BINGE DRINKING AND PUBLIC HEALTH

Alcohol misuse, in the form of binge drinking (BD), is prevalent among young people and seems to be a distinctive characteristic of the British drinking culture. Over the last 2 years the Government has reformed licensing laws and implemented a strategy aimed at reducing alcohol-related harm. This briefing describes the extent of BD in the UK, examines the current legislation and analyses the policy implications.

What is binge drinking?
BD refers to the consumption of excessive amounts of alcohol within a limited time period. Such behaviour leads to a rapid increase in blood alcohol concentration (BAC) and consequently to drunkenness. Definitions of BD vary; a commonly used definition is the consumption of twice the daily benchmark given in the Government’s guidelines (Box 1). Figures in this paper are based on this definition. BD is predominantly seen in those aged 16–24, but it may also extend to those in their 30s. Problems associated with BD are most visible at weekends in urban areas and are responsible for a large fraction of the policing resources and Accident and Emergency (A&E) department attendances at these times.

Extent of binge drinking
BD is embedded in wider aspects of drinking behaviour, so estimating its extent is not simple. Recent reports from the Prime Minister’s Strategy Unit¹, The Academy of Medical Sciences (AMS)² and the Health Development Agency have tried to uncover the scale of BD in the UK. These and other studies suggest that:

- 23% of adult males and 9% of adult females (a total of 5.9 million people) engage in BD;
- in the last decade, BD among young British women has increased more than in any other EU country;
- UK death rates due to acute intoxication have doubled in the last 20 years in both sexes;
- 29% of deaths attributable to alcohol are from injuries that have occurred in a state of intoxication – these are more common among 16- to 34-year-olds.

Box 1 Units and recommended intakes
The strength of an alcoholic drink is indicated by the percentage of alcohol by volume (ABV). A unit corresponds to approximately 8 g (or 10 ml) of pure alcohol, regardless of the amount of liquid in which it is diluted. For instance, half a pint of beer (ABV 3.5%) or a small glass of wine (ABV 12–14%) is the equivalent of 1 unit.

Guidelines issued by the Department of Health (DH) in 1995 recommend a maximum daily alcohol intake of 3–4 and 2–3 units for men and women, respectively. Any occasion on which a person drinks more than the daily recommended limit should be followed by 48 alcohol-free hours.

Impact of BD on health
Physical health
The behavioural and health effects of alcohol are dose-dependent and vary from one person to another. They range from relaxation and euphoria to violent behaviour and coma. A rapid increase in BAC may lead to accidents, falls (due to impaired motor co-ordination), head, hand and facial injuries, self-harm due to suicidal behaviour, drowning, collapse, unsafe sex, severe intoxication, hypothermia, low blood sugar (which may lead to coma and death), heart irregularities and stroke. Death can also be caused by respiratory or circulatory failure or inhalation of vomit.

Mental health
BD affects the brain and its function and has been linked to mental illness. Heavy alcohol misuse is responsible for 15–25% of suicides and 65% of suicide attempts³: BD accounts for a proportion of such figures. Further, increasing numbers of young people are being referred for
alcohol-related psychiatric problems. Overall, BD can affect mood, motivation, memory, learning and attention and hence school performance.

**Social impact of binge drinking**

Alcohol misuse is closely linked with anti-social, aggressive and violent behaviour. For instance, alcohol is a factor in 30% of sexual offences, 33% of burglaries and 50% of street crimes. Such incidents impose significant costs on the National Health Service, Police, Probation Service, Prison Service and the Courts. Men are more likely to commit or experience alcohol-related violence, whereas women are at increased risk of sexual assaults. Around 70% of attendances at A&E departments between midnight and 5am on weekends are alcohol-related. As many as 1 in 10 assaults treated in UK A&E departments are caused by offenders using glasses and bottles as weapons, which can lead to permanent and disfiguring hand or facial injuries. Such incidents may often not be prosecuted because of the unreliability of witnesses recalling facts that occurred while they were intoxicated.

**Factors behind BD**

**Drinking cultures**

BD is a common behaviour among young people in many Northern European countries. BD in the UK has gradually increased over the last decade and has typically been viewed as socially acceptable and a 'normal' youth behaviour: reversing this trend will require fundamental changes in the UK drinking culture. By contrast, BD is far less common in Mediterranean countries, some of which have an overall per capita alcohol consumption higher than that in the UK. Research suggests that drunkenness is seen as socially unacceptable in Southern Europe, particularly among women; family structure and dynamics, and historical factors may account for this difference in drinking cultures.

**Personal and social factors**

BD is influenced by a range of personal and social motives that may differ according to age group. Among teenagers, curiosity and experimentation may lead to identification of alcohol as important to sociability, confidence and enjoyment in social and sexual situations. Group pressure, the desire to appear 'grown-up' and positive expectations of alcohol use are specific drives of teenage BD. Research by the Joseph Rowntree Foundation suggests that teenage binge drinkers may indulge because they enjoy the experience and because it alleviates boredom. However, attitudes to alcohol evolve with age and traits such as risk-taking, rebelliousness and experimentation diminish as people move into adulthood. As people age, the frequency of alcohol consumption increases while volume of intake lessens, suggesting that BD is a transitional behaviour. Although a minority of people persists binging even in their 30s, most people leave BD behind as they approach their mid-20s.

**Availability**

Physical availability and affordability are factors that may contribute to the level of alcohol consumption among young people. Drinks are more expensive in clubs and bars, so young people often consume alcohol at home before they go out. The introduction of ready-to-drink (RTD) or ‘alcopop’ products, specifically designed to appeal to young people is also often cited as a factor influencing consumption among young teenagers. However, alcohol producers point out that RTD comprise only 4% of total drinking (by volume). The context in which BD takes place also deserves attention. Bars designed to offer drinking while standing as the only entertaining activity ('vertical drinking establishments'), and irresponsible promotions, such as happy hours, ‘two for the price of one’ and ‘all you can drink for £10’, are thought to significantly contribute to BD among young people. Overall, price, availability, taste and image undoubtedly play a role in influencing drinking patterns and preferences. However, the interplay between these factors and other variables such as attitudes, cultural norms among peers, expectancies and context all play a role in shaping drinking behaviour among young people.

**Issues on current Government measures**

UK Government policy currently follows a harm-minimisation strategy. It has three main strands (Box 2):

- a new Licensing System;
- an Alcohol Harm Reduction Strategy;
- a Public Health White Paper.

However, as outlined in the following sections, these measures have been criticised by the medical profession and others, who argue that policies that restrict alcohol availability (for example, through licensing and affordability) would be more effective in reducing BD as well as alcohol misuse in general.

**Licensing laws**

The changes to the licensing laws (Box 2) have been widely criticised by scientists, clinicians and the Police. Such groups are concerned about the potential social and health implications and argue that relaxing the licensing laws will cause more harm than good.

**Public health impact**

The Royal College of Physicians (RCP) strongly opposes the new licensing laws. It suggests that the extended opening hours that the new system allows may increase overall alcohol consumption and is concerned that this will have implications for public health. The Government, however, hopes that the new licensing laws will reduce crime and anti-social behaviour and encourage a change in UK drinking culture. The British Medical Association (BMA) does not oppose prolonged opening times but urges the Government to monitor the situation to establish whether or not longer licensing hours have the desired effect. RCP and BMAs have both called for more consistent, evidence-based, policies.

**Social impact**

The Department for Culture, Media and Sport (DCMS) sees two potential benefits for extending opening times. First, it may reduce the practice of ‘stocking up’ with alcohol just before closing time. Second, it may stagger closing times, reducing the number of people simultaneously disgorging onto the streets. DCMS hopes that the changes will encourage a change in UK drinking...
culture, away from BD towards a more responsible attitude to drinking.

**Box 2: Current Government Measures**

**The Licensing Act**
The new licensing laws regulate all licensed activities involving alcohol — including off-licences and supermarkets, entertainment and late night refreshment — in a single piece of legislation and replace the fragmented system currently in use. They allow the extension of opening times to 24 hours, transfer licensing powers from magistrates to local authorities and expand police powers to deal with troublesome premises. The new laws will come into force in November 2005.

**The National Strategy to reduce alcohol harm**
The new Strategy, which applies to England only, focuses on:
- better education and communication to achieve a long-term change in attitudes to irresponsible drinking;
- better health and treatment systems to improve early identification and treatment of alcohol problems;
- combating alcohol crime and disorder to address the problems of town and city centres that are blighted by alcohol misuse at weekends;
- working with the alcohol industry to build on the good practice of existing initiatives and develop new ones.

Implementation of the Strategy began in 2004 and will be reviewed in 2007. Responsibility for implementation is shared between the Home Office and the DH; funding for this is currently being clarified. The Government has published a consultation document setting out proposals to change attitudes and behaviours towards binge- and underage drinking. The Home Office has already implemented a number of successful initiatives such as the Alcohol Misuse Enforcement Campaign which took place last summer and during the Christmas period, the Tackling Violent Crime Program and the increase of certain alcohol Fixed Penalty Notice fines from £40 to £80.

**The “Choosing Health” White Paper**
The main features of the White Paper include:
- developing a voluntary social responsibility scheme for alcohol producers and retailers;
- working closely with the drinks industry to develop a campaign on BD;
- investments in the NHS to improve services to help tackle alcohol problems at an early stage;
- piloting screening and brief interventions for BD.

However, police and residents representatives argue that rather than solving the problem, prolonged opening hours could simply increase the opportunity for BD, shifting the trouble later and spreading it over a longer period. In a recent report on anti-social behaviour, the House of Commons Home Affairs Committee concluded that 'there is no clear-cut evidence as to whether more flexible licensing hours will make current problems worse or will improve the situation' and urged the Government ‘to monitor the situation on the ground extremely closely and to seek to change the law if necessary’.

**Access and consumption**
Central to this debate is the issue of whether or not increasing access to alcohol will lead to a rise in consumption. Experience from various countries around the world is mixed. For instance, in Perth, Western Australia, an extension of bar opening times from midnight until 1 am led to a rise in alcohol consumption, violence and drunkenness. Similar effects have been reported in Iceland, Ireland and Canada, while a reduction in licensing hours in Norway, Finland and Sweden led to a decrease of alcohol consumption among heavy drinkers. On the other hand, availability of alcohol in many Mediterranean countries is not restricted and yet those countries are not affected by BD on the scale seen in the UK. Overall, it appears that the prevailing drinking culture is a key factor in determining consumption patterns. In those countries with a well established BD culture, increasing access to alcohol has led to increased consumption. It remains to be seen whether the changes to the licensing laws in this country will encourage a more responsible attitude towards drinking (as the government hopes) or simply fuel a rise in BD (as the medical profession and some other parties fear).

**The National Strategy and Health White Paper**
In the Government’s view, the main impacts of BD are crime and anti-social behaviour, rather than public health issues. However, academics and medical professionals note that alcohol intoxication is the main cause of alcohol-related harm in terms of violence as well as injuries, accidents and traffic casualties. Such groups thus suggest that alcohol policy should also focus on the health impact of acute alcohol misuse. The following sections examine some of the specific issues raised.

**Partnership with the alcohol industry**
Both the White Paper and the National Strategy place a heavy reliance on working closely with the alcohol industry. Academics, clinicians and the police suggest that this reliance on partnership may compromise the effectiveness of the policies. The Government has said it will monitor and review the effectiveness of the partnership in delivering a reduction in alcohol-related harm. Industry has also launched a number of corporate social responsibility initiatives. For instance, the British Beer & Pub Association is producing a Code of Good Practice aimed at curbing irresponsible promotions in licensed premises. Furthermore, the drinks company Diageo has a programme of social responsibility TV advertising, funding of server training and alcohol education in schools. Despite such initiatives, the implementation of industry best practice varies and some licensees still engage in irresponsible promotions.

**Education**
Education in schools and improvement of public information is an important strand of government policy on alcohol harm reduction. The Government sees it as one important way of curbing BD and changing the UK drinking culture. However, research shows that while knowledge can be increased and attitudes may be changed, affecting drinking behaviour through school programmes and public information is a very difficult task. Experience from educational campaigns in other contexts suggests that they are most likely to be successful where they are given a very high profile and accompanied by other measures. For instance, the drink-driving campaign, which led to a large change in attitudes towards drink driving, was accompanied by effective enforcement of tough penalties. The Strategy’s emphasis
on individual responsibility has also been criticised by the AMS and the House of Commons Home Affairs Committee in its inquiry into anti-social behaviour. The Committee points out that such a concept contrasts with the move to restrict smoking in public places (see postnote No. 206) and questions the reliance of the Government on the role of individuals.

Prevention and treatment services
Neither the Strategy nor the White Paper contain any reference to addressing BD through alcohol treatment services. Furthermore, the DH suggests that there is little evidence that counselling or other such interventions are effective in discouraging BD. However, research suggests that such interventions can be effective if offered in appropriate settings. Opportunistic interventions are unlikely to be effective at the first A&E attendance if the attendant is intoxicated, but have proved very successful when combined with wound care (for example, suture removal). The DH is currently piloting programs to test the effectiveness of brief interventions.

Advertising
Alcohol brands are advertised through television, radio, print, point-of-sale promotions and the internet. In the UK, TV and radio advertising codes are administered by the Advertising Standards Authority, which also regulates all other forms of paid-for advertising under a self-regulatory code. The Television Advertising Standards Code is the responsibility of Ofcom, the UK regulator of communications industries. The Code has recently been reviewed to ensure that it does not target under-18s or glamorize irresponsible behaviour. However, the RCP and BMA argue that this review does not go far enough and proposes a total ban on alcohol advertising.

Further considerations
There is a widespread concern within the medical and scientific community that current government policy on alcohol harm reduction places too much emphasis on education and reducing social impacts. The general consensus among this community is that more emphasis should be placed on managing supply and supporting research, prevention and treatment.

Managing supply
Bodies such as the RCP, BMA and AMS advocate restricting the availability of alcohol through measures such as increased taxation and stricter licensing laws. They suggest that such measures would reduce overall per capita consumption and thus reduce alcohol-related harm. For instance, the AMS estimates that a 10% increase in alcohol taxes could reduce homicide rates by 5.0% (in males) to 7.1% (in females). These groups acknowledge that such an approach would affect all drinkers rather than targeting BD. However, they argue that there is a wealth of evidence suggesting that the level of alcohol-related harm is related to the overall alcohol consumption of a population.

The Government is trying to achieve a more targeted reduction of harm among those who misuse alcohol. Targeted interventions through restriction of availability and increased pricing are very difficult. For instance, young people in their 20s and 30s tend to have relatively high disposable incomes and may be able to absorb increases in price. Additionally, strict control measures may cause unintended effects such as criminality associated with illicit markets, a feature observed during prohibition in Sweden and the USA. The Government considers that per capita consumption cannot be reduced by simply controlling price and availability because of this interplay with other factors. It has thus decided to pursue a harm-minimisation approach.

Implementing the licensing laws
The Home Affairs Committee and other bodies have highlighted a number of issues concerning implementation of the new licensing laws. For instance, there is a need to ensure that the new licensing hours are fully integrated with the provision of other services such as policing/enforcement, public transport, street cleaning and the availability of public conveniences. Further clarity in the planning rules would prevent town and city centres from becoming over-populated with the ‘vertical drinking establishments’ that are linked with violence and anti-social behaviour. Finally, enforcement of the rule that intoxicated persons be refused further sales of alcohol in pubs and off-licenses is also likely to be an issue.

Overview
- BD is increasingly causing harm in terms of health, crime and work productivity.
- The Government has responded with (a) revised licensing, (b) Harm Reduction Strategy and (c) Public Health White Paper.
- Some medical bodies, local communities and police bodies fear that the new licensing laws have the potential to worsen the impact of BD and alcohol misuse in general. However, DCMS will monitor the outcome of the implementation.
- The medical community criticises the Strategy and the Public Health White Paper for their emphasis on education and public safety. It calls for measures to manage supply to effectively reduce health impacts.

Endnotes
1 Alcohol Harm Reduction Strategy, PMSU 2004.
2 Calling time The Academy of Medical Sciences, 2004
3 Alcohol Concern, 1999
4 Underage ‘risky’ drinking. Joseph Rowntree Foundation, 2005
5 www.bma.org.uk/ap.nsf/Content/poliniticombatbindrink
6 Drinking responsibly. DCMS, HO, ODPM, January 2005.
8 Babor et al., Oxford University Press, 2003

POST is an office of both Houses of Parliament, charged with providing independent and balanced analysis of public policy issues that have a basis in science and technology. POST is grateful to Dr Loredana Santoro for researching this briefing, to the British Psychological Society for funding her parliamentary fellowship, and to all contributors and reviewers. For further information on this subject please contact Dr Peter Border at POST.

Parliamentary Copyright 2005
The Parliamentary Office of Science and Technology, 7 Millbank, London, SW1P 3JA, Tel: 020 7219 2840; email: post@parliament.uk

www.parliament.uk/parliamentary_offices/post/pubs2005.cfm