

# NZ Drug Foundation

## Review of research on alcohol advertising and sponsorship

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## 1. Introduction

- The NZ Drug Foundation calls for discontinuation of alcohol advertising on television and radio (including programme sponsorship), the internet, in print and outdoor media. Alcohol sponsorship of sports and, increasingly, alcohol sponsorship of concerts and forms of music that appeal to the young are major marketing strategies. These should be discontinued, as part of a comprehensive and effective policy to reduce alcohol promotion messages and help change New Zealand's drinking culture.
- There is now considerable international and New Zealand evidence to show that alcohol advertising influences young people under the legal age of purchase and helps recruit the next generation of heavy drinkers. The research reviewed below updates evidence presented to the ASA code review committee in 2003. Terms of reference for that review focused attention on econometric studies, rather than research on young people's responses to alcohol advertising. In publications since 2003, several studies bridge the divide between these two bodies of research – again demonstrating the impact of alcohol advertising on young people.
- There is also evidence that restrictions on alcohol advertising (bans and partial bans) reduce levels of alcohol related harm and underage drinking (Saffer 1997; Babor et al. 2003; Saffer and Dave 2002a), and that this would a cost- effective policy strategy for this region (Chisholm et al. 2004).
- To avoid displacement, a policy discontinuing broadcast alcohol advertising should also prohibit alcohol promotion via sponsorships. Alcohol sponsorship, of television programmes and of sports, may be almost as important a means of promoting alcohol brands and drinking as advertising through the media. Sponsorship of sports and music embeds alcohol messages into the lived experience of children and young people, as well as adult drinkers. Marketing linkages between alcohol, sports and masculinity reinforce our heavy drinking culture.
- Alcohol health promotion messages are contradicted and undermined by constant alcohol advertising and sponsorship messages. Government policies aim to reduce excessive drinking and alcohol related harm – particularly New Zealand's high burden of alcohol related injury (Connor et al. 2-005). Statistics New Zealand reports since 1998 show that total alcohol available for consumption is no longer declining. Average per occasion consumption increased over the 1990s for most age/gender groups, but for teenagers (Habgood et al. 2001). ALAC expenditure on 'culture change' messages can never match the advertising and sponsorship resources of a now globalised alcohol industry.
- This data does not include the repeated exposure of minors to alcohol brand names and logos linked to sports through television programme sponsorship by alcohol companies.
- In 1992 the Broadcasting Authority, with Cabinet agreement, permitted alcohol advertising on television and radio in exchange for free airtime for alcohol health promotion. Cabinet then decided to allow industry 'the opportunity to become self-regulating' in regard to broadcast alcohol advertising, including dealing with complaints (CAB 100/92; BSA Amendment Act 1993).<sup>1</sup>
- The Drug Foundation recommends that this 1992 policy experiment be discontinued, in that:
  - It is inconsistent with the Alcohol Strategy objective of reducing the exposure to alcohol messages of children and young people, who have high levels of television and radio use,

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<sup>1</sup> See separate Drug Foundation paper, Alcohol Advertising Policy in New Zealand, May 2006.

- Codes on ad content do not limit the association of alcohol with young adult lifestyles which are highly attractive to teenagers,
- Self-regulation by industry takes this important policy area out of government control,
- The self-interested nature of industry decision making was demonstrated when the ASA brought forward the television start time for alcohol ads by half an hour, despite strong opposition by government agencies and despite evidence that this would increase exposure of 10-17 year olds by about 20 percent.
- The Drug Foundation recommends that alcohol advertising, programme sponsorship, and sponsorship of sports and music be prohibited through an amendment to the Sale of Liquor Act, alongside the current section prohibiting irresponsible promotions by licensed premises. The Broadcasting Act will need amendment in regard to the BSA's overview and complaints role. A wider definition of advertising is needed to encompass new forms of audiovisual commercial communication, including the internet, cellphones, infomercials and product placement. Monitoring and compliance with restrictions on all alcohol marketing and sponsorship could one of the functions of a new Agency to overview all marketing with implications for public health.

## **2. Influence of alcohol advertising on young people: Reasons for concern**

- There is now a considerable body of research that shows how alcohol advertising influences children and young people. Advertising encourages positive perceptions about alcohol, typical drinkers, and how much other people drink. These perceptions help shape their subsequent drinking behaviour. Studies reviewed below show children becoming aware of alcohol brands and influenced by alcohol advertising at a very young age.
- Alcohol advertising and other marketing is reaching children and teenagers under age 18, whether or not this is intended by advertisers or the alcohol industry. However, a key function of marketing must logically be to encourage and maintain new generations of drinkers. Heavier drinking is concentrated in the late teenage years and early adulthood, but there is natural attrition from this market as consumption reduces among most drinkers through life changes such as marriages and mortgages, ageing and eventually death (Casswell 2004).
- New Zealand research shows that, not only do those under 25 drink more heavily on average, they experience disproportionate harm from their drinking compared to older adults drinking the same amounts (Wyllie, Millard and Zhang 1996; Habgood et al. 2001).
- Beginning to drink regularly at an early age increases the risk of later drinking problems (Bonomo et al. 2004; Grant and Dawson 1997; Chou and Pickering 1992). Eventual alcohol dependence is four times more likely among those who start drinking at age 14 than at age 21.
- Alcohol can disrupt physical and mental development during adolescence. Drinking before or at the time of puberty can affect growth and sexual maturation. Structural and functional reorganisation of the brain occurs throughout adolescence. Development that enables planning, judgement and control of emotional responses is not complete until the early 20s. Brain plasticity in adolescence means alcohol may affect neuro-development (NIAAA 2005ab).
- Neurobiological changes also mean adolescents tend to be more impulsive and self-conscious than adults and may be especially attracted to risky branded products that, in their view, provide immediate gratification, thrills and/or social status. When that product is alcohol, it poses more of a risk to developing teenagers than to adults Pechman et al. 2004). The policy implication, in the

view of these researchers, is legislation to protect children and adolescents from alcohol advertising and promotions.

### 3. Statistical studies of advertising expenditure and alcohol consumption

- Several early studies (some funded by industry) found that expenditure on alcohol advertising had little measurable impact on total alcohol consumption. These findings have been used by industry representatives to argue that advertising does not increase drinking; it just increases market share for a particular brand.
- Some studies have shown no effects of annual advertising expenditure on total alcohol consumption (Bourgeois and Barnes 1979; Ornstein and Hanssens 1985; Grabowski 1976), including an analysis of four European countries in the 1970s and 1980s (Calfee and Scherega 1994). Research that examined more disaggregated data did show small impacts. Studies of advertising impacts on beer, wine or spirits consumption, using UK or US data for periods from the mid 1950s to the early 1990s, showed small increases in consumption of one (beer or wine) but not all beverage types (McGuinness, 1980, 1983; Duffy, 1981, 1995); displacement between wine and spirits (Nelson and Moran 1995), or that spirits advertising increased consumption of the brand advertised with little benefit for other spirits brands (Gius 1995). A UK study, testing six methods to analyse quarterly advertising expenditure for 1963-1992 on television, radio, and print, showed a small impact for wine and spirits but not beer (Duggy 1995).
- These studies have been well critiqued. Aggregate-level data does not capture impacts on different drinking patterns or by different population subgroups. Annual advertising data does not reflect the ‘pulsing’ that ad campaigns use to increase effectiveness. In markets where consumption is high and alcohol is continually advertised, what is being measured in these studies is the diminishing marginal return on any *additional* expenditure – not the whole effect (Saffer and Dave 2002a, Saffer 1998, 1996, Hastings 2005). Nor does this approach measure the lingering effect of ads or ‘cultural cultivation’ from cumulative exposures (Saffer 2002; Gerbner et al. 1986). The studies do not include non-advertising marketing (sponsorships, direct promotions) which are now half to two-thirds of total spend (FTC 1999; Hastings 2005). Only studies specifically evaluating advertising bans (see later section) give consideration to differing policy contexts.
- An econometric study investigating impacts on harm, rather than on consumption, used quarterly data for different regions of the USA to measure advertising expenditure against motor vehicle fatality data. After controlling for numerous other relevant variables, the study found advertising levels had an impact on motor vehicle fatality that was significant (although smaller than that of alcohol price) (Saffer 1997).
- A subsequent study looked specifically at young people’s drinking and the impact of alcohol advertising in their local environment. It used 1996-1998 data on alcohol participation, monthly and binge drinking from two separate national youth surveys (N=60,000 13, 15, 16 year olds; N=10,000 12-16 year olds) and on alcohol advertising expenditure for five local media. Variables included income level and local beer price, as well as race and gender. This showed advertising had a positive effect on annual alcohol participation, monthly participation and binge participation, and higher prices had a negative effect. Lower participation by blacks was not as well explained by the variables as it was for whites. Price and advertising effects were generally larger for girls (Saffer and Dave 2003).
- All the above statistical studies were undertaken in the USA or Europe. These are mature alcohol markets, already ‘saturated’ with both alcohol and advertising. Recent annual reports of several global companies express an expectation that their marketing strategies in emerging alcohol markets in Asia and the Pacific will increase per capita consumption.

- See Section 7 for statistical studies that evaluate the impact of full or partial legislative bans on alcohol advertising in different jurisdictions on alcohol related harm. The next section includes a sub-section on statistical studies that matched local alcohol advertising with young people's responses and/or drinking behaviour.

## 4. Studies of teenage responses to alcohol advertising

### *Overview of this research*

- There is now a considerable body of research on the responses of children and young people to alcohol advertising. Advertising encourages positive perceptions about alcohol, typical drinkers, and how much other people drink. These perceptions help shape current and subsequent drinking behaviour. Recent studies show children becoming aware of brands and influenced by alcohol advertising at a very young age.
- Statistical and experimental studies assume a fairly immediate response to alcohol advertising, which they set out to measure. Other researchers assume that the affects of advertising are likely to be more cumulative. The gradual effect of many thousands of exposures may be to encourage positive views of alcohol, with consequent effects on consumption (Gerbner et al. 1986; Petty and Caccioppo 1981). Researchers have therefore looked at the impact of alcohol advertising on perceptions about alcohol and drinking, and how those positive perceptions in turn shape young people's drinking behaviour. It is now well established that beliefs about drinking norms and expectancies about drinking are important predictors of both current and future drinking by teenagers.
- Since the 1970s, survey analysts have compared teenagers who have been highly exposed and who report greater awareness or more positive responses to alcohol advertisements, with those who do not. These found links between liking for alcohol advertisements, as well as self-reported exposure and positive beliefs, and respondents' drinking behaviour.
- Studies with a prospective or longitudinal design can follow influences, responses and drinking behaviour of a set of teenagers over time – for two or three years, or over the whole journey to adulthood. This is valuable for exploring the cumulative influence of advertising on onset of drinking and on the development of drinking patterns. Full longitudinal studies from childhood into adulthood are extremely expensive, and rare.
- The possibility of reverse causality has been considered and dismissed (Hastings 2005). Early work by Aitken et al. found familiarity and appreciation of alcohol ads increased rapidly between ages 10 and 14, and that teenage drinkers paid more attention to ads. The researchers suggested that the ads rewarded and reinforced their drinking (Aitken 1988). More recent studies using structural equation modelling are able to test the strength and direction of relationships between variables. These studies found no support for a hypothesis that drinking might generate positive attitudes to alcohol advertising.  
Instead, the studies provide evidence of a pathway in which teenage exposure to and liking for ads leads to positive beliefs and expectations about drinking, an intention to drink when older and misperceptions about drinking norms among other people, which in turn shape decisions about whether and how much they drink themselves.
- Some recent studies match young people's responses to alcohol advertising and beliefs about drinking to expenditure data in their local alcohol advertising market.

### *Advertisement experiments show limited effect on immediate drinking*

- Experiments that measured drinking behaviour after viewing alcohol advertisements have shown mixed results. The studies with more sophisticated designs, conducted in normal settings for drinking and with participants unaware of the study's purpose did show heavier drinking after

viewing the ads (Atkin 1995; McCarty and Ewing 1983). Other studies of print advertisements showed no effect on later consumption (Kohn et al. 1984).

- Male college students shown alcohol advertising embedded in television programmes they watched in relatively natural social settings were more likely to choose alcohol rather than soft drink (Kohn and Smart 1984) and were likely to drink more (Wilks et al. 1992). These effects differed depending on timing and the number of ads shown, and another study using a less naturalistic situation showed no effect (Sobell et al. 1986).

### ***Exposure increases alcohol and brand awareness among children and young teenagers***

- Recent research in South Dakota schools tested alcohol advertising penetration among 9 year olds (N=1996) and 13 year olds (N=1,525) using masked television ads for beer. Fourteen percent of 9 year olds and 20% of 13 year olds recognized at least 3 out of 4 sample beer ads. Seventy-five percent of 9 year olds and 87% of 13 year olds recognized the Budweiser ferret ad; about one out of three 9 year olds and more than three out of four 13 years olds could name the brand. Almost 29% of 9 year olds and 82% of 13 year olds could list 3 or more beer brands (Collins et al. 2005).
- Among the 13 year olds in the above study (N=1350), those with greater exposure to alcohol advertisements in magazines, at sporting and music events and on television had greater knowledge than those with less exposure, as had teens who watched more TV, pay attention to beer advertisements and knew adults who drank. Beer advertisement awareness was dramatically higher among boys (content and placement suggested the ads targeted a male audience), and was linked to current drinking (Collins et al. 2003). A longitudinal study as part of the same research programme is reported in a later subsection (Ellickson et al. 2005).
- This research programme also included a longitudinal study. Children were tracked from age 12 to age 14 (N=3,111) to explore the effects of exposure to alcohol promotion via television, in-store displays, magazines and concession stands, as well as other variables. The children completed questionnaires about drinking at ages 12 and 14 and about advertising exposure at age 13. For non-drinkers at age 12, exposure to in-store beer displays predicted drinking onset by age 14. For 12 year old drinkers, exposure to magazines with alcohol ads and to beer concession stands at sports or music events predicted frequency of drinking at age 14. Although exposure to television beer advertising was significantly related to alcohol use by those who had been non-drinkers at age 12, it was not a significant predictor of drinking for either group in the multivariate analyses. Which source of alcohol messages dominate depends on the child's prior experience with alcohol (Ellickson et al. 2005).

At this young age, it appears that alcohol promotion that is part of direct daily experience is as important as or reinforces the influence of television advertising.

### ***Exposure of New Zealand children and teenagers***

- In New Zealand, young children as well as minors are exposed to alcohol advertising through television in their homes. The BSA reports that watching late evening television is relatively common for children even as young as 6-7 years (Zwaga 2000).
- The advertising industry provides data for viewing by 10-17 year olds. In 2003 ALAC provided the 2003 ASA code review committee with 2002 data showing that 23.7% of 10-17 year olds were watching television at 9.00-9.30 pm, and at 8.30 pm – the new start time implemented by the ASA against– 26% of 10.17 years olds were watching (ALAC 2003). ALAC, the Ministry of Health and other public health organisations advised against bringing the start time forward for this reason.

- At that time penetration of alcohol advertising to minors was illustrated by research on the ‘chin heads’ ad campaign for Lion Red. The research showed that 97% of minors recalled seeing the chin heads, 71% knew the ad was for Lion Red, 92% had positive views about the ads and 64% thought the chin head humour would appeal to minors (CM Research 2001).

Alcohol advertising, particularly television advertising that comes into the home, makes it more difficult for heavy drinkers and those in treatment to give up.<sup>1</sup>

### *Exposure and liking the ads shapes beliefs and consequent drinking behaviour*

- Following repeated exposure to beer advertising, college students rated alcohol as more beneficial and less risky than before seeing the ads (Synder and Blood 1992), and reported more positive assessments of the benefits of beer (Slater and Domenech 1995). Such positive beliefs were predictive of plans about future alcohol use (Slater et al. 1995), although exposure of school children to advertisements did not affect expectancies of drinking (Lipsitz et al. 1993).
- In US studies, those who reported seeing the most advertisements were more likely to see the typical drinker as ‘fun-loving, happy and good-looking. This in turn was linked to more favourable values about amounts, situations and benefits of drinking (Atkin and Block 1981, 1984). A survey of 12 -22 year olds (N=1227) found 33% of the half who were more exposed to alcohol advertising were drinking at least 5-6 drinks per week, compared with 16% of the less exposed (Atkin et al. 1983).
- Other US and **New Zealand** studies linked positive beliefs about alcohol to expectations of future drinking and/or current drinking behaviour (Strickland 1982; Atkin et al. 1983; Grube and Wallack 1994; Wyllie et al. 1998). Structural equation modelling used to analyse recent surveys has indicated a likely causal pathway between advertising and expectations of future drinking (Grube and Wallack 1994) and positive beliefs and consumption levels (Wyllie et al. 1998).
- **New Zealand** boys aged 10-13 said they knew more about drinking from watching ads (but no alcohol ads depict risks or harm). The 10-17 year olds who recalled most alcohol ads were more likely to think it was okay for kids their age to get drunk, to think their friends drank frequently and consequently to drink more themselves (Wyllie, Zhang & Casswell 1998; Wyllie 1997) – a pathway also shown in overseas studies.
- The **Dunedin** Childhood Development longitudinal study, following a group of children from birth, found an impact of response to advertising on later consumption. Numbers of alcohol ads recalled at age 15 in response to a question about the portrayal of alcohol in the media significantly predicted heavier drinking among males at age 18 (Connolly et al. 1994). Those who responded positively to alcohol advertising at age 18 were heavier drinkers and reported more alcohol related aggression at age 21 (Casswell and Zhang 1998). By age 26, amounts but not frequency of drinking had declined for most of these young people. Those who had responded most positively to alcohol advertising at age 18 were the most frequent drinkers at age 26 (Casswell et al. 2002).
- A recent US study also looked at whether the impact of alcohol advertising exposure on intention to drink and actual consumption is mediated by responses to advertising messages and positive expectancies about alcohol use. National telephone surveys were undertaken with 15-20 year olds (under the US drinking age, N=608) and 21-29 year olds (N=612). The positive responses to alcohol advertising and the information it provides led to positive expectancies about alcohol drinking for the teenagers but not for the adults (Fleming, Thorson, Atkins 2004).

- A recent prospective study in Los Angeles surveyed 12 year olds (N=2998) on drinking, recall of alcohol ads and whether they watched particular television programmes, with a follow-up survey 12 months later. Popular programmes and sports coverage programmes were weighted by the number of alcohol ads shown. The study was considered comprehensive in the range of measures and confounders investigated. It found that one standard deviation increase in viewing of television programmes with alcohol ads was associated with an excess risk of beer use (44%), wine/liquor use (34%), and 3-drink episodes (26%) the following year. This was most consistent for beer. (Spirits is not advertised on most US free-to-air channels.) Both opportunities for exposure, ie. viewing either programmes with alcohol ads or sports coverage which had higher levels of alcohol advertising, predicted subsequent beer consumption (Stacy et al. 2004).
- Over a quarter of all US alcohol advertising expenditure, and over 80% of advertising expenditure for spirits (including alcopops), is in magazines, particularly youth oriented ones (CAMY 2002). A survey of 12 and 13 year olds (N=972) at six schools in two western states looked at the effects of exposure to youth-oriented magazines on normative beliefs about teenage drinking, drinking expectancies, and drinking frequency during the past 30 days. Two of the schools were in northern Utah, where a dominant religious culture strongly discourages drinking. Structural equation modeling was used to test the simultaneous influences (direct and indirect) of music/entertainment, sports and men's lifestyle magazines, along with religiosity, parents' drinking, and number of best friends who drank. The number of friends who drank was the strongest predictor of beliefs about the acceptability of teenage drinking, drinking expectancies, and current consumption. As anticipated, religiosity was inversely related to teenager drinking as a norm, positive expectancies from drinking, and recent drinking. Music and entertainment magazines were the type most frequently read by these teenagers. This was positively linked with belief that teenagers drink and with drinking expectancies, but not yet with current drinking. Reading sports magazines showed no influence. This finding was unexpected, although researchers noted strong rules against alcohol use by student athletes at all six schools. Frequency of reading men's lifestyle magazines was positively associated (both directly and indirectly) with normative beliefs that teenagers drink, expectancies that drinking will bring positive outcomes, and also the number of alcohol beverages drunk in the past 30 days (Thomsen and Rekke 2004).
- As part of a 3 year study of 9-16 year olds (N=652) in the San Francisco Bay area, an information processing model was used to examine how persuasive alcohol ads influence positive beliefs about alcohol and drinking behaviours. It showing how young people used logical) and affect-based processes as they internalised advertising messages, then employ them in eventual decisions about behavioral choices. Exposure was measured by hours of television viewing and programmes including sports coverage. Although the study found that how ads were interpreted was as important as exposure, but the affect-oriented route to behaviours dominated, with both younger and older boys and girls. The desirability of media portrayals of alcohol use predicted identification, which predicted liking of beer brands and positive alcohol expectancies. There was no significant relation between skepticism about the ads (the logic-based processing enhanced by parental guidance and media literacy) and drinking. Children's desire for branded merchandise appeared to be related to alcohol use (Austin et al. 2006).

### ***Young people's responses linked to local advertising expenditure***

- A study already covered in the statistical research section brought together local data on alcohol advertising expenditure with drinking by young people, so is repeated here. It used 1996-1998 data on alcohol participation, monthly and binge drinking from two national surveys of 12-16 year olds and on alcohol advertising expenditure for five local media. Variables included local beer price, as well as socio-economics indicators, race and gender. The study showed advertising had a positive

effect on annual alcohol participation, monthly participation and binge participation, and higher prices had a negative effect (Saffer and Dave 2003).

- Survey data on beer brand awareness, attitudes and drinking behaviours among 12-17 year olds (N=1588) at mid-western and eastern US schools was correlated with local alcohol advertising data. The beer companies that spent the most on advertising had the highest brand awareness, highest brand preference, highest brand use, and highest brand loyalty among the adolescents. Media and advertisements were a significant predictor of these four and also of intentions to drink at age 21. (Gentile et al. 2001).
- A US study interviewed 15-26 year olds four times over 1999-2001, randomly sampled within households and households within 24 media markets (N per wave=1872, 1173, 787, 588). Self-reported drinking and alcohol advertising exposure in the previous month was matched against local alcohol advertising expenditure on television, radio, billboards and newspapers. Those who saw more alcohol advertisements on average drank more. The number of drinks increased by 1% for each additional ad reported. Those in markets with greater alcohol advertising expenditures drank more. Drinks increased by 3% for each additional dollar spent per capita. Separate analysis of those under the legal drinking age (21) also showed an impact of alcohol advertisement exposure and expenditure on drinking. Young people in markets with more alcohol advertisements showed higher levels of drinking levels into their late 20s, but drinking plateaued in the early 20s for those in markets with less advertising. Variables included age, gender, ethnicity, education and alcohol sales (Snyder et al. 2006).

#### ***Brand images and 'lifestyle' marketing attractive to young***

- Alcohol marketing, both local and international, now focuses on brands targeting particular markets (by age, gender, ethnicity, leisure interest, income, lifestyle). Brands have 'personalities' that a particular group of consumers can identify with, and brand image advertising focuses on the lifestyle of the user of the product rather than on the intrinsic characteristics of the product itself.
- In the **Dunedin** Childhood development study, those who had established a relationship with a beer brand by age 18 were heavier drinkers and reported more alcohol-related aggressive behaviour at 21 (Casswell and Zhang 1998).
- Teenagers aged 13, 14 and 16 (N=1058) from three communities in the north-eastern USA were asked about drinking and to compare matches sets of 'product' and 'image' print ads for beer, wine and scotch. These were for low saturation brands not targeting a young market and carefully selected for equal visual attractiveness. A seven item questionnaire was completed for each pair, and responses matched with the drinking questionnaire. Image advertisements were, on average, preferred by participants over product advertisements for all pairs presented. For each pair, respondents ranked the image ad as the one to which they would pay more attention, the one they liked better, the one they considered to be more persuasive, and the one they believed their friends would prefer. Two questions required a preference rating, between 4, the strongest possible preference for the product ad, and 24, the strongest possible preference for the image ad. Mean scores for preference were compared with the student's 'intention to drink' response. Overall, the teenagers reacted more favourably to the image ads, and those who intended to drink in the future tended to prefer image ads. The image ads were more appealing to males and females at all grade levels, with males showing a stronger preference than females, particularly among the 12 year olds (Kelly and Edwards 1998).
- Advertisement videos, questionnaires, and group discussions with 253 Californian 10-17 years olds were used to explore what makes alcohol ads attractive to teenagers. Specific ad elements

contributed to liking and this was strongly liked to ad effectiveness indicated by intention to purchase the product and brand. Humour and story were rated more highly than appreciation of music, animals or people depicted, yet the three most favoured ads used animal characters as leading actors. Ads focused primarily on product qualities (as under French law) or referring to legal drinking age were rated less favourably (Chen et al. 2005).

- Recent marketing has an active interaction with youth culture– internet, direct promotions at venues and events, sponsorship of concerts, DJs, musicians, free music. These target young drinkers in ways that are relatively invisible to older segments of the population. This includes sweet ‘starter’ drinks (alcopops) that are marketed in low profile ways to reduce policy attention as well as costs (Casswell 2004). **New Zealand** research shows that alcohol brand images and lifestyle marketing are providing young people with commercialised identities to take up, along with the alcoholic products (McCreanor et al. 2005).

## 5. Alcohol marketing through sponsorships

### *Alcohol sports sponsorship*

- Little New Zealand or international research is available on alcohol sponsorship, and tends to be descriptive documentation, rather than evaluation of impacts. Internationally, most industry and company codes on alcohol marketing do not cover sponsorship, despite its increasing importance in promoting alcohol brands.
- By the early 1990s, world wide, more than half of all advertising expenditure was spent on other forms of promotion, such as sponsorships and direct marketing (Stewart and Rice 1995). In 1999 it was estimated that the US industry's total alcohol marketing expenditure may be three or more times its expenditures for measured media advertising (FTC 1999, Appx.B).
- Alcohol brand websites and corporate reports show that alcohol sponsorship of sports, music and other events is a major strategy, both nationally and internationally. Alcohol sponsorship deals include event and team naming rights, at both national and international level, pourage rights at sports grounds, and sponsorship of local clubs. The benefits of sponsorship of major events is 'leveraged' with media advertising and point of sale promotions, as part of integrated package to promote the brand (Rekve 1998). For example, Carlsberg's football sponsorship of EURO 2004 in Portugal grew the brand by about 6% that year; June sales increased 25%, and 54% in Portugal.
- Alcohol sports sponsorship helps embed brands and products in the everyday lived experience of drinkers and future drinkers, making alcohol 'impressions' on many people well below the drinking age. These help form attitudes and preferences in adolescence that are carried into later life (Buchanan and Lev 1989; Kelder et al. 1994).
- In the late 1990s a time sample of sponsored sport television clips showed that **New Zealand's** two main breweries were between them sponsoring most male sports (Hill 1999). In contrast to women's sports, many men's sports clubs have become dependent on alcohol sales and alcohol sponsorship. Large licensed sports clubs have been described by licensing police as 'virtual taverns' (Hill & Stewart 1996). As well as alcohol signage, merchandise and sales outlets, alcohol ads are screened on large screen during breaks at rugby games (NZTBC 2003).
- In 2003 Sport and Recreation **New Zealand** reported that alcohol companies sponsored sport and recreation organisations to the tune of \$34 million a year. It noted that sport sponsorship was a growing area of investment as sports organisation sought to maximise the commercial potential of their sport (SRNZ 2003). Sponsorship of clubs is variously in the form of funds, discounted prices, product, and branded merchandise. However, some high profile clubs have found other corporate sponsors, eg. In the shift to the 21st century the DB Warriors became the Vodafone Warriors.
- A study of sponsorships (N=640) in the **Wellington** region and nationally via internet information found that the top eight sports for 5-17-year-olds were dominated by 'unhealth' sponsorships: gambling, alcohol or foods high in fat and sugar. The marketing principle behind sponsorship is to ensure a good 'fit' between the sponsorship and target market. Over 11% of all sponsors for all sports were bars or beer companies, with significantly more alcohol sponsorship of rugby and other top male sports. (NB: Gaming machine trusts are linked to also local licensed premises and national alcohol companies.) Methodological limitations mean these results are probably an underestimation (Maher et al. 2006).
- Recent fieldwork research on alcohol brands and identity formation among young **New Zealanders** by SHORE and Whariki researchers documented numerous examples of alcohol sponsorship for

teenage sportspeople, sponsored events, branded merchandise and small branded giveaway items. As noted earlier, US research links young teenagers' ownership of alcohol branded merchandise with onset of drinking (McClure 2006).

- Heavy drinking and intoxicated behaviour among elite **New Zealand** sportspeople is well documented by the media as well as other sources (O'Brien et al. 2005; Oliver 2005). 'Heroes of the young' may not be used in alcohol advertisements, according to industry voluntary rules, but are seen by young people on alcohol sponsored television programmes.
- This situation contrasts with Norway where sports clubs and ngos have worked together to make sports clubs family-friendly alcohol free zones. One **North Shore** rugby club that tried this approach was successful in increasing its membership and match attendance among past players and their families.
- The European Charter on Alcohol recommends that WHO member states 'implement strict controls, recognizing existing limitations or bans in some countries, on direct and indirect advertising of alcoholic beverages and ensure that no form of advertising *is specifically addressed to young people, for instance, through the linking of alcohol to sports.*'"

#### ***Alcohol sports sponsorship on New Zealand television***

- This is an important form of marketing via television in **New Zealand**. An important function of it for the alcohol industry is that it circumvents the time restriction on alcohol advertisement on television to protect children and young people from exposure. Alcohol brand name and logos can appear at any time of day on sponsored programmes.
- In 2003 Television NZ received \$517,437.56 in programme sponsorship from alcohol companies. This included some contribution towards making sponsored programmes (corres. Vautier to NZDF, 14.2.2003).
- Sponsored programmes included dramas and cooking programmes, but are typically these are sports coverage programmes and sports 'magazine' programmes (eg Lion Red Café). These are viewed by many children and young people under the drinking age. Alcohol sponsorship of sports is one of the ways that television takes alcohol messages into the homes of millions of future drinkers, and perpetuate heavy drinking as part of male sports culture.
- When sponsored programmes are sports coverage, the relaying of brand advertising on sports field signage and clothing increases the number of 'impressions'. The BSA Programme Code no longer requires broadcasters to minimise such incidental promotion of alcohol, as long as it does not 'dominate' programmes.
- From 1981 to 1992 ads for alcohol brands were not accepted on **New Zealand** television but corporate or sports sponsorship were, as were ads for off-licensed outlets. A sample of New Zealand boys aged between 9 and 14 years responded positively to sports sponsorship ads that carrying an alcohol company logo; 81% said their friends would take notice of this form of marketing, and 36% said beer or alcohol was being advertised, rather than the team or company (Wyllie et al. 1989).
- US research shows that watching sports programmes is a major source of exposure for children and young people (Stacy et al. 2004; Austin et al. 2006). Levels of exposure to televised sports

programmes containing alcohol ads at age 13 predicted alcohol consumption at age 14 (Stacey 2004).

- Televised beer advertisements with sports content is also consistently preferred by male teenagers in the USA. Liking for these ads was linked to current drinking and future drinking intentions (Slater et al. 1997, 1996).
- Alcohol brand names and logos on sponsored sports programmes are likely to have the same effect on young teenagers as in the above research on advertisements. There is now considerable similarity between alcohol sponsored programmes, depicting attractive sporting lives and heroes of the young with alcohol logos at each end of programme segments, and many recent alcohol brand advertisements. Many of these emphasise young adult lifestyles or humorous depictions of masculinity that are likely to be attractive or interesting to young teenagers – perhaps just a last image ‘pack shot’ or brand logo at the end.

### *Alcohol marketing through music and music sponsorships*

- A review of brand and corporate websites for global alcohol brands shows alcohol being plugged into youth culture through sponsorship of music events and musicians. In North America, concerts organised by Molson Coors keeps the focus on the brand by not reveal the line-up of top bands. There are ‘be a rockstar’ competitions to attend the concerts and meeting the bands. Budweiser organises free music events, concerts with invites via music stations and liquor outlets and talent quests.
- In the USA alcohol target young people, particular black young people, via rap music. In the late 1990s Seagrams acquired Universal (MCA) and Polygram and linked Seagrams brands to rap artists. These relationship continued after Seagrams brands were divided between Diageo and Pernod Ricard (who now dominate spirits and wine ownership in New Zealand). In 2002 Heineken (co-owner of DB), Coors and Remy Martin sponsored US rap artists and promoted brands through rap music celebrity parties. From 1979 to 1997, rap lyrics referring to alcohol increased from 8% to 47% of all rap songs released. There was a significant increase in positive references, with alcohol signifying glamour and wealth, and to using alcohol with drugs. By 1994–97, 71% of songs included references to alcohol brands. A youth medium for expression has been transformed into a vehicle for alcohol promotion (Herd 2005; Mosher 2005).
- Alcohol brands sold in **New Zealand** are increasing being marketing via music and music sponsorships, as well as sports. For example, DB sponsored the NZ Music Awards and Found@Thirst, a dance music competition that tours 30 countries with world prominent DJs, the Big Day Out, and the Export Gold Battle of the Bands. In 2006 Lion Red took over Big Day Out sponsorship, accompanied by a Amp it Up promotion and on-pack competition with music prizes including scanner radios, Philips MP3 Stereos, music vouchers. Big Day Out tickets and the chance to go backstage, could be won with Lion Red purchases at either on- or off-license outlets. The promotion included the chance to have Noise Control fines paid up to \$250 so “the party can continue.” Lion’s marketing is made interactive by its many competitions, some involving quite mad behaviour.

## 6. Poor record of industry self-regulation

- This section reviews the available research literature on alcohol industry self-regulation of advertising, while the next section reviews the effectiveness of legislative restrictions on alcohol advertising in reducing underage drinking and alcohol related harm.
- A separate paper reviews alcohol advertising policies in other countries. Many countries have legislation restricting alcohol advertising. Even in the deregulatory climate of the 1990s, the trend has been towards tighter controls whether through regulation or industry self-regulation (Montonen 1996), and this trend has continued in recent years – particularly in Europe. In the USA continual efforts by politicians at state and federal level to regulate alcohol advertising have foundered on constitutional arguments (Starek 1997). Legal opinions, including one from the Attorney General show that this argument has less relevance in **New Zealand** and other countries with parliamentary sovereignty.
- The alcohol industry is active, both nationally and internationally, in pursuing and/or preserving self regulation of alcohol advertising as policy. Industry voices warn that ‘irresponsible marketing of alcohol is producing a regulatory backlash’ (Allied Dolmecq website, s.7.7.05; Inbev website, s.18.8.05; World Whiskies Conference, 2006, www.just-drinks.com, s.28.4.06). In 2005 a number of global alcohol corporations published responsibility marketing policies as part of their corporate social responsibility package, as well as endorsing national industry codes.
- Research on a wide range of industries shows that voluntary codes are vulnerable to collapse following infringement by some companies. The more players involved in an industry, the more difficult it is to maintain voluntarism. Voluntary code development and compliance typically reflect the likelihood of regulation by government (Ayres & Braithwaite 1992). A review of industry self-regulation in Australia concluded that voluntary codes and complaints systems had the capacity to represent a triumph of business self-interest over public interest (Field 2000).
- It should be noted that the studies reviewed above, showing how alcohol ads influence the alcohol beliefs and drinking behaviour of young people, are based on current, code-compliant advertisements, not rogue examples.

### *United States*

- In the USA, a voluntary industry ban against advertising spirits on television and radio collapsed after it was breached by Canadian-based Seagrams in 1996. (This US ban dated back to discussions with industry around the time Prohibition was repealed. Similar voluntary rules in the UK, Germany and Austria against advertising spirits on television were also abandoned. Public concern in the US has kept ‘hard liquor’ ads off most free-to-air network channels, but it is accepted by US cable channels which have high subscription levels. Beer is widely advertised in all media, with widespread controversy over use of cartoon characters and billboards close to schools.
- The US beer, wine, spirits and outdoor advertising industries all have their own voluntary codes on alcohol advertising. Continual infringements of these industry codes, particularly ads attractive to children, caused public concern and efforts to regulate (CSPI 1998). In 1998-9 the Federal Trade Commission investigated eight of the largest beer and spirits companies and found that half were in violation of their self-regulatory industry codes and two were targeting underage drinkers (<21) in a quarter of their ads. The FTC called for the alcohol industry to improve its practices to limit underage exposure to alcohol advertising (FTC 1999). Despite industry assurances, improvement has been slow.

- US research continues to show high levels of brand recognition for Budweiser frogs and ferrets among children and young teenagers (Gentile 2001; Collins et al. 2005) and disproportionate targeting of alcohol advertising to young audiences. In 2001, around 26% of all US advertising for alcohol beverages was in magazines. Nearly half the ads were in 24 magazines with more than 16% of their readers were aged under 20 (CAMY 2002) – i.e. above the proportion of 12-20 year olds in the US population. Spirits brands spent nearly 83% of their advertising dollars on magazines, and spirits ads accounted for 82% of youth alcohol advertising impressions in magazines (CAMY, 2005).
- A review of advertisements data for 35 of 48 major US magazines 1997-2001 compared differences in alcohol advertising with level of youth readership. Magazine advertising by the beer and liquor industries (but not the wine industry) was associated with adolescent readership. After adjusting for other magazine characteristics, the ad rate ratio was 1.6 times more for beer and liquor for every additional million adolescent readers (Garfield et al. 2003). Nelson (2005) critiques Garfield's methodology and provides an analysis to show that the beer and spirits industry are advertising in magazines that have a high readership among young adults. The key point of difference is whether disproportionate youth audience means (Nelson) disproportionate in the magazine's readership or (Garfield) disproportionate to youth in the population. Were large numbers of underage people being exposed to these alcohol promotion message? Yes.
- From September 2003 – the time of the second Federal Trade Commission report – the beer industry and spirits industry advertising standards codes lowered the maximum youth proportion of audiences from 50% to 30%, to match the wine industry code – about twice the proportion of 2-20 year olds in the US population. This has been adhered to on free-to-air television, but not on cable. Between 2001 and 2004, cable advertising increased by 32% overall, but alcohol ads increased by 138% and spirits ads by 5,687%, from 645 to 37,328 ads in 2004. Although only 13.4% of these alcohol ads were shown on cable channels with disproportionately young audiences, this expansion meant the actual number of alcohol ads shown to these young audiences doubled (CAMY 2004a).
- Analysis of alcohol advertising in US magazines from 2001 to 2004 showed a 31% decline in underage exposure although the number of ads dropped only 10% and adults exposure dropped 17%. Only 3% of alcohol ads and less than 2% of alcohol advertising dollars in 2004 were spent in magazines exceeding the alcohol industry's voluntary restriction of alcohol advertising to audiences with less than a 30% proportion of under 20s. This shows some response to the recommendations of the FTC's second report. As the 30% maximum is double the rate of 12-20s in the US population, however, underage readers were still exposed to 15% more beer ads, 10% more distilled spirits ads and 33% more ads for alcopops per capita than adults age 21 and over. In 2004, 42% of ads and 48% of spending were in magazines with larger youth audiences than the proportion in the population. More than half of youth exposure came from 22 brands which accounted for around a third of all alcohol advertising spending in magazines (CAMY 2006b)
- A study using FTC methodology for television advertising targeting children showed children and teenagers aged 2 to 20 saw almost 33% more alcohol ads on television in 2004 than they did in 2001, with a steady increase in exposure across those years. For 2-11 year olds, the increase was 27.5%, to 123.2 ads a year; for 12 to 20, the increase in alcohol ads seen was 31.7%: from 209.3 ads per youth per year to almost 275.6 ads per youth per year (CAMY 2006a). US teens aged 12-17 listen to radio more than they watch television, surf the internet or read magazines, and more than all other age group. In 2003, teenagers aged 12-20 heard more advertising on average than adults in 92 out of 1004 US radio markets and more than adults aged 21-34 in 29 markets. Four radio music formats accounted for 73% of all teenage exposure, with eight brands marketed most heavily (CAMY 2004d).

- A Chicago study evaluated the effectiveness of the Outdoor Advertising Association of America's voluntary code restricting the placement of billboards for age-restricted products. The code states that products not to be sold to minors would not be advertised on billboards within 500 feet of a school, playground or place of worship, and billboards in these locations would be marked accordingly. There would also be voluntary limits on the number of alcohol and tobacco billboards in an area. The alcohol industry also has codes stating that beer, wine and spirits will not be advertised where audiences are disproportionately under age. The researchers geocoded the location of billboards (N=4,278) and schools, parks and playlots. Churches were omitted because of lack of information on 'storefront' as well as established churches. In African American majority wards, 15.0% of alcohol billboards were within the 500-foot zone; 13.7% in Hispanic majority wards; 3.3% in no ethnic majority wards; and 6.6% in the white majority wards. Forty-nine percent 49% of all billboards advertising alcohol were within 1000 feet. Numbers of alcohol billboards appeared to target poor black neighbourhoods (Hachbarth et al 2001).
- A 2001 study showed US student campuses were being disproportionately targeted with alcohol advertising and promotions, including cut prices. Almost three quarters of on-licensed premises offered specials on weekends, and more than 60% of the off-licensed. The availability of large volumes of alcohol (24- and 30-can cases, kegs, etc.), low sale prices and frequent promotions and advertisements for on and off sales were associated with higher binge drinking rates on the college campuses. An overall measure of on- and off-premise establishments was positively associated with the total number of drinks consumed (Kuo 2003).
- Anheuser-Busch (Budweiser) recently secured a deal to advertise alcohol to a million subscribers to a cellphone tv service – 18 ads a minutes across 30 channels. Public health organizations say this targets users under age 21. MobiTV has no figures but says most of its users are between 18 and 40. Advertising industry data shows 81% of 18 to 21 year olds have cellphones, as have 68% of 16 to 17 year olds and 49% of 13 to 15 year olds. Cellphone users aged 13- to 17-year-old cellphone users are far more likely to use their phones to participate in TV or radio polls, purchase ringtones, play games and send text messages than other users (*Advertising Age* 6.4.06).

### *Australia*

- In Australia, a voluntary code of standards on alcohol advertising collapsed in 1996, following public criticism about lack of compliance. It was two years before a new code was established. During that time the only restriction or standard on alcohol advertising was a television industry restriction of alcohol ads to adult programming times. Research on non-compliance and self-regulation under the 1998 code led to a review by commonwealth, state and territorial governments. Its report prompted a new and improved code in 2004, under threat of regulation, with deadline.
- In 2002 the Centre for Youth Drug Studies had documented alcohol ads in all media that contravening the code. In particular, alcohol products were often associated with sexual, social and sporting success. Alcohol ads in magazines had sexual imagery and features likely to appeal to young people (Roberts 2002). Ads were appearing on bus shelters, public transport and billboards, seen by large numbers of young people. Many alcohol websites had features likely to appeal to young people (games, slang, videos, music), and six were particularly youth oriented. More detailed study of these concluded the internet provided an opportunity to target underage customers and the sites would have been in breach of the code, had it applied to them (Carroll and Donovan 2002).

- There was also criticism of the self-regulatory complaints system. A study of this asked eight marketing academics to judge whether ads breached the alcohol advertising code or advertising code of ethics, without knowing what the Advertising Standard Board's rulings had been. The same ads were similarly assessed by a group of second-year advertising students. A majority of the expert judges perceived breaches for seven of the nine advertisements. A majority of the university students felt that all nine ads were in breach of one or more of code rules (Jones and Donovan 2002). Age groups of high school and university students (N=44, 43) completed questionnaires similarly assessing three current ads for a vodka based premixed alcohol drink. They rated the ads as suggesting that it would 'contribute to social and sexual success' and 'a significant change in mood' (stress reduction/relaxation). Observation of alcohol ads suggested that contravention of the alcohol advertising code was more widespread than complaint numbers would indicate (Jones and Donovan 2001).
- Fosters recently ran ridiculing the alcohol advertising standards rules and intimidating a (hopefully imaginary) complainant: 'You have been warned'. This ad breaches Foster's own code of practice as well as the Australia-wide Alcohol Beverages Advertising Code.

### *Europe*

- In Europe, where many European countries restrict alcohol advertising at least partially, codes of industry self-regulation for permitted ads reflect or build on rules in Article 15 of the EU Television Without Frontiers directive. Most of these have parallels in New Zealand's voluntary code. The public health umbrella group Eurocare says these rules are not working well in the current marketing environment. For example, despite the rule against implying that alcohol contributes to social and sexual success, sex is used to sell drinks much more than it used to be. Its reports documented ads that infringed codes and targeted young people and failure to apply letter and spirit of voluntary codes (Eurocare 2005, 2001; Rutherford 2003).
- In the Netherlands, the National Foundation for Alcohol Prevention monitored and documented alcohol advertising in 2002 and 2003. They concluded that self-regulation was not effective because alcohol advertising reached many people, the code was violated regularly, the code's wording was vague and open to interpretation and decisions by the code committee were slow and failed to have an impact (NFAP/STAP 2003). They have also documented the growing use of 'hidden advertising' in television programming.
- Ireland's voluntary code on alcohol advertising standards and self-regulatory system is similar to New Zealand's but includes the power to impose financial sanctions for infringement. Nevertheless, a study of the impact of alcohol advertising on teenagers in Ireland found that the majority of those surveyed identified alcohol advertisements as their favourites and most believed that the majority of alcohol ads targeted young people, because the ads depicted scenes – dancing, clubbing, lively music, wild activities - identified with young people. They interpreted alcohol advertisements as suggesting governing alcohol advertising, that alcohol is a gateway to social and sexual success and as having mood altering and therapeutic properties. Their perceptions suggested that advertisements were infringing the code in a number of ways: by linking alcohol use with social or sexual success, depiction of immoderate drinking, use of characters that appear under 25, implying that alcohol has therapeutic effects or improves physical performance, and the targeting of young people (Hope and Dring 2001).
- In Europe a review of sports sponsorship by major alcohol brands provides many examples that would be contrary to the letter or spirits of national voluntary codes on alcohol promotion. There are examples of sponsoring alcohol companies deliberately circumventing national rules or

pressuring countries to change policies or legislation for an international match that provides a marketing opportunity (Rekve 1998).

- The UK Institute of Alcohol Studies has pointed out the parallels between alcohol industry arguments about advertising and those once run by the tobacco companies (IAS 2005). The Centre for Tobacco Control Research at University of Stirling analysed internal documents from the tobacco industry's main UK advertising agencies. Their analysis concluded that:
  - “The aim [of the advertising] was to increase consumption as well as brand share. Individual brands gain from market expansion and therefore deliberate plans were made to encourage it.
  - Other industry strategies included undermining government policy and evading regulation - for example, resisting and circumventing restrictions on advertising and tax increases on tobacco products.
  - Voluntary, self-regulatory codes were treated cynically, the advertising agencies playing cat and mouse with the regulatory body, pushing to the limits and avoiding the rules whenever possible.
  - The young were a key target, and the imagery used in the advertising was designed to attract them, although for public consumption, care was taken always to refer to the young adult market. The lifestyles, motivations and aspirations of young people were continuously assessed. It was concluded that young people smoked for emotional reasons and that the branding could meet their needs by adding aspiration, coolness and `street cred' to the products. This in itself was counter to the regulatory code which stipulated that cigarette ads should not suggest that smoking was associated with social success or play on the susceptibilities of the emotionally vulnerable, especially the young.
  - The issue was marketing, not just advertising alone. All aspects of marketing such as price, distribution and other commercial communications such as point of sale material and direct mail were brought into play to maximise the uptake and continuance of smoking and thus to increase sales.” (Hasting and McFadyen 2000 cited in IAS 2000)
- French law (Loi Evin) both restricts the media in which alcohol may be advertised and regulates the content of alcohol advertising. This law was a response to flagrant breaches of standards while previous law that discriminated against non-French products was being challenged in the EU courts. The new law prohibited alcohol advertising that targets young people, advertising on television and in cinemas, and alcohol sponsorship of sports or cultural events. Alcohol advertising permitted in print media and on radio and billboards may only use messages and images related to product qualities. The quantitative effect of the law is difficult to assess as it has both contributed to and been swamped by a decrease in per capita consumption from 30 litres pure alcohol per capita in 1960 to 13 litres in 2004 (cf NZ 2005, 9.4 litres per person 15+). Great importance is attributed to the qualitative and symbolic impacts of the law, and successive governments have chosen to defend it against challenge in both French and European courts. As advertisement content is regulated in law, infringements have been enforced through local courts, with marked success. Researchers note that French national and international sport did not die without alcohol sponsorship (Rigaud and Craplet 2004). Switzerland has very similar policy.
- The EU is currently reviewing the Television Without Frontiers directive. In consultations on Article 14, the Commission has proposed a new definition of audiovisual commercial communications that would, as well as conventional advertisements, included promotional sponsorship slogans and logos, tele-shopping (infomercials), split screens, interactive advertising and product placement. There is concern that new rules should ensure complete transparency for viewers that a communication is in fact a commercial promotional message (Eurocare 2005).

### *New Zealand*

- No other example needs be given of the failure of industry self-regulation to meet government public health goals than the 20% increase in exposure of children and young people to alcohol television advertising when the ASA brought start time was brought forward to 8.30 pm, against recommendations of government agencies. Industry self-regulation means loss of government control over policy to improve public health. See separate paper on policy history.

## 7. Effectiveness of prohibiting alcohol advertising

- All Western countries, to a greater or lesser extent, place constraints on alcohol advertising, using a mixture of state legislation and industry self-regulation. As in New Zealand, the outcomes reflect policy struggles and decisions continue to be contested (Hill & Casswell 2001). See separate paper for a review of other countries' policies.
- Some statistical studies have compared countries in which advertising bans or partial bans have been implemented with countries which have no restrictions. Differences between findings led to considerable debate critiquing and refining methodology. Key points have been the importance of using disaggregated data (quarterly or local expenditure, consumption by beverage or age) to pick up the marginal benefits of increased expenditure on advertising alcohol in a saturated market.
- Earlier studies, mainly within single countries, that found no effect of partial and short term bans on alcohol consumption Smart and Cutler 1976; Makowsky and Whitehead 1991; Schweitzer et al. 1983; Osborne and Smart 1980). A US study using annual data found a positive but small effect of advertising on beverage consumption, mostly related to wine advertising and not to (heavily advertised) beer (Nelson and Moran 1995).
- A 17 country comparison using time series data for the period 1970-1983 showed that alcohol advertising impacted on both consumption and motor vehicle fatalities. The countries with a ban on spirits advertising had 16% lower consumption and 10% lower motor vehicle fatalities than countries with no such ban. Countries that ban advertising of beer and wine as well as spirits about 11% lower alcohol consumption and about 23% lower motor vehicle fatality rates than countries with bans only on spirits advertising (Saffer 1991). This study linked alcohol consumption to advertising policy and to alcohol price. Liver cirrhosis mortality rates was related to price. Motor vehicle fatality rates are related to advertising policy and less clearly to price.
- Another study of 1977-1995 annual data from countries with complete bans and bans of spirits advertising found no reduction over the study period in per capita alcohol consumption or abuse compared to countries which did not prohibit advertising (Nelson and Young 2001). The countries with complete bans had lower current rates of consumption and cirrhosis and a more marked decrease in alcohol-related road fatalities, which could be also to restrictive policies in areas other than alcohol advertising.
- A US study investigated the relationship between local levels of alcohol advertising expenditure and road fatalities (rather than consumption), using market-specific rates in different metropolitan areas for television, radio, newspaper and billboard advertising, as well as national network and cable television, radio and magazine advertising. Price, income and a range of regional demographic variables were also considered in the regression analyses. Alcohol advertising was found to be a contributing factor to the high level of motor fatalities in the US, although smaller than alcohol price. The data was then used to consider two policy options. If the voluntary television ban on spirits advertising at that time was extended to beer and wine, allowing for likely substitution to other media, it was estimated that 2,000 to 3,000 lives a year would be saved. If the tax deductibility of alcohol advertising was removed, the reduced advertising from current expenditure would reduce fatalities by about 1,300 and raise about \$300 million a year in government revenue (Saffer 1997).
- An update of Saffer's 1991 study pooled time series of data from 20 countries over 26 years to measure the effect of partial bans on alcohol advertising. Policy variations around partial bans were addressed by counting separate bans for television, radio or print covering beer/wine or spirits (Although policies vary between countries, cross-national differences in response to advertising are

small.) The study concluded that one more ban on beer and wine or on spirits would reduce consumption by about 5%, and one more ban on all alcohol advertising in a media would reduce consumption by about 8%. This study addressed the Nelson and Young study by showing that alcohol advertising bans were more likely to be adopted in countries with rising alcohol consumption – as at present in New Zealand - and less likely where drinking was declining (Saffer and Dave 2002b).

- Saffer and Dave's statistical study of alcohol advertising and young people (see Section 3) developed a variable based on local advertising expenditure data (television, radio, billboards, magazine and newspaper), which was about one third of all alcohol advertising. (There was no local variation in national level advertising that could be measured to show effects.) Alcohol advertising was shown to have a positive and significant impact on drinking alcohol in the past 12 months, on drinking alcohol in the past month, and on binge drinking participation in the past two weeks. Applying this finding preventatively, a ban on all alcohol advertising would reduce underage monthly alcohol participation as much as a 100% increase in alcohol prices and would reduce participation in binge drinking by about 40% (Saffer and Dave 2003).
- This research shows that more forms of advertising and promotion that are discontinued, the more effective the policy will be. Advertising bans in some but not all media – say, television and radio - may not reduce the total advertising spend, but will reduce the effectiveness of advertising in substitute media. This is not only because television is the most powerful medium but because in each medium advertising is subject to diminishing marginal product, i.e. diminishing response. Partial restrictions (by time, just spirits or just television) will be less effective (Saffer and Dave 2002b, 2003) or will shift sales to other beverage types (Nelson 2003; Tremblay and Okuyama 2001). Alcohol companies may increase marketing by other techniques, such as point of sale and direct promotions. Sports and music sponsorship are already major strategies for alcohol promotion and could be included in a comprehensive ban.
- A recent US study estimated the effect of public health interventions to decrease harmful drinking among young people, as shown by US research, and used life table methods to estimate alcohol attributable years of life lost by age 80 among the cohort of around 4 million aged 20 in 2000. Using national survey data on transitions in drinking habits by age, the impact of various interventions on alcohol-attributable mortality was modeled. The study found that a tax increase and an advertising ban were the most effective interventions. With no intervention there would be 555,259 alcohol-attributable deaths over the lifetime of the cohort. A tax-based 17% increase in the price of alcohol, of US\$1 per six pack of beer, could reduce deaths by 1,490. A complete ban on alcohol advertising would reduce deaths from harmful drinking by 7,609 and result in a 16.4% decrease in alcohol related life-years lost. A partial advertising ban, for youth oriented media only, would result in 4% reduction (Hollingworth et al. 2006).
- In the 1980s, alcohol advertising in the USA gave rise to considerable public criticism and a series of political initiatives and congressional hearings about possible legislation. In this context, spending on for alcoholic-beverage advertising, in inflation-adjusted dollars, declined 46.5% in Between 1986 and 1993. Expenditure in the measured media (television, radio, print, outdoor) dropped from a high of US\$1,511 million in 1986 to \$808 million in 1993 (inflation-adjusted). Beer ad expenditure dropped 40%; liquor advertising 41%, wine advertising 54% and advertising for wine coolers (early alcopops) dropped 88%. Per capita alcohol consumption declined 10%, to a 26-year low in 1992. . Alcohol involvement in fatal crashes for drivers aged 16-20 decreased from 36.5% in 1986 to 24.6% in 1993, and for those 21-24 from 47.3% to 39.4%. Reported binge drinking (5+ drinks) among high-school seniors reduced by a quarter to 27.5% in 1993, and college binge drinking also declined (Hacker and Stuart 1995).

- CHOICE, a World Health Organization work programme to identify cost-effective public health interventions, modelled the cost effectiveness of key interventions to reduce alcohol related harm in WHO regions with differing patterns of epidemiology and hazardous alcohol use. Scenarios over 100 years compared the impact and cost of each intervention over 10 years (expressed in Disability Adjusted Life Years averted) with taking no action. The policies evaluated were alcohol tax, drink-driving legislation and random breath-testing, reduced hours of sale, a comprehensive advertising ban and brief advice intervention in primary health care. In six subregions with high prevalence of heavy drinkers (including Western Pacific A), taxation was most cost effective; advertising bans were more effective at less cost than restricted hours of trading; random breath testing had the highest cost per DALY averted, and brief intervention for half all hazardous drinkers would be also effective but at high cost. Taking into account costs already carried by existing policies, the lowest cost per DALY averted to be achieved in New Zealand's region would be from a 50% increase in alcohol tax and an advertising ban (Chisholm et al. 2004).

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