Submission to the Joint Oireachtas Committee on Health and Children on the

Heads of the Public Health (Alcohol) Bill 2015

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Key points

- Alcohol-related harm has a major impact on population health and health inequalities in Ireland. Current levels of harmful¹ drinking have a significant impact on health and social services in terms of acute physical and mental health issues and injury. Patterns of consumption contribute significantly to our evolving epidemics of obesity, chronic disease and multi-morbidity. The cost of alcohol-related harm is €3.7bn per annum. Any delays in introduction of the Bill will incur further cost to population health and social wellbeing as well as the Exchequer.
- IPH welcomes the Heads of Bill. We consider the Bill a critical element of the implementation of the recommendations of the *Steering Group Report on a National Substance Misuse Strategy*. Members of the committee should be assured that the evidence has consistently shown that broad regulatory measures addressing alcohol availability are effective in reducing alcohol-related harm. A focus on health education and awareness campaigns, though important, is insufficient to effect meaningful change and a comprehensive regulatory framework is also required.
- IPH considers that while all Heads of Bill are important, the introduction of minimum unit pricing (MUP) is critical in terms of reducing the stark inequalities in alcohol-related harm seen in this country and in relieving the excess burden of that harm shouldered by the most vulnerable and disadvantaged communities.
- There is significant commitment in the Republic of Ireland and Northern Ireland to work cooperatively and consider carefully progression towards the introduction of MUP. IPH chairs the North South Alcohol Advisory Group, and one of the groups outputs a briefing paper on alcohol availability supports many elements of the Heads of Bill. Members should be assured that both jurisdictions are progressing with due concern for cross-border issues, based on jointly commissioning research.
- While we acknowledge the importance of this Bill, IPH notes that certain provisions in the Bill fall short of the steering group's initial recommendations. There is scope for greater clarity on specific details relating to labelling requirements, regulation of controls on advertising and marketing and the timeframe for progress on structural separation.

¹ Harmful drinking as defined by score on the WHO AUDIT-C measure.

1. Introduction

1.1 The Institute of Public Health in Ireland

The remit of the Institute of Public Health in Ireland (IPH) is to promote cooperation for public health between Northern Ireland and the Republic of Ireland in the areas of research and information, capacity building and policy advice. Our approach is to support Departments of Health and their agencies in both jurisdictions, and maximise the benefits of all-island cooperation to achieve practical benefits for people in Northern Ireland and the Republic of Ireland (www.publichealth.ie).

1.2 North South Alcohol Policy Advisory Group

Strategies in both jurisdictions have highlighted the need for cross-departmental and cross-sectoral engagement to reduce alcohol consumption and harm. At the request of the Chief Medical Officers in both jurisdictions, IPH facilitates collaborative working by chairing and supporting the operations of the North South Alcohol Policy Advisory Group (NSAPAG). The NSAPAG was established in 2012 and comprises representatives from government departments, academia, professional bodies, research institutions and third sector organisations. The NSAPAG has developed a paper *Reducing alcohol-related harm by addressing availability – Maximising benefits from North South Cooperation.* which was presented to the North South Ministerial Council in April 2014.

1.3 Context of IPH Submission

IPH welcomes the opportunity to comment on Heads of the Public Health (Alcohol) Bill. International evidence supports these regulatory measures in addressing alcohol consumption and related harm. The World Health Organization has strongly endorsed the use of such public health legislation to regulate the availability of alcohol as a means to reduce alcohol-related harm (WHO, 2010). This Bill will have important implications in terms of addressing a wide range of alcohol-related harms and improving population health.

2. Overview of evidence

2.1 Alcohol consumption and related harms

Table 1 overleaf presents some key facts on alcohol -related harm in Ireland.

Table 1.	Key facts on alcohol consumption and alcohol -related harms in Ireland.
Individual	Chronic alcohol-related conditions are becoming increasingly more common among younger age groups (RCPI, 2013).
	Alcohol liver disease morbidity and mortality almost trebled between 1995 and 2007, consistent with an increase in alcohol consumption and harmful drinking patterns (Mongan et al, 2011).
	Alcohol-related cancers are expected to increase significantly, with the number of new alcohol-related cancers forecast to double among women and increase by 81% for men by 2020 (National Cancer Registry, 2006).
	The majority of alcohol consumed was done so as part of a binge drinking session (Long and Mongan, 2014).
Family	Alcohol is known to have been a factor in over half of all suicides and 38% of self-harm cases in Ireland (National Office for Suicide Prevention, 2013).
	46% of 10-17 year olds have consumed alcohol in their lifetime, with almost three in ten (28%) having been 'really drunk' in the month prior to the survey (Kelly et al, 2012)
	271,000 children (children under 15 years) and 587,000 children (all ages) exposed to risk from parental hazardous drinking on a regular basis ² (based on 2006 Census) (Hope, 2011).
	28% of all injury attendances at accident and emergency departments were alcohol-related, increasing to 80% between midnight and 6am on Sundays (Hope, 2005).
Society	97% of public order offences are influenced by alcohol (Hope, 2008).
	In 1 in 4 fatal road accidents the driver had consumed alcohol (An Garda Síochána, 2011).
	Cost of alcohol-related harms is estimated to be €3.7bn per annum (1.9% GDP) (Byrne, 2010).

2.2 Part II Labelling and Minimum Unit Pricing Head 5 Labelling of alcohol products

2.2.1 Grams of alcohol and calorie content

Health labelling of food and drinks is an important measure in helping consumers make informed choices at the point of sale. Alcohol is the second most calorie-dense source of energy, containing seven calories per gram, compared with fat which contains nine calories per gram (NHS, 2014). Current patterns of heavy alcohol consumption contribute significantly to overweight and obesity among both men and women (Wannamethee and Sharper, 2003; Wannamethee et al, 2004). With two out of three adults in Ireland either

² Regular hazardous drinking is defined as consuming 4 pints or more (78 grams of alcohol/occasion), at least once a month.

overweight or obese (Morgan et al, 2008), it is important to consider the contribution alcohol makes to total energy intake and the role it plays as a source of 'hidden calories'. Recent data from the *National Diet and Nutrition Survey for Northern Ireland* revealed that, on average, over the four-day recording period, alcohol provided between 8 and 9 percent of energy intake for adult consumers of working age (Bates et al, 2015).

Consumer knowledge of the calorie content of alcohol drinks is poor - evidence from the UK suggests that over 80% of adults did not know or underestimated the number of calories in a pint of lager (RSPH, 2014). Evidence from a recent Health Research Board (2012) report showed a high level of public support for the inclusion of alcohol strength, number of calories, details of alcohol-related harms and ingredients on alcohol product labels.

2.2.2 Health warnings

Drinking above normal limits has become the norm in Ireland with, less than one in ten people correctly identifying the recommended weekly maximum number of standard drinks for men and for women (Long and Mongan, 2014).

Research shows that many members of the Irish public are aware of the association between excessive alcohol consumption and disease of the liver and pancreas and high blood pressure. However, there was lower awareness of the full range of health impacts and on the issue of alcohol-related cancers (Health Research Board, 2012). These findings highlight the importance of health warnings as a means of increasing public awareness and understanding of the potential impacts of their alcohol consumption choices.

Legislation is the correct approach to labelling. Efforts to address alcohol labelling were introduced as part of the UK Public Health Responsibility Deal. However, experience from the UK has shown that attempts to improve labelling of alcohol products, done in conjunction with industry, were ineffective, with only 15% of all commercially available products being compliant with the voluntary labelling standards (Campden BRI, 2009).

A recent review concluded that alcohol labelling is a valid component of alcohol policy, but attention needs to be given to the formatting of the labelling to ensure it is effective (Martin-Moreno et al, 2013). The European Alcohol Policy Alliance has proposed that health messages should make reference to liver cirrhosis, cancers, mental health issues, injuries, violence and risk of dependence (Eurocare, 2011). In 2014, the European Commission publicly committed to make a decision on extending nutrition labelling (including calorie labelling) on alcoholic products.

2.3 Head 6 Minimum Price of Alcohol Products

Minimum unit pricing (MUP) is an effective policy in relation to reducing alcohol consumption and alcohol-related harms (Booth et al, 2008; Zhao et al, 2013; Stockwell et al,

2013; Wagenaar et al, 2010). Minimum unit pricing has important implications for certain groups, for example, young people purchasing low cost alcohol from off-license premises (particularly supermarkets) and those drinking at harmful levels. MUP has important implications in terms of addressing health inequalities and the impact on alcohol-related harm to both the individual and others.

The evidence to date would point to 'upstream' public health interventions, such as price increases and restrictions on the availability of health-damaging products, as being the most likely to help reduce health inequalities (Smith and Foster, 2014). Significant research in this area has been undertaken by the University of Sheffield based on the Sheffield Alcohol Policy Model (SAPM) suggesting that a MUP would have greater effects on heavy drinkers compared with moderate drinkers (Purshouse et al, 2010).

From their modelling of the effects of MUP on different income and socioeconomic group, Holmes et al (2014) have concluded the following:

- Harmful drinkers with the lowest incomes would reduce their consumption the most.
- Most health gains occur in harmful drinkers in the poorest routine or manual worker groups, suggesting that the policy could contribute substantially to the reduction of health inequalities.
- Drinkers on a low income are less able to absorb price increases and their resultant behavioural changes (eg switching between beverage types) leads to small overall reductions in spending across all products.
- SAPM estimates harm reductions for low socioeconomic groups, suggesting MUP is a progressive policy in terms of the reduction of health inequalities.

Alcohol-related harms have wide ranging social and economic impacts such as the demand on healthcare and emergency services, workplace absenteeism and crime. These impacts, as well as potential economic benefit to society (including exchequer and retailers) have been outlined in the findings from the model-based appraisal of minimum unit pricing of alcohol in Northern Ireland. Minimum unit pricing will target the cheapest alcohol and unlike duty increases, which can be absorbed by retailers, it will set a floor price at which alcohol can be sold. While pricing and taxation strategies are considered to be the alcohol policies with the strongest evidence base for reducing harmful consumption, MUP is a variation which the evidence suggests is more targeted towards the heaviest drinkers (Stockwell and Thomas, 2013). Even with taxation increases, retailers in the off-trade can still sell products as loss leaders at extremely cheap prices. Unlike excise duties, minimum unit pricing will affect outlets where the cheapest alcohol is sold, and targets vulnerable drinkers, rather than moderate drinkers (RCPI, 2013).

IPH welcomes the jointly commissioned research by the respective health departments in Northern Ireland and the Republic of Ireland. Although findings from the Republic of Ireland element of the study are not yet publicly available, the findings from the Northern Ireland study show that a MUP of 50p was more effective that lower unit prices and other pricing strategies such as a ban on below cost selling and price-based promotions (Angus et al, 2014).

Based on a 50p MUP, some of the effects of the modelled policy include:

- Estimated reduction of 2,425 fewer hospital admissions per year.
- Estimated reductions in deaths equate to 13% for drinkers in poverty and 10% for those not in poverty.
- Direct costs to healthcare services are estimated to reduce with savings of at least £0.8million in year 1 and £177million over the first 20 years following implementation of a promotion ban and all MUP thresholds of at least 45p. The savings for a 50p MUP are £1.8million in the first year and £397million over 20 years.
- The total societal value in harm reduction is estimated at £956million over the 20 year period (includes reduced direct healthcare costs, savings from reduced crime and policing, savings from reduced workplace absence and a financial valuation of the health benefits measured in terms of Quality-Adjusted Life Years³).

2.4 Part III Control of Marketing and Advertising of Alcohol Head 9 Control of marketing and advertising of alcohol

A systematic review published in 2009 concluded that exposure to alcohol marketing can reduce the age at which young people start to drink, increase the likelihood that they will drink and increase the amount of alcohol they will consume once they have started to drink (Anderson et al, 2009 and Jones and Magee, 2011). A recent UK study found that children as young as 10 years old are highly familiar with alcohol brands and televised alcohol advertising and that football clubs and tournaments are strongly associated with the beer brands that sponsor them, particularly by boys (Alcohol Concern, 2015). In Ireland, a study examining children's awareness of sport sponsorship found a high level of awareness of the alcohol brand associated with the event, particularly amongst boys, older children (aged 11-13) and those living in the area of the winning team (Houghton, 2014).

While use of age verification mechanisms to restrict access to alcohol-related content are used by alcohol marketers and social media providers, their effectiveness remains uncertain. (Winpenny et al, 2012). Recent research has highlighted the rise in online marketing of alcohol and the high use of social media websites by young people suggests that this is an area requiring further monitoring and regulation (Winpenny et al, 2014).

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³QALYs – valued at £60,000 in line with Department of Health (UK) guidelines

It is notable that the Alcohol Beverage Federation of Ireland formally disagreed with the recommendation of the *Steering Group Report on a National Substance Misuse Strategy* in relation to the restriction of advertising of alcohol.

2.5 Part IV Enforcement

Head 15 Amendment of Section 9 of the Intoxicating Liquor Act

Alcohol sales in the supermarket and grocery sector represent an important aspect of the rise in alcohol availability on the island. Regulation of the sale and display of alcohol products in mixed trading premises has been proposed on the basis that alcohol is not an ordinary product and this should be reflected in appropriately restricted visibility, display and sale arrangements in such premises.

Section 9 of the *Intoxicating Liquor Act 2008* relates to the structural separation of alcohol products from other retail items in mixed trading premises such as supermarkets, convenience stores and garage forecourts. It provides that in mixed trading premises:

- The display and sale of alcohol are confined to a part of the premises that is separated from the rest of the premises by means of a wall or similar barrier.
- Access can only be gained from the rest of the premises to this part through a door, gate, turnstile or similar means of access.
- The only place within the premises that customers can pay for alcohol is at a counter or point of sale within this separated part of the premises.
- The only permitted alternative is to confine the display and sale of alcohol other than wine to a part of the premises to which the public does not have access, e.g. an area behind a counter.

A voluntary code of practice was introduced in respect of these provisions, subject to this code satisfying conditions relating to demonstrable compliance with the structural separation objectives. The Responsible Retailing of Alcohol in Ireland body (RRAI), established by the mixed trading sector, oversees the implementation of the voluntary code and submits compliance reports to this effect. IPH produced a submission to the Department of Justice and Equality in 2011 on the *Review of the Code of Practice on the Sale and Display of Alcohol in mixed trading premises*. In our submission we highlighted concerns in relation to the effectiveness of the voluntary code in terms of limited participation by independent retailers and in the context of the international evidence that statutory codes of practice are more fit-for-purpose in fostering compliance (IPH, 2011).

3. Recommendations

3.1 Part II Labelling and Minimum Unit Pricing Head 5 Labelling of alcohol products

IPH welcomes the proposals to introduce health labels on all alcohol products. There is a need for consistent messages and a standardised approach to health labelling with due consideration being given to health literacy.

Consumers have the right to be informed on the content of the products they are consuming. Recent progress on legislation on calorie posting on menus has the capacity to compliment the progress made in calorie-labelling on alcohol products and provide consumers with the information they need to make informed choices. To determine the effectiveness of alcohol labelling, it is critical that decision on the content and format of labelling remains with the government and that compliance is monitored by an independent body.

For optimal impact, we would recommend that health labelling should be evaluated (pre and post introduction) and reviewed periodically, in the context of new products designs, which may try to circumvent the meaning of any health warning. We also recommend that due attention is given to issues such as the label size, format and design.

3.2 Head 6 Minimum Price of Alcohol Products

IPH fully endorses the introduction of MUP for alcohol products. We consider MUP to be the a particularly important element of the Bill.

The introduction of MUP policies in Northern Ireland and the Republic of Ireland has the potential to make a real contribution to reducing alcohol-related harm across the island. IPH welcomes the commitment by both jurisdictions to work together on alcohol pricing policies, particularly in the context of cross-border issues.

3.3 Part III Control of Marketing and Advertising of Alcohol Head 9 Control of marketing and advertising of alcohol

We strongly endorse the need for explicit protection of under 18s, acknowledging that the provisions within the Bill needs to be broad enough to encompass the multiple exposures to alcohol advertising and marketing young people experience daily. In addition, social/digital media is highly influential among this group but is currently absent from the proposed areas of regulation and we would welcome a plans to regulate for this channel of communication.

Greater clarity is needed on how the proposed changes to advertising, marketing and sponsorship will be regulated, including the timeframe for the introduction of these regulations. We would encourage the appointment of an independent regulatory body to monitor the regulations, with clearly defined terms of reference.

3.4 Part IV Enforcement

Head 15 Amendment of Section 9 of the Intoxicating Liquor Act

We welcome the inclusion of the new statutory provision which will empower Environmental Health Officers employed by the Health Service Executive to enforce the provisions of the Section 9 of the Intoxicating Liquor Act 2008 when commenced.

Conclusions:

Current levels of alcohol consumption and related harms are significant public health issues, with associated high costs to the state. The core provisions of the Bill represent important progress in regulating the availability of alcohol – the provisions are strongly evidence-informed and enjoy a high level of public support and acceptance.

IPH urges members to support the progress of this Bill through all stages.

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References

Alcohol Concern (2015) *Children's recognition of alcohol marketing*. Available at: http://www.alcoholconcern.org.uk/wp-content/uploads/woocommerce_uploads/2015/02/Childrens-Recognition-of-Alcohol-Marketing_Briefing.compressed.pdf

Alcohol Health Alliance (2015) *Public call for health warnings on alcohol labels*. Available at: http://www.ias.org.uk/News/2015/07-January-2015-Public-call-for-health-warnings-on-alcohol-labels.aspx

An Garda Síochána (2011) Annual Report. Dublin: An Garda Síochána

Anderson P, de Bruijn A, Angus K, Gordon R and Hastings G (2009) Impact of Alcohol Advertising and Media Exposure on Adolescent Alcohol Use: A Systematic Review of Longitudinal Studies. *Alcohol & Alcoholism* 44 (3) 229–243 doi: 10.1093/alcalc/agn115

Angus C, Meng, Y, Ally A, Holmes J and Brennan A (2014) *Model-based appraisal of minimum unit pricing for alcohol in Northern Ireland. An adaption of the Sheffield alcohol Policy Model version 3.* Sheffield: University of Sheffield

Bates B, Lennox A, Prentice A, Bates C, Page P, Nicholson S, Balmer R and Swan G (Editors) (2015) *National Diet and Nutrition Survey Rolling Programme (NDNS RP) Results from Years 1-4 (combined) for Northern Ireland (2008/09-2011/12)*. Northern Ireland: Food Standards Agency; Department of Health, Social Services and Public Safety and *safe* food.

Booth A, Meier P, Stockwell T, Sutton A, Wilkinson A, Wong R, et al. (2008) *Independent review of the effects of alcohol pricing and promotion*. Sheffield: University of Sheffield

Byrne S. (2010) Costs to society of problem alcohol use in Ireland. Dublin: Health Service Executive, 2010.

Campden BRI (2009) *Monitoring Alcohol Implementation Regime, Stage 2 (including advice to women on alcohol and pregnancy)* on behalf of Health Improvement and Protection, Department of Health. Gloucestershire: Campden BRI Food and Drink Innovation

Dooley BA and Fitzgerald A (2012) *My World Survey: National Study of Youth Mental Health in Ireland.* Dublin: Headstrong and UCD School of Psychology. Available at: http://www.ucd.ie/t4cms/MyWorldSurvey.pdf

Eurocare (2011) European Alcohol Policy Alliance: Position Paper on: Health warniong messages on alcoholic beverages. Available at:

http://www.eurocare.org/resources/policy_issues/labelling Accessed: 27 February 2015

Gornall J (2014) Under the influence. *British Medical Journal* 348: f7646 doi: http://dx.doi.org/10.1136/bmj.f7646 (Published 08 January 2014)

Health Research Board (2012) *Alcohol: Public Knowledge, Attitudes and Behaviours*. Dublin: Health Research Board

Holmes J, Meng Y, Meier PS, Brennan A, Angus C, Campbell-Burton A, Guo Y, Hill-McManus D and Purshouse RC (2014) Effects of minimum unit pricing for alcohol on different income and socioeconomic groups: a modelling study. *Lancet* 383: 1655–64 Published **Online** February 10, 2014 http://dx.doi.org/10.1016/S0140-6736(13)62417-4

Hope A, Gill A, Costello G, Sheehan J, Brazil E and Reid V (2005) *Alcohol and Injuries in the Accident and Emergency Department: A National Perspective*. Dublin: Department of Health and Children

Hope A. (2008) *Alcohol-related harm in Ireland*. Dublin: Health Service Executive – Alcohol Implementation Group

Hope, A. (2011) *Hidden Realities: Children's Exposure to Risks from Parental Drinking in Ireland*. Letterkenny: North West Alcohol Forum Ltd

Houghton F, Scott L, Houghton S and Lewis CA (2014) Children's awareness of alcohol sponsorship of sport in Ireland: Munster Rugby and the 2008 European Rugby Cup. *International Journal of Public Health* 59 (5) 829-832

IAS (2012) Institute of Alcohol Studies Letter to President of the European Commission in support of Scottish Government's proposals to introduce a minimum price per unit of alcohol. Available at: http://www.ias.org.uk/uploads/pdf/News%20stories/ias-letter-jm-barroso.pdf

IPH (2011) Submission to Civil Law Reform Division, Department of Justice and Equality Review of the Code of Practice on the Sale and Display of Alcohol in Mixed Trading Premises. Available at:

http://www.publichealth.ie/sites/default/files/Review%20of%20Code%20-%20Alcohol%2020%20Dec%2011.pdf Jones SC and Magee CA (2011) Exposure to alcohol advertising and alcohol consumption among Australian adolescents. *Alcohol and Alcoholism* 46 (5) 630-637

Kelly C, Gavin A, Molcho M and Nic Gabhainn S (2012) *The Irish Health Behaviours in School-aged Children (HBSC) Study 2010*. Galway and Dublin: Health Promotion Research Centre and Department of Health

Long J, and Mongan, D (2014) *Alcohol consumption in Ireland 2013: Analysis of a national alcohol diary survey.* Dublin: Health Research Board

Martin-Moreno JM, Harris ME, Breda J, Moller L, Alfonso-Sanchez, JL and Gorgojo, L (2013) Enhanced labelling on alcoholic drinks: reviewing the evidence to guide alcohol policy. *The European Journal of Public Health Advance Access published May 8*, 2013 doi:10.1093/eurpub/ckt046

Morgan K, McGee H, Watson D, Perry I, Barry M, Shelley E, Harrington J, Molcho M, Layte R, Tully N, van Lente E, Ward M, Lutomski J, Conroy R and Brugha R (2008) *SLÁN 2007: Survey of Lifestyle, Attitudes & Nutrition in Ireland. Main Report.* Dublin: Department of Health and Children.

National Cancer Registry Ireland (2006) *Trends in Irish cancer incidence 1994-2002 with projections to 2020*. Dublin: National Cancer Registry Ireland

National Office for Suicide Prevention (2013) *Annual Report 2012*. Dublin: Health Service Executive

NHS (2014) http://www.nhs.uk/Livewell/alcohol/Pages/calories-in-alcohol.aspx Accessed 04/03/15

NSAPAG (2104) *Reducing alcohol-related harm by addressing availability – Maximising benefits from North South Cooperation*. North South Alcohol Policy Advisory Group.

Purshouse RC, Meier PS, Brennan A, Taylor KB and Rafia R. (2010) Estimated effect of alcohol pricing policies on health and health economic outcomes in England: an epidemiological model. *Lancet* 375 (9723)1355–64

RCPI Policy Group on Alcohol (2013) *Reducing Alcohol Health Harm Policy Statement*. Dublin: Royal College of Physicians in Ireland

RSPH (2014) *Increasing awareness of the 'invisible' calories from alcohol*. London: Royal Society for Public Health.

Smith K and Foster J (2012) *Alcohol, health inequalities and the harm paradox: why some groups face greater problems depaite consuming less alchol.* London: Institute of Alcohol Studies.

Stockwell T, Zhao J, Martin G, et al. (2013) Minimum alcohol prices and outlet densities in British Columbia, Canada: estimated impacts on alcohol-attributable hospital admissions. *American Journal of Public Health* 103: 2014–20

Wagenaar AC, Tobler AL and Komro KA (2010) Effects of alcohol tax and price policies on morbidity and mortality: a systematic review. *American Journal of Public Health* 100: 2270–78.

Wannamethee SG, Shaper AG. (2003) Alcohol, body weight, and weight gain in middle-aged men. *American Journal of Clinical Nutrition* 77:1312–17

Wannamethee SG, Field AE, Colditz GA and Rimm EB (2004) Alcohol intake and 8-year weight gain in women: a prospective study. *Obesity Research* 12:1386–96

WHO (2010) Global strategy to reduce harmful use of alcohol. Geneva: World Health Organization

Winpenny E, Patil S, Elliott M, Villalba van Dijk L, Hinrichs S, Marteau T and Nolte E (2012) *Assessment of young people's exposure to alcohol marketing in audio-visual and online media*. Cambridge: RAND Europe

Winpenny E, Marteau T, Nolte E (2014) Exposure of Children and Adolescents to Alcohol Marketing on Social MediaWebsites. *Alcohol and Alcoholism* 49 (2) 154–159 doi:10.1093/alcalc/agt174

Zhao J, Stockwell T, Martin G, et al. (2013) The relationship between minimum alcohol prices, outlet densities and alcohol-attributable deaths in British Columbia, 2002–09. *Addiction* 108: 1059–69