HRB Overview Series

Social consequences of harmful use of alcohol in Ireland





HRB Overview Series

Social consequences of harmful use of alcohol in Ireland



Deirdre Mongan, Ann Hope and Mairea Nelson

Health Research Board

This work may be cited as follows:

Mongan D, Hope A and Nelson M (2009) Social consequences of harmful use of alcohol in Ireland. HRB Overview Series 9. Dublin: Health Research Board.

Published by: Health Research Board, Dublin © Health Research Board 2009 ISSN 2009-0161

Copies of this publication can be obtained from:

Administrative Assistant Alcohol and Drug Research Unit Health Research Board Knockmaun House 42–47 Lower Mount Street Dublin 2 t (01) 2354 127 f (01) 6618 567 e adru@hrb.ie

An electronic copy is available at: www.hrb.ie/ndc

Copies are retained in: National Documentation Centre on Drug Use Health Research Board Knockmaun House 42–47 Lower Mount Street Dublin 2, Ireland t (01) 2345 175 e ndc@hrb.ie

About the HRB

The Health Research Board (HRB) is the lead agency supporting and funding health research in Ireland. We also have a core role in maintaining health information systems and conducting research linked to national health priorities. Our aim is to improve people's health, build health research capacity, underpin developments in service delivery and make a significant contribution to Ireland's knowledge economy.

Our information systems

The HRB is responsible for managing five national information systems. These systems ensure that valid and reliable data are available for analysis, dissemination and service planning. Data from these systems are used to inform policy and practice in the areas of alcohol and drug use, disability and mental health.

The **HRB Overview series** reviews specific health or social issues in the areas of problem alcohol and drug use, child health, disability and mental health. It is envisaged that each issue in the series will be used as a resource document by policy makers, service providers, researchers, community groups and others interested in the topic area.

Overview series publications to date

Long J, Lynn E and Keating J (2005) *Drug-related deaths in Ireland, 1990–2002*. HRB Overview Series 1. Dublin: Health Research Board.

Connolly J (2005) *The illicit drug market in Ireland*. HRB Overview Series 2. Dublin: Health Research Board.

Connolly J (2006) Drugs and crime in Ireland. HRB Overview Series 3. Dublin: Health Research Board.

Long J (2006) *Blood-borne viral infections among injecting drug users in Ireland, 1995 to 2005.* HRB Overview Series 4. Dublin: Health Research Board.

Keane M (2007) *Social reintegration as a response to drug use in Ireland*. HRB Overview Series 5. Dublin: Health Research Board.

Mongan D, Reynolds S, Fanagan S and Long J (2007) *Health-related consequences of problem alcohol use*. HRB Overview Series 6. Dublin: Health Research Board.

Walsh D (2008) *Suicide, attempted suicide and prevention in Ireland and elsewhere*. HRB Overview Series 7. Dublin: Health Research Board.

Pike B (2008) *Development of Ireland's drug strategy 2000–2007*. HRB Overview Series 8. Dublin: Health Research Board.

The **Alcohol and Drug Research Unit** is a multi-disciplinary team of researchers and information specialists who provide objective, reliable and comparable information on the drug situation, its consequences and responses in Ireland. The ADRU maintains two national drug-related information systems and is the Irish national focal point for the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). The unit also manages the National Documentation Centre on Drug Use. Through its activities, the ADRU aims to inform policy and practice in relation to problem alcohol and drug use.

Acknowledgements

The authors would like to express sincere thanks to all those who contributed to this publication. Thanks are due to Mr Tim Linehan and Ms Claire Burke of the Central Statistics Office for providing PULSE data. We also thank Mr Gavin Scott of the Garda Síochána Crime Statistics Office for his assistance in interpreting the PULSE data.

We thank Dr Norman Giesbrecht and Professor Ian O'Donnell for their helpful comments on an earlier draft of this paper.

Finally, we would also like to thank our colleagues in ADRU for all their assistance, in particular Ms Joan Moore for editing the work and the staff in the National Documentation Centre on Drug Use.

Contents

Li	st of tab	les and figures	6
1	Summa	ry	7
2	Introduo	ction	11
3	Alcohol	and the family	13
	3.1	Introduction	13
	3.2	Effects of alcohol on the family as a whole	13
	3.3	Effects of parental drinking on children	14
	3.4	Effects of alcohol on spouses/partners	15
	3.5	Alcohol treatment and the family	17
	3.6	Conclusion	18
4	Effects	of alcohol on education and employment	19
	4.1	Effects of alcohol on education	19
	4.2	Effects of alcohol on employment	22
	4.3	Conclusion	24
5	Alcohol	and crime	25
	5.1	Introduction	25
	5.2	Alcohol-related violence	25
	5.3	Alcohol and public disorder	26
	5.4	Sexual abuse	27
	5.5	How alcohol causes crime	27
	5.6	Alcohol-related crime and young people	28
	5.7	Prisoners	29
	5.8	Drink-driving	30
	5.9	Effect of policy on alcohol-related offences	30
	5.10	The Garda Siochána PULSE system	31
	5.11	Analysis of PULSE data	32
_	5.12	Conclusion	43
6	Social o	consequences of alcohol use – results from the National Drinking Surveys	45
	6.1	Introduction	45
	6.2	Negative social consequences experienced by the drinker	45
	6.3	Negative social consequences experienced by others besides the drinker	47
	0.4 6.5	Canalusian	49
-	0.0		50
1	Conclus	sion	51
Ap	opendix		53
Re	eference	S	55

List of tables and figures

Tables

- Table 3.1
 Cases receiving treatment for harmful use of alcohol, by living arrangements (NDTRS 2008)
- Table 4.1 Self-reported weekly alcohol use by schoolchildren, by age and gender (HBSC 2006)
- Table 4.2 Persons aged 15–64 years, by age of school leaving (NDTRS 2008; CSO 2006)
- Table 4.3 Persons aged 15–64 years, by highest level of education completed (NDTRS 2008; CSO 2006)
- Table 4.4 Persons aged 15 years and over, by employment status (NDTRS 2008; CSO 2008)
- Table 5.1Delinquency problems experienced by Irish and European students in the previous 12 months due
to their own alcohol use (ESPAD 2007)
- Table 5.2 Profile of drunkenness, public order and assault offenders (PULSE 2003–2007)
- Table 5.3
 Number of drink-driving offences (PULSE 2003–2007)
- Table 6.1
 Negative social consequences experienced by the drinker (National Drinking Surveys 2002–2006)
- Table 6.2Negative consequences of someone else's drinking, by gender and age (National Drinking Survey 2006)

Figures

- Figure 4.1 Experience of adverse effects of alcohol use on work or studies in the past 12 months in Ireland and the ECAS countries, by age and gender
- Figure 5.1 Trends in drunkenness, public order and assault offences (PULSE 2003–2007)
- Figure 5.2 Drunkenness, public order and assault offenders, by age group (PULSE 2003–2007)
- Figure 5.3 Trends in drunkenness, public order, and assault offences among minors (PULSE 2003–2007)
- Figure 5.4 Drunkenness, public order and assault offenders, by gender and age (PULSE 2003–2007)
- Figure 5.5 Drunkenness, public order and assault offences among adults, by time of day (PULSE 2003–2007)
- Figure 5.6 Drunkenness, public order and assault offences among minors, by time of day (PULSE 2003–2007)
- Figure 5.7 Drunkenness, public order and assault offences among adults, by day of week (PULSE 2003–2007)
- Figure 5.8 Drunkenness, public order and assault offences among minors, by day of week (PULSE 2003–2007)
- **Figure 5.9** Average annual proportion of drunkenness, public order and assault offences committed by adults, by week of year (PULSE 2003–2007)
- Figure 5.10 Average annual proportion of drunkenness, public order and assault offences committed by minors, by week of year (PULSE 2003–2007)
- Figure 5.11 Average annual number of offences (drunkenness, public order and assault) per 1,000 of the adult population, by county (PULSE 2003–2007)
- Figure 5.12 Drink-driving offenders, by gender and age group (PULSE 2003–2007)
- Figure 5.13 Drink-driving offences, by time of day (PULSE 2003–2007)
- Figure 5.14 Drink-driving offences, by day of week (PULSE 2003–2007)
- Figure 5.15 Average annual number of drink-driving offences per 1,000 of the adult population, by county (PULSE 2003–2007)
- Figure 6.1 Negative social consequences, by drinking pattern (National Drinking Surveys 2002–2006)
- Figure 6.2 Negative social consequences of weekly risky drinking (RSOD), by age group (National Drinking Surveys 2002–2006)
- Figure 6.3 Harm to others, by drinking pattern (National Drinking Survey 2006)

1 Summary

1.1 Introduction

It is well established that alcohol consumption can have harmful health effects on the drinker; it is causally related to more than 60 different medical conditions and is implicated in numerous premature deaths every year from disease, accidents and injuries. Although the health-related consequences of harmful use of alcohol have dominated public discussion on alcohol-related problems, it has been estimated that alcohol-related social problems can impose as much of a burden as the health consequences. Such negative social consequences include spouse/family problems, public disturbances, violence, and reduced work performance, which impact on all facets of society. The purpose of this Overview is to compile and analyse the available data on the social consequences of harmful use of alcohol in Ireland. The methods used involved a combination of archival data, survey research results and research literature.

1.2 Effects of alcohol on the family

Harmful use of alcohol can have negative effects on social relationships within the family. While it is difficult to determine the extent of the suffering and harm experienced by the immediate family of a problem drinker, it is likely to be considerable and to constitute a critical component of the burden of alcohol-related harm. A recent Irish survey on the impact of parental drinking among 18–40-year-olds reported that of those who had parents who drank alcohol during their childhood, almost one in 10 had often felt ashamed of or embarrassed by their parent's drunken behaviour, or had often witnessed conflict between their parents when they were drinking or related to their drinking. The impact of parental drinking did not differ across socio-economic class. Across the EU, it is estimated that between 7% and 12% of children have parents with alcohol abuse and dependence problems, which implies that up to 109,476 Irish children aged 14 years or under are affected by parental alcohol use. It is conservatively estimated that each dependent user of alcohol will, on average, negatively affect the lives of two other close family members.

There is a substantial risk of intergenerational transmission of problem drinking to children of problem drinkers. It has been estimated that these children are two to 10 times more likely to develop alcohol problems compared to other children. The risk of dependence is increased by a family history of alcohol problems, antisocial behaviours, and poor social networks. Fathers' present heavy drinking and parental early drinking are the key predictors of their children's harmful use of alcohol at the age of 15.

While children of problem drinkers are susceptible to a wide range of problems, not all experience the negative effects of parental drinking either in the short or long term. There appear to be resilience factors that can minimise the negative impact of parental drinking. These include positive family functioning; available support within the family (such as the presence of a stable adult figure); family cohesion and harmony; good support external to the family (for example, a teacher); and deliberate planning by the child to make their life less disrupted.

The spouse of the problem drinker may have to cope with numerous consequences, including the unpredictability and frequent unpleasantness of life with a problem drinker. The divorce rate is twice as high in marriages complicated by alcohol problems as in those without alcohol problems. A family history of alcohol dependence also increases the likelihood of divorce. It has been estimated that an increase of one litre in per capita alcohol consumption brings about an increase in the divorce rate of about 20%.

1.3 Effects of alcohol on education and employment

Harmful use of alcohol can restrict educational attainment and stifle job opportunities. The negative effects of alcohol on educational attainment can arise from both parental drinking and drinking by

the student him/herself. Maternal drinking during pregnancy can damage the developing fetal brain and result in fetal alcohol spectrum disorder, which is associated with a range of negative physical, cognitive and behavioural effects. Children's own consumption of alcohol can cause problems to their intellectual development. Alcohol consumption during adolescence is associated with damage to the brain regions that are important for memory and learning capabilities, which can impair academic performance. Harmful use of alcohol can result in substantial economic costs or loss of labourmarket productivity, in part through the direct health-related consequences of alcohol use, such as physical injuries in the workplace, and through absenteeism.

1.4 Alcohol-related crime in Ireland

There are significant links between alcohol consumption and rates of criminal violence: international studies show that alcohol is involved in 35%–85% of assaults and homicides. A number of factors contribute to the relationship between alcohol and crime, including the effects of alcohol, the characteristics of the drinker, the drinking situation and the cultural context of both drinking and criminal behaviour.

Data from the Garda PULSE (Police Using Leading Systems Effectively) system were analysed for the years 2003–2007. Analysis was confined to crimes in which alcohol was definitely involved, for example, drunkenness and drink-driving offences, and crimes which commonly have alcohol as a contributory factor, for example, assaults and public order offences. Between 2003 and 2007 the total number of drunkenness, public order and assault offences increased by 30% from 50,948 to 66,406. According to the latest crime and victimisation survey only 53% of assaults were reported; we can therefore assume that the figures presented here are an underestimation.

According to the PULSE data, the typical profile of a drunkenness, public order or assault offender was that of a young male aged under 24 years. The 18–24-year age group were responsible for two-fifths of offences. This is not surprising as numerous drinking surveys have identified young people as having the highest level of both alcohol consumption and binge drinking in Irish society.

Those aged under 18 years accounted for 17% of offenders. The total number of offences among minors increased from 6,531 in 2003 to 10,037 in 2007, an increase of 54%. While increases were observed for each offence type, the increase in the number of public order offences (78%) was noticeably higher than that for other offences. Males accounted for 84%–92% of adult offenders and 74%–83% of minor offenders (under-18s). While females committed only a small proportion of offences, there was a higher percentage of female minor offenders than adult offenders. This was especially true for drunkenness offences where females accounted for one-fifth of minor offenders, compared to one-tenth of adult offenders.

For both adults and minors, approximately half of all offences occurred at the weekend. Just under half of adult offences occurred between midnight and 4.00 am, and offences peaked at 2.00 am, which coincides with weekend closing time in many licensed premises, when large volumes of people spill onto the streets, often in a state of intoxication. The majority of drunkenness (60%) and public order (52%) offences among minors occurred between 9 pm and 2 am. Drunkenness and public order offences among minors tended to occur earlier at night than those among the adult population.

The number of drink-driving offences increased by 74% between 2003 and 2007, from 11,421 to 19,864. The largest increase (32%) was observed between 2005 and 2006, which can be explained by the introduction of legislation permitting random breath testing in 2006. Males accounted for 90% of drink-driving offenders. The mean age of offenders was 34 years and the median 32 years. The largest proportion of offenders for both males and females were in the 18–24 age group, followed by the 25–29 age group. In general, female offenders tended to be older than males, with 37% aged 40 years or over, compared to 30% of males. The percentage of drink-driving offenders aged 30 or under increased steadily during the years under study, accounting for 37% of offenders in 2003 and 47% in 2007. Over half (52%) of all drink-driving offences were recorded between midnight and 4.00 am, and 54% were recorded on a Saturday or Sunday.

1.5 Self-reported alcohol-related social harm in Ireland

Data from four national drinking surveys (2002–2006) were analysed to examine social harm in the general population. The likelihood of experiencing at least one of the four social harm indicators (fights, or harm to friendships, home life or work) in the previous year due to the drinker's own alcohol use was one in five (21%), with men twice as likely to report social harms compared to women (men 28%, women 13%). The overall prevalence of experiencing at least one of the social harms was significantly higher among those who engaged in weekly risky drinking (36%) in comparison with less frequent risky drinkers (16%) and to those who did not engage in risky drinking (5%).

Younger participants were more likely to report that they experienced fights and work problems, while harm to home life was more common among those aged 35 years and over. The number of young people (one in four) who reported harm to their work/studies and fights as a result of regular risky drinking is of concern, given the potential burden to their well-being and their important role in the economic activity of the country.

Harm to others besides the drinker in the previous year was examined, using five indicators: family problems, and having been a passenger with a drunk driver, been hit or assaulted, had financial trouble or had property vandalised as a result of someone else's drinking. The overall prevalence of experiencing at least one of these negative consequences from someone else's drinking was over one in four (28%). While men experienced more social harms from their own drinking than did women, both men and women experienced similar levels of harm from someone else's drinking.

An examination of the harms individually showed that more women than men reported the experience of family and money problems. Family problems were experienced equally by those who drank and those who did not drink. Men were more likely to experience the negative consequences of being a passenger with a drunk driver and of being assaulted. The risk of experiencing either of these harms increased as the frequency of risky drinking by the victim increased. The younger age groups, of both men and women, were more likely to report experiencing assaults and being a passenger with a drunk driver.

1.6 Conclusion

In Ireland, harmful use of alcohol is a serious public health and social problem. The health consequences of the harmful use of alcohol have been well documented. Since 1995 alcohol-related morbidity and mortality have increased in line with increased consumption and harmful drinking patterns (Mongan *et al.* 2007). Alcohol is a major factor in social problems such as violence, family disharmony and child abuse and neglect. Alcohol-related harm is not restricted to the individual drinker, but has negative consequences for families, innocent bystanders and the wider community. Although some published evidence exists in Ireland on the social harms caused by alcohol, there are major gaps in our knowledge base, in particular around families of problem drinkers, alcohol use and related problems in the workplace and the effect of alcohol on communities.

The findings of this Overview illustrate the urgent need for the introduction of a co-ordinated national alcohol strategy. The international evidence is substantive and clear on the most effective and cost-effective strategies to reduce alcohol harm. The pressing need for an alcohol strategy to reduce the level of alcohol-related harm in Ireland has consistently been emphasised in recent years. In March 2009, the Government approved the development of a combined National Substance Misuse Strategy to include both alcohol and drugs. For this strategy to succeed it is imperative that it is comprehensive and co-ordinated; that a proper structure is put in place with an agency or body taking responsibility for its implementation; that resources are available for its enforcement and long-term implementation; and that the relevant stakeholders provide the necessary commitment to ensure its sustained success.

Social consequences of harmful use of alcohol in Ireland

2 Introduction

Alcohol plays a complex role in Irish society; it represents an integral part of modern culture and is generally consumed for enjoyment, relaxation and reasons of sociability. Alcohol is also a psychoactive substance and is responsible for a considerable burden of death, disease and injury in Ireland. Since 1995, alcohol-related mortality and morbidity in Ireland has risen in line with increased consumption (Mongan *et al.* 2007). Alcohol also has many adverse consequences which can be characterised as 'social' in nature rather than medical, although there is considerable overlap between the two domains. Social harm has been defined as 'perceived misperformance or failure to perform in major social roles – as a family member, as a worker, as a friend or neighbour, or in terms of public demeanour' (Room 2000). The failure to perform properly may be momentary, in the event, or it may be continuing and cumulative. It has been estimated that alcohol-related social problems can impose as much of a burden as the health consequences (Rehm *et al.* 2009, Room *et al.* 2003).

Per capita consumption is a good indicator of alcohol-related harm in a country. The higher the average consumption of alcohol in a population, the higher the population's incidence of alcohol-related problems, and this relationship also holds good at the individual level. The level of alcohol consumption in Ireland is high: in 2008 the recorded per capita consumption was 12.4 litres of pure alcohol for every adult aged 15 or over. This represents a decrease of 7.5% on the 2007 figure; however, it is possible that this decrease can be attributed to the fall in the value of Sterling relative to the Euro, which led to an increase in cross-border trading in Northern Ireland, in particular during the last quarter of 2008. It is also possible that the current recession has led to people having less disposable income to spend on alcohol.

In addition to per capita consumption, patterns of drinking, especially drinking to intoxication, play an important role in causing alcohol-related harm. People in Ireland engage in drinking patterns that are excessive and problematic, with risky drinking now the norm for a substantial proportion of people. A Eurobarometer study of 25 European countries revealed that during the previous 12 months 89% of respondents in Ireland had consumed five or more drinks on the one occasion; this compares to 69% of all European respondents. Over half (54%) of respondents in Ireland stated they consumed at least five drinks on one occasion at least weekly, compared to a European average of 28% (TNS Opinion & Social 2007). This suggests that 2.14 million Irish adults engage in risky drinking each year.

Alcohol-related harm is not confined to the minority of heaviest drinkers in the population. In reality, it is the much greater number of low- to medium-volume drinkers in a population who drink to excess on occasion that accounts for much of the acute alcohol-related problems, such as aggression, violence, injuries, and poor work performance which are often associated with episodes of intoxication. The World Health Organization recognises the range of harm when, in the context of developing a draft global strategy, it states

the concept of harmful use of alcohol is broad and encompasses both the drinking that causes detrimental health and social consequences for the drinker, the people around the drinker and society at large, and the patterns of drinking that are associated with increased risk of detrimental health outcomes. Harmful use of alcohol compromises both individual and social development. It can ruin the lives of individuals, devastate families, and damage the fabric of communities. (WHO 2009)

In the past decade the availability and affordability of alcohol in Ireland have increased. Opening hours were extended and the free movement of licences was introduced in the Intoxicating Liquor Act 2000. Between 2000 and 2003 the Commission on Liquor Licensing published four reports and recommended further ways to extend the availability of alcohol. Between 2001 and 2007 the number of off-licences and mixed trading premises authorised to sell the full range of alcohol products increased by almost 70% (Government Alcohol Advisory Group 2008).

Since 1996 the affordability of alcohol (price relative to income) increased by 50% (Rabinovich *et al.* 2009). In addition, the price of alcohol has fallen in recent years, particularly in the off-trade. The Groceries Order, which had given statutory effect to minimum pricing arrangements and had prohibited below-cost selling of products, including alcohol, was repealed in 2006. The abolition of this Order allows below-cost selling, whereby cheaper alcohol is used to attract customers in the expectation that they will purchase other products as well as alcohol once inside the store. As in the rest of the EU, there is a trend in Ireland towards more off-trade alcohol consumption, which tends to be cheaper than alcohol sold on-trade. A recent European report by Rabinovich *et al.* (2009) stated that the off-trade share of the alcohol market in Ireland grew in monetary terms from 19% in 1991 to 28% in 2000 and to 36% in 2006.

Several Government reports in the last decade have recommended effective ways to regulate availability and price to reduce alcohol harm. In 2008 a Government Alcohol Advisory Group was established to bring forward proposals for changes in the law on the public order aspects of the sale and consumption of alcohol. More specifically, it examined the increase in the number of off-trade premises and the conditions of sale of alcohol products in these outlets, including below unit-cost selling and special promotions. It also looked at the use, adequacy and effectiveness of existing sanctions and penalties directed towards combating excessive and under-age alcohol consumption. While the group made several recommendations, a limited number were incorporated into new legislation, with some given immediate legal effect. Parts of the legislation were transposed into a voluntary code of practice for the off-trade on conditions of sale of alcohol within stores (display, location and promotional material).

Ireland has a high level of alcohol consumption and many Irish people engage in harmful drinking patterns. This has been fuelled by the increased availability of cheap alcohol and the widespread promotion of alcohol in Ireland. Consequently, we have seen an increase in alcohol-related morbidity and mortality.

The purpose of this Overview is to compile and analyse the available data on the social consequences of harmful use of alcohol in Ireland. The sources used in this Overview are a combination of archival data, survey research results and research literature. Irish and international published literature is used to describe the effects of alcohol on the family and on education and employment. The contribution of alcohol to crime is examined using data from the Garda PULSE (Police Using Leading Systems Effectively) system. Survey data from four national drinking surveys conducted in the period 2002–2006 are used to describe the negative effects of alcohol use among the general population.

This Overview will help describe the extent of the alcohol challenge in Ireland and will identify gaps in current knowledge so as to inform policy direction and future research work in this area.

3 Alcohol and the family

3.1 Introduction

The adverse effects of harmful use of alcohol are not confined to the individual drinker and it is likely that the families of problem drinkers suffer the more profound effects. Nonetheless, the impact of alcohol on families is frequently overlooked when measuring the ill-effects of harmful use of alcohol.

This chapter will describe the effects of harmful use of alcohol on the family, and more specifically on children and spouses. It is based predominantly on published literature. Where possible, data from Irish sources are presented, but unfortunately there is little published Irish literature on the effects of alcohol on the family. Data in this chapter pertaining to treatment were obtained from the National Drug Treatment Reporting System (NDTRS). The NDTRS is an epidemiological database on treated substance misuse in Ireland and has recorded alcohol data since 2004. Data collected for each patient include information on the main problem substance, type(s) of intervention provided during treatment and demographic and socio-economic details. Individuals who are treated for harmful use of alcohol in psychiatric units or hospitals are recorded by the National Psychiatric In-patient Reporting System (NPIRS) and are not included on the NDTRS database, nor in the analysis presented in this Overview.

3.2 Effects of alcohol on the family as a whole

While the extent of the suffering and harm experienced by the immediate family of a problem drinker is difficult to determine, it is likely to be considerable and to constitute a critical component of the burden of alcohol-related harm. The negative effects of heavy drinking by a spouse or parent can include the non-fulfilment of spousal and parental responsibilities and economic hardship for families. These effects are linked to neglect of children, marital or family alienation, disharmony or isolation, alcohol-related aggression and chronic unemployment.

When a family member develops an alcohol problem, traditional roles may break down and the roles played by family members may change. The problem drinker may cease to perform their previous functions, for example, as a breadwinner, in the support and supervision of children or in the performance of household chores. A child, in particular an eldest child, may be required to adopt adult roles and responsibilities, such as carrying out household chores or acting as a surrogate parent to younger siblings. Family life in a household with a problem drinker can be chaotic, with a lack of routine. The problem drinker's behaviour can become unpredictable and disruptive, impairing the family's capacity to plan activities in advance or to stick to familiar routines. It may become impossible to be sure whether the problem drinker will return home at the proper time, or appear at school to collect the children, or what condition he or she will be in, in the presence of the child's friends. Uncertainty and anxiety are therefore constant features of life for the family members of problem drinkers.

Family gatherings such as Christmas and birthdays, designed to celebrate and integrate the family, may be particularly subject to disruption, because of the absence of the problem drinker, or even because of their presence. Recreational activities within the family may be restricted if the drinker becomes unwilling or unable to participate. Indeed, other family members may themselves choose to avoid activities out of fear of the drinker's unpredictable and disruptive behaviour, which can be a source of embarrassment. There is often a tendency to keep the problem a secret from the outside world, making it difficult to invite others into the family home, or to accept invitations from others, rendering the family socially isolated.

Having a family member with an alcohol problem can have serious financial repercussions, especially if that person is the primary breadwinner. Money spent on alcohol is not available for other purposes. An alcohol problem may impair or destroy the drinker's capacity to earn a livelihood. Reduced earnings or unemployment are consequences of drinking problems and these, naturally, affect the

other members of the family. It is conservatively estimated that, on average, each dependent user of alcohol will negatively affect the lives of two other close family members (Zohhadi *et al.* 2004).

3.3 Effects of parental drinking on children

Living with a problem drinker severely affects children since they can do little to protect themselves from the direct or indirect consequences of parental drinking. There are no figures on the number of Irish children affected by parental drinking. In the United Kingdom (UK), it is estimated that up to one in 11 (1.3 million) children are affected by parental alcohol problems (Prime Minister's Strategy Unit 2004). Across the EU it is estimated that between 7% and 12% of children have parents with alcohol abuse and dependence problems (Eurocare and COFACE 1998). In Ireland, this corresponds to 63,861–109,476 affected children aged 14 years or under (based on a total of 912,300 children aged 14 years or under in 2008). Given Ireland's high alcohol consumption and harmful drinking patterns when compared to other European countries, it is likely that the number of affected Irish children is at the upper end of this scale.

Abuse, neglect, isolation and insecurity, and inconsistent parental behaviour are more common in the families of problem drinkers than in others. The family and social environment of the children of problem drinkers is often chaotic and consequently not disposed to fostering balanced development. The impact on children can begin before birth and can lead to a sustained, damaging legacy into adulthood. Studies of children of parents with alcohol-related problems have stressed the fragility of family cohesion (arguments, marital disruption, deaths) and the inconsistent attitudes or behaviour of the parents. Because of the higher rate of mortality among problem drinkers, these children may be at increased risk of suffering the trauma of losing a parent. A study of young adults found that, compared with a control group, the children of problem drinkers recalled more negative experiences from their childhood. They more often had to assume responsible or parenting roles inappropriate to their age, such as having to put one of their parents to bed, worrying about the household's finances or fearing that their father would lose his job. Their social life had been very limited and they had frequently been left to their own devices (Velleman and Orford 1990).

Child abuse can be another direct consequence of parental alcohol use. In the UK, parental alcohol use is a factor in 50% of child protection cases (Prime Minister's Strategy Unit 2004). There are no valid or reliable published data on this issue available for Ireland, although an unpublished onecounty study in 1999 found that 43% of children in care were there because of parental addiction. The addiction in this case referred primarily to alcohol dependency, and these children tended to get 'stuck in care' (Butler 2002a). Affected children often have particular difficulties, demonstrating while still young a higher propensity for anti-social behaviour, emotional problems and problems in the school environment. During adolescence they may show friendship difficulties, a division between home life and peer relationships, being prescribed psychoactive drugs, earlier use of alcohol or drugs, leaving home early, earlier marriage and involvement with a semi-deviant sub-culture. The children of problem drinkers are more liable to suffer emotional trauma which may affect their mental state. A New Zealand study compared the prevalence of psychiatric disorders diagnosed at the age of 15 years in children of alcohol-abusing parents with that in children of other parents. The disorders studied (abuse/dependence, behavioural disorders, attention disorders/hyperactivity, affective and anxiety disorders) were between 2.2 and 3.9 times more common in children whose parents abused alcohol (Lynskey et al. 1994).

Different consequences for boys and girls have been identified. Boys tend to have an increased risk of being socially excluded from peer groups, more often display anger and violence and are more often involved in crime. Girls have increased risk of experiencing feelings of guilt, anxiety, sexual acting out, promiscuity, prostitution and self-damaging impulsive sexual behaviour (Christoffersen and Soothill 2003).

The agency Barnardos has highlighted some of the realities facing children of problem drinkers in Irish society. Barnardos reported that children in families where one or both parents abuse alcohol can suffer from material deprivation such as lack of proper diet, lack of school books, clothes and toys due to the high family spend on alcohol (Barnardos 2002). A recent Irish survey, *Keeping it in the family* (Alcohol Action Ireland 2009), studied the prevalence and impact of parental drinking among 18–40-year-olds (N=454). Of those who had parents who drank alcohol at all during their childhood (67%), 9% had often felt ashamed of or embarrassed by their parent's drunken behaviour; 8% had often witnessed conflict between their parents when they were drinking or related to their drinking; 7% often felt afraid or unsafe as a result of their parent's behaviour; 7% had taken on responsibilities for looking after siblings; and 4% stated that their schooling had suffered. The impact of parental drinking did not differ across socio-economic class.

A Danish study analysed data on 84,765 children to assess the long-term consequences of parental alcohol abuse. In total, 4.5% of the children had experienced a parent being hospitalised with an alcohol-related illness during their formative years. Children of problem drinkers were more likely to self-damage, perpetrate damage to others, suffer adverse life experiences and have fewer resources than children of non-problem drinkers. Hospitalisation due to violence, an increased risk of teenage pregnancy and unemployment were also seen more frequently among the offspring of alcohol abusers. In general, parental harmful use of alcohol was significantly associated with children being involved in family separation and experiencing youth unemployment or social exclusion (Christoffersen and Soothill 2003).

Children learn about alcohol at a very young age, and are therefore extremely open to parental example. Parental behaviour and values in respect of alcohol are likely to have a modelling effect on future attitudes of children. Likewise, children may in the long term internalise parental expectations of the effects of alcohol (for example, consuming alcohol to deal with stress), which may influence their future behaviour in regard to alcohol (Ellis *et al.* 1997). There is a substantial risk of intergenerational transmission of problem drinking for children of problem drinkers. It has been estimated that these children are two to 10 times more likely to develop alcohol problems compared to other children (Sher 1997). The risk of dependence is increased by a family history of alcohol problems, antisocial behaviours, higher anxiety levels, smoking, and poor social networks. It has been reported that fathers' present heavy drinking and parental early drinking are the best predictors of their children's harmful use of alcohol at the age of 15 (Seljamo 2006).

While children of problem drinkers are more susceptible to a wide array of problems, it is evident that not all experience the negative effects of parental drinking either when they are young or when they reach adulthood. There appear to be resilience factors that can minimise the negative impact of parental drinking. These resilience factors include positive family functioning; available support within the family (such as the presence of a stable adult figure); family cohesion and harmony; good support external to the family (for example, a teacher), and deliberate planning by the child to make their life less disrupted (Velleman and Templeton 2003). Children appear to cope better in the short and long term when the parental drinking problem is not permitted to disrupt family rituals which can offer stability in the face of difficult circumstances.

3.4 Effects of alcohol on spouses/partners

In spite of the limited international evidence, it is generally accepted that harmful use of alcohol, usually by the husband, is a cause of, or exacerbates marital disharmony and can lead to the breakup of relationships or the family unit. General population studies have shown that divorce leads to heavier drinking and that heavy drinking contributes to divorce. In the United States (US), marriages affected by alcohol dependence are fairly common, with estimated prevalence rates ranging from 10% to 45% (Marshal 2003). Aggregate-level studies indicate a relationship between marital status and per capita alcohol consumption, and in the US it has been estimated that an increase of one litre in annual per capita alcohol consumption brings about an increase in the divorce rate of about 20% (Caces *et al.* 1999). It has also been reported that higher divorce rates are related to heavier and more frequent binge drinking at the individual level (Fillmore *et al.* 1994). A study on marital breakdown revealed that, of 16 factors examined as a cause of break-up, alcohol was in sixth position, and that 36% of women and 17% of men who were divorced or separated stated that alcohol was a factor in their marriage difficulties (Burns 1984). In the UK, more than one-third of problem drinkers receiving treatment cited marital conflict as one of the main problems caused by drinking. The divorce rate was twice as high in marriages complicated by alcohol problems as in those without alcohol problems (Eurocare and COFACE 1998). A family history of alcohol dependence also increases the likelihood of divorce. Sons and daughters of alcohol abusers are at risk of separation and divorce, even after controlling for alcohol abuse among the offspring (Caces *et al.* 2003).

The spouse of the problem drinker may have to cope with numerous consequences, including the unpredictability and frequent unpleasantness of life in such a relationship. The more serious an alcohol problem, the less able a person is likely to be to perform competently, or at all, the various roles and responsibilities of a spouse and parent. A spouse may be affected by difficulties in their relationship not only with the drinking partner but also with the children. As the drink problem comes to dominate the lives of everyone in the family, the non-drinking parent may simply have less time and less emotional as well as material resources to devote to the children. The non-drinking parent may have to assume the whole responsibility for disciplining the children. Where the non-drinking partner is employed, his or her own work performance or attendance may suffer as a result of the difficulties experienced at home.

While the collapse of any marriage can be harmful, especially to children, the preservation of a relationship in which one partner is an alcohol abuser may be just as detrimental. The long-term psychological stress experienced by the spouse can manifest as loss of self-confidence and self-esteem, anxiety, or depression. Spouses may employ unsuitable responses to such stresses, such as the inappropriate use of tranquilisers. There are indications that spouses of problem drinkers are heavy users of health and social services. Some spouses may themselves get into difficulty with alcohol, perhaps using it to cope with stress, or in the misguided belief that by drinking with the partner they will be able to exercise some control over his or her consumption.

An Irish survey of 2,050 couples and 1,407 individuals entering ACCORD marriage counselling reported that up to 40% of men and 20% of women in distressed relationships were drinking excessively. These figures were based on self-reporting, and were corroborated by the reports of the partners (McKeown *et al.* 2002). In a study of 2,000 cases who attended marriage counselling in an eight-year period, alcohol abuse was a factor in marital disharmony in one-quarter of cases (O'Connor 2001). O'Connor also stated that in many instances the wife in these marriages came to the centre seeking help in trying to cope with a problem-drinking husband, many of whom were 'adult children of alcoholics'.

3.4.1 Domestic abuse

The association between harmful use of alcohol and domestic abuse has long been recognised. However, the causal nature of the relationship is unclear, for example: Does harmful use of alcohol cause domestic abuse, or is harmful use of alcohol an excuse for the violent partner's behaviour? There is support for a causal relationship between a husband's drinking and physical abuse of a wife in couples where there is a high degree of verbal aggression in conflict interactions. However, it is important not to overstate alcohol's role in domestic abuse as alcohol is neither a necessary nor a sufficient cause. The majority of aggressive episodes occur without alcohol, and men who have behaved aggressively with alcohol have often behaved aggressively without alcohol also. The role of alcohol appears to be a contributing cause (Leonard 2001). Abuse that occurs in the context of alcohol use may be more likely to lead to injury. A study by Testa *et al.* (2003a) provides some evidence that episodes of marital violence in which the husband is drinking may be more severe than episodes perpetrated by the same husbands when sober. Children are also victims of domestic violence, both when they are directly targeted by the perpetrator of the violence and/or when they witness the domestic abuse of a parent. Subjecting a child to witnessing domestic violence can be considered emotional abuse. The Economic and Social Research Institute (ESRI) conducted a survey of domestic abuse in 2003 using a nationally representative statistical sample of over 3,000 Irish men and women aged over 18 (Watson and Parsons 2005). This study identified that in the year prior to the survey 3.2% of women and 1.6% of men experienced severe domestic abuse. This suggests that in the region of 50,000 women and 25,000 men in Ireland may be severely abused by a partner in a 12-month period (based on Central Statistics Office [CSO] figures 2008). The study also reported the use of alcohol as the second most common trigger in abusive behaviour (34%), especially when the male partner had been drinking. This would indicate that alcohol is a trigger in cases affecting over 25,000 victims of domestic abuse in Ireland each year. Alcohol was involved 'always' for 27% of the respondents who had experienced domestic abuse, 'some of the time' for 44%, and 'never' for 29%. While these results are not strongly suggestive of a causal link between alcohol consumption and abuse, the role of alcohol in triggering or exacerbating incidents of domestic abuse needs to be taken seriously.

3.5 Alcohol treatment and the family

It is generally accepted that only a small minority of people with alcohol problems come to the attention of treatment services. There are no reliable estimates of the extent of alcohol dependence in the Irish population. In the UK, a country with lower per capita alcohol consumption than Ireland, a survey estimated that among the 16-74-year-old population 11.9% of males and 2.9% of females were currently dependent on alcohol (IAS 2009). These proportions applied to the Irish adult population would indicate that approximately 207,000 males and 51,000 females aged 15 years or over are alcohol dependent. Only a small proportion of these people seek or receive treatment at addiction treatment services. Those who do seek treatment have typically experienced prolonged alcohol-related problems affecting health, relationships and finances and have had previous, failed, unassisted attempts at changing their drinking behaviour. This is corroborated by data from the National Drug Treatment Reporting System (NDTRS) and the National Psychiatric In-Patient Reporting System (NPIRS). According to the NDTRS, in 2008, 8,476 cases who entered treatment reported alcohol as their main problem substance. This figure does not include cases who were assessed only but did not enter a treatment programme. In addition, preliminary data from the NPIRS indicate that in 2008 approximately 2,409 of all admissions to psychiatric in-patient facilities had an alcohol disorder as their primary diagnosis (Daly 2009).

Table 3.1 describes the living arrangements of cases receiving treatment for harmful use of alcohol in 2008. The majority of cases lived with family members, with over one in five (22%) living with children alone or with a partner and children; we may infer that these children were at increased risk of experiencing the harms associated with parental drinking. Another group of children at risk of experiencing harm are those who were taken into care as a result of parental harmful use of alcohol.

)		
	n	%
Alone	2136	25.2
With parents/family	2453	28.9
With friends	220	2.6
With partner only	968	11.4
With partner and child(ren)	1384	16.3
Alone with children	443	5.2
Not known/other	872	10.3

Table 3.1Cases receiving treatment for harmful use of alcohol, by living arrangements (NDTRS 2008)

Although family members of problem drinkers are at high risk of developing stress-related problems, they don't always receive appropriate help. Services have traditionally been oriented towards helping the problem drinker and not the relative. In Ireland, child welfare and adult addiction services have

traditionally been organised as separate, parallel services, with addiction services focused on the drinking parent, and child-care specialists focused on the child. As a result, children affected by parental drinking do not get the integrated service they require (Butler 2002a). Children are not the only family members who require support and assistance during the treatment process. Efforts designed to involve spouses or other family members in the treatment of the drinking patient are promising since they may have an impact not only on the immediate problems but also in preventing the enhanced risk of future addiction in the relatives of the drinking member. Over one in five cases (22%) reported to the NDTRS in 2008 received family therapy as part of the treatment process. In the south east region, exit data were collected after the treatment episode. According to these data, 37% of cases had family members involved in the treatment process.

3.6 Conclusion

At a societal level, the abuse of alcohol is a grave and pertinent public health issue. While the harms related to harmful use of alcohol are pervasive across all facets of society, it is likely that the families of problem drinkers bear the brunt of these harms. The effects of alcohol on all members of a family are often shattering and the devastating impact that alcohol abuse can have on marriage and family life cannot be overstated. It can destroy the fabric of family life and in many cases leaves a legacy of neglect, abuse, chaos and damaged children. The limited Irish data on the subject have been documented by Butler (2002a), who states that there is little or no empirical research aimed at establishing the precise contribution of parental alcohol use to child welfare problems, and official data-gathering on this subject – at both regional and national levels – continues to be somewhat haphazard.

The fact that children are likely to be affected by the problems arising from alcohol consumption is recognised by the World Health Organization (1995). The WHO European Alcohol Charter signed by all member states of the European Region, including Ireland, in 1995 states: 'All children and adolescents have the right to grow up in an environment protected from the negative consequences of alcohol consumption and, to the extent possible, from the promotion of alcoholic beverages.' In view of Ireland's stated commitment to the Charter, our failure to address the harms experienced by children and, indeed, by families is staggering and our lack of knowledge about the extent of the problem in Ireland is indicative of this contradictory attitude.

4.1 Effects of alcohol on education

The negative effects of alcohol on educational attainment can arise both from parental drinking and from drinking by the student him/herself. These effects can originate even before the child is born. Alcohol is a teratogen that readily crosses the placenta and can interfere with normal fetal development. The most devastating effects are the intellectual disabilities associated with the negative impact of alcohol on fetal brain development and the central nervous system. Fetal alcohol spectrum disorder (FASD) is the umbrella term used to describe the various developmental disorders associated with maternal alcohol use during pregnancy. These disorders range in diversity from the full presentation of Fetal Alcohol Syndrome (FAS) to a set of conditions – including partial fetal alcohol syndrome, alcohol-related birth defects and alcohol-related neuro-developmental disorders – that exhibit some, but not all, of the features of FAS.

There is a dose–response relationship between maternal drinking during pregnancy and cognitive problems that lead to learning problems in the school setting. FAS is characterised by flat mid-face, thin upper lip, small eye openings, short nose, short stature and central nervous system dysfunction, in addition to lower intellectual functioning in childhood and behavioural problems. These children may display symptoms of hyperactivity or attention deficit. A review of the cognitive and behavioural effects of prenatal alcohol exposure reported that children with FAS revealed an average IQ of 65.7 (normal IQ is 85+) (Mattson and Riley 1998) and virtually all FAS patients exhibit serious attention and behavioural problems (Streissguth *et al.* 1991).

There is considerable debate regarding the negative effects of low to moderate maternal alcohol consumption during pregnancy. It has been reported that children exposed to any level of alcohol prenatally were three times more likely to display delinquent behaviour compared with those not exposed, even after controlling for other factors (Sood *et al.* 2001). Other studies have found associations between low-level alcohol consumption in pregnancy and neurocognitive deficits in the child (Willford *et al.* 2006; Sayal *et al.* 2006; Streissguth and O'Malley 2000).

In Ireland in 2007, the Chief Medical Officer in the Department of Health and Children provided unambiguous advice in relation to alcohol consumption and pregnancy, stating: 'Given the harmful drinking patterns in Ireland and the propensity to "binge drink", there is a substantial risk of neurological damage to the fetus, resulting in Fetal Alcohol Spectrum Disorders (FASD). Alcohol offers no benefits to pregnancy outcomes. Therefore, it is in the child's best interest for a pregnant woman not to drink alcohol during pregnancy' (Department of Health and Children 2007). However, the National Institute for Health and Clinical Excellence in the UK (2008) has stated that if women choose to drink alcohol while they are pregnant they should consume no more than 8–16 grams of pure alcohol (one standard drink contains 10g of alcohol) once or twice a week.

There are currently no data available for the incidence of FAS or FASD in Ireland. In the US, the incidence of FAS has proved difficult to quantify, but is reported to be between 0.2 and 2 per 1,000 live births (May and Gossage 2001; CDC 2002); almost 10% of pregnant American women report some consumption of alcohol during pregnancy and 2% engage in binge drinking or frequent use of alcohol (CDC 2004). In comparison, based on figures from the Coombe Women's Hospital, almost two-thirds of Irish pregnant women consume alcohol (Barry *et al.* 2007). Another Irish study, by Donnelly (2008), reported that 54% of women admitted to drinking alcohol following a positive pregnancy test, with 8% of these women consuming more than five standard drinks (50g pure alcohol) per week. It has been estimated that as many as 9 per 1,000 live births in western countries involve children affected by FASD (Autti-Ramo 2002). Individuals with less severe FASD usually do not have facial effects, making the disorder more difficult to diagnose, but the disorder may be characterised by the presence of disturbances in behavioural, emotional, and/or social functioning. Around 80% of these cases display neuro-developmental disorder only (Gray and Henderson 2007).

The adverse effects of FASD may be influenced by the poor home environment experienced by many children of problem drinkers and by concurrent behavioural difficulties.

According to the CSO, there were 75,065 births in Ireland in 2008; applying the US rate of between 0.2 and 2.0 per 1,000 live births, we may infer that between 15 and 150 Irish children born in 2008 have FAS, and that up to 676 children are affected by FASD, based on a rate of 9 per 1,000 live births. This in turn means that, potentially, the school performance of these children will be adversely compromised as a consequence of prenatal alcohol exposure.

Beyond the risk of maternal drinking in pregnancy, parental drinking affects the child in other ways. Children are more likely to reach their educational potential if they are exposed from the outset to a healthy environment that is conducive to learning. Parenting styles among harmful drinkers are often characterised by inconsistency, neglect, and impoverished surroundings. Children of harmful users of alcohol have more disrupted school careers and are more likely to be poorly motivated with respect to education compared to other children (Christoffersen and Soothill 2003). These children are also more likely to have problems at school in terms of learning difficulties, reading problems, poor concentration, and low performance compared to other children. Absenteeism from school may result, as young people may have to care for a parent who is unwell or look after younger siblings. Feelings of anxiety and fear about a parent's welfare can also contribute to absenteeism or lead to disruptiveness in school. Career potential may be reduced if achievements at school are less than they would have been had the parental alcohol problem not existed.

A UK study examining the effects of parental harmful use of alcohol on children revealed that problems in the home led to poor performance at school. Such children fared poorly because of missing school or arriving late, or because of a lack of interest by parents in their work or abilities. The children reported that they missed school because they had to care for their parents, or because of worry about what was happening at home, or because supervision was so poor that there was no expectation of them to attend. They also reported difficulties in concentrating at school because of feeling tired due to taking on the caring routines in the home, and that school was not really a priority for them. They found it difficult to prepare for examinations and complete homework, and had low expectations and aspirations (Turning Point 2006).

It is also the case that children's own consumption of alcohol can cause problems to themselves and their intellectual development. Research has shown that adolescents are more vulnerable than adults to the effects of alcohol on learning and memory. The American Medical Association (2002) reported that an adolescent need drink only half as much as an adult to experience the same negative effects, and that even occasional binge drinking can damage the young brain. When the MRI (Magnetic Resonance Imaging) scans of 14–21-year-old brains were compared, it was discovered that those who abused alcohol had about 10% smaller hippocampi – the area of the brain that handles memory and learning and is responsible for decision-making and reasoning. Alcohol exerts a greater toll on the brain development of those aged under 21 than on any other age group. Adolescent drinkers scored worse than non-users in vocabulary, visual-spatial and memory tests and were more likely to perform poorly in school, and to experience social problems. The need to focus national attention on this issue was highlighted by the US Surgeon General (2007). In a call to action on underage drinking he pointed out that the developing adolescent brain may be particularly susceptible to longterm negative consequences of alcohol use and that recent studies show that alcohol consumption has the potential to trigger long-term biological changes that may have detrimental effects on the developing adolescent brain, including neurocognitive impairment.

Recent figures from the Health Behaviour in School-aged Children (HBSC) study (Gavin *et al.* 2008) indicate that a substantial minority of school-going adolescents in Ireland are regular weekly drinkers (Table 4.1), with the proportion increasing with age. This would imply that a significant number of schoolchildren are at risk of developing brain damage as a result of their own alcohol consumption, which may have negative effects on their educational attainment. Early drinking also increases the likelihood of developing alcohol dependence in later life. People who begin drinking before the age

of 15 are four times more likely to develop alcohol dependence at some time in their lives than those who have their first drink at age 20 or older (Grant *et al.* 1997).

Age	Boys %	Girls %	All %
13 years	3	1	2
14 years	9	7	8
15 years	14	14	14
16 years	22	20	21
17 years	37	31	34
18 years	43	36	40

 Table 4.1
 Self-reported weekly alcohol use by schoolchildren, by age and gender (HBSC 2006)

Source: Gavin et al. (2008)

In the most recent European School Survey Project on Alcohol and other Drugs (ESPAD) report (Hibell *et al.* 2009), which compared alcohol and drug use among 15–16-year-old students in 35 European countries, 12% of Irish boys and 14% of girls surveyed reported that they had performed poorly at school or work in the previous 12 months as a result of their own alcohol use. In the College Lifestyle and Attitudinal National (CLAN) survey of undergraduate full-time students in Ireland, 55% of males and 48% of females had felt the effects of alcohol while at class or at work in the past 12 months. One-third (34%) of males and one-quarter (25%) of females reported that their studies or work had been harmed in the past year as a result of their own alcohol use, and 48% of males and 42% of females had missed school or work days due to their own alcohol use (Hope *et al.* 2005a).

For those presenting for treatment to services, it appears clear that harmful use of alcohol and low educational attainment are linked, it is difficult to determine whether harmful use of alcohol directly leads to lower educational levels or vice versa. Other social and economic factors are likely to play a part. According to the National Drug Treatment Reporting System (NDTRS), 17% of 15–64-year-old cases treated in 2008 who reported alcohol as their main problem substance had left school at the age of 14 years or under (Table 4.2). In comparison, just 6% of the general population aged 15–64 years had left school at 14 years or under, according to the 2006 census. Of the total number of cases treated in 2008 who reported harmful use of alcohol, 1,097 (13%) were aged 23 years or under. Given that it usually takes a number of years of heavy drinking for alcohol problems to become apparent and for harmful drinkers to present at treatment services, it is probable that the education of these individuals has been severely affected. Low levels of educational attainment can lead to poorer economic prospects and social disadvantage for these people.

Table 4.2	Persons aged 15	-64 vears.	by age of	school leaving	(NDTRS 20	08: CSO	2006)
	i oroono ugou re	, or youro,	by ugo or	oonoon louving	(110 110 20	00,000	2000)

	NDTRS	S (2008)	CSO (2006 census)	
	%	(n)*	%	
Left school aged 14 years or under	16.9	(1064)	6.3	
Left school aged 15 years or over	80.7	(5067)	75.8	
Still at school	2.4	(148)		
Education not ceased			17.8	

*No data for 1,911 cases

Table 4.3 presents the highest level of education completed by cases aged 15–64 years recorded by the NDTRS compared to the general population. In general, cases receiving treatment for harmful use of alcohol had lower levels of education compared to the general population. This was

especially evident with regard to third-level education: 9% of NDTRS cases had completed third-level education, compared to 27% of the general population.

Table 4.3	Persons aged 15–64 years, by highest level of education completed (NDTRS 2008; CSO
	2006)

	ND	TRS (2008)	CSO (2006 census)
	%	(n)	%
Primary (incl. no formal education)	17.1	(1405)	10.1
Junior certificate	29.4	(2411)	17.2
Leaving certificate	22.9	(1878)	25.2
Third level	8.9	(728)	26.7
Still in full-time education	3.3	(272)	12.0
Not stated/Other	18.3	(1496)	8.8

4.2 Effects of alcohol on employment

Harmful use of alcohol can result in substantial economic costs or loss of labour-market productivity, in part through the direct health-related consequences of alcohol use, such as physical injuries in the workplace, and through absenteeism. Alcohol is known to be a major reason for workplace absenteeism. In the UK, the Prime Minister's Strategy Unit (2004) estimated that up to 17 million working days were lost each year as a consequence of alcohol-related absence. It was estimated that the annual cost of alcohol-related harm from loss of productivity and profitability in the workplace was up to £6.4 billion. This was due to increased absenteeism, increased unemployment and premature death. The evidence and estimates presented here indicate that there is a strong correlation between alcohol and work absence. An Australian survey of 13,582 workers examined the relationship between workers' drinking patterns and alcohol-related absenteeism. High-risk drinkers were up to 22 times more likely to be absent from work because of their alcohol use compared to low-risk drinkers. High-risk drinking was defined as consumption of 11 or more standard drinks (110g+ of pure alcohol) for men and seven or more (70g+ of pure alcohol) for women on any one day at least weekly, or an average weekly consumption of 43 or more standard drinks (430g+ of pure alcohol) for men and 29 or more (290g+ of pure alcohol) for women. Young employees and males were more likely to report alcohol-related absenteeism compared to older employees and females. The study also showed that alcohol-related absenteeism was not restricted to chronic heavy drinkers, but included the much larger number of non-dependent drinkers who binge drink periodically (Roche et al. 2008).

There are few published studies in Ireland that examine the association between alcohol and workplace productivity. A conservative estimate of the cost of alcohol-related problems was reported at €2.65 billion a year in 2003, of which loss of output due to alcohol-related absences from work was estimated to be €1 billion (DOHC 2004). The Irish Business and Employers' Confederation (IBEC 2004) carried out a small survey of 557 organisations, in which 12% of companies cited alcohol and alcohol-related illnesses as a cause of short-term absence for men, and 4% of companies reported the same for women. Some 40% of short-term absences occurred around the weekend. The Confederation estimated that absence from work costs Irish businesses about €1.5 billion a year.

Excessive drinking at the weekend may lead to severe hangover and absence from work on Mondays. People who take occasional days off sick are not necessarily 'chronic problem drinkers' and, conversely, people with an alcohol dependency are often very good at hiding it, not least from themselves, so their attendance record may be unblemished for long periods of time. The problem of alcohol-related absenteeism was noted in the final report of the Commission on Liquor Licensing (2003), in particular the adverse impact of later opening hours on Thursday nights on young people reporting for work or training on Friday mornings. While the evidence was mainly anecdotal, the

Commission recognised the negative impact of the extended opening hours and recommended that closing time should revert to 11.30 pm on Thursdays.

In a comparative study of Irish drinking habits, 12.4% of men and 2.9% of women aged 18–64 years living in Ireland reported that they had experienced adverse effects on their work or studies in the previous 12 months as a result of their own alcohol use (Figure 4.1) (Ramstedt and Hope 2005). When compared to participants in six countries involved in the European Comparative Alcohol Study, men living in Ireland had the highest level of adverse effects on their work or studies and women had the second highest level (women living in the UK reported the highest level). Across the ECAS countries, the average percentage of men experiencing adverse effects on their work or studies was 4.7%, and for women the rate was 1.8%.



Figure 4.1 Experience of adverse effects of alcohol use on work or studies in the past 12 months in Ireland and the ECAS countries, by age and gender

Source: Ramstedt and Hope (2005)

Young men aged 18–29 years were most likely to report adverse effects on their work or studies as a result of their own alcohol use; one in five (19.5%) of this group reported adverse effects, compared to 8.9% of men aged 50–64 years. While women were much less likely to report adverse effects to their work or studies – just 1% of women aged 30–64, 10% of women aged 18–29 reported adverse effects. This relatively high proportion of young women reporting adverse effects is probably not too surprising, given that binge drinking is common among this group (Ramstedt and Hope 2005).

High unemployment seems to be common among people presenting for treatment. In 2008, 45% of cases receiving treatment for harmful use of alcohol were unemployed, compared to 4.1% of the general population (Table 4.4). Almost 30% were in paid employment. The causal link between alcohol abuse and unemployment is complex: problem drinking may reduce employability but unemployment can also increase alcohol use and abuse. It is also important to note that people presenting to alcohol treatment services often have the most severe alcohol problems; these data do not include those who may use alcohol in a harmful way but have not presented for treatment.

	NDTF	RS (2008)	CSO (2008)		
	%	(n)	%		
At work	29.8	(2512)	57.7		
Unemployed	45.1	(3805)	4.1		
Student	3.2	(272)	10.3		
On home duties	5.1	(434)	15.2		
Retired	11.8	(994)	8.8		
Other/Unknown	4.9	(422)	3.9		

Table 4.4Persons aged 15 years and over, by employment status (NDTRS 2008; CSO 2008)

4.3 Conclusion

Harmful use of alcohol disrupts career opportunities and work relations. Maternal drinking during pregnancy can result in FASD, which can have a negative effect on a child's ability to complete their schooling and attain educational qualifications. Early onset of alcohol problems among young people can significantly retard educational attainment and stifle job opportunities. It is difficult to determine whether alcohol problems lead to poorer educational outcome and employment prospects or whether failure to complete education and secure or retain employment leads to a greater likelihood of developing chronic alcohol problems. In order to address deficiencies in education and employment, it is important to provide harmful users of alcohol with social and/or occupational integration as part of the treatment process. There are major research gaps regarding the relationship between alcohol use and problems in the workplace. There is a pressing need for detailed research on the financial costs to the workplace and the effects on productivity arising from alcohol-related absenteeism in Ireland. There is also a need for research on the chronic and acute effects of alcohol and its impact on the workplace.

5 Alcohol and crime

5.1 Introduction

It is obvious that the vast majority of drinking occasions do not necessarily lead to violent or other aggressive behaviour. Moreover, most drinkers never commit acts of violence, regardless of whether they are drunk or sober. However, since earliest historical records alcohol has been linked with antisocial and criminal activities, including violent behaviour. Alcohol is a depressant, psychoactive drug that can affect attention levels, information processing, reasoning, problem-solving and impulse control; impairment of any of these faculties can increase the likelihood of crime. An extensive body of evidence has consistently shown that, in societies and situations in which alcohol consumption is commonplace, criminal acts often involve perpetrators who had been drinking prior to committing the offence or who were intoxicated at the time of their crime. This association does not, in itself, prove the existence of a direct causal connection between drinking and rowdiness or violence. While alcohol consumption may contribute to aggression and violent behaviour, drinking is neither a necessary nor a sufficient cause of either. Nonetheless, significant and positive associations between alcohol consumption and rates of criminal violence have been observed (Room and Rossow 2001). We can say with some confidence that more drinking tends to result in more violence, and less drinking tends to result in less violence.

This chapter describes the extent of alcohol's contribution to violence and public disorder and examines the link between alcohol and crime. Data from the Irish Garda PULSE (Police Using Leading Systems Effectively) system were analysed to describe the extent of alcohol-related crime in Ireland and the profile of the perpetrators. Drunkenness, public order, assault and drink-driving offences recorded on the PULSE system are analysed for the years 2003–2007.

5.2 Alcohol-related violence

Although estimates of the proportion of violent crimes involving alcohol vary considerably depending on the type of crime and on the country where it occurs, a reasonable overall estimate is that over 50% of assailants have been drinking prior to their offences (Graham *et al.* 1998). An international comparison reported that alcohol involvement in assaults and homicides ranged from 35% in Canada to 85% in Sweden (Klingemann 2001). According to the 2007/2008 British Crime Survey (Kershaw *et al.* 2008), victims believed the offender(s) to be under the influence of alcohol in 45% of all violent incidents; this would imply that there were 947,000 violent incidents in the UK where the victim believed the offender(s) to be under the influence of alcohol. Analysis of 1,594 homicides in Wales and England between 1996 and 1999 revealed that alcohol played a major role in 52 (6%) and a minor role in 364 (39%). In homicides where alcohol was a contributory factor, perpetrators were more likely to have previous convictions for violence, less likely to have a serious mental illness but more likely to have a personality disorder. Victims were older, more likely to be male and to be strangers (Shaw *et al.* 2006).

A study investigating the role of alcohol in injury cases attending Irish emergency departments revealed that over one-third (35%) of alcohol-related injuries (defined as those occurring in a person who had consumed alcohol in the six hours prior to the injury event) were intentional and perpetrated by somebody else. Of the injuries that were not alcohol related, only 5% were intentional and perpetrated by somebody else (Hope *et al.* 2005a). In 79% of the alcohol-related intentional injuries the respondent stated that the perpetrator had definitely been drinking, compared to 48% of the respondents in the case of non-alcohol-related injuries. This difference was statistically significant, lending credence to the belief that alcohol consumption increases the likelihood of being a victim of aggression. Of the injuries that were caused by someone else, strangers were the main perpetrators of the injury to both those who had and those who had not been drinking. However, a spouse or partner was twice as likely to be the perpetrator of alcohol-related injuries (8% vs. 4%) in comparison to non-alcohol-related injuries.

The College Lifestyle and Attitudinal National (CLAN) survey investigated the occurrence of violent incidents attributable to alcohol among third-level students. One in five males (21%) and one in 10 females had been in a fight in the previous 12 months as a result of their own alcohol use. Regular binge drinkers (defined as binge drinking at least once a week) were more likely to have been in a fight, compared to less frequent binge drinkers or non-binge drinkers (22% vs. 6%) (Hope *et al.* 2005b). Binge drinking was defined as consuming 75 grams or more of pure alcohol on the one occasion; 75 grams of pure alcohol is the equivalent of approximately four pints of beer, seven pub measures of spirits or one bottle of wine. In a European comparison survey, 12% of Irish men and 3% of women reported that they had got into a fight in the previous 12 months as a result of their alcohol use. In comparison, the average for the six other countries was 4% for men and 1% for women. In Ireland, young men and women aged 18–29 years were most likely to report having been involved in a fight (16% and 7% respectively) (Ramstedt and Hope 2005).

5.3 Alcohol and public disorder

An indicator of alcohol-related social harm is the level of drunkenness and disorder in public places, which undermines confidence in public safety. Research on alcohol outlets has demonstrated that greater numbers of bars and off-premise drinking places in a single location are related to greater problems (Livingston 2008; Gruenewald *et al.* 2006; Zhu *et al.* 1994). Interpersonal violence appears to occur more often in and around locations of alcohol outlets, and the locations of bars and alcohol outlets are correlated with higher rates of violence.

Premises licensed to sell alcohol disturb neighbourhoods. Noise from bars, public houses and hotels with late closing constitutes a public nuisance. Litter such as beer cans or glass bottles is a nuisance and safety risk. Fear of crime, vandalism and graffiti diminish property values and cause concern about the preservation of a distinctive atmosphere and the reputation of a town as a clean and orderly community. In Australia, 40% of alcohol-related accidents stem from drinking in licensed establishments (Stockwell 1994). Research evidence suggests that liberalisation and deregulation with respect to outlet density and opening hours can result in an increase in alcohol-related disturbances to public order and threats to safety, the cost and burdens of which the taxpayer and the general public have to suffer. Evidence indicates that a large proportion of violent crime occurs in and around licensed premises.

An Australian study examined the link between alcohol outlet density and assault in Melbourne and found that alcohol-related assaults increased with the number of outlets (Livingston 2008). However, the author noted that there may be a point after which each additional outlet contributes increasing numbers of additional assaults. This suggests that alcohol-related problems do not necessarily increase consistently with outlet density, and supports the development of appropriate caps on liquor licences in local areas. A Californian study supported the notion that levels of violence are associated with characteristics of the environment and that, in turn, these associations are related to the availability of alcohol (Gruenewald *et al.* 2006).

The National Crime Council (2003) commissioned research into public order offending in Ireland. Data were collected and analysed from a variety of criminal justice agencies within the State. In addition, the researchers accompanied the Garda Síochána on duty for a six-month period in two sites, one in Dublin city centre comprising an active entertainment zone and one in Dublin suburbs with a predominantly residential population. The study identified licensed premises as a major source of public disorder. In the city centre location, 40% of incidents occurred either on or inside licensed premises, compared to 7% in the suburbs. The researchers noted that the PULSE system had a facility for recording whether the Garda Síochána believed that the offender had consumed alcohol or other drugs, but that in 66% of cases no such information was recorded. Of the cases in which such information was recorded, 97% identified alcohol as a contributory factor. In its report, the Crime Council reiterated the association between alcohol consumption and public order offending. It recommended that a new national alcohol policy be developed to provide a framework which would set out clearly defined objectives and measureable criteria for implementation in a co-ordinated

way by relevant government departments and agencies. O'Donnell (2005) has highlighted the consequences of increased alcohol consumption for public order on the streets. Between 1996 and 2003 the number of prosecutions taken under public order legislation more than trebled, in line with an increase in consumption.

5.4 Sexual abuse

The Sexual Abuse and Violence in Ireland (SAVI) study of over 3,000 Irish adults contained a number of questions on alcohol's involvement in sexual abuse (McGee *et al.* 2002). It reported that 24% of men and 30% of women experienced some level of sexual abuse in childhood, and that 12% of men and 26% of women experienced some level of sexual abuse in adulthood. Alcohol was involved in almost half of the cases of sexual abuse that occurred in adulthood (53% of men and 45% of women). Of those who reported alcohol involvement, both parties were drinking in 63% of cases concerning sexual assault of men and in 57% of cases concerning sexual assault of women. Where only one party was drinking, the perpetrator was the one drinking in the majority of cases (70% of male and 84% of female assault cases). For those abused as children, 10% of both men and women stated that alcohol was involved.

These statistics are similar to those reported by national studies in other countries. In a US study, the perpetrator was reported to have been using alcohol at the time of the sexual assault in over one-third of cases (Greenfield 1998). The US 1992–1994 National Crime Victimisation Survey found that 61% of sexual assault victims reported that the perpetrator had used either alcohol or drugs at the time of the offence (Brecklin and Ullman 2001). Alcohol use by the victim just prior to the assault was associated with assault by a stranger, as was being in riskier situations. Data examined from a US sample of college women suggested that a drunk or drinking victim may be targeted by the offender who sees an opportunity to commit sexual assault (Ullman *et al.* 1999). Alcohol may also contribute to sexual violence through multiple pathways, including its effects on cognitive and motor skills, beliefs about its effects on sexual behaviour and aggression and stereotyped views about those who drink (Abbey *et al.* 2001).

5.5 How alcohol causes crime

There is no simple causal relationship between alcohol and crime; however, a number of contributing factors leading to alcohol-related crime have been identified. These causes include the effects of alcohol; the effects of the drinking environment; personality, attitudes or other expectations of the drinker; and societal attitudes, expectations and values (Graham *et al.* 2000). Alcohol may act as a 'disinhibitor' whereby people, after drinking, may behave differently to their supposed 'normal' behaviour while sober (Room and Collins 1983). Alcohol depresses the higher centres of the brain and there is a belief that disinhibition is a pharmacological property of alcohol. This presumed pharmacological action is often used to excuse or account for otherwise inexcusable behaviour. The importance of the drinking context has also been demonstrated. Many of the situational factors, such as crowding, frustration and the presence of other intoxicated persons are correlated with alcohol-related crime and would be expected to increase the probability of aggression regardless of any effects of alcohol (Graham *et al.* 2000).

The psychological expectancies of alcohol, that is, the belief that alcohol causes people to behave aggressively, may actually cause drinkers to behave aggressively. Drinking patterns in society generally have an effect on alcohol-related crime (Room and Rossow 2001). There are some cultures in which aggressive or criminal behaviour rarely or never occurs when people drink. Other cultures have defined drinking occasions as situations in which normal restrictions on behaviour do not apply, and drinking and violence are thereby associated. In other words, these societies define drinking events as 'time out'. Alcohol intoxication becomes an excuse for behaviour that violates prevailing norms (Graham *et al.* 1998).

There are complex interactions between crime and alcohol use, with drinking patterns at national and individual levels having a considerable effect. As per capita consumption increases, so too

does the rate of violent crime. Changes in total alcohol consumption in Sweden between 1956 and 1994 accounted for 47% of the increase in the country's assault rate, and as much as 69% of the homicide rate (Norstrom 1998). Countries vary greatly, however, in the relationship between total consumption and crime, which indicates that drinking patterns and social factors not directly related to level of consumption also play a part. Pooled estimates from time-series analyses of alcohol sales and homicide rates in 14 European countries (1950–1995) across three regions of Europe found that the impact of alcohol on homicide rates was highest in Nordic countries, where acute intoxication to a large extent characterises the drinking pattern. Homicide rates were lowest in Mediterranean countries, where a 'wet' drinking culture predominates, whereby alcohol consumption is integrated into everyday life and is usually consumed with meals. This difference in homicide rates was a positive and statistically significant association between total alcohol sales and total homicide rates.

In a Norwegian study, both frequency of intoxication and overall alcohol consumption were positively associated with the probability of having been in a fight while intoxicated. The risk increased with frequency of drinking, frequency of being intoxicated and frequency of visiting public drinking places (Rossow 1996). Analysis of the 2003 Offending, Crime, and Justice Survey in the UK (Matthews and Richardson 2005) found that those who frequently binge drink were more likely to report offending in the previous year compared to their sober counterparts, with young adult male binge drinkers (defined as those who reported being very drunk at least once a month in the past 12 months) reporting the highest rates of offending. Among 18–24-year-olds, 27% of binge drinkers admitted that they had committed an offence in the previous 12 months, compared to 13% of other regular drinkers. Even after other factors were taken into account, frequency of drunkenness was still an important indicator of criminal and disorderly behaviour during or after drinking. The likelihood of getting into an argument, of getting into a fight and of damaging something during or after drinking increased the more frequently individuals drank to intoxication.

Most crimes, including alcohol-related crimes of violence and drink-driving, are committed by men; however, recent analyses of survey responses suggest that the higher rate of alcohol-related consequences among men cannot be accounted for entirely by higher rates of alcohol consumption. Studies have found that the effect of alcohol on aggression is greater in men than in women. Age group has also been consistently related to levels of crime in general and to alcohol-related crime specifically. Victimisation surveys indicate that the younger age groups (24 years and under) report the highest rates of violence victimisation (CSO 2007; Rossow 1996), with the rate reported in Ireland by those aged 18–24 years four times higher than that by those aged 45–64 years (CSO 2007).

Drinking by the victim is often a crucial factor in the alcohol and crime nexus. Intoxicated individuals are easy prey for robbers and thieves. Assaults by people who have been drinking are more likely to involve victims who have also been consuming alcohol (Lindqvist 1991). It can be argued that the most plausible connection between alcohol and crime is that those who are drunk are easy and traditional prey for criminal harm. However, when fights or assaults are initiated and both parties are drunk, it can be unclear who will end up as the victim. Pooled estimates have revealed that a harmful or hazardous level of alcohol consumption by the victim is a contributory cause of 47% of assaults (English *et al.* 1995). Another study found that women who had been drinking were less likely to recognise dangerous situations and therefore were more vulnerable to sexual assaults (Testa *et al.* 2003b).

5.6 Alcohol-related crime and young people

It is widely acknowledged that there is a lack of meaningful, detailed and up-to-date statistical data on the operation of the Irish youth justice system. However, a couple of studies focusing on the Children Court have been undertaken in recent years. Both studies illustrated the major contribution that alcohol plays in cases appearing before the Court. There is a high chance in such cases that the young person has a family member with an alcohol problem and that the young person committed an alcohol-related offence him/herself. Kilkelly (2005) observed court proceedings in 944 cases over 50 days in 2004 and highlighted the significant influence of alcohol in the lives and offending of young people who faced charges in the Children Court, with drunkenness and harmful use of alcohol common occurrences. Public order offences were almost exclusively alcohol-related, as were the charges of assault; many of the charges of theft also involved alcohol as the principal item being stolen, and theft of other items easily resold were sometimes explained by a desire to fund alcohol or drug habits. The typical profile of the young person appearing before the Children Court was that of a male aged between 16 and 17 years, with problems of varying complexity, including alcohol or drug addiction, health problems such as behavioural disorders, educational disadvantage and a lack of family support.

Carroll and Meehan (2007) collected information on 400 young people under the age of 18 with cases complete in the Children Court in 2004. Of the 210 young people for whom family background information was available, 40 (19%) had a family member with an alcohol or drug problem. In 40% of these 40 cases the young person's father had addiction issues, in 33% the mother, and in 15% both parents had problems with drug or alcohol misuse. Substance misuse by siblings and other family members, such as uncles and aunts, was also noted. Alcohol and drug use was also prevalent in the lives and crimes of the young people themselves, with 30% committing alcohol-related crimes and 5% committing drug-related crimes.

According to the most recent ESPAD report, Irish teenagers experienced more delinquency problems as a result of their own alcohol use than their European counterparts; 15% of Irish teenagers stated that they had been involved in a physical fight in the past 12 months as a result of their own alcohol use and 13% had been in trouble with the police (Table 5.1). These percentages were higher than the average recorded for all participating countries (Hibell *et al.* 2009).

	Boys		Girls		Total	
	Ireland	Ireland Europe	Ireland	Europe	Ireland	Europe
	%	%	%	%	%	%
Been in physical fight	17	19	12	8	15	13
Victimised by robbery or theft	4	3	3	2	4	3
Trouble with police	14	10	13	5	13	7

Table 5.1Delinquency problems experienced by Irish and European students in the previous 12
months due to their own alcohol use (ESPAD 2007)

5.7 Prisoners

Prison populations include substantial proportions of men and women who are heavy drinkers or have alcohol-related problems. A study of a representative sample of 777 prisoners in Irish prisons reported that 41% of male and 24% of female prisoners were under the influence of alcohol when they committed the offence for which they were incarcerated. A high proportion (54%) of young males aged 15–24 were under the influence of alcohol when they committed their crime (Hannon et al. 2000). In total, 82% of male and 60% of female prisoners stated they had drunk alcohol in a typical week before imprisonment. On a typical drinking occasion male prisoners consumed 12 standard drinks (120g pure alcohol) and females consumed an average of nine standard drinks (90g pure alcohol). Taking into account that prisoners reported drinking on an average of four days (males) or five days (females) per week, their total weekly consumption of alcohol is likely to have exceeded the recommended low-risk drinking limits. Another study of Irish prisoners found a lifetime prevalence of harmful use of alcohol or dependence of 60% among remanded prisoners and a point prevalence of 35% (Linehan et al. 2005). It would appear that excessive alcohol consumption and harmful use of alcohol are much more prevalent among prisoners than among the general population. These results are similar to those of a US study, where about 40% of offenders in state and local jails had been drinking at the time of the offence for which they were jailed (Room and Rossow 2001).

5.8 Drink-driving

The practice of driving a car while under the influence of alcohol contributes to injuries, disabilities and death to both drivers and innocent road users. It has been shown that all levels of blood alcohol concentration (BAC) are associated with a higher risk of collisions (relative to a BAC of zero), and that the risk of injury increases exponentially with markedly higher BACs. Studies have found that for a driver with a BAC of 0.05% the risk of crashing a vehicle is double that for a driver with a BAC of zero (Babor *et al.* 2003).

The most recent SLAN (Survey of lifestyle, attitudes, and nutrition) survey reported that 12% of drinkers who were also drivers had driven a car in the previous year after consuming two or more standard alcoholic drinks. Men were more likely than women to have done this (17% vs. 5%) and there were no differences in drink-driving behaviour across age groups (Morgan *et al.* 2008). In 2003, all fatal road cashes in Ireland were analysed using the National Traffic Bureau files. The study established that alcohol was a contributory factor in 36.5% of all fatal collisions, and that 40% of drivers who died tested positive for alcohol (Bedford *et al.* 2006). Alcohol-related fatalities were more likely among male drivers. The rate of alcohol-related death among drivers was highest for those aged 19–34 years and lowest for those aged 60–69 years. Alcohol-related fatal collisions were three times more likely to occur on Saturday, Sunday and Monday and were more common late at night and early in the morning.

5.9 Effect of policy on alcohol-related offences

A number of studies have found that an increase in a population's drinking level is followed by an increase in rates of violence in that population (Rossow 2001). When alcohol consumption is restricted through increasing prices and reducing availability, crime rates are deflated, thus illustrating that the alcohol and crime association is not spurious and that alcohol policies advocating environmental controls have merit (Mosher and Jernigan 2001). This association can be interpreted as a reflection of two underlying mechanisms: an increase in total consumption implies an increase in the proportion of people who are drinking heavily and in that condition are more prone to behave aggressively or violently, and an increase in total consumption implies an increase in the number of drinking occasions that lead to acute intoxication, which may trigger violent behaviour among otherwise moderate consumers. The former Soviet Union's curbs on alcohol production in 1985 were reportedly accompanied by a 40% decline in the murder rate among Russian males (Shkolnikov and Nemtsov 1997 cited by Graham *et al.* 1998).

Lower BAC limits consistently produce positive results in relation to alcohol-related road traffic accident rates. At the current Irish BAC limit of 0.08%, the risk of crashing a vehicle is 10 times that for a person with a zero BAC, and at BACs of 0.15% or higher the relative crash risk is in the hundreds (Borkenstein *et al.* 1974). A number of countries have introduced a graduated licensing system, whereby the BAC limit for young or inexperienced drivers is set at zero. This measure has been shown to be effective in reducing drink-driving among younger people. Increasing the frequency and visibility of drink-driving enforcement increases the perceived probability of being apprehended among motorists and can result in fewer collisions.

Legislation was introduced in Ireland in July 2006 which permits random breath testing. This allows the Garda Síochána to stop motorists at random and request a preliminary breath test, even when the driver is not suspected of having committed an offence or of being involved in a collision. In the first year after its introduction there were 337 road deaths, a decrease of 19% compared with the 414 deaths in the corresponding period in 2005/6. A review of 23 studies of random breath testing to assess its effectiveness found a decline of 13%–36% in fatal road collisions following its implementation (Shults *et al.* 2001).

An international review of the effectiveness of 32 policy interventions sponsored by the WHO (Babor *et al.* 2003) concluded that the most effective strategies for reducing alcohol-related harm were alcohol taxes, regulating physical availability, that is, restricting hours and days of sale, restricting

outlet density, and introducing minimum legal purchase ages, and drink-driving countermeasures such as random breath testing, lowered BAC limits and low BAC for young drivers.

5.10 The Garda Síochána PULSE system

The Garda PULSE (Police Using Leading Systems Effectively) system was introduced in late 1999 primarily to service the information needs of the policing business area. Until 2006, recorded crime statistics were published in the annual reports of the Garda Síochána. In 2006, responsibility for reporting crime statistics was transferred to the Central Statistics Office (CSO). In 2008 the CSO introduced a new Irish Crime Classification System (ICCS), which was developed by the CSO and the Garda Síochána, in conjunction with an Advisory Group on Crime Statistics. The ICCS was used for the first time in the report *Garda recorded crime statistics 2003–2006* published in 2008. As we are using the same classification system for this analysis we decided to analyse only data pertaining to 2003 onwards. This classification is described in further detail in Appendix 1.

A criminal offence is classified at the time it is entered on the PULSE system. In the vast majority of cases, this happens very soon after the incident becomes known to a member of the Garda Síochána; however, all data recorded have the potential to be revised. For criminal events which consist of more than one offence, for example, assault and public disorder occurring as part of an event, only the most serious incident is counted for statistical purposes. This ensures consistency when it comes to comparison of data across geographic boundaries or over time. A criminal event is recorded according to the number of victims involved; in general, one offence counts per victim. Therefore, an assault with one offender and two victims counts as two offences or incidents. Conversely, an event with two offenders and one victim counts as one offence in the recorded crime statistics. As the offences under study in this analysis can be committed by more than one person, there are more offenders than offences. All recorded offences or incidents are included in this analysis, regardless of the outcome, that is, we have not studied how many of these incidents led to relevant legal proceedings and/or resulted in convictions.

In order to assess the contribution of alcohol to crime in Ireland, data from the PULSE system were analysed. Access to annoymised individual-level data rather than aggregated data was sought, as this allowed more extensive data analysis for the purposes of this Overview. This also allowed for the recoding of variables and cross tabulations which enabled us to answer more specific research questions. While the PULSE system has the facility to record whether alcohol is involved in a crime, this information is not routinely recorded. Therefore, we limited this analysis to crimes in which alcohol was definitely involved, for example, drunkenness and drink-driving offences, and crimes which commonly have alcohol as a contributory factor, for example, assaults and public order offences. The PULSE system does not explicitly record whether an assault is alcohol-related or not. However, assaults are included in this analysis as they are considered a valid proxy for alcoholrelated violence internationally (WHO 2004). A comparison of assault rates across Sweden, Norway, Finland, USA and Canada revealed that alcohol involvement in assaults and homicides ranged from 35% to 85%. Given that Ireland has a higher per capita rate of consumption than the countries studied, and drinking patterns among people in Ireland are often synonymous with binge or heavy episodic drinking, we can assume that alcohol plays a major role in assaults in Ireland. Similarly, there is sufficient evidence to support the argument that alcohol plays a major role in public disorder.

It is important to note that the PULSE system is an operational database and its main function is to record Garda activity. There are therefore limitations when using such a system for research purposes. An increase in the number of alcohol-related offences recorded does not necessarily reflect an increase in the underlying level of these behaviours; increased recording may also be a consequence of changing Garda priorities or the targeting of particular places or activities. Obviously, not every crime comes to the attention of the Garda Síochána, and the CSO provides additional information on non-recorded crime through its victimisation surveys. In the most recent crime and victimisation survey, victims of crime reported just over half (53%) of all assaults and 43% of vandalism cases (CSO 2007). The survey report stated that reporting of crime incidents to the Garda

Síochána seemed to be related to the perceived seriousness of the crime, the financial loss incurred (and whether the loss was insured) and the individual's perception as to whether the Garda Síochána could or would do anything about the incident. It is therefore safe to assume that the PULSE system underestimates the amount of crime in Ireland. Consequently, the analysis presented in this Overview does not completely portray the extent of alcohol-related crime committed in Ireland. For a more complete picture the CSO crime and victimisation surveys could ask victims of crime whether the perpetrator, in their opinion, had consumed alcohol prior to the offence.

5.11 Analysis of PULSE data

Figure 5.1 presents the trends in the number of incidents of drunkenness, public order and assault offences between 2003 and 2007. The number of public order offences increased considerably from 26,205 in 2003 to 40,824 in 2007, an increase of 56%. The number of assault offences increased by one-fifth (19%), with the largest increase observed between 2006 and 2007 (11%). There were fluctuations in the number of drunkenness offences, which peaked in 2005 (13,036) and decreased by one-fifth (20%) over the following two years. This does not necessarily imply a genuine decrease in drunkenness. As the Garda Síochána only record the most serious offence, it is possible that some drunkenness offences are classified as public order offences as this is the more serious offence. The Garda Information Service Centre (GISC) was introduced in 2005 on a phased basis and its remit is to enter and record all incidents recorded by the Garda Síochána on the PULSE system. The introduction of this service centre and subsequent changes in reporting practices may be responsible for some of the variation in trends since 2005. It is also possible that there has been an increase in home drinking in recent years and that this has led to a decrease in public drunkenness.



rigule 5.1 Thends in druhkenness, public order and assault offences (FOLSE 2005–2007)

Not all assaults are reported to the Garda Síochána, as borne out by the most recent household survey on crime and victimisation, which reported that almost half (47%) of those who experienced a physical assault did not report it, for a variety of reasons (CSO 2007). Therefore, the number of assaults recorded by the PULSE system can be regarded as an underestimation of the true level of violence perpetrated in Ireland. If only 53% of assaults are reported, we can therefore estimate that there were actually 28,502 assaults in 2007, of which 15,106 were reported. Based on international figures, we can estimate that alcohol was involved in 9,976–24,227 of these assaults.

5.11.1 Profile of offenders

As an offence may be committed by one or more offenders, more offenders than offences are recorded by the PULSE system. The age and gender profile of offenders was very similar for each offence type (Table 5.2). Males accounted for just over 88% of drunkenness and public order offenders. The proportion of females was higher among assault offenders (17%) than among drunkenness and public order offenders (11.4% and 11.8% respectively). The age range of offenders was also similar across each offence type, with the mean age ranging from 25.7 years for public order offenders.

	Drunkenness	Public order	Assault
No. of offences	59,154	159,074	66,413
No. of offenders	64,515	183,519	76,638
Males* (%)	88.6	88.2	82.8
Females* (%)	11.4	11.8	17.2
Mean age* (years)	27.7	25.7	27.0
Median age* (years)	24	22	24

Table 5.2 Profile of drunkenness, public order and assault offenders (PULSE 2003–2007)

*Cases where gender and/or age were not recorded are not presented here.

Figure 5.2 describes the age profile of offenders. The 18–24-year age group was responsible for twofifths (40%) of offences. The typical profile of a drunkenness, public order or assault offender is that of a male aged under 24 years. This is not surprising as numerous drinking surveys have identified young males as having the highest level of both alcohol consumption and binge drinking in Irish society. They are also the group that are most likely to have experienced harms as a consequence of their own alcohol use (Ramstedt and Hope 2005; Morgan *et al.* 2008).



Figure 5.2 Drunkenness, public order and assault offenders, by age group (PULSE 2003–2007)

Those aged under 18 years accounted for 17% of offenders. This is probably not surprising as alcohol consumption and drunkenness occur among minors even though the Intoxicating Liquor Act 2003 prohibits the sale or delivery of alcohol to a person aged under 18 years on a licensed premises. According to the most recent Health Behaviour in School-aged Children (HBSC) study, 14% of 15-year-olds, 21% of 16-year-olds and 34% of 17-year-olds drink weekly, with little variation between the sexes (Gavin and Nic Gabhainn 2008). Over one-third of boys and girls aged 15–17 years reported being drunk in the previous 30 days.

Figure 5.3 presents the trends in the number of offences among minors (under-18s) from 2003 to 2007. As data on age were recorded for only 69% of assault offenders, the figures presented here may be an underestimation of the actual number of assaults committed by minors. The total number of offences among minors increased from 6,531 in 2003 to 10,037 in 2007, an increase of 54%. While increases were observed for each offence type, the increase in the number of public order offences (78%) was noticeably higher than that of other offences. There were 8,473 drunkenness offences committed by 9,898 offenders between 2003 and 2007. Drunkenness offences increased by 22% between 2003 and 2005, but decreased by 13% between 2005 and 2007. As with the trends observed for adults, it is possible that changes in data recording are responsible for this decrease.



Figure 5.3 Trends in drunkenness, public order, and assault offences among minors (PULSE 2003–2007)

The majority of offenders were male and accounted for 84%–92% of adult offenders and 74%–83% of minor offenders (Figure 5.4). While females committed only a small proportion of offences, there was a higher percentage of female minor offenders than female adult offenders. In the case of drunkenness offences, females accounted for one-fifth of minor offenders, compared to one-tenth of adult offenders.





5.11.2 Time of offence

Just under half (49%) of adult offences occurred between midnight and 4.00 am, with 48% of drunkenness, 51% of public order and 40% of assault offences occurring during this time period (Figure 5.5). The offences peaked at 2.00 am, which coincides with the weekend closing time of many licensed premises, when large volumes of people spill onto the streets, often in a state of intoxication. The trends in drunkenness, public order and assault offences follow a similar pattern, which would suggest that alcohol plays a substantial role in public disorder and violence in Ireland.



Figure 5.5 Drunkenness, public order and assault offences among adults, by time of day (PULSE 2003–2007)

The majority of drunkenness (60%) and public order (52%) offences among minors occurred between 9 pm and 2 am (Figure 5.6). Drunkenness and public order offences among minors tended to occur earlier at night than those among the adult population. This may be explained by the fact that minors tend to drink in public spaces rather than in licensed premises, where it is illegal for them to purchase alcohol. Assaults were more evenly spread out during the day compared to drunkenness and public order offences. As alcohol is not necessarily a factor in all assaults, it is possible that assaults occurring during daytime hours are largely unrelated to alcohol. In comparison, it appears more likely that assaults occurring in the early hours of the morning are alcohol-related as this is the time when drunkenness and public order offences are most common. This would suggest that there is a stronger link between alcohol and assaults among adults than there is among minors.



Figure 5.6 Drunkenness, public order and assault offences among minors, by time of day (PULSE 2003–2007)

5.11.3 Day of week

Half of all adult offences occurred at the weekend, which is not surprising given that this is when most socialising in pubs and night-clubs occurs and licensed premises have later opening hours, which gives patrons more time to drink (Figure 5.7). The trends for each offence type were similar.



Figure 5.7 Drunkenness, public order and assault offences among adults, by day of week (PULSE 2003–2007)

Among minors, over half of all drunkenness offences occurred on a Friday or Saturday (Figure 5.8). The trends for drunkenness and public order offences were somewhat similar; however, assault offences were more evenly spread throughout the week, with 47% occurring between Monday and Thursday, compared to just 26% of drunkenness offences occurring on those days.



Figure 5.8 Drunkenness, public order and assault offences among minors, by day of week (PULSE 2003–2007)

5.11.4 Week of year

There were a number of times during the year when the incidence of assaults, drunkenness and public order was particularly high among adults – the week during which St Patrick's Day occurs, the last week in October when Hallowe'en and a bank holiday fall (although the increase in drunkenness offences during this week is relatively minor), and the two weeks around Christmas and New Year's Day (Figure 5.9). As there are 52 weeks and one day in a year, offences recorded on 31 December are included with Week 52, which accounts for some of the increase in offences recorded for that week. These weeks in Ireland have traditionally been associated with increased levels of socialising and increased alcohol consumption, and the increase observed for both public order and assault offences during these weeks provide further evidence of the involvement of alcohol in these crimes.

In recent years there has been a lot of commentary in Ireland regarding the high level of drunkenness and public disorder surrounding St Patrick's Day celebrations. The extent of these excesses is borne out in this analysis. For example, the average annual number of drunkenness offences recorded for that week was 39% higher than for the rest of the year. The number of public order offences was 36% higher and the number of assaults was 46% higher.

The percentage of offences that occurred in January (excluding the week when New Year's Day falls), the weeks during which Lent occurs and in November were lower than average. People typically drink less in January following the excess of consumption associated with Christmas time, and tend to have less spare cash to spend on non-essential items such as alcohol. For religious reasons, Lent, which usually falls during February and March, and November have traditionally been times of abstinence from alcohol in Ireland, which may explain the low percentage of offences occurring during these months.



Figure 5.9 Average annual proportion of drunkenness, public order and assault offences committed by adults, by week of year (PULSE 2003–2007)

For minors, the times of the year associated with increases in each offence type were the week when St Patrick's Day falls, the second week in September and the last week in October when Hallowe'en falls (Figure 5.10). The increase observed in the second week in September may be explained by the fact that students receive their Junior Certificate results at this time, which is often associated with celebrations among adolescents. It is also possible that there is an increased Garda presence on the streets during this time which may account for some of the increase observed. As was the case among the adult population, St Patrick's Day and Hallowe'en appear to be associated with high levels of drunkenness and public disorder among minors. Unlike the trends observed for adults, Christmas time was not associated with a large increase in offences among minors.





Figure 5.11 presents the average annual number of offences (drunkenness, public order and assault) in each county in the period 2003–2007. Waterford and the border counties had the highest rate of offences. This does not necessarily imply that alcohol-related crime occurs more frequently in these counties; it is possible that differing Garda practices between counties are responsible for some of the variation between counties. Counties with fewer major urban centres, such as Meath, Roscommon and Laois, had the lowest rates of offences.



Figure 5.11 Average annual number of offences (drunkenness, public order and assault) per 1,000 of the adult population, by county (PULSE 2003–2007)

5.11.5 Drink-driving offences

Between 2003 and 2007, 76,187 incidents of driving or being in charge of a vehicle while over the legal alcohol limit were recorded. These incidents involved 76,645 offenders. There was a considerable increase (74%) in the number of offences between 2003 and 2007, with the largest increase (32%) observed between 2005 and 2006. This is probably explained by the introduction of legislation permitting random breath testing in 2006 (Table 5.3). This legislation permits a member of the Garda Síochána to request motorists to perform a preliminary breath test, even if the driver is not suspected of having committed an offence or of being involved in a collision.

Table 5.3Number of drink-driving offences (PULSE 2003–2007)

	2003	2004	2005	2006	2007
Number of offences	11,421	12,168	14,095	18,639	19,864

Gender was recorded for 73,165 offenders. Males were nine times more likely than females to be a drink-driving offender (66,186 90% males vs. 6,979 10% females). The mean age of offenders was 34 years and the median age 32 years. The largest proportions of both male and female offenders were in the 18–24-year age group, followed by the 25–29-year age group. In general, female offenders tended to be older than males, with 37% aged 40 years or over compared to 30% of males (Figure 5.12). These results are in contrast to the most recent SLAN survey, where self-reported rates of driving after consuming two or more standard drinks were similar across all age groups.

Males aged 18–24-years were the group with the highest number of drink-driving offences. This does not imply that this cohort is most likely to drink and drive. It is possible that young males are more often charged with drink-driving due to police targeting. The percentage of drink-driving offenders aged under 30 increased steadily during the years under study, accounting for 37% of offences in 2003 and 47% in 2007. The general public perception is that young adults are less likely to drink and drive, however, this is not supported by our findings.



Figure 5.12 Drink-driving offenders, by gender and age group (PULSE 2003–2007)

The mean age of drink-driving offenders was higher than that of the other offenders analysed. The proportion of drink-driving offenders aged 45 years or over was double (21%) the proportion of drunkenness offenders (11%) in the same age group. Traditionally, driving a car after consuming alcohol was considered socially acceptable and the comparatively lax drink-driving laws reflected this. Previous attempts at toughening drink-driving legislation in Ireland were met with considerable opposition. For example, the Road Traffic Act 1994 contained a number of measures which

represented a tougher approach to drink-driving, including reducing the permitted blood alcohol concentration (BAC) for drivers from 0.10% to 0.08%. In the face of public opposition, in particular from vintners' associations, the Government softened the penalties for drink-driving shortly after the legislation came into effect (Butler 2002b). It would appear that some people in the older age groups have not modified their driving behaviour to mirror the changes in drink-driving legislation.

Not surprisingly, given that it is the time that licensed premises close, over half (52%) of all drinkdriving offences were recorded between midnight and 4.00 am (Figure 5.13).



Figure 5.13 Drink-driving offences, by time of day (PULSE 2003–2007)

Over half (54%) of all drink-driving offences were recorded on a Saturday or Sunday (Figure 5.14). A substantial proportion of offences were recorded on a Monday (15%). This may be explained by people returning home in the early hours of Monday morning having been out on the preceding Sunday evening, or by the number of bank holidays which fall on a Monday.





The trends observed for time of day and day of week are similar to those observed in a study by Bedford *et al.* (2006) which analysed alcohol's involvement in fatal collisions in Ireland in 2003. This study reported that alcohol-related fatal collisions were commonest late at night and early in the morning and peaked between midnight and 2.00 am. Alcohol-related road collisions were more likely to occur on a Saturday, Sunday or Monday compared to the other days of the week.

An annual average of 4.6 drink-driving offences per 1,000 adults aged 15 years or over was recorded in Ireland between 2003 and 2007 (Figure 5.15). The rate ranged from 3.6 in 2003 to 6.7 in 2007. There was some variation between counties, with Dublin and Roscommon having the lowest number of offences (3.9) and Monaghan having the highest (10.7). While there may be a true difference in drink-driving behaviour between counties, it is possible that this variation may be explained by variations in Garda practices in different geographical regions, or by people in urban areas such as Dublin having much greater access to public transport and taxis compared to rural dwellers.





While there was an increase in the number of drink-driving offences between 2003 and 2007, the number of offences per pub licence was quite low. In 2007, 8,253 pub licences were issued in Ireland (Revenue Commissioners, personal communication, 2009). During the same year, there were 19,864 drink-driving offences, which correspond to 2.4 drink-driving offences per pub licence. In 2003, there were 1.2 drink-driving offences per pub licence (9,282 licences, 11,421 offences).

5.12 Conclusion

Analysis of PULSE data indicates that alcohol and crime are closely linked. In 2007 alone there were 30,340 offences which can be fully attributed to alcohol (drink-driving and drunkenness) and 55,930 offences where alcohol is likely to have played a substantial role (public order and assault offences). This large number of offences places considerable pressure on the scarce financial resources of the State, with major costs for the tax-payer in terms of the increased policing required, the demands on the criminal justice system and on hospital emergency departments, and the expense of tidying up city and town centres, which have not been considered here. There is also a human cost: innocent victims of alcohol-related violence may sustain injuries, and public disorder contributes to people's fear of crime. According to the latest Crime and Victimisation survey (CSO 2007), 26% of respondents stated that they felt unsafe or very unsafe in their local area after dark. This corresponds to 912,574 of the adult population (aged 15 years or over) in Ireland in 2008 who did not feel safe in their own community. Given the high level of drunkenness and public order offences committed in Ireland, particularly at night time, alcohol plays a substantial role in fuelling some of the fear and anxiety among the general public.

While adults were responsible for the majority of offences, minors were responsible for committing 17% of offences. It is illegal for children under the age of 18 to purchase alcohol, but it appears that they have little trouble accessing it. In the most recent ESPAD report, 27% of boys had purchased beer for their own consumption in the previous 30 days while 27% of girls had purchased spirits. In addition, 26% of boys had consumed beer in a bar or disco in the previous 30 days and 28% of girls had consumed spirits. Although young people are often blamed for the problems arising from alcohol use, and policies to combat harmful use of alcohol often concentrate on underage drinkers, this depiction is unfair. Any policy which targets only young people's drinking without addressing the wider drinking culture and environment ignores the fact that young people do not form their views and attitudes in isolation. Young people's attitudes towards alcohol are influenced by their parents' drinking habits and the culture of drinking within their area, as well as by their peers. Irish society and culture are immersed in alcohol. When all alcohol-related offences were analysed, there were more male than female offenders, but among minors there was a higher proportion of female offenders. In recent years it has become more socially acceptable for women to consume alcohol in greater volumes and in patterns mirroring those of their male counterparts. In comparison to older age groups, young females are more likely to consume alcohol and drink to intoxication, as evidenced by successive HBSC and ESPAD reports. In spite of this, it is important to remember that men are still responsible for the majority of alcohol-related crime that is committed in Ireland.

Social consequences of harmful use of alcohol in Ireland

6 Social consequences of alcohol use – results from the National Drinking Surveys

6.1 Introduction

This section examines the reported negative social consequences of alcohol use among the general population in Ireland. The data presented are based on the National Drinking Surveys conducted in 2002 and repeated in subsequent years (2004–2006). In each year, a national representative quota sample (1,000+) of the adult population aged 18 years and over was surveyed by a market research company funded by the Department of Health and Children (2002–2005) and by the Health Service Executive (2006). In face-to-face interviews, respondents were asked a number of questions about their drinking habits and experiences of negative consequences of alcohol use. A detailed description of the methodology has been reported elsewhere (Ramstedt and Hope 2005). Four questions on social harm were asked of current drinkers (defined as those who had consumed alcohol in the previous 12 months): 'During the last 12 months have you 1) got into a fight when you had been drinking? 2) felt that your drinking harmed your friendships or social life? 3) felt that your drinking harmed your home life or marriage? 4) felt that your drinking harmed your work or studies?'

In the 2006 drinking survey, five measures were used to assess the negative consequences experienced by people as a result of someone else's drinking (harm to others). The harm to others questions were asked of all participants: 'During the last 12 months, have you experienced any of the following as a result of someone else's drinking? 1) had family problems or relationship difficulties? 2) been a passenger with a driver who had too much to drink? 3) been hit or assaulted by someone who had been drinking? 4) had financial trouble? 5) had property vandalised by someone who had been drinking?'

6.2 Negative social consequences experienced by the drinker

This analysis combines the four years of survey data for robustness and ease of presentation, giving a total sample of 4,171 participants. Of the total survey sample, 77% of participants were current drinkers, with a higher proportion in 2004 (87%) and a lower proportion in 2005 (68%). The social harm responses were based on current drinkers (n=3,209). The overall prevalence of experiencing at least one of the four social harms (fights, harm to friendship, home-life or work) as a result of their own alcohol use was 21%, with men twice as likely to report social harms as women (men 28%, women 13%).

Looking at the social harms individually, one in 10 participants felt that their drinking had harmed their friendships and social life (Table 6.1). A slightly lower proportion (9%) reported experiencing fights and harm to work, and 7% experienced harm to home life as a result of their own drinking. In 2005 the proportion of participants reporting harm to home life was lower than in other years. Overall, men were twice as likely as women to report experiencing the negative social consequences on each of the four measures.

			Harm to	Harm to	Harm to work/
	Total sample	Fights	friendships	home life	study
	N	%	%	%	%
Average	4171	9.3	9.6	6.8	9.3
2002	1044	8.2	7.9	5.4	8.6
2004	1041	9.0	11.0	10.9	12.0
2005	1083	8.0	8.9	3.3	7.4
2006	1003	11.9	10.3	6.5*	8.5
Gender					
Men	2058	13.3	12.2	10.1	12.6
Women	2113	5.0	6.9	3.2	5.7

Table 6.1Negative social consequences experienced by the drinker (National Drinking Surveys
2002–2006)

*p<.01

The rate of reported negative social consequences as a result of their own drinking increased as the frequency of risky single-occasion drinking (RSOD) increased. RSOD, sometimes called 'binge drinking', was defined as consuming at least 75 grams of alcohol on a drinking occasion, which is the equivalent of one bottle of wine, four pints of beer or seven single pub measures of spirits. The overall prevalence of experiencing at least one of the social harms was significantly higher among those who engaged in weekly RSOD (36%) in comparison to less frequent risky drinkers (16%) and to those who did not engage in risky drinking (5%). The increased risk from RSOD was evident for all four social harm areas: fights, problems in social life, harm to home life and harm to work (Figure 6.1). For example, of those who did not drink in a risky way, just 3% reported that their drinking had harmed their work, while the figure for infrequent risky drinkers increased to 7%, and to 17% for those engaged in risky drinking at least once a week. Similar increases were seen for fights and harm to friendships. In comparison to the 2% of light and infrequent risky drinkers who reported harm to home life, a much larger proportion (12%) of weekly risky drinkers reported this harm.



Figure 6.1 Negative social consequences, by drinking pattern (National Drinking Surveys 2002–2006)

An examination across age groups of those engaged in weekly RSOD showed that social harms can differ for different age groups. The younger the participants, the more likely they were to report experiencing fights and work problems as a result of weekly RSOD (Figure 6.2). Harm to home life was more common among those aged 35 years and over who engaged in weekly risky drinking. Harm to friendships and social life was reported by a similar number of people involved in weekly RSOD across all the age groups up to 64 years.



Figure 6.2 Negative social consequences of weekly risky drinking (RSOD), by age group (National Drinking Surveys 2002–2006)

6.3 Negative social consequences experienced by others besides the drinker

Harm to others besides the drinker was examined in the 2006 drinking survey, using five indicators: family problems, passenger with a drunk driver, been hit or assaulted, had financial trouble or had property vandalised as a result of someone else's drinking. The overall prevalence of experiencing at least one of these negative consequences from someone else's drinking was 28%, with no significant gender difference. An examination of the harms individually showed that the experience of family and money problems was reported by more women than men. Men were more likely to experience the negative consequences of being a passenger with a drunk driver, and of being assaulted (Table 6.2). The younger age groups, of both men and women, were more likely to report experiencing assaults and being a passenger with a drunk driver. Men aged 35–49 were most likely to report having their property vandalised as a result of someone else's drinking.

	Family	Passenger with		Money	Property
	problems	drunk driver	Assault	problems	vandalised
Age group	%	%	%	%	%
Men					
18–24	8.5	22.9	18.1	1.2	11.0
25–34	12.1	13.9	21.3	1.9	3.7
35–49	15.7	12.9	14.3	6.4	15.7
50–64	8.7	8.7	5.9	5.8	9.8
65+	9.2	6.3	1.6	1.6	3.2
Total	11.5	13.1*	13.1*	3.8	9.5*
Women					
18–24	20.8	16.7	16.7	5.1	9.1
25–34	21.2	8.8	8.8	5.3	8.9
35–49	16.0	8.4	2.3	8.3	7.6
50–64	16.8	3.0	3.9	8.9	9.0
65+	11.1	3.7	1.2	6.2	3.7
Total	17.3	7.9*	6.1*	6.9	7.8

Table 6.2Negative consequences of someone else's drinking, by gender and age (National
Drinking Survey 2006)

* p<.01

Harm to others was examined by drinking pattern to see if the negative consequences experienced as a result of someone else's drinking were influenced by the drinking pattern of the victim. Two of the harms, assaults and being a passenger with a drunk driver, showed a clear gradient of increased risk with more frequent episodes of risky drinking by the victim (Figure 6.3). For example, of those who were non-drinkers, just 5% reported experiencing assault as a result of someone else's drinking, and of those who did not drink in a risky way, the proportion was 6%. This proportion increased to 10% for infrequent risky drinkers and rose to 17% for those engaged in risky drinking at least once a week. A similar risk curve was evident for the experience of being a passenger with a drunk driver. In contrast, the experience of family problems as a result of someone else's drinking was reported at a similar rate for non-drinkers, drinkers and risky drinkers alike. There were also no significant differences for money problems or property vandalised when examined by drinking pattern.



Figure 6.3 Harm to others, by drinking pattern (National Drinking Survey 2006)

6.4 Discussion

One in five of all drinkers in Ireland reported experiencing social harm as a result of their own alcohol use, and the proportion was higher among men than women. However, the rate of social harm rose to one in three among those who engaged in risky drinking at least once a week. The proportion of social harms experienced by Irish drinkers as a result of their own alcohol use was higher than in other European countries, for both men and women (Ramstedt and Hope 2005). The one exception for women was the rate of harm to home life, which was higher among women in the UK compared to women in Ireland. The negative social consequences exponentially increased when drinkers engaged in regular risky drinking (defined as RSOD of 75+ g of alcohol at least weekly). The relationship between risky drinking and higher rates of self-reported alcohol problems was also found among Irish college students (Hope *et al.* 2005b). Risky single-occasion drinking (RSOD) has been linked to increased risk of alcohol harms, such as injuries (Rossow *et al.* 2001), violence (Holder 2008), coronary heart disease (Britton and McKee 2000), social problems and harm to work (Anderson and Baumberg 2006).

The younger the participants, the more likely they were to report experiencing fights and work problems, while harm to home life was more common among those aged 35 to 64 years. The number of young people (one in four) who reported harm to their work or studies and involvement in fights as a result of regular risky drinking is of concern, given the potential threat to their well-being and their important role in the economic activity of the country. The relationship between workplace absenteeism, young workers and risky drinking has been reported in relation to the Australian workplace (Roche *et al.* 2008).

Harm to others besides the drinker was reported by over one in four participants for at least one of the harms measured. This rate of social harm as a result of someone else's drinking was higher than that reported from an individual's own alcohol use, which was one in five. While men experienced more social harms from their own drinking than did women, both men and women experienced similar levels of harm from someone else's drinking. The top three reported third party harms were family problems, being a passenger with a drunk driver and assault. High levels of harm to others besides the drinker were also reported in the CLAN survey of college students, with verbal abuse,

arguments with friends and family and being a passenger with a drunk driver the most common experiences (Hope *et al.* 2005b). Family and money problems were reported by more women than men. Men reported more harm from assaults and being a passenger with a drunk driver. The younger age groups, of both men and women, were more likely to report experiencing assault and being a passenger with a drunk driver as a result of someone else's drinking. The risk of experiencing either of these harms (assaults, passenger with drunk driver) increased as the frequency of risky drinking by the victim increased. The risk of being assaulted was three times greater if the victim also engaged in risky drinking. The relationship between risky drinking and increased risk of self-reported harm is in line with that reported in other studies (Rehm and Gmel 1999; Room *et al.* 1995; Rossow and Hauge 2004). However, this was not the case for family problems, which were experienced equally by those who did not drink, those who drank moderately and those involved in risky drinking.

6.5 Conclusion

The burden of the negative social consequences of alcohol use was experienced to a greater extent by people other than the drinker (third party). A pattern of risky drinking by an individual increased the chance of alcohol-related violence to third parties as well as to the drinker.

The negative effect of alcohol on personal social networks, in terms of family life and friendships, was evident in a number of ways. Harm to home life was more common among those in their middle years who engaged in regular risky drinking. Given that many people in this age group are married with children, this suggests that family members, including children, are negatively affected by those engaged in risky drinking. The finding that women experienced the greatest burden of family problems as a result of someone else's drinking, and that this was felt across all age groups and equally by those who drank and those who do not drink, lends support to this conclusion. Money problems, which could have a negative affect on children and family life, were also experienced by more women than men. The findings in this Overview reinforce the negative impact of alcohol on the family which we outlined in Chapter 3. Problems with work were negatively affected by alcohol use and were greatest among those involved in risky drinking, which has been identified as a cause of short-term absence in the Irish workforce (IBEC 2004).

Alcohol-related violence was reflected in terms of reported fights by the drinker and the risk of assault as a result of someone else's drinking. Fights were more common among men and among those under 35 years involved in risky drinking. Men were at higher risk of experiencing an assault or being a passenger with a drunk driver. Young women were at the same risk as men of experiencing an assault and being a passenger with a drunk driver. The risk of experiencing either of these harms greatly increased if the victim also engaged in risky drinking. The finding of increased risk of fights reported by young drinkers is supported by the population-level analysis in Chapter 5 on drunkenness, public order and assault offences, which shows that young men account for the highest rates of offending.

The reported social harm to the drinker and harm to others besides the drinker demonstrates the extended reach of alcohol-related harm throughout the life cycle, within families and across Irish communities. While alcohol-related violence can be visible in public places, the negative impact of alcohol on family life is often hidden but can have more devastating consequences.

7 Conclusion

Irish culture is generally characterised by ambivalence towards alcohol and drunkenness. Ireland has a high level of alcohol consumption; 12.4 litres of pure alcohol were consumed in 2008 for every adult aged 15 or over. Harmful drinking patterns are also common in Ireland, with most drinkers involved in risky drinking on some occasions. Given our high level of consumption and harmful drinking patterns, it is not surprising that alcohol has a serious and prolonged negative impact on all facets of Irish society, on the individual and their social networks and on the community in which they live.

At a societal level, harmful use of alcohol is a serious public health and social issue. Alcohol has a negative effect on family well-being, and can contribute to relationship and marriage problems and impact on children, who are especially vulnerable to the effects of parental drinking. The effects of alcohol can undermine the fabric of family life and in many cases leave a legacy of neglect, abuse, chaos and damaged children. The emotional cost borne by these families is huge. Irish survey data show that more women than men experience family problems as a result of someone else's drinking. The likelihood of experiencing such family problems is similar for female drinkers and non-drinkers.

Harmful use of alcohol, by one or both parents or by the student him/herself, can negatively affect educational attainment. Almost two-thirds of pregnant Irish women consume alcohol; the children in such cases are at increased risk of developing Fetal Alcohol Syndrome Disorders. Alcohol consumption can render an adolescent's brain more susceptible to long-term damage and can affect learning and memory. A substantial minority of school-going adolescents in Ireland are regular drinkers, which increases their risk of developing brain damage. Over one in 10 Irish 15–16-year-old students reported they had performed poorly at school or work in the previous 12 months as a result of their own alcohol use. Harmful use of alcohol can result in substantial economic costs and loss of labour-market productivity, in part through absenteeism and through the direct health-related consequences of alcohol use, such as physical injuries in the workplace.

Drunkenness, alcohol-related violence and public disorder diminish quality of life, undermine confidence in public safety and play a substantial role in driving people's fear of being a victim of crime. In 2007 there were over 65,000 alcohol-related offences in Ireland. This has a substantial human cost: innocent victims of alcohol-related violence may sustain injuries, and public disorder can increase people's fear of crime. The quality of life of both the drinker and those around the drinker can be severely compromised. In addition, alcohol-related crime places considerable pressure on the scarce financial resources of the State, with major costs for the taxpayer in terms of the increased policing required, and the demands on the criminal justice system and on hospital emergency departments.

In Ireland young people under the age of 30, particularly males, were responsible for committing the majority of alcohol-related offences (drunkenness, public order, assault offences) and were most likely to experience harm arising from their own alcohol use. This is not surprising given that surveys have consistently shown that this group has the highest level of both overall alcohol consumption and binge drinking in Ireland. Regular risky drinkers were more likely to report acute consequences arising from their own alcohol use, such as being involved in fights and performing poorly at work, and were also more likely to be a passenger with a drunk driver or to be a victim of assault. Many alcohol-related harms, especially more immediate social harms such as drink-driving and violence, involve drinkers who may typically drink within recommended low-risk limits but on occasion engage in risky drinking. This demonstrates that alcohol-related harms are not limited to dependent drinkers.

Although men predominate among heavy and binge drinkers, women bear much of the burden of harm from others' drinking. Women were more likely to experience family problems and financial problems arising from someone else's drinking. Alcohol harm experienced by people other than the drinker is a serious social problem and affects family well-being and public safety. Such harm is not confined to the drinker but extends to the family, workplace, community and wider society.

Although some published evidence exists in Ireland on the social harms caused by alcohol, there are major gaps in our knowledge base. We know very little about the extent of suffering experienced by the families of problem drinkers in Ireland, although it is likely that they endure the most serious effects. There are also major knowledge gaps regarding the relationship between alcohol use and problems in the workplace in Ireland. We have no detailed estimates of the financial costs to the workplace and the effects on productivity arising from alcohol-related absenteeism, although such costs are likely to be considerable. While little primary research on alcohol and crime has been conducted in Ireland, the PULSE system provides valuable information in our attempt to measure the contribution of alcohol to crime. As there are few high-quality data systems that specifically monitor alcohol-related harm in Ireland, it is important that existing data systems are utilised in order to gather data across a range of alcohol harm indicators. It is vital that alcohol questions are included in national surveys, such as the crime and victimisation survey and the household survey, and in hospital emergency department and social work data systems.

Alcohol-related harm is complex and multifaceted and will not be reduced unless action is taken. The international evidence is substantive and clear on the most effective policies to reduce alcohol harm (Anderson *et al.* 2009). The most cost effective strategies to reduce harm are making alcohol more expensive and less available. Drink-driving regulations, banning alcohol advertising and interventions directed individually at drinkers already at risk are also cost effective. The pressing need for an alcohol strategy to reduce the level of alcohol-related harm in Ireland has consistently been emphasised in recent years. Since 1996 we have seen the publication of the National Alcohol Policy (1996) and two reports from the Strategic Task Force on Alcohol, in 2002 and 2004. These documents presented evidence-based strategies for the reduction of alcohol-related harm and advocated environmental and individual measures to reduce alcohol-related problems in Ireland. Unfortunately, it appears that no co-ordinated strategy for the implementation of these recommendations was put in place, with the result that the recommendations have had limited impact.

In March 2009, the Government approved the development of a combined National Substance Misuse Strategy to include both alcohol and drugs. If this strategy is to succeed where others have failed it is imperative that it is comprehensive and co-ordinated; that a proper structure is put in place with an agency or body taking responsibility for its implementation; that resources are made available for its enforcement and long-term implementation; and that the relevant stakeholders provide the necessary commitment to ensure its sustained success. If this approach is not taken, the impact of the new strategy is likely to be negligible. It is important that alcohol issues are continually monitored; this would involve evaluating the impact of policy changes, and regularly monitoring indicators of the situation and consequences of alcohol use, including measuring alcohol use in the general population and in sub-groups, treated problem alcohol use, health-related consequences, social and economic consequences and alcohol-related crime.

Since the 1990s alcohol-related morbidity and mortality have increased considerably in Ireland. The health-related consequences of harmful use of alcohol have been documented in a previous publication in the HRB Overview Series (Mongan *et al.* 2007). Coupled with those findings, this Overview paints a grim picture of the increasingly negative role played by alcohol in Irish society. This has major implications for policy makers, especially in the areas of health, justice and social policy. The high level of alcohol-related social harm does not bode well for the future health and well-being of the Irish population.

Appendix

There have been a number of changes in the classification of crime following the introduction of the Irish Crime Classification System (ICCS) in 2007. Prior to the ICCS, crimes were classified into headline and non-headline offences, which reflected the seriousness of the offence committed. Under the old system, assault causing harm was classified as a headline offence, whereas minor assault was classified as a non-headline offence. Under the new system all assaults are categorised under the umbrella of 'attempts/threats to murder, assaults, harassments and related offences'. The ICCS does not distinguish between headline and non-headline offences. Drink driving is not now classified under road and traffic offences but as a negligent act, and included with acts of a similar behavioural nature.

The changes in classification in public order offences are outlined below.

Irish Crime Classification System (ICCS) 2007

13 Public order and other social code offences

131 Disorderly conduct

- 1311 Affray/Riot/Violent disorder
- 1312 Public order offences
- 1313 Drunkenness offences
- 1314 Air rage disruptive or drunken behaviour on aircraft
- 132 Trespass offences
- 133 Liquor licensing offences
- **134 Prostitution offences**
- 135 Regulated betting/money, collection/trading offences
- 136 Social code offences

Crime classification used prior to ICCS Group 15 Public order offences (as presented in Garda annual reports) Intoxication in public place (Section 4 Public Order Act 2004) Disorderly conduct in public place (Section 5) Threatening, abusive or insulting behaviour (Section 6) Failure to comply with Garda direction (Section 8) Entering building with intent to commit an offence (Section 11) Trespass on building etc. (Section 13) Control of access to special events (Section 21) Surrender and seizure of intoxicating liquor (Section 22) Urinating in public – summary jurisdiction (IR) Amendment Act 1871 Other public order offences Social consequences of harmful use of alcohol in Ireland

References

- Abbey A, Zawacki T, Buck PO, Clinton AM and McAuslan P (2001) Alcohol and sexual assault. *Alcohol Health and Research World*, 25: 43–51.
- Alcohol Action Ireland (2006) *Alcohol in Ireland: time for action. A survey of Irish attitudes*. Dublin: Alcohol Action Ireland. http://alcoholireland.ie/wp-content/uploads/2009/02/ keepingitinthefamilysurvey2009.pdf
- American Medical Association (AMA) (2002) *Harmful consequences of alcohol use on the brains of children, adolescents and college students*. Chicago: AMA. http://www.ama-assn.org/ama1/pub/upload /mm/388/harmful_consequences.pdf
- Anderson P and Baumberg B (2006) *Alcohol in Europe: a public health perspective*. London: Institute of Alcohol Studies.
- Anderson P, Chisholm D and Fuhr DC (2009) Effectiveness and cost-effectiveness of policies and programmes to reduce the harm caused by alcohol. *Lancet*, 373: 2234–2246.
- Autti-Ramo (2002) Foetal alcohol syndrome a multifaceted condition. *Developmental Medicine* & *Child Neurology*, 44: 141–144.
- Babor T, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K et al. (2003) Alcohol: no ordinary commodity. Research and public policy. New York: Oxford University Press.
- Barnardos (2002) *Every child matters: families under the influence*. Dublin: National Children's Resource Centre, Barnardos.
- Barry S, Kearney A, Lawlor E, McNamee E and Barry J (2007) *The Coombe Women's Hospital study of alcohol, smoking and illicit drug use, 1988–2005*. Dublin: Coombe Women's Hospital.
- Bedford D, McKeown N, Vellinga A and Howell F (2006) *Alcohol in fatal road crashes in Ireland in 2003*. Naas: Population Health Directorate, Health Service Executive.
- Borkenstein R, Crowther R, Shumate R, Ziel W and Zylman R (1974) The role of the drinking driver in traffic accidents. *Blutalkohol*, 11 (Suppl. 1): 1–134.
- Brecklin L and Ullman S (2001) The role of offender alcohol use in rape attacks: an analysis of National Crime Victimization Survey data. *Journal of Interpersonal Violence*, 16: 3–21.
- Britton A and McKee M (2000) The relation between alcohol and cardiovascular disease in Eastern Europe: explaining the paradox. *Journal of Epidemiology and Community Health*, 54: 328–332.
- Burns A (1984) Perceived causes of marriage breakdown and conditions of life. *Journal of Marriage and the Family*, 46: 551–562.
- Butler S (2002a) Addiction problems, addiction services, and social work in the Republic of Ireland. In SLA Straussner and L Harrison (eds) *International aspects of social work practice in the addictions*. Binghamton, NY: Haworth Social Work Practice Press. pp. 31–48.
- Butler S (2002b) Alcohol, drugs and health promotion. Dublin: Institute of Public Administration.
- Caces MF, Harford TC, Williams GD and Hanna EZ (1999) Alcohol consumption and divorce rates in the United States. *Journal of Studies on Alcohol*, 60: 647–652.
- Carroll J and Meehan E with McPhilips S (2007) *The Children Court: a national study*. Dublin: Association for Criminal Justice Research and Development Ltd.

- Central Statistics Office (2007) Crime and victimisation: Quarterly National Household Survey. Cork: CSO. http://www.cso.ie/releasespublications/documents/crime_justice/current/ crimevictimisation_qnhs2006.pdf
- Central Statistics Office (2008) Irish Crime Classification System (ICCS). Cork: CSO.
- Centres for Disease Control and Prevention (2002) Fetal alcohol syndrome Alaska, Arizona, Colorado, and New York, 1995–1997. *Morbidity and Mortality Weekly Report*, 51: 433–435.
- Centres for Disease Control and Prevention (2004) Alcohol consumption among women who are pregnant or who might become pregnant United States, 2002. *Morbidity and Mortality Weekly Report*, 53: 1178–1181.
- Christoffersen M and Soothill K (2003) The long-term consequences of parental alcohol abuse: a cohort study of children in Denmark. *Journal of Substance Abuse Treatment*, 25: 107–116.
- Commission on Liquor Licensing (2003) *Commission on Liquor Licensing: final report*. Dublin: Department of Justice.
- Daly A (2009) National Psychiatric In-Patient Reporting System (NPIRS) Preliminary National Bulletin Ireland 2008. Dublin: Health Research Board.
- Department of Health and Children (2002) *Strategic Task Force on Alcohol: interim report*. Dublin: DOHC.
- Department of Health and Children (2004) *Strategic Task Force on Alcohol: second report*. Dublin: DOHC.
- Donnelly JC, Cooley SM, Walsh TA, Sarkar R, Durnea U and Geary MP (2008) Illegal drug use, smoking and alcohol consumption in a low-risk Irish primigravid population. *Journal of Perinatal Medicine*, 36: 70–72.
- English D, Holman C, Milne E, Winter M, Hulse GK, Codde JP *et al.* (1995) *The quantification of drug-caused morbidity and mortality in Australia, 1995.* Canberra: Commenwealth Department of Human Services and Health.
- Eurocare and COFACE (1998) Alcohol problems in the family: a report to the European Union. England: Eurocare.
- Fillmore KM, Golding JM, Leino EV, Ager CR and Ferrer HP (1994) Societal-level predictors of groups' drinking patterns: a research synthesis from the Collaborative Alcohol-Related Longitudinal Project. *American Journal of Public Health*, 84: 247–253.
- Gavin A, De Roiste A and Nic Gabhainn S (2008) *Short report on age-related patterns in alcohol consumption*. Galway: National University of Ireland, Galway.
- Government Alcohol Advisory Group (2008) *Report of the Government Alcohol Advisory Group*. Dublin: Department of Justice, Equality and Law Reform.
- Graham K, Leonard KE, Room R, Wild TC, Pihl RO, Bois C and Single E (1998) Current directions in research on understanding and preventing intoxicated aggression. *Addiction*, 93: 659–676.
- Graham K, West P and Wells S (2000) Evaluating theories of alcohol-related aggression using observations of young adults in bars. *Addiction*, 95: 847–863.
- Grant BF and Dawson DA (1997) Age at onset of alcohol use and its association with DSM-IV alcohol abuse and dependence: results from the National Longitudinal Alcohol Epidemiologic Survey. *Journal of Substance Abuse*, 9: 103–110.
- Gray R and Henderson J (2006) *Review of the fetal effects of prenatal alcohol exposure: report to the Department of Health.* Oxford: National Perinatal Epidemiology Unit, University of Oxford.

- Greenfield L (1998) Alcohol and crime: an analysis of national data on the prevalence of alcohol involvement in crime. Report prepared for the assistant attorney general's national symposium on alcohol abuse and crime. Washington DC: US Department of Justice.
- Gruenewald PJ and Remer L (2006) Changes in outlet densities affect violence rates. *Alcoholism: Clinical and Experimental Research*, 30: 1184–1193.
- Gruenewald PJ, Freisthler B, Remer L, Lascala EA and Treno A (2006) Ecological models of alcohol outlets and violent assaults: crime potentials and geospatial analysis. *Addiction*, 101: 666–677.
- Hannon F, Kelleher C and Friel S (2000) *General healthcare study of the Irish prisoner population*. Galway: National University of Ireland Galway.
- Hibell B, Guttormsson U, Ahlström S, Balakireva O, Bjarnason T, Kokkevi A et al. (2009) The 2007 ESPAD Report: alcohol and other drug use among students in 35 European countries. Stockholm: The Swedish Council for Information on Alcohol and Other Drugs (CAN), Council of Europe, Co-operation Group to Combat Drug Abuse and Illicit Trafficking in Drugs (Pompidou Group).
- Holder HD (2008) Alcohol and violence: a complex nexus of drinking environment and drinking pattern. *Addiction*, 103: 78-79.
- Hope A, Dring C and Dring J (2005b) *College Lifestyle and Attitudinal National (CLAN) survey*. Dublin: Department of Health and Children.
- Hope A, Gill A, Costello G, Sheehan J, Brazil E and Reid V (2005a) *Alcohol and injuries in the accident and emergency department: a national perspective*. Dublin: Department of Health and Children.
- IBEC (2004) *Employee absenteeism: a guide to managing absence*. Dublin: Irish Business and Employers Confederation.
- Institute of Alcohol Studies (2009) *Excessive and problem drinking in England and Wales*. London: IAS.
- Kershaw C, Nicholas S and Walker A (2008) *Crime in England and Wales 2007/08: findings from the British Crime Survey and police recorded crime*. London: Home Office.
- Kilkelly U (2005) The Children's Court: a children's rights audit. Cork: University College Cork.
- Klingemann H (2001) Public order and safety. In H Klingemann and G Gmel (eds), *Mapping the social consequences of alcohol consumption*. Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Leonard K (1999) Alcohol use and husband marital aggression among newlywed couples in XB Ariaga and S Oskamp (eds) *Violence in intimate relationships*. Thousand Oaks, California: Sage Publications Inc.
- Lindqvist P (1991) Homicides committed by abusers of alcohol and illicit drugs. *British Journal of Addiction*, 86: 321–326.
- Linehan SA, Duffy DM, Wright B, Curtin K, Monks S and Kennedy HG (2005) Psychiatric morbidity in a cross-sectional sample of male remanded prisoners. *Irish Journal of Psychological Medicine*, 22: 128–132.
- Livingston M (2008) Alcohol outlet density and assault: a spatial analysis. *Addiction*, 103: 619–628.
- Lynskey MT, Fergusson DM and Horwood LJ (1994) The effect of parental alcohol problems on rates of adolescent psychiatric disorders. *Addiction*, 89: 1277–1286.
- Marshal MP (2003) For better or for worse? The effects of alcohol use on marital functioning. *Clinical Psychology Review*, 23: 959–997.

- Matthews S and Richardson A (2005) *Findings from the 2003 Offending, Crime and Justice Survey: alcohol-related crime and disorder*. London: Home Office.
- Mattson S and Riley E (1998) A review of the neurobehavioural deficits with fetal alcohol syndrome or prenatal exposure to alcohol. *Alcoholism: Clinical and Experimental Research*, 22: 279–284.
- May P and Gossage J (2001) Estimating the prevalence of fetal alcohol syndrome: a summary. *Alcohol, Research and Health*, 25: 159–167.
- McGee H, Garavan R, de Barra M, Byrne J and Conroy R (2002) *The SAVI report: sexual abuse and violence in Ireland*. Dublin: The Liffey Press.
- McKeown K, Lehane P, Rock R, Haase T and Pratschke J (2002) *Unhappy marriages: does counselling help?* Kildare: Accord.
- Mongan D, Reynolds S, Fanagan S and Long J (2007) *Health-related consequences of problem alcohol use.* HRB Overview Series 6. Dublin: Health Research Board.
- Morgan K, McGee H, Watson D, Perry I, Barry M, Shelley E et al. (2008) SLÁN 2007: Survey of Lifestyle, Attitudes & Nutrition in Ireland. Main report. Dublin: Department of Health and Children.
- Mosher J and Jernigan D (2001) Making the link: a public health approach to preventing alcohol-related violence and crime. *Journal of Substance Use*, 6: 273–289.
- National Crime Council (2003) Public order offences in Ireland. Dublin: NCC.
- National Institute for Health and Clinical Excellence (2008) *Antenatal care: routine care for the healthy pregnant woman*. London: NICE.
- Norstrom T (1998) Effects on criminal violence of different beverage types and private and public drinking. *Addiction*, 93: 689–699.
- O'Connor C (2001) *Marital counselling research project*. Dublin: Department of Social, Community and Family Affairs.
- O'Donnell I (2005) Violence and social change in the Republic of Ireland. *International Journal of the Sociology of Law*, 33: 101–117.
- Prime Minister's Strategy Unit (2004) *Alcohol harm reduction strategy for England*. London: Prime Minister's Strategy Unit.
- Rabinovich L, Brutscher P, de Vries H, Tiessen J, Clift J and Reding A (2009) *The affordability* of alcoholic beverages in the European Union: understanding the link between alcohol affordability, consumption and harms. Cambridge, UK: RAND Europe.
- Ramstedt M and Hope A (2005) The Irish drinking habits of 2002: drinking and drinking-related harm in a European comparative perspective. *Journal of Substance Use*, 10: 273–283.
- Rehm J and Gmel G (1999) Patterns of alcohol consumption and social consequences: results from an 8-year follow-up study in Switzerland. *Addiction*, 94: 899–912.
- Rehm J, Mathers C, Popova S, Thavorncharoensap M, Teerawattananon Y and Patra J (2009) Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. *Lancet*, 373: 2223–2233.
- Roche AM, Pidd K, Berry JG and Harrison JE (2008) Workers' drinking patterns: the impact on absenteeism in the Australian work-place. *Addiction*, 103: 738–748.
- Room R (2000) Concepts and items in measuring social harm from drinking. *Journal of Substance Abuse*, 12: 93–111.
- Room R and Collins G (1983) *Alcohol and disinhibition: nature and meaning of the link*. NIAAA research monograph 12. Washington DC: Department of Health and Human Resources.

- Room R, Bondy S and Ferris J (1995) Risk of harm to oneself from drinking, Canada 1989. *Addiction*, 90, 499–513.
- Room R, Graham K, Rehm J, Jernigan D and Monteiro M (2003) Drinking and its burden in a global perspective: policy considerations and options. *European Addiction Research*, 9: 165–175.
- Room R and Rossow I (2001) The share of violence attributable to drinking. *Journal of Substance Use*, 6: 218–228.
- Rossow I (1996) Alcohol-related violence: the impact of drinking pattern and drinking context. Addiction, 91: 1651–1661.
- Rossow I (2001) Alcohol and homicide: a cross-cultural comparison of the relationship in 14 European countries. *Addiction*, 96 Suppl. 1: S77–92.
- Rossow I and Hauge R (2004) Who pays for the drinking? Characteristics of the extent and distribution of social harms from others' drinking. *Addiction*, 99: 1094–1102.
- Rossow I, Pernanen K, and Rehm J (2001) Accidents, suicide and violence. In H Klingemann and G Gmel (eds) *Mapping the social consequences of alcohol consumption*. Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Sayal K, Heron J, Golding J and Emond A (2007) Prenatal alcohol exposure and gender differences in childhood mental health problems: a longitudinal population-based study. *Pediatrics*, 119: e426–434.
- Seljamo S, Aromaa M, Koivusilta L, Rautava P, Sourander A, Helenius H and Sillanpaa M (2006) Alcohol use in families: a 15-year prospective follow-up study. *Addiction*, 101: 984–992.
- Shaw J, Hunt IM, Flynn S, Amos T, Meehan J, Robinson J *et al.* (2006) The role of alcohol and drugs in homicides in England and Wales. *Addiction*, 101: 1117–1124.
- Sher KJ (1997) Psychological characteristics of children of alcoholics. *Alcohol Health and Research World*, 21: 247–254.
- Shults R, Elder R, Sleet D, Nichols J, Alao M, Carande-Kulis V *et al.* (2001) Reviews of evidence regarding interventions to reduce alcohol-impaired driving. *American Journal of Preventive Medicine*, 21 (Suppl. 1): 66–88.
- Sood B, Delaney-Black V, Covington C, Nordstrom-Klee B, Ager J, Templin T *et al.* (2001) Prenatal alcohol exposure and childhood behaviour at age 6 to 7 years: I. Dose-response effect. *Paediatrics*, 108: 1–9.
- Stockwell T (1994) *Questionnaire for the WHO project on public drinking*. In H Klingemann and G Gmel (eds) *Mapping the social consequences of alcohol consumption*. Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Streissguth A and O'Malley K (2000) Neuropsychiatric implications and long-term consequences of fetal alcohol spectrum disorders. *Seminars in Clinical Neuropsychiatry*, 5: 177–190.
- Streissguth AP, Aase JM, Clarren SK, Randels SP, LaDue RA and Smith DF (1991) Fetal alcohol syndrome in adolescents and adults. *Journal of American Medical Association*, 265: 1961–1967.
- Testa M, Livingston JA, Vanzile-Tamsen C and Frone MR (2003b) The role of women's substance use in vulnerability to forcible and incapacitated rape. *Journal of Studies on Alcohol*, 64: 756–764.
- Testa M, Quigley BM and Leonard KE (2003a) Does alcohol make a difference? Withinparticipants comparison of incidents of partner violence. *Journal of Interpersonal Violence*, 18: 735–743.

- TNS Opinion & Social (2007) *Attitudes towards alcohol.* Special Eurobarometer 272. Brussels: European Commission.
- Turning Point (2006) *Bottling it up: the effects of alcohol misuse on children, parents and families*. London: Turning Point.
- US Department of Health and Human Services (2007) *The Surgeon General's call to action to prevent and reduce underage drinking*. Rockville, MD: US Department of Health and Human Services.
- Ullman S, Karabatsos G and Koss M (1999) Alcohol and sexual assault for a national sample of college women. *Journal of Interpersonal Violence*, 14: 603–625.
- Velleman R and Orford J (1990) Young adult offspring of parents with drinking problems: recollections of parents' drinking and its immediate effects. *British Journal of Clinical Psychology*, 29: 297–317.
- Velleman R and Templeton L (2003) Alcohol, drugs and the family: results from a long-running research programme within the UK. *European Addiction Research*, 9: 103–112.
- Watson D and Parsons S (2005) *Domestic abuse of women and men in Ireland*. Dublin: Stationery Office.
- Willford J, Leech S and Day N (2006) Moderate prenatal alcohol exposure and cognitive status of children at age 10. *Alcoholism: Clinical and Experimental Research*, 30: 1051–1059.
- World Health Organization (1995) European charter on alcohol. Copenhagen: WHO.
- World Health Organization (2004) Global status report on alcohol 2004. Geneva: WHO.
- World Health Organization (2009) *Working document for developing a draft global strategy to reduce harmful use of alcohol.* Geneva: WHO.
- Zhu L, Gorman DM and Horel S (2004) Alcohol outlet density and violence: a geospatial analysis. *Alcohol and Alcoholism*, 39: 369–375.
- Zohhadi S, Templeton L and Velleman R (2004) Service provision for the children and families of alcohol misusers. Bath: University of Bath.

design by **drawinginc**