Advice for Purchasing Strategy on Public Health Issues:

Alcohol Harm Reduction

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1 Summary

- Analysis of drinking patterns in national and regional surveys shows that many drinkers in their teens and early twenties, particularly males, are drinking hazardous amounts, and that young people experience disproportionate harm from their drinking. The main focus of policy and health promotion strategies should therefore be drinkers aged under 25. Early age of onset of regular drinking is implicated in problem drinking at later ages.

- Drinking is social behaviour; individual attitudes and behaviours are shaped by a range of environmental and policy factors. Educational strategies, whether school-based or public campaigns, show little effectiveness when used alone. More effective are legislative, enforcement, local environmental and community action strategies used together to tackle the range of factors that shape behaviour and attitudes of drinkers and sellers and other providers of alcohol.

- High turnover in 'new entrant' cohorts of young drinkers means that 'educating' individuals alone is likely to be less cost-effective in reducing intoxication and alcohol related harm among young people than population-based environmental strategies.

- Alcohol consumption is associated with diseases and medical conditions identified as target areas by the Ministry of Health. Reduction in the level of national aggregate alcohol consumption is therefore a continuing health goal, since incidence levels of these diseases can be expected to parallel alcohol consumption levels. Public information about the full range of medical risks for men and women associated with drinking alcohol needs to be balanced against publicity given possible reduced risk of coronary heart disease.

- Alcohol related harm, such as injuries, road fatalities, juvenile crime, domestic violence, unsafe sex, drownings and public disorder, are associated with intoxication. The high health and social costs associated with these forms of harm make reduction of intoxication a key goal.

- Disproportionate harm is associated with young people's drinking.

- Reduction in other people purchasing alcohol for underage drinkers and in underage self-purchase from off-licensed premises are effective strategies for reducing alcohol related harm.

- Statutory reporting by public health officers and education work with licensees is important to maintain a strong local focus on responsible management of on- and off-licensed premises. Health promotion officers and community health workers play key roles in this, in working with police on Last Drink Surveys, in encouraging cross-community liquor liaison gatherings and in ensuring a public health perspective in event planning and on local alcohol issues. There is some variation in this work across liquor licensing districts.

- New Zealand's drinking culture, for both young males and adults, has strong associations with sports and masculinity, which are well understood by alcohol marketers in attracting new generations of drinkers.

- Sports clubs have been identified as poor on host responsibility, as well as poorly monitored. Clubs for the main male sports can be the centre of local communities, but currently play a role in introducing young players to alcohol. Local initiatives to enhance host responsibility and encourage alternatives to the alcohol industry as funding sources have shown some promise.

- Forthcoming events in New Zealand such as the America's Cup and Millenium celebrations will increase the risk of intoxication related harm.

- Effective community action on alcohol and other drug use has shown the value of projects 'rooted in the community'. This is particularly important in addressing alcohol related harm and young people's drinking in Maori and Pacific Islands communities. Greater effectiveness is related to appropriate involvement of all relevant agencies, community organisations and local business people. Multiple factors are involved in local drinking and alcohol related harm, and community

action projects which harness local knowledge to develop priorities and strategies to meet broadly defined goals negotiated with funders are likely to be effective.

- Projects are most effective when based in existing appropriate community organisations, or when local health promotion officers facilitate the formation of a community-based group. Effectiveness is not sustained by 'pilot' projects or by relying on voluntary efforts alone in the medium term. Wages for a paid coodinator, based in a community organisation, rather than an agency, may facilitate the efforts of a wider cross-sectoral group of people.

- Evaluations offer an opportunity to make links between community organisations and researchers or health agencies, in which the later provide health information and research findings and support the development of skills. Evaluation research reports also offer the opportunity to document strategies and successes, assisting the transfer of knowledge to other groups and localities.

- Public information, participation in policy formation and media advocacy work ensures a high profile for public health perspectives in debates that shape policy decisions and help shape drinking attitudes and perceptions about the role of alcohol in New Zealand society. This balances the high profile, well resourced presentations of alcohol by its marketers.

2. Recommendations

- That the HFA ensure that all liquor licensing districts have a local health promotion or health protection officer actively working as part of the local licensing team. This role should include a focus on alcohol issues in the wider community and involvement in planning for special events.

- The HFA fund community action to address issues around safe socialising spaces and opportunities for teenagers.

- That HFA funded community projects involve evaluation processes to maximise transfer of evidence based approaches, use of local knowledge and effective programme development, as well as project documentation that can increase public health knowledge.

- That the HFA widen its support for host responsibility programmes with sports clubs to include all regions, to assist in reducing the dependence of some clubs on brewery funding, and to include boating clubs with a focus on risks of drinking on the water.

- That the HFA funds media and advocacy work to balance the high profile given to alcohol by television advertising by raising public awareness of the range of risks associated with both long term heavy alcohol use and drinking to intoxication, and to encourage debate about our drinking culture - particularly the links between alcohol, sport and masculinity.

- That the HFA, in funding community action projects, continue to fund agreed health objectives and allow local knowledge to influence the strategies undertaken.

- That the HFA fund community action projects for a five year time frame.

- That the HFA includes evaluation findings in community action projects where these will provide data on innovative projects and enhance workforce development.

- That the HFA ensures the collection of Last Drink Surveys data in all areas.

3. Overview of Broad Health Determinants

Alcohol is widely recognised in health policies as a 'hazard or risk factor' for disease and injury that increases an individual's risk and contributes to the overall burden on public health both in New Zealand and globally (MoH 1998a&b; Public Health Commission 1994; Global Burden of Disease Unit 1996; Hart *et al..* 1999; Holder and Edwards 1995; Jernigan 1997).

While most disease effects of alcohol manifest at later ages, increased risks of injury, road crashes and premature death are particularly associated with heavy drinking patterns, especially among young males (Holder and Edwards 1995; Wyllie Millard and Zhang 1995; Land Transport Safety Authority 1995, 1996; Injury Prevention Unit 1996). Alcohol is also a factor in crime and violence (Bureau of Justice Statistics 1998; All Party Group 1995; Graham *et al..* 1998; Parker and Rebhun 1995; Langley, Chalmers and Fanslow 1996; Chalmers and Langley 1995). As well as direct health care and policing costs, lost work productivity, quality of life and the loss of young lives impact heavily on New Zealand society and economy (Easton 1997; Hall 1996; Devlin, Scuffham and Bunt 1997).

Although the total alcohol available for consumption in New Zealand has been falling since the 1970s, it is still well above pre-war levels and there is evidence from surveys that recent decline is partly attributable to an increase in the proportion of non-drinkers and a reduction in the frequency of drinking, particularly among low income earners (APHRU 1998). Surveys do not support an assumption that declining total alcohol figures are evidence of moderation in behaviour by drinkers per occasion (APHRU unpublished data)..

Those under 25 not only consume most of the alcohol, they also experience harm in disproportion to the amounts they drink (Wyllie, Millard and Zhang 1996). The risks associated with youth, inexperience and sensation seeking (Thombs *et al..* 1994: Tomsen 1996), as well as with drinking larger amounts of alcohol, underlie the minimum legal age of purchase restriction in New Zealand and comparable countries. For reasons of limited resourcing and over-complex legislation, the drinking age is poorly enforced at present. Amendments currently being passed by parliament simplify the drinking age provisions but also lower the minimum age to 18, despite strong opposition from the public health sector. Amendments so far have added nothing to increase drinking age enforcement. Age identification with a photo driver's licence makes no provision for non-drivers and will only be as successful as its enforcement. With the lower drinking age, the current high risk drinking patterns of young people can be expected to grow in the foreseeable future.

Analysis of trends through the 1990s show that 14-19 year olds are binge drinking increasingly large amounts per drinking occasion (APHRU 1998). Underage drinkers currently have little difficulty accessing alcohol, which is both more widely sold and more heavily promoted than in previous decades. Alcohol and its risks are part of the adult social world that young people are entering, but it is also a 'gateway' drug for 'at risk' young people, who have disproportionately borne the brunt of unemployment and harsh income policies over the past decade.

The recent focus on the 'ageing population' should not obscure the fact that over the next decade the size of under-25 population, particularly Maori and Pacific Islands people, will be growing both relatively and proportionately (Statistics NZ 1998a&b; Auckland City 1999). Profiles of population growth are receiving attention from local governments and their planners. The spread of youth populations is uneven between localities, and is not necessarily well matched by local facilities and opportunities for safe socialising by teenagers. Little attention is given to alcohol issues in planning, although problems associated with young people, drinking and other drug use in public and private spaces are of increasing concern, and can be expected to grow with youth population increases.

The dominant perspective of the international literature on alcohol and young people's drinking is that 'the problem' should not be narrowly defined as how to change the attitudes and choices of individuals, but to recognise that drinking is a *social* behaviour. The drinking cultures of sub-populations as well as the whole population are shaped by a range of environmental and policy factors, that are amenable to change. Because of turnover among 'new entrant' age cohorts in the alcohol market, strategies focused on 'educating' individuals alone may be less successful and less cost-effective than strategies focused on national policies and local environments (Holder *et al..* 1997b; Wagenaar and Perry 1992).

4. Goals and Priorities

Over the 1990s the Ministry of Health has pursued goals of reducing overall consumption of alcohol and mortality in which alcohol or intoxicated drivers are a primary cause, while acknowledging that these targets do not provide a complete picture of alcohol related harm. In its National Drug Policy, the Ministry of Health identified alcohol as an important factor in fatal falls, death from drowning, suicide, unsafe sex, and a significant aggravator of violence - street violence and disorder, family violence, crime and generally anti-social behaviour.

At 8.5 litres per capita per annum (Statistics NZ 1999), New Zealand's national alcohol consumption is nearly three times the level internationally recommended as a public health goal (Skog 1991). National consumption levels correlate with levels of risk for a number of diseases. Cirrhosis of the liver, alcohol dependence and stroke are associated with chronic heavy drinking, although these risks are not increased by low levels of consumption (Hart 1999; MoH 1998b). However, diseases vary in the level of alcohol consumption at which risk is increased. MOH (1998b) notes the well-publicised but still controversial protective effect from low level alcohol consumption for older males at risk of coronary heart disease (Hart *et al..* 1999; Casswell 1997a; Anderson in Holder and Edwards 1995), but also that a very low level of alcohol consumption increases women's risk of breast cancer. Looking beyond chronic disease, episodes of heavy drinking are most likely to contribute to adverse effects on health and safety (MoH 1998b, 1999).

In general, changes in total alcohol consumption include and reflect changes in heavy drinking, in both amount and proportion of total drinkers (Marmot 1998; Anderson in Holder and Edwards 1995; Rose 1992). Aggregate consumption levels alone, however, disguise the skewed distribution of consumption, and of alcohol related harm, by gender and by age. About 10% of the drinkers, predominantly young males, drink about 60% of the alcohol consumed (Casswell 1997b; Holder and Edwards 1995). The amount drunk on a single occasion, i.e. intoxication, and the situations in which this heavy drinking occurs increase risk of road crashes, injury, violence and other experiences of alcohol-related harm. It is patterns of drinking among different sub-populations, rather than aggregate national consumption, that are the indicator here.

Patterns of drinking and total consumption levels are both important indicators for public health, not least because population consumption levels reflect broad social factors that shape drinking cultures (Marmot 1998). Current public health perspectives on alcohol reject an earlier focus on the individual 'problem drinker' at risk of alcohol dependence alone, with its implied assumption that 'social drinkers' were safe. Different alcohol related risks are best addressed through a mix of policies targeting high risk sub populations and whole-populations (Casswell 1997a; Holder 1993; Mosher and Jernigan 1989). The latter help change the culture and settings in which New Zealanders drink, but also address 'prevention paradoxes'. One paradox is that not all alcohol harm results from heavy drinkers, but the lower risks associated with moderate drinking involve large numbers and therefore large overall effects (Nordstrom 1995; Rose 1992). A second paradox is that not all individuals, whether moderate or heavy drinkers, will see personal benefit in cutting their consumption, but overall reduction in alcohol related harm can bring considerable benefits to the community as a whole, and to public health costs (Rose 1992). This highlights the importance of maintaining a high profile for public health perspectives in public, media and political debates.

The current priority of alcohol health promotion is therefore to target heavy drinking sub-populations - particular young males - with a range of strategies that can help reduce both levels of drinking and alcohol related harm. Harm associated with drinking also depends on the situations in which intoxication occurs, and can be reduced by highlighting the risk in particular situations (such as the operation of machinery or vehicles), or by making changes to physical and social environments (through management changes to licensed premises, for example.) However, attention also needs to be given to alcohol health promotion that challenges the wider culture around alcohol, socialising and sport which shapes the way New Zealanders drink. Alcohol is not only New Zealanders' drug of choice, but one seen as a serious issue for the community (Field and Casswell 1999; Black and Casswell 1991).

Teenage drinking

Teenage drinking is a particular priority because the age at which people start to drink is predictive of alcohol related problems in subsequent years, as has been shown by longitudinal research both in New Zealand and the United States (Casswell and Zhang 1997; Swandi 1998; Grant and Dawson 1997; Fergusson *et al..* 1995; Chou and Pickering 1992; Fillmore *et al..* 1991). Chou and Pickering's study showed sharp differences in experience of problems between those who began drinking at age 15 and those who began at 20. A recent US household survey also showed a steady decrease of heavy drinking with postponement of age of first use, with little variation in risk across sex and race subgroups (Grant and Dawson 1997). In New Zealand's Christchurch longitudinal study, 15-16 year olds who were drinking heavily showed significantly higher rates of violence and property crime (Fergusson, Lynskey and Horwood 1996).

A community approach to alcohol health promotion

Recognition of the social nature of drinking and alcohol related risk and the value of addressing environmental factors has led to a focus on social interaction in local community contexts, recognising that politico-economic factors are played out in local environments, and supporting community ownership of both problems and solutions (Casswell, forthcoming; Room 1995; Casswell 1999; Holder *et al..* 1997a; Holder 1993).

Increasing priority in alcohol health promotion is being given to building community capacity through local tripartite relationships between different sectors; such as health/ development organisations, state or local government agencies, as well as business networks and grassroots/flaxroots community organisations. Such relationships have potential for successful community initiatives with a public health objective and for investment in organisational structures which ensure their continuity (Stewart 1997b; Bush 1997; Mosher 1996; Treno and Holder, 1997). A recent international case studies review concludes that alliances across public, private, non-government groups, across professional and lay boundaries, do work; the greater the local community involvement, the larger the impact of community action programmes (Gillies 1997). Programmes 'with roots deep in the community' rather than 'parachuted in' from outside are most likely to work (Schorr 1993; Casswell, forthcoming).

This suggests a participatory role for health agencies and researchers that facilitates the emergence of voices, choices and actions by local people organising collectively for change (Sohng 1996). Principles of such an approach include recognition of community, whether of interest or locality, as a basis for effective action; building on community strengths and resources; collaborative partnerships; the benefits of shared knowledge, co-learning and empowerment that addresses inequalities; reiterative re-evaluative processes; a holistic perspective on wellbeing and the free dissemination new knowledge (Israel *et al..* 1998).

Policy matters decided at national level, such as excise tax rates and liquor licensing laws, have a crucial local impact at local levels that shape drinking environments and drinking behaviour. Moreover, theorists argue that state regulation can be made more effective by involving community organisations and local residents in decisions. They contribute local knowledge, their presence reduces cat-and-dog dynamics between firm and inspectors, and they can act in an ongoing watchdog role, making regulation more cost effective (Ayres and Braithwaite 1992; Hill and Stewart 1998). Regulation of the sale of alcohol in New Zealand now has a strong multi-agency focus at the local level which lends itself to this approach. Changes to the drinking age and other aspects of the sale of alcohol can be expected to impact at the local level over the next year or two, suggesting a high priority for community action on alcohol health promotion.

Risk by Gender, Age and Ethnicity

Age and gender are the personal characteristics that are the two most important predictors of drinking patterns and alcohol related problems in New Zealand surveys of drinking. High risk behaviour and patterns of drinking to excess are more common among young people, particularly among young males, than among older groups (Field and Casswell 1999; Wyllie, Millard and Zhang 1996; Wyllie and Casswell 1989; ALAC 1997). Moreover, there is disproportionate risk from young people's drinking: they are also more likely to experience alcohol related harm than an older person drinking the same amount (Casswell, Zhang and Wyllie 1993). Similar patterns of hazardous drinking and alcohol related harm are found among young people in comparable countries (Shanahan and Hewitt 1999; Board of Science and Education 1999; Royal College of Physicians 1995; Escobedo *et al..* 1995; Sharp 1994).

Australian research is of particular interest because of similarities of dominant culture (including drinking culture), liquor licensing laws and public health approaches (Stewart 1997b; Stockwell 1993).

In adolescence, young people are taking up a range of (not always desirable) adult socialising behaviours. In New Zealand, drinking is 'part of a consumer lifestyle, not a deviant one' (Perry *et al..* 1996; Paton-Simpson 1995) and adult masculinity is reified in sports, mateship and beer drinking (Hill 1999). Australian researchers identify sensation-seeking traits among teenagers; 'a sense of carnival' may make higher risk venues attractive to young males or encourage high risk behaviour (Thombs *et al.* 1994; Tomsen, 1996). Knowing where, when and why teenagers drink and how they perceive risk may contribute more to harm reduction strategies than knowing about frequency or amount (Thombs *et al.* 1994; Smith and Rosenthal 1995). Also noted is the importance of socialising with peers, group acceptance and the construction of youth culture in particular communities (Wagenaar and Perry 1994; Smith and Rosenthal 1995).

Young males

Alcohol, New Zealand's most commonly used drug, is most heavily used by young males. In the 1998 national drug survey (Fields and Casswell 1999), nearly the half of 18-19 year old males reported drinking six or more drinks at least once a week over the previous year (49% for 18-19; 47% for 20-24). Around 40% reported drinking enough to feel drunk at least once a week (41% for 18-19; 38% for 20-24).

The 1995 national survey *Drinking in New Zealand* provides greater detail on drinking and alcohol related harm (Wyllie, Millard and Zhang 1996; Dacey 1997). In this survey males aged 18-24, though less than 7% of respondents, drank nearly a third of reported beer. The 18 and 19 year old males were already drinking 3.5 times their share of the total male beer intake, although not yet as high a proportion as those in their first few years of legal age drinking. Almost a quarter of 16-17 year old males and one in ten 14-15 year old males were drinking 6 or more drinks on a single occasion at least weekly.

The 18-24 year olds were most likely to be heavy drinkers and to report alcohol related problems, such as getting into fights or drink-driving (Wyllie, Millard and Zhang 1996; Dacey 1997). Alcohol is a factor in juvenile crime (Fergusson, Lynskey and Horwood 1996) and 17 percent of assaults in or around hotels resulting in hospitalisation involved people under 20 (Langley *et al..* 1996). Males under 24 are disproportionately represented in statistics on alcohol related road crashes and breath alcohol (Land Transport Safety Authority 1995; 1996) and assaults in and around licensed premises (Langley, Chalmers and Fanslow 1996). Alcohol has also been identified as a factor in homicides, with highest rates among males aged 20-24 and Maori (Fanslow, Chalmers and Langley 1995). That is, all these risks parallel patterns of heavier drinking by young males.

Teenage drinkers

Teenage drinkers of both sexes meet few refusals when attempting to purchase alcohol. The 1995 national survey showed that in the previous 12 months nearly a third of the 14 to 19 year olds had drunk alcohol in pubs/hotels and 38% had purchased takeaway alcohol (Wyllie, Millard and Zhang 1996). Analysis of seven Auckland surveys over the 1990s showed that among teenagers aged 14-19 the amount being drunk on a single occasion had been increasing (APHRU 1998). This increase was associated with drinking in nightclubs and drinking takeaway alcohol in other people's homes. In the Dunedin longitudinal study underage access to alcohol via licensed premises was more important for the teenagers' drinking and related problems than was peer or parental influence (Casswell and Zhang 1997).

Older rural males

A further group of heavier and more frequent drinkers is found among older males (Wyllie, Millard and Zhang 1996). As well as young male drink-drivers, research on rural drink driving has identified men in their late 30s and older as a heavy drinking and driving group whose experience and thinking was that they could get away with it if they drove carefully and slowly (Stewart and Conway 1998; Blyth *et al..* 1995). Rural dwellers are at greater risk of injury and death from an alcohol related traffic crash than people living in urban areas. A 1992 study found that 66% of traffic crash fatalities and 29% of crash injuries occurred in rural areas (def. 100 km speed limit roads) and a disproportionate number of the fatalities involved rural residents and those living in small rural towns (Land Transport Authority 1993; Stewart and Conway 1998). A subsequent study found that at fault drink drivers from small

towns and rural areas were involved in around double the rate of fatal crashes compared with those from cities and larger towns (Bailey 1995).

Women

Women as a group drink at considerably lower levels than men. However, there has been a significant increase between the 1995 national survey and the 1998 drug survey in the proportion of women who drink enough to feel drunk at least monthly. One in three women drinks four drinks or more on a single occasion at least once a week, and one in four reported feeling drunk at least weekly. Among Auckland women there had been a significant increase in the number of women drinking more than four drinks per occasion at least weekly. The 1995 national survey showed a third of the 16-24 year old women were drinking enough to feel drunk at least once a month, and one in eight were doing so once a week (Field and Casswell 1999; Wyllie, Millard and Zhang 1996).

Wine is the drink favoured by women. The introduction of wine into New Zealand supermarkets, offering lower prices, was followed by a 17% increase in overall wine sales, with a permanent effect on wine consumption. In qualitative research, the availability and convenience of wine in supermarkets was given as a reason for increased consumption by women.(Zhang and Casswell, in press; Wagenaar and Langley 1995; Wyllie, Holibar *et al..* 1993).

An alcohol related risk associated with women, although it involves both genders, is unwanted and/or unsafe sexual intercourse. Of the young people involved in the Dunedin Multi-disciplinary Study of Health and Development, 10% reported that alcohol was the main reason for first intercourse, and more said it was one factor (Dickson *et al..* 1998). A third of the teenage girls seeking emergency contraception from NZ Family Planning report that they were drunk when they had unsafe, and sometimes unwanted, sex (NZ Family Planning Assn 1994).

The tripartite link between alcohol, unprotected sex and unplanned pregnancy is relevant to a specific risk to women and their offspring, foetal alcohol syndrome. Risk is highest from heavy drinking during pregnancy, but harm may also occur during the conception period (Murphy-Brennan and Oei 1999). Foetal acohol syndrome (FAS) and foetal alcohol effects (FAE) (alcohol related neuro-developmental disorders) are believed to be under-recognised and underreported in New Zealand, with low public awareness of risks. Only about half GPs and obstetricians routinely advise women about alcohol consumption at the first antenatal contact. (Leversha and Marks 1995; Cordero *et al..* 1994; Fetal Alcohol NZ 1999). The University of Otago's Paediatric Surveillance Unit is planning a two year report back project on new cases presenting to paediatricians. The consequences of heavy drinking during pregnancy can be severe for both child and mother, and there are policy issues to be resolved around responsibility for financial and other support.

This specific risks to women may be informed by an up-to-date prevalence study of FAS and the less severe FAE, and addressed by increasing awareness through public education campaigns, media advocacy, neo-natal care systems and alcohol warning labels (Greenfield 1997). A review of Australian prevention programmes showed raised awareness but limited behavioural change in 'high risk' drinkers, once again suggesting that education alone about a particular risk is not enough (Murphy-Brennan and Oei 1999). Hazardous drinking by women needs also to be addressed through policy and environmental strategies, as discussed below, that target drinking by young people.

The Ministry of Health targets FAS as one of two physiological alcohol health risks specific to women. The other is breast cancer. Even low levels of alcohol increase risk (MoH 1998b**;** Willett and Stampler 1997; Swanson *et al..* 1997). There have been low levels of media attention and public awareness on this issue, relative to that given to benefit effects of low alcohol consumption for older males at risk of coronary heart disease.

Maori

Maori use of alcohol has been a contentious issue since the 1840s (Durie 1998a; Hutt 1999; Te Puni Kokiri 1995). The 1995 *Drinking in NZ* study showed that, although the Maori sample included a slightly lower proportion of drinkers compared with the whole population, Maori men were drinking at higher average levels. Around half the reported alcohol was consumed by males aged 14-29 years. A larger share of drinking occasions occurred in pubs/hotels/bars, nightclubs, sports and other clubs. In these venues, as well as outdoor spaces and other people's homes, larger quantities were likely to be consumed (Dacey 1997).

This higher proportion of heavy drinkers among a lower socio-economic group, while overall consumption may be greater among high socio-economic groups, is a common pattern for disadvantaged groups. So too is the integration of drinking and tough social images into aspects of cultural identity and socialising (Moewaka Barnes 1996).

Alcohol is a leading diagnosis in psychiatric hospital first admissions for Maori males. The second most common cause of hospital admission for Maori males is road crashes, and it is to be noted that half all road crash fatalities involve alcohol (Pomare *et al..* 1995). The higher incidence of drinking and driving among Maori compared with Pakeha was noted in a 1995 report on the role of alcohol in road crashes, with the recommendation for a Maori Working Party representing a range of Maori organisations to develop strategies (Officials Committee 1995). There is also a link between alcohol use and the offending which leads to Maori comprising 50% of the prison population, as well as to family violence, higher recidivism and lower standards of health (Durie 1998b).

Maori males' pattern of drinking start young: an over-representation of Maori boys was noted in one study of school age drinkers (Pomare *et al..* 1995), and 14-19 year olds have reported no difficulty in obtaining take away alcohol and drinking on licensed premises (Dacey 1997).

Pacific Islands and Other

Over half of all Pacific Islands adults do not drink alcohol. Of those who do, a high proportion show hazardous patterns of drinking. For men it is around the same proportion as for Pakeha men, with a lower proportion of women drinking hazardously compared with Pakeha women (MoH 1999).

Survey findings for 'other ethnicity' reflect low and non-drinking patterns among the different Asian and Indian communities in New Zealand.

Prospects for the next decade

The priority focus for programmes is indicated by the above discussion: increasing underage and hazardous drinking by young people, particularly young males, has put them at high risk. Programmes with young Maori and Pacific Islands drinkers will need to be based within, and specifically designed for, those communities.

It is likely that current trends in young people's drinking will continue, and that these will be increased by the decision to lower the drinking age to 18. There is little in the Amendment Bill now before parliament or in resources planned for police or other agencies to encourage a belief that enforcement of laws restricting young people's access to alcohol will improve. The new photo driver's licence is only as good as its enforcement, and does not cover the 20% of the population who do not drive. If the drinking age is lower, under present circumstances, alcohol related harm will increase. Increases in alcohol related harm will increase pressure on health care and policing system already under strain.

In Australia, where 1980s research showed adverse effects from lowering the drinking age to 18, over two-thirds of alcohol purchases by underage-looking people continue to go unchallenged (Schofield *et al..* 1994). In both Canada and the United States researchers have analysed adverse effects from lowering the drinking age, and positive effects when the US raised theirs again to 21 (Wagenaar 1993; O'Malley and Wagenaar 1991; Hughes and Dodder 1992). In all these countries the focus of recent legislative amendments and police initiatives has been on tightening up licensee compliance with the minimum age of purchase (Grube 1997; Wagenaar and Wolfson 1994; Hill 1997). Similar actions are needed, but not yet being introduced, in New Zealand.

High Risk Environments

The perception that it may be better to allow young people to drink in licensed premises rather than unsupervised in private homes or public spaces is not borne out by research. In both New Zealand and Australia, 18-24 year old men do most of their heavy drinking on licensed premises like hotels, taverns and clubs, and drinking large amounts in these locations is an important predictor of alcohol related harm, such as getting into a fight or drink-driving (Casswell, Zhang, Wyllie 1993; Stockwell, Somerford and Lang 1992). In Western Australia a programme of research on serving practices associated with different types of licensed premises showed intoxication and alcohol related harm from pubs and bars, particular those with late hours of trading (Stockwell 1997; Stockwell 1993; Stockwell *et al..* 1992; Stockwell, Somerford and Lang 1991, 1992; Ireland and Thommeny 1993; Homel and Tomsen 1991).

Over the period of the Dunedin longitudinal study of childhood development, the young people's attitudes towards drunkenness became more positive until, at age 18, eight in 10 felt it was okay to get drunk now and again (Casswell 1996). Situational factors such as the presence of peers or parents and money available influenced the amount the 15 year olds consumed (Connolly *et al..*1994). Those purchasing alcohol themselves from licensed premises at age 15 were significantly more likely to drink heavily at age 18. Drinking on licensed premises before the age of 18 was significantly related to heavy drinking and to frequent drinking on licensed premises at age 21 (Casswell and Zhang 1997). The increasing amounts being binge-drunk by Auckland teenagers was associated with drinking in nightclubs, as well as at 'other people's homes' - that is, takeaway alcohol from an off-licence. Underage access to takeaway alcohol will be of increasing concern now that supermarket are to sell beer as well as wine. Beer is the preferred beverage of young males, and supermarkets scored the lowest rates for reported refusals to purchase attempts in the 1995 national survey (Wyllie, Millard and Zhang 1996). Off-licensed premises are seldom monitored unless they come to police attention. Limited resources mean that police and inspectors target late night pubs and nightclubs rather than the off-licences, café-bars and other outlets that have proliferated since the mid 1990s under liberalised licensing (Hill and Stewart 1996a&b; Stewart, 1999).

Alcohol and Sports

In both New Zealand and Australia sports clubs, frequently the social centre of small communities, have been identified as often poorly managed with regard to serving young people and heavy drinking (Munro 1999; Business Research Centre forthcoming, Hill and Stewart 1996a). Unsafe drinking patterns are evident among both players and sports audiences (D'Arcy *et al..* 1997; Quarrie *et al..* 1996). Until recently New Zealand club premises received little attention from inspectors and health promotion officers, despite their role in the promotion of alcohol through sponsorship agreements and sponsored media coverage in this country and elsewhere (Hill 1999; Rekve forthcoming, Buchanan and Lev 1989).

The association of drinking with water sports and boating also presents risks. (McKnight 1990). ALAC recently commissioned New Zealand research which showed that 40% of drownings of those aged 15 and over involved drinking. Risk was higher for boating, and included not just skippers involved in accidents but passengers falling overboard (Smith, Coggan *et al..* 1999). Drinking on the water will be a particular focus of harm reduction strategies around the Americas Cup and other harbour based events in Auckland over late 1999/early 2000.

Prospects for the Next Decade

The lowering of the drinking age from 1 October 1999 gives all 18-19 year olds access to age restricted hotel/tavern/pub premises, which are most associated with heavy drinking and experience of alcohol-related harm, as well as allowing them to buy takeaway alcohol, including beer as well as wine conveniently sold at supermarkets. All premises will now trade seven days a week. It can therefore be expected that the increase in amounts drunk by some Auckland teenagers in nightclubs and in other people's homes will be reflected across a larger population of 18-19 year olds.

If this increase is not to include the effects of a lower 'de facto' drinking age, every effort needs to be made to ensure that effective age identification is implemented and enforced. A photo has been included on the drivers licence but will not be fully issued before mid 2000. As at 30 July amendments to the licensing law offer only a definition of acceptable proof of age; there is no requirement on licensees to actually ask for ID. Efforts to ensure age identification to enforce the new drinking age will be largely informal. This is the situation in which New Zealand faces the Millenium celebrations.

Nevertheless, there is a window of opportunity here, in public concern about this change, that should not be lost. It may be possible over the next year to set in place a set of expectations and changed practices around asking young drinkers for ID. At a recent ALAC conference, police called for a strong collaborative effort from all those in the licensing field to implement age identification; it was suggested one or two licence removals might help focus the attention of licensees. There is a role here for health promotion to contribute both through a national publicity campaign and through active work with licensed premises at the local level.

5. Literature Review of Programme Effectiveness

A focus on environmental factors

In the European Union, where alcohol is considered a major public health priority (Oberlé *et al..* 1998; Her and Rehm 1998; Marmot 1998; Zureik and Ducimetière 1996; *The Globe* 1997) and the Council of Ministers is targeting drinking by teenagers (*The Globe* 1999a), a second Plan of Action is being implemented towards WHO's goal of a 25% reduction in alcohol consumption. This focuses on health promotion through different *settings,* such as the school, workplace, the urban environment. (Eurocare 1998).

This approach reflects the growing body of alcohol research and health promotion literature pointing to the importance of the *environmental* factors, both physical and social, that shape drinking cultures and individual drinking behaviour (Edwards *et al.* 1994; Holder and Edwards 1995; Holder 1994).

There is some, if mixed, evidence for the efficacy of intervention programmes directed at individuals; education in schools is discussed further below. There is considerably less evidence for the overall impact of such programmes on aggregate levels of alcohol related harm. For all ages, the environment surrounding the individual drinker helps determine risk, as well as drinking behaviour, and that environment is structured by cultural, social, economic and policy factors including availability and access to alcohol (Holder and Edwards 1995; Marmot 1998; Single 1994; Skog 1991; Mosher and Jernigan 1989). This leads to policy and health promotion that move beyond educating or treating the individual 'problem drinker' to recognising the social nature of drinking and its adverse consequences. It is increasingly recognised that education on alcohol is unlikely to lead individuals to change their behaviour if nothing around them changes. This recognition underpins the international popularity of community action projects involving a range of strategies (Casswell, forthcoming).

The literature advocates instead a multi-layered approach involving the legislative framework, price control through taxation (Wette *et al..* 1993; Godfrey 1997; Grossman *et al..* 1994), policies on alcohol advertising, sponsorship and labelling (Casswell 1995; Saffer 1998; Craplet 1997; Rekve forthcoming; Greenfield 1997) and enforcement of liquor laws and licence conditions (Hill and Stewart 1996b; Stockwell 1993), community involvement in decision making and monitoring, host responsibility and good management by licensees (Gliksman *et al..* 1993; Holder and Wagenaar 1994; Holder *et al.*, 1993). This reflects increasing recognition in the public health sector of community contexts and that individual health choices are part of the human social systems and webs of mutual obligation (Room 1995; Cox 1997; Crampton 1997).

Social patterns, not just those 'at risk'

There is a wide consensus among independent alcohol researchers that cost effective prevention efforts and public action strategies need to address factors that affect patterns of alcohol use across whole populations, not just 'at risk' groups or those drinking at 'at risk' levels (Edwards *et al..* 1994; Holder and Edwards 1995; Marmot 1999). Targeting individuals is not cost effective. Shrinking public health resources cannot provide programmes in sufficient numbers for the large heavier drinking and occasionally heavier drinking populations, even if a single 'cure' or programme were available (Wagenaar and Perry 1992).

This is particularly true for young drinkers, since the concern is not just for 'at risk' kids (Fergusson 1996; Sibthorpe *et al.* 1995) but for the disportionate risk that *all* young drinkers are exposed to in 'normal' socialising. The combination of inexperience with alcohol and with other activities and situations involved leads to underestimation of risks (Smith and Rosenthal 1995). In addition, Wagenaar and Perry (1992) make a strong point that young drinkers are a constantly moving target for educational strategies, as each year brings new high risk entrants into the market. This means that, while public and school-level education has a valuable place, various environmental strategies including regulation are likely to provide the most cost-effective use of resources with longer benefits over time (Wagenaar and Perry 1992).

Individual targeting is also not effective, because drinking is a *social* behaviour, not just an individual consumer choice. The long term aim is to address attitudes and behaviour through changing the drinking culture. In the shorter term the focus is on practical ways to shape the social and physical

environments in which drinking occurs so as to reduce alcohol related harm (Mosher 1996; Holder 1994; McKnight 1990), including attention to the physical design of drinking venues (Graham and Homel 1997; McIntyre and Homel 1996).

Alcohol Education in Schools

Traditionally schools have been regarded as a prime target for delivery of alcohol education to young people. They are seen as a discrete area of influence with a captive audience ripe for alcohol education aimed at preventing or reducing alcohol-related harm. Early alcohol education programmes concentrated on information-giving, then more recently added skills training and peer support processes. However, from literature on the development and effectiveness of school education programmes, it is evident that strategies focused on shaping/changing individual behaviour just through providing knowledge and skills are largely ineffective at preventing or reducing use or delaying onset of alcohol or drug use (Howard 1998; White and Pitts 1998; Beck 1998, Samarasinghe 1997; Foxcroft *et al..* 1997; Erickson 1997; Gorman 1996; Hawthorne *et al..* 1995; Hansen, 1993; Gerstein and Green, 1993; Abel, 1992).

Because drinking alcohol is legal (although sales is regulated by law), a harm reduction approach in education programmes is more easily argued for than with illicit drugs. One United States study has attempted to measure the harm reduction effects of an alcohol education programme. The Alcohol Misuse Prevention Study (AMPS) compared rates of increase in harm from alcohol use in two student cohorts. One group was taught a misuse prevention curriculum; the other were not. The study found that, while there was no significant difference in alcohol consumption at follow-up, those in the intervention group who had a prior history of unsupervised drinking did not show as much increase in alcohol-related harm as the control group (Dielman 1994, Shope *et al.* 1994). While the study involved small numbers, it seems to indicate that harm reduction can be achieved by school drug education and that this need not necessarily be through an overall reduction in alcohol use. An Australian study developed along similar lines is currently in progress and has reported preliminary findings consistent with these results (McBride 1999).

There has, however, been widespread concern that most individually focused alcohol and drug education programmes have 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 contextual health education curriculum with alcohol education sessions, student support services such as Student Assistance Programmes, Students against Driving Drunk (SADD), and parent and community interaction (Board of Trustees 1991; Tobler 1992; Gerstein and Green 1993; Garrahan 1995; Christchurch College of Education 1998; Manahi,1998; Joyce and King 1999; Ministry of Education 1999).

An example of this approach is a comprehensively designed project in Minnesota, Project Northland. Researchers reported that interventions that simultaneously focused on schools, parents and the wider community significantly reduced tobacco and alcohol use; influenced peer norms and reduced peer influence to use; increased parent-child communication about drug use; and delayed the onset of all drug use in the intervention areas, compared to other reference areas (Perry *et al.*, 1996; Wagenaar and Perry 1992).

Principles for alcohol and drug education in schools, based on the evaluation of effective health education programmes, have been drawn up in Australia and Britain (Ballard 1994; Joyce and King 1999; Ministry of Education 1999). These include:

- Student centred education based on assessed need of the students and their community
- Age and developmental stage-appropriate alcohol education which is integrated into the health education curriculum across a variety of levels
- Co-ordination of alcohol education, policy and support services within the school environment
- Training and support processes for all staff, students and school management [Board of Trustees] involved in alcohol policy development, and delivery of education and support services
- Establishment of clear, realistic and measurable objectives for alcohol education delivered in the school

- Development of an educational programme from a sound theoretical framework (such as social influence and inoculation) using interactive delivery methods and activities based on evidence from evaluated programmes
- Selection of appropriate and complementary material and resources including representatives from community agencies congruent with school student groups and the programme objectives and content.

The theme that emerges from the literature is that school based education by itself is of limited value but when combined with other community prevention strategies impacting on young people such as parenting skills programmes, media awareness, alternative recreational opportunities, environmental modifications, alcohol regulatory policies and law enforcement activities can achieve substantial sustainable reductions in alcohol-related harm (Harachi *et al..* 1996; Perry *et al..* 1996; Kumpfer 1997; Samarasinghe 1997). To be most effective, alcohol education in schools should be in line with the health curriculum. Information should be appropriate to the particular age groups risk of use and harm and discussion should focus on the contexts in which this may occur - socialising with peers, in the teenagers' own locality, in relation to other issues such as sex, other drugs, teen culture. What is taught about alcohol in schools needs to be congruent with what teenagers see and experience around them in their community.

This leads to a recommendation that school based education parallel and be part of a local community alcohol health promotion project to reduce local alcohol related harm.

Alcohol and Driving

There are disproportionately high risks associated with young drinkers and driving (Land Transport Safety Authority 1996, 1995; ALAC 1995; Officials Committee on Road Safety 1995; Keall 1994). Drink driving provides an example of a set of environmental strategies which have worked together to help change social norms and individual attitudes and behaviour about driving after drinking (Officials Report 1995; Perkins 1992). The combination of laws against drink driving, breath alcohol testing, high profile compulsory random breath testing, high profile education campaigns, media advocacy and community group action have proved more effective than laws alone, in New Zealand and elsewhere (Voas 1997; Snortum 1990). These media campaigns are pitched at the whole population, as well as implemented through schools and community organisations, and backed by enforcement practices.

There is little evidence that mass media campaigns on their own change drinking behaviour, although they may have limited effect on beliefs and attitudes in, and can contribute to public support for policies related to alcohol availability, pricing and advertising (Connolly *et al..* 1994; Edwards *et al..* 1994; Casswell *et al..* 1989).

In both New Zealand and in the US, the concept of a non-drinking 'designated driver' has become widely accepted and saves lives, but has been criticised because it sends a double message condoning drinking at the same time as warning against it. 'Students hear its pro-drinking message accurately: it is all right to get as drunk as you like - so long as someone else drives' (Manahi 1998). Young people's risk perception and behaviours about *driving* have been influenced, but not those about binge drinking when not driving, putting them at risk of other alcohol-related harm.

Community based drink drive projects

In the USA and elsewhere, a number of projects have been undertaken that involve local residents and organisations as programme initiators, as well as a range of city agencies. Voluntary effort is a key component, but so too is public funding for dedicated coordinator and project costs (Hingson *et al..* 1996; Baum *et al..* 1997). Community based projects, addressing a range of contributing factors, such as sales to minors, poor host responsibility, police enforcement, outlet density and parental and community awareness, have also been used to address injury from all alcohol related causes (Homel 1997; Holder 1993). The effectiveness of a community based approach to injury prevention targeting the range of contributory factors was tested in controlled community trials over five years in the USA (Holder 1993).

In New Zealand, slower change of behaviour among older rural males was noted and researched (Blyth *et al..* 1995; Fairweather and Campbell 1990), leading to community action projects on drink-driving.

The Waikato Rural Drink Drive project used a community action approach through the development of collaborative alliances between workers in community organisations and state agencies, to which researchers contributed public health and evaluation research based knowledge. The result was the development of effective community capacity through flexible, evolving enforcement and prevention practices, and innovations in data gathering and policy development (Stewart and Conway 1998).

A similar approach with differences in focus has proved successful in projects to reduce traffic injury among Maori. The Waikato Rural Drink Drive project design included an independent Maori component, Waka Taua (McCreanor *et al..* 1998). In another three year project to reduce alcohol-related traffic crashes, two Maori organisations developed and implemented a broad range of strategies in collaboration with Whariki (APHRU) researchers, who acted as formative, process and impact evaluators. The focus was on raising awareness of and support for culturally viable strategies in Maori settings, on reducing drunkenness in public drinking environments where Maori drink and on strategies which complemented compulsory breath testing (Moewaka Barnes *et al..* 1996a&b).

Last drink surveys

In some districts police collect information on the last place of drinking when charging drink-drivers as a way of targeting 'problem premises' for attention and host responsibility training (Hill and Stewart 1996a). This strategy was developed by a community action project around implementing the changes of the 1989 Sale of Liquor Act (Stewart *et al..* 1993). Results show a small number of licensed premises being named by a number of those charged and this data provides a guide to police, licensing inspectors and public health officers on which premises should be monitored more closely and targeted for host responsibility training (Wood *et al..* 1995; Lang 1991)). Initially last drink surveys were of short duration, but have gradually gained full support from police. In the Auckland cities this alcohol data is now recorded for all offences, not just drink driving, as part of projects jointly funded by police, local governments and/or health agencies (Arnold 1998; Thomas 1998).

Of key importance has been the role that public health workers have played in processing the data from the police and passing findings back to the local statutory officers responsible for monitoring licensed premises. In some localities health promotion officers working with licensees were also processing data for local last drink surveys; in others this was contracted to a local community health organisation or advocacy group. Research interviews with licensing police in 1995 suggest that without this assistance last drink surveys would not have been continued to the point at which their usefulness was recognised (Hill and Stewart 1996a).

In other areas, this work is performed on contract by community health workers. Where community health organisations exist, they also play a role in contributing a public health perspective on liquor licensing issues - in host responsibility monitoring and education, and in supporting community input into the licensing process through the provision of information.

Licensing and Monitoring of Alcohol Outlets

Statutory responsibilities in liquor licensing

The sale of liquor, levels of intoxication and the responsible management of drinking venues have important implications for public health. There is now a large body of literature, particularly from the US and Australia, which focus on 'supply side' issues, such as availability, server responsibility and liquor law enforcement. Trends towards deregulation on alcohol sales and marketing have not reduced public expressions of concern, from medical and health agencies and local communities (Casswell, forthcoming).

Research in Australia has explored in detail the links between licensed premises, intoxication and violence (Ireland and Thommeny 1993; Homel and Clark 1994; Homel and Tomsen 1991). Responsible server practices can reduce levels of intoxication and influence behaviour, but research has shown that training for staff will be ineffective unless fully supported by managers and owners of licensed premises with high expectations that host responsibility requirements and licensing laws will be effectively enforced (McKnight and Streff 1994; Stockwell *et al..* 1995; Stockwell, Lang *et al..* 1993; Single and Tocher 1992).

Public health officers play an important monitoring and educational role in the regulation of licensed premises at the local level, because of the statutory reporting role of Medical Officers of Health, alongside District Licensing Agency inspectors and police licensing sergeants (Hood 1996). This MOH role is not well balanced in the Sale of Liquor Act against the other two roles in terms of powers to seek closure, formal delegation of authority to local officers, etc. Local officers have also called for this work to be supported by legislative amendments to name or define 'host responsibility' and to require written in-house host responsibility policies (Hill and Stewart 1996a&b). (Evaluation research showed limited takeup of ALAC and HANZ host responsibility materials and policies by managers and licensees, Webb *et al..* 1996). Nevertheless, this statutory role provides an invaluable entree into licensed premises which is not available to alcohol health promoters in most comparable countries.

Research in 1995 showed the important role public health officers have developed as part of the local licensing team (Hill and Stewart 1996a&b). The investigative work for the MOH's statutory reporting role is increasingly carried out by health promotion officers (rather than health protection officers) who develop particular expertise on alcohol issues. (Local governments employment of specialist inspectors for liquor licensing is also proving effective.) They use this opportunity to work with licensees and their staff on host responsibility and other management practices that can help reduce intoxication, aggression and alcohol related harm and support the enforcement of liquor licensing laws. The public health perspective they contribute appears to increase the importance that local police officers and inspectors give to host responsibility aspects in the Act such as the provision of food and non-alcoholic drinks. As a team, their differing perspectives and responsibilities enable them to respond appropriately to any infringement or undesirable management practices by a licensee.

In 1995, this role was not being fulfilled in all localities - particularly at the fringe of RHA areas - which was attributed by interviewees to restructuring and resourcing. However, it was those areas in which a local public officer was active as a member of the licensing team, that officers reported most satisfaction with the Act and with their local licensed businesses (Hill and Stewart 1996a&b).

This team approach to local licensing was initially facilitated by a project involving community health workers in the first years under the 1989 Sale of Liquor Act (Stewart *et al..* 1993). It led on to the development of regular or occasional liquor liaison gatherings that involve all sectors of the local community. These are actively encouraged by ALAC as providing a useful venue for resolving local issues or planning safe local events (Stewart *et al..* 1997; ALAC 1996a&b). Health promotion officers and community health organisations can also make a valuable contribution on host responsibility practices as a part of community based prevention projects, as discussed below (Holmila 1998).

One example of the benefits of a well developed partnership between liquor licensing officers is that between District Licensing Agency, policy and public health officers at Healthcare Otago which has provided the base for jointly funded action research projects related to licensed premises, one related to door staff, and one related to assessing and improving the 'atmosphere' of local drinking venues (DCC DLA 1998, 1995). The team also worked closely with university groups and licensees in the development of a local age identification card.

With the drinking age changing to 18 and a photo now on the driver's licence (and it is hoped some form of non driver's ID), local statutory officers are already planning a strong focus on ensuring licensees and their staff do actually request ID. The 'educative' work of health promotion/protection workers with licensing staff and in promoting the issue with local communities generally will be important in supplementing the enforcement roles of police and inspectors (Hill 1998a). In Australia and the US an increased focus on how underage drinkers access alcohol (Forster *et al..* 1995; Wagenaar *et al..* 1995; Wagenaar and Wolfson 1994), led to amendments tightening laws on age identification and selling alcohol to minors, and to enforcement drives. The results have been reflected in lower local harm statistics (Hill 1997; Lang *et al..* 1996; *Prevention File* 1995).

Supporting community involvement in licensing decisions

Local alcohol health promotion workers often also fill a valuable role in providing information and support for neighbours and community groups wanting to have input into licensing and planning decisions, as provided for in the Sale of Liquor and Resource Management Acts (Hill 1998b). Although these Acts are designed to dovetail with regard to the location and the management of licensed premises, few local plans so far address issues around the sale of alcohol. In some localities - usually those in which local communities have experienced problems from late night premises or considered a location inappropriate - this process has been begun with the development of Council policies on, for

example, maximum closing times. Health promoters can also offer knowledge and experience on alcohol issues and host responsibility as part of encouraging Councils to develop formal policies in regard to in-house functions, Council-owned halls for hire, and the planning of public events (eg Waitakere 1992; Rylett *et al..* 1999). However, there is still much work to be done to include the location of alcohol outlets and venues in local planning, before the two Acts dovetail as designed.

The supply, marketing and responsible serving of alcohol and strengthening community action are key aspects in a broad based strategy to address drinking and alcohol related harm among Maori (Te Puni Kokiri 1995). Manaaki Tangata, a programme developed by Maori alcohol health promotion officers and ALAC focused on licensed premises and responsible host management, including clubs and marae that allow alcohol (Officials Committee 1995). Maori wardens have a statutory responsibility with regard to Maori and licensed premises, and in a few cases wardens and marae committees have lodged objections to liquor licence applications or renewals (Moaewaka Barnes *et al..* 1996b). Both wardens and kaumatua or other Maori leaders would (like community board members) be recognised as legitimate objectors having an 'interest greater than the public in general', and there is potential for Maori community alcohol health promotion projects to have more active involvement in local licensing decisions to ensure responsible management of premises and outlets in their community.

Off licensed outlets

Survey evidence on young people's drinking shows that, as well as increasing host responsibility in drinking venues, there needs to be greater compliance with drinking age laws by off-licensees and by adults who purchase on behalf of teenage drinkers.

Dunedin longitudinal research has shown that of 15 years olds who found it easy to obtain alcohol 28% asked sometone to buy it for them. At age 18, under the present Sale of Liquor Act, 86% said it was easy for them to g*et al.*cohol. Although the age of purchase was 20, 63% usually bought it themselves; of these 63% got it from bottlestores and 62% from taverns or pubs (Casswell 1996). In the 1995 national survey, supermarkets were reported with the lowest rate of refusal to purchase attempts (Wyllie, Millard and Zhang 1996). Analysis of Auckland surveys over the 1990s showed an increase in the amount drunk per occasion by 14-19 years olds associated with drinking in other people's homes, ie takeaway alcohol, as well as in nightclubs (APHRU 1998). With a lower drinking age and beer in supermarkets, ensuring effective age identification will be part of the 'window of opportunity' for health promoters and local enforcement officers in averting a lower 'de facto' drinking age.

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The issue of underage off-licence purchase has become a focus of attention at the community level in the US and Australia. Again, a community based multi-faceted approach has been shown to work (Grube 1997; Wolfson *et al..* 1996). Controlled trials with pre and post sales data were used to prevent alcohol sales to minors through a mix of increased enforcement, host responsibility training for outlets and media advocacy.

Sports clubs and events

The Amendment Bill currently before parliament includes a proposal that licensed clubs become normal on-licensed premises, able to sell to the public. This would increase current concerns and efforts to address poor management and poor host responsibility in sporting and other clubs. In Northland an innovative Barskills Road Show has been initiated by a Working Party of local government, police and public health stakeholders and funded by Northland Health (Nash 1998). This raises host responsibility issues with club management committees and members, providing a range of practical skills such as how to organise quick, cheap meals to soak up the after match beer.

In Norway concern that sportsclubs, often the social heart of small communities, should provide a safe environment for children and families, has led to including sports in a campaign promoting a set of 'alcohol free zones'. These include traffic, boats and bathing, sports and outdoor life, situations in company with children and adolescents, working life, conflicts, mourning and depressions, and pregnancy (Alkokutt 1999).

Australasian drinking cultures include strong linkages between alcohol, sports and masculinity (Hill 1999; Tomsen 1996). Clubs for the male sporting codes play a role in introducing young players to alcohol (Hill and Stewart 1996a) and alcohol sponsorship of sports teams, clubs and television sports coverage now promotes drinking in parallel with brand advertising in the broadcast media. This kind of promotion and sponsorship is no longer possible for tobacco products in New Zealand and most

comparable countries. The Norwegian initiative suggests that, as well as media advocacy, there may be a role for a roadshow-style project which assists clubs to develop alternative sources of income and/or alternative sponsors.

With major boating events taking place in Auckland over the next year, and ALAC taking an interest in 'alcohol and water', there may be opportunities for a similar 'road show' on host responsibility aimed at sailing and boating clubs. A focus on 'skipper responsibility' has been suggested. In the US, where risks associated with alcohol and recreational boating have received attention in liquor law amendments and preventative health promotion, there is recognition that the boat operator is not only a target for intervention but also a potential intervenor in drinking by passengers (McKnight 1990).

Community Action on Alcohol

A community based approach to reducing alcohol related harm recognises the value of existing networks and local organisations, as well as locally based state agencies, in the development of successful local initiatives. 'Yes, Community action does work' is the title of a final report from a Healthy Localities project in Benalla, NSW that developed a strong focus on youth, alcohol, drugs and family violence. It began as an initiative by local agencies but, based on the principle that 'residents know best', it attracted locals to become active on a range of activities and programmes, and organising on-going youth and other groups (Healthy Localities Project Benalla 1993). A community partnership approach involving a cross section of agencies and existing organisations, as well as input from young people themselves, was used in San Diego in a programme with specific focus on safer social activities for the 13-15 age group (San Diego County 1994).

Community action on alcohol is often instigated by residents themselves as a response to dissatisfaction with levels of street disorder and alcohol harm. In both New Zealand and Australia this has occurred in communities with large numbers of young visitors gathering for certain events or at certain times of the year and drinking either in licensed premises or in public places. Two documented examples of this in New Zealand occurred in the beach communities of Whangamata (Johnson *et al..* 1996) and Piha (Conway 1998a&b). In both localities, organisation around planned solutions to recurrent problems involved a number of local groups as well as police, local government and public health officers. In Whangamata, health promotion officers took a leading role. On the Piha project help with promotion was provided by the Waitakere Injury Prevention Programme.

In Australia community dissatisfaction with street disorder and violence flowing from licensed premises led to the development of 'Accords' - local codes of conduct adopted by licensees - as a way of encouraging more responsible management practices by licensees (National Centre for Research into the Prevention of Drug Abuse 1992; Victoria Police 1993). Some, such as the Geelong Accord, have been successfully sustained. Given the inherent instability of industry self-regulation, others have collapsed, and there has also been criticism that codes can be a means of reducing attention from police while not necessarily improving actual management practices (Hawks *et al..* 1998).

There has, however, been considerable success with projects taking a wider, cross sectoral approach. In Queensland, alcohol-related violence and disorder in Surfers Paradise was the starting point for a local community action project to improve tourist destination image and reduce fear of crime. The project focused community militancy about safety and security by channelling energy into a steering committee, three major task groups and a Code of Practice monitoring committee which involved members of all sections of the community including nightclub managers (McIlwain 1996, 1994a&b; Homel *et al..* 1995a&b). An insight from this project was that involvement of the wider community, not just enforcement agencies, increased personal and moral pressure on licensees who valued being regarded as part of the respectable business community. (The value of an appeal to responsible citizenship and an initial assumption of willing cooperation by regulators has been noted by theorists - Ayres and Braithwaite 1992). Work of task groups also included changes to improve street safety, such as street light, siting of transport stops and public phones, etc. The Surfers multi-sector approach has been successfully replicated in three other localities in Queensland (Hauritz *et al..* 1998a&b).

This year, a community partnership approach is also being taken in Auckland City in planning the development of the Viaduct Basin for a six month series of major events likely to attract large numbers of visitors. the Louis Vuitton Cup, America's Cup, World Power Boat Championships and FIFA world youth soccer, as well as three major large public events in central Auckland to celebrate the Millenium.

All these events can be expected to involve drinking. The combination of drinking and boating provides a risk, but also provides a focus for health promotion activities by ALAC and others.

As part of the development of the Viaduct area and the America's Cup Village, an Accord-style code of conduct is being developed that takes a much more cross sectoral approach than the Australian Accords. It is being developed by licensees' representative organisations as a partnership with the local statutory agencies involved in liquor licensing. Initially the focus has been on licensed premises in the Viaduct and Downtown areas, but the plan is to involve other interested health and community parties, and to extent the scope to the whole inner city, then the Auckland region and beyond.

Community action on underage drinking

The same approach proved successful in Queensland in reducing risk behaviour and harm among young end-of-school tourists (McIlwain 1998; Smith and Rosenthal 1997). Involving young people themselves in early discussions enabled alcohol and other drug use to be distinguished from other factors young people regarded as essential to having a good time, and separating the latter from the former. Young people's input also enabled organisers to provide support facilities with which young people felt most comfortable (one surprise being that help havens should be staffed by people their parents' age). Howard (1996) notes that involving young people themselves in broad based initiatives increases likelihood of success and need not be high cost compared to less effective educational approaches.

In the USA the effectiveness of a community based strategy to reduce alcohol injury was demonstrated through controlled community trials in a five year project and reported in a special *Addiction* supplement (92 S2 Holder 1997; Holder *et al..* 1997a&b). Environmental factors were targeted through five main components: community mobilisation (Trena and Holder 1997), host responsibility on licensed premises (Saltz and Stanghetta 1997); drink driving enforcement and prevention (Voas 1997; Voas *et al..* 1997); reducing retail availability to minors (Grube 1997); and reducing availability and outlet density through local government planning controls (Reynolds *et al..* 1997; Holder and Reynolds 1997).

In New Zealand, a two year ALAC funded community action project on Youth and Alcohol has just been concluded (Stewart 1999). This developed and implemented strategies to reduce alcohol related harm among young people, with a goal of encouraging and empowering communities to address youth alcohol consumption. This project involved alcohol health promotion advisers from towns and cities throughout New Zealand to identify opportunities for local action, and to plan, encourage and support activities in their community. Issues include drinking and driving, alcohol related violence and safer drinking environments, encouraging enforcement of the minimum drinking age law and the adoption of policy on alcohol management by schools, tertiary education institutions, clubs and sports teams. Communication between these scattered workers was facilitated through Internet closed discussion pages on project issues and supported by researchers acting in a formative evaluation role.

Young people's illegal access to alcohol and the need to strengthen surveillance and enforcement emerged as a major concern in need of further attention. Also highlighted was the role played by parents and other adults, perhaps siblings or friends just over legal age, in buying alcohol for teenage drinkers. (This source of supply for younger teenagers has also been documented in the United States, Wagenaar *et al..* 1995). The value of strong partnerships between agencies responsible for licensed premises was demonstrated in some areas. Innovative strategies to improve host responsibility were developed, not only in licensed premises but for less regulated settings such as functions before and after school balls, in tertiary student venues and residences, at major public events and at private parties. Seeking advice and support form young people in solution-finding and seeking local authority support for young people's activities were important strategies (Stewart, 1999).

The project also highlighted the need to identify and support activities to reduce alcohol related harm among young Maori in Maori settings and contexts, and has led to a further project in 1999 involving Maori health promotion workers, Whariki and ALAC (Moewaka Barnes and Halbert Crowe 1999). For effective projects involving Maori community action, these need to develop under an independent Maori kaupapa. This underpins ownership of issues, the contribution of cultural knowledge to the development of appropriate processes and solutions, and full support for strategies and activities (Moewaka Barnes *et al..* 1996a&b; McCreanor, Moewaka Barnes and Mathews 1998).

Another current project funded by the Ministry of Education, ALAC and the HFA, blends school-based alcohol and drug education with community action. Community Action on Youth and Drugs (CAYAD) is a two-and-a-half year project in six rural, urban and provincial localities, the majority of which have high youth and Maori populations and high unemployment. Recognising the social and environmental context of alcohol and other drug use, the project involves both school and local organisations in planning, priority-setting and a range of culturally appropriate activities to promote community ownership of problems and solutions. Each region has appointed a community action worker to take a lead role in the community coordination and implementation of strategies, with APHRU and Whariki researchers providing formative evaluation. An interactive limited access website provides a means of communication and information exchange for regional coordinators and researchers.

The objectives are to increase informed debate; promote, implement and support policies and safe behaviours; identify 'best practices' for addressing the needs of schools, young people and whanau; develop local resources and alliances between organisations and agencies; and support young people's voices being heard in discussions on reducing alcohol and other drug related harm. Activities include consultation hui; developing policies and practices that build on schools' health education curriculum using student assistance programmes and peer support approaches; development of youth leadership; encouraging clubs and maraes to formulate policies; whanau education and support programmes; as well as support and resources for young people organising their own activities. (Conway *et al..* 1999a&b,1998a&b; Conway and Tunks 1998).

The above two projects draw on components and evaluation methodologies developed in earlier community based projects (Stewart *et al..* 1993; Duignan *et al.* 1993; Duignan and Casswell 1992; Casswell and Gilmore 1989).

A newly reported Rotorua project came to issues around young people's alcohol and drug use via a different route. A local government research team gathered the views of young people as part of planning facilities. Discussions with the young people highlighted links between socialising spaces and alcohol and drug use (Rotorua District Council 1999a&b).

The Alcohol & Public Health Research Unit is embarking on a programme of further research related to safer socialising by young people and their alcohol and drug use. The first component of this, funded by the HRC, focuses on contexts of local government policy and community organisation in selected localities in the cities of Auckland. Funding is being sought for a second component working with young people from those localities which will focus on their use of space, both public and private, in socialising with peers.

Relationship of public health agencies with independent community groups

There are considerations and possible tensions around whether a local project to meet public interest goals should be a health promotion activity of a state agency or be fully devolved to a community organisation. Community action needs to make good use of both local professional resource and existing community organisations with a stake in the issues - if an appropriate grass roots community organisation exists. It may be necessary for health agency promoters to draw on a reservoir of concern in the community to facilitate group formation, but issues and activities need to 'take root' through active organisation among local people for change to be effective and sustained.

On the other hand, voluntary activity tends to be ad hoc and difficult to sustain. Few local people may have time to devote to alcohol issues), which is why many evaluated projects have sought to fund a salaried position (Casswell, forthcoming; Duignan *et al..* 1992). The paid community member provides continuity, develops knowledge and supports input from other residents. This may be a way of facilitating group formation, supporting the continuation of a group already organising around an issue, or to enable a new project area to be developed by an existing organisation. There is greater acknowledgement of the strengths of the community and the extent and importance of their knowledge base, which will be essential to success in any minority culture community.

By collaborating through alliances and coalition building, communities increase knowledge, share information and develop skills to enhance their capacity to deal with issues that arise. These experiences in building community capacity to address issues can then be transferred to problem solving on other issues in a ripple or multiplier effect (Bush 1997; Hawe *et al..*1997).

Relations and communication between health agencies or evaluators and community groups is crucial to effectiveness; in particular how the community group perceives the relationship (Casswell, forthcoming; Larson 1990). Loss of agency control over priorities or how things are done may pay off in creativity and energy - the key is agreement over project goals, and a high degree of independence in deciding how those goals are to be reached (Healthy Localities Project Benalla 1993; Holder *et al..* 1997b). The project evaluation requirements of funders offer an opportunity for formative evaluators to facilitate communications and relations between project partners, as well as contributing knowledge from public health research (Stewart, Casswell and Duignan 1993; Duignan and Casswell 1992).

With health promotion among Maori and Pacific Islands communities, these issues and the role of the project evaluator as 'critical friend', are particularly important. 'Ownership of the problem' is a phrase in current use, that may lead to challenging counter-perspectives on the 'problem' as part of a colonising culture. A Treaty partnership approach will be crucial to negotiating questions of whose goals and priorities are to be met through the project, and who should 'own' community knowledge, including research knowledge from the project (Casswell 1999; Moewaka Barnes and Stanley 1999). The Treaty of Waitangi offers a framework consistent with the Ottawa Charter for developing policy and community based projects directed to minimising alcohol related harm among Maori (Te Puni Kokiri 1995).

Media Portrayal and Public Discourses on Alcohol

At its widest level, a focus on environmental factors includes consideration of public discourses on alcohol. The role of alcohol in socialising and perceptions of risk, as well as compliance with liquor laws by both licensees and drinkers, is shaped by public debates on issues such as the death toll on the road or the drinking age. An example of this from the USA is the way research evidence on the adverse effects of lowering state drinking ages in the 1970s led to federal policy that reversed this in 1984, with evidence of benefits provided by further research findings (Wagenaar 1993).

Public debate also shape policies on advertising and other ways alcohol is presented through the media. It should not be overlooked that the alcohol industry is a very large client for the advertising and media industries, including the now commercialised broadcast media. Media presentation of alcohol issues can be one-sided, and the down side is seldom portrayed in text, programmes and film (*The Globe* 1999b).

Advertising is just one factor influencing drinking decisions, but there is growing research evidence showing that alcohol advertising has a small but contributory effect to drinking behaviour and its consequences (Craplet 1997; Casswell 1997; Saffer 1995; Atkin 1995; Edwards *et al..* 1994). Alcohol

advertising has important longer term effects as an 'educator' and recruiter, shaping young people's view on alcohol (Stewart and Casswell 1990, Mosher and Jernigan 1989: 250) and threatening heavier drinkers in their attempts to reduce their drinking (Thomson, Bradley and Casswell 1997). In a study of responses to television advertisements, the drinking of 10-17 year olds correlated with how acceptable they thought drunkenness was to their friends, but that perception correlated with the number of alcohol advertisements recalled (Wyllie *et al..* 1993). Longitudinal research in Dunedin has shown that at age 9 children had predominantly negative perceptions of drinking and drunkenness, with a third citing television as their source of information. By age 18, attitudes had become much more positive, with fewer thinking drinking was a waste of money, more believing alcohol helped you relax and 80% feeling it was okay to get drunk now and again. Early attitudes have consequences for later behaviour; expectations of getting drunk at age 15 were related to frequency of actually doing so at age 18 (Casswell 1996) by consequences

In addition, alcohol sports sponsorship has substituted for, and since 1992 now supplements, broadcast brand advertising. Not only do sponsorship deals with clubs involve promotion and sales that make the product part of the lived reality of teams and fans enjoying sporting events (Buchanan and Lev 1989), sponsorship of televised sports coverage enables product logos to side-step an advertising standards code restricting alcohol ads to 'adult viewing hours' after 9 pm.

In submissions to a recent review, New Zealand alcohol producers took credit for the 'normalisation' of alcohol through advertising. Such spins on public health concepts and political lobbying by the large producers and industry associations needs to be balanced by counter-arguments and media advocacy work by health promoters that re-frames issues from a public health perspective (Wallack *et al..* 1993). Advocacy groups also play a valuable role in providing information to schools and to members of the general public wishing to engage in policy debates on alcohol and public health. They translate academic research and statistics into forms more usable by the general public, and often act as a 'bridge' in supplying research findings to politicians and other policy makers (Wagenaar 1993). They do valuable work presenting public health perspectives on alcohol policy issues, legislation etc. There is more work to be done in getting alcohol planning and licensing issues on local government agendas and into local District Plans.

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