



Strategy Unit Alcohol Harm Reduction project

Interim Analytical Report

This is an analytical report reviewing available data and evidence. It is not a statement of Government policy. Comments and views are invited and can be sent to the Strategy Unit on: su-alcohol@cabinet-office.x.gsi.gov.uk

This is the Interim Analytical Report for the National Alcohol Harm Reduction Strategy

- This paper is the Interim Analytical Report for the National Alcohol Harm Reduction Strategy. It sets out the evidence on which the harm reduction strategy will be based. It is not the final report and therefore does not contain any policy recommendations. Policy recommendations will be published with the final strategy later in the year.
- The aim of the National Alcohol Harm Reduction Strategy is to reduce the harms associated with alcohol misuse. This report therefore focuses on these harms, what they are, who they affect, and the costs they cause to public services and the economy, as well as the role the Government and others can play in tackling these harms. It is built on the existing evidence base, which is stronger in some areas than others.
- The report does not focus on alcohol use *per se* - or on the benefits of alcohol, although it is important to acknowledge these benefits as part of the wider context within which the strategy is situated. This wider context encompasses a range of Government priorities and initiatives, including:
 - » encouraging regeneration and active and cohesive communities;
 - » raising productivity;
 - » tackling health inequalities and promoting public health;
 - » tackling crime and anti-social behaviour; and
 - » promoting leisure and tourism.
- The final strategy will be published as a separate report and will set out how the Government proposes to take forward policy in this area. The Government will consult further on the details of implementation. The strategy will be implemented from 2004.

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Part 1

Introduction

This part of the report looks at:

- » The place of alcohol in society
- » The way we drink now
- » Why this matters



A) The place of alcohol in society

Alcohol and society

B) The way we drink now

Consumption and trends

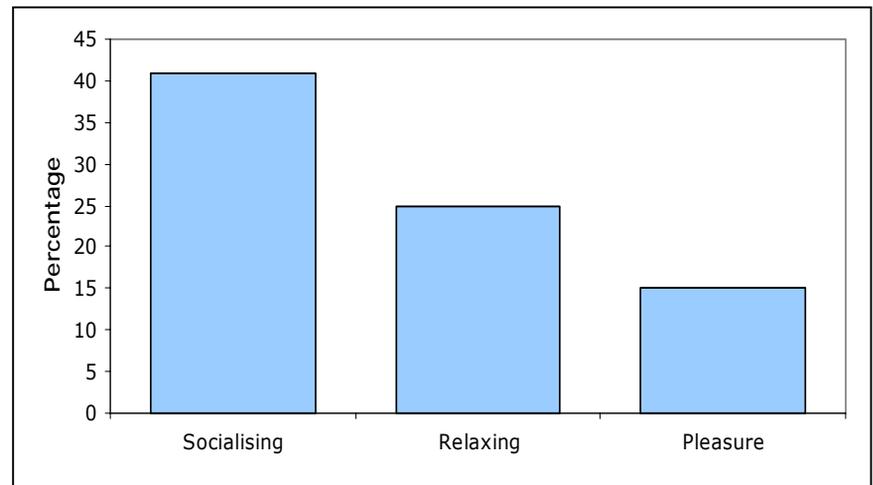
C) Why this matters

Alcohol and harm

Alcohol has an important place in our society

- The drinking of alcohol is widely accepted and associated with socialising, relaxing and pleasure.
- Over 90 per cent of adults in Britain - nearly 40m people - drink alcohol. The majority do so with no problems the majority of the time.
- Alcohol has many functions:
 - » simply as a drink when thirsty, or with a meal;
 - » to help socialise and celebrate;
 - » to show hospitality; and
 - » as a perceived aid to relaxation.
- It plays a key role within the growing leisure and tourist industry.

MOST COMMONLY MENTIONED POSITIVE ASSOCIATIONS WITH ALCOHOL



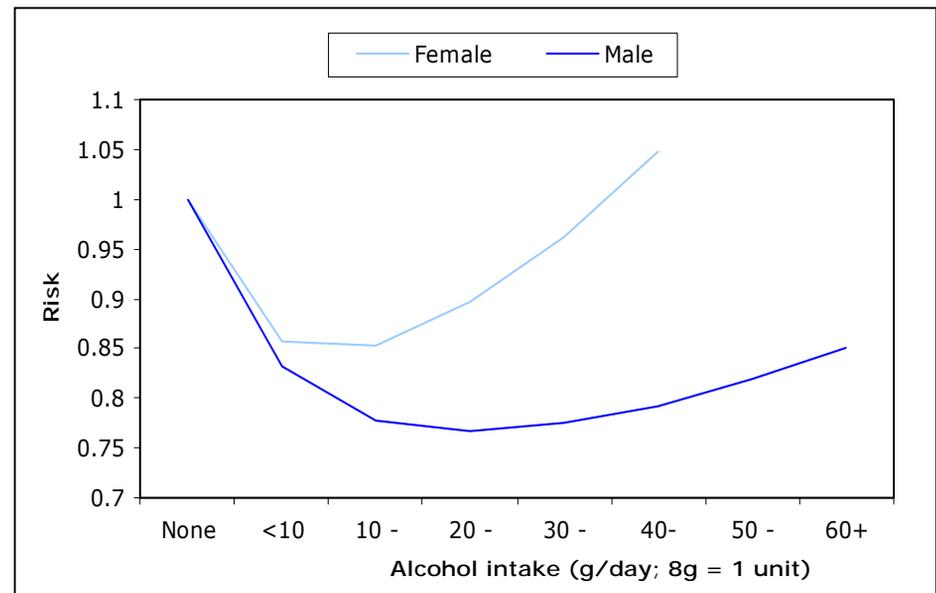
Source: MORI (2000)

In moderation, alcohol can provide health benefits

- Drinking in moderation can also confer health benefits: consumed in low amounts at regular intervals, alcohol can lower the risk from coronary heart disease (CHD) and ischaemic stroke.
- The cardioprotective effect applies across the age range but is seen mainly at ages over 40, where the incidence of CHD is highest.
- Through this protective effect, alcohol is estimated to prevent about 15,000-22,000 deaths annually, roughly equivalent to the number of deaths caused by alcohol misuse

Sources: McKee and Britton (1998); Rimm et al. (1999); Britton and McPherson (2001); White (2000); Mukamal et al. (2003); Chenet et al. (2001)

RELATIVE RISKS OF MORTALITY FROM CORONARY HEART DISEASE BY LEVEL OF ALCOHOL INTAKE



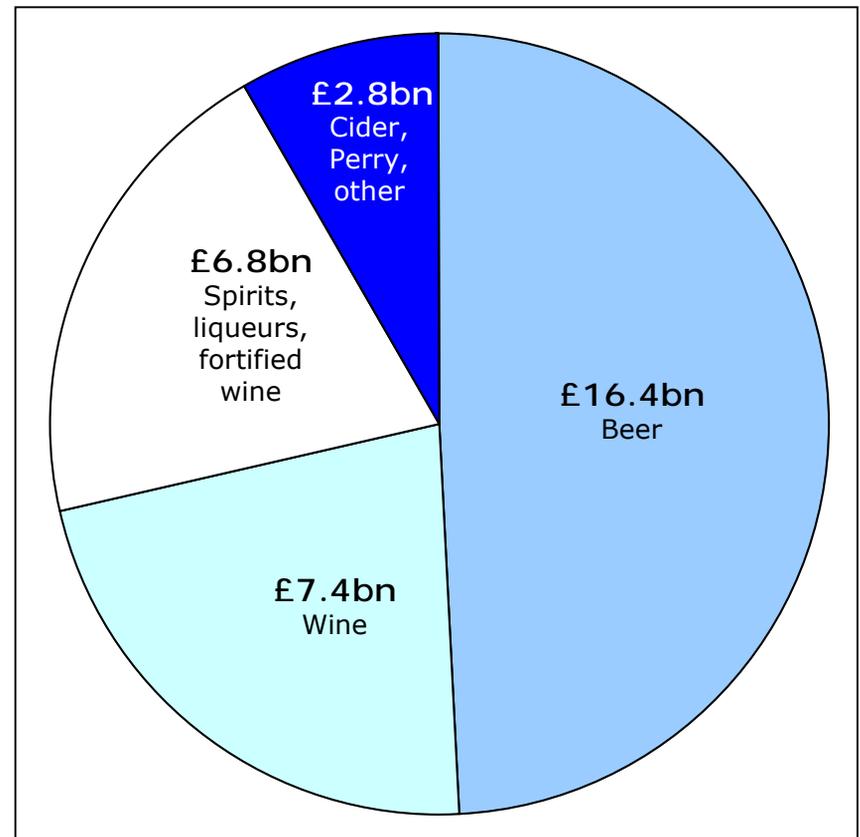
Source: Britton, derived from meta-analysis by Corrao et al. (2000)

The alcoholic drinks market is a substantial part of the UK economy

- The total value of the UK alcoholic drinks market exceeds £30bn.
- Excise duties on alcohol raise about £7bn per year in Exchequer revenues.
- UK consumers spend more of their disposable income on alcohol than they do for example on personal goods and services, fuel and power or tobacco.
- It is estimated that the drinks industry generates approximately 1m jobs in the UK across the whole of the value chain, from farming through distribution to pubs, bars and restaurants.

Source: Mintel; UK Drinks Market (2001); ONS - Family Expenditure Survey (2000/01)

UK ALCOHOLIC DRINKS MARKET BY VALUE, 2000



Source: UK Drinks Market (2001)



A) The place of alcohol in society

Alcohol and society

B) The way we drink now

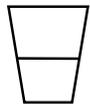
Consumption and trends

C) Why this matters

Alcohol and harm

Defining drinking patterns

- Most measurements of drinking patterns are unit-based.
- In the UK, a unit is defined as 8g of alcohol. This is equivalent to:



a half pint of ordinary strength beer



125ml (a small glass) of wine (at 9 per cent strength)



one measure of spirits

- The definitions in this report are based on those used in official surveys, which use government weekly and daily guidelines (see box) as benchmarks. They are as follows:
 - » *Binge*: drinking over twice the daily guidelines in one day (8+ for men/6+ for women)
 - » *Low to moderate drinking*: drinking up to previous weekly guidelines (0-14/21)
 - » *Heavy to moderate drinking*: drinking between 14/21 and 35/50 units in a week
 - » *Very heavy*: drinking 35/50+ units in a week
 - » *Chronic*: sustained drinking which is causing or likely to lead to risk of harm.
- The strength of drinks has risen: wine for example is now frequently 12 per cent or 13 per cent. This has an impact on calculating unit sizes.

GOVERNMENT'S RECOMMENDED SENSIBLE DRINKING GUIDELINES

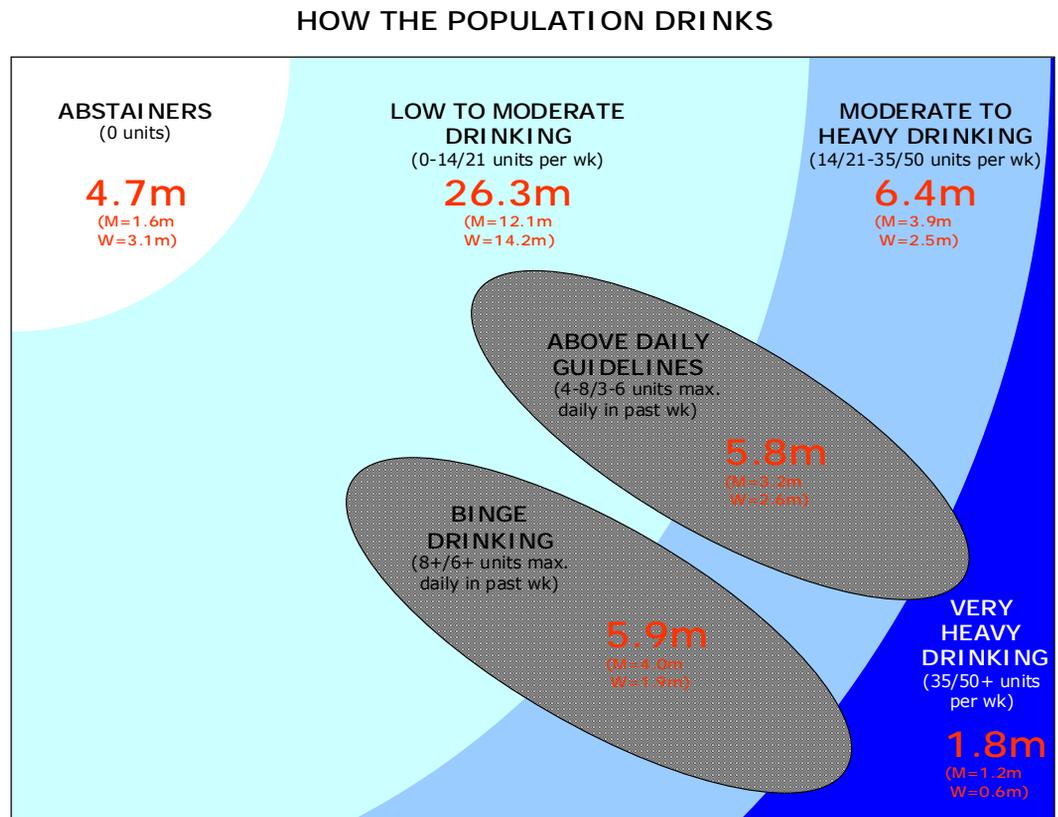
- Government-recommended sensible drinking guidelines were developed on the basis of careful consideration of the harmful and some beneficial effects of drinking at different levels.
- In 1992 the Government recommended that men should consume no more than 21 and women no more than 14 units a week.
- In 1995 this was amended to reflect patterns of consumption more closely: men were recommended to consume no more than 3-4 units per day and women 2-3, with two non-drinking days after an episode of heavy drinking. Consistent consumption at the upper limit is not advised.

Putting 'binge drinking' in context

- In this report, binge drinking is intended to describe heavy or risky consumption of alcohol in a single session.
- For research purposes, the definition we have used is based upon intake: double the daily guidelines. This equates to 6 units (about two-thirds of a bottle of wine) for women, or 8 units (about 4 pints of beer) for men. This is the minimum threshold: many people in this category will be drinking at far higher levels.
- But binge drinking is a debated term. Since alcohol will affect different people in different ways, there is no fixed relationship between the amount drunk and its consequences. So although many people understand 'bingeing' to mean deliberately drinking to excess, or drinking to get drunk, not everyone drinking over 6/8 units in a single day will fit this category. Similarly, many people who *are* drinking to get drunk, will drink far in excess of the 6/8 units in the unit-based definition.
- We have used a unit-based definition of binge drinking since it reflects that used in the evidence available and allows us to measure drinking trends over time. Clearly, though, the consequences of drinking these quantities will differ from individual to individual.

The way we drink now

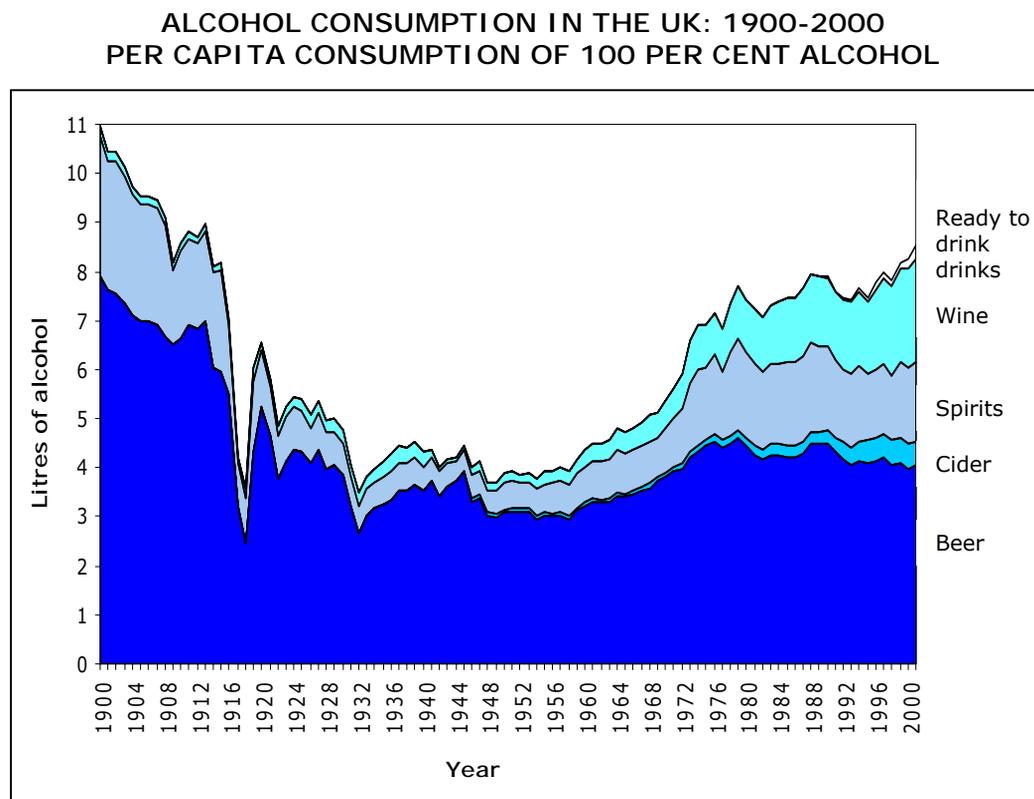
- Over half the adult population drinks less than 14/21 units per week, and within this group 4.7m drink nothing at all.
- However:
 - » 6.4m people drink up to 35/50 units per week; and
 - » a further 1.8m people drink over 35/50 units per week.
- Within these, and overlapping, are groups who drink heavily on single occasions: 5.9m people drink more than twice the recommended daily guidelines on some occasions.



Source: ONS General Household Survey (2001); Note: Categories above are based on government guidelines for weekly (1992) and daily (1995) drinking limits. Graphic is illustrative and not to scale.

We drink less now than a century ago, but over the last half century the trend has been upwards

- Since the middle of the last century, levels of alcohol consumption in the UK have been rising.
- Over the course of 2001, per capita consumption was 8.6 litres of pure alcohol. This represents:
 - » a decrease of 22 per cent since 1901; but
 - » an increase of 121 per cent since 1951.
- Most of this increase has been due to growing consumption of wine: this rose by over 500% from 3.7 litres per head in 1970 to 21.6 in 2000



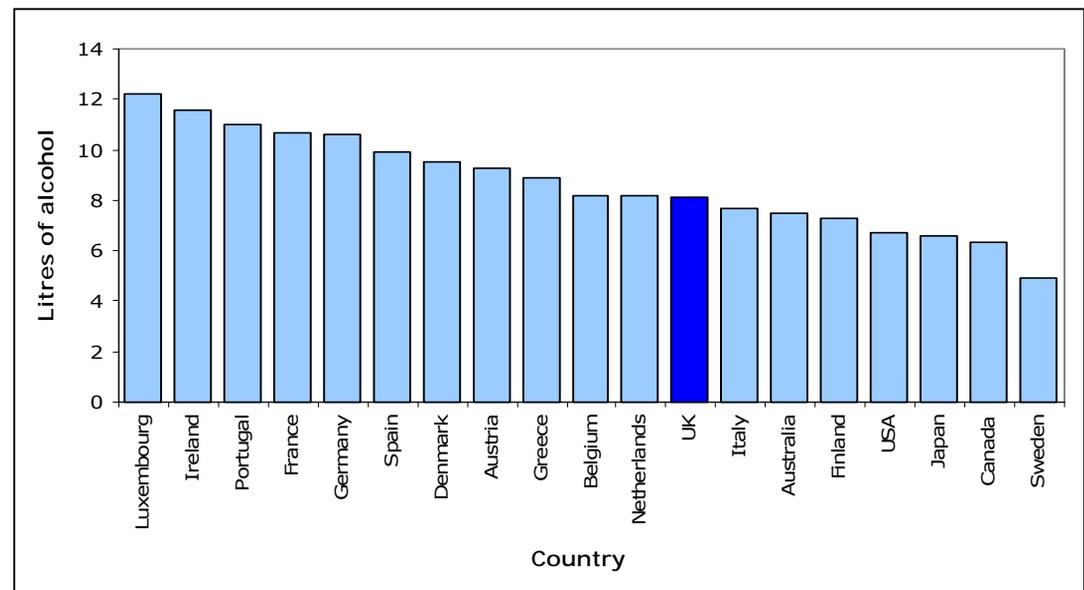
Source: BBPA Statistical Handbook (2001)

We are in the middle of the range for consumption compared to other countries

- In terms of the total amount of alcohol drunk, the UK has been a relatively moderate consumer compared with other Western European countries.
- Historically, the heaviest drinking countries have been the wine-producers. However, in recent years, consumption has fallen in most of these countries, and tended to stabilise elsewhere in Western Europe.
- In the UK, by contrast, consumption is still rising. If present trends continue, the UK would rise to near the top of the consumption league within the next ten years.

Source: IAS (2002)

ALCOHOL CONSUMPTION IN THE WORLD - LITRES OF PURE ALCOHOL PER INHABITANT, 1999

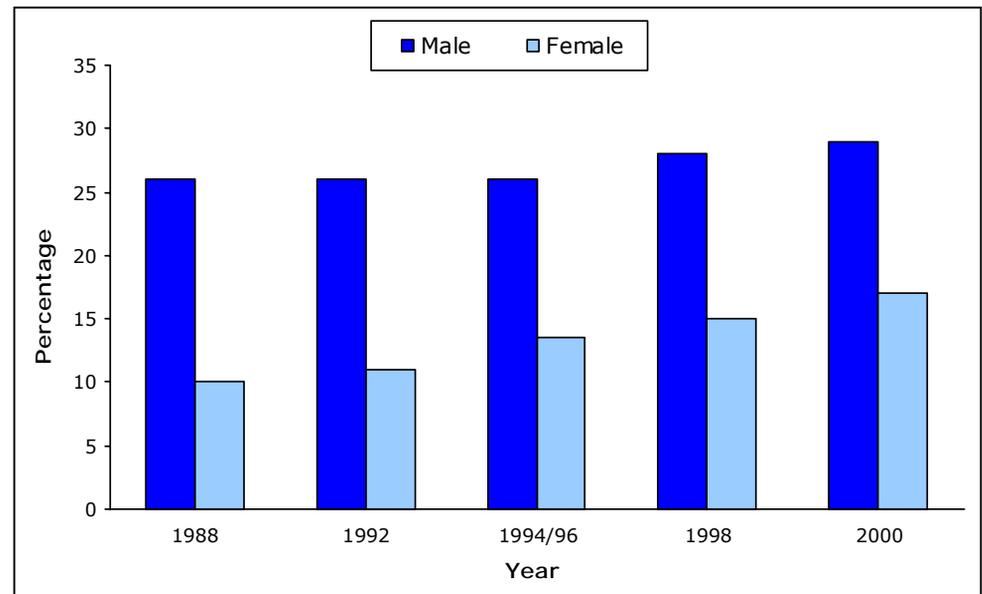


Source: *Produktschap voor gedistilleerde Dranken, Schiedam, Netherlands (2000)*

As a population we are drinking more...

- Almost one in three adult men and nearly one in five women now exceed the recommended guidelines of 21 and 14 units per week, respectively.
- In 1988, one in four men and one in ten women exceeded recommended guidelines.
- The number of women drinking above recommended guidelines has therefore risen by over half in the last 15 years.

PROPORTION OF ADULTS CONSUMING OVER 14 (FEMALE) OR 21 (MALE) UNITS PER WEEK, 1988-2000



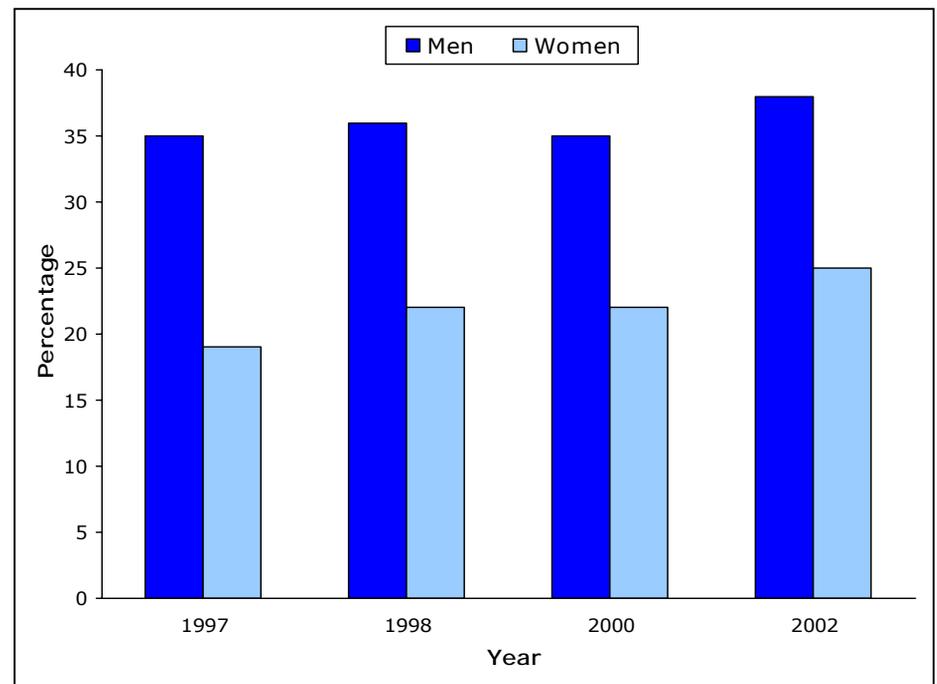
Source: GHS 2000-01 (ONS 2001). Data unweighted for 1998 to compensate for low response.

...and we are drinking more often

- 38 per cent of men and 25 per cent of women now drink on three or more days per week; there is a very gradual upward trend which is more perceptible for women.
- More men now drink on five or six days of the week; more women now drink on three or four days of the week.
- In 2001 22 per cent of men and 13 per cent of women drank on more than five days in the preceding week

Source: GHS 2001

PROPORTION OF THE ADULT POPULATION DRINKING ON THREE OR MORE DAYS OF THE WEEK IN GREAT BRITAIN, 1997-2002

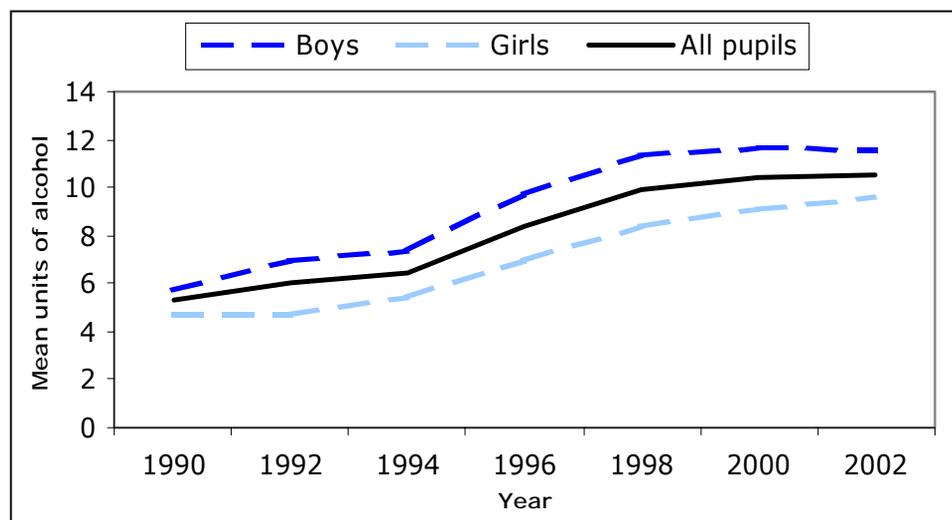


Source: Drinking: Adults' Behavior and Knowledge in 2002, ONS (2002)

Drinkers under the age of 16 are drinking twice as much today as they did ten years ago...

- The proportion of pupils who drank in the last week has fluctuated between 20 per cent and 27 per cent over the last fifteen years, with no sustained increase or decrease over time.
- However, those who do drink are drinking more: over the last decade the average number of units consumed per week has almost doubled, from 5.3 in 1990 to 10.5 in 2002.
- Most alcohol use amongst school-age children occurs amongst the oldest age groups. Over the previous week, alcohol will have been consumed by:
 - » 20 per cent of 13 year old boys and 21 per cent of 13 year old girls; and by
 - » 49 per cent of 15 year old boys and 45 per cent of 15 year old girls.

MEAN ALCOHOL CONSUMPTION BY SCHOOL PUPILS WHO DRINK OVER LAST WEEK, BY SEX, 1990-2001



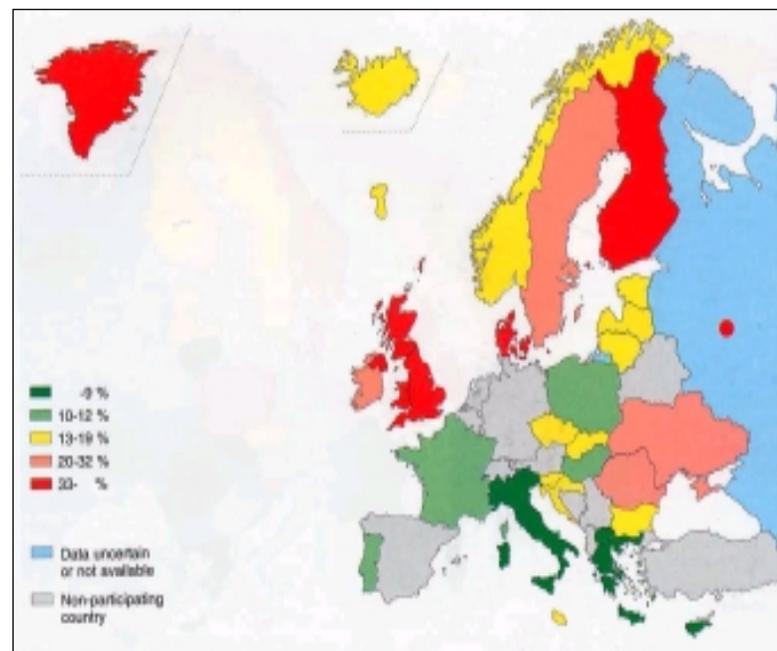
DoH School Survey 2002

...and are likely to get drunk earlier than their European peers

- British teenagers, along with those in Ireland and Denmark, are among the heaviest teenage drinkers in Europe: they are more likely to drink, to get drunk and to report problems associated with drinking than their counterparts in other European countries.
- In the UK, more than a third of 15 year olds report having been drunk at age 13 or earlier. This is true of no more than one in ten French and Italian children.

Sources: IAS (2003), Hibell et al. (2000)

PROPORTION OF ALL STUDENTS WHO HAVE BEEN DRUNK AT AGE 13 OR YOUNGER, 1999



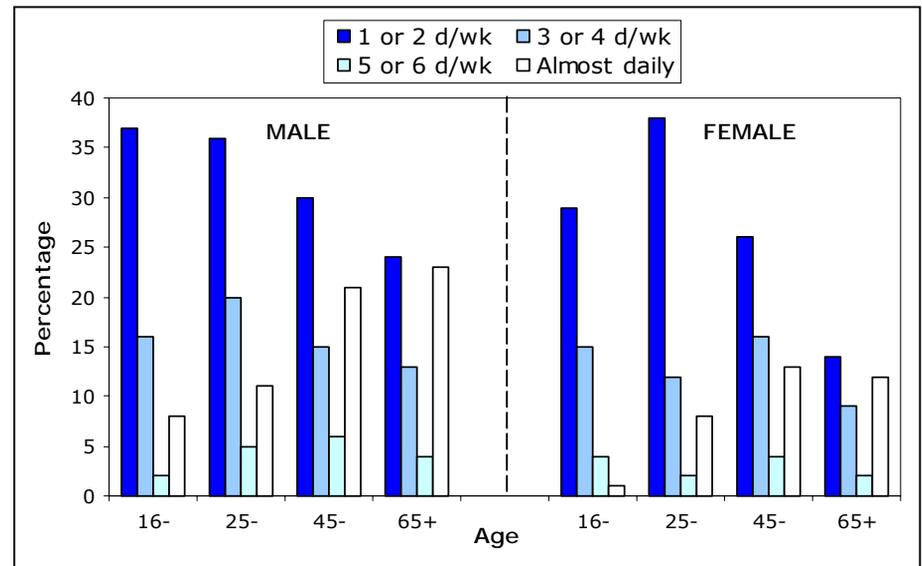
Source: Hibell et al. (2000)

Our drinking patterns change with age

- The age of highest consumption is 16-24: 14 per cent of men and 7 per cent of women drink respectively more than 50 and 35 units per week at this age. Drinking at this age tends to be concentrated in fewer days of the week: 5 per cent of men and 3 per cent of women at this age drink daily.
- While the volume of alcohol consumed lessens with age, regularity of consumption increases: those *over 45* are more likely to drink daily.
- 21 per cent of men and 12 per cent of women over 65 drink daily.

Source: GHS 2001

DRINKING FREQUENCY BY DAYS PER WEEK, AGE AND SEX IN BRITAIN, 2002

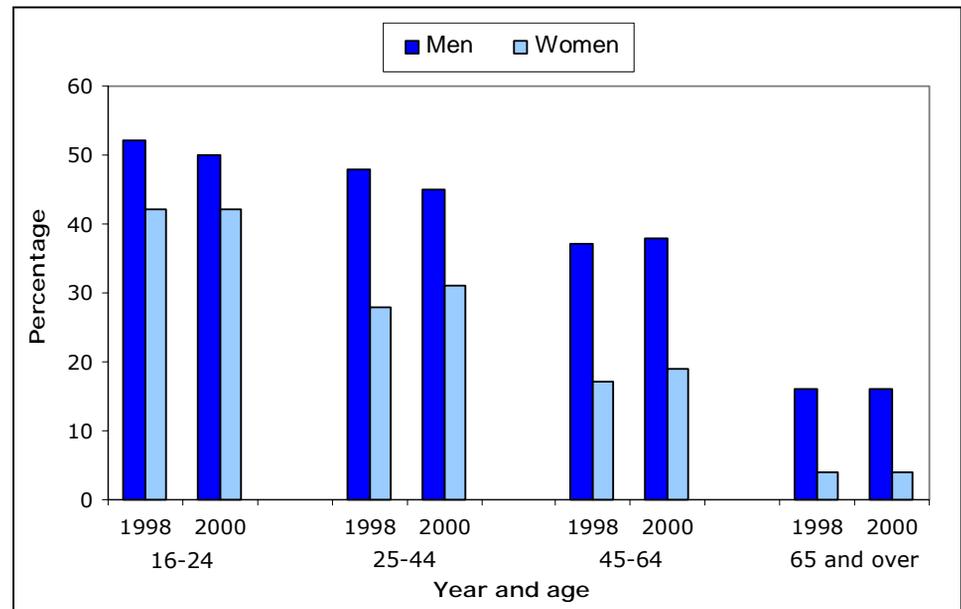


Sources: Lader and Meltzer (2002)

Binge drinking is most characteristic of the young...

- Those aged 16-24 are more likely than all other age groups to binge drink. Only a quarter of women of this age, and around one in six men report never drinking more than 6/8 units per day.
- For some people, this type of drinking behaviour continues into middle age, with around one in three men and one in five women drinking twice the recommended daily benchmarks at least once a week between the ages of 45 and 64.

PROPORTION OF ADULTS DRINKING MORE THAN DAILY GUIDELINES ON AT LEAST ONE DAY IN THE PREVIOUS WEEK, BY AGE

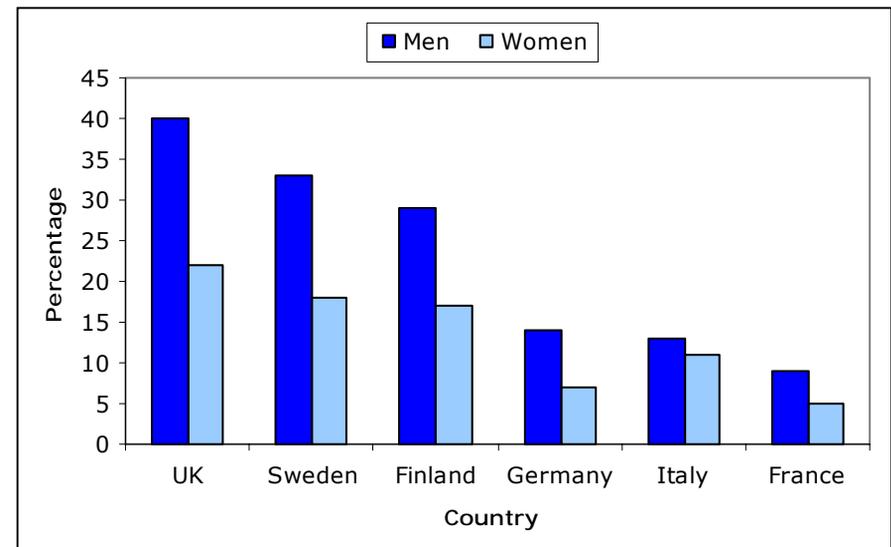


Source: ONS, Health Survey for England 2000

...and is more prevalent in Britain than in many other parts of Europe

- Whereas regular, daily, drinking is most common in Southern Europe, the quantity consumed per drinking occasion is highest in the UK and Northern Europe.
- In the UK, binge drinking accounts for 40 per cent of all drinking occasions by men and 22 per cent by women.

BINGE DRINKING OCCASIONS AS A PROPORTION OF ALL DRINKING OCCASIONS (OVER PREVIOUS 12 MONTHS)

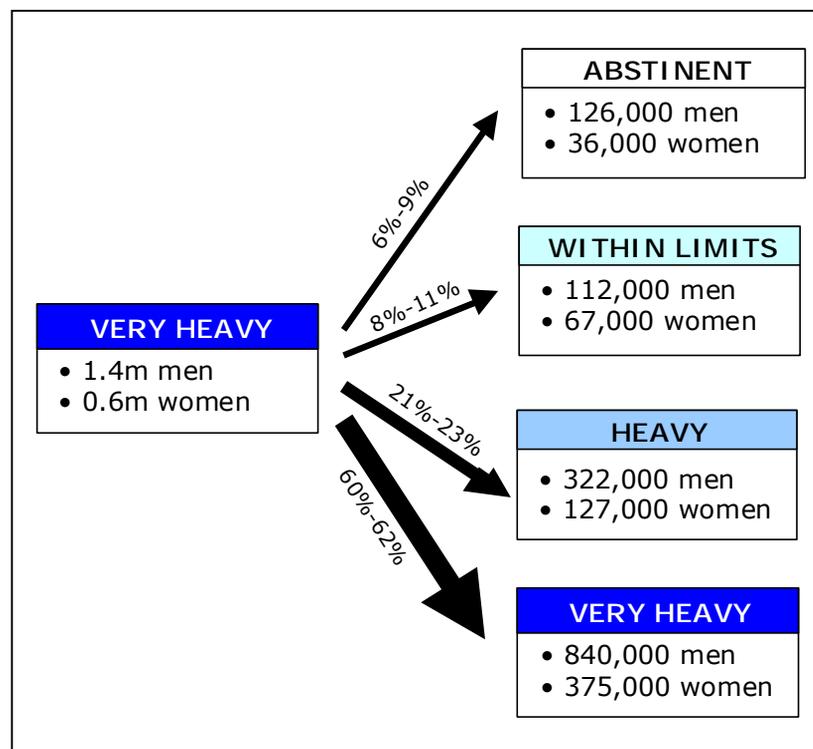


Source: Hemström et al. (2002); Note: Binge drinking in this study is defined as drinking at least a bottle of wine or equivalent on the occasion

But people's drinking patterns tend to change as they go through life

- Drinking patterns are not fixed for life: the trajectory of an individual's 'drinking career' will be shaped by a wide range of factors, many of which are outlined in Part 3 of this report.
- Foremost among these factors is the drinker's age. At younger ages, drinking patterns appear to be less set: while evidence exists that some young people who drink heavily will do so later in life, adolescent drinking - particularly binge drinking - is not strongly associated with adult drinking behaviour.
- However, drinking behaviour within adulthood is more stable and drinking patterns become more entrenched with age. For example, a Birmingham study of untreated heavy drinks suggests that, while some reduce their drinking in a number of ways, over 60 per cent of very heavy drinkers are still very heavy drinkers after four years.

HOW VERY HEAVY DRINKERS MIGHT MOVE BETWEEN DIFFERENT DRINKING PATTERNS



Sources: Derived from Primatesta et al. (2002), ONS (2003) population data, and Dalton and Orford (2002); diagram extrapolated from Birmingham Untreated Heavy Drinkers study



A) The place of alcohol in society

Alcohol and society

B) The way we drink now

Consumption and trends

C) Why this matters

Alcohol and harm

The pharmacological effects of alcohol: intoxication, toxicity and dependence

- Along with the pleasure and health benefits that alcohol brings comes the risk of harm to self and others.
- An important component of the pleasure we derive from alcohol reflects its chemical properties as a drug acting on the brain. As well as changes in mood and emotion, *alcohol intoxication* may induce a range of other short-term psychological and psychomotor effects, including impaired co-ordination, lengthened reaction time, increased risk-taking and decreased responsiveness to social expectations.
- Alcohol is not only an intoxicant, but also a *toxic* substance with direct and indirect effects on a wide range of body organs and systems. These effects may be acute, such as alcoholic poisoning, or chronic, where long-term exposure to high levels of alcohol can lead to disease, such as certain types of cancer.
- In some drinkers, alcohol may also induce *dependence*. Alcohol dependence is considered to be a treatable disorder and can be characterised by a number of symptoms and signs. These include: tolerance to the effects of alcohol; a physiological withdrawal state when alcohol use is reduced or ceased; persistent use despite clear evidence of harmful consequences; preoccupation with alcohol use; impaired capacity to control drinking behaviour; and a strong desire or sense of compulsion to use alcohol. Although physical withdrawal is often a prominent feature of dependence the key elements of dependence are the psychological and behavioural components listed above.

Source: Babor et al. (forthcoming); Orford (2001)

Both volume and patterns of drinking are important determinants of the risk of harm

- Drinking patterns are characterised by:
 - » the frequency of drinking;
 - » the quantity per occasion; and
 - » the variation between one occasion and another.
- At the extremes, two harmful drinking patterns in particular stand out:
 - » chronic heavy drinking (high frequency/high volume); and
 - » heavy single occasion, or 'binge', drinking (low frequency/high volume).
- Because many heavy drinkers develop tolerance to the physical effects of alcohol, chronic heavy drinking does not often lead to evident intoxication, but can still cause physical and psychological damage and lead to dependence.
- By contrast, drinking to intoxication, even if done so infrequently, can lead to a variety of problems, such as accidents, injuries, interpersonal violence, alcohol poisoning and certain types of acute tissue damage.

Source: Grant and Litvak. 1998; WHO 2002

But risk is the operative word: the link between alcohol use and harm is not always clear

- Alcohol misuse does not lead automatically to harm. It does, however, lead to increased risk of harm depending on:
 - » *individual reactions and circumstances*: habitual heavy drinkers can appear near-sober after amounts of alcohol which would incapacitate a non-drinker, although they are at risk of longer-term harm;
 - » *the nature of the harm*: alcohol poisoning, for example, is directly attributable to alcohol whereas other health consequences such as cancer are less directly attributable; and
 - » *the interaction of alcohol with other factors*: an aggressive pub environment can influence the likelihood of violence occurring between drinkers.
- Alcohol is a stronger cause of some harms than others:
 - » the risk of some harms, such as liver cirrhosis, is disproportionately higher when larger amounts are drunk;
 - » in other cases, such as coronary heart disease, the risk of harm decreases with moderate drinking then rises again sharply with higher consumption;
 - » the exact relationship between risk and intake may not always be clear - particularly for some of the social harms, such as interpersonal violence - although it appears that heavy consumption under certain circumstances can elevate risk.
- Often alcohol is one amongst other factors which cause harm such as drug use, mental health or housing problems: for example, about a third of those with serious mental illness have substance abuse problems, and around a quarter of those who use drugs also have problems with heavy drinking.

Source: Edwards et al. (1994); WHO 2000; NTORS

Summary

- In summary, Part 1 of this report has shown that:
 - » Alcohol plays a key role in our economy and society. It is used by many people to socialise and is widely associated with pleasure and relaxation. The total value of the UK alcoholic drinks market exceeds £30bn, and alcohol plays an important role within the growing leisure and tourist industries.
 - » As a society we are drinking more, more often. We have particularly high levels of binge drinking amongst 16-24 year olds, and British teenagers are some of the heaviest teenage drinkers in Europe.
 - » Most young heavy drinkers 'grow out' of heavy drinking, reducing their consumption as they get older. But a significant minority continue to drink at high levels.
 - » Heavy drinking matters because it leads to an increased risk of harm, both immediately and in later life. Not all heavy drinkers suffer serious harm. But their risk of encountering a range of harm is much higher. And they can harm not only themselves, but families, friends, employers and society.
- In Part 2, we examine the nature and prevalence of the harms
- In Part 3, we look at the factors causing harmful drinking; and,
- In Part 4, we consider the measures which are most effective in tackling the consequences of harmful drinking.

Part 2

The harms caused by alcohol misuse

This part of the report looks at alcohol and the harms it causes:

- » What are the harms associated with alcohol misuse?
- » Who suffers them?
- » What are the costs?



A) What are the harms, who suffers them and what are the costs?

Overview - the costs of alcohol misuse

Health

Crime & public disorder

Productivity at work

Family & social networks

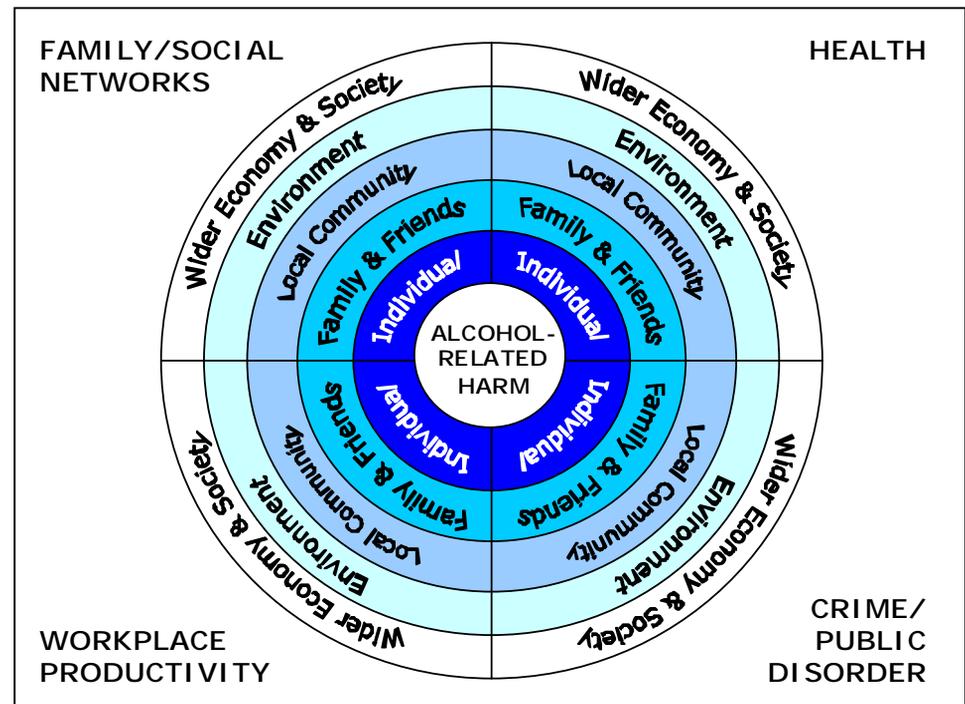
B) Conclusion - alcohol and its effects

Alcohol-related harms

Alcohol-related harms fall into four broad areas and affect individuals, their friends and family as well as wider society

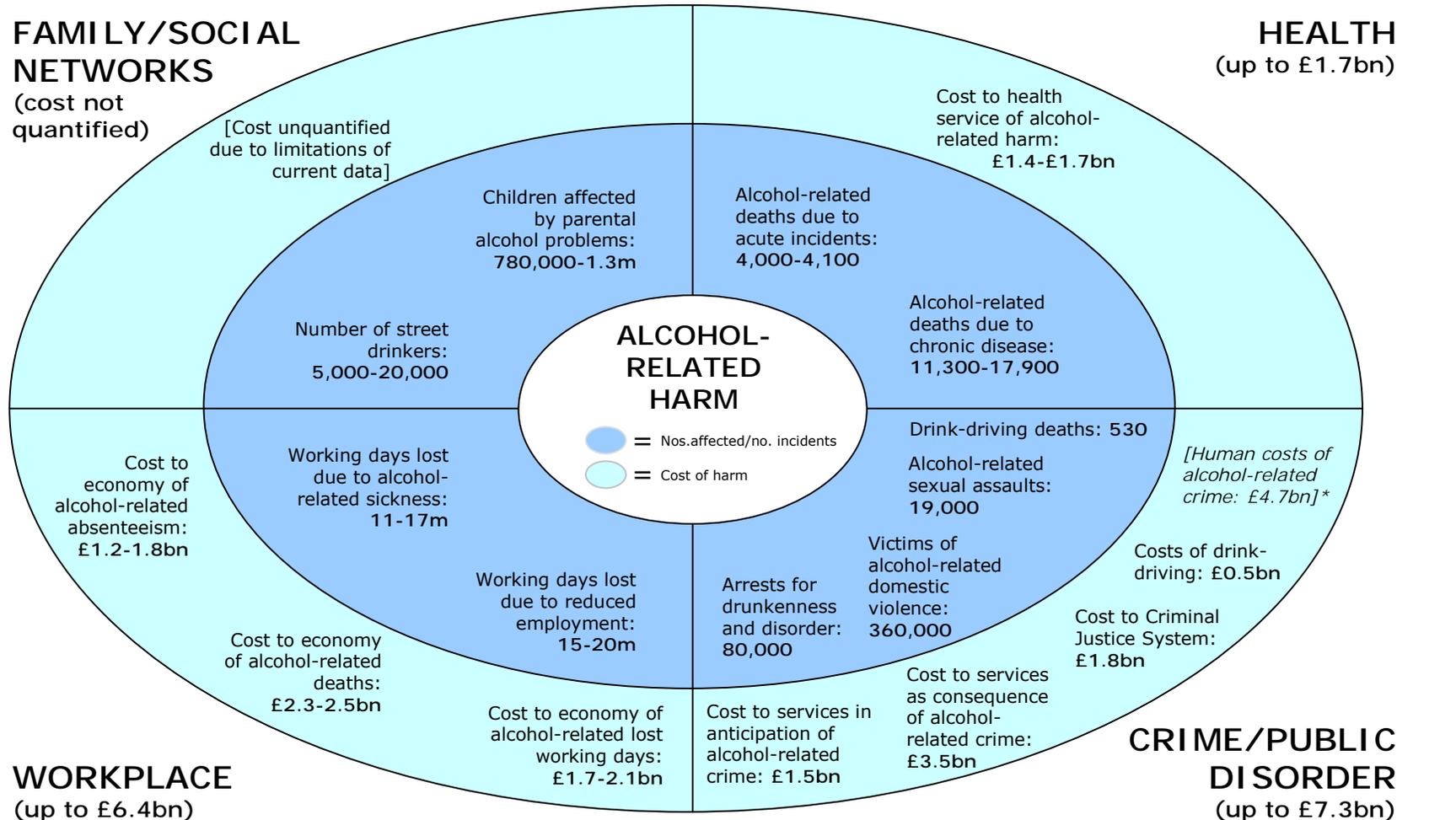
- There is clear evidence that alcohol use increases the risk of various physical harms and that the risk rises with the volume of drinking.
- Some of these consequences are transient, such as a hangover, while others are potentially more serious and lasting in their effects, resulting in chronic harm to physical and mental health.
- However, alcohol-related harm is neither limited to health and casualties nor experienced by the individual drinker in isolation. It has serious harmful effects on a cross-section of society, impacting upon:
 - » family and friends;
 - » employers; and
 - » society more broadly as taxpayers and citizens.

THE HARMFUL EFFECTS OF ALCOHOL



Source: Anderson (1995)

The numbers affected and how much it costs



Sources: DoH (2001), Leontaridi (2003), Mental Health Foundation, Simmon et al. (2002); Note: All figures are annualised; *Human costs are those incurred as a consequence of the human and emotional impact suffered by victims of crime (e.g. attending victim support services); due to the lack of research in the field, equivalent costs have not been estimated for other alcohol-related harms. For this reason, human costs are not included in the crime/public disorder total figure.



A) What are the harms, who suffers them and what are the costs?

Overview - the costs of alcohol misuse

Health

Crime & public disorder

Productivity at work

Family & social networks

B) Conclusion - alcohol and its effects

Alcohol-related harms

Up to 150,000 hospital admissions and 15-22,000 deaths are associated with alcohol each year

- It has long been clear that excess drinking puts long-term health at significant risk and that the risk of harm increases with increasing consumption.
- The chronic use of alcohol can adversely affect a wide range of body organs and systems, but a low to moderate intake can lessen the risk of coronary heart disease and ischaemic stroke.
- However, the impact of alcohol misuse is not limited to chronic health effects. Acute disorders can also cause harm.
- Alcohol misuse is associated with between 15,000 and 22,000 deaths each year.

Sources: DoH (1995); Gutjahr et al. (2001); Britton and McPherson 2001; White (1998)

MAJOR ALCOHOL-RELATED HEALTH CONDITIONS CONTRIBUTING TO MORBIDITY AND MORTALITY

CHRONIC DISORDERS
<ul style="list-style-type: none">• Gastrointestinal conditions• Cardiovascular conditions• Neuropsychiatric conditions• Cancers• Maternal and perinatal conditions

Annual hospital admissions (chronic): 34,000-91,000
Annual direct & indirect deaths (chronic): 11,300-17,900

ACUTE DISORDERS
<ul style="list-style-type: none">• Acute toxic effects• Accidents and intentional assaults• Self-inflicted injuries

Annual hospital admissions (acute): 39,000-60,000
Annual direct & indirect deaths (acute): 4,000-4,100

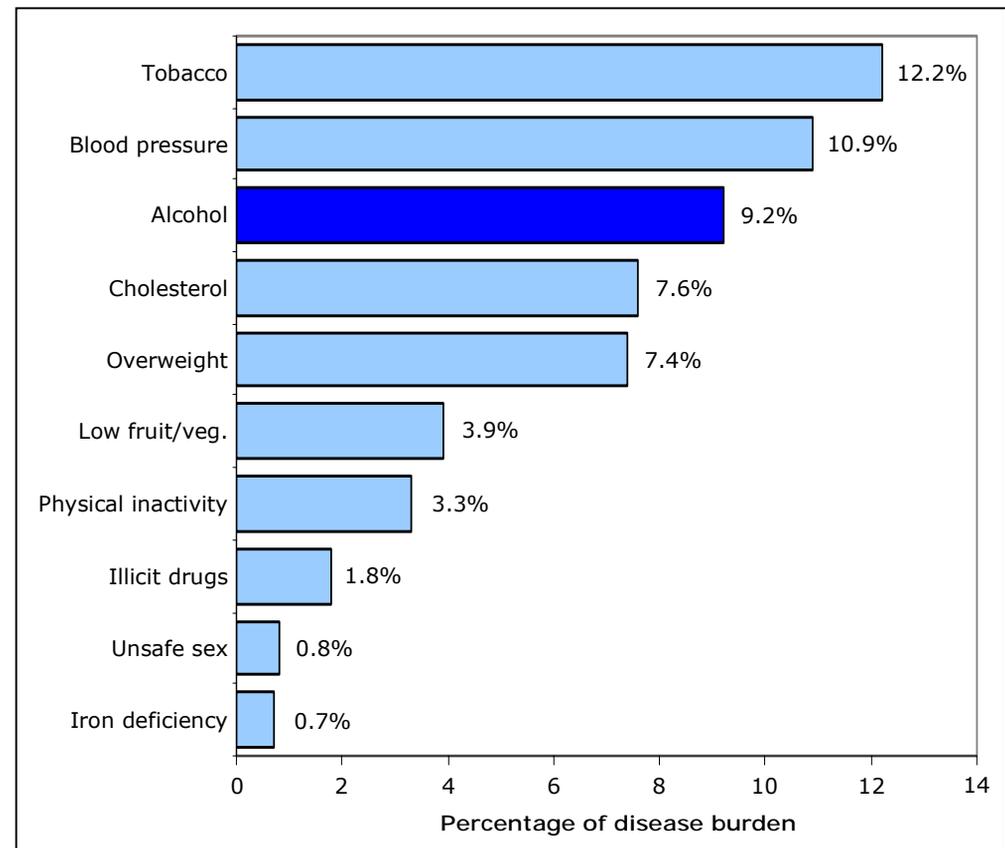
Note: Hospital admission figures show the range of admissions of patients with a primary diagnosis or a primary and/or secondary diagnosis involving alcohol misuse

Alcohol misuse accounts for nearly ten per cent of the disease burden in developed countries, if the benefits of moderate consumption are ignored

- Alcohol is a major cause of disease and injury. It accounts for 9.2 per cent of the years of life lost, plus years lived with a disability, in developed countries, although this measure does not take account of the benefits of moderate consumption
- Only tobacco (12.2 per cent) and high blood pressure (10.9 per cent) are higher risk factors.
- In Europe, mental and behavioural disorders due to alcohol are the fifth highest cause of disability-adjusted life years, after depression, coronary heart disease, dementias and stroke.

Sources: World Health Report (2002); Murray et al. (2001)

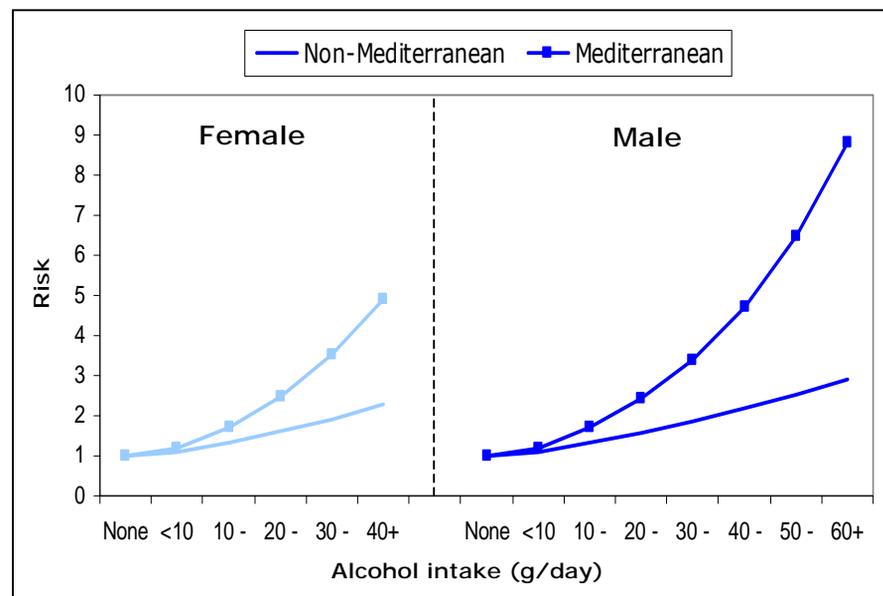
MAJOR BURDEN OF DISEASE – LEADING 10 SELECTED RISK FACTORS IN DEVELOPED COUNTRIES, 2000



Alcohol-related liver disease is responsible for over 30,000 hospital admissions each year

- Excessive alcohol consumption is a major cause of liver disease in Western industrialised countries. Liver cirrhosis is found in one in five heavy drinkers, but the risks are higher in Mediterranean than non-Mediterranean peoples, perhaps due to different patterns of drinking.
- Alcohol-related liver disease is responsible for about 33,000 hospital admissions (including both primary and secondary diagnoses) and for over 4,500 deaths annually. Age-specific rates of mortality from liver disease explicitly attributed to alcohol have risen by about 90 per cent over the past decade. Interaction of alcohol misuse with Hepatitis C virus infection probably contributes to this trend.
- A high alcohol intake can also have adverse effects on other parts of the digestive system, including gastritis, stomach ulcers, oesophagitis, oesophageal varices, and pancreatitis.

RELATIVE RISKS OF LIVER CIRRHOSIS
BY LEVEL OF ALCOHOL INTAKE



Sources: Heather et al. (2001); BLT (2002); Department of Health (2001); Baker and Rooney (2003); Henry et al. (2002); Corrao et al. (1999).

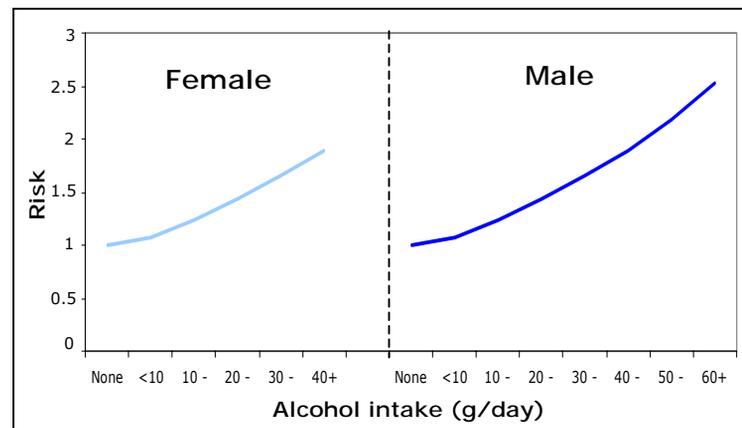
Drinking raises blood pressure and the risk of haemorrhagic stroke, which is associated with up to 1,500 deaths per year

- Alcohol consumption is associated with raised blood pressure. Hypertension accounts for about 3,000 deaths per annum, around 300 of which are related to alcohol consumption. Incidence of the condition approximately doubles in those who drink over six units per day.
- Hypertension is related to risk of haemorrhagic stroke. Chronic high alcohol intake raises the risk of both haemorrhagic and ischaemic stroke. Deaths from haemorrhagic stroke associated with alcohol use may account for up to 1,200 deaths per year.

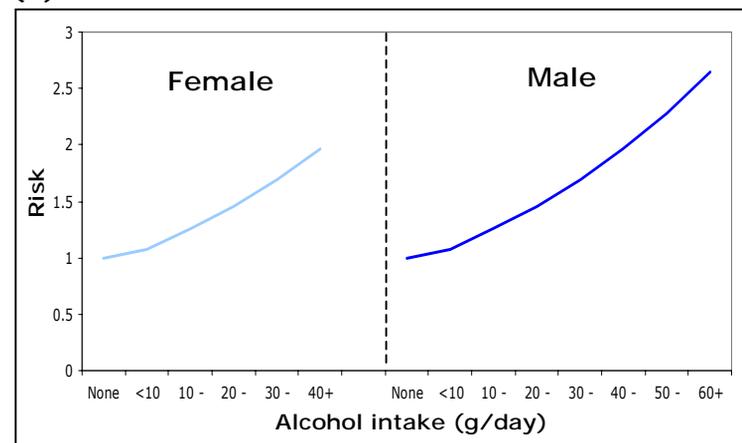
Sources: Heather et al. (2001); WHO (2000); Corrao et al. (1999); Bamford et al. (1990) cited by White et al. (2000); Mazzaglia et al. (2001); Office of Health Economics (2002)

RELATIVE RISK BY LEVEL OF ALCOHOL INTAKE:

(1) HYPERTENSION



(2) HAEMORRHAGIC STROKE



Excessive alcohol consumption is associated with a range of negative consequences for mental health

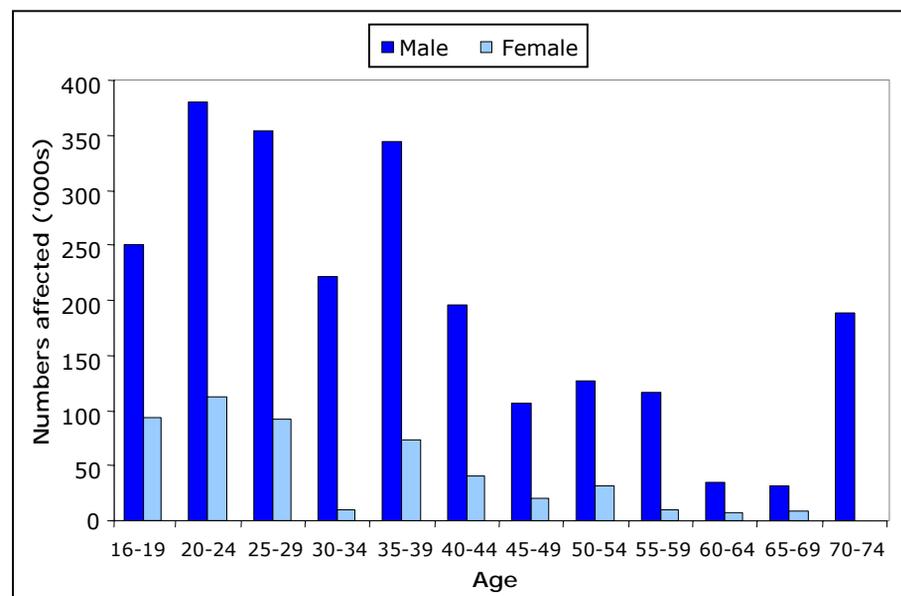
- Heavy drinkers (and non-drinkers) when compared to light-to-moderate drinkers show poorer mental well-being; but the general relationship is affected by many other factors and is not necessarily directly causal.
- Heavy drinking can contribute to anxiety and depression and can accelerate, or uncover a predisposition to, development of psychiatric disorder (including psychosis). Alcohol can have an effect on the action of psychotropic medication, and/or lead to non-compliance with medication.
- Co-morbidity refers to the co-existence of mental illness with a substance misuse problem. In the UK, about a third of psychiatric patients with serious mental illness have a substance misuse problem (commonly this is actually alcohol misuse); and about half of those attending drug and alcohol services have some form of mental health problem (commonly depression or a personality disorder). These figures tend to be higher in the prison population.
- In 1998/99 there were 78,900 admissions to NHS hospitals of patients with mental or behavioural disorders associated either directly or indirectly with alcohol misuse, although these figures also include patients who were admitted with acute alcohol intoxication.

Sources: DoH (2001); Chick (1999); RCP (2002); Weaver et al. (1999); Single et al. (1997); Hospital Episode Statistics provided by DoH

Alcohol dependence syndrome accounts for over 30,000 hospital admissions per year

- States of 'dependence' are shown by a combination of symptoms which can include:
 - » impaired control of drinking;
 - » drinking to avoid withdrawal symptoms;
 - » tolerance to the effects of alcohol;
 - » progressive neglect of other activities; and
 - » persistent drinking despite harm.
- About 2.9m, or 7 per cent of the adult population, are defined as dependent upon alcohol:
 - » this peaks below age 30 when it is more often, though not exclusively, transient;
 - » chronic dependence has particularly visible effects on those over 40; and
 - » alcohol dependence syndrome accounts for about 30,000 to 36,000 hospital admissions (primary and secondary diagnoses) per year.

ESTIMATED NUMBERS OF PEOPLE WITH DEPENDENCE DEFINED BY SEVERITY OF ALCOHOL DEPENDENCE QUESTIONNAIRE (SADQ) IN 2001



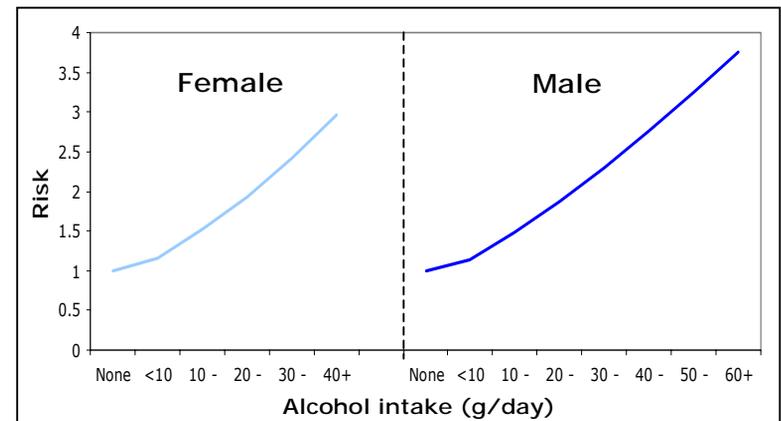
Sources: Coulthard et al. (2002); ONS (2003) population data for 2001; meta-analysis of longitudinal studies of "unwanted drinking behaviour" by Fillmore (1988); hospital episode statistics provided by DoH; within the category of mental and behavioural disorders due to alcohol (ICD-10 F.10) a patient may be admitted with more than one diagnosis

Nearly 5,000 cancer deaths per year are attributable to alcohol

- It is estimated that 3.5 per cent of all deaths from cancer, or approaching 5,000 per annum, are attributable to alcohol.
- Alcohol accounts for a dose-related increase in risk of cancers of the oral cavity, pharynx, larynx and oesophagus, and the highest risk is in conjunction with smoking.
- Cancers at other sites, such as the liver, stomach, pancreas, colon, and rectum also have a dose-dependent association with alcohol consumption.
- Drinking alcohol increases the risk of breast cancer in women, though the magnitude of the risk is small and the mechanism unclear. The results of new research are being considered by the Committee on Carcinogenicity which will help to improve the knowledge base in this area.

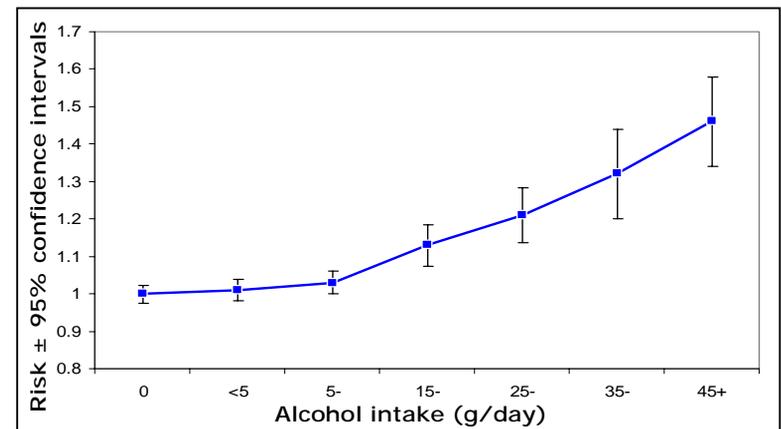
Sources: WHO (2000); White and Nanchahal (1998); Bagnardi et al. (2001); Britton and McPherson (2001)

RELATIVE RISK BY LEVEL OF ALCOHOL INTAKE: (1) OROPHARYNGEAL CANCER



Source: Data derived from meta-analysis of G. Corrao et al. (1999)

(2) BREAST CANCER IN WOMEN



Source: Data from meta-analysis by the Collaborative Group on Hormonal Factors in Breast Cancer (2002)

Drinking in pregnancy can affect pre- and post-natal development

- Drinking while pregnant may cause miscarriage, but the level at which drinking becomes a danger is disputed: some suggest that risk of miscarriage is increased in women drinking 1-2 units of alcohol per day, while others report increased risks only at higher levels of consumption.
- It is estimated that around 61 per cent of women drink in pregnancy and of these, 71 per cent drink less than 1 unit of alcohol per week. Around 1 per cent of pregnant women drink more than 14 units of alcohol per week.
- Foetal Alcohol Syndrome (FAS) is the name given to a group of characteristics reported in the babies of women with a clearly identifiable drinking problem.
 - » Symptoms include: growth deficiencies, central nervous system defects, lowered IQ and facial malformations;
 - » Experimental studies suggest that dose-response relationships between alcohol and brain function vary across the stages of pregnancy: early heavy exposure poses the greatest risks but the mechanisms are poorly understood;
 - » Some of the apparent effects of alcohol on child physical growth and development attenuate and disappear with age;
 - » There is no consensus on whether light drinking affects risk of FAS. FAS is also related to socio-economic status, maternal nutrition, obstetric history, maternal age, and possibly other confounding factors; and
 - » Between 2 per cent and 30 per cent of women drinking more than 56 units of alcohol per week may have babies with FAS; and the overall incidence in industrialised countries is estimated to lie between 0.4 and 2 per 1000 live births, suggesting that England and Wales might expect between 240 and 1,190 such cases per year. However, the relative impact of alcohol and other factors remains unclear.

Sources: M. Plant et al. (1999), D. Raistrick et al. (1999), T. Babor (1995), Department of Health (2002) S. Astley et al. (2000); DoH (1995); Streissguth et al. (1999); ONS (2002); Testa et al. (2003)

Alcohol is linked to between one in three and one in seven accidental deaths: up to 1,700 deaths per year

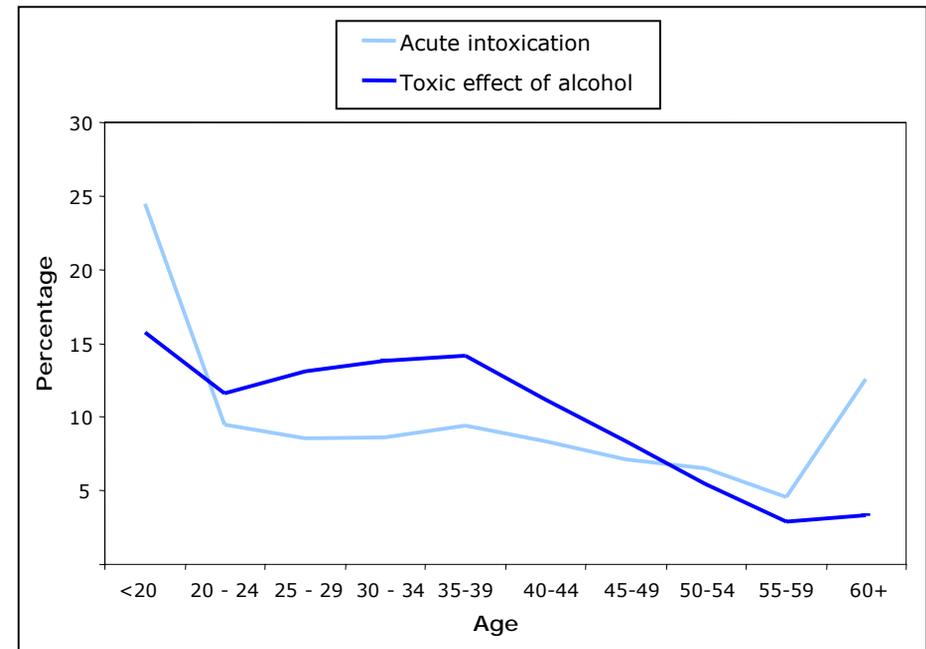
- Many activities are associated with the risk of accidents and alcohol can increase this risk. This applies to leisure activities, driving and other forms of transport, and activities within the workplace and the home.
- Alcohol has been linked to:
 - » 38-45 per cent of deaths in fires;
 - » 7-25 per cent of deaths at work; and
 - » 23-38 per cent of drownings.
- A longitudinal study of civil servants suggests that even drinking within weekly recommended limits can increase risk of absence from work due to injury.
- Alcohol may be associated with up to 1,700 accidental deaths per year.

Sources: Raistrick et al. (1999); RoSPA (1998); Hutchison et al. (1998); Tether and Harrison (1986); WHO (2000); Whitehall study data adjusted for age, sex, and employment grade from Head et al. (2002); Charles et al. 1999

Alcohol intoxication results in around 23,000 hospital admissions per year

- Alcohol is toxic and cannot be stored by the body.
- Acute intoxication refers to disturbances in level of consciousness, cognition, perception, affect or behaviour, or other psycho-physiological functions and responses, which are directly related to acute pharmacological effects. About 23,000 hospital admissions occurred as a result of this in 2000-01.
- Alcohol can cause death by overdose and when taken with sedatives or tranquillisers. It can also cause damage directly to a range of tissues. These toxic effects resulted in about 16,000 hospital admissions in 2000-01.
- The prevalence peaks in those under 20, and tails off after the age of 40, reflecting the heavy single-occasion drinking patterns most common among young and inexperienced drinkers.

PERCENTAGES OF PRIMARY AND SECONDARY DIAGNOSES OF ACUTE INTOXICATION AND TOXIC EFFECTS OF ALCOHOL IN EACH AGE GROUP, 2000-01



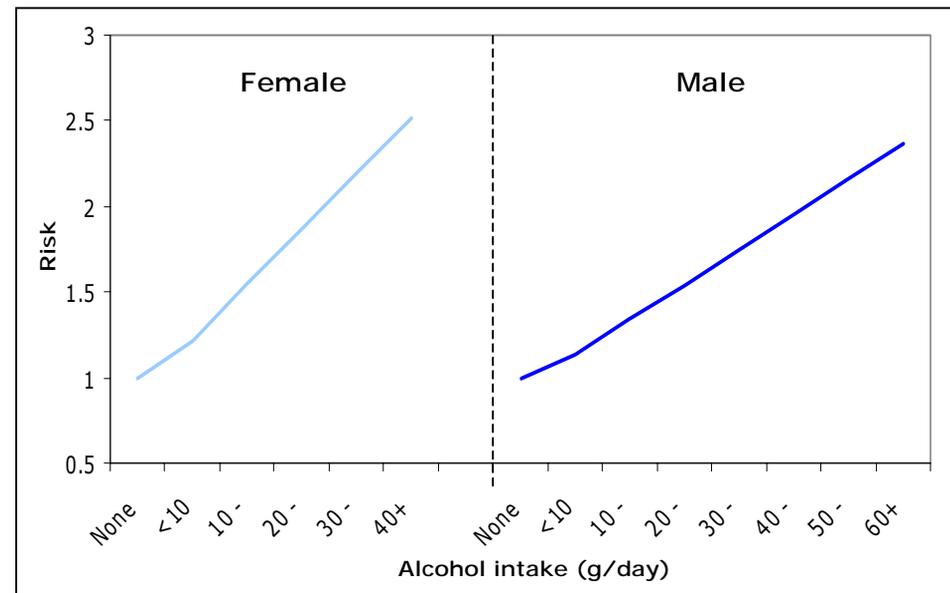
Sources (left and above): WHO (1992); Edwards (2000); provisional hospital episode statistics for 2000-01 supplied by DoH

Alcohol is associated with up to 1,000 suicides per year

- Between 16 and 41 per cent of suicides are thought to be attributable to be alcohol.
- Among men who present to hospital following an episode of deliberate self harm, 50 per cent regularly drink excessively and about 23 per cent are dependent on alcohol.
- However, the nature of any causal relationship is debated. Self-perception, low self-esteem, depression, anxiety, and psychiatric co-morbidity have complex relationships with alcohol dependence and are predictors of suicide. In some cases, alcohol dependence and its consequences may lead people to kill themselves.
- In 2001, there were 3,479 deaths from suicide and self-inflicted injury. Up to 1,000 of these cases can be associated with alcohol misuse.

Sources: Edwards (2000); Merrill et al (1992); Demirbas et al. (2003); OHE (2002)

RELATIVE RISKS OF MORTALITY FROM SUICIDE BY LEVEL OF ALCOHOL INTAKE

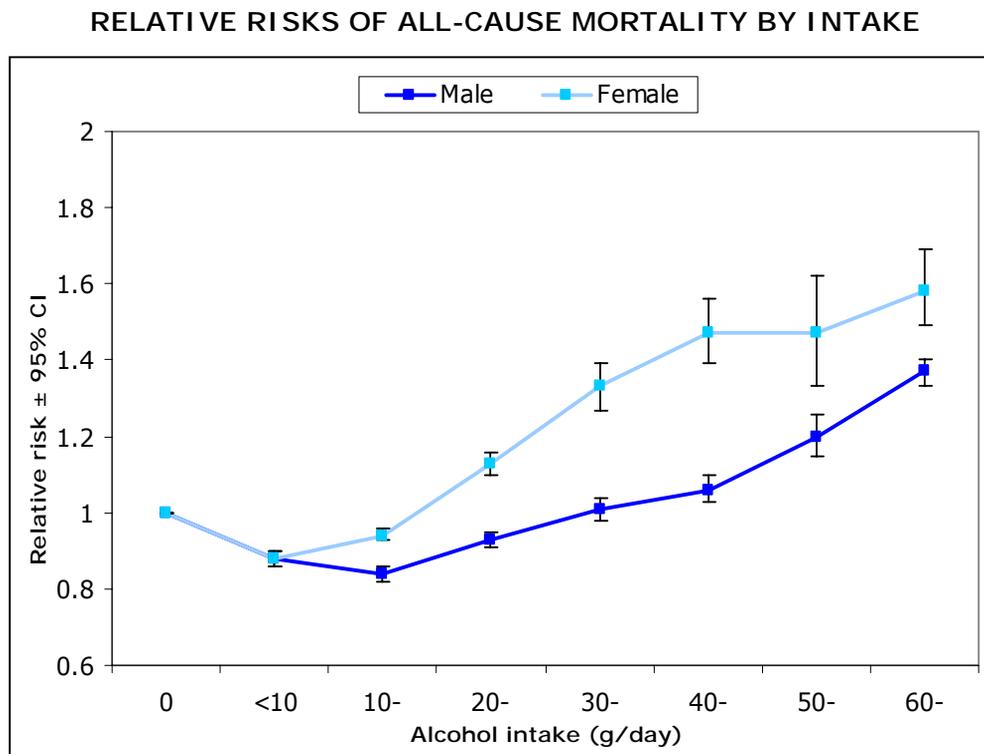


Source: Data supplied by A. Britton and derived from meta-analysis by G. Corrao et al. (2000)

These varied risks mean that while alcohol kills about 19,000 people yearly, it may also prevent a similar number of deaths

- Compared with non-drinkers, low levels of alcohol intake are associated with lower levels of mortality. However, risks rise with increased intake.
- In 2000, there were between 15,000 and 22,000 alcohol-related deaths in England and Wales. Of this total, almost 6,000 were *directly* attributable to alcohol, while protective effects on coronary heart disease will have prevented about 18,000 deaths, and on stroke will have prevented several thousand more.
- Approximately 70 per cent more men than women die from directly alcohol-related causes.

Sources: SU analysis, excluding deaths from ischaemic stroke, based on methods of Britton and McPherson (2001); WHO (2000); ONS (2003)

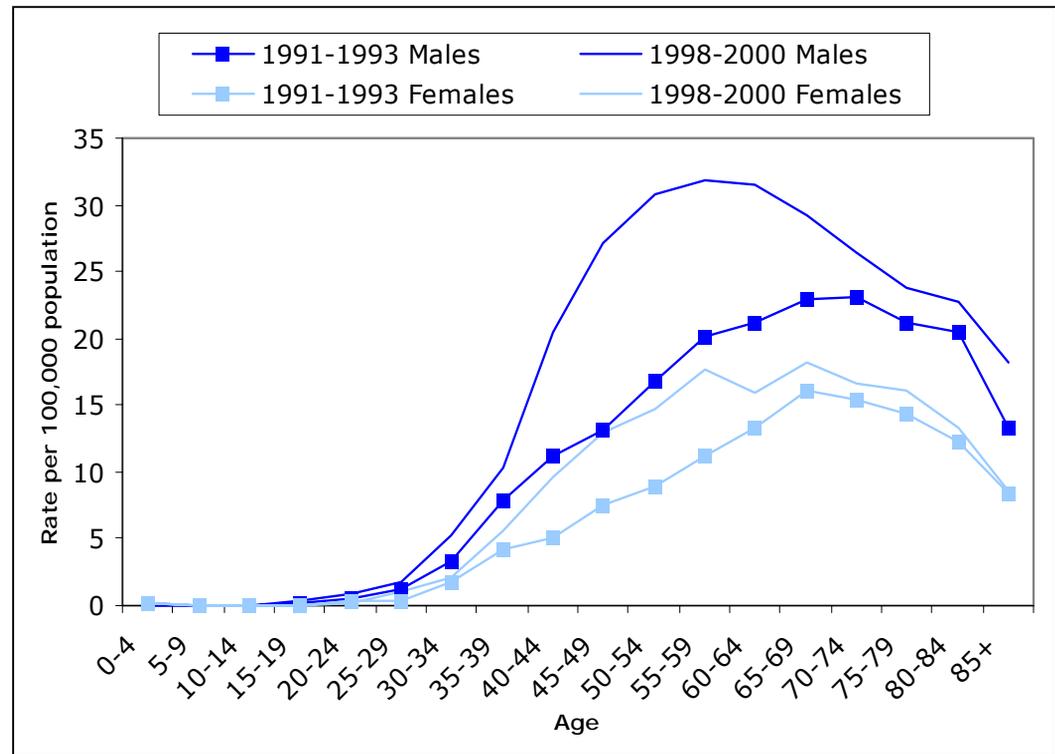


Source: C. Holman et al. (1996)

Those who do die are dying younger from conditions related to alcohol misuse

- Alcohol-related mortality rates vary considerably by age and sex:
 - » they begin to rise from the age of 30 and peak among those aged over 40; but
 - » the age at which mortality rates peak has fallen over the last decade in both sexes, perhaps as a result of heavier drinking at earlier ages.
 - » In 1991, alcohol-related deaths peaked at around age 70 for both men and women. By 2000, most alcohol-related deaths in both sexes occurred between the ages of 55 and 70.

AGE-SPECIFIC ALCOHOL-RELATED DEATH RATES
IN ENGLAND AND WALES, 1991-2000



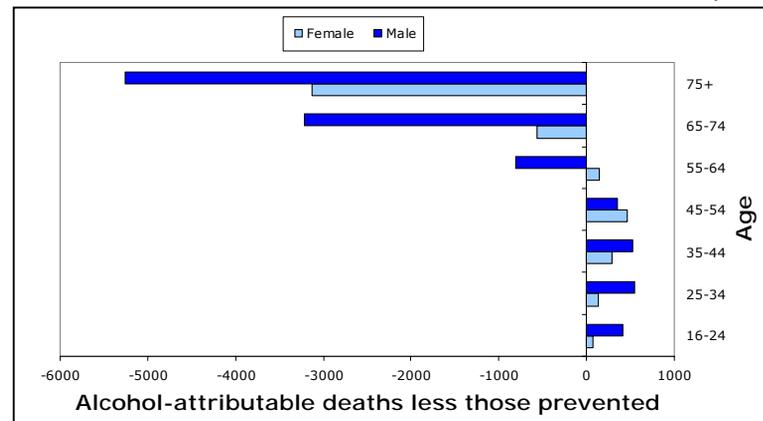
Source: ONS (2003)

Alcohol accounts directly for 58,000-63,000 potential years of life lost before age 65 and indirectly for about another 90-100,000

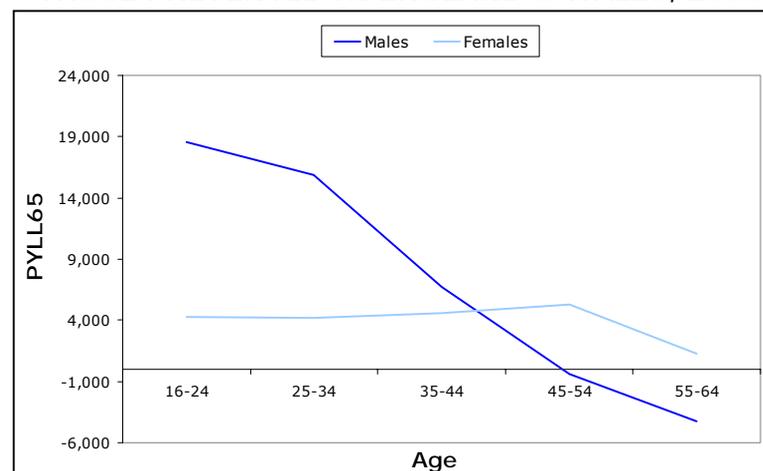
- The balance between those deaths caused and those deaths prevented by alcohol changes with age, as the graph alongside shows.
- Measuring the potential years of life lost (PYLL) as a result of alcohol related deaths allows for a greater acknowledgement of those deaths which occur at younger ages.
- Because coronary heart disease and ischaemic stroke tend to occur at later ages, the protective effects of alcohol on these causes have less effect on PYLL than the accidents, injuries and other major causes of alcohol-related death at younger ages and particularly among men.
- In 2000, between 58,000 and 63,000 potential years of life lost before age 65 (PYLL65) are estimated as attributable directly to alcohol. Including all other causes indirectly attributable to alcohol raises total PYLL65 to between 148,000 and 163,000, while protective effects may have saved 29,000 PYLL65.
- PYLL65 directly and indirectly attributable to alcohol have been rising over the past decade in both sexes.

*Note: The data shown in both charts exclude deaths from ischaemic stroke.
Sources: Baker and Rooney (2003); Britton and McPherson (2001); White et al. (2000); SU analysis of year 2000 data for paper by Leontaridi (2003).*

DEATHS ATTRIBUTABLE TO ALCOHOL LESS THOSE PREVENTED BY ALCOHOL IN ENGLAND & WALES, 1996



MINIMUM ESTIMATE OF LIFE-YEARS LOST LESS THOSE PREVENTED IN ENGLAND & WALES, 2000

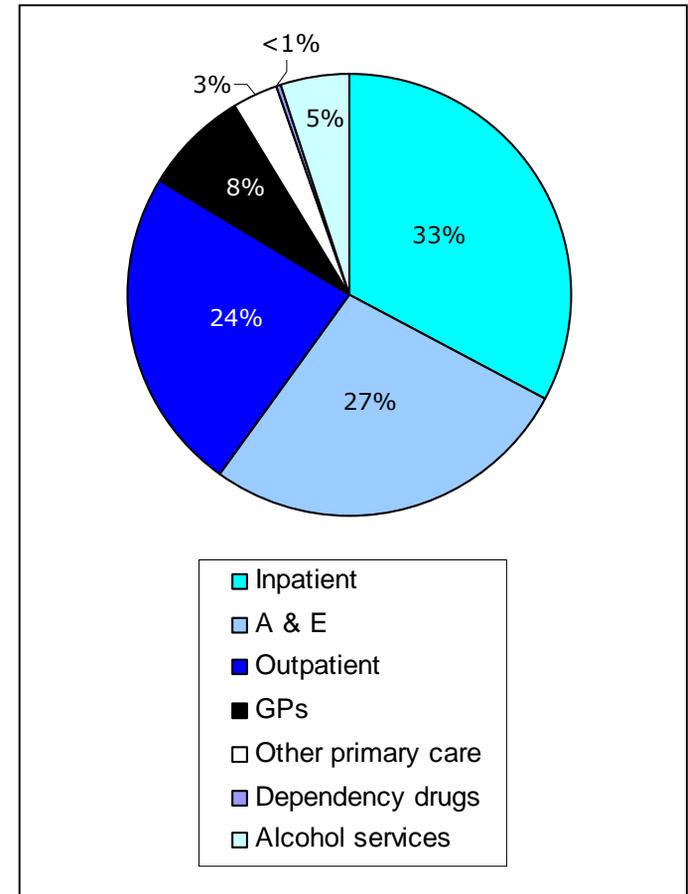


The cost to the NHS of treating the chronic and acute effects of alcohol misuse is up to £1.7 billion per year

- Alcohol misuse, either directly or indirectly, increases the work burden on all aspects of health and social care.
- Cost breakdown of alcohol misuse shows a major strain on NHS hospitals:
 - » the NHS is the dominant funder of specialist alcohol services: expenditure is estimated at £95m, with £24m on NHS services and the rest provided by the voluntary sector;
 - » alcohol-related diseases account for 1 in 26 NHS bed days (c. 2m) and 1 in 80 NHS day cases (c.40,000); and
 - » up to 35 per cent of all accident and emergency (A&E) attendance and ambulance costs (c.£0.5bn) may be alcohol-related.
- The annual cost of other primary care services reaches a total of almost £0.5 bn.
- Total healthcare costs related to alcohol misuse range between £1.4 and £1.7bn, with a middle estimate of about £1.6bn.

Sources: Alcohol Concern (2002); Britton and McPherson (2001); WHO (2000); Netten and Curtis (2002); HDA and MORI (2003); Leontaridi (2003)

COST BREAKDOWN OF ALCOHOL MISUSE

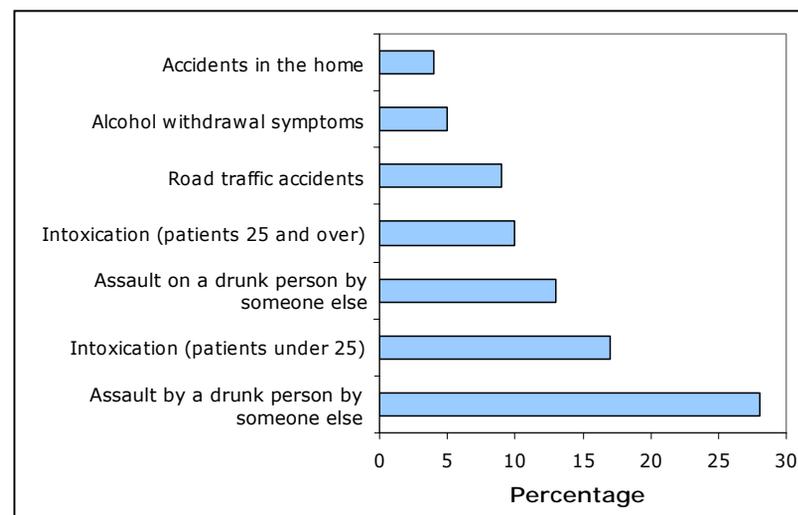


In particular, one-third of all A&E attendances may be due to alcohol - at a cost of over £0.5 billion per year

- Up to 35 per cent of all accident and emergency (A&E) attendance and ambulance costs (c.£0.5bn) are estimated to be alcohol-related.
- A study commissioned for this analysis showed that alcohol places a very significant burden on A&E departments at peak times:
 - » 41 per cent of all attendees were positive for alcohol consumption;
 - » 14 per cent were intoxicated; and
 - » 43 per cent were identified as problematic users after screening.
 - » Between midnight and 5am 70% of attendances are alcohol related
 - » staff may experience violence
- Reasons for attendance for those alcohol positive were significantly more commonly:
 - » a violent assault incident involving weapons; or
 - » road traffic accidents;
 - » psychiatric emergencies; or
 - » deliberate self harm episodes
- The reasons for attendance found in the recent study show similar results to previous reports.

Sources: Drummond et al, unpublished research for SU

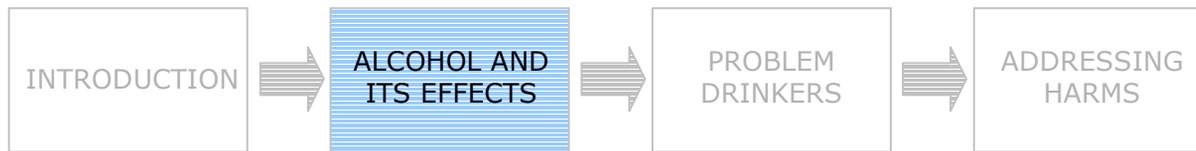
PERCENTAGE OF A&E STAFF IN ENGLAND RANKING VARIOUS REASONS AS AMONG THE TOP 5 CAUSES OF ALCOHOL-RELATED ATTENDANCE



Source: MORI and Health Development Agency (2002)

Alcohol-related health harms: a summary

- **Who is affected?**
 - » dependence on alcohol can affect men and women at any age;
 - » heavy drinkers aged 40 or over are more likely to suffer from liver cirrhosis, cancer, mental health problems and other chronic conditions; men are at greater risk than women; and
 - » young drinkers aged between 16-24, often binge drinking, are more likely to suffer accidents, assaults and acute incidents of poisoning.
 - » Some people have multiple problems, notably drug abuse and mental health, alongside problems with alcohol misuse
- **How many are affected?**
 - » alcohol dependence syndrome accounts for over 30,000 hospital episodes per year;
 - » up to 150,000 hospital admissions each year are related to alcohol misuse; and
 - » some 20,000 die prematurely - although alcohol probably prevents about the same number of deaths in older people by reducing the risk of coronary heart disease.
- **How much does it cost?**
 - » up to £1.7bn in costs to the NHS;
 - » we do not have the data to quantify the loss in terms of human suffering both to drinkers and to their friends and family.



A) What are the harms, who suffers them and what are the costs?

Overview - the costs of alcohol misuse

Health

Crime & public disorder

Productivity at work

Family & social networks

B) Conclusion - alcohol and its effects

Alcohol-related harms

Alcohol misuse is also linked to anti-social behaviour, public disorder, and violence - including domestic violence

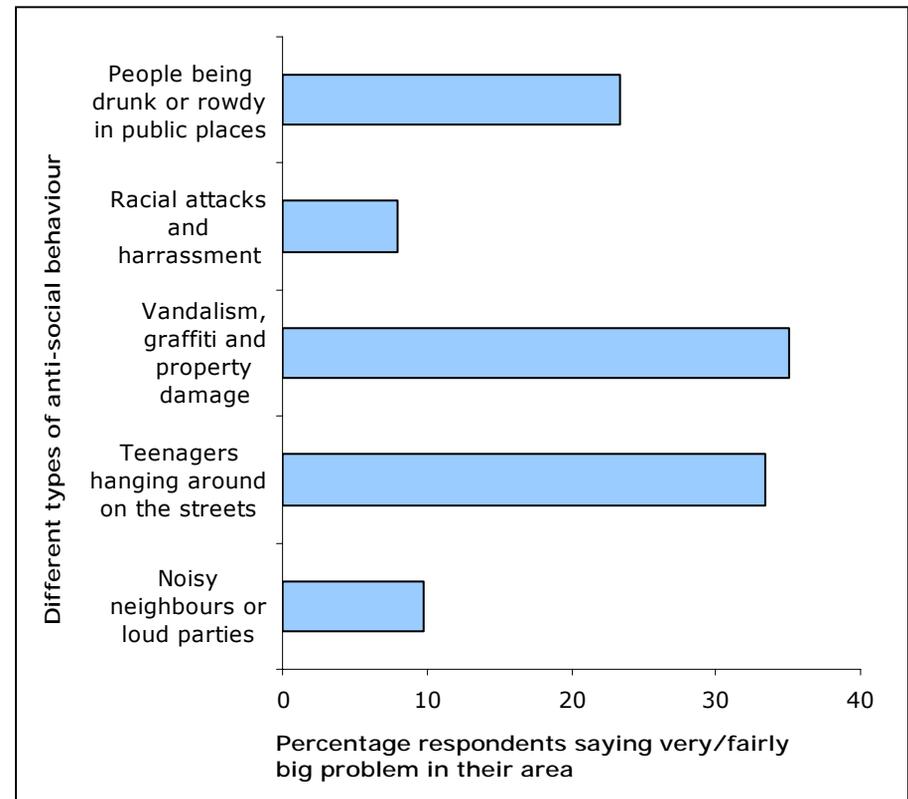
- As well as causing harm to health, alcohol misuse is also linked to crime and disorder.
- Alcohol misuse can contribute to various types of anti-social, violent or aggressive behaviour through a complex interplay of factors. These include its pharmacological effect on the body, and our social norms and expectations about acceptable behaviour when drinking or when drunk.
- In particular, alcohol misuse is associated with:
 - » anti-social behaviour and public disorder, including public drunkenness and street drinking;
 - » violence, injury and victimisation, both in and around pubs and night-clubs, but also domestic violence and sexual assault; and
 - » deaths and casualties through road traffic accidents involving alcohol.
- These incidents impose significant costs on the criminal justice system. These costs fall on
 - » the Police;
 - » the Probation Service;
 - » the Prison service; and
 - » the Courts.

One in four people say drunk and rowdy behaviour is a problem in their neighbourhood

- In 2002/03, 23 per cent of respondents in the British Crime Survey said that drunk or rowdy behaviour was a 'very' or 'fairly' big problem in their area.
- As the graph opposite shows, this compares with:
 - » 35 per cent for vandalism, graffiti and property damage;
 - » 33 per cent for teenagers 'hanging around on the streets'; and
 - » 10 per cent for noisy neighbours or loud parties.
- Concern about drunk or rowdy behaviour was greater in inner city or urban areas than in rural areas:
 - » 33 per cent of respondents living in inner city areas and 26 per cent of respondents living in urban areas viewed drunk and rowdy behaviour as a problem, compared to only 12 per cent in rural areas.

Source: *Simmons et al. (2003)*

PUBLIC CONCERN ABOUT DIFFERENT TYPES OF ANTI-SOCIAL BEHAVIOUR



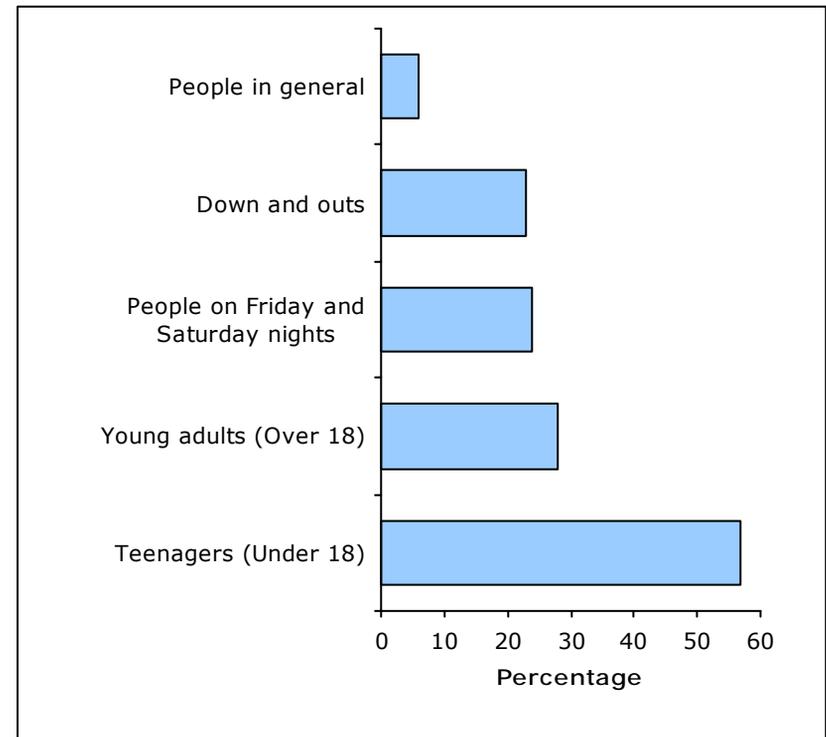
Source: *Simmons et al (2003)*

Seven in ten say drinking in public places or on the street is a problem in their area

- Women are more likely than men to say that street drinking is a problem (43 per cent of women compared to 38 per cent of men).
- 57 per cent of the general public see under 18s as the biggest problem. Over 65s are most likely and under 25s are least likely to believe this.
- Young adults (over 18s) are seen as the next biggest problem (28 per cent of respondents), with 'People on Friday and Saturday Nights' and 'Down and outs' the third and fourth biggest problems in terms of street drinking.

Source: MORI (2001)

TYPES OF PEOPLE CONSIDERED A PROBLEM IN TERMS OF DRINKING IN LOCAL STREETS AND PARKS

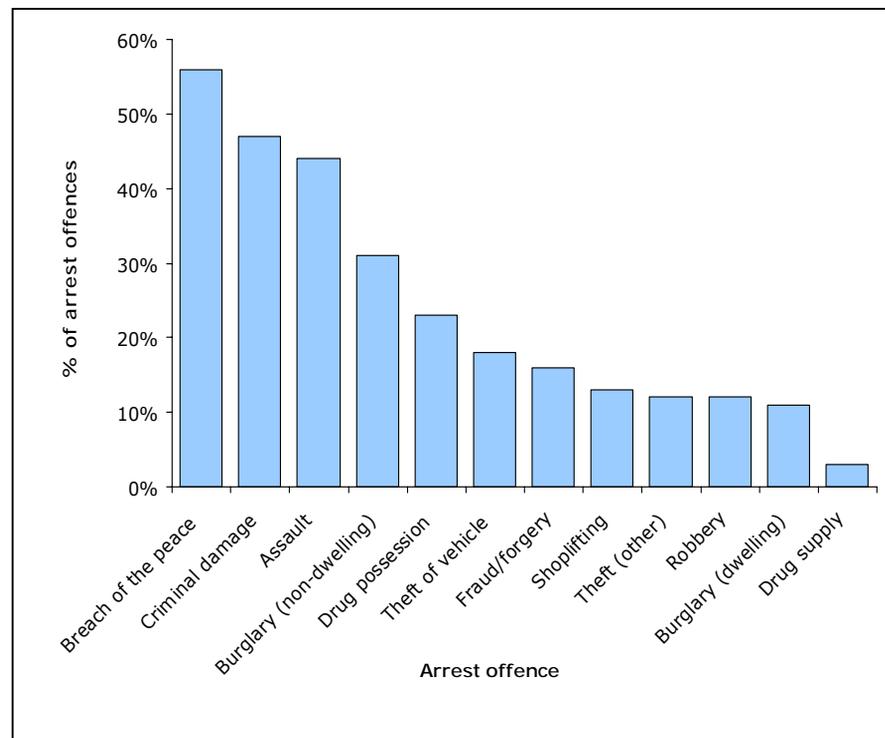


Source: MORI (2001)

Drinking is more likely to be associated with violent offences than with acquisitive crimes

- There are some offences which are specific to alcohol. These include:
 - » sale to underage or intoxicated customers;
 - » bootlegging and selling unlicensed alcohol;
 - » drunk and disorderly and drunk and incapable; and
 - » driving whilst under the influence.
- In addition, alcohol may play a role in other offences, particularly violence and public order offences. As the graph opposite shows, people arrested for breach of the peace, criminal damage, and assault (including sexual assault and domestic violence) are most likely to have been drinking.
- This picture contrasts with that for illicit drugs, which are mostly associated with acquisitive crimes. Unlike illicit drugs, alcohol is widely available and relatively cheap - and so few people who are dependent steal to fuel a habit.

PERCENTAGE OF ARREST OFFENCES COMMITTED BY PEOPLE TESTING POSITIVE FOR ALCOHOL IN URINE SCREENING



Source: New English & Welsh Arrestee Drug Abuse Monitoring, 1999-2001, Home Office; Note: Data from 16 police stations in England and Wales; only offences with sample sizes of more than 50 arrestees have been included. Intoxicated arrestees were not interviewed, which suggests that some figures are likely to be underestimates and explains why drunkenness offences are not included.

Alcohol contributes to violent, or aggressive behaviour through a complex interplay of factors

- Alcohol impairs cognitive skills, meaning that people may misread social cues, take bad judgements about risk, or respond inappropriately in social situations. In particular, they are more likely to respond aggressively when they believe they are being provoked.
- Alcohol also impairs motor skills - meaning that, in crowd situations, people who have been drinking are more likely to knock into each other (sometimes causing offence) or that victims may be less able to defend themselves.
- Norms of drunken behaviour differ from the standards of behaviour that are expected when sober. Noisy, jubilant, or rowdy behaviour may be expected; aggressive or out of character behaviour may be tolerated. Expectations about the effect that alcohol has on behaviour also play a key role, and drunkenness is often used as an excuse.

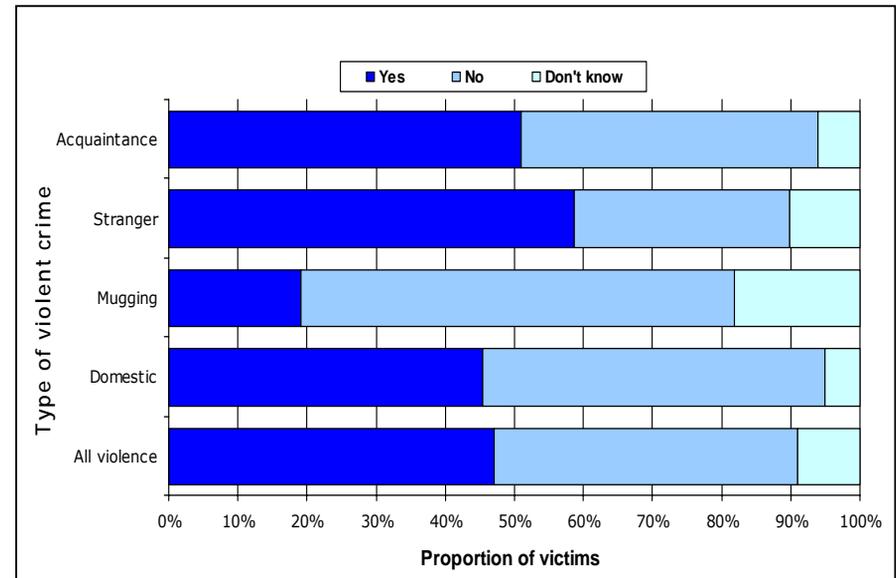
Sources: Sumner and Parker (1995), Graham (2001)

Almost half of victims of violent crime say the perpetrator was under the influence of alcohol at the time

- The British Crime Survey (BCS) shows that in 2001/02, 47 per cent of all victims of violence described their assailant as being under the influence of alcohol at the time. The comparable figure in 2000 was 40 per cent.
- BCS figures suggest that in 1999, there were an estimated 1.2m incidents of alcohol-related violence. Over 60 per cent of these did not come to the attention of the Police.
- Just over a third of incidents were between strangers and a further third between acquaintances. A quarter were domestic assaults between partners, relatives or household members and five per cent were muggings.

Sources: *Flood-Page et al. (2003); Budd (2003)*

VICTIM PERCEPTION OF WHETHER PERPETRATOR WAS DRUNK



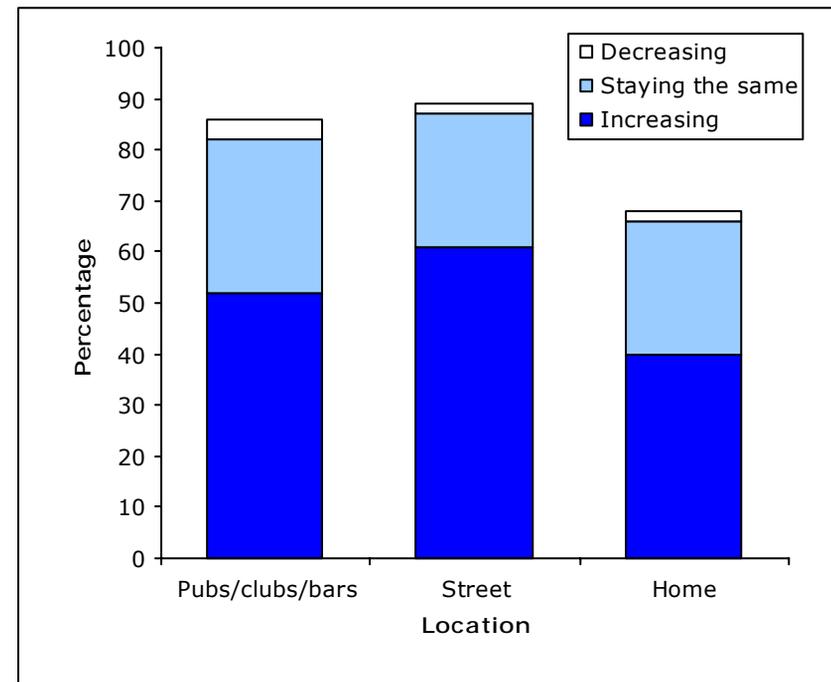
Source: *Flood-Page et al. (2003)*

There is a public perception that alcohol-related violent crime is increasing - which is not borne out by the evidence

- 52 per cent of people think that alcohol-related violence in pubs, clubs and bars is increasing; those living in the North West are most likely to think this (61 per cent).
- 61 per cent say alcohol-related violence in the streets is on the increase; 55-64 year olds are most likely to think this (71 per cent).
- 40 per cent think that it is increasing in the home.
- However, findings from the British Crime Survey suggest that alcohol-related violence declined by 21 per cent between 1995 and 1997, remaining stable between 1997 and 1999. This decline mirrors the decline in overall violence during this period.
- These findings reflect the more general gap between public perception and reality regarding crime. However, the fear of crime is still a matter of concern.

Sources: MORI (2001); Budd (2003)

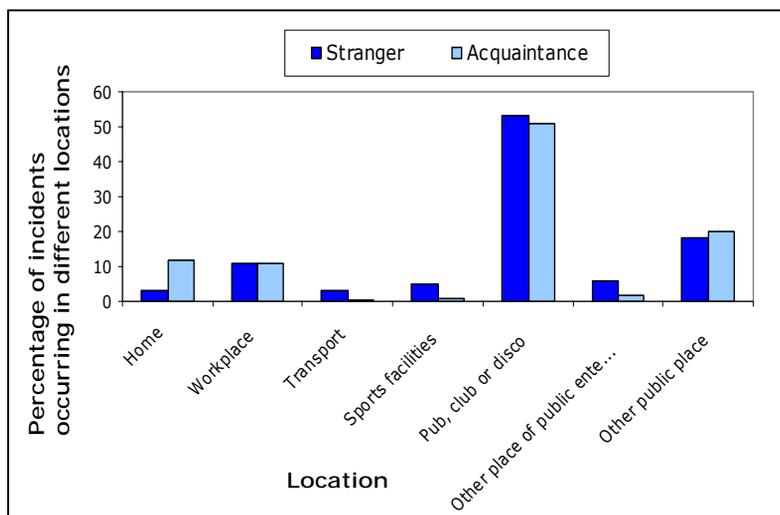
PROPORTIONS OF PEOPLE THINKING ALCOHOL-RELATED VIOLENCE IS INCREASING, DECREASING OR STAYING THE SAME



Source: MORI (2001)

One in five violent crimes occurs in or around pubs and clubs

LOCATION OF ALCOHOL-RELATED VIOLENCE BETWEEN STRANGERS AND ACQUAINTANCES

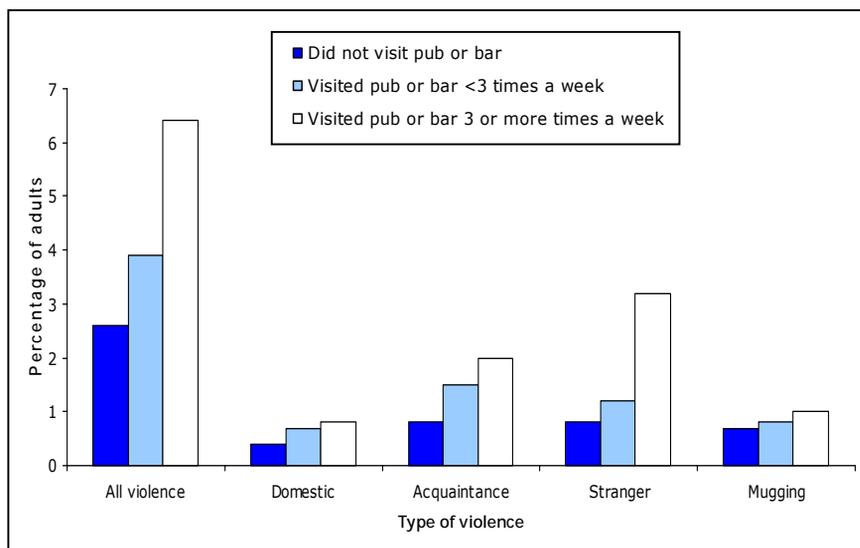


- The graph above, based on findings from the British Crime Survey, shows that over half of alcohol-related violence between strangers and acquaintances occurs in or around pubs, clubs or discos; 70 per cent of these incidents took place on weekend evenings.

Source: Budd (2003)

- As the graph below shows, people who visit pubs and bars three or more evenings per week are over twice as likely to be the victims of violence, compared to those who rarely visit pubs or bars.

PROPORTION OF ADULT VICTIMS OF VIOLENCE BY NUMBER OF VISITS TO A PUB OR BAR IN THE EVENING DURING THE LAST MONTH, 2001/02



Source: Simmons et al. (2002)

Violent incidents where alcohol is involved are more likely to result in more serious injuries

- Over half of all incidents of alcohol-related violence between strangers and acquaintances resulted in some form of injury.
- The most common form of injury was minor bruising. Alcohol-related incidents were significantly more likely to result in cuts and broken bones than non-alcohol-related incidents.
- Nevertheless, not all incidents are taken seriously: whilst around a half of all victims of alcohol-related stranger and acquaintance assault did consider themselves to be a victim of a crime, around a third viewed it as “just something that happens.”

Source: Budd (2003)

Victims and offenders tend to be young men, and often share similar profiles

- In many cases of alcohol-related violence, the dividing line between victim and offender is blurred:
 - » almost half of alcohol-related assaults between strangers involved more than one offender, as did 38 per cent of incidents between acquaintances; and
 - » around a fifth involved four or more offenders.
- Evidence from a Cardiff study indicates that:
 - » more than half of all arrestees for alcohol-related crime are first-time offenders; but
 - » a substantial minority of alcohol-related arrestees are repeat offenders: approximately one in five alcohol-related arrestees have four or more previous convictions; and
 - » victims and offenders often share similar profiles and often both have been drinking.

Sources: Budd (2003); Maguire et al. (2002)

RISK FACTORS FOR BECOMING A VICTIM OF ALCOHOL-RELATED STRANGER OR ACQUAINTANCE VIOLENCE

- Being male aged 16 to 29
- Being single
- Being unemployed
- Visiting a pub frequently
- Visiting a night club frequently
- Living in urban or inner city area
- Living in privately rented accommodation
- Drinking on average 3-4 times a week
- Drinking more than 10 units on a typical drinking day

These factors are largely accounted for by *exposure to risk*. People who regularly expose themselves to social situations where large numbers of people have been drinking, are most likely to become victims of alcohol-related assault. However, risk factors for victimisation are not simply a reflection of the characteristics of a typical drinker: although drinking by young women has increased considerably, men still account for most cases of alcohol-related assault (as perpetrators and victims).

Source: Budd (2003)

Alcohol plays a role in around a third of cases of violence between spouses and partners

- Partner violence is a significant problem:
 - » almost one in four women are estimated to have been assaulted by a partner since age 16; and
 - » two women are killed each week in England and Wales by a current or former partner.
- Approximately a third of incidents of partner violence were committed when the perpetrator had been drinking.
- Offender-only drinking is common in incidents of partner violence, whilst victim-only drinking is rare.
- Alcohol use is associated with increased violence severity and appears to escalate already existing conflict.
- In addition, partner violence is linked to chronic alcohol misuse:
 - » rates of alcohol abuse and dependence among perpetrators may be 2-7 times higher than in the general population.
 - » alcohol misuse is a risk factor for partner violence perpetration and predicts perpetration over time, even taking into account other risk factors.
- Alcohol use by victims is also a risk factor:
 - » heavy drinkers are at increased risk of victimisation; and
 - » many victims develop alcohol problems following victimisation.
- In turn, this may make it more difficult for victims to access vital services such as refuge accommodation.
- However, alcohol misuse is only one risk factor among many. Others include prior assault, separation from the partner, and age, with under 25s being at greatest risk.

Sources: Mirrlees-Black (1999), Kaufman et al. (1987), Quigley and Leonard (2000), White and Chen (2002), Logan et al. (2001), O'Farrell (1999), White and Chen (2002), Roberts et al. (1997) cited in Finney (forthcoming)

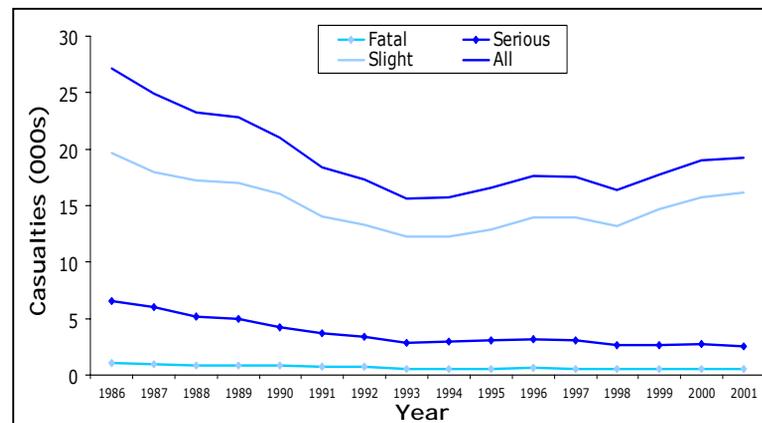
Perpetrators of sexual assault have often been drinking at the time, and many are also chronic heavy drinkers

- Sexual assault often occurs when the perpetrator, and frequently also the victim, have been drinking:
 - » in a small-scale UK study, 58 per cent of those imprisoned for rape reported drinking in the six hours prior to the rape;
 - » in a survey of 10,000 USA state prisoners, 57 per cent of rapists reported drinking at the time; and
 - » however, findings vary widely across studies and should be interpreted with caution.
 - Although drink-spiking is a matter of both public and police concern, there are very few recorded cases; many more incidents take place when the victim is drunk, rather than drugged.
 - Many perpetrators are also chronic heavy or 'problem' drinkers:
 - » 37 per cent of the UK prisoners above were deemed dependent; and
 - » among Canadian imprisoned offenders, almost half the rapists were severe alcohol misusers, compared with 4 per cent of the non-sexual violent offenders.
 - In April 2002/03, the Police recorded:
 - » more than 11,000 rapes and almost 24,000 indecent assaults against females; and
 - » over 800 rapes and 4,000 indecent assaults against males.
 - However, it is estimated that less than one in five incidents of female sexual victimisation come to police attention. Intoxicated victims are less likely to report their victimisation.
 - 67 per cent of rapes against women were committed by a current or former partner or date. Alcohol-related sexual assaults are more likely than other sexual assaults to occur between people who do not know each other well.
 - Offender drinking increases the likelihood and severity of victim injury.
- Sources: *Bureau of Justice Statistics (1983); reported in Martin (1992); Grubin and Gunn (1990); Abracen et al. (2000); Myhill and Allen (2002); Fisher et al. (2003); Abbey et al. (2001a); Brecklin and Ullman (2002); Salisbury (2003) cited in Finney (forthcoming)*

Although drink-driving has been declining, there has been a recent levelling out

- In 2000, driving over the legal limit accounted for 5 per cent of all road accidents and 17 per cent of all road deaths - some 530 deaths in total. In 2001, this dropped to 480 deaths.
- As the graph opposite shows, the number of drink driving casualties fell significantly between 1986 and 1993.
- More recently however, although fatal and serious casualties have remained low, slight casualties have increased. Between 1993 and 2001, the total number of casualties from road accidents involving alcohol rose by one fifth.
- Men are more likely to drink and drive than women, and research identifies two key risk groups: young men (who are likely to be unemployed or in manual work); and older professional and managerial men.
- Amongst men aged 18-25, heavy or problem drinkers were at six times greater risk of being involved in an accident than moderate drinkers.

CASUALTIES FROM ROAD ACCIDENTS INVOLVING ILLEGAL ALCOHOL LEVELS, 1986-2001



Source: Department of Transport (2001)

BLOOD ALCOHOL LEVELS OF DRINK-DRIVE FATALITIES AGED 16 AND OVER IN GREAT BRITAIN, 2000

Mode of transport	Percentage over blood alcohol levels (mg/100ml)					
	9	50	80	100	150	200
Motorcycle riders	24	12	10	10	7	4
Other vehicle drivers	35	24	22	22	16	10
Passengers	39	24	20	17	10	4
Pedestrians	47	38	35	33	27	22
Cyclists	22	14	14	14	14	8

Source: Adapted from Department of Transport (2001)

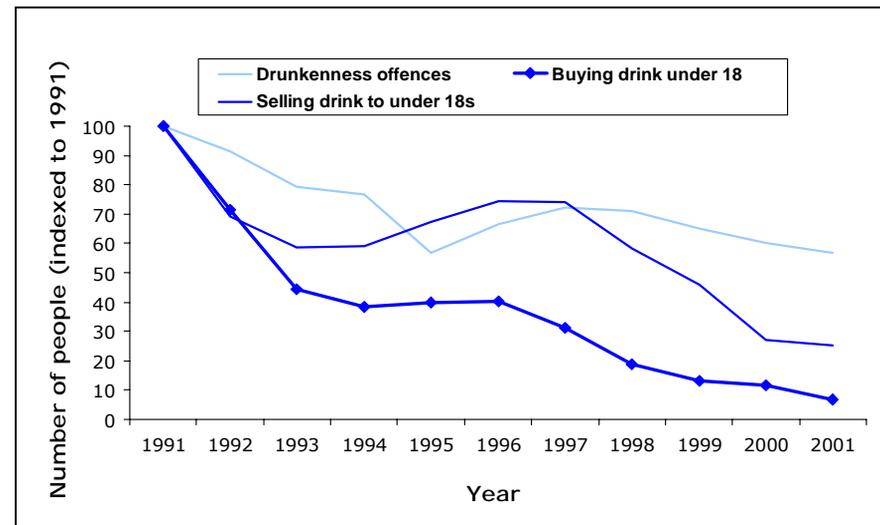
Sources: Department of Transport (2001); Hutcheson (1995); Andersen et al. (2001); Rose (2002)

Three in ten city centre arrests are alcohol-related, but enforcement of drunkenness offences has declined

- Alcohol is a factor in over 30 per cent of city centre arrests. Although many of these will be violent offences, a significant number will be for drunkenness offences, particularly drunk and disorderly.
- However, as the graph opposite shows, the number of persons found guilty or cautioned for these offences is in decline. This is likely to be as much to do with police practice, as to do with the actual prevalence of drunken and anti-social behaviour.
- Different Police forces adopt different data collection and policing strategies: not all forces routinely collect information on alcohol involvement, for example. Similarly, if the police have a policy of targeting certain offences (i.e. drunkenness offences) this may lead to higher numbers detained for that offence, whilst other local initiatives may reduce the targeting of street drinkers or alcohol related offences. Fixed penalty notices are being piloted and initial results are encouraging.

Source: Lan-Ho et al. (2002) , Maguire et al (2003)

PERSONS FOUND GUILTY OR CAUTIONED FOR ALCOHOL-SPECIFIC OFFENCES



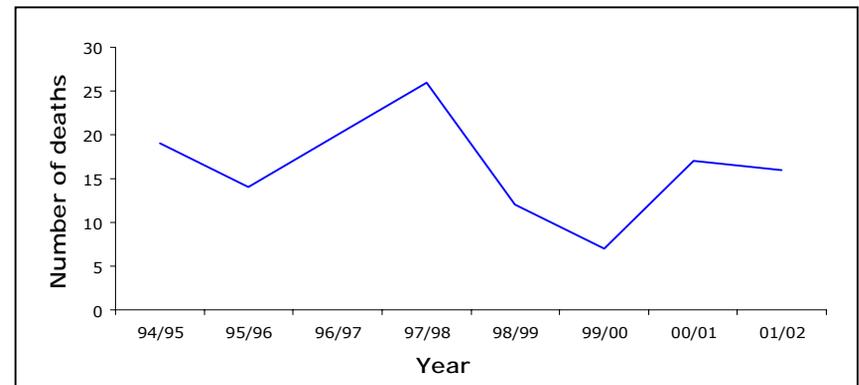
Source: Home Office Criminal Statistics (2001)

Drunken arrestees impose a considerable burden on Police resources

- Alcohol-related crime is a major burden on police resources and intoxicated detainees are a significant problem, not least because of the risk of death in custody.
- Intoxicated arrestees need to be carefully monitored whilst in police custody: in 2001-2, there were 16 deaths in police custody involving alcohol and/or drug intoxication.
- Detainees under the influence of alcohol also cause problems for custody officers in terms of noise, hygiene and disruptive behaviour. For these reasons, and the fact that they need close supervision, these detainees are most time consuming and expensive for the police to process:
 - » as the chart opposite shows, it costs, on average, £59 more to process an alcohol-related arrestee (compared to a similar non-alcohol related arrestee).

Source: Lan-Ho et al. (2002) , Maguire and Nettleton (2003)

NUMBER OF DEATHS IN POLICE CUSTODY INVOLVING ALCOHOL AND/OR DRUG INTOXICATION, 1994-2002



Sources: HO statistics on deaths in police custody, Police Complaints Authority

COST OF PROCESSING DRUNKEN DETAINEEES

TYPE OF OFFENCE	COST (£)
Alcohol specific offence	117
Offence involving alcohol	180
Non-alcohol related offence	121

Almost two-thirds of male prisoners and over a third of female prisoners have problems with alcohol

- Alcohol misuse and dependence is significantly higher in prison than in the general population:
 - » hazardous drinking (based on AUDIT questionnaire score of 8+) in the year before coming to prison was reported by 63 per cent of sentenced male prisoners and 39 per cent of sentenced female prisoners.
- In 2001/02, 6,255 prisoners undertook alcohol detoxification programmes. In 2000/01, the comparable figure was 7,813.
- Offenders with alcohol and drug dependence have been shown to have significantly higher rates of mental health problems such as neurosis, psychosis and personality disorder. These may also require treatment, and may pose an additional obstacle to rehabilitation.
- 58 per cent of prisoners discharged from prison in 1997 were reconvicted of a standard list offence (these include the more serious offences) within two years of release. Although the evidence base in this area is weak, alcohol problems may be one factor inhibiting rehabilitation and influencing recidivism.
- Prison is extremely expensive - the cost per uncrowded place for 2001/02 is £27,090. Alcohol-related offenders sentenced to custody therefore impose significant costs on the criminal justice system, although many will receive sentences of less than a year.

Sources: Singleton (1998), Elkins (2001)

Offenders with alcohol problems account for half of the average Probation Officer's caseload

- Approximately one in five offenders sentenced to probation orders (now 'Community Rehabilitation Orders') cited the influence of alcohol as the reason for committing the offence. This was the second most popular reason, the first being money.
- The Criminal Justice Acts of 1991 and 1993 introduced drug and alcohol treatment as additional requirements that courts can place on probation orders.
- One estimate suggests that around half the offenders on the average Probation Officer's caseload have problems with alcohol.

Sources: Mair and May (1997) Harrop (2001)

KEY PROBATION STATISTICS

- In 2000, the courts sentenced 1.42m offenders.
- Community sentences were imposed in 30% of sentences for indictable offences.
- In 2000:
 - » 232 of those starting Community Rehabilitation Orders had residential drugs/ alcohol treatment requirements;
 - » 7,786 had non-residential drugs/ alcohol treatment requirements; and
 - » 1,093 had a requirement for drugs/alcohol treatment by qualified medical persons.

The total cost of alcohol-related crime in England and Wales is estimated to be up to £7.3 billion

- The costs of alcohol-related crime fall into three main categories.
- Firstly, those costs incurred *in anticipation* of crime. These include measures aimed at reducing the risk of victimisation, such as defensive expenditure on security products and insurance.
- Secondly, costs incurred *as a consequence* of crime. These include the cost of damaged or stolen property, victim support and emotional impact costs, and loss of productive output of the victim.
- Thirdly, costs incurred *in response* to crime. These include costs to the police, the Crown Prosecution Service, Magistrates and Crown courts, legal costs and costs to the prison and probation services.

Source: Leontaridi (2003)

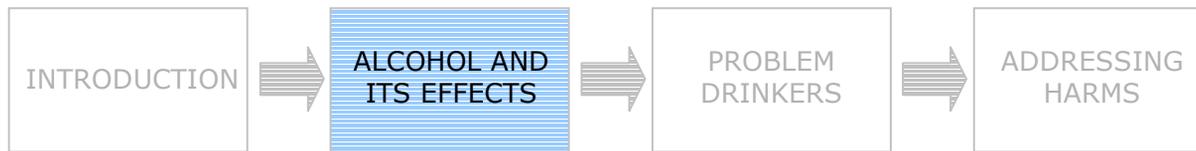
ESTIMATED COST OF ALCOHOL-RELATED CRIME

Costs incurred in anticipation of crime	
	£1.5bn
Costs incurred as a consequence of crime	
Property/health and victim services costs	£2.5bn
Crime costs of lost productive output	£1bn
Costs incurred in response to crime	
Alcohol-specific offences	£30m
Alcohol-related offences	£1.7bn
Costs of drink-driving	
	£0.5bn
TOTAL CRIME COSTS	
	£7.3bn

Source: Leontaridi (2003); Note: Additional costs incurred as a consequence of the human and emotional impact suffered by victims of crime (e.g. attending victim support services) are calculated to be up to £4.7 bn. Due to the lack of research in the field, similar costs have not been estimated for other alcohol-related harms. For this reason, human costs are not included in the crime/public disorder total figure.

Alcohol-related crime and public order harms: a summary

- **Who commits crimes and how many are there?**
 - » an estimated 1.2m incidents of alcohol-related violence;
 - » 80,000 arrests for drunk and disorderly behaviour;
 - » 360,000 alcohol-related incidents of domestic violence;
 - » 19,000 sexual assaults related to alcohol; and
 - » 85,000 cases of drink driving.
- **How many are affected and who are they?**
 - » For violence between strangers and acquaintances the dividing line between victims and offenders is often blurred, with the overwhelming majority being male, young and unemployed;
 - » all these crimes had casualties - 480 dead and 17,530 injured as a result of drink driving for example; but
 - » there is a gap between perception and reality although fear of crime is still a matter for concern.
- **How much does it cost?**
 - » an estimated total cost of up to £7.3bn; and
 - » human/emotional costs of £4.7bn.



A) What are the harms, who suffers them and what are the costs?

Overview - the costs of alcohol misuse

Health

Crime & public disorder

Productivity at work

Family & social networks

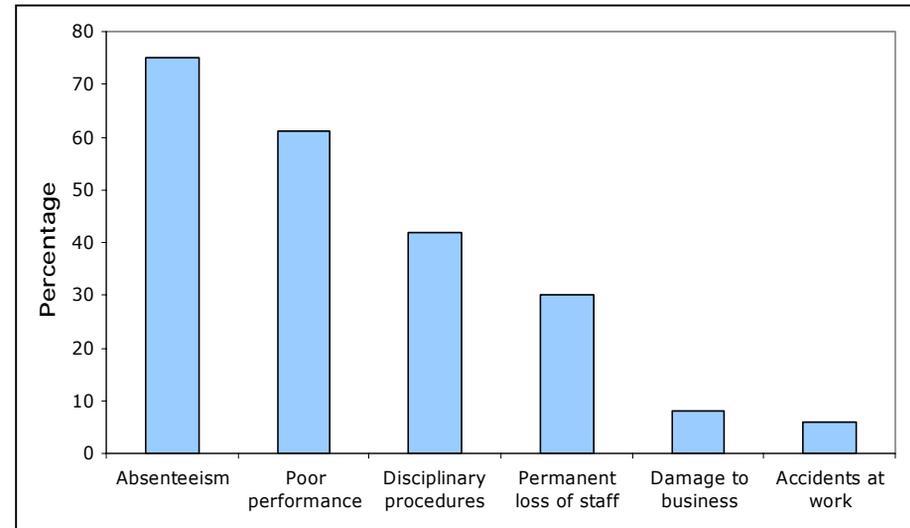
B) Conclusion - alcohol and its effects

Alcohol-related harms

Alcohol affects workplace activity

- Alcohol plays a part in and around work, both as a perceived antidote to the pressures of the modern workplace and as a way to socialise or network with clients and colleagues.
- However, drinking can reduce the productivity of the UK economy in a number of ways. This occurs through:
 - » increased sickness absence: drinking 7+ (for women) or 14+ (for men) units per week raises the likelihood of absence from work through injury by 20 per cent;
 - » the inability to work (unemployment and early retirement); and
 - » premature deaths among economically active people (people of working age).
- Combined, these three factors account for a total alcohol-related output loss to the UK economy of up to £6.4bn.

PERCENTAGE OF EMPLOYERS ATTRIBUTING SELECTED WORKPLACE PROBLEMS TO ALCOHOL MISUSE



Sources: *Alcohol Concern (2002)*; *Whitehall studies reported by Head et al. (2002)*; *Leontaridi (2003)*

Heavy drinkers stay less long in jobs

- Workers who misuse alcohol are more likely to have sickness absence and accidents.
- Those with a history of alcohol misuse are likely to change jobs more often, there is some suggestion that they are more likely to be unemployed.
- The unemployed have relatively high levels of alcohol consumption and an above average proportion of problem drinkers are unemployed: alcohol accounts for 3.9 per cent of expenditure in unemployed households compared to 0.86 per cent for full-time employees.
- There is no evidence that chronic heavy drinkers suffer a drop in income: on the contrary, those who drink above government guidelines have higher wages. Binge drinkers are likely to earn up to £7,000 less annually than heavy drinkers; however, as they tend to be concentrated amongst younger age groups this to some extent reflects the fact that they are unlikely to have climbed far up the career and earnings ladder.

Sources: FES (2000), unpublished research for SU by David Bell, EU (2003)

Absenteeism from work through alcohol misuse costs the economy about £1.5bn

- It is generally acknowledged that people with alcohol-related problems have increased rates of sickness absence from work.
- The value of lost output during sickness has long been regarded as one of the main costs to the economy of alcohol misuse.
- In 2001, across the whole UK workforce, over 176m working days were lost as a result of absenteeism. Between 6 per cent and 15 per cent of this aggregate figure can be attributed to alcohol-related sickness.
- In total, alcohol-related sickness absence is estimated to cost between £1.2bn and £1.8bn, with a middle estimate of approximately £1.5bn.

Sources: *Labour Market Trends (2002)*, *CBI (2002)*

ESTIMATED COST OF ALCOHOL-RELATED SICKNESS ABSENCE

Minimum estimates	
Alcohol-attributable working days lost in 2001	c.11m
Alcohol-attributable cost of sickness absence in the economy	£1.2bn
Maximum estimates	
Alcohol-attributable working days lost in 2001	c.17m
Alcohol-attributable cost of sickness absence in the economy	£1.8bn

Source: *Leontaridi (2003)*

But alcohol misuse can also reduce employment, which accounts for a further £1.9bn cost

- The relationship between drinking and unemployment is not straightforward.
- However, there is evidence suggesting that excess drinking is negatively associated with employment:
 - » it is estimated that problem drinking by men accounts for a 7-31 per cent drop in the probability of working;
 - » problem drinking may also lead to lower activity rates among heavy or dependent drinkers, through a 'discouraged worker' effect; and
 - » unemployed young men of the 1958 British birth cohort were more likely than other men to be heavy drinkers regardless of drinking group at age 16.
- In total, the reduction in employment activity associated with drinking is estimated to cost between £1.7bn and £2.1bn, with a middle estimate of approximately £1.9bn.

ESTIMATED COST OF ALCOHOL-RELATED REDUCED EMPLOYMENT

Minimum estimates	
Number of days out of employment	c.15m
Alcohol-related reduced employment costs to the economy	£1.7bn
Maximum estimates	
Number of days out of employment	c.20m
Alcohol-related reduced employment costs to the economy	£2.1bn

Source: Leontaridi (2003)

Premature death from alcohol misuse loses the economy around £2.4bn in potential output

- Premature death from alcohol-related causes accounts for at least 58,000 potential years of life lost under the age of 65.
- This removes employees from the workforce and implies loss of output in the economy.
- The economic cost of alcohol-related premature death is the value foregone of their potential output in current and future years up to retirement.
- The total economic cost is estimated to lie between £2.3bn and £2.5bn.

Source: ONS (2003)

ESTIMATED COST OF ALCOHOL-RELATED PREMATURE MORTALITY

Minimum estimates	
Alcohol-attributable deaths	c.15,000
Alcohol-attributable cost of lost output through premature mortality	£2.3bn
Maximum estimates	
Alcohol-attributable deaths	c.22,000
Alcohol-attributable cost of lost output through premature mortality	£2.5bn

Source: Leontaridi (2003)

Alcohol-related workplace productivity harms: a summary

- Who is affected?
 - » binge drinkers are at higher risk of unemployment - even when in work, their annual incomes are up to £7,000 below those of other drinkers (although this at least in part reflects the fact they are younger); and
 - » chronic drinkers are at some risk of higher unemployment, but earn more as their drinking rises until, and if, their drinking becomes unsustainable.
- How many are affected?
 - » up to 17m working days are lost annually due to alcohol-related absence;
 - » up to 20m working days are lost annually due to alcohol-related reduced employment;
 - » at least 58,000 potential working years are lost annually due to premature alcohol-related deaths; and
 - » this represents lost earnings for individuals, lost profit for employers and lost productivity for the country.
- How much does it cost?
 - » a cost of up to £6.4bn in lost productivity.



A) What are the harms, who suffers them and what are the costs?

Overview - the costs of alcohol misuse

Health

Crime & public disorder

Productivity at work

Family & social networks

B) Conclusion - alcohol and its effects

Alcohol-related harms

Alcohol misuse can also affect a drinker's relationships, their family and how they participate in society

- As well as its consequences in terms of health, crime and workplace productivity, alcohol misuse can also have broader effects on people's lives and social well-being.
- By impacting upon the way in which people interact with family and friends on the one hand, and with wider society and public services on the other, alcohol misuse can have serious implications for people's social and support networks and for the way in which they participate in society.
- In terms of family, friends and other personal relationships, alcohol misuse may be associated with:
 - » relationship break-down;
 - » domestic violence and aggression;
 - » health impacts;
 - » poor parenting - and in the most serious cases, child abuse; and
 - » unsafe or regretted sex.
- In terms of the way in which people interact with the wider community and society, alcohol misuse may, in particular, be associated with:
 - » truancy and delinquency (in under-age drinkers);
 - » anti-social behaviour; and
 - » homelessness and street-drinking.

Alcohol misuse can contribute to the breakdown of family relationships

- Heavy drinking is a common factor in family break-up:
 - » marriages where one or both partners have an alcohol problem are twice as likely to end in divorce as marriages where alcohol problems are absent; and
 - » research by the World Health Organisation has indicated that as many as one in three divorce petitions in the UK may cite excessive drinking by a partner as a contributory factor.
- Alcohol is reported as a factor in approximately one-third of domestic violence incidents.
- However, the exact relationship between alcohol use and marital aggression is unclear:
 - » alcohol misuse may contribute to the violence, but may be used as an excuse.
 - » the alcohol use and violence may both be due to the personality of the aggressor; and
 - » alcohol misuse by the victim may contribute to problems in the relationship or may be a consequence of dealing with the violence.

LIFE WITH A PROBLEM DRINKER

- Life with a problem drinker can be bewildering and unpleasant for a non-drinking spouse, who may have to take on extra roles and responsibilities. For example, a sole parenting role, at the same time as dealing with the effects of the spouses drinking. Financially supporting the family and providing all the emotional support.
- Spouses (especially women) may become anxious or depressed, and may feel guilty about effects on the family or may become angry.
- Spouses (especially women) may wrongly blame themselves for their partner's drinking problems.

Sources: Velleman (1993), Robinson and Hassell (2000), Velleman (1993), Kantor and Strauss, PAT 8, WHO (1995)

Alcohol misuse by parents can also have adverse consequences for their children

- It is estimated that between 780,000 and 1.3 million children are affected by parental alcohol problems in the UK.
- Alcohol misuse affects the healthy functioning of families and can impair parenting skills and relationships with children. For example:
 - » there may be mood swings and poor communication with the child;
 - » the family's relationship with the outside world is often affected due to embarrassment and shame about the situation;
 - » the non-drinking parent may have less time and emotional resources to devote to the child; and
 - » children may have to take on a caring role within the family.
- Alcohol misuse features heavily in cases of child protection:
 - » surveys suggest between 30 and 60 per cent of child protection cases involve alcohol; and
 - » in an NSPCC help-line study, 23 per cent of child abuse or neglect calls involved alcohol misuse.
- Children of parents with alcohol problems may experience problems in relation to:
 - » the school learning environment: learning difficulties, loss of concentration, overall poor school performance and truancy;
 - » emotional and psychological problems: higher levels of depression and anxiety, especially amongst older children; and
 - » anti-social behaviour: aggressive behavior, delinquency, hyperactivity and other forms of conduct disorder.
- Some children of problem drinkers will go on to experience problems into adulthood. These can include depressions, anxiety and relationship problems.

Sources: Eurocare (1998), Velleman (1993), Velleman and Orford (1999) Robinson and Hassell (2000)

Alcohol misuse can increase the risk of unsafe sex

- The association between alcohol misuse and unsafe sex is complex for both adults and young people. Alcohol can be perceived as enhancing sex and sexuality, but can also be associated with regretted, unsafe or abusive sexual activity.
- Alcohol can increase the likelihood of unsafe sex because it:
 - » lowers inhibitions and reduces the sense of self control. Risks are greater if there are mental health problems;
 - » makes it more difficult to take judgements and assess risks, as well as decreasing dexterity;
 - » is sometimes seen a legitimate excuse; and
 - » is often associated with contexts where people are more likely to meet sexual partners (e.g. parties, pubs and clubs).
- A study of students aged 19 in North East England between 1989/90 found that, after drinking, 35 per cent had sex without contraception.

Sources: Drug and Alcohol Education and Prevention Team and Alcohol Concern (2002), Wellings et al. (2001)

As well as affecting relationships with friends and family, alcohol misuse can also be linked with truancy and school exclusion

- Permanent school exclusions have fallen by about a quarter since 1996 to 9,540. But in 20 per cent of pupils that are suspended alcohol misuse plays a role, often resulting in behavioural problems, such as violence and vandalism. Longer term it affects future achievement through lost years of education, and can also lead to involvement in crime.
- When pupils are excluded from the school community they tend to spend more time with a heavy drinking peer group, which can lead to them drinking more heavily than non-excluded pupils:
 - » 16 per cent of excluded drink daily (compared with 3 per cent of non-excludees); and
 - » 20 per cent of excluded drink alcohol 3-4 times a week (compared with 3 per cent of non-excludees).
- Family relationships and peer pressure are significant factors that also lead to truancy and exclusion, and in some cases leaving home. Where the child take on the role of caring for a parent that is drinking, their school attendance and achievement may also be affected. One survey found that the fathers of over 60 per cent of excluded pupils were not in employment.
- Children in care tend to have much higher rates of permanent exclusion and school non-attendance and may become involved in youth offending more easily.
- School drop-out amongst young people may also be associated with alcohol.

Source: Alcohol Concern (2001), Robinson and Hassell (2001); Schwarz (2000)

Around half of homeless people are dependent on alcohol

- A relationship between alcohol and homelessness exists, although its precise nature is less obvious. Dependence can lead to homelessness, but can also exacerbate problems that already exist, while for others, alcohol problems may develop as a result of being homeless.
- A 1996 study found alcohol dependence to be present in:
 - » 16 per cent of hostel dwellers;
 - » 44 per cent of those in night shelters; and
 - » 50 per cent of day centre attendees.
- More recently, it has been estimated that:
 - » up to 50 per cent of rough sleepers are alcohol reliant; and
 - » approximately one in three rough sleepers has a combination of mental health and substance misuse problems.
- There are few services designed specifically for homeless people who are problem drinkers. Services tend to be either for the homeless or those with alcohol problems.
 - » There has been interest in establishing wet centres for people who might otherwise drink in town centres and disturb members of the public. The Handel Day Centre in Nottingham and the Anchor Centre in Leicester both provide a range of services for their clients and ensure that people are able to drink in a supportive environment without intimidating members of the public and local community. The Homeless Directorate (Office of Deputy Prime Minister) and the Kings Fund are jointly funding a research project into wet centres.
 - » With no comprehensive package of care available to this group they frequently move between tertiary sources of health care, temporary shelter and alcohol treatment services.

Sources: Gill et al. (1996), ODPM (2002), Raistrick et al. (1999), Alcohol Concern Factsheet 19, Mental Health Foundation (1996)

Many homeless people come from backgrounds where there has been alcohol misuse

- Often homeless people come from backgrounds where they may have already experienced either some form of social exclusion or institutional life, often where alcohol has featured. The case is also similar for street drinkers, and there is a strong association with homelessness, especially rough sleeping and street drinking.
- A survey of 1,400 single homeless people reported that:
 - » 29 per cent had been in prison;
 - » 15 per cent in care; and
 - » 5 per cent in the army.

HOMELESS PERSON: PROFILE AND RISK FACTORS

- Family background (including family crisis, losing touch with children and being single);
- Institutional life (prison/ remand centres, foster care, children's homes, substance misuse treatment centres or the armed forces);
- Access to housing (some single people, particularly those from the armed services may experience particular difficulties).
- US research profiles an alcoholic homeless person as usually male, often older, few ties to non-drinking friends or family, has probably been married and likely to have been homeless longer than other homeless people.

STREET DRINKER: PROFILE

- Typical street drinkers are: white; male, 35 years or older; unemployed; dependent on alcohol; often drunk; using illegal drugs; suffering from psychiatric disorder; in poor physical health; at risk of arrest for drunkenness, shoplifting and minor public order offences; at risk of victimisation and often homelessness.
- Though the numbers of women street drinkers remains generally low, they are typically younger and lack social support.

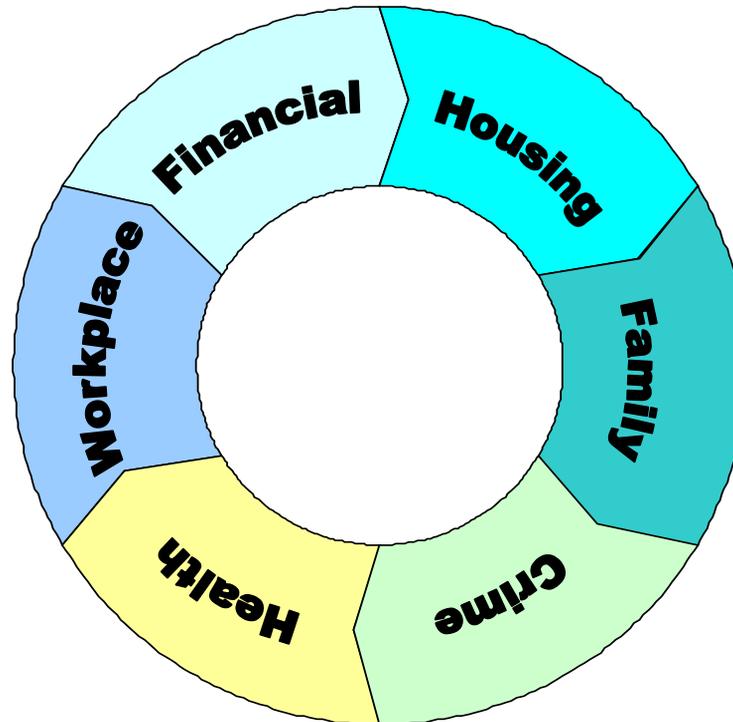
Sources: *Mental Health Foundation (1996), ODPM 2002, Regional Task Force (US)*

Dependence can affect many aspects of people's social and working lives

FINANCIAL: reduced ability to earn; possibly unemployment; money spent on alcohol rather than family/home.

WORKPLACE: absenteeism; accidents; decline in performance.

HEALTH: problems with physical health (e.g. liver disease) and mental health



HOUSING: unable to pay rent/mortgage; may lose housing and move to temporary accommodation.

FAMILY AND FRIENDS: difficulties in maintaining relationships; reduced opportunities; breakdown of marriage; unable to care for children; abusive behaviour.

CRIME: greater likelihood of arrest for drunkenness, drink driving and possibly domestic violence.

Alcohol-related family and social networks harms: a summary

- **Who is affected?**
 - » the drinker themselves, as alcohol assumes higher priority;
 - » family and friends: as problems with drinking worsen stability, relationships and income decline; and
 - » wider social networks are also affected: those with severe alcohol problems withdraw increasingly and may end up jobless, homeless, out of contact with their family and beyond the reach of services.
- **How many are affected?**
 - » alcohol dependence syndrome accounts for over 30,000 hospital episodes per year;
 - » between 0.78 and 1.3m children are affected by alcohol misuse in the family;
 - » marriages where one or both partners have an alcohol problem are twice as likely to end in divorce;
 - » up to half of rough sleepers have problems with alcohol; and
 - » there are up to 20,000 street drinkers in the UK.
- **How much does it cost?**
 - » there are no reliable estimates. This reflects the difficulty of putting a value on suffering; the difficulty of defining the role of alcohol compared to other factors in complex problems; and the lack of reliable data on a problem which by definition is often hidden.



A) What are the harms, who suffers them and what are the costs?

Overview - the costs of alcohol misuse

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B) Conclusion - alcohol and its effects

Alcohol-related harms

Alcohol-related harm: a summary

- What are the harms?
 - » there are four broad areas of harm associated with alcohol misuse: health, crime, workplace productivity and family and social networks.
- Who is affected?
 - » binge drinkers, predominantly but not exclusively those aged between 16-24. Both men and women are at greater risk of accidents and alcohol poisoning; young men in this group are far more likely than women both to commit and to experience alcohol-related violence, whilst young women are at increased risk of sexual assault. Both genders are likely to have lower earnings and higher unemployment than other drinkers;
 - » chronic drinkers: men over 40 and, to a lesser extent, women are likely to suffer chronic diseases and to die earlier (although for men over 40 and post-menopausal women this has to be offset against lower risk of heart disease). They are less likely than binge drinkers to commit crimes. Up to a point they prosper at work;
 - » some very vulnerable groups with multiple problems - for example, rough sleepers;
 - » families of drinkers suffer as their health, productivity and ability to cope decline: between 0.78 and 1.3m children suffer from parental drinking; and
 - » society as a whole: there are an estimated 1.2m alcohol-related violent incidents every year, and a quarter of the population see alcohol as a problem in their neighbourhood.

Alcohol-related harm: a summary (contd.)

- **How many are affected?**
 - » alcohol dependence syndrome accounts for over 30,000 hospital episodes per year;
 - » 150,000 people enter hospital as a consequence of alcohol;
 - » around 20,000 people die prematurely, about a fifth of those because of acute problems;
 - » there are an estimated 1.2m alcohol-related violent incidents every year;
 - » 480 deaths as a consequence of drink-driving;
 - » up to 17m days lost from alcohol-related absence and up to 20m due to alcohol-related reduced employment activity;
 - » up to 1.3m children affected by family drinking; and
 - » up to 20,000 street drinkers.

- **How much does it cost?**
 - » between £1.4bn and £1.7bn to the NHS;
 - » up to £7.3bn for crime
 - » human/emotional costs of £4.7bn for crime;
 - » approximately £6.4bn in lost productivity; and
 - » we do not have the data to quantify costs in human suffering, not only for drinkers but also for their families and friends.

Experiences of alcohol misuse: from three different perspectives

The chronic drinker

- Adam is 39, an accountant.
- He has drunk regularly since his mid-teens, something he continued with his friends at the rugby club until his late twenties.
- He drinks on the train home from work and often goes to the pub after supper.
- Recently he has met several clients whilst "the worse for wear".
- His wife has recognised his behaviour in a questionnaire about alcoholism and is keen that he seek help. He has refused saying there is no problem.

Source: abridged from Plant and Cameron

The binge drinker

- "Beers first. But when you get light headed then we go on to spirits and alcopops and stuff." (Male, 18-20)
- "I think for a lot of people their main reason for going out... is to have some excitement either way, whether they start a fight or have a dance they want something to happen." (Male 21-24)
- "Battering heads and nicking cars...drink makes you madder." (Male, 13)
- "I've done really stupid things like get into cars with friends who are really really, drunk and I shouldn't have done." (Female 18-20)
- "When you start to feel sick then I'll stop drinking..." (Female, 21-24)

Source: Richardson and Budd (2003), Brain and Parker (1997)

The drinker with multiple problems

- Chris was an alcoholic for 15 years and a rough sleeper for 12.
- Despite repeated visits to hospital and support in a hostel he continued to drink until he collapsed with acute liver failure.
- Once he left hospital staff from the hostel worked intensively to rebuild his self-esteem and coping skills.
- He now lives independently, sees his family and does volunteer work.

Source: Equinox

Part 3

Problem drinkers

This part of the report looks at problem drinkers and what makes their drinking problematic:

- » What factors influence the likelihood of problem drinking - and therefore the risk of harm to the drinker and others?
- » Which groups are at greatest risk from harmful drinking?



A) What factors influence the likelihood of problem drinking?

Overview

Individual characteristics

Family environment

Life events and experiences

Social norms and drinking culture

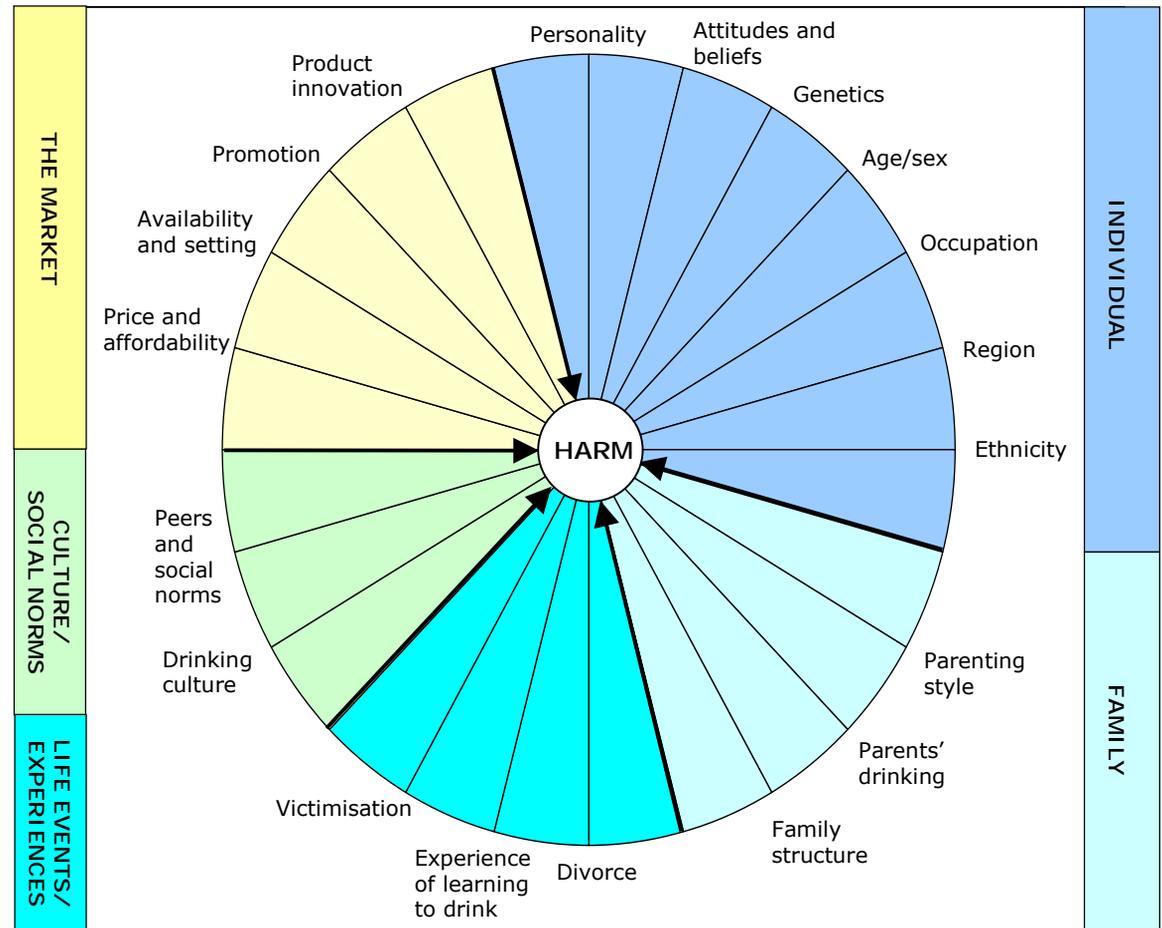
The market

B) Conclusion - which groups are at greatest risk from harmful drinking?

Identifying problem drinkers

A wide range of factors influence the likelihood of an individual drinking excessively

- As Part 1 made clear, the relationship between drinking and harm is not straightforward: drinking increases the risks of different harms in different ways, but is rarely the sole cause of harm.
- The relationship between drinking and harm is shaped by the interaction of a range of risk factors pertaining to:
 - » the individual;
 - » their family;
 - » their life events and experiences;
 - » culture and social norms; and
 - » the market.





A) What factors influence the likelihood of problem drinking?

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B) Conclusion - which groups are at greatest risk from harmful drinking?

Identifying problem drinkers

Some people have personality types that are associated with greater and riskier alcohol consumption and other risks

- Personality type can drive alcohol use and the likelihood of future harm.
- A range of personality problems, using differing definitions, have been linked with alcohol misuse and dependence. There is only a limited consensus on the evidence and limited agreement on appropriate classifications of different personality traits and types.
- There is stronger evidence for the link between aggressive, anti-social and impulsive personality characteristics or behaviour and alcohol misuse, but that only partly contributes to the misuse. There is less clear evidence for adults than for young people.
- In teenagers, for example, the likelihood of drinking at any age is higher in those with pre-existing anti-social behaviour or conduct problems. This suggests that personality type is causally more important in influencing behaviour than are the disinhibiting effects of alcohol. But clearly the interaction between these effects and personality traits can increase any predisposition to problematic alcohol use.

Source: Grant and Litvak (1998), Lewis and Bucholz (1991), Young et al. (2002)

Perception of risk influences excessive drinking

- Young people's perception of risk has been shown to correlate with levels of alcohol consumption (belief that alcohol can be harmful is associated with lower levels of consumption). This suggests that, for drinking - as for drug use - knowledge of the associated risks may be an important component of the decision-making process.
- The strength of this correlation reduces for excessive drinkers, who may alter or downplay their perception of the risk. This could be in part because such excessive drinkers find they have not yet experienced harm despite their consumption levels or might in part be a form of 'denial'.
- Studies have identified personality traits that lead to risk-taking behaviours, including alcohol abuse. For example, traits of high 'novelty-seeking' and low 'harm avoidance' have been shown to predict early onset of getting drunk, cigarette smoking, and drug use. However, these personality traits affect a range of risky or harmful behaviours and their actual impact is moderated by social context.
- In a 2000 MORI study:
 - » 78 per cent of adults said they feel fairly well or very well informed about the risks associated with alcohol, and 44 per cent that they would like more information; but
 - » the majority (60 per cent) said they feel the amount they drink has neither a good nor bad effect on their health. Amongst the remainder opinion was divided - 17 per cent said it has a good effect, and 19 per cent a bad effect.

Sources: Grant and Litvak (1998), Jessor (1987), Berman and Noble (1993), Milkman and Sunderwirth (1994), Mässe and Tremblay (1997); MORI (2002)

Some people are genetically more susceptible to alcohol and its associated harms

- Susceptibility to alcohol-related harm is partly a result of genetics. Experimental work and population studies implicate genes on a number of chromosomes in:
 - » forming taste preferences;
 - » physiological and pharmacological responses to alcohol;
 - » sensitivity to withdrawal from alcohol; and
 - » susceptibility to alcohol dependence.
- Studies of twins and adopted children suggest that disposition to alcohol abuse or dependence can be inherited. However, any genetic predisposition is likely to be complex, only partial and to be influenced by a wide range of other factors affecting individuals and interacting with their personalities.
- There are currently no biological markers for reliably predicting those at risk of alcohol dependence or adverse effects of alcohol. This may change with advances in molecular biology.

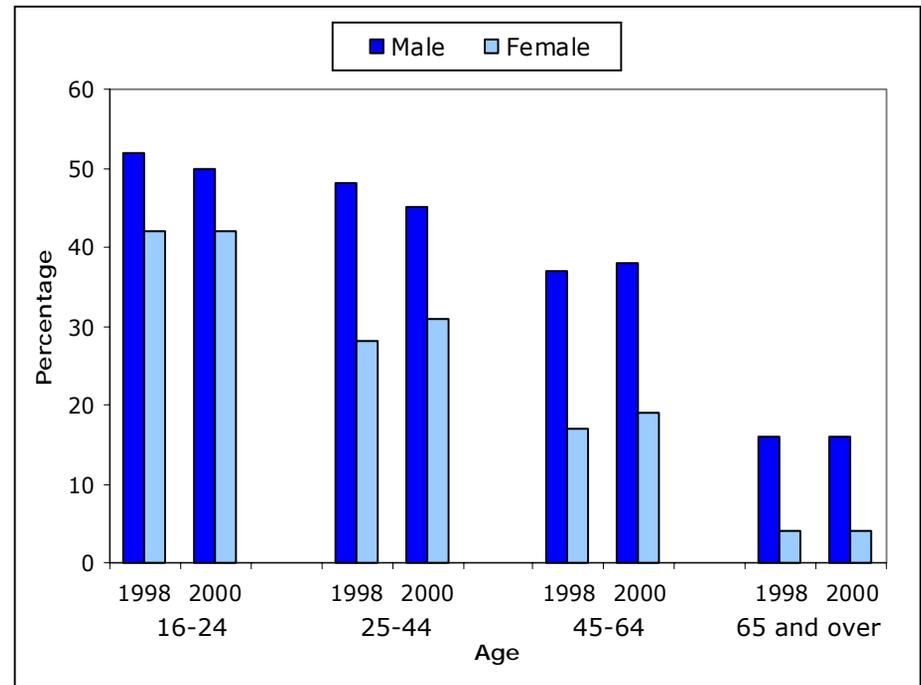
Sources: Crabbe et al. (1999), Reich et al. (1998), Couzigou et al. (1999), Cook and Hurling (2001), Sigvardsson et al. (1996), Peters and Preedy (2002), Cook and Gurling (2001), Jellinek (1960), Vaillant (1995), Neslter (2000)

Age and sex strongly predict the likelihood of excessive drinking

- Young adults and men - are more likely to drink in excess of recommended guidelines than are older adults and women.
- Drinking above recommended guidelines has increased over the past decade particularly in younger women.
- Women are more vulnerable to the effects of alcohol than men because, on average, they are smaller, have a smaller lean body mass and metabolise alcohol less efficiently.

Sources: ONS (2001) analysis of HSE data by Primatesta et al. (2002)

PROPORTION OF ADULTS WHO DRANK MORE THAN DAILY GUIDELINES ON AT LEAST ONE DAY IN THE PREVIOUS WEEK IN ENGLAND IN 1998 AND 2000

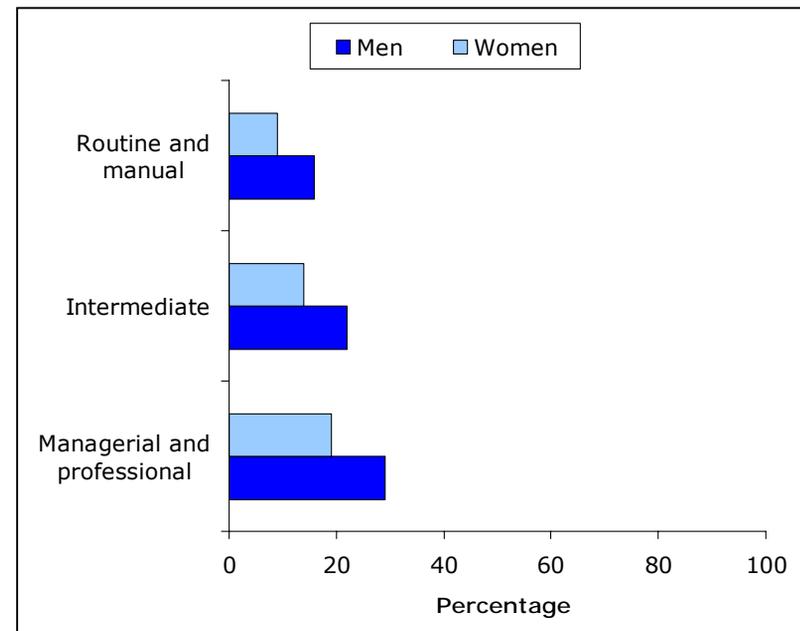


Source: ONS (2001)

Levels of excessive drinking do vary across occupational groups, but in rather complex ways

- Men and women in managerial and professional households are:
 - » more likely than other men and women to have drunk alcohol in the last week; and
 - » more likely to have done so on five or more days.
- Differences are particularly marked for managerial and professional women, who tend to drink excessively above the daily recommended guidelines and binge drink more often.
- Variations in amount (rather than frequency) drunk, however, are much less marked:
 - » among men, there were no clear patterns of difference according to household socio-economic class; but
 - » among women, however, those in the three managerial and professional classes of household were more likely than other women to drink more than 3 units and more than 6 units.
- However unskilled men in England were shown as more likely to drink very heavily.

PROPORTION OF PEOPLE DRINKING ON 5 OR MORE DAYS IN THE LAST WEEK

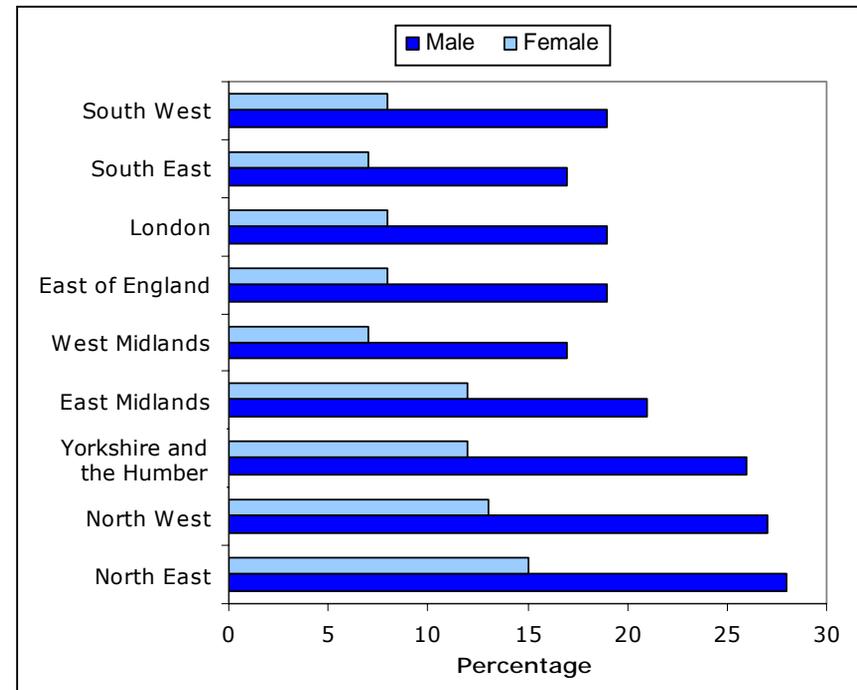


Sources (above and left): GHS (2001), HSE (2001)

Consumption levels are also related to region of residence

- Binge drinking is more prevalent in Yorkshire and the Humber, the North West and the North East of England than in other regions.

REGIONAL VARIATION IN PREVALENCE OF HEAVY SINGLE OCCASION DRINKING IN ENGLISH REGIONS, 2001



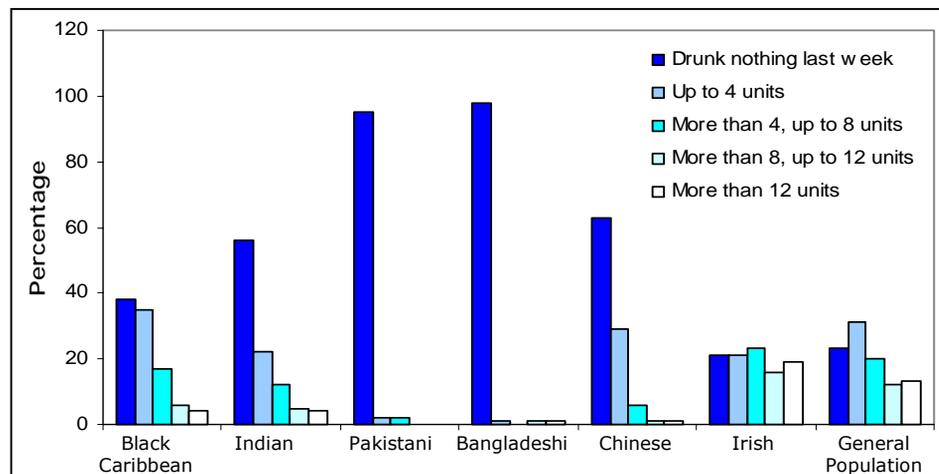
Source: ONS (2001)

Ethnic minorities, particularly Asians, generally drink less than their White counterparts

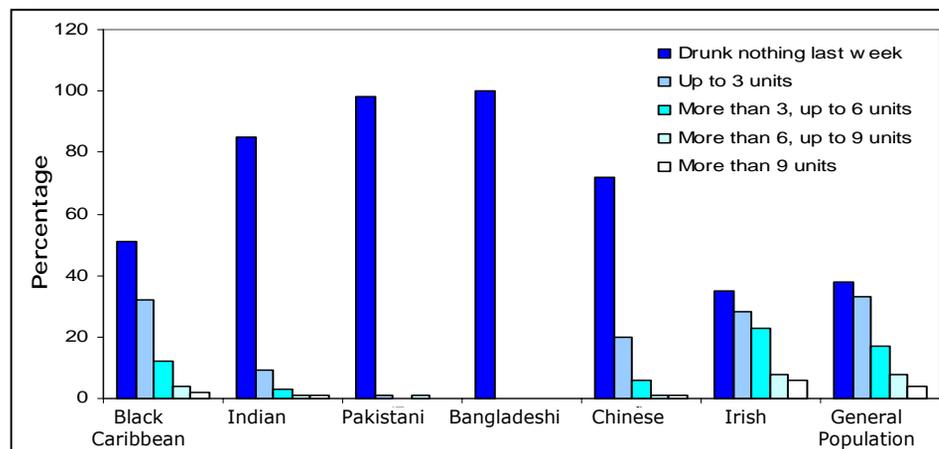
- Men and women from all minority ethnic groups, apart from the Irish, are less likely to drink alcohol than the general population. Overall they drink smaller quantities and all minority groups report drinking less frequently than the general population, except for the Irish, who drink as frequently.
- However this is not necessarily true for all groups at a local level: Black and minority ethnic populations are diverse in a number of ways (for example, generation, culture, language). More localised studies show differences in consumption by relation to such factors and by gender - for example higher consumption amongst Sikh men and black men and women in the Midlands.

ALCOHOL CONSUMPTION BY ETHNIC MINORITIES IN ENGLAND, 1999

i) MALE



ii) FEMALE



Source: Purser et al. (2001), Cochrane and Bal (1990)

Source: Health Survey for England (2001)



A) What factors influence the likelihood of problem drinking?

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B) Conclusion - which groups are at greatest risk from harmful drinking?

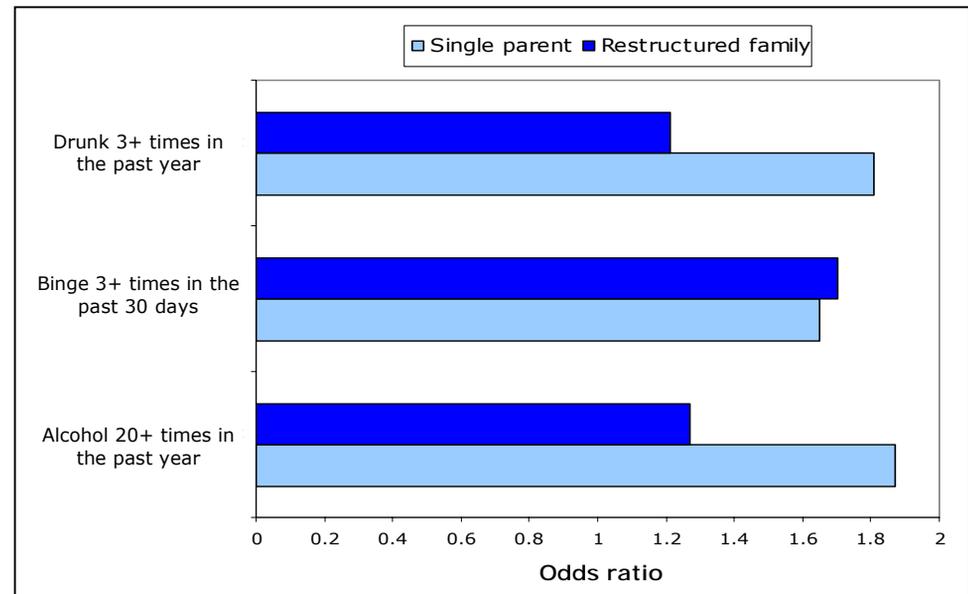
Identifying problem drinkers

Parental divorce before age 16 raises the likelihood of harmful drinking

- There is no conclusive evidence to demonstrate a causal link between family breakdown or disruption and later alcohol misuse. There is evidence to suggest a role in some cases although the mechanism has not been determined.
- Social trends in marriage and separation appear to have long-term effects: parental divorce when children are younger than 16 is associated with an increased risk of such children becoming heavy or problem drinkers in their 30s.
- By contrast, evidence indicates that family structure does not affect teenage drinking in France, where relationships with individual parents are more important.

Sources: Power et al. (1999)

ASSOCIATION OF FAMILY STRUCTURE WITH TEENAGE DRINKING IN ENGLAND

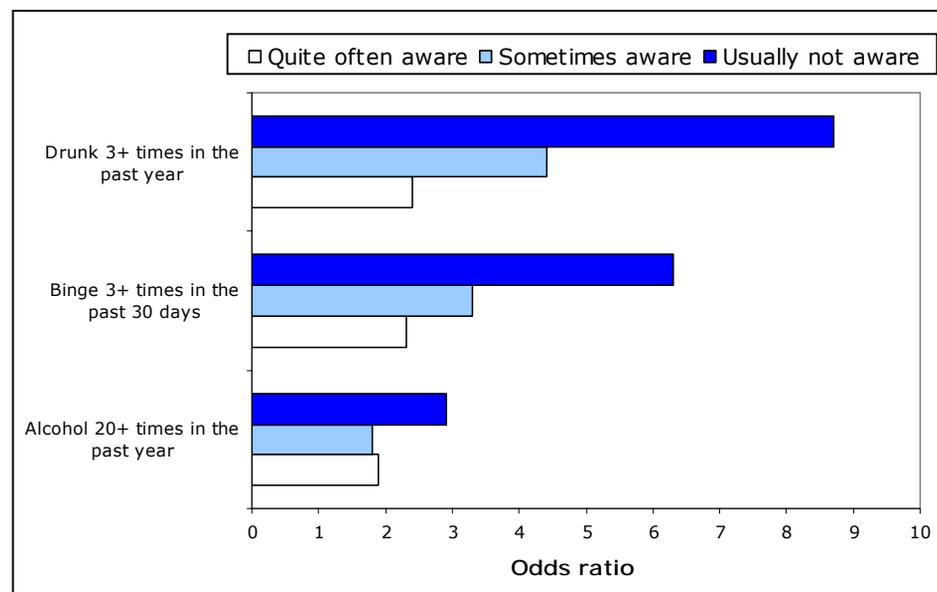


Source: Ledoux et al.(2002)

Relationships with parents show an association with children's drinking behaviour

- Many children are introduced to alcohol by their parents, and parental consumption can affect how they learn to drink.
- As children grow older influence of peers and friends may outweigh parental influence.
- Some parental drinking patterns do appear significant: children of heavy drinkers and abstainers are more likely to drink heavily than other children, but this does not necessarily last into adulthood.
- Children whose parents are usually not aware of their whereabouts on a Saturday nights are almost nine times as likely to have been drunk more than three times in the past year than those whose parents are always aware.

ASSOCIATION OF DRINKING AT AGE 15 WITH PARENTAL AWARENESS OF WHEREABOUTS ON SATURDAY NIGHT IN THE UK, 1999



Source: Ledoux et al. (2002)

Sources: Foxcroft and Lowe (1995); Barnes and Welte (1986); Barnes and Farrell (1992); Orford (1990); Ledoux et al. (2002)

Children in care show increased levels of consumption, but those with complex problems have even higher levels

- Children in care are more likely to drink than children in private households. In a recent study of children in care:
 - » less than half had never had an alcoholic drink (compared to 86 per cent of those in private households); and
 - » a quarter drank at least once a month (compared to 9 per cent in private households);
- Children in care with a mental disorder are more likely to be regular drinkers than children with no mental disorder: one in 20 children with a mental disorder reported that they drunk almost every day, compared with none of the children with no disorder. Six per cent of children with conduct disorder drank almost every day, and a quarter of children with an emotional disorder drank at least once or twice a week.
- Children in care are four times more likely than children living in private households to smoke, drink and take drugs. Children with a mental disorder are much more likely to have all three lifestyle behaviours than those with no disorder (13 per cent compared with 4 per cent).

Source: Meltzer et al. (2003)



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Identifying problem drinkers

Increased drinking can be a response to stress or trauma and may be a way of coping for some victims of violence

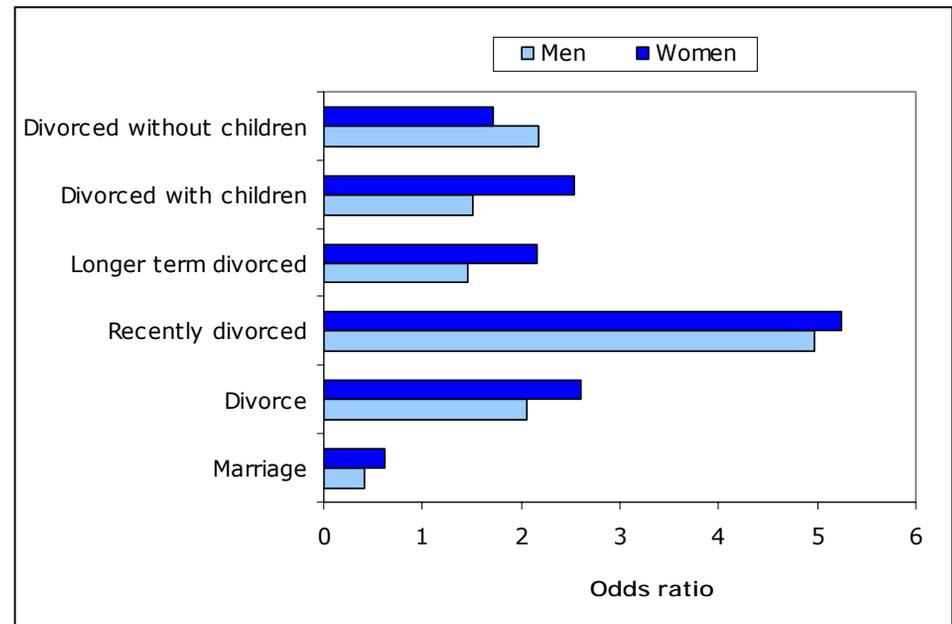
- Whilst some people drink to have a good time, others drink to cope with stressful or traumatic situations, to seek refuge, or to forget (this may be condoned, for example at wakes). Alcohol misuse or dependence may be one symptom of post-traumatic stress disorder.
- There is a strong link between drinking, and victimisation - particularly domestic violence, sexual assault and child abuse:
 - » amongst 50 mothers presenting at alcohol services in Southwark and Lambeth, almost all reported experiencing recent domestic violence;
 - » amongst 753 U.S. women receiving welfare, those who had recently experienced physical partner violence scored significantly higher on measures of alcohol dependence;
 - » a U.S. study of 238 female undergraduates found those with histories of repeat sexual victimisation reported greater weekly alcohol consumption rates than non-victimised women; and
 - » in a Canadian study of 358 gay and bisexual men, alcohol abuse was almost three times more common among those who reported having experienced non-consensual sex by another man (in childhood, adulthood or both).

Sources: Mertin and Mohr (2000), Howard and O'Reily (2001), Tolman and Rosen (2001), Corbin et al. (2001) Ratner et al. (2003)

Relationship breakdown tends to lead to heavier drinking

- Even in full adulthood drinking remains variable and is affected in complex ways by intimate relationships.
- The likelihood of heavy drinking is affected by the search for sexual partners, and by major life events such as marriage, child-bearing, separation, and divorce.
- The Birmingham Untreated Heavy Drinkers Study found that, for heavy drinkers, marriage or cohabitation reduced amounts drunk and the frequency of heavy drinking, but being in a relationship did not itself appear to have any effect.

EFFECTS OF CHANGE IN RELATIONSHIPS ON RISK OF HEAVY DRINKING AT AGE 33 ADJUSTED FOR DRINKING AT AGE 23



Source: Power et al. (1999), Dalton and Orford (2002); ONS (2002); Note: The odds ratios represent the likelihood of heavy drinking by individuals following change in their relationships compared with that of those whose relationships did not change.



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British drinking culture looks to northern rather than southern Europe

- There are clear differences in social norms and attitudes between Mediterranean drinking culture, in which the dominant beverage is wine, and Northern European and Anglo-Saxon cultures in which beer and spirits have traditionally predominated. British drinking culture shares most characteristics with the latter.
- These characteristics are deeply rooted in culture, tradition and indeed climate.

'MEDITERRANEAN' CULTURE

- wine-based
- wine part of diet
- regular part of meals and family life
- strong informal sanctions against public drunkenness

'NORTH EUROPEAN' CULTURE

- beer-based
- less frequent but heavier
- often pub-based
- drinking an end in itself
- public drunkenness tolerated and even expected

Nordstrom (2001), Grant and Litvak (1998)

Culture is not uniform: it changes and there are different drinking subcultures

- Some features of British drinking culture are common to most drinkers such as the practice of buying in rounds or the traditional pub promoted as part of the tourist industry
- But culture changes over time. For example anecdotal evidence suggests that drinking at lunchtime is now much less acceptable for employees. Consumption of wine has risen by some 500 per cent since 1970 reflecting changing incomes and aspirations
- And there are different subcultures within overall culture. Particularly evident - though not necessarily reflective of the population as a whole - is a culture of going out to get drunk.

GOING OUT TO GET DRUNK

- particularly associated with 16-24s
 - very heavy drinking, often drinking before going out to hasten drunkenness
 - large numbers coming into town centres from up to 50-60 miles round
 - circuit drinking moving from one establishment to another
 - strong likelihood of disorderly or criminal behaviour
- "It's very important to get drunk. I'm spending money and I want to get drunk and if I don't it's just a waste of money"*

Sources: BBPA handbook; Chatterton and Hollands (2001); Hobbs (2003); Richardson and Budd (HO, 2003), Brain and Parker (1997)

Culture and attitudes are driven by multiple influences

- *Friends:*
 - » “you’re all having a drink together and you’re all having a laugh and that sociable thing”
- *Acceptance:*
 - » “it feels really powerful in a horrible sort of way, you know, it’s just like you are... accepted...it’s like you own the City”
- *Relationship-seeking:*
 - » “one time we had a competition to see how many men we could pull in one night and we were all fierce to get out there”
- *Fashion and consumption:*
 - » “we don’t just go out for a good time... we go out to put on a show”
- *Social norms:*
 - » “because everyone else does it - which isn’t really a reason, but I’m not really going to go to a pub and sit there with a coke while everyone else is drinking alcohol and getting drunk”
- *Images and perceptions, for example in the media:*
 - » “ ‘x’ is a rich man’s beer, it’s pretty dear”; “ ‘y’ is a rich man’s beer”.

Sources: Chatterton and Hollands (2001), Hobbs (2003), Richardson and Budd (2003); Brain and Parker (1997)



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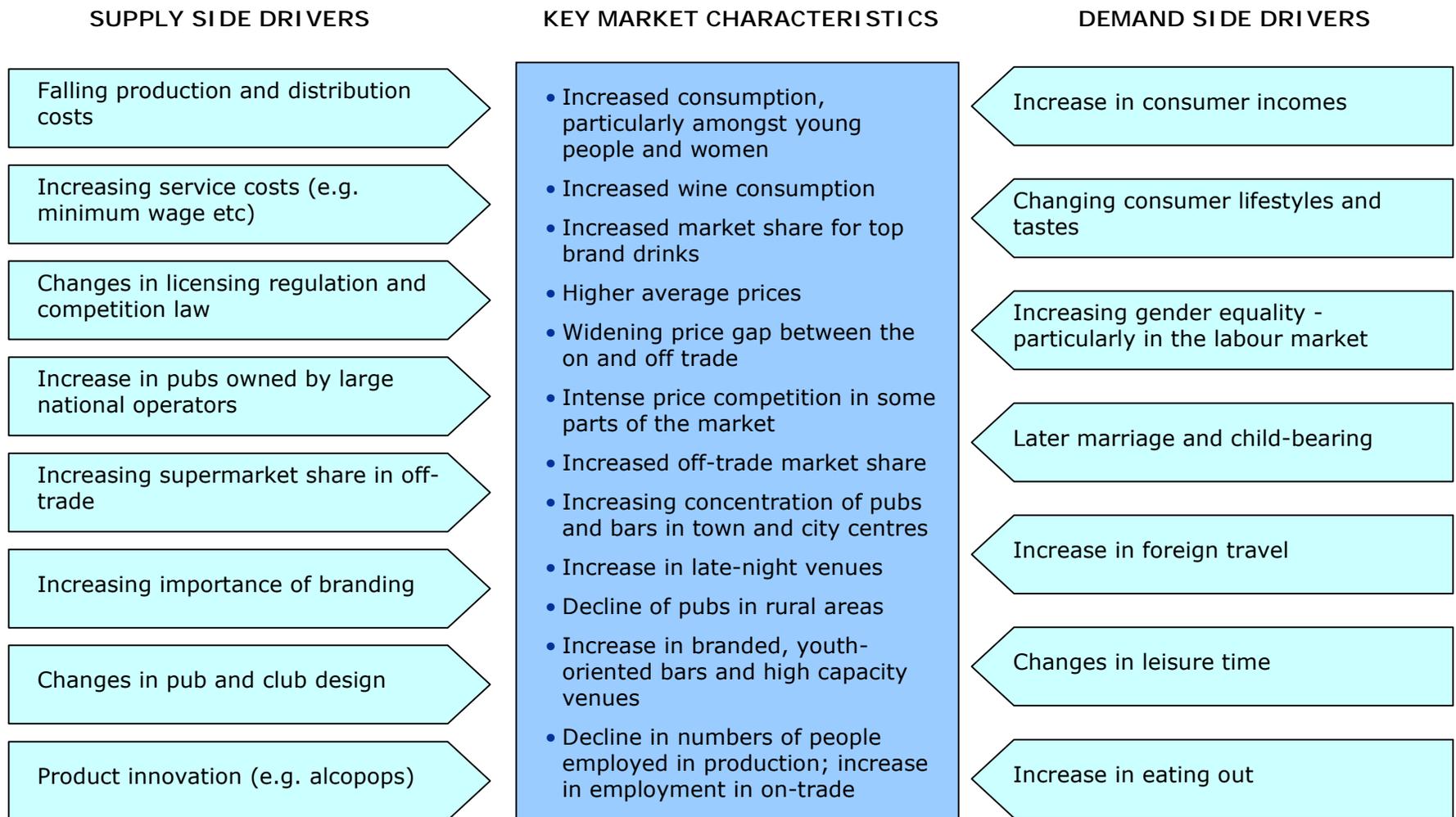
Social norms and drinking culture

The market

B) Conclusion - which groups are at greatest risk from harmful drinking?

Identifying problem drinkers

The market is complex and both shapes and reflects consumer behaviour

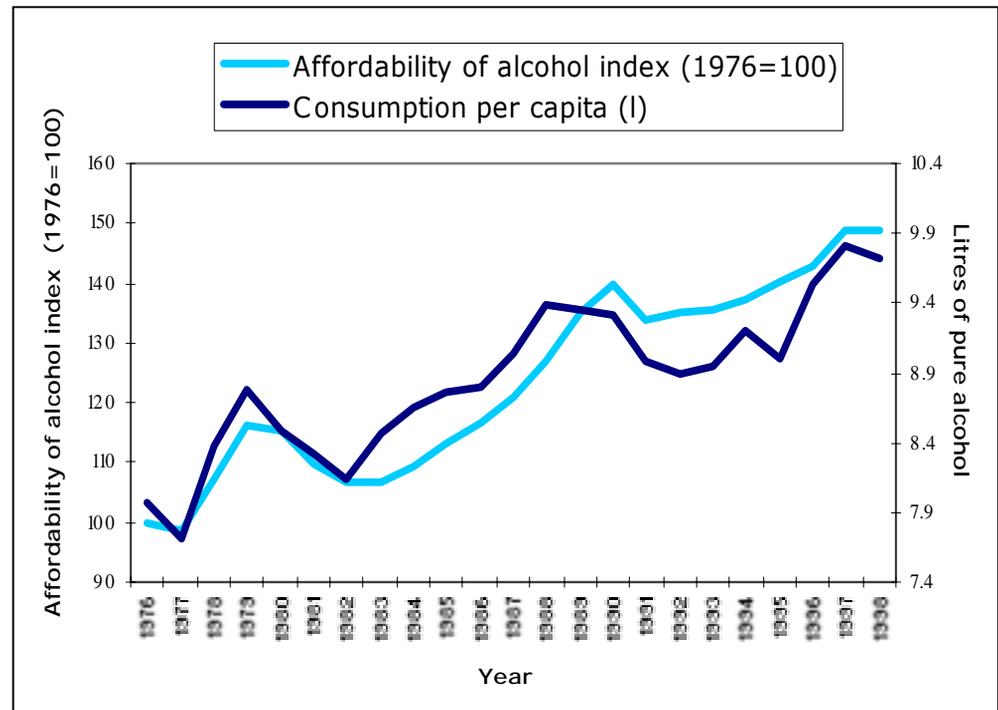


The affordability of alcohol affects how much we drink

- Affordability is an interaction between price, relative to other goods, and disposable income.
- Alcohol was 49 per cent more affordable in 2000 than in 1978
 - » Whilst the average price of alcoholic drinks increased by 24 per cent more than prices generally, household disposable income increased by 84 per cent in real terms over the same period.
- As the graph opposite shows, there is a close link between affordability and consumption per capita.
- This link tends to be weaker at higher levels of affordability, as alcohol becomes relatively inexpensive.

Source: Department of Health Statistical Bulletin (2001)

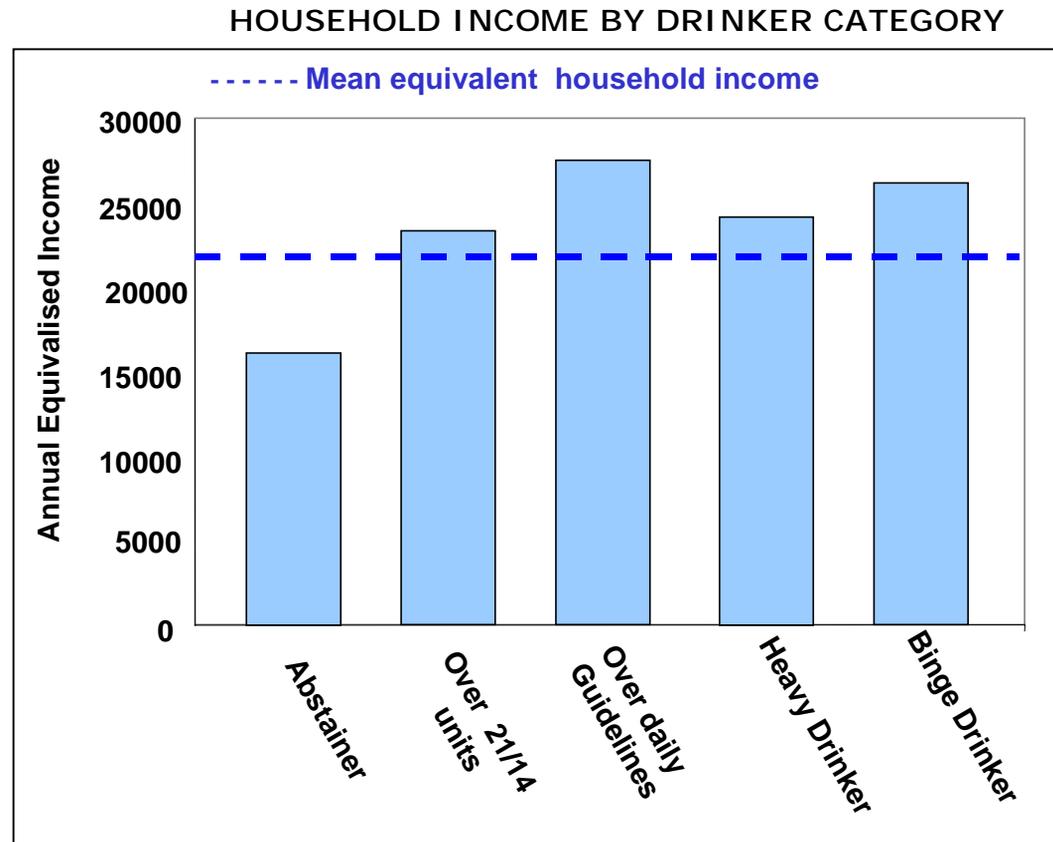
TRENDS IN AFFORDABILITY AND CONSUMPTION, UK



[Note: The Affordability of Alcohol Index measures the relative affordability of alcohol, by comparing the relative changes in the price of alcohol with changes in Households' Disposable Income over the same period (allowing for inflation). It is calculated as follows: Real Households' Disposable Income/ Relative Alcohol Price x 100.]

People with higher incomes can afford to, and do, drink more

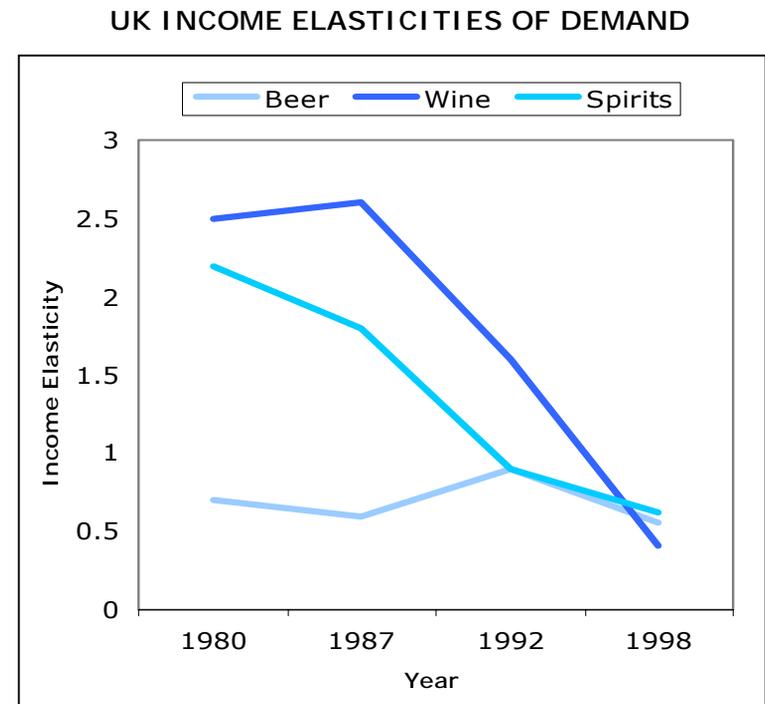
- The graph on the right shows the mean household income of various categories of 'excessive' drinkers. It shows that heavy drinkers tend to have household incomes which are higher than the UK average (shown by the dotted line).
- This is likely to be because people with higher incomes can afford to drink more.



Source: Health Survey of England (2000) from Bell, D. (2003), report prepared for the Strategy Unit

But because average incomes have risen, income now has less effect on drinking behaviour than it used to

- The graph on the right shows the percentage increase in consumption of different drinks resulting from a one per cent increase in income. This measures the extent to which consumers are responsive to changes in their income.
- Overall, drinkers are now less responsive to income changes than they were.
 - » Responsiveness of spirits and wine consumption to income has fallen dramatically as incomes have risen.
 - » Responsiveness of beer consumption to income has stayed roughly constant over the past 20 years, since increases in its price 'cancelled out' the income effect.
- This is largely because average incomes have risen significantly over the period. The richer people are, the less income changes affect how much they drink.



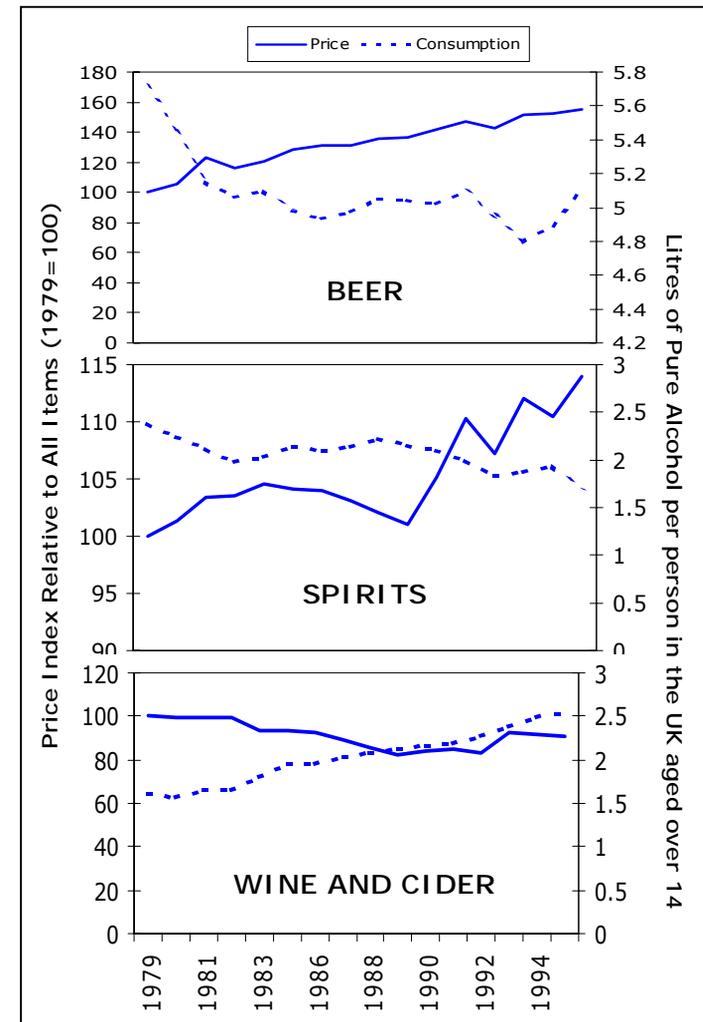
Sources: HM Treasury models reported by Raistrick et al. (1999), Chambers (1999)

Price is another of the factors that influence drinking behaviour, but consumer choices are complex

- As the graphs opposite show, since 1979:
 - the price of beer (relative to other items) has increased by 55 per cent, whilst consumption of beer has declined;
 - the price of spirits has increased by 13 per cent, whilst consumption of spirits has declined;
 - the price of wine and cider has decreased by 9.5 per cent, whilst consumption of wine and cider has increased (although cider is now in decline).
- Although these graphs do not demonstrate a causal relationship between price and consumption, other econometric work has shown that such a relationship does exist.
- However, this relationship is very complex and will be different for different people and for different drinks. Price is only one factor among many influencing how people drink; other factors such as tastes, brands and fashion, lifestyles, life experiences and family environment are crucial.
- Many factors influence the price, including consumer tastes, the level of taxation, and the costs of production.

Sources: Lader and Meltzer (2001); Godfrey (1997); HM-Treasury and Customs and Excise models reported in Huang (2003)

PRICE AND UK CONSUMPTION OF DIFFERENT DRINKS



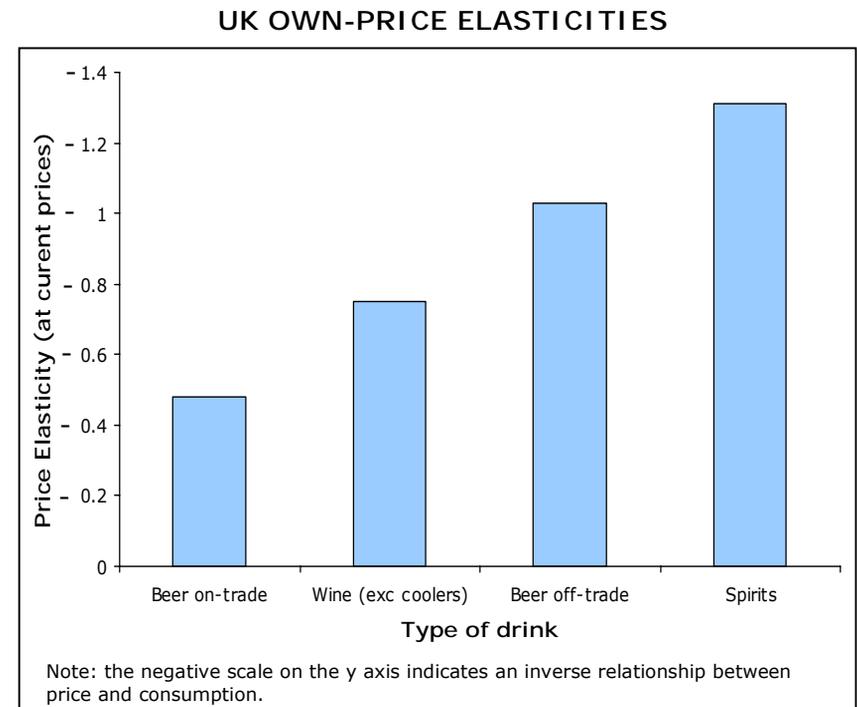
Different consumers respond in different ways to changes in price

- Whilst price affects all drinkers to varying degrees, the extent to which it affects an individual will depend on that individual's tastes and preferences, lifestyle, income and a large number of other factors.
- It may be thought that *heavy drinkers* would be unresponsive to changes in price because of their dependence. However, because heavy drinkers spend a greater proportion of their income on alcohol, price changes will have a proportionally larger impact on their budget. This may mean they actually reduce their consumption more than other drinkers following increases in price.
- However, this finding needs to be treated with caution: it may only apply to heavy drinkers who are not dependent on alcohol, and to those with lower incomes, who are more affected by price. Heavy drinkers on low incomes may also switch to cheaper alcoholic drinks (e.g. it is typical for rough sleepers who are alcohol-dependent to drink low-cost high-strength beer and cider, for example).
- Reviews of the available international literature suggest *young people* may be more responsive to price changes than older drinkers.
- The more frequently young people drink, the more important price appears to be. In one study, a sample of 13-16 year olds were asked to rank the importance of price, strength and taste as factors influencing their choice of drink. Although taste came out the single most important factor, the more frequently the young people drank the more important to them strength and price became.

Sources: Sewell (2003); Brain and Parker (1997)

Response to price changes also depends on the type of product

- The graph on the right shows the percentage increase in consumption of different drinks resulting from a 1 per cent decrease in their price.
 - » UK consumers are less responsive to changes in the price of beer, and more responsive to changes in the price of spirits.
- This reflects the fact that typically consumers tend to be less responsive to changes in the price of their main national beverage (beer in the UK; wine in France etc).
- However, this pattern appears to be changing in the UK, as beer drinking has declined and wine drinking increased.
- Consumers are more responsive to the price of beer bought in off-licences - because here they are paying purely for the product, where in pubs and bars they are also paying for the social experience of drinking.

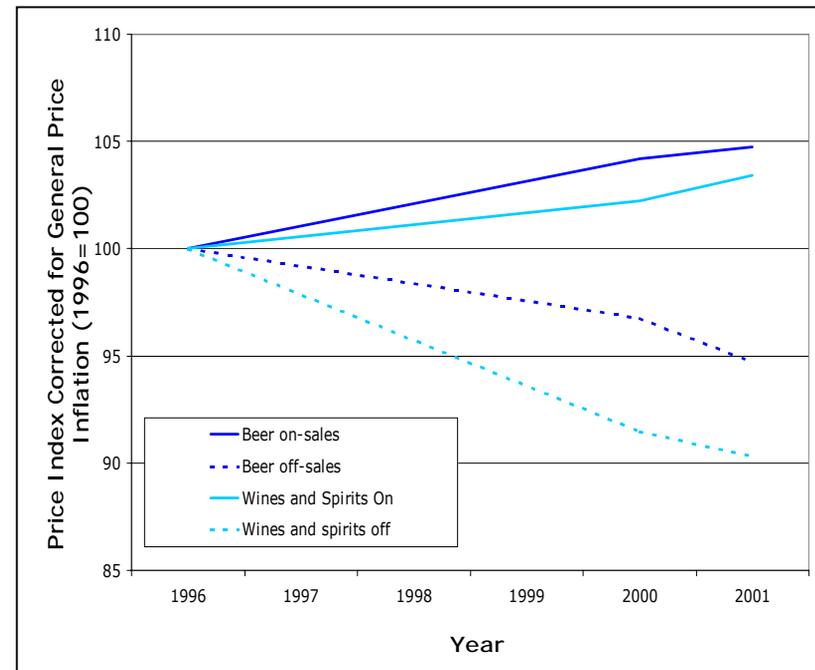


Sources: Huang (2003), Kendell et al. (1983) Christie et al. (2003), Sewell (2002) Cooke et al. (forthcoming)

Price can also affect patterns of consumption, such as where people buy alcohol, rather than overall consumption

- As the diagram opposite shows, there is a widening price gap between the on and off trade, contributing to changing drinking habits.
- This is largely due to the service element of the on-trade - the costs of services such as hospitality and entertainment tend to rise more quickly than the production costs of alcohol.
- More people are buying from the off-trade, in part due to lower off-trade prices, but also to factors such as the improvement in the quality of home entertainment (e.g. DVDs etc). In 2001:
 - » 85 per cent of wine;
 - » 74 per cent of spirits; and
 - » 35 per cent of beer (up from 20 per cent in 1991) by volume was purchased in the off-trade.
- Within the off-trade, supermarket chains are gaining larger market shares:
 - » From 1997 to 2001, there was a 23 per cent increase in spending on alcohol at large supermarket chains, compared to a 5 per cent increase for other off-premises outlets.

PRICE CHANGES IN DRINKS SOLD IN THE ON-TRADE AND OFF-TRADE

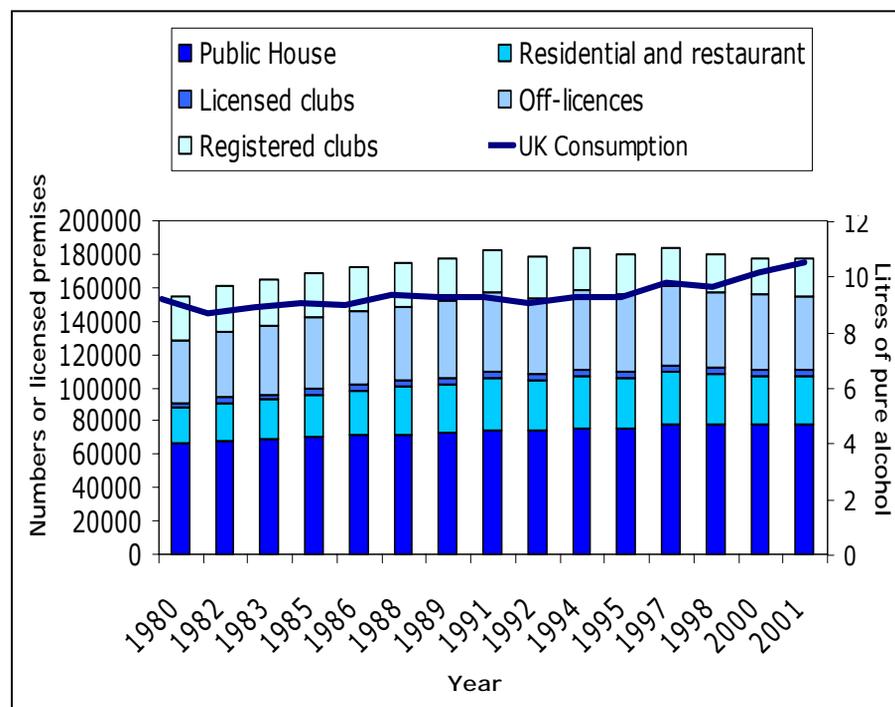


Source: Family Spending/ONS/Nvision, Monthly Digest of Statistics/Key Note (2001), Mintel;

Rising levels of consumption have also been accompanied by a growth over the last 25 years in availability

- In the last 25 years *on-licensed* premises (excluding registered clubs), increased by 30 per cent to 110,000, although total numbers did not increase in the past decade:
 - » pubs and bars increased by 20 per cent, to 78,500;
 - » restaurants and hotels increased by 68 per cent, to 28,000;
 - » licensed clubs increased by 28 per cent to 3,800; and
 - » annual applications for an on-licence are now at over 5,000 per year, an increase of 145 per cent from 1980.
- Licensing statistics hide the size of venues and are likely to underestimate increases in overall capacity (e.g. some “super-pubs” are 20 times bigger than a typical pub). Other indicators also suggest an increase in overall capacity: there are now 16 per cent more people employed in the on-trade than there were in 1990.
- *Off-licences* increased even more dramatically than on-licensed premises, doubling in the last thirty years to more than 40,000.
- Pubs and bars are diversifying: nearly 90% serve food

PREMISES SELLING ALCOHOL IN ENGLAND AND WALES AND UK CONSUMPTION 1980-2001



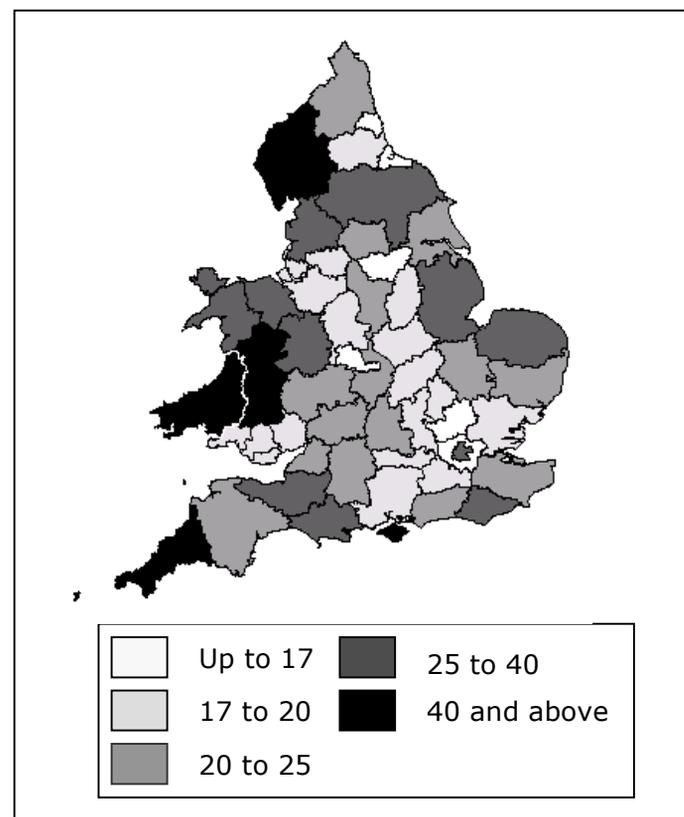
Source : Allen (2002) Statistical Bulletin: Liquor Licensing; BBPA

Urban areas have seen the biggest growth in pubs and bars - with increasing concentration around city centre 'night-spots'

- From 1995 to 2001, the number of pubs increased in 36 English counties and declined in 12:
 - » the largest overall increase was in the City of London (up 26 per cent); and
 - » the largest overall decline was in Devon (down 37 per cent).
- This appears to be part of a wider trend: as many as six rural pubs close per week. However, rural areas still have more pubs per person than urban areas. This is largely explained by tourism, and lower population density in these areas. Conversely urban regeneration accounts for some of the rise in city centre pubs
- Although national licensing statistics can be broken down by county, they are not sufficiently sensitive to show trends at the local level. However, local studies suggest that pubs, bars and night-clubs are becoming less evenly dispersed, and more concentrated in a smaller number of areas - usually well defined 'night-spots' of towns and cities. Often late night leisure development has been linked to the regeneration of an area - with many pubs taking over vacant town centre buildings such as old banks and cinemas.

Sources: Allen (2002) Statistical Bulletin: Liquor Licensing, The Countryside Agency (2001)

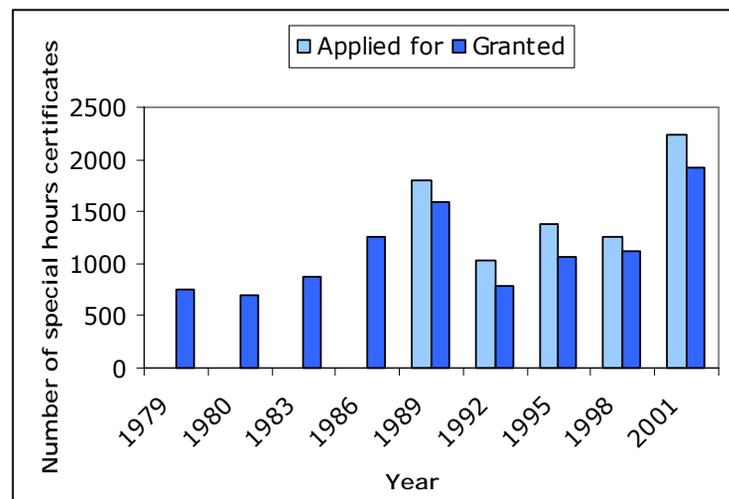
ON-LICENCES PER 10,000 POPULATION BY COUNTY, ENGLAND AND WALES, 2001



Many of these premises are catering for a growing youth market - and more are staying open later

- Many town centres have seen a move away from traditional pubs with a wider range of clientele to more youth-orientated dance bars, employing door supervisors.
- As the graph opposite shows, more premises are also staying open later.
- Other trends include the growth of 'branded high street' city centre bars owned by national operators.
 - » Mintel estimate that numbers of branded bars have increased by 23 per cent in the last two years, and turnover rose by 22 per cent to £2.5 bn over the last year alone.
- There is a growing youth market for late night leisure such as bars and night-clubs - shaped by factors such as changes in working hours and leisure time and later age of marriage. Alcohol is the predominant source of revenue (over 70 per cent) for late night venues, even those which charge an entry fee. Changes in the night time economy may be linked to increased binge-drinking by young people, much of which takes place whilst socialising with friends in pubs or nightclubs.

SPECIAL HOURS CERTIFICATES APPLIED FOR AND GRANTED 1979-2001



Sources: Mintel (2002); Hobbs et al. (2003), ONS, Statistical Bulletin: Liquor Licensing (Home Office 2002).

NB Special hours licences are currently only available to places holding music and dancing licences or to casinos. This has itself shaped the late night market for alcohol. This will change with the implementation of the Licensing Act 2003.

These changes are having important implications for how people drink - and behave when drunk

- The increasing density of venues in certain areas, and the trend towards more late night, high-capacity, youth-oriented venues, has resulted in large concentrations of drinkers in relatively small areas.
- In many places, late night urban infrastructure, particularly transport, has not kept pace with changes in licensed capacity, creating problems with dispersal, crowd management and leading to increasing numbers of disputes, assaults and anti-social or disorderly behaviour.
- For example, in Manchester, significant new investment by the leisure industry, combined with regeneration initiatives, led to a massive increase (of 242 per cent between 1996 and 1999) in the licensed capacity of premises in the city centre. Manchester now has a licensing capacity of nearly 200,000 with over 500 licensed premises. The city centre can regularly draw in around 125,000 people in a single evening.
- This has brought with it many of the problems outlined above: from 1996 to 1999 the 242 per cent increase in the licensed capacity was mirrored by a 225 per cent increase in assaults. This trend has subsequently been reversed by an innovative Police led multi-agency initiative 'Manchester City Safe'.
- The expansion of venues in key locations has also made for a more competitive marketplace - in some sections of the market. This has led to price competition, and, in some instances, heavy discounting, which has been associated with increased drunkenness and binge-drinking. Venues struggling to make a profit may also cut corners with management and other overhead costs, by employing less staff etc. When this leads to bad management, these venues can become trouble 'hotspots'.

Sources: Hobbs et al (2003); Manchester City Safe

The design and management of pubs and bars influences the likelihood of violent and disorderly behaviour

- The likelihood of aggression and violence breaking out in situations where people have been drinking is heavily influenced by the drinking environment.
- Research has shown that the factors in the box on the right increase the likelihood of violent behaviour in pubs and clubs.
- Many of the fights and disputes which break-out in or near pubs and clubs originate in competition for scarce resources;
 - » for example, waiting to get served at the bar; queuing in the taxi rank, or at the kebab van.
- This is often exacerbated in areas where there is a high density of venues, where there is a lack of local infrastructure (particularly public transport) and when venues all close at the same time.

KEY CHARACTERISTICS OF PUBS AND BARS WHERE THERE IS AN INCREASED RISK OF VIOLENCE

Management

- Management skills, style and experience (e.g. in post less than 12 months)
- Unfriendly bar and door staff
- Bad behaviour tolerated, even expected

Clientele

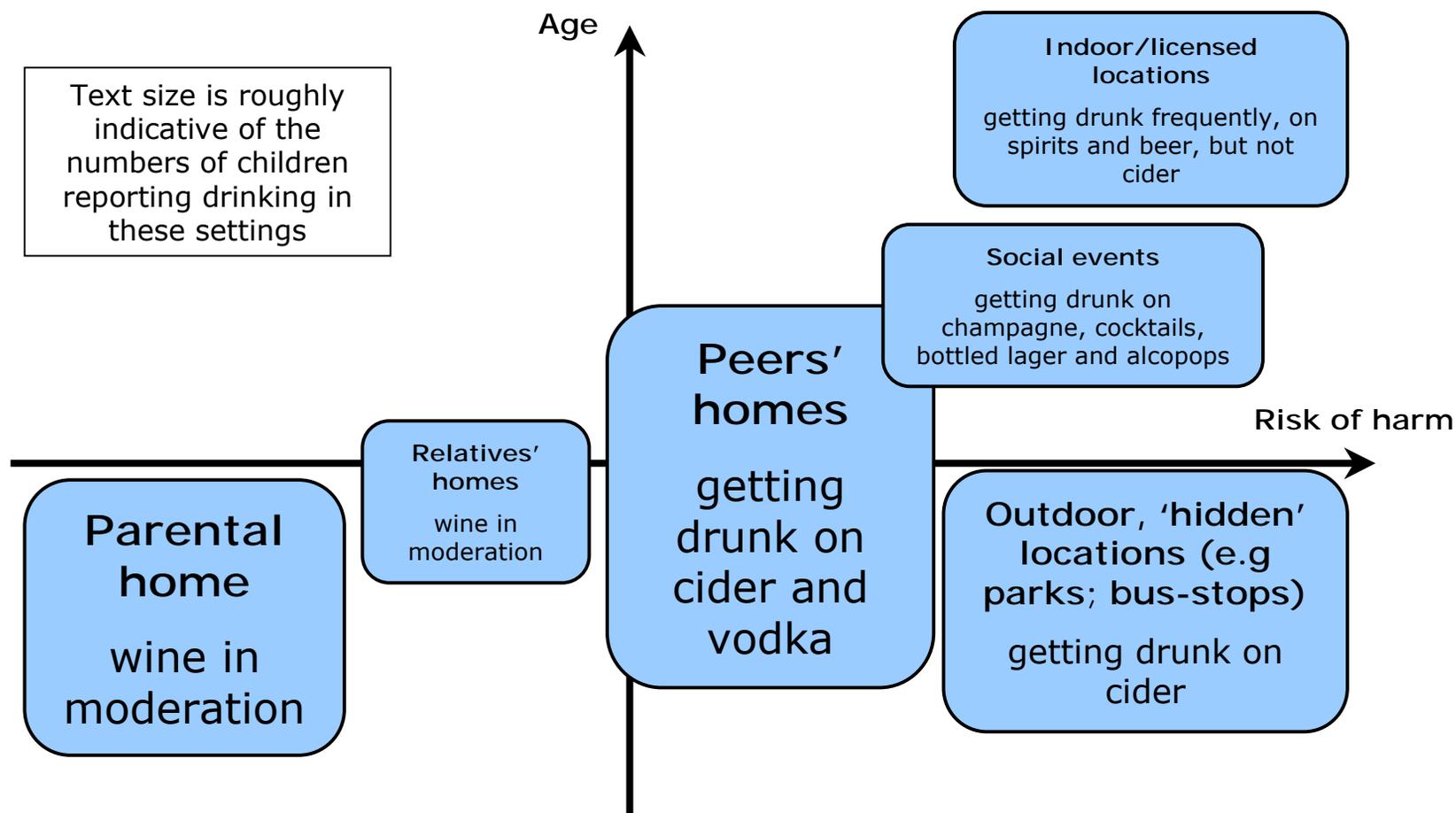
- High proportion of 18-30 year-old customers
- Customers drinking rapidly to intoxication

Layout and design

- Unpleasant, unclean and inexpensive surroundings and shabby décor;
- Poor ventilation; smoky atmosphere and loud music;
- Lack of seating
- Poor layout - leading to crowding and queuing

Sources: Graham et al. (1980); MCM Research (1990)

Unsupervised settings are associated with increased drunkenness and risk of harm among underage drinkers



Source: Forsyth and Barnard (2000)

Data based on a survey of 1,240 Scottish schoolchildren in five comprehensive schools in Perth & Kinross (1998); relatively rural locations, one in Perth itself; ages 14 and 15 years; 9 out of 10 had drunk a whole alcoholic drink at least once; 2 out of 3 said they had been drunk.

Recent work suggests that higher alcohol advertising may be associated with higher consumption, but evidence is mixed

- Around seven in ten people think that advertising influences the amount other people drink, whilst only one person in ten thinks that advertising influences the amount *they* drink.
- Most econometric studies on the effect of advertising find either no effect on consumer beliefs and behaviour or, at most, a small or short-term effect. However the methodology has been a subject of debate.
- Recent work by Saffer (2002) addressed some of these difficulties by using a larger sample of time series data drawn from 20 OECD countries, including the UK. He found that that higher total expenditure on alcohol advertising is associated with higher overall consumption. He suggests that partial or total advertising bans would be expected to substantially lower consumption. This contradicts other findings, such as a recent published meta-analysis by Nelson and Young (2003) which concludes that advertising bans would not reduce alcohol consumption.
- In practice, even given sophisticated econometric models, it is difficult to evaluate the impact of advertising on behaviour. This impact depends on a large number of other factors, including the cultural context, and caution is needed when extrapolating findings across different cultural and national contexts.

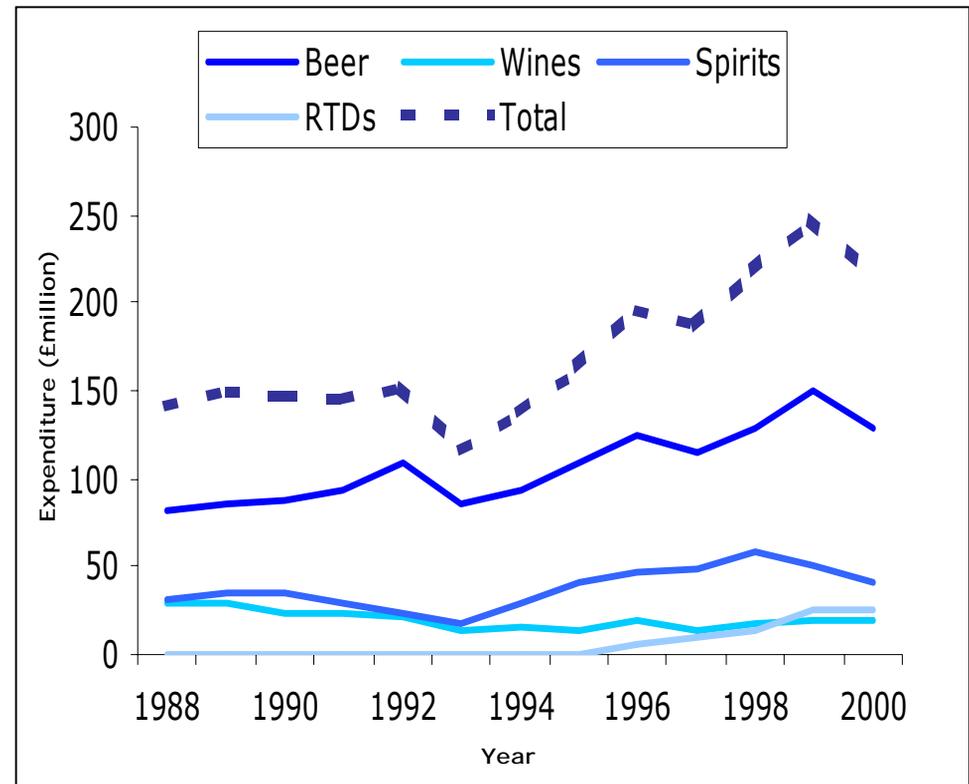
Sources: Saffer (2000), MORI (2002), Cooke et al. (forthcoming)

More than £200m is spent on advertising alcohol in the UK

- *Direct* alcohol advertising (on TV, radio and the print media) in the UK exceeded £200m in 2000.
- The World Health Organisation reports that, among US brand names, spending on *indirect* promotional activities such as sponsorships, product tie-ins and placements, contests and special promotions was three times higher than spending on direct advertising in 1993, a reversal of the situation a decade before that.
- If we were to assume a similar picture in the UK, this would place the total value of promotional activity in the UK in the range of £600m-£800m per annum.

Sources: WARC (2002); Advertising Association (2003); Jernigan (2001), Cooke et al. (forthcoming)

UK ADVERTISING EXPENDITURE AT CURRENT PRICES



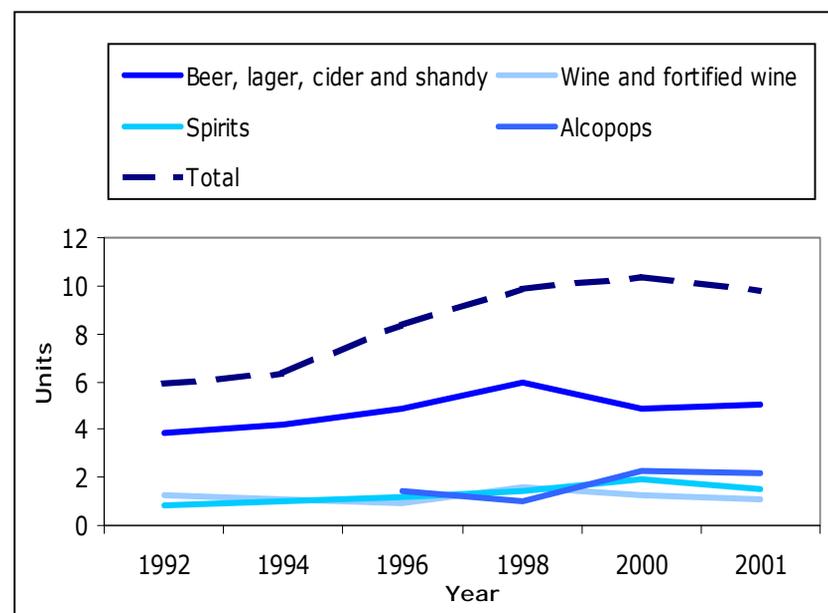
In particular, advertising can influence youth attitudes and behaviour

- Young people may be particularly susceptible to advertising because:
 - » social identity and peer group are significant influences on the young;
 - » young people are more conscious of, and more likely to follow, rapidly evolving trends in fashion;
 - » they are early on in their drinking 'careers', and therefore less likely to have established brand and drink preferences.
 - The more aware and appreciative young people are of alcohol advertising, the more likely they are to drink both now and in the future, e.g.
 - » a cross-sectional survey of 10-17 year olds demonstrated that underage drinkers enjoy alcohol advertising more and are significantly better at recognising the brand imagery contained in it, than their non-drinking peers.
 - Advertising has been associated with increased binge-drinking by young people:
 - » recent econometric research using a representative national sample in the US found that higher levels of local advertising were associated with higher levels of drinking, particular binge-drinking, amongst young people. The authors suggest that a complete ban on advertising may be expected to lower binge drinking by as much as 42 per cent. However, caution is needed when extrapolating from their findings.
 - Branding is also a key influence on youth drinking:
 - » The top drinks brands command high market shares. For example, Stella Artois is drunk by 26 per cent of adults; Bacardi Breezer is drunk by 19 per cent of adults, many of whom will be under 25 (Monthly Digest).
 - » These top, "youth" brands are also given a significant amount of advertising support; for example, £7.2m was spent on Bacardi Breezer in the year to August 2002.
- Sources: Aitken et al. (1988, 1989); AC Nielsen MMS, Monthly Digest, Raistrick et al. (1999), Saffer et al., (2003), Sewell (2002), Cooke et al. (forthcoming); CYPU consultation "Safely on our Streets"*

Innovation in the market also shapes drinking patterns: 'alcopops' or 'ready to drinks' are a good case study

- The introduction of alcopops in 1996 does not appear to have increased the total number of school age drinkers. The proportion of 11-15 year olds drinking in the last week was lower in 2000 than in 1996.
- However, alcopops may have contributed to the increase in the amount drunk by this group. Between 1992 and 2001 the average amount drunk increased by 63 per cent, with approximately half of this increase first measured in the year in which alcopops were introduced.
- Alcopop consumption by 11-15 year olds rose from 1.4 units in 1996 to 2.2 units in 2001, with a dip in 1998. This dip may be explained by:
 - » rising alcopop prices;
 - » the introduction of a voluntary code on naming, packaging and merchandising by the Portman Group in 1996, in response to criticism of the growing 'alcopop' market;
 - » non-inclusion of some emerging brands as examples in the 1998 sweep of the survey, leading to possible under-reporting.

AVERAGE ALCOHOL CONSUMPTION OF DIFFERENT DRINKS AMONG 11-15 YEAR OLDS WHO DRINK, 1992-2001



Sources: Boreham et al. (2002), SU analysis



A) What factors influence the likelihood of problem drinking?

Overview

Individual characteristics

Family environment

Life events and experiences

Social norms and drinking culture

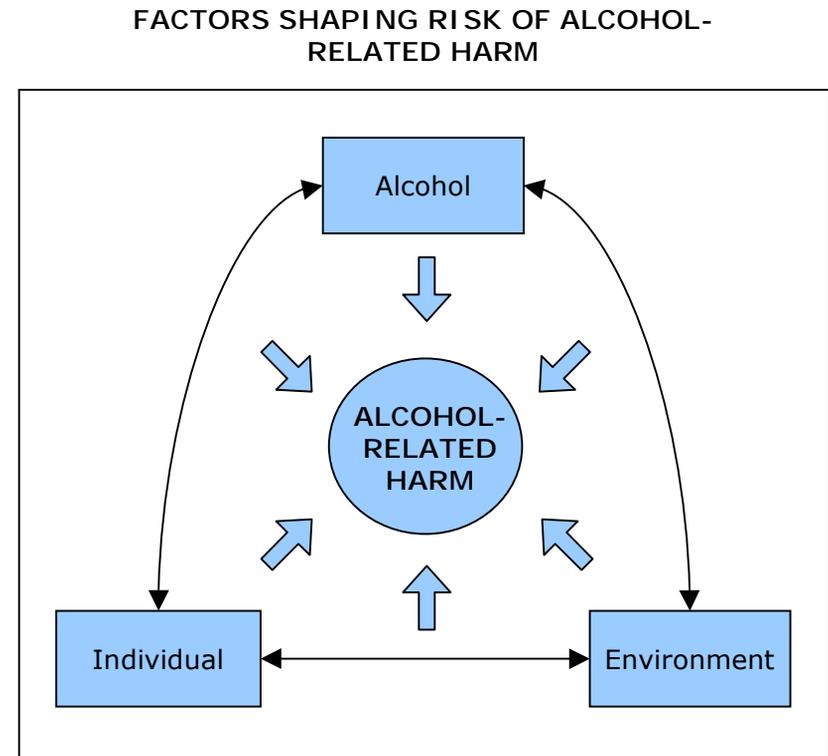
The market

B) Conclusion - which groups are at greatest risk from harmful drinking?

Identifying problem drinkers

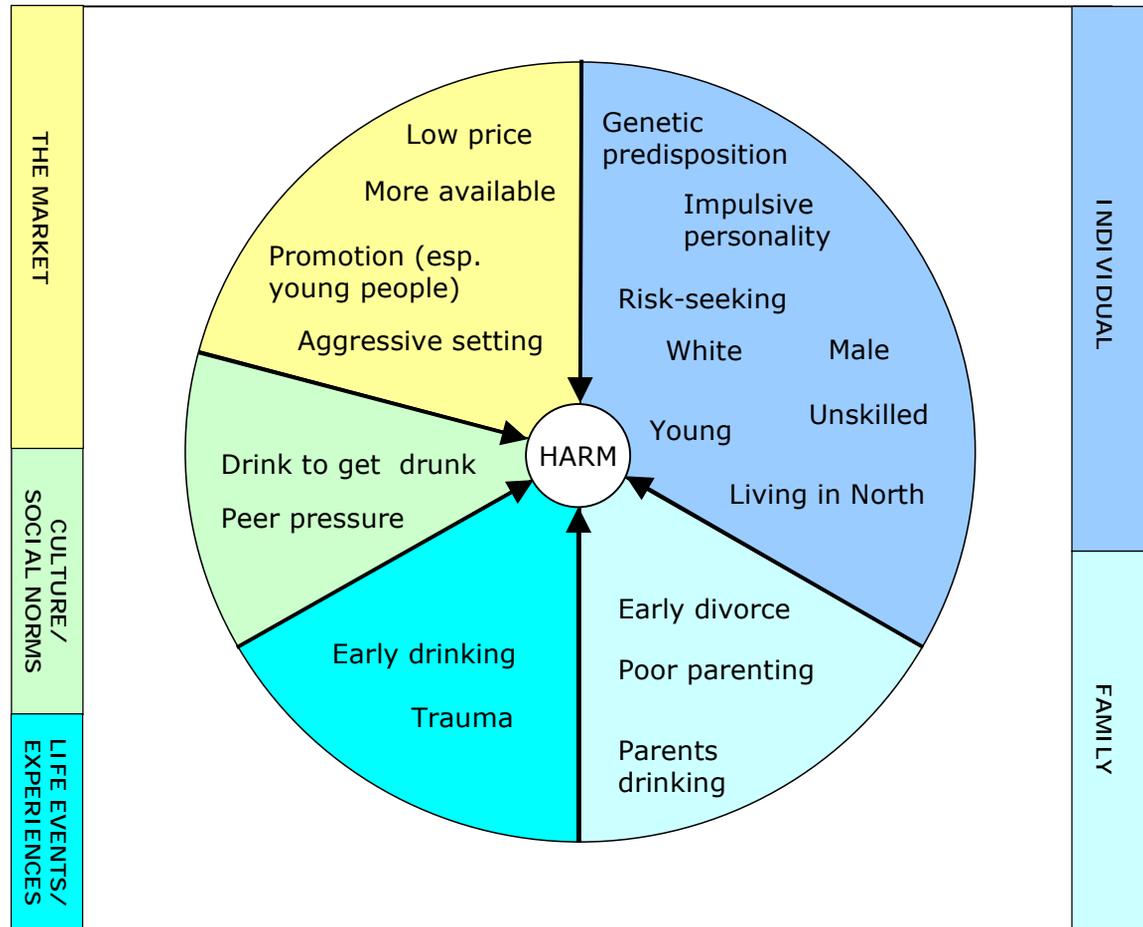
The risk of harm is shaped by pattern of drinking, by individual factors and by the surrounding environment

- Broadly, the relationship between drinking and harm is shaped by the interaction of risk factors at three levels:
 - » alcohol (frequency/volume of consumption);
 - » individual (e.g. personality, genetics, physiology); and
 - » environment (e.g. price, supply, beverage type, brand, social/cultural meanings)
- These factors interact in a variety of ways to determine drinking behaviour and therefore risk of harm.
- The starting point is consumption of alcohol and physical response. Both the decision to drink and the actions taken as a result of drinking are shaped by individual factors and by the drinker's interaction with the surrounding environment.



A range of factors create a higher risk of harm

- We list opposite the factors most likely to lead to heavy drinking and therefore to higher risk of harm.
- The interaction of the factors is as important as the factors themselves.
- For example, a young man may drink heavily without causing harm; his friend may drink the same amount but commit a violent offence because of his personality and because the bar environment encourages violence; another friend may end up in hospital with alcohol poisoning because of peer pressure to drink and inability to cope with the amount drunk



There is no such thing as a typical heavy drinker, but we can identify groups at greater risk of harm

- Those with a mix of the factors described above are most likely to drink heavily and therefore to experience or cause problems. The highest risks lie with young unskilled males who take risks, have fractured family backgrounds and early experience of drinking, live in a heavy drinking culture and are targeted by promotions for alcohol at low prices.
- The most powerful determinant of drinking pattern is age. Those aged 16-24 drink heavily and often. As they reach their late twenties, the majority reduce drinking levels. A minority continue to experience and cause harm, and as they do so the factors driving this become more apparent.
- Differing factors will have different weights for different individuals, and alcohol is rarely a sole factor in causing harm. It is the interaction with other factors which determines risk.

Part 4

Addressing harms

This part of the report looks at addressing the harmful effects of alcohol misuse:

- » How are interventions to address the harmful effects of alcohol currently delivered?
- » Which interventions have been used?
- » What lessons can we draw for a strategy?



A) Institutions delivering interventions

The institutional landscape

B) Interventions addressing harm

The range of interventions

C) Implications for a government strategy

Lessons for a strategy

The alcohol field has a wide variety of organisations delivering a wide variety of the interventions

The institutional landscape is a complex one:

- the inter-relationships between service providers are complex;
- the system is difficult for users to navigate; and
- some users pass repeatedly through the system.

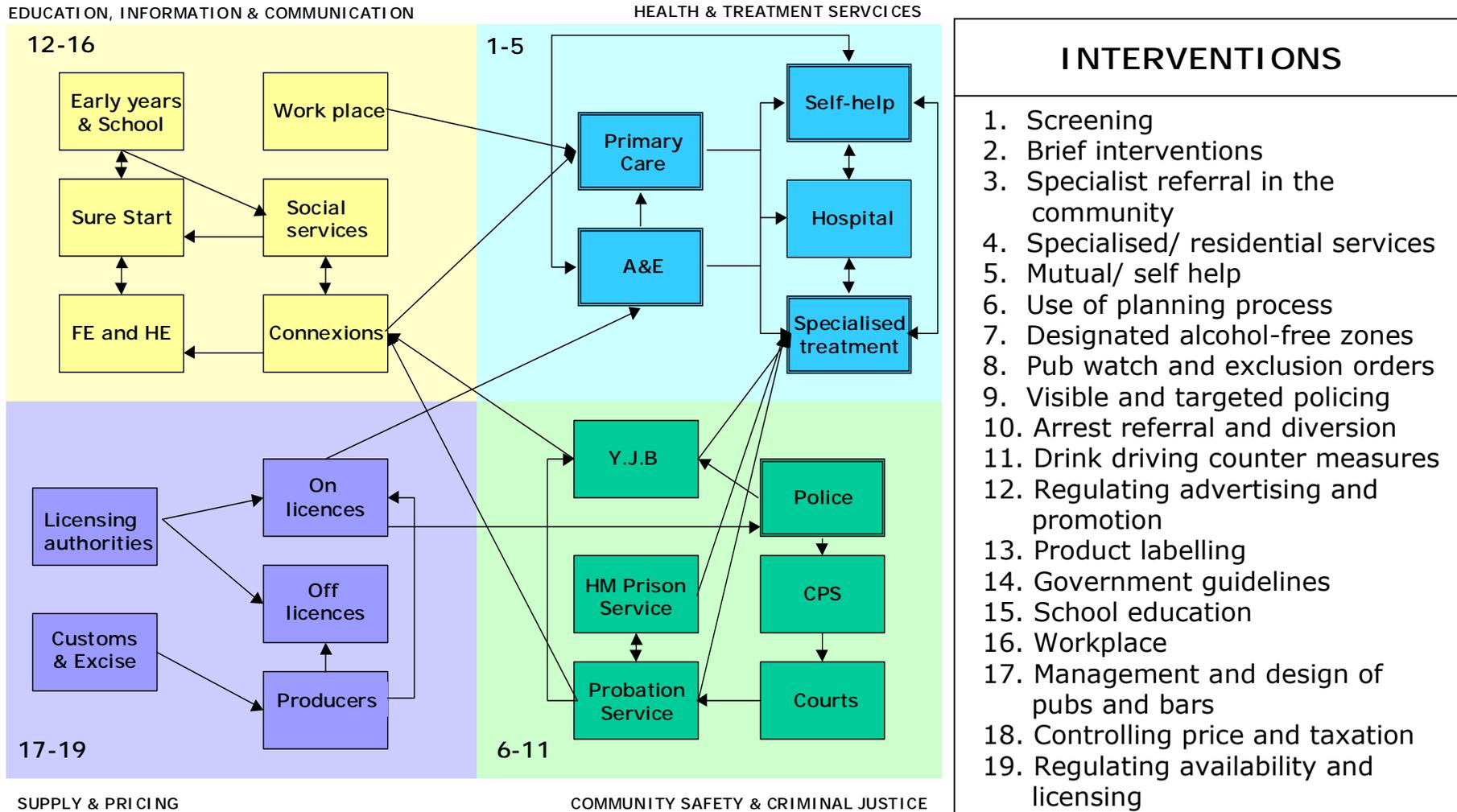
The next few slides give an example of the different routes through the system. They also aim to illustrate the different perspectives and the differing needs of four different types of drinkers. The categories are used in the broadest sense, for example 'primary care' also incorporates community mental health teams.

However, there remain inter-relationships and crossovers between the various sectors which it is not possible to show. For example, the treatment sector covers providers based in the NHS, voluntary and private sectors - and about 70% of treatment services are located within the voluntary sector.

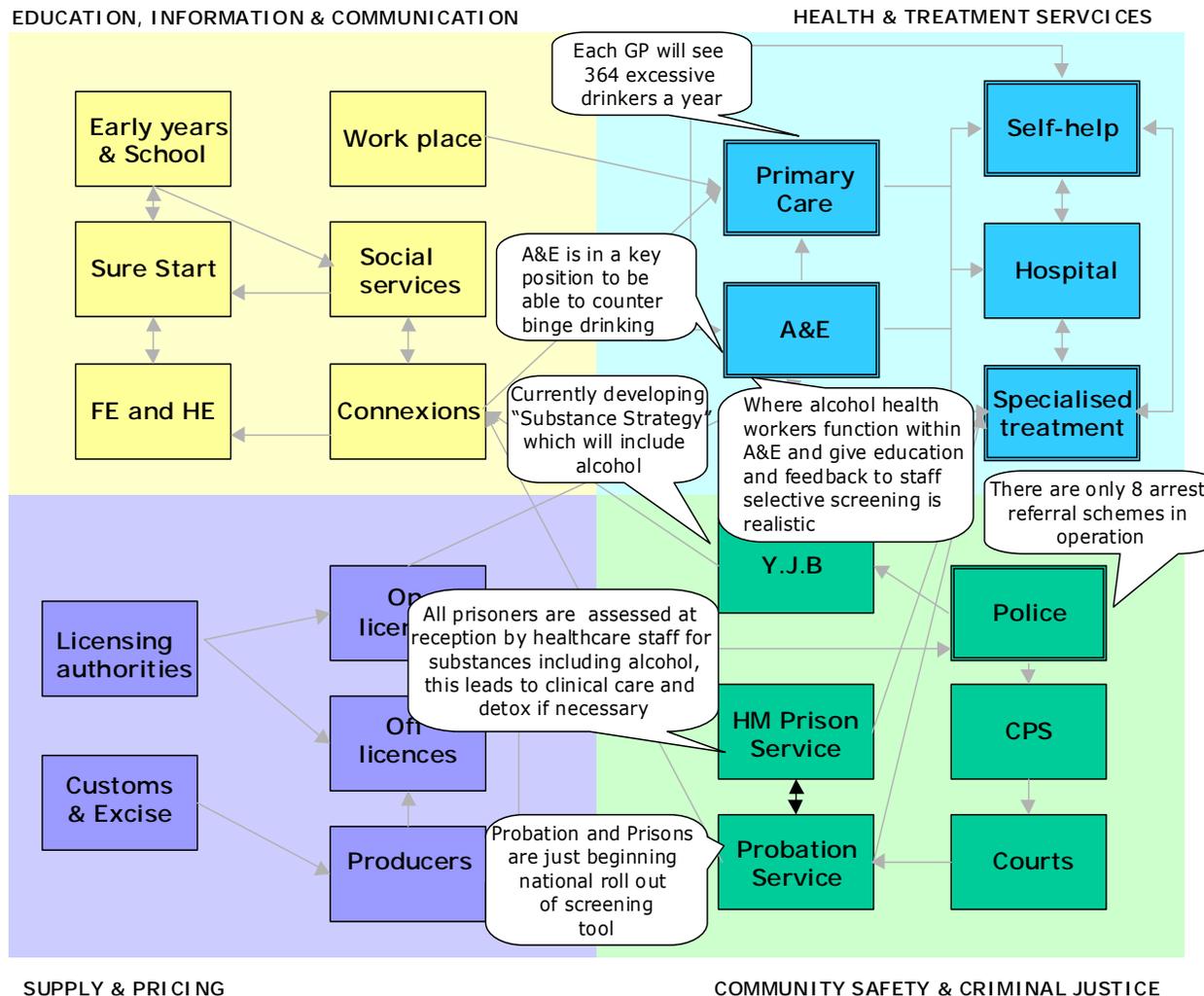
The range of interventions:

- we identify four broad types of intervention:
 - education
 - managing supply
 - help and treatment
 - community safety
- they are all important but they cannot change behaviour in isolation.

A map of the complex institutional relationships



Problem drinkers may enter the system at a variety of "capture points"



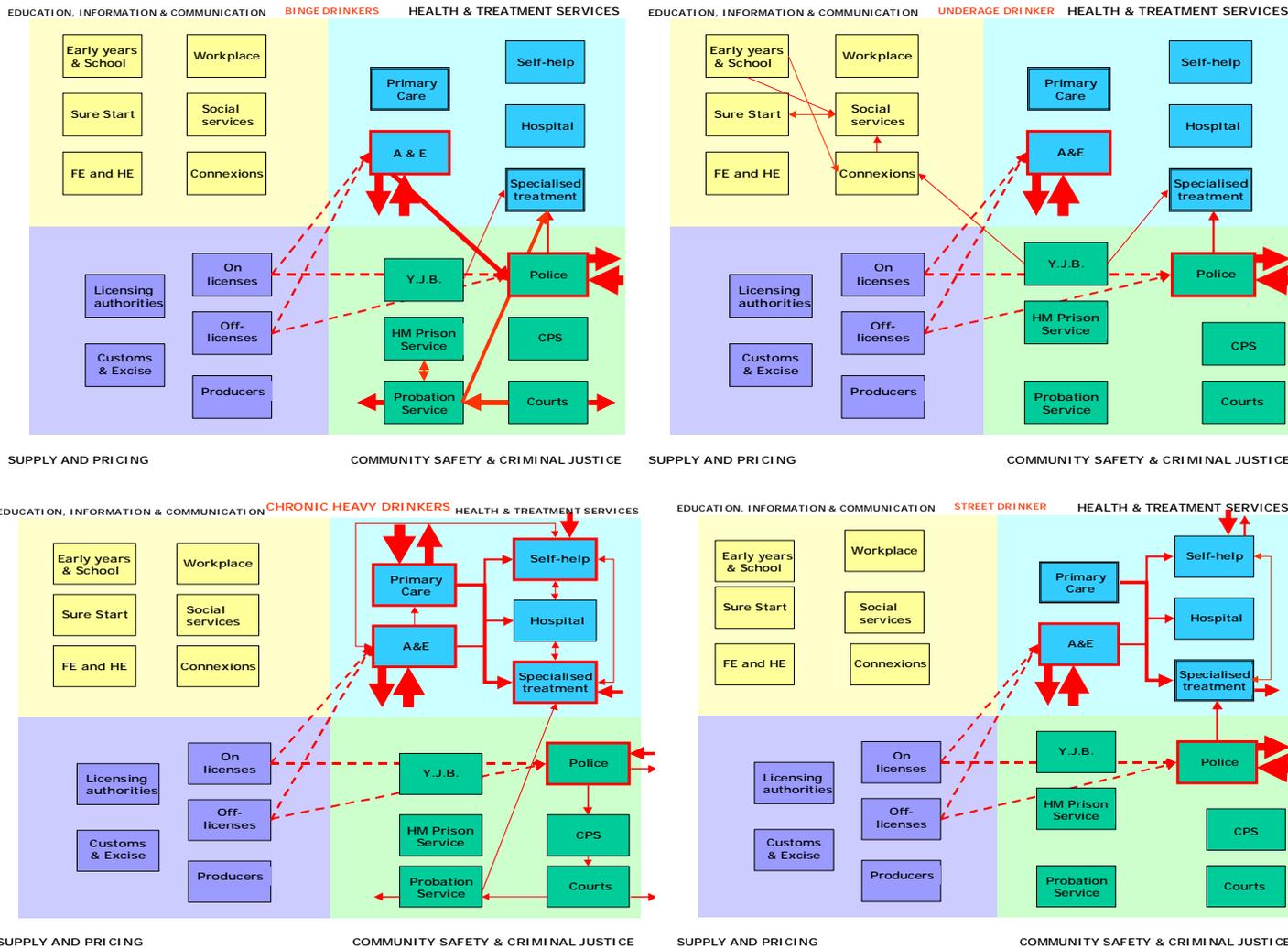
Some key capture points are in the frontline services that problem drinkers are most likely to access:

- Heavy drinkers use outpatient services at a rate double that of the population average
- Heavy drinkers are more likely to come into contact with the police

Other agencies (e.g. Social services, probation and prisons) are well placed to capture people already in the system and to tackle their alcohol misuse alongside their other needs

The lack of systematic identification can lead to a 'revolving door' system where a user never gets identified at key stages. And the actions of one provider can have substantial resource implications for others down the line:-
 - police decisions to arrest and charge an offender means a greater number are entering the system and directly impacts the work of the CPS and courts

There are a multiplicity of routes through the system



Different drinkers take different routes through the system

We illustrate four potential routes for different types of drinker

Some service providers such as the police and A&E could have a key role to play in identifying users who are repeatedly going through the system

Available evidence suggests that services are heavily used

- Around a quarter of the adult population drink in a way which may lead to problems or is already causing problems:
 - » 6.4m people drink more than the recommended guidelines;
 - » a further 1.8m drink more than 35 units (women) and 50 units (men);
 - » 5.8m drink above daily guidelines
 - » 5.9m drink more than twice the daily guidelines
- It is difficult to estimate the overall potential burden posed by alcohol misuse:
 - » Some misusers will present repeatedly to services and agencies: for example the TASC project in Cardiff found that a fifth of alcohol offenders had four or more convictions; those in treatment will often need several cycles and/or use several different types of service - even simultaneously;
 - » Ongoing support may be needed for a considerable period: for example it is not unusual for attendance at AA to become a lifelong commitment;
 - » Conversely many misusers will be reluctant to present to services. Problems are hidden not only from friends and family but denied until the reality becomes inescapable. On top of this some groups such as ethnic minorities, mentally ill people, the elderly and rural dwellers can have difficulties in accessing services.
- Alcohol problems also pose considerable burdens on mainstream services - 2m NHS bed days, a third of all A&E attendances costing £305m, 1.2m violent incidents and 360,000 cases of domestic violence. Anecdotal evidence suggests long waiting lists for treatment. This suggests little spare capacity in the system.

Sources: TASC project; AA; Alcohol Concern focus group; consultation responses

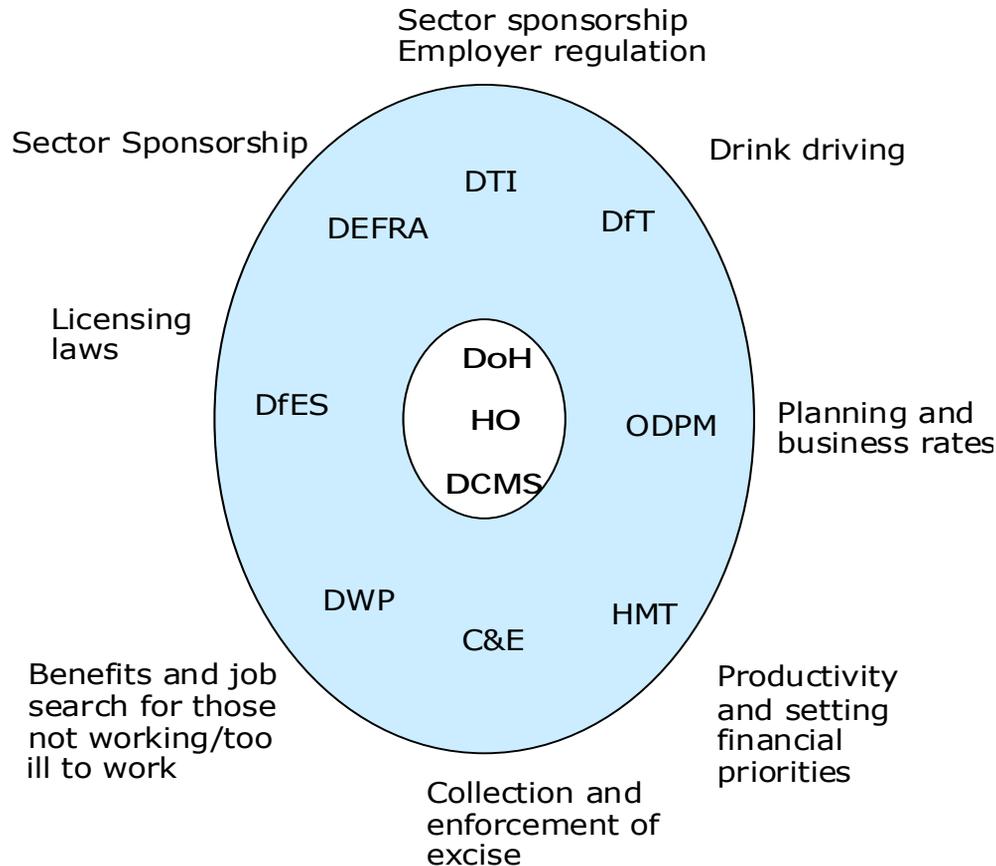
There are examples of good practice in co-ordination at local level

- A range of bodies and networks have an interest in alcohol at a local level. It is predominantly health and crime issues which have so far formed the basis for local strategies for reducing the harm caused by alcohol.
 - » These can take the form of Drug Action Teams (DATs) and in many cases Drug and Alcohol Action Teams (DAATs). These are currently being brought within the scope of local Crime and Disorder Reduction Partnerships (CDRPs).
 - » The Youth Justice Board oversees and supports local youth offending teams through grants, training, planning, establishing national standards and promoting good practice. The multi-agency teams draw together members from the probation service, social services, health and education services.
 - » There are some excellent examples of co-ordination at a local level, for example, local strategic partnerships and local licensing forums.
 - » These existing structures can be built upon by placing a greater emphasis on a wider spread different organisations working together e.g. licensing, education and other YP services and local voluntary organisations, and by providing clearer objectives and better co-ordination.

Case study:

Local authorities are also working on new initiatives: the London Borough of Hammersmith and Fulham has a 3 year alcohol strategy. Which has led to the creation of an alcohol strategy co-ordinator post and an alcohol sergeant post within the Hammersmith and Fulham Metropolitan police.

But the national picture lacks coherence



- There is no clear focus for cross-cutting policy on alcohol within central government, although a large number of departments have an interest in various areas.
- Communications on alcohol are not co-ordinated either across Government or with the industry and others
- Unlike drugs there is no target for reducing the harm caused by alcohol use and without a clear strategy alcohol is unlikely to be treated as a priority.
- There are no co-ordinated objectives or targets and a lack of indicators related to alcohol at both a local and national level.
- There is no capacity for co-ordinating research and this leads to gaps in the data.
- There is a strong case for maximum local flexibility and delegation in delivering a strategy based on clear national standards and aims, building on existing good practice.



A) Institutions delivering interventions

The institutional landscape

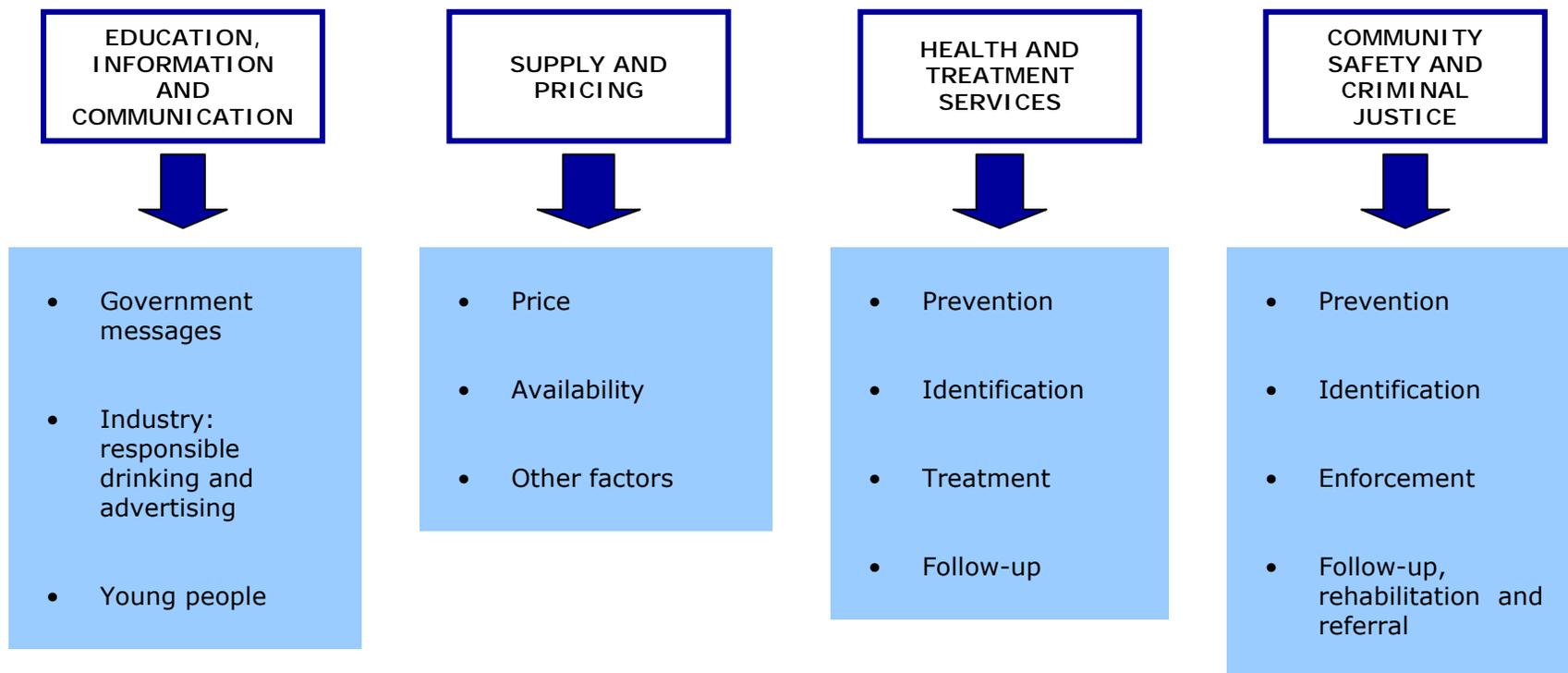
B) Interventions addressing harm

The range of interventions

C) Implications for a government strategy

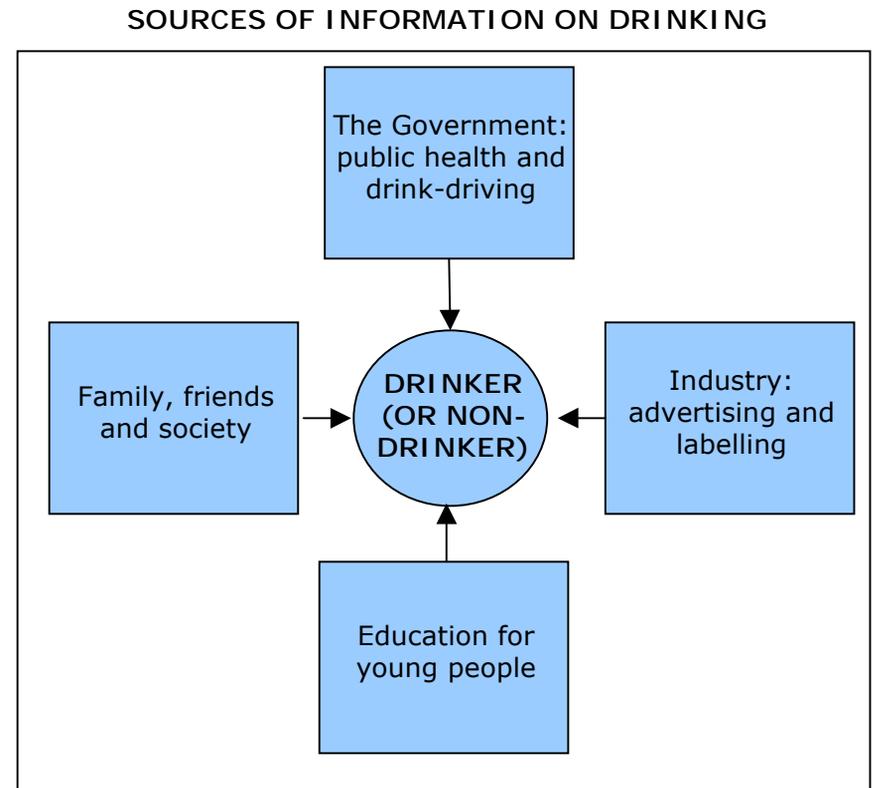
Lessons for a strategy

Interventions designed to address alcohol-related harm fall into four broad categories



Education, information and communication: drinkers receive messages from a wide variety of sources

- Information and communication are crucial if drinkers are to make informed choices.
- Consumers receive messages about drinking behaviour from several sources:
 - » the government, whose messages focus on public health and drink driving;
 - » the industry: advertising and product information
 - » family, friends and the media.
- Under-18s are increasingly likely to receive alcohol education at school; all schools should be providing it by March 2004



Education, information and communication: Government

- The main message to the public about the general risks of using alcohol is the sensible drinking message, which takes a public health approach. The message is backed up by Drinkline. There have been no national Government advertising campaigns around sensible drinking although the Portman Group promotes a responsible drinking message.
- Recognition of the message is relatively high: 80 per cent of drinkers have heard of units. But understanding and impact on behaviour is low: a consistent 10 per cent of drinkers actually check their consumption in units, around a quarter understand the practical implications of what a unit is, and the heaviest drinkers show most recognition. Drinkline is used less than any other helpline. Awareness of consequences is also low: in one hospital 50% of cirrhosis patients stopped drinking when the consequences are explained.
- The other Government message on alcohol is around drink-driving: this, linked with other measures, has been successful
- For other alcohol issues, including where to seek help and the social consequences of misuse there are no Government messages although examples of local good practice.

Sources: Lader and Meltzer (2002), SU workshop with IPA and AA; SU advisory group

THE SENSIBLE DRINKING MESSAGE

The message was first disseminated in the 1980s and focussed on weekly guidelines; in 1995 it was changed to focus on daily guidelines. It suggests:

- a maximum intake of 2-3 units per day for women and 3-4 for men with 2 alcohol-free days after heavy drinking; consistent consumption at the upper level is not advised;
- intake of up to 2 units a day has moderate protective effect against heart disease for men over 40 and post-menopausal women; and
- some groups such as pregnant women those engaging in potentially dangerous activities should drink less or nothing at all

It is based on unit intake by volume: there is little emphasis on consequences of misuse warning signs or on how and where to seek help.

Education, information and communication: the industry

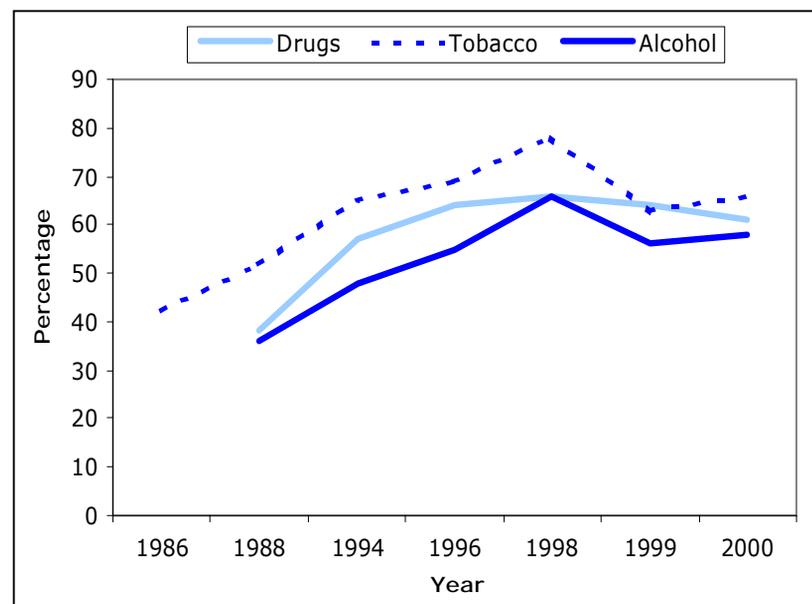
- The industry provides a small amount of information about alcohol content of products: there is an increasing trend to put unit labelling on containers (although this is less useful in a pub or club where consumers may not see the container), and all containers and pump handles give details of alcohol by volume. There are no warning labels: these have been used in the US, for example, since 1989 though evidence of their effectiveness is limited.
- The industry also promotes a responsible drinking message through supporting the Portman Group, which produces a variety of materials for schools, parents and pubs. Some producers are running a pilot campaign of socially responsible advertising imported from the US, which has a voluntary agreement that a proportion of all alcohol advertising should be dedicated to promoting social responsibility rather than the brand.
- However the vast bulk of messages to consumers promote alcohol through advertising, sponsorship and other media. There is no requirement, as there is for example in France to include a health warning in such advertising. There is a mix of regulatory control:
 - » content is restricted: advertisements should not appeal to under-18s or depict drinkers under 25, encourage excessive drinking or antisocial behaviour, point to the intoxicating effect or imply that alcohol promotes success;
 - » there are some restrictions on the scheduling of advertising; and
 - » OFCOM regulates broadcast media: other forms of advertising such as packaging are self-regulated.
- The consultation carried out by the SU revealed concerns about the content of alcohol advertising and a perception that it was often targeted on young people

Education, information and communication: young people

- Most schools now have a drug and alcohol policy setting out their approach to drug and alcohol education and other aspects of substance misuse.
- In the classroom, alcohol education is chiefly delivered through Personal, Social and Health Education (PSHE), and will also feature in the statutory Citizenship Curriculum. These aim to develop pupils' knowledge, skills, attitudes and understanding about alcohol.
- Such programmes are successful in imparting information. But there is little evidence for the effectiveness in changing behaviour of alcohol education delivered in schools or any other alcohol prevention programme aimed at young people, especially in a UK context.
- There is, however, some evidence that:
 - » peer-led prevention programmes can effectively enhance teacher-led programmes;
 - » interactive programmes to develop interpersonal skills can be particularly effective in reducing alcohol use.

Sources: Waller et al. (2002), Foxcroft et al. (2002)

PROPORTION OF PUPILS REMEMBERING TOPICS OF HEALTH EDUCATION LESSONS, 1986-2000



Source: Jamison and Schagen (2001)

Education, information and communication: key findings

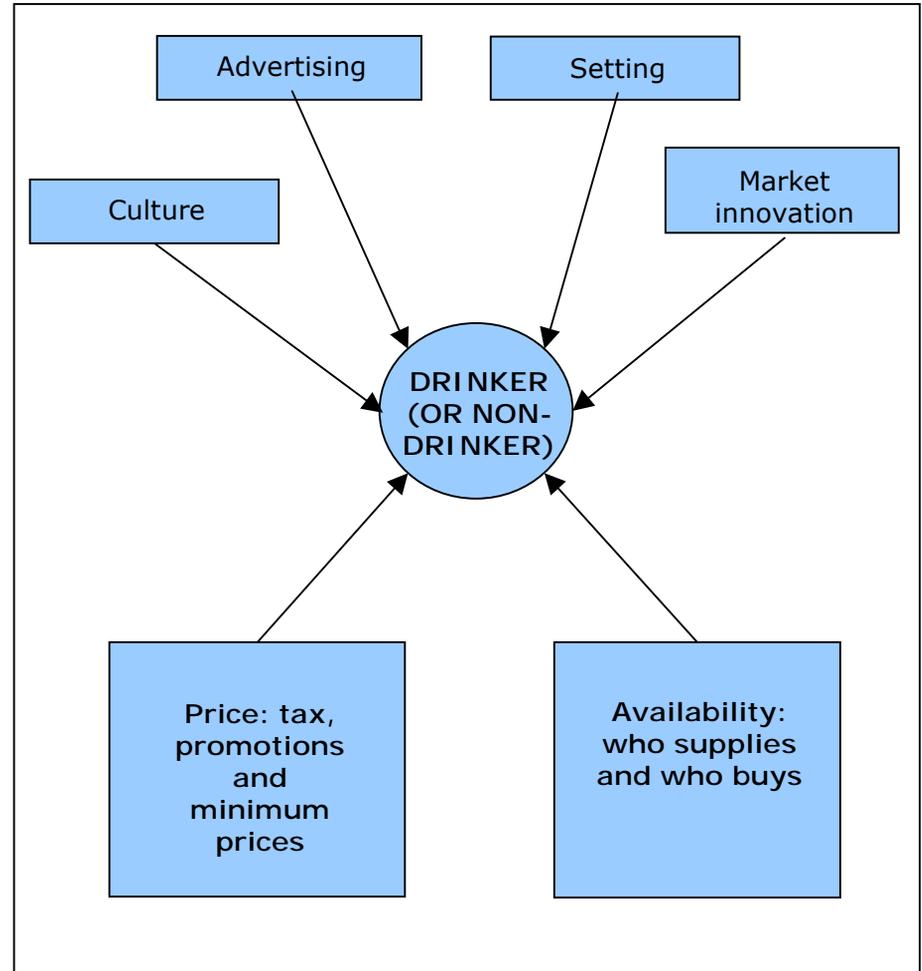
- **Some drinkers - and especially young people - receive conflicting messages about drinking:**
 - » those about the positive impact of alcohol are promoted far more heavily than those focussing on risks; and
 - » there is a perception that the content and target of advertising go beyond the spirit of existing self-regulation.
- **Education is successful at imparting information about alcohol intake:**
 - » this is essential if consumers are to make informed choices about their drinking; and
 - » it is particularly important for young people to have factual information, opportunities to develop attitudes and skills and to know where to go for further information on alcohol.
- **But education is less successful in changing behaviour:**
 - » it can be difficult to relate to everyday behaviour and experience: for example 100ml glasses are no longer widely used and wine strength has risen, making it hard for the consumer to calculate what a unit is in real terms; and
 - » long-term risks lack immediacy, and the effects of alcohol cloud perception of short-term risks.
- **So to be effective education must work in tandem with other policies:**
 - » the long-running drink-drive campaign has been successful because it has worked in tandem with policies on identification of offenders, tough enforcement and penalties which focus on preventing reoffending.

Supply and demand - the role of price and availability

- The historical correlation between levels of drinking in the population generally and levels of harm has been widely illustrated. Traditionally two main supply side levers have been cited as influencing levels of consumption in the whole population and therefore reducing alcohol misuse:
 - » price; and
 - » availability.
- However, as we go on to argue, these levers act in the context of a complex range of other factors that influence consumption (culture, advertising, setting and market innovation described earlier in the analysis). This means that changes in price and availability alone will not always affect behaviour, and that changes in behaviour may come about for other reasons.

Sources: Bruun, Edwards, Lumio et al. (1975); Edwards, Anderson Babor et al. (1994); Plant and Caneron (2000)

LEVERS CONTROLLING CONSUMPTION AND SUPPLY



Supply and demand: the effect of raising price

- Price can be controlled through three mechanisms:
 - » tax;
 - » price promotions, and
 - » minimum pricing.

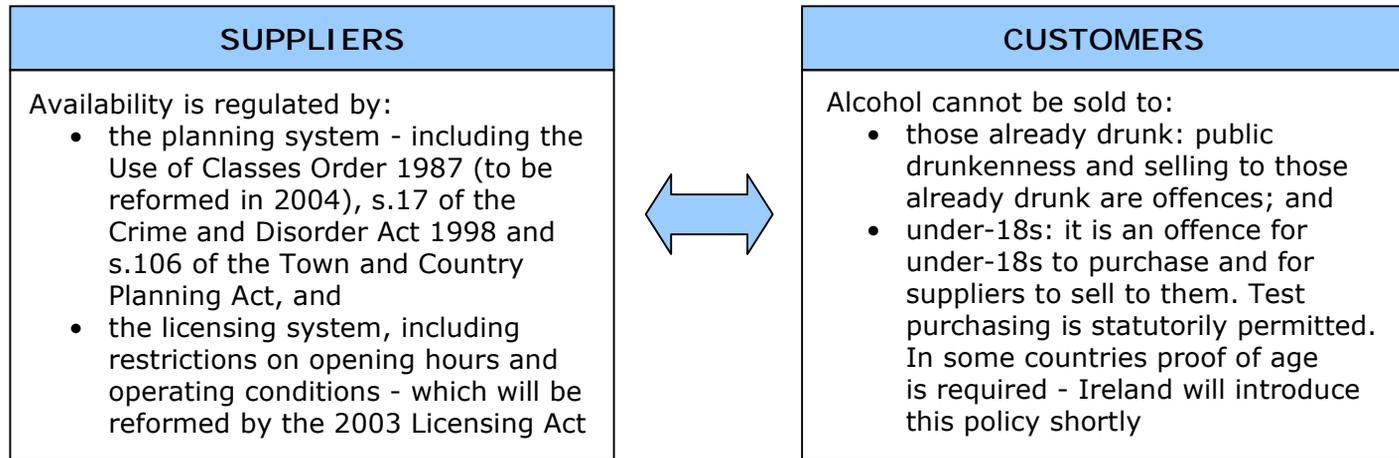
TAX	PRICE PROMOTIONS	MINIMUM PRICING
<ul style="list-style-type: none"> • VAT: levied at 17.5 per cent. • Excise duties, which raise £7bn per annum. • Duty rates are relatively high compared to the rest of the EU. • The duty take has fallen from 4.9 per cent of revenue in 1978 to 3.4 per cent in 1999 (although counterbalanced by a rise in VAT) 	<ul style="list-style-type: none"> • There is no legislation governing promotions, although the BBPA has guidelines for its members. • These raise consumption by attracting and retaining customers. 	<ul style="list-style-type: none"> • Pricing is governed by the same rules on fair trade as any other commodity. Local schemes have sought to impose a floor price: these are under review, and there is little evidence on effectiveness.

- These mechanisms potentially affect all purchasers of alcohol.
- As argued above, raising price is one of the key levers cited as contributing to reducing consumption at a population level: in Russia for example abolition of the state monopoly drove prices down and cirrhosis death rates soared. But price and consumption do not necessarily go hand in hand: for example between 1960 and 1980 consumption in EU countries with a high tax on alcohol rose faster than in those with lower tax. High prices often drive up illicit consumption: in Sweden around 25% of the population have come into contact with black market spirits. And as argued above some drinkers are more sensitive to price than others, notably heavy drinkers, young people and young males on lower incomes.

Sources: Edwards (2000); Plant and Cameron (2000); SU analysis.

Supply and demand: the effect of reducing availability

- Availability is regulated both for suppliers and for individual customers



- These mechanisms affect all purchasers of alcohol.
- As with price, restrictions on availability have historically been shown to reduce general consumption and therefore general levels of harm. Greater availability can lead to an increase in harm: in New Zealand a reduction in the minimum drinking age led to a perceived increase in anti-social behaviour by young people. But again the evidence suggests that the issue is more complex. When New Zealand relaxed rules on availability and advertising in the early nineties, beer consumption dropped by 25 per cent over the next ten years. In France consumption fell by 31 per cent between 1962 and 1992 without specific Government measures.

Sources: Edwards (2000); Alcohol Advisory Council of New Zealand

So the issue is more complex than simply restricting price and availability for the whole population

- The impact of policies involving price and availability will depend on the range of different factors that influence consumption, which we have set out above in part 3. There are limitations in using the evidence base to predict the response to specific policy measures on actual consumption. Whilst there is a clear association between price, availability and consumption overall, there is less sound evidence for the impact of introducing specific policies in a particular social and political context and determining exactly the right level.
- Other factors have to be taken into account too:
 - » Targeting - restricting price and availability would affect all drinkers, not just those experiencing problems. Limiting choice to reflect the needs of a minority who do experience problems may raise questions about fairness and acceptability.
 - » The potential for unintended consequences - the experience of high-tax countries such as Sweden and Iceland suggests that evasion and unrecorded consumption go hand in hand with heavy restrictions on availability. In Britain, cross-channel alcohol smuggling has been reduced from £260m to £15m in two years; 15 per cent of spirits come from an illicit source.
 - » The impact of the prevailing public ethos - the initial effectiveness of prohibitionist policies in the early 20th century was preceded by a widespread temperance movement which had already affected levels of consumption.
- All of this suggests that price and availability, whilst important, are not the only levers and that they interact with other factors in ways which can have unexpected consequences.

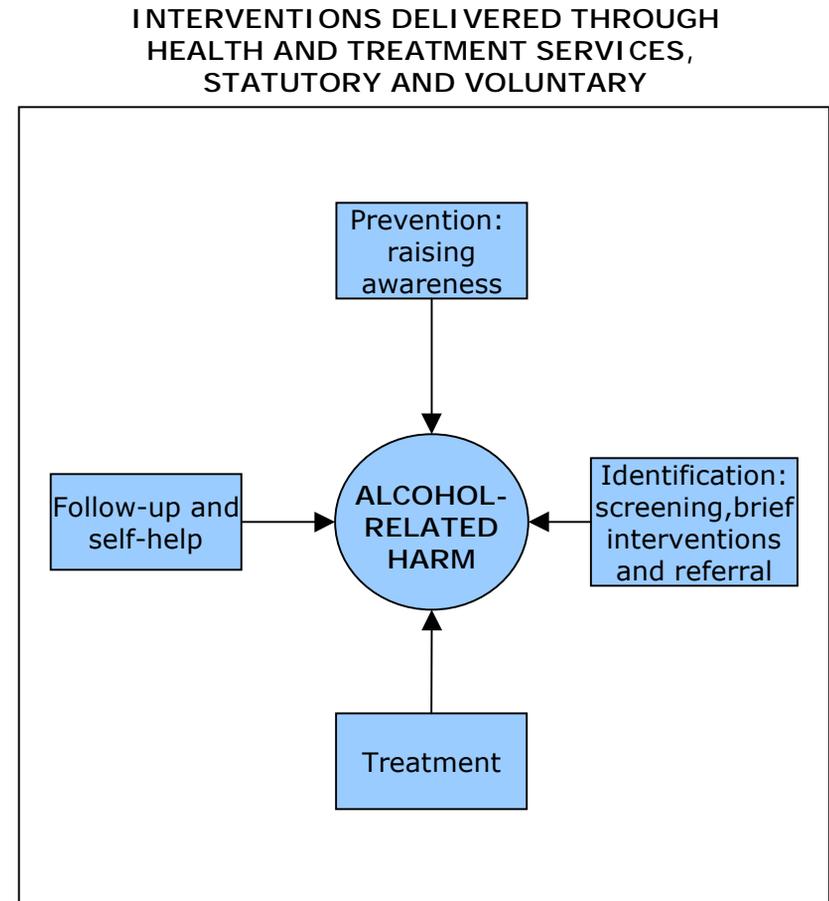
Sources: C&E; Berridge, unpublished paper for SU

Supply and demand: key findings

- **Price and availability are important levers on overall consumption:**
 - » there is clear evidence of links between price and availability and overall consumption, and hence harm.
- **However the evidence is less able to demonstrate the likely impact of specific measures:**
 - » in some cases measures which should have reduced consumption have failed to do so; and
 - » in other cases consumption has fallen independent of policy measures.
- **The interplay with other factors is crucial in determining overall behaviour, as set out above:**
 - » consumers make buying decisions based on a host of drivers of which price is only one, albeit an important one: brand, fashion, setting, innovation and other factors may be just as important.
- **This means that policies can have unintended consequences:**
 - » for example countries with high taxes on alcohol tend to have higher rates of smuggling and illicit production.
- **So policies on price and availability have to be seen in a wider economic and social context**

Health and treatment: prevention, treatment and follow-up

- Health and treatment services have four main functions in tackling the harms caused by alcohol:
 - *Prevention:*
 - » messages around responsible drinking and raising awareness of risks.
 - *Identification of problems:*
 - » screening and assessment;
 - » brief interventions;
 - » referral between institutions;
 - » occupational health.
 - *Treatment:*
 - » specialist treatment in the community, through both counselling and detoxification;
 - » specialised and residential services.
 - *Follow-up:*
 - » statutory and voluntary provision;
 - » self-help.



Health problems: prevention and identification

- **Messages:**
 - » The lack of impact of the sensible drinking message on behaviour is discussed above.
- **Screening**
 - » There are a variety of methods and tools: questionnaires such as AUDIT, interviews with the drinker and their family and/or clinical examination and biochemical tests.
 - » These can potentially be administered in a wide variety of settings: A&E, GP surgeries, ante-natal care, police stations, and other generic non-alcohol services
 - » In terms of cost it is likely to be more effective targeted at those picked out as at higher risk than universally; and it generates longer-term savings. Success depends however on staff having the training and incentive to screen.

Case study: in St Mary's Paddington all patients attending A&E are asked four questions about their use of alcohol. Those who are found to have problems are given information and referred to an alcohol health worker.

- **Brief interventions**
 - » These take many forms ranging from a few minutes of information and advice to several interviews and motivational counselling
 - » They can be used in a wide variety of settings; they focus on catching those with problems at a "teachable moment" - for example when someone who has been involved in alcohol-related violence attends hospital to have their stitches removed
 - » Available evidence suggests that they achieve long-term reductions in problem drinking and cost savings. There are a number of examples of good practice currently in existence.

Smith et al (2003); Chick, Ritson and Connaughton 1988; Chick 1993; Heather 1995

Health problems: prevention and identification

- **Referral**
 - » The potential for more effective referral between institutions as a way of identifying problems early is discussed below.
- **Occupational health**
 - » Chronic drinkers are likely to be in work, giving an early opportunity to identify problems.
 - » Policies include screening, testing, occupational health, employee assistance programme's health promotion and buddying.
 - » 43 per cent of organisations do not have an alcohol policy. There is little comprehensive evidence but examples of good practice suggest that organisations which do have such policies find they help avoid the absences and lower productivity caused by alcohol misuse.
 - » *Sources: CIPD 1996; Royal and Sun Alliance briefing*

Health problems: treatment and follow-up

- Most treatment is provided by voluntary sector organisations.
- **Community-structured counselling** can involve motivational therapy; coping/ social skills training; behavioural self-control training; marital/family therapy; and a wide range of other modes of psychosocial treatments.
 - » major psychosocial interventions approximately double the likelihood of abstinence or controlled drinking compared with control groups and there is evidence that they deliver longer-term savings
- **Community detoxification** is delivered either in the home, on an out- or day-patient basis, or within a supported residential facility.
- **Specialised residential services** are appropriate for those who have few social resources or very serious conditions meaning that they are unlikely to return home without relapsing
- **Statutory and mutual help follow-up**, in particular Alcoholics Anonymous
- Within this overall treatment framework a wide variety of different types of treatment are available. Amongst the most successful are:
 - » behavioural marital therapy;
 - » behaviour contracting;
 - » community reinforcement;
 - » social and other skills training;
 - » opiate antagonist;
 - » GABA antagonist;
 - » motivational enhancement
 - » local self-help groups
- This suggests that:
 - » there is no one right form of treatment for all drinkers: treatments have to be tailored to individual need;
 - » treatments which involve family and community are amongst the most successful
 - » motivation is key to success

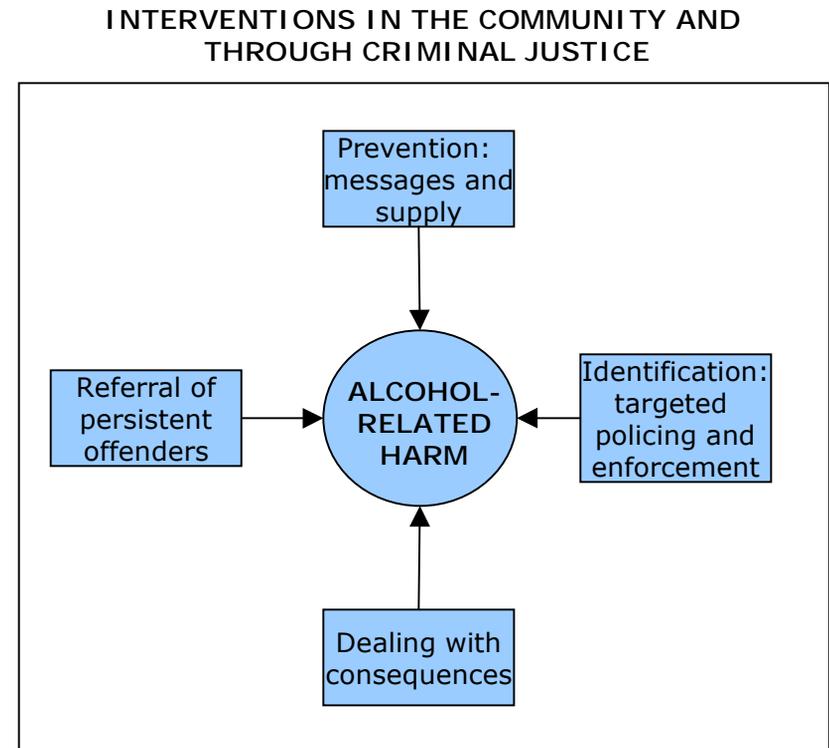
Sources: Health Technology Board for Scotland (2003); Miller and Wilbourne, Addiction (1997)

Health: key findings

- To maximise the chances of successful treatment the following are needed:
 - » earliest possible identification of problems and early intervention: this consistently delivers longer-term cost savings for services and earlier help for the drinker;
 - » treatment which is tailored to the needs of the individual; and
 - » aftercare and support. A stable family situation may be crucial to the success of the treatment.
- Different categories of drinker are likely to take different courses through the system:
 - » most young binge drinkers will need acute care; but it is important to pick up consistent problems and refer them for further help if needed;
 - » chronic drinkers will need tailored support through treatment; and
 - » some chaotic drinkers with multiple problems will need to have alcohol misuse recognised as an issue if their support is to be effective in other areas. In particular many drug users also have problems with alcohol misuse
- Motivation and willingness to engage may be crucial to the success of treatment

Crime and community safety: prevention, identification, dealing with the consequences and follow-up

- Preventing harm to the community from alcohol follows a similar spectrum:
- *Prevention:*
 - » designing the environment, inside and outside premises, to reduce risk of problems;
 - » messages.
- *Identification:*
 - » targeted policing;
 - » identifying and excluding troublemakers;
 - » identification of under-18s and those already drunk; better enforcement.
- *Dealing with the consequences:*
 - » deterrence and penalties
 - » rehabilitation
- *Follow-up:*
 - » identifying and where appropriate referring those who cause persistent problems.
- *Drink-driving* is examined separately.



Community safety: preventing problems

- Partnership between industry and the statutory sector is of proven effectiveness in reducing crime and disorder:
 - » *Planning and bye-laws* allow reduction of harm in public space: 60 local authorities operate alcohol-free zones, targeted particularly on street drinkers and young people.
 - » *Planning law* allow authorities to impose a requirement for planning permission for change of use and to have regard to crime and disorder in determining applications.
 - » *Design and management of premises* are crucial to reduce harm inside. As we argue above crowded premises where fast drinking is encouraged and aggressive behaviour tolerated are more likely to fuel disorder.
 - » *Door staff and bar staff* are in the front line of ensuring premises do not become too crowded or drinkers too drunk: good training is essential, and is already mandatory for door staff.
- » *Use of toughened glass* has reduced risk of accidents in trials.
- » *Controls on irresponsible promotions* may also assist in preventing disorder.
- » *Messages*: there are good local examples of messages to drinkers backed up by some industry material: but overall there is little emphasis on the consequences of heavy and binge drinking for the community or on drinkers' responsibility for them.

Case study: Manchester City Safe: combines public information; visible and targeted policing; co-operation with licensing, trading standards and fire safety officers, street cleaners; improved provision of late night transport including taxi regulation. The result has been to reverse a rising trend of late night disorder amongst a footfall of some 100,000 by 8.5 per cent in the first year and 12.3 per cent in the second.

Sources: Town and Country Planning (Use of Classes Order) 1987; s.17 of Crime and Disorder Act 1998; s.106 of Town and Country Planning Act 1990; Hobbs 2003; Graham et al (1980); Shepherd et al (1988)

Community safety: identifying problems

- Targeted policing directs policing to where the resource is needed, based on an analysis and understanding of the problem and causes (“intelligence led”), for example around a specific club or pub where there are likely to be problems. It also ensures that policing is visible in potential problem areas and act as a strong deterrent.
- Identifying and excluding troublemakers: a number of schemes ensure that persistent troublemakers are identified and banned.
- Identifying and refusing to serve under-18s and those already drunk: it is an offence for retailers to sell alcohol to under-18s and drunks and for them to purchase. Requirements have been tightened in the Licensing Act 2003.
 - » There is widespread evidence that under-18s routinely have little difficulty in purchasing alcohol. One study found that 71 per cent of sales to 16 year old girls and 60 per cent to 16 year old boys went unchallenged, and little enforcement. In 2000 109 premises were found guilty of selling to under-18s.
- There are a variety of card schemes but no general obligation to seek proof of age before selling; over 80 per cent would support introduction of identity cards.
- Case studies:
 - » In Cardiff the TASC project targeted two clubs for eight weeks with high profile policing and regular monitoring, resulting in a 41 per cent reduction in violence, which was sustained over time. In Manchester the police ran a “top ten” list of disorderly clubs. Clubs which found themselves on it were quick to co-operate and ensure their removal from the “top ten”.
 - » In the Pubwatch scheme licensees and the police communicate via pager and radio to give early warning of trouble. In Stroud the Behave or be Banned scheme ensures that troublemakers are banned from all premises for a specified period.

Source : TASC project; Maguire (2003); MORI (2001);

Community safety: dealing with consequences and following them up

- Public drunkenness and consumption by under-18s are offences. But as we argue above the number of those found guilty has fallen sharply over the last ten years. There is little perceived deterrent to such behaviour and fuelling a perception that such behaviour is publicly tolerated.
- Fixed penalty notices have been piloted with adults as a means of dealing with such offences. The scheme is now being extended nationally and is to be piloted with 16 and 17 year olds. The incentive of a quick and less time consuming way of dealing with minor offences drunkenness could increase the number of offences dealt with and reverse the perception that minor disorder on the streets is acceptable.
- Some drinkers repeatedly experience problems: for example, heavy drinkers may attend A&E and/or be arrested several times in a year. This strains resources and may result in the drinker not receiving the right kind of help.
- Two-thirds of prisoners have problems with alcohol; if these are not effectively treated offenders are likely to remain within the criminal justice system.

Arrest referral

Eight arrest referral schemes deal specifically with alcohol: these may either provide an alcohol worker in the custody suite or impose bail conditions that offenders attend a treatment centre within 24 hours, for example. In Gloucestershire re-offending was cut by half.

Diversion

The Watford New Hope scheme diverts repeatedly drunk arrestees to a night shelter which has three dedicated beds for police referrals and provides assessment and information.

Drink-driving is controlled by a similar spectrum of measures

- *Prevention*
 - » The campaign against drink-driving has become something of a national fixture and public attitudes have been transformed since its inception.
 - » Blood alcohol limits: the UK has a limit of 0.08 per cent, higher than the 0.05 per cent in much of the rest of Europe. There is evidence that lower limits may reduce accident levels. The evidence is similar for policies targeted on young and/or inexperienced drivers: in the US for example, some states impose limits for younger drivers that are between zero and 0.02 per cent, with consequent evidence that the number of fatal accidents dropped.
 - » designated driver schemes and ignition interlock schemes have been tried alongside more sweeping measures.
- *Identification of offenders*
 - » Random breath testing is widely used e.g. in Australia, and has a deterrent effect: 82 per cent of Australian drivers have been stopped by the police for a random test. Selective testing targets resources better but may miss more drunk drivers: for example in the US police miss up to 50 per cent of drivers with a blood alcohol count of over 0.1 per cent.
- *Penalties and follow-up for those convicted*
 - » Penalties have a strong deterrence effect. A variety of penalties exist such as fines, disqualification, education and treatment. Punishments combined with treatment show higher success rates: for example treatment without licence suspension had little effect whereas combining suspension with education and counselling produced a 7-9 per cent reduction on repeat offences.

Sources: Babor et al (forthcoming); Department of Transport (2001)

Community safety: key findings

- **Planning ahead and prevention make a major contribution to minimising harm. Approaches include:**
 - » design and management of town centres so as to avoid trouble;
 - » identification of trouble-makers;
 - » good management of premises.
- **The alcoholic drinks industry is a key partner**
 - » there are examples of excellent practice where industry and police or local authorities cooperate to reduce disorder.
- **But public drunkenness is widely tolerated**
 - » there is little enforcement of existing sanctions either on drinkers or on those who sell them alcohol;
 - » this contributes to a high level of disorder and crime, with a perception that outstrips the reality.
- **Some reoffend repeatedly**
 - » there is little referral between the criminal justice and health systems, though some examples of good practice.
- **Drink-drive policies are delivering good results though there is never room for complacency**



A) Institutions delivering interventions

The institutional landscape

B) Interventions addressing harm

The range of interventions

C) Implications for a government strategy

Lessons for a strategy

Different packages of interventions are likely to apply to different groups of drinkers

DRINKER GROUP	INTERVENTION																			
	Health and treatment services					Community safety and criminal justice							Education, information and communication					Supply and pricing		
	Screening	Brief interventions	Specialist referral in community	Specialised/residential services	Mutual help/self-help	Use of planning process	Business Improvement Districts	Alcohol-free zones	Pub Watch and exclusion orders	Visible and targeted policing	Arrest referral and diversion	Drink-driving counter-measures	Regulating advertising and promotion	Product labelling	Government guidelines	School education	Workplace	Management and design of pubs and bars	Controlling price and taxation	Regulating availability, and licensing
General population												✓	✓	✓		✓		✓	✓	
Young people												✓	✓	✓	✓			✓	✓	
Binge drinkers	✓	✓				✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	
Chronic heavy drinkers	✓	✓	✓	✓	✓					✓	✓	✓	✓	✓				✓	✓	
Drinkers with multiple problems	✓	✓	✓	✓	✓					✓										

The table shows how particular interventions might apply to particular groups of drinkers. But, as argued above, none of these measures can be successful in isolation.

Policy success depends on a balance of factors...

- Coherence: policies do not succeed in isolation
e.g. education programmes show better results when linked to other measures
- Sustainability: behaviour change is a long term process
e.g. the UK's drink-drive policy has run since the Sixties and has transformed behaviour and attitudes
- Cultural fit: behaviour change is incremental unless heavily enforced
e.g. Prohibition in the US grew out of a long-term push for temperance; the Great Depression and the rise of the mass media in the Twenties undermined public acceptance of the policy ultimately leading to its repeal
- Value for money
e.g. early identification and treatment of problems saves longer-term health expenditure
- Practicality: achievable and foreseeing unintended consequences
e.g. tighter restrictions on sale of alcohol to young people can displace them into unsupervised settings for drinking with greater risk of harm
- Successful policies need to balance all these factors to a greater or lesser extent

...and responsibilities

- Responsibility for preventing and dealing with the harms caused by alcohol is shared between several key players. Together they provide an institutional map for the delivery of policy:
 - » individuals;
 - » industry;
 - » providers;
 - » Government
- All of this plays out at the level of individual communities.

INDIVIDUALS	ALCOHOL INDUSTRY	PROVIDERS	GOVERNMENT
<p><i>Responsible for:</i></p> <ul style="list-style-type: none"> • making informed choice • consequences of choice for self and others • ...unless unable to exercise choice (e.g. ill, child) <p><i>Need:</i></p> <ul style="list-style-type: none"> • information • support • protection from others 	<p><i>Responsible for:</i></p> <ul style="list-style-type: none"> • accurate info • responsible supply <p><i>Need:</i></p> <ul style="list-style-type: none"> • fair regulation 	<p><i>Responsible for:</i></p> <ul style="list-style-type: none"> • accurate info • treatment • support <p><i>Need:</i></p> <ul style="list-style-type: none"> • clear lines of funding and accountability • clear objectives • flexibility to deliver 	<p><i>Responsible for:</i></p> <ul style="list-style-type: none"> • accurate information • ensuring treatment and support • protection • fair regulation • involvement of all stakeholders • clear strategic context: funding, accountability, objectives and flexibility to deliver

Conclusion

- **There is much good practice at local level in dealing with the harms caused by alcohol. But there is no strategy.**
 - » The system is complex for providers and users alike
 - » There are no clear objectives or indicators; lines of funding and accountability are often unclear
- **A wide range of interventions already exist:**
 - » education: successfully imparts information, but cannot change behaviour in isolation from other measures
 - » supply: price and availability have historically been shown to have an impact, but need to be seen in the context of a complex range of mechanisms
 - » treatment: there is much good practice but the system is hard to navigate and sometimes heavily loaded
 - » community safety and criminal justice: there is much good practice to build on in prevention, but enforcement has declined
- **A successful strategy to reduce the harm caused by alcohol will:**
 - » include a variety of interventions
 - » recognise that changing behaviour and attitudes is a long-term process
 - » work with the grain of attitudes and culture in seeking to change behaviour
 - » ensure best use of resources, particularly in seeking to prevent harm
 - » be firmly grounded in reality, drawing on best practice and what works
 - » recognise that responsibility is shared between individuals, the supply side and Government