Report for the Department of Health

**Alcohol Literature Review**

By

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Department of Health

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This briefing document has been prepared in response to a request from the Department of Health to conduct an alcohol literature review and update the evidence contained in the National Substance Misuse Strategy, in the context of the draft Public Health (Alcohol) Bill.

The report incorporates the latest Irish and International research evidence on alcohol consumption and harm. It also presents the latest research evidence on the regulation of alcohol marketing and health labelling.

Table of Contents

1. **Update of Irish evidence**

* Alcohol consumption . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
* Cost to society of problem alcohol use in Ireland . . . . . . . . . . . . 6
* New relevant Irish research . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 14

2. **Update of International Evidence**

* Alcohol consumption . . . . . . . . .. . . . . . . . . . . . . . . . . . . . . . . . 17
* Burden of Disease/ Alcohol-related harm . . . . . . . . . . . . . . . . . 18
* Effective measures to reduce alcohol related harm . . . . . . . . . 20
* Global monitoring framework . . . . . . . . . . . . . . . . . . . . . . . . . . 20

3. **Regulation of Alcohol marketing**

* Rationale . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 22
* Review of research evidence . . . . . . . . . . . . . . . . . . . . . . . . . . . . 22
	+ Effects of alcohol marketing
	+ Alcohol branded sports sponsorship
	+ Digital marketing
* Enforcement mechanisms . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 26

4. **Health Labelling**

* Review of research evidence . . . . . . . . . . . . . . . . . . . . . . . . . . 31
	+ Health warning labels
	+ Low-risk drinking guidelines

**5. References**  . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 33

**6. Appendices** . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 37

**1.1 Alcohol consumption in Ireland**

During the last 30 years, alcohol consumption per capita (15+ years) of pure alcohol increased from 9.5 litres in 1984 to a high of 14.3 litres in 2001 (Figure 1). In 2003, alcohol consumption dropped by 6% following a substantial tax increase on spirits. A further reduction was observed during the early phase of the recession years (2008-2009). Alcohol consumption again increased in 2010 and 2011. In 2013, alcohol consumption was 10.6 litres per capita (15+), a decline of 7.7% from the previous year. While this reduction in consumption is to be welcomed, it is important to recognise that Ireland’s alcohol consumption remains in the top five among EU28 Member States and the WHO European Region has the highest consumption in the world (WHO 2014).

*Figure 1: Alcohol consumption per capita (15+) in Ireland, 1984 to 2013*

In Ireland, the most recent national alcohol survey shows that more than half (54%) of adult drinkers (18-75 years) in the population are classified as **harmful drinkers**, using the WHO AUDIT-C screening tool (Long & Mongan 2013). These results are similar to those in the SLAN 2007 survey. Harmful drinking is more common among men than women. The vast majority (three in every four) of young adult drinkers have positive AUDIT-C scores.  When the proportion of survey respondents who are classified as harmful drinkers is applied to the population, this equates with between 1.3 and 1.4 million harmful drinkers.  While alcohol per capita (15+) declined between 2007 and 2013, it still remains high and the damaging dominance of a harmful drinking pattern in Ireland remains very high by European standards and is a major public health concern.

Youth drinking patterns

 Youth drinking was examined, based on the HBSC four surveys between 1998 and 2010, using two drinking measures - alcohol use in last 30 days (current drinkers), drunkenness ever. The most meaningful discussion is by gender and age. When examined by gender and age, the findings show there was an increase in alcohol engagement as age increased, with lowest engagement in the youngest age group (10 to 11 yrs) and the highest in the older age group (15-17 yrs), in terms of current drinkers and drunkenness. Boys were more likely to be current drinkers than girls up to age of 14 years. In the older age group, gender difference diminished over time for both measures (Figure 2). Between 1998 and 2010, some reductions (mainly among boys) were seen but the pattern was inconsistent. In 2010, 40% (two out of five) of 15 to 17 year olds were current drinkers and over half (53%) reported drunkenness (Figure 2). In the 12 to 14 age group, 15% of girls and 18% of boys reported drunkenness. While some decline has taken place, the drinking pattern of children continues to pose serious health and welfare risks and delaying the onset of drinking is a public health imperative.

*Figures 2: Youth drinking pattern, reported by gender and age, based on HBSC surveys from 1998 to 2010.*

**1.2 Cost to Society of problem alcohol use in Ireland**

**1.2.1 The principal social costs of problem alcohol use.**

The links between problem alcohol use and the social costs to which it gives rise are complex and just some of the costs can be estimated with some degree of reliability. Problem alcohol use gives rise to three types of costs: direct costs, indirect costs and intangible costs. Direct costs are borne by the government and therefore by taxpayers and include costs to the health care, criminal justice and welfare systems. Indirect costs include lost output through alcohol related absenteeism and output lost due to premature death or disability. Intangible costs are mainly pain and suffering experienced by those who experience alcohol related problems and are the most difficult category of costs to measure.

As the social costs of problem alcohol use are very significant to individuals and to society, there are large potential savings not only in money terms but also it terms of reduced suffering and improved quality of life, if those costs can be reduced. Estimates of the cost of problem alcohol use are useful in formulating effective alcohol policies, can identify gaps in national statistical reporting systems and enable cross national comparisons. But there are other social costs which are more difficult to estimate. These include the suffering imposed on the families of problem drinkers. McKeon et al (2002) found that of a large sample of married couples seeking counselling, 40% of men and 20% of women, were abusing alcohol. Alcohol is a factor in up to 70% of domestic violence against women (National Crime Council of Ireland, 2006). As only about 5% of domestic violence cases are prosecuted, the cost of domestic violence does not appear in the cost of crime figures.

In estimating the cost of problem alcohol use, it is important to recognise that dependant drinkers who are usually thought of as alcoholics do not impose the largest share of costs on society. While dependent drinkers are more likely to have the largest number health, social and other problems, they account for a relatively small share of the total cost of problem alcohol use to society.

The pattern of drinking as well as overall consumption affects the social cost of problem alcohol use. In Ireland, a large proportion of the population engage in heavy episodic drinking (HED) known as ‘binge drinking’ (Long & Mongan 2014), which leads to high costs in terms of violence and accidents. In addition, problem alcohol use imposes costs on people who suffer as a result of the drinking of others. Research by Hope (2014) shows that in Ireland over one quarter of survey respondents reported that they had experienced harm in the previous year as a result of someone else’s drinking. These harms included family and money problems, assaults, property vandalised and being a passenger with a drunk driver. Estimating the full cost of harm to others is difficult due to the variety of costs that may be incurred and is not attempted in this paper but will be estimated in future research.

**1.2.2 Studies of the social cost of problem alcohol use for other countries**

Beginning in the 1970s, many governments in developed countries began to recognise the costs to society of problem alcohol use and commissioned studies of these costs. The studies from which the estimates are derived vary widely in terms of methodology and reliability of data. In their report to the EU Commission; *Alcohol in Europe: A Public Health Perspective*, Anderson and Baumberg (2006) reviewed 21 European studies of the social costs of alcohol. Summarising the conclusions of these studies, Anderson and Baumberg arrived at a total tangible cost of alcohol to the European Union of 1.3% of GDP with a range of 0.9% to 2.4% for individual countries. The costs included in Anderson and Baumberg’s report are: costs to the health care system, the cost of alcohol related crime, the cost of alcohol related traffic accidents, the cost of alcohol induced unemployment and absenteeism and the cost of alcohol related premature mortality.

The cost studies from other countries most relevant to Ireland are those for the UK and Northern Ireland as the patterns of problem drinking in those countries are similar to those in Ireland. Those studies are: UK Cabinet Office report *Alcohol misuse – How much does it cost*? ( 2003) and the Scottish Executive’s *Alcohol Misuse in Scotland; Trends and Costs (*2001).Those studies attempt to comprehensively assess the costs to society in England and Wales and in Scotland. Both studies estimate health costs, costs of alcohol related crime and accidents and costs of lost output due to alcohol. The Scottish study also estimates the human costs of problem alcohol use to those whose lives are affected by it other than the drinker. A comprehensive report on the costs of problem alcohol use in Northern Ireland was published in 2010. (Department of Health, Social Services and Public Safety in Northern Ireland, 2010). The Northern Ireland study uses a similar methodology to the Scottish study.

**1.2.3 Methodology of cost estimates**

If adequate data were collected, it would be relatively straightforward to measure the direct costs of problem alcohol use to the healthcare and criminal justice system and the costs of alcohol related road accidents. Those who engage in hazardous and harmful drinking often deny their problem alcohol use, even to themselves, so there is considerable underreporting of the role of alcohol in illness and accidents and even in crime. Some costs of problem alcohol use in Ireland must therefore be estimated using information gathered in studies in England and Wales (Cabinet Office 2003), Scotland (2001) and Northern Ireland (2010). This is the approach taken in Byrne (2010) and is used in this paper, which is largely an updating of the estimates in Byrne’s paper.

**1.2.4 Costs to the health care system of problem alcohol use**

The International Classification of Diseases lists nine conditions that are 100% attributable to alcohol and a further thirty conditions that are partly attributable to problem alcohol use. The WHO’s Global Burden of Disease shows alcohol to be the third most significant risk factor for ill health and premature death after tobacco and high blood pressure. Drinking alcohol is associated with a risk of developing such health problems as alcohol dependence, liver cirrhosis, cancer and injuries.

Alcohol misuse therefore places a heavy cost burden on public health care. The Irish studies showing the extent of this burden are summarised in Byrne (2010). Based on Irish studies of the extent of alcohol related use of health services, Byrne estimates that 10% of the cost of general hospital services, 7% of the cost primary care and 10% of the cost of mental health services are attributable to alcohol misuse.

For 2013, 10% of the cost of acute hospitals was €411 million, 7% of the cost of primary care was €214 million while 10% of the cost of mental health service was €73 million.

As Hope’s study of alcohol related harm to other’s (Hope, 2014) one in ten adults reported that children for whom they have parental responsibility experienced at least one or more alcohol related arms as a result of someone else’s drinking. Children who experience such harms are very likely to require the services funded under the allocation for children and families in the HSE’s budget. Ten per cent of the total allocated by the HSE for spending on children and families for 2013 is €54 million. It is likely that 10% of spending by the Department of Children and Youth Affairs also relate to alcohol related interventions. This figure is €41 million for 2013.

The total figure for health and social care expenditure related to alcohol misuse in 2013 is €793 million. While this represents a decrease from Byrne’s figure for 2007 of €1.3 billion this does not indicate a reduction in alcohol related demands on the health service but is mainly due to significant reductions in government spending on health since 2007.

|  |  |
| --- | --- |
| **Costs to the Health care system related to alcohol in 2013** |  |
| Cost of general acute hospital services related to problem alcohol use (10%) | €411mn |
| Cost to primary care (7%)  | €214mn |
| Cost of mental health services (10%)  | €73mn |
| Cost of services for children and families in HSE (10%) | €54mn |
| Cost of service to children and families in Dept. of Children and Youth Affairs (10%) | €41mn |
| **Total direct health care system costs related to alcohol**  | **€793mn** |

The total figure for health and social care expenditure related to problem alcohol use in 2013 is €999 million. While this represents a decrease from Byrne’s figure for 2007 of €1.3 billion this does not indicate a reduction in alcohol related demands on the health service but is mainly due to significant reductions in government spending on health since 2007. The costs estimates are based on a proportion of the total health care budget spend each year.

**1.2.5 Costs to the Criminal Justice System of Alcohol Misuse**

Many crimes result from problem alcohol use. The most commonly prosecuted are drinking and driving related offences and public order offences. Alcohol is a factor in many assaults, including sexual assaults and in rape, domestic violence, murder and manslaughter. Alcohol related crime therefore imposes considerable costs on the criminal justice system. These costs include the costs of policing alcohol related crime, the cost of processing alcohol related crimes in the courts and the cost to the prison and probation services of dealing with alcohol related crime.

In his 2010 paper, Byrne estimated on the basis of the study *Alcohol Misuse in Scotland: Trends and Costs* (2001) that 12% of the cost of policing alcohol related crime, 12% of the costs of the prison system and 7% of the costs of the courts could be attributed to alcohol related crime. For 2013 these figures are:

|  |  |
| --- | --- |
| **Costs of alcohol related crime 2013** |  |
| Cost of Garda Siochana resources devoted to alcohol related crime  | €166mn |
| Cost to the prison service of alcohol related crime  | €7.3mn |
| Cost to the courts of alcohol related crime  | €7.3mn |
| Total direct costs of alcohol related crime | €180.6mn |

In addition to the direct costs of detecting and punishing alcohol related crime, costs are also incurred by the victims of crime in the form of trauma, injury and even death. Other costs include the cost of property lost through burglary and criminal damage and the cost of security systems incurred in anticipation of crime. Victims of crime may be absent from work and their output is therefore reduced. In the study of the costs of alcohol misuse in England and Wales, these costs are much greater than the cost to the criminal justice system. Byrne (2010), taking the direct cost of alcohol related crime used ratios derived from the UK study to estimate these costs for Ireland. The ratios he used are:

|  |  |
| --- | --- |
|  | Ratios |
| Criminal justice system costs | 1.0 |
| Property/health and victim services costs | 1.40 |
| Costs in anticipation of crime | 0.85 |
| Crime cost of lost productive output | 0.55 |
| Emotional impact costs | 2.70 |

Applying these ratios to the direct cost of alcohol related crime gives the following figures:

|  |  |
| --- | --- |
| Criminal justice system costs | €180.6mn |
| Property/health and victim services costs | €252.8mn |
| Costs in anticipation of crime | €153.5mn |
| Cost of crime related loss of output | €99.3mn |
| **Total alcohol-related crime costs** | **€686.2mn** |

**1.2.6 Cost of alcohol related road accidents**

Bedford et al (2006) found that alcohol was a factor in 30% of all road collisions and in 36.5% of fatal collisions. Alcohol related road accidents result in loss of life, pain and suffering, medical costs and lost output. Other relevant costs include damage to property, insurance administration, police and court costs. The standard method used to estimate the cost of road accidents is the “willingness to pay” method which puts a statistical value on a life by considering how much people are willing to pay for reduced risk of death. The willingness to pay method covers loss of life, pain and suffering and medical costs as well as lost output. The willingness to pay method is used by the National Roads Authority as the basis for calculating the cost of road accidents.

In 2012 there were 162 deaths on Irish roads and 7,942 injuries, of which 474 were serious. The RSA calculates the cost of all road accidents as €773 million in 2012. This represents a reduction of 44% between 2007 and 2012. If it is assumed that alcohol was the crucial factor in 30% of road accidents in 2012, the cost of such accidents was €258 million.

**1.2.7 Costs of alcohol related absenteeism from work**

 A survey by IBEC (2011) found that 4% of companies surveyed cited alcohol as a major factor in 4% of absences by men and 1% by women. The survey found that 12% of absences had some alcohol connection. For absences not due to illness, 5% had alcohol as a main cause and 22% were alcohol related. IBEC estimated the value of lost output due to absenteeism as €1.5 billion in 2010. The IBEC survey covered only private sector employers. Public sector employment is 20% of private sector employment which suggests that the value of lost output should be augmented by 20% which would give a total value of lost output of €1.8 billion in 2010. Adjusting this figure to 2013 values gives a total value for lost output of €1.95 billion.

To estimate the value of lost output due to alcohol requires taking a figure between the 4% and 12% for absences in which alcohol was the main cause or a contributing factor while for alcohol related absences not due to illness, requires taking a figure between 6% and 14%. A reasonable compromise would be to assume that 10% of the estimated total value of lost output due to absenteeism is alcohol related. This gives a figure of €195 million for the value of lost output due to alcohol related absenteeism.

**1.2.8 Cost of alcohol related industrial accidents**

A report by the Health and Safety Authority (2004) for the Department of Jobs, Enterprise and Innovation Economic *Impact of the Legislation on Health and Safety at Work,* estimated conservatively that lost output due to work related accidents was valued at €1.8 billion in 2003. The report did not estimate the proportion of alcohol related accidents at work, but a UK study (Alcohol Concern, 2000) found that 25% of accidents at work are alcohol related. As no study has been undertaken in Ireland to estimate the proportion of workplace accidents that are alcohol related it would be excessively pessimistic to assume that 25% of workplace accidents are alcohol related in Ireland. A more conservative approach would be to assume that at least 10% of workplace accidents are alcohol related. This would give a value of €180 million for lost output in 2003 prices which adjusted by the GDP deflator gives a value of €185 million.

**1.2.9 Cost of alcohol related suicide**

Several studied show a positive association between per capita alcohol consumption and suicide. Brady (2006) finds that there is evidence that problem alcohol use predisposed to suicidal behaviour through its depressive effects and promotion of adverse life events, impairment of problem solving skills and aggravation of impulsive personality traits. Walsh (2010) finds that alcohol is a highly significant influence on suicide among men in all age groups between 15 and 54 years. Walsh (2010) also found that alcohol consumption influenced suicides among women under the age of 35.

While the studies of the social cost of alcohol misuse in the UK and Northern Ireland do not include the costs of alcohol related suicide, the significant increase in the suicide rate in Ireland over the past 30 years in Ireland coincided with an equally significant increase in alcohol consumption.

A study by the Departments of Public Health in the former Health Boards (2001) based on a survey of GPs and psychiatrists found that 21% of GP patients who attempted or committed suicide had taken alcohol immediately preceding the event and 21% of GP patients and 27% of psychiatrists’ patients who had attempted or committed suicide had a history of alcohol abuse.

In his paper, *The Economic Cost of Suicide in Ireland*, Kennelly (2007) estimated the cost of suicide in Ireland was €835 million. Kennelly’s estimates include the direct cost of suicide such as medical and emergency services costs but these are small compared to his estimates of the indirect costs. The large indirect cost is based on the “willingness to pay” approach to valuing human life which is also used in estimating the cost of road accidents. Assuming that 20% of suicides are alcohol related gives a cost of €167 million for such suicides in 2003 prices. Updating this figure by the GDP deflator gives a figure of €169 million.

**1.2.10 Cost of alcohol related premature mortality**

Problem alcohol use leads to premature mortality for many people in the labour force and therefore reduces output. The number of working years lost for those who die prematurely from alcohol use can be calculated and an economic value put on the output they might have produced if they had stayed in the labour force until 65.

The psychological effect of premature death of a person who misuses alcohol is borne by his or her family and friends. The effects can be estimated by the Willingness-to-Pay (WTP) method which values human life according to what individuals would be willing to pay for a change that reduces the probability of illness or death. Estimates based on WTP are much larger than the cost of material production lost using the human capital method.

Martin et al (2011) estimate that 1.8% of deaths in Ireland are attributable to alcohol. Applying this percentage to the total number of deaths in Ireland in 2012, gives 382 deaths attributable to alcohol. Sufficient data is not available in Ireland to calculate the cost of premature mortality using the WTP method. As the mortality costs for road accidents and suicide given in this paper are based on the WTP method, it would be inconsistent to ignore the cost of other types of alcohol related mortality. In the Scottish study (2001) which rigorously applied the willingness to pay method, the cost of premature mortality is one third of the more tangible costs of lost output due to alcohol related absenteeism and unemployment. One third of the cost of lost output due to alcohol related absenteeism as calculated above is €65 million.

**1.2.11 Estimated Total Social Costs of Problem alcohol use in Ireland in 2013**

|  |  |  |
| --- | --- | --- |
| Category of Cost | €Million | % of total |
| Cost to the health care system | 793 | 34 |
| Cost of alcohol related crime | 686 | 29 |
| Cost of alcohol related road accidents | 258 | 11 |
| Cost of lost output due to alcohol relate absenteeism | 195 | 8 |
| Cost of alcohol related accidents at work | 185 | 7 |
| Cost of alcohol related suicides | 169 | 6 |
| Cost of alcohol related premature mortality | 65 | 3 |
| **Total Costs** | **2351** | **100** |

**1.2.12 Costs of problem alcohol use in 2007 and 2013**

**The estimated total cost to Irish society of problem alcohol use is €2.35 billion in 2013.** The figures estimated in this paper show a significant decrease in the estimated cost to society between 2007 and 2013. Byrne (2010) estimated the social costs for 2007 at €3.7 billion.

The reduction in 2013 is due to a number of factors:

* the cost of alcohol related road accidents has fallen sharply, due to the fall in the number of accidents
* the costs to the health care system and the criminal justice system which are the largest elements of the total cost are estimated as a proportion of total spending on those services and spending has been reduced significantly since 2007, when government spending overall peaked before the onset of the recent recession.
* Total spending on health fell by 23% between 2008 and 2013 and total spending on the gardai, courts and prisons fell by 9% in the same period.

**1.2.13 Irish and UK studies of the cost of problem alcohol use**

While comparisons between countries are difficult, the proportion of GDP will be used to compare Ireland with other neighbouring countries – Northern Ireland, Scotland, England and Wales. The total cost of problem alcohol use in Ireland estimated in this paper of €2.35 billion represents 1.4% of GDP in 2013. In a study for the HSE, Byrne (2010) estimated the costs of problem alcohol use in Ireland for 2007. His estimate of the total cost of problem alcohol use was €3.7bn. This represented 1.9% of Irish GDP in 2007. The study for England and Wales estimated the cost of alcohol use as 1.7% of GDP while the study for Scotland was 1.5%. The Northern Ireland study estimates the social cost of alcohol misuse in Northern Ireland in 2008 to be 1.8% of GDP. The cost estimates for Ireland are somewhat similar to our neighbouring countries and higher than the EU average. Anderson and Baumberg (2006) calculated the total tangible costs of problems alcohol use in the EU as 1.3% of GDP with a range of 0.9% to 2.4%.

Comparison of estimated social costs of problem alcohol use

|  |  |  |
| --- | --- | --- |
| Country | Year for costs | Per cent of gross domestic product (GDP) |
| **Ireland** | **2013** | **1.4%** |
| Ireland | 2007 | 1.9% |
| Northern Ireland  | 2008 | 1.8% |
| England and Wales | 2003 | 1.7% |
| Scotland  | 2001 | 1.5% |
| EU average | 2006 | 1.3% with a range from 0.9% to 2.4% |

**1.2.14 Limitations of the cost estimates**

As outlined above and discussed in more detail in Byrne (2010) estimating the cost of problem alcohol use presents many problems of methodology and availability of data. For Ireland, improving the national reporting systems in a number of key areas would enable more accurate estimates of problem alcohol use in Ireland. Key information areas are:

* Recording of alcohol consumption by all  patients in general hospitals and not only those whose diagnosis directly relate to alcohol abuse
* Recording of the role of alcohol in inpatient psychiatric admissions and psychiatric outpatient services
* Recording of the role of alcohol in all serious crimes such as murder, manslaughter, grievous bodily harm and rape. At present most alcohol-related crimes recorded tend to relate to minor offences such as public order offenses.
* Recording of alcohol related absences in all public and private sector organisations.
* Recording of the role of alcohol in family problems by Family Support Agencies.
* Recording of alcohol’s harm to others across a range of health and welfare agencies.
* Detained survey information on alcohol’s harm to others experienced in the general population and in high-risk sub-population groups.

 **1.3 New relevant Irish research**

***Hope A (2014). Alcohol’s harm to others in Ireland. Dublin: Health Service Executive***

This report introduces the concept of ‘alcohol’s harm to others’ in an Irish context. This research study confirms that alcohol is causing significant damage across the population, in workplaces and to children in families and carries a substantial economic burden to all in Irish society, at a higher level than comparable societies such as Australia, Canada and America.

Over one in four people (28%) in the general Irish population reported experiencing at least one or more negative consequences as a result of someone else’s drinking - family problems, passenger with a drunk driver, assault, property vandalised and money problems. In the workplace, one in ten Irish workers experienced at least one or more negative consequences due to co-workers who were heavy drinkers, such as the ability to do their work was negatively affected, they had to work extra hours and had an accident or close call at work due to co-workers drinking habits. Overall, one in ten Irish parents reported that children experienced at least one or more harms in the past 12 months as a result of someone else’s drinking – verbal abuse, left in unsafe situations, witness to serious violence in the home and physical abuse

The results indicate that problem alcohol use can no longer be framed exclusively in the realm of harm to the drinker. In over a quarter of cases, harm to others is documented and in the case of each of two specific situations, one a vulnerable population (children) and the other economic (the workplace), one in ten report harm to others. While men generally experience more harm from others, in two domains – family and finance-women experience more harm.

***Griffin E, Arensman E, Wall A Corcoran P, Perry I (2013). National registry of Deliberate self-harm Annual Report 2012. Cork: National Suicide Research Foundation.***

Alcohol was involved in 38% of all self-harm cases. While overall alcohol involvement decreased slightly from 2011, alcohol was significantly more often involved in male episodes of self-harm than females (42% versus 36%, respectively).

***National Office for Suicide Prevention (2013). Annual report 2012. Health Service Executive.***

Alcohol-Related Self-Harm and Seasonality

With regard to seasonality and self-harm, overall significantly different patterns were found for men and women when we analysed self-harm data of patients who had not taken alcohol at the time of the self-harm act. A ratio higher than 1 indicates that there were more self-harm acts than expected. However, when analysing the data based on those who had used alcohol, there was a remarkable similarity between the seasonality of female and male self-harm in that both genders showed similar peaks in self-harm in March, July and August. Furthermore, for men an additional self-harm peak emerged in May when alcohol was involved.

***My World Survey*** <http://www.headstrong.ie/sites/default/files/My%20World%20Survey%202012%20Online.pdf>

The Headstrong My World Survey was a large scale study of youth mental health in Ireland, which surveyed over 14,000 people aged 12-25. The survey reported six important themes:

1. One ‘Good Adult’ in a young person’s life is a key indicator of young people’s mental health
2. 58% of those aged 16 and older reported excessive drinking
3. Not talking about problems was linked to suicidal behaviour
4. Sharing problems was linked with better mental health
5. Many young people in distress are not seeking help
6. Money is a significant stressor.

***Power J & Johns C (2013). The efficacy of minimum unit pricing, fiscal and other pricing public policies for alcohol. CJP Consultants* (For the Department of Health)**

This report was commissioned from CPJ Consultants by the Department of Health. It sets out the issues relating to hazardous and harmful consumption of alcohol in Ireland. It looks at the international experience and policy response and makes recommendations about how the problems caused by hazardous alcohol consumption can and should be tackled in Ireland, with a specific focus on pricing policies.

***Fagan J, Lyons S & Smyth BP (2014). Alcohol and Alcoholism, pp1-5.* doi: 10.1093/alcalc/agu015**

Abstract

Aim: International research indicates that the role which alcohol plays in accidents tends to be understated in media reports. Evidence suggests that public support for alcohol harm reduction policies would increase if people were better informed about the role of alcohol in serious injuries. We hypothesized that the role of alcohol in Irish accidental deaths is under-reported in the Irish print media. Method: We identified all traumatic and poisoning deaths (excluding suicides) in Ireland during the years 2008 and 2009 where alcohol was mentioned on the death certificate. We conducted an Internet-based search for newspaper reports of these deaths. The content of each report was examined and rated for mention of alcohol’s possible role in the individual death. Results: This study demonstrates the under-reporting in Irish newspapers of the role of alcohol in traumatic and poisoning deaths. Where deaths were reported, the role played by alcohol was generally ignored. Conclusion: This represents a missed opportunity to inform the public about

the role of alcohol in these deaths. More accurate information would permit the public to make more informed decisions regarding their own behaviour and regarding their support for alcohol harm-reducing strategies.

***Dillon A & Dohery G. ( 2014). Alcohol-related gastro problems on the rise***

[From Irishhealth.com](http://www.irishhealth.com/article.html?id=23611)

Excess alcohol consumption can lead to many gastrointestinal symptoms, ranging from reflux and diarrhoea to life-threating conditions such as cancer and liver cirrhosis. According to specialist registrar in gastroenterology, Dr Audrey Dillon, and consultant gastroenterologist, Dr Glen Doherty, of St Vincent’s University Hospital in Dublin, alcohol-related gastrointestinal problems can causes diseases ‘that carry significant morbidity and mortality’. They pointed out that hospital admissions as a result of alcohol consumption have ‘risen dramatically’ in Ireland. Between 1995 and 2002 alone, they increased by a massive 92%. Between 1995 and 2007, alcohol-related liver disease rose by a staggering 190%, ‘with a worrying trend among younger age groups – a 247% increase among 15-34 year olds’. “Approximately 10% of all general inpatient hospital costs, 7% of GP costs and up to 30% of emergency department costs are directly attributable to alcohol,” the doctors said. Alcohol consumption can affect the oesophagus, stomach, bowel, pancreas and liver. Furthermore, alcohol has been ‘directly linked to cancer of the oral cavity, pharynx, oesophagus, stomach and upper airways’. The doctors also pointed out that alcohol liver disease leads to cirrhosis, ‘which carries a significant liver cancer risk’ and alcohol has also been implicated in the risk of breast cancer. “As alcohol consumption continues to increase in Ireland, the treatment of the gastrointestinal-related complications will prove challenging,” Dr Dillon and Dr Doherty warned.

They made their comments in *Forum (Clinical Focus)*, the Journal of the Irish College of General Practitioners.

***Health Research Board (2014). Treated problems alcohol use in Ireland 2012. National Drug Treatment Board Report.***

The [Health Research Board](http://www.irishtimes.com/search/search-7.1213540?tag_organisation=Health%20Research%20Board&article=true) report *Treated problem alcohol use in*[*Ireland*](http://www.irishtimes.com/search/search-7.1213540?tag_location=Ireland&article=true)*: figures for 2012 from the National Drug Treatment Reporting System* reported more than 40,000 cases were treated for problem alcohol use between 2008 and 2012. The total number of cases treated increased from 7,940 in 2008 to 8,604 in 2011 and then decreased to 8,336 in 2012. But the number of previously treated cases grew from 3,606 in the first year of the study to 4,212 in 2012. The number of new cases treated was up by almost 18 per cent from 3,833 to 4,520 in 2011. That dropped to 4,028 the following year. Two out of three of those presenting for treatment were male and the median age was 40. The overall incidence of treated problem alcohol use among 15-64 year olds in Ireland rose from 119.7 per 100,000 of population to 141.2 in 2001 before declining to 125.1 in 2012.

Waterford, Donegal, Sligo, Leitrim and Wexford saw the highest incidence of new cases in the five-year period. All of these counties had more than 224 cases per 100,000 of the 15-64 year old population, the study said. Incidence was lowest in Clare, Roscommon, Wicklow, Mayo and Meath, where each had fewer than 83 cases per 100,000. Incomplete reporting, however, meant that some counties’ figures understated the number of cases presenting for treatment.

***Drug-related deaths and deaths among drug users in Ireland 2011 figure from the National Drug-related Deaths Index (2014) Health Research Board.***

In the eight-year period 2004–2011 a total of 4,606 deaths by drug poisoning and deaths among drug users met the criteria for inclusion in the NDRDI database. Of these deaths, 2,745 were due to poisoning and 1,861 were deaths among drug users (non-poisoning). The annual number of deaths in 2011 increased to 607, compared to 597 in 2010. The 2011 figure is likely to be revised when new data become available. The annual number of poisoning deaths increased from 338 in 2010 to 365 in 2011. Males accounted for the majority of deaths in each year since 2004; 72% of all poisoning deaths in 2011 were male. The median age of those who died in 2011 was 39 years, similar to previous years. Over half (59%) of all poisoning deaths involved more than one substance (polysubstance use). This represents a 28% increase from 2010 when 168 polysubstance poisonings were recorded compared to 215 in 2011. Alcohol was involved in 37% of poisoning deaths in 2011, more than any other substance. Alcohol alone was responsible for 17% of all deaths.

***Laffoy M, McCarthy T, Mullen L, Byrne D, Martin J. (2013). Cancer Incidence and Mortality due to alcohol: an Analysis of 10 year data. Irish Medical Journal, 106 (10) 1-3.***

Abstract

Alcohol consumption is causally related to cancer of the upper aero-digestive tract, liver, colon, rectum, female breast and pancreas. The dose response relationship varies for each site. We calculated Ireland’s cancer incidence and mortality attributable to alcohol over a 10-year period. Between 2001 and 2010, 4,585(4.7%) male and 4,593(4.2%) female invasive cancer diagnoses were attributable to alcohol. The greatest risk was for the upper aero-digestive tract where 2,961(52.9%) of these cancers in males and 866(35.2%) in females were attributable to alcohol. Between 2001 and 2010, 2,823(6.7%) of male cancer deaths and 1,700(4.6%) of female cancer deaths were attributable to alcohol. Every year approximately 900 new cancers and 500 cancer deaths are attributable to alcohol. Alcohol is a major cause of cancer after smoking, obesity and physical inactivity. Public awareness of risk must improve. Over half of alcohol related cancers are preventable by adhering to Department of Health alcohol consumption guidelines.

**2. Update of International Evidence**

**2.1 Alcohol consumption**

According to the recent World Health Organisation report, *Global status report on alcohol and health 2014*, worldwide alcohol consumption in 2010 was equal to 6.2 litres of pure alcohol per person aged 15 years or older. **The WHO European Region continues to have the highest alcohol consumption in the world at 10.9 litres** of pure alcohol per capita (15+ years). Although alcohol consumption declined by 10% since the 2003-2005 period, the European Region consumes 4.7 litres higher than the world average (6.2 litres). The WHO Region consumes more than a quarter of the total alcohol consumed worldwide.

Alcohol related harm is determined, apart from the environmental factors, by three related dimensions of drinking, the volume of alcohol consumed, the pattern of drinking and on rare occasions the quality of the alcohol consumed. Alcohol consumption has been identified as a component cause for more than 200 diseases, injuries and other health conditions, with ICD-10 codes. For most diseases and injuries causally impacted by alcohol, there is a dose-response relationship – in other words, the higher the consumption of alcohol, the larger the risk for these conditions.

Factors affecting alcohol consumption and alcohol-related harm include, age, gender, family risk factors, socioeconomic status, economic development, culture and alcohol control and regulation policies (Babor et al 2010). Children, adolescents and elderly people are typically more vulnerable to alcohol-related harm from a given volume of alcohol than other age groups. Early initiation of alcohol use (before 14 years of age) is a predictor of impaired health status, because it is associated with increased risk for alcohol dependence and abuse at later ages, adverse impacts on brain development, car crashes and other unintentional injuries.

As people grow older, their bodies are typically less able to handle the same levels and pattern of alcohol consumption as in previous years, leading to a higher burden from unintentional injuries such as alcohol-related falls. The alcohol-related burden of disease among older age groups is an increased public health concern for WHO because of the rapidly ageing population in many countries worldwide (WHO 2014).

Men are less often abstainers, drinking more frequency and in larger quantities, resulting in higher levels of injuries. However, for women the same level of consumption leads to more pronounced health outcomes such as cancers, gastrointestinal diseases or cardiovascular diseases (Rehm et al 2010).

The pattern of drinking is also important. The amount of alcohol on a single occasion is important for many acute consequences such as alcohol poisoning, injury and violence. **Heavy episodic drinking** (HED), defined by WHO as the consumption of 60 or more grams of pure alcohol (6+ standard drinks in most countries and in Ireland) on at least one single occasion at least monthly, **is associated with detrimental consequences, even if the average** **level of alcohol consumption of the person concerned is relatively low**. The prevalence of heavy episodic drinking (HED) worldwide was 7.5%, however, in the WHO European Region HED was 16.5% (Table 1). The overall prevalence of heavy episodic drinking in Ireland was 39%, which was higher for males (53%) than females (25.5%), based on the information provided in the recent WHO report (WHO 2014). When Ireland was compared with the EU28 countries, **the prevalence of HED among males in Ireland ranked third highest in Europe** after Austria and Czech Republic (Appendix 1). For **females, the prevalence of HED in Ireland ranked second highest** after Austria (Appendix 2).

**2.2 Alcohol-related harms**

There is increasing awareness of the significant impact of harmful use of alcohol[[1]](#footnote-1) not only on individuals, but also on global public health. The harmful use of **alcohol ranks among the top five risk factors for disease, disability and death** throughout the world. It is a causal factor in more than 200 diseases and injury conditions. Drinking alcohol is associated with a risk of developing such health problems as alcohol dependence, liver cirrhosis, cancer and injuries and more recently linked to infectious diseases (tuberculosis, HIV/AIDS).

Overall worldwide, about 3.3 million deaths in 2012 were estimated to have been caused by alcohol consumption, after taking into account the beneficial effects of low-risk patterns of alcohol consumption on some diseases. This corresponds to 5.9% of all deaths (**one in every twenty deaths) in the world each year** (7.6% for men, 4% for women). The highest numbers of deaths were from cardiovascular diseases, followed by injuries (especially unintentional injuries), gastrointestinal diseases (mainly liver cirrhosis) and cancers. The WHO European Region has the highest proportion of alcohol-attributable deaths relative to all deaths in the world. This is not surprising, as alcohol consumption in the European region is also the highest in the world.

In 2012, 5.1% of the global burden of disease and injury, as measured by DALYs[[2]](#footnote-2), was attributable to alcohol. About a quarter of all alcohol-attributable DALYs were due to neuropsychiatric disorders compared with 4% for all alcohol-attributable deaths. This is mainly due to Alcohol use disorders (AUDs) which cause more disability than mortality compared to others chronic diseases. Alcohol consumption causes more deaths and greater burden of disease in the WHO European region than in any other region of the world. In the European Region and particularly in high-income countries within Europe, there is a much higher alcohol-attributable disease burden compared to alcohol-attributable deaths because of the disabling impact of AUDs.

Table 3: Summary of total consumption, harmful drinking pattern (HED) and burden of disease for the WHO European Region and the World.

|  |  |  |
| --- | --- | --- |
|  | World | WHO Euro Region |
| Total alcohol per capita consumption (15+ years) litres of pure alcohol | 6.2 litres | 10.9 litres |
| Prevalence of Heavy episodic drinking (HED) (percentage) | `7.5% | 16.5% |
| Alcohol-related DeathsAlcohol-attributable factions (AAFs) for all-cause deaths - % of all deaths | 5.9%(3.3 million deaths per year) | 13.3% |
| Burden of DiseaseAlcohol-attributable fractions (AAFs) for all-cause DALYs - % of all global DALYs | 5.1%(139,000 DALYs) | 12.8% |

It is important to note that **harmful use of alcohol kills or disables people at a relatively young age,** resulting in the loss of many years of life to death and disability. Among all groups starting from 15 years old, alcohol-attributable deaths are highest in the European region. Within the WHO European Region, those aged 20-39 years have the highest proportion of alcohol deaths (one in four) and for the 15-19 age group is one in five. While worldwide alcohol-attributable deaths are highest within the population aged 40-49 years.

**Alcohol’s harm to others**

Harmful use of alcohol results in significant health, social and economic burden on society at large. Alcohol consumption can have both health and social consequences for others around the drinker, such as family member, friends, co-workers and strangers. The types of harm to individuals around the drinker include injury, neglect or abuse, default on social role, property damage, toxic effects and loss of amenity or piece of mind. The WHO has identified alcohol’s harm to others as a priority research area to enable further burden of diseases studies include this significant area of alcohol-related harm, which is currently not included.

Alcohol related harm imposes significant social and economic cost in society in three main categories – direct costs mainly borne by government such as cost to the health care, criminal justice and the welfare systems. Indirect costs such as lost productivity due to absenteeism, unemployment, decreased output, reduced earnings potential and lost working years due to premature pension or death, mainly borne by society at large. The third category is intangible costs, generally poorly measured, such as the pain and suffering and more generally diminished quality of life. The intangible costs are mainly borne by drinkers as well as their families and potentially by others linked to the drinker. Alcohol-attributable costs have been estimated at about **€125 billion per year** in the European Union (EU) in 2003 (Anderson et al 2006). In addition, the estimated intangible costs were 270 billion in the European Union.

**2.3 Evidence of effectiveness**

**The extent and nature of the alcohol-attributable disease burden and social harms provides a solid rationale for implementing effective alcohol policies by governments**. The WHO Global strategy to reduce harmful use of alcohol identifies guiding principles for the development and implementation of alcohol polices at all levels. One of the key guiding principles is that alcohol policies should be based on the best available evidence and that public health should be given ‘proper deference’ in relation to competing interests. A substantial body of knowledge has accumulated during recent years on the feasibility, effectiveness and cost effectiveness of different policy options shown to reduce alcohol-related harm. The WHO report affirms that

“*The accumulated research findings indicate that population-based policy options - such as the use of taxation to regulate the demand for alcohol, restrictions on alcohol availability and implementing bans on alcohol advertising – are the best buys in reducing the harmful use of alcohol as they are highly cost-effective in reducing alcohol-attributable deaths and disability at population level* “

(*Chisholm et al 2004; Anderson et al 2009; WHO 2011)*

There is also strong evidence of effectiveness for certain measures against drink-driving such as setting low BAC limits and enforcing them by random breath testing (Babor et al 2010). Screening and brief interventions for hazardous and harmful drinking have a good cost-effectiveness profile, although their implementation requires more resources than are needed for population-based measures (Chisholm et al 2004; Anderson et al 2012). There is some evidence of effectiveness of multicomponent community interventions (Holder et al 2000; Wagenaar et al 2000; Ramstedt et al 2013). The recent research evidence on the effectiveness of minimum unit pricing in reducing consumption and harm has received much attention (Zhao et al 2012; Zhao et al 2013; Holmes et al 2014).

**2.4 Global monitoring framework**

As a follow on from the UN Political Declaration on Non-Communicable Diseases (NCD) in 2011 where harmful use of alcohol was identified at a key risk factor, along with tobacco use, an unhealthy diet and lack of physical activity, one alcohol-related voluntary global target was recommended

*“at least 10% relative reduction in the harmful use of alcohol within the national context”*

In addition, the following three alcohol-related indicators for monitoring were identified

* Total alcohol per capita (aged 15+ years) consumption per year
* Age-standardized prevalence of heavy episodic drinking among adolescents and adults
* Alcohol-related morbidity and mortality among adolescents and adults.

For achieving the voluntary target on alcohol, the Global Action Pan for the prevention and control of NCDs proposed that Member States reduce the harmful use of alcohol through the development and implementation, as appropriate, of comprehensive and multisectoral national policies and programmes, as outlined in the Global strategy to reduce the harmful use of alcohol.

**3. Regulation of alcohol marketing**

**3.1 Rationale**

Alcohol use is the leading cause of death and disability for young people between the ages of 15-24 years (Gore et al 2011). Alcohol can alter the young developing brain, potentially affecting both brain structure and function. This may cause cognitive or learning problems and/or make the brain more prone to alcohol dependence. This is especially a risk when people start drinking at a young age and drink heavily (US Surgeon General Report 2007). Exposure to alcohol marketing decreases the age that adolescents start to drink and increases the amount that adolescents who already drink consume. The Irish Government has given international commitments to protect young people from the pressure to drinking and to reduce exposure to alcohol marketing (WHO 1995-2011).Therefore, protecting children from exposure to alcohol marking is an important public health goal for Ireland.

**3.2 Research Evidence on effects of alcohol marketing**

There is compelling evidence that alcohol marketing is having an effect on young people’s drinking. This evidence base has grown and the quality of the research design has expanded. Numerous longitudinal studies have found that **young people who are exposed to alcohol marketing are more likely to start drinking, or if already drinking, to drink more** (Anderson et al 2009). These findings have been endorsed by the Scientific Group of the European Alcohol and Health Forum. A summary of some of the key findings from the systematic review are provided in Appendix 3. Since that systematic review, more studies continue to confirm and expand the findings, in particular related to alcohol branded sports sponsorship and new digital media.

A longitudinal study in Scotland reported that involvement with alcohol marketing at baseline (12-14 yrs) was predictive of both uptake of drinking and increased frequency of drinking at follow-up (14-16 yrs). Awareness of marketing at baseline was also associated with an increased frequency of drinking at follow-up (Gordon et al 2010). This dose-response relationship is also consistent with that found with awareness of tobacco marketing and tobacco consumption among young people (Davis et al 2008). Grenard et al (2013) showed that exposure to alcohol advertising and liking of those ads in early adolescence had a significant influence on the severity of alcohol related problems later in adolescence, which was mediated by growth in alcohol use in the intervening years.

Adolescence is a time where social engagement, communication, independence and self-expression are key developmental issues through such areas as sport, music and dance. These same lifestyle areas are increasingly used by the alcohol industry to promote pro alcohol lifestyles (Hope 2013). Although alcohol marketing may not be aimed at underage drinkers, they are nevertheless exposed to and affected by it. Adolescents are highly susceptible to image appeals because of their preoccupation with personal image and identity (McClure to al 2013).

**Alcohol is marketed through an integrated mix of marketing strategies** including broadcast (TV, radio), outdoors (billboards, posters), print (newspapers/magazines), sponsorship, merchandise, special price offers, product placement, package/product design and new digital media (SNS, SME texting). A Scottish study, using cross-sectional data, examined the cumulative impact of alcohol marketing on youth (12-14 years) on drinking behaviour (Gordon et al 2011). Fifteen different types of alcohol marketing were examined including TV, print, outdoors, sponsorship, price promotions and new digital media. Two-thirds or more of the youth (12-14 year olds) were aware of adverts on TV, clothing with alcohol brands and sponsorship of sports by alcohol brands. Adolescents who had had an alcoholic drink were aware of significantly more alcohol marketing channels than adolescents who never drank. There was a significant relationship between awareness of and involvement with alcohol marketing and drinking behaviour (Gordon et al 2011).

A significant association were found between ownership of alcohol–branded merchandise and binge drinking which occurred through (mediated) both drinker identify and brand allegiance, identified by the researchers as marketing-specific cognitions, cognitions that marketers aim to cultivate in the consumer (McClure et al 2013). While exposure to all forms of marketing are associated with drinking by young people, more active engagement, such as owning merchandise and downloading screensavers were shown to be stronger predictors of drinking. Early alcohol brand allegiance was related to not only drinking and future intention to drink, but also consuming larger quantities (Lin et al 2012). Exposure to alcohol consumption in movies was associated with youth binge drinking and was little influenced by cultural difference between six counties in Europe (Hanewinkel et al 2012).

Examining the different marketing areas in isolation while useful, underestimates the power of modern marketing. Alcohol is marketed using multiple channels of communications (integrated marketing), therefore the **impact of the cumulative exposure to alcohol marketing is more powerful than just individual channels**.

**Alcohol branded Sports sponsorship**

Alcohol marketing is not confined to formal commercial advertisements. The area of alcohol branded sports sponsorship illustrates the **saturation exposure of alcohol product placement during sporting events**. A study on the extent of marketing strategies during a televised sports series concluded that, sport is increasingly used as a vehicle for the promotion of ‘risky consumption’ products (Lindsay et al 2013). The researchers examined the marketing for alcoholic beverages, gambling products and unhealthy foods during the televised coverage of Australian National Rugby League series. Out of a total of 360 minutes, 200 minutes of incidental alcohol marketing took place during the three games, which was much higher than for gambling (26 mins) or unhealthy foods (8 mins) marketing. This equates to 11.3 episodes per minute. Over one-third (37%) was ‘on field’ alcohol marketing such as banners, display boards, paddings surrounding the goal posts, painted logos on the field, players uniform. The off-field alcohol marketing included brand signage in coaching area, towels, chairs, drink coolers and in the team dressing rooms. For about two thirds of the television broadcast, the marketing for at least one ‘risky’ product, most notably alcohol was visible. The commercial break advertisements accounted for less than 1% of episodes, representing just over 7% of the marketing time for all three products. This illustrates that embedded marketing strategies can be extensive in sports programmes and is similar to product placement in television programmes, movies, video games and online product placement.

 An analysis of six televised English Professional Football recorded visual alcohol references at a frequency of nearly two per minute during the broadcast of the games, while verbal references and formal commercial advertisements accounted for less than 1% of broadcast time. The visual alcohol references included billboards alongside the field of play, on the field of play, on-screen around replays, substitutions and score updates. The researchers concluded that the frequently repeated nature of such momentary glimpses, may combine to have a greater effect than single instances of formal commercials (Graham & Adams 2013). An examination of embedded alcohol visuals during the EURO2012 international soccer matches, showed that more than one per minute visual alcohol references were identified (Adams et al 2014). A longitudinal study investigating the association between alcohol branded sports sponsorship and youth drinking among 14 year olds in four European countries (N=6,650) found that adolescents who were exposed to alcohol branded sports were more likely to consume alcohol more frequently. Exposure also indirectly influenced alcohol expectancies, in other words increased their expectation that alcohol will make them feel more positive because of exposure to alcohol branded sports sponsorship and therefore more likely to drink (de Bruijn 2012a).

**Digital media**

The advance of alcohol marketing into social networking sites (SNS), a technology widely used by young people in their daily lives, further extends the risk of exposure to pro alcohol environments and youth drinking. A European study, involving over 9,000 children from four countries, reported that the higher the exposure of 14 year olds to online alcohol marketing, the higher the risk of binge drinking, indicating a dose response effect (de Bruijn, 2012b).

**SNS is changing the dynamics of alcohol cultures in significant ways and is shaping young people’s alcohol use**. There are several studies which have reported on exposure of children and adolescents to alcohol marketing on social media sites. In the UK, Facebook was identified as the social media site with the highest reach, closely followed by YouTube. The study demonstrated the potential for high exposure of children and young people to alcohol marketing through social media websites. Marketer-generated brand presence on the five alcohol brands studied were identified on Facebook, YouTube and Twitter with varying levels of user engagement (Winpenny et al 2014). While Facebook has an age restriction in place, the study reported 39% of boys and 48% of girls aged 6-14 accessed Facebook during the study period, suggesting that children provide false ages to access Facebook. While in most cases with YouTube and Twitter access was possible by all ages. Young people in Ireland are no different, with significant numbers (82%) of 13-16 year olds with a profile on social network sites, which is higher than the European average. ([*www.eukidsonline.net*](http://www.eukidsonline.net/)*)*.Jernigan & Rushman (2013) reported that user activity on Facebook for the 15 alcohol brands most popular among US youth has grown dramatically in the last number of years. However, protection against youth exposure to alcohol marketing on social media sites is considered weak. The researchers found **no alcohol branded sites using any kind of age verification from a third party**, they all rely on the individual user to report accurate information.

The alcohol industry’s drive to use SNS, blurs the line between user-generated and industry marketing materials. An illustration of this blurring, as reported by Bradshaw (2011), is the Diageo’s advertising deal with Facebook, described by Vice President of Global Marketing at Diageo,

*“facebook are working with us to make sure that we are not only fan collecting but that they are actively engaged and driving advocacy for our brands. We are looking for increased customer engagement and increases in sales and shares”*

Kathy Parker, Senior VP of Global Marketing Diageo (Bradshaw 2011).

Diageo’s engagement with Facebook resulted in a 20% increase in sales of five of their key brands in the US. In the UK, Nicholls (2012) identified a number of distinct marketing methods used by alcohol brands when using social media such as real-world tie-ins, interactive games, competitions and time specific suggestions to drink. He highlighted the fact that **social media goes further than any previous communication platform in blurring the boundaries between unidirectional advertising messages, consumer interaction and broader social activities.**

According to McCreannor et al (2013) high levels of alcohol related material on SNS posted by users and frequent, on-going engagement with such materials by large audiences **intensifies the norms of intoxication and entrenches ‘intoxigenic’ environments**. An example is the recent ‘NEKnomination’ games, evident in Ireland and elsewhere, where SNS environments were used to dare others to engage in reckless and dangerous drinking games, with tragic consequences, demonstrating the serious risks posed for adolescents and young people.

A recent study in Ireland, commissioned by Alcohol Action Ireland, examined alcohol marketing exposure among Irish adolescents (13-17 years) using a proportional stratified sample in three regions (N=686) (AAI personal communication). The findings showed highest exposure to alcohol marketing was in off-line (traditional) alcohol marketing (91%), followed by online (77%) and ownership of alcohol branded merchandise (61%), based on previous week exposure. The top four off-line exposure media were TV, outdoor, newspapers and public transport. Online engagement with alcohol marketing was reported by adolescents for - pop-up alcohol ads, invite to ‘like’ an alcohol brand or event sponsored by an alcohol brand and received an online quiz’s about alcohol or drinking. Children who owned alcohol branded merchandise were more likely to engage in drinking, binge drinking and drunkenness, which were similar to findings elsewhere (McClure et al 2013 and Lin et al 2012). Intention to drink in the next year was also predicted by exposure to online marketing.

There is a **strong body of research evidence which shows that exposure to alcohol marketing, whether it is on TV, online, in movies, in public places or alcohol branded sports sponsorship, predicts future youth drinking.** The effects of alcohol marketing on young people’s drinking are similar to that shown for tobacco (Lovato et al 2004) and food marketing (Hastings et al 2005).

Collective responsibility is necessary if the burden from alcohol is to be reduced, so that current and future adolescents can live healthy and productive lives. The public health experience which radically changed tobacco policy shows what can be achieved.

**3.3 Regulation and Enforcement**

Given the evidence that exposure to alcohol marketing has a significant impact on the decisions of young people to drink, stringent statutory regulations are required to protect children from these significant risks and negative consequences some of which result in serious disability. Alcohol is marketed through multiple channels and the marketing campaigns create pro drinking stimuli. Children are most at high risk of indiscriminate exposure to alcohol marketing in three key areas:-

* the public domain (outdoors), such as billboards, public transport and sporting events,
* on TV, be it from direct commercials or product placement across a range of programmes, with sports programmes carrying a high risk of saturation exposure,
* the new digital media, in particular social network sites, which are the focus of social engagement for most adolescents. It is now the platform where alcohol commercial companies engage with social media users, providing a lethal cocktail for embedded alcohol marketing and where the media user has in effect become a ‘marketer’ for the alcohol industry.

**The cumulative effect of young people’s exposure in these major areas of alcohol marketing creates a pro alcohol culture among young people, who are susceptible to risk and harm**.

**Best Practice**

A proposed Framework for Alcohol Regulation and Enforcement could include the following elements:

1. **Clear public health objectives** – to protect public health and provide greater protection for children and young people, by reducing the exposure of children and young people to alcohol marketing.
2. **Precautionary approach** – recognising that society has a social responsibility to prevent and protect children from exposure to risk to their health and well-being, even when full scientific certainly has not been agreed by all.
3. **Transparency** - identify what alcohol marketing practises are permitted, for volume, place and content, so that the measures are clear and transparent for the public to understand (equivalent to the rules of the road).
4. **Sustainability** – low cost enforcement mechanisms are essential, as it requires long term commitment to protect present and future generations of children from risk of early onset of drinking
5. **Enforcement** – ensure that national young organisations/ citizens groups can validate compliance issues and are proactive.
6. **Accountability** – require industry to disclose information as requested by Government (Minister of Health) to ensure exposure to alcohol marketing by young people is adequately reduced, in line with legal targets.
7. **Infringements** – where validated, fines act as a good deterrent as does offender coverage in media (name and shame).

These principles are consistent with the approaches taken for better regulation in a wide range of sectors, including environmental protection and tobacco control.

Not in line with best practice is the use of audience profiling which is promoted by the alcohol industry to decide risk exposure. It is fundamentally flawed, as it fails to protect large numbers of children from exposure to alcohol marketing. This was effectively illustrated in recent studies examining the frequency of embedded alcohol marketing in sports matches (Lindsay et al 2013; Graham & Adams 2013). In the Australian rugby series, the estimated viewed audience aged 5-17 years was 290,711 young people (10.5% of total audience) in game one, 269,499 young people (10.7% of audience) in game two and 321,466 young people (11.9% of total audience) in game three. While the consumption of alcohol products and gambling products are restricted to those over 18 years of age, yet approximately 10-12% of the audience watching the National Sports series were under 18 years (Lindsay et al 2013). In the UK English Professional Football matches, the audience under 18 years ranged from 19,000 youth (6.5% of audience) in one game to 450,000 youth (9% of audience) in another game, in matches analysed (Graham & Adams 2013). Using the audience profiling method, all of these programmes complied with the rules, yet substantial actual numbers of young people (under 18) were exposed to high volumes of embedded alcohol marketing throughout each of the games. Therefore, audience profiling is not effective and should be avoided.

**Best Practice Examples in Europe**

The **French Law** ‘Loi Evin’ is a good example of a strong transparent framework with the key approach of providing guidance on what is allowed, rather than stating what is forbidden in order to avoid ambiguity (Box 1). In the French system, compliance is monitored by non-governmental organisations.

|  |
| --- |
| Box I: Alcohol advertising restriction in FranceFrance implemented important restrictions on advertising and sponsorship in favour of alcoholic beverages in accordance with the *Loi Evin [Evin Law]* of 1991. A total ban exists on TV and on sponsorship of any kind. In broadcasting, advertising is forbidden between 17:00 hours and 00:00 hours, and on Wednesdays (when schools are closed) from 07:00 hours to 00:00 hours. Advertising is forbidden in the print media and on internet websites dedicated to young people. Advertising is still allowed on: - billboards and convenience store brand premises; - small posters or any item inside a specialized point of sale; - catalogues or brochures sent by producers, importers, merchants, etc.; - vehicles usually dedicated to the delivery of alcoholic beverages; - promotional material for traditional feasts and fairs dedicated to local alcoholic beverages; - promotional material for traditional museums, universities and courses on oenology; - items specifically dedicated to the consumption of alcoholic beverages, marketed during the direct sale of alcoholic beverages by the producer or during tourist visits to the production site. The content of advertisements is restricted to: the degree of alcohol, origin of the product (soil, characteristics), denomination, composition, details of the producer or sellers, development process, terms of sale, ways to consume the product and any objective reference to the characteristics of the product. The aim is to limit advertising to objective information about the product. A health warning message must be placed on every advertisement allowed. Respect for the regulatory framework is assured by the advertising regulation authority and by surveillance of advertisements by nongovernmental organizations. Violations of the rules can be met with a fine of up to €75 000. The maximum fine can be increased to up to 50% of the budget for the illegal activity. *Source:* Dr Pierre-Yves Bello, Bureau des pratiques addictives (MC2), Direction générale de la santé, Ministère du travail, de l’emploi et de la santé, Paris, France.  |

Source: *European status report on alcohol and health 2014*. WHO Regional Office for Europe.

The **Finnish Alcohol Law** includes a new section to deal with new forms of online and social media marketing. The new law restricts online alcohol advertising to protect young people. The law clearly specifies what is included and what is excluded (see Box 2). In Finland, a National Supervisory Authority for Welfare and Health supervises compliance with Alcohol marketing regulation, together with the Regional State Administrative Agencies.

Box 2: Finland’s new Alcohol Marketing Regulations[[3]](#footnote-3)

**Background**: In Finland today, all major advertisers are promoting their products across totally new platforms: social networks, viral videos, mobile phones and virtual communities. Games and contests are used to engage consumers in marketing activities: “Like us and win …!”. Young people are especially enthusiastic participants in all online social networks.

The government of Finland took note of this trend and the evidence that alcohol advertising and promotion "*increased the likelihood that adolescents will start to use alcohol, and to drink more if they are already using alcohol*”.

In December 2013, the Parliament of Finland approved a Bill restricting new forms of online and social media alcohol advertising. The new law will come into effect in 2015.

According to the Finnish Alcohol Act

- **All advertising of strong alcoholic beverages (>21%) is prohibited**, but advertising of mild alcoholic beverages is permitted with certain restrictions:

- Not targeted to minors, no reference to social or sexual success etc.

**- TV watershed** 7.00-22.00

**- Outdoor ban**  - in public places i.e. streets, billboards, road sides, buses, trams, delivery vehicles, … (except public events)

**- Indoor ban** in public places i.e. public shopping mall areas, hallways, TV-radio shops etc. (except restaurants, alcohol retail shops)

- **Online and social media marketing ban**

"All advertising and sales promotion activities are prohibited if

-they involve taking part in a game, lottery or contest or if

-they involve any textual or visual content produced by consumers or any such content or content produced by such actor\*, which is intended to be shared by consumers"

\*This applies only to information networking service activities of a commercial actor.

It does not apply to private citizens.

This means that alcohol advertising with any digital games or gaming apps in consoles, tablets and mobile phones as well as product placement in video games will be banned. All kinds of alcohol sales promotion quizzes, competitions and prizes in social media (as well as in real life) will be banned. Allowing people sharing their stories, photos or videos in the social media platform of an alcohol brand and making available viral videos intended to be shared by consumers will be banned.

Internet-marketing of alcohol will not be banned as such as, “conventional” textual and audiovisual content is still allowed with previous restrictions.

**Norway** has a statutory law that regulates alcohol marketing and is administered by the Minister of Health and Care Services. No marketing practices of alcohol are allowed including a ban of alcohol industry sports sponsorship. Complaints about violations of the laws can be filed by any citizen to the Directorate for Health and Social Affairs which is responsible for monitoring and imposes sanctions when the laws have been violated.

There are also several other European countries where certain aspects of alcohol marketing are banned. **Alcohol industry Sports sponsorship** is banned in seven WHO European Region countries - France, Malta, Norway, Turkey, Former Yugoslav Republic of Macedonia, Uzbekistan and Turkmenistan. A ban on alcohol advertising **outdoors (Billboards)** is in place in Belarus, Sweden, Iceland, Norway, Uzbekistan and Turkmenistan. **Health warning** labels are required on **alcohol advertisements** in fourteen countries – Belgium, Estonia, France, Israel, Latvia, Lithuania, Poland, Republic of Moldova, Romania, Russia, Slovenia and Sweden, Ukraine, Uzbekistan.

**4. Health labelling**

Health labelling serves two interconnecting purposes:

1. Health warning labels: Provides information about the risks associated with alcohol use, both specific, drinking during pregnancy, drinking before driving, and general health risks.
2. Low-risk drinking guidelines: Relevant information on alcohol containers can help drinkers track their alcohol intake, such as number of standard drinks in the bottle (1sd=10 grams in Ireland), calories (obesity) and ingredients (sugar content).

**4.1 Health Warning Labels**

Babor et al (2010) examined the research evidence on what effect health warning labels on alcohol containers has on consumers and concluded,

“*There is evidence that warning labels impact on knowledge, awareness, intentions and perceptions, but evidence on drinking behaviour is at best equivocal”*

Information from surveys indicate that a significant proportion of the population has seen these health warning labels. There is some evidence that health warning labels increase knowledge regarding the risk of drink-driving and drinking during pregnancy among some groups (light drinkers). Among college students, a health warning ‘alcohol is a drug’ resulted in greater perceived risk than the standard US warning labels on alcohol containers (Creyer et al 2002). A review by MacKinnon and Nohre (2006) concluded that there is no convincing evidence of an effect of general alcohol warning labels on behaviour. It may be possible to enhance awareness of health warning labels by combining it with others strategies such as community-based campaigns to change alcohol policies or enforce alcohol-related regulation, but so far evidence is lacking. In the Eurobarometer survey of 2009, 79% of EU citizens supported health warning messages (pregnancy and driving) on bottles and an even high proportion (82%) supported warnings on advertisements (Special Eurobarometer 331). Kerr & Stockwell (2012) have indicated that accurate information on the alcohol content of specific beverages is essential to promote drinker’s tracking of alcohol intake and that the number of defined standard drinks in each alcohol container is an effective way of enabling it.

**4.2 Low-risk drinking guidelines**

There are challenging issues in setting low-risk drinking guidelines. As pointed out by Stockwell and Room (2012), there are two main approaches – ‘relative risk’ as used in developing the new Canadian guidelines and ‘absolute risk’ as used in Australia. A relative risk approach considers the proportionate change in risk for an individual or social category for a given consumption of alcohol, while the absolute risk approach is concerned with the category’s absolute increment in risk from the alcohol consumption, regardless of the level of risk from others factors. The main difference in results between the two approaches is that with ‘relative risk’ the upper limit per occasion for men is set higher that for women (Stockwell & Room 2012). From a health promotion perspective, the issue is how widely are low-risk drinking guidelines recognised and to what extent do they affect norms and behaviour. A ‘standard drink’ measure tends to be used in population surveys and in clinical settings to evaluate overall consumption and hazardous and harmful drinking patterns. However, the research evidence shows that ‘standard drink’ or units are widely misunderstood by the general public (Kerr & Stockwell, 2012). Firstly, the ‘standard drink’ definition varies across countries and typically contains less alcohol than actual drinks. Secondly, drinkers have difficulty defining and pouring standard drinks, with over-pouring being the norm, so that the intake volume is typically underestimated. The lack of knowledge of low-risk drinking guidelines was also confirmed in a sample of young people (16-25 yrs) in England (de Visser & Birch 2012). In a large general population in Australia, knowledge of the official guidelines was also low, with younger respondents and heavier drinkers providing higher estimates of low-risk drinking thresholds (Livingston 2012). Evidence on the effects of guidelines on actual drinking behaviour remains scant. However, Stockwell and Room (2012) reported on two Australian studies where changes in the guidelines, from abstinence during pregnancy to a guideline of less than 7 standard drinking per week and no more than 2 drinks a day, produced a positive (reduction in the proportion of pregnant women drinking moderately or more heavily) and an negative effect (drop in abstainers among mothers of babies born before and after the changes).

Kerr and Stockwell (2012) indicate that ‘**standard drink’ labelling is an effective, but little used strategy, for enabling drinkers to track their alcohol intake and potentially conform to low-risk drinking guidelines**. An added benefit of health labelling, over and above the benefit of communicating the risks associated with alcohol use, is the labelling of the number of standard drinks on the alcohol container which can provide opportunities for greater awareness of low-risk drinking guidelines.

The low risk drinking guidelines (weekly) in Ireland had traditionally followed the UK guide, using the UK unit of 8 grams. However, a study published in 2009 established that the standard drink in Ireland is 10 grams and recommended the upper weekly low risk drinking guidelines be revised to the 11/17 standard drinks to reflect that fact (Hope, 2009). In Ireland, a survey conducted in 2012 by Ipsos MRBI on behalf of the Health Research Board, showed that very few people understand what a standard drink is. Only one in ten (9%) people knew the low risk drinking guideline weekly upper limit (old limits) of 14 standard drinks for women and 21 for men. The majority supported labelling alcohol containers to include calories, alcoholic strength, ingredients and health warnings (82%-98%). Therefore, the information and opportunity is now available to ensure that the standard drink is explicitly stated on the label of alcohol containers sold in Ireland, which has a high level of public support. The proposed Framework for Alcohol regulation and Enforcement could equally apply to health labelling. The content of the health label and the enforcement mechanisms should be the responsibility of the Department of Health with delegated responsibility to the Health Service Executive.

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Appendix 1

*Figure X: Prevalence of Heavy episodic drinking (HED) for males in the EU 28 Member States, based on figures in WHO Global status report on alcohol and Health 2014 report.*

*^HED - defined as 60 or more grams of pure alcohol on a least one single occasion at least monthly.*

**Appendix 2**

 *Figure X: Prevalence of Heavy episodic drinking (HED) for females in the EU 28 Member States, based on figures in WHO Global status report on alcohol and health 2014 report.*

*^HED - defined as 60 or more grams of pure alcohol on a least one single occasion at least monthly.*

Appendix 3

**Effects of exposure to alcohol advertising on drinking behaviour**

**Summary of Key findings**

A summary of key findings on the effects of exposure to alcohol advertising on drinking behaviour (de Bruijn 2012c), are:

* 12 year olds who are highly exposed to **overall alcohol advertising** are more likely to start drinking within a year, compared to 12 year olds who are only slightly exposed to alcohol advertising (Collins et al 2007).
* Youngsters who watch more **alcohol advertisements on television** than average are 44% more likely to have ever used beer, 34% more likely to have ever used wine/hard liquor and 26% more likely to have ever drunk three or more drinks on one occasion (Stacy et al 2004).
* In non-drinking 13-year-olds, exposure to **in-store beer displays** predicts the age of onset of drinking (Ellickson et al 2005).
* Teenage boys who own an **alcohol-branded promotional item** are 1.78 times more likely to start using alcohol than boys who did not own such items. For girls the figure was 1.74 (Fisher et al 2007).
* Possession of a **promotional item** from an alcohol producer and an attitudinal susceptibility toward alcohol brands predicted the age of onset of drinking as well as binge drinking among 10-14 year olds (McClure et al 2006; McClure et al 2009).
* Teenagers who are highly exposed to **alcohol advertising** will drink more alcohol when they are in their twenties. In youngsters who have been slightly exposed to alcohol advertising, alcohol consumption stabilizes in the early twenties (Snyder et al 2006).
* 10-12 year olds exposed to **outdoor alcohol advertisements** was associated with subsequent intentions to drink (Pasch 2007).

Some additional studies not in systematic review

* Studies on the impact of exposure to **alcohol portrayal in films** concluded that the start of alcohol use was positively related to baseline exposure to alcohol advertising (Sargent et al 2006; Hanewinkel et al 2009; Morgenstern et al 2011).
* Experimental studies on the immediate effect of alcohol advertising suggest a direct effect of exposure to **alcohol marketing cues in films and/or television commercials**. (Engels et al 2009; Koordeman et al 2011).
* Hazardous drinking was more common in adult sports people who received some form of **sport sponsorship** than those who reported no sponsorship (O’Brien et al 2011).

**In 2009 the Scientific Group of the European Alcohol and Health Forum concluded that “*alcohol marketing increases the likelihood that adolescents will start to use alcohol, and to drink more if they are already using alcohol.”***

1. The WHO global strategy to reduce the harmful use of alcohol, defines “harmful use” in the context of public-health effects of alcohol consumption (WHO 2010). [↑](#footnote-ref-1)
2. Disability-adjusted life years (DALYs) represent a time-based measure of overall burden of disease for a given population. DALYs are the sum of years of life lost due to premature mortality as well as years of life lost due to time lived in less than full health. [↑](#footnote-ref-2)
3. Special thanks to Mr Ismo Tuominen for assisting with this summary, Ministerial Councellor – legal affairs, Department for Promotion of Welfare and Health, Finland. [↑](#footnote-ref-3)