
Make moderate use (including low alcohol use and non-use) viable and attractive options.	8.1 Promote more strenuously the non-use option, the use of lower-alcohol products, and the importance of eating food with alcohol.8.2 Continue moderation advertising.

Targeted health promotion

Two principles that underpin this National Alcohol Strategy are 'appropriateness' and 'empowerment'. To be appropriate, strategies must be consistent with people's cultures, realities and behaviours. One strategy will not be equally effective for all. For strategies to be empowering, those people who are targeted must have some input into the design of those strategies. Different groups will address alcohol-related harm in different ways, and will identify different priorities for action.

Health promotion is animated by these ideas of appropriateness and empowerment. In helping people to change their lifestyles and move towards a state of optimal health, health promotion initiatives will often be targeted at particular groups within the general population, seeking to facilitate lifestyle change through a combination of efforts to enhance awareness, change behaviours, and create environments that support health.

Youth

Alcohol is readily accessible to people who are under the minimum age for legally purchasing alcohol and who are particularly vulnerable to its effects. Although young people today are probably better educated about alcohol and the problems associated with its misuse than previous generations were, they still feature disproportionately in the statistics that measure alcohol-related harm. Moreover, while it has been found that more youth are abstaining from alcohol, those who do drink appear to be consuming more in binges.¹⁰

The Alcohol Advisory Council defines 'binge drinking' as drinking five or more glasses on one drinking occasion. This is in line with standard international definitions of binge drinking: refer to Substance Abuse and Mental Health Administration 1996; Schulenberg et al 1996.

A common response to such trends is to opt for classroom-based drug education. However, concerns have been raised about the effectiveness of information strategies focused solely on school settings. Various researchers have noted that most individually focused alcohol education programmes have a limited, unsustainable impact on students, and disproportionately use up scarce resources (Wysong et al 1994; Mosher 1996; Wood 1997). A large number of studies and reviews recommend instead that schools adopt a more holistic approach, promoting a more integrated range of strategies addressing school policies, a broad health curriculum with alcohol education sessions, peer support services such as Students against Driving Drunk (SADD), work with parents, and community action (Alcohol and Public Health Research Unit 1999).

Broadly speaking, the international health promotion literature indicates that education on its own is not cost-effective, especially those programmes aimed at young people (Wagenaar and Perry 1992; Perry et al 1996). However, there are still examples of promising curriculum-based programmes that take an explicit harm minimisation approach (McBride et al 2000). Instead, there seems to be more support for community-based approaches that simultaneously focus on schools, parents and the wider community; and that allow young people themselves to play a key role in the design and delivery of interventions.

Embedding health promotion initiatives in this wider framework also takes account of the fact that a significant number of young people are not actually in school, for a variety of reasons. In order to reach these out-of-school youth, programmes targeting young people must be offered not only in their general community, but also through youth-specific media, as well as through new information technologies such as the Internet.

Objective: youth	Demand reduction strategies
Reduce the level and likelihood of alcohol-related harm amongst young people.	9.1 Provide clear, accurate and relevant information to young people, their parents and other caregivers, about the effects of alcohol and the harm caused by its inappropriate use.
	9.2 Provide information to young people, their parents and others about assistance for young people who are experiencing drinking problems.
	9.3 Ensure information for young people is appropriately presented, available in a wide variety of settings and through a range of media.
	9.4 Ensure young people are routinely consulted on the development of information-based strategies around alcohol.
	9.5 Promote and support effective programmes and policies in schools that make best use of current knowledge about how to address the decision of whether to drink, and about responsible use of alcohol.
	9.6 Support groups that are shown to deliver effective peer-education on the responsible use of alcohol.
	9.7 Promote and support programmes that assist young people to develop skills to manage drinking situations, and actively involve young people in the planning and delivery of such programmes.
	9.8 Work towards changing the prevailing climate of acceptance of binge drinking by young people.

Objective: youth	Demand reduction strategies	
	9.9 Promote and support the development of community-based initiatives designed to reduce alcohol-related problems amongst young people.	
	9.10 Ensure that young people are engaged in the design and implementation of community-based programmes to reduce alcohol-related harm.	
	9.11 Support research on the ways that young people access alcohol.	
	9.12 Investigate the establishment of a national advisory committee to provide leadership in the development and delivery of programmes targeting young people's use of alcohol.	

Young men

Research continues to show that young men are the most likely to drink in a manner that puts them at high risk of alcohol-related harm. Although this is not a new problem, it is important that resources, energy and innovative thinking are invested in the development and implementation of strategies to minimise the level and likelihood of alcohol-related harm amongst this group of drinkers who are most at risk.

Objective: young men	Demand reduction strategies
Reduce the level and likelihood of alcohol-related harm amongst young men.	 10.1 Encourage the delayed onset of drinking by young men. 10.2 Work towards changing the prevailing climate of acceptance of heavy drinking by young men. 10.3 Include youth-specific media in strategies to disseminate information on alcohol to young men. 10.4 Promote and support effective male-specific programmes to reduce alcohol-related harm.

Young women

Women's changing drinking patterns are the result of a complex interplay of social and economic forces. An increased proportion of women in employment, changing ideas of gender and family responsibilities, and targeted marketing strategies have led to the trend whereby young women today drink substantially more than young women one or two generations ago.

There is evidence that it is more difficult for women to admit problems with their drinking than it is for men (Gray and Norton 1998). Furthermore, based on previous New Zealand studies it seems that because of their beliefs about 'problem drinking', many women do not realise that the amount of drinking that they regard as 'ordinary' is above generally accepted responsible limits (Park 1991).

Given the growing evidence of the dangers of drinking while pregnant, it is important that women, particularly young women, are well informed about responsible drinking and the possible harmful effects of excessive alcohol consumption.

Objective: young women	Demand reduction strategies
Reduce the level and likelihood of alcohol-related harm amongst young women.	11.1 Encourage a delay in the onset of drinking by young women.
	11.2 Widely promote responsible drinking guidelines for women.
	11.3 Ensure that clear and accurate information on the effects of alcohol on women is made available to health professionals.
	11.4 Develop and actively disseminate information about alcohol and pregnancy to young women, including culturally appropriate information for young Māori and Pacific women.
	11.5 Ensure that young women's drinking is not overlooked in media campaigns designed to reduce alcohol-related harm.
	11.6 Include the use of youth-specific media in strategies to disseminate information on alcohol to young women.

Older people

Like younger people, older people are vulnerable to alcohol problems. They are more prone to the adverse effects of alcohol because they are more strongly affected by it than those in middle age. Older people are also more prone to adverse interactions between alcohol and the medication they may be taking. Moreover, life situations commonly experienced by older persons, such as loneliness and bereavement and other losses, may increase the likelihood that they will seek consolation from alcohol.

Objective: older people	Demand reduction strategies
12. Reduce the likelihood of alcohol- related harm amongst older people.	12.1 Make information readily available to older people about the effects of alcohol, and about responsible drinking practices.
	12.2 Ensure all health and social service professionals and volunteers providing services to older people are well informed about the effects of alcohol on older people, and about lower-risk drinking practices.
	12.3 Ensure information on the effects of alcohol, and on lower-risk drinking practices, is readily available to the families, relatives and friends of older people.
	12.4 Ensure information about assistance for older people experiencing drinking problems is readily available to older people, their families and health and social service professionals.

Māori

There is evidence that Māori drinking patterns are different in some respects from those of other New Zealanders. Differences in drinking patterns, cultural values and social practices mean that specifically developed and targeted strategies are needed to reduce alcohol-related harm amongst Māori.

Objective: Māori	Demand reduction strategies
13. Reduce the likelihood and level of alcohol-related harm amongst Māori.	13.1 Resource Māori community development initiatives as a way of reducing alcohol-related harm.
	13.2 Foster the development of kaupapa Māori alcohol and drug services, especially in those Māori communities that do not have such services.
	13.3 Support the further development and delivery of Maanaki Tangata and other health promotion programmes designed by Māori for Māori.
	13.4 Support the development of appropriate advertising and other marketing strategies for Māori to promote both moderation in the use of alcohol and the non-use option.
	13.5 Ensure all initiatives for age-related alcohol health promotion, especially those targeting youth and older people, also address the needs of Māori.
	13.6 Support the work of Māori wardens in the reduction of risky drinking practices by Māori.
	13.7 Ensure Māori communities are involved fully in developing policies on alcohol, including control/regulation, education, treatment and research.
	13.8 Improve linkages between Māori communities and statutory agencies to ensure co-ordinated and integrated planning, and to avoid the separation of alcohol-related initiatives from other social and health-related initiatives.

Pacific peoples

Pacific cultures emphasise the importance of the group over the individual. They encourage generosity and the provision of abundant food and drink. Health promotion strategies such as host responsibility, based as they are on a concept of moderation, may meet with limited success amongst people for whom generosity is paramount. Effective strategies for a reduction in alcohol-related harm amongst Pacific peoples will be different from other approaches, and may need to draw on values and influences such as the role of the church in Pacific communities, and the importance placed on genealogy (Alcohol Advisory Council of NZ 1997b; Ministry of Pacific Island Affairs 1999).

Objective: Pacific peoples	Demand reduction strategies
 Reduce the likelihood and level of alcohol-related harm amongst Pacific peoples. 	14.1 Support policy-relevant research on the place of alcohol in the lives of Pacific peoples in order to establish accurate baseline data.
	14.2 Resource the development and implementation of alcohol-related programmes by Pacific peoples for Pacific peoples.
	14.3 Develop alcohol-related information resources in different Pacific languages.
	14.4 Ensure all initiatives for age-related alcohol health promotion, especially those targeting youth (eg, school-based drug education programmes), also address the needs of Pacific peoples.
	14.5 Explore and utilise existing cultural structures, mechanisms and channels of communication to promote responsible use of alcohol amongst Pacific peoples.
	14.6 Ensure Pacific peoples are involved in developing policies on alcohol, including control and regulation, education, treatment and research.
	14.7 Improve linkages between Pacific communities and statutory and non-statutory agencies (eg, churches), to ensure co-ordinated and integrated planning for minimising alcohol-related harm.

Minority groups

There are indications that members of some minority groups are at greater risk of alcohol-related harm than the population as a whole.

Although the evidence is mixed, some sources suggest that gay, lesbian, bisexual and transgender people, especially younger members of these communities, are at greater risk of alcohol-related harm than other people (Smith et al 1999; Fergusson et al 1999; MacEwan and Kinder 1991; MacEwan 1994; Heffernan 1998).¹¹

Also, new arrivals from other countries, especially those from countries where alcohol is not widely used, may be at greater risk. This vulnerability exists for short-term tourists to New Zealand, as well as for people who are emigrating to New Zealand to live.

Strategies aimed at reducing alcohol-related harm amongst members of minority groups need to recognise and be in tune with the different life experiences and realities of the members of these groups.

¹¹ There are also several useful papers on substance use in the conference proceedings of *Health in Difference: First national lesbian, gay, transgender and bisexual health conference* (University of Sydney, 2–5 October 1996).

Objectives: minority groups	Demand reduction strategies
15. Reduce the likelihood of alcohol- related harm among gay, lesbian, bisexual and transgender people.	15.1 Incorporate information on the effects of alcohol and on responsible drinking practices in queer health initiatives, and via gay and lesbian media.
	15.2 Promote community activities for gay, lesbian, bisexual and transgender people that are not oriented around drinking alcohol.
	15.3 Ensure that alcohol-related health promotion strategies for men and women address the needs of people who are same-sex-attracted.
	15.4 Ensure initiatives for all alcohol health promotion for young people address the needs of same-sex-attracted youth.
16. Reduce the likelihood of alcohol- related harm among tourists to New Zealand, and people recently settled in New Zealand.	16.1 Ensure people visiting or settling in New Zealand are informed about the effects of alcohol, responsible drinking practices, and legislation governing alcohol in this country (eg, drink driving limits, minimum legal drinking age).
	16.2 Ensure new arrivals receive information about assistance for those experiencing drinking problems.
	16.3 Ensure members of minority groups are involved in the design and delivery of initiatives to prevent and reduce alcohol-related harm amongst members of their communities.
	16.4 Support research on the drinking patterns and practices of tourists and those recently settled in New Zealand.

Responsible marketing

Unlike most food and other drinks that are sold freely over the counter, alcohol has the capacity to alter mood, thought and behaviour. For these reasons, it is important that alcohol is marketed responsibly, and with a clear appreciation of its potential for harm.

Alcohol marketing encompasses a wide variety of strategies designed to: maintain or increase the frequency with which alcohol is purchased; attract new customers; and improve market share. Examples of such strategies include (but are not limited to): advertising; sponsorship of sports, cultural and social events; on-licence point-of-sale promotions, such as 'happy hours'; the use of loss-leaders in off-licence outlets; merchandising, such as the sale of branded clothing; new products, like 'alcopops'; and the use of new distribution modes, such as the Internet and vending machines.

Of the various marketing strategies, advertising has received the most attention. Although previously absent from television and radio, alcohol brand advertising was introduced in 1992, and now has an established presence in these broadcast media.

Alcohol advertising in New Zealand is covered by the Advertising Standards Authority (ASA) and the Broadcasting Standards Authority (BSA), which operate formal codes of practice, backed by systems for addressing any complaints made under the codes. In addition, the Liquor Advertising Pre-vetting System (LAPS) exercises some control over the way alcohol is promoted in the media, offering a 'front-end' checking system.

Whether alcohol advertising increases consumption (either in aggregate or in specific cohorts), or whether it simply influences brand allegiance, is unclear. In the absence of convincing evidence that alcohol advertising does not increase consumption, however, particularly in certain market segments, a cautious approach to advertising is required.

Objectives: responsible marketing	Demand reduction strategies
17. Ensure that alcohol advertising/ sponsorship conforms to the relevant codes of practice.	 17.1 Require regular independent reviews of the ASA and BSA codes of practice and procedures governing alcohol advertising and sponsorship. 17.2 Ensure reviews of alcohol advertising include the consideration of evidence about the possible need for
	tighter controls on such advertising. 17.3 Support the continuation of the LAPS Committee.
Minimise the exposure of young people to alcohol marketing	18.1 Resist any relaxation of the broadcast time constraints on alcohol advertising.
messages.	18.2 Advocate against new sales and distribution strategies that are difficult to police and have the potential to increase underage drinking.
	18.3 Monitor compliance with the National Guidelines on the Naming, Packaging and Merchandising of Alcoholic Beverages (ALAC 2000), especially regarding the responsible marketing of 'alcopops' and related products.
19. Minimise the use of marketing strategies that may cause or contribute to alcohol-related harm.	19.1 Advocate against the use of aggressive pricing strategies, including loss-leader strategies, aimed at attracting new customers.
	19.2 Monitor compliance with the <i>National Protocol on Alcohol Promotions</i> , (Hospitality Association of New Zealand et al 2000) regarding the responsible use of point-of-sale marketing techniques (eg, 'happy hours', half-priced drinks).
	19.3 Commission research to determine the impact of point-of-sale alcohol promotions on alcohol consumption.
	19.4 Consider alternative sponsorship sources for current alcohol-sponsored sporting events.
20. Ensure that any new detrimental alcohol marketing strategies are identified early, and do not become established in New Zealand.	20.1 Establish a body to monitor new alcohol marketing and sales strategies and provide advice on their likely effects on alcohol consumption, including consumption by underage drinkers.

Taxation

Within the range of factors that determine how people use alcohol, price is an important influence, both on total alcohol consumption and individual drinking patterns.

The effect of price changes on alcohol consumption has been extensively investigated (Wette et al 1993; Edwards et al 1994; Lehto 1995; Godfrey 1997; Ponicki et al 1997). Research has consistently shown that, all other factors being equal, a rise in price leads to a drop in consumption, and a decrease in price leads to a rise in consumption. There are, however, differences in the degree to which these typical patterns hold true: there is greater price sensitivity to some beverages than to others (Grossman et al 1994) and some groups in the population, such as young people, appear to be more sensitive to price changes than the population as a whole (Zhang and Casswell 1999).

Some critics have suggested that the heaviest drinkers are not very sensitive to price, and that this undermines the ability to use taxes to influence their drinking behaviour. However, it has been demonstrated that significantly raising the price of alcohol does in fact lead to a decrease in consumption by excessive drinkers (Hawks 1993). Indeed, one classic study found that during a period of economic recession, it was the heavier drinkers who reduced their alcohol consumption more than any other group within the population (Kendell et al 1983).

Building from these research findings, taxation has been widely used as an instrument to vary the price of alcoholic drinks.

Broadly speaking, excise tax is imposed on alcohol to:

- offset the external costs of alcohol misuse. Alcohol imposes costs (such as those associated with death and injuries on the roads, increased health care, violence, and lost productivity) on the community, which drinkers do not pay. An excise tax on alcohol helps to compensate for these negative externalites
- reduce harm. A review of evidence indicates that proportionately higher alcohol prices (and taxes) are associated with fewer alcohol-related problems. Separate studies have shown small, but statistically significant, reductions in drink-driving, suicide deaths, cancer, homicides, rapes and assaults when alcohol prices have been raised through taxation (Kenkel and Manning 1996; Chikritzhs et al 1999).

In terms of excise loading, currently the alcohol in beer and wine is taxed at a considerably lower rate than is the alcohol in spirits. As it is the alcohol component of the beverage that is responsible for alcohol-related harms, some have suggested that a more equitable form of excise might be one based on alcohol content rather than on beverage type. To this end, officials at The Treasury have observed that:

An increase in excise on beer and wine and a reduction in that on spirits, so that the excise rate on all beverages were equalised and overall revenue were unchanged, would increase overall welfare (Hall 1997; Crosbie et al 2000).

It should be noted, however, that from a public health perspective, it is the final cost to the consumer of different beverages that will be the critical factor, rather than their excise loadings. This final cost, in turn, will be influenced by the price relativities of alcohol when judged against a consumer's disposable income and overall purchasing power. Recognition of this fact has led public health advocates to argue that excise tax should be indexed to the rate of inflation, thereby maintaining the relative price of alcohol.

Objective: taxation	Demand reduction strategies
21. Develop a comprehensive taxation policy on alcohol to discourage excessive use, and recoup some of the external costs caused by the misuse of alcohol.	 21.1 Retain an inflation-indexed excise tax on alcohol. 21.2 Investigate the adoption of an excise tax based on alcohol content, rather than beverage type. 21.3 Retain a specific levy on alcohol to fund work by the Alcohol Advisory Council of New Zealand.

Problem limitation strategies

The notion of problem limitation accepts that alcohol is a part of many people's lives, and that strategies are needed to minimise problems that can result from its misuse.

Problem limitation involves encouraging those who serve alcohol to do so responsibly. It also means taking steps to ensure that drinking environments, especially those linked with alcohol-related harm, are made as problem-free as they can be.

Importantly, problem limitation strategies also include the provision of treatment. Even with effective strategies for supply control and demand reduction in place, some people will always require help to manage problems that are associated with their drinking.¹²

Environments

Licensed venues and other social settings

The development of low-risk drinking environments requires, in particular, responsible serving of alcohol, whether on licensed or private premises, to avoid alcohol problems amongst customers or guests. Responsible serving aims to prevent over-consumption and to reduce the incidence of intoxication and its associated problems.

The five requirements of being a responsible host are:

- · providing and promoting substantial food
- · providing and promoting non-alcoholic and low alcohol beverages
- serving alcohol with care and responsibility
- identifying, and responsibly dealing with, intoxicated and underage drinkers
- arranging safe transport options.

Given that many licensed premises provide both alcohol and gaming opportunities, there is also an increasing awareness of the need to incorporate host responsibility principles and practices around gambling, as well as alcohol, in these environments.

¹² It is important to note, however, that the majority of people who misuse alcohol or are alcohol dependent do not seek help for their drinking problems: see Hornblow et al 1990. A key challenge in the treatment field is thus exploring opportunities for early intervention with such people, in forms that do not require individuals to come into a traditional treatment setting.

Objectives: licensed and social settings	Problem limitation strategies
22. Encourage the development of licensed premises as places where alcohol can be consumed	22.1 Continue to promote initiatives, such as host responsibility, which are designed to reduce alcohol-related problems on licensed premises.
responsibly.	22.2 Display information for patrons in all licensed premises that explains host responsibility and outlines responsible drinking practices.
	22.3 Promote the availability of low alcohol and non-alcoholic drinks, and encourage licensees to price such drinks in a way that reflects their lower cost to the licensees.
23. Ensure that licensees and managers understand and implement the principles of host responsibility.	23.1 Refine targeted training packages to assist and encourage the implementation of host responsibility practices.
	23.2 Continue to require that those applying for new or renewed licences have a written host responsibility policy, which includes provisions for ongoing training of staff.
	23.3 Ensure staff of licensed premises are trained to manage alcohol-related problems that may occur, especially those likely to result from intoxication.
	23.4 Encourage the inclusion of more comprehensive host responsibility principles and practices in licensed premises that provide alcohol and gaming opportunities.
24. Encourage host responsibility in homes and other social settings.	24.1 Increase awareness of host responsibility among members of the public, and promote its importance for those who are hosting a private function.

Workplaces

People whose drinking affects their work can jeopardise both their own safety and productivity, and the safety and productivity of others.

Legislation such as the Health and Safety in Employment Act 1992 makes employers responsible for providing a safe working environment. That means doing as much as possible to reduce the risk of accident and injury.

Effective workplace programmes aimed at reducing alcohol-related harm are likely to include the development of workplace alcohol policies, employee education and employee assistance programmes (EAP). In some workplaces, such as those where workers use heavy machinery or where public safety is at stake, testing for alcohol may also need to be considered.

Objective: workplaces	Problem limitation strategies
25. Reduce alcohol-related harm in the workplace.	25.1 Develop and promote workplace alcohol policies that incorporate host responsibility principles and practices.
	25.2 Educate employers and employees about the effects of alcohol, including 'day after' effects of heavy drinking on work performance and safety.
	25.3 Develop and promote policies for the effective management of alcohol-related problems in the workplace (eg, intoxication and alcohol-related accidents, absenteeism).
	25.4 Promote the use of EAP programmes as a way to help employees with alcohol-related problems.
	25.5 Investigate the desirability of using alcohol testing in workplaces where the safety of workers and the public is at stake.
	25.6 Investigate the introduction of reduced ACC or insurance levies for industries and organisations with approved alcohol policies in place.
	25.7 Support research into the extent of alcohol-related problems in New Zealand workplaces.

Public places

Throughout the year, but particularly in late December to early January, media around the country typically carry reports of outdoor events marred by drunken violence and vandalism. Many people choose to celebrate traditional festivals outside when the weather is good. However, the harm associated with large quantities of alcohol being quickly consumed, often by young people in unsupervised settings, can be significant.

Indeed, it was a recognition of these types of seasonal problems that lay behind the Local Government Amendment Act (No 4) 1999. This Act strengthened the power of local authorities to prohibit the consumption or possession of alcohol in public places on specified days.

As well as traditional festive occasions, more organised events such as sports fixtures and open-air concerts are frequently the sites of problems resulting from excessive consumption of alcohol. Sporting events, in particular cricket matches, have often been the scene of disruptive and dangerous behaviour by people who have had too much to drink.

Quite apart from large scale public events, problems can arise when individuals or small groups drink in public places. The 1995 National Alcohol Survey found that outdoor public places were the third most popular drinking venue for those aged 14–17 years (Wyllie et al 1996).

There are also concerns about individuals or small groups who drink outside as part of other recreational activities, and for whom the effects of alcohol may be compounded by their exposure to the sun all day. As mentioned in Part Two, more and more evidence is beginning to emerge about the role of alcohol in drownings, and questions are increasingly being asked about the involvement of alcohol in boating accidents (Smith et al 1993; Warner et al 2000).

Objectives: public places	Problem limitation strategies
26. Reduce alcohol-related harm at organised public events such as sporting fixtures and concerts.	26.1 Educate event organisers on how to manage the availability and use of alcohol, and the problems that may arise from its misuse, at organised public events.
	26.2 Support the implementation of guidelines on <i>Managing a Successful Public Event</i> , to help reduce alcohol-related problems at public events.
	26.3 Encourage interagency planning for major public events that involve the use or sale of alcohol.
	26.4 Support and promote alcohol-free events.
	26.5 Develop host responsibility guidelines for events with special licences.
27. Reduce alcohol-related harm at informal and/or unplanned public events.	27.1 Raise awareness of local authorities' power to set conditions around the possession and use of alcohol in public places.
	27.2 Provide guidelines for managing alcohol-related problems that may occur at unplanned events.
28. Raise public awareness of the dangers of combining alcohol with water-based recreational activities.	28.1 Educate the public about the dangers of drinking alcohol before and while swimming or boating.
	28.2 Investigate ways to enhance the powers of regional and local bodies to better manage the use of alcohol during water-based public events.

Roads

Although alcohol-related fatalities and crashes on the roads have been significantly reduced in recent years, there is still more to be done. A national strategy to reduce alcohol-related harm cannot overlook the personal, social and economic costs of drinking and driving.

Objective: roads	Problem limitation strategies
29. Further reduce the incidence of alcohol-impaired driving.	 29.1 Increase the frequency of compulsory breath testing. 29.2 Actively promote initiatives designed to reduce alcoholimpaired driving (eg, designated drivers, the availability of public transport options). 29.3 Increase the emphasis on addressing drinking and driving in known areas of high risk, such as rural roads. 29.4 Develop targeted strategies to reduce alcohol-related road crashes amongst Māori. 29.5 Improve strategies for dealing with repeat drinking drivers, and those with very high breath and/or blood alcohol concentrations. 29.6 Continue to monitor international evidence on different legal limits for breath/blood alcohol levels when driving vehicles, and assess the relevance of such evidence for New Zealand.

Treatment

Regardless of what general strategies are in place to minimise alcohol-related harm, some individuals will require help for problems associated with their drinking.

The treatment of alcohol problems has evolved over time. The recent development of more accurate assessment techniques and specialised treatment programmes has enabled those involved in this area to improve the effectiveness of their services. Pharmacological interventions for the treatment of alcohol problems, such as the use of Naltrexone and Acamprosate, are also showing real promise (Hoes 1999; Garbutt et al 1999 and Anton et al 1999).

The benefits of treatment, both to individuals having difficulties with their drinking and to the wider community, are well established (Some of the most recent studies are Hoes 1999; Garbutt et al 1999; and Anton et al 1999). One of the most widely quoted statistics is that every dollar spent on treatment generates seven dollars' worth of 'downstream' savings, primarily through the health care and criminal justice systems (Holder et al 1996; Gossop et al 1998).

An important advance in recent times has been the recognition that there are different degrees of drinking problems (see Figure 9 below). No one kind of treatment is able, nor should it be used, to respond to them all. A range of responses needs to be offered.

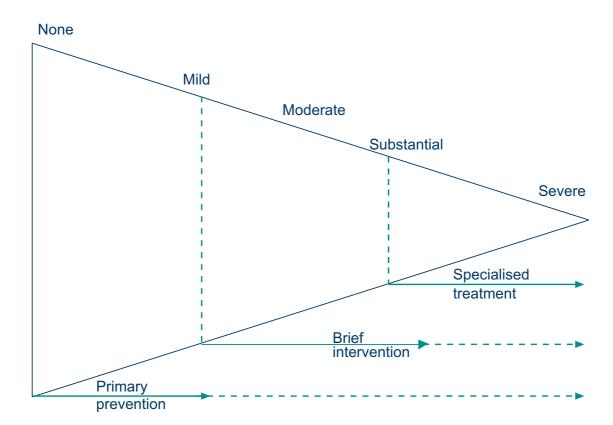


Figure 9: Alcohol-related problems and associated responses

Source: Institute of Medicine 1990.

While to some extent a range of treatments already exists, further development is required, especially in the delivery of brief interventions to those experiencing problems that are at an early stage (Powell et al 1996; Adams et al 1997 and McCormick et al 1999). In this regard, the National Health Committee's *Guidelines for Recognising, Assessing and Treating Alcohol and Cannabis Abuse in Primary Care* offer a valuable tool for frontline workers, and efforts must now be directed at implementing the *Guidelines* (National Health Committee 1999).

A key challenge will be to deliver the required range of interventions coherently, and in a manner that ensures both adequacy of coverage and a high quality of service.

Another important development has been the move to take the stigma out of getting treatment for alcohol problems. It has been commented that, in much the same way as dental checks are seen as a normal part of life, more needs to be done to ensure that screening for alcohol problems becomes a part of standard health care delivery (MacEwen 1999; National Health Committee 1999).

The increased awareness that drinking problems manifest themselves in a variety of ways and contexts indicates that there is a need to train people across a range of disciplines to recognise and respond to these problems. Frontline workers in health, justice and social services need to be alert to early indications of drinking problems amongst their clients, and to be aware of how to intervene appropriately. For an example taken from general medical practice, refer to Paton-Simpson et al 2000. In addition, it is essential that there exists an effectively trained, specialist workforce to provide back-up support for those at the front line, and to treat any drinkers who present with serious problems.

Research has identified a number of groups whose treatment needs are not being adequately met, including women, adolescents, clients of the criminal justice system, Māori and Pacific peoples, and those with one or more co-existing mental health problems. There are also a several areas in the country where public funding of community assessment and treatment services is below benchmark levels. 13

To ensure that treatment is accessible to all groups within society, levels of treatment provision need to be raised, and the treatment sector better resourced, to meet the needs of different groups. In addition, there is an urgent need to develop new and innovative ways of reaching and providing assistance to the many problem and dependent drinkers who do not participate in formal or informal interventions (MacEwan 1999). The success of the Alcohol Helpline telephone service, established in 1995, has underlined the unmet needs in this area; the wider field of consumer health informatics¹⁴ may offer some of the best ways of providing services for people who are not accessing traditional 'bricks and mortar' services, such as people who live in rural and remote communities, and those who feel uncomfortable presenting for help in person.

As demands on health and welfare budgets continue to increase, so further research will be necessary to ensure that funds spent on treatment are used to the best effect. In addition, research is required to better understand and respond to treatment needs of Māori and Pacific peoples, and other population groups who may have special treatment needs (for instance, people who are same-sex-attracted), as well as to explore the effectiveness of new approaches that are producing encouraging results overseas.

A 1999 assessment against benchmarks found that some of the most poorly served areas were in parts of Auckland, Waikato, the Bay of Plenty, Manawatu, Porirua, Wellington and Central and North Otago (Health Funding Authority 1999). The most up-to-date analyses suggest that, although service gaps still remain, these spatial patterns may have changed.

¹⁴ This term refers to the use of computer-based and telecommunications technologies to help consumers obtain information, analyse their health care needs, and make healthy decisions.

Objectives: treatment	Problem limitation strategies
30. Increase understanding of the range, the causes and the treatment of drinking problems.	 30.1 Provide information on the range of problems that individuals have with alcohol, the diversity of the causes of such problems, and patterns of recovery. 30.2 Make information more widely available on the range of treatment options for drinking problems. 30.3 Continue to support and strengthen the National Centre for Treatment Development (Alcohol, Drugs & Addiction)
31. Increase primary care workers' early identification of and response to alcohol-related	 as a centre of excellence for the theory and practice of treating drinking problems. 31.1 Educate and resource primary care workers to recognise and respond to alcohol-related problems. 31.2 Incorporate teaching in alcohol studies into a wide range
problems.	of health and social service training. 31.3 Explore the use of contractual levers and other incentives for general practitioners to provide screening and brief interventions for alcohol problems.
32. Ensure the provision of a coherent and comprehensive approach to alcohol treatment.	 32.1 Provide well-resourced, publicly funded and nationally co-ordinated treatment services. 32.2 Provide a comprehensive range of treatment options, including effective pharmacotherapies.
33. Ensure treatments are accessible.	 33.1 Publicise the full range of alcohol treatment and support services. 33.2 Promote the idea that seeking help for a drinking problem is equivalent to getting help for any other health problem. 33.3 Address specific barriers to treatment such as location and cultural appropriateness.
	 33.4 Ensure community-based assessment and treatment options are accessible to people throughout the country. 33.5 Explore and support options for delivering treatment (eg, consumer health informatics) for which access is not dependent upon location.
34. Ensure treatments are effective.	34.1 Further encourage the development of independent assessment services to ensure people receive treatment appropriate to their needs.
	 34.2 Develop treatment manuals and protocols. 34.3 Promote and support research into treatment effectiveness, particularly in regard to cultural and other facets specific to the provision of treatment in New Zealand.
	34.4 Support increased training opportunities for treatment workers.

Objectives: treatment	Problem limitation strategies
35. Ensure that treatment services are responsive to unmet and emerging needs.	 35.1 Improve treatment services for adolescents. 35.2 Provide services that better meet the needs of Māori. 35.3 Provide services that better meet the needs of Pacific peoples. 35.4 Address any special treatment needs of other groups that experience alcohol-related harm (eg, women). 35.5 Improve the ability of treatment services and staff to respond effectively to the needs of people with both alcohol use problems and mental health problems. 35.6 Increase and improve treatment services for clients of the criminal justice system. 35.7 Increase the responsiveness of treatment services to the needs of family members and other supporters of people receiving treatment.

Part Five: Workforce Development

Professional education and training are increasingly being recognised as pivotal in the effective identification, management, and reduction of alcohol-related harm.

Improving alcohol-related education and training needs to be seen, then, as a key component of any strategy to minimise such harm. Although they are not a panacea, appropriate education and training are needed to implement strategies and maximise their impact (Roche 1998).

Broadening the base of education and training

Various types of alcohol-related harm are encountered in a variety of contexts. Minimising such harm is no longer considered peripheral to the responsibilities of those who work in these contexts, or of relevance only to the few who specialise in alcohol-related work.

To maximise the potential that exists in the prevention and management of alcohol-related harm, education and training should, therefore, be broadly based. Involvement in alcohol intervention cannot be expected and will not be realised, or effective, unless a wide range of professionals acquire appropriate knowledge and skills. Consistent with this claim, a New Zealand survey of medical practitioners found positive relationships between levels of training and perceived effectiveness, and between levels of training and active involvement in alcohol intervention (Adams et al 1995).

As well as providing alcohol-related training to traditional health care professionals, such as doctors (especially general practitioners and psychiatrists) and nurses, appropriate training should be provided to others likely to encounter people with alcohol problems. Relevant generalist workers include Māori and Pacific community health workers, social workers, corrections officers, school guidance counsellors, youth workers, psychologists, mental health support workers, police and members of the hospitality industry. Also, the needs of volunteer workers should not be overlooked. A survey of 140 New Zealand community-based social service organisations found that 60% of the volunteers working for these organisations had frequent contact with clients adversely affected by alcohol. The majority (87%) of these volunteers indicated that they would avail themselves of alcohol training if appropriate opportunities were available (Parsons 1998).

In the education of members of a generalist profession, the greatest gains have been made within undergraduate medical programmes. These gains have resulted from dedicated positions being established in each of the medical schools, funded by the Alcohol Advisory Council, to co-ordinate alcohol teaching. The Alcohol Advisory Council recently established a similar position within the Psychiatric Registrar Training Programme at the University of Auckland. Alcohol education is also offered as part of a training programme for primary care workers (including Māori and Pacific primary care workers) in the Auckland region, ¹⁵ and initiatives are under way to address the alcohol education and training needs of youth workers and mental health support workers. ¹⁶

Notwithstanding these gains, and despite the recommendations of several national (Hannifin and Gruys 1996) and international (WHO 1990) reviews calling for improvements to the alcohol education and training of generalist workers, the area has received little attention, and remains less than adequate

 $^{^{15}}$ This is the Tobacco, Alcohol and Drug Programme taught out of the Goodfellow Unit at the Auckland Medical School, funded by the Ministry of Health.

The Alcohol Advisory Council has commissioned a review of the alcohol education and training needs of mental health support workers, and the development of an alcohol teaching resource for those training youth workers.

in most professional training programmes. Where it is provided, it tends to be ad hoc and dependent on the interests of individuals, rather than being a clearly articulated curriculum requirement, or part of a considered workforce development strategy.

A recent review of alcohol education and training in nursing found that while many of the schools of nursing expressed a commitment to the area, teaching on alcohol topics tended to rely on the commitment of staff with relevant expertise (Lightfoot 1998).

Barriers to the development of alcohol education and training in generalist programmes include a lack of resources, lack of appropriate expertise amongst teaching personnel, no recognition of alcohol-related matters as a legitimate area of practice, no recognition of the workforce's ability to deliver an effective intervention, and overcrowded curricula (Ariell 1999).

Education and training for alcohol treatment specialists

A 1996 survey of managers of alcohol and drug treatment services found that 94% considered specialist education and training to be very important for those working in the alcohol and drug field (Hannifin and Gruys 1996). This view is reflected in one of the Ministry of Health's targets specified in *Moving Forward: The National Mental Health Plan for More and Better Services*, which requires that, by 2002, 50% of contracted drug and alcohol services that employ clinical staff include staff members with postgraduate specialty training in drug and alcohol treatment (Ministry of Health 1997c).

Currently a major gap exists between the level of education and training considered desirable and the level of qualifications held. A recent survey of the treatment workforce found that 38.6% had achieved less than a tertiary qualification, and only 16.3% held a postgraduate qualification. Very few (3.3%) held a postgraduate qualification directly related to their work (National Centre for Treatment Development 1998).

A number of barriers to education and training have been identified (Hannifin and Gruys 1996).

- Limited opportunities for appropriate training. The situation has improved with the recent development of postgraduate certificate and diploma courses by the universities of Otago and Auckland, and an undergraduate degree programme by the Central Institute of Technology. However, few relevant education and training opportunities exist for those wanting to work from a kaupapa Māori or Pacific perspective, and none yet leads to a nationally recognised qualification such as a national certificate, national diploma or degree.
- **Financial constraints**. A lack of money is one of the barriers most frequently cited by managers wanting to obtain training for their staff.
- **Work pressures**. The pressure of meeting contracted work targets means many managers have difficulty releasing staff to undertake training.
- **Geographical barriers**. Most training is available only in the main centres, which makes it difficult for those working outside these areas to access such training.
- **Insufficient inducement**. Low salary scales relative to other professions, and a lack of career opportunities, have reduced the attractiveness of investing in training.

As well as the education and training needs of those specialising in the assessment and treatment of people with drinking problems, consideration should be given to the education and training needs of those specialising in alcohol-related policy, health promotion and liquor licensing issues.

Education and training for those working to prevent harm

Consideration must also be given to strengthening those workforces that are concerned with preventing alcohol-related harm. Specific training needs for health promoters, including training leading to qualifications as well as on-the-job training, have been identified and should be addressed (Conway 1990; Ministry of Health 1997d). Furthermore, recent studies indicate that greater recognition should be given to the value of health promotion training delivered as an integral component of health promotion initiatives. Community action training, for example, that is provided through formative evaluation projects utilising independent evaluators as 'critical friends', is emerging as a useful process for upskilling health promoters who are relatively inexperienced, and those working in rural and remote communities (Conway et al 2000). Also, health promotion training, and in particular community development training, that reflects kaupapa Māori and other cultural perspectives, needs to be further developed and made more widely available.

Like health promoters people involved in the supply of alcohol, especially those working in the hospitality industry, should not be overlooked as important audiences for alcohol education and training. Recognition of this was included in a recent amendment to the Sale of Liquor Act which stipulates that, as from 1 December 2002, no person will be entitled to hold a General Manager's certificate to operate a licensed premise without a prescribed qualification (Blair and Bennett-Bardon 1999). The qualification is designed to ensure knowledge about, and an ability to implement, responsible host practices. However, others in the hospitality industry, such as bar staff and security staff, require training as well. Bar staff and security staff are able to contribute significantly to the maintenance of safe drinking practices and environments (Chandler Coutts et al 2000). Training will help reinforce that their activities to this end are important areas of their work, and enhance their ability to perform such activities effectively.

Equally important is training for those concerned with the control of alcohol, such as police and licensing inspectors. Repeated calls for increased training for licensing inspectors employed by District Licensing Agencies have been made at successive 'Working Together' conferences, hosted by the Alcohol Advisory Council for groups involved in host responsibility and liquor licensing.

Furthermore, since the lowering of the minimum legal drinking age to 18 years, public health groups have emphasised the importance of training for police as a means of ensuring that laws controlling the availability of alcohol are effectively enforced. Indeed, given the many, often potentially hazardous, situations involving alcohol that are regularly encountered by police, alcohol education and training for frontline officers have been identified as a priority (Hannifin and Gruys 1996).

Research plays a central role in shaping the direction of policy, public health initiatives and treatment interventions for the future (Adams 2000). The ability to generate high quality and relevant research, however, is dependent (at least in part) on the existence of an appropriately skilled workforce. To ensure the ongoing provision of high quality research, funders of alcohol research must always keep in mind the need to attract potential recruits, and to support such new recruits to acquire appropriate expertise.

Until there is adequate and appropriate education and training of all relevant personnel, efforts with respect to treatment, prevention and policy development will be hampered (Roche 1998).

Depth and breadth of education and training

Alert to the dangers of 'one size fits all' thinking, education and training programmes need to be tailored to cater for the professional and situational requirements specific to each group (Roche 1998). The programme mix should ideally include:

- different levels of training, such as undergraduate and postgraduate, pre-entry and post-entry, basic and advanced
- different types of training, such as formal (qualification-based) and informal (on-the-job) training
 that is culturally oriented as well as training designed to meet the needs of particular client groups;
 training that is multidisciplinary as well as training that is discipline-specific; and training that is
 general as well as training that is responsive to emerging problems and issues.

Satisfying these conditions will require an extensive and diverse array of training opportunities.

Content of education and training programmes

The core knowledge base of the alcohol field has expanded substantially over the past 10 to 15 years. Knowledge of effective mechanisms and strategies by which to prevent, manage or minimise the negative consequences of alcohol use is far greater today than ever before.

However, current practices, and in particular treatment practices, are highly varied. Some have claimed that many ineffective or empirically unsupported modalities are in widespread use, whereas other more effective interventions are rarely used. This perceived situation has led to calls for educators to base their activities on the principles of evidence-based practice, which is seen to include the following general characteristics (Roche 1998):

- critical research findings
- evaluation of clinical practice and services
- feedback from service providers
- · measures of health outcomes and clinical audits
- clinical supervision and reflective practice.

The above apply primarily to a health context. Similar sets of guiding principles need to be developed for those working in other contexts, and from different cultural perspectives.

In recent years there has been an increasing emphasis on the identification of core competencies to ensure greater consistency in the nature and quality of practice. In line with this trend, a set of practitioner competencies has been developed and is currently being trialled by the alcohol (and drug) treatment workforce (Alcohol and Drug Treatment Workforce Development Advisory Group 2000). Similar efforts are needed to identify and clearly articulate alcohol-related competencies that could reasonably be expected of professionals working in other sectors.

Placements, practicums and internships are considered an essential component of vocational training. It is through their fieldwork experience that students are able to utilise theory and knowledge acquired in the classroom, test out and practise new skills, and develop a professional identity.

Nonetheless, placements must be well managed to generate positive results. To this end, a recent review of alcohol-related student placements in the Auckland region found few examples of placements that were working well. The availability of placements was limited and the quality variable. This left many students feeling dissatisfied with their placement experience (Health and Safety Developments 1999).

If placements are to be an effective component of education and training:

- a good relationship must exist between the learning institution and the placement provider, and must be maintained by ongoing liaison
- responsibilities and expectations of the student, the placement provider and the learning institution must be clearly articulated and understood by all parties
- · regular and appropriate supervision must be provided to students.

Based on the limited evidence available, it appears that insufficient resources are being committed to student placements. This is clearly an area where improvements must be made.

Effectiveness of education and training

Careful evaluation of educational activities, and the development of an endorsed research agenda focusing on education and training, are critical success factors for improving the quality, effectiveness and efficiency of all types of education.

Evaluation is also needed to identify potential barriers to education, and to ensure that education and training efforts remain relevant and appropriate to the needs of the particular target group(s) (Carnegie 1998).

To date there has been very little comprehensive evaluation of alcohol education and training activities, and consequently little is known about the effectiveness of such activities. Both short- and long-term evaluation studies are needed (Roche 1998).

For evaluation to be useful, it is important that the intent and purpose of education and training are clearly articulated. The effectiveness of any programme can only be gauged in terms of pre-established goals. The provision of education and training initiatives therefore requires precision, both in terms of conceptualising the initiatives themselves, and in terms of expectations and requirements of the end product (Roche 1998).

Wider issues for the specialist workforce

For a complete overview, it is important to touch briefly on a number of general issues relating to the specialist alcohol treatment workforce that have emerged over the last five years.

Size of the workforce

The Mental Health Commission's *Blueprint for Mental Health Services in New Zealand* indicates that the treatment workforce is significantly under-resourced in some areas. Whereas the *Blueprint* recommends that a workforce of 614 full-time equivalent staff (FTEs) is needed to provide community-based assessment and treatment services, the current workforce in this area is estimated at only 262 FTE (Mental Health Commission 1998).

Workforce retention

A survey of managers of alcohol and drug agencies found that nearly half considered the retention of skilled staff to be a problem (Hannifin and Gruys 1996). Low pay and limited career opportunities were the most frequently cited factors contributing to this problem.

Accreditation

Currently there is no requirement for people working in the alcohol treatment field to be accredited. Consistency in the nature and quality of their practice cannot, therefore, be easily assured. The recently developed practitioner competencies could provide a basis upon which to develop an accreditation system.

Leadership

There is no official body, such as a professional association, that can consider the needs or represent the interests of the treatment workforce. An alcohol (and drug) treatment workforce advisory group, convened by the Alcohol Advisory Council in 1998, has at least partially addressed this deficit.

Future of specialist services

As alcohol (and drug) treatment services are funded from mental health budgets, fears have been expressed that these services may be subsumed by mental health. The majority (59%) of those working in treatment services favour being part of mental health, but with a separate identity (National Centre for Treatment Development 1998). Internationally, however, there is a widely acknowledged need for a specialist workforce as a vital component of a comprehensive therapeutic approach, that is able to respond effectively to people with significant problems (Institute of Medicine 1990), and to act as a resource for primary care and other professionals (World Health Organization 1990).

Objectives: workforce development	Education and training strategies
36. Ensure that a wide range of groups are able to respond people with early stage dring problems, and provide appropriate interventions including referral for those more serious problems.	36.1 Promote and support the integration of alcohol education and training into the vocational training programmes of groups likely to encounter people with drinking problems, especially: • primary health care workers (including general
37. Ensure that effective treatmare provided to people with moderate to severe drinking problems.	

Objectives: workforce development	Education and training strategies
38. Ensure the effective implementation of strategies to prevent and reduce alcohol	38.1 Promote and support the integration of alcohol education and training into training programmes for health promoters.
harm.	38.2 Support the development of training in kaupapa Māori and Pacific-based alcohol health promotion.
	38.3 Support the provision of short courses to assist health promoters in updating and extending their alcohol knowledge and skill base.
39. Ensure the responsible serving of alcohol and maintenance of safe drinking environments.	39.1 Support the provision of appropriate training for people working in the hospitality industry, including managers, bar staff and security staff.
	39.2 Promote the adoption of host responsibility policies for licensed premises that specify appropriate training for bar staff and security staff.
40. Ensure that restrictions on the supply of alcohol are effectively	40.1 Support the development of relevant training for licensing inspectors employed by local authorities.
enforced.	40.2 Maintain training on alcohol-related issues as a priority for police training.
41. Ensure dangerous and potentially dangerous incidents and situations involving alcohol are managed safely.	41.1 Support the provision of appropriate training for police on how to safely manage dangerous and potentially dangerous incidents and situations involving alcohol.
42. Support the production of high quality research on alcohol issues.	42.1 Provide alcohol research scholarships to attract new researchers and help develop relevant research expertise.
	42.2 Provide a level of funding for alcohol research that is sufficient to sustain a critical mass of relevant research expertise.
43. Ensure alcohol education and training are effective.	43.1 Promote and support the evaluation of existing alcohol education and training programmes and approaches.
	43.2 Promote and support the evaluation of new programmes and approaches, particularly distance learning approaches.
	43.3 Support education and training programmes based on principles of best practice, in relation to both work and educational practice.
	43.4 Support training that provides opportunities for experiential/hands-on learning.
	43.5 Identify alcohol competencies for different fields of practice.

Part Six: The Monitoring Framework

Although the *National Drug Policy* identifies areas to be targeted for improvement, it neither specifies the extent of improvement expected, nor how progress will be measured or monitored. These shortcomings were addressed in a 1999 report prepared for the Inter-Agency Committee on Drugs (Ministry of Health and Alcohol Advisory Council 1999). The report:

- suggested specific quantitative and qualitative indicators for monitoring progress towards the *National Drug Policy*'s desired outcomes
- offered supporting evidence and rationale for the chosen indicators' appropriateness and value
- gave the baseline data for the indicators chosen, along with some reference to the data already gathered that are relevant to the indicators
- discussed the availability of data to enable monitoring over time
- suggested improvements to data collection to enable more effective monitoring
- proposed both quantitative and qualitative targets where appropriate.

Targets and indicators

The tables that follow present a summary of the alcohol-related targets and indicators from the IACD report, some of which have been slightly adapted for present purposes.

The tables use the following format:

- Priorities: alcohol-related priorities for action identified in the National Drug Policy
- Outcomes: the desired outcomes specified for each priority in the National Drug Policy
- Targets: quantified outcomes to be achieved within specified times
- Indicators: yardsticks to measure progress towards outcomes
- Data sources: datasets used to identify indicators and provide a basis for measuring progress
- **Responsibility for monitoring and reporting:** IACD agency responsible for monitoring and reporting on progress
- **Comment:** information, drawn largely from the IACD report, on the limitations of the monitoring framework for each outcome.

National Drug Policy Priority One:

To enable New Zealanders to increase control over and improve their health by limiting the harms and hazards of alcohol use.

Outcome 1: Government staff and agencies

General acceptance by government staff of harm minimisation as an effective approach to reducing alcohol-related harm; and ongoing co-operation and collaboration amongst agencies involved in alcohol issues.

Targets	Indicators	Data source	Responsibility for monitoring/ reporting
See comment	Number of IACD meetingsSix-monthly reporting	National Drug Policy reporting structure	All IACD agencies

Comment:

Development of a target is not considered appropriate to this outcome as meetings and reporting are process results and will not of themselves contribute to the priority.

Data sources will be generated by IACD agency participation.

Outcome 2: Community involvement

Increased involvement of the community and particular subgroups within the community in reducing alcohol-related harm.

Targets by 2003	Indicators	Data source	Responsibility for monitoring/ reporting
See comment	 Service delivery contracts let to non-government organisations in relation to harm minimisation Funding levels that community agencies and non-government organisations receive in association with <i>Policy</i> outcomes IACD agencies' sixmonthly reporting on community involvement in reducing harm within their sector IACD agencies' sixmonthly reporting on the degree and nature of contact and consultation with non-government organisations and the community 	National Drug Policy reporting structure	All IACD agencies

Comment:

Development of a target is not considered appropriate to this outcome as the nature of involvement and consultation is of as much importance as, if not more than the quantity. Data on service delivery contracts let to non-government organisations exist but would need to be analysed to enable recording against the indicators.

Data on contact and consultation with non-government organisations and the wider community have not yet been collected.

Outcome 3: School policies and education

More effective school policies and education in the school setting about healthy attitudes and practices for alcohol use.

Targets by 2003	Indicators	Data sources	Responsibility for monitoring/ reporting
See comment	 A higher proportion of schools have drug education policies and programmes that take into account relevant aspects of <i>Drug Education: A Guide for Principals and Boards of Trustees</i> (Ministry of Education 2000) More evidence that teachers understand the principles of effective drug education, and models of good practice, and that this understanding is demonstrated in drug education programmes delivered in schools A higher proportion of schools provide their students (at least those in years 1–10) with opportunities to achieve drug education goals that are consistent with the national Health and Physical Education Curriculum 	Surveys and monitoring evaluation data developed from the Drug Education Development Programme	Ministry of Education

Comment:

Insufficient data are available to set targets.

Outcome 4: Workplace injury and productivity

Reduction in injury and loss of productivity in the workplace, linked to the use of alcohol.

Targets by 2003	Indicators	Data sources	Responsibility for monitoring/ reporting
See comment	See comment	Occupational Safety and Health Service does not collect data on the use of alcohol and illicit drugs	Ministry of Health/ Alcohol Advisory Council

Comment:

Insufficient data are available to set targets. No indicators are proposed due to lack of relevant datasets. The Ministry of Health and Alcohol Advisory Council have been allocated provisional responsibility for monitoring/reporting because the Occupational Safety and Health Service is not a member of the IACD.

Outcome 5: Treatment

Improved range, quality and accessibility of treatment options for people with alcohol problems.

Targets by 2003	Indicators	Data sources	Responsibility for monitoring/ reporting
See comment	See comment	Data not yet available. The Ministry of Health is implementing a reporting framework for mental health providers and a categorisation programme for mental health services, which should yield datasets over time	Ministry of Health

Comment:

Until indicators are finalised, targets cannot be set.

Indicators will need to be developed from data collected by the Ministry of Health through its reporting framework for mental health providers. Those data are now being systematically collected, and it is expected they will be available soon.

Outcome 6: Expertise of health workers

Improved expertise of health workers in the alcohol field.

Targets by 2003	Indicators	Data sources	Responsibility for monitoring/ reporting
See comment	 Proportion of alcohol and drug treatment workers with postgraduate qualifications 	Workforce surveys	Alcohol Advisory Council
	 Improved alcohol and drug competency scores achieved by medical students as they progress through undergraduate training 	Evaluation of undergraduate medical education	
	 Number of students completing postgraduate and undergraduate papers 	Training institution records	

Comment:

Indicators identified, but targets not yet set as data has only been collected for a short time.

The emphasis in the indicators on clinically oriented education and training reflects the current absence of relevant workforce development opportunities for those working in the public health sector.

National Drug Policy Priority Three:

To reduce the hazardous and excessive consumption of alcohol, and the associated injury, violence and other harm, particularly on the roads, in the workplace, in and around drinking environments, and at home.

Outcome 1: Responsible drinking levels

Increase in the proportion of the population who do not exceed maximum responsible drinking levels.

Targets by 2003	Indicators	Data sources	Responsibility for monitoring/ reporting
From 21% to 18% for males; and from 8% to 6% for females	 Proportion of drinkers who exceed maximum responsible drinking levels on an occasion at least weekly: 6 standard drinks for males 4 standard drinks for females 	Alcohol and Public Health Research Unit national surveys on drinking	Alcohol Advisory Council
From 27% to 25% at 10 litres; from 12% to 10% at 20 litres.	 Proportion of drinkers whose annual consumption exceeds: 10 litres of absolute alcohol/year 20 litres of absolute alcohol/year 		

Comment:

It is an open question at this stage is whether the survey samples should be kept at 14–65 years and defining 'adult' drinkers as those aged 15+ (in line with Statistics New Zealand data and other sources); or whether 'adult' drinkers should be defined as those aged 18+, to allow more sensitive evaluation of the lowering of the legal drinking age. These questions will require further consideration by IACD agencies.

Outcome 2: Alcohol and pregnancy

Reduction in the prevalence of drinking among pregnant women and women planning pregnancy.

Targets by 2003	Indicators	Data sources	Responsibility for monitoring/ reporting
See comment	See comment		Ministry of Health/ Alcohol Advisory Council

Comment:

Indicators/targets cannot be identified until baseline data are generated. However, the Ministry of Health and Alcohol Advisory Council propose to work with the Alcohol and Public Health Research Unit to include questions regarding alcohol and pregnancy in future surveys.

Outcome 3: Drinking and young people

Reduction in the prevalence of binge drinking and other harmful drinking patterns amongst young people, including young Māori and young Pacific peoples.

Targets by 2003	Indicators	Data sources	Responsibility for monitoring/ reporting
From 18% to 15% for males; and from 7% to 5% for females	 Proportion of drinkers aged 14–17 years who, on one occasion at least weekly, exceed: 6 standard drinks for males 4 standard drinks for females 	Alcohol and Public Health Research Unit national surveys on drinking	Alcohol Advisory Council
From 36% to 30% for males; and from 28% to 25% for females	 Proportion of drinkers aged 18–19 years who, on one occasion at least weekly, exceed: 6 standard drinks for males 4 standard drinks for females 		
From 16% to 12%	 Proportion of drinkers under 18 years who report experiencing 5 or more negative consequences from their own drinking 		

Targets by 2003	Indicators	Data sources	Responsibility for monitoring/ reporting
	 Proportion of drivers under 18 years who exceed prescribed breath/ blood alcohol levels Proportion of drivers under 18 involved in alcohol-related road crashes 	Land Transport Safety Authority datasets	Land Transport Safety Authority

Comment:

Indicators/targets have been drawn from available survey data as the most suitable measures. It has not yet been possible to develop robust indicators/targets in relation to young Māori and young Pacific peoples.

Outcome 4: Alcohol and road crashes

Reduction in the rate of road crashes involving drivers who have consumed alcohol beyond prescribed blood alcohol content levels.

Targets by 2003	Indicators	Data sources	Responsibility for monitoring/ reporting
A reduction in the proportion of deceased drivers over the legal alcohol limit at the time of the crash, to 25% or less for 2000/01	 Proportion of fatal road crashes where driver alcohol was involved Proportion of road crashes resulting in injury where driver alcohol was involved 	Land Transport Safety Authority datasets on alcohol-related fatalities and crashes	Land Transport Safety Authority

Outcome 5: Māori, alcohol and road crashes

Reduction in the rate of Māori death and injury caused by alcohol-related motor vehicle crashes.

Targets by 2003	Indicators	Data sources	Responsibility for monitoring/ reporting
See comment	 Proportion of Māori drinkers who exceed maximum responsible drinking levels on one occasion at least weekly: 6 standard drinks for males 4 standard drinks for females Proportion of Māori drinkers whose annual consumption exceeds: 10 litres of absolute alcohol/year 20 litres of absolute alcohol/year Proportion of Māori drivers who exceed prescribed breath/blood alcohol levels Proportion of Māori drivers involved in alcohol-related road crashes 	Māori booster sample from Alcohol and Public Health Research Unit national surveys on drinking Land Transport Safety Authority datasets	Alcohol Advisory Council Land Transport Safety Authority

Comment:

Insufficient data available to set targets. Although ethnicity data is not routinely collected by the Land Transport Safety Authority at present, there is an expectation that such data will be become available over time.

Outcome 6: Alcohol-related crimes

Reduction in the rate of alcohol-related crimes, including criminal assaults and public order offences.

Targets by 2003	Indicators	Data sources	Responsibility for monitoring/ reporting
From 10% to 5%	 Proportion of males surveyed who report being assaulted by someone who had been drinking 	Alcohol and Public Health Research Unit national surveys on drinking	Police
From 5% to 3%	 Proportion of females surveyed who report being assaulted by someone who had been drinking 		
	 Proportion of domestic violence incidents attended where alcohol involvement was noted 	POL 400 forms and national police reports	Police/ Liquor Licensing Authority
	 Proportion of offences where alcohol was a factor when charges were laid 	Police charge sheet data for offences	Police
	 Number of prosecutions taken against license holders as a proportion of all licences 	Police offence data and Liquor Licensing Authority statistics	
	 Number of infringement notices issued for Sale of Liquor Act offences 	Police infringement notice datasets	

Comment:

Insufficient data available to set targets, except for those crime-related indicators derived from national surveys conducted by the Alcohol and Public Health Research Unit.

Outcome 7: Alcohol-related drownings and injuries

Reduction in the rate of alcohol-related drownings and other alcohol-related injuries.

Targets by 2003	Indicators	Data sources	Responsibility for monitoring/ reporting
A reduction in the proportion of alcohol- related drownings to 15% of all drownings	 Proportion of drownings that are alcohol-related Proportion of hospitalisations involving external injury where alcohol was present 	Water Safety New Zealand database New Zealand Health Information Service hospitalisation data	Ministry of Health/ Alcohol Advisory Council Ministry of Health

Comment:

Indicators are drawn from official datasets of Water Safety New Zealand and New Zealand Health Information Service.

Analysis of time-series data is required before hospitalisation target can be set. Note also that hospitalisation data provide only a partial picture of alcohol-related injuries.

Reporting

The IACD report on indicators proposes that:

- as part of its six-monthly reporting requirement to the Ministerial Committee on Drug Policy, the IACD should produce an annual update against the indicators
- the updates form part of IACD's second (August) report for each year
- the reporting on indicators should begin in 2000.

The IACD report on indicators further notes that mid-year updates on the outcomes would support a proposed biennial production of a National Drug Statistics Report.

Going beyond the framework

Future research

Indicators for a number of the outcomes listed in this National Alcohol Strategy were identified from, and will be monitored using existing datasets – at least, as long as these datasets continue to be compiled. For other outcomes, however, no dataset appropriate for the purpose of developing indicators currently exists. For example, in the case of alcohol-related injuries, treatment options, and Māori rates of death and injury in alcohol-related road crashes, suitable datasets may be able to be developed from

information that is currently being collected. For other outcomes, such as alcohol and pregnancy, it is much more likely that new research will be needed.¹⁷

For the most part, the outcomes, which form the basis of the monitoring framework, focus on groups, environments and behaviours known to be associated with alcohol-related harm. However, as society changes it is likely that the nature and causes of alcohol-related harm will change also.

It is expected that the *National Drug Policy* will be reviewed in 2003. In the meantime, it is important that efforts are not focused solely on the known problems and strategies. Wider monitoring in the form of new research – research that enables emerging problems to be quickly identified, and strategies to be developed and implemented – also needs to be undertaken.

Research identified in Part Two: Key issues

- · the contribution of alcohol to deaths, illness and hospitalisations
- · the prevalence of co-existing alcohol problems and mental health disorders
- · the extent to which alcohol is involved in boating fatalities and other drownings
- New Zealand prevalence of FAS/FAE
- the contribution of alcohol to violence within the family
- · the role of alcohol in other types of offending
- the contribution of alcohol to workplace accidents.

As well, more needs to be known about how some groups use alcohol, in particular:

- Māori
- · Pacific peoples
- · young women
- older people
- people with mental health problems.

Research identified in Part Four: Strategies

- · impact of the reduction in the legal drinking age on alcohol-related harm
- impact of the increased availability of alcohol on alcohol-related harm
- impact of devolving further decision-making power to District Licensing Agencies
- · impact of marketing and sales strategies on alcohol consumption
- feasibility of recalibrating tax levels to influence drinking patterns and practices
- drinking patterns and practices of people who are same-sex-attracted
- · drinking patterns and practices of groups recently settled in New Zealand
- effectiveness of family-based approaches to dealing with alcohol problems
- effectiveness of community development models in reducing alcohol-related harm
- · effectiveness of treatment, especially for members of different cultures
- new treatment approaches, such as pharmacotherapies and brief interventions.

¹⁷ This need has been foreseen for some time; refer to Public Health Commission 1994.

Research identified in Part Five: Workforce development

- · effectiveness and efficiency of education and training
- relevance and appropriateness of education and training programmes
- · barriers to education and training.

Research identified in Part Six: The monitoring framework

- effectiveness of school policies and education in the school setting on healthy attitudes and practices around alcohol
- · prevalence of drinking amongst pregnant women and women planning pregnancy
- impact of the use of alcohol on injury and lost productivity in the workplace
- · Māori rates of death and injury from alcohol-related road crashes
- the extent of alcohol-related crime.

Co-ordination of information

Government agencies produce and retain vast amounts of information. Much information relating to alcohol use and misuse, and to alcohol-related harm and problems, is collected and collated. Most of this information, however, is stored in databases maintained in relative isolation from one another.

To maximise the usefulness of available information, there needs to be greater co-ordination of data sources. Not only will this approach help avoid costly duplications, but it will help ensure that those addressing alcohol-related harm are readily able to find out what is available, easily access it when required, and select from it the information they need.

The rapidly growing use of the Internet, supported by ever more sophisticated computer technology, has made more information more readily available, and available to a much wider audience, than was previously possible. It is now important to determine how best to utilise these computer-based developments to improve the co-ordination of information and, in so doing, facilitate the application of new information to future efforts to reduce alcohol-related harm.

References

- Abel, EL and Hanningan, JH. 1995. Maternal risk factors in fetal alcohol syndrome: provocative and permissive influences, *Neurotoxicology and Teratology*, vol 17: 445–462.
- Abbott, M and Volberg, R. 1992. Frequent Gamblers and Problem Gamblers in New Zealand. Research Series No 14. Wellington: Department of Internal Affairs.
- Abbott, M and Volberg, R. 1996. The New Zealand national survey of problem and pathological gambling, *Journal of Gambling Studies*, vol 12(2): 143–160.
- Abbott, M and Volberg, R. 2000. Taking the Pulse on Gambling and Problem Gambling in New Zealand: A Report on Phase One of the 1999 National Prevalence Survey. Wellington: Department of Internal Affairs.
- Adams, PJ. 2000. *Towards a National Strategy on Alcohol and Drug Research*. Unpublished paper presented at the Cutting Edge Conference. Rotorua.
- Adams, PJ et al. 1995. *Doctors' Practices and Attitudes to Early Intervention for Harmful Alcohol Consumption*. WHO Collaborative Study on Early Intervention for Alcohol. Auckland: University of Auckland.
- Adams, PJ et al. 1997. Incentives for general practitioners to provide brief interventions for alcohol problems, *New Zealand Medical Journal*, vol 100: 291–294.
- Alcohol Advisory Council of New Zealand. 1997. *Youth and Alcohol Survey: Overview.* Occasional Paper No 1. Wellington: Alcohol Advisory Council.
- Alcohol Advisory Council of NZ. 1997b. *The Place of Alcohol in the Lives of People from Tokelau, Fiji, Niue, Tonga, Cook Islands and Samoa living in New Zealand.* Alcohol Advisory Council Research Monograph Series, No 2. Wellington: Alcohol Advisory Council.
- Alcohol Advisory Council of New Zealand. 1999. *Managing a Successful Public Event*. Wellington: Alcohol Advisory Council.
- Alcohol Advisory Council of New Zealand. 2000. *National Guidelines on the Naming, Packaging and Merchandising of Alcoholic Beverages*. Wellington: Alcohol Advisory Council.
- Alcohol Advisory Council of New Zealand. 2000. *Youth and Alcohol: ALAC Youth Drinking Monitor*. Wellington: Alcohol Advisory Council / Business Research Centre.
- Alcohol and Drug Treatment Workforce Development Advisory Group. 2000. *Practitioner Competencies for Alcohol and Drug Workers: Pilot Draft.* Wellington: Alcohol Advisory Council.
- Alcohol and Public Health Research Unit. 1998. *Trends in Drinking Patterns in Auckland 1990–1996: A Brief Report*. Auckland: Alcohol and Public Health Research Unit.
- Alcohol and Public Health Research Unit. 1999. *Advice for Purchasing Strategy on Public Health Issues: Alcohol Harm Reduction*. Auckland: Alcohol and Public Health Research Unit. (Available online at: http://www.aphru.ac.nz/HFA%20Alcohol.doc)
- All Party Group on Alcohol Misuse. 1995. *Alcohol and Crime: Breaking the Link*. London: House of Commons All Party Group on Alcohol Misuse.
- Anton, RF et al. 1999. Naltrexone and cognitive behavioral therapy for the treatment of outpatient alcoholics: Results of a placebo-controlled Trial *American Journal of Psychiatry*, vol 156(11): 1758–1764.
- Aotearoa Women's Consultancy Group on Alcohol and Other Drugs. 1993. Women and Drugs. Wellington: Alcohol Advisory Council.
- Ariell, G. 1999. Advancing Professional Alcohol and Drug Education in New Zealand: Some Challenges from a Purchaser's Perspective. Unpublished paper presented at the Australasian Symposium on Professional Education and Training on Alcohol and Other Drugs, Adelaide.
- Barraclough, B. 1987. Suicide: Clinical and Epidemiological Studies. London: Croom Helm.
- Bathgate, M et al. 1994. The Health of Pacific Islands People in New Zealand. Wellington: Public Health Commission.
- Beautrais, AL et al. 1996. Risk factors for serious suicide attempts among youths aged 13 through 24 years, *Journal of the American Academy of Child and Adolescent Psychiatry*, vol 35(9): 1174–1182.
- Beautrais, AL et al. 1998. Psychiatric illness in a New Zealand sample of young people making serious suicide attempts, *New Zealand Medical Journal*, vol 111: 44–47.

- Beautrais, AL. 2000. Risk factors for suicide and attempted suicide among young people, in NHMRC et al, *National Youth Suicide Prevention Strategy Setting the Evidence-based Research Agenda for Australia: A Literature Review.* Canberra: Commonwealth Department of Health and Aged Care.
- Blair, A and Bennett-Bardon, S. 1999. *The Manager's Guide: A Brief Guide to the Sale of Liquor Act and Other Legislation*. Dunedin: Dunedin City Council District Licensing Agency/Otago Polytechnic.
- Bollinger, C. 1967. Grog's Own Country: The Story of Liquor Licensing in New Zealand. Auckland: Minerva.
- Bradbury J. 1984. Violent Offending and Drinking Patterns. Wellington: Victoria University Institute of Criminology.
- Brinded, P et al. 1996. Psychiatric Morbidity in Prisons; An Investigation of the Prevalence of Psychiatric Disorders amongst New Zealand Prisoners. Pilot Study. Wellington: Department of Justice / Ministry of Health / Department of Corrections.
- Brown, RA. 1986. *Alcohol and Offending Amongst Probationers*. Research report 83/86 Wellington: Department of Justice.
- Bushman, BJ. 1997. Effects of alcohol on human aggression: Validity of proposed explanations, in M Galanter (ed), *Recent Developments in Alcoholism, Alcohol and Violence*, pp 227–243. New York: Plenum Press.
- Bushnell, J et al. 1994. *A Review of the Epidemiology of Substance Use Disorders in New Zealand*. Research Report No 2. Wellington: Health Research Services Centre.
- Carnegie, J. 1998. Education and training, in M Hamilton et al (eds), *Drug Use in Australia: A Harm Minimisation Approach*, pp 213–230. Melbourne: Oxford University Press.
- Casswell, S et al. 1993. The importance of amount and location of drinking for the experience of alcohol-related problems, *Addiction*, vol 88: 1527–1534.
- Chandler Coutts, M et al. 2000. Results of a pilot program for training bar staff in preventing aggression, *Journal of Drug Education*, vol 30(2): 171–191.
- Chikritzhs, T et al. 1999. The Public Health, Safety and Economic Benefits of the Northern Territory's Living with Alcohol Program, 1992/3 to 1995/6. Perth: National Drug Research Institute.
- Coggan, C et al. 1997. Risk-taking behaviours in a sample of New Zealand adolescents, *Australian and New Zealand Journal of Public Health*, vol 21(5): 455–461.
- Collins, D and Lapsley, H. 1996. *Estimating the Economic Costs of Drug Abuse in Australia*. National Campaign Against Drug Abuse Monograph, No. 15. Canberra: Australian Government Printing Service.
- Conway, K. 1990. *Training Needs of Alcohol Health Promotion Workers: A Needs Assessment*. Wellington: Alcohol Advisory Council.
- Conway, K et al. 2000. Te Whānau Cadillac A waka for change, *Health Education & Behaviour*, vol 27(3): 339–350.
- Crofton, J. 1987. Extent and costs of alcohol problems in employment: A review of the British data, *Alcohol and Alcoholism*, vol 22: 321–325.
- Crosbie, D et al. 2000. *Alcohol, Taxation Reform and Public Health in Australia*. Submission to the Federal Parliamentary Inquiry into Substance Abuse in Australian Communities. Melbourne: Alcohol and other Drug Council of Australia.
- Curtis, J. 1994. Alcohol and Pregnancy. Wellington: Alcohol Advisory Council.
- Dacey, B. 1997. *Te Ao Waipiro: Māori and Alcohol in 1995.* Auckland: Whariki Research Group, Alcohol and Public Health Research Unit.
- Deehan, A. 1999. *Alcohol and Crime: Taking Stock.* Crime Reduction Research Series Paper 3. London: Home Office Policing and Reducing Crime Unit.
- Dent, OF et al. 2000. Alcohol consumption in a community sample of older people, *Australian and New Zealand Journal of Public Health*, vol 24(3): 323–326.
- Department of Justice. 1987. Submission to the Ministerial Committee of Inquiry into Violence. Unpublished departmental submission. Wellington: Department of Justice.
- Devlin, NJ et al. 1996. *The Social costs of Alcohol Abuse in New Zealand*. Economics Discussion Paper. Dunedin: Economics Department, University of Otago.
- Dormer, A et al. 1990. Sale of Liquor. Updated Series. Wellington: Brookers.
- Drew, LR and Truswell, AS. 1998. Wernicke's encephalopathy and thiamin fortification of food: Time for a new direction?, *Medical Journal of Australia*, vol 168: 534–535.

- Easton, B. 1997. *The Social Costs of Tobacco Use and Alcohol Misuse*. Public Health Monograph No 2. Wellington: Department of Public Health, Wellington School of Medicine.
- Edwards, G et al (eds). 1994. Alcohol Policy and the Public Good. Oxford: Oxford University Press.
- Feigelman, W et al. 1998. Binge drinkers, illicit drug users, and polydrug users: An epidemiological study of American collegians, *Journal of Alcohol and Drug Education*, vol 44(1): 47–69.
- Fergusson, DM and Lynskey, MT. 1996. Alcohol misuse and adolescent sexual behaviors and risk taking, *Pediatrics*, vol 98(1): 91–95.
- Fergusson, DM et al. 1996. Alcohol misuse and juvenile offending in adolescence, Addiction, 91(4) 483-494.
- Fergusson, DM et al. 1999. Is sexual orientation related to mental health problems and suicidality in young people?, *Archives of General Psychiatry*, vol 56: 876–881.
- Field, A and Casswell, S. 1999a. *Drugs in New Zealand: National Survey, 1998.* Auckland: Alcohol and Public Health Research Unit.
- Field, A and Casswell, S. 1999b. *Drug Use in New Zealand: Comparison Surveys, 1990 & 1998.* Auckland: Alcohol and Public Health Research Unit.
- Garbutt, JC et al. 1999. Pharmacological treatment of alcohol dependence: A review of the evidence, *Journal of the American Medical Association*, vol 281(14): 1318–1325.
- Gerstein, D et al. 1994. *Evaluating Recovery Services: The California Drug and Alcohol Treatment Assessment (CALDATA*). Sacramento: State of California Department of Alcohol and Drug Programs.
- Godfrey, C. 1997. Can tax be used to minimise harm? A health economist's perspective, in M Plant et al (eds.), *Alcohol: Minimising the Harm*, pp 29–42. London: Free Association Books.
- Gossop, M et al. 1998. NTORS At One Year: The National Treatment Outcome Research Study. London: Department of Health.
- Graham, K et al. 1998. Current directions in research on understanding and preventing intoxicated aggression, *Addiction*, vol 93(5): 659–676.
- Gray, A and Norton, V. 1998. *Women and Alcohol, Part 1: What's the Problem?* Research Monograph Series No 9. Wellington: Alcohol Advisory Council.
- Grossman, J et al. 1994. Effects of alcohol price policy on youth, *Journal of Research on Adolescence*, vol 4: 347–364
- Hall, T. 1997. The Alcohol Excise. Unpublished paper. Wellington: The Treasury.
- Hannifin, J and Gruys, M. 1996. *New Directions for Alcohol and Drug Education and Training in New Zealand.* Wellington: Alcohol Advisory Council.
- Hawks, D. 1993. Raising the price of alcohol to reduce consumption: Being right is not always popular, *Health Promotion Journal of Australia*, vol 3(2): 18–20.
- Health and Safety Developments. 1999. *Are Student Placements Working in the Alcohol and Drug Field?* Wellington: Alcohol Advisory Council.
- Health Funding Authority. 1999. *National Drug Policy Work Programme Treatment Services Gap Definition*. Unpublished paper presented to the MCDP. Wellington: Health Funding Authority.
- Heffernan, K. 1998. The nature and predictors of substance use among lesbians, *Addictive Behaviors*, vol 23(4): 517–528.
- Hill, L and Stewart, L. 1996. The Sale of Liquor Act 1989: Reviewing regulatory practices, *Social Policy Journal of New Zealand*, issue 7:174–190.
- Hill, L and Stewart, L. 1998. *'Responsive regulation' and liquor licensing in New Zealand*. Auckland: Alcohol and Public Health Research Unit.
- Hoes, M. 1999. Relapse prevention in alcoholics, Clinical Drug Investigation, vol 17(3): 211-216.
- Holder, H et al. 1996 The cost-effectiveness of treatment for alcoholism: A first approximation, *Journal of Studies on Alcohol*, vol 52: 517–525.
- Homel, R et al. 1991. The problem of violence in licensed premises: The Sydney study, in T Stockwell et al (eds), The Licensed Drinking Environment: Current Research in Australia and New Zealand, pp 33–40. Melbourne: National Centre for Research into the Prevention of Drug Abuse.

- Homel, R et al. 1992. Public drinking and violence: Not just an alcohol problem, *Journal of Drug Issues*, vol 22: 679–697.
- Hornblow, A et al. 1990. Christchurch psychiatric epidemiology study: Use of mental health services, *New Zealand Medical Journal*, vol 130: 415–417.
- Hospitality Association of New Zealand, Alcohol Advisory Council of New Zealand, New Zealand Police and Local Government New Zealand. 2000. *National Protocol on Alcohol Promotions*. Wellington: Alcohol Advisory Council of New Zealand.
- Hughes O. 1992. *New Zealand Drug and Alcohol Outpatient Statistics*. Wellington: Alcohol Advisory Council of New Zealand.
- Hutt, M. 1999. *Te Iwi Māori me te Inu Waipiro: He Tuhituhinga Hitori / Māori & Alcohol: A history.* Wellington: Health Services Research Centre / Alcohol Advisory Council.
- Institute of Medicine. 1990. *Broadening the Base of Treatment for Alcohol Problems*. Washington: National Academy Press.
- Inter-Departmental Working Group on Sensible Drinking. 1995. Sensible Drinking. London: Department of Health.
- Ireland, CS and Thommeny, JL. 1993. The crime cocktail: Licensed premises, alcohol and street offences, *Drug and Alcohol Review*, vol 12: 143–150.
- Jacobson, SW. 1997. Assessing the impact of maternal drinking during and after pregnancy, *Alcohol Health & Research World*, vol 21(3): 199–203.
- Jacobson, JL et al. 1998. Relation of maternal age and pattern of pregnancy drinking to functionally significant cognitive deficit in infancy, *Alcoholism: Clinical and Experimental Research*, vol 22(2): 345–351.
- Jakarta Declaration on Health Promotion into the 21st Century. 1996. Jakarta: World Health Organization.
- Jones, S et al. 1995. The economic costs of alcohol-related absenteeism and reduced productivity amongst the working population of New Zealand, *Addiction*, vol 90: 1455–1461.
- Kendall, R et al. 1983. Effect of economic changes on Scottish drinking habits, 1978–82, *British Journal of Addiction*, vol 78(4): 365–379.
- Kenkel, D and Manning, W. 1996. Perspectives on alcohol taxation, *Alcohol Health and Research World*, vol 20(4): 230–238.
- Kerner, H-J et al. 1997. Patterns of criminality and alcohol abuse: Results of the Tuebingemn criminal behaviour development study, *Criminal Behaviour and Mental Health*, vol 7: 401–420.
- Khan, N. 1998. *Prevalence of Alcohol Problems among Elderly Rest Home Residents in Christchurch*. Unpublished MHS (Gerontology) Thesis, Christchurch Medical School.
- Land Transport Safety Authority. 1997. *Motor Vehicle Accidents in New Zealand*. Wellington: Land Transport Safety Authority.
- Land Transport Safety Authority. 1998. *Road Safety Progress, No 15 (December)*. Wellington: Land Transport Safety Authority.
- Land Transport Safety Authority. 2000. Personal communication.
- Larkby, C and Day, N. 1997. The effects of prenatal alcohol exposure, *Alcohol Health & Research World*, vol 21(3): 199-203.
- Lehto, J. 1995. *The Economics of Alcohol Policy.* WHO regional publication, European series No 61. Copenhagen: World Health Organization.
- Leibrich, J et al. 1995. *Hitting Home: Men Speak about Abuse of Women Partners*. Wellington: Department of Justice / AGB McNair.
- Lightfoot, R. 1998. *The Development of Alcohol and Drug Education and Training in Nursing*. Wellington: Alcohol Advisory Council.
- Liquor Licensing Authority. 2000. Personal communication.
- Luckey, JW. 1987. Justifying alcohol treatment on the basis of cost savings, *Alcohol Health & Research World*, vol 12(1): 8–15.
- MacEwan, I. 1994. Differences in assessment and treatment approaches for homosexual clients, *Drug and Alcohol Review*, vol 13: 57–62.

- MacEwan, I. 1999. Overview of Specialist Alcohol and Drug Assessment, Treatment and Interventions in the New Zealand Context. Wellington. Alcohol Advisory Council.
- MacEwan, I and Kinder, P. 1991. *Making Visible; Improving Services for Lesbians and Gay Men in Alcohol and Drug Treatment and Health Promotion.* Wellington: Alcohol Advisory Council.
- Marsden, J et al. 2000. Psychiatric symptoms among clients seeking treatment for drug dependence: Intake data from the National Treatment Outcome Research Study, *British Journal of Psychiatry*, vol 176: 285–289.
- McBride, N et al. 2000. Early results from a school alcohol harm minimization study: The School Health and Alcohol Harm Reduction Project, *Addiction*, vol 95(7): 1021–1042.
- McCormick, R et al. 1999. Encouraging general practitioners to practice screening and brief intervention for problem use of alcohol: A marketing trial, *Drug and Alcohol Review*, vol 18: 171–178.
- McNeish, J. 1984. Tavern in the Town. Wellington: Reed.
- Mental Health Commission. 1998. *Blueprint for Mental Health Services in New Zealand*. Wellington: Mental Health Commission.
- Ministry of Education. 2000. *Drug Education: A guide for principals and boards of trustees.* Welllington: Learning Media.
- Ministry of Health. 1994. *Looking Forward: Strategic Directions for the Mental Health Services.* Wellington: Ministry of Health.
- Ministry of Health. 1997a. Progress on Health Outcome Targets. Wellington: Ministry of Health.
- Ministry of Health. 1997b. *Moving Forward: The National Mental Health Plan for More and Better Services*. Wellington: Ministry of Health.
- Ministry of Health. 1997c. *Strengthening Public Health Action: The Strategic Direction to Improve, Promote and Protect Public Health.* Wellington: Ministry of Health.
- Ministry of Health. 1998a. National Drug Policy. Wellington: Ministry of Health.
- Ministry of Health. 1998b. New Zealand Youth Suicide Prevention Strategy. Wellington: Ministry of Health.
- Ministry of Health. 1999a. *NZ Food, NZ People: Key Results of the 1997 National Nutrition Survey.* Wellington: Ministry of Health.
- Ministry of Health. 1999b. *Taking the Pulse: The 1996/97 New Zealand Health Survey.* Wellington: Ministry of Health.
- Ministry of Health and Alcohol Advisory Council. 1999. *Indicators Report.* Unpublished paper prepared for the IACD. Wellington: Ministry of Health / Alcohol Advisory Council.
- Ministry of Health. 2000. The New Zealand Health Strategy. Wellington: Ministry of Health.
- Ministry of Pacific Island Affairs. 1999. Pacific Directions Report. Wellington: Ministry of Pacific Island Affairs.
- Morris, A. 1997. Women's Safety Survey 1996. Wellington: AC Nielsen / McNair / Victimisation Survey Committee.
- Mosher, J. 1996. Alcohol policy and the young adult: Establishing priorities, building partnerships, overcoming barriers, in *Proceedings of the Alcohol Policy Conference: Reducing Risk Among Young Adults.* Toronto: Addiction Research Foundation.
- Murphy, G and Wetzel, R. 1990. The lifetime risk of suicide in alcoholism, *Archives of General Psychiatry*, vol 47: 383–392.
- Musto, D. 1997. Alcohol control in historical perspective, in M Plant et al (eds), *Alcohol: Minimising the Harm*, pp 10–25. New York: Free Association Books.
- National Advisory Committee on Core Health and Disability Support Services. 1995. *Care for Older People in New Zealand*. Wellington: Ministry of Health.
- National Centre for Treatment Development. 1998. *A Telephone Survey of a Random Sample of Alcohol and Drug Treatment Workers in New Zealand.* Unpublished paper presented at the Cutting Edge Conference. Wellington.
- National Health and Medical Research Council. 2000. *Australian Drinking Guidelines Consultation Draft*. Canberra: National Health and Medical Research Council.
- National Health Committee. 1999. *Guidelines for Recognising, Assessing and Treating Alcohol and Cannabis Abuse in Primary Care.* Wellington: National Health Committee.
- Occupational Safety and Health Service. 1996. Alcohol and Other Drugs in the Workplace: Guidelines for Employers.

- Draft discussion paper. Wellington: Occupational Safety and Health Service.
- Ottawa Charter for Health Promotion. 1986. Ottawa: World Health Organization / Health and Welfare Canada / Canadian Public Health Association.
- Park, J. 1991. Beyond stereotypes: A study of some New Zealand women alcohol drinkers, *Australian Journal of Public Health*, vol 15(3): 202–206.
- Parsons, M. 1998. A Review of Alcohol and Drug Education for Volunteers. Wellington: Alcohol Advisory Council.
- Paton-Simpson, GR et al. 2000. Problem drinking profiles of patients presenting to general practitioners: Analysis of Alcohol Use Disorders Identification Test (AUDIT) scores for the Auckland area, *New Zealand Medical Journal*, vol 113: 74–77.
- Perry, C et al. 1996. Project Northland: Outcomes of a community-wide alcohol use prevention program during early adolescence, *American Journal of Public Health*, vol 86: 956–965.
- Pomare, E et al. 1995. Hauora: Māori Standards of Health III. Wellington: Te Ropu Rangahau Hauora a Eru Pomare.
- Ponicki, W et al. 1997. Altering alcohol price by ethanol content: Results from a Swedish tax policy in 1992, *Addiction*, vol 92(7): 859–870.
- Powell, AM et al. 1996. Preventive medicine in general practice with particular emphasis on early intervention for alcohol, *New Zealand Family Physician*, vol 23: 44–47.
- Productschap voor Gedistilleerde Dranken. 1999. World Drink Trends 1999. NTC Publications.
- Public Health Commission. 1994. *Alcohol: The Public Health Commission's Advice to the Minister of Health, 1993–1994.* Wellington: Public Health Commission.
- Rehm, J. 1999. Okonomische aspekte von Substanzmibauch, in M Gastpar et al (eds), *Lehrbuch der Suchterkrankungen*, pp 118–127. Stuttgart: G Thieme Verlag.
- Roche, AN. 1998. Alcohol and drug education and training: A review of key issues, *Drugs: Education, Prevention and Policy,* vol 5(1): 85–99.
- Romelsjö, A. 1995. Alcohol consumption and unintentional injury, suicide, violence, work performance and inter-generational effects, in H Hold and G Edwards (eds), *Alcohol and Public Policy: Evidence and Issues*, pp 114–142. Oxford: Oxford University Press.
- Schuckit, MA and Hesselbroack, V. 1994. Alcohol dependence and anxiety disorders: What is the relationship?, *American Journal of Psychiatry*, vol 151: 1723–1734.
- Schulenberg, J et al. 1996. Getting drunk and growing up: Trajectories of frequent binge drinking during the transition to young adulthood, *Journal of Studies on Alcohol*, vol 57: 289–304.
- Simpson, AIF et al. 1999. *The National Study of Psychiatric Morbidity in New Zealand Prisons*. Wellington: Department of Corrections.
- Single, E et al. 1998. The economic costs of alcohol, tobacco and illicit drugs in Canada, 1992, *Addiction*, vol 93: 991–1006.
- Single, E et al. 1999. Evidence Regarding the Level of Alcohol Consumption Considered to be Low-Risk for Men and Women: Final Report October 1999. Canberra: Commonwealth Department of Health and Aged Care.
- Smith, AMA et al. 1999. Same-sex attraction, drug injection and binge drinking among Australian adolescents, *Australian and New Zealand Journal of Public Health*, vol 23(6): 643–646.
- Smith, GS et al. 1999. *The Role of Alcohol in Drowning and Boating Deaths in the Auckland Region: An Updated Report to the Alcohol Advisory Council.* Injury Prevention Research Centre Report Series, No 44. Auckland: Injury Prevention Research Centre.
- Smith-Warner, SA et al. 1998. Alcohol and breast cancer in women, *Journal of the American Medical Association*, vol 279(7): 535–541.
- Statistics New Zealand. 1999. *Alcohol Available for Consumption: December 1998 Quarter.* Wellington: Statistics New Zealand.
- Statistics New Zealand. 2000. Alcohol Available for Consumption: December 1999 Quarter. Wellington: Statistics New Zealand.
- Stewart, L. 1998. Alcohol dependence, in PM Ellis and SCD Collings (eds), *Mental Health in New Zealand from a Public Health Perspective*, pp 294–316. Public Health Report No 3. Wellington: Ministry of Health.
- Stockwell, T. 1998. Towards guidelines for low-risk drinking: Quantifying the short-term and long-term costs of

- hazardous alcohol consumption, *Alcohol: Clinical and Experimental Research*, vol 22(2) [Supplement], 63S-69S.
- Stockwell, T et al. 1993. High-risk drinking settings: The association of serving and promotional practices with harmful drinking, *Addiction*, vol 88(11): 1519–1526.
- Substance Abuse and Mental Health Administration. 1996. *Preliminary Estimates from the 1995 National Household Survey on Drug Abuse*. Advance Report No 18. Rockville, MD: Substance Abuse and Mental Health Administration.
- Sullivan, S et al. 1998. Problem gamblers: A challenge for GPs, New Zealand Family Physician, vol 25(1): 37-42.
- Te Puni Kōkiri and Kaunihera Whakatupato Waipiro o Aotearoa. 1995. *Te Māori me te Waipiro*. Wellington: Te Puni Kōkiri / Alcohol Advisory Council.
- The Treasury. 1999. December Economic and Fiscal Update 1998. [AJHR B.6]
- Todd, F et al. 1999. The Assessment and Management of People with Co-existing Substance Use and Mental Health Disorders. Christchurch: NCTD.
- Truswell, AS. 2000. Australian experience with the Wernicke-Korsakoff syndrome, Addiction, vol 95(6): 829-832.
- Turning Point. 1998. *An Evaluation of the Geelong Local Industry Accord.* Melbourne: Turning Point Alcohol and Drug Centre.
- Wagenaar, AC and Perry, CL. 1992. Community strategies for the reduction of youth drinking: Theory and application, *Journal of Research on Adolescence*, vol 4: 319–345.
- Warner, M et al. 2000. Drowning and alcohol in New Zealand: What do the coroner's files tell us? *Australian and New Zealand Journal of Public Health*, vol 24(4): 387–390.
- Watson, P and McDonald, B. 1999. *Nutrition during Pregnancy: Report to the Ministry of Health.* Palmerston North: Massey University.
- Wells, JE et al. 1989. Christchurch Psychiatric Epidemiology Study, Part 1: methodology and lifetime prevalence for specific psychiatric disorders, *Australian and New Zealand Journal of Psychiatry*, vol 23: 315–26.
- Wells, JE et al. 1992. Problems with alcohol, drugs and gambling in Christchurch, New Zealand, in M W Abbott (ed), *Alcohol, Drug Dependence and Disorders of Impulse Control*. Auckland: Mental Health Foundation.
- Welte, JW and Miller, BA. 1987. Alcohol use by violent and property offenders, *Drug and Alcohol Dependence*, vol 19: 313–324.
- Wette, H et al. 1993. The effects of prices on alcohol consumption: New Zealand, 1983–1991, *Drug and Alcohol Review*, vol 12: 153–160.
- Wiese, JG, Shlipak, MG and Browner, WS. 2000. The alcohol hangover. *Annals of Internal Medicine*, vol 132(11): 897–902.
- Williams, W. 1930. In the beginning: Period up to 1886, in J Coker and J Malton Murray (eds), *Temperance and prohibition in New Zealand*, pp 20–59. London / Wellington: Epworth Press / New Zealand Alliance.
- Wood, C. 1997. Drugs, money & life education, Connexions, June/July, 4-10.
- Working Party on Upper Limits for Responsible Drinking. 1995. *Upper Limits for Responsible Drinking*. Wellington: Alcohol Advisory Council.
- World Health Organization. 1990. Substance-Abuse Education for Health Professionals: Report on a European Symposium. The Hague: World Health Organization.
- Wyllie, A and Casswell, S. 1989. *Drinking in New Zealand: A Survey 1988.* Auckland: Alcohol and Public Health Research Unit.
- Wyllie, A et al. 1993. *The Relationship between Alcohol Consumption and Alcohol-related Problems: New Zealand Survey Data.* Paper presented at 19th Annual Alcohol Epidemiological Symposium of Kettil Bruun Society for Social and Epidemiological Research. Krakow.
- Wyllie, A et al. 1996. *Drinking in New Zealand: A National Survey 1995.* Auckland: Alcohol and Public Health Research Unit.
- Wysong, E et al. 1994. Truth and DARE: Tracking Drug Education to Graduation and as Symbolic Politics, *Social Problems*, vol 41: 448–472.
- Zhang, J-F and Casswell, S. 1999. The effects of real price and a change in the distribution system on alcohol consumption, *Drug and Alcohol Review*, vol 18: 371–378.
- Ziring, DJ and Adler, AG. 1991. Alcoholism: Are you missing the diagnosis?, Postgraduate Medicine,