

**Pathways to problems : hazardous use of tobacco, alcohol, and other drugs by young people in the UK and its implications for policy.**

**Contributors**

Great Britain. Advisory Council on the Misuse of Drugs.

**Publication/Creation**

[England] : Advisory Council on the Misuse of Drugs, [2006], ©2006.

**Persistent URL**

<https://wellcomecollection.org/works/eytxdtdv>

**License and attribution**

You have permission to make copies of this work under an Open Government license.

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>

# Pathways to Problems

Hazardous use of tobacco, alcohol and other drugs by young people in the UK and its implications for policy



M

8806

Council on the Misuse of Drugs

September 2006

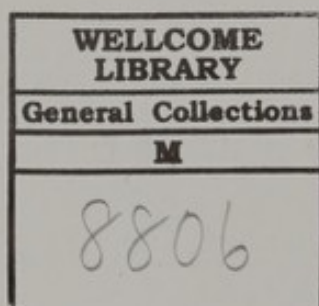


22503124543

# Pathways to Problems

Hazardous use of tobacco, alcohol  
and other drugs by young people  
in the UK and its implications for policy





© Crown Copyright 2006.

The text in this document may be reproduced free of charge in any format or media without requiring special permission. This is subject to the material not being used in a derogatory manner or misleading context. The source of the material must be acknowledged as Crown Copyright and the title of the document must be included when being reproduced as part of another publication or service.

The photographs in this report have been reproduced with permission of the following:

Jupiter Images, front cover and page 7; Science Photo Library, page 13; Photofusion Picture Library, pages 25 and 85; John Birdsall Social Issues Photo Library, page 17; and Rex Features, page 41.

All photos have been posed by models.

Key messages from this report	6
Overview and recommendations	7
Introduction	13
1 Why do we use psychoactive drugs, how do they work and why can they be harmful?	17
2 Patterns and trends in the hazardous use of tobacco, alcohol and other drugs by young people in the UK	25
3 The availability of tobacco, alcohol and other drugs to young people in the UK and the impact of controls, pricing and marketing	41
4 Key characteristics and circumstances of the young people who are most at risk	51
5 School and other education-based prevention initiatives	73
Appendices and references	85
Appendix 1 Members of and contributors to the Prevention Working Group	86
Appendix 2 Members of the Advisory Council on the Misuse of Drugs	88
Appendix 3 Sources and limitations of survey data	90
References	95

# Key messages from this report

## Numbers

- In the UK at present, 20–25% of 15-year-olds are regular smokers, with females now outnumbering males; around 40–50% are drinking alcohol at least weekly; and 20–25% are using other drugs – mainly cannabis – at least monthly.
- Among the 6.8 million 16–24-year-olds in the UK, there are an estimated 2.1 million daily smokers, 1.9 million who drink more than twice the recommended daily alcohol limit at least once a week and 1 million who have used another drug in the past month. Because many young people use more than one drug, there is much overlap between these groups.

## Findings

- There are many factors which influence whether or not young people will use tobacco, alcohol or other drugs hazardously. The most important of these include early life experiences, family relationships and circumstances, and parental attitudes and behaviour. It is difficult to predict who will develop serious problems.
- While many young people first use tobacco, alcohol or other drugs in their early and mid-teens, hazardous use often starts in the late teens or twenties.
- Of all drugs, the use of alcohol has shown the greatest recent growth and causes the most widespread problems among young people in the UK today. It is also the least regulated and the most heavily marketed.
- Most schools in the UK provide drug prevention programmes. Research indicates that these probably have little impact on future drug use.

## Recommendations

- As their harmfulness to individuals and society is no less than that of other psychoactive drugs, tobacco and alcohol should be explicitly included within the terms of reference of the Advisory Council on the Misuse of Drugs.
- The ongoing debate about how best to bring up children should be informed by the evidence that good parenting and stable family life can reduce the risks of hazardous tobacco, alcohol and other drug use by young people.
- The Government should continue to invest heavily in minimising the number of children and young people in relative poverty and also in protecting and supporting the most disadvantaged and vulnerable young people in the UK.
- Additional measures are needed to reduce the overall consumption of alcohol in the UK. Among other things, the Government should seriously consider progressively raising the excise duty on alcohol.
- There should be a careful reassessment of the role of schools in drug misuse prevention. The emphasis should be on providing all pupils with accurate, credible and consistent information about the hazards of tobacco, alcohol and other drugs, including volatile substances.



# Overview and recommendations



# Overview and recommendations

1. In the UK today, a large proportion of young people use tobacco, alcohol and other drugs in the pursuit of pleasure, solace, acceptance or escape. Such drugs all act on the same areas of the brain, altering its normal function and hence the user's experience. The precise nature of the experience and other consequences will reflect the interaction of the particular drug with the individual's physiology, psychology and current circumstances. To a greater or lesser extent, these drugs are capable of altering behaviour, producing dependence and causing a wide range of direct and indirect harms to health and well-being.
2. The youngest smokers and drinkers are aged under ten years. From about 11, volatile substances are used by a small but important minority of both boys and girls. As each year goes by, a growing proportion of young people use cannabis, mostly on an occasional basis, while far larger numbers are becoming addicted to nicotine or drink alcohol frequently and to excess.
3. Over the past 20 years there has been an encouraging decline in smoking among teenage boys, but not among girls. The use of volatile substances has also become less common but remains dangerous and sometimes fatal. However, by the age of 15, and with the exception of smoking among boys, levels of tobacco, alcohol and other drug use in the UK are among the highest in Europe. Recent surveys have found that around 20–25% of 15-year-olds are regular smokers, with females now outnumbering males; 40–50% are drinking at least weekly; and 20–25% have used illegal drugs in the past month. Many are using more than one drug. The regional differences across the UK are not great.
4. In the late teens and early twenties, all forms of substance use – with the exception of volatile substances – become more common, particularly after leaving school. Tobacco, alcohol and cannabis dominate, but significant minorities begin using stimulants such as ecstasy, cocaine and amphetamines, and depressants such as heroin and tranquillisers. Multiple drug use is common at all ages. Young tobacco smokers are much more likely to use illegal drugs than non-smokers.
5. Among the 6.8 million 16–24-year-olds in the UK, there are an estimated 2.1 million daily smokers, 1.9 million who drink more than twice the recommended daily alcohol limit at least once a week and 1 million who have used an illegal drug in the past month. The most alarming development in the past decade has been the growth in the number of young women who are drinking frequently and to excess. During this time, the proportion of women drinking more than twice the recommended weekly limit has doubled. Between 1992 and 2002, average weekly consumption of alcohol by women aged 16–24 in England doubled from seven to 14 units. Since 1998, there have been significant declines in the use of cannabis and amphetamines but an increase in the use of cocaine. The situation is dynamic and has shown substantial change over the past 25 years. Consequently, the future cannot be predicted with confidence.
6. Consumption of all drugs tends to wane from the mid-twenties onward. However, first-time hazardous use of drugs in the late twenties is not rare, and there are many who remain persistent heavy users thereafter – with grave consequences for their immediate and future health and well-being.
7. Young people in the UK have little difficulty in obtaining tobacco, alcohol or other drugs, despite a legal framework designed to restrict their access to them. There are age-of-purchase regulations for tobacco and alcohol, a range of licensing laws for the sale and use of alcohol and heavy penalties for the sale and possession of illegal drugs. However, these are flouted by large numbers of young people. While prosecutions for the sale and possession of illegal drugs are common, prosecutions of vendors of cigarettes or alcohol to underage customers are very rare.
8. There is international evidence that raising the price of cigarettes leads to reduced smoking by young people, while advertising encourages uptake. In line with this evidence, tax rises have increased the real cost of tobacco in the UK in recent years, and tobacco advertising and sponsorship have recently been prohibited. There is also international



evidence that raising the purchase age and price of alcohol reduces alcohol-related problems among young people. However the real cost of alcohol has been falling in the UK, and its availability to young people has been increasing. Of all the psychoactive drug producers, the alcohol industry is at present uniquely able to market its products with all the creativity and resources it can muster. Despite intensive efforts by law enforcement agencies, the real cost of illegal drugs has tended to fall in recent years.

**9.** The few children who start smoking or drinking before they are 12 have typically experienced individual and family disadvantage and disturbance. Teenagers with a record of truancy or delinquency or who show other signs of behavioural problems have much higher rates of use of all drugs, as do young people who have been in care or who are homeless. Where parental supervision is lax or one or both parents use tobacco, alcohol or other drugs, hazardous use by their teenage children is more likely. School-age teenagers living with a single parent or step-parent are more likely to use drugs hazardously than those living with two natural parents, but there are many exceptions. In general, it is difficult to predict who will develop serious problems and who will not.

**10.** There is some variation in drug use between ethnic groups, but there are insufficient data to reflect the growing ethnic diversity of the UK.

**11.** Higher levels of socio-economic disadvantage are associated with higher levels of smoking, drinking and cannabis use among girls in their mid-teens, but not among boys. From the late teens onwards, heavy smoking and problem drinking or drug use are strongly linked to socio-economic disadvantage, often with disastrous results. Multiple drug use and drug injecting are much more common in disadvantaged communities, in many of which problem drug use has become an inescapable feature of life.

**12.** Recent UK government policy has included welcome measures to reduce the numbers of children in poverty and a range of initiatives to protect and support vulnerable and disadvantaged children and young people. If sustained, these measures may address some of the important underlying factors linked to hazardous drug use by young people. Initiatives directly to address truancy, anti-social behaviour and young offending will engage young people among whom the prevalence of hazardous drug use is particularly common, and may provide opportunities for addressing drug use. There has been a welcome recent expansion in services for young people with drug problems, particularly in England, but coverage is patchy and evidence for the effectiveness of the services is in short supply.

**13.** School-based programmes have been a major part of drug prevention in the UK and other countries for many years. However, systematic reviews of the available published research (mainly from the US) show that the success of these programmes in limiting the uptake of tobacco, alcohol or other drugs by young people has been slight or non-existent, and that they can actually be counter-productive.

**14.** Recent reviews of current practice in schools in England, Scotland and Northern Ireland have shown that most schools are now providing drugs education across the school-age range. However, there is much inconsistency and duplication of effort, with relatively little use being made of those methods that have a better record of effectiveness. Blueprint, a large pilot schools-based programme in England and ASSIST, a peer-supported programme to prevent smoking in Wales, are both currently being evaluated. Drug testing and sniffer dogs in schools have recently become more widely used in the US. Although powers are available for their use, they remain uncommon in the UK.

In the light of these findings we have made the recommendations that follow.



### Recommendation 1

As their actions are similar and their harmfulness to individuals and society is no less than that of other psychoactive drugs, tobacco and alcohol should be explicitly included within the terms of reference of the Advisory Council on the Misuse of Drugs (see paragraph 1.14).

**Action:** Home Office.

### Recommendation 2

The Government should ensure that young people are repeatedly made aware of the real hazards of using tobacco, alcohol and other drugs. This should be done in ways that are accurate, credible and consistent, using a variety of routes including the media, the school system and further and higher education. In particular, we endorse the decision taken by the Government in January 2006 to conduct an education campaign to communicate the risks of cannabis use for mental and physical health (see paragraph 1.15).

**Action:** Department for Education and Skills (DfES), Department of Health (DH), Home Office, devolved administrations.

### Recommendation 3

Periodic, large-scale surveys of representative samples of 11–15-year-olds should continue, with coverage across the whole of the UK, using the same definitions and questions regarding tobacco, alcohol and other drug use, including volatile substances. To quantify the number of young people of this age who frequently use drugs other than tobacco or alcohol, such surveys should include questions about their weekly and more frequent use (see paragraphs 2.35–2.36).

**Action:** DH, DfES, Home Office, devolved administrations.

### Recommendation 4

In order to obtain information about the extent to which 16–30-year-olds are combining the use of tobacco and alcohol with illegal drugs, the Health Survey of England and its equivalents in Scotland, Wales and Northern Ireland should include a small number of identical questions about the use of drugs

other than tobacco and alcohol, including volatile substances (see paragraph 2.37).

**Action:** DH, devolved administrations.

### Recommendation 5

A longitudinal follow-up lifestyle study of a representative sample of 16–30-year-olds should be commissioned to enable drug use to be seen in the wider context of their lives (see paragraph 2.38).

**Action:** DH.

### Recommendation 6

It should become an offence to sell tobacco products to anyone under the age of 18 (raised from the present age of 16), and this new limit should be strictly enforced. The impact of this change should be carefully evaluated (see paragraph 3.34). (See also Recommendation 9.)

**Action:** DH, devolved administrations.

### Recommendation 7

Given the strong evidence that increasing the price of alcohol reduces consumption overall and may have a disproportionately large effect on consumption by young people, the Government should seriously consider progressively raising the excise duty on alcohol (see paragraph 3.37).

**Action:** HM Treasury.

### Recommendation 8

Given the continuing rise in the prevalence of alcohol-related health problems and the high levels of drinking among young people, we recommend that a much stricter code for alcohol advertising (including via the internet) and sponsorship should be established. This would include prohibiting alcohol advertising on TV or in cinemas showing films to under-18s and prohibiting sponsorship by alcohol companies of sports or music events attended or watched by under-18s (see paragraph 3.38).

**Action:** Department for Culture, Media and Sport (DCMS).

### Recommendation 9

Given the unequivocal evidence that many under-18s buy alcohol and many under-16s buy tobacco, the age-of-purchase laws for tobacco and



alcohol should in future be much more strictly applied. Vendors should be encouraged to require proof of age and compliance should be reinforced through the use of underage test-purchasing and the prosecution of offenders (see paragraph 3.39).

**Action:** *DH, Department of Trade and Industry, devolved administrations.*

#### Recommendation 10

The current arrangements to control the supply of drugs covered by the Misuse of Drugs Act (1971) should be reviewed to determine whether any further cost-effective and politically acceptable measures can be taken to reduce the availability of drugs to young people (see paragraph 3.40).

**Action:** *Home Office.*

#### Recommendation 11

A fully integrated approach should be taken to the development of policies designed to prevent the hazardous use of tobacco, alcohol and other drugs (see paragraph 4.48).

**Action:** *All relevant government departments.*

#### Recommendation 12

A greater emphasis should be placed on policies aimed at preventing hazardous tobacco, alcohol and other drug use by young people in their late teens and early twenties (see paragraph 4.50).

**Action:** *All relevant government departments.*

#### Recommendation 13

Given the poorer driving skills and higher accident rates among inexperienced young drivers, the Government should give consideration to reducing the maximum legal blood alcohol rate for drivers under 25 years of age to 50mg per 100ml. If successful, this could be extended to drivers of all ages (see paragraph 4.51).

**Action:** *Department for Transport.*

#### Recommendation 14

The Government should continue to invest heavily in minimising the number of children and young people in relative poverty and protecting and supporting the most disadvantaged and vulnerable children and

young people throughout the UK. Among many benefits, enabling children to have more secure and happier lives may reduce their risk of becoming involved in hazardous and subsequently problematic use of tobacco, alcohol and other drugs. As far as practicable, the impact of these measures should be evaluated (see paragraph 4.57).

**Action:** *HM Treasury, DH, DfES, devolved administrations.*

#### Recommendation 15

The ongoing debate about how best to bring up children should be informed by the evidence that good parenting and stable family life can reduce the risks of hazardous tobacco, alcohol and other drug use by young people (see paragraph 4.59).

**Action:** *The media.*

#### Recommendation 16

The National Treatment Agency should continue to promote and monitor the development of accessible services for young people with serious tobacco, alcohol or other drug-related problems across the country, and take active steps to ensure that these services are coordinated with other initiatives that engage with vulnerable young people (see paragraph 4.64).

**Action:** *DH.*

#### Recommendation 17

Following the example of the NTA, Scotland, Wales and Northern Ireland should also develop a coherent and specifically funded plan for providing and evaluating services for young people with serious tobacco, alcohol or other drug-related problems (see paragraph 4.65).

**Action:** *Devolved administrations.*

#### Recommendation 18

In addition to the other measures in *A Framework for Volatile Substance Abuse* (published in 2005), butane lighter fuels should be made impracticable for abuse and all gas fuel containers should carry a prominent safety warning (see paragraph 4.67).

**Action:** *Department of Trade and Industry.*

### Recommendation 19

In the light of the evidence that classroom-based drugs education has very limited effectiveness in reducing rates of drug use, there should be a careful reassessment of the role of schools in drug misuse prevention. The emphasis should be on providing all pupils with accurate, credible and consistent information about the hazards of tobacco, alcohol and other drugs – including volatile substances (see paragraph 5.43).

**Action:** *DfES, devolved administrations.*

### Recommendation 20

All schools should seek to maintain a supportive environment for all their pupils, while recognising and responding to the needs of those whose behavioural problems or family background may put them at particular risk of hazardous drug use (see paragraph 5.44).

**Action:** *DfES, devolved administrations.*

### Recommendation 21

Drug testing and sniffer dogs should not be used in schools. We consider that the complex ethical, technical and organisational issues, the potential impact on the school-pupil relationship and the costs would not be offset by the potential gains (see paragraph 5.45).

**Action:** *DfES, devolved administrations.*

### Recommendation 22

All universities, colleges of further education and other major training institutions should take more responsibility for encouraging and enabling their students or trainees to minimise the hazardous use of tobacco, alcohol and other drugs (see paragraph 5.46).

**Action:** *DfES, devolved administrations.*

### Recommendation 23

The media, particularly television and radio, should be used more extensively and imaginatively than at present to inform young people of the real hazards of using tobacco, alcohol and other drugs (see paragraph 5.47).

**Action:** *DH, Home Office, DCMS, devolved administrations.*

### Recommendation 24

Any future major drug prevention initiatives should be designed with evaluation in mind from the outset. They should be evaluated using scientifically rigorous methods, employing randomised controlled trials where possible. This should ensure that any conclusions on the effectiveness of the initiatives can be accepted with confidence, both in the UK and elsewhere (see paragraph 5.48).

**Action:** *Home Office, DH, DfES, devolved administrations.*



# Introduction



## The role of the ACMD

The Advisory Council on the Misuse of Drugs (ACMD) has a duty under the Misuse of Drugs Act (1971) "to keep under review the situation in the United Kingdom with respect to drugs which are being or appear to them likely to be misused and of which the misuse is or appears to them capable of having harmful effects sufficient to cause a social problem and to give ministers advice on measures which ought to be taken for preventing the misuse of such drugs or dealing with social problems connected with their misuse".

In its first 30 years, the ACMD has focused most of its attention on drugs that are subject to the controls and restrictions of the Misuse of Drugs Act (1971). Although its terms of reference do not prevent it from doing so, the ACMD has not considered alcohol and tobacco other than tangentially. The scientific evidence is now clear that nicotine and alcohol have pharmacological actions similar to other psychoactive drugs. Both cause serious health and social problems and there is growing evidence of very strong links between the use of tobacco, alcohol and other drugs. For the ACMD to neglect two of the most harmful psychoactive drugs simply because they have a different legal status no longer seems appropriate.

## Why the need for this report?

Over the past 40 years or so, it has been recognised that the use of psychoactive drugs typically starts in adolescence. Numerous recent surveys of schoolchildren in the 11–16 age range have demonstrated that, by 15, the majority of young people in the UK have smoked tobacco or cannabis or drunk alcohol, and a large proportion are using one or more regularly. There is widespread anxiety that what may start as casual use of tobacco, alcohol or cannabis may not only lead to immediate

harm but may also set the individual on a path leading to dependence and long-term harm, and to the use of "hard" drugs such as heroin or cocaine.

Concern about the potential harm of early drug use has led to numerous efforts by government, education and health authorities and other agencies to discourage young people from using drugs. There are now few primary or secondary schools that do not address this issue at some point in the curriculum.

In May 2003, the ACMD agreed that it was time to take a fresh look at the patterns, trends and determinants of early use of psychoactive drugs by young people in the UK. It asked the Prevention Working Group (PWG) to conduct this inquiry under the chairmanship of Dr Laurence Gruer OBE.\* The main aim was to generate new insights and better advice on how to reduce the number of young people whose lives are blighted by their use of drugs. We first addressed the following questions:

What are the current patterns and trends in the use of tobacco, alcohol and other drugs by young people in the UK? How do we compare with other countries in Europe, and are there significant variations in patterns of use between different parts of the UK? Are the teenage years the critical time for initiation into drug use, or can this happen earlier or later?

Why do only some young people use psychoactive drugs, and only some become hazardous or dependent users? Are there particular individual, familial or social factors that make drug use and drug dependence more or less likely?

How easy is it for young people to obtain drugs, and to what extent are they influenced by how the drug is marketed?

Are there interventions that have been shown to be effective in preventing hazardous drug use?

\*The PWG is a subgroup of the ACMD, composed of members of the Council itself and other individuals co-opted for their particular expertise. The PWG conducts in-depth inquiries into important issues on behalf of the ACMD.



Are there factors associated with the current patterns of hazardous drug use in the UK that suggest new approaches to prevention?

We then examined the current relevant policies in the UK which may have a bearing on drug use by young people. Finally, we sought to make a series of practical recommendations, the implementation of which we think would reduce the number of young people in the UK who are being damaged by drugs.

## Methods of working

We gathered information from a wide range of sources to answer these and other questions as accurately and helpfully as we could. We made extensive use of national and international surveys, and carried out comprehensive literature reviews of key topic areas. We commissioned a series of new analyses of data from cross-sectional and longitudinal studies and other databases to provide important new insights into the nature of drug use by young people in the UK. The full text of these reports will be available at [www.drugs.gov.uk](http://www.drugs.gov.uk). Nevertheless, we are aware that major gaps in knowledge remain, particularly relating to the transition from regular use to the development of serious drug problems.

We sought up-to-date descriptions of current government policies in all parts of the UK, either through the relevant websites or via members and officials attending the PWG.

## Definition of key terms used in the report

In this report, the following terms are used:

A (psychoactive) **drug** is any chemical substance people take to alter the way they feel, think or behave.

The term **drugs** is used to refer to all psychoactive drugs, including:

- **legal** drugs: those which can be legally sold, purchased or possessed, albeit often with

certain restrictions. They include tobacco, alcohol, caffeine, volatile substances, and relevant over-the-counter and prescription medicines;

- **illegal** drugs: those whose sale, purchase or possession constitutes an offence under the Misuse of Drugs Act (1971) in the UK or equivalent legislation in other countries; and
- **illicit** drugs: an ill-defined term which includes illegal drugs and those not used for their intended purpose.

**Drug use** or **substance use** is drug-taking, for example smoking a cigarette, drinking alcohol or swallowing a pill.

**Drug misuse** or **substance misuse** is drug-taking which is judged to be inappropriate or dangerous.

**Drug addiction** or **dependence** is a state characterised by a continuing strong desire or compulsion to take a drug and an inability or failure to give up despite harmful consequences.

**Volatile substance abuse** is the deliberate inhalation of a volatile substance (gas, aerosol propellants, solvents in glues and other solvents) to achieve a change in mental state.

Because our purpose is to prevent future harm, we have focused on the development of **hazardous** use, that is use which has the potential to cause harm, and on the development of **problem drug use**. The ACMD has defined a problem drug user as "anyone who experiences social, physical, legal or psychological problems with one or more drugs". This embraces the wide range of problems that may result from the use of drugs in our society.

**Risk** refers to the possibility of a future event happening. Thus, if 20% of all 15-year-olds are regular smokers compared with 30% of 15-year-olds whose parents are smokers, then the risk for the 12-year-old daughter of a smoker being a smoker herself at age 15 is 50% above average. However, it



should be noted that, in this example, 70% of the children of smokers are not smokers by age 15.

**Risk factors** are characteristics or circumstances associated with a greater likelihood of the occurrence of something else. For example, having a parent who smokes is a risk factor for being an early teenage smoker. However, a risk factor is not necessarily causative, and nor does everyone with the risk factor necessarily have or develop the associated occurrence.

In this report, the term **young people** generally refers to the age group 10–30 years, although some of our evidence may refer to individuals who were somewhat younger or older than this.

## Structure of the report

In Chapter 1, we consider why people use drugs and how they produce psychoactive effects and may cause dependence. We also highlight the potential of drugs for harm to health and well-being.

In Chapter 2, we compare the hazardous use of drugs by 15-year-olds in the UK with that in other European countries; and we look at recent trends among 11–15-year-olds in the UK. We then look at patterns and trends among people aged 16–30 in the UK, and consider the current gaps in data collection.

In Chapter 3, we summarise what we know about how and where young people obtain drugs. We consider the advertising and marketing techniques employed to encourage purchasing of tobacco and alcohol. We examine the impact of the various measures – such as pricing, licensing and a minimum purchase age – designed to limit the availability of tobacco, alcohol and other drugs to young people.

In Chapter 4, we look in more detail at the changing patterns of drug use among young people as they get older. We then consider the individual and family characteristics and circumstances that are particularly associated with a greater likelihood of

beginning to use drugs and with the development of serious problems. We end the chapter by highlighting the range of recent government policies which may alter young people's circumstances and we consider their potential for reducing the risk of future drug use.

In Chapter 5, we consider the effectiveness of initiatives specifically intended to discourage young people from using drugs. These are mainly school-based. We then consider current practice in our schools and higher education in the light of these findings, and the implications of this for future policy.

# Why do we use psychoactive drugs, how do they work and why can they be harmful?





# Why do we use psychoactive drugs, how do they work and why can they be harmful?

## Key points

- Psychoactive drugs are used worldwide in the pursuit of pleasure, solace and acceptance. Young people may also be attracted to use them for other, sometimes contradictory reasons – curiosity, rebellion or a desire to belong or escape. Psychoactive drugs all act on certain parts of the brain, altering normal neuro-chemical functions and hence the user's experience. The precise nature of the experience and other consequences will reflect the interaction of the particular drug with the individual's physiology, psychology and current circumstances.
- With repeated use of some drugs, addiction or dependence may develop, characterised by a compulsion to use the drug to the neglect of other activities and despite negative consequences. The addictiveness of drugs varies considerably, and some people become more readily and more severely addicted than others.
- Other harms to health and well-being may result from the direct effects of the drug on the body, from indirect effects such as infection, from psychological effects and from the wider social consequences of use.
- The mechanisms of action of psychoactive drugs cannot in themselves explain the huge worldwide increase in their use over the past 40 years. Attitudinal, cultural and economic changes may provide at least a partial explanation.
- The current system for classifying and controlling drugs in the UK has a number of shortcomings and should be reviewed.
- There is an ongoing responsibility for adults to provide children and young people with accurate and credible information about drugs, their effects and the possible consequences of their use.

## Why do we use drugs?

**1.1** The worldwide appeal of psychoactive drugs lies largely in the expectation that they will produce desirable effects: generating or enhancing feelings of pleasure or relaxation; diminishing pain, depression, sadness or fatigue; increasing energy or concentration; and facilitating socialisation. For example, in the European School Survey Project on Alcohol and Other Drugs (ESPAD),<sup>1</sup> a large proportion of respondents in all 35 participating countries – all aged around 15 – said they associated alcohol with “having fun”, that it would make them feel “more friendly and outgoing” or “relaxed”. British respondents were among the most positively disposed towards alcohol. In the 2004 survey of 11–15-year-olds in England, while almost all pupils agreed smoking was a cause of ill health, 68% thought it helped people relax if they were nervous and around 20% felt that smokers stayed slimmer than non-smokers, and that smoking gave people confidence and helped them cope better with life.<sup>2</sup> Smokers were more likely to have positive

views than non-smokers, but older non-smokers had more positive views than younger. In a study of older regular drug users, the main reasons given for using drugs were: to increase energy, relax, dance, get away from problems, help manage the effects of other drugs, decrease inhibitions, relieve boredom, relieve depressive thoughts, suppress appetite/diet, increase motivation, facilitate work and increase confidence.<sup>3</sup> A desire to conform or to emulate one's peers may also contribute to the decision to use drugs, and may enable first users to tolerate unpleasant effects such as nausea, dizziness or an unpleasant taste and still come back for more. Among 11–15-year-olds in England, the proportion who thought it was acceptable to try something at least once varied markedly according to the drug. In 2004, 62% thought it was acceptable to try drinking alcohol once, 40% to try smoking, 11% to try cannabis and 3% to try heroin.<sup>2</sup> For many, that first cigarette, glass or joint will be an inconsequential moment. For a substantial minority it will prove to be the first step on a perilous and costly pathway from which they may never escape.



## How do drugs work?

**1.2** Research over the past 20–30 years has greatly increased our understanding of how psychoactive drugs affect the brain.<sup>4</sup> The processes are highly complex and only a brief summary of current knowledge will be given here. An essential feature of a psychoactive drug is its ability to produce a **reward**, that is an experience perceived by the individual as pleasurable or otherwise positive. This occurs through the way in which the drug acts upon certain neural pathways in the brain, influencing the release or processing of specific neuro-chemicals and thereby altering the individual's experience. The precise nature of the effects will be broadly consistent for each particular drug but may be influenced by the individual's genetic make-up and overall state of health. The drug's effects will also be influenced by other factors such as concurrent experiences and the presence of other drugs. If sufficiently large quantities of the drug are taken, this may have immediate effects on other aspects of brain and bodily functions such as balance, coordination and reflexes, perception of time and space, or the control of respiration. For example, too much alcohol can cause disinhibition and drunkenness, volatile substances can cause cardiac arrest and heroin can cause respiratory arrest. Such effects are more likely to occur if more than one drug with a similar action is taken simultaneously, for example alcohol and tranquillisers. Thus, harmful short-term consequences may result from drug use at any stage but can be particularly likely for the inexperienced user or when the amount of the drug being taken is uncertain.

## Drug dependence

**1.3** What is the process by which use of the drug may evolve into the more compulsive patterns of behaviour we call dependence or addiction? A complex interplay of psychological and neuro-biological factors appears to be responsible, interacting with the individual's genetic make-up and environmental background. While the specific action of each drug is different, most work through neural

pathways which are mediated by the neuro-transmitter dopamine and link the brain centres responsible for motivation, emotion and memory.<sup>4</sup> In response to the drug, the normal release of dopamine in key areas of the brain is altered. This strengthens the neural connections associated with the experience of the reward, reinforcing the behaviour that led to the reward and increasing motivation or incentive to use the drug again. This process is known as **sensitisation**. In addition, the individual can gradually become conditioned to associate the reward with memories of the circumstances surrounding the drug use, such that these circumstances or cues generate the motivation for further use. With repeated use, the brain becomes more sensitised to both the motivational and rewarding effects of the drug. This has been shown to occur with a variety of drugs including amphetamines, cocaine, heroin, nicotine and alcohol. At this stage, the individual may still be in control and not dependent but can yet experience negative health and social consequences of his or her drug use. Sensitisation can be very persistent so that the drug can produce heightened effects in the individual months or years after regular use has stopped.

**1.4** With repeated use, larger doses of the drug may be needed to produce the same effect. This may be because the body becomes more able to metabolise and inactivate the drug and is known as **tolerance**. The extent to which tolerance develops varies between individuals and between drugs and also between different actions of the same drug. Thus, both sensitisation and tolerance can develop in the same individual. With continued use, the individual can develop **craving** – a strong or compelling desire to experience the effects of the drug. This can be accompanied by **withdrawal** – disagreeable physiological and psychological symptoms when levels of the drug in the body fall to a low level. New imaging techniques can demonstrate heightened neural activity in certain parts of the brain associated with these experiences.<sup>5</sup>



## Why do we use psychoactive drugs, how do they work and why can they be harmful?

**1.5** Actual dependence or addiction is defined as the presence of at least three of the following:<sup>4</sup>

- a strong sense of compulsion to use the drug;
- difficulty in controlling drug-using behaviour;
- a physiological state of withdrawal;
- progressive neglect of alternative pleasures or interests; or
- persistent use, despite clear evidence of overtly harmful consequences.

### Genetic and ante-natal factors

**1.6** Whether or not addiction develops depends in part on the properties of the drug itself. For example, heroin and nicotine are more likely to cause addiction than alcohol or cannabis, but all four drugs have the potential to do so. Ecstasy and LSD appear to have little addictive potential. The development of addiction also depends on the characteristics of the individual. Some people have a greater predisposition to start using and become addicted to psychoactive drugs than others. The psychological, social and environmental factors that contribute to this are explored in more detail later in the report. However, a genetic component may also be important.<sup>4</sup> Twin studies have shown that whether or not an individual starts to smoke tobacco and, to an even greater degree, whether or not smoking is continued, depends to some extent on his or her genes. Similar findings have been reported for alcohol and opiate dependence. There is also an additional genetic contribution to the use of and dependence on a combination of tobacco, alcohol and other drugs. In particular there are strong genetic links between tobacco and alcohol dependence. Evidence is also emerging that genetic factors have a bearing on the extent to which cannabis use may generate psychotic symptoms – which in turn may also alter reward and motivation mechanisms.<sup>6</sup> In general, while family circumstances and other social environmental factors predominantly influence initiation into drug use, genetic factors are also an important determinant of heavy use and dependence.

**1.7** There is some evidence that exposure to psychoactive drugs in the womb may predispose the child to drug use or dependence in later life. A comprehensive literature review for the PWG revealed that there has been relatively little research on this issue (see [www.drugs.gov.uk](http://www.drugs.gov.uk) for the full review). A recent study found a positive association between maternal tobacco-smoking during pregnancy and the risk of subsequent cigarette initiation by offspring. Following up 152 adolescents aged between 16 and 21, those whose mothers reported smoking tobacco during pregnancy were more than twice as likely to have started smoking later in adolescence, compared to the offspring of non-smokers. The association was stronger for male offspring.<sup>7</sup> Similar relationships have been found between maternal drinking during pregnancy and subsequent problem drinking by the child at age 14 and 21 years, even taking into account parental drug use and other factors during childhood. However, whether or not at least some of this tendency is due to genetic factors or to parental drug use after birth is unclear.

### Drug-related harm

**1.8** Psychoactive drugs may provide the user with what he or she wants – at least to begin with. But they all have a dark side: the potential to cause harm to users, their families and friends, and the community at large. This is the cause of public concern. The most frequently encountered serious problems resulting from the most commonly used psychoactive drugs are summarised in Figure 1.1. They vary greatly from drug to drug. Some problems can occur suddenly. Others take years to develop. Some are the direct result of the drug itself. Others result from the way the drug is taken – such as by injecting – or from the lifestyle it may lead to – such as criminal behaviour and prostitution. It is very clear that most young people have little or no idea of the personal risks they may be taking by starting to use a particular drug.

Figure 1.1 Serious hazards of the most commonly used psychoactive drugs

Drug	Addictive potential	Acute effects	Common long-term effects	Common indirect harms
Tobacco	High	Damage to fetus (pregnant smokers) Asthma	Long-term dependence Over 60 serious diseases including lung and many other cancers; heart and blood vessel disease, lung disease, blindness and infertility	Financial costs Secondhand smoke
Alcohol	Moderate	Drunkenness Violence Accidents Unintended sex/pregnancy Damage to fetus (pregnant drinkers)	Dependence Liver cirrhosis Brain and nerve damage Gastro-intestinal cancers and other conditions	Financial costs Domestic and work problems Violent crime
Cannabis	Moderate	Intoxication Lethargy Lung damage	May precipitate or exacerbate psychosis	Financial costs Secondhand smoke
Volatile substances	Low	Sudden death	None	None
Ecstasy	Low	Sudden death	Possible depression	None
Cocaine	High	Violence Acute chest pain Sudden death	Dependence Nasal erosion Paranoia Psychosis Anorexia Cardiovascular problems	Financial problems Drug-related crime HIV Hepatitis if injected
Amphetamines	Moderate	Raised blood pressure	Dependence Paranoia Psychosis Anorexia	HIV or hepatitis if injected
Heroin	High	Death from overdose	Dependence	HIV or hepatitis if injected Drug-related crime Social exclusion Prostitution

**1.9** About half of all teenage smokers will become lifelong smokers, and half of these will die as result of a smoking-related disease. While death rates from coronary heart disease overall and from lung cancer in men have been falling, smoking tobacco continues to cause over 100,000 premature deaths in the UK each year.<sup>8</sup>

**1.10** There has been a rapid recent rise in the number of deaths in the UK due to cirrhosis of the

liver among both men and women.<sup>9</sup> It is thought this is due largely to long-standing excessive drinking. Figure 1.2 shows the death rates for younger men and women in England and Wales, Scotland and other European countries. The rise in Scotland is particularly alarming. Alcohol is also a major factor in violent crime: according to recent research, victims believe that offenders were under the influence of alcohol in 48% of violent incidents.<sup>10</sup>



## Why do we use psychoactive drugs, how do they work and why can they be harmful?

**1.11** Cannabis can provoke the onset of psychosis or worsen existing psychotic illness.<sup>11</sup> In the ten years to 2003, 700 people in the UK died from inhaling volatile substances, particularly gas fuels.<sup>12</sup> Many thousands of young women are inadvertently harming their unborn babies through use of tobacco, alcohol or other drugs during pregnancy. About 2% of untreated heroin addicts die every year, and over 60% of heroin injectors are infected with hepatitis C in parts of the UK.

**1.12** The neurological processes outlined above help to explain why psychoactive drugs have the effects they have. However, as there is no evidence that either the human brain or genome has changed in recent years, the mechanisms cannot explain why drug use among young people has increased so dramatically over the past 40 years or so, both in the UK and elsewhere. To better understand this phenomenon, we need to look at the changing nature of prevailing attitudes and values; at the way we are bringing up our children; at the characteristics of our communities and social environment; and at the ways in which tobacco, alcohol and other drugs can be bought and sold. In succeeding chapters, we will examine these factors in more detail. Our prime aim is to identify ways in which we as a country

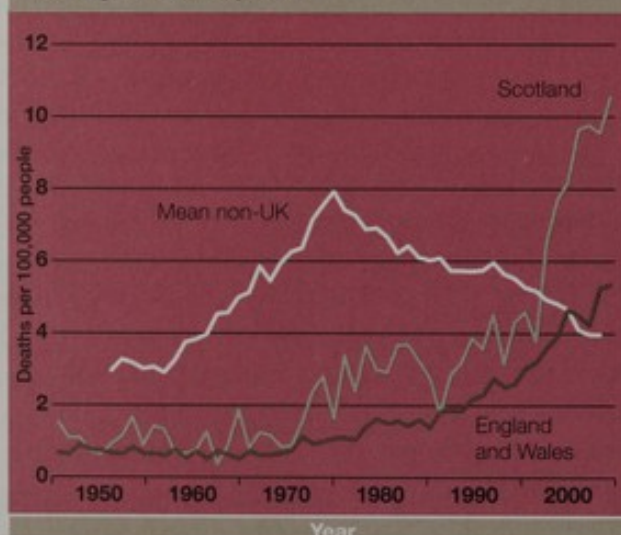
might more successfully protect young people from the hazards of psychoactive drugs.

## Implications of our findings for policy and practice

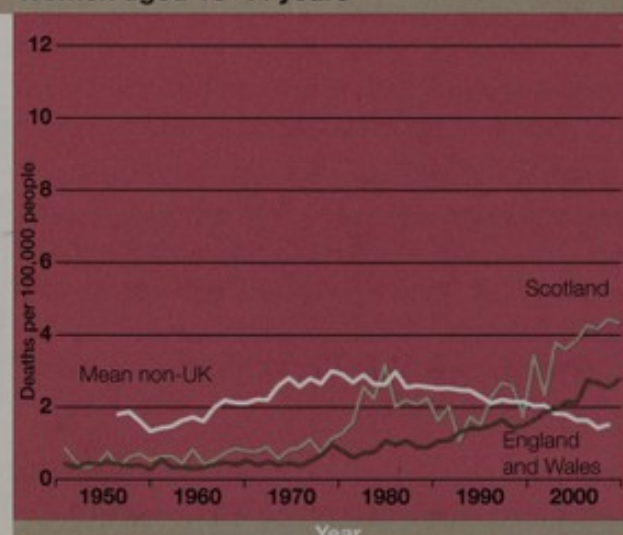
**1.13** What are the implications of these insights into the mechanisms of action of psychoactive drugs and their effects? We believe that policy-makers and the public need to be better informed of the essential similarity in the way in which psychoactive drugs work: acting on specific parts of the brain to produce pleasurable and sought-after effects but with the potential to establish long-lasting changes in the brain, manifested as dependence and other damaging physical and behavioural side-effects. At present, the legal framework for the regulation and control of drugs clearly distinguishes between drugs such as tobacco and alcohol and various other drugs which can be bought and sold legally (subject to various regulations), drugs which are covered by the Misuse of Drugs Act (1971) (Figure 1.3) and drugs which are classed as medicines, some of which are also covered by the Act. The insights summarised in this chapter indicate that these distinctions are based on historical and cultural factors and lack a consistent and objective basis.

**Figure 1.2** Time trends in mortality from liver cirrhosis in England and Wales, Scotland and other European countries. Age-standardised rates per 100,000 people between 1950 and 2002.<sup>9</sup>

### Men aged 15–44 years



### Women aged 15–44 years



Furthermore, evidence will be presented in Chapters 2 and 3 that many young people use tobacco and alcohol concurrently with other drugs, and that users of cannabis and other illegal drugs are highly likely to be regular tobacco smokers.

**1.14** As their actions are similar and their harmfulness to individuals and society is no less than that of other psychoactive drugs, we **recommend** that tobacco and alcohol should be explicitly included within the terms of reference of the Advisory Council on the Misuse of Drugs.

**Action:** Home Office.

**1.15** We also **recommend** that the Government should ensure that young people are repeatedly made aware of the real hazards of using tobacco, alcohol and other drugs. This should be done in ways that are accurate, credible and consistent, using a variety of routes including the media, the school system and further and higher education. In particular, we endorse the decision taken by the Government in January 2006 to conduct an education campaign to communicate the risks of cannabis use for mental and physical health.

**Action:** DfES, DH, Home Office, devolved administrations.

Figure 1.3 Classification of drugs under the Misuse of Drugs Act (1971)

Drugs are grouped into one of three classes, on the basis of their harmfulness to individuals and society (as agreed by Parliament):

**Class A** (most harmful) includes cocaine, diamorphine (heroin), 3,4-methylenedioxymethamphetamine (ecstasy) and lysergic acid diethylamide (LSD).

**Class B** (an intermediate category) includes amphetamines, barbiturates and codeine.

**Class C** (less harmful) includes cannabis, benzodiazepines, anabolic steroids and gamma-hydroxybutyrate (GHB).

The system of classification of drugs, under the Act, is related to determining the penalties for their possession and supply. The current maximum penalties are as follows:

**Class A drugs:** for possession – 7 years' imprisonment and/or a fine; for supply – life imprisonment and/or a fine.

**Class B drugs:** for possession – 5 years' imprisonment and/or a fine; for supply – 14 years' imprisonment and/or a fine.

**Class C drugs:** for possession – 2 years' imprisonment and/or a fine; for supply – 14 years' imprisonment and/or a fine.





# Patterns and trends in the hazardous use of tobacco, alcohol and other drugs by young people in the UK



# Patterns and trends in the hazardous use of tobacco, alcohol and other drugs by young people in the UK

## Key points

### Under 16 years

- Rates of regular smoking among girls and regular drinking, drunkenness and use of cannabis among both boys and girls in the UK are all among the highest in Europe.
- The hazardous use of all drugs except volatile substances rises steadily with age.
- Regular smoking by boys has declined over the past 20 years throughout the UK. Rates among girls have remained fairly constant. In England in 2004, 16% of boys and 26% of girls aged 15 smoked at least once a week. Smoking rates are similar in Scotland and Wales but appear somewhat higher in Northern Ireland.
- Across the UK, 40–50% of 15-year-olds report having drunk alcohol in the past week. The proportion of 11–15-year-olds in England drinking in the past week has not increased from 1988 to 2004, but there has been a clear upward trend in Scotland. Weekly prevalence of drinking for 15-year-olds in Northern Ireland is lower than estimates for the rest of the UK. In England, the average weekly consumption by 15-year-olds who drank at least once a week rose from 5.3 units in 1990 to 10.7 units in 2004. About a third of 15-year-olds across the UK have been drunk at least four times.
- Recent trends in other drug use by 11–15-year-olds suggest a slight decline in at least monthly use in both England and Scotland. Volatile substances are most commonly used by 11- and 12-year-olds, but cannabis is by far the most commonly used by age 15. Regular use of other drugs remains rare among under-16s in England, Scotland and Wales. Comparable data for Northern Ireland are not available. Multiple drug use is relatively common, with regular smokers particularly likely to use other drugs.

### 16–30 years

- The prevalence of use of all drugs except volatile substances rises with age until the mid-twenties and then declines gradually.
- Smoking rates have changed little recently, with around 26% daily smokers among 16–19-year-olds and 36% among 20–24-year-olds. Slightly more men than women smoke in this age group and the number of cigarettes smoked each day increases with age.
- Among women aged 16–24 the proportion drinking over the recommended limits and the average weekly alcohol consumption both almost doubled to 33% and 14 units respectively between 1992 and 2002. Consumption by men did not change much during this period. Among drinkers, 57% of men and 32% of women aged 16–24 drank more than eight and six units of alcohol respectively at least once in the past week – a much higher proportion than other age groups.
- Overall rates of use of other drugs by this age group have not changed much over the past decade. Cannabis is the most popular illegal drug, used by 14% of 16–24-year-olds in the past month. No other drug is used monthly by more than 4% of this age group. Cocaine use rose from 0.5% to 2.6% between 1996 and 2003–04 but fell to 2.1% in 2004–05.
- Multiple drug use is relatively common; smokers are much more likely to use other drugs than non-smokers.



## Introduction

**2.1** In this chapter we describe recent patterns of drug use by young people in the UK and the rest of Europe. Our aim is to create as clear and accurate a picture as possible. Given the large mass of available data we have inevitably had to be selective, focusing largely on indicators of **hazardous** use. We have defined hazardous use among young people as follows: at least weekly smoking among those aged under 16 years and at least daily smoking among those aged 16 and over; at least weekly drinking or being drunk at least four times among under-16s; weekly drinking of over 35 units of alcohol (females) and 50 units (males) if 16 or over; and illegal drug use in the previous month (both over-16s and under-16s). The differences in the definitions for smoking and drinking for under- and over-16s reflect different measures used in the main surveys we have referred to. This means that comparisons between over-16s and under-16s have to be made with caution. For a description of the main sources and limitations of these data, and more detailed definitions of the measures of drug use we have employed, see Appendix 3.

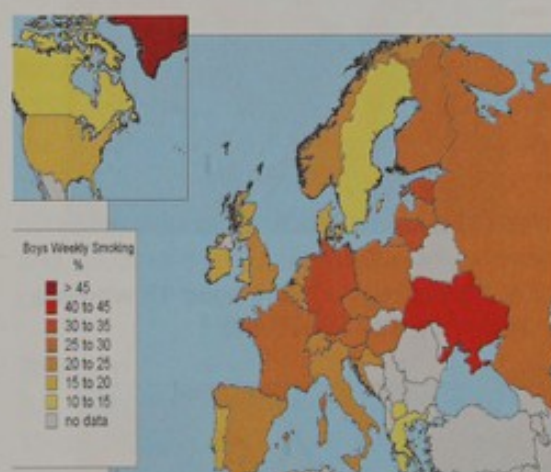
## Hazardous drug use by 11–15-year-olds: a European perspective

**2.2** The most recent Health Behaviour in School-aged Children (HBSC) study, published in 2004, draws on a sample of about 1,500 children in each of three age groups (11, 13 and 15 years old) in 33 countries including England, Scotland and Wales. It thus enables the patterns of early drug use within the UK to be compared with those in 30 other countries. The European School Survey Project on Alcohol and Other Drugs (ESPAD), also published in 2004 – although using slightly different measures of tobacco, alcohol and other drug use – gives very similar results to HBSC in terms of the position of the UK relative to 34 other European countries.<sup>1</sup> For the present report, we have concentrated largely on the results for 15-year-olds from the HBSC study, specially commissioned for this report<sup>13</sup> and on

responses that relate to hazardous use – smoking at least weekly, drinking alcohol at least weekly or drunkenness, and using cannabis at least monthly. Although there are differences between the UK nations, these are small compared to the differences between the UK and the rest of Europe.

**2.3** The prevalence of regular smoking in the UK is higher among girls than in most other European countries but UK smoking rates among boys are among the lowest in Europe (Figures 2.1 and 2.2). Scotland and Wales are two of only four European countries where smoking among boys has declined since 1998.

**Figure 2.1** Percentage of 15-year-old boys who are weekly smokers (HBSC 2001–02)<sup>13</sup>



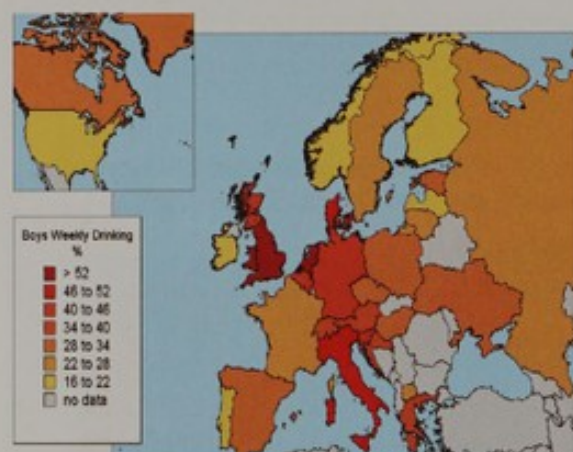
**Figure 2.2** Percentage of 15-year-old girls who are weekly smokers (HBSC 2001–02)<sup>13</sup>



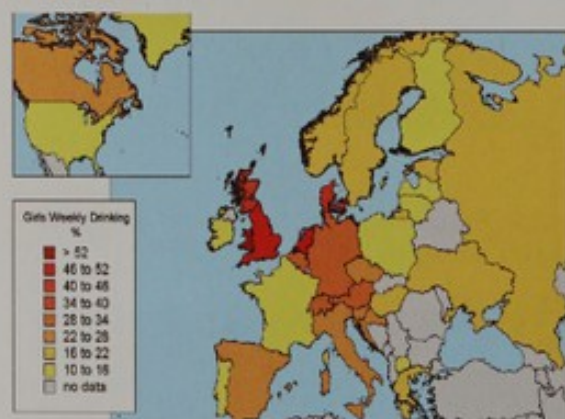


**2.4** The UK has higher rates of regular drinking and drunkenness among 15-year-olds than most other countries in Europe and North America (Figures 2.3–2.6). Out of 35 European countries, ESPAD found that the UK had the third highest proportion of 15-year-olds (after Denmark and Ireland) who had been drunk ten times or more in the past year – 24% of boys and 25% of girls.<sup>1</sup>

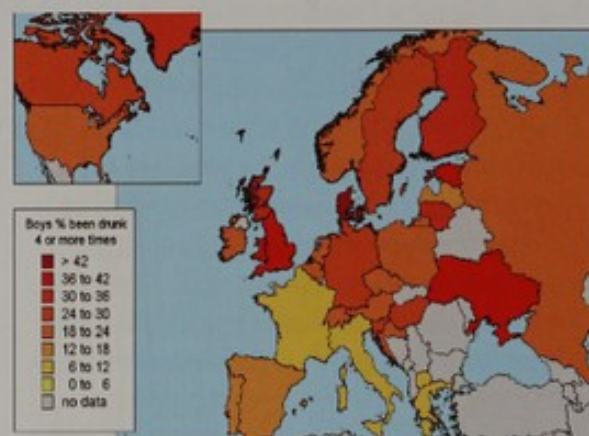
**Figure 2.3** Percentage of boys aged 15 who are weekly drinkers (HBSC 2001–02)<sup>13</sup>



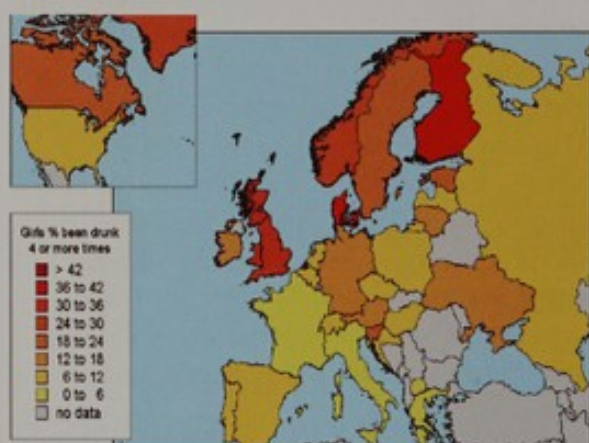
**Figure 2.4** Percentage of girls aged 15 who are weekly drinkers (HBSC 2001–02)<sup>13</sup>



**Figure 2.5** Percentage of 15-year-old boys ever drunk four or more times (HBSC 2001–02)<sup>13</sup>



**Figure 2.6** Percentage of 15-year-old girls ever drunk four or more times (HBSC 2001–02)<sup>13</sup>



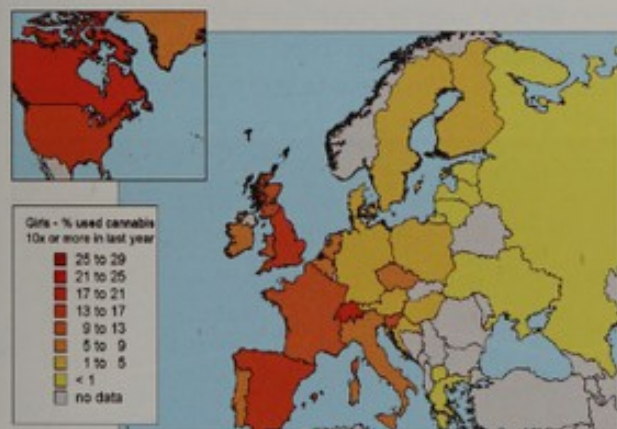
**2.5** The prevalence of cannabis use in the UK is among the highest in Europe and similar to that found in other Western European countries such as France, Switzerland and Spain (Figures 2.7 and 2.8).



Figure 2.7 Percentage of 15-year-old boys who used cannabis ten times or more in the past year (HBSC 2001–02)<sup>13</sup>



Figure 2.8 Percentage of 15-year-old girls who used cannabis ten times or more in the past year (HBSC 2001–02)<sup>13</sup>



**2.6** Gender differences in the prevalence of drinking and drunkenness and the age at initiation of smoking are smaller in the UK than those generally found in Europe and North America. Elsewhere in Europe and in North America, boys report earlier initiation of smoking. They are also more likely than girls to drink and to exhibit drunkenness. UK gender differences in smoking (where girls report higher prevalence than boys) and cannabis use (where boys report a higher prevalence than girls) are in line with the pattern in northern Europe and contrast with what is found in southern and eastern Europe.

## Trends in hazardous drug use by 11–15-year-olds in the UK

**2.7** The latest survey of drug use among schoolchildren in England was carried out in 2005 and involved a representative sample of over 9,000 11–15-year-olds.<sup>14</sup> Similar surveys were carried out in 2003<sup>15</sup> and 2004.<sup>2</sup> The Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS), a study of 23,000 13- and 15-year-olds in Scotland was carried out in 2002<sup>16</sup> with a smaller repeat survey of 7,000 pupils being carried out in 2004.<sup>17</sup> Welsh data are from the 2001–02 HBSC survey,<sup>13</sup> and the Young Persons' Behaviour and Attitudes Survey (YPBAS) of 2003 has been used for Northern Ireland.<sup>18</sup> Direct comparisons between England, Scotland and Wales are made using the HBSC results, as the same questions were used in the different surveys. As the methods used for the YPBAS survey were different from those for the other countries, comparisons between Northern Ireland and the other three countries should be made with caution.

### Tobacco

**2.8** The prevalence of regular smoking by 11–15-year-olds in England has fluctuated since 1982 but has been quite stable (between 9% and 11%) since 1998. However, the overall rate masks a downward trend among boys – from 11% to 7% – whereas girls remain at 11%. The prevalence of smoking is also strongly related to age. In England, only 1% of 11-year-olds were regular smokers in 2005, compared with 16% of 15-year-old boys and 25% of 15-year-old girls. In Scotland, 16% of 15-year-old boys and 23% of girls were regular smokers. In Wales, 16% of 15-year-old boys and 27% of girls were regular smokers. In Northern Ireland, the comparable figures were 35% of 15-year-old boys and 41% of 15-year-old girls, apparently much higher than in the rest of the UK.<sup>18</sup>

**2.9** There is evidence that many regular smokers are already addicted to nicotine by the time they are 15. In the English 2004 survey, among pupils who



## Patterns and trends in the hazardous use of tobacco, alcohol and other drugs by young people in the UK

had been smoking for over a year, 76% felt it would be difficult not to smoke for a week and 88% thought it would be difficult to give up altogether.<sup>2</sup> Among those who had been smoking for up to a year, 65% thought it would be difficult to stop altogether. In Scotland, 71% of 15-year-olds who were regular smokers said they wanted to give up and, of these, most had tried but not succeeded. Perceived difficulty in stopping increased greatly with the length of time pupils had been smoking and with the number of cigarettes smoked per week: more than half the pupils who reported smoking more than 70 cigarettes per week felt they would find it very difficult to stop smoking compared with only 5% of those who reported smoking fewer than seven cigarettes per week.<sup>16</sup>

### Alcohol

**2.10** In England over the period 1988 to 2005 there has been no clear trend in the prevalence of weekly

drinking among boys or girls, with rates fluctuating from 42% to 54% among 15-year-old boys and from 36% to 55% among 15-year-old girls (Figure 2.9).<sup>2,17</sup> More girls than boys are now weekly drinkers from age 13 upwards. In Scotland there has been a clearer upward trend: between 1990 and 2004, weekly drinking increased from 30% to 40% among 15-year-old boys and from 25% to 46% among 15-year-old girls. In Scotland, 2004 was the first year in which more 15-year-old girls than boys were weekly drinkers. In Wales, in 2002, 58% of boys and 52% of girls were weekly drinkers. In Northern Ireland, in 2003, 37% of 15-year-old boys and 36% of girls reported weekly drinking. Thus, weekly drinking appears highest in England and Wales and lowest in Northern Ireland. Among pupils in England who drank in the last week, average alcohol consumption has risen from 5.3 units per week in 1990 to 10.7 units in 2004, with little difference between boys and girls.

**Figure 2.9** Drinking in past week by 15-year-olds in England and Scotland<sup>2, 17</sup>





## **Drunkenness and other signs of hazardous drinking**

**2.11** The most recent HBSC surveys and the Northern Ireland YPBAS surveys show that by the age of 15 about a third of young people in the UK have already been drunk at least four times. There appears to be little difference between the four UK countries but all show a much higher proportion than the average for Europe. Slightly more boys than girls report drunkenness in all countries except Scotland. We were unable to find survey data to examine the longer-term trends in the prevalence of drunkenness among young people in the UK.

**2.12** SALSUS asked a number of questions about whether and how often pupils had been drunk or had experienced potentially harmful effects of alcohol (vomiting, fighting, injury, absences from school, use of other drugs and unprotected sex).<sup>17</sup> Among 15-year-olds who had drunk alcohol, 61% had experienced at least one of the harmful effects listed above in the past year, and 21% three or more. The most common were vomiting (49%) and having an argument or a fight (34%). Seventeen per cent of girls and 12% of boys reported having had unprotected sex when under the influence of alcohol.

## **Other drug use**

**2.13** The proportion of 15-year-old boys in England who reported taking illegal drugs in the last month appeared to rise from 19% in 1998 to 25% in 2001 and remained steady over the next two years.<sup>15</sup> The trend for 15-year-old girls was similar, rising from 16% in 1998 to 22% in 2001 and 2003. However, these apparent rises are likely to have been due to a change in the questions used in the surveys for 1998 and 2001. In Scotland, between 1998 and 2004 the proportion of pupils reporting use of illegal drugs in the past month fell from 26% to 21% among 15-year-old boys and from 22% to 20% among 15-year-old girls.<sup>17</sup> Monthly use by 13-year-olds in Scotland remained steady at 11%. There is much less information about frequent use of drugs at this age. Among 15-year-olds in England in 2004, 4% of boys and 2% of girls reported using drugs other than tobacco and alcohol on most days.<sup>2</sup>

Equivalent data for Scotland, Wales and Northern Ireland are not available.

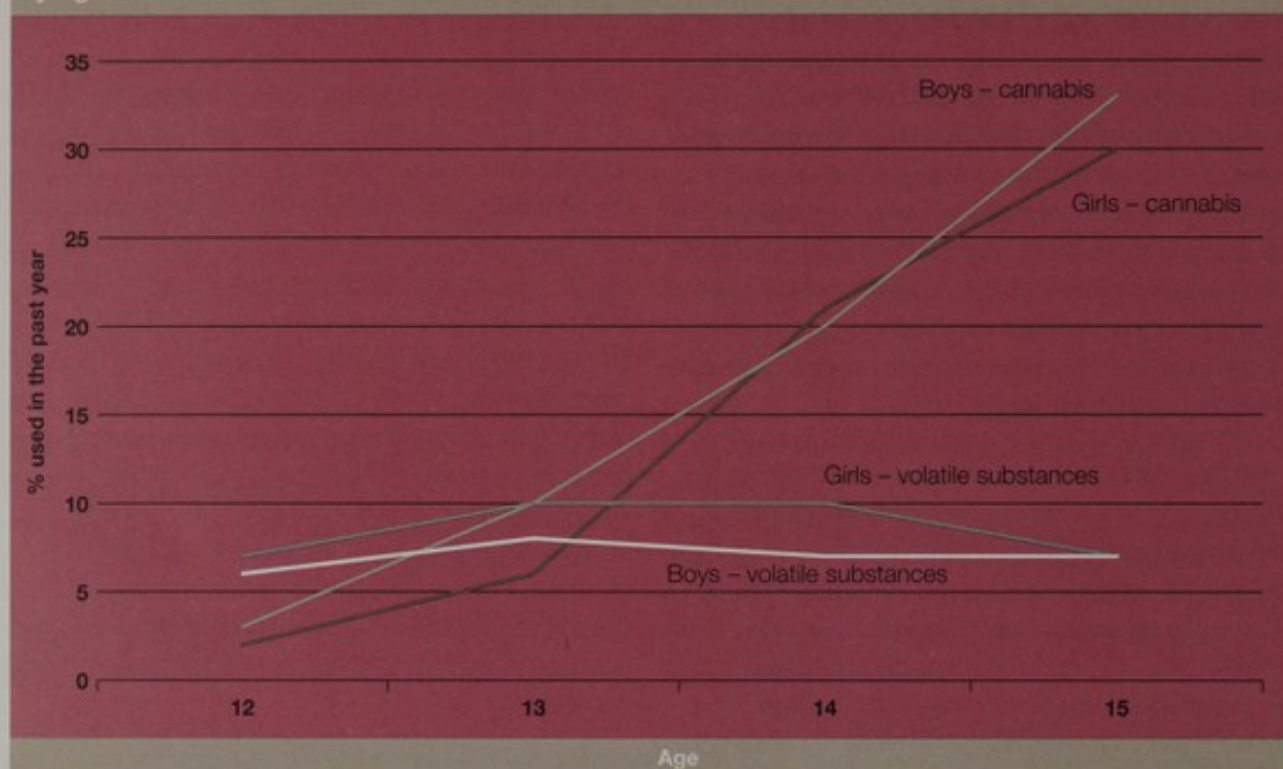
**2.14** The picture of use of individual drugs by schoolchildren is complex, given the large number of different drugs. In England, at the age of 12 or 13, volatile substances are the most commonly used. By 14, cannabis is firmly established as by far the most commonly used drug other than tobacco and alcohol (Figure 2.10).<sup>15</sup> In England among 15-year-olds in 2004, 27% of boys and 26% of girls reported that they had used cannabis at least once in the past year.<sup>2</sup> Use of cannabis by age 15 appears slightly less common in Scotland and Wales. Use of other drugs by 11–15-year-olds is less common but increases with age. In England in 2004, 12% of 15-year-olds had used a stimulant in the past year, 5% a psychedelic drug and 2% heroin or other opiate.<sup>2</sup> Similar figures were reported from Scotland. Comparable data for Wales and Northern Ireland are not available.

## **Volatile substance abuse**

**2.15** Volatile substance abuse (VSA) has been of particular concern over the past 20 years because of the large numbers of sudden deaths, particularly among teenagers. In 1991, VSA caused more deaths among 10–18-year-olds in the UK than leukaemia or drowning.<sup>19</sup> In 1992, a national advertising campaign about the dangers of VSA was initiated and other measures to restrict access to solvents by under-18s were introduced. Since 1992, there has been a marked decline in the annual number of VSA deaths among under-18s but little change among the over-18s (Figure 2.11).<sup>12</sup> In 2003, there were only four deaths of under-16s compared with 36 in over-16s. Since 1992, the proportion of deaths caused by gas fuels (mainly butane gas for lighters) has increased from 36% to around 70% in 2003 and that of aerosols, glues and other sources has fallen from 64% to around 30%. Twenty-nine of the 35 gas fuel-related deaths in 2003 were among over-18s.

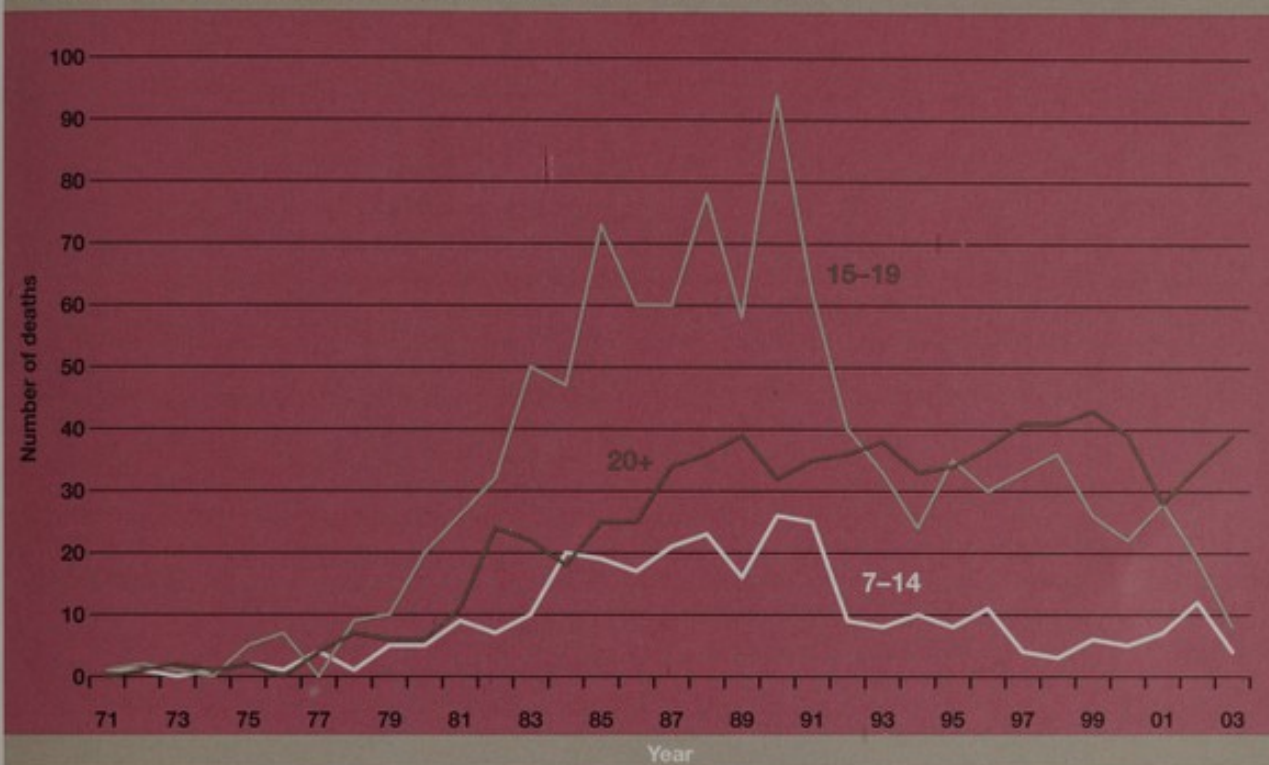
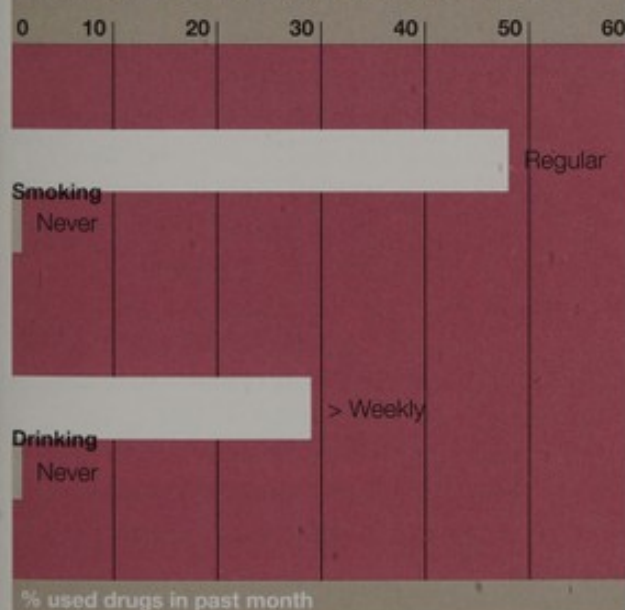


**Figure 2.10** Use of volatile substances or cannabis in the past year in England in 2003 by age and sex<sup>15</sup>

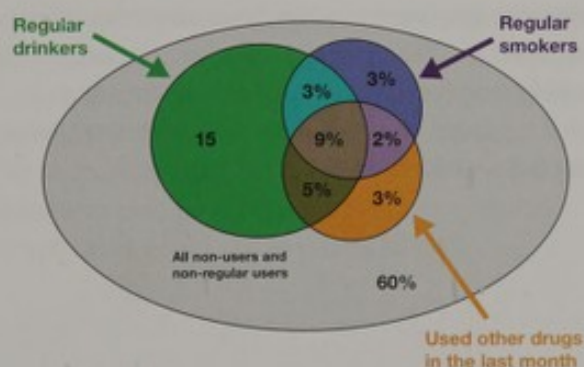


### Multiple drug use

**2.16** Schoolchildren aged 11–15 who are regular smokers or drinkers are much more likely than non-smokers or non-drinkers to use other drugs. Sixty-eight per cent of respondents in the English schools survey in 1999 who were both regular smokers and drinkers had used other drugs in the past month, compared with 28% of regular smokers who only drank occasionally and none of the pupils who had neither smoked or drunk alcohol. In Scotland, among 13-year-olds, almost half of all regular smokers and 30% of regular drinkers had used drugs in the past month, compared with only 1% of those who had never smoked or drunk alcohol (Figure 2.12).<sup>16</sup>

Figure 2.11 Age distribution of VSA deaths in the UK 1971–2003<sup>12</sup>Figure 2.12 Percentage of regular and non-smokers and drinkers who had taken drugs in past month: 13-year-olds in Scotland<sup>16</sup>

2.17 The proportions of 15-year-olds in Scotland in 2002 who used more than one drug are shown in Figure 2.13. This shows, for example, that 9% of all 15-year-olds were regular users of tobacco, alcohol and cannabis. Only 3% of the sample only smoked cigarettes, whereas 14% smoked cigarettes and regularly used one or more other drugs. Overall, 24% of the 15-year-olds in the Scottish sample were regular users of one or more drugs, rising to 43% of 15-year-olds.

Figure 2.13 Pattern of regular drug use among Scottish 15-year-olds<sup>17</sup>



**2.18** In England, regular smokers, drinkers and cannabis users were much more likely to have used Class A drugs (heroin, cocaine, amphetamines and ecstasy) in the past year than non-users, particularly if they had started to smoke, drink or use cannabis at an early age. For example, Class A drug use was reported by 40% of 15-year-old pupils who had started using cannabis at age 12 or earlier, compared with 9% of those starting at 14 and 1% of non-cannabis users. By contrast, there was a relatively weak relationship between the use of volatile substances and the use of alcohol, tobacco or other drugs.<sup>2</sup>

#### Differences between geographical areas

**2.19** The sample sizes of the English surveys were too small to make comparisons between smaller areas. The SALSUS study, with 23,000 respondents, was big enough to allow meaningful comparisons between local authority areas and between urban and rural areas in Scotland.<sup>13</sup> There was little evidence of much variation in prevalence of regular smoking, drinking or recent cannabis use between local authorities in Scotland. There were a few local authorities where the prevalence of an individual drug was significantly higher or lower than the national prevalence. Generally a local authority that had an extreme prevalence in one drug did not necessarily have an extreme prevalence of others. Only one local authority in Scotland broke this generalisation, having significantly lower prevalence of regular drinking and recent cannabis use, and a relatively low prevalence of regular smoking compared with national estimates.

**2.20** In Scotland, more rural areas (smaller settlement size and more remote settlements) were associated with increased prevalence of regular smoking (particularly among boys), drinking and recent cannabis use. In general, this relationship was weak but was strongest for smoking.

## Hazardous drug misuse in the UK by 16–30-year-olds

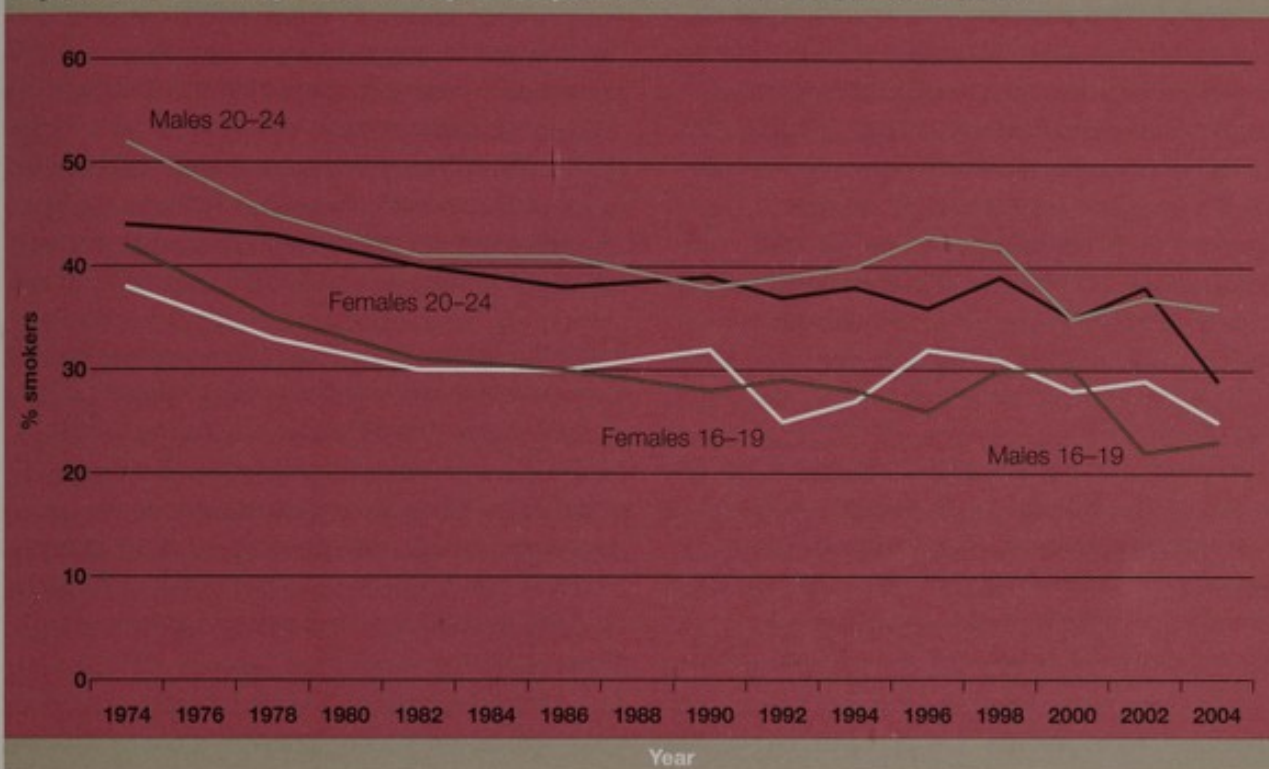
**2.21** The data about tobacco and alcohol use in this section are drawn from the General Household Survey of Great Britain (1974–2004),<sup>20</sup> the Health Survey of England 2003<sup>21</sup> and the Scottish Health Survey 2003.<sup>22</sup> Information on illegal drug use comes from the British Crime Survey (1996–2004/05)<sup>23</sup> and only includes data for England and Wales. The Scottish Crime Survey does include questions about drug use. However, as the Scottish samples for 2003 and 2004 only included 434 and 329 16–24-year-olds respectively (compared with 6,287 in the British Crime Survey), and because the focus of the analysis was on ever having used or used in the past year, we did not consider the results sufficiently reliable or relevant for inclusion. For full references and hyperlinks to these sources, see the references section at the back.

### Tobacco

**2.22** The prevalence rates in the above surveys are for daily smoking and cannot therefore be directly compared with the rates for 13- and 15-year-olds. Cigarette smoking among the adult population as a whole has almost halved since the early 1970s. The rate of decline slowed in the 1980s and then levelled out after 1990. Since the mid-1990s, prevalence has fluctuated (probably due to sampling variation) but has remained at just over one quarter: in 2003, 26% of adults were cigarette smokers. Men are slightly more likely than women to smoke cigarettes – the difference in most years has been about 2%.

**2.23** Among 16–24-year-olds, daily smoking rates have tended to fluctuate a little from year to year, mainly because of the relatively small sample sizes in this age group. This can make trends difficult to detect. There has only been a modest decline in rates since 1990 (Figure 2.14), and rates are broadly similar in the different countries of the UK. It is also worth noting that prevalence is higher among men than among women in most years, in both the 16–19 and the 20–24 age groups. This is in contrast to the situation among current 13–15-year-olds, where more girls smoke (Figure 2.15).<sup>20</sup>



Figure 2.14 Smoking rates among 16–24-year-olds in Great Britain 1974–2004<sup>20</sup>Figure 2.15 Smoking in England: weekly among 11–15-year-olds; and daily among 16–34-year-olds<sup>2,21</sup>

**2.24** The prevalence of cigarette smoking is currently higher in 20–24-year-olds than in any other age group. Prevalence is lower among those aged 16–19 than among those aged 20–24 (26% compared with 36% in 2003). The main reason for this is that up to their early twenties, more young people are starting to smoke than are giving up. Although many smokers start when still of school age, in 2003 about one in six current daily smokers started after the age of 20. Other research confirms that in the mid to late teens many individuals are still either starting or, in smaller numbers, stopping smoking.<sup>24</sup> Those who become daily smokers after 20 are likely to have been occasional smokers previously. After the early 20s, smoking prevalence tends to decline with increasing age, because although older people are more likely than younger people to ever have been smokers, they are also much more likely to have given up.



## Patterns and trends in the hazardous use of tobacco, alcohol and other drugs by young people in the UK

**2.25** Based on the current population and the prevalence of daily smoking, it is estimated that at present there are about 2.1 million regular smokers among the 6.8 million people aged 16–24 years in the UK. Among those who do smoke, the daily number of cigarettes smoked tends to increase with age. Those aged 16–19 smoke on average 11 cigarettes a day, compared with 14 for all adult smokers. Only 3% of all 16–19-year-olds and 5% of those aged 20–24 smoke 20 or more cigarettes a day, compared with 8% of all those aged 25 and over.

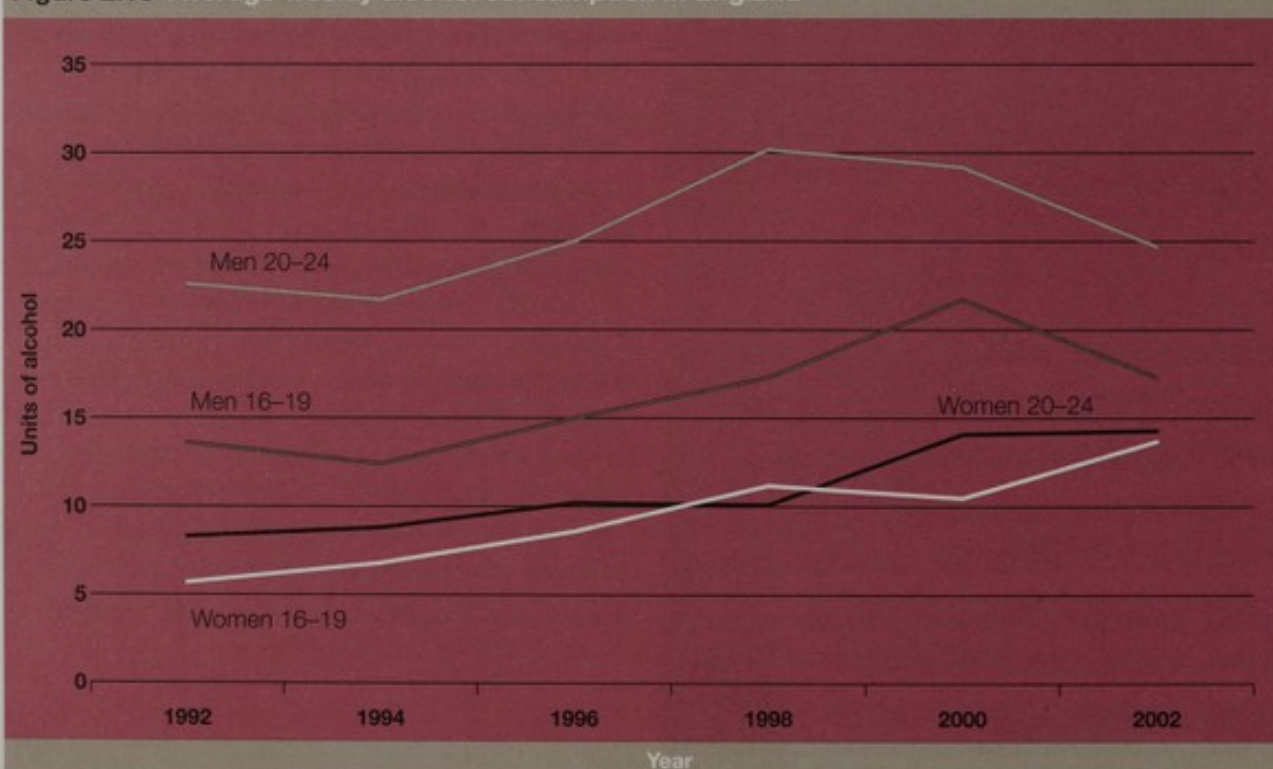
### Alcohol

**2.26** Drinking among the adult population in the UK as a whole has increased in recent years, while in other European Union countries such as France, Germany and Spain it has decreased. Overall alcohol consumption in the UK (excluding undeclared imports) rose by 20% from 9.7 to 11.7 litres of pure

alcohol per person per year from 1998 to 2002.<sup>25</sup> The UK now ranks ninth in the world for alcohol consumption. Average self-reported weekly consumption rose among men from 15.9 units in 1992 to 17.2 units in 2002, whereas the corresponding increase among women was from 5.4 to 7.6 units over the same period.<sup>20</sup> These figures also show that the difference in consumption between men and women is narrowing.

**2.27** As with smoking, alcohol consumption tends to peak in the early twenties and then fall with increasing age. The difference in consumption by men and women is much smaller for 16–19-year-olds than for other age groups and has been narrowing. In 1992, men aged 16–19 drank about 8 units a week more than women of the same age; by 2002, the difference had reduced to three units (Figure 2.16).<sup>20</sup>

**Figure 2.16** Average weekly alcohol consumption in England<sup>20</sup>



**2.28** Over the decade from 1992, average weekly alcohol consumption increased among 16–24-year-olds, although there was the suggestion of a decline among men in that age group between 1998 and 2002.<sup>20</sup> The proportion of women of this age drinking over the recommended weekly limits doubled from 17% in 1992 to 33% in 2002. Average weekly consumption by women in this age group also doubled from 7.3 to 14.1 units during the same period (Figure 2.16). Young people aged 16–24 are much more likely to exceed the recommended daily limits than older adults. Among those drinking alcohol in the last seven days, 57% of 16–24-year-old males drank at least eight units on at least one occasion, compared with 35% of 45–54-year-olds and 16% of 65–74-year-olds. Among 16–24-year-old females, 45% consumed six units on at least one occasion, compared with 19% of 45–54-year-olds and 4% of 65–74-year-olds. The disparity between younger and older women is notably larger than between younger and older men. It is thus estimated that currently around 1.9 million of the 6.8 million people aged 16–24 in the UK drink at least twice the recommended daily upper limit at least once a week.<sup>20</sup>

**2.29** The proportions of young people drinking more than 50 (men) and 35 (women) units a week also increased over the decade 1992–2002. In 2002, among those aged 16–19, 9% of males drank on average more than 50 units a week, and 10% of females drank more than 35 units a week, compared with only 5% and 2% respectively in 1992.<sup>20</sup>

**2.30** Young people are also much more likely to be drunk than older adults. In Scotland in 2003, 40% of current male drinkers aged 16–24 reported being drunk at least once a week in the past three months, compared with 21% of men aged 35–44 and 7% of 65–74-year-olds. The corresponding figures for women were 28% of 16–24-year-olds, 10% of 45–54-year-olds and 1% of 65–74-year-olds.<sup>22</sup>

### Other drugs

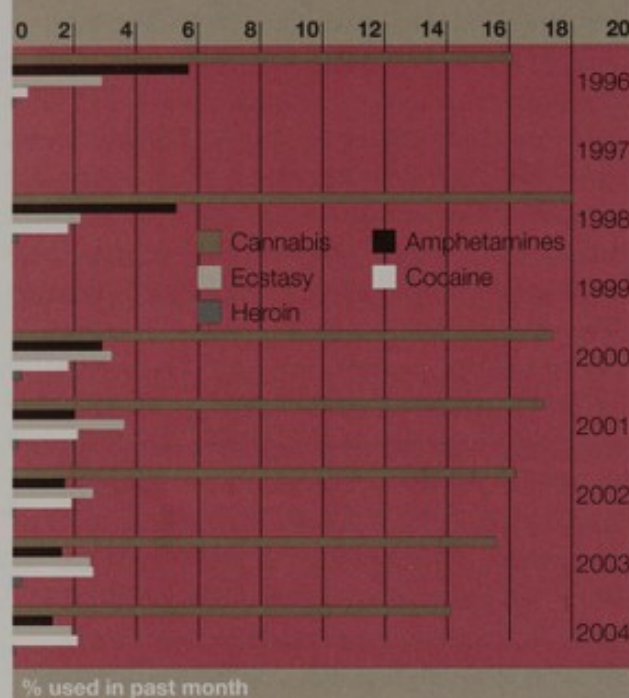
**2.31** Regular use of other drugs remains much less common among young people than use of tobacco or alcohol. However, compared with smoking and drinking, use of other drugs is much more common among young people than older generations. In 2004–05, 16% of 16–24-year-olds had used one or more other drugs in the last month and 26% in the last year, compared with 7% and 11% respectively of all 16–59-year-olds.<sup>23</sup> Thus around 1 million 16–24-year-olds have used at least one drug in the past month. Cannabis is by far the most popular, with 14% of 16–24-year-olds in 2004–05 reporting that they had used cannabis in the last month. The next most commonly used drugs – cocaine, ecstasy and amphetamines – had been used in the past month by only 2.1%, 1.9% and 1.3% of respondents respectively. One of the major limitations of these data is that usage of at least once a month does not enable us to identify the proportion of people who are using other drugs at levels likely to be hazardous – daily or at least several times a week. Data on weekly or daily use appear not to exist.

**2.32** Figure 2.17 shows the trends in self-reported use of other drugs in the past month among 16–24-year-olds since 1996.<sup>23</sup> There has been a statistically significant downward trend in the use of cannabis since 1998. Cannabis was reclassified from Class B to Class C in January 2004.<sup>11</sup> In the first year after the change, the gentle decline in reported cannabis use continued. However, it is too early to say whether or not this encouraging trend is because or in spite of the reclassification. The self-reported use of amphetamines in the past month has also shown a significant decline – from 5.7% in 1996 to 1.3% in 2004–05. The only drug showing a significant increase is cocaine, with at least monthly use rising from 0.5% to 2.6% between 1996 and 2003–04 but falling to 2.1% in 2004–05.<sup>23</sup>



## Patterns and trends in the hazardous use of tobacco, alcohol and other drugs by young people in the UK

**Figure 2.17** Trends in self-reported use of illegal drugs by 16–24-year-olds in England and Wales<sup>23</sup>



### Multiple drug use

**2.33** A significant proportion of 16–24-year-olds in England and Wales use more than one drug other than tobacco or alcohol. The British Crime Survey of 2003–04 found that 25% of 16–24-year-olds taking illegal drugs in the past year had used two or three different drugs, 9% had used four or five and 5% had used six or more.<sup>26</sup>

**2.34** The West of Scotland Twenty-07 study (see paragraph 4.9) appears to be the only representative sample of young people aged 16–30 in the UK that provides data about multiple drug use, including tobacco and alcohol. A sample of around 1,000 people aged 15 at recruitment have been followed up since 1987. The proportion of current smokers who also drank and/or used other drugs increased with age, peaking when respondents were 23 years old (in 1995). Smoking was more likely to occur in combination with illegal drugs than drinking, this effect being particularly marked at 23, when 12% of the sample reported current smoking and using illegal drugs in the last year (but not drinking

excessively). Only 2% reported smoking and drinking over recommended levels (but not using other drugs). Finally, while almost none reported combined use of tobacco, alcohol and at least one other drug at 15, the rate was 6% at 18, 8% at 23, and 5% at 30 years old. The particularly strong relationship between smoking tobacco and using other drugs, especially cannabis, is consistent with the analysis of the SALSUS survey of 15-year-olds in Scotland.<sup>17</sup>

## Implications: information gaps

**2.35** There is a good deal of recent data about tobacco, alcohol and other drug use by 11–15-year-olds in the UK. We strongly **recommend** that periodic, large-scale surveys of representative samples of this age group should continue, with coverage across the whole of the UK, using the same definitions and questions regarding tobacco, alcohol and other drug use, including volatile substances.

**Action:** DH, DfES, Home Office, devolved administrations.

**2.36** In the existing surveys, there is a lack of data on the frequent (daily or weekly) use of drugs other than tobacco or alcohol. Consequently, it is very difficult to identify the proportion of young people who are using such drugs at a genuinely hazardous level. We thus **recommend** that future surveys of 11–15-year-olds should include questions about weekly and more frequent use of drugs other than tobacco or alcohol.

**Action:** DH, DfES, Home Office, devolved administrations.

**2.37** There is no current large-scale survey of young people aged over 16 in the UK which simultaneously collects information about tobacco, alcohol and other drug use. This means that there is a serious lack of information about the extent to which young people are combining the use of tobacco and/or alcohol with other drugs. We therefore **recommend** that the Health Survey of England and its equivalents

in Scotland, Wales and Northern Ireland should include a small number of identical questions about the use of drugs other than tobacco and alcohol, including volatile substances.

**Action:** DH, devolved administrations.

**2.38** Overall, there is a dearth of reliable information about the hazardous use of tobacco, alcohol and other drugs by young people in the 16–30 age group in the UK, and the extent to which this causes subsequent problems. We **recommend** that a longitudinal follow-up lifestyle study of a representative sample of this age group should be commissioned to enable drug use to be seen in the wider context of their lives.

**Action:** DH.





The availability of tobacco, alcohol and other drugs to young people in the UK and the impact of controls, pricing and marketing





# The availability of tobacco, alcohol and other drugs to young people in the UK and the impact of controls, pricing and marketing

## Key points

- The use of drugs by children and young people largely reflects the extent to which they are made available by adults – socially or through legal or illegal markets.
- Tobacco, alcohol and other drugs are currently widely available to young people of school age through social contacts and illegal commercial activities.
- Recent upward trends in the use of alcohol and illegal drugs have occurred in parallel with their becoming increasingly affordable.
- Despite the ban on advertising and sponsorship, tobacco companies continue to seek ways of marketing their products.
- Alcohol companies have considerable freedom to market their products to young people using the full panoply of product development, advertising and other techniques.
- Increasing the retail price of tobacco and alcohol, which can most readily be achieved by increasing taxation, is likely to reduce their use among young people.
- Vigorously enforcing the law on minimum purchase ages is likely to reduce young people's use and hazardous use of alcohol, and perhaps of tobacco.
- Making alcohol more widely available for sale may lead to increased consumption among young people.
- Intervening in illegal drug markets has not been clearly shown to influence the patterns of drug use among young people.

**3.1** In Chapter 2 we have shown that large numbers of children and young people in the UK are using tobacco, alcohol and other drugs in hazardous ways. In order to use drugs, they must first be able to acquire them. This is largely influenced by how readily they are available, which is ultimately determined by the adults involved in their production and marketing, and the regulation and control of these. Adults also bear the responsibility, actively or inadvertently, for making drugs more or less attractive to children and young people. In this chapter we look at the contribution of these factors to the development of hazardous patterns of use among young people in the UK. We will consider price and taxation, importation, licensing, sales practices, marketing strategies and illegal markets. We considered that the manufacturing process and related factors such as production subsidies or crop substitution were beyond the scope of this report.

## Tobacco

### Availability and underage sales

**3.2** Tobacco is widely available for sale from retail outlets across the UK. Tobacco is an age-restricted product and it is an offence to sell to anyone under 16 years of age. However, surveys of schoolchildren indicate that 12–15-year-olds have little difficulty in obtaining cigarettes from numerous different sources – purchased from shops, most often newsagents; purchased from friends or relatives; and given by friends or relatives.<sup>2,15,16</sup>

**3.3** Regular and older smokers are most likely to buy cigarettes from shops. However, in recent years there has been an increase in the proportion of schoolchildren reporting they have been refused the sale of cigarettes.<sup>27</sup> Friends and relatives have therefore become an increasingly important source of cigarettes. For younger, occasional smokers this is the most important source and a survey of 15-year-olds in the West of Scotland found that only 10% reported buying their first cigarette.<sup>28</sup>



**3.4** Evidence from the US suggests that more stringent underage sales policies are associated with lower youth smoking rates.<sup>29</sup> Reviews also concur that the vigorous enforcement of the minimum legal purchase age combined with high compliance by retailers is more effective in reducing illegal sales than unenforced voluntary agreements or retailer education.<sup>30</sup> However, as shown by intervention studies,<sup>31</sup> the impact of vigorous enforcement of the minimum legal purchase age on actual smoking behaviour is weaker, probably because young people obtain cigarettes from a variety of different sources.

### The impact of price

**3.5** Compared with the rest of Europe, the cost of tobacco products in the UK is high. Econometric studies, which combine data on tobacco sales and tobacco prices to determine the price elasticity of demand, have found that the demand for tobacco is sensitive to price change. It is estimated that, in higher-income countries, a 10% increase in the price of cigarettes will lead to a 4% reduction in demand or consumption.<sup>32</sup> Furthermore, young people may be up to three to four times more price sensitive than older adults. A recent systematic review concluded that price affected both the number of young smokers and the amount of tobacco consumed.<sup>33</sup>

### Smuggled tobacco

**3.6** The availability of much cheaper, smuggled tobacco products – both cigarettes and loose tobacco – which are widely available for sale from vans and at open-air markets across the UK has the potential to undermine the impact of pricing and sale control measures currently in place. However, although customs activity can reduce smuggled cigarettes' share of the domestic market, there is no direct evidence regarding the impact of this activity on tobacco consumption by adults or young people. On the other hand, in Canada the downward trend in teenage smoking prevalence was reversed in provinces where there was a substantial cut in tobacco taxes in order to make smuggled tobacco less attractive.<sup>34</sup> This suggests that the availability of smuggled tobacco may not have much influence on tobacco use by young people.

### Tobacco advertising and marketing strategies

**3.7** The tobacco industry worldwide invests vast resources on the marketing of its products. Tobacco advertising was banned in the UK and the rest of Europe in 2002 and tobacco sponsorship came to an end in 2005. The impact of this development is yet to become clear. However, the marketing of tobacco products in the UK continues through a variety of communications and promotional devices. Cigarettes are still prominently displayed in thousands of supermarkets, newsagents, petrol stations and other points of sale.

**3.8** There is a growing body of research on the impact of tobacco advertising on youth smoking. Lovato and colleagues<sup>35</sup> conducted a meta-analysis of nine cohort studies and found "a positive, consistent and specific relationship" between exposure to tobacco advertising and the subsequent uptake of smoking among adolescents. In all the studies, non-smoking adolescents who were more aware of tobacco advertising or receptive to it were more likely to have experimented with cigarettes or to become smokers at follow-up. Other studies have found a positive association between smoking and awareness of and appreciation of tobacco advertising among young smokers than their non-smoking peers.<sup>36,37</sup> Furthermore, adolescents appear to be more receptive to tobacco advertising than adults.<sup>38,39</sup> Although a causal relationship cannot be inferred, the association is consistently in the same direction and tends to support the hypothesis that advertising encourages young people to continue smoking as well as to start.

**3.9** Studies of a variety of other tobacco marketing communications and promotional devices, including point of sale advertising, packaging, brand stretching, loyalty schemes, free samples and the internet, have shown a similar relationship with youth smoking as tobacco advertising. One major study examined young people's awareness of and involvement with all existing forms of tobacco promotion.<sup>40</sup> The authors found that smokers had more involvement with tobacco promotions than non-smokers and the heavier the smoker, the greater the involvement. This cumulative impact suggests that integrated



marketing communications are an effective way of influencing adolescent tobacco use.

## Alcohol

### Availability and underage sales

**3.10** Like tobacco, alcohol is an age-restricted product, available for sale from licensed premises to adults aged 18 years or older. It is an offence for under-18s to buy or attempt to buy alcohol or for anyone to sell alcohol to under-18s. However, under-18s may consume alcohol at home and adolescents aged 16 and 17 years may be bought alcohol (excluding spirits) to drink with a meal.

**3.11** Young people's drinking begins most often in the home with their parents. Most 13-year-olds who drink regularly are allowed to drink at home.<sup>16</sup> After that age, drinking shifts to less controlled locations with friends, for example, at parties or outdoors, before moving into pubs and clubs at around 14 or 15 years of age. Up to half of 12- to 15-year-olds who have consumed alcohol say that they never buy it.<sup>15,16</sup> Younger drinkers are most likely to acquire alcohol from friends or relatives, but by the age of 15 a substantial minority report buying alcohol from pubs, off-licences or shops.<sup>41</sup> Girls are more likely to be able to buy alcohol. In recent years buying from off-licences has declined in favour of buying from friends and relatives.<sup>16,27</sup> By the age of 16–17, most drinkers usually buy alcohol themselves, and 80% of 18- to 24-year-old drinkers say they usually drink in a pub or bar.<sup>42</sup>

**3.12** Raising the minimum purchase age for alcohol is associated with reductions in young people's alcohol consumption and in alcohol-related road crashes involving young drivers.<sup>43,44</sup> As with tobacco sales, enforcement substantially increases the effectiveness of the law. Most of this evidence comes from American studies of changes in the minimum purchase age between 18 and 21 years, but a recent Danish study has also shown decreases in alcohol consumption and drunkenness among secondary school pupils following the introduction of a minimum purchase age of 15 in 1998 where previously there had been none.<sup>45</sup>

### Impact of price

**3.13** The price of alcohol has halved in real terms over the last 20 years and available data on per capita consumption indicate that consumption has risen in line with increased affordability. Reviews of econometric evidence agree that demand for alcohol is sensitive to changes in price.<sup>44</sup> In the UK demand for beer consumed on the premises is sensitive to price, but less so than demand for wine or spirits, or off-licence beer sales.<sup>43</sup> Many studies have shown that price rises have the greatest effect on those who drink more than average but not on the very heaviest drinkers.<sup>46</sup> Some reviews have also concluded that young people may be more sensitive to price than older adults, although this is not a consistent finding.<sup>43</sup>

**3.14** An inverse relationship has also been found between the price of alcohol and alcohol-related harm, with higher prices associated with lower drink-driving convictions and fatal road crashes among young people, as well as a lower prevalence of problem drinkers and deaths from liver cirrhosis in the general population.<sup>44</sup> However, there is little evidence about the effect of price on binge drinking.

### Licensing and server training schemes

**3.15** In the UK over the last 20 years there has been an increase in the density and size of licensed premises, particularly in city centres, and a lengthening of opening hours. Evidence about the effects of licensing interventions is quite limited and comes mostly from Nordic and US studies related to state monopolies on alcohol supply. However, several studies have shown that major relaxation in controls on the number and density of sales outlets was associated with an increase in beer consumption and/or total alcohol consumption, while consumption fell when controls were re-introduced.<sup>47</sup> One study also found that drunkenness and alcohol-related hospital admissions rose following an increase in outlet density. US studies have also found a positive association between the density of outlets in states and total alcohol consumption and the number of fatal road crashes, but these latter findings do not provide clear evidence of causation.<sup>48</sup> The effects of



marginal changes in availability when alcohol is already widely available are much less clear.<sup>47</sup>

**3.16** Changes in licensing hours can affect where and when people drink, and may also affect total alcohol consumption. The relaxation of Scottish licensing laws in 1976 was associated with reductions in convictions for underage drinking and for drunkenness among 19- to 26-year-olds, but overall, evidence that changes in licensing hours affect total alcohol consumption is mixed, and very limited for young people.<sup>49</sup>

**3.17** Finally, there is also some evidence that intensive staff training in responsible service practices, when accompanied by strong management support and rigorous enforcement, can be effective in reducing underage sales and in reducing the level of intoxication among customers.<sup>43</sup> Unenforced voluntary codes of practice have not been shown to be effective.<sup>44</sup>

### Advertising and marketing strategies

**3.18** Compared with tobacco there has been considerably less research into the impact of alcohol marketing strategies. Nevertheless, there is some evidence from cross-sectional studies that underage drinkers are more aware, familiar and appreciative of alcohol advertising than their non-drinking peers.<sup>50</sup> Furthermore, these associations are not related to other factors known to be linked with underage drinking (such as age and alcohol consumption by parents or peers) or those that might explain an attraction to television advertising. A similar association has also been found with young adult drinkers.<sup>51,52</sup>

**3.19** Longitudinal studies have also shown a positive relationship between the recall of alcohol-related mass-media communications at ages 13 and 15 and alcohol consumption at the age of 18<sup>53</sup> and between beer brand allegiance and liking of alcohol advertisements at age 18 and beer consumption at the age 21.<sup>54</sup>

### Product development and the marketing mix

**3.20** Since the 1990s there has been a rapid increase in the number and range of alcoholic

products available. This diversification has been accompanied by a variety of marketing strategies, largely targeted at young people. Research on fortified fruit wines and dry white ciders in Scotland in the mid-1990s showed how they met perfectly the needs of underage drinkers and were consumed disproportionately by under-16s. This consumption was also independently related to problems such as violence and drunkenness.<sup>55</sup> There is little evidence about the impact of alcohol marketing but it is also difficult to imagine that new products such as shots, which are designed as "chasers" to be drunk in addition to other alcoholic products, can do anything other than increase consumption. Indeed one leading brand, Sidekick, even comes in a pack that can be clipped onto the "main" drink – whether it be in a glass or a bottle.

**3.21** Commentators have also speculated about the importance of imagery. Forsyth<sup>56</sup> argues that in the 1990s the alcohol industry recognised the importance of the expanding drug and rave culture and incorporated drug imagery from the rave scene into its advertising. He refers to style magazines of the time stating that one brand was attempting to "woo young people through rave imagery", and that another's advertising had a "strange ambient club feel, a bit druggy".

**3.22** Another aspect of alcohol marketing is drink promotions such as "two-for-one" offers, money-off coupons and happy hours. There is little direct evidence on their impact but, taking into account the known impact of price on alcohol consumption, it seems reasonable to assume that price reductions and special offers, when used as a marketing tool, will also increase consumption.<sup>57</sup>

## Illegal drugs

### Availability

**3.23** It is a criminal offence under the Misuse of Drugs Act (1971) to supply or possess a controlled drug except for approved medical purposes. The legislation defines three classes of controlled drug, classified according to their perceived harmfulness when they are misused, with Class A being the most



dangerous. Class A drugs attract the highest penalties for unlawful manufacture, supply or possession (see Figure 1.3). Volatile substances are not controlled under the Misuse of Drugs Act (1971), but they are age-restricted goods and it is a criminal offence to sell solvents and cigarette lighter refills to anyone under the age of 18.

**3.24** In spite of these controls, surveys indicate that about one-third of 13-year-olds and two-thirds of 15–24-year-olds in the UK perceive illegal drugs, particularly cannabis, as easy or fairly easy to obtain.<sup>16,58</sup> Furthermore, access is perceived to be easier than in many other European countries. This, combined with falling drug prices in the UK (in real terms), tends to suggest that illegal drugs are more available here than in many other countries. By the age of 15 years, two-thirds of young people in the UK report having been offered a drug, most commonly cannabis, and at least 10% report having been offered heroin, cocaine or crack-cocaine.<sup>15,16</sup>

**3.25** Drugs are distributed through open, semi-open (clubs and bars) and closed drug markets. Closed drug markets are those in which drugs are only sold to known customers, with deals often made by mobile phone.<sup>59</sup> A relatively recent open drug market is the internet where there is already a large and growing number of websites devoted to the sale of illegal drugs. At present, there are very few data to indicate to what extent these are currently used by young people in the UK to obtain drugs.

**3.26** First or occasional users of illegal drugs, particularly cannabis, are usually given by or shared with friends or relatives, whereas regular users usually buy their own.<sup>1</sup> Users aged 10–15 typically obtain drugs from people well known to them — initially from relatives or older friends, and subsequently from peers — who have their own sources of supply. However, a substantial minority may acquire drugs from contacts less well known to them.<sup>16</sup> Two-thirds of 15-year-olds say they know of somewhere they can easily buy cannabis, most commonly the house of a dealer; a quarter say that cannabis can easily be bought at school.<sup>1</sup>

### Impact of price

**3.27** Street prices of some illegal drugs vary quite considerably within the UK, but it has not been possible to link variations in drug use by young people to local variations in prices.<sup>60</sup> Short-term fluctuations in price and supply are a normal feature of some drug markets, particularly heroin. Recent evidence from Australia indicates that a heroin “drought” in 2000–01 was associated with an increase in price and a decrease in purity of street heroin.<sup>61</sup> There was a decrease in the quantities injected and the incidence of heroin-related ambulance calls and overdoses. However, some injecting users reported substituting other drugs, notably cocaine.

**3.28** Various studies have found inverse associations between drug prices and demand for drugs, including young people's demand for cannabis.<sup>62</sup> Increased drug prices have also been found to reduce the probability that arrestees will test positive for cocaine, and the incidence of heroin- and cocaine-related attendances at accident and emergency departments.<sup>63,64</sup>

### Impact of drug controls

**3.29** There is little good recent evidence about the impact of drug control measures on the availability of drugs, levels of drug use, or even drug prices.<sup>64</sup> However, the suggestion that scaling down the police and army presence in Northern Ireland in the 1990s may have favoured the development of the illegal drug trade is supported by new evidence of an increase in young people's drug use following the ceasefires.<sup>65</sup>

**3.30** The Netherlands is unusual in that cannabis is legally available for sale to people aged 18 and over in coffee shops. The evidence about whether or not this *de facto* legalisation may have influenced cannabis use is mixed.<sup>66</sup> A recent study comparing experienced cannabis users in Amsterdam and San Francisco (where the supply and use of cannabis is illegal and subject to enforcement) found no difference in the average age of onset or pattern of cannabis use, but users in Amsterdam were much less likely to report having used other illegal drugs.<sup>67</sup>



**3.31** A recent 100 kg heroin seizure in Canada had no discernible effect on the patterns of drug use among established injecting users, suggesting much larger quantities were available on the illegal market.<sup>68</sup> Recent reviews (including one systematic review) of enforcement activities in local drug markets have found little or no evidence that these have had any effect on levels of drug use.<sup>69,70</sup>

Dealers may respond to increased enforcement by changing personnel, buyers may take more care to avoid detection, and markets may be relocated or transformed from open to closed patterns of trading.

**3.32** The introduction in 1992 of measures to restrict the sale and discourage the misuse of volatile substances may have contributed to a subsequent decline in deaths attributable to certain types of product, but the effects of these control measures on overall volatile substance abuse is not clear.<sup>12,71</sup>

**3.33** Cannabis was reclassified in the UK from Class B to Class C in 2004. The British Crime Survey of 2004/05 showed that the gentle decline in the prevalence of cannabis users continued after the reclassification.<sup>23</sup>

## Implications of the findings for policy

**3.34** The current legal age of purchase of tobacco (16 years) was affirmed by legislation in 1933 in England, Wales and Northern Ireland and in 1937 in Scotland. At that time neither the addictiveness of nicotine nor the harmful effects of smoking were known. Given what is now known about tobacco, and the continuing large number of young people who are becoming addicted to nicotine, it seems entirely unjustified that such a dangerous drug, clearly labelled as lethal, should still be sold to minors. Although there is a lack of evidence from other countries that raising the age of legal sale in and of itself reduces the prevalence of smoking, we consider that to leave it unchanged would be inconsistent with the range of other tobacco control measures now in place or imminent. These include the continued increase in the relative price of

cigarettes, the ban on advertising, and legislation to ban smoking in enclosed public places. We therefore **recommend** that it should become an offence to sell tobacco products to anyone under the age of 18 (raised from the present age of 16), and this new limit should be strictly enforced. The impact of this change should be carefully evaluated.

**Action:** *DH, devolved administrations.*

**3.35** Legislation prohibiting smoking in enclosed public places came into effect in Scotland in March 2006 and similar legislation is expected to follow in England, Wales and Northern Ireland in the near future. By reducing the visibility of smokers and projecting a more negative image of smoking, it is hoped that these new regulations will discourage smoking by young people. Time will tell if this happens.

**3.36** In Chapter 2 we have shown that of all the psychoactive drugs, it is the use of alcohol by young people which has shown the most worrying trend. The ease with which teenagers well under the legal age can acquire alcohol, the growing frequency with which many become drunk on a regular basis, and the rising average consumption by girls in particular should all be a matter of grave concern. Set against a background of rapidly rising alcohol-related diseases, such as liver cirrhosis, and the links between alcohol and violent crime (see paragraph 1.10), the future looks bleak unless effective action can be taken. While controls on the availability, pricing and marketing of tobacco have been progressively tightened in recent years and those on illegal drugs were already highly restrictive, alcohol has become more readily available and cheaper and is widely advertised. The boxes that follow show the actions proposed in the alcohol action plans for England, Scotland and Northern Ireland for addressing underage and excessive drinking by young people. We think it very unlikely that these measures will be sufficient.



### England

The Alcohol Harm Reduction Strategy for England (2004) proposes the following measures aimed at reducing alcohol misuse by young people:

- Review the code of practice for TV advertising to ensure it does not target young drinkers or glamorise irresponsible behaviour.
- Strongly encourage drinks companies to pledge not to manufacture products irresponsibly – for example, no products that appeal to underage drinkers or that encourage people to drink well over recommended limits.
- At local level, there will be new “code of good conduct” schemes for retailers, pubs and clubs, run locally by partnership of the industry, police and licensing panels and led by the local authority. These will ensure that industry works alongside local communities on issues which really matter such as underage drinking and making town centres more welcoming at night.

**3.37** As we have shown, there is very strong evidence that increasing the price of alcohol reduces consumption overall and may have a disproportionately large effect on consumption by young people. We consequently **recommend** that the Government should seriously consider progressively raising the excise duty on alcohol.

**Action:** *HM Treasury.*

### Scotland

In Scotland the *Plan for action on alcohol problems* (2002) proposed the following action to reduce alcohol use by young people:

- Children and young people need positive and affordable alternatives to alcohol.
- Encouraging young people to have respect for others should reduce high-risk activities such as unsafe sex linked to drinking too much.
- The Executive is keen to reduce harmful drinking by children and young people. Proof of age card schemes may well help prevent illegal sales. Specifically, retailers are encouraged to adopt a “no proof, no sale” policy.
- The Lord Advocate has authorised a pilot scheme to permit criminal proceedings to be taken on the basis of evidence obtained by test purchasing of age-restricted goods, including alcohol, by children.

[www.alcoholinformation.isdscotland.org/alcohol\\_misuse/files/Plan\\_08.pdf](http://www.alcoholinformation.isdscotland.org/alcohol_misuse/files/Plan_08.pdf)

**NB** A revised plan is expected to be published in late 2006.

## Northern Ireland

Addressing underage drinking is a key priority within the New Strategic Development for Alcohol and Drugs currently being developed.

A number of actions are proposed:

- Develop and promote, both regionally and locally, schemes and coordinated activities that address underage drinking.
- Develop a five-year integrated binge-drinking prevention campaign.
- Partnership working between Drug and Alcohol Coordination Teams, Community Safety Partnerships and other area-based partnerships need to be further developed in respect of addressing alcohol and drug related anti-social behaviour.
- Enforce current and future liquor licensing regulations and laws concerning underage drinking.

*New strategic direction for alcohol and drugs (2006–2011): a consultation document.*

Department of Health, Social Services and Public Safety, February 2006

- A review of liquor licensing in Northern Ireland is ongoing at present. Within this review, it is proposed that the licensed trade will be encouraged to take a "no proof, no sale" approach to suspected underage customers and to adopt a single, voluntary proof of age card.

*Liquor licensing – the way forward – government proposals to reform liquor licensing law in Northern Ireland: consultation document.*

Department for Social Development, October 2005

**3.38** As we have shown, the evidence is equivocal that alcohol advertising encourages the consumption of alcohol by young people. However, it is hard to avoid the conclusion that the alcohol industry seeks to increase sales by fostering an attractive image of youthful vigour and carefree pleasure through its advertising themes and sponsorship of sport. The alcohol industry in the UK spends around £200 million annually on promoting a very misleading picture of the realities of alcohol consumption. Given the continuing rise in the prevalence of alcohol-related health problems and the high levels of drinking among young people, we **recommend** that a much stricter code for alcohol advertising (including via the internet) and sponsorship should be established. This would include prohibiting alcohol advertising on TV or in cinemas showing films to under-18s and prohibiting sponsorship by alcohol companies of sports or music events attended or watched by under-18s.

**Action:** *Department for Culture, Media and Sport.*

**3.39** Given the unequivocal evidence that many under-18s buy alcohol and many under-16s buy tobacco, we **recommend** that the age-of-purchase laws for tobacco and alcohol should in future be much more strictly applied. Vendors should be encouraged to require proof of age and compliance should be reinforced through the use of underage test-purchasing and the prosecution of offenders.

**Action:** *DH, Department of Trade and Industry, devolved administrations.*

**3.40** We **recommend** that the current arrangements to control the supply of drugs covered by the Misuse of Drugs Act (1971) should be reviewed to determine whether any further cost-effective and politically acceptable measures can be taken to reduce the availability of drugs to young people.

**Action:** *Home Office.*





# Key characteristics and circumstances of the young people who are most at risk





# Key characteristics and circumstances of the young people who are most at risk

## Key points

- A wide range of factors have a bearing on whether and when young people engage in hazardous tobacco, alcohol or other drug use, and whether this then results in serious problems. It is nevertheless difficult to predict which individuals will develop serious problems and who will not.
- Use of tobacco and alcohol is first seen among a small number of children under 13, many of whom have other pre-existing disadvantages such as early family adversity, parental drug use and low mental ability or poor academic performance.
- The typical picture of a teenager at risk of hazardous drug use is someone with a relatively problematic family background associating with other risk-taking peers. All forms of drug use among teenagers are more common among (but by no means restricted to) individuals for whom one or more of the following factors are present:
  - Drug use by parents or older siblings.
  - Family conflict or poor and inconsistent parenting.
  - Truancy and other forms of delinquency.
  - Pre-existing behavioural problems.
  - Low parental supervision.
  - Living with a single or step-parent.
- There are some variations between ethnic groups: among 13- and 15-year-olds, white and mixed ethnicity boys and girls are, at present, more likely than others to report hazardous drug use. Among 16–30-year-olds, there are significant variations in levels of hazardous drug use among different ethnic groups, but there are insufficient data to reflect the increasing diversity of this age group in contemporary Britain.
- Although much variation exists, initiation of drug use often begins with one or more of the following in the early teens: tobacco, volatile substances, alcohol or cannabis. Ecstasy and other dance drugs are often tried in the late teens, while initiation of opiates or cocaine typically occurs in the early twenties. However, the great majority of young people do not progress beyond the use of tobacco, alcohol and cannabis.
- Many young people use drugs intermittently at different stages of their lives. In the mid-twenties, reducing use or stopping becomes more common than starting. This is usually without professional help and is often associated with marriage and stable employment.
- In their mid-teens, girls – but not boys – from the least affluent families are more likely to be regular smokers or drinkers or use other drugs. All forms of hazardous and seriously problematic drug use become increasingly related to socio-economic disadvantage with increasing age. This is especially so with drug injecting and the use of heroin, crack cocaine, amphetamines and benzodiazepines. In some areas, problem drug use has become an inescapable part of community life.



## Introduction

**4.1** We have shown in Chapter 2 that large numbers of young people are using drugs hazardously and in Chapter 3 that in part this is because they have little difficulty in acquiring them. In this chapter we examine in more detail the variety of routes into and out of hazardous drug use taken by young people as they grow older. We also consider the important characteristics and circumstances of young people that are most strongly associated with hazardous drug use. In doing so, we draw on data from three long-term cohort studies to which we have had access: the Avon Longitudinal Study of Parents and Children (ALSPAC),<sup>72</sup> the Edinburgh Study of Youth Transitions and Crime<sup>73</sup> and the West of Scotland Twenty-07 Study.<sup>74</sup> Together, these have followed young people from birth to age 30. Further details of these studies are given in Appendix 3. We made further use of the UK and European surveys of 11–15-year-old schoolchildren.<sup>1,13</sup> We also used data on problem drug users attending specialist services provided by the National Drug Treatment Monitoring System and other research studies from the UK and elsewhere.

## Main findings from the cohort studies

### Birth to 12 years

**4.2** In ALSPAC, the proportions of children who reported using tobacco, alcohol or cannabis were small, so the results should be treated with caution. Children whose mothers smoked tobacco or drank during pregnancy or smoked cannabis during the child's early years were two to three times more likely to smoke or drink at age eight than other children. High family adversity during the first two years of life was associated with a 1.5 times greater risk of drinking at age ten. Children who were smoking at eight years were six times more likely than other children to be smoking at ten years. Children who were overt bullies at age eight were 5.6 times more likely than other children to smoke at age ten.

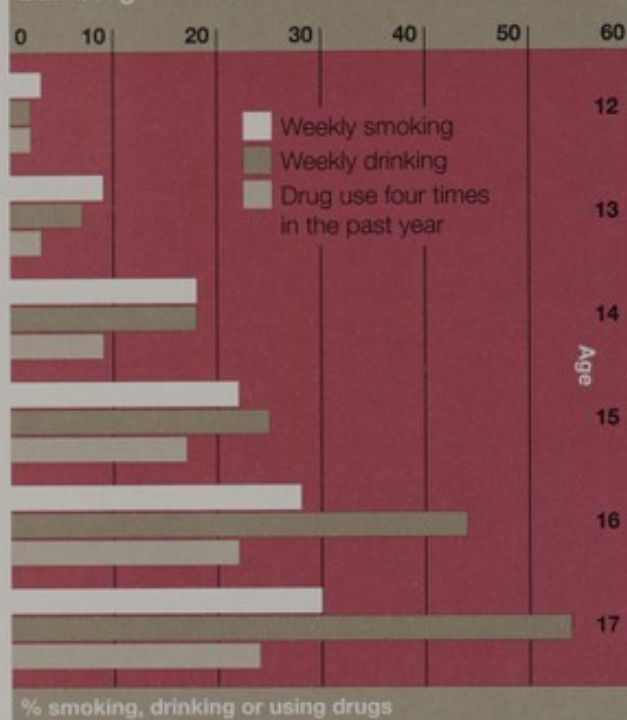
Children who were among the lowest 5% in academic performance at school were over six times more likely to smoke at age ten. Children among the lowest 5% for total IQ scores were almost four times more likely to drink alcohol at age ten than others. Only one child reported cannabis use at age ten. At age 12, about 10% reported smoking or drinking in the six months before assessment, and 2% reported cannabis use. Children who had been smoking at age eight or drinking at age ten were respectively six and ten times more likely than other children to have used cannabis at age 12.

### 12 to 17 years

**4.3** The Edinburgh Study of Youth Transitions and Crime began at the stage of the life course where current ALSPAC follow-up finished. Although the prevalence of drug use across the two studies is not directly comparable as slightly different measures were used, the estimates are similar: 2–3% of children in Edinburgh reported weekly smoking at age 12, compared to 10% smoking in the last six months in Bristol. The prevalence of weekly smoking rose steadily to 30% at age 17 in Edinburgh. Drinking alcohol follows a similar pattern, with over 50% of the sample reporting weekly drinking by 17. Prevalence of other drug use at age 12 in Edinburgh is similar to that reported by children in Bristol. In ALSPAC, around 2% of children of 12 reported cannabis use in the six months preceding assessment. In Edinburgh, 3% of the 12-year-old sample reported ever using cannabis, 4% reported ever using solvents and 1% reported ever using other illegal drugs. Solvent use in the previous year peaked at around 7% at age 14 but fell steadily thereafter. In contrast, the use of cannabis and other illegal drugs in the last year rose steadily throughout the study period. At age 17, 40% of the sample reported use of cannabis in the past year. 13% of 17-year-olds in Edinburgh reported use of other illegal drugs in the past year. This category included a broad range of drugs – from stimulants and hallucinogens to opiates.



**Figure 4.1** Prevalence of weekly smoking, weekly drinking and other drug use in the Edinburgh cohort<sup>73</sup>



**4.4** In common with ALSPAC, more boys than girls reported smoking at age 12. However, this pattern reversed thereafter, with more girls than boys reporting they were weekly smokers. The gap was almost 10% at 15 and 16, but narrowed again to only 4% by age 17. In contrast, use of alcohol and other drugs was similar between the sexes across

the adolescent life course (Figure 4.1). The peak age of initiating regular use of other drugs was also similar in boys and girls. For weekly smoking it was around 13–14 and for weekly drinking around 15–16. The peak age of first use of other drugs (usually cannabis) was 14–15. There were close links between the use of tobacco, alcohol and other drugs at age 12. These associations were much looser by age 17, particularly for alcohol, when many alcohol users neither smoked nor used other drugs. In contrast, most smokers were also alcohol users and most users of other drugs were smokers. There was a strong continuation of use of all drugs across adolescence once regular use was established – particularly in the case of smoking and particularly among smokers starting in mid-adolescence. However it was also true that many young people in the Edinburgh cohort who reported that they had started using illegal drugs did not report continuing to use these when followed up in subsequent sweeps.

**4.5** Respondents who reported using any drug were much more likely than other young people to report other forms of delinquency such as vandalism, shoplifting, racial abuse, car-breaking, joyriding, selling drugs, house-breaking, assault, selling stolen goods, robbery, harming animals, fire-setting, carrying a weapon and being rowdy in public over the same time period (Figure 4.2).

**Figure 4.2** Self-reported delinquency by drug use at the same age<sup>73</sup>

	Mean self-reported delinquency score (volume) at each age					
	12	13	14	15	16	17
<i>Smoking</i>						
Weekly	35	29	32	26	10	8
Not weekly	8	8	10	8	3	2
<i>Drinking</i>						
Weekly	33	29	32	25	9	5
Not weekly	8	8	10	8	3	2
<i>Other drugs</i>						
Used last year	27	34	30	23	10	7
Not used last year	7	7	9	7	3	1
<i>Other drugs</i>						
Four times or more last year	37	45	38	29	12	8
Not four times or more last year	8	8	10	8	3	2

Note: the scores reflect the total number of times that the respondent had engaged in any of the specified delinquent acts.



**4.6** Up to the age of 15, regular smoking, drinking and other drug use were all associated with higher rates of delinquency and the strength of the association was similar for all drugs. However, at later ages (16-17), the association with delinquency became weaker, particularly for drinking alcohol. These associations were explored in statistical models that looked at the inter-relation between delinquency and any drug use at age 15, by which time both were common. Any drug use, but particularly use of illegal drugs was very strongly associated with delinquency – even when other factors such as social deprivation were taken into account. Reporting delinquency was a very strong predictor of reporting illegal drug use at age 15. However, being female was a stronger predictor of smoking than delinquency at this age.

**4.7** The Edinburgh Transitions study found there was substantial continuity in young people's use of drugs between the ages of 12 and 17: for example, 69% of weekly smokers at age 11-12 were still weekly smokers at age 16-17. At the same time, there was considerable discontinuity too. For example, well over half of those who reported starting to use illegal drugs by age 12 desisted a year later, although some then started using again two or three years later. Odds ratios were calculated to link use of a drug at one sweep with use of the same drug at subsequent sweeps. In general, these ratios were extremely high for smoking, very high for other drugs, and lower (but still substantial) for drinking. These findings fit with the view that smoking cigarettes is one of the most addictive forms of drug use.

**4.8** In the case of smoking, the degree of continuity increased markedly with age: a 12-year-old regular smoker was 23 times more likely than a non-smoker of the same age to be a regular smoker at age 13; a 16-year-old regular smoker was 61 times more likely than a non-smoker of the same age to be a smoker at 17. This suggests that prevention programmes should not focus solely on young people who start smoking very early, since those who start in their mid-teens appear particularly likely to continue.

Although continuity from one sweep to the next increased with age, the influence of earlier use of other drugs diminished markedly with the lapse of time. These findings show that early use increases the risk of later use, but this effect fades: in other words, early use does not determine a pathway from which escape is impossible.

### 15 to 30 years

**4.9** The West of Scotland Twenty-07 study showed similar prevalence of drug use at age 18 to that reported by 17-year-olds in Edinburgh, although it should be remembered that the West of Scotland sample experienced this stage of their life course about ten years before the Edinburgh sample. A slightly lower proportion had used cannabis and a slightly higher proportion were regular drinkers of alcohol.

**4.10** The West of Scotland study found that there was a substantial increase in the use of all drugs in the immediate post-school period (ages 15-18), with smoking tobacco and the use of other drugs also continuing to increase between 18 and 23. The balance between uptake and quitting was leaning towards the uptake of all drugs up to age 23. Thereafter, with the exception of "hard" drugs such as heroin and cocaine, the balance tipped towards quitting. Thus there was a steep increase in rates of current smoking and heavier levels of use between the ages of 15 and 18, and a continuing, but less marked increase between 18 and 23. After 23 the proportion of light smokers declined. Rates of regular drinking rose markedly between 15 and 18 and then remained stable to age 23. After this there was a slight drop in the very heaviest levels of drinking. There were steep increases in the use of illegal drugs between ages 18 and 23 (use in the past month and daily use) after which rates for all except "hard" drugs (heroin, cocaine and ecstasy) returned to the age-18 levels. However, at least monthly use was reported by only a minority and daily use by very few. Thus at age 23, 17% of the sample reported using cannabis at least monthly but only 3% daily, while 9% used another illegal drug at least monthly and less than 1% daily.



**4.11** There was also considerable fluctuation in and out of drug use with age. Smoking showed the most consistency, followed by drinking above recommended levels and the use of other drugs. Using cannabis was the least consistent behaviour. Just as the use of most drugs individually increased up to age 23, so did the proportion using two or more drugs. The overlap between smoking tobacco and using other drugs at each age was greater than that between smoking and drinking or drinking and using other drugs, highlighting the fact that drinking was more likely to occur separately from the use of other drugs. Use of any drug at age 18 or 23 tended to predict hazardous levels of its use at age 30. There was a strong association between early cannabis-only use and later "hard" drug use. Rates were substantially lower among those who were married at 23 or 30 compared with those who were not (including cohabiters).

**4.12** Drug use, particularly smoking tobacco, was associated with social disadvantage at ages 15 and 18, but thereafter showed little social patterning in this sample. In fact, higher levels of drinking in young adulthood were associated with socio-economic advantage rather than disadvantage. Patterns of use of more than one drug were similar to those seen in Edinburgh in that many users of alcohol did not use other drugs. However, most smokers were also drinkers and most users of other drugs were smokers. Sex differences were relatively small in the West of Scotland study: at all ages, males were slightly more likely to be users of all drugs, including tobacco, than females.

**4.13** Smoking tobacco or using illegal drugs was related to adverse socio-economic circumstances or family life among those who started smoking or using other drugs relatively early (in the case of this sample, prior to age 18). However this link did not extend to those who drink, or those starting to smoke or use other drugs after age 18. Indeed, the evidence suggests that beginning to smoke or use illegal drugs – such as ecstasy, cocaine and heroin – between 18 and 23 years was more likely among those in tertiary education. In other words, there is a "student" effect. Those who become new users

around this age removed the earlier association between smoking or drugs and disadvantage. However, this may be short-lived, since this new group of users was subsequently most likely to quit.

**4.14** As with the Edinburgh study, indicators of early delinquency (such as contact with the police by age 15) were strong predictors of later drug use – particularly of illegal drugs other than cannabis. Relationships between drug use and early mental health problems, indicated by contact with child guidance or psychiatry, were much less pronounced. However, having thoughts about suicide was related to smoking and the use of illegal drugs at ages 18, 23 and 30. At 18 and 30 it was associated with needing a drink first thing in the morning, but not with drinking above recommended levels.

## Other important factors

### Ethnicity

**4.15** The Office for National Statistics survey of English schools is the only representative survey of 11–15-year-olds with a large enough sample of non-white children to be able to detect important differences related to ethnic or cultural background (see Appendix 3 for more details).<sup>15</sup> White and mixed ethnicity pupils were more likely than black or South Asian pupils to report being regular smokers. Around one in ten white pupils (12% girls and 8% boys) and mixed ethnicity pupils (11% girls and 8% boys) were regular smokers compared with one in 20 black pupils (7% girls and 4% boys). The same proportion of South Asian boys as black boys were regular smokers (4%) although South Asian girls were less likely than other girls to smoke (3%).

**4.16** White and mixed ethnicity pupils were substantially more likely than pupils in other ethnic groups to have drunk alcohol in the last week. Around a quarter of white pupils (28% boys and 25% girls) and pupils from mixed ethnic groups (24% boys and 23% girls) reported having drunk alcohol in the past week, compared with around one in ten black pupils (9% boys and 13% girls) and around one in 20 South Asian pupils (6% boys and 5% girls).



**4.17** There was less variation across ethnic groups in the prevalence of other drug use. Mixed ethnicity pupils were more likely than those in other groups to have taken illegal drugs in the last month – 16% of boys and 17% of girls, compared with just over a tenth of white pupils (12% boys and 10% girls) and black pupils (12% boys and 12% girls). South Asian pupils were less likely than other ethnic groups to have taken drugs (9% boys and 6% girls).

**4.18** In Scotland, even with a sample size of 23,000 in the SALSUS 2002 survey,<sup>16</sup> South Asian 13- and 15-year-olds were the only ethnic group large enough to allow comparisons to be made with white pupils. Girls of South Asian origin were significantly less likely than white girls to be regular smokers or weekly drinkers. Boys of South Asian origin were significantly less likely than white boys to be weekly drinkers. No data on ethnic minorities in Wales or Northern Ireland were available.

**4.19** In the 16–29 age group, the British Crime Survey for 2000 included a booster sample to increase the number of respondents from ethnic minorities.<sup>75</sup> Data on the use of illegal drugs were collected, but not on tobacco or alcohol. Similar analyses by ethnic group have not been conducted since then. The survey found that 26% of white respondents reported using a drug other than alcohol or tobacco in the previous year, compared with 21% of all black respondents, 12% of Indian respondents and 8% of Pakistani respondents. Lifetime use of drugs other than tobacco and alcohol by 16–29-year-olds of mixed ethnicity was significantly higher than other groups.

**4.20** Given the increasing heterogeneity of the ethnic mix in the UK, and the differences in values and behaviour between succeeding generations of immigrants, these data should only be seen as a very broad-brush indicator of the possible differences in patterns of drug use. Furthermore, as they only ask about lifetime use or use in the past year, these data give very little insight into hazardous use.

### **Socio-economic status of family or place of residence**

**4.21** Investigating the relationship between socio-economic status (such as social class) and drug use among schoolchildren is problematic, as they may not be able to provide sufficient information about their parents' occupations to allow for accurate classification.<sup>15</sup> The English surveys have therefore not explored this relationship other than by using receipt of school meals as a proxy measure (see paragraph 4.26).

**4.22** A more detailed analysis of the relationship between drug use by pupils and the relative affluence of the area they live in was possible in the SALSUS study in Scotland, where 81% of pupils were able to provide their postcode area of residence.<sup>16</sup> From this, a measure of deprivation was assigned to each individual, indicating the deprivation score of their postcode sector of residence.<sup>76</sup> Deprivation was categorised by postcode sector decile of deprivation from 1 to 10. A score of 1 indicated that a postcode sector was among the 10% least deprived postcode sectors in Scotland, and 10 indicated that a postcode sector was among the 10% most deprived postcode sectors in Scotland. Increasing area deprivation was associated with increased prevalence of regular smoking, drinking and recent cannabis use among girls, but not among boys. The strength of this relationship was similar for all three drugs.

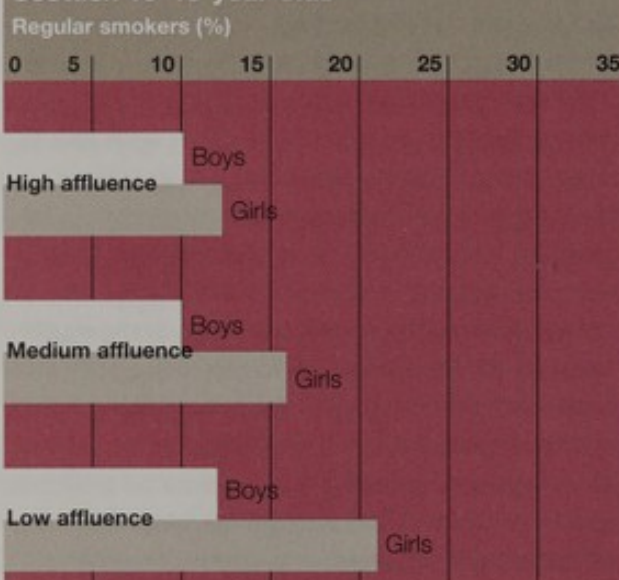
**4.23** Socio-economic status as defined by the General Register Office is very difficult to measure from children's self-reported data. To combat these problems the Family Affluence Scale (FAS) is an alternative measure which can easily be captured in self-reported data. The scale comprises four questions covering car ownership, bedroom sharing, family holidays and computer ownership. At present, computer ownership in Scotland is very gender-biased, and a simplified scale without computer ownership was therefore used. FAS is correlated with socio-economic status, but is more related to family wealth. It is related to patterns of consumption in particular, not to the social standing of parental



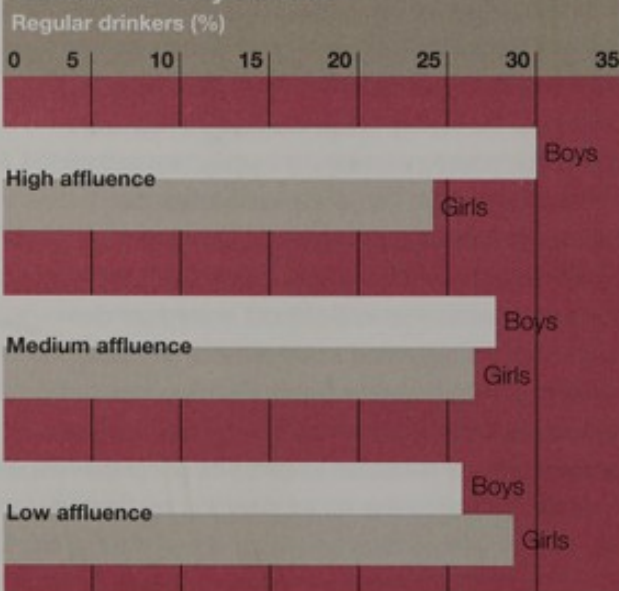
occupations. Almost all pupils (97%) in the SALSUS study have a FAS score.

**4.24** The relationship between FAS and tobacco, alcohol or other drug use is clear and strong among girls, particularly for smoking and cannabis use. The prevalence of regular smoking, drinking and recent cannabis use is higher among girls from families with lower affluence (Figures 4.3, 4.4 and 4.5).

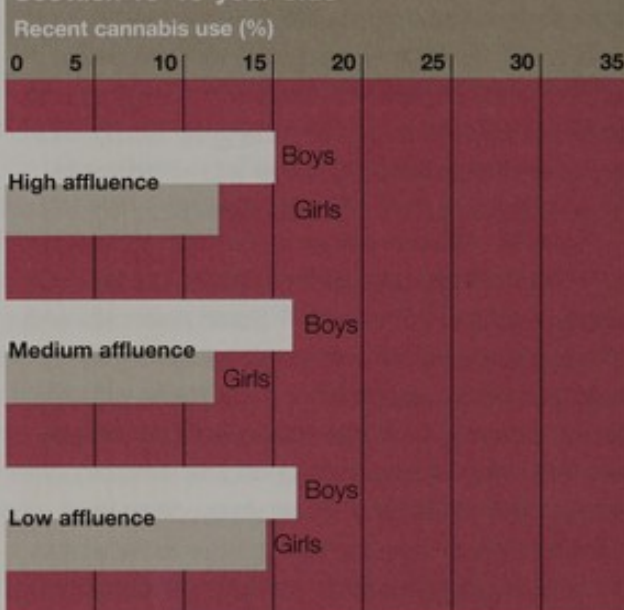
**Figure 4.3 Relationship between smoking and family affluence by gender among Scottish 13–15-year-olds<sup>13</sup>**



**Figure 4.4 Relationship between drinking and family affluence by gender among Scottish 13–15-year-olds<sup>13</sup>**



**Figure 4.5 Relationship between cannabis use and family affluence by gender among Scottish 13–15-year-olds<sup>13</sup>**



**4.25** In contrast, there is no association among boys between regular smoking or recent cannabis use and family affluence. The prevalence of regular drinking is slightly higher among boys with higher family affluence – the opposite of that found among girls.

**4.26** In England, pupils in receipt of school meals were more likely than those who were not to have taken drugs in the last month (16% and 12%) and to be regular smokers (12% and 9%).<sup>15</sup> However, pupils who received school meals were slightly less likely to have drunk alcohol in the last week (23% and 25%). The patterns for boys and girls were similar.

#### Family structure

**4.27** A large body of research in Europe and North America has found that teenagers who live with both biological parents are less likely to smoke cigarettes, drink alcohol or use cannabis. For example, the ESPAD study<sup>1</sup> found that living with a single parent was significantly associated with more tobacco use in 23 of 29 countries, with more alcohol use in 12 of 29 countries and with more cannabis use in 21 of 29 countries. Living with a step-parent was associated with significantly more tobacco use in 23 of 29

countries, with more alcohol use in 15 of 29 countries and with more cannabis use in 23 of 29 countries. There was no country in Europe where living with a single parent or a step-parent was associated with significantly lower use of tobacco, alcohol or cannabis.

**4.28** In the UK ESPAD sample, living with a single parent or a step-parent was significantly associated with smoking, drinking and cannabis use. The relationship between smoking and living with a step-parent was particularly strong in the UK. These findings were consistent with the SALSUS study, which found that pupils living with a step-parent were more than twice as likely to be regular smokers as pupils living with both natural parents.<sup>17</sup>

#### Parental supervision

**4.29** The type and quality of family relationships are thought to have a stronger influence on young people's drug use than living arrangements or economic factors.<sup>77,78</sup> In the ESPAD study, students were asked if their parents knew where they spent their Saturday nights. In 30 of the 31 countries, including the UK, adolescents used "substantially and significantly" more tobacco, alcohol and cannabis when their parents did not know where they spent their Saturday nights. These findings were confirmed by the SALSUS study, which found that low parental monitoring was one of the factors most strongly associated with both single and multiple drug use. For example, pupils with low levels of parental monitoring were about **five** times more likely to be regular smokers than pupils reporting moderate levels of parental supervision. At age 15, 68% of regular smokers had lower than average maternal monitoring compared with 48% of non-smokers; 63% of weekly drinkers had lower than average maternal monitoring compared with 32% of non-drinkers; 72% of pupils who used drugs in the last month had lower than average parental monitoring compared with 44% of pupils who had never used drugs.

#### Drug use by older siblings

**4.30** In 31 of the 32 countries in ESPAD there were significant and strong positive associations between having an elder sibling who used drugs and personal use of cigarettes, alcohol or cannabis. The correlations in the UK were among the strongest in Europe. Similar findings have been reported in a recent study of young people in Belfast.<sup>79</sup>

#### Tuancy

**4.31** In every one of the 32 reporting countries in ESPAD there was a positive and significant relationship between truancy and the use of cigarettes, alcohol and cannabis. In the UK, the association was particularly strong between truancy and the use of cigarettes or cannabis. Figure 4.6 shows the huge differences in the prevalence of drug use reported by both boys and girls in England in 2003.<sup>15</sup> Boys and girls who had ever truanted were both more than eight times more likely to smoke and almost five times more likely to have used cannabis than those who had not truanted. Similar findings were reported by SALSUS. School excludées in Belfast were twice as likely as those who had not been excluded to have smoked tobacco in the past year and almost three times as likely to have smoked cannabis. Rates of drunkenness and volatile substance abuse were much more common among the excludées.<sup>80</sup>



Figure 4.6 Relationship between self-reported truancy and regular drug use<sup>15</sup>

**Ever truanted**

	Yes %	No %
<b>Boys</b>		
Regular smoker	26	3
Drank in last week	50	20
Took drugs in last month	39	7
<b>Girls</b>		
Regular smoker	42	5
Drank in last week	54	18
Took drugs in last month	37	7

**Psychological factors**

**4.32** There is extensive and growing documentation – mainly from cross-sectional studies – of the association between all forms of drug use and mental health and behavioural problems in young people.<sup>81</sup> For example, a study was conducted of 53 12–14-year-olds attending units for children with emotional and behavioural difficulty in Belfast.<sup>79</sup> Among these the following proportions reported at least weekly use of tobacco – 50%, alcohol – 8%, and cannabis – 25%. Multiple drug use was also common. The rates of tobacco and cannabis use are much higher than in the catchment population of the same age. A possible mechanism has been proposed: poor quality parenting interferes with the attachment of the child to the parent, impairing the child's capacity to develop trusting, secure relationships with parents and other adults such as teachers. They then enter adolescence without the restraint of family or other adults and tend to seek immediate satisfaction of their perceived needs. They typically associate with other like-minded peers, developing problematic relationships, risky sexual behaviour, school failure and persistent juvenile offending. Hazardous drug use is an almost inevitable component within this scenario. The most common types of mental health problems associated with drug use by young people are affective disorders (depression, anxiety, panic, phobias and post-traumatic stress syndrome); personality disorders (conduct, borderline and

antisocial); and attention deficit disorders. Learning disabilities have not been extensively studied, although clinical experience also suggests an association with drug use. Since psychiatric disorders that begin in childhood may continue into adult life, there may be opportunities to intervene early to prevent or reduce those conditions complicated by drug misuse, if access to appropriate services is provided.

## Pathways to seriously problematic drug use

**Sources of information**

**4.33** One of the main drawbacks of the surveys and cohort studies we have reviewed is that they are not able to identify those young people who have developed or will develop dependence or other serious drug-related problems. This probably reflects several factors. First, the surveys rarely ask the sort of questions that identify those people with serious problems; second, only a small proportion of young people develop serious problems related to the use of drugs other than tobacco or alcohol; and third, the very nature of problem alcohol or other drug use makes it less likely that such individuals will either be selected or will agree to be interviewed. Consequently, general population surveys and cohort studies do not give us sufficient information about the pathways that end up in drug dependence, damaging behaviours such as drug injecting, or serious alcohol-related problems.

**4.34** Some important insights can be gleaned from several sources:

- Information gathered from individuals attending specialist drug services.
- Data on people admitted to hospital due to serious alcohol-related or other drug-related problems.
- Research on particularly vulnerable young people such as looked-after children and homeless young people.



The National Drug Treatment Monitoring System collects information on all individuals with drug problems being assessed for treatment in England. Among other things, this includes the first age at which clients used each of their reported drugs, the age at which any drugs were first injected and the age at which treatment for drug use was first received. Available English data from this period (covering eight of the nine English Government Office Regions for 2001 to 2003) were examined to find out the ages at which different drugs were first taken, the ages at which those drugs that lead individuals to seek treatment were first taken, the amount of time that passes between the first use of these drugs and first receipt of treatment, and the length of time between use of drugs, injecting and receiving treatment. The data set employed for this analysis contained information about 140,000 individual treatment-seekers, brief details of whom are presented in Figure 4.7.<sup>82</sup>

**4.35** We have shown earlier that regular smoking is now more common among young females than males, regular drinking is equally common and regular use of cannabis is slightly more common among males than females. However, Figure 4.7 shows that problem drug use in England is much more common among males than females. Equivalent data for Scottish drug services for 2003–04 show a similar pattern, with 67% of referrals being male.<sup>83</sup>

#### Age of first use of drugs by problem drug users

**4.36** Figure 4.8 shows the age of first use of drugs reported by problem drug users in the North of England, the only area where this information was available. Data on tobacco and alcohol were not available. A clear pattern emerges. Solvents and cannabis are typically first used in the early teens; ecstasy, hallucinogens and amphetamines in the late teens; and so-called hard drugs such as heroin, benzodiazepines, cocaine and crack cocaine in the late teens and early twenties. However, it is also clear that substantial numbers of people only start using drugs such as heroin, benzodiazepines and cocaine in their late twenties or early thirties. This underlines the importance of not assuming that all drug problems start during adolescence.

**Figure 4.7 Sex, ethnic category and main problem drug of about 140,000 individuals assessed by specialist drug services in England 2001–03<sup>82</sup>**

Male	73%
Female	27%
White	88%
Other	12%
Main drug:	
Heroin	68%
Cannabis	9%
Amphetamines	4%
Cocaine	4%
Crack cocaine	5%
Others	10%

**Figure 4.8 Reported first age of use of drugs by individuals assessed by specialist drug services in the North of England 2001–04 (% of all reporting first use of each drug)<sup>82</sup>**

	Solvents	Cannabis	Ecstasy	Amphetamines	Heroin	Benzo-diazepines	Cocaine	Crack	Methadone
Under 15	72%	54%	28%	18%	5%	8%	6%	3%	2%
15–19	25%	37%	52%	51%	45%	41%	37%	31%	26%
20–24	1%	5%	11%	17%	28%	28%	28%	31%	34%
25–29	1%	2%	4%	8%	13%	13%	17%	20%	21%
30–34	1%	1%	2%	5%	5%	6%	8%	9%	10%
35–39	0%	0%	1%	2%	2%	2%	3%	4%	4%
40–44	0%	0%	1%	0%	1%	1%	1%	1%	1%

Note: Columns do not all add up to 100% due to rounding.



**4.37** For most of those seeking treatment, the main problematic drugs were heroin, cocaine or crack cocaine and benzodiazepines. While the median age of first use of these drugs was in the late teens or early twenties, the age range for first use was extremely wide, with a significant minority not beginning until their late twenties or older. On average, drug injectors started injecting a year later than first starting their problematic drug. The interval between first starting to use the problematic drug and seeking treatment averaged three years but was often less than a year.

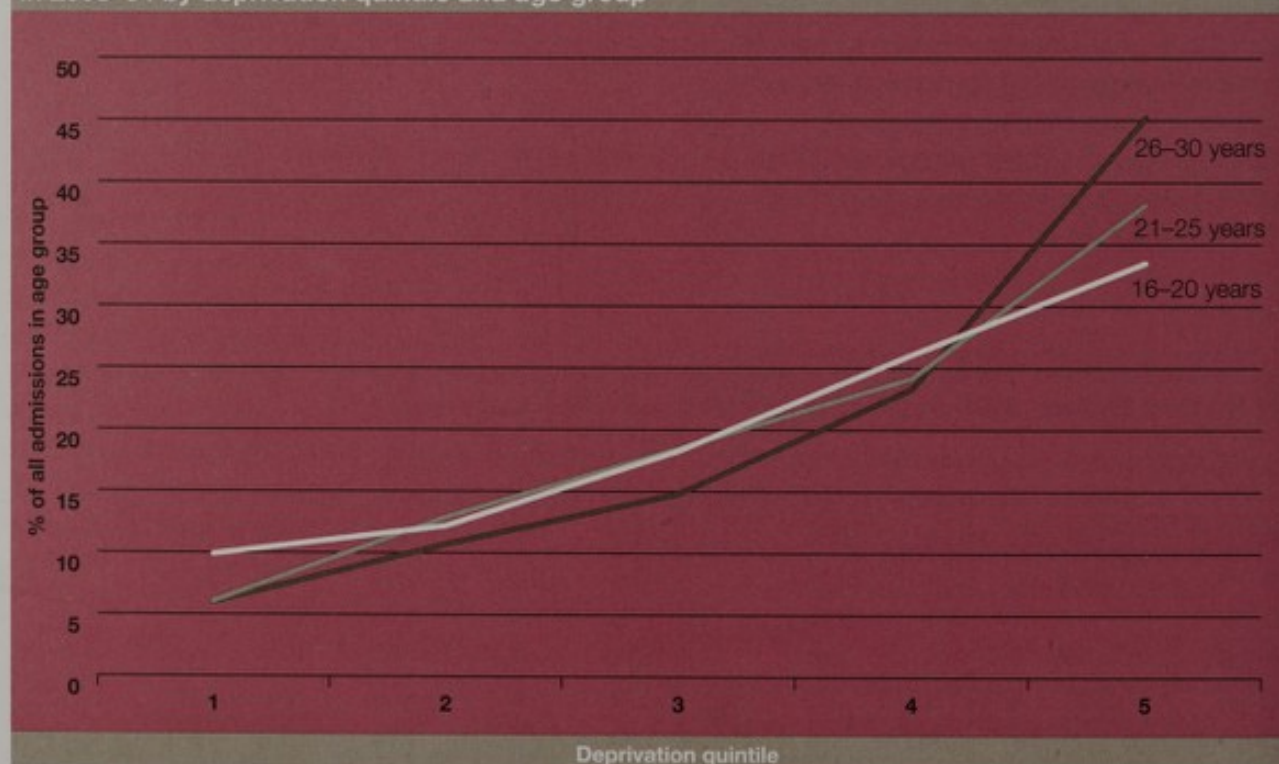
#### Socio-economic circumstances of problem drug users

**4.38** As discussed earlier in this chapter, the ALSPAC study found a link between socio-economic adversity at a young age and smoking at age eight years. Both SALSUS in Scotland and the English schools survey found an association between regular use of tobacco, alcohol and cannabis and lower

family affluence for girls in their mid-teens but not boys. At neither age are these associations nearly as strong as with others we have found – such as parental smoking, delinquency or truanting. However, there is a much stronger relationship between poorer socio-economic circumstances and serious dependency or other serious problems among older age groups.

**4.39** Among adults in Scotland aged 16 or over, those living in the 20% most deprived areas or in the 20% of the population with the lowest income are about three times more likely to be smokers than those in the most affluent 20%.<sup>22</sup> Less affluent smokers also smoked more cigarettes. Age-specific smoking rates by social class are not available for Scotland and we could find no smoking rates by social class in England. We could not therefore establish whether the social class gradient for smoking becomes increasingly steep with age.

**Figure 4.9** Alcohol-related non-psychiatric admissions in Scotland (Scottish Morbidity Record 1) in 2003–04 by deprivation quintile and age group<sup>63</sup>



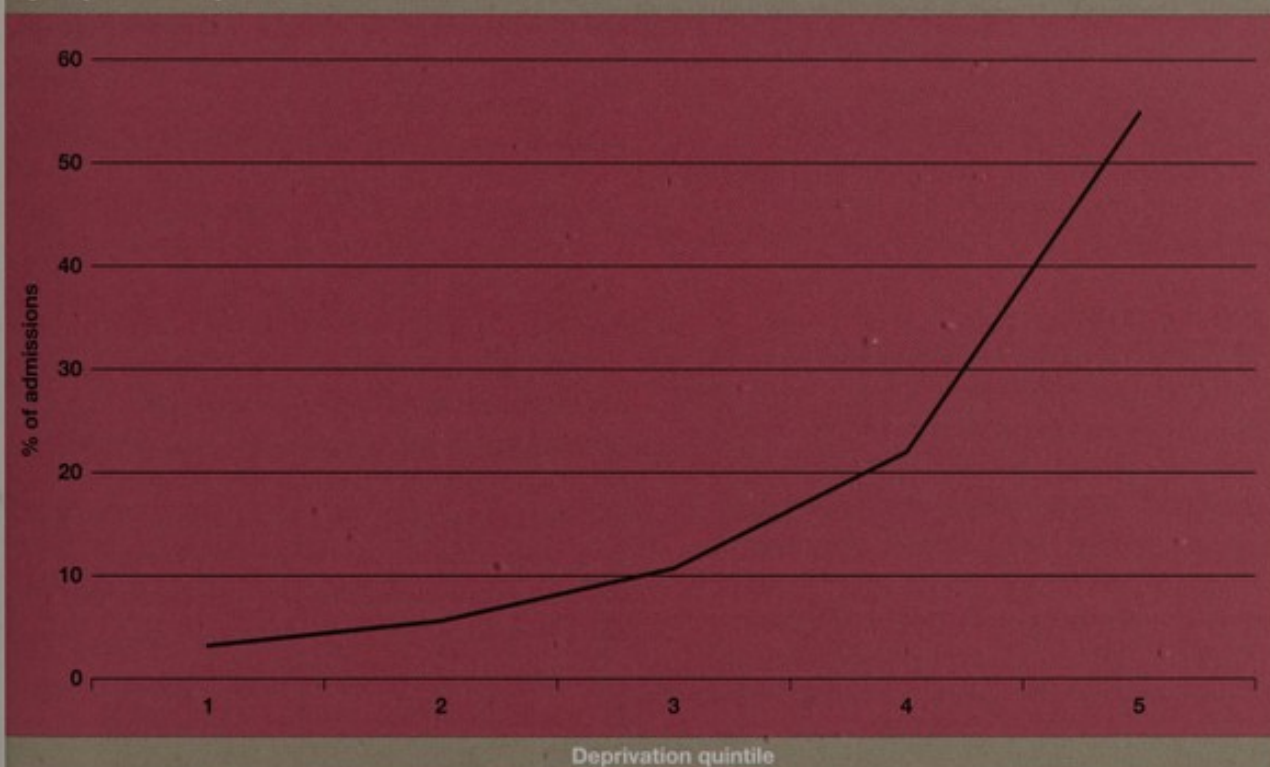
**4.40** Figure 4.9 shows data on non-psychiatric alcohol-related admissions in Scotland in 2003.<sup>83</sup> All admissions are categorised into one of five quintiles, each containing a fifth of the Scottish population according to a standard index of deprivation of their area of residence and ranked from least (1) to most (5) deprived. The figure shows that the rate of admission increases with increasing levels of deprivation in all three age groups shown. It also appears that the proportion of admissions from the most deprived fifth of the population increases as age increases. For 16–20-year-olds, there was a **threefold** difference between the most and least deprived, rising to a **ninefold** difference among 26–30-year-olds.

**4.41** An even more dramatic picture is found with problem drug use, typically characterised by dependence on heroin or other opiates, drug injecting and multiple drug use. During the 1980s, it became clear that the development of serious health and social problems as a result of heroin injecting was largely associated with social disadvantage. Research

to support this came from South London, Nottingham, the Wirral, Liverpool, the north of England and Glasgow.<sup>84</sup> Data collected by the Thames Regional Drug Misuse Database in 1991–94 on problem drug users seen by services in the Greater London Area found a strong correlation with residence in an "under-privileged area".<sup>85</sup> This situation has continued into the 21st century. Figure 4.10 shows the proportion of drug misuse-related general hospital admissions in Scotland in 2003–04 by deprivation quintile (see paragraph 4.40). Almost 70% of these admissions are aged under 35. The figure shows that the admission rate in the most deprived quintile was **17 times** higher than in the least (Information and Statistics Division Scotland, unpublished data). In addition, there is evidence that regular and heavy smoking is currently much more common among disadvantaged adults than the most affluent.

**4.42** Taken together, these data suggest that serious problems associated with the use of tobacco, alcohol or other drugs become

**Figure 4.10** Drug misuse-related general hospital admissions in Scotland in 2003–04 by deprivation quintile





progressively more related to socio-economic circumstances with increasing age. In broad terms, low socio-economic circumstances are associated with greater vulnerability to serious problems, while greater affluence is protective. In the main, it appears this is because people living in disadvantaged areas are more likely to develop problems. However, for some it may be the result of "downward social drift". That is, the development of financial problems and homelessness may lead to individuals having to move to more deprived areas.

**4.43** In its report *Drug Misuse and the Environment*,<sup>84</sup> the ACMD highlighted the additional pressures on young people in areas where drug dealing and illegal drugs have become established. In such neighbourhoods, where young people may see few opportunities for employment, drugs and the crime associated with them can offer some the possibility of gaining money and status. For others, the hopelessness and boredom they may feel are the very feelings from which psychoactive drugs appear to offer relief. It should perhaps be no surprise that young people who are succeeding in their careers and relationships and assuming greater responsibilities tend to reduce their drug use in their twenties. On the other hand, for significant numbers of those who are not, drug use may escalate. For some, a vicious cycle of increasing drug dependence, worsening financial and social problems and encounters with the criminal justice system may ensue, from which escape may prove extremely difficult.

### Vulnerable groups

**4.44** The surveys we have referred to above have identified certain young people as being much more likely to report hazardous drug use. These include young offenders, school truants and excludees, and young people with behavioural disorders. Recent research has underlined the high levels of drug use by young people in these groups as well as among those who have ever been in care or who have been homeless.<sup>86</sup> In 2001–02, a study was conducted of 200 young people who were about to leave care or

had left care.<sup>87</sup> Their average age was 18.

Two-thirds were daily cigarette smokers, one third smoked cannabis daily, 15% had used ecstasy in the past month and 10% had used cocaine. However, use of alcohol was less than the average for this age group. A study of 160 homeless young people was carried out in 2001–02 in four urban areas in England and Wales. Almost all smoked and many were heavy smokers. Lifetime use of all other drugs except for alcohol was much higher than in the general population of the same age.<sup>88</sup> Alcohol use was on average considerably less than in the general population.

## Implications of our findings for policy and practice

**4.45** Over the past eight years, the Government has developed a series of wide-ranging strategy documents aimed at tackling tobacco, alcohol and other drugs. Some have relevance for the UK as a whole; others have been produced by the devolved administrations in Scotland, Wales and Northern Ireland. The key documents are listed in the box overleaf. In general terms, these strategies have all sought to base their approach on an analysis of the nature and scale of the problem and to set out a rational response. Do our findings add anything new to the understanding of the issues, and do they suggest that any of the responses should be different?

### How drugs work and who uses them

**4.46** In Chapter 1 we showed that nicotine, alcohol and most of the other psychoactive drugs in common use all act on the brain in similar ways. We have also shown that large numbers of young people use two or more drugs either simultaneously – such as smoking tobacco with cannabis or having a drink and a cigarette – at different moments in the course of a day or a week, or at different periods in their lives. While tobacco, alcohol and other drugs all have differing legal status, many young people do not appear to recognise these distinctions. However, with the exception of the Wales Strategy for Substance Use (which covers alcohol and all



other drugs except tobacco), the strategies have a narrower focus and address tobacco, alcohol or other drugs as separate issues (see the box that follows).

**4.47** Such an approach runs the risk of failing to recognise and respond to the realities of how drugs

are used in contemporary society and the harms they cause. An integrated approach is increasingly being taken with respect to drugs education in schools (see Chapter 5) and to the provision of support and treatment services (see paragraph 4.61 onwards). However, there do appear to be inconsistencies in other respects: the differing

## Policy links

**Key government legislation and policies aimed at tackling tobacco, alcohol and other drug use among young people**

### UK

Tackling Drugs to Build a Better Britain (1998)

[www.archive.official-documents.co.uk/document/cm39/3945/3945.htm](http://www.archive.official-documents.co.uk/document/cm39/3945/3945.htm)

*Smoking Kills – A White Paper on Tobacco* (1998)

[www.archive.official-documents.co.uk/document/cm41/4177/contents.htm](http://www.archive.official-documents.co.uk/document/cm41/4177/contents.htm)

### England

Updated Drug Strategy 2002

[www.drugs.gov.uk/publication-search/drug-strategy/updated-drug-strategy-2002.pdf](http://www.drugs.gov.uk/publication-search/drug-strategy/updated-drug-strategy-2002.pdf)

Alcohol Harm Reduction Strategy for England (2004)

[www.strategy.gov.uk/downloads/su/alcohol/pdf/CabOffice%20AlcoholHar.pdf](http://www.strategy.gov.uk/downloads/su/alcohol/pdf/CabOffice%20AlcoholHar.pdf)

### Scotland

Tackling Drugs in Scotland: Action in Partnership (1999)

[www.scotland.gov.uk/library/documents-w7/tdis-00.htm](http://www.scotland.gov.uk/library/documents-w7/tdis-00.htm)

Plan for Action on Alcohol Problems

[www.alcoholinformation.isdscotland.org/alcohol\\_misuse/AI\\_MainPage.jsp?pContentID=2054&p\\_applic=CCC&p\\_service=Content.show&](http://www.alcoholinformation.isdscotland.org/alcohol_misuse/AI_MainPage.jsp?pContentID=2054&p_applic=CCC&p_service=Content.show&)

A Breath of Fresh Air for Scotland

[www.scotland.gov.uk/Resource/Doc/26487/0013536.pdf](http://www.scotland.gov.uk/Resource/Doc/26487/0013536.pdf)

### Wales

Tackling Substance Misuse in Wales – A partnership approach (2000)

[www.drugscope.org.uk/wip/7/PDFS/walesSubstanceMisuse.pdf](http://www.drugscope.org.uk/wip/7/PDFS/walesSubstanceMisuse.pdf)

### Northern Ireland

Drug Strategy for Northern Ireland

[www.nics.gov.uk/drugs/pubs/strat.pdf](http://www.nics.gov.uk/drugs/pubs/strat.pdf)

Strategy for reducing alcohol related harm (2000)

[www.dhsspsni.gov.uk/publications/archived/2000/alcohol.pdf](http://www.dhsspsni.gov.uk/publications/archived/2000/alcohol.pdf)



policies on the taxing, advertising and age of purchase of tobacco and alcohol are arguably one example of this. Greater integration of thinking in this field could result in more coherent and effective policies.

**4.48** We therefore **recommend** that a fully integrated approach should be taken to the development of policies designed to prevent the hazardous use of tobacco, alcohol and other drugs.

**Action:** *All relevant government departments.*

**4.49** In the current strategy documents, much use is made of the surveys of schoolchildren in the 11–15 range. These show clearly that many young people do start using drugs at this age and provide a rationale for attempts to prevent drug use through education at this age. However, we have shown in Chapter 2 and Chapter 4 that the late teens and early twenties are a period when many other young people start using drugs for the first time or move from relatively infrequent to regular and hazardous use. This suggests both that current drugs education in schools is not very effective in dissuading young people from using drugs subsequently and also that the later teens and early twenties may be a time for further preventive efforts.

**4.50** We therefore **recommend** that a greater emphasis should be placed on policies aimed at preventing hazardous tobacco, alcohol and other drug use by young people in their late teens and early twenties.

**Action:** *All relevant government departments.*

#### **Drinking and driving**

**4.51** Drivers under the age of 25 are more likely than older drivers both to have road accidents and to fail alcohol tests when involved in accidents.<sup>89</sup>

For some years there have been loud calls for the blood alcohol limit for drivers in the UK to be reduced from 80mg per 100ml to 50mg per 100ml, in line with 21 out of the 25 countries in the European Union.<sup>90</sup> There is strong evidence that enforcing lower blood alcohol limits for drivers prevents road accidents.<sup>44</sup> Given the poorer driving skills and higher accident rates among inexperienced young drivers, we **recommend** that the Government should give consideration to reducing the maximum legal blood alcohol rate for drivers under 25 years of age to 50mg per 100ml. If successful, this could be extended to drivers of all ages.

**Action:** *Department for Transport.*

#### **Vulnerable young people**

**4.52** We have shown that many of the young people who use drugs from an early age and to excess present a relatively troubled picture in terms of their family or community background or their own risk-taking or anti-social behaviour. Levels of problem drug use are higher in more disadvantaged areas and are particularly high among truants and school excluders, serious or persistent offenders, homeless young people and those who have ever been in care.

**4.53** These links between vulnerability and drug use have been increasingly recognised by the Government. In recent years, there has been a rapid and welcome development of a range of legislative measures, policies and programmes in the UK designed to protect and support vulnerable and disadvantaged children and young people. This followed the publication of Lord Laming's report of the Victoria Climbié Inquiry<sup>91</sup> and other reports on vulnerable children including *Hidden Harm – Responding to the needs of children of problem drug users*.<sup>92</sup>

## Policy links

Key government legislation and policies aimed at helping vulnerable children and young people

### England

Children Act 2004

[www.opsi.gov.uk/acts/acts2004/20040031.htm](http://www.opsi.gov.uk/acts/acts2004/20040031.htm)

Every Child Matters – Change for Children

[www.everychildmatters.gov.uk](http://www.everychildmatters.gov.uk)

Every Child Matters – Change for Children: Young People and Drugs

[www.everychildmatters.gov.uk/\\_files/9660D91BB1755A6E288998AAE145297F.pdf](http://www.everychildmatters.gov.uk/_files/9660D91BB1755A6E288998AAE145297F.pdf)

The Children's Fund

[www.everychildmatters.gov.uk/strategy/childrensfund](http://www.everychildmatters.gov.uk/strategy/childrensfund)

Sure Start

[www.surestart.gov.uk](http://www.surestart.gov.uk)

Parenting contracts, parenting orders and penalty notices

[www.dfes.gov.uk/behaviourandattendance/uploads/Parenting%20Orders%20and%20Contracts.pdf](http://www.dfes.gov.uk/behaviourandattendance/uploads/Parenting%20Orders%20and%20Contracts.pdf)

### Scotland

Children (Scotland) Act 1995

[www.opsi.gov.uk/acts/acts1995/ukpga\\_19950036\\_en\\_1.htm](http://www.opsi.gov.uk/acts/acts1995/ukpga_19950036_en_1.htm)

Protecting Children and Young People – The Charter (2004)

[www.scotland.gov.uk/library5/education/ccel-00.asp](http://www.scotland.gov.uk/library5/education/ccel-00.asp)

Working for Families Fund (Scotland)

[www.scotland.gov.uk/library5/society/wfpps2-02.asp](http://www.scotland.gov.uk/library5/society/wfpps2-02.asp)

Parenting orders

[www.scotland.gov.uk/consultations/social/abcdg-01.asp#3](http://www.scotland.gov.uk/consultations/social/abcdg-01.asp#3)

### Wales

Children Act 2004

[www.opsi.gov.uk/acts/acts2004/20040031.htm](http://www.opsi.gov.uk/acts/acts2004/20040031.htm)

Children and Young People: Rights to Action (2004)

[www.wales.gov.uk/subchildren/content/framework.htm](http://www.wales.gov.uk/subchildren/content/framework.htm)

Children First

[www.childrenfirst.wales.gov.uk/](http://www.childrenfirst.wales.gov.uk/)

Cymorth – the Children and Youth Support Fund

[www.wales.gov.uk/subchildren/content/cymorth-e.htm](http://www.wales.gov.uk/subchildren/content/cymorth-e.htm)

### Northern Ireland

The Children and Young People (C&YP) funding package

[www.deni.gov.uk/children-and-young-people-funding-package.pdf](http://www.deni.gov.uk/children-and-young-people-funding-package.pdf)



**4.54** The Updated Drug Strategy (2002) for England clearly recognised the association between drug use and school exclusion, family problems and living in deprived communities. It set out a range of actions and proposals designed to support vulnerable young people, to intervene early where possible and to provide specialist treatment services for those who have already developed drug problems. How this will work has then been developed in Every Child Matters – Change for Children: Young People and Drugs (see the box on page 67). This policy document outlines three objectives:

- to achieve closer links at local, regional and national levels between the Updated National Drug Strategy and the Every Child Matters – Change for Children programme;
- to ensure provision is built around the needs of vulnerable children and young people, with more focus on prevention and early intervention with those most at risk; and
- to develop a range of universal, targeted and specialist provision to meet local needs and ensure delivery of workforce training to support it.

**4.55** Given the evidence we have presented that the children and young people who are most at risk of hazardous drug use in the long term are those who are vulnerable and disadvantaged, we strongly support these measures. While there is as yet no direct evidence that these policies are reducing levels of hazardous drug use among young people, we nevertheless consider that they are at least aiming to alter the factors associated with its development. A list of the main relevant legislation and policies and their web links is given in the box on page 67. This is not an exhaustive list but provides a good indication of the range of recent measures.

**4.56** The Government has also introduced a number of other measures designed to support vulnerable young people, including the homeless, and to provide better higher education, training and employment opportunities. One example is Positive Futures (see box).

**4.57** We **recommend** that the Government should continue to invest heavily in minimising the number of children and young people in relative poverty and protecting and supporting the most disadvantaged and vulnerable children and young people throughout the UK. Among many benefits, enabling children to have more secure and happier lives may reduce their risk of becoming involved in hazardous and subsequently problematic use of tobacco, alcohol and other drugs. As far as practicable, the impact of these measures should be evaluated.

**Action:** *HM Treasury, DH, DfES, devolved administrations.*

## Positive futures

[www.drugs.gov.uk/young-people/positive-futures/strategy](http://www.drugs.gov.uk/young-people/positive-futures/strategy)

Positive Futures is a national sports-based social inclusion programme. One of the main aims of the programme is to address multiple issues associated with problematic substance misuse. It is aimed at marginalised young people from 10–19 years of age. Priority is given to engaging young people living in deprived neighbourhoods. It includes 115 youth projects, 19 of which are run by the Football Foundation. Two of the projects are in Wales, the rest in England. Projects are delivered locally by a range of agencies including local authorities, charities, sports clubs and crime reduction agencies.

Participants are offered coaching skills across a range of sports with opportunities to play competitively. Also on offer are educational and leadership skills programmes and opportunities for volunteering and part-time work.

Funding is provided by the Home Office, the Football Foundation, Sport England and local supporters.

## Importance of parents

**4.58** The evidence we have gathered, however, indicates that the likelihood of smoking tobacco or cannabis regularly or drinking frequently and/or



excessively is by no means restricted to the most disadvantaged children. The nature of the family unit and how it functions are also important. In virtually every country in Europe, young people in their early teens living in single-parent families or with a step-parent are more likely to use tobacco, alcohol or other drugs hazardously than those living in two-parent families. It should, however, be emphasised that the majority of young people living with a single parent or a step-parent in the UK do not use tobacco, alcohol or other drugs. Furthermore, in the UK and throughout Europe, children who are subjected to less parental monitoring and supervision are consistently more likely to engage in hazardous drug use. These data suggest that parental behaviour and family structure may have a greater influence on tobacco, alcohol and other drug use by early teenagers than family socio-economic circumstances per se. They underline the valuable role that parents can play in guiding and supporting their children as they enter the adult world without yet having the capacity and skills to make sensible independent decisions.

**4.59** A social and economic climate that supports stable families and enables parents to be engaged with their children and aware of their whereabouts would thus seem likely to favour less hazardous drug use by children and young people who are still living at home. The high levels of divorce and the growing proportion of parents who both work full time or longer, or whose work necessitates long daily commutes or living away several days a week, are two recent trends which appear to have taken us in the opposite direction. Addressing these major societal trends is perhaps less about government policies than it is about stimulating a wider debate about our contemporary lifestyle and values and their consequences for children. We **recommend** that this ongoing debate should be informed by the evidence that good parenting and stable family life can reduce the risks of hazardous tobacco, alcohol and other drug use by young people.

**Action:** *The media.*

**4.60** The evidence is particularly strong that adolescents who are truanting or involved in repeat offending or serious anti-social behaviour are much more likely to use psychoactive drugs hazardously. Concerted efforts have been made in the past five years to tackle these problems, for example through the use of truancy patrols, parenting contracts, parenting orders and anti-social behaviour orders (ASBOs) (see box on page 67 for links). Despite its much higher prevalence, it is unclear to what extent hazardous drug use is being addressed as a factor among such young people. These measures may well provide an opportunity for the early identification of young people at risk of developing hazardous drug use.

#### Treatment services

**4.61** Truants and young offenders are part of a wider group of young people in whom hazardous drug use is part of a much more complex picture of behavioural disorder and mental health problems. What can be done to intervene in an attempt to prevent further deterioration in behaviour with the attendant risks to physical health and future prospects? On behalf of the PWG, an extensive review was conducted of the evidence for effective treatment of adolescents with problematic drug use.<sup>93</sup> Several important conclusions emerged:

- There is extensive evidence that both psychosocial and pharmacological treatment interventions can achieve beneficial change in adults who are problem drug users. Treatment interventions implemented for young people with drug problems largely draw on the adult addiction experience and that of child and adolescent psychiatry and psychology. Over the last five years evidence has been rapidly accumulating that treatment may potentially work in young people, but as yet is far less extensive than that for adults.<sup>94,95,96</sup> In particular, much of the evidence comes from studies in the US, the transferability of which to settings in the UK and its cost-effectiveness are uncertain.
- There are a number of treatment approaches that have yielded promising results. Those that



appear most fruitful are based on learning theory, for example cognitive behavioural therapy and family therapy. However, studies demonstrate considerable variability in outcomes following treatment. As such, these approaches are not sufficiently well-defined for them to be recommended for more general use with adolescents without further careful research by specialist centres in the UK.

**4.62** In addition, the consensus statement of the British Association of Psychopharmacology provides evidence of the effectiveness of treatment of conditions co-existing with problem drug use, such as attention deficit disorder and anxiety, although it is not focused on adolescents.<sup>97</sup>

**4.63** The National Treatment Agency (NTA) has been leading recent efforts in England to develop a network of services for young people with drug problems. Key components of its approach are summarised in the box, with more detail on the NTA website. There does not appear to be a similar policy initiative in Scotland, Wales and Northern Ireland, although we understand one is under development in Wales.

**4.64** We commend the NTA for its recent efforts to provide accessible services for young people with serious tobacco, alcohol or other drug-related problems. We **recommend** that it should continue to promote and monitor the development of these services across the country, and that it should take active steps to ensure that these services are coordinated with other initiatives that engage with vulnerable young people.

**Action:** *DH.*

**4.65** Following the example of the NTA, we **recommend** that Scotland, Wales and Northern Ireland should also develop a coherent and specifically funded plan for providing and evaluating services for young people with serious tobacco, alcohol or other drug-related problems.

**Action:** *Devolved administrations.*

#### National Treatment Agency (NTA)

[www.nta.nhs.uk](http://www.nta.nhs.uk)

To support the delivery of Every Child Matters – Change for Children and the Updated National Drug Strategy, the Department for Education and Skills, the Home Office and the Department of Health have agreed a joint approach to the development of universal and targeted specialist services to prevent drug harm and to ensure that all children and young people reach their full potential.

The NTA has agreed a clear role for its work with children and young people on ensuring that high quality, targeted treatment interventions, able to meet young people's needs, are readily accessible throughout England. This will form the NTA's young people's work during 2006–07.

A joint regional approach to the delivery of the young people's drugs public service agreement is being implemented nationally. All local authorities in England and their partners are expected to make significant progress towards meeting its objectives from April 2005, with more rapid and sustained progress in 30 high focus areas. Joint young people's regional drugs teams led by the Government Office drugs team are working with key partners, including the NTA, to monitor performance against agreed targets.

**Regional monitoring:** each NTA regional team has a young people's lead who is responsible for performance monitoring young people's treatment system and policy implementation.

**NTA national target:** to increase the participation of young people aged under 18 entering, receiving and completing treatment programmes by 50% between 2004 and 2008.

The NTA has also developed directories of community and residential services in England for young people with drug problems.

### Volatile substance abuse

**4.66** As described in paragraph 2.15, there has been an encouraging decline in the number of volatile substance abuse (VSA) deaths among under-18-year-olds over the last 15 years. Those among the over-18s have plateaued and now account for the majority. Gas lighter fuels are now the commonest cause of death. *A Framework for Volatile Substance Abuse* was published in 2005, setting out a plan for future action developed by the Department of Health, in partnership with the Home Office and the Department for Education and Skills and with the support of the Department of Trade and Industry.<sup>98</sup> This sets out four main priorities for action: better education, dealing with VSA better locally, minimising the opportunities for abuse, and research. While we fully support this plan, we note it focuses predominantly on the under-18s while the majority of deaths now occur among the over-18s and involve lighter fuels. We think the key measure in the framework that would address VSA deaths across the age range is to develop proposals with the relevant industry bodies to make butane lighter refills impracticable for abuse.

**4.67** In addition to the other measures in *A Framework for Volatile Substance Abuse* (published in 2005), we **recommend** that butane lighter fuels should be made impracticable for abuse and all gas fuel containers should carry a prominent safety warning.

**Action:** *Department of Trade and Industry.*





# School and other education-based prevention initiatives





# School and other education-based prevention initiatives

## Key points

- There have been over 1,000 published evaluations of specific initiatives designed to prevent substance use among young people. Most are of primary preventive initiatives in school settings in the US. Most have serious methodological weaknesses, but there are sufficient good studies to allow conclusions to be drawn.
- *Tobacco*  
About half of 15 well-evaluated, school-based programmes using social influence techniques reduced short-term smoking prevalence, but the largest, most carefully studied programme did not. Only two mass media campaigns out of 63 reviewed were found to have a useful preventive effect. Both were intense and of long duration. Only two out of 17 community interventions were both adequately evaluated and showed a useful, sustained and preventive effect. Both were part of a larger, community-wide cardiovascular disease programme for the whole population.
- *Alcohol*  
A systematic review of 56 alcohol prevention programmes found only two that were both adequately evaluated and successful in achieving substantial long-term effectiveness. Their relevance to the UK is doubtful.
- *Illegal or other drugs*  
A number of systematic reviews have found that some skills-based drugs education programmes in schools had limited effectiveness in preventing substance use in the short term, but there was no evidence of long-term impact. It has not yet been possible to identify the components of skills-based programmes that are necessary for effectiveness.
- *Current practice in the UK*  
The vast majority of primary and secondary schools in the UK offer drug prevention programmes. However, there are wide variations in the degree of integration with the rest of the curriculum, the methods and materials used, and the standard of teaching. Two large programmes, Blueprint and ASSIST, are currently being evaluated.
- Despite the evidence that large numbers of young people only start using tobacco, alcohol or other drugs once they have left school, very little seems to be done to provide information or support in the higher and further education sectors.

**5.1** In this chapter we summarise what is currently known about the effectiveness of specific initiatives designed to prevent the use or misuse of tobacco, alcohol or other drugs through direct engagement with young people. We then consider current policy and practice in the UK before making recommendations for the way forward.

**5.2** Two main types of preventive initiatives are recognised: **primary prevention**, where the aim is to avert or delay initial use of a drug, and **secondary prevention**, where it is to minimise hazards or actual harms among those who have already begun using

drugs.<sup>99</sup> Most preventive interventions to date have been **universal**, that is directed at unselected populations of children or young people, typically in a classroom situation. A small minority **selectively** target children or young people known or believed to be at heightened risk of involvement with drug use. Universal initiatives are usually undertaken for primary prevention purposes. Selective prevention initiatives may have either objective. The vast majority of interventions that have been evaluated are primary and universal and most take place in an educational setting.



**5.3** The objective evaluation of drug use prevention initiatives requires the collection of data that allow comparisons over time between those who have been exposed to an intervention and those who have not. In this chapter we have only drawn on reviews that have carefully assessed the strengths and weaknesses of the methods used in published studies. Where subjects have been randomly allocated to either the intervention or a control group, as in a randomised controlled trial (RCT), there is more certainty that differences in drug use behaviours between the groups have actually been caused by the intervention. Without such rigorous comparisons it is difficult if not impossible to know if any observed changes have resulted from the intervention. Unfortunately, good quality RCTs are rare in drug prevention.

**5.4** Over the last 40 years there have been at least 1,000 published studies of the effectiveness of programmes designed to prevent tobacco, alcohol or other drug use. Most are evaluations of drugs education in American schools, invariably aimed at primary prevention and usually addressing tobacco and alcohol as well as illegal drugs.

**5.5** Since the late 1970s two main approaches have been taken.<sup>100,101</sup> The first, the social influence approach, seeks to achieve "psychological inoculation" and aims to encourage anti-drug use attitudes, counteract beliefs that using illegal drugs is normal, and develop the ability to resist offers of drugs. The second, the social competence or life skills approach, seeks to develop a broader range of personal and social skills in addition to tactics to refuse offers of drugs.

**5.6** Unfortunately, a large proportion of the published evaluations have serious methodological problems which limit the reliability of the results.<sup>102,103,104,105</sup> Skara and Sussman summarised the methodological weaknesses of many studies.<sup>106</sup> These included variability in outcome measurement; unreported assessments of measures that fail to show effects; lack of statistical adjustment for multiple testing; sparse information on the content and quality of interventions; missing

explanations for the selection of intervention components; potential sampling problems and selection bias; high rates of loss to follow-up and limited investigations of the consequences of such attrition; inadequate baseline data; generally absent impact data on hypothesised mediating variables; and unclear and potentially biased reporting of outcomes.

## Tobacco

**5.7** The Cochrane Collaboration undertakes systematic reviews of healthcare and other health-related interventions according to rigorous quality criteria. A systematic review of 76 studies of interventions to prevent children and adolescents from beginning to smoke was published by the Cochrane Collaboration in 2002. Of these, 30% were conducted outside the US.<sup>107</sup> Mixed results were obtained. Fifteen of the 16 studies deemed of high quality involved social influence interventions. Of these, eight showed some effect on smoking prevalence and seven did not. The largest and most rigorous study, the Hutchinson Smoking Prevention Project, involved 65 sessions over an eight-year period but showed no effects. There were methodological problems with the evaluation of other intervention approaches, preventing conclusions being drawn about their effectiveness.

**5.8** The conflicting evidence on schools-based smoking prevention was mirrored in the mixed results found in the Cochrane Collaboration reviews of mass media<sup>108</sup> and community interventions.<sup>109</sup> In the review of mass media interventions, only six of the 63 studies examined met all the review's inclusion criteria. Of the six, only two concluded that the mass media were effective in influencing the smoking behaviour of young people. A Norwegian study found that a mass media campaign aimed at girls was more effective in influencing smoking behaviour compared with no intervention.<sup>110</sup> An American study found that a mass media campaign combined with a schools-based programme was more effective than a schools-based programme alone.<sup>111</sup> Both campaigns were similarly intensive



and of long duration, lasting three and four years respectively.

**5.9** Six of the 17 controlled trials included in the community interventions review were randomised, with findings yielding "limited support" in favour of community interventions. Of nine studies comparing community interventions with standard practice or no intervention, only two reported reductions in the prevalence of smoking in the intervention compared with the control community. Both were part of a much larger, cardiovascular disease programme aimed at the entire population. In the Class of 1989 study in Minnesota, smoking prevalence was consistently lower in the intervention community over a five-year period. In the North Karelia Project in Finland, at 15-year follow-up, when the participants were aged 28, mean lifetime cigarette consumption was 22% lower among those in the intervention community compared with the control community. The reviewers underlined the difficulties in evaluating community-wide programmes. The unique nature of each community also makes it difficult to know how readily even a successful intervention could be translated to other areas or countries.

### Alcohol

**5.10** A systematic review has been published by the Cochrane Collaboration of 56 evaluations of alcohol prevention programmes, encompassing a diverse range of intervention types and content, delivery settings and outcome measures.<sup>112</sup> The main focus of the review was on subsequent drinking behaviour. Only nine of the 56 studies were from outside the US. Forty-two of the 56 studies examined interventions delivered entirely within the school setting, with a further four involving school and community or family components. Non-school settings for interventions included youth clubs, accident and emergency departments, colleges, young offender institutions, the family, and the wider community. Serious methodological limitations were frequently encountered, making it difficult to draw conclusions about effectiveness. However, many of the programmes were sufficiently well evaluated to

be considered ineffective and not recommended for use. Only two demonstrated longer-term effectiveness: the Strengthening Families Programme<sup>113</sup> and a culturally focused, skills-based intervention.<sup>114</sup> Whether or not the interventions focused on alcohol alone did not appear to affect outcomes. Whether the methods of these interventions would have relevance to the UK is unclear.

**5.11** Following the disappointing results of school-based interventions, research attention has more recently begun to focus on alternatives. A Cochrane review of family interventions is currently under way, in which the improvement of parenting skills among those with young children is sought. The evidence base for brief interventions with older teenagers, which have previously been demonstrated to be effective in reducing hazardous drinking among adults, has also been accumulating rapidly in recent years. Promising family interventions are likely to be the subject of further research attention. Some evidence of effectiveness was obtained in two brief intervention studies, one of which was undertaken in London further education colleges.

### Illegal and other drugs

**5.12** The Cochrane Collaboration published a systematic review of school-based prevention of illicit drug use in 2005.<sup>105</sup> Twenty-nine of 32 studies included were RCTs, 28 of which were conducted in the US. They were largely evaluations of interventions delivered to children of pre-teenage years, with seven studies involving teenagers. None achieved the highest quality rating for their study methods.

**5.13** Interventions designed to enhance knowledge and modify psychological factors (affective approaches) were found to be no better than the usual curriculum in respect of actual drug use outcomes, although there was some evidence that both improved drug knowledge, attitudes and self-efficacy. The review found that skills-based approaches resulted in lower subsequent drug use when compared with the normal curriculum.



However, no differences in drug use were detected in studies that directly compared skills-based with either knowledge or affective approaches.

**5.14** Although the review found the skills-based approach achieved some positive effects in the short term, there was no evidence of long-term impact. It is unclear which components of skills-based approaches may contribute to effectiveness. For example, it remains unknown whether the same age or older peers may be more effective, whether parents should be involved and how many booster sessions are needed. Furthermore, the paucity of studies from outside the US makes generalising to other countries unwise.

**5.15** Given the findings of the reviews summarised above, there is clearly a mismatch between what is practised in the US and what is known about the ineffectiveness of drugs education in schools. This is also likely to be the case in other countries. For example, there is a consensus in reviews of DARE (Drug Abuse Resistance Education), a social influence programme in which resistance skills are taught by uniformed police officers in the classroom, that it has been proven to be ineffective.<sup>115,116</sup> Yet this intervention has been reported to be delivered in the majority of American schools.<sup>116,117</sup>

**5.16** A systematic review of drug prevention in settings other than schools was published in 2006.<sup>104</sup> It assessed 17 RCT studies all published within the last ten years. The interventions were categorised into four types: multi-component community studies; family intervention studies; education and skills training; and brief interventions. No definite evidence of effectiveness was obtained, with the authors concluding that further high-quality trials were needed to explore interventions that appear to have "potential benefit". There was insufficient evidence that the five multi-component community studies which were considered had any advantage over the school-based programmes with which they were compared. Neither of the education and skills training interventions had any effect, nor did the majority of the eight family interventions.

**5.17** It is also important to consider the possible **harms** as well as **benefits** that may arise from drug use prevention. A review by Werch and Owen found no negative effects of smoking prevention initiatives.<sup>118</sup> Worryingly, however, evidence of increasing rather than decreasing prevalence following the intervention was obtained in 17 studies of alcohol or drug prevention between 1980 and 2001, with greater evidence of these negative effects found in the most recent study period between 1996 and 2001.<sup>118</sup> These effects were judged by the review authors to be indicative of real harms. Most of these negative effects were observed in sub-groups with previous experience of alcohol or drug use. The potential for such difficulties may be inherent in universal prevention activities, most notably in the classroom, where both drug users and non-users are taught together.

**5.18** In addition to primary prevention, there is a need to develop and evaluate secondary prevention interventions among those young people who have already begun using tobacco, alcohol or other drugs hazardously or problematically. With these young people, we may need to be particularly mindful of the possibility that well-intentioned efforts have adverse effects.

## Current practice in the UK

### England

**5.19** The Updated Drug Strategy states that "universal programmes of education and information will give all young people and their families the information and skills they need to protect themselves from the risks and harm of all drugs". Following policy direction from the National Healthy Schools Programme, Ofsted and the DfES guidance *Drugs: guidance for schools*, the emphasis for drugs education is for it to be taught in schools as part of a holistic, whole-school approach. The stated aim of drugs education in England is to enable pupils to make healthy, informed choices. "The expectations of drugs education are that, as well as increasing



knowledge, changing attitudes and enhancing skills, the taught programme will also impact positively on pupils' behaviour".<sup>119</sup>

**5.20** *Drugs: guidance for schools*<sup>120</sup> states that all schools should have a drugs education programme which:

- is developmental and appropriate to the age, maturity and ability of pupils;
- covers, as a minimum, the statutory elements included in the National Curriculum Order for Science for each key stage;
- is taught as part of personal, social and health education (PSHE) and citizenship and, to be effective, is supported by a whole-school approach;
- covers all drugs and, when appropriate, should focus on drugs of particular significance to pupils such as alcohol, tobacco, cannabis, volatile substances and Class A drugs;
- is based on pupils' views and builds on their existing knowledge and understanding; and
- is taught by skilled and confident teachers.

**5.21** The guidance also states that all schools should have a drug policy which sets out the school's role in relation to all drug matters: both the content and organisation of the drugs education programme and the management of drugs within school boundaries.

**5.22** In 2004 Ofsted carried out a survey of drugs education involving visits to over 60 schools and consideration of over 200 school inspection reports.<sup>119</sup> They found that more than four-fifths of primary schools had a drugs education policy compared with only two-fifths in 1997. The quality of the policy and related curriculum planning was rated as good in over half the schools but unsatisfactory in almost one-third. Concern was expressed that in one-quarter of primary schools, assessing the needs of pupils was unsatisfactory. Over nine out of ten secondary schools now have a drugs education

policy compared with less than three-quarters in 1997. Again the lack of understanding of pupils' needs was highlighted. While the concerns of many teachers and parents were about the involvement of young people with illegal drugs, Ofsted considered that the reality is that the overwhelming majority of young people regard the greatest drug-related dangers they face are from tobacco and alcohol.

**5.23** The report found that most schools are doing all they can to involve parents in educating their children about drugs. Despite their concerns about the risks their children face from drugs, information and advice evenings for parents were said to have attracted little support. The authors pointed out that setting expectations for their children, and being aware of and accepting responsibility for their behaviour, are major challenges for all parents. Some are not meeting them well, thus placing their own children as well as others at considerable risk.

**5.24** A large drug preventive programme, Blueprint, is currently being evaluated (see the box that follows).

**5.25** In 2000, the Government launched the Connexions Service, a support service for all young people aged 13–19. Its aim is to provide outreach, information, advice, support and guidance about all the many issues that may concern young people. This is done through a website (see box) and a network of personal advisers and multi-agency teams throughout England. The network has been complete since April 2003.

### Scotland

**5.26** Drugs education is expected to be given in all primary and secondary schools in Scotland. A large and detailed evaluation of drugs education has recently been carried out on behalf of the Scottish Executive, but by August 2006 it had not yet been published. Completed questionnaires were received from over 500 primary schools, 350 secondary schools and 40 special schools. The survey was supplemented by observed lessons in 40 schools and discussions with focus groups.



## The Blueprint Programme

Blueprint was a two-year drug prevention programme conducted between 2003 and 2005 through a partnership of the Home Office, the Department for Education and Skills and the Department of Health. It targeted 11–13-year-olds in 29 schools across four local education authority (LEA) areas: Cheshire, Derby City, Derbyshire and Lancashire. A total of 23 schools took part in the schools component, and six acted as comparator schools.

The programme was designed in the light of research suggesting that multi-component programmes are more effective at changing behaviour than school-based lessons alone. Consequently, it consisted of an integrated mix of intervention strategies designed to address a range of influences on drug use. There were five strands spanning school-based lessons, as well as the involvement of parents and careers, the community and local media, and development of local health policy.

Delivery of the programme is now complete and its impact is being evaluated by a team led by the Institute of Social Marketing, University of Stirling. The evaluation aims to improve our understanding of the impact of multi-component approaches on drug use and of the feasibility of rolling out such programmes in the UK context. It incorporates process, impact and economic elements, accounting for and assessing planning, delivery, and short- and longer-term impacts on drug use. The results are expected at the end of 2007.

## [www.connexions-direct.com](http://www.connexions-direct.com)

The Connexions website offers rapid access to information and advice about a wide range of subjects, including all types of drug use. For example, the section on **solvent abuse** provides clear facts about the effects of solvent abuse and how dangerous it is. It then offers several ways of getting immediate help, for example by contacting a Connexions Direct adviser by phone (8am to 2am every day), texting or on-line; speaking to a personal adviser at the nearest Connexions Centre (throughout England); or contacting the specialist voluntary agency, ReSolv.

**5.27** Preliminary conclusions from the study are that most schools used methods that have not been found to be effective and many used out-of-date materials. Teachers were often unaware of alternatives or did not have the confidence to try them. A large proportion of those providing the teaching – either teachers themselves or outside agents – had not had appropriate training in the past three years. There was considerable duplication of content within schools and between primary and secondary schools. Many pupils were critical of drugs education, finding it uninspiring and unrelated to their own experience.

### Wales

**5.28** In Wales, drugs education is covered both by the *Personal and social education framework key stages 1–4 in Wales*<sup>121</sup> and by the Wales National Curriculum Science Order. Detailed information about the provision is given in Part 3 of the Welsh Assembly Government circular *Substance misuse: Children and young people*.<sup>122</sup> The current arrangements have not yet been evaluated.



### The All Wales Schools Programme

**5.29** The All Wales Schools Programme was initially developed and introduced in primary and secondary schools in the Gwent Police area. The programme is delivered by police school liaison officers, working in partnership with PHSE teachers in schools. It has three main strands – drug and substance misuse; social behaviour and community; and safety. The programme, and individual lessons, comply with good practice as outlined in *Substance misuse: Children and young people*.<sup>122</sup>

**5.30** Police school liaison officers have a dual role. Roughly 80% of their time is devoted to delivering the All Wales Schools Programme in Welsh primary and secondary schools. The remainder of their time is devoted to supportive school policing, although this also includes valuable work in terms of drug misuse education and prevention. For example, in July 2005 an all-Wales police campaign to address solvent abuse among young people was launched. Following the launch, the network of school liaison officers was used rapidly to circulate campaign materials before the summer holidays.

**5.31** The programme is intended to be delivered in all Welsh primary and secondary schools. Work to develop and roll it out across the other police force areas in Wales began in 2004–05. During the 2004–05 academic year, school liaison officers delivered lessons in 1,871 of the 1,918 Welsh primary and secondary schools (97%).

### ASSIST

**5.32** A large-scale evaluation of a schools-based smoking prevention initiative is currently being conducted in schools in South Wales and the Bristol area of England. Fifty-nine schools were randomly allocated either to continue with their normal smoking education programme, or to do so with additional peer supporter training. Peer-nominated students in Year 8 (aged 12–13) were recruited as “peer supporters” and given intensive training off the school premises by professional health promotion staff. The peer supporters were trained to intervene

with their Year 8 peers in everyday situations to discourage them from smoking. Pupils have been followed up for two years to compare smoking rates in the intervention and comparison schools. The results are expected in 2007.

### Northern Ireland

**5.33** Since 1996 it has been a statutory requirement for all schools in Northern Ireland to have a drugs education policy and publish it in their prospectus; and to teach drugs education as part of the health education cross-curricular theme. Schools are provided with detailed guidance on how to do this.

**5.34** “Learning for Life and Work” will become part of the statutory curriculum from 2007. This area includes personal, social and health education. Drug and alcohol education will be part of this new curriculum. Having personal, social and health education as a statutory requirement is not in place elsewhere in the UK.

**5.35** In 1998 the Department of Education, Northern Ireland, undertook a survey of drugs education in post-primary schools and colleges of further education.<sup>123</sup> Most schools had developed a drug policy but there was considerable variation in their quality. The level of involvement of teachers in drugs education was considered to be good. Tobacco and alcohol were included in the programmes. Drugs education was largely available for pupils aged between 11 and 15 years old. Older pupils were less likely to receive drugs education. Very few of the colleges had developed policies. Few students in colleges of further education had direct access to drugs education and were insufficiently aware of their colleges’ support programme and drug-related matters.

### Sniffer dogs and random drug testing

**5.36** Another development in the US in recent years has been mandatory drug testing in schools, either of all students or of certain groups such as those participating in sports and other extracurricular activities. While the US Supreme Court upheld the



right of schools to carry out drug testing, the policy remains highly controversial. Opponents argue that the procedure is an infringement of human rights and represents a breach of trust between the school and the student body; that it does not cover legal drugs such as nicotine and alcohol; and that specimens can be tampered with or results mixed up. A large study in Michigan involving 76,000 pupils found no difference in the prevalence of drug use among students in schools where drug testing was conducted compared with those where it was not.<sup>124</sup>

**5.37** Schools in England and Wales are permitted to request samples from pupils to test for drugs or to use sniffer dogs if it is judged appropriate. While the Ofsted report in England found that the majority of schools indicated that their approach to dealing with drugs did not involve either the use of sniffer dogs or random drug testing, a small number of schools have used drug testing and some have used trained sniffer dogs to detect drugs. A group of schools in Bedfordshire carried out a trial of the use of sniffer dogs with pupils, but found that walking pupils past dogs "carried high costs and risks and added no value to the events".<sup>119</sup> A small number of schools were said to be considering or to have introduced random drug testing in schools. Ofsted concluded that such testing raised a number of serious issues which required national debate.

## Implications of the findings for policy

**5.38** The extensive published research on school-based preventive initiatives makes disappointing reading. While many of the evaluations were poorly designed, those that were conducted to an acceptable standard found that even carefully designed, resourced and implemented programmes resulted in, at best, small and short-lived delays in the use of tobacco, alcohol or other drugs by pupils. Indeed, many studies showed no effect at all and some programmes were found to be counter-productive. While there was some evidence that skills-based approaches were more likely to be

effective than the normal curriculum, studies comparing skills-based with information- or affective-based approaches found there was little, if any, difference between them (see paragraph 5.13). Furthermore, the evaluations of current practice in England and Scotland indicate wide variations in standards, with many schools using traditional, information-based methods that are least likely to be effective. Despite this, drugs education policy in the UK continues to be based on the assumption that drugs education is effective, investing large amounts of staff and pupil time and resources in such activity.

**5.39** Given the evidence presented in other chapters, however, these findings are less surprising. Many of the young people who start taking drugs at an early age have a parental or family background or circumstances which put them at higher risk, or have already shown evidence of patterns of behaviour such as truancy or offending which are strongly associated with using tobacco, alcohol or other drugs. When these circumstances are combined with an environment in which drugs are readily available, it is perhaps unrealistic to expect a small number of classroom-based exercises to act as a deterrent.

**5.40** We have thus concluded that the expectations placed on school-based drugs education programmes need to be more realistic. We believe that schools do have a clear responsibility to provide young people with accurate and balanced information about the hazards of using drugs. In that respect, there should be more emphasis placed on hazards related to tobacco and alcohol, including:

- the addictiveness of tobacco and hence the difficulty of stopping once you have started smoking – if any drug should have a "just say never" tag attached to it, it is tobacco;
- the extreme danger of using volatile substances;
- the links between alcohol intoxication and violent behaviour and unsafe sex; and
- damage to the unborn child due to smoking or drinking during pregnancy.



**5.41** We agree that drugs education needs to be placed in the much wider context of a whole-school approach involving the whole school community. This is at the heart of the National Healthy Schools Programme in England and Health Promoting Schools in Scotland. A Healthy School is defined as one which effectively addresses the following four themes.<sup>120</sup>

- personal, social and health education, including sex and relationship education and drugs education (including alcohol, tobacco and volatile substance abuse);
- healthy eating;
- physical activity; and
- emotional health and well-being (including bullying).

**5.42** These are some of the key attributes of a Healthy School, all of which we endorse. A Healthy School:

- identifies vulnerable individuals and groups and establishes appropriate strategies to support them and their families;
- provides clear leadership to create and manage a positive environment that enhances emotional health and well-being in school – including the management of the behaviour and rewards policies;
- has clear, planned curriculum opportunities for pupils to understand and explore feelings using appropriate learning and teaching styles;
- has a confidential pastoral support system in place for pupils and staff to access advice – especially at times of bereavement and other major life changes – which actively works to combat stigma and discrimination;
- has explicit values underpinning positive emotional health which are reflected in practice and work to combat stigma and discrimination;
- has a clear policy on bullying, which is owned, understood and implemented by the whole school community;

- provides appropriate professional training for those in a pastoral role;
- provides opportunities for pupils to participate in school activities and gives them responsibilities to build their confidence and self-esteem;
- has mechanisms in place to ensure pupils' views are reflected in curriculum planning, teaching and learning and the whole school environment, including those of pupils with special educational needs and specific health conditions, disaffected pupils, young carers and teenage parents; and
- has a clear confidentiality policy.

**5.43** In the light of the evidence that classroom-based drugs education has very limited effectiveness in reducing rates of drug use, we **recommend** that there should be a careful reassessment of the role of schools in drug misuse prevention. The emphasis should be on providing all pupils with accurate, credible and consistent information about the hazards of tobacco, alcohol and other drugs – including volatile substances.

**Action:** *DfES, devolved administrations.*

**5.44** We endorse the concept of the Healthy or Health Promoting School and **recommend** that all schools should seek to maintain a supportive environment for all their pupils, while recognising and responding to the needs of those whose behavioural problems or family background may put them at particular risk of hazardous drug use.

**Action:** *DfES, devolved administrations.*

**5.45** We **recommend** that drug testing and sniffer dogs should not be used in schools. We consider that the complex ethical, technical and organisational issues, the potential impact on the school-pupil relationship and the costs would not be offset by the potential gains.

**Action:** *DfES, devolved administrations.*

## Beyond the school

### Universities, colleges of further education and other training establishments

**5.46** Earlier in the report we showed that many young people only start using tobacco, alcohol or other drugs in a hazardous way once they have left school. An increasingly large proportion of school-leavers now spend several years at universities or further education colleges and thousands of others receive training in other establishments such as the armed forces, the police and the Civil Service. The combination of new freedoms, greater stresses, peer pressures and more disposable income may all tip the balance for many in favour of smoking, excessive drinking and use of other drugs. To our knowledge, such institutions either provide no information to students or trainees about the potential hazards of tobacco, alcohol and other drugs or it is done in a very low-key way – a few lines in a freshers' week manual for example. We think that should change. We therefore **recommend** that all universities, colleges of further education and other major training institutions should take more responsibility for encouraging and enabling their students or trainees to minimise the hazardous use of tobacco, alcohol and other drugs.

**Action:** *DfES, devolved administrations.*

### Media

**5.47** In Chapter 1 (paragraph 1.15), we **recommended** that the Government should ensure that young people are repeatedly made aware of the real hazards of using tobacco, alcohol and other drugs. As well as doing this through the school system and further and higher education, we also **recommend** that the media, particularly television and radio, should be used for this purpose more extensively and imaginatively than at present.

**Action:** *DH, Home Office, DCMS, devolved administrations.*

**5.48** There is one final lesson to be drawn from the drug prevention literature. We should use the highest-quality research methods to evaluate the impact of our efforts. This need for evaluation extends to all aspects of public policy bearing upon drug prevention, including the consequences of legislation, policing and other enforcement activities. We therefore **recommend** that any future major drug prevention initiatives should be designed with evaluation in mind from the outset. They should be evaluated using scientifically rigorous methods, employing randomised controlled trials where possible. This should ensure that any conclusions on the effectiveness of the initiatives can be accepted with confidence, both in the UK and elsewhere.

**Action:** *Home Office, DH, DfES, devolved administrations.*





# Appendices and references





# Appendix 1: Members of and contributors to the Prevention Working Group

## Prevention Working Group Members

Dr Laurence Gruer OBE, Director of Public Health Science, NHS Health Scotland (Chairman and report editor).

### **Advisory Council on the Misuse of Drugs members**

Dr Dima Abdulrahim, Briefings Manager, National Treatment Agency.

Martin Barnes, CEO, Drugscope.

Revd Martin Blakeborough, Director, Kaleidoscope.

Raj Boyjoonauth, Deputy Director, Central and North West London Mental Health Trust and Substance Misuse Unit.

Professor Ilana Crome, Professor of Addiction Psychiatry, Keele University.

Dianne Draper, Public Health Policy Support Officer, Leeds.

Vivienne Evans, CEO, Adfam.

Patrick Hargreaves, Drugs and Alcohol Adviser, Durham County Council.

Peter Martin, Former CEO, Addaction.

Dr Richard Pates, Consultant Clinical Psychologist and Clinical Director, Community Addiction Unit, Cardiff.

Dr Roy Robertson, General Practitioner, Edinburgh.

### **Co-opted members**

Chris Carmona, Analyst – Research, National Institute for Health and Clinical Excellence.

Dr Michael Donmall, Director, National Drug Evidence Centre, University of Manchester.

Eileen Goddard, Social Survey Specialist, Office for National Statistics.

Sally Haw, Senior Public Health Adviser, NHS Health Scotland.

Dr John Macleod, Senior Lecturer, Department of Primary Care and General Practice, University of Birmingham.

Dr Jim McCambridge, Wellcome Trust Research Fellow, National Addiction Centre.

Dr Petra Meier, Lecturer, Department of Psychology, Manchester Metropolitan University.

Dr Louise Millward, Analyst – Research, National Institute for Health and Clinical Excellence.

Dr David Ogilvie, Public Health Physician, NHS Health Scotland.

Owen O'Neill, Senior Drug and Alcohol Coordinator, Eastern Drug and Alcohol Coordination Team, Belfast.

Rick Rutkowski, Head of Programme Development, Good Practice Unit for Young People, Drugscope.

Dr Daniel Warm, Senior Research Specialist, Health Development Agency.

## Secretariat

Stuart Harwood  
Angela Scrutton  
Saleah Ahmed  
Mohammed Ali  
Manel Mohan

## Research

The Prevention Working Group is particularly grateful to the following individuals for their contributions:

Dr Michael Donmall and Andrew Jones, National Drug Evidence Centre, University of Manchester.

John Witton and Dr David Best, National Addiction Centre.

Dr Erica Bowen, University of Bristol.

Professor David J. Smith, Centre for Law and Society, University of Edinburgh.

Professor Candace Currie, Dorothy Currie and Gillian Small, Child and Adolescent Health Research Centre, University of Edinburgh.

Professor Gerard Hastings, Susan Anderson and Kathryn Angus, Institute of Social Marketing, Stirling University and Open University.

Professor Patrick West and Dr Helen Sweeting, Medical Research Council Social and Public Health Research Unit, Glasgow University.

## Oral presentations

Professor Ilana Crome, Keele University – Substance misuse and psychological problems.

Ruth Joyce, Home Office – Blueprint.

Dr Andrew Percy, Institute of Child Care Research, Queen's University, Belfast – Belfast youth development study.

Dr David Ogilvie, NHS Health Scotland – Availability of tobacco, alcohol and illicit drugs to young people.

Dr Daniel Warm, Health Development Agency – Preventive measures in young people: alcohol, smoking and illicit drugs.

Dr Jane Becker, Home Office – Key results of the Vulnerable Groups Research Programme 2000–02 (Home Office research study).

Stephen Roe, Home Office – Key findings of the Review of Drug Prevention with Vulnerable Young People (to be published).

Professor Barry Everitt, University of Cambridge – Overview of the neural mechanisms of addiction.

Natalia Chivite-Matthews, Home Office – Risk, resilience and protective factors for drug use: identifying resilient young people and learning from their experiences.

Lucy Dillon and Ini Grewal, National Centre for Social Research – Exploring young people's resilience to drug use.

Andrew Jones, National Drug Evidence Centre, University of Manchester – Age-specific analysis of National Drug Treatment Monitoring System (NDTMS) data.

Geraldine Brown and Nicola Singleton, Home Office – Exploring factors associated with resilience to drug use: identifying resilient young people and learning from their experiences.

In addition, oral presentations were received from those commissioned to undertake research for the production of this report (see list of research contributors).

## Officials representing government departments

Dr Jane Becker, Home Office.

Colin Cook, Scottish Executive.

Ruth Joyce, Home Office.

John Lenaghan, Welsh Assembly.

Richard Lukulay, Department of Health.

Dr Mark Prunty, Department of Health.

Nicola Singleton, Home Office.

Rhian Stone, Department for Education and Skills.



## Appendix 2: Members of the Advisory Council on the Misuse of Drugs

Professor Sir Michael Rawlins (Chair)	Professor of Clinical Pharmacology, University of Newcastle upon Tyne
Dr Dima Abdulrahim	Briefings Manager, National Treatment Agency
Lord Victor Adebawale	Chief Executive, Turning Point
Martin Barnes	Chief Executive, Drugscope
Dr Margaret Birtwistle	Specialist General Practitioner, Senior Tutor – Education and Training Unit, St George's Hospital, and Forensic Medical Examiner
Reverend Martin Blakebrough	Director, Kaleidoscope Drugs Project, Kingston upon Thames
Dr Cecilia Bottomley	Specialist Registrar in Obstetrics and Gynaecology, Guy's and St Thomas' Hospital Trust
Carmel Clancy	Principal Lecturer in Mental Health and Addictions, Middlesex University
Professor Ilana Crome	Professor of Addiction Psychiatry, Keele University Medical School, Harlands Hospital
Robyn Doran	Registered Mental Health Nurse and Service Director, Substance Misuse, Central and North West London Mental Health Trust
Dianne Draper	Public Health Policy Support Officer, Leeds
Robert Eschle	School teacher and magistrate
Vivienne Evans	Chief Executive, ADFAM
Professor C Robin Ganellin FRS	Emeritus Professor of Medicinal Chemistry, University College, London
Dr Clare Gerada, MBE	General Practitioner, London; Primary Care Lead for Drug Misuse
Dr Laurence Gruer OBE	Director of Public Health Science, NHS Health Scotland
Patrick Hargreaves	Adviser (Drugs and Alcohol), Durham County Council Education Department.
Paul Hayes	Chief Executive, National Treatment Agency
Andrew Hayman	Assistant Commissioner, Metropolitan Police, Chair of the Association of Chief Police Officers Drugs Committee
Russell Hayton	Clinical Nurse Specialist and Clinical and Services Governance Manager, Plymouth Drug and Alcohol Action Team
Caroline Healy	Children's Services Adviser, Government Office for the East Midlands
Dr Matthew Hickman	Deputy Director, Centre for Research on Drugs and Health Behaviour, Senior Lecturer in Public Health, University of Bristol

Alan Hunter	Director – Law Regulatory & Intellectual Property and Secretary to the Association of British Pharmaceutical Industry
Professor Leslie Iversen FRS	Professor of Pharmacology, University of Oxford
His Honour Judge Thomas Joseph	Resident Judge, Croydon Crown Court
Professor Michael Lewis	Professor of Oral Medicine, Cardiff University
Dr John Marsden	Research Psychologist, Institute of Psychiatry
Peter Martin	Former Chief Executive, Addaction
Samantha Mortimer	Head of PSHE and Citizenship, St Paul's Catholic High School, Manchester
Professor David Nutt	Director of Psychopharmacology Unit, University of Bristol
Dr Richard Pates	Consultant Clinical Psychologist and Clinical Director, Community Addiction Unit, Cardiff
Trevor Pearce	Acting Director General, National Crime Squad
Howard Roberts	Deputy Chief Constable, Nottinghamshire Police
Kay Roberts	Pharmacist, Glasgow
Dr Mary Rowlands	Consultant Psychiatrist in Substance Misuse, Exeter
Dr Polly Taylor	Veterinary Surgeon
Monique Tomlinson	Freelance consultant in drug misuse
Arthur Wing	Assistant Chief Officer, Sussex Probation Area



## Appendix 3: Sources and limitations of survey data

There are three main types of research that can provide useful information about drug misuse by young people. The most common is a single questionnaire survey of a representative sample of the population, also known as a **cross-sectional survey**. Provided the same or very similar questions are used, this can be used to compare different areas and groups and to look at relationships with personal characteristics such as age, gender, family background, etc. If the same questionnaire is repeated at intervals, cross-sectional surveys can be used to examine trends over time. However, they are not a good means of studying causal relationships, as it is generally not possible to identify which attributes come first, for example does early drinking precede juvenile offending or vice versa?

A more powerful means for studying causality is the **longitudinal cohort study** where a sample of the population is followed up over months or years. Here the development of patterns of behaviour by individuals over time can be studied and insights gained into temporal and therefore possibly causal relationships between one factor and another. Such studies tend to be very expensive and time consuming. Also, because they generally include people from a single area, they are not necessarily representative of the population as a whole. Both cross-sectional surveys and cohort studies usually gather quantitative or numeric information using a structured questionnaire containing questions such as: When did you start drinking? How often do you smoke? and How often do you go out at night?

**Qualitative studies** collect much more detailed information using a range of different methods including in-depth interviews and focus groups. The number of participants tends to be small (usually less than 100) and so these studies are not representative of the population. They may also focus on particular groups, for example young smokers or people attending addiction services.

Qualitative studies can provide very detailed descriptions of people's experiences, motivation, values and behaviour.

A summary of surveys and studies used in this report is given in Figure A1.

### Pre-teens

Only one study, the Avon Longitudinal Study of Parents and Children (ALSPAC), has provided data on the use of tobacco, alcohol and other drugs in children aged 10 years or younger.<sup>72</sup> This cohort study recruited around 14,900 children and their parents living in the Avon and Bristol area. Pregnant women were recruited in 1991–92 and their children were followed up at 8, 10 and 12 years. Further follow-up of study participants is planned.

### Schoolchildren aged 11–15

There are a number of different national and international surveys of school-age children that are used to monitor the use of tobacco, alcohol and other drugs in children aged 11 years or older, both in the UK and other countries. Most are in-school, cross-sectional surveys with data on tobacco, alcohol or other drug use collected in "exam conditions" using a self-complete questionnaire.<sup>2</sup> The Health Behaviour of School Children (HBSC)<sup>13</sup> and the European School Survey Project on Alcohol and Drugs (ESPAD)<sup>1</sup> are both very large international surveys, providing data for 35 European and North American countries and 35 European countries respectively. Both include countries within the UK.

The sample sizes of most surveys at a country level tend to be 5,000 or less, limiting sub-group analyses. The exception to this is the Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) which had a sample size of 23,000 in 2002.<sup>16</sup>



There have been two cohort studies of schoolchildren in recent years, the Edinburgh Study of Youth Transitions and Crime<sup>73</sup> and the Belfast Youth Development Study.<sup>79,80</sup> Both recruited children aged 11–12 years, on entry to secondary school, and have (Edinburgh) or will (Belfast) follow up participants over at least five years.

### Black and ethnic minorities

Most surveys are not large enough to allow analysis by ethnic group. However, an ethnic group analysis was conducted by combining the 2001–03 English surveys of Smoking, Drinking and Drug Use in Young People.<sup>15</sup> Pupils were asked to select which of the following categories best described their ethnicity: White, Mixed, Asian or Asian British, Black or Black British, Chinese or Other. Even though three years worth of data were combined, due to the small number of pupils describing their ethnicity as Chinese this group was combined with those describing their ethnicity as Other. The total numbers of pupils in each category were: White, 24,936; Mixed, 1,052; Asian, 1,839; Black, 880; and Other, 551.

A limited analysis by ethnic group was carried out in SALSUS. However, although there were 23,000 pupils in the survey, only “South Asians” (people with origins in India, Pakistan or Bangladesh) were present in sufficient numbers to permit comparisons to be made.

## Young people aged 16–30

The data in this section are drawn from the surveys used by government for monitoring levels of tobacco, alcohol or other drug use in the adult population. They are surveys of adults interviewed in private households using Computer-Assisted Interviewing. The smoking and drinking data are taken from the General Household Survey (GHS),<sup>20</sup> which covers Great Britain and has collected such information since the early 1970s; the Health Surveys for England;<sup>21</sup> and the Scottish Health Surveys of 1995, 1998 and 2003.<sup>22</sup> Although, in general, the GHS questions are asked aloud by the interviewer, a self-complete questionnaire is used for young people aged 16 and 17, and for other young

people living at home with their parents if the interviewer considers it advisable in order to encourage honest answers.

Questions about drug use have been asked in the British Crime Survey since 1994, and are addressed to those aged 16–59 rather than to all adults.<sup>23</sup> Drug use is potentially a very sensitive topic, and, to protect privacy, the respondent is given a laptop computer and answers questions as prompted on the screen. The answers are electronically scrambled, so they are not visible to the interviewer, either at the time of interview or later.

A limitation of the British Crime Survey and other household surveys is that they do not include certain groups that may have high rates of drug use, such as the homeless and those living in institutions such as prisons or student halls of residence. Problematic drug users with chaotic lifestyles are also less likely to be reached by household surveys.

The only British cohort study of young people over school-age that we are aware of is the Medical Research Council 2007 study which recruited about 900 15-year-olds living in the West of Scotland in 1987.<sup>74</sup> Respondents were re-interviewed in 1990, 1995 and 2000.



Figure A1 Summary of the surveys

Study name	Study design	Study population	Sample size	Survey dates	Substances
<b>Pre-teens</b>					
Avon Longitudinal Study of Parents and Children (ALSPAC) <sup>72</sup>	Cohort study	Children living in the Avon and Bristol area born to mothers pregnant in 1991–92	14,000 at birth; 7,000 aged 8 and 10; 1,700 aged 12 (incomplete dataset)	Every 2 years: 2000, 2002, 2004	Tobacco and alcohol aged 8 and 10; cannabis, tobacco and alcohol aged 12
<b>11–15-year-olds</b>					
Edinburgh Study of Youth Transitions and Crime <sup>73</sup>	Cohort study	Children recruited aged 11–12 in Edinburgh in 1998	About 4,300	Annually, 1998 to 2004	Tobacco, alcohol and other drugs
Belfast Youth Development Study <sup>79,80</sup>	Cohort study	Children recruited aged 11–12 in Belfast in 2001	About 4,300	Annually, 2001 to 2005	Tobacco, alcohol and other drugs
Health Behaviour of School Children (HBSC) <sup>13</sup>	International cross-sectional survey	11, 13 and 15-year-olds. In 2001–02 included 35 European and North American countries	1,500 in each age group in each country	England: 1984, 1998, 2002 Scotland: Every 4 years 1990–2002 Wales: Every 4 years 1986–2002	Tobacco and alcohol aged 11; tobacco, alcohol and cannabis aged 13 and 15
European School Survey Project on Alcohol and Drugs (ESPAD) <sup>1</sup>	International cross-sectional survey	15–16-year-olds in 30 European countries	In 2003: about 90,000 across 35 countries	Every 4 years: 1995, 1999, 2003	Tobacco, alcohol and other drugs
Smoking, Drinking and Drug Use in Young People (ONS/Nat Cen/NFER) <sup>2</sup>	National cross-sectional survey	England and Wales; Scotland	England and Wales: about 9,700 in 2003 and over 9,000 in 2005 Scotland: about 4,700 in 2000	Annually from 1998	Tobacco from 1982; tobacco and alcohol from 1988; tobacco, alcohol and drugs from 1998
Scottish Schools Adolescent Lifestyle and Substance Use <sup>16</sup> Survey (SALSUS)	National cross-sectional survey	Scotland	In 2002: about 23,000 In 2004: about 7,000	2002 and 2004	Tobacco, alcohol and other drugs

Study name	Study design	Study population	Sample size	Survey dates	Substances
<b>Adults: 16–30 years</b>					
Medical Research Council (MRC) 2007 study <sup>74</sup>	Cohort study	West of Scotland 15-year-olds recruited in 1987	About 900 recruited at baseline; with 50% follow-up in 2000	1987, 1990, 1995, 2000	Tobacco, alcohol and other drugs
British Crime Survey <sup>23</sup>	National cross-sectional survey	16–24 sub-sample of 16–59 population	5,429 16–24-year-olds in 2003–04; 6,287 in 2004–05	Every 2 years 1992–2000 Annually 2001–02 to 2004–05	Other drugs only
Health Survey for England, <sup>21</sup> Scottish Health Survey <sup>22</sup>	National cross-sectional survey	16–24 sub-sample of adult population	England: 1,631 in 2003 Scotland: about 900 in 2003	England: 1995, 1998, 2003 Scotland: 1995, 1998, 2003	Tobacco and alcohol
General Household Survey <sup>20</sup>	National cross-sectional survey	16–24 sub-sample of adult population in Great Britain	In 2002: about 500	Annual survey with tobacco and alcohol modules included every 2 years since 1972	Tobacco and alcohol



## Definitions of patterns of use of tobacco, alcohol and other drugs

Surveys and studies of drug use employ a range of measures to describe patterns of drug misuse. Figure A2 below gives a summary of definitions used in this report for first, regular/recent, and hazardous use of tobacco, alcohol and other drugs.

Figure A2 Summary of definitions

<b>Tobacco</b>	<b>Measures</b>
Ever/first use	Ever smoked/age first smoked cigarette (more than just a puff)
Regular/recent use	Weekly use Use in last week
Hazardous use	
For under-16s:	Weekly smoking
For 16 years or over:	Daily smoking
<b>Alcohol</b>	
First use	Ever used/age first drank whole drink (not just a sip)
Regular/recent use	Weekly use Use in last week
Hazardous use	
For under-18s:	Weekly drinking Drunkenness
For 18 years or over:	Over 14 units/week (women) Over 21 units/week (men) 6 units or more on single drinking occasion (women) 8 units or more on single drinking occasion (men) Drunkenness in last week
<b>Other drugs</b>	
First use	Age of first drug use (any drug, amount not specified)
Recent use	Use in last year
Hazardous use	Use in last month Ever injected

# References

- 1 Hibell B, Andersson B, Bjarnasson T, Ahlstrom S, Balakireva O, Kokkevi A, Morgan M. *The ESPAD Report 2003: alcohol and other drug use among students in 35 European countries*. Swedish Council for Information on Alcohol and Other Drugs, Stockholm, 2004.
- 2 Fuller E, ed. *Smoking, drinking and drug use among young people in England 2004*. The Stationery Office, London, 2005. [www.streetdrugs.org/pdf/04118154.pdf](http://www.streetdrugs.org/pdf/04118154.pdf)
- 3 Boys A, Marsden J, Strang J. 'Understanding reasons for drug use amongst young people: a functional perspective'. *Health Education Research*, 2001; 16: 457-69.
- 4 World Health Organization. *Neuroscience of psychoactive substance use and dependence*. WHO, Geneva, 2004.
- 5 Volkow N, Fowler J, Wang G. 'The addicted human brain: insights from imaging studies'. *Journal of Clinical Investigation*, 2003; 111: 1444-50.
- 6 Capsi A, Moffitt T, Cannon M, McClay J et al. 'Moderation of the effect of adolescent-onset cannabis use on adult psychosis by a functional polymorphism in the catechol-O-methyltransferase gene; longitudinal evidence of a gene x environment interaction'. *Biological Psychiatry*, 2005; 57: 1117-27.
- 7 Porath A J, Fried P A. 'Effects of prenatal cigarette and marijuana exposure on drug use among offspring'. *Neurotoxicology and Teratology*, 2005; 27: 267-77.
- 8 Tobacco Advisory Group of the Royal Colleges of Physicians. *Nicotine addiction in Britain*. Royal Colleges of Physicians, London, 2000.
- 9 Leon D, McCambridge J. 'Liver cirrhosis mortality rates in Britain from 1950 to 2002: an analysis of routine data'. *Lancet*, 2006; 367: 52-6.
- 10 Nicholas S, Povey D, Walker A, Kershaw C. *Crime in England and Wales 2004/2005*. Home Office, London, 2005: Section 5.8. [www.homeoffice.gov.uk/rds/pdfs05/hosb1105.pdf](http://www.homeoffice.gov.uk/rds/pdfs05/hosb1105.pdf)
- 11 Advisory Council on the Misuse of Drugs. *Further consideration of the classification of cannabis under the Misuse of Drugs Act (1971)*. Home Office, London, 2005. [www.drugs.gov.uk/publication-search/acmd/cannabis-reclass-2005](http://www.drugs.gov.uk/publication-search/acmd/cannabis-reclass-2005)
- 12 Field-Smith M, Butland B, Ramsey J D, Anderson H. *Trends in deaths associated with abuse of volatile substances 1971-2003*. St George's University of London, 2005. [www.vsareport.org](http://www.vsareport.org)
- 13 Currie D, Small G, Currie C. *Prevalence and profiles of substance and multi-substance use by adolescents: UK and international perspectives*. Advisory Council on the Misuse of Drugs, Home Office, London, 2005. See also [www.hbsc.org](http://www.hbsc.org)
- 14 Information Centre. *Drug use, smoking and drinking among young people in England in 2005: headline figures*. 2006. [www.ic.nhs.uk/pubs/drugsmokedrinkyoungeng2005](http://www.ic.nhs.uk/pubs/drugsmokedrinkyoungeng2005)
- 15 Boreham R, Blenkinsop S (eds). *Drug use, smoking and drinking among young people in England in 2003*. The Stationery Office, London, 2004. [www.dh.gov.uk/assetRoot/04/09/89/17/04098917.pdf](http://www.dh.gov.uk/assetRoot/04/09/89/17/04098917.pdf)
- 16 Currie C, Fairgrieve J, Akhtar P, Currie D. *Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) National Report: Smoking, drinking and drug use among 13 and 15 year olds in Scotland in 2002*. Scottish Executive, Edinburgh, 2003.
- 17 Corbett J, Akhtar P, Currie D, Currie C. *Scottish Schools Adolescent Lifestyle and Substance Use (SALSUS) National Report: Smoking, drinking and drug use among 13 and 15 year olds in Scotland in 2004*. Scottish Executive, Edinburgh, 2004.
- 18 Central Surveys Unit. *Young Persons Behaviour and Attitudes Survey*. [www.csu.nisra.gov.uk/surveys/survey.asp?id=11](http://www.csu.nisra.gov.uk/surveys/survey.asp?id=11)
- 19 Advisory Council on the Misuse of Drugs. *Volatile substance abuse*. Home Office, London, 1995.
- 20 Office for National Statistics. *General Household Survey 2003-04*. [www.statistics.gov.uk/StatBase/Product.asp?vlnk=5756](http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=5756)
- 21 Department of Health. *Health survey for England 2003*. [www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsStatistics/PublicationsStatisticsArticle/fs/en?CONTENT\\_ID=4098712&chk=F4kphd](http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsStatistics/PublicationsStatisticsArticle/fs/en?CONTENT_ID=4098712&chk=F4kphd)
- 22 Scottish Health Survey 2003. [www.scotland.gov.uk/Resource/Doc/76169/0019729.pdf](http://www.scotland.gov.uk/Resource/Doc/76169/0019729.pdf)



- 23 Roe S. *Drug misuse declared: Findings from the 2004/05 British Crime Survey (England and Wales)*. Home Office, London, 2005. [www.homeoffice.gov.uk/rds/pdfs05/hosb1605.pdf](http://www.homeoffice.gov.uk/rds/pdfs05/hosb1605.pdf)
- 24 Amos A, Wiltshire S, Bostock Y, Haw S, McNeill, A. "You can't go without a fag.....you need it for your hash" – qualitative exploration of smoking cannabis and young people'. *Addiction*, 2004; 99: 77–81.
- 25 HM Customs and Excise. *Alcohol Factsheet*. HMCE, November 2005. [www.uktradeinfo.com/index.cfm?task=factAlcohol](http://www.uktradeinfo.com/index.cfm?task=factAlcohol)
- 26 Chivite-Matthews N, Richardson A, O'Shea J, Becker J, Owen N, Roe S, Condon J. *Drug use declared: Findings from the 2003/04 British Crime Survey*. Home Office, London, 2005. [www.homeoffice.gov.uk/rds/pdfs05/hosb0405.pdf](http://www.homeoffice.gov.uk/rds/pdfs05/hosb0405.pdf)
- 27 Boreham R, McManus S, eds. *Smoking, drinking and drug use among young people in England in 2002*. TSO, London, 2004.
- 28 Young R, Sweeting H, West P. *The West of Scotland 11 to 16 Study: basic frequencies of the 15 year old (S4) sweep*. MRC Social and Public Health Sciences Unit, Glasgow, 2000.
- 29 US Department of Health and Human Services. *Reducing tobacco use: a report of the Surgeon General*. USDHHS, Atlanta, 2000.
- 30 Stead L, Lancaster T. 'Interventions for preventing tobacco sales to minors' (Cochrane Review). In: *The Cochrane Library*, Issue 1, 2004. John Wiley & Sons Ltd, Chichester, 2004.
- 31 Lantz P, Jacobson P, Warner K et al. 'Investing in youth tobacco control: a review of smoking prevention and control strategies'. *Tobacco Control*, 2000; 9: 47–63.
- 32 Chaloupka F, Hu T-W, Warner K, Jacobs R, Yurekli A. 'The taxation of tobacco products'. In: Jha P, Chaloupka F, eds. *Tobacco control in developing countries*. OUP, Oxford, 2000.
- 33 Hopkins D, Briss P, Ricard C et al. 'Reviews of evidence regarding interventions to reduce tobacco use and exposure to environmental tobacco smoke'. *Am J Prev Med*, 2001; 20: 16–66.
- 34 Joossens L. *Smuggling and cross-border shopping of tobacco products in the European Union*. Health Education Authority, London, 1999.
- 35 Lovato C, Linn G, Stead L F, Best A. 'Impact of tobacco advertising and promotion on increasing adolescent smoking behaviours' (Cochrane Review). In: *The Cochrane Library*, Issue 3, 2004. John Wiley & Sons Ltd, Chichester, 2004.
- 36 Aitken P P, Leather D S, Scott A L and Squair S I. 'Cigarette brand preferences of teenagers and adults'. *Health Promotion*, 1988; 2: 219–26.
- 37 Evans N, Farkas A J, Gilpin E A, Berry C, Pierce J P. 'Influence of tobacco marketing and exposure to smokers on adolescent susceptibility to smoking'. *Journal of the National Cancer Institute*, 1995; 87: 1538–45.
- 38 Pierce J P, Gilpin E, Burns D M, Whalen E, Rosbrook B, Shopland D, Johnson M. 'Does tobacco advertising target young people to start smoking? Evidence from California'. *JAMA*, 1991; 266: 3154–58.
- 39 Pollay R W, Siddarth S, Siegel M, Haddix A, Merritt R K, Giovino G A, Eriksen M P. 'The last straw? Cigarette advertising and realized market shares among youths and adults, 1979–1993'. *Journal of Marketing*, 1996; 60: 1–16.
- 40 MacFadyen L, Hastings G B, MacKintosh A M. 'Cross sectional study of young people's awareness of and involvement with tobacco marketing'. *British Medical Journal*, 2001; 322: 513–17.
- 41 Wright L. *Young people and alcohol: what 11- to 24-year-olds know, think and do. A literature review*. Health Education Authority, London, 1999.
- 42 Richardson A, Budd T. *Alcohol, crime and disorder: a study of young adults*. Home Office, London, 2003.
- 43 Academy of Medical Sciences. *Calling time: the nation's drinking as a health issue*. AMS, London, 2004.
- 44 Babor T, Caetano P, Casswell S et al. *Alcohol: no ordinary commodity. Research and public policy*. OUP, Oxford, 2003.
- 45 Møller L. 'Legal restrictions resulted in a reduction of alcohol consumption among young people in Denmark'. In: Room R, ed. *The effects of Nordic alcohol policies: what happens to drinking and harm when alcohol controls change?* Nordic Council for Alcohol and Drug Research, Helsinki, 2002.
- 46 Sewel K. *International alcohol policies: a selected literature review*. Scottish Executive, Edinburgh, 2002.

- 47 Mäkelä P, Rossow I, Tryggvesson K. 'Who drinks more and less when policies change? The evidence from 50 years of Nordic studies'. In: Room R, ed. *The effects of Nordic alcohol policies: what happens to drinking and harm when alcohol controls change?* Nordic Council for Alcohol and Drug Research, Helsinki, 2002.
- 48 Secretary of Health and Human Services. *Tenth special report to the US Congress on alcohol and health*. US Department of Health and Human Services, Washington, DC, 2000.
- 49 Adam Smith Institute. *Time to call time*. ASI, London, 1986.
- 50 Aitken P P. 'Television alcohol commercials and underage drinking'. *International Journal of Advertising*, 1989; 8: 133-50.
- 51 Wyllie A, Zhang J F, Casswell S. 'Responses to televised alcohol advertisements associated with drinking behaviour of 10-17 year olds'. *Addiction*, 1998a; 93: 361-71.
- 52 Wyllie A, Zhang J F, Casswell S. 'Positive responses to televised beer advertisements associated with drinking and problems reported by 18 to 29 year olds'. *Addiction*, 1998b. 93: 749-60.
- 53 Connolly G M, Casswell S, Jia-Zhang J, Silva P A. 'Alcohol in the mass media and drinking by adolescents: a longitudinal study'. *Addiction*, 1994; 89: 1255-63.
- 54 Casswell S, Zhang J F. 'Impact of liking for advertising and brand allegiance on drinking and alcohol-related aggression: a longitudinal study'. *Addiction*, 1998; 93: 1209-17.
- 55 Hughes K, MacKintosh A M, Hastings G, Wheeler C, Watson J, Inglis J. 'Young people, alcohol, and designer drinks: quantitative and qualitative study'. *British Medical Journal*, 1997; 314: 414-18.
- 56 Forsyth A. 'The impact of alcohol marketing and young people's social behaviour'. Presentation to the QMW Public Policy Seminar, London, 4 April 2003.
- 57 Hastings G B, Anderson S, Cooke E, Gordon R. 'Alcohol advertising and marketing and young people's drinking'. *Journal of Public Health Policy* (in press).
- 58 Aust R, Sharp C, Goulden C. *Prevalence of drug use: key findings from the 2001/2002 British Crime Survey*. Home Office, London, 2002.
- 59 Lupton R, Wilson A, May T, Warburton H, Turnbull P. *A rock and a hard place: drug markets in deprived neighbourhoods*. Home Office, London, 2002.
- 60 Pudney S. *The road to ruin? Sequences of initiation into drug use and offending by young people in Britain*. Home Office, London, 2002.
- 61 Day C, Topp L, Rouen D, Darke S, Hall W, Dolan K. 'Decreased heroin availability in Sydney in early 2001'. *Addiction*, 2003; 98: 93-5.
- 62 Williams J. 'The effects of price and policy on marijuana use: what can be learned from the Australian experience?' *Health Econ*, 2004; 13: 123-37.
- 63 Stolzenberg L, D'Alessio S. 'A multilevel analysis of the effect of cocaine price on cocaine use among arrestees'. *J Crim Just*, 2003; 31: 185-95.
- 64 Caulkins J. 'Drug prices and emergency department mentions for cocaine and heroin'. *Am J Public Health*, 2001; 91: 1446-8.
- 65 Higgins K, Percy A, McCrystal P. 'Secular trends in substance use: the conflict and young people in Northern Ireland'. *J Soc Issues*, 2004; 60: 485-506.
- 66 Ketelaars T, van Laar M, van Gageldonk A, Cruts A. *Report to the EMCDDA by the Reitox National Focal Point: the Netherlands drug situation 2002*. Trimbos Institute, Utrecht, 2002.
- 67 Reinerman C, Cohen P, Kaal H. 'The limited relevance of drug policy: cannabis in Amsterdam and in San Francisco'. *Am J Public Health*, 2004; 94: 836-42.
- 68 Wood E, Tyndall M, Spittal P et al. 'Impact of supply-side policies for control of illicit drugs in the face of the AIDS and overdose epidemics: investigation of a massive heroin seizure'. *Can Med Assoc J*, 2003; 168: 165-9.
- 69 May T, Harocopos A, Turnbull P, Hough M. *Serving up: the impact of low-level police enforcement on drug markets*. Home Office, London, 2000.
- 70 Mason M, Buckle T. 'Evaluating actions against local drug markets: a 'systematic' review of research'. *Police J*, 2002; 75: 15-30.
- 71 Esmail A, Anderson H, Ramsey J et al. 'Controlling deaths from volatile substance abuse in under 18s: the effects of legislation'. *BMJ*, 1992; 305: 692.



- 72 Bowen E. *Antecedents of substance use at ages 8, 10 and 12 years: Evidence from the Avon Longitudinal Study of Parents and Children*. Advisory Council on the Misuse of Drugs, Home Office, London, 2006. See also [www.alspac.bristol.ac.uk](http://www.alspac.bristol.ac.uk)
- 73 Smith D J. *Substance use at ages from 12 to 17: findings from the Edinburgh study*. Advisory Council on the Misuse of Drugs, Home Office, London, 2006. See also [www.law.ed.ac.uk/cls/esyt/studyoutputs.htm](http://www.law.ed.ac.uk/cls/esyt/studyoutputs.htm)
- 74 Sweeting H, West P. *Substance use between the ages of 15 and 30: Data on smoking, drinking and drugs from the youth cohort of the West of Scotland Twenty-07 Study*. Advisory Council on the Misuse of Drugs, Home Office, London, 2006. See also [www.msoc-mrc.gla.ac.uk/Twenty-07/Twenty-07\\_MAIN.html](http://www.msoc-mrc.gla.ac.uk/Twenty-07/Twenty-07_MAIN.html)
- 75 Ramsay M, Baker P, Goulden C, Sharp C, Sondhi A. *Drug misuse declared in 2000: results from the British Crime Survey*. Home Office, London, 2001. [www.homeoffice.gov.uk/rds/pdfs/hors224.pdf](http://www.homeoffice.gov.uk/rds/pdfs/hors224.pdf)
- 76 Carstairs V, Morris R. *Deprivation and health in Scotland*. Aberdeen University Press, Aberdeen, 1991.
- 77 Glendinning A, Schucksmith J, Hendry L. 'Family life and smoking in adolescence'. *Social Science and Medicine*, 1997; 44: 93-101.
- 78 Sokol-Katz J, Dunham R, Zimmerman R. 'Family structure versus parental attachment in controlling adolescent deviant behaviour: a social control model'. *Adolescence*, 1997; 32: 199-215.
- 79 McCrystal P. 'Drug use among 12 and 13 year olds attending emotional and behavioural difficulty units in Belfast'. *Emotional and Behavioural Difficulties*, 2005; 10: 203-18. See also [www.qub.ac.uk/ss/cccr/projects/youth.html](http://www.qub.ac.uk/ss/cccr/projects/youth.html)
- 80 McCrystal P, Higgins K, Percy A, Thornton M. 'Adolescent substance abuse among young people excluded from school in Belfast'. *Drugs: Education, Prevention and Policy*, 2005; 12: 102-12.
- 81 Crome I, Ghodse H, Gilvary E, McArdle P. *Young people and substance misuse*. Gaskell, London, 2004.
- 82 Donmall M, Jones M. *Initiation of drug use, injecting and treatment. Age specific analyses of NDTMS*. National Drug Evidence Centre, University of Manchester, unpublished 2006. [www.ndtms.net](http://www.ndtms.net)
- 83 ISD. *Drug Misuse Statistics Scotland 2005*. [www.drugmisuse.isdscotland.org/publications/05dmss/05dmssb.htm](http://www.drugmisuse.isdscotland.org/publications/05dmss/05dmssb.htm)
- 84 Advisory Council on the Misuse of Drugs. *Drug misuse and the environment*. Home Office, London, 1998.
- 85 Jones M, Bolton K, Edmond I, Hanstock R, Horrigan I, Olearnik H, Sondhi A. *Problem drug use reported by services in Greater London*. Thames Regional Drug Misuse Databases, London, 1995.
- 86 Becker J, Roe S. *Drug use among vulnerable groups of young people: findings from the 2003 Crime and Justice Survey*. Study No 254. Home Office, London, 2005.
- 87 Ward J, Henderson Z, Pearson G. *One problem among many: drug use among care leavers in transition to independent living*. Home Office Research Study No 260. Home Office, London, 2003.
- 88 Wincup E, Buckland G, Bayliss R. *Youth homelessness and substance use: report to the drugs and alcohol research unit*. Home Office Research Study No 191. Home Office, London, 2003.
- 89 Department for Transport. *Road casualties in Great Britain 2004: Annual Report 2005*. [www.dft.gov.uk/stellent/groups/dft\\_control/documents/contentservertemplate/dft\\_index.hcst?n=14438&l=3](http://www.dft.gov.uk/stellent/groups/dft_control/documents/contentservertemplate/dft_index.hcst?n=14438&l=3)
- 90 British Medical Association. *Driving - Drinking and driving*. Briefing paper, February 2006. [www.bma.org.uk/ap.nsf/Content/Drinkinganddriving](http://www.bma.org.uk/ap.nsf/Content/Drinkinganddriving)
- 91 Lord Laming. *The Victoria Climbié Inquiry*. Department of Health and Home Office, London, 2003.
- 92 Advisory Council on the Misuse of Drugs. *Hidden harm - responding to the needs of problem drug users*. Home Office, London, 2003. Also available at [www.drugs.gov.uk](http://www.drugs.gov.uk)
- 93 Crome I, Frisher M. *Interventions for young people with substance problems in the United Kingdom*. Advisory Council on the Misuse of Drugs, Home Office, London, 2006.
- 94 Chung T, Maisto S A, Cornelius J et al. 'Adolescents' alcohol and drug use trajectories in the year following treatment'. *Journal of Studies on Alcohol*, 2004; 65: 105-14.
- 95 Waxmonsky J G, Wilens T E. 'Pharmacotherapy of adolescent substance use disorders: A review of the literature'. *Journal of Child and Adolescent Psychopharmacology*, 2005; 15: 810-25.



- 96 Spooner C, Mattick R P, Noffs W. 'Outcomes of a comprehensive treatment program for adolescents with a substance-use disorder'. *Journal of Substance Abuse Treatment*, 2001; 20: 205-13.
- 97 Lingford-Hughes A R, Welch S, Nutt D J. 'Evidence-based guidelines for the pharmacological management of substance misuse, addiction and comorbidity: Recommendations from the British Association for Psychopharmacology'. *Journal of Psychopharmacology*, 2004; 18: 293-335.
- 98 Department of Health. *Out of sight?..... not out of mind. Children, young people and Volatile Substance Abuse (VSA). A Framework for Volatile Substance Abuse*. DH, London, 2005.  
www.dh.gov.uk/assetRoot/04/11/56/04115605.pdf
- 99 Advisory Council on the Misuse of Drugs. *Drugs education in schools: the need for new impetus*. HMSO, London, 1993.
- 100 Evans R I. 'A historical perspective on effective prevention'. In: Bukoski W J, Evans R I (eds). *Cost-benefit/cost-effectiveness research of drug abuse prevention: implications for programming and policy*. NIDA Monograph 176, NIDA, Rockville, MD, 1998.
- 101 Botvin G J. 'Preventing drug abuse in schools: social and competence enhancement approaches targeting individual-level etiologic factors'. *Addiction Behaviour*, 2000; 25: 887-97.
- 102 Foxcroft D R, Lister-Sharp D, Lowe G. 'Alcohol misuse prevention for young people: A systematic review reveals methodological concerns and lack of reliable evidence of effectiveness'. *Addiction*, 1997; 92: 531-7.
- 103 Morgan M, for National Advisory Committee on Drugs. *Drug use prevention: an overview of research*. The Stationery Office, Dublin, 2001.
- 104 Gates S, McCambridge J, Smith L A, Foxcroft D R. 'Interventions for prevention of drug use by young people delivered in non-school settings'. *Cochrane Database of Systematic Reviews*, 2006; (1).
- 105 Faggiano F, Vigna-Taglianti F D, Versino E, Zambon A, Borraccino A, Lemma P. 'School-based prevention for illicit drugs use'. *Cochrane Database of Systematic Reviews*, 2005; (2).
- 106 Skara S, Sussman S. 'A review of 25 long-term adolescent tobacco and other drug use prevention program evaluations'. *Prev Med*, 2003; 37: 451-74.
- 107 Thomas R. 'School-based programmes for preventing smoking'. *Cochrane Database of Systematic Reviews*, 2002; (2).
- 108 Sowden A J, Arblaster L. 'Mass media interventions for preventing smoking in young people'. *Cochrane Database of Systematic Reviews*, 1998; (4).
- 109 Sowden A, Stead L. 'Community interventions for preventing smoking in young people'. *Cochrane Database of Systematic Reviews*, 2003; (1).
- 110 Hafstad A, Stray-Pederson B, Langmark F. 'Use of provocative emotional appeals in a mass-media campaign designed to prevent smoking among adolescents'. *Eur J Public Health*, 1997; 7: 122-7.
- 111 Flynn B, Worden J, Secker-Walker R, Pirie P, Badger G, Carpenter J, Geller B. 'Mass media and school interventions for cigarette smoking prevention: effects 2 years after completion'. *Am J Public Health*, 1994; 84: 1148-50.
- 112 Foxcroft D R, Ireland D, Lowe G, Breen R. 'Primary prevention for alcohol misuse in young people'. *Cochrane Database of Systematic Reviews*, 2002. Issue 3. Art. No.: CD003024. DOI: 10.1002/14651858.CD003024.
- 113 Spoth R, Redmond C, Lepper H. 'Alcohol initiation outcomes of universal family-focused prevention interventions: one and two year follow-ups of a controlled study'. *Journal of Studies on Alcohol*, 1999; 13: 103-11.
- 114 Schinke S P, Tepavac L, Cole K C. 'Preventing substance use among native American youth. Three year results'. *Addictive Behaviours*, 2000; 25: 387-97.
- 115 Ennett S T, Tobler N S, Ringwalt C L, Flewelling R L. 'How effective is drug abuse resistance education? A meta-analysis of Project DARE outcome evaluations'. *Am J Public Health*, 1994; 84: 1394-401.
- 116 Lynam D R, Milich R, Zimmerman R, Novak S P, Logan T K, Martin C et al. 'Project DARE: No effects at 10-year follow-up'. *Journal of Consulting & Clinical Psychology*, 1999; 67: 590-3.
- 117 Rogers E M. 'Diffusion of preventive innovations'. *Addictive Behaviours*, 2002; 27: 989-93.
- 118 Werch C E, Owen D M. 'Iatrogenic effects of alcohol and drug prevention programs'. *J Stud Alcohol*, 2002; 63(5): 581-90.



- 119 Ofsted. *Drug education in schools. A report from the Office of Her Majesty's Chief Inspector of Schools*. 2005. [www.ofsted.gov.uk/publications/index.cfm?fuseaction=pubs.displayfile&id=3952&type=doc](http://www.ofsted.gov.uk/publications/index.cfm?fuseaction=pubs.displayfile&id=3952&type=doc)
- 120 Department for Education and Skills, Department of Health. *National Healthy School status: a guide for Schools*. 2004. [www.wiredforhealth.gov.uk/PDF/NHSS\\_A\\_Guide\\_for\\_Schools\\_10\\_05.pdf](http://www.wiredforhealth.gov.uk/PDF/NHSS_A_Guide_for_Schools_10_05.pdf)
- 121 Qualifications, Curriculum and Assessment Authority for Wales. *Personal and social education framework key stages 1-4 in Wales*. ACCAC, 2000.
- 122 Welsh Assembly Government. *Substance misuse: Children and young people*. WAG Circular 17/02, 2002.
- 123 Education and Training Inspectorate. *Report of a survey of drugs education in post primary schools and colleges of further education inspected 1996-1998*. Department of Education, Northern Ireland, 1998.
- 124 Yamaguchi R, Johnston, L D, O'Malley P M. 'The relationship between student illicit drug use and school drug-testing policies'. *Journal of School Health*, 2003; 73: 159-64.  
[www.drugabuse.gov/about/organization/ICAW/epidemiology/epidemiologyfindings903.html](http://www.drugabuse.gov/about/organization/ICAW/epidemiology/epidemiologyfindings903.html)





Manuscript Library





In this authoritative report, the Advisory Council on the Misuse of Drugs takes a long, hard look at an issue of great national importance: the hazardous use of tobacco, alcohol and other drugs by young people in the UK. It tackles the following key questions:

- What are the current patterns and trends of use in the UK?
- Why do only some young people use drugs, and, of these, why do only some come to harm?
- How and where do young people obtain tobacco, alcohol and other drugs, and what influences their availability?
- What measures or interventions have been shown to prevent or reduce hazardous drug use?

The report considers current government policy in the light of its findings and makes a series of bold recommendations, designed to reduce the harm caused by drugs to individuals and communities.

*Pathways to Problems* is essential reading for everyone concerned about the impact of tobacco, alcohol and other drugs on society in the 21st century.

Further copies of *Pathways to Problems* can be obtained by emailing [ACMD@homeoffice.gsi.gov.uk](mailto:ACMD@homeoffice.gsi.gov.uk), by phoning 020 7035 0459 or by visiting [www.drugs.gov.uk](http://www.drugs.gov.uk).

*Pathways to Problems* is also available on the National Drug Strategy website at [www.drugs.gov.uk](http://www.drugs.gov.uk)