



United Kingdom Drug Situation 2010 EDITION

UK Focal Point n Drugs

Annual Report to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)





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United Kingdom drug situation: annual report to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) 2010

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The United Kingdom Focal Point on Drugs

The United Kingdom (UK) Focal Point on Drugs is based at the Department of Health and the North West Public Health Observatory at the Centre for Public Health, Liverpool John Moores University. It is the national partner of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) and provides comprehensive information to the Centre on the drug situation in England, Northern Ireland, Scotland and Wales.

The Focal Point works closely with the Home Office, other Government Departments and the devolved administrations. In addition to this annual report, it collates an extensive range of data in the form of standard tables and responses to structured questionnaires, which are submitted regularly to the EMCDDA. It also contributes to other elements of the EMCDDA's work such as the development and implementation of its five key epidemiological indicators, the Exchange on Drug Demand Reduction Action (EDDRA) and the implementation of the Council Decision on New Psychoactive Substances.

Further information about the United Kingdom Focal Point, including previous annual reports and data submitted to the EMCDDA, can be found on the Focal Point website at www.ukfocalpoint.org.uk

The EMCDDA's website is www.emcdda.europa.eu

The Head of the United Kingdom Focal Point on Drugs is Alan Lodwick at the Department of Health (alan.lodwick@dh.gsi.gov.uk).

The structure and content of this report

The structure and content of this annual report are pre-determined by the EMCDDA to facilitate comparison with similar reports produced by the other European Focal Points. Ten chapters cover the same subjects each year, and three further chapters provide in-depth information on selected issues which change from year to year.

Each of the first ten chapters begins with an **Introduction**. This sets the context for the remainder of the chapter, describing the main features of the topic under consideration within the United Kingdom. This may include information about the main legislative and organisational frameworks, sources of data and definitions used, the broad picture shown by the data and recent trends.

The remainder of each chapter is concerned with **New Developments and Trends** that have not been included in previous annual reports. Generally, this covers developments that have occurred in the second half of 2009 or the first half of 2010. Relevant data that have become available during this period will also be discussed although these will often refer to earlier time periods.

This report, and the reports from the other European countries, will be used in the compilation of the EMCDDA's annual report of the drug situation in the European Union and Norway to be published in 2011.

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Technical Notes

Standard Tables

References in the text to Standard Tables (sometimes abbreviated to ST01, ST02 etc.) are to standardised reporting formats specified by the EMCDDA. All National Focal Points provide data using these Standard Tables in order to facilitate the collection of information in a consistent and comparable format across Europe. The tables provided to the EMCDDA by the UK Focal Point are available on the Focal Point website (www.ukfocalpoint.org.uk).

The standard tables usually include the source of the data and details of methodology. A list of standard tables referred to in this report is included in Part C of the document.

Exchange Rates

All monetary values in this report are provided in both Euros (€) and Pounds Sterling (£). Euro values have been derived using the annual average spot exchange rate published by the Bank of England for the most appropriate calendar year. (For example, for 2007/08 financial year values the exchange rate for 2007 has been used). For 2010 the annual rate has been estimated from the first three quarterly average rates published at the time of writing and by assuming that the fourth quarter rate is the same as that prevailing in the third quarter. The 2010 rate has been calculated as the average of these four quarterly rates.

Exchange rates used in the text are shown in the table below.

YEAR	EURO RATE (£1 =)
2003	1.4456
2004	1.4739
2005	1.4629
2006	1.4670
2007	1.4619
2008	1.2588
2009	1.1233
2010	1.1752

There have recently been considerable changes in the Sterling/Euro exchange rate. Therefore, care must be taken when interpreting trends in values given in Euros.

References to Specific Drugs

Cocaine. Where appropriate, this report distinguishes between 'cocaine powder' and 'crack cocaine'. When the word 'cocaine' is used it should be interpreted as meaning both forms of the drug.

Amphetamine(s) The term used in the text is the same as that used in the survey or study being described. In the UK methylamphetamine is the term used in legislation for what is more generally known as methamphetamine.

Use of term 'significant'

When the word significant is used it should be interpreted as meaning statistically significant at the five per cent level or better.



The United Kingdom population was estimated to be 61.8 million in the middle of 2009. Eighty-four per cent (51.8 million) live in England, eight per cent (5.2 million) in Scotland, five per cent (3.0 million) in Wales and three per cent (1.8 million) in Northern Ireland.

Summary

PART A: New developments and trends

Chapter 1. Drug policy: legislation, strategies and economic analysis

Drug Classification

A number of drugs have been controlled under the *Misuse of Drugs Act 1971* including synthetic cannabinoid receptor agonists, mephedrone, GBL and BZP. The new Government has announced that it will introduce a new system of temporary bans on new 'legal highs'.

National action plans and strategies

The Government intends to publish its Drug Strategy in December 2010. Public Service Agreements, which underpinned the previous strategy, have been abolished. The new strategy will include options for an evaluative framework.

A HEAT (Health Improvement ,Efficiency, Access, Treatment) target relating to drug treatment waiting times was introduced in Scotland. Reports on the progress made in implementing the substance misuse strategies in Wales and Northern Ireland have been published.

Research

A *Cross-Government Drugs Research Strategy* has been published in England identifying six key priorities. The Scottish Government published a review of the drugs evidence base, which will inform future research priorities.

Public expenditure

Labelled public expenditure on drugs in the United Kingdom is estimated to be around €1.5 billion (£1.3 billion) per annum. Funding increased across the UK in 2009/10.

Chapter 2. Drug use in the general population and specific groups

Results have been published from the 2009/10 British Crime Survey (BCS), the 2008/09 Scottish Crime and Justice Survey and the 2008/09 Northern Ireland Crime Survey. All three report that drug use in the adult population has fallen since the preceding survey. The BCS reports that last year prevalence was at the lowest level since the survey first asked questions about drug use in 1996. This fall has been largely driven by a decrease in cannabis use, while the long term trend in Class A drug use has been relatively stable. Multivariate analysis of the BCS showed that, in addition to age and sex, the characteristics that contribute most to explaining last year drug use are frequency of alcohol consumption and marital status.

The UK Focal Point has produced United Kingdom prevalence estimates for 2008/09 based on the three crime surveys undertaken in that year. In the adult population as a whole, prevalence has changed little from the previous UK estimate based on surveys undertaken around 2006/07. However, prevalence among young adults appears to have fallen slightly. It should be noted that these UK estimates are strongly influenced by the results of the 2008/09 BCS which in that year reported generally higher prevalence than might be anticipated from the long term trend.

School pupils

The latest survey of smoking, drinking and drug use amongst school pupils in England reported that prevalence of drug use in 2009 has changed little since 2008 although there has been a general decline since 2001. Recent users of Class A drugs were more likely to report frequent use than users of other drugs. Of recent cannabis-only users, a third said they had only ever taken drugs once.

Drug use by ethnicity and sexual orientation

A new analysis of drug use by ethnicity using combined data from three years of the BCS was reported. Recent drug use was highest amongst the 'mixed' ethnic group (though at a similar level to 'white' groups after standardising for age) and was lowest amongst the 'Asian or Asian-British' group. An analysis of drug use by self-reported sexual orientation using data from the 2007/08 and 2008/09 BCS was also published. Prevalence of recent drug use was much higher amongst those reporting themselves as gay or bisexual (32.8%) than for heterosexual adults (10.0%).

Attitudes to drug use

Results from the *British and Scottish Social Attitudes Surveys* were published in 2010 and both show that attitudes to drug use have become less liberal since questions were last asked on this topic in 2001.

Chapter 3. Prevention

Universal - education

In England, 86% of schools had achieved 'healthy schools status' by summer 2010 meaning that they could demonstrate a focus on Personal, Social, Health and Economic (PSHE) education. This includes substance misuse education, a clear drug policy and appropriate links to outside agencies.

In Wales a review of schools drug guidance is underway. The All Wales Schools Programme is being further developed to extend the reach of substance use education with disengaged pupils.

Mass media and campaigns

In England, FRANK had 5.6m contacts in 2009/10. From autumn 2009 it ran a 'Crazy chemist' campaign focusing on legal highs.

In Scotland, Know the Score focused on cocaine, with the message: 'You don't know what you are getting with cocaine.' The campaign was re-enforced with cocaine awareness weekends targeting young people in pubs, clubs and festivals.

In Wales, the Dan 24/7 telephone helpline reported an increase in callers from the previous 12 months as a result of targeted advertising at key times of year such as Xmas and New Year.

Community based prevention

In England and Wales the 'Positive Futures' programme, which provides diversionary activities in disadvantaged areas, reported that in 2009/10 nearly 55,000 young people took part in activities and 1,135 received substance misuse education and support.

The UK Drug Policy Commission (UKDPC) conducted a literature review of drug prevention provision in the UK for Ethnic minorities, Lesbian Gay Bisexual, Transgender (LGBT) and Disabled communities. They suggest that further knowledge should be gained about these groups and that prevention should be specifically tailored to meet the needs of diverse communities and delivered using a variety of media, venues and languages.

At risk families and children

In England, 'Family Intervention' projects provide intensive support to families affected by drug use. At the end of 2009 around 230 projects were operational.

Following a positive evaluation last year, the 'Strengthening Families' programme in Wales has been extended to a further seven areas of the country (in addition to Cardiff where it has been running since 2005). The aim of the project is primary drug prevention, to improve family bonds and reduce risk factors associated with drug use. A Randomised Controlled Trial (RCT) exploring the outcomes of the project started in 2009 and is due to report in 2014.

Chapter 4. Problem drug use

Estimate of problem drug users

New estimates for 2008/09 of the number of problem drug users in England were published in October 2010. The total number of PDUs was estimated to be just over 320,000, with about 260,000 opiate users and 190,000 crack cocaine users. There was no significant change from the previous overall estimate for 2006/07, though there was a statistically significant fall in the estimated number of opiate users. There were decreases in the numbers in younger age groups and an increase in the 35 to 64 age group.

In Wales, following on from a national estimate published in 2009, PDU estimates have been published at Heath Board level and show marked differences between areas.

Combining the new estimates for England with the most recent estimates for Northern Ireland, Scotland and Wales, it is estimated that there are just under 400,000 PDUs in the UK, equivalent to a rate of 9.79 per 1,000 population aged 15 to 64.

Chapter 5. Drug-related treatment: treatment demand and treatment availability

Strategy and policy

It was announced that the National Treatment Agency (NTA) will cease operating as a separate organisation in 2012 and become part of the new proposed Public Health Service. The treatment system in England will be realigned to champion abstinence based treatment.

Treatment system

The NTA in England published guidance on commissioning for reintegration and recovery and has set up a Substance Misuse Skills Consortium to build consensus around effective treatment for recovery. Research on the use and effectiveness of injectable opioids has been published. There has also been a number of reports published focusing on drug treatment outcomes in England including findings from the Drug Treatment Outcomes Research Study (DTORS) and data from the Treatment Outcomes Profile (TOP).

Treatment demand indicator

Presentations to treatment increased by six per cent in 2008/09 to 139,390. Opiates remain the most common primary drug accounting for 61% of all treatment presentations with around one-third of primary heroin users reporting secondary use of crack cocaine. Cannabis and cocaine powder presentations continue to increase and account for a higher proportion of all treatment presentations than in previous years. Older clients (aged over 40) now account for 17% of all treatment presentations and 19% of heroin presentations, a near doubling since 2003/04 (10%).

Clients in treatment

In 2009/10 there were 206,889 adults in contact with structured drug treatment in England. It is estimated that 50% of problem drug users (users of heroin and/or crack cocaine) were in contact with drug treatment services in England during 2008/09. There were 6,429 clients receiving drug treatment in Wales during 2009/10.

Substitution treatment

Data show that 119,729 opiate users were in contact with prescribing services in England during 2008/09. In Wales there were 1,376 referrals to prescribing services during 2009/10 and in Northern Ireland 550 individuals were in contact with substitute prescribing treatment services in 2008/09.

Chapter 6. Health correlates and consequences

Drug-related deaths

Using the EMCDDA definition, drug-related deaths decreased by 6.2% on the previous year (2,092 in 2009 compared to 2,231 in 2008). The average age of death is rising (from 32 in 1996 to 38 in 2009). Opiates were the main drugs mentioned on death certificates. Cocaine mentions peaked in 2008 and fell sharply in 2009.

In Scotland in 2009 a total of 545 DRDs were recorded according to the UK Drug Strategy definition, a decrease of five per cent from 2008. This follows a sharp increase (of 26%) in deaths between 2007 and 2008.

Drug-related infectious disease

HIV prevalence in IDUs in 2009 is similar to previous years at 1.5% (in England & Wales), although these are higher levels than those recorded in the 1990's (0.8% in 1999 and 2000). Prevalence is much higher in London (4.1% compared to 0.9% elsewhere). In Northern Ireland, infection amongst IDUs is reported as 1.3%.

In 2009, prevalence of hepatitis C amongst IDUs in England and Wales was 48% (compared to 44% in 2008). Broken down by constituent country this equates to 49% in England; 32% in Wales; and 28% in Northern Ireland. Similar to HIV, current prevalence is higher than in the late 1990's (35% in 1999) and is also much higher in London (59%).

Between December 2009 and 30th September 2010, there were 51 confirmed cases of anthrax amongst heroin users resulting in 16 deaths (47 cases in Scotland, 13 deaths; 4 cases in England, 3 deaths). It is thought to be due to a batch of contaminated heroin.

Chapter 7. Responses to health correlates and consequences

Drug-related deaths

In Scotland the National DRD database (NDRDD) collected its first year of data which is due for publication in late 2010. Briefing papers and overdose prevention materials have been published by the Scottish Drugs Forum and the National Forum on DRD respectively. In Wales four confidential panels have started to review the circumstances around DRDs resulting in changes in service provision.

Take home naloxone schemes are currently being piloted in England and Wales, and in Scotland a national scheme has commenced.

Drug-related infectious disease

In Scotland a hepatitis C campaign was launched and an increase has been reported in the numbers treated for it. Guidance for the provision of injecting equipment to drug users has been published. In Wales a blood-borne virus action plan has been launched alongside £1.3m funding. A needle exchange monitoring system has started.

Chapter 8. Social correlates and social reintegration

Housing

Sixteen per cent of clients entering treatment in Scotland in 2008/09 reported being homeless. Eight per cent of new clients entering treatment in England during 2009/10 reported an urgent housing problem.

In 2008/09 local authorities spent €37.8 million (£30 million) on housing related support services for drug users funded through the Supporting People programme. Research carried out on behalf of Communities & Local Government estimated the overall net benefit of the Supporting People programme to be €178.2m (£157.8m) per annum.

Employment

Data show that only 15% of clients entering treatment in England, Scotland and Northern Ireland during 2008/09 were in regular employment. Research published by the Department for Work and Pensions explored problem drug users' experience of the employment and benefits system.

Following criticism of proposals for the welfare reform drugs recovery pilot scheme in the Social Security Advisory Committee's response to the Green Paper, the new Government announced that it would not be proceeding with the pilots.

A report by the National Audit Office stated that only eight per cent of drug users who received help into employment by the Progress2work programme kept a job for 13 weeks or more.

Families

Forty-two per cent of clients reporting to the Scottish Drug Misuse Database in 2008/09 reported having dependent children under the age of 16 years old.

The UKDPC estimate that at least 1,443,774 adult family members live with a problematic drug user.

Guidance on the development of local protocols between drug and alcohol treatment and local safeguarding and family services has been published.

Chapter 9. Drug-related crime, prevention of drug-related crime and prison

Drug offences

There were 277,552 recorded drug crimes in the UK in 2009/10, a 3.5% decrease since the previous year and the first decrease since the introduction of the cannabis warning in England and Wales in 2004. The number of persons arrested for drug offences in England, Wales and Northern Ireland increased by 10% in 2008/09 to 117,130. In 2008 there was an eight per cent increase in the number of convictions and cautions for drug offences with cocaine powder offences continuing to rise.

Prevention of drug-related crime

Data show that, in 2008/09, almost 58,000 adults commenced drug treatment in England and Wales through the Drug Interventions Programme (DIP).

Data show that, amongst a cohort of drug-misusing offenders in early 2008, 61% were convicted of at least one offence in the 12 months following identification. Data from Scotland show that the two-year re-offending rate of a 2006/07 cohort of drug offenders was 45%.

Interventions in the criminal justice system

The new Government's draft structural reform plan states that a full examination of sentencing will be conducted to ensure that sentencing for drug use helps offenders come off drugs. In 2010, the Sentencing Advisory Panel published advice for The Guidelines Council on sentencing for drug offences.

Twenty-one per cent of drug offenders convicted at court in England and Wales during 2008 were sentenced to immediate custody, an increase from 18% in the previous year. Nine per cent of all receptions to prison were for drug offences.

Alternatives to prison

In 2009/10 there was an 11% decrease in the number of Drug Rehabilitation Requirement (DRR) commencements in England and Wales with the completion rate increasing from 47% to 56%.

In Scotland during 2008/09 there were 881 Drug Treatment and Testing Orders (DTTOs) handed out by courts with two-thirds of these for crimes of dishonesty such as shoplifting and housebreaking. Following a process evaluation of the DTTO II pilots in Scotland, the pilots have been extended.

Drug use and prisons

In England and Wales, 7.8% of prisoners tested positive for drugs in 2009/10.

In Scotland, in 2009, just over one-fifth of prisoners reported using drugs in the last month while in prison. Data show that, of the prisoners tested on reception to prison in Scotland during 2008/09, 71% tested positive. On release from prison, 29% tested positive.

The Integrated Drug Treatment System (IDTS) is in its final phase of roll-out in England and an independent evaluation is underway. Data show that 64,747 prisoners received clinical drug treatment in England and Wales in 2008/09 and 10,747 started non-clinical treatment programmes.

The findings and recommendations of the prison drug treatment strategy review group, chaired by Lord Patel have been published.

The Scottish Prison Service published a strategy framework for managing substance misuse in custody.

Chapter 10. Drug markets

Availability

Since 2005 there has been a downward trend in the proportion of school children reporting that it is easy to obtain drugs.

Seizures

There was a six per cent increase in the number of drug seizures in England and Wales during 2008/09. Cocaine powder seizures continue to increase and there has been an increase in the number of cannabis factory discoveries.

The quantity of cannabis seized has increased while seizures of cocaine powder and ecstasy have fallen.

In Northern Ireland there were a total of 3,319 seizures, an increase of four per cent from the previous year.

The number of ecstasy tablets analysed by the Forensic Science Service (FSS) has fallen substantially since late 2006. Since then there has been an increase in tablets containing piperazines and, after the classification of piperazines, cathinones.

Price/purity

Data from law enforcement agencies show that the price for crack cocaine and ecstasy has fallen while the price for skunk cannabis has increased.

The purity of cocaine powder has again decreased and is now at 20%. When adjusting for purity, the price of cocaine powder has almost doubled since 2003.

SOCA's Project Endorse has reported on levels of purity found in seizures of heroin, cocaine and amphetamine over 25g in weight.

PART B: Selected issues

Chapter 11. History, methods and implementation of national treatment guidelines

The United Kingdom has a long tradition of providing guidance for professionals involved in the provision of drug treatment. There is a large number of guidelines covering a wide range of topics, settings and client groups. This chapter provides an overview of the development of treatment guidelines in the UK, the framework within which they operate, their content, the groups they address and the methods of implementation.

Twenty four individual treatment guidelines and a further twenty four documents providing contextual guidance are identified. Of these six are discussed in detail. *Drug use and dependence: UK guidelines on clinical management* issued in 2007 was developed to be applicable across the UK. *Models of Care for Treatment of Adult Drug Misusers*, updated in 2006, is applicable to England and provides guidance on a commissioning framework for drug services that can provide a wide range of interventions to meet the needs of drug users. Four guidelines produced by the National Institute for Health and Clinical Excellence (NICE) are described, two clinical guidelines and two 'technology appraisals'. The status of NICE guidance varies across the UK. Of all the guidelines described only NICE technology appraisals have specific statutory status.

UK guidelines are generally in accordance with World Health Organisation (WHO) guidelines.

Chapter 12. Mortality related to drug use: a comprehensive approach and public health implications

This chapter includes a review of national prospective cohort studies (NTORS and DORIS) and several local studies conducted by record linkage of treatment, GP, hospital and death data. The majority of deaths in the studies considered were 'drug-related' (e.g. overdose, poisoning) but up to a third of deaths in some studies were due to 'other' reasons. It is reported that older (over 40) drug users are more likely to die due to 'other' reasons including: liver disease; hepatitis; injury/assaults and infection.

Chapter 13. Cost of drug-related treatment

Sources of funding

The largest source of funding to Drug Action Teams (DATs) in England during 2008/09 was the Pooled Treatment Budget (PTB). Other large sources of funding were Primary Care Trust (PCT) mainstream monies and the Drug Interventions Programme.

The majority of prison drug treatment funding comes from the Ministry of Justice with funding from the Department of Health for prison clinical drug treatment.

Expenditure

Data taken from DATs' local treatment plans show that, in 2008/09, just over half of all PTB funding was allocated for structured community based treatment with eight per cent allocated for residential/inpatient treatment. Social services funding was most likely to be spent on residential/inpatient treatment (52%).

Costs of drug treatment

The NTA has published a unit cost dataset for drug treatment to assist DATs with local treatment planning.

Economic evaluations

A number of economic evaluations of drug treatment have been published including NTORS and DTORS. All studies suggest that drug treatment is cost-effective mainly due to a reduction in criminal justice costs although the lack of a control group in studies makes it difficult to attribute changes to the treatment received.

Part A: New Developments and Trends





1. Drug policy: legislation, strategies and economic analysis

1.1 Introduction

The United Kingdom consists of England, Wales, Scotland and Northern Ireland. England accounts for 84% of the UK population. A number of powers have been devolved from the United Kingdom Parliament to Wales, Scotland, and Northern Ireland, but each has different levels of devolved responsibilities.

The Misuse of Drugs Act 1971 is the principal legislation in the United Kingdom with respect to the control and supply of drugs that are considered dangerous or otherwise harmful when misused. This Act divides such drugs into three Classes (A, B and C) to reflect their relative harms and sets maximum criminal penalties for possession, supply and production in relation to each class. Drugs in Class A include cocaine-based drugs, ecstasy, LSD, magic mushrooms, heroin, methadone and injectable amphetamine. In addition, methylamphetamine was reclassified from Class B to Class A in January 2007. Class B drugs include amphetamine, cannabis (since January 2009) and, since April 2010, cathinone derivatives including mephedrone. Further cathinone derivatives, including naphyrone, were added in July 2010. Class C drugs include anabolic steroids, tranquillisers, ketamine and since December 2009, BZP and GBL. *The Drugs Act 2005* amended sections of the *Misuse of Drugs Act 1971* and the *Police and Criminal Evidence Act 1984*, strengthening police powers in relation to the supply of drugs.

The United Kingdom Government is responsible for setting the overall strategy and for its delivery in the devolved administrations only in the areas where it has reserved power. A new United Kingdom Drug Strategy was launched by the former Labour Government in February 2008; within it, policies concerning health, education, housing and social care were confined to England; those for policing and the criminal justice system covered England and Wales.

The Scottish Government and the Welsh Assembly Government (WAG) also launched new strategies in 2008, the latter combining drugs, alcohol and addiction to prescription drugs and over-the-counter medicines. All aim to make further progress on reducing harm and each looks towards a greater focus on recovery. All three strategy documents were accompanied by an action or implementation plan, providing a detailed set of objectives; actions and responsibilities; expected outcomes and a corresponding time scale (HM Government 2008a; HM Government 2008b; Scottish Government 2008a; WAG 2008a; WAG 2008b). Each plan reflects the devolution of responsibilities to the national government. Northern Ireland's strategy for reducing the harm related to alcohol and drug misuse, the *New Strategic Direction for Alcohol and Drugs (NSD)*, was launched in 2006. The NSD contained actions and outcomes, at both the regional and local level, to achieve its overarching aims (DHSSPSNI 2006). The UK strategies are also underpinned by performance management frameworks and associated sets of performance indicators which progress is measured against.

Labelled public expenditure on drugs in the United Kingdom is estimated to be around €1.5 billion (£1.3 billion) per annum. The economic and social costs of Class A drug use in England and Wales combined are estimated to have been around €22.2 billion (£15.4bn) in 2003/04 (Gordon et al. 2006). Using a similar methodology, it is estimated that in 2006 the economic and social costs of illicit drug use in Scotland were €5.1 billion (£3.5bn) (Audit Scotland 2009).

1.2 Legal framework

Welfare Reform Act 2009

The Welfare Reform Act 2009 came into effect in November 2009. Schedule 3 to the Act makes provisions for the imposition of certain requirements on people claiming jobseeker's allowance (JSA) who misuse drugs. These provisions require claimants to answer questions about their drug use and to undertake a substance-related assessment if there are reasonable grounds for suspecting that they may have a drug problem. The substance-related assessment has two parts; an initial assessment followed by an interview a few days later. Where the claimant refuses the assessment, they can be required to take one or more drugs tests. If a claimant is misusing drugs and agrees to a voluntary rehabilitation plan, jobseeking conditions can be suspended and a 'treatment allowance' provided instead. Where a claimant refuses to take part voluntarily, a mandatory rehabilitation plan can be imposed upon them. This may include a requirement to take part in educational programmes or attend assessments and interviews but cannot include medical treatment without the claimant's consent. Sanctions for not complying with the treatment regime include non-payment of benefit for a period of at least one week and no more than 26 weeks.

These provisions had not been implemented before the General Election in May 2010 and, following it, the new Government announced that it would not be taking forward the proposals contained within the Act (see section 8.3.2).

Classification under the Misuse of Drugs Act 1971

Classification of 'legal highs'

On 23rd December 2009, a range of so-called 'legal highs' were brought under control of the *Misuse of Drugs Act 1971.*¹ These were:

- synthetic cannabinoids receptor agonists (including herbal smoking mixes such as Spice) which were controlled as Class B drugs alongside cannabis;
- gamma-butyrolactone (GBL), a chemical solvent which is converted to GHB (gamma-hydroxybutyrate) in the body and was controlled as a Class C drug when intended for human consumption; and
- 1-benzylpiperazine (BZP) and related piperazines, which were controlled as Class C.

Fifteen anabolic steroids and two growth promoters were also controlled as Class C drugs as was oripavine, which is an alkaloid found in poppy straw of the opium poppy and can be converted into thebaine (controlled under the 1971 Act as a Class A drug) and used in the production of semi-synthetic opiates such as hydrocodone and oxycodone.

Classification of mephedrone and related cathinone derivatives

The Advisory Council on the Misuse of Drugs (ACMD) gathered written and oral evidence on the cathinones during the early part of 2010. On 31st March a report on the consideration of the cathinones was published and provided to the Home Secretary (ACMD 2010a). It concluded that mephedrone and related cathinone derivatives are likely to be harmful to users. However, at present, data on harms are mostly self-reported with little clinical data available. These harms were assessed as being commensurate with those caused by amphetamines and consequently it was recommended that the substances be controlled by way of a generic definition as Class B drugs. Following the ACMD's advice, an order was placed before Parliament² and a ban on some cathinone derivatives including mephedrone

¹ See: http://www.legislation.gov.uk/uksi/2009/3135/contents/made

² See: http://www.legislation.gov.uk/uksi/2010/1207/contents/made

came into effect on 16th April 2010.

An editorial in *The Lancet* criticised the speed at which the ban on mephedrone came into effect and suggested that there was insufficient evidence to judge the harms caused by cathinones (The Lancet 2010).

Classification of naphthylpyrovalerone analogues and related compounds

The ACMD provided the Home Secretary with a further report on 7th July on the naphthyl analogues of pyrovalerone, including naphyrone (ACMD 2010b). It assessed naphyrone as having a high potency by comparison with other cathinone derivatives and this suggests that its use is likely to be associated with a higher risk of accidental overdose. Following the ACMD's advice, an order was placed before Parliament³ and a ban on these cathinone derivatives came into effect on 23rd July 2010 controlling them as Class B drugs.

Rethinking drug control options

A research project is being carried out by the United Kingdom Drug Policy Commission (UKDPC) and Demos⁴ to examine possible different ways of handling the control of emerging synthetic drugs similar to mephedrone. The project is due to report in early 2011.

Review of drink and drug driving law

In December 2009 the Secretary of State for Transport asked Sir Peter North to look at possible changes to the legislative regime for drink and drug driving.⁵ The study looked at whether there is a need to tighten the law on drug driving or for new legislation to be introduced to make it an offence to drive with a named substance in the body. The final report, published in June 2010, explored the current law and procedure and discussed the evidence on and issues around drug driving (North 2010). An evidence review was conducted to inform the study, summarising both national and international research (Jackson and Hilditch 2010) with the review concluding that the evidence in relation to drug driving is poor. Twenty-three recommendations related to drug driving were given and a road map for improving the law and drug testing process was published. This consists of five stages:

- 1. Improving the current drug testing process.
- 2. Activating the use of preliminary screening tests.
- 3. Introduction of a specific prescribed limit drug drive offence.
- 4. Development of preliminary drug screening at the roadside.
- 5. Development of evidential saliva testing

To implement stage three of the process, agreement on levels at which different drugs could be deemed to be impairing, the creation of a new offence of driving with a level of a drug above the prescribed limit, and the power to create a list of controlled drugs with specified limits for driving would be needed.

³ See: http://www.legislation.gov.uk/uksi/2010/1800/contents/made

⁴ An independent think tank with a focus on power and politics. See: http://www.demos.co.uk/about

⁵ See: http://northreview.independent.gov.uk/index

1.3 National action plan, strategy, evaluation and co-ordination

1.3.1 National action plans and strategies

England

After a change in Government in May 2010, the *Action Plan* relating to the previous Government's *Drug Strategy* (HM Government 2008b) became obsolete. Furthermore, in June 2010 it was announced that Public Service Agreements (PSAs)⁶ were to be abolished to be replaced with an as-yet unspecified system that will allow for better transparency, less top-down performance management and more local priority setting.

The new Coalition Government set out a number of immediate priorities related to drugs within the Coalition Agreement, which was published in May 2010 (Cabinet Office 2010). These include:

- the introduction of a system of temporary bans on new 'legal highs';
- a full review of sentencing policy to ensure that it is effective and helps offenders to come off drugs; and
- exploring alternative forms of secure, treatment-based accommodation for drug offenders.

The Home Office also published a draft structural reform plan in July 2010, in which specific activities on drugs are set out including the introduction of a new system of temporary bans on new legal highs and the development of options and a new strategy for tackling drugs misuse covering prevention, enforcement, treatment and reintegration (including rehabilitation) (Home Office 2010a).

In August 2010 a targeted consultation on the new Drug Strategy was launched (Home Office 2010b). The Home Office will lead the Strategy, which is due for publication in December 2010. The broad themes have been agreed with Ministers and the consultation document contained a number of questions around these themes. The consultation document was structured around the following headings: prevent drug use; strengthen enforcement, criminal justice and legal framework; rebalance treatment to support drug free outcomes; and support recovery to break the cycle of drug addiction. The new Strategy aims for:

- greater ambition for individual recovery whilst ensuring the crime reduction impact of treatment;
- actions to tackle drugs being part of building the 'Big Society';'7
- a more holistic approach with drugs issues being assessed and tackled alongside other issues such as alcohol abuse, child protection, mental health, employment and housing;
- budgets and responsibility devolved wherever possible, with commissioning of services at a local level;
- budgets and funding streams simplified and outcome based; and
- the financial costs of drug misuse reduced.

⁶ PSAs described how targets would be achieved and how performance against those targets would be measured. Thirty new PSAs were announced after the 2007 Comprehensive Spending Review, with PSA 25: Reducing the harm caused by alcohol and drugs being the most relevant for drugs policy.

⁷ See: http://www.cabinetoffice.gov.uk/media/407789/building-big-society.pdf

Scotland

HEAT targets

In April 2010, a national HEAT (Health improvement, Efficiency, Access, Treatment) target was announced stating that, by March 2013, 90% of people who need help with their drug problem will wait no longer than three weeks for treatment. By April 2011, this will be incorporated into a target covering both alcohol and drug waiting times.

Drugs Strategy Delivery Commission

The Drugs Strategy Delivery Commission (DSDC) has been established to provide independent expert advice and to challenge the Scottish Government on the delivery of the national drugs strategy. The Commission includes individuals with a range of practical expertise in the drugs field; the medical profession, academia, prisons, families, the voluntary sector, law enforcement, local government, pharmacy and volunteers with experience of recovery. The Commission met for the first time in December 2009 and has since established five key priorities that will inform how the Commission might assess the impact of the drugs strategy at a local and national level in Scotland. These five priorities, forming the basis of the DSDC's work in its first year, are Children and Families, Prevention, Enforcement, Care, Treatment and Recovery, and Performance and Delivery.

Scottish Drugs Recovery Consortium

The Scottish Drugs Recovery Consortium (SDRC)⁸ is a new national membership organisation and independent charity funded by the Scottish Government to support the delivery of the national drugs strategy, *The Road to Recovery* (Scottish Government 2008a). It brings together key partners from the voluntary, statutory, policy and academic fields and individuals in recovery who share the belief that people can and do recover from drug problems and addiction. The SDRC will drive and promote recovery for individuals, family members and communities affected by drugs across Scotland.

Wales

Substance Misuse Area Planning Boards

Guidance for partner agencies establishing Substance Misuse Area Planning Boards (APBs) has been developed. APBs are being established to support the planning, commissioning and performance management of substance misuse services at a regional level. To ensure direct accountability at a local level, the seven Local Health Boards are now statutory members of Community Safety Partnerships (CSPs) and the Probation Service will become a 'responsible authority' within CSPs by the end of the year.

Implementation of the Substance Misuse Strategy

The *Substance Misuse Annual Report 2009* (WAG 2010a) sets out the progress made in implementing the Welsh Assembly Government's 10-year Substance Misuse Strategy. An annex to the report sets out progress against the Key Performance Indicators (KPIs). Baselines for progress were established in 2008 and the most recent data show a seven per cent reduction in serious acquisitive crime and a reduction in drug-related deaths, the latter contrary to the trend across the UK. Other targets met include:

- the creation of 1,160 extra treatment places (1,739 created); and
- an increase in proportion of cases assessed within 10 working days from 55% at baseline to 62% in the 2nd quarter of 2009/10.

⁸ See: http://www.sdrconsortium.org/

However there was a slight increase in unplanned ending of contact with services from 43% to 47%, a reduction in the proportion of cases being treated within 10 days of assessment from 93% to 85%, and a decrease in the proportion of young people being assessed within five days of referral from a youth offending team (89% to 82%).

Northern Ireland

An update on the implementation and delivery of the *Northern Ireland Drug Strategy, the New Strategic Direction on Alcohol and Drugs 2006-2011* (DHSSPSNI 2006) was published in April 2010 (DHSSPSNI 2010a). It sets out progress against key priorities and short and medium term outcomes concluding that a significant amount of work aimed at reducing the harm caused by alcohol and drugs has been undertaken. The NSD is due to run until 2011 and the NSD Steering Group has proposed that, rather than carrying out a full formal review and new strategy development, a process to update and extend the NSD for a further five years is put in place.

1.3.2 Implementation and evaluation of national drug strategy

Tackling problem drug use

A report by the National Audit Office (NAO 2010) stated that there was no overall evaluation framework for assessing the effectiveness of the *Drug Strategy* and related *Action Plan*. The difficulties in devising a framework for evaluation are noted but the NAO state that an evaluation framework is necessary "to safeguard the ongoing use of public funds; to understand the extent to which the Strategy is achieving the intended objectives, and how this could be improved, and to report on performance in reducing the costs to society of problem drugs."

To date, evaluation of the *Drug Strategy and Action Plan* has used individual measures related to specific objectives to assess effectiveness. However of the 22 strategic objectives in the *Action Plan for 2008-11*, the NAO report that eight do not have an identified measure to assess progress. A validation of the data systems underpinning the main PSA for drugs, PSA 25 (now obsolete following a change in Government), found that while the data systems for the number in effective treatment and public perceptions of drug use/dealing as a problem were fit for purpose, it was not possible to measure reliably the rate of drug-related offending or report on performance in reducing this rate.

The NAO stated that without an evaluative framework for the Strategy as a whole, it was not able to conclude positively on value for money. Nevertheless, it was noted that the *Drug Treatment Outcomes Research Study (DTORS)* estimated the cost-benefit ratio for drug treatment, the largest element of spending, at 2.5:1 (see section 13.6.1) and that the programme has delivered some significant successes.

The NAO report was presented to the House of Commons' Committee of Public Accounts and, following further evidence from witnesses in the Home Office and the National Treatment Agency (NTA), a report was published containing a number of conclusions and recommendations including the need to evaluate spend and progress against the *Drug Strategy's Action Plan* (Committee of Public Accounts 2010).

The Home Office response to the Committee of Public Accounts was published in July 2010 (HM Treasury 2010). The response stated that a single evaluation of the wide-ranging *Drug Strategy* is not considered to be the most suitable form of measurement. A single evaluation, the response argues, would find it difficult to determine what is driving outcomes due to the many strands of drug policy. Furthermore the data required to undertake such an evaluation are limited and it would be difficult to establish what would have occurred in the absence of the *Drug Strategy*. Thus far, evaluation has used a bottom-up approach focusing on individual strands of the strategy but the future *Drug Strategy* of the Coalition Government will include details of a new approach to help facilitate a more holistic overview of the effectiveness and value for money of the new *Drug Strategy*.

1.3.3 Other drug policy developments

Resignation of the Chair of the ACMD

In October 2009, the former Home Secretary wrote to the Chair of the ACMD, Prof. David Nutt stating that: "your recent comments... have been lobbying for a change in Government policy" and he had therefore lost confidence in his ability to advise him and would ask him to resign his position. Five further members of the ACMD resigned in the wake of Prof. Nutt's resignation and a debate ensued around the relationship between scientific advice and government policy. In January 2010, Prof. Les Iversen, was appointed as Chair.

Independent Scientific Committee on Drugs

Prof. David Nutt subsequently established the Independent Scientific Committee on Drugs (ISCD), consisting of members from across the substance misuse field including former and current members of the ACMD.⁹

1.3.4 Research

Cross-Government Drugs Research Strategy

In February 2010 the Cross-Government Drugs Research Strategy was published (HM Government 2010a). Developed by the Cross-Government Research Programme on Drugs (CGRPD),¹⁰ it identified six key priorities:

- 1. Strengthen understanding of drug use: aetiology, incidence, prevalence and patterns of use.
- 2. Strengthen knowledge of drug use and needs amongst a number of groups, including young people, Black and Minority Ethnic (BME) groups, families, and drug-using offenders.
- 3. Review knowledge and measures of drug-related harms.
- 4. Develop understanding of treatment, prevention and other demand side interventions.
- 5. Review and strengthen understanding of UK drug markets, and interventions to tackle them.
- 6. Strengthen understanding of public confidence, perceptions and behaviour.

The strategy makes a commitment to refresh the list of priorities annually and sets out the way in which the CGRPD will support delivery of the research strategy. This includes:

- carrying out stock-takes of ongoing government research on drugs annually and monitoring their delivery;
- assessing research needs and activity against the Drug Strategy and Drug Strategy Action Plan; and
- revisiting the research priorities, assessing progress against these and identifying further priorities on an annual basis.

⁹ See: http://www.drugscience.org.uk/

¹⁰ The CGRPD was established in the autumn of 2008 following a commitment in the 2008 Drugs Strategy to strengthen the evidence base through better coordination of drugs research across Government. See 2009 UK Focal Point report for further information.

Drugs evidence review

The Scottish Government commissioned an evidence review (Best et al. 2010) to assess the existing drugs evidence base against the requirements of Scotland's Drug Strategy. The review aimed to identify where the evidence base is already strong, what can be learnt from it about effective approaches to recovery, and what research is still needed to help inform the successful delivery of the strategy.¹¹

The review found that sustained recovery is the norm, although the time to recover and the pathways involved are unique to the individual. The recovery journey typically lasts five to seven years (to get former problem drug users to the point where they are no more likely to take illicit drugs than the general population). The most important driver of recovery is the extent of 'recovery capital'. This includes the personal and psychological resources a person has, the social supports that are available to them and the basic foundations of quality of life (i.e. a safe place to live, meaningful activities and a role in their community). While structured treatment has a key role to play in an individual's recovery, it is only part of the support that most people will need to recover from their drug use. Ongoing support in the community is essential for maintaining and continuing the recovery journey. Findings from the review emphasise the importance of the positive outcomes associated with mutual aid and peer support in the community and the importance of assertive follow-up support following treatment.

The review also identified a number of gaps in the evidence and highlighted the fact that most of the evidence around recovery comes from the alcohol field and from the United States. More 'technology transfer' research is needed to test effective approaches to drugs recovery in a Scottish/UK context. The review suggests that there is a need for new longitudinal research examining the medium and longer-term impact of a recovery approach and revealing the most effective long-term recovery pathways. The review highlighted a particular evidence gap on the impact of drug treatment aftercare in Scotland.

The Scottish Government and Scotland's National Drugs Evidence Group will now work towards agreeing a new Drugs Evidence Framework, setting out the key priorities for new evidence to fill the gaps identified by the review.

Drugs research programme

The Joseph Rowntree Foundation (JRF) published a report summarising the findings and implications of research funded under the JRF's five-year Drugs and Alcohol Research Programme (Lloyd and McKeganey 2010).¹² The authors state that, despite significant government investment in drugs research, the majority has been on large-scale surveys, monitoring and evaluations rather than on descriptive or explanatory research. While the JRF programme attempted to fill some of the gaps, the authors highlight a number of areas where gaps in understanding still exist. These include knowledge about cannabis use, with the authors suggesting the need for a user survey, and knowledge about enforcement despite a large proportion of government expenditure in this area. Other gaps identified include routes in and out of problematic drug use; the long-term impact of drug use on families; drug injectors' reactions to positive hepatitis C tests; and how services can reduce drug-related deaths. The authors go on to say that there is a need to look beyond medical science, which they claim dominates drug research, towards more social science research since drug use is essentially a social activity.

¹¹ The study involved a comprehensive literature review of published and unpublished evidence around recovery (in drugs, but also in other related fields such as alcohol and mental health), as well as a series of specific reviews in the areas of criminal justice, families, prevention and treatment. The literature review was followed by a 'consultation' phase, in which key experts in the drugs field were interviewed about the findings of the review, the drugs evidence base in Scotland and internationally and the key gaps in current knowledge.

¹² The research programme was funded over the period 2001 to 2005, during which time £1.5 million was spent. The last report from the programme was published in 2008.

Evidence-based drug policy

Bennett and Holloway (2010) examined the extent to which the 2008 UK Drug Strategy was based on evidence. The authors identified one case study in each of the four main strands of the strategy: the reclassification of cannabis; the Blueprint drug education programme; dedicated drug courts; and the 'Talk to Frank' campaign. They found that all policies were based on evidence although they assessed the evidence used to support the 'Talk to Frank' campaign as not being of good quality. In two of the case studies, of Blueprint and 'Talk to Frank', they concluded that the evidence used was selective and, in the other two cases, they felt that the conclusions the policies were based upon did not accurately reflect the conclusions of the research evidence.

1.4 Economic analysis

1.4.1 Budget and public expenditure

England

The aims of the new Drug Strategy contained in the consultation document (Home Office 2010b; see section 1.3.1), include measures to simplify budgets and funding streams and reduce the financial costs of drug misuse.

Labelled drug expenditure

Table 1.1 shows labelled drug expenditure for England from 2006/07 to 2009/10 by the United Nations Classifications of the Functions of Government (COFOG).¹³ Overall in 2009/10 labelled expenditure increased by two per cent from 2008/09¹⁴ with increases in expenditure on public order and safety, health, and social protection. Increases in public order and safety expenditure over this period are predominantly due to a 71% increase in expenditure on the Integrated Drug Treatment System (IDTS) in prisons from €29.2 million (£23.2 million) to €44.6 million (£39.7 million). For health, the adult pooled treatment budget (PTB) increased by two per cent to €403.6 million (£359.3 million) and mainstream health contributions increased by five per cent to €244.9 million (£218.0 million). The increase in social protection expenditure since the previous year is due to the introduction of drug co-ordinators in Jobcentres, which was allocated €4.5 million (£4 million) worth of funding. The overall reduction in social protection spending since 2006/07 is due to the mainstreaming of certain programmes (see 2009 UK Focal Point report).

COFOG CATEGORY	2006/07	2007/08	2008/09	2009/10
	(£/€ million)	(£/€ million)	(£/€ million)	(£/€ million)
01 Conorol public convices	83.1	74.6	76.1	62.2
01 – General public services	121.9	109.1	95.8	69.9
03 – Public order and safety	276.7	255.9	269.6	287.9
	405.9	374.1	339.4	323.4
07 Haalth	601.6	611.2	644.9	657.0
07 – Health	882.5	893.5	811.9	738.0
00 Education	5.4	4.2	4.1	3.9
09 - Education	7.9	6.1	5.2	4.4
10 Coold protection	49.8	31.0	7.6	11.4
10 – Social protection	73.1	45.3	9.6	12.8
Total	1016.6	977.0	1002.3	1022.5
ΙΟΙΔΙ	1,491.3	1,428.1	1,261.9	1,148.6

Table 1.1: Labelled public expenditure on drugs by COFOG category in England, 2006/07 to 2009/10

Source: Government Departments

¹³ See: http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=4

¹⁴ Percentage change is based on national currency. The change in Euros will be different due to fluctuations in exchange rates.

Northern Ireland

There was a three per cent rise in public expenditure on the drugs problem in Northern Ireland for 2009/10 to £8.41 million (Table 1.2). Sixty-one per cent (£5.2 million) of the labelled expenditure was allocated for implementing the Drugs Strategy across the four Drug and Alcohol Co-ordination Teams (DACTs).

	2008/09	2009/10
	(£/€ million)	(£/€ million)
Allocation to DACTo	£0.74	£0.74
Allocation to DAC is	€0.93	€0.83
Allocation to implement the national strategy across DACTs	£5.04	£5.2
Allocation to implement the national strategy across DAC is	€6.34	€5.84
Out of the design of the second	£1.03	£1.04
Substitute prescribing anocation to health boards	€1.30	€1.17
Policy dovelopment/research	£0.20	£0.3
Tolicy development/research	€0.25	€0.34
Public information compaigns	£0.44	£0.45
Tublic Information campaigns	€0.55	€0.51
Noodlo and Svringo Exchange Schome	£0.14	£0.15
Needle and Synnge Exchange Scheme	€ 0.18	€0.17
National Strategy implementation expenditure	£0.60	£0.53
	€0.76	€0.60
Total	£8.19	£8.41
	€10.31	€9.45

Table 1.2: Labelled public expenditure in Northern Ireland, 2008/09 to 2009/10

Source: Government departments

Wales

Expenditure

Data from the Welsh Assembly Government show a 43% increase in substance misuse expenditure between 2006/07 and 2009/10 (Table 1.3). The majority of this is due to a near doubling of expenditure on the Substance Misuse Action Fund (SMAF) from €15.1 million (£10.3 million) in 2006/07 to €22.6 million (£20.1 million) in 2009/10. There have been no reductions over this period in any of the listed expenditure items.

EXPENDITURE ITEM	2006/07	2007/08	2008/09	2009/10
	(£/€ million)	(£/€ million)	(£/€ million)	(£/€ million)
Substance Misuse Action Fund (SMAF)	10.30	14.78	18.17	20.13
	15.10	21.61	22.87	22.61
SMAF Capital	4.31	3.69	6.43	5.95
	6.32	5.39	8.09	6.68
Local Health Board*	9.70	10.36	10.87	11.09
	14.20	15.15	13.68	12.46
Drug Interventions Programme (DIP)**	5.65	5.65	6.47	6.47
	8.29	8.26	8.06	7.27
Drug Testing on Charge (DTOC)**	0.82	0.82	-	-
	1.20	1.20	-	-
Operation Tarian	0.64	0.64	0.64	0.64
	0.94	0.94	0.81	0.72
Policy Initiatives	2.40	2.75	3.22	3.98
	3.52	4.02	4.05	4.47
Total	33.82	38.69	45.80	48.26
	49.57	56.57	57.65	54.21

Fable 1.3: Labelled	public expenditure in	Wales, 2006/07 to 2009/10
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*Expenditure relates to 0.4% ring-fenced LHB allocation

**DIP and DTOC budgets aggregated from 2008/09

Source: Welsh Assembly Government

Budget

The SMAF for 2010/11 stands at &38.8 million (£34.5 million), an increase of 21% on the previous year. The increase is made up of both revenue and capital funding, the latter seeing a 70% increase on the previous year. In addition, &19.10 million (£17 million) will be provided from the NHS budget.

Scotland

Funding to NHS Boards for drug treatment services for 2010/11 has increased by over 20% in Scotland since 2006/07. Across Scotland, the ring-fenced budget for Health Boards' drug services will amount to €32.1 million (£28.6 million) in 2010/11, up from €31.5 million (£28.0 million) in 2009/10. This funding will be spent on recovery-focused services, in line with the drugs strategy, to help people to recover from drug problems. In addition, the Scottish Government is providing €3.7 million (£3.3m) to Health Boards to support the operation of Alcohol and Drug Partnerships (ADPs).

These figures refer only to the ring-fenced funding provided to Health Boards and are not the complete picture of Government spend on drug misuse i.e. money from the Justice Directorate budget is allocated for Drug Treatment and Testing Orders (DTTO) and Drug Courts amounting to €10.6m (£9.4m) in 2010/11. A further €30.2 million (£26.9 million) has been allocated from the Justice Directorate to support the Scottish Crime and Drug Enforcement Agency (SCDEA) in 2010/11 (this includes an additional €3.4m (£3m) to boost the capability of the SCDEA in tackling Serious Organised Crime and to allow them to establish the Scottish Intelligence Co-ordination Unit).

In addition, Health Boards provide funding from their unified budget, and funding from local government in the past has been significant, and at least comparable to the ring-fenced funding provided by central government.

1.4.2 Social costs

For estimates of the social costs of adult family members living with a problem drug user, published by the UKDPC (Copello et al. 2009) see section 8.2.3.

2. Drug use in the general population and specific groups

2.1 Introduction

The *British Crime Survey* (BCS) provides estimates of the prevalence of drug use in the general population in England and Wales,¹⁵ Scotland¹⁶ and Northern Ireland¹⁷ also undertake similar surveys. In England and Wales, for which the most complete time series data are available, prevalence of last year use was fairly stable at around 12% from 1996 to 2003/04, but then decreased steadily to around 10% in 2007/08; a downward trend that has been resumed in 2009/10.

Combining data from the crime surveys undertaken in 2008/09, the UK Focal Point estimates that 36.2% of the adult population in the United Kingdom, aged between 16 and 59, had used an illicit drug at some point in their lifetime.

As in previous years, young adults aged under 35 are much more likely than older adults to use drugs, and amongst those who are less than 25 years old, recent (last year) and current (last month) prevalence is higher still. Amongst young people in England and Wales, there has been a decline in drug use since 1998 (31.8%) to reach 20.0% in 2009/10.

Males are more likely to report drug use than females but the difference varies according to age, this difference being more pronounced in the older age groups.

Amongst the school age population, surveys of drug use prevalence have been undertaken in each of the four administrations of the United Kingdom.¹⁸ In England, for which the longest time series are available, drug use has fallen since 2001 overall, and among both boys and girls.

Cannabis continues to be the most commonly used drug throughout the UK with prevalence rates close to those for use of any drug. The use of other drugs is considerably lower. The *British Crime Survey* shows that the use of cocaine powder increased substantially between 1996 and 2000 and at a slower rate since 2001/02; over the same period a corresponding decline in amphetamines use can be seen.

¹⁵ The BCS is an annual survey, which gathers information about experience of crime in England and Wales. The BCS was first carried out in 1982 and since 2001/02 it has become a continuous survey. Since 1996, it has also asked respondents aged 16 to 59 about their use of illicit drugs in a self-completion module. The latest published results are for 2009/10. For more information see section nine of the *User Guide to Home Office Crime Statistics* (Home Office, 2010c).

¹⁶ The Scottish Crime and Justice Survey (SCJS) (previously the Scottish Crime and Victimisation Survey (SCVS) and the Scottish Crime Survey) is similar in scope and aims to the BCS. The latest published results are for 2008/09. Surveys were carried out, as part of the British Crime Survey (BCS) in 1982 and 1988, as the independent Scottish Crime Survey in 1993, 1996, 2000, 2003 and as the SCVS in 2004 and 2006.

¹⁷ The Northern Ireland Crime Survey (NICS) is also similar to the BCS. Surveys were carried out in 1994/95, 1998, 2001 and 2003/04 and the survey has been continuous since January 2005. The latest published results are for 2008/09. In addition, a Drug Prevalence Survey, based on the EMCDDA model questionnaire, was carried out in Northern Ireland in 2002/03 and 2006/07.

¹⁸ In England, a survey of the prevalence of drug use, smoking and drinking amongst young people (11 to 15 year old school children), has been undertaken annually since 1998 with comparable data on drug prevalence available since 2001. The *Young Person's Behaviour and Attitudes Survey* was undertaken in Northern Ireland in 2000 and repeated in 2003 and 2007. In Scotland, the *Scottish Schools Adolescent Lifestyle and Substance Use Survey* (SALSUS) is undertaken every two years, the most recent in 2008. *The Health Behaviour in School Age Children Survey* (HBSC) provides data from Wales and is undertaken every four years with a two-year interim survey. The most recent survey was conducted in 2006.
2.2 Drug use in the general population

Since submission of the 2009 United Kingdom Focal Point report, results have been published from the 2009/10 *British Crime Survey* which covers England and Wales; the 2008/09 *Northern Ireland Crime Survey*; and the 2008/09 *Scottish Crime and Justice Survey*.

2.2.1 UK estimate for 2008/09

By combining data from the 2008/09 BCS (Hoare 2009), the 2008/09 *Scottish Crime and Justice Survey* (MacLeod et al. 2010) and the 2008/09 *Northern Ireland Crime Survey* (Toner and Freel 2010), the Focal Point has produced a United Kingdom estimate for 16 to 59 year olds (Table A.1, Appendix A) showing that:

- 36.2% had used drugs in their lifetime (ever);
- 10.0% had used drugs in the last year (recent use); and
- 5.8% had used drugs in the last month (current use).

These are similar to the prevalence rates reported when the last United Kingdom estimate was produced in 2008 (see 2008 UK Focal Point report), which was based on data from surveys undertaken in 2006/07. In that estimate, rates were 35.4%, 10.2% and 6.0% for lifetime, last year and last month prevalence respectively. It should be noted that the 2008/09 estimates are strongly influenced by the BCS figures for England & Wales (which account for about 87% of the UK population) and that in 2008/09, the BCS prevalence rates were higher than in both the preceding and following years, suggesting that by chance the sample selected for interview in that year had unusually high rates of use.

Within the UK, lifetime drug use prevalence is marginally higher in England and Wales than in Scotland while last year and last month prevalence rates are similar. Reported drug use remains lowest in Northern Ireland.

2.2.2 England and Wales: the British Crime Survey

The latest findings from the 2009/10 *British Crime Survey*¹⁹ (Hoare and Moon 2010), show that for adults aged 16 to 59 years, 36.4% had used drugs at least once in their lifetime (ever use); 8.6% had used drugs at least once in the last year (recent use); and 5.0% had used drugs at least once in the last month (current use) (Table 2.1). Cannabis continues to be the most commonly used drug across all recall periods followed by cocaine powder for recent and current use. For all recall periods, males have continued to report higher levels of use than females for all individual drugs. In the last year, males were over twice as likely as females to have used any drugs, and any individual drug.

Table 2.1: Percentage of 16 to 59 year olds reporting lifetime, last year and last month use of individual drugs in England and Wales, 2009/10

	LIFETIME USE		LA	ST YEAR U	SE	LAST MONTH USE			
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Any drug	42.8	29.9	36.4	11.9	5.4	8.6	7.3	2.6	5.0
Amphetamines	14.6	8.7	11.7	1.4	0.6	1.0	0.5	0.2	0.3
Cannabis	36.7	24.5	30.6	9.3	4.0	6.6	5.7	2.0	3.9
Cocaine	11.5	6.0	8.8	3.6	1.5	2.5	1.7	0.6	1.1
Ecstasy	11.4	5.2	8.3	2.4	0.8	1.6	1.0	0.3	0.6
LSD	7.5	3.1	5.3	0.3	0.1	0.2	0.1	0.0	0.1
Magic mushrooms	10.7	4.1	7.4	0.6	0.2	0.4	0.1	0.0	0.1
Opiates	1.2	0.5	0.9	0.2	0.1	0.2	0.2	0.0	0.1
Base	11,920	14,279	26,199	11,920	14,279	26,199	11,920	14,279	26,199

Source: Standard Table 01

Frequency of drug use

In 2009/10 the BCS, for the first time, reported data on the frequency of use of drugs in the year before interview for people aged 16 to 59 years. The extent of frequent use²⁰ varies between drugs. Cannabis users were most likely to report frequent use (45% of users reported use more than once a month in the past year), followed by users of tranquillisers (35%) and amphetamines (25%). Ecstasy users were least likely to report frequent use (6%).

¹⁹ The fieldwork for the survey was carried out between April 2009 and March 2010. The overall response rate for the survey was 76% and the response rate for the self-completion drugs module asked of 16 to 59 year olds was 93% equating to 26,500 adults.

²⁰ Frequent use was defined in the BCS as the use of any drug more than once a month in the past year.

Factors related to drug use

Multivariate analysis of the BCS was carried out and shows a number of variables independently associated with illicit drug use (Hoare and Moon 2010). This logistic regression analysis showed that the characteristics that contribute most to explaining the likelihood of last year drug use are age, sex, frequency of alcohol consumption and marital status:

- the model shows that adults who were young (aged 16 to 19) had significantly higher odds of using any illicit drug in the last year compared with all older age groups; and
- adults who were married had lower odds of using any drug in the last year compared with all other groups (and there was no statistically significant difference in the odds of last year drug use between those who were single, cohabiting or previously married).

For the first time, the 2009/10 BCS explored the impact of the frequency of alcohol consumption on the likelihood of last year drug use; this proved to be a stronger indicator of any last year drug use than the location of alcohol consumption. Other demographic variables such as having a long-term illness or disability, frequency of nightclub or pub visits and housing tenure were also important.

For discussion on differences by ethnicity and sexual orientation, refer to sections 2.5.2 and 2.5.4 respectively.

Polydrug and polysubstance use

Polydrug use, as measured by the BCS, involves having taken two or more illicit drugs within the same time period e.g. last year.²¹ Polysubstance use was a new addition to the BCS in 2009/10 and refers to an individual having taken two or more types of illicit drugs or at least one illicit drug and alcohol in the last year. Both definitions therefore reflect concurrent rather than simultaneous use.

In 2009/10, amongst adults aged 16 to 59:

- 19.7% reported taking more than one illicit drug (polydrug use) in their lifetime;
- 3.3% reported recent polydrug use; and
- 1.4% reported current polydrug use.

Fifty-five per cent of adults who had ever used drugs reported using more than one drug in their lifetime with 39% of recent and 28% of current users reporting concurrent polydrug use. The drugs most commonly used by last year polydrug users were cannabis (taken by 83% of polydrug users in the last year) followed by cocaine powder (65%), ecstasy (46%) and amphetamines (26%). Nevertheless, 58% of cannabis users did not use any other drugs. In contrast, users of stimulants had higher levels of polydrug user, with only 11% of cocaine powder users, nine per cent of amphetamines users and five per cent of ecstasy users not using any other drugs.

Multivariate analysis (logistic regression) showed that the characteristics that contribute most to explaining the likelihood of last year polydrug use were age, the number of visits to a nightclub and the frequency of alcohol consumption in the last month. Other factors associated with polydrug use were similar to those for any drug use.

²¹ Does not necessarily mean on the same occasion.

Adults were more than twice as likely to be recent polysubstance users (8.1%) than recent polydrug users (3.3%). This is not surprising as 87% of adults and 99% of polysubstance users reported drinking alcohol in the last year. The proportion of last year users of illicit drugs also reporting last year alcohol use was at least 90% for all drugs and as high as 98% for cocaine powder and amyl nitrite. The 2009/10 BCS report includes a table of conditional prevalence rates and further commentary on the likelihood of different combinations of substances being used (Hoare and Moon 2010).

Trends in drug use

In 2009/10 for adults aged 16 to 59 years old in England and Wales, reported last year drug use was at the lowest level (8.6%) since the BCS first asked questions on drug use in 1996 (11.1%). The 2009/10 figure suggests a resumption of the steady downward trend that was observed between 2003/04 and 2007/08 (Figure 2.1). The fall in overall drug use has been driven mainly by a decrease in the use of cannabis, which was significantly lower at 6.6% in 2009/10 than that reported in 2007/08 (7.9%) and 1996 (9.5%).

There was also a statistically significant fall in the last year use of Class A drugs, suggesting a continuation of the relatively stable long term trend. The last year prevalence rate for cocaine powder fell to 2.4%, similar to the levels seen between 2003/04 and 2007/08. There were significant falls between 2008/09 and 2009/10 in the usage rates for amphetamines, tranquilisers and amyl nitrite.

Figure 2.1: Percentage of 16 to 59 year olds reporting having used drugs in the last year in England and Wales, 1996 to 2009/10



Type of cannabis used

In 2009/10, the BCS asked cannabis users about the type of cannabis they had taken. The proportions of last year users stating they had used herbal cannabis, cannabis resin and/or cannabis oil in the last year were 71%, 38% and six per cent respectively; 15% said that they did not know what type they had used. The majority (71%) of those who did know had used just one type.

Among lifetime users, equal proportions had used cannabis resin (49%) and herbal cannabis (50%). The authors suggest that the apparent trend towards greater use of herbal cannabis may reflect choice but, more likely, may reflect availability.

The survey asked separately about the use of skunk²² and estimated that 3.2% of adults had used it in the last year, about half the proportion of those reporting last year cannabis use (6.6%).

2.2.3 Northern Ireland Crime Survey 2008/09

Results from the *Northern Ireland Crime Survey* (NICS) 2008/09²³ (Toner and Freel 2010) show that in 2008/09, amongst adults aged 16 to 64:

- 26.3% reported lifetime use of an illegal drug;
- 6.2% reported recent drug use; and
- 3.6% reported current drug use.

Cannabis remained the most commonly used drug; lifetime use was reported by 19.4% of respondents, recent use by 4.6% and current use by 2.6%. Ecstasy and cocaine powder were the next most commonly reported drugs for recent use (Table 2.2). For the first time, ketamine prevalence (0.4% for last year use) was reported in the NICS. Males were more likely to report recent drug use than females for any drug and for cannabis and cocaine.

Table 2.2: Percentage of 16 to 64 year olds reporting lifetime, last year and last month use of individual drugs in Northern Ireland, 2008/09 by gender

	LIFETIME USE			LAST YEAR USE			LAST MONTH USE		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Any drug	32.0	21.3	26.3	8.3	4.5	6.2	4.9	2.5	3.6
Amphetamines	8.8	5.6	7.1	0.4	0.7	0.5	0.1	0.1	0.1
Cannabis	23.7	15.6	19.4	6.5	2.9	4.6	3.9	1.4	2.6
Cocaine	5.9	3.2	4.5	1.4	0.6	1.0	0.7	0.4	0.5
Ecstasy	9.1	5.9	7.4	1.0	1.0	1.0	0.6	0.4	0.5
LSD	5.5	3.0	4.2	0.4	0.4	0.4	0.2	0.1	0.2
Magic mushrooms	7.0	2.8	4.8	0.2	0.1	0.2	0.1	0.1	0.1
Opiates	1.1	0.9	1.0	0.2	0.0	0.1	0.2	0.0	0.1
Base	1,071	1,346	2,417	1,064	1,339	2,403	1,064	1,339	2,403

Source: Standard Table 01

²² The terms 'sinsemilla' and 'homegrown' also refer to stronger forms of cannabis, but the term 'skunk' has been included in the BCS as a generic reference to herbal cannabis with stronger potency. The potency of herbal cannabis varies; not all herbal cannabis can be defined as 'skunk'.

²³ The fieldwork for the survey was carried out between April 2008 and March 2009. The overall sample size for the survey was 3,856 for people aged 16 years and over with a response rate of 65%. The figures quoted here are from the Standard Table provided to the EMCDDA and differ from those in the published bulletin which restricts analysis to adults aged 16 to 59 to allow comparison with previous years and with England & Wales.

Reported lifetime prevalence of drug use has remained stable between 2003/04 and 2008/09. In general, there has been a downward trend in recent and current use of drugs (Table 2.3).

Table 2.3: Percentage of 16 to 59 year olds²⁴ reporting lifetime, last year and last month use of any drug in Northern Ireland, 2003/04 to 2008/09

DRUG	LIFETIME USE			LAST YEAR USE			LAST MONTH USE		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
2003/04	31.6	23.7	27.4	11.5	8.1	9.7	7.4	5.1	6.2
2005	32.0	21.0	26.2	12.4	4.5	8.2	7.5	2.5	4.9
2006/07	31.5	23.4	27.3	10.6	6.4	8.4	5.4	3.3	4.3
2007/08	29.5	20.5	24.6	8.7	5.1	6.8	5.5	2.4	3.8
2008/09	33.6	22.0	27.5	8.9	4.7	6.7	5.3	2.6	3.8

Source: Toner and Freel 2010

The fall in last year overall drug use has been accompanied by a parallel decrease in the use of cannabis which was lower at 5.0% in 2008/09 than that reported in 2007/08 (5.2%) and in 2003/04 (6.4%). There has also been a decrease in last year cocaine and ecstasy use (Figure 2.2).

Figure 2.2: Percentage of 16 to 59 year olds reporting having used drugs in the last year in Northern Ireland, 2003/04 to 2008/09



Source: Toner and Freel 2010

²⁴ Standard Table 01 is provided for Northern Ireland for 16 to 64 year olds to more closely match the EMCDDA's preferred range. However, for comparison with results from previous surveys, data for 16 to 59 year olds are given in this table.

2.2.4 Scottish Crime and Justice Survey: Drug Use 2008/09

Latest survey data for Scotland, from the *Scottish Crime and Justice Survey 2008/09* (SCJS) (MacLeod et al. 2010),²⁵ reported that amongst adults aged 16 to 64 years:

- 31.3% reported that they had taken illicit drugs at some point in their lives;
- 9.4% reported recent drug use; and
- 5.5% reported current use.

Cannabis continues to be the most commonly used drug across all recall periods followed by cocaine for recent and current use. However, for lifetime use, the prevalence rates for amphetamines and ecstasy are higher than for cocaine (Table 2.4).

Table 2.4: Percentage of 16 to 64 year olds reporting lifetime, last year and last month use of individual drugs in Scotland, 2008/09, by gender

	LIFETIME USE			LAST YEAR USE			LAST MONTH USE		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Any drug	37.2	25.6	31.3	13.4	5.5	9.4	8.0	3.0	5.5
Amphetamines	12.2	6.6	9.3	1.8	0.7	1.3	0.6	0.3	0.4
Cannabis	34.3	22.6	28.4	11.2	4.3	7.7	6.5	2.2	4.4
Cocaine	11.8	5.1	8.4	5.5	1.5	3.5	2.6	0.6	1.6
Ecstasy	12.1	6.0	9.0	3.6	1.0	2.3	1.5	0.4	0.9
LSD	9.2	3.0	6.1	0.8	0.1	0.5	0.3	0.0	0.2
Magic mushrooms	10.4	3.4	6.8	0.7	0.1	0.4	0.4	0.0	0.2
Opiates	1.7	0.9	1.3	0.6	0.2	0.4	0.4	0.2	0.3
Base	3,752	4,736	8,488	3,752	4,736	8,488	3,752	4,736	8,488

Source: Standard Table 01

Males were more likely to report drug use across all recall periods and individual drugs, than females. As the SCJS had no upper age limit, it is possible to make comparisons between the 16 to 59, 16 to 64 and 16 and over (no upper limit) age groups). Lifetime drug prevalence for those aged 16 to 64 years (31.3%) was lower than that of the 16 to 59²⁶ years group (33.5%). This is similar to the differences observed when the BCS extended its age range (see 2009 UK Focal Point report). Taking the 16 and over age group in its entirety (i.e. no upper age limit), prevalence rates were lower still (25.6% for lifetime use of any drug).

²⁵ The fieldwork for the survey was conducted during the course of 2008/09. The final sample size for the survey was 10,974 with a response rate of 69%. Results reported here have been taken from the ST01 provided on an EMCDDA basis and refer to 16 to 64 year olds so data differ slightly from the published SCJS report as this gives data for adults aged 16 and over.

²⁶ The previous crime survey (SCVS 2006), provided data for adults aged 16 to 59 years. The 2008/09 SCJS had no upper age limit. Where comparisons have been made, the SCJS 2008/09 data has been filtered to exclude those respondents aged 60 years and over.

Factors related to drug use

Associations were investigated as simple one-to-one relationships. Victims of crime, as measured by the 2008/09 SCJS²⁷ (MacLeod et al. 2010), were almost twice as likely to report recent drug use than nonvictims (14.6% compared with 7.6% respectively). Other demographic variables associated with higher levels of drug use in the last year were accommodation type, employment and socio-economic status. Adults living in urban areas (8.6%) were more likely to report having used any drug in the last year than those living in rural areas (3.1%).

Polydrug use²⁸

Over one third (35.3%) of adults who had used at least one illicit drug in the last month reported some kind of polydrug use in their lifetime. These polydrug users were also asked about the drugs they had ever combined with the drug they used most often in the last month (which was cannabis for 70.6% of polydrug users). The drugs that polydrug users were most likely to have ever combined with the drug they currently used most often were ecstasy (56.9%) and cocaine powder (56.1%).

The majority of adults who had used at least one illicit drug in the last month reported drinking alcohol at some point in their lives while under the influence of the drug they had used most often in the last month (85.3%).

Trends in drug use

Due to the change in methodology, from paper completion to Computer Assisted Personal Interviewing (CAPI) in the SCVS 2006, it is not possible to make meaningful comparisons prior to 2006.

Between 2006 and 2008/09, the proportion of 16 to 59 year olds who reported lifetime, recent or current drug use in 2008/09 decreased across all recall periods (Table 2.5).

Table 2.5: Percentage of 16 to 59 year olds reporting lifetime, last year and last month use of any drugin Scotland, 2006 and 2008/09

DRUG	LIFETIME USE			LAST YEAR USE			LAST MONTH USE		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
2006	42.5	30.9	36.6	16.2	9.1	12.6	10.4	5.6	8.0
2008/09	39.8	27.5	33.5	14.6	6.1	10.3	8.7	3.3	6.0
Base (2006)	1,436	1,722	3,158	1,436	1,722	3,158	1,436	1,722	3,158
Base (2008/09)	3,298	4,169	7,467	3,298	4,169	7,467	3,298	4,169	7,467

Source: MacLeod, Page, Kinver, Iliasov and Williams 2009

First use of drugs

Just under half of adults who had ever used drugs (48.7%) reported that late adolescence (16 to 19 years) was the age at which they first did so. Around a quarter (24.1%) had first used them before they were 16 years old. Cannabis was by far the most common drug first taken (76.0%) followed by amyl nitrite (4.2%) and amphetamines (3.5%).

²⁷ See: http://www.scotland.gov.uk/Topics/Research/by-topic/crime-and-justice/crime-and-justice-survey/publications

²⁸ Polydrug use is defined in the SCJS as the "use of more than one drug at the same time, often with the intention of enhancing or countering the effect of another drug". Therefore, it relates to what may be called 'simultaneous drug use' as distinct from multiple or concurrent drug use, where users may be taking more than one type of drug over a particular period, which is the type of polydrug use considered in the BCS report.

2.3 Drug use amongst young adults

Additional analyses have been undertaken from United Kingdom population surveys for the United Kingdom Focal Point to provide data for the 16 to 34 age group used by the EMCDDA. The surveys also routinely report data for 16 to 24 year olds.

2.3.1 UK Estimate for 2008/09

By combining data from surveys undertaken for 2008/09 (as described in section 2.2.1), it is estimated that in the United Kingdom amongst 16 to 34 year olds:

- 45.9% have ever used drugs;
- 18.0% have used drugs recently; and
- 10.5% are current drug users (Table A.2, Appendix A).

These rates are a little lower than the corresponding figures given in the previous UK estimate from surveys undertaken around 2006/07 which were 46.9%, 19.0% and 11.3% for lifetime, last year and last month prevalence respectively.

Amongst 16 to 24 year olds it is estimated that in the United Kingdom:

- 42.5% have ever used drugs;
- 22.5% have used drugs recently; and
- 13.0% are current drug users (Table A.3, Appendix A).

Again these are lower than the figures from the previous UK estimate made by the Focal Point, when the rates were 45.2%, 24.5% and 14.6% respectively. For both age ranges, prevalence rates were lower for all individual drugs except cocaine where rates were higher.

The prevalence of recent drug use amongst 16 to 24 year olds (20.0%) remains more than twice that for all adults aged 16 to 59 (8.6%). The most commonly reported drug was cannabis followed by cocaine and ecstasy (Table 2.6). Prevalence for the 16 to 34 age group is lower than for 16 to 24 year olds.

Table 2.6: Percentage of 16 to 24 year olds and 16 to 34 year olds reporting last year use of individualdrugs in England and Wales, 2009/10 by gender

DRUG	16	-24 YEAR OLI	os	16-34 YEAR OLDS			
	Male	Female	Total	Male	Female	Total	
Any drug	25.9	14.0	20.0	20.7	10.2	15.5	
Amphetamines	3.1	1.7	2.4	2.3	1.2	1.8	
Cannabis	21.5	10.7	16.1	16.5	7.5	12.0	
Cocaine	8.1	3.1	5.6	6.7	2.9	4.8	
Ecstasy	6.6	1.9	4.3	4.8	1.6	3.2	
LSD	0.9	0.2	0.5	0.5	0.2	0.3	
Magic mushrooms	2.0	0.5	1.2	1.3	0.3	0.8	
Base	1,597	1,832	3,429	3,970	4,975	8,945	

Source: Standard Table 01

Between 2001/02 and 2008/09 the BCS included a boost sample of young adults to improve the precision of drug use estimates among 16 to 24 year olds. In 2009/10, the BCS removed this boost sample so estimates are now being produced from the core sample only. The Home Office has undertaken a comparison of prevalence rates estimated from the 2008/09 survey with and without the boost sample which show minor differences in the estimates and a small, but not appreciable, widening of confidence intervals when the boost is removed, as might be expected (Home Office 2010c).²⁹

Frequency of drug use

Frequent drug³⁰ use among 16 to 24 year olds (7.3%) is over twice as high as for adults aged 16 to 59 years (3.3%). Frequency of use differs with individual drug, 43% of recent cannabis users reported frequent drug use compared with 28% of amphetamine users and 14% of recent cocaine powder users. There has been a decrease in frequent drug use amongst 16 to 24 year olds since measurement began in 2002/03 (when it was 11.6%).

Trends in drug use

Recent drug use amongst 16 to 24 year olds fell significantly from 22.6% in 2008/09 to 20.0% in 2009/10; this is largely due to a significant reduction in the use of cannabis over the same period (from 18.7% to 16.1%). These falls continue the steady declines seen since 1998 (apart from a non-significant increase between 2007/08 and 2008/09) (Figure 2.3). Last year use of cocaine powder remains at a level similar to those seen in the last five years although is much higher than that reported in 1996 (1.3%). Whilst prevalence remains low, there were small but significant increases in the use methadone (from less than 0.05% to 0.2%) and crack cocaine (from 0.2% to 0.5%) since the previous survey.

²⁹ See section 9.2 in Home Office 2010c.

³⁰ Defined as the use of any illicit drug more than once a month in the last year. Questions on frequency for 16 to 24 year olds were first introduced to the BCS in 2002/03.



Figure 2.3: Percentage of 16 to 24 year olds reporting last year use of individual drugs in England and Wales, 1996 to 2009/10

Source: Standard Table 01

2.3.3 Northern Ireland Crime Survey 2008/09

Findings from the 2008/09 NICS (Toner and Freel 2010) show that for 16 to 24 year olds:

- 35.2% reported lifetime use, compared with 34.9% in 2007/08;
- 18.2% reported recent drug use, compared with 15.7% in 2007/08; and
- 10.2% reported current use, compared with 10.7% in 2007/08.

However, it should be noted that the sample size for this age group is small so such differences are not statistically significant.

Across all individual drugs, there is a higher prevalence of last year drug use amongst 16 to 24 year olds than 16 to 34 year olds (Table 2.7). Cannabis has the highest prevalence of use for both age groups, followed by ecstasy and cocaine.

Table 2.7: Percentage of 16 to 24 year olds and 16 to 34 year olds reporting last year use of individualdrugs in Northern Ireland, 2008/09 by gender

	16	-24 YEAR OL	DS	16-34 YEAR OLDS			
	Male	Female	Total	Male	Female	Total	
Any drug	22.7	14.5	18.2	18.0	10.1	13.8	
Amphetamines	1.6	2.7	2.2	1.2	1.7	1.4	
Cannabis	17.8	10.4	13.8	14.2	7.1	10.4	
Cocaine	3.8	2.2	2.9	3.8	1.7	2.6	
Ecstasy	4.3	4.5	4.4	2.8	2.9	2.9	
LSD	2.2	2.2	2.2	0.9	1.0	1.0	
Magic mushrooms	0.5	0.9	0.7	0.5	0.4	0.4	
Opiates	0.0	0.0	0.0	0.0	0.0	0.0	
Base	117	169	286	337	468	805	

Source: Standard Table 01

2.3.4 Scottish Crime and Justice Survey 2008/09

Findings from the 2008/09 SCJS (MacLeod et al. 2010) also show that 16 to 24 year olds have higher last year use of any drug than 16 to 34 year olds. Cannabis had the highest prevalence for both age groups, followed by cocaine and ecstasy. Across both age groups, males are more likely to be recent users of drugs than females (Table 2.8).

Table 2.8: Percentage of 16 to 24 year olds and 16 to 34 year olds reporting last year use of individual drugs in Scotland, 2008/09 by gender

	16	-24 YEAR OLI	DS	16-34 YEAR OLDS			
	Male	Female	Total	Male	Female	Total	
Any drug	30.3	16.4	23.5	26.1	11.8	19.0	
Amphetamines	4.4	1.7	3.1	3.4	1.4	2.4	
Cannabis	27.2	13.1	20.3	21.8	9.2	15.6	
Cocaine	10.6	5.2	8.0	11.4	3.9	7.7	
Ecstasy	7.9	4.3	6.1	7.7	2.7	5.2	
LSD	2.3	0.3	1.3	2.0	0.2	1.1	
Magic mushrooms	1.4	0.3	0.9	1.5	0.2	0.9	
Base	493	511	1,004	1,118	1,367	2,485	

Source: Standard Table 01

Trends in drug use

Recent drug use amongst 16 to 24 year olds decreased from 31% in 2006 to 23.5% in 2008/09 and amongst 16 to 34 year olds there was a fall from 23.7% in 2006 to 19.0% in 2008/09. There were decreases for all individual drugs.

2.4 Drug use in the school and youth population

Since submission of the 2009 United Kingdom Focal Point report, results have been published from *Smoking, Drinking and Drug Use amongst Young People in England 2009* (Fuller and Sanchez 2010).

2.4.1 Smoking, drinking and drug use among young people in England

The latest survey of smoking, drinking and drug use in England was undertaken in 2009³¹ and found that 22.3% of 11 to 15 year old school pupils reported lifetime use of any drugs with recent and current use at 14.8% and 8.2% respectively. Cannabis was the most common illicit drug for recent and current use amongst pupils aged 11 to 15 years (Table 2.9). The highest lifetime prevalence was for volatile substances (Fuller and Sanchez 2010).

Table 2.9: Percentage of pupils aged 11 to 15 years old reporting lifetime, last year and last month use of individual drugs in England, 2009 by gender

	LIFETIME USE			LAST YEAR USE			LAST MONTH USE		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Any drug	23.4	21.3	22.3	15.7	13.9	14.8	9.3	7.1	8.2
Amphetamines	1.2	0.9	1.0	0.9	0.6	0.8	0.3	0.2	0.3
Cannabis	11.7	9.4	10.5	9.8	8.1	8.9	6.0	4.0	5.0
Cocaine powder	1.9	1.6	1.8	1.5	1.0	1.2	0.7	0.3	0.5
Crack cocaine	0.9	0.7	0.8	0.7	0.6	0.6	0.2	0.3	0.2
Ecstasy	1.8	1.3	1.6	1.4	1.0	1.2	0.6	0.3	0.4
LSD	0.9	0.8	0.8	0.7	0.6	0.7	0.3	0.2	0.3
Magic mushrooms	2.4	1.7	2.0	1.8	1.3	1.5	0.9	0.6	0.7
Opiates	1.0	0.7	0.9	0.8	0.5	0.7	0.4	0.2	0.3
Volatile substances	12.7	12.8	12.7	5.4	5.6	5.5	2.4	2.4	2.4
Base	3,837	3,811	7,648	3,837	3,811	7,648	3,837	3,811	7,648

Source: Fuller and Sanchez 2010

³¹ The survey was conducted between September and December 2009, with a total of 247 schools, giving a school response rate of 54%. The response rate from selected pupils was at 87% which produced 7,674 completed questionnaires. The combined response rate of the school and pupil rates gave an overall response rate of 47%.

Age and gender

With increasing age, levels of drug use among school pupils increases (Table 2.10). Overall, boys were more likely to report use than girls but the difference was less pronounced than that between men and women seen in the adult population (see section 2.2).

	11 YRS	12 YRS	13 YRS	14 YRS	15 YRS	TOTAL
Boys	5.3	7.5	9.5	18.9	31.8	15.7
Girls	3.8	5.7	10.1	18.3	27.5	13.9
Total	4.5	6.6	9.8	18.6	29.7	14.8
Base (boys)	601	801	805	723	907	3,837
Base (girls)	619	781	772	764	875	3,811
Base (total)	1,220	1,582	1,577	1,487	1,782	7,648

Table 2.10: Percentage of pupils reporting last year use of drugs in England, 2009 by age and gender

Source: Fuller and Sanchez 2010

Type of drug by age

For recent use, there was a clear change in individual substances used as pupils' age increased. Amongst younger pupils (those aged between 11 and 13 years), volatile substances were the most commonly reported drug. Aged 14, pupils were more likely to report cannabis use, with prevalence increasing to 12.0%. At 15 years cannabis continued to be the most commonly reported drug with a prevalence of 22.8% but there was also an increase in the use of any stimulants (9.3%) at this age. Sixty-seven per cent of pupils who took drugs recently only took one drug. The likelihood of taking two or more drugs in the last year more than doubled with increasing age (15% at age 11 and 41% aged 15).

Frequency of use

Of those pupils reporting last year use, six per cent reported using drugs most days; use at least once a month was reported by 36%. Users of Class A drugs were more likely to report frequent use than users of any other type of drug; 13% of last year Class A users reported using drugs on most days and two-thirds (65%) reported use at least once a month. For cannabis only users, these proportions were 3% and 34% respectively, while a third of cannabis only users said they had only ever taken drugs once.

Trends in drug use

There has been a general decline in both recent and current drug use amongst the school population between 2001 and 2009 (Figure 2.4). This long-term downward trend is largely accounted for by a decline in cannabis use for which last year prevalence fell from 13.4% in 2001 to 8.9% in 2009.





Source: Fuller and Sanchez 2010

2.4.2 England: Regional drug use amongst young people between 2006 and 2008

Further analysis of the data sets from the *Smoking, drinking and drug use amongst young people in England*, from 2006 to 2008 was published in 2010. Using these aggregated datasets, regional differences in smoking, drinking and drug use amongst young people were found (NatCen and NFER 2010). Key findings were:

- recent drug use for 11 to 15 year olds ranged from 15% in the South West to 20% in the North West;
- recent cannabis use, varied from eight per cent in the North East to 12% in the North West;
- London had the second (equal) lowest prevalence, 16% of 11 to 15 year olds reported recent use of any drug and nine per cent of cannabis; and
- prevalence was similar among boys and girls in all regions.

2.4.3 England: TellUs4 Survey

The *2009 TellUs4 Survey* is the fourth and last in a series of annual surveys of children and young people³² (Chamberlain et al. 2010). Combining data for pupils in Years 8 (aged 12 to 13 years) and 10 (aged 14 to 15 years), nine per cent reported that they had taken drugs at some point in their lifetime. Young people who described their ethnicity³³ as 'White Other' and 'Other' had a higher rate of drug use (14% and 15% respectively) than young people as a whole (9%). Cannabis or 'skunk' were the most frequently used substances.

2.4.4 Other studies on drug use in the school and youth population

The influence of school experience

Case-study research carried out in a mixed-sex, high-achieving secondary school in outer London (Fletcher et al. 2009), found that for a group of female pupils, who came from disadvantaged families, smoking cannabis and other substances acted as an important source of attachment and identity; separate to the norms and values perpetuated throughout the school. Drug use acted as a coping mechanism for these girls, helping to reduce anxiety and the sense of imprisonment that they felt at school. Whilst providing a legitimate excuse for struggling with schoolwork, drug use was also a source of excitement for these marginalised pupils.

YouGov Youth Index

The Prince's Trust (2010) commissioned a survey³⁴ that examined the effect unemployment has had on young people. It was found that more than one in ten (11%) felt that they had turned to drugs or alcohol due to being unemployed.

³² The Tellus4 Survey was a self-completion on-line survey, designed to collect children and young people's views on their life, school and local area. The survey was conducted between 5th October and 20th November 2009 on behalf of the Department for Children, Schools and Families. The survey represented the views of 253,755 children and young people in school Years 6, 8 and 10 in 3,699 schools.

³³ Ethnicity responses had been aggregated to form the categories: White British; White Other; Mixed Race; Asian or Asian British; Black or Black British; Other including Chinese; and prefer not to say.

³⁴ A total of 2,088 young people aged 16 to 25 year olds completed an online poll conducted by YouGov on behalf of the Prince's Trust in December 2009. Data were weighted according to age, gender and region to be representative of all UK 16 to 25 year olds. One-hundred and thirty respondents were not in employment, education or training.

The effect of parental guidance

Looking into the relationship between parental guidance about drinking and self-reported behaviours, Miller et al. (2010)³⁵ explored associations between groups, family backgrounds and the use of cannabis and other psychoactive substances. For all groups, the factor 'parental guidance' was consistently associated with substance use when other variables were controlled. The group with the greatest substance use came from families where parents held more tolerant attitudes towards drinking and intoxication. It was found that drug use was least common in the two groups that were provided with opposing parental guidance on drinking, namely the group where no parental guidance about drinking was given, and the group whose parents discouraged drinking.

YouthNet

The survey 'High or dry'³⁶ conducted by YouthNet (2010), found that 63% of 16 to 24 year olds reported that they had used a recreational drug at some point in their life, with 49% stating this was done before they were sixteen. Once again, factors such as age and gender were associated with differences in drug use. Both personal and others' drug use was reported to affect relationships negatively; 52% reporting effects on friendships and 47% on romantic relationships. Forty-five per cent reported that their personal and others' drug use had affected their mental health and 39% their physical health. Only 15% reported never accessing information or advice about drugs. Whilst the internet scored highly (42%) as an accessible source of drug related information, it scored low for accuracy (27%) and trustworthiness (31%) in comparison to other sources. Amongst young adults aged 16 to 24 years, doctors were rated as the most trustworthy (67%) and accurate (65%) providers for drug related information and advice.

2.5 Drug use amongst specific groups in the adult population

2.5.1 Armed Forces

With compulsory drug testing in the Armed Forces being introduced by the *Armed Forces Act 1996,* around 85% of servicemen and women are tested annually (HC Deb, 10 May 2006, c296W). The proportion of individuals testing positive for drugs in the British Army decreased from 0.70% in 2008 to 0.46% in 2009 (Table 2.11).

Table 2.11: Drug tests and percentage positive in the British Army, 2008 to 2009	

YEAR	NO. TESTED	NO. POSITIVE	% POSITIVE
2008	89,839	630	0.70
2009	102,949	446	0.43

Source: HC Deb, 22 March 2010, c9W

³⁵ Conducted as part of ESPAD, using data from a self-reporting survey carried out between March and June 2007 amongst 2,179 UK school students aged 15 to 16 years from 117 schools (response rate of 83.6%). To establish seven student groups, cluster analysis based on questions about parental advice was used.

³⁶ Between March and April 2010, a self-selecting sample of 604 people aged 16 to 24 years from throughout the UK completed the online survey, which followed on from the YouthNet survey 'Pills and Spills' conducted in 2009.

Over the same period, there was a decrease in the proportion of positive tests involving cocaine and ecstasy and a corresponding increase in the proportion of tests that were positive for cannabis (Table 2.12).

Table 2.12: Proportion of all	positive drug tests b	y drug in the British Arm	y, 2008 to 2009
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YEAR	CANNABIS	COCAINE	ECSTASY	
2008	27.1	67.8	5.1	
2009	45.5	53.1	1.3	

Source: HC Deb, 22 March 2010, c9W

2.5.2 Ethnic Minorities

Data from the 2006/07, 2007/08 and 2008/09 BCS provided information on illicit drug use according to ethnicity.³⁷ Recent drug use was highest amongst 'Mixed' ethnic groups at 17.6% (but after applying age-standardised rates was at a similar level to those from the 'White' groups). Adults from the 'Asian' or Asian British' group generally had the lowest levels of any drug use in the last year (3.0%) (Figure 2.5).

Figure 2.5: Proportion of 16 to 59 year olds reporting last year use of individual drugs according to ethnicity in England and Wales, 2006/07 to 2008/09 combined dataset



Source: Hoare and Moon 2010

For 'White' and 'Asian or Asian British' adults, males had a higher level of reported last year use of any drug than females. No gender differences were detected for other ethnic groups. However for cannabis, men from a 'Black or Black British' ethnic group (as well as those from 'White' and 'Asian or Asian British' groups) were more likely to have been last year users than women from that group.

³⁷ A little over 2,000 of the 28,000 respondents who completed the drugs module of the BCS, described themselves as being from a background other than 'White'. Due to this small sample size, prevalence estimates for last year use were produced from a combined three-year BCS dataset (2006/07, 2007/08 and 2008/09).

2.5.3 Drug use amongst gay men

A study on methamphetamine use amongst gay men across the UK (Bonell et al. 2009)³⁸ found that 4.7% of gay men used methamphetamine at the time of the survey. Regionally, methamphetamine use was significantly higher in London (7.8%) than elsewhere; Scotland and Northern Ireland³⁹ reported the lowest level of use (2.2%). In London only, age proved a significant factor in the use of methamphetamine, with use being highest amongst males aged 40-49 (9.5%). Across the UK, use was higher (13.9%) amongst men that tested HIV-positive than those who had tested as negative or who had never tested. This was significant in all regions, except Scotland, Northern Ireland and Northern England. After adjusting for covariates, use of methamphetamine was significantly higher among men who reported five or more male partners within the last year.

Amongst men who have sex with men (MSM) in England and Wales, Hickson et al. (2010)⁴⁰ reported results from cross-sectional surveys conducted in 1999 and 2005. One part of the study analysed the frequency of drug-use, poly-drug use and individual's worries about their drug use in 2005. A large majority of the MSM participants used illicit drugs. Users of alkyl nitrite reported the highest frequency of use with 33.6% using the drug at least once a week. Regarding concerns about personal drug use, 30.7% of GHB users, 28.5% of LSD and ketamine users and 22.6% of cocaine powder users agreed with the statement that they "sometimes worry about their drug use". The second part of the study compared the prevalence of illicit drug use between the 1999 and 2005 samples, and showed that there had been an overall increase in the number of MSM using drugs. For recent use, cocaine powder had the highest increase (from 12.6% in 1999 to 22.3% in 2005) and amphetamine, the greatest decrease (from 18.4% in 1999 to 9.4% in 2005).

2.5.4 Drug use by sexual orientation

Data from the 2007/08 and 2008/09 BCS provided information on the prevalence of illicit drug use by selfreported sexual orientation.⁴¹ Recent drug use was more likely amongst those reporting themselves to be gay or bisexual (32.8%) than heterosexual adults (10.0%); this higher prevalence of drug use amongst gay or bisexual adults was found across most drug types. Once again, cannabis had the highest prevalence (21.3% of gay/bisexual adults), followed by amyl nitrite (15.2%), which was used by significantly more gay/ bisexual men (23.7%) than women (6.0%). Overall, gay/bisexual men were more likely to report any drug use than gay/bisexual women (38.2% compared with 26.9% respectively for recent use).

Browne at al. (2009)⁴² reported on a survey undertaken on drug and alcohol use within the Lesbian, Gay, Bisexual and Transgender (LGBT) community in Brighton and Hove. Half (50%) of the respondents had taken illegal drugs or legal drugs without prescription in the previous five years. Of those who had taken drugs, the drug reported by the highest proportion of respondents was cannabis (66%), followed by ecstasy (48%) and cocaine powder (45%). Being a young LGBT adult,⁴³ being in debt and having mental health problems were all associated with an increased likelihood of a person having taken illegal or legal drugs without prescription in the last five years.

⁴³ Classified as those aged 16 to 26 years.

³⁸ Research involved a cross-sectional survey using a self-completion questionnaire distributed at 107 community-based agencies. Data was obtained from 6,155 male participants over the age of 14.

³⁹ Scotland and Northern Ireland were combined as one region for the purpose of this study.

⁴⁰ A convenience sample of 2,480 MSMs in 1999 and 3,913 MSMs in 2005. The study involved two community-based crosssectional surveys of gay community venues and services across England and Wales; 71 in 1999 and 107 agencies in 2005.

⁴¹ In 2008/09 500 of the 25,000 self-completion respondents identified themselves as gay, lesbian or bisexual. Due to this small sample size, the BCS combined data from 2007/08 and 2008/09 to provide more reliable estimates.

⁴² The research was conducted between January 2006 and October 2006 and consisted of a large scale questionnaire (producing both qualitative and quantitative data) with 819 respondents and 20 focus groups with 69 participants. The participants were aged 16 years and over.

2.5.5 Drug use amongst festival goers in Scotland

Whilst the majority of attendees (68%) at a Scottish music festival did not engage in any type of drug use at the festival, those that had were found to demonstrate self-regulating protective behaviours which Martinus et. al (2010)⁴⁴ suggest is indicative of a developing social culture of 'controlled intoxication'. The most popular protective behaviours included bringing water (72%), sticking with and looking out for friends during the festival (68%) and keeping phone numbers safe (66%). Cannabis was the most common drug used (24%), followed by ecstasy (16%) and cocaine powder (13%). The most likely group to use drugs were aged between 18 to 24 years.

2.5.6 Drug use amongst people with psychiatric disorders

Exploring the illicit and non-prescribed drug use of people with a range of psychiatric disorders, Charles et al. (2010)⁴⁵ found that there was no strong evidence that patients self-medicated in response to their psychotic symptoms. Five participants perceived drug use as having been a direct causal factor in the development of their mental health problems. Most participants recognised that their psychosis was exacerbated by drug use.

Lobbana et al. (2010)⁴⁶ identified four key themes that people with recent onset psychosis found influenced their drug use. The first theme attributed drug taking to societal influences such as the legal classification system and how drug taking was perceived amongst a person's normative peer group. The second explored attributions for initial and ongoing drug taking; a common reason for initial drug taking was a reduction of societal anxiety and engagement within a group for fun. The third theme looked into the likelihood of changes in life goals affecting drug use, such as a move away from drug taking towards one of closer family relationships. The fourth theme looked at the beliefs held about drug use and mental health, which were largely based around personal experience of the effects of differing quantities of drugs and the consequent impact on a person's mental health state

2.5.7 Drug use amongst young club goers

Winstock et al. (2010)⁴⁷ undertook a survey for the Mixmag Magazine, which found that the principal drugs of choice used in the last month, by young club goers in the UK were cannabis (54.4%), ecstasy (48.4%), and cocaine powder (47.4%). This year's survey included a question on mephedrone, which proved to be the fourth most commonly used drug in the last month (33.6%). The analysis showed that the most common factor that contributed to the decision to take 'legal highs' was that other drugs were unavailable.

⁴⁴ A total of 1,589 festival attendees took part in an anonymous self-reporting survey of drug and alcohol use during the summer of 2008. Forty-five per cent of respondents were male and fifty-five percent were female. The mean age was 23 years.

⁴⁵ Between January 2001 and February 2002, cross-sectional qualitative interviews were conducted with 14 patients from inner-London Community Mental Health Team, who were diagnosed with psychosis and misused drugs.

⁴⁶ A qualitative study with a purposive sample of 19 participants aged between 16 to 35 years, selected from an Early Intervention Service within the NHS. Participants had a clinical diagnosis of a psychotic disorder and were either currently misusing drugs or had been doing so six months before their first contact with the service. The interviews took place between January and September 2008.

⁴⁷ Released in February 2010, the results came from a cross sectional, self-reported, self-nominating survey of over 2,000 UK clubbers (typically aged between 18 to 27 years), who were asked questions about their drug-taking habits.

2.5.8 Ageing drug users

Seeking to explore older people's experiences of drug use, Roe at al. (2010)⁴⁸ were able to categorise participants who have used, or continue to use problematic drugs, as either 'early onset' or 'late onset' users. Amongst this sample, it was found that no particular drug could be identified as the 'gateway' for drug use. In combination with their increasing age, participants acknowledged that their drug use was having a detrimental effect on their health. Drug use was also identified as a common feature for the loss of familial relationships. The authors suggest that the experience of older drug users could be important in health promotion and the prevention of drug use in younger populations. However, older users emphasised the need for tailored services as group work alongside younger drug users had lead them to realise that the needs of younger and older drug users differed.

2.5.9 Cocaine users in Northern Ireland

McCrystal et al. (2010)⁴⁹ explored the patterns of cocaine use and the lifestyle of a diverse range of cocaine users from Northern Ireland. The study identified that there were two types of cocaine users. 'Recreational users' who used in social settings, were typically young, employed, educated, and felt 'in-control' of their use. In contrast, 'treatment users' referred to themselves as addicted to cocaine, were typically unemployed and had a low level of educational qualifications. For both groups, cocaine was not the first drug they had experienced. All those involved in the study were polydrug users. In their reports, recreational users were more animated and stated few negative effects. Treatment users were more likely to report the negative effects of cocaine use and the impact it had on their physical and mental well-being. The researchers felt that the different perceptions held by each group, may have implications for the development of both treatment and prevention interventions and that a review of treatment provision for users of cocaine is needed.

2.6 Drug use amongst specific groups in the school age population

2.6.1 Looked after children

In 2006, the Department for Children, Schools and Families (DCSF) started collecting information on the number of looked after children identified as having a substance misuse problem. Of the 43,200 children looked after for at least 12 months in the year ending 30th September 2009, 2,160 (5%) were identified as having a substance misuse problem; the proportion remaining stable from the previous year (4.9%) (DCSF 2009a).

2.7 Attitude surveys on the use of illegal drugs

British Social Attitudes (BSA): The 26th Report

The latest *British Social Attitudes* report (Bailey et al. 2010)⁵⁰ shows that 58% of participants felt that cannabis should remain illegal, an increase from 46% in 2001⁵¹ (Gould et al. 2002). Four per cent thought that it should be legalised without restriction, while 34% believed it should be legalised if available only from licensed shops. The statement "cannabis isn't as damaging as some people think" was supported by 24% of respondents, a decrease from 46% in 2001. The authors suggest that external factors, such as reclassification of cannabis to a Class B drug in 2009 and media reports that have highlighted the perceived harm of cannabis, have significantly influenced the change in attitude.

- ⁴⁸ In 2008, qualitative semi-structured interviews were conducted with a convenience sample of 11 self-selecting participants, living in the North West of England, aged 49 years and over.
- ⁴⁹ A qualitative study, with 40 participants (aged 18 to 56 years). There were two phases: in phase one, the *Community Assessment Process* informed the community of the project and helped develop links for participant recruitment; phase two consisted of in-depth questionnaires with cocaine users, with a focus on users drug 'stories'. Mixed sample strategies were used to recruit adults and young people for in-depth interviews.
- ⁵⁰ There were 4,486 respondents to the four section survey. The sample was confined to residents of private households. Interviewing was carried out mainly between June and September 2008,
- ⁵¹ The BSA survey last reviewed attitudes towards smoking, drinking and drugs in 2001.

Scottish Social Attitudes Survey 2009

With a particular focus on attitudes towards opiate and cannabis misuse, the *Scottish Social Attitudes Survey (SSA)*⁵² reported that in general, the attitudes of Scottish adults were less liberal in 2009 than in 2001 (Scottish Government 2010a). Support for the legalisation of cannabis fell from 37% in 2001 to 24% in 2009, while 34% of respondents believed that people in possession of small amounts of cannabis should not be prosecuted.

There was an increase in the number of respondents who disagreed with the statement "using illegal drugs should be accepted as a normal part of some peoples' lives", from 40% in 2001 to 57% in 2009. In 2001, those in the 18 to 24 year old age group were most likely to agree with that statement (52%), compared to 14% of 18 to 24 year olds in 2009. Typically, those individuals that reported ever having used drugs and/or to have had indirect experience of drug use (through family and friends) were more liberal in their attitudes towards drug use.

Most respondents (54%) agreed with the statement that taking cocaine occasionally is "very seriously wrong". Less than half (45%) thought that persistent heroin users were to blame for their problems with heroin, while 29% agreed with the statement "most users come from difficult backgrounds".

Anti-doping beliefs of young British athletes

As a result of what is perceived to be stringent drug testing in the UK for athletes, Bloodworth et al. (2010)⁵³ found that young British athletes did not believe that drug use was a widespread problem. Within the group, staunch anti-doping beliefs were maintained. Shame was one of the main reasons given for dissuading young athletes from using drugs. A decreased injury time was one of the hypothetical occasions when the use of drugs would be considered as an option for some young athletes.

2.8 Emerging trends in the use of psychoactive substances

There has been increasing concern about the use of a range of new substances, mostly in night-life settings, which are often described as 'legal highs'. A number of these have been included within the *Misuse of Drugs Act* provisions over the last year. However, these are being replaced by alternative substances. This poses a challenge in terms of assessing prevalence of use among the general population, even where continuous surveys are being used, as it takes time to test and make changes to questionnaires. As a result, general population prevalence rates are normally only established after action has been taken to control use. Prior to that information on use is generally only available from studies or surveys of special populations, such as clubbers or the LGBT community.

The emergence of mephedrone

In 2009, Measham et al. (2010) reported that Britain had experienced significant changes in recreational drug use. In particular, the substituted cathinone mephedrone had grown rapidly in availability and use. The authors felt that this change had been influenced by a reduction in the availability (and resulting purity) of other drugs and that the disillusionment with this, had acted as a key motivator for a displacement to alternatives. The ease of access to mephedrone, prior to the banning of the substance (as demonstrated by Schmidt et al. 2010), via the Internet is also likely to have influenced the increase in use. As mephedrone is now controlled under the *Misuse of Drugs Act 1971* in the UK (see section 1.2) the BCS will include a specific question on the use of this drug in the 2010/11 survey.

⁵² A sister study to the BSA with 1,482 face to face interviews conducted between April and September 2009.

⁵³ A qualitative investigation in which 40 athletes from 13 different sports took part in focus groups held from October 2007 to January 2009. The mean size of the focus groups was small (3.3 individuals) and they lasted for between 30 to 60 minutes.

Recently classified drugs

In October 2009 the BCS added questions asking about last year use of recently classified drugs.⁵⁴ Amongst adults aged 16 to 59 years, 0.5% reported using BZP, followed by Spice and other cannabinoids (0.4%) and GBL/GHB (0.1%). Younger adults (aged 16 to 24) were more likely to have used recently classified drugs in the last year than adults aged 25 and over.

Relationship between use of new substances and ecstasy

Data from the *British Crime Survey* and reports from Drugscope (Daly 2009) suggest that ecstasy is now commonly used in combination with a number of other drugs, both legal and illegal. Data from the Forensic Science Service (FSS) (see section 10.4.2) showing a decline in ecstasy tablet records and a concurrent rise in BZP and, more recently, mephedrone records suggest that 'legal highs' are increasingly sought as an alternative to ecstasy.

This suggestion of a shift from ecstasy to other substances is also supported by the fact that all principal indicators for the drug are below 2003 levels (Figure 2.6).



Figure 2.6: Relationship between ecstasy indicators in the United Kingdom, 2003 to 2008: indexed to 2003

Source: Standard Tables 01; 06; 11; 13; 14; 16; 34

Seizures and offences data were above 2003 levels until 2008 when there was a large decrease in ecstasy convictions and a continued decrease in seizures after an increase in 2006. The mean drug content of ecstasy tablets is almost half what is was in 2003 which tallies with anecdotal reports about the poor quality of ecstasy tablets and reports of shortages of the precursors necessary for the production of ecstasy. Despite reports of a lack of availability of ecstasy, the price (which is often used as an indicator of availability) fell between 2003 and 2006 and has remained stable since. Similarly, reported use of ecstasy has remained relatively stable since 2005. However, it remains a possibility that what is being sold and consumed as ecstasy has relatively little, if any, active MDMA content. Looking at health indicators, the number of deaths recording the presence of MDMA has reduced and the number of presentations to treatment for primary ecstasy use fell substantially in 2008.

⁵⁴ Preliminary estimates of prevalence were reported based on six months worth of data.

3. Prevention

3.1 Introduction

To date, prevention of young people's drug use has been a key element of drug strategies in the United Kingdom. Family interventions, education, regeneration of communities and tackling social exclusion and poverty have been seen as the main aspects of prevention. Policies have been embedded in, or complemented by, a much wider framework of social action to create the capacity of both individuals and communities to resist drugs, including policy for children and young people aimed at enabling them to reach their full potential. In England, the *Children's Plan* aimed to facilitate this (DCSF 2007). The devolved administrations take a similar approach, specifically through *Children and Young People: Rights to Action (WAG 2004)* in Wales and the Scottish Government's *Curriculum for Excellence Health and Wellbeing*⁵⁵ outcomes agenda. In Northern Ireland, *Our Children and Young People – Our Pledge: A 10 year strategy for children and young people in Northern Ireland*, 2006-2016 (OFMDFMNI 2006) sets a framework for addressing the needs of young people. Improved education and early interventions for young people and families (especially those most at risk) and improved public information about drugs have been priority areas.

Universal drug prevention initiatives have been an important area of policy. Communication programmes, such as 'Talk to FRANK'⁵⁶ in England and 'Know the Score'⁵⁷ in Scotland, provide factual information and advice to young people and their families. In Northern Ireland, the Public Health Agency⁵⁸ develops public information campaigns for various target groups and settings, and in Wales a bilingual (Welsh and English) helpline, 'Dan 24/7'⁵⁹ is available. School-based drug education forms a central part of the United Kingdom's approach to universal drug prevention. Throughout most of the United Kingdom, drug prevention has been part of the national curriculum and the majority of schools have a drug education policy and guidelines around dealing with drug incidents. Guidance on drug education has recommended an approach that incorporates all psychoactive substances, including alcohol and tobacco, and places drug education within the wider health and social education agenda.

To date, in England and Wales, all local areas have been expected to produce *Children and Young People's Plans* for all services for children and young people, including prevention and treatment. The *Common Assessment Framework (CAF)*⁶⁰ in England aims to facilitate early identification of problems and secure a network of required support services, linking into more targeted arrangements. The priorities within targeted prevention are to ensure young people have access to a range of core services to help keep them engaged in education, in stable housing and with a supportive family or care placement.

In Scotland, *Getting it Right for Every Child*⁶¹ is the programme by which all children's services are to be delivered, including for the early years and for children in substance misusing households. The *Integrated Children's Services Planning Framework* requires a single plan agreed with all relevant agencies to deliver integrated services for children and young people and the *Early Years Framework* (Scottish Government 2008b) has been developed in response to current policy which acknowledges that some groups of young people are more vulnerable to substance misuse problems than their peers.

- 58 See: http://www.publichealth.hscni.net/
- ⁵⁹ See: http://www.dan247.org.uk
- ⁶⁰ See: http://www.dcsf.gov.uk/everychildmatters/strategy/deliveringservices1/caf/cafframework/
- ⁶¹ See: http://www.scotland.gov.uk/Topics/People/Young-People/childrensservices/girfec

⁵⁵ See: http://www.ltscotland.org.uk/learningteachingandassessment/curriculumareas/healthandwellbeing/ principlesandpractice/index.asp

⁵⁶ See: http://www.talktofrank.com/

⁵⁷ See: http://knowthescore.info/

Communities are provided with assistance to build the capacity to resist drugs, through a range of initiatives which are delivered by local partnerships. There are specific interventions targeting young people in deprived communities such as Positive Futures⁶² in England and Wales. In Scotland, a number of projects receive time limited funding from the Scottish Government in partnership with Lloyds TSB Partnership Drugs Initiative (PDI)⁶³, targeting children with, or at risk of, problem drug misuse as well as those affected by familial drug use. Increasingly, family interventions are being set up, more specifically for problem drug users, to help support parenting, and therefore reduce the risk of drug use amongst their children but also with wider objectives.

3.2 Universal prevention

Universal prevention targets the entire population, regardless of individual levels of risk at national, local community, school, or neighbourhood level with programmes, initiatives and messages aimed at preventing or delaying the onset of illicit drug use.

ACMD: Pathways to Problems progress report

The Advisory Council on the Misuse of Drugs (ACMD) (2010c) published a follow-up report to its *Pathways to Problems* publication (ACMD 2006). It detailed progress against the 24 recommendations in the original report, which aimed to reduce the number of young people affected by substance⁶⁴ use in the UK. It was reported that some 'significant progress' had been made since 2006 and highlighted improvement in several specific areas of policy linked to drug prevention including: approaches to health promotion and drug education in schools⁶⁵ across the UK; information campaigns such as FRANK; an increased emphasis on early intervention and programmes designed to improve parenting skills and stabilise families.⁶⁶ However, the authors also recommend that: the evaluation of drug prevention initiatives should be a priority from the outset and they should be designed with evaluation in mind; the 'Healthy Schools' (see 3.2.1) approach should be extended to young people in the youth justice system; and the media should do more to ensure they are conveying information about the hazards of substance use to young people in the most appropriate manner.

3.2.1 School

England

Substance misuse and other aspects of health inequalities are addressed through the national healthy schools programme. To achieve 'Healthy School status' schools must demonstrate a focus on Personal, Social, Health and Economic (PSHE) education, including training for staff, a clear drug policy and appropriate links to outside agencies. By summer 2010 it is reported that 86% of schools achieved 'Healthy School status' (personal communication - Department for Education).

It was reported last year (see 2009 UK Focal Point report) that following a review, drug education⁶⁷ in schools was expected to become a statutory requirement (DCSF 2009b). However, proposed legislation to introduce statutory drug and alcohol education was not enacted in the last parliamentary session, prior to the change in UK Government in May 2010.

From September 2010 head teachers are allowed to search school pupils without consent for illegal drugs and legal highs⁶⁸ (HC Deb, 9 Sep 2010 c153WH).

- ⁶² See: http://www.posfutures.org.uk/index.asp?m=793&t=Home
- ⁶³ See: http://www.ltsbfoundationforscotland.org.uk/index.asp?tm=16
- ⁶⁴ Including alcohol and tobacco.
- ⁶⁵ Including the Healthy Schools programme in England; Curriculum for Excellence in Scotland and the All Wales School Liaison programme.
- ⁶⁶ The Strengthening Families campaign in Wales was cited as a specific example of this.
- ⁶⁷ As part of a wider Personal, Social, Health and Economic (PSHE) curriculum.
- ⁶⁸ See: http://www.theyworkforyou.com/wrans/?id=2009-12-07a.303561.h&s=drug+section%3Awrans#g303561.q0 and http://www.publications.parliament.uk/pa/cm201011/cmhansrd/cm100909/halltext/100909h0001.htm

Pilot whole-school intervention to improve school ethos and reduce substance use

A feasibility study was conducted in four schools in England to investigate the appropriateness of a whole school intervention entitled 'Healthy Schools Ethos' that has previously been carried out in Australia and the USA (Bonnell et al. 2010). The intervention aims to improve social inclusion in schools.⁶⁹ The authors report that the intervention could feasibly be applied in English schools. They suggested several refinements and recommended that the health and educational outcomes of the programme should be evaluated as they were not measured as part of this study.

Pupils' attitudes towards drug education

In 2009, similar to previous years, 59% of school pupils in England age 11 to 15 who were surveyed could recall having received drug education in school in the previous year (Fuller and Sanchez 2010) (see section 2.4.1). Older pupils were more likely to remember these lessons than their younger counterparts (65% of Year 11 pupils compared to 43% of Year 7 pupils).⁷⁰ Most pupils who remembered the lessons reported that they had helped them to: think about the risks associated with drugs (96%); find out more about drugs (91%); learn that drugs are illegal (85%); avoid drugs (79%); or think what to do if they were offered them (76%). Thirty-eight per cent stated the lessons showed them that less young people than they thought took drugs.

Younger pupils were more likely than older pupils to say that the lessons helped them: avoid drugs; think about what to do if offered drugs; realise that drugs are illegal; and see that not as many young people as they think take drugs compared to older pupils. Older pupils were slightly more likely to say that lessons helped them find out where to go for help or for information about drugs. Pupils who had taken drugs in the last month and also recalled having drugs lessons were less likely than other pupils to say that the lessons had helped them to: think about the risks of taking drugs; think what to do if they were offered them; realise that taking drugs is against the law; and avoid taking drugs.

In the TellUs4 survey (see section 2.4.3) it was reported that the majority (90%) of Year 10⁷¹ pupils that were surveyed had received information about drugs in school. Of those pupils, 78% found the information helpful. The majority of all pupils that took part in the survey had not used drugs (83%); this proportion was slightly higher amongst those that had found the information helpful (88%) (Chamberlain et al. 2010).

Scotland

Under Scotland's new curriculum⁷² schools are required to develop children and young people's understanding of the use and misuse of a variety of substances including over the counter and prescribed medicines, drugs and solvents. This includes: developing an understanding of the impact of risk-taking behaviour on life choices; learning how to make informed personal choices; raising young people's expectations and aspirations; and teaching skills and attributes that will help them achieve and sustain positive lives. The aim is to change the attitudes and mind-set of children and young people, starting at an early stage. The curriculum is intended to provide a cohesive and progressive education for all young people aged three to 18.

⁶⁹ Two pairs of schools, matched by achieving similar local authority inspection ratings, either took part in the intervention or were assigned as a control. Students were asked to complete questionnaires regarding their knowledge of the intervention. Semi-structured interviews were conducted with staff.

⁷⁰ Year 7 pupils are aged 11 and 12. Year 11 pupils are aged 15 and 16.

⁷¹ A total of 70,545 Year 10 pupils took part in the survey. Year 10 pupils are aged 14 and 15.

⁷² See: http://www.ltscotland.org.uk/curriculumforexcellence/healthandwellbeing/outcomes/substancemisuse/index.asp and http://www.scotland.gov.uk/News/Releases/2010/04/22164648

Education policy, delivery and academic evidence

Scottish drug education policy and its delivery in schools were compared with academic evidence of effectiveness (Stead et al. 2010). It should be noted that the fieldwork for this study was conducted in 2003/04 and the policy and guidance documents that were considered as part of it have now been superseded by Scotland's new curriculum. The authors report that in 2003/04 whilst drug education was provided in the vast majority of schools, it was not always delivered according to the evidence base. The authors make a series of recommendations to close the gap between evidence and practice which include: increased emphasis in school guidance on approaches which have evidence of effectiveness; teacher training in evidence based approaches; increased continuity between drug education in primary and secondary school; resources that are appropriate to the age and ability of pupil; and specific guidance on the best way to utilise external trainers in schools.

Evaluation of Celtic and Rangers projects

In 2009 the Scottish Government commissioned a process evaluation of the *Celtic Against Drugs and Rangers Positive Choices* projects (Flint et al 2010), which were funded by the Scottish Government to deliver drug education and promote healthy lifestyles and participation in diversionary activities. The schemes were targeted at primary schools in the most deprived areas of Glasgow, but were provided universally to children in certain age groups (eight to nine years old or 10 to 11 years old). It was reported that the programmes successfully engaged pupils from a range of backgrounds. Both projects were viewed positively by teachers, pupils and delivery partners and appeared to have achieved short-term impacts including: enhancing pupils' awareness and knowledge of drugs and alcohol; and enabling pupils to participate in out-of-school sporting activities. However, it was not possible to establish their long-term impacts, or to compare their effectiveness with other prevention initiatives.

CASE+ (Cannabis And Smoking Education) project

A feasibility study and pilot intervention of the CASE+ (Cannabis And Smoking Education) project were conducted in seven schools in the West of Scotland. CASE+ is an extension to a (cigarette) smoking intervention⁷³ which is currently used in secondary schools across Wales (Munro and Bloor 2009). The smoking intervention⁷⁴ involves a two-day intensive peer support training programme (CASE). A further one day training session has been developed as a 'bolt-on' to this training, with the focus on cannabis education (CASE+). An evaluation was conducted using an experimental design.⁷⁵ The authors report that the process evaluation showed that the CASE+ intervention can be successfully implemented in secondary schools, however, they were unable to report conclusive evidence on its effectiveness. A programme manual for the CASE+ project was also published (Welsh 2009).

⁷³ The CASE (formerly known as ASSIST) peer support project was piloted in 59 schools in Wales and the West of England with pupils aged 12 to 13. They were trained in techniques on how to intervene with their peers and promote smoking prevention and cessation. Two year follow-up data showed a reduction in regular smoking prevalence at the schools who participated and the Welsh Assembly Government began to roll out the programme across all Welsh secondary schools in 2007.

⁷⁴ For the purpose of this study the smoking intervention is named CASE (formerly known as ASSIST) and the smoking intervention incorporating the cannabis intervention is named CASE+.

⁷⁵ A randomised controlled trial (RCT) design was used and each of the schools were randomly assigned to one of three groups: CASE+ where the school received the smoking intervention plus the cannabis intervention; CASE where the school received the (cigarette) smoking intervention only; control where pupils receive their usual school health education programmes.

Wales: Substance Misuse Education steering group

The Welsh Assembly Government (2009) report that the steering group⁷⁶ has commenced a review of the substance misuse guidance issued to schools. The All Wales School Liaison Programme⁷⁷ (see 2009 UK Focal Point report) is being further developed to extend the reach of the programme to disengaged pupils (currently in 72 Pupil Referral Units or units within mainstream schools). The steering group are currently reviewing the Volatile Substance Abuse (VSA) elements of the programme in response to a commitment in the drugs strategy to reduce VSA use (WAG 2008a). The Welsh Assembly Government are also developing a support strategy (due for publication in 2010) which will require local authorities to provide additional support services such as help for substance misuse problems.

3.2.2 Community

England: Positive Futures⁷⁸

In 2009/10, 54,607 young people participated in Positive Futures projects and 10,709 young people achieved awards and qualifications, an improvement on the previous year. Of the 9,963 young people whose engagement levels were recorded in 2009/10, 7,409 (74%) showed 'movements in a positive direction'. The data for 2009/10 also shows that 1,136 participants also received substance misuse education and/or support to address substance misuse issues.

Scotland: CashBack for Communities79

The Scottish Government has made a commitment to invest over £19.5 million⁸⁰ in a range of projects for young people, funded with money recovered through the Proceeds of Crime Act 2002 (see 2009 UK Focal Point report). Recently funded initiatives are the multi-sports project (£1.5 million); the Personal Social Development project (over £1.6 million); and the Uniformed Organisations project (£0.5 million). Over 300,000 young people have participated in CashBack for Communities activities (internal communication – Scottish Government).

UK Drug Policy Commission (UKDPC) review: drug prevention and diversity

The UKDPC conducted a review of UK literature regarding the impact drugs have on several minority communities (ethnic minorities; Lesbian, Gay, Bisexual and Transgender (LGBT); and disabled) (UKDPC 2010a-c) (see section 5.3.7). The authors recommend that drug prevention should be specifically tailored to meet the needs of drug users from diverse communities as there is a likelihood that mainstream service provision will not always be suitable for them. Key conclusions and recommendations were that:

- more information is needed regarding the breadth of education and prevention interventions available to different Black and Minority Ethnic (BME) communities;
- there is little evidence of what works in terms of preventative initiatives amongst BME communities across the UK and a lack of evaluation of programmes and of the effectiveness of drug education and information;
- ⁷⁶ Set up to review and oversee the further development of substance misuse education and prevention programmes in schools and other educational settings The group includes education experts and key stakeholders.
- ⁷⁷ Substance use education programme running since 2004. It is delivered across the majority of primary and secondary schools in Wales by a partnership between specialist police liaison officers and teachers. See 2008 and 2009 UK Focal Point reports.
- ⁷⁸ Positive Futures is a social inclusion programme for young people aged 10 to 19 that has been running since 2001. It provides diversionary activities (through 91 partnership projects) in deprived communities across England and Wales. It is funded by the Home Office and managed by a young people's charity, Catch22.
- ⁷⁹ See: http://www.scotland.gov.uk/Topics/Justice/public-safety/17141/cashback
- ⁸⁰ This represents £2.5 million to the Scottish Football Association, £6.5 million to YouthLink, £1.4 million to Scottish Rugby Union, £0.6 million to Arts and Business Scotland, £1.7 million to Scottish Sports Futures in partnership with Basketball Scotland, £2 million to the Sports Facilities Fund and £1.2 million to the Scottish Arts Council and Scottish Screen.

- specific venues have been cited as important for some BME groups and preferable for the delivery
 of drug-related information e.g. community centres where people feel comfortable and are in familiar
 surroundings; youth clubs; colleges and universities; and gender-specific venues in some cases;
- utilisation of a variety of media in appropriate languages is needed to provide drug education successfully;
- innovative approaches towards drug prevention with the LBGT community should be used such as an emphasis on delivery via community venues, internet sites and social media;
- sexual and mental health service providers could facilitate targeted prevention with the LGBT community if they had an improved awareness of their specific substance use issues;
- better data regarding drug use amongst members of the LGBT community are required in order to develop appropriate interventions; and
- there are extensive differences in individual disabilities therefore a range of approaches are necessary to convey information to disabled people about drugs e.g. supportive materials for hearing impaired young people who may not benefit fully from orally delivered mainstream substance misuse education and provision of teacher training (UKDPC 2010a-c).

3.3 Selective prevention in at-risk groups and settings

Selective prevention initiatives target subsets of the total population that are deemed to be at greater risk of substance misuse such as truants or young offenders.

3.3.1 At-risk groups

Inspiring Scotland

Inspiring Scotland⁸¹ uses a model of venture philanthropy whereby investment is made in third sector organisations to fund the provision of services (rather than receiving donations or grants). The Scottish Government is one of many investors from the public and private sectors, alongside high net worth individuals and other sources of trust funding. Inspiring Scotland will have a number of 'themes' of investment, the first of which is the '14 to 19 Fund' which is aligned to the Scottish Government's *More Choices, More Chances* strategy (Scottish Executive 2006a). It offers £10 million per year over 10 years. There is a portfolio of 24 organisations supported through the fund, from large national bodies to local programmes. These organisations focus on supporting vulnerable young people into learning or employment. For many of them, this includes a focus on young people with issues associated with drugs misuse. Organisations involved include 'Aberdeen Foyer'; 'Action for Children Scotland'; 'Move On'; 'Tomorrow's People'; and the 'Venture Trust', among others (internal communication – Scottish Government).

3.3.2 At-risk families

England: Family Intervention projects pilots

It was estimated (by the previous UK Government) that 228 Family Intervention programmes (FIPs) (see 2009 UK Focal Point report) were in place by the end of 2009 and the availability of further funding for more projects from April 2010 was announced.⁸² It was anticipated that 10,000 families would be supported by FIPs each year from 2011/12. Following the change in Government in May 2010, the Department for Children, Schools and Families (DCSF) became the Department for Education and at the time of writing there had been no further announcements on this initiative (HC Deb, 10th November 2009 c348W).

⁸² See: http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm091110/text/91110w0039.htm

⁸¹ See: http://www.inspiringscotland.org.uk/

Wales: Strengthening Families programme 10-14

The Strengthening Families 10-14 Programme⁸³ (see 2009 UK Focal Point report), running in Cardiff since 2005, has been introduced in a further seven locations across the country. The intervention will form part of a Randomised Control Trial (RCT) (funded by National Prevention Research Initiative) which will explore whether the outcomes for this project are equitable with those that were reported when the project was implemented in the USA (where the programme originated). The trial started in September 2009 and results are expected in March 2014 (WAG 2010a).

3.4 Indicated prevention

Children at risk with individually attributable risk factors e.g. children with attention deficit (hyperactivity) disorder (AD(H)D), children with externalising or internalising disorders.

Research: evaluation of drug prevention intervention

An RCT evaluating the effect of a drug prevention intervention was conducted with a sample of secondary school students aged between 13 and 16 in London (Conrod et al. 2010). The participants completed a series of self-reported personality tests to identify if they displayed character traits⁸⁴ which may be associated with an elevated risk of substance use problems. They were assigned to two groups; one group (n=395) were exposed to a brief intervention⁸⁵ which aimed to delay the onset, prevalence and frequency of drug use and the other, control group received no intervention (n=337). The study followed up participants over a two year period and examined the differences in drug use between the two groups. Over the two years of the study the control group reported a significantly higher frequency of drug use than those who had received the intervention. They also used a significantly greater number of drugs. The authors suggest that brief interventions which target specific high risk personality types can be of benefit in preventing substance use problems developing in young people.

3.5 National and local media campaigns

Talk to FRANK⁸⁶

In the lead up to the classification of a range of 'legal highs' (see section 1.2), FRANK launched its 'Crazy Chemist' campaign in England in the autumn of 2009. It featured information on the FRANK website and in printed media about the potential dangers of 'legal highs' such as benzylpiperazine (BZP), gammabutyrolactone (GBL) and synthetic cannabinoids. Aimed at 18 to 24 year old clubbers and students, who were thought to be most at risk, it included advertising: in clubs and bars; online; on search engines under key terms; and in 'Mixmag' clubbing magazine. This activity was followed up with a new publication about mephedrone at the time of its control in April 2010.

An evaluation of the 2009 FRANK cocaine campaign (see 2009 UK Focal Point report), conducted by the Home Office with 300 young people before and after the campaign, reported that 67% of those surveyed agreed that they had underestimated the harm cocaine can cause and that 63% said that the campaign had made them less likely to take cocaine in the future (Home Affairs Committee 2010).

- ⁸³ This programme aims to strengthen protective factors (parenting, communication, and young people's resilience skills) and also reduce key risk factors within families. The intervention typically lasts for about seven weeks and involves weekly sessions where the young person and family members meet separately with a project worker for the first hour and in the second hour they meet as a family with the project worker.
- ⁸⁴ In total 5,302 school pupils from 24 secondary schools in London completed the Substance Use Risk Profile Scale (Conrod et al. 2002) a 23-item questionnaire which includes self-report measures of hopelessness, anxiety, sensitivity, impulsivity and sensation seeking. This identified 2,028 individuals with elevated scores and, of these, 732 students (who provided parental consent) participated in the trial.
- ⁸⁵ The intervention consisted of two, 90 minute, group sessions about changing behaviour so that individuals are able to cope with vulnerable aspects of their personality.
- ⁸⁶ The Talk to FRANK campaign has been running in England for seven years. See: http://www.talktofrank.com.

Data from the Home Office show that there were over 5.6 million contacts made with the FRANK service (helpline, website, text message, email and MSN FRANK Bot) in 2009/10 (personal communication - Home Office).

High or Dry survey

- In the 'High or Dry'⁸⁷ survey of young people aged between 16 and 25:
- most respondents (83%) said that they had heard of the FRANK website;
- just under half of respondents had used the FRANK website (48%);
- 90% of those who had used the FRANK website found it useful (58% very; 32% fairly);
- three quarters (75%) of respondents remembered having seen at least one FRANK awareness campaign;
- of those that had seen a campaign, 85% reported that the message behind FRANK was clear;
- 75% agreed with the statement 'young people are more aware of the dangers of drugs because of FRANK';
- 59% agreed that 'FRANK is an effective way of reducing drug use amongst young people;
- 43% agreed that 'people take fewer risks with drugs because of FRANK'; and
- 39% thought that 'young people don't take any notice of FRANK campaigns' (Youthnet⁸⁸ 2010).

In the same survey over half (57%) of respondents had used the internet for drug-related information or advice; 47% had spoken to their friends; and just over a third (36%) had spoken to their parents about drugs. Eight per cent had called a telephone helpline for information about drugs. Around three quarters (77%) agreed that 'young people need more information about drugs', with almost half (46%) strongly agreeing. Other findings included:

- 78% agreed with the statement that 'there is more that could be done to educate young people about drugs';
- 70% agreed with the statement 'I am confident that I know which drugs are legal and which are illegal'; and
- 67% agreed that they 'know a lot about drugs and their side effects'.

Of those who stated that they knew a lot about drugs, 43% thought their knowledge had made them less likely to take drugs, whilst a similar proportion (44%) thought their knowledge had made them more likely to do so (Youthnet 2010).

⁸⁷ Between 25th March and 1st April 2010, 604 young people aged 16 to 25 from the UK completed the survey conducted by YouthNet called High or dry. The report explores young people's experience and awareness of drugs, as well as their attitudes towards drug information, advice and education. The survey constituted a second wave of drug-related research funded by the Department of Health, the sample was self-selecting.

⁸⁸ Youthnet is an online charity that provides information and support on issues affecting 16 to 25 year-olds (including drugs). See: http://www.youthnet.org/

Pupils' attitudes to drug information provision

English school pupils, asked about where helpful information about drugs could be found, were most likely to cite television as a source of information (71%) (Fuller and Sanchez 2010) (see section 2.4.1). The next most popular sources of information were teachers (63%) and parents (63%). Magazines/ newspapers and the internet were mentioned by just under half of pupils (48% and 49% respectively) and friends, relatives and the police were also key sources of information (mentioned by 43%, 40% and 40% respectively). The FRANK campaign was mentioned by just over a third of all pupils (36%) with older pupils more likely to mention it than younger pupils (47% of 15 year olds compared to 20% of 11 year olds) and boys (39%) more likely to mention it than girls (33%). Helplines were the least likely source of information (18%).

Know the Score cocaine campaign: Scotland

In Scotland, 'Know the Score' ran a two-month campaign, targeting young people aged 16 to 22 about the dangers associated with cocaine powder. The campaign included adverts in cinemas and at bus stops and also utilised online media such as Spotify and Facebook. The key message of the campaign was 'you don't know what you are getting with cocaine'.⁸⁹ This message is reinforced by annual cocaine awareness weekends targeting young people at clubs, pubs and social events at colleges and universities. 'Know the Score' also holds annual Cocaine Awareness Weekends in over 200 pubs and clubs in Scotland and has an information point at the country's biggest music festival 'T in the Park'.

The Welsh Drug and Alcohol Helpline DAN 24/790

The Welsh Assembly Government (2010b) reported that over the past 12 months the number of callers to DAN 24/7 and the geographical reach and age range of callers has increased. This is due to targeted advertising at specific times of year when issues are likely to occur such as Christmas, New Year and Easter. The campaign has had a presence at large outdoor events and festivals employing a range of media such as posters, leaflets and adverts on local radio stations.

Public Health Agency: Northern Ireland

In their *Priorities for Action 2010/11* the Department of Health, Social Services and Public Safety Northern Ireland (DHSSPNI) (2010b) recommends that the Public Health Agency should ensure the delivery of effective substance use media campaigns by working in partnership with other organisations and in line with the drug strategy.

⁸⁹ See: http://www.scotland.gov.uk/News/Releases/2010/01/21103852

⁹⁰ Drug and Alcohol Helpline, 'DAN 24/7' is a bilingual (Welsh and English) telephone help line funded by the Welsh Assembly Government and operated by Betsi Cadwaladr University Health Board. It provides a 24 hour gateway service, designed to provide substance use information, guidance, advice and sign post callers to local relevant services.

4. Problem drug use

4.1 Introduction

Estimates of problem drug use (PDU) in the United Kingdom are derived using two indirect measurement techniques: the capture-recapture (CRC) method; and the multiple indicator (MIM) method. Since 2006, all four United Kingdom administrations have published prevalence estimates to meet their policy requirements. The drugs and data covered by these estimates differ across the United Kingdom.

Latest national and regional estimates for England are for 2008/09 for opiate and/or crack cocaine use, with separate estimates available for opiate use and crack cocaine use. Estimates of drug injecting by users of opiates or crack cocaine in England are available for 2006/07. In Scotland the latest national and regional estimates are for 2006, for opiates and/or benzodiazepine misuse and drug injecting. In Wales a provisional national estimate for 2006/07 for long duration or regular use of opioids, cocaine powder and/or crack cocaine was published in 2009. Local estimates for 2006/07 were published in 2010. Estimates for Northern Ireland for 2004 were published in 2006 and cover problem opiate and/or problem cocaine powder use.

Based on these, it is estimated that there are a total of 397,346 problem drug users in the United Kingdom, and 147,900 injecting drug users (primarily of opiates or crack cocaine).

4.2 Prevalence estimates of problem drug use

4.2.1 Prevalence estimates for England for 2008/09

New estimates of the prevalence of problem drug use in England for 2008/09 nationally and regionally, have been published as a follow-up to an earlier three year study (Hay et al. 2010a).⁹¹ Estimates are for opiate and/or crack cocaine users (problem drug users) with separate estimates for opiate users and crack cocaine users. It was not possible to derive an estimate for injecting drug users.

There were an estimated 321,229 PDUs in England in 2008/09, a rate of 9.41 per thousand population aged 15 to 64; an estimated 262,428 opiate users, a rate of 7.69 per thousand population; an estimated 188,697 crack cocaine users, a rate of 5.53 per thousand population (Table 4.1).

	ESTIMATE	95% CONFIDENCE INTERVAL (CI)	RATE	95% CONFIDENCE INTERVAL
Opiate and/or crack cocaine users	321,229	316,684-329,025	9.41	9.27-9.64
Opiate users	262,428	258,782-268,517	7.69	7.58-7.90
Crack cocaine users	188,697	182,894-195,506	5.53	5.36-5.75

Table 4.1: Estimates of problem drug use and rates per 1,000 population aged 15 to 64 in England, 2008/09

Source: Hay et al. 2010a

⁹¹ The earlier study was a Home Office project which provided prevalence estimates for 2004/05, 2005/06 and 2006/07 (Hay et al. 2006; 2007; 2008) ('sweeps' 1 to 3). The new study, commissioned by the National Treatment Agency (NTA) was carried out two years after the final 'sweep' of the original project and therefore is considered as a fifth 'sweep'. Estimates for 2007/08 are not available as a study wasn't commissioned for that year.

It was reported last year (see 2009 UK Focal Point report) that in the original three year study, PDU rates had remained stable. Similarly, in the latest study it is reported that the PDU estimate remained stable between 2006/07 and 2008/09 with slight changes that were not statistically significant. There was however, a significant decrease in the estimated number of opiate users between 2006/07 and 2008/09. The reported increase in crack cocaine users over this period was not statistically significant (Table 4.2).

Table 4.2: Estimated number of problem drug users aged 15 to 64 in England, 2004/05, 2005/06, 2006/07 and 2008/09

	2004/05	2005/06	2006/07	2008/09
Opiate and/or crack cocaine users	327,466	332,090	328,767	321,229
Opiate users	281,320	286,566	273,123	262,428
Crack cocaine users	192,999	197,568	180,618	188,697

Source: Hay et al. 2008; 2010a

Regional differences

As in the previous sweeps these latest estimates show marked variation in prevalence rates for opiate and/or crack cocaine users across the nine Government Regions. Although fluctuations in estimates of the numbers of PDUs were reported across the regions between 2006/07 and 2008/09, only the North East reported a statistically significant increase (Hay et al. 2010b).

London continues to have the highest rate of problem drug use per 1,000 population (11.64 per 1,000) followed by the North West and Yorkshire and the Humber (11.48 and 11.30 per 1,000 respectively). Similar to 2008/09, the North West has the highest estimated rate per 1,000 population for opiate use (9.86 per 1,000), followed by Yorkshire and the Humber (9.81), then North East (9.19) (Hay et al. 2010b).

Age

In the latest sweep of estimates of problem drug use in England for 2008/09, the highest prevalence of problem drug use continues to be amongst those in the 25 to 34 age group (Table 4.3).

The North East and Yorkshire and the Humber have the highest rate in the 25 to 34 year old age group (30.52 per 1,000 and 28.05 per 1,000 population respectively).

London has the highest prevalence rate in the 35 to 64 year old age group (10.96 per 1,000 population). The highest prevalence rates in the younger age group (15 to 24 years old) are found in London and the North East (10.24 per 1,000 and 10.22 per 1,000 population respectively) (Hay et al. 2010b).

 Table 4.3: Prevalence rate per 1,000 population of opiate and/or crack cocaine users by age group in England, 2008/09

15 TO 24 YEARS			25 TO 34 YEARS			35 TO 64 YEARS		
Rate	95%	CI	Rate	95%	6 CI	Rate	959	% CI
8.03	8.02	8.53	19.25	18.80	19.67	6.66	6.52	6.81

Source: Hay et al. 2010b

Between 2006/07 and 2008/09 there were significant decreases in the estimated numbers of PDUs in the 15 to 24 age group and the 25 to 34 age group. Over the same period, there was a significant increase in the estimated number of PDUs in the older, 35 to 64, age group (Table 4.4). The authors suggest that this is likely to be due to an ageing drug using population (rather than people over the age of 34 starting to take drugs) (Hay et al. 2010b).

 Table 4.4: Estimated number of opiate and/or crack cocaine users by age group in England, 2006/07 and 2008/09

	15 TO 24 YEARS		25 TC	34 YEARS	35 TO 64 YEARS		
Year	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	
2006/07	60,672	59,245-63,598	139,284	136,139-144,344	128,810	125,982-133,641	
2008/09	55,145	55,104-58,618	129,141	126,101-131,926	136,943	134,091-140,083	

Source: Hay et al. 2010a;b

4.2.2 Regional estimates of problem drug use in Wales

National, provisional estimates of problem drug use in Wales (injecting drug use or long duration or regular use of heroin, other opioids, cocaine powder and crack cocaine) in 2006/07 were reported last year (see 2009 UK Focal Point report). In 2010 the Welsh Assembly Government published regional PDU estimates by Health Board area. There were marked regional differences, with the rate (per 1,000 population) ranging from 4.7 (95% CI 4.2 to 5.2) in the Powys Teaching and Hywel Dda area to 16.2 (95% CI 10.2 to 28.5) in the Abertawe Bro Morgannwg University (ABMU) trust area⁹² (WAG 2010b).

4.2.3 Estimates of problem drug use in Scotland

In Scotland, work is currently underway by ISD Scotland to produce national and local PDU estimates for 2009/10.⁹³ It is anticipated that the estimates will be available in late 2011 or early 2012 (internal communication – Scottish Government).

⁹³ See: http://www.drugmisuse.isdscotland.org/publications/abstracts/prevalence projectupdate.htm

⁹² ABMU trust provides health services to Swansea, Neath, Port Talbot and Bridgend.

4.2.4 Estimates of problem drug use in the United Kingdom

Combining the new estimates for England and the most recent estimates for Northern Ireland, Scotland and Wales (Centre for Drug Misuse Research 2006; Hay et al. 2009; WAG 2009; Hay et al. 2010a) it is possible to derive an estimate for the United Kingdom of 397,346, a rate of 9.79 per 1,000 population (Table 4.5).

Table 4.5: Estimates of problem drug use in the United Kingdom: number and rate⁹⁴ per 1,000 population aged 15 to 64

COUNTRY	ESTIMATE	95% CONFIDENCE INTERVAL		RATE	95% CON INTE	FIDENCE RVAL
England	321,229	316,684	329,025	9.41	9.27	9.64
Northern Ireland	1,395	1,316	1,910	1.28	1.21	1.75
Scotland	55,328	54,451	57,234	16.16	15.91	16.72
Wales	19,394	15,085	31,780	10.10	7.86	16.55
United Kingdom95	397,346	387,536	419,949	9.79	9.55	10.35

Source: Centre for Drug Misuse Research 2006; Hay et al. 2009; 2010a; WAG 2009

The latest available estimate for the number of injecting⁹⁶ PDUs (predominantly of opiates and crack cocaine) in the UK was reported last year as 147,900. The estimated rate of injecting is 3.69 per thousand population (see 2009 UK Focal Point report).

⁹⁴ Calculated using the following population estimates for 15 to 64 year olds: England 34,146,000; Northern Ireland 1,090,990; Scotland 3,422,900; Wales 1,920,300; United Kingdom 40,580,190.

⁹⁵ Based on estimates of opiates and/or crack cocaine use in England for 2008/09; opiate use in Northern Ireland for 2004; opiate and/or benzodiazepine misuse in Scotland for 2006; long duration or regular use of opioids, powder cocaine and/ or crack cocaine in Wales for 2006/07.

⁹⁶ Based on estimates of injecting of any drug by users of opiates and/or crack cocaine in England for 2006/07; injecting of any drug by opiate and/or problem powder cocaine users in Northern Ireland for 2004; and injecting of opiates and/ or benzodiazepines in Scotland for 2006. Estimates for Wales are extrapolated from England. Injecting estimates for Northern Ireland assume the same proportion of injecting as England (Centre for Drug Misuse Research 2006; Hay et al. 2008; Hay et al. 2009).
Trends in prevalence of problem drug use for the United Kingdom

Table 4.6 shows estimates provided over time by the UK Focal Point; the dates refer to the year the estimate was produced rather than the year the estimate refers to.⁹⁷

Table 4.6: Estimates of problem drug use: number and rate per 1,000 population, aged 15 to 64 in theUnited Kingdom

YEAR OF ESTIMATE	ESTIMATE	95% CONFIDENCE INTERVAL		RATE	95% CON INTE	FIDENCE RVAL
200698	357,160	344,263	375,615	9.26	8.92	9.73
200799	398,845	397,033	421,012	10.15	10.11	10.72
2008100	403,547	395,378	423,907	10.19	9.98	10.70
2009101	404,884	396,267	431,120	10.10	9.88	10.75
2010102	397,346	387,536	419,949	9.79	9.55	10.35

Source: Hay 2004; Centre for Drug Misuse Research. 2006; Hay et al. 2006; 2007; 2008; 2009; 2010a; WAG 2009

4.3 Data on PDUs from non-treatment sources

Statistics from the Northern Ireland Addicts Index 2009

The Northern Ireland Addicts Index provides information about individuals reported to be addicted to one or more of 14 specific drugs¹⁰³ classified under the *Misuse of Drugs Act 1971* (PHIRB 2010a). The index showed that at 31st December 2009:

- 288 individuals were registered on the Addicts Index, an increase of seven from 281 in 2008;
- 81% of registered addicts were male in 2009 (83% in 2008);
- 24% of registered addicts were aged 29 years and under in 2009 compared to 25% in 2008 and 29% in 2007;
- ⁹⁷ For more information on these estimates see previous UK Focal Point Reports.
- ⁹⁸ 2006 estimate is based on estimates of problem drug use by: Frischer et al. 2004 (England 2001); McElrath 2002 (Northern Ireland 2000); and Hay et al. 2004 (Scotland 2003). Estimates for Wales are extrapolated from England estimates.
- ⁹⁹ 2007 estimate is based on estimates of opiates and/or crack cocaine use in England for 2004/05 (Hay et al. 2006), opiate use in Northern Ireland for 2004 (The Centre for Drug Misuse Research 2006), and problem drug use in Scotland, 2003 (Hay et al. 2004). Estimates for Wales are extrapolated from England estimates.
- ¹⁰⁰ 2008 estimate is as 2007 above except for England for 2005/06 (Hay et al. 2007).
- ¹⁰¹ 2009 estimate is based on estimates of opiates and/or crack cocaine use in England for 2006/07 (Hay et al. 2008), opiate use in Northern Ireland for 2004 (The Centre for Drug Misuse Research 2006), opiates and/or benzodiazepine use in Scotland, 2006 (Hay et al. 2009) and for long duration or regular use of opioids, powder cocaine and/or crack cocaine in Wales in 2006/07 (WAG 2009).
- ¹⁰² 2010 estimate is based on estimates of opiates and/or crack cocaine use in England for 2008/09 (Hay et al. 2010a;b), opiate use in Northern Ireland for 2004 (The Centre for Drug Misuse Research 2006), opiates and/or benzodiazepine use in Scotland, 2006 (Hay et al. 2009) and for long duration or regular use of opiates and/or cocaine in Wales in 2006/07 (WAG 2009).
- ¹⁰³ People are registered on the Index if they are known to be, or a medical practitioner considers them to be, addicted to one or more of 14 controlled drugs. The Misuse of Drugs (Notification of and Supply to Addicts) (Northern Ireland) Regulations 1973 require any doctor to notify the Chief Medical Officer (CMO) of the Department of Health, Social Services and Public Safety in writing within seven days, if they attend a patient who he considers to be, or has reasonable grounds to suspect is, addicted to any of the following controlled drugs: Cocaine, Methadone (Physeptone), Dextromoramide (Palfium), Morphine, Diamorphine (Heroin), Opium, Dipipanone (Constituent of Diconal), Oxycodone, Hydrocodone, Pethidine, Hydromorphone, Phenazocine, Levorphanol, Piritramide.

- heroin was the most frequently used notifiable drug, reported by 80%;
- as in recent years, methadone (22%) and cocaine (5%) were the second and third most commonly reported drugs;
- in 2009, 55% of registered addicts whose injecting behaviour was known reported currently injecting, an increase from 51% in 2008 and from 44% in 2007;
- of the 288 addicts on the Index, 60 were registered within the last year; 150 have been registered between one and five years; the remaining 78 addicts have been registered between six and 20 years; and
- there were 228 re-notifications in 2009 (compared to 212 in 2008 and 206 in 2007) and 60 new notifications.

4.4 Relationship between indicators

Crack cocaine

The number of crack cocaine users has remained stable since 2004^{104} with only the price and purity of crack cocaine decreasing since 2003 and all other indicators increasing. The number of crack cocaine offences has increased substantially since 2003, both for possession (137%, n= 3,174) and trafficking (167%, n=2,721) (ST11). Presentations to treatment for primary crack cocaine use have increased and there has also been an increase in the number of primary opiate users reporting secondary use of crack cocaine (see section 5.4.2 and ST34). As with heroin (r= +0.999) and cocaine powder (r= +0.994), there is a strong positive correlation between offences and Treatment Demand Indicator¹⁰⁵ (TDI) treatments (r= +0.956), perhaps reflecting the role of the criminal justice system in referring problematic drug users into treatment. Extra TDI analysis carried out on behalf of the UK Focal Point in 2010 shows that one-third of primary crack cocaine users entering treatment in the UK during 2008/09 were referred by the criminal justice system, the highest proportion for any individual drug.

The number of deaths mentioning cocaine has increased since 2003 although there was a large decrease in 2009. There is a strong positive correlation between the number of deaths and TDI treatments (r= +0.914) and the number of deaths and offences (r= +0.968). Indeed, for all problem drugs there is a strong positive correlation between offences and deaths: amphetamines (r= +0.932); cocaine powder (r= +0.903); and heroin (r= +0.891).

 ¹⁰⁴ PDU estimates are for England and Wales and have been indexed to 2004 when the first sweep of the PDU estimates began. The estimate for 2008 has been used for the missing year (2007).
¹⁰⁵ See Chapter 5.



Figure 4.1: Relationship between crack cocaine indicators in the United Kingdom, 2003 to 2009: indexed to 2003

Older problem drug users

The number of drug users aged 40 years and over entering treatment has more than doubled since 2003/04, with the proportion of primary heroin users aged over 40 increasing from 10% of all heroin presentations to treatment in 2003/04 to 19% in 2008/09 (see section 5.4.2 and ST34). Despite overall numbers of PDUs remaining stable over this period, the number aged 35 to 64 has increased and is statistically significant. Reports suggest that this is due to an ageing cohort of PDUs rather than people starting to use drugs at a later age (see section 4.2.1). It has also been suggested that the increase in the number of drug-related deaths is due to an ageing cohort of PDUs and the doubling of drug-related deaths amongst people aged 40 and over between 2003 and 2009 supports this assertion (see section 6.4.1 and ST06). Looking at prevalence rates of infectious disease amongst older IDUs, it can be seen that this age group pose particular health problems; 55% of IDUs aged 35 and over tested positive for hepatitis C antibodies in England and Wales during 2009 compared to 36% of 25 to 34 year olds and 21% of those aged under 25. Prevalence rates of hepatitis B infection were also much higher amongst the older group (20.1%) than those aged 25 to 34 years old (8.4%) and under 25 years old (4.1%). The prevalence of HIV infection amongst IDUs aged 35 and over was 2.1% in 2009 compared to 1.2% of 25 to 34 year olds and 0.3% of those aged under 25 years old (ST09). However, the relatively low levels of HIV infection amongst IDUs in the UK, the introduction of effective treatment for hepatitis C and the high proportion of PDUs in contact with drug treatment services has impacted on survival rates for PDUs and may continue to contribute to the ageing cohort.

^{*}From 2007 onwards crack cocaine prices were provided per gram not per rock **Source:** Standard Tables 06; 07; 11; 13; 14; 16 and 34

5. Drug-related treatment: treatment demand and treatment availability

5.1 Introduction

United Kingdom drug strategies identify treatment as being effective in tackling problem drug use and therefore, seek to improve its quality and effectiveness. *Drug Misuse and Dependence: UK Guidelines on Clinical Management* (DH and the devolved administrations 2007) and in England, *Models of Care for Treatment of Adult Drug Misusers: Update 2006* (NTA 2006) provide the basic framework for drug treatment, offering guidance on the structure and range of services to be commissioned in each area, as well as guidelines on clinical practice. The National Institute for Health and Clinical Excellence (NICE) also provides guidance in a number of areas. Treatment interventions in any given area are expected to include advice and information, care planning, psycho-social interventions, community prescribing, inpatient drug treatment and residential rehabilitation. In addition, drug misusers are to be offered relapse prevention and aftercare programmes; hepatitis B vaccinations; testing and counselling for hepatitis B and C and HIV; and needle exchange. Oral opiate substitution maintenance treatment with methadone is the most common pharmacological treatment used in treating heroin addiction; buprenorphine is also prescribed while injectable opioids, such as injectable methadone and injectable diamorphine, are also available but are not commonly used.

Co-ordination and integration between a range of providers is seen as key in helping problem drug users reintegrate into society and all recent drug strategies in the United Kingdom focus on this area. While providing treatment remains a priority, housing, employment, education and training have also been identified as important, more particularly with new drug strategies having a much stronger focus on recovery and reintegration.

With access to effective treatment being a priority of the United Kingdom drug strategies, treatment capacity has increased substantially. This has been accompanied by significant financial investment. Some research initiatives are funded centrally to improve treatment engagement, and there are other initiatives to increase the capacity and improve effectiveness, for example nurse prescribing, guidance for pharmacists working with drug users, and continued encouragement to expand the role of general practitioners (GPs) in the treatment and care of drug misusers. Increased attention is being given to measuring the health and social outcomes associated with treatment.

Treatment demand indicator (TDI) data are from four separate systems: the National Drug Treatment Monitoring System (NDTMS) in England, the Scottish Drug Misuse Database, the Welsh National Database for Substance Misuse and the Northern Ireland Drug Misuse Database. Data are combined for the United Kingdom. Continuous national data are only available from 2003/04. From 2003/04 to 2005/06, presentations to treatment increased substantially levelling off in 2006/07 before rising by three per cent in 2007/08 and six per cent in 2008/09. While the number of opiate presentations continue to increase, they account for a smaller proportion of all presentations than previously with cocaine powder and cannabis presentations rising.

5.2 Strategy and policy

England

In June 2010, the Secretary of State for Health announced that the National Treatment Agency (NTA), the organisation responsible for substance misuse treatment in England, would cease operating as a separate organisation in 2012 and become part of the proposed Public Health Service. The future focus and structure of treatment services will be set out in the new Drug Strategy, due for publication in December 2010.

NTA Business Plan 2010/11

The NTA's Business Plan (NTA 2010a) sets out milestones and actions for the financial year 2010/11. It sets out five major strands of work, reflecting a new vision for drug treatment:

- improving outcomes, using the Treatment Outcomes Profile (TOP) and data warehouse project;
- better value for money, providing comparative unit cost data and allocating funding to incentivise achievement;
- championing abstinence-focused treatment, with new clinical protocols on substitute prescribing to prevent unplanned drift into long-term maintenance;
- commissioning a rebalanced treatment system, developing patient placement criteria to ensure a transparent approach to commissioning community and residential rehabilitation, and new services for new problems such as new psychoactive substances; and
- rehabilitating offenders, working with the Ministry of Justice and Offender Health to promote abstinence-focused treatment in criminal justice settings.

Drug System Change pilots

Seven 'Drug System Change Pilots' are half way through the second year of a two-year pilot programme (see 2009 UK Focal Point report). They have used their pilot status to strengthen joint commissioning and allow more funding freedom and flexibility. Following an initial scoping phase for the evaluation of the pilots, a baseline report is awaiting Ministerial approval with the second phase of the evaluation including qualitative interviews underway.

Payment according to outcomes

Consistent with the Coalition Agreement and overseen by an Inter Ministerial Group led by Oliver Letwin, Minister for Government Policy, the NTA is working with government departments to develop models of commissioning drug treatment and recovery based on payment by results. Current plans are to begin pilots of these models during 2011/12.

Consensus statement

A drug treatment 'consensus statement' was drafted by four national charities and supported by many other charities and organisations.¹⁰⁶ It states that to move forward in treatment services:

- better links between health, social care and support services need to be developed to support recovery;
- the treatment system should be balanced and focus on recovery, quality of outcomes and re-integration rather than just the numbers of people entering services;
- services need to be personalised with users fully involved in decisions about their treatment and they should be sensitive to ethnicity and diversity; furthermore, the role of families and carers should be acknowledged and they should be supported;
- services need to address the balance between heroin and crack cocaine focussed services and other types of substance use services such as stimulant use, alcohol use, cannabis use and polydrug use; and
- treatment services should be available to all those in need, be it in prison, probation, community or residential settings.

¹⁰⁶ See: http://www.drugscope.org.uk/Resources/Drugscope/Documents/PDF/Other/Consensusstatement.pdf

Scotland

Waiting times

A HEAT (Health improvement, Efficiency, Access, Treatment) target relating to drug treatment waiting times in Scotland was approved by the Scottish Government in November 2009. It stated that, by March 2013, clients would wait no longer than three weeks from referral to receiving appropriate drug treatment that supports their recovery. To assist services in meeting these targets, the Scottish Government published a guide aimed at NHS Boards, Alcohol and Drug Partnerships and specialist substance misuse service providers (Scottish Government 2010b). It contains advice on how to improve access to and re-design services as well as providing a number of good practice case studies from across the UK. Progress against this target is reported quarterly.¹⁰⁷

5.3 Treatment systems

5.3.1 Guidance

The NTA published guidance for commissioners on how best to commission services to support re-integration and recovery (NTA 2010b). The guidance covers a number of areas to achieve this: understanding the drug treatment, reintegration and recovery challenge and setting goals; providing local leadership; choosing interventions; commissioning processes; and monitoring and evaluation. A commissioning competences checklist is provided for each of these five domains in addition to a list of relevant materials, guidance and tools.

5.3.2 Treatment outcomes

Drug Treatment Outcomes Research Study (DTORS)

The final outcomes report from the Drug Treatment Outcomes Research Study (DTORS) was published in 2009¹⁰⁸ (Jones et al. 2009). Data on baseline characteristics were published in an earlier report (Jones et al. 2007) and summarised in the 2008 UK Focal Point report. Data show that 52% of participants received substitute prescribing at first follow-up and 65% at second follow-up while the figures for structured counselling were 40% and 50% respectively. Around one in five had received residential rehabilitation at first and second follow-up and around one in ten had received inpatient detoxification. In terms of treatment retention, 'new' treatment clients showed lower levels of retention than other clients and levels were similar between criminal justice referral clients and clients referred from other sources.

The study found that many clients ceased using the drugs they reported at baseline and those who did continue to use tended to do so at lower levels. The greatest change in drug use occurred between baseline and first follow-up. Forty-four per cent of heroin users had ceased use by first follow-up and 49% by second follow-up. Amongst crack cocaine users the proportion was higher; 53% were abstinent at first follow-up and 61% at second follow-up. Of those continuing to use heroin and crack cocaine, the monetary value of the drugs used reduced. Fifty-three per cent of those injecting at baseline had ceased by first follow-up and 63% by second follow-up.

¹⁰⁷ See: http://www.scotland.gov.uk/About/scotPerforms/partnerstories/NHSScotlandperformance/drugwaitingtimes

¹⁰⁸ Of the 1,796 individuals recruited for baseline interview between February 2006 and March 2007 across 342 treatment centres in England (94 of 149 Drug Action Team areas), 1,131 (63%) were interviewed again. 886 initial follow-up interviews were conducted between three to five months (first follow-up) and, of these, 504 were interviewed a third time between 11 and 13 months (second follow-up). Where necessary, data were weighted to account for non-response bias. Further technical information can be found in Appendix 1 of the outcomes report.

Findings also show that offending behaviour reduced during treatment with 40% reporting having committed an acquisitive crime in the last four weeks at baseline compared to 21% at first and 16% at second followup. Analysis¹⁰⁹ showed that the proportion of clients committing acquisitive crime decreased in the first six months of treatment, with no significant change thereafter. Similarly, improvements in self-reported mental health levelled off at around six months.

The authors conclude that, despite lower than anticipated follow-up rates, treatment is associated with a reduction in harmful behaviours associated with problem drug use with most improvements occurring within the first few months of treatment.

See section 13.6.1 for findings from the cost-effectiveness analysis of DTORS data.

Qualitative study on drug treatment effectiveness

A qualitative study based on interviews with front-line drug treatment providers and treatment seekers was also undertaken as part of DTORS (Barnard et al. 2009). This explored staff and user views on the factors influencing effectiveness of treatment services. The findings suggest that treatment should be flexible to meet the varying needs of individuals and that treatment is unlikely to be successful in the absence of a high level of client motivation. Treatment providers highlighted the challenges brought about by an expansion in treatment numbers and higher levels of retention. The contribution of criminal justice referrals to this growing caseload was acknowledged with some suggestion of services being under-resourced. However, the ability of the criminal justice approach to reach those who may not have accessed treatment was cited as a positive impact with treatment seekers referred from Criminal Justice System (CJS) sources displaying similar levels of motivation as non-CJS referrals. Finally engagement with clients at 'key transition points' such as leaving prison was seen as an important factor in successful drug treatment.

Treatment Outcomes Profile

In 2008/09 NDTMS incorporated information from TOP¹¹⁰ for the first time. This allows assessment of treatment effectiveness using a number of measures.

Outcomes for women in drug treatment

TOP data from England in 2008/09 show that one-third (34%) of women who used opiates had ceased use by their six month review with a further 29% having 'reliably improved' their use. Amongst crack cocaine users, abstinence was higher at 42% with 15% reliably improved and amongst cocaine powder users, the proportions were 59% and nine per cent respectively. Eighty-six per cent of those reporting sharing equipment at treatment start had ceased injecting by review (six months) and around one-quarter reported improvements in their psychological health (24%) and quality of life (26%).

Outcomes for cocaine powder users

A study carried out by the NTA looked at outcomes for cocaine powder users in treatment in England (NTA 2010c). Of the 5,511 users identified in 2008/09,¹¹¹ 70% reported use of an additional problematic drug at treatment start, primarily alcohol, cannabis or amphetamine. Within six months, 3,965 were discharged from treatment, half (51%) of whom completed treatment successfully. There was a reduction in the average number of days of cocaine powder use from 9.9 in the month before treatment start to

¹⁰⁹ See Appendix 1 of the final outcomes report for further information on method of analysis.

¹¹⁰ The Treatment Outcomes Profile (TOP) is a tool to help measure drug treatment outcomes. The TOP form consists of 20 questions addressing drug use, injecting, crime and health and social functioning. It is completed at treatment start, at 26 week reviews, and at treatment exit. See: http://www.nta.nhs.uk/who-healthcare-top.aspx.

¹¹¹ Using NDTMS data, 5,511 cocaine powder users aged over 16 accessing psychosocial interventions in England during 2008/09 were identified from 738 treatment providers. Of these, 3,075 clients had valid TOP data available at treatment start and at follow-up review within six months.

2.6 in the month preceding review. The use of other drugs also reduced significantly. Overall, 61% were abstinent from cocaine powder use after six months and 11% had improved, with 27% reporting an uncertain change and one per cent deteriorating. The analysis showed that improvements in health, particularly psychological health and quality of life were associated with the degree of change in cocaine powder use with those becoming abstinent demonstrating greater improvements.

Long-term outcomes of drug users leaving treatment

A study following up a cohort of drug users leaving treatment in 2005/06¹¹² found that, in the four years after leaving treatment, 46% of clients did not return either to drug treatment or to drug interventions within the CJS (NTA 2010d). Just under half of the clients returned to treatment (45%) with 62% of these re-presenting straight to treatment and 38% having a criminal justice contact first. Those who left treatment through a planned discharge were less likely to have further contact than those who dropped out, 57% had no further contact compared to 43%. Between drug groups, the proportion re-presenting to drug treatment or drug interventions in the CJS differed with 64% of problem drug users re-presenting compared to 33% of clients using other drugs. Seventy-two per cent of clients using opiates and crack cocaine re-presented in the four years compared to 63% of clients using opiates only and 51% of clients using crack cocaine only. The authors suggest that the results show sustained recovery from addiction in almost half of the clients discharged from treatment in 2005/06.

Effect of methadone maintenance treatment (MMT) on levels of criminality

A study looking at the effect of time spent in treatment on rates of convictions, cautions and imprisonment in one city in England found that, over five years (1999 to 2005), MMT was effective in reducing criminality (Oliver et al. 2010).¹¹³ Splitting the cohort into four groups, the study found that those in continuous treatment were convicted or cautioned for fewer crimes than those receiving non-continuous treatment, those dropping out of treatment, and those discharged for positive reasons. Similarly the continuous treatment group were less likely to receive a custodial sentence in the five year follow-up period than other groups: nine per cent compared to 53% of the non-continuous group; 45% of treatment dropouts; and 21% of positive discharges. Overall 32% of the cohort received a custodial sentence in the five year follow-up period. The authors conclude that retention in treatment at first attempt is crucial as, despite the non-continuous group spending around 70% of the amount of time in treatment as the continuous group, criminal activity was similar to that of treatment dropouts. Furthermore the finding that those discharged drug-free or stable had higher rates of criminality than the continuous group suggests that some relapsed and highlights the need to retain clients in treatment rather than discharging too early.

Outcomes monitoring at a local level

An independent review into outcomes monitoring in a London Community Drug Partnership (Marsden and Stillwell 2010) found that there was a reliable improvement in drug use in around half of the problem drug users followed up.¹¹⁴ Thirty-six per cent of crack cocaine only users were abstinent from crack cocaine at follow-up compared to 33% of those using both crack cocaine and heroin. For heroin use, those using heroin alone were more likely to show a reliable improvement in heroin use (33%) than those

- ¹¹² 41,475 clients were identified who had left treatment in 2005/06, were not in prison at treatment exit and had unique identifiers. Data from the NDTMS and Drug Interventions Programme (DIP) were brought together to see if any of the clients had turned up again in the following four years.
- ¹¹³ Participants were recruited from a primary care clinic for drug dependence in Sheffield, England. A sample of 116 consecutive referrals for MMT were recruited between April 1999 and September 2000 with 108 patients actually starting treatment. Data on cautions and convictions were obtained from the Police National Computer (PNC) and treatment status was assessed from clinical records. Baseline criminality was similar for each of the four treatment groups.
- ¹¹⁴ A total of 320 PDU clients who were using drugs at treatment start and had review information available were included in the effectiveness analysis. They were drawn from a cohort of 1,100 clients referred to 12 treatment services in Blenheim Community Drug Partnership in London during 2008. The research used data from the TOP form and also assessed TOP compliance against NDTMS requirements.

using both crack cocaine and heroin (26%) but less likely to be abstinent (22% compared to 26%). The proportion injecting drugs decreased by 45%, and the number of days injecting and proportion sharing needles also fell.

Changes in drug use, drug beliefs and motivation at a stimulant clinic

Ramsey et al. (2009), using retrospective case note examination of former clients of a stimulant clinic in London,¹¹⁵ found a significant reduction in the amount of drugs used and the frequency of drug use between treatment entry and exit. The majority of clients (89%) used cocaine based drugs with 60% of crack cocaine clients and 67% of cocaine powder clients abstinent at exit compared to 20% and seven per cent respectively at entry. The research also found higher levels of confidence and readiness to change scores between entry and exit and positive improvements in nine of 20 drug belief items. Interviews with five current clinic users found that knowledge of processes involved in drug use and working within a cognitive behavioural therapy (CBT) framework was helpful, although the authors highlight the limitations of working with such a small sample.

5.3.3 User involvement

A study into drug service user groups (Patterson et al. 2010) found that, while many Drug Action Teams (DATs) reported involvement with user groups, active user groups were only found in a third of DATs.¹¹⁶ Around a third of groups (32%) were self-organisations, a third (32%) were convened by agencies and the remainder (36%) were collaborative groups between users and agencies. The aims, function and form of groups varied widely and there was evidence of a lack of clarity about the role of these groups. Furthermore there was often conflict between user and agency expectations and suggestions that group attendance was compromised by the 'chaotic lifestyles' of users. A major issue raised by participants was the sustainability of user groups and others seeing the transient membership as evidence of drug users' inability to form effective groups and others seeing it more positively as a feature of drug users moving on. The authors conclude that the existence of drug user groups should not in itself be evidence of user involvement as they are only a partial solution. They also stress the need for appropriate support and research into the factors which allow groups to function successfully and for a better conceptualisation of the rationale for user involvement.

5.3.4 Substance misuse workforce

Substance Misuse Skills Consortium

The Substance Misuse Skills Consortium, a sector-led initiative to build consensus around effective treatment for recovery, is due to launch in England in October 2010.¹¹⁷ Membership consists of service providers, service users and carers, and professional and membership organisations. The aims of the consortium are to help the substance misuse treatment sector:

- identify what the treatment workforce needs to promote and sustain better outcomes for service users, their communities and families;
- review and develop initiatives to attract and retain the workforce; and
- equip practitioners and managers with the relevant skills.
- ¹¹⁵ One hundred and twenty-two patient case files from former clients of a stimulant clinic in South East London were examined retrospectively. All clients had attended the clinic between 2000 and 2006. Complete data for changes in drug use were only available for 58 of the 122 case files. A subset of 10 patients was used to assess changes in drug beliefs and motivational ratings and five current patients were recruited to undertake semi-structured interviews on experiences at the clinic.
- ¹¹⁶ The research used a stratified random sample of 50 DATs in England. A survey was sent to commissioners, service providers and user groups asking questions about user groups. Six case study sites were purposively selected for indepth analysis using interviews and focus groups. The research took place between February and September 2006.
- 117 http://www.nta.nhs.uk/healthcare-skills-consortium.aspx

Experiences, attitudes and training needs of pharmacy support staff

Mackridge and Scott (2009) carried out a survey of pharmacy support staff in registered pharmacies.¹¹⁸ An analysis of qualitative information from the survey found that there was a willingness and desire to participate in drug treatment service provision amongst many respondents but others did not feel that pharmacies, and support staff in particular, should be involved. Some negative experiences related to violence and stealing were described but positive attitudes were also displayed. Support staff identified four key areas for further training: advising and working with drug users; the nature of drug use; treatment services and their availability; and clinical and legal aspects. The authors conclude that pharmacists should provide appropriate support and supervision of support staff.

5.3.5 Inpatient and residential treatment

In 2010, the NTA launched Rehab Online,¹¹⁹ a directory of residential rehabilitation services for adult drug and alcohol users in England and Wales. The directory is designed to help professionals, service users, families and carers access details of relevant services.

5.3.6 Alternative types of treatment

The use of injectable opioids in England

A study carried out by Mayet et al. (2010) assessed the use of injectable opioids for heroin addiction in England. The study surveyed a sample of community pharmacists using the same methodology as a previous survey carried out in 1995.¹²⁰ Findings show that the use of injectable opioids reduced significantly from 10.5% of all maintenance prescriptions in 1995 to 1.8% in 2005. The majority of these were for methadone (86%) with 13.5% for diamorphine, similar proportions to those reported in 1995. Private practitioners were more likely to prescribe injectable opioids than National Health Service (NHS) doctors; 27.2% of all private prescriptions for opioid maintenance were injectables compared to 1.5% of NHS prescriptions.

The study also found differences between regions with the proportion of all maintenance prescriptions that were injectable opioid prescriptions highest in the North West of England (41.5%) followed by London (17.5%) and South West England (14%). The North East of England had the lowest proportion of injectable prescriptions (0.6%). The proportion of injectable prescriptions dispensed on a daily basis doubled from 29% in 1995 to 58% in 2005. Private prescribers were less likely to prescribe on a daily basis with a mean of one or two dispensings per week compared to daily for NHS prescribers.

Randomised Injectable Opioid Treatment Trial (RIOTT)

Results from the RIOTT study comparing supervised injectable heroin or injectable methadone against optimised oral methadone for the treatment of chronic heroin addiction have been published (Strang et al. 2010a).¹²¹ The primary outcome measure was the reduction in regular use of street heroin during

¹¹⁸ Five self-completion postal questionnaires were sent to a random sample of 10% of all Great Britain registered community pharmacies for completion by support staff in January 2007. After two reminders, responses were received from 57% of pharmacies, with 50% of sampled pharmacies returning valid questionnaires. A total of 1,976 valid questionnaires were returned and 454 respondents provided comments in the open-ended questions. These qualitative data were analysed using NVivo.

¹¹⁹ See: http://www.rehab-online.org.uk/

¹²⁰ A 25% random sample of all community pharmacies in England stratified by health authority was generated. Senior pharmacists at 2,473 pharmacies were asked to complete a postal survey with an achieved response rate of 95%, 62% of whom dispensed injectable opioids for opioid dependence. Full prescription information was obtained from 85% of dispensing pharmacies through a total of 9,260 opioid prescriptions.

¹²¹ One-hundred and twenty seven chronic heroin addicts (mean length of opiate use = 16.6 years) receiving conventional oral maintenance treatment for more than six months and continuing to inject street heroin on the majority of days in the preceding three months were randomly assigned to treatment: 42 to supervised injectable methadone; 43 to supervised injectable heroin; and 42 to optimised oral methadone. The trial took place across three sites in England.

weeks 14 to 26 of the study.¹²² Findings show that a higher proportion of those on injectable heroin were 'responders' at follow-up (72%) than those on injectable methadone (39%) or oral methadone (27%), with the difference significant for injectable heroin versus oral methadone but not for injectable methadone versus oral methadone. Thirteen per cent of the injectable heroin group were abstinent during weeks 14 to 26 compared to two per cent of the injectable methadone group and four per cent of the oral methadone group. However, the difference was not significant. There was a significant difference between injectable heroin clients and oral methadone clients in abstinence or near abstinence;¹²³ 41% of injectable heroin clients. The difference between injectable methadone (9%) and oral methadone was not significant.

Weekly urinalysis results showed that the greatest improvement in abstinence across all three groups occurred in the first six weeks of treatment with only slight improvements thereafter. Those receiving injectable heroin showed the largest increase in abstinence at six weeks.

The finding that injectable methadone treatment led to a far lower reduction in the use of street heroin than injectable heroin treatment, and showed no significant improvements compared to oral methadone treatment is important for the UK, the authors suggest. This is due to injectable methadone treatment being the most prescribed form of injectable opioid treatment in the UK and the authors conclude that supervised injectable heroin should now be provided with close monitoring for selected chronic heroin addicts.

Acupuncture or counselling

A study carried out in England looked at predictors of treatment choice and outcomes for those choosing acupuncture or counselling for substance misuse treatment (Ashton et al. 2009).¹²⁴ The majority of clients were primary alcohol users (73%) with primary heroin users accounting for 14% of the study population. Those reporting heroin as their main drug were over four times more likely to choose acupuncture than those with other drug preferences. Only 11 primary heroin users were followed up at two months with four decreasing heroin use, six remaining the same and one increasing heroin use. After six months, follow-up data were only available for five heroin clients, so no meaningful analysis between the two groups could be undertaken. Overall the difference in six month follow-up rates between the acupuncture (25%) and counselling (44%) groups was significant.

5.3.7 Treatment of specific groups

Ethnicity and drug treatment

A study carried out by the UK Drug Policy Commission (UKDPC 2010a) looked at ethnicity and drug treatment. Using baseline Treatment Outcomes Profile (TOP)¹²⁵ data for England the authors found that the types of substances used by those in treatment differed across ethnic groups. Asian groups were most likely to report opiate use (70.5%) with Black groups least likely to report use of opiates (37.8%). Just over half of those from Black groups (52.0%) reported use of crack cocaine rising to almost a third (65.0%) of those aged over 40 years old in Black groups. Crack cocaine use amongst those of White or Asian ethnicity was 31.1% and 38.0% respectively. Cannabis use was most likely to be reported by those of Black (43.2%) and Mixed (41.2%) ethnic origin and least likely to be reported by those of Asian origin (27.6%).

¹²² Defined as 50% or more negative specimens on urinalysis during weeks 14 to 26 and referred to in the analysis as responders. Specimens were obtained at random once a week and analysed using liquid chromatography mass spectrometry to detect opioid impurities.

¹²³ Less than two positive specimens between weeks 14 and 26.

¹²⁴ 162 participants recruited consecutively from those who were self-referred to one open access centre in England. Clients were aged 18 to 65 years and both male and female. They were given a choice between acupuncture or counselling with both groups free to use other complementary therapies such as reflexology and massage. Assessments were made at two and six months by an experienced psychiatrist.

¹²⁵ See: http://www.nta.nhs.uk/who-healthcare-top.aspx.

The study goes on to report on experiences of and satisfaction with treatment services drawing largely upon the work by Fountain (2009a-e) and the *2007 User Satisfaction Survey* (NTA 2007) (see 2008 UK Focal Point report).

Black and Minority Ethnic drug misuse needs assessment

The University of Central Lancashire was commissioned to examine the knowledge of and information about drugs and drug services amongst a range of black and minority ethnic groups in England. Reports were published on each of the researched groups (Fountain 2009a-e).

The series shows that more and better targeted information is required for various ethnic groups that enables community members to understand the impact of drugs on their communities and that helps them access and trust drug services when needed. Overall, ethnic groups are under represented in drug services and there is also a perceived lack of cultural and religious competence in the service.

South Asian drug users

Illicit drug use among young South Asians (particularly those born in the UK) is seen as a result of communities becoming 'more westernised' as their adherence to traditional South Asian culture lessens, especially in relation to the preservation of family respect and behaving according to religious principles. The major barrier to treatment is a lack of awareness of the range of services that exist and the help they can offer. Families tend to employ strategies to avoid seeking help and to deny the problem exists to the extended family and community.

Black African drug users

Disclosing drug use was felt to be an issue that might negatively affect immigration status and therefore it is likely that illicit drug use was under reported. Cannabis was the most reported drug. Two main barriers reported were stigma, which prevented people talking about drug use (Khat use attracted less stigma and taboo) and limited awareness of the range of drug services that exist and the services they can offer. If a problem is identified they were most likely to seek help from families/friends, religious organisations and GPs.

Black Caribbean drug users

Cannabis (including skunk) was the most commonly used drug by Black Caribbeans of all ages, but the use of crack cocaine and heroin may have been under reported due to the stigma associated with these substances. Community members were concerned about the negative effects of drug use and dealing (particularly of crack cocaine) in their localities. The major barrier to seeking help was a lack of awareness of the range of services that exist and the help they can offer.

Kurdish, Turkish Cypriot and Turkish drug users

Cannabis was the most common drug used by all age groups. Illicit drug use is connected to crime and causes stigmatisation in the community, resulting in drug users being ostracised and making people reluctant to discuss drug issues. The greatest reported barrier to accessing help is the lack of awareness of drug services and their functions. In moving forward, it was recommended that work is undertaken to encourage communities to acknowledge drug use, address the stigma and thus lift the taboo on discussing drug-related issues.

Chinese and Vietnamese drug users

Cannabis was the most commonly used drug, followed by amphetamines for the Vietnamese and ecstasy for the Chinese communities. The stigma attached to drug use prevents Chinese drug users

from revealing their drug problems to families and Chinese people are more likely to seek help from their GP. Vietnamese people are reluctant to seek help due to the fear of coming to the attention of the police, are reluctant to discuss with their community and lack trust in the confidentiality of drug services. Community organisations recommend working in partnership with drug services to address the barriers to accessing drug services.

Treatment of Accession Eight migrants

A study looking at the drug treatment needs of Accession Eight¹²⁶ migrants in London (Mills and Knight 2009) found that there are increasing levels of need within London boroughs but access to drug services varies. While some areas provide services with no restrictions, others deny migrants access to services based on resource constraints. The operation of the *Drug Interventions Programme (DIP)* highlights these differences with five boroughs providing access to DIP treatment services and two denying access. This, the authors suggest, has implications for other elements of DIP such as restriction on bail and could lead to migrants being remanded in custody. There was evidence of use of low threshold prescribing and harm reduction services but the need for interpreters was cited as an issue. The authors suggest the need for cross-borough working and for providers and policy-makers to cut across service types and budgets to find new responses to the needs of new migrants.

Lesbian, Gay, Bisexual & Transgender (LGBT) groups

A further report by UKDPC (UKDPC 2010b) looked at the need for, and access to, treatment programmes for LGBT groups. They found that 'there was a paucity of evidence in the literature reviewed on what represents good practice in drug treatment and prevention' amongst this group (see also section 3.2.2). Findings of the literature review suggest that the perceived focus on heroin and crack cocaine use in treatment services may form a barrier to service uptake. Specifically in relation to gay men, one study (Bonell et al. 2010) reported that substance misuse treatment for this group is absent from public health strategy. This affects the ability of services to meet the specific needs of this population (the use of GHB is cited as an example of this). The benefits of using the existing resources of the LGBT community, such as venues and networks, to address treatment and prevention needs were highlighted in the UKDPC report.

Disabled people

A literature review by the UKDPC explored the impact of drugs on disabled people including the need for, and access to, treatment services (UKDPC 2010c). It found that studies tend to focus on people with learning disabilities and hearing impairments with other types of disabilities rarely discussed. Furthermore, some studies have suggested the need for more robust methodology including larger sample sizes and control groups to allow generalisations to be made.

Treatment for young people

A report by Drugscope looked at the state and future of drug and alcohol treatment for young people (Drugscope 2010). Based on a number of consultation events held in England and discussions with young people's treatment service providers, the report identified a number of key messages. These include: young people have multiple needs not only regarding drug and alcohol use; targets should be different than for adult treatment services; the concept of problem drug use in this group should be wider including the use of cannabis, alcohol and polydrug use; the transition between young people's and adult services needs to be addressed; and services for young people are patchy and vary throughout the country. The report sets out six recommendations for the future development of drug and alcohol treatment for young people.

¹²⁶ Eight former Central and Eastern European countries that acceded to the EU in 2004 (Estonia, Latvia, Lithuania, Poland, Czech Republic, Slovakia, Hungary and Slovenia).

5.4 Characteristics of treated clients (TDI)

The treatment demand indicator (TDI) records the number of clients entering treatment in a particular year but cannot provide information on clients who are already in treatment within that year. Data presented are from the National Drug Treatment Monitoring System (NDTMS) in England, the Scottish Drug Misuse Database, the Northern Ireland Drug Misuse Database and the Welsh National Database for Substance Misuse. Data presented are for the United Kingdom as a whole.¹²⁷ Continuous national data are only available from 2003/04.

Treatment presentations

In 2008/09 there were 139,390 presentations to treatment services in the United Kingdom recorded through the Treatment Demand Indicator (TDI), an increase of six per cent from the previous year (n=132,003).

5.4.1 Treatment centres

The majority of clients receive treatment through outpatient centres (94%) (Table 5.1). Overall, the proportion of those receiving treatment from GPs has remained stable at around three per cent although numbers have increased. In 2008/09 there was an 8.3% increase in numbers receiving treatment from GPs despite GP data for 2008/09 being for England only while previous GP data also included Scotland. In England there was an 14.9% increase in presentations to GPs between 2007/08 (n=3,614) and 2008/09 (n=4,151) with an 88% increase in crack cocaine presentations and a 16% increase in primary opiate users.

The proportion of all treatments that took place in inpatient centres fell from 3.3% in 2007/08 to 2.7% in 2008/09 with a 14.2% decrease in numbers over the same period. The decrease in inpatient presentations occurred throughout the UK with a decrease of 13.2% in England, 17.3% in Wales, and 28.0% in Scotland.

CENTRE TYPE	2003/04		2003/04		2003/04		2004/	05	2005/	06	2006/	07	2007/	08	2008/	09
	n	%	n	%	n	%	n	%	n	%	n	%				
Outpatient	91,659	91.9	111,434	94.6	121,202	94.4	120,226	93.8	123,850	93.8	131,532	94.4				
GP*	3,966	4.0	3,402	2.9	3,833	3.0	4,303	3.6	3,833	2.9	4,151	3.0				
Inpatient	4,038	4.0	2,945	2.9	3,411	3.0	3,679	3.6	4,320	3.3	3.707	2.7				
Total	99,663	100	117,781	100	128,466	100	128,208	100	132,003	100	139,390	100				

Table 5.1: Presentations to treatment by centre type in the United Kingdom, 2003/04 to 2008/09

*Data for 2008/09 are for England only, previous data included Scotland **Source:** Standard Table 34

Previous treatment

Forty per cent of clients presenting to treatment in 2008/09 stated that it was their first treatment ranging from 23% of those presenting to GP services to 41% of those presenting for outpatient treatment.¹²⁸ The proportion of treatment entrants reporting no previous treatment differed with primary drug; 26% of primary heroin presentations, 44% of primary crack cocaine users, 51% of primary amphetamine users, 69% of primary cocaine powder users, and 70% of primary cannabis users reported that it was their first treatment.

¹²⁷ Percentages quoted are valid percentages. Where missing data are substantial, this has been stated in the text.

¹²⁸ Twenty per cent of presentations had missing data for previous treatment.

5.4.2 Characteristics of treated clients (TDI)

Source of referral

The most common source of referral in 2008/09 amongst all clients was again self-referral (31%) followed by the CJS (26%). However, clients presenting to inpatient treatment were most likely to have been referred from hospital or other medical sources (48%) and less likely to be referred from GPs (1%) compared to those entering outpatient or GP services (both 9%). Inpatient clients were also less likely to be referred from criminal justice sources (8%) than clients entering GP services (12%) or outpatient services (27%). This reflects the practice of referral into treatment in the UK.

Additional analyses carried out for 2008/09 looked at source of referral by individual drug. Data show that:

- primary crack cocaine users were the group most likely to be referred from the CJS (33.4%), with CJS referrals accounting for one-fifth to one-quarter of referrals for opiates, cocaine powder, stimulants and cannabis;
- two-thirds of benzodiazepine users (66.2%) were referred to treatment by a GP;
- methadone users were most likely to have been referred from hospital or other medical source (29.4%);
- the proportion of volatile substance users (30.9%), cannabis users (22.3%) and MDMA users (18.2%) referred to treatment from 'other' sources (including education services) was much higher than for other groups of drug users;
- users of volatile inhalants were more likely than other users to have been referred by social services (11%) with less than four per cent of other drug users referred from this source; and
- source of referral was similar for first treatment clients.

Drugs used

Opiates remain the most common primary drug accounting for 61% of all treatment presentations in the UK during 2008/09 (Table 5.2). Clients presenting to GP services (90%) and inpatient services (77%) were more likely to report opiate use than those presenting to outpatient treatment (60%) (Figure 5.1). The predominance of opiates in the treatment population is indicative of their status as the most common problematic illegal drug in the UK and of the availability of treatment for opiate dependence.

After opiates, cannabis was the most common primary drug (17%) followed by cocaine powder (9%) reflecting their prevalence in the general population (see chapter 2).

However, amongst first treatment entrants, the proportion who reported primary opiate use was substantially lower at 41%. Primary cannabis users accounted for 28% of all first treatment presentations and cocaine powder for 15%.

DRUG	OUTPATIENTS		INPAT	IENTS	G	Р	TOTAL		
	n	%	n	%	n	%	n	%	
Amphetamines	4,180	3.3	73	2.0	62	1.5	4,315	3.2	
Benzodiazepines	2,394	1.9	58	1.6	28	0.7	2,480	1.9	
Cannabis	22,657	18.0	107	2.9	120	2.9	22,884	17.1	
Cocaine powder	11,203	8.9	190	5.2	53	1.3	11,446	8.5	
Crack cocaine	7,483	5.9	380	10.5	122	3.0	7,985	6.0	
Opiates	75,501	59.8	2,795	77.0	3,720	90.3	82,016	61.2	
Other	2,793	2.2	26	0.7	15	0.4	2,834	2.1	
Sub Total	126,211	100.0	3,629	100.0	4,120	100.0	133,960	100.0	
Not Known	5,321		78		31		5,430		
Total	131,532		3,707		4,151		139,390		

Table 5.2: Primary drug by centre type in the United Kingdom, 2008/09

Source: Standard Table 34



Figure 5.1: Proportion of clients presenting to treatment for primary use of individual drugs in the United Kingdom, 2008/09 by centre type

Crack cocaine

While primary crack cocaine users account for only six per cent of all treatment presentations, numbering around 8,000 users in 2008/09, a further 27,009 clients reported secondary crack cocaine use, the majority of whom (96%) were primary opiate users.

Figure 5.2 shows that, while the number of primary heroin users who also use crack cocaine increased slightly in 2008/09, the proportion of all heroin presentations reporting secondary crack cocaine use remained stable at just over one-third between 2007/08 (34.6%) and 2008/09 (34.2%) after increases in previous years. Primary heroin users presenting to inpatient services were more likely to report secondary crack cocaine use (41.6%) than those presenting to GP (32.4%) or to outpatient (34.1%) services.

In addition, 34.9% of primary crack cocaine users (n=2,787) reported secondary use of heroin, an increase from 33.5% in 2007/08 and 31.3% in 2006/07. Amongst those entering inpatient treatment in 2008/09, the proportion rose to 54.5% and, albeit based on small numbers, 64.8% of primary crack cocaine users entering GP treatment in 2008/09 reported secondary use of heroin.

Overall, one-fifth of all clients presenting to treatment reported use of both heroin and crack cocaine (n=27,817).

Source: Standard Table 34



Figure 5.2: Number and percentage of primary heroin presentations reporting secondary use of crack cocaine in the United Kingdom, 2003/04 to 2008/09

Source: Standard Table 34

Secondary drugs

Amongst clients presenting for primary cocaine powder use, 37% reported additional problems with alcohol. This was similar to the levels of secondary alcohol problems reported by primary cannabis (37%) and MDMA (36%) users. The prevalence of secondary cannabis use amongst primary users of MDMA and cocaine powder was similarly high, at 41% and 31% respectively. Primary MDMA users also reported high levels of secondary cocaine powder use (29%). This is in line with findings from the British Crime Survey in England and Wales where high levels of polydrug use, particularly the concurrent use of alcohol and cannabis, were found (see section 2.2.2).

Age

The mean age of clients entering treatment in 2008/09 was 32.8 years old; clients presenting to GP services (33.5 years old) and inpatient services (33.6 years old) were older. The younger mean age of outpatient clients (31.3 years) reflects the greater proportion of cannabis users in this treatment population (Table 5.2) and the younger age profile of primary cannabis users (Figure 5.3).

Two-thirds of treatment presentations in 2008/09 were young adults under 35 years of age, with 13% under the age of 20 years old. Twenty-one per cent of treatment presentations were 25 to 29 years old with 40% between the ages of 25 and 34 years old. The number of older treatment entrants (over 40 years old) increased by 12.0% between 2007/08 (n=22,448) and 2008/09 (n=25,132) with the largest increase seen amongst those aged 60 years and over (28.8%, small numbers). The proportion of all treatment entrants who were over the age of 40 increased from 17.0% in 2007/08 to 18.0% in 2008/09. Amongst primary heroin users, the number of older users continued to rise (n=14,066) with a 16% increase from the previous year. In 2008/09 people aged over 40 years old accounted for 19.2% of all heroin presentations, an increase from 17.3% in 2007/08 and 10.3% in 2003/04.

Figure 5.3 shows that, amongst the youngest age groups, cannabis is overwhelmingly the most common primary drug accounting for 87% of all treatment presentations under the age of 15 and 67% of those aged 15 to 19 years old in 2008/09. In the 15 to 19 years old age group, opiate (13.2%) and cocaine powder use (9.6%) become more common. Presentations for primary cocaine powder use are most prevalent amongst those in their twenties with 16.1% of those aged 20 to 24 and 9.6% of those aged 25 to 29 presenting for primary cocaine powder use. After the 20 to 24 years old age group, opiates dominate with no other drug accounting for more than 10% in each age group until the age of 60. In clients aged over 60, it becomes increasingly common to be seeking treatment for primary benzodiazepine use with 17.5% of those aged 60 to 64 years old and 24.4% of those aged over 65 years old presenting for primary benzodiazepine use.





Source: Standard table 34

Presentations for primary crack cocaine use (not shown above) was most prevalent amongst the 45 to 49 age group (9.7%) while primary opiate use was most prevalent amongst those aged between 30 and 34 years old (74.1%). Primary crack cocaine users were more likely to be over the age of 40 years old (25.5%) than primary opiate users (20.1%). This possibly reflects the older age at which crack cocaine users first used the drug with 21% having first used the drug aged 30 years or over compared to 15% of opiate users. Conversely opiate users were more likely to have started using the drug under the age of 20 (44.6%) than crack cocaine users (38.2%).¹²⁹

¹²⁹ Around one-quarter of primary heroin and crack presentations had missing data for age of first use.

Gender

As in previous years, males accounted for just under three-quarters of treatment presentations (73%). This is similar across treatment settings. When looking at other indicators, the gender distribution is reflected in the results of problem drug user estimates.

Women are more likely to be represented in the younger age groups with the proportion of women in the overall population of treatment entrants decreasing in older age groups. This is particularly the case amongst GP clients, although the small numbers involved could have an impact (Figure 5.4).





Source: Standard Table 34

Injecting status

Just over half of all clients presenting to treatment reported never having injected drugs (52.7%) with 19.3% reporting that they currently injected. This is higher than the proportion reporting never having injected drugs in 2003/04 (46.7%) with clients in 2003/04 more likely to report being current injectors (33.7%).¹³⁰ In 2008/09, females were more likely than males to report that they have never injected drugs and less likely to report current injecting (Table 5.3).

INJECTING STATUS	MAI	E	FEM/	LE	TOTAL		
	n	%	n	%	n	%	
Ever injected, but not currently	25,113	27.9	9,049	28.2	34,162	28.0	
Currently injecting (in last month)	17,983	20.0	5,582	17.4	23,565	19.3	
Never injected	46,920	52.1	17,464	54.4	64,384	52.7	
Sub Total	90,016	100	32,095	100	122,111	100	
Not known/missing	12,162		5,117		17,279		
Total	102,178		37,212		139,390		

Table 5.3: Injecting status amongst all clients entering treatment in the United Kingdom, 2008/09 by gender

Source: Standard Table 34

Sixty-five per cent of inpatient presentations and 68% of GP presentations reported ever having injected drugs with GP clients more likely to be current injectors (31.4%) than inpatient clients (23.0%). The greater proportion of injectors in GP and inpatient services compared to outpatient centres reflects the dominance of opiate users in these settings. Indeed, across all centre types, 67.5% of primary opiate users reported ever injecting although opiate users entering GP services (71.5%) and inpatient services (76.1%) were more likely to report ever having injected than their outpatient counterparts (67.0%).

Twenty-nine per cent of crack cocaine users reported having ever injected with 7.7% currently injecting. Thirty-eight per cent of primary amphetamines users reported ever having injected and 17.2% reported that they were currently injecting.

¹³⁰ Changes in injecting status must be interpreted with care since the proportion of missing cases in 2003/04 was 46% compared to 12% in 2008/09.

Living and labour status

TDI data on living and labour status are presented in chapter 8.

5.4.3 TDI trends

Presentations for treatment increased substantially in the two years after 2003/04 from 99,663 in 2003/04 to 128,446 in 2005/06, an increase of 28.9% (Table 5.4). In the following two years, presentations increased by only three per cent with numbers of opiate users entering treatment remaining stable. In 2008/09 treatment presentations increased by six per cent from 2007/08 with the largest increases seen for cocaine powder users (12.1%), cannabis users (9.3%) and crack cocaine users (7.1%). There were reductions in the number of clients seeking treatment for benzodiazepines (-1.3%), amphetamines (-2.3%), and other drugs (-5.9%).

Table 5.4: Number and percentage of all drug treatment presentations by primary drug in the United Kingdom, 2003/04 to 2008/09

DRUG	2003/04		2004/05		2005/06		2006/07		2007/08		2008/09	
	n	%	n	%	n	%	n	%	n	%	n	%
Amphetamines	3,474	3.7	3,731	3.6	4,134	3.5	4,622	3.8	4,416	3.5	4,315	3.2
Benzodiazepines	1,929	2.1	2,503	2.4	2,297	1.9	2,226	1.8	2,512	2.0	2,480	1.9
Cannabis	9,849	10.7	14,801	14.1	18,793	15.8	19,108	15.6	20,938	16.4	22,884	17.1
Cocaine powder	3,739	4.0	5,093	4.9	6,890	5.8	8,372	6.9	10,215	8.0	11,446	8.5
Crack cocaine	4,980	5.4	5,842	5.6	6,857	5.8	7,096	5.8	7,453	5.9	7,985	6.0
Opiates	66,012	71.4	70,179	67.0	77,580	65.1	77,849	63.7	78,803	61.9	82,016	61.2
Other	2,494	2.7	2,662	2.5	2,540	2.1	2,890	2.4	3,011	2.4	2,834	2.1
Sub Total	92,477	100	104,811	100	119,091	100	122,163	100	127,348	100	133,960	100
Not Known	7,186		12,970		9,355		6,045		4,655		5,430	
Total	99,663		117,781		128,446		128,208		132,003		139,390	

Source: Standard Table 34

The number of first treatments increased by 42.3% between 2003/04 and 2004/05 and by a further 16.8% the following year (Table 5.5). Since then the number of first treatment presentations has decreased each year despite stable or increasing numbers of all treatments. This suggests that an increasing number of clients entering treatment have received treatment in the past. Amongst heroin users entering treatment in 2008/09, the proportion who had been previously treated was around three-quarters (73.6%) compared to under two-thirds (63.2%) in 2004/05.¹³¹

Table 5.5: Number and percentage of first drug treatment presentations by primary drug in the United Kingdom, 2003/04 to 2008/09

DRUG 2003/04		2004/05		2005/06		2006/07		2007/08		2008/09		
	n	%	n	%	n	%	n	%	n	%	n	%
Amphetamines	1,455	5.1	1,619	4.1	1,812	3.9	2,045	4.3	1,976	4.4	1,640	3.8
Benzodiazepines	675	2.3	1,226	3.1	1,153	2.5	916	1.9	1,285	2.9	1,074	2.5
Cannabis	5,289	18.6	8,653	22.1	11,506	24.8	11,325	24.0	12,251	27.2	12,214	28.0
Cocaine powder	1,683	5.8	3,016	7.7	4,197	9.1	4,951	10.5	5,980	13.3	6,581	15.1
Crack cocaine	1,722	6.0	2,589	6.6	3,116	6.7	2,900	6.1	2,822	6.3	2,922	6.7
Opiates	16,656	57.8	20,464	52.3	23,021	50.0	21,561	45.7	19,126	42.5	17,892	41.0
Other	1,329	4.6	1,525	3.9	1,528	3.3	1,468	3.1	1,573	3.5	1,360	3.1
Sub Total	28,809	100	39,092	100	46,333	100	45,166	100	45,013	100	43,683	100
Not Known	1,056		3,405		3,292		1,999		1,588		1,365	
Total	29,865		42,497		49,625		47,165		46,601		45,048	

Source: Standard Table 34

Figure 5.5 shows that, across all centre types, the proportion of first treatment presentations amongst all treatment presentations has fallen since 2003/04.¹³² This is particularly the case for GP presentations where the proportion of first presentations has fallen consistently since 2004/05 and reflects the dominance of opiate users in GP treatment.





5.5 Trends of clients in treatment

5.5.1 Clients in treatment

Data on clients in treatment are currently only available from England and Wales. Scotland started collecting data on individuals in treatment in April 2009 but data will not be available for reporting until 2011.

Information from the NDTMS for England shows that in 2009/10, 206,889 individuals aged 18 and over were in contact with structured drug treatment services, a two per cent decrease since the previous year (n=210,815). Of these, 84% (n=173,760) were problem drug users (users of opiates and/or crack cocaine), a similar proportion to 2005/06 (NTA 2010e).

In Wales during 2009/10, there were 6,429 clients receiving drug treatment, just over half of whom (53%) were primary heroin users with 17% primary cannabis users.

Source: Standard Table 34

¹³² The proportion of treatment entrants with missing data on previous treatment is relatively high. In 2003/04 this ranged between 23% of GP presentations and 45% of inpatient presentations while in 2008/09 the range was between 20% for outpatients and 22% for inpatients (there have been years when the proportion was lower at around 15%).

Young people in treatment in England

NDTMS data show that 24,053 young people under the age of 18 accessed specialist substance misuse services in England during 2008/09 (NTA 2010f). The most common primary drug used was cannabis (53%) followed by alcohol (37%). Overall 73% of clients were primary or secondary cannabis users. The proportion of young people in treatment for Class A drug use was low: three per cent for cocaine powder; two per cent for opiates; and one per cent for ecstasy. Figure 5.6 shows that the numbers in treatment for these drugs has decreased since the previous year. It also shows the increase in young people receiving treatment for cocaine powder use and a corresponding decrease in those receiving treatment for heroin and other opiate use.





NTA 2010f

5.5.2 Treatment engagement in England

The TDI cannot be used to consider treatment engagement rates as the data do not take account of those individuals already in treatment prior to, and during, the reporting period. However NDTMS data for England can be used to estimate engagement as they count individuals in contact with treatment services in a given year.

Table 5.6 shows that over half of the estimated number of problem drug users (PDUs) in England were in contact with structured drug treatment services during 2008/09. Opiate users (63.7%) were more likely to have been in contact with treatment services than crack cocaine users (39.5%). Since 2005/06, the proportion of PDUs that are in contact with drug treatment services has increased both for opiates and crack cocaine.

	PDU ESTIMATES (2005/06)	NDTMS (2005/06)		PDU ESTIMATES (2006/07)	DU NDTMS MATES (2006/07)		PDU ESTIMATES (2008/09)	NDTM (2008/0	IS 09)
	n	n	%	n	n	%	n	n	%
Opiate and/or crack cocaine users	332,090	146,981	44.3	328,767	167,396	50.9	321,229	175,673	54.7
Opiate users	286,566	139,544	48.7	273,123	158,988	58.2	262,428	167,256	63.7
Crack cocaine users	197,568	49,728	25.2	180,618	60,103	33.3	188,697	74,598	39.5

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Table 5.6: Problem	drug users in	drug treatment in	England 2005/06,	2006/07 an	id 2008/09100

Source: Standard Table 07 and NTA 2010e

5.5.3 Substitution treatment

Data from the National Drug Treatment Monitoring Service (NDTMS) in England

Data from the NDTMS in England show that amongst clients in treatment during 2009/10, 153,632 had received prescribing interventions,¹³⁴ accounting for around three-quarters of those in treatment during 2009/10. The number receiving prescribing interventions increased by four per cent from the previous year (n=147,504).

Data from the Welsh National Database for Substance Misuse

Data show that, amongst those receiving drug treatment in 2009/10, there were 1,376 referrals to substitute prescribing services.

Standard table 24 shows that there were 119,729 opiate users in substitution treatment, just over half of whom (52%) had been in substitution treatment for more than 12 months.

¹³³ NDTMS data presented here cannot be compared to data published in previous Focal Point Reports or to Standard Table 24 as the basis on which the data were calculated differs. NDTMS data, published by the NTA, are based on the concept of a journey consisting of one or more episodes (NTA 2010e) while data submitted to the EMCDDA in Standard Table 24 is based on latest episode only. Furthermore NDTMS data uses attributor and DAT of residence to control for double counting while data submitted to the EMCDDA uses attributor only.

¹³⁴ Data on drug prescribed is not collected centrally. While the majority will be receiving methadone or buprenorphine, other drugs may also be prescribed.

Substitution treatment in Northern Ireland

In 2008/09 there were a total of 550 individuals in contact with substitute prescribing treatment services in Northern Ireland, an increase of eight per cent from 2007/08 (n=507) (PHIRB 2009a). Over this period, 79 individuals discontinued from the scheme with the main reason given as 'failed to present for substitute prescribing'. On March 31st 2009 there were 429 clients receiving substitution medication, 93% (n=400) of whom were stabilised. Of those in receipt of substitution medication, 50% were prescribed methadone and 48% were prescribed buprenorphine.

Data show that 78% of those in receipt of substitution treatment had been receiving treatment for over 12 months (ST24).

The mean age of clients in contact with substitute prescribing services, on 31st March 2009 was 35 years, slightly older than the previous year (34 years old) with 23% aged 40 years and over. The majority (73%) of clients were male. Fifty-five per cent of clients in contact with substitute prescribing services reported that their main route of administration was injecting.

6. Health correlates and consequences

6.1 Introduction

HIV prevalence amongst injecting drug users (IDUs) in the United Kingdom was 1.5% in 2009, similar to that seen in recent years, and higher than in the late 1990s. In London prevalence has been higher at, or near, four per cent. Prevalence of hepatitis C (HCV) is much higher at around 48% (in England and Wales).

Prevalence and attribution of dual diagnosis remain difficult to estimate. Depression, anxiety disorders, personality and psychotic disorders are commonly reported amongst drug users, although prevalence varies with setting and specific sub-populations. It has been suggested that from 1993 to 1998 there were at least 195,000 co-morbid patients and 3.5 million general practitioner (GP) consultations involving such patients in England and Wales.

The impact of maternal drug use on unborn children can be wide ranging and babies can be affected by withdrawal from maternal drug use. In the United Kingdom, there is little evidence of HIV transmission to babies through maternal infection specifically associated with drugs. However, there is a risk of hepatitis transmission, particularly of HCV, where the risk of transmission amongst babies whose mothers test positive is six per cent.

Data on drug-related deaths (DRD) submitted to the EMCDDA by the United Kingdom are based on three different definitions. The EMCDDA definition refers to deaths caused directly by the consumption of at least one illegal drug.¹³⁵ The definition used to measure deaths for the United Kingdom Drug Strategy is where the underlying cause is drug abuse, drug dependence, or poisonings where any of the substances scheduled under the *Misuse of Drugs Act 1971* are involved. The definition used by the Office for National Statistics (ONS) is much wider and includes legal drugs.¹³⁶

The Drug Strategy definition has been adopted by the General Mortality Registers (GMRs) across the United Kingdom and is a subset of the ONS definition. Information on deaths is also available from a Special Mortality Register (SMR).¹³⁷ In the United Kingdom, based on the EMCDDA definition, DRDs rose steadily from 1996, when 1,152 deaths were registered. Following a period of decline between 2001 and 2003, deaths increased again between 2004 and 2008 when they reached their highest level (2,231). Latest figures for 2009 show a 6.2% reduction from the previous year (2,092 in 2009 compared to 2,231 in 2008).

6.2 Drug-related infectious diseases

Information on infectious disease is based on that presented in *Shooting Up: Infections among injecting drug users in the United Kingdom 2009* (HPA et al. 2010a) and provided to the EMCDDA in Standard Table 09 (ST09).

¹³⁵ These deaths are known as 'overdoses', 'poisonings' or 'drug-induced deaths'. See: http://www.emcdda.europa.eu/ themes/key-indicators/drd

¹³⁶ See: Wells (2010) http://www.statistics.gov.uk/pdfdir/dgdths0810.pdf

¹³⁷ The National Programme on Substance Misuse Deaths (np-SAD) uses data from inquests into drug-related deaths reported by coroners in England, Wales, Northern Ireland, Guernsey, Jersey and the Isle of Man; Procurators Fiscal in Scotland and the Scottish Crime and Drug Enforcement Agency.

6.2.1 HIV/AIDS

The overall prevalence of HIV amongst IDUs in 2009 was similar to that seen in recent years, and remains higher than in the late 1990s. The Unlinked Anonymous Monitoring (UAM)¹³⁸ survey of current and former IDUs in England and Wales indicated an overall HIV prevalence of 1.5% in 2009, higher than the prevalence of 0.8% found in 2000 (Standard Table 09). In 2009 the prevalence was 1.5% among both men and women, with prevalence increasing with age from 0.3% among those aged under 25 years to 2.1% among those aged 35 years and over (ST 9).

In London in 2009, the HIV prevalence among current and former IDUs participating in the UAM survey was 4.1%¹³⁹ while elsewhere in England it was 0.93%.¹⁴⁰ In Northern Ireland the HIV prevalence found in the UAM survey was 1.3%¹⁴¹ and in Wales it was 0.57%¹⁴² (HPA et al. 2010a).

HIV prevalence amongst those who reported injecting in the four weeks prior to taking part in the UAM survey (current IDUs) has increased in recent years. In 2009 the overall prevalence amongst current IDUs in England and Wales (1.5%) was twice the level seen in 2000 (0.72%) (HPA et al. 2010a).

In London, HIV prevalence amongst current IDUs is higher than the national average, but has changed little in recent years (5.0% in 2008) (HPA et al. 2009). However, outside of London the HIV prevalence among current IDUs in England and Wales has increased. In 2000 it was 0.20% and remained at around that level until 2003 (0.32%), it then increased to 0.66% in 2004. Prevalence amongst this group has remained elevated since then: 1.6% in 2005, 0.66% in 2006, 0.63% in 2007, 1.1% in 2008, and 0.74% in 2009 (HPA et al. 2009; HPA et al. 2010a).

There is also evidence that ongoing HIV transmission amongst IDUs in the UK has increased in recent years. In particular, the HIV prevalence amongst recent injecting initiates in England, Wales and Northern Ireland (those injecting for less than three years) has been elevated since 2003. The prevalence amongst the recent initiates participating in the UAM survey has remained higher than it was prior to 2003, with a prevalence of 0.71% in 2009 compared with no infections found among this group in 2000 (HPA et al. 2010a; Figure 6.1).

140 95% CI 0.58%-1.4%

141 95% CI 0.16%-4.6%

142 95% CI 0.01%-3.2%

¹³⁸ Data are taken from a voluntary self-reported surveillance questionnaire issued by drug agencies to participants who have ever injected drugs. Participants are also asked to provide an oral fluid sample which is tested for antibodies to HIV (anti-HIV), hepatitis C (anti-HCV) and hepatitis B core antigen (anti-HBc). It is a multi-site survey managed by the Health Protection Agency (HPA) and involving over 70 specialist drug agencies in England, Wales and Northern Ireland. Data on viral infections amongst current and former IDUs, including HCV, hepatitis B and HIV prevalence are collected, in addition to risk/protective behaviours and uptake of healthcare.Data have been collected since 1990 and are irreversibly anonymous.

¹³⁹ 95% confidence interval (CI) 2.6%-6.0%





*Those who started injecting drugs during the three years prior to participating in the survey.

**Includes Northern Ireland from 2002.

Source: Data from UAM survey of IDUs in contact with specialist services.

In Scotland, the prevalence of HIV amongst IDUs is monitored through the surveillance of people undergoing voluntary confidential HIV testing. An HIV prevalence of 0.55%¹⁴³ amongst IDUs undergoing testing in Scotland was found during 2008.¹⁴⁴ This compares with a prevalence of 1.4% to 3.2% in the early to mid-1990s and 0.3% to 0.9% during the period 1998 to 2007 (HPA et al. 2010a; ST9).

In recent years, the number of new HIV diagnoses amongst IDUs in the United Kingdom has been low and relatively stable, averaging 161 reports each year from 2000 to 2009. Up to the end of June 2010, 149 new HIV diagnoses had been reported in this group for 2009 (51 in London, 13 in Scotland and 85 elsewhere; HPA et al. 2010a).

The proportion of newly diagnosed HIV infections amongst IDUs in the UK, from areas outside of London and Scotland, has increased from 39% during 1995 to 1999, to 52% during 2005 to 2009 (HPA et al. 2010a). The probable country of infection was reported for 66% (n=98) of new diagnoses in 2009. Where reported, 56% (n=55) of infections were probably acquired within the UK and 44% (n=43) outside the UK, mostly in Northern and Eastern Europe (HPA et al. 2010a).

¹⁴³ Thirteen cases out of 2,381 tests.

¹⁴⁴ Data for 2009 were not available at the time of publication.

6.2.2 Viral hepatitis

Hepatitis C

The prevalence of hepatitis C infection amongst IDUs remains high overall (HPA et al. 2010a). Of the (current and former) IDUs participating in the UAM survey in 2009, in England and Wales, 48% had antibodies to hepatitis C,¹⁴⁵ similar to the levels seen in recent years (in 2008 it was 44%) (ST9). However, this is higher than the level seen in 2000 when prevalence was 38% (ST9). The prevalence in 2009 was similar amongst men and women, and increased with age from 26% of those aged under 25 years to 60% of those aged 35 years and over (ST9).

In 2009 the overall prevalence of antibodies to hepatitis C amongst the IDUs participating in the UAM survey in England was 49%, with marked regional variations from 33% in the North East to 59% in London and 62% in the North West. Prevalence in Wales and Northern Ireland was lower than in many of the English regions (32% and 28% respectively) (HPA 2010).

The prevalence of antibodies to hepatitis C amongst recent injecting initiates in England, Wales and Northern Ireland (those injecting for less than three years) has been elevated in recent years. In 2009 the prevalence amongst this group was 24%, a similar level to that recorded between 2001 and 2007 (HPA 2010). However, the prevalence amongst this group remains higher than it was in 2000 (12%) and earlier years (Figure 6.2) (HPA et al. 2010a).

Figure 6.2: Proportion of recently initiated injecting drug users* with antibodies to hepatitis C in England, Wales and Northern Ireland**, 1998 to 2009



*Those who started injecting drugs during the three years prior to participating in the survey.

**Includes Northern Ireland from 2002.

Source: Data from UAM survey of IDUs in contact with specialist services.

¹⁴⁵ Prior to 2009 this survey only collected oral fluid samples. However, in 2009 both oral fluid and dried blood spot (DBS) samples were collected from participants. The sensitivity of the test on DBS samples for antibodies to hepatitis C is almost 100%. However, the sensitivity of the oral fluid sample test for antibodies to hepatitis C is about 92%. Results presented are adjusted to allow for the poorer sensitivity of the tests on the oral fluid samples.

In 2008/09, the estimated prevalence of antibodies to hepatitis C was 55% amongst the current IDUs surveyed at needle exchanges across Scotland as part of the Needle Exchange Surveillance Initiative (NESI)¹⁴⁶ (HPA et al. 2010a). The prevalence amongst recent injecting initiates was 24% (HPA et al. 2010a). The prevalence of antibodies to hepatitis C amongst IDUs in Glasgow¹⁴⁷ was 63% in 2008, a similar level to 1999/2000 when it was 62% (HPA et al. 2010a; ST9).

Data on diagnosed infection in the UK are monitored through laboratory reports rather than through the use of statutory notifications. Whilst data from both of these types of systems have limitations, laboratory reports are regarded as being more useful despite risk factor information often being missing or incomplete. There has been a marked increase in the annual number of new diagnoses throughout the UK reflecting increased availability of and easier access to voluntary confidential testing (see section 7.3.2). In the UK, since reporting began, there have been over 100,000 reported laboratory diagnoses of hepatitis C infection with around 90% of these infections thought to be associated with injecting drug use. In 2009, there were 11,005 laboratory diagnoses of hepatitis C infection in the UK; 8,605 in England, 2,081 in Scotland, 207 in Wales, and 112 in Northern Ireland (HPA et al. 2010a; ST9).

Dried blood spot HCV testing

A survey conducted in Bristol, South West England with current IDUs¹⁴⁸ assessed the incidence of hepatitis C infection through a combined hepatitis C antibody and ribonucleic acid (RNA)¹⁴⁹ test, using dried blood spot (DBS) testing (Hope et al. 2010a) (see section 7.3.2). Over half of the participants who were tested were anti-HCV positive (n=173) (weighted antibody prevalence was 54%). Of these antibody positive samples, 42%¹⁵⁰ (n=70) were hepatitis C RNA negative, indicating cleared infection. Amongst the 115 samples that were hepatitis C antibody negative, 14 were RNA positive suggesting an incidence of 38 to 47 per 100 person years. The authors report that this demonstrates a high incidence of HCV in Bristol, a similar level to that found in London in previous studies. Incidence was found to have been highest amongst individuals in areas with poor needle exchange coverage and those injecting crack cocaine. The following factors were found to be associated with infection: increasing number of years since first injection; crack cocaine injection and antibodies to hepatitis B core antigen (anti-HBc) positivity. The authors go on to say that, while regional variations in HCV incidence exist across the UK, this may be, at least in part, due to differences in methodologies used to collect the data.

Hepatitis B

Overall about one in six IDUs have ever had hepatitis B infection. In 2009, 17% of the current and former IDUs who took part in the UAM survey in England, Wales and Northern Ireland had anti-HBc (a marker of previous or current hepatitis B infection);¹⁵¹ this is lower than in 2000 when prevalence was 28% (HPA et al. 2010a; HPA 2010; ST9).

- ¹⁴⁸ A total of 299 IDUs were recruited using respondent driven sampling. All participants were aged over 15, resident in the Bristol urban area and had injected in the previous four weeks. They undertook a computer-aided interview and provided a DBS sample. Hepatitis C incidence was estimated from the proportion of participants that were antibody negative and RNA positive, and estimates of the duration of this state which indicates very recent infection. Results were then adjusted according to respondent driven sampling derived weights to reduce recruitment bias. Hepatitis C testing was performed on 288 samples.
- ¹⁴⁹ HCV ribonucleic acid (RNA) levels indicate whether virus is present or has been cleared, and determine when and whether treatment should be stopped or continued in the setting of antiviral therapies. The primary goal of treatment is sustained virologic response (SVR), defined as the absence of detectable HCV RNA in the serum.

¹⁵¹ Prior to 2009 this survey only collected oral fluid samples. However, in 2009 both oral fluid and DBS samples were collected from participants. The sensitivity of the test on DBS samples for antibodies to hepatitis C is almost 100%. However, the sensitivity of the oral fluid sample test for antibodies to hepatitis C is about 75%. Results presented are adjusted to allow for the poorer sensitivity of the tests on the oral fluids samples.

¹⁴⁶ The Needle Exchange Surveillance Initiative (NESI) measures and monitors the prevalence of the hepatitis C, HIV and injecting risk behaviours amongst IDUs in Scotland. See: http://www.hps.scot.nhs.uk/bbvsti/publicationsdetail.aspx?id=38071

¹⁴⁷ Monitored through the unlinked anonymous testing of residual sera from those having voluntary confidential tests for HIV.

¹⁵⁰ 95% CI 34-50% weighted.

6.2.3 Other infectious morbidity

Anthrax

In December 2009 the first ever confirmed case of anthrax amongst heroin users in the UK was reported. Anthrax is a very rare infection caused by a spore forming bacterium. Anthrax spores can survive in the environment for a long time and so can contaminate heroin during production or distribution. Up to 30th September 2010 there had been a total of 51 cases reported in the UK (47 in Scotland¹⁵² and four in England); of which 16 people had died. In response to the cases, advice and information was issued to drug users and those who work with them (see section 7.3.4). Retrospective diagnosis is expected to identify more cases of people who survived infection. Most but not all of the users are understood to have administered the heroin by injection.

Wound botulism

Cases of infections caused by other spore forming bacteria continue to occur. In 2009, there were 22 suspected cases of wound botulism amongst IDUs in the United Kingdom including a cluster of cases in Southern England in the winter of 2009. This was higher than in previous years but comparable to the annual number of cases seen earlier in the decade; there had been four, three, 22, 28 and 41 suspected cases reported in 2008, 2007, 2006, 2005, and 2004 respectively (HPA et al. 2010a). There was also one reported case of tetanus in an IDU in 2009. Cases of tetanus have been occurring amongst IDUs in recent years albeit in lower numbers than earlier this decade (HPA et al. 2010a).

Cases of severe infection related to both methicillin resistant Staphylococcus aureus (MRSA) and Group A streptococci continue to occur amongst IDUs (HPA et al. 2010a). For example, data from the mandatory enhanced surveillance of MRSA bacteraemia in England from 2006 and 2009 indicate that, amongst those reports with risk factor information (optional and provided in 31% of all reports), three per cent reported injecting drug use as a risk (HPA et al. 2010a).

Injection site infection in IDUs

Symptoms of a possible injecting site infection appear to be common amongst IDUs, with 32% of IDUs participating in the UAM survey in 2009 reporting they had experienced an abscess, sore or open wound, possible symptoms of an injecting site infection, during the previous year (HPA et al. 2010a). An analysis of data from the survey on these reported symptoms for the period 2006 to 2008¹⁵³ (Hope et al. 2010b) found that overall, 36% self-reported having a symptom with no changing trend (35% 2006, 37% 2007 and 34% 2008). Symptoms were less common in the North East of England; increased with years injecting; and were higher amongst women, those recently homeless, those recently using a needle exchange, and those injecting both opiates and stimulants. Amongst those who had injected during the previous four weeks, symptoms were associated with: injecting daily; injecting 10 or more times a day; injecting into hands, groin, or legs; sharing filters; and re-using water to flush syringes (Hope et al 2010b).

¹⁵² See: http://www.documents.hps.scot.nhs.uk/news/anthrax-press-release-2010-04-12.pdf and http://www.hps.scot.nhs.uk/ anthrax/

¹⁵³ Since 2006 participants of the UAM survey (see section 6.2) have been asked to self-report if they have ever had one of the following (likely) symptoms of a bacterial infection at an injection site: a swelling containing pus (abscess); a sore; an open wound. All participants who answered the survey between 2006 and 2008 and had self-reported injecting opiates or stimulants in the previous 12 months were included in this analysis (n=5,209).

6.3 Other drug-related health correlates and consequences

6.3.1 Psychiatric co-morbidity

Scotland

Inpatient hospital data from Scotland show that in 2007/08, 5.6% (n=1,380) of psychiatric inpatient discharges had a diagnosis of drug misuse (as either a main or supplementary diagnosis), a rate of 28 discharges per 100,000 population. After remaining stable between 2001/02 and 2004/05 (from 36 to 37), the rate per 100,000 population has fallen since (Figure 6.3) (ISD Scotland 2010).

Figure 6.3: Psychiatric inpatient discharges with a diagnosis of drug misuse in Scotland, 2001/02 to 2007/08; rate per 100,000 population



Source: ISD Scotland (2010)

In 2007/08, 63% of psychiatric inpatient discharges with a discharge diagnosis of drug misuse (resulting in mental and behavioural disorder) recorded use of multiple drugs or other psychoactive substances, an increase from 61% in 2006/07. The most frequently reported drugs were opioids, recorded in a quarter of cases and cannabinoids, recorded in seven per cent of cases.

Research on psychiatric co-morbidity and other health correlates and consequences

In a survey of members of the lesbian, gay, bi-sexual and transgender (LGBT) community in Brighton, South East England (see section 2.5.4) it was reported that those who had taken drugs in the past five years were significantly more likely to experience mental health difficulties than those who had not (76%, n=304 compared to 61%, n=236) (Browne et al. 2010).

6.3.2 Non-fatal overdoses and drug-related emergencies

Data on drug overdoses are provided using hospital inpatient data and International Classification of Diseases (ICD-10) codes¹⁵⁴ T40 and T43.6. However, it is thought that these data may be an underestimate

¹⁵⁴ See: http://www.who.int/classifications/icd/en/

since evidence from the poisons unit at Guy's and St. Thomas' Hospital suggest that 50% of recreational drug toxicity cases that present to Accident and Emergency are discharged directly from there and not admitted to hospital (and thus not included in inpatient data) (Wood and Dargan 2010).

Similar to last year (see 2009 UK Focal Point report), data for 2008/09 show that, of the 28,134 inpatient discharges recording poisoning by drugs in the UK,¹⁵⁵ over half (57%) were due to 'other opioids' (including morphine and codeine). Ninety-nine per cent of all drug poisonings were emergencies. There were 3,047 heroin poisonings, almost all of which were emergencies (99%). The next most common individual drug was cocaine (2,493 discharges) followed by methadone (1,428 discharges).

There were 21,197 inpatient discharges related to mental and behavioural disorders due to drugs.¹⁵⁶ This excludes those related to 'dependence syndrome' since these are likely to be planned inpatient treatment patients. The drugs most commonly involved were opioids (5,651), cannabinoids (5,133), and cocaine (4,267). However, cases involving cocaine were more likely to be emergencies (90%) compared to those involving opioids (86%) and cannabinoids (78%).

6.3.3 Pregnancies and children born to drug users

Inpatient hospital data on effects of maternal use of drugs

In the United Kingdom during 2008/09 there were 390 discharges with an ICD-10 code P04.4 related to fetus and newborn affected by maternal use of drugs of addiction and 1,669 discharges with an ICD-10 code P96.1 of neonatal withdrawal symptoms from maternal use of drugs of addiction.

Scotland

Inpatient data from Scotland show that in 2007/08, there were 499 maternities for which drug misuse was recorded,¹⁵⁷ a rate of 8.9 per 1,000 maternities. This is a decrease from the 2006/07 number of 552 (10.2 per 1,000). However, it is higher than levels recorded in 2003/04 (438; 8.4 per 1,000). Seventy-five per cent were recorded as full-term normal birth-weight compared to 90% of all births and 14% were preterm compared to eight per cent of all births. Of all the births recording drug misuse between 2003/04 and 2007/08, 55% were classed as coming from the most deprived areas, with a further 26% from the next most deprived. Only three per cent were from the least deprived areas¹⁵⁸ (ISD 2010a).

Methadone use and pregnancy

The case files of 20 children exposed in utero to prescribed methadone and other drugs and who had also been referred to a national paediatric visual electrophysiology service were retrospectively reviewed (Hamilton et al. 2010). The authors reported a range of eye problems amongst these children including: reduced acuity¹⁵⁹ (95%); nystagmus¹⁶⁰ (70%); delayed visual maturation (50%); strabismus¹⁶¹ (35%); and refractive errors¹⁶² (30%). In addition to sight problems, a quarter of the children also had neuro-developmental problems. There was a significant difference between the children who had been pharmacologically treated for neonatal abstinence syndrome (NAS) and those who had not. Those who had been treated for NAS were more likely to have developed nystagmus (92% of those treated for NAS, n=11 compared to 38% of those not treated for NAS, n=3).

¹⁵⁵ Using ICD-10 diagnosis codes T40 and T43.6.

¹⁵⁶ Using ICD-10 diagnosis codes F11 to F19 excluding F17. Codes ending in .2 were also excluded.

¹⁵⁷ Defined as ICD-10 codes 035.5, F11, F12, F13, F14, F15, F16, F18 and F19.

¹⁵⁸ Using Scottish Index of Multiple Deprivation (SIMD) 2006.

¹⁵⁹ Acuteness or clearness of vision, especially form vision, which is dependent on the sharpness of the retinal focus within the eye and the sensitivity of the interpretative faculty of the brain.

¹⁶⁰ Nystagmus is an involuntary movement of the eyes, usually from side to side, sometimes up and down and in some cases, in a circular motion. In most cases vision is also significantly worse than average.

¹⁶¹ A condition where the eyes are not properly aligned with each other, resulting from a lack of co-ordination between muscles in the eyes.

¹⁶² An error in the focusing of light by the eye and a frequent reason for reduced visual acuity.

Injecting other drug users

A study conducted in Brighton, South East England¹⁶³ investigated the practice of drug users injecting other users. The aim was to identify the prevalence of this practice and discuss the influence (if any) it may have on the high number of DRDs and mortality amongst substance users in the area¹⁶⁴ (Cherry et al. 2009). It was reported that around a quarter of participants in this study either injected or were injected by others (most often partners and friends). Key reasons for this included difficulties around the technique of injecting (86% of injectors and 74% of injectees¹⁶⁵) and the sharing of equipment. Those who engaged in this practice tended to have been injecting for longer than injectors who did not (mean duration 12 years compared to 9 years). Thirty-nine per cent of injectees did not view the risk of overdose to be any greater if they had been injected by someone else than if they had injected themselves; 35% thought receiving injections from others was less safe than self-injecting; and around a quarter (26%) perceived it to be safer. In contrast, 73% of injectors thought injecting others was less safe in terms of overdose risk.

Needle fixation

A psychological theory of 'needle fixation'¹⁶⁶ (a characteristic displayed by a minority of IDUs who find it difficult to cease injecting) was put forward in a paper which aimed to identify and define its traits and components¹⁶⁷ (Pates and Gray 2009). The authors discussed the belief that some IDUs are compelled to inject for secondary reasons such as sexual pleasure, which are in addition to their need to satisfy cravings for drugs or to experience the 'rush' from injecting. They also reported that some injectors may divide their drugs into smaller quantities to inject more frequently; inject inert substances (e.g. water) or may 'flush' the blood back and forth into the vein. They examined the differences between needle fixated (NF) and non-needle fixated (NNF) IDUs. Participants were screened and grouped according to their responses to a needle fixation profile (NEFPRO) (see section 7.3.1). The results showed behavioural differences between the groups, with the NF group scoring significantly higher than the NNF control group on several measures of obsessive compulsive traits¹⁶⁸ such as washing and checking. The NF group were also different from each other in terms of behaviours and motivations. The authors conclude that this study provides evidence that needle fixation is a phenomenon, made up of several components, whereby IDUs gain secondary pleasures from injecting and may display one or more of a range of characteristics.

Risk associated with 'snowballing' heroin and crack cocaine

In a small qualitative study¹⁶⁹ exploring the experiences of a group of homeess IDUs who partake in 'snowballing' (co-injecting heroin and crack cocaine) it was reported that participants viewed the practice as a 'communal activity' (Wilkins et al. 2010). The authors discussed the risks associated with communal

- ¹⁶⁴ At the time of the study the area had the highest number of DRDs in England and Wales, with a higher than average mortality rate.
- ¹⁶⁵ Injectees in this study are those that had been injected by others.
- ¹⁶⁶ Defined as "repetitive puncturing of the skin with or without the injection of psychoactive drugs via intravenous, subcutaneous or intramuscular routes, irrespective of the drug or drugs injected or the anticipated effects of the drug" (Pates et al. 2001).
- ¹⁶⁷ Thirty three IDUs in Cardiff, Wales were recruited through statutory and non-statutory drug agencies. Services were asked to identify and recruit individuals who may have needle fixation Semi-structured interviews about injecting behaviour were conducted with participants. The results were examined using content analysis and participants were then allocated into one of two groups on the basis of these results: n=10 needle fixated (NF) and n=10, non-needle fixated (NNF).
- ¹⁶⁸ Measured using the Padua Inventory (PI), a self-report measure of obsessive and compulsive symptoms.
- ¹⁶⁹ Eighteen homeless drug users (5 female, 13 male) who attend a needle exchange in Nottingham, England were recruited using purposive sampling (all participants had to meet the following criteria: attended the service in two months prior to the study; injected snowballs daily; homeless or living in hostel; over 18 years old). They were interviewed following a semi-structured format and data were analysed using template analysis.

¹⁶³ The study was based on a sample of 61 individuals presenting to treatment in Brighton, 39 who had injected others/been injected by others; and 22 individuals in the comparison group who had never injected/ been injected by others.
drug taking and report that a common theme in this study was the re-using and sharing of equipment. Several participants discussed sharing mixing containers to ensure everyone has an equitable share of the snowball. Often this involved drawing up the snowball solution and then transferring some of it back into the container if they had inadvertently drawn up more of the snowball solution than other people they were sharing with. The authors suggest that this can carry significant risks if the injecting equipment has been used before. Several participants held misconceptions about the risks of sharing equipment and the transmission of blood-borne viruses (BBVs). Abscesses and wounds at injection sites were common, as was poor vein quality leading to some participants needing other people to inject them in places they couldn't reach themselves. This practice made some peer injectors feel anxious due to the responsibility they felt towards the person they were injecting. The authors conclude that this study raises some significant issues regarding the risk of BBV transmission and bacterial infections amongst 'snowball' injectors and also the misconceptions participants held about those risks.

Injecting drug users in Scotland and hepatitis C

In a study examining the extent of alcohol use amongst current and former IDUs attending services in Scotland,¹⁷⁰ hospitalisation with an alcohol-related diagnosis was used as an indicator of problematic consumption levels (McDonald et al. 2010). Levels of hospital admissions were compared pre and post-HCV diagnosis. At the end of the follow-up period a greater number of those who were diagnosed with HCV had at least one alcohol-related admission, compared to those who did not have HCV (16.4% and 5.7%, respectively). Due to this increased risk for alcohol-related hospital admission in those IDUs diagnosed with HCV, the authors suggest that alcohol intake is addressed when managing chronic HCV infection in the IDU population.

Injecting drug use in public toilets

A small qualitative study¹⁷¹ examined the views of drug users who had experience of injecting in public toilets lit by fluorescent blue lighting, which is fitted to deter this practice (Parkin and Coomber 2010). It was reported that in many cases (58%, n=18) the blue lighting had not deterred drug users from injecting in a public toilet and where it had, drug injecting had merely been dispersed to nearby public areas. The authors discussed the health risks involved in injecting in poorly lit areas, as drug users may have to rely on touch rather than sight to find a vein and it may encourage riskier injecting practices, for example injecting into the femoral artery. They suggested that the use of blue lights in public toilets is of little (if any) benefit to the general public and may increase the risks associated with injecting drug use amongst users.

6.3.5 Cannabis

Semantic memory and cannabis use

Testing of semantic memory¹⁷² was conducted with a group of current cannabis users, whilst they were under the influence of cannabis and again after three to five days of abstention, using a computerised decision making word task (Morgan et al. 2010). Results were compared to a control group of non-cannabis users.¹⁷³ The authors reported that whilst intoxicated there were significant differences in 'priming' (reaction times) of cannabis users and non-cannabis users. They also reported significant

¹⁷⁰ A retrospective cohort study using record linkage to four national databases to determine alcohol-related hospital admission rates and HCV status amongst a large cohort of 41,062 IDUs who were registered on the Scottish Drug Misuse Database (SDMD) between April 1995 and March 2006.

¹⁷¹ Semi-structured interviews regarding users' experience and opinions of injecting in public toilets, took place with 31 current IDUs in Plymouth, South West England who were clients at either a drug agency or a homeless hostel.

¹⁷² Semantic memory is related to meanings, understandings, and concept-based, general knowledge unrelated to a memory of a specific experience or event. It is considered to be "a conscious recollection of factual information and general knowledge that is independent of context and personal relevance" (Morgan et al. 2010).

¹⁷³ Seventy-four participants were recruited using snowball sampling. Participants were placed into two groups, 36 recreational cannabis users (at least once a month, for at least a year) and 38 non-cannabis users. An independent groups, repeated measures design was used to compare the groups on two separate test occasions three to five days apart.

differences in the reaction times of the cannabis using group when the word pairs were displayed at the shortest time apart. Their reaction times were slower (increase in priming or 'hyper-priming') whilst intoxicated compared to those recorded after three days of abstention from cannabis. These results suggest that acute cannabis use may increase 'automatic semantic priming'.

Prospective memory and cannabis use

The prospective memory¹⁷⁴ of a group of cannabis users was compared to non-users via a questionnaire whereby participants' self-reported the frequency and type of memory lapses¹⁷⁵ they have encountered in the past and techniques they may have used to help them remember things (Bartholomew et al. 2010). Participants also undertook a video based task to provide an objective measure of their prospective memory. It was reported that there was no significant difference between groups in terms of self-reported prospective memory deficits but the results for the video based task showed that non-users of cannabis performed significantly better than cannabis users. The authors posit that these results suggest an association between cannabis use and impairments in prospective memory in young adults.

6.3.6 Ecstasy and polydrug use

Emotional intelligence and ecstasy polydrug users

In a study comparing the emotional intelligence (EI)¹⁷⁶ of ecstasy polydrug users, cannabis users and nondrug using controls¹⁷⁷ (Craig et al. 2010), the authors reported there were no significant differences in El between individuals in the three groups and that this finding is contrary to the findings of an earlier study.

Life changes attributed to ecstasy and polydrug use

In an exploratory study of recreational drug use and long-term 'off drug' effects, Soar et al. (2009) compared a group of problematic ecstasy users¹⁷⁸ with non-problematic ecstasy users, polydrug users and alcohol and nicotine using controls who reported that they had never used drugs.¹⁷⁹ The aim of the study was to investigate if participants attributed life changes (negative and positive) to drug use and if so, were these changes more highly associated with polydrug or ecstasy use. The results of the study suggest that long-term effects often attributed to ecstasy use may be attributable to polydrug use. They conclude that isolating the effects of ecstasy alone in studies is extremely difficult.

¹⁷⁴ Prospective memory is thought to control the part of the memory used to remember to do things that will happen in the future such as keeping an appointment or meeting or to complete an intended task.

¹⁷⁵ Ninety undergraduate students in the North East of England aged 18 to 24 were recruited using opportunity sampling and were assigned to two groups: last year cannabis users (n=45) and non-users (n=45). The Prospective Memory Questionnaire (PMQ) was used in this study to assess the participant's prospective memory across three areas; longterm episodic prospective memory; short-term habitual prospective memory and internally cued prospective memory.

¹⁷⁶ Emotional intelligence (EI) "describes the ability, capacity, and skill to identify, assess, manage and control the emotions of one's self, of others, and of groups".

¹⁷⁷ Participants were recruited using snowball sampling and via direct approaches to university students. Seventy eight ecstasy/polydrug users, 38 cannabis only users and 34 non-drug users were administered questionnaires regarding "drug use, lifestyle, parenting style and El with separate IQ measures for fluid intelligence (Ravens matrices) and pre-morbid intelligence: National Adult Reading Test (NART). Current mood measures were obtained from an adjective checklist".

¹⁷⁸ Defined as ecstasy users who reported using other drugs and indicated that they had experienced problems which they attributed to their ecstasy use.

¹⁷⁹ Participants were recruited through advertising at the University of East London, clubs in London and an advert in the Big Issue magazine. Two hundred and eighty eight participants were assigned to the following groups: alcohol/nicotine (n=111); polydrug users with no history of ecstasy use (n=62); non-problematic ecstasy polydrug users (n=62); and problematic ecstasy polydrug users (n=53).

Sub-acute effects of ecstasy

An investigation into differences in sub-acute and chronic effects of ecstasy was conducted by comparing a group of regular ecstasy users who intended to take the drug within the next week with a group of regular ecstasy users who intended to abstain from taking it in the next week¹⁸⁰ (Pirona and Morgan 2010). Baseline data from both groups (both groups drug free) were collected and participants were re-interviewed between one to four days later (after the ecstasy intenders group had taken ecstasy). At follow-up, after controlling for sleep deprivation and alcohol use, the authors reported no statistically significant differences in mood between the groups that had used ecstasy and those who had not. They also reported that three days after taking ecstasy there were few sub-acute effects on cognitive function amongst participants.

Everyday and prospective memory deficits in ecstasy/polydrug users

Laboratory based prospective memory tasks and self-report measures of prospective memory were used to assess whether any impairment was present in a sample of ecstasy/polydrug users and non-ecstasy users¹⁸¹ (Hadjiefthyvoulou et al. 2010). Both prospective memory and everyday memory deficits were recorded in ecstasy/polydrug users in both the laboratory and self-reported measures. These observed deficits indicated some general mechanisms that underpin both time and event-based prospective memory contexts and were not task specific. The authors reported that there were also some deficits associated with the recreational use of cocaine powder in the ecstasy/polydrug user group, and they suggest that this finding merits further research.

6.3.7 Cathinones

Mephedrone

Wood et al. (2010) reported on a clinical case of isolated mephedrone toxicity thought to be the first recorded case in England.¹⁸² The patient had ingested 0.2g of mephedrone and had not felt any effect, and an hour later injected himself with 3.8g into each thigh. After feeling unwell and developing palpitations, chest pressure and sweating, he presented to hospital with sympathomimetric toxicity (symptoms included increased heart rate, raised blood pressure, dilated pupils). He was also said to be agitated and anxious. After a period of observation and treatment with lorazepam, he was discharged after six hours in hospital.

In a case study of 15 patients presenting to an emergency department following self-reported mephedrone use (Wood et al. 2010), it was reported that symptoms included agitation (53%), tachycardia¹⁸³ (40%), systolic hypertension (20%) and seizures (20%), with 20% requiring treatment with benzodiazepines for the management of agitation. The majority of patients (73%, n=11) were discharged following a period of observation and/or symptom control with no further concerns. All of the patients reported concomitant use of other substances, namely alcohol or other recreational drugs, including other 'legal highs' or

- ¹⁸⁰ Thirty-two participants aged between 19 and 30 were recruited using snowball sampling techniques at the University of Sussex in South East England and local nightclubs. Participants were selected for the study on the basis that they were recreational ecstasy users (self-reported using at least once a month). After baseline assessment participants were assigned to one of two groups on a post hoc basis according to whether they reported ecstasy use after baseline. Participants were administered a number of questionnaires and counterbalanced neuropsychological tests to explore behavioural memory; mood; depression; concentration; working memory; general drug history; and sleep patterns during the previous 24 hours and three days.
- ¹⁸¹ Forty-two ecstasy/polydrug users (14 male, 28 female) and 31 non-ecstasy users (5 male, 26 female) were recruited via a direct approach to university students in two universities in the North West of England and using snowballing sampling techniques. Prior drug use consumption was self-reported by participants using a questionnaire and lifetime use was estimated by the research team. A number of questionnaires and tests were administered on participants measuring everyday and prospective memory.
- ¹⁸² A urine and serum (blood) sample were taken from the patient and toxicological analysis confirmed the presence of mephedrone and did not detect any other drugs or alcohol.
- ¹⁸³ Accelerated heart rate.

GHB/GBL. None of the cases described any skin discoloration or cool/cold peripheries as has been reported elsewhere. The authors conclude that the toxicity presentation reported is similar to that seen from 1-benzylpiperazine (BZP).

ACMD review of harms related to cathinones

The Advisory Council on the Misuse of Drugs (ACMD) report that little clinical data regarding harm related to cathinone use (including mephedrone) currently exists. Of the self-reported data available it has been suggested that side effects can include agitation; reduced appetite; insomnia and increased heart rate (ACMD 2010a) (see section 1.2).

6.3.8 Other drug use

Cocaine-associated cardiac arrhythmias

In a review of previous studies, regional variations in the purity of cocaine are discussed. The authors suggest that this may increase an individuals' risk of inadvertent overdose (Wood and Dargan 2010). They go on to say that cardiac arrhythmias¹⁸⁴ can be a risk associated with cocaine use but there are no published frequency data to assess the extent of the problem. This, they posit, could be partly due to doctors not asking patients about recent cocaine use when they present with symptoms of this condition.

Aggression in opiate users

In a study of opiate use and aggression, a sample¹⁸⁵ of opiate-dependent men were compared to exusers and a control group who had never used opiates (Clair et al. 2009). Participants were asked to complete a series of word tests which measured their tendency towards interpreting ambiguous sentences in an aggressive or neutral manner. The results were analysed to investigate differences between the three groups in terms of whether they displayed a bias towards neutral or aggressive interpretations. The authors report that the control group displayed the greatest bias towards aggression compared to the current and former opiate using groups. Both opiate groups showed a cognitive bias away from aggressive interpretation towards a neutral interpretation. They suggest that opiate use may be associated with lower levels of aggression and hypothesise that this may be due to lower levels of testosterone which has previously been associated with opiate use.

Ketamine use, neurocognitive function and psychological well-being

In a longitudinal assessment of the effects of chronic ketamine use, 150 participants were tested on neurocognitive functioning and psychological well-being ¹⁸⁶ (Morgan et al. 2010). The participants were then re-tested approximately 12 months after the first batch of testing (80% re-assessment rate). Neurocognitive deficits were reported in frequent users of ketamine and increased use over the year was correlated with decreasing performance on spatial working memory and pattern recognition memory tasks. Greater dissociative symptomatology was seen in frequent users and a dose-response effect was noted regarding delusional symptoms (frequent users scoring higher than infrequent, abstinent and non-users, respectively). Increased depression scores were reported in both frequent and abstinent users over the 12 month period. The authors suggest that heavy use of ketamine may have harmful cognitive and psychological effects.

- ¹⁸⁴ An arrhythmia is a problem with the rate or rhythm of the heartbeat. During an arrhythmia, the heart can beat too fast, too slow, or with a regular or irregular rhythm. It is a clinical sign not a disease.
- ¹⁸⁵ Sixty four participants were recruited in London from drug treatment services (opiate dependant group, n=21); residential rehabilitation clinics (ex-users, n=21); and job centres (never used opiates, n=22).
- ¹⁸⁶ Participants were recruited through an existing drug user database and via snowball sampling. Thirty participants were assigned to each of the following five groups: frequent ketamine users (more than 4 times per week); infrequent ketamine users (less than 4 times per week but at least once a month); abstinent ketamine users (abstinent for minimum of 1 month); polydrug users (matched to current ketamine-using groups for use of other drugs); and non-drug users (no illicit drug use).

lvory wave

There has been a cluster of hospital admissions associated with the consumption of a substance called lvory Wave reported in Scotland and South West England.¹⁸⁷ Symptoms displayed by several individuals have been reported to include: grand mal seizures; agitation; hallucinations; delusions; possible cardiac toxicity; and tachycardia. Initial tests suggest that lvory Wave contains desoxypipradrol (aka 2-DPMP), a non-controlled analogue of the Class C controlled drug pipradrol (diphenyl-2-piperidinemethanol) (personal communication – Les King).

6.3.9 Drug use and sexual health

Substance use and sexual risk behaviours

Data from the Belfast Youth Development Study (BYDS)¹⁸⁸ were examined to identify if an association exists between substance use and risky sexual behaviour in participants aged between 17 and 19 (McAloney et al. 2010). It was reported that substance use, particularly frequency of recent ecstasy use, was associated with being sexually active at an earlier age and taking part in risky sex behaviours. Weekly and monthly users of ecstasy were more likely to have participated in casual sex (4 times more likely and 7 times more likely respectively) than non-users of ecstasy. Monthly cannabis users were over twice as likely as their non-using counterparts to engage in casual sex, as were those who drank daily compared to non-drinkers.

Randomised Controlled Trial (RCT) comparing mouth swab testing to same day blood tests for HIV

An RCT of two methods of HIV testing (mouth swab compared to same day blood tests) was conducted with a group of young people in drug treatment in East Midlands, England (Apoola 2010). Participants were randomly assigned to one of two groups.¹⁸⁹ Both groups had a pre-test discussion for HIV testing; those in the control group (blood tests) were then referred to the same day HIV testing service at a sexually transmitted infections (STI) clinic and offered blood tests for syphilis, HIV, hepatitis B and C. Those in the study group (oral swab) were swabbed orally for HIV, hepatitis B and C. All were then offered an appointment for screening swab tests for genital infections at the STI clinic. The primary outcome measure was the number of participants attending for STI screening at the clinic, secondary measures were the number of unvaccinated individuals receiving at least one dose and all three doses of the hepatitis A and B vaccinations; and the numbers receiving results within a week of testing. There was a significant difference between the numbers in the groups tested for HIV and hepatitis C; with all participants in the study group being tested, compared to just five and two being tested in the control group for HIV and hepatitis C, respectively. Similarly, 92.6% (n=25) of the study group were tested for hepatitis B, compared to 7.4% (n=2) in the control group. It was demonstrated that offering an oral swab test instead of a blood test increased the number of young people tested for BBV in the community drug setting, however there was no significant increase in the number who went on to obtain testing for STI infections. The small sample size is noted by the authors and several reasons for reduced levels of subsequent STI screening are suggested.

¹⁸⁷ See: http://www.sehd.scot.nhs.uk/cmo/CMO(2010)18.pdf

¹⁸⁸ The Belfast Youth Development Study (BYDS) began in 2001, following approximately 4,000 young people each year during 2000 to 2005, and again in 2007 and 2010. It is a longitudinal study of young people in Northern Ireland which examines the onset and patterns of substance use from age 11. Results from this particular study are from the sixth sweep of data involving 2,250 young people aged between 17 and 19.

¹⁸⁹ Young people (aged under 20) who attended the Young Person's Community Substance Misuse Service in Derby, East Midlands, England were invited to participate in the study (n=486). A total of 54 individuals (27 male, 27 female) agreed to participate and were recruited between February 2007 and December 2008. Participants were randomised into either the control group (blood test; n=27), or the study group (oral swab; n=27).

6.3.10 Drug driving

Data from the Department for Transport¹⁹⁰ show that in 2008, there were 60 fatal casualties in accidents where impairment due to illicit or medicinal drugs was a contributory factor, including 280 serious injuries and 790 slight injuries. Of those accidents, the driver was killed in 29 cases and seriously injured in 132 (HC Deb, 21st January 2010, c423W).

In a review of 1,185 fatal road traffic accidents from ten police force areas across the UK between 1994 and 2005, it was reported that four per cent of all cases (n=47) involved drugs (either alone or in combination with alcohol). A total of 18 drivers were under the influence of drugs only (Clarke et al. 2010).

6.4 Drug related deaths and mortality of drug users

6.4.1 Direct overdoses and indirect drug-related deaths

Using the EMCDDA definition of DRD, the latest data across the United Kingdom are for 2009. There were 2,092 deaths in 2009, a decrease of 6.2% since 2008 (n=2,231) (Figure 6.4). Since 1996 DRDs have increased by 81.6% (from n=1,152).





Source: Standard Table 06

The rate of deaths per 100,000 population (all ages) shows that differences exist between the different countries within the UK. Thus, in 2009 the rate using the EMCDDA definition was 10.24 in Scotland compared to 2.80 in England & Wales and 1.96 in Northern Ireland. The UK average was 3.40 (this figure was 1.98 in 1996).

¹⁹⁰ See: http://www.publications.parliament.uk/pa/cm200910/cmhansrd/cm100121/text/100121w0002.htm#10012125002602

The slightly different Drug Strategy definition, which was originally adopted to measure the impact of the UK Drug Strategy,¹⁹¹ shows that the number of deaths in 2009 was 2,481 a decrease of 3.4% since 2008 (n=2,569). Using the much wider ONS definition, the total number of deaths in 2009 was 3,677 a decrease of 2.1% from the previous year (n=3,754) (Figure 6.5).



Figure 6.5: Comparison of total number of deaths using three definitions in the United Kingdom, 1996 to 2009

Source: Standard Table 06

Age and gender

Using the EMCDDA definition, in 2009 in the UK, 1,685 deaths (80.5%) were males and 407 (19.5%) were females (male to female ratio = 4.1:1). The highest proportion of males was 82.6% in England & Wales and the lowest was 65.7% in Northern Ireland (Scotland was 75.6%). The number of deaths amongst females in the UK decreased by 6.4% between 2008 and 2009.

The average age of death was 38.1 years with males (37.4 years) tending to be around four years younger than females (41.2 years).¹⁹² The average age of death has increased from 31.7 in 1996 to 38.1 in 2009. In terms of male deaths, there was little variation in average age across the constituent countries of the UK. However, the mean age of female deaths in Northern Ireland was 45.8 years (n=12) compared to 37.0 years in Scotland (n=130), although it should be noted that the total number of female deaths in Northern Ireland was much lower.

Overall, most deaths in the UK in 2009 occurred in the 35 to 39 age group, although deaths amongst this age group decreased by 7.5% from the previous year. In the past year deaths have decreased in all age groups apart from amongst the oldest age groups (aged 55 and over) (Figure 6.6). The biggest decrease was seen amongst those aged 20 to 24 year olds (from n=219 to n=163 or 25.6%)

¹⁹² Average age is calculated from grouped data.

¹⁹¹ The definition refers mainly to England, but for the purpose of this report has been used to compile data on DRDs across the UK. Some historical data in this report will differ from earlier published UK Focal Point on Drugs because of revisions/ updates to data.



Figure 6.6: Number of deaths by age group in the United Kingdom, 1998 to 2009; EMCDDA definition

Source: Standard Table 06

Drugs mentioned on death certificates in the United Kingdom

Most deaths continue to be linked with the use of opiates, primarily heroin/morphine and, to a lesser extent, methadone (Table 6.1). Heroin/morphine mentions decreased by 2.7% in 2009 while mentions of methadone increased by 3.0%. After a sharp rise in cocaine mentions in 2008, they decreased by 26.8% in 2009. Ecstasy mentions fell by 41.8% in 2009 and have fallen by 59.5% since 2002.

DRUG	YEAR							
	2002	2003	2004	2005	2006	2007	2008	2009
Heroin/Morphine	1,118	883	977	1,043	985	1,130	1,243	1,210
Methadone	300	292	300	292	339	441	565	582
Cocaine	161	161	192	221	224	246	325	238
Ecstasy	79	66	61	73	62	64	55	32
Diazepam ¹⁹³	356	282	217	205	186	223	489	300
Temazepam	89	114	87	55	55	56	55	48

Table 6.1: Drug mentions on death certificates in the United Kingdom, 2002 to 2009

Source: GROS 2010; NISRA 2010; Wells 2010

¹⁹³ A revised data collection form was introduced in Scotland in 2008 which has resulted in more specific drugs being identified than in previous years.

6.4.2 Special Mortality Register: The National Programme on Substance Abuse Deaths (np-SAD)¹⁹⁴

The np-SAD Annual Report for 2010 (Ghodse et al. 2010a), which contains data from the SMR shows that:

- 2,170 DRDs in the UK were notified to the np-SAD database in 2009;195
- similar to previous years, the majority of cases were males (78%), under the age of 45 years old (74%), and of a White Ethnic origin (95%);
- the principal underlying causes of death were accidental poisoning (72.3%), intentional self-poisoning (8.5%), and poisoning of undetermined intent (9.2%);
- 10.0% of deaths were related to 'other' causes;
- as in previous years opioids (i.e. heroin/morphine, methadone and opioid analgesics) alone or in combination with other drugs, accounted for the majority of all np-SAD cases; and
- heroin/morphine alone or in combination with other drugs, accounted for the highest proportion of fatalities (52.9%).

Data from the SMR show that most male accidental poisoning and overdose deaths occur amongst young age groups who consume illicit drugs, whereas typically amongst women it is older females who overdose deliberately on antidepressants and (opioid) analgesics. Those who have a history of drug use/abuse die from a drug-related death at a much younger age than those without such a history. However, the average age at death (of whatever cause) of those with a known history of drug use/abuse has risen over time (from 31.2 years in 1997 to 37.8 years in 2009). Between two-fifths and one half of those who die are unemployed. Two-fifths live alone, and about one in twenty has no fixed abode. Socio-economic determinants play a large part in the geographical distribution of DRDs both nationally and locally. There are differences in the types of drug and mode of administration, not only between but within regions (Ghodse et al. 2010a).

6.4.3 Drug-related deaths database: Scotland

As was reported last year, a new database covering the whole of Scotland went live on 1st January 2009. Since then, National Drug Related Deaths (NDRD) Data Collection Co-ordinators have been assigned to each area of Scotland. These Co-ordinators are tasked with collecting and collating DRD data from different agencies (e.g. drug treatment services, police, GPs, and pathologists) and sending completed NDRD datasets to Information Services Division (ISD). The collection of all NDRD data is expected to be completed by summer 2010. Scotland's 2009 National Drug-related Deaths Report is scheduled to be issued by ISD as a separate publication in late November/early December 2010.

6.4.4 Deaths associated with volatile substance abuse

There were 36 deaths associated with volatile substance abuse (VSA) in 2008 (59 in 2007 and 51 in 2006). This is the lowest figure since data collection methods became stable in 1983 and compares with the all-time peak of 152 in 1990 (Ghodse et al, 2010b). Gas fuels, including nine lighter fuel deaths, accounted for 21 cases; aerosols five; alkyl nitrites ('poppers') three; nitrous oxide two; chloroform two; and other substances accounted for three cases. Five of the deaths occurred in the under 18 year's age-group, 10 were aged 18 to 24 years, and five were aged 25 to 34 years. The median age was 30 years (range 12 to 85 years). In addition to these 36 VSA-related deaths, there were 25 deaths resulting from the inhalation of helium, compared to 10 in 2007 and 29 in the period 2000 to 2006.

¹⁹⁴ Using data from inquests into drug-related deaths.

¹⁹⁵ This figure is not comparable with the number of DRDs reported in the 2009 UK Focal Point on Drugs report, as the number of DRDs for 2008 have increased since its publication due to further submissions being made by coroners.

6.4.5 Deaths from HIV/AIDS and HCV

Deaths of IDUs with AIDS accounted for 7.9% (1,388) of the total number of AIDS deaths in England and Wales up to the end of December 2009 (n=17,515). In Northern Ireland the proportion was 6.7% (6 deaths n=89), but in Scotland it was 48.1% (77 deaths n=1,613). The levelling off in the annual number of deaths of IDUs with AIDS seen in recent years gave way to a slight increase in 2007, but this appears to have reversed in 2008. The UK figure of 47+ for 2008¹⁹⁶ (57+ in 2007) is about 22% of the peak level in 1995 (n=212). By the end of December 2009, 57+ deaths had been reported for that year; the number is likely to increase (personal communication to John Corkery from Health Protection Agency, 1 June 2010).

6.4.6 Mortality and causes of deaths amongst drug users (mortality cohort studies)

Results from two regional mortality cohort studies were published in 2010 (see section 12.4). Both studies were conducted retrospectively using case linkage data from treatment, medical and death records.

In Beynon et al. (2010) the results of a study linking National Drug Treatment Monitoring System (NDTMS) data from North West England and ONS death certificates¹⁹⁷ are discussed. Additional findings from the same cohort of drug users by Hurst et al. (2009) were reported last year (see 2009 UK Focal Point report). In Beynon et al (2010) it was reported that the median age at death of the cohort had increased significantly during the study period (from 36.46 years in 2003/04 to 41.38 years in 2007/08). The chances of an individual aged 40 and over dying from a non-drug related death were 3.27 times those of someone aged less than 40 dying from a non-drug related death.

Kimber et al. (2010) reported on results from the 'Edinburgh Addiction' cohort study in Scotland which linked GP data regarding patients who were IDUs with General Register Office for Scotland (GROS) and hospital admission records.¹⁹⁸ The methodology used to investigate this particular cohort of IDUs is discussed in a separate publication by Macleod et al. (2010). The initial cohort size was 814 and by the start of follow-up 227¹⁹⁹ had died. The median duration from first injection to death for members of the cohort with HIV was 24 years. For those without HIV it was 41 years. For each additional year of opiate substitution treatment the risk of death before long-term cessation of injecting fell by 13%.²⁰⁰ However, exposure to opiate substitution treatment was inversely related to the chances of achieving long term cessation. The authors conclude that opiate substitution treatment in injecting drug users in primary care reduces this risk of mortality, with survival benefits increasing with cumulative exposure to treatment. In Macleod et al. (2010) it is suggested that IDUs recruited from a community setting such as those in the 'Edinburgh Addiction' cohort can be successfully followed-up through interviews and record linkage. They go on to say that comparisons between cases and controls may allow the identification of early life risk factors for drug injection, clarifying the burden of disease associated with injection and the influence this has on different health and social interventions.

¹⁹⁶ The figures for recent years are described as 57+ as the HPA has introduced the practice of not giving exact numbers for occurrences of cases less than five.

¹⁹⁷ Details of individuals reported to the North West of England's National Drug Treatment Monitoring System (NDTMS) as having died between 2003/04 and 2007/08 were matched by ONS to death registrations to identify the cause of death.

¹⁹⁸ Individuals registered at a primary medical care facility in Edinburgh between 1980 and 2006.

¹⁹⁹ Follow-up was between October 2005 and October 2007.

²⁰⁰ 95% CI 17% to 9% and after adjustment for HIV, sex, calendar period, age at first injection, and history of prison and overdose.

Hospital attendance and DRDs

Thanacoody et al. (2009) investigated previous contact with hospital-based services and DRDs by linking hospital episode data to deaths records.²⁰¹ Sixty per cent of DRDs occurred in individuals who had used hospital-based services in the previous five years. The median time from hospital contact to death was five months, and median number of hospital attendances/admissions was three.²⁰² The authors conclude that liaison between emergency departments, clinical toxicology services and community based drug addiction services is important to identify drug users who may be at high risk of death. They suggest that a hospital-based specialist nurse-led liaison service may be able to fulfil such a role.

Supervised methadone and DRDs

The impact of introducing supervised methadone consumption on methadone-related overdose deaths in Scotland and England between 1993 and 2008 was examined by Strang et al. (2010b), controlling for increased prescribing of methadone (as measured by daily dose). Using the outcome measure annual OD4-methadone index,²⁰³ they found that OD4-methadone declined substantially over the four four-year periods between 1993 and 2008. The measure decreased significantly in 10 of 12 epoch changes: in Scotland from 19.3 (95% Cl 15 to 24) to 4.1 (95% Cl 2.8 to 5.4) and finally to 3.0 (95% Cl 2.4 to 3.5) for methadone only deaths (and from 58 to 29 to 14 for deaths with any mention of methadone); in England from 27.1 (95% Cl 25 to 29) to 24.8 (95% Cl 23 to 27) and finally to 5.8 (95% Cl 5.3 to 6.3) for methadone only deaths (and from 46 to 42 to 12 for deaths with any mention of methadone). The decreases in OD4-methadone were closely related to the introduction of supervised dosing of methadone in both countries, first in Scotland (1995 to 2000) and later in England (1999 to 2005). These declines occurred over periods of substantial increases in the prescribing of methadone (18-fold increase in defined daily doses per million population annually in Scotland and seven-fold increase in England). The authors conclude that the introduction of supervised methadone dosing was followed by substantial declines (at least a 4-fold reduction) in deaths related to overdose of methadone in both Scotland and England.

Index of fatal toxicity

An index of fatal toxicity for illicit drugs has been developed (King and Corkery 2010). The aim was to determine the lethal toxicity of five commonly-used illicit substances (heroin, cocaine/crack, ecstasy, amphetamine and cannabis) by relating the number of associated deaths to their availability. It was calculated as the ratio of the number of deaths associated with each substance to its availability in the period 2003 to 2007. Three separate proxy measures of availability were used (number of users as determined by household surveys, number of seizures by law enforcement agencies and estimates of the market size).²⁰⁴ A broad correlation was found between all three denominators of availability. Heroin and cannabis showed the highest and lowest toxicities respectively. The index of fatal toxicity of MDMA was close to that of amphetamine and cocaine. There was a rank correlation between this index and other measures of lethal toxicity based on safety ratios.

²⁰¹ Records of DRDs occurring in the Lothian region of Scotland between 2003 and 2005 were considered and 75 deaths in the catchment area of the Edinburgh Royal Infirmary were linked to hospital records.

²⁰² Range 1-26.

²⁰³ Number of deaths with methadone implicated per million defined daily doses of methadone prescribed in that year.

²⁰⁴ All data related to England and Wales only.

7. Responses to health correlates and consequences

7.1 Introduction

In 2001 an action plan to reduce drug-related deaths (DRDs) was introduced in England and Wales (DH 2001). In England, this was updated as part of *Reducing Drug-related Harm: An Action Plan* with a focus on three key areas: campaigns, improving delivery and surveillance (DH and NTA 2007). In Scotland a strategy and action plan to reduce DRDs was published in 2005 (SACDM 2005). In relation to the prevention of drug-related infectious diseases, a public health approach aimed at containing HIV transmission began in the 1980s. The subsequent action, involving harm reduction measures, is regarded as having been successful in helping to contain HIV amongst injecting drug users (IDUs). Measures include: the provision of free needles and syringes; promoting the safe disposal of used equipment; information campaigns on safer sex and safer injecting; and HIV/AIDS counselling, support and testing. Treatment for infectious diseases is provided as part of the National Health Service (NHS), including the provision of anti-retroviral treatment for HIV and hepatitis C virus (HCV).

A *Hepatitis C Action Plan for England* was published in 2004 (DH 2004), prioritising prevention of infection and disease progression. A *Hepatitis C Action Plan* for Scotland was launched in 2006 (Scottish Executive 2006b) and a second phase of the plan was launched two years later (Scottish Government 2008c). An *Action Plan for the Prevention, Management and Control of Hepatitis C* was launched in Northern Ireland in 2007 (DHSSPSNI 2007). The Welsh Assembly Government published its *Blood-borne Viral Hepatitis Action Plan for Wales 2010-2015* in 2010 (WAG 2010c).

Standards of care for problem drug users with mental health problems were agreed in 2001 (HAS 2001). Guidance on good practice (DH 2002a) and the provision of services were developed in England. The Department of Health highlighted the need for generic health services to work in partnership with other agencies, such as drug services (DH 2002b).

Treatment for wound infections is available through primary care, accident and emergency (A&E) departments, and in some areas, through needle exchange schemes and specialist drug services. Those in prison have access to HIV and hepatitis testing, and vaccination against hepatitis B.

Increasingly there is recognition of the needs of pregnant drug users, with systems in place to ensure that they are identified and that their needs, and those of their babies, are met.

7.2 Prevention of drug-related emergencies and reduction of drug-related deaths

7.2.1 Data collection and information provision

Drug-related deaths in Scotland

The National Drug-related Deaths Database (NDRDD)²⁰⁵ in Scotland (see 2009 UK Focal Point report) is due to report its first year of data in late 2010.

²⁰⁵ The database gathers information about every drug-related death that occurred in Scotland on or after 1st January 2009. For every deceased drug user collected information includes: personal circumstances; drug use history; contact with drug treatment services and GPs; medical history; substitute prescriptions; contact with the criminal justice system; scene of death; and toxicology results.

The Scottish Drugs Forum²⁰⁶ has produced two briefing papers containing information about the issues surrounding naloxone²⁰⁷ and drug-related deaths²⁰⁸ with the aim of increasing knowledge amongst non-specialists.

The National Forum on Drug-Related Deaths in Scotland has produced a range of overdose prevention materials displaying information about risks and what to do if an overdose occurs. Resources include a poster, information leaflets and emergency contact details, which are distributed in General Practice (GP) surgeries, community pharmacies, Alcohol and Drug Partnerships (ADPs) and drug services (Scottish Government 2010c). In their annual report the Forum issued the following recommendations aimed at reducing DRDs:

- increase access to and retention at treatment services, reduce waiting times and target hard to reach groups;
- further develop and improve services and evidence-based treatments, focus on high-risk groups, take home naloxone and overdose awareness training; and
- work in partnership e.g. with ambulance service, police, prisons and A&E departments (Scottish Government 2010d).

Wales: Confidential review panels

In Wales, four regional panels have been established to conduct confidential reviews of the circumstances surrounding drug-related deaths in order to learn lessons and improve services in the future. The reviews have led to changes in service provision including flexible opening hours and targeted support for highrisk individuals such as newly released prisoners. Further initiatives to reduce the number of deaths and near fatal poisonings include: improved data collection by paramedics and A&E staff; equipping paramedics and A&E staff with local information to refer near fatal poisonings for necessary treatment and support; and development of a joint ambulance and police protocol for attendance at overdoses in order to promote early reporting of emergencies (WAG 2010a).

England: mephedrone information material

In a review of the available evidence and user experiences²⁰⁹ regarding mephedrone, Newcombe (2009) published harm-reduction information aimed at users.

7.2.2 Naloxone

England: Overdose training and naloxone for family members pilot

A pilot scheme has been introduced to provide overdose training and naloxone to families and carers of drug users²¹⁰ (see 2009 UK Focal Point report). The National Treatment Agency (NTA) has reported that the results of this pilot, involving around 950 individuals across 16 sites in England, will be published in 2010.

²⁰⁸ See: http://www.sdf.org.uk/sdf/files/Drug%20Deaths%20in%20Scotland.Occasional%20Paper%201.2009.pdf

²⁰⁶ The National Forum on Drug Related Deaths was set up in response to one of the main actions of the Scottish DRD strategy (SACDM 2005). The forum is independent and has representation from experts in a range of professional fields. It provides advice and recommendations to the Scottish Government and partners on measures to reduce drug related deaths in Scotland.

²⁰⁷ See: http://www.sdf.org.uk/sdf/files/Naloxone%20Briefing.Occasional%20Paper%202.pdf

²⁰⁹ The author carried out a literature review and conducted a series of three focus groups with 10 users of mephedrone in Middlesbrough, North East England. Short, unstructured interviews were also conducted with two members of staff from a local drug agency.

²¹⁰ See: http://www.nta.nhs.uk/uploads/naloxone_faqs_for_web_and_stakeholders.pdf

England: Naloxone Investigation (N-ALIVE) pilot Randomised Controlled Trial

A Medical Research Council (MRC) funded randomised controlled trial (RCT) which aims to reduce DRDs amongst newly released prisoners (see 2009 UK Focal Point report) commenced in a sample of prisons in England in summer 2010.

Scotland: national take-home naloxone programme

Following a recommendation from the National Forum on Drug-Related Deaths and a number of pilot schemes in Scotland, the Scottish Government is supporting the roll out of a national naloxone programme. The aim is to increase the availability of naloxone in order to reduce the number of fatal opiate overdoses. Protocols and guidance have been developed, enabling naloxone to be supplied to named patients by nurses and pharmacists. From late 2010, naloxone will be issued to all high-risk individuals leaving prison in Scotland. This programme will also be rolled out across the country to other drug users (outside prisons). It will be evaluated to monitor the impact it has on the total number of opiate-related drug deaths (as registered by the General Register Office for Scotland (GROS)), in particular on those which occurred in the first four weeks following release from prison custody (internal communication – Scottish Government).

Wales: naloxone rescue scheme

The Welsh Assembly Government is currently running a take-home naloxone scheme in several pilot areas across the country. It has published information materials²¹¹ aimed at service users which promote overdose prevention and the life saving potential and free availability of naloxone. There are also materials aimed at drugs workers running the schemes, including descriptions of the two different naloxone kits that are given to service users: one is a pre-filled syringe supplied with a needle; the other is a kit containing a separate syringe, needle and dose of naloxone for the user to make up. It is reported that 50 kits were issued to individuals in the first few months of the initiative and five of those kits had been used successfully in an overdose situation. The project is currently being independently evaluated and it is anticipated that the results of this will inform a further roll out of the scheme across Wales (WAG 2010a).

7.3 Prevention and treatment of drug-related infectious diseases

7.3.1 Needle exchanges and sharing of equipment

The level of needle and syringe (direct) sharing reported by participants in the Unlinked Anonymous Monitoring (UAM)²¹² survey in England, Wales and Northern Ireland has declined from 31% in 2000 to 19% in 2009 (HPA et al. 2010a). Direct sharing was reported by 19% of the participants in England (regional range: 13% to 27%), 17% of those in Wales, and 14% of those in Northern Ireland in 2009 (HPA 2010).

Sharing of any of the injecting equipment asked about the in the UAM survey (i.e. needles, syringes, mixing containers, water or filters; direct and indirect sharing) was reported by 37% of participants in 2009. Sharing of any of this equipment was reported by 38% in England (regional range: 29% to 48%), by 34% in Wales, and by 36% in Northern Ireland in 2009 (HPA 2010).

In Scotland, data from the Scottish Drug Misuse Database indicates that 19% of IDUs reported needle and syringe sharing in the financial year 2008/09 (HPA et al. 2010a).

The vast majority of participants in the UAM survey from across England, Wales and Northern Ireland reported that they had used a needle or syringe exchange, with 92% reporting having ever done so in 2009 (HPA et al. 2010a).

²¹¹ See: http://wales.gov.uk/topics/housingandcommunity/safety/substancemisuse/publications/naloleaf/;jsessionid=nJNTLn 2CXGH75TzFh2WcQ25RcJWWcgJPJm8xp6Vb1wHJjXzR2hZL!-897520699?lang=en

²¹² See section 6.2.1.

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Guidance for the provision of injecting equipment

In response to an action point in the Hepatitis C Action Plan for Scotland Phase II (Scottish Government 2008c), the Scottish Government has produced guidelines for injecting equipment provision (IEP) services²¹³ (Scottish Government 2010e). The aim is to: provide a national framework of best practice for IEP services; improve access to sterile equipment for IDUs; develop standards and consistency of services; encourage partnership working between IEP and other services for IDUs; and ensure health and safety standards for the disposal of used injecting equipment are followed locally.

Injecting Equipment Provision Survey 2008/09

Results from an IEP survey in Scotland have been published (ISD Scotland 2010b) as part of the response to the Hepatitis C Action Plan for Scotland Phase II (Scottish Government 2008c). It was reported that in 2008/09:

- around 250,000 contacts with IEP services were reported;
- the majority of clients were male (77%);
- 4.38 million needles/ syringes were distributed;
- an estimated²¹⁴ 2.47 million needles/ syringes were returned;
- wipes/swabs and citric acid were the next most commonly provided injecting paraphernalia (2.4 million and 2.3 million items respectively);
- over 90% of services provided sharp bins (n=234) and wipes/swabs (n=219);
- a large increase in the number of filters provided was reported in the first half of 2009/10 (723,282 compared to 355,872 in 2008/09); and
- a higher proportion of IEP agencies (93%) provide access/ referral to HCV testing and treatment compared to pharmacies (74% testing, 73% treatment).

Needle exchange in prisons

In phases one and two of the *Hepatitis C Action Plan for Scotland* (Scottish Executive 2006b; Scottish Government 2008c) the establishment of needle exchange facilities within prisons has been stated as an aim, although at the time of writing this has not yet been possible due to operational issues.²¹⁵ The provision of other injecting equipment,²¹⁶ excluding needles and syringes, is offered to prisoners in custody by health staff (ISD Scotland 2010b).

²¹³ Including needles, syringes and other injecting paraphernalia.

²¹⁴ Self-reported by clients in two-thirds of outlets and by service estimates in a third of outlets.

²¹⁵ It remains Scottish Government policy to carry out a pilot needle exchange in prison custody, however, this cannot be implemented at present due to health and safety concerns from the Prison Officer's Association. Discussions between the Scottish Government, the Scottish Prison Service and the Prison Officer's Association in respect of their concerns are ongoing.

²¹⁶ Equipment is available in packs and includes 2ml water for injection, ampoule snapper, citric acid sachet, cooker, foil, hand cleaner, pre-injection swab, filter and leaflet on how to clean a needle and syringe.

Northern Ireland Needle and Syringe Exchange Scheme

Northern Ireland has operated a Needle and Syringe Exchange Scheme since 2001, and activity monitoring information is collected from twelve pharmacies and one Community Addiction Team that offer the service. In 2009/10:

- there were 15,828 visits to participating pharmacies by users of the scheme, an increase of 18% from 2008/09 (Table 7.1);
- 153,625 syringes were issued in 2009/10, an increase of 13% from 2008/09;
- 51% of cin bins issued to users of the scheme were returned; and
- 86% of visits were made by male clients (PHIRB 2010b).

Table 7.1: Syringe provision: number of visits, syringes issued and proportion of visits involving return of used equipment in Northern Ireland, 2001/02 to 2009/10

YEAR	NUMBER OF VISITS	NUMBER OF SYRINGES ISSUED	% RETURN RATE ²¹⁷
2001/02	5,213	67,989	67
2002/03	6,043	67,516	61
2003/04	7,508	82,731	59
2004/05	7,440	86,056	54
2005/06	8,797	85,801	44
2006/07	9,997	97,684	40
2007/08	11,387	116,935	54
2008/09	13,389	135,700	53
2009/10	15,828	153,625	51

Source: DAIRU 2003;2004;2005;2006;2007; PHIRB 2008;2009b; 2010b

Welsh pilot needle exchange data collection project

A needle exchange monitoring system was piloted in six areas of Wales for a period of four weeks in 2008 (see 2009 UK Focal Point report). A needle exchange database²¹⁸ is now operational across the whole country and it is anticipated that data will be available in 2011/12 (WAG 2010c).

²¹⁷ Since April 1st 2007 the method of calculation of the return rate of used equipment has changed from the proportion of visits involving the return of used equipment to the number of cin bins returned as a percentage of the number issued at every visit, hence the 2006/07 figure is different from that reported in 2008 UK Focal Point report.

²¹⁸ Hosted by Public Health Wales.

Research

Optimal provision of needle and syringe programmes for IDUs

A systematic review²¹⁹ was carried out with the aim of identifying the best policies and delivery methods for the provision of needle exchange services (Jones et al. 2010). The authors reported that in most studies considered within the review, differences in policies used in syringe exchanges did not have an effect on the injecting behaviours of clients.²²⁰ They went on to say that in some studies there was evidence to suggest that younger IDUs and high-risk individuals tended to be more attracted to mobile sites and vending machines. The authors were unable to make any firm conclusions as to the best approach in terms of delivering needle exchange services due to a lack of suitable evidence and recommended that further research should be undertaken to evaluate the impact of such services.

Clinical screening tool for needle fixation

A brief screening tool²²¹ has been developed which aims to identify 'needle fixation'²²² amongst clients in treatment which is thought, in a minority of cases, to be a contributing factor to some individuals' inability to cease injecting drug use (Pates et al. 2009). The authors suggest that the needle fixation profile (NEFPRO) which they have developed may be utilised by clinicians in drug treatment settings to identify if needle fixation is a potential barrier to their clients' treatment and cessation of injecting.

7.3.2 Viral hepatitis prevention and treatment

Hepatitis C: uptake of testing

In England, increasing the proportion of IDUs who are aware of their infection status through improved uptake of voluntary confidential testing is one of the aims of the *Hepatitis C Action Plan for England* (DH 2004). Of those IDUs taking part in the UAM survey in England in 2009, 81% reported having undertaken a voluntary confidential test, compared to 49% in 2000. Fifty-one per cent of those infected with hepatitis C were aware of their status in 2009, compared to 40% in 2000 (HPA 2010).

Of UAM survey participants from Wales, 75% reported having a voluntary confidential test for hepatitis C in 2009, with 45% of those with hepatitis C were aware of their infection. In Northern Ireland in 2009, 92% of IDUs who participated in the UAM survey reported having been tested for hepatitis C, and 52% were aware of their hepatitis C infection (HPA 2010).

Scotland: Hepatitis C Action Plan communication campaign

As part of the two-phase *Hepatitis C Action Plan for Scotland* (Scottish Executive 2006b; Scottish Government 2008c), the Scottish Government launched a communications campaign targeting at-risk groups, including IDUs. The purpose was to raise awareness and encourage hepatitis C testing among at-risk individuals, in order to help reach a target of 2,000 new people in treatment each year. Informative posters were displayed near pharmacies, drug treatment services and within Scottish prisons. The Scottish Government estimate that around 800 new patients were treated for hepatitis C in 2009/10, compared with around 400 in 2007/08.²²³

²²² Where injecting has become a compulsive behaviour (and can be with or without the administration of psychoactive drugs). See section 6.3.4 for further information.

223 See: http://www.scotland.gov.uk/News/Releases/2010/03/08094128 and www.hepcscotland.co.uk

²¹⁹ Studies published since 1990 were extracted from 15 databases and their titles and abstracts were screened by two reviewers. Sixteen studies met the criteria for inclusion.

²²⁰ Based on 11 studies.

²²¹ Qualitative interviews were conducted with 24 IDUs from Cardiff, Wales resulting in 74 statements pertaining to needle fixation. The authors developed this into a 74 statement questionnaire, completed by 80 IDUs, which was then refined on two further occasions to a final 10 point scale. The scale has two questions for each of the following components: substitution; experience of pain; flushing (blood in and out of the vein); injecting to arouse sexual feeling; and injecting as a sexual activity.

Wales: Blood-borne viral hepatitis action plan for Wales 2010-2015

The Welsh Assembly Government has published an action plan (developed by Public Health Wales) on bloodborne viral hepatitis (WAG 2010c) for which it has allocated funding of £1.3 million. The aim is to increase diagnosis levels amongst those who are unaware that they are infected; prevent further transmission; improve care for those with hepatitis B and C; and monitor and evaluate treatment and prevention programmes.

Dried blood spot testing for HCV

In a study measuring the incidence of HCV amongst current IDUs (see section 6.2.2) the authors suggest that increased use of dried blood spot (DBS) specimens could improve HCV surveillance. They go on to say that this method of testing can distinguish between people whose infection has cleared, those with ongoing infections and individuals who have been infected recently. They posit that the information gained from this method of testing could be used to enhance the harm reduction evidence base and the further development of public health interventions (Hope et al. 2010a).

British Liver Trust: information materials for health professionals and drug users

The British Liver Trust²²⁴ (2009) published a guide about hepatitis C for professionals working with IDUs. It also designed a range of information materials²²⁵ targeted at IDUs and prisoners which aim to raise awareness of blood-borne viruses and how to avoid hepatitis B, hepatitis C and HIV transmission.

Hepatitis B vaccination

The proportion of IDUs who participated in the UAM survey and who have taken up an offer of the hepatitis B vaccination has increased markedly over time, rising from 35%, in 2000 to 73% in 2009 (self-reported data²²⁶) (HPA et al. 2010). Self-reported vaccination uptake varied by region and country; in 2009 it was 73% in England (regional range: 64% to 87%), in Wales it was 72%, and in Northern Ireland it was 80% (HPA 2010).

7.3.3 HIV prevention and treatment

HIV testing

Among IDUs, there has been an increase in the uptake of HIV testing in recent years. In 2009, 25% of IDUs (95% CI 24%-27%) who took part in the UAM survey reported never having had a voluntary confidential test for HIV (HPA et al. 2010a). This is the lowest level ever recorded in this survey. Between 1990 (when the UAM survey started) and 2003, the uptake of HIV testing changed little, with 42% (95% CI 41%-44%) reporting never having had a test in 2002 (HPA et al. 2010a).

Awareness of HIV infection in 2009 was comparable to previous years. Of the participants in the UAM survey who had antibodies to HIV, 63% (95%CI 47%-77%) were aware of their infection in 2009, which is similar to the levels seen in recent years (HPA et al. 2010a).

HIV treatment and care

In 2009, 1,547 IDUs living with HIV were seen for HIV-related treatment and care in the UK, an increase of 18% since 2000, when 1,313 IDUs were seen (HPA et al. 2010a). Of the IDUs seen for HIV-related care in 2009, around 37% had CD4 counts of 350 cells per mm3 or less (the level at which it is recommended to start antiretroviral therapy).²²⁷ Equivalent figures were 20% among men who have sex with men (MSM),

²²⁴ See: http://www.britishlivertrust.org.uk/home/health-professionals/literature-for-professionals/a-professionals-guide-to-hepatitis-c-and-injecting-drug-use.aspx

²²⁵ See: http://www.britishlivertrust.org.uk/home/order-resources/blood-borne-virus-awareness-series.aspx

²²⁶ Vaccination uptake data should be interpreted with caution as they are based on self-reports.

²²⁷ Gazzard, B.G & BHIVA Treatment Guidelines Writing Group. (2008). British HIV Association Guidelines for the treatment of HIV-1-infected adults with antiretroviral therapy 2008. HIV Medicine 9 (8) 563-608.

and 30% among heterosexuals (HPA et al. 2010a). In 2009, of the 510 IDUs seen for care with CD4 counts of 350 or less, 18% were not in treatment; this is comparable to other risk groups (20% among MSM and 15% among heterosexuals) (HPA et al. 2010a).

Condom use

Participants in the UAM survey are asked about the number of sexual partners they had and condom use with these partners during the preceding year. Data from the survey for England, Wales and Northern Ireland indicates that of those reporting more than one sexual partner during the past year only 20% had always used a condom for vaginal or anal intercourse (HPA 2010).

7.3.4 Responses to other infectious diseases

Anthrax outbreak 2009/10

Health Protection Scotland (HPS) and the Health Protection Agency (HPA) in England have published guidance for drug users and professionals in response to an outbreak of anthrax (Bacillus anthrax) amongst heroin users in the UK (see section 6.2.3). This includes a dedicated website²²⁸ for each country providing updates on the outbreak and information materials aimed at users, clinicians and drug workers. In Scotland, an Outbreak Control Team (OCT) was established by HPS to co-ordinate expert epidemiological advice; provide surveillance and issue updates and information regarding the outbreak to those at risk; and work with the police to try and identify the source of the contamination. They also co-ordinated the distribution and use of anthrax anti-toxin as an adjunct to classical treatment protocols for those affected (Scottish Government 2010b).

7.4 Responses to other health correlates amongst drug users

Cannabis and schizophrenia

In a research report by Hickman et al. (2009a) the authors estimated the size of drug prevention efforts required in order to prevent one case of schizophrenia or psychosis in cannabis users.²²⁹ They concluded that the size of the prevention effort required is so great that, in their opinion, it would be more beneficial to focus instead on establishing if a causal link exists between cannabis use and psychosis. They went on to suggest that further thought should be given to developing prevention strategies that encourage reduction of heavy cannabis use amongst young people.

Pregnant substance users

An all Wales maternity record has been introduced which includes questions designed to support expectant mothers with a substance misuse problem (WAG 2010a).

Drug adulteration

A report published in 2010 presented a summary of the evidence of drug adulteration, including reference to the UK anthrax outbreak (Cole et al. 2010). The report recommended improved public health responses to adulteration incidents including: routine national and international surveillance and access to data on adulterants; shared learning from adulteration outbreak situations; development of protocols to respond to and minimise the risks to health that adulterants represent; and access to information and training about adulterants for key personnel, such as emergency medical staff, general health professionals and drug treatment staff.

²²⁸ See: http://www.hps.scot.nhs.uk/anthrax/index.aspx and http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/ Anthrax/

²²⁹ They calculated this using estimates of schizophrenia; risk of cannabis causing schizophrenia and rates of cannabis use (heavy and light).

8. Social correlates and social reintegration

8.1 Introduction

There is a large volume of evidence from the United Kingdom showing an association between problem drug use and social exclusion. A high proportion of problem drug users have been socially excluded as children and young people; many are poorly educated; a high proportion live in inappropriate housing; and research in 2008 suggested that just over 80% (266,798) of problem drug users in England were in receipt of state benefit, representing seven per cent of all those receiving such benefits (Hay and Bauld 2008). There are also further concerns about the effect of parental drug use on children, leading to problems of social deprivation for them.

Social reintegration is a key element within recent drug strategies in England, Scotland and Wales. The strategy for Northern Ireland also recognises the need to provide support with housing and employment and wider support with social reintegration. There are various programmes to help drug users. The Supporting People Programme, introduced in 2003, provides housing related support to vulnerable groups generally, including people with drug problems. Progress2work (p2w), initiated in 2002 supports recovering drug users who are drug free or stabilised, in gaining employment. The Building Safer Communities Fund aims to develop communities that are resistant to drugs. Social inclusion programmes such as Positive Futures can bridge the gap between universal and targeted services (see section 3.2.2). Attention is also focused on the impact of parental drug use on children. In addition, there is a growing number of responses to neighbourhood problems associated with problem drug use, including drug dealing. For example, the *Anti-social Behaviour Act 2003* seeks to stop the use of premises for drug dealing. Also, there is guidance to tackle the inappropriate disposal of drug paraphernalia.

8.2 Social exclusion and drug use

8.2.1 Housing

Treatment data

Data from the National Drug Treatment Monitoring System (NDTMS) in England show that in 2009/10, eight per cent of clients presenting for treatment reported an urgent housing problem, down from 10% the previous year.

Using NDTMS data for 2008/09 the National Audit Office (NAO) estimated that there were up to 100,000 problem drug users (PDU) in England with a housing problem (NAO 2010).

In a UK Drug Policy Commission study (UKDPC 2010a) looking at baseline Treatment Outcomes Profile (TOP) data and ethnicity (see section 5.3.7), those from Black ethnic groups were most likely to report an acute housing problem (29.5%) and be at risk of eviction (14.3%) with those from Asian ethnic groups least likely to report an acute housing problem (12.5%) or to be at risk of eviction (6.6%).

Data from the Scottish Drug Misuse Database (SDMD) show that 16% of clients entering drug treatment in 2008/09 were homeless (ISD Scotland 2010a). Seventeen per cent of clients reported that they lived with other drug users.

8.2.2 Employment and education

Treatment data

Data from England, Scotland and Northern Ireland show that 15.1% of those entering treatment in 2008/09 were in regular employment, with males (16.7%) more likely to be in regular employment than females (10.6%). Amongst those entering treatment for the first time, the rate of employment was higher at 20.2%. Only eight per cent of those entering inpatient treatment reported being in regular employment, although for just over one-third of presentations, labour status data were not available.

Seventy-one per cent of clients entering treatment in Scotland in 2008/09 were unemployed and only 15% were employed. Sixty-eight per cent reported funding drug use from welfare benefits (ISD Scotland 2010a).

The UKDPC study (UKDPC 2010a) found that, of those completing a baseline TOP in 2008/09, those from Black ethnic groups were less likely to be undertaking paid work (12.2%) than those from White ethnic groups (19.3%) with those from Asian ethnic groups (26.2%) most likely to report participating in paid work in the past four weeks.

Problem drug users' experiences of employment and the benefit system

Research carried out for the Department for Work and Pensions (DWP) explored PDUs' experiences of employment and the benefit system (Bauld et al. 2010). The research focussed on users of heroin and crack cocaine and looked at the interaction between benefits, employment and drug use through a literature review and interviews with PDUs and professionals.²³⁰ Barriers to employment identified included poor self-confidence, lack of education, training and skills, ongoing drug use and stigmatisation by employers. Almost all interviewees viewed becoming drug-free as a higher priority than coming off benefits and getting a job but most aspired to move into some form of work in the future. The study concludes that there is a need for wider availability of support to PDUs, and greater integration between drug treatment services, the social security system, employment services and employers.

8.2.3 Families

Treatment data

In Scotland in 2008/09, 42% of clients reporting to the SDMD stated that they had dependent children under the age of 16 years old.²³¹ The percentage of individuals with dependent children has remained stable between 2006/07 and 2008/09 (42% in 2006/07; 43% in 2007/08; and 42% in 2008/09) (ISD Scotland 2010a).

In Northern Ireland in 2008/09, Treatment Demand Indicator (TDI) data show that 6.3% of clients presenting to outpatient treatment lived alone with a child with a further 16.4% living with a partner and child.

²³⁰ The literature review used a systematic methodology, searching databases and websites with specific search terms.

²³¹ The Scottish Drug Misuse Database (SDMD) records information on drug misusers using information collected from a standard reporting tool. It should be noted that, while this is a source of information on children affected by parental substance misuse, the main purpose of the database is not to assess the numbers of children living with substance misusing parents and only parents who are entering treatment will be recorded. Information on children is not reported for all clients, and relies upon honest self disclosure.

Families affected by drug use

A report from the UKDPC (Copello et al. 2009) estimated the number of adult family members affected by drug use. Using data from a number of sources including findings on drug dependence²³² and living status from the 2007 Adult Psychiatric Morbidity Study (APMS) (Fuller et al. 2009) (see 2009 UK Focal Point report), it is estimated that at least 1,443,774 adult family members live with a PDU, the majority of whom (84%) live with a problematic cannabis user. The authors suggest a number of ways in which these figures may under-estimate the number of family members affected by drug use. This includes the fact that the analysis is limited to adult family members living with a drug misuser and that the focus is on the use of opiates, cocaine and cannabis.

Estimates of the social cost and resource savings of family members living with a problem opiate/crack cocaine user show that the social cost per family member per annum is €10,979 (£9,497), with annual resource savings to the National Health Service (NHS) of €905 (£783) and to the local authority of €3,644 (£3,152). Multiplying this by the estimates of the numbers affected gives a minimum total social cost of €2.08 billion (£1.8 billion) and resource savings for the NHS and local authorities combined of €864 million (£747 million).

8.2.4 Sex workers

Data from Scotland show that two per cent of those entering drug treatment in 2008/09 funded their drug use through sex work (ISD Scotland 2010a).

8.2.5 Stigmatisation of problem drug users

Lloyd (2010), on behalf of the UKDPC, carried out a literature review of the research evidence on the stigmatisation of problem drug users. The author examines the attitudes of the general public, health professionals and young people towards PDUs and goes on to look at stigma from a user perspective. Research shows that a substantial proportion of PDUs feel stigmatised when attending a pharmacy to pick up a methadone prescription or obtain syringes and needles and the author also highlights the particular stigma of methadone. Other situations where stigma may occur are in interactions with the police and during recovery, when past drug use may make employers reluctant to employ someone. The study suggests that medicalisation of drug addiction rather than criminalisation may reduce stigma but points out that many other diseases have been, and still are, stigmatised. The role of the media in exacerbating fears around drug use and criminal behaviour is also discussed by the author and the feeling that drug users are culpable for their addiction is seen as contributory factor towards stigmatisation. The report concludes that stigmatisation matters and that it has a serious impact on drug users' lives and can prevent the social reintegration of drug users (see SQ28).

²³² A positive response to any of the following items was used to indicate drug dependence: daily use for two weeks or more; a sense or need or dependence; an inability to abstain; increased tolerance; and withdrawal symptoms.

8.2.6 Perceptions of anti-social behaviour

Analysis of the 2009/10 *British Crime Survey* (Flatley et al. 2009) looking at measures of anti-social behaviour shows that 14% of respondents perceive there to be a high level of anti-social behaviour in their area, down from 17% in 2008/09. One of the seven indicators used to compile this measure is people dealing or using drugs. In 2009/10, 26% of respondents reported that this was a problem in their area, a statistically significant reduction from 27% in 2008/09. Looking at the long-term trend, the levels are higher than that reported in 1996, but lower than the levels reported in the early 2000s (Figure 8.1)

Figure 8.1: Proportion of adults reporting people using or dealing drugs to be a problem in their area in England and Wales, 1996 to 2009/10



Source: Flatley et al. 2010

The Scottish Household Survey 2009 (Scottish Government 2010f) found that 12.1% of respondents perceived drug misuse or dealing to be 'very' or 'fairly common' in their neighbourhood. This varied from 32% in the ten per cent most deprived areas to two per cent in the ten per cent least deprived areas, as measured by the Scottish Index of Multiple Deprivation.

8.3 Social reintegration

8.3.1 Housing

England

Housing policy is devolved to the local level in England. This makes it difficult to accurately measure the extent of the national problem but enables flexibility to address local issues. Nevertheless there are national programmes, providing funding for local authorities to tackle housing problems amongst drug users.

In 2008/09 local authorities spent €37.76 million (£30 million) on housing-related support services for drug users funded through the Supporting People programme.²³³ The NAO state that there is no UK research assessing the efficacy of measures to put problem drug users in appropriate accommodation (NAO 2010). Since 2010 Supporting People funding is no longer ring-fenced.

²³³ The Supporting People programme provides housing-related services to vulnerable client groups at risk of social exclusion.

Research carried out on behalf of the Communities and Local Government Department estimated the financial benefits of the Supporting People programme in 2009 (Ashton and Hempenstall 2009). At the time of the research, there were 4,895 household units of people with drug problems receiving Supporting People services at an average cost per package of €30,859 (£27,331) per household unit per annum. The cost per package includes the cost to Supporting People €6,953 (£6,158), housing costs €4,568 (£4,046), health service costs €2,649 (£2,346), crime costs €2,649 (£2,346) and benefits and related services €4,688 (£4,152). Using the assumption that, in the absence of Supporting People 80% of households would require residential rehabilitation packages and 20% would require inpatient psychiatric care, the authors estimate the overall net benefit of the programme for drug users to be €178.2 million (£157.8 million) per annum. This difference is due to the higher package costs for residential and inpatient care although the alternative reduces 'event' costs mainly through a reduction in criminal justice costs.

Scotland

In March 2009, three events were held across Scotland to disseminate the findings of a research publication, *Effective services for substance misuse and homelessness in Scotland: Evidence from an international review* (Scottish Government 2008d) and to seek a response from people working in these areas. Participants showed considerable interest in the Housing First²³⁴ approach described in the research and were keen to develop models based on this approach in Scotland. Other issues raised were:

- difficulty in accessing accommodation;
- a lack of suitable accommodation;
- the loss of accommodation due to substance misuse;
- involvement in substance misuse due to lack of appropriate accommodation;
- the perception that the targets for housing providers (such as sustainable communities, rent collection and dealing with anti-social behaviour) are incompatible with supporting problem substance misusers unless a 'bigger picture' is borne in mind; and
- local variation in treatment service availability and accessibility for substance misusers.

Based on the research and the outcomes from the events, the Advisory Group on Homelessness and Substance Misuse published 12 recommendations (Scottish Drugs Forum 2010). These recommendations were in the context of the Scottish Government commitment that all unintentionally homeless households will be entitled to settled accommodation by 2012. Additionally, a Housing First pilot was established by Turning Point Scotland in Glasgow during 2010.

8.3.2 Employment

In April 2009, a voluntary referral pathway to treatment discussions was introduced across England. Between April 2009 and January 2010, over 1,100 referrals were made.

²³⁴ The Housing First approach model originated in the United States and differs from the continuum of care model as it looks to move homeless people directly into independent housing rather than via a number of interim steps.

Welfare reform drugs recovery pilot scheme

The previous Government announced that Welfare Reform Drug Recovery Pilots would take place in five Jobcentre districts in England from October 2010 for two years. A consultation on the regulations governing these pilots was launched in February 2010 (SSAC 2010a). The proposals stated that, where there is reasonable suspicion that a claimant is a PDU and he/she is not in treatment, the pilot scheme would require the claimant to attend a two-part substance related assessment. If they failed to engage, they would be required to undergo mandatory drug testing. Problem drug users would then have to adhere to a mandatory rehabilitation plan including a treatment awareness programme although drug treatment would not be forced upon the individual. Where clients failed to engage, benefit sanctions would be imposed.

The Social Security Advisory Committee (SSAC) criticised the proposals in its response to the Green Paper (SSAC 2010b). The report called the proposals "unconvincing" and "simplistic" and expressed the concern that coercion and the removal of income could worsen the situation. Furthermore, previous schemes linking behavioural change with benefit receipt have been unsuccessful and the proposals to exchange information with law enforcement authorities was seen as a "clumsy and disproportionate approach to identifying a relatively small group of people."

Following publication of the SSAC's response, the new Government announced that it would not be proceeding with the Welfare Reform Drug Recovery Pilots.²³⁵ In a letter to the Chair of the SSAC, the Minister for Disabled People stated that the new Government wished to take a more holistic approach than the proposed pilot scheme, recognising other barriers to employment for substance misusers such as housing, offending behaviour and mental health.

Grover and Paylor (2010) argue that the approach taken in the welfare reform paper, *No one written off* (DWP 2008), most notably the coercive element, is deeply problematic since it has the potential to impoverish drug users and it pathologises PDUs instead of focusing on barriers that they face in accessing paid work. Furthermore, it oversimplifies the situation and does not recognise the complex relationship between unemployment and problem drug use. The authors situate the welfare proposals within a wider framework of the criminalisation of social policy and believe it represents the tension between the poverty and social exclusion agenda on the one hand and the remoralisation agenda on the other hand.

Progress2work²³⁶

A report by the National Audit Office (NAO 2010) on tackling problem drug use states that only eight per cent of drug users who have received help into employment kept a job for 13 weeks or more. They estimate the cost per drug user helped into a job as €14,602 (£11,600) in 2008/09. Around 12,500 individuals joined the programme each year between 2006/07 and 2008/09 but the number starting a job after participating in the programme fell from 2,500 to 1,950. The report recommends that a review of the programme is undertaken to improve value for money and identify successful aspects of the programme.

The new Government has stated that all welfare to work programmes will be combined into one overarching programme (Cabinet Office 2010). This will affect the Progress2work scheme and the DWP is in dialogue with existing contract holders.

²³⁵ See: http://www.dwp.gov.uk/newsroom/press-releases/2010/june-2010/dwp072-10-170610.shtml

²³⁶ Programme aimed at providing employment support for people with drug dependency who are stable in recovery.

Guidance on developing local protocols

The former Department for Children, Schools and Families (DCSF),²³⁷ Department of Health (DH), and the National Treatment Agency (NTA) (2009) published joint guidance on the development of local protocols between drug and alcohol treatment services and local safeguarding and family services. The guidance states that treatment services should be routinely screening clients for childcare responsibilities and recommends a whole family approach by sharing information and working together with dedicated children, family and parenting services. The guidance provides a checklist of actions for both drug and alcohol treatment services and children, parenting and family services to aid them in carrying out their responsibilities.

Interventions for adult family members affected by problem drug use

A report by UKDPC into adult family members and PDU (Copello et al. 2009) (see section 8.2.3) summarises effective interventions to help family members and users. It separates interventions by their specific focus: interventions responding to the needs of family members in their own right; interventions supporting family members to help facilitate drug users' entry into treatment; and interventions working with family members and users together. The report goes on to suggest the development of a template involving levels of responses which can be used to monitor the extent of service provision across the UK.

Family drug and alcohol court

In January 2008, the first ever family drug and alcohol court was opened in the UK as a pilot project. Located in London and funded by central government, Camden, Islington and Westminster Councils, the pilot was originally due for completion in December 2010 but has now been extended. An interim evaluation report was published in 2009 (Harwin 2009) with a final evaluation report due later in 2010.

The 5-step intervention for family members

A small research project looked at the suitability of a structured brief intervention, the 5-step²³⁸ intervention, for delivery in a group setting (Templeton 2009). Using data from a pre and post-intervention questionnaire completed by 12 family members who attended a themed carer programme, the study found that family members can demonstrate positive change as a result of attending a group programme. According to the author, the results show that the intervention can be successfully adapted as part of a structured group programme for family members although the small sample size limits the generalisability of the results.

Adfam's manifesto for families

Adfam, a national charity working with families affected by drug and alcohol abuse published a 2010 manifesto highlighting five key challenges:

- 1. supporting families in their own right;
- 2. involving families in treatment;
- 3. monitoring effectiveness;
- 4. public services thinking family; and
- 5. commissioning effectively.
- ²³⁷ Following a change in Government in May 2010, DCSF is now called the Department for Education.
- ²³⁸ The five steps are: listen to the family member's story, offer guided advice and information, explore coping, explore social support, and explore further needs.

These challenges were identified during a series of regional consultations with stakeholders at the end of 2009 (Adfam 2010).

Further work from Adfam includes a report on recovery and families (Adfam and Drugscope 2009). Following a national conference in November 2008, a number of themes were picked up and condensed into five recommendations:

- 1. there should be a detailed cost-benefit analysis of the economic value of investing in family support;
- 2. the support available to families of drug users must be improved and increased;
- 3. there should be a full inquiry into the experiences of the families of drug users and the services available to help them, with recommendations to government;
- 4. the contribution of families to recovery should be at the centre of policy development, not the margins; and
- 5. there is an urgent need to improve support for families that have lost contact with or disengaged from a family member with a drug problem.

9. Drug-related crime, prevention of drug-related crime and prison

9.1 Introduction

Drug use is not a crime in the United Kingdom, but possession, dealing and trafficking are specific offences under the *Misuse of Drugs Act 1971*. Recorded drug crimes, after increasing in recent years, fell in 2009/10. The number of persons dealt with by the courts for drug offences, cautioned or issued formal cannabis warnings, has risen, mainly for cannabis related offences but there has also been a rise in cocaine powder offences. A prison sentence is the most common outcome when found guilty at court of import/export and trafficking offences but a fine or community sentence are the most common disposals for possession offences.

Police records on general criminal offences do not contain information on the offenders' drug habits, neither do records of specific drug law offences. It is therefore not possible to provide an accurate estimate of the number of offences that are drug-related, but there is substantial research evidence of the link between drug use, particularly use of heroin and crack cocaine, and acquisitive crime. Around three-quarters of the users of these drugs admit to committing crime to support their habit. Around two-thirds of those in custody are reported to be recent drug users with an estimated 55% of prisoners received into custody being problematic drug users (PDU). However, acquisitive crime, to which drug-related crime makes a substantial contribution, has fallen in recent years.

Since 2003, the Drug Interventions Programme (DIP) has operated in every local area in England and Wales to tackle Class A drug misusing offenders, managing over 58,300²³⁹ into drug treatment in 2009/10. Local programmes intervene at various stages through the criminal justice journey, making use of legislative sanctions to direct drug misusing offenders into treatment and other support to reduce their offending. The Drug Rehabilitation Requirement (DRR), which can be attached to a Community Order is the primary measure used at court stage to address drug-related offending in England and Wales.

In Scotland, Drug Treatment and Testing Orders (DTTOs) provide offenders with access to treatment services as a requirement of the order. These have been extended to lower tariff offenders on a pilot basis in Edinburgh and Lothians in the form of DTTO IIs.

There is a range of measures to prevent drugs entering prison including clearly-defined searching procedures covering all possible routes; passive and active drug dogs, with passive dogs available to all prisons; CCTV surveillance of all social visit areas and low-level fixed furniture; and comprehensive measures to tackle visitors attempting to smuggle drugs, including closed visits, visit bans and police arrest. Recently introduced initiatives include mobile phone blocking to prevent contact with dealers and the introduction of body orifice searches. Since April 2006 in England and Wales, responsibility for prison health services has been fully devolved to the National Health Service (NHS), and an Integrated Drug Treatment System (IDTS) has been developed to improve the availability and quality of drug treatment in prison, bringing it in line with treatment in the community. In Scotland, responsibility for health care in prisons is to be transferred to the NHS.

9.2 Drug-related crime

9.2.1 Drug law offences

Recorded crime

After the introduction of the cannabis warning in England and Wales in 2004 recorded drug offences increased with a 90% increase in cannabis possession offences between 2004/05 and 2008/09. However,

²³⁹ This figure includes offenders identified through DIP in the community and in prison in England and Wales, entering Tier 2 and Tier 3/4 drug treatment.

in 2009/10 recorded drug crime decreased by 3.5% due to a 5.5% decrease in possession offences (Table 9.1), both for cannabis and other drugs. Nevertheless, cannabis possession offences accounted for 69% of all recorded drug offences in England and Wales in 2009/10. Recorded trafficking offences have increased continually since 2004/05 with a 6.8% increase in the United Kingdom between 2008/09 and 2009/10.

Table 9.1: Recorded crime: Drug offences in the United Kingdom by offence type and country, 2003/04 to 2009/10²⁴⁰

	YEAR						
	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
England and Wales							
Trafficking*	24,628	24,190	25,276	26,550	28,330	29,894	33,009
Possession	118,006	120,866	152,602	167,003	200,735	212,527	200,872
Other drug offences**	877	781	601	680	816	1,123	1,117
Total offences	143,511	145,837	178,479	194,233	229,881	243,544	234,998
		No	rthern Irela	nd			
Trafficking	405	375	349	473	529	607	668
Possession	2,184	2,247	2,595	1,938	2,191	2,367	2,478
Total offences	2,589	2,622	2,944	2,411	2,720	2,974	3,146
			Scotland				
Trafficking	9,537	9,333	9,613	10,890	9,827	10,315	9,901
Possession	32,463	32,268	34,440	31,329	30,559	31,805	29,179
Other drug offences***	275	222	194	203	360	389	328
Total offences	42,275	41,823	44,247	42,422	40,746	42,509	39,408
United Kingdom							
Trafficking	34,570	33,898	35,238	37,913	38,686	40,816	43,578
Possession	152,653	155,381	189,637	200,270	233,485	246,699	232,529
Other drug offences	1,152	1,003	795	883	1,176	1,512	1,445
Total offences	188,375	190,282	225,670	239,066	273,347	289,027	277,552

*Trafficking usually includes production, supply, possession with intent to supply, possession on a ship, carrying on ship and unlawful import and export.

**For England and Wales 'other drug offences' mainly concerns permitting premises to be used for the production, supply and use of drugs.

***For Scotland 'other drug offences' includes production and manufacture of drugs (not illegal cultivation), money laundering related offences and other drugs offences not designated as trafficking or possession.

Source: Flatley et al. 2010; Walker et al. 2009; Kershaw et al. 2008; PSNI 2004a; PSNI 2006a; PSNI 2008a; PSNI 2010a; Scottish Government 2010g

²⁴⁰ Police forces in England and Wales revise their data as further information becomes available and figures in this table may therefore not agree with those previously published.

Arrests for drug offences

The number of persons arrested for drug offences increased by 10% between 2007/08 and 2008/09 after a 17% increase the previous year (Table 9.2). The figure is now higher than in 2003/04 before the introduction of the cannabis warning (which does not constitute an arrest). Arrests data do not allow the identification of individual drug so it is not possible to comment on the use of arrest for individual drugs.

In England and Wales in 2008/09 drug arrests increased by 10.5% for men and 8.0% for women (Povey et al. 2009). The largest increase was amongst adults aged 21 years and over (12%) with an increase of six per cent amongst those aged 18 to 20 years old and five per cent amongst those under the age of 18 years old.

Table 9.2: Number of persons arrested for drug offences in England and Wales, and Northern Ireland,2002/03 to 2008/09

YEAR							
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
England and Wales	131,100	113,100	84,800	88,600	89,393	104,532	115,116
Northern Ireland	1,295	1,754	1,356	1,440	1,726	1,896	2,014
Total	132,395	114,854	86,156	90,040	90,926	106,428	117,130

Source: Povey et al. 2009; Povey et al. 2010; PSNI 2004b; 2006b; 2008b; 2010b

Stop and searches for drugs

In 2008/09, 536,576 stop and searches for drugs were carried out by police in England and Wales, a 12% increase from the previous year. The number of arrests for drug offences as a result of these stop and searches was 40,631, accounting for eight per cent of all drug stop and searches. This is a seven per cent decrease from the previous year (Povey et al. 2009).

Beddoes et al. (2010) looked at Ministry of Justice (MOJ) data for 2007/08 on race and the criminal justice system. They conclude that:

- Black and Minority Ethnic (BME) groups are disproportionately targeted for stop and searches with those from Asian ethnic groups most likely to be affected;
- despite lower proportions of people from BME groups being arrested for drug offences, they experience a higher sentencing rate than White groups; and
- the over-representation of BME groups in the policing of drugs may be due to the fact that a high proportion of BME groups are present in high-crime stop and search areas.

MOJ data for 2008/09 show that 66% of all stop and searches for drugs were of White ethnic origin, 20% were of Black ethnic origin and 12% were of Asian origin. For both White and Black ethnic groups, eight per cent of stop and searches for drugs resulted in an arrest with this proportion falling to six per cent for those of Asian ethnic origin (MOJ 2010a)

Convictions for drug offences

There was a 10% increase in the number of convictions and cautions for drug offences between 2007 and 2008 (Table 9.3). Crack cocaine convictions increased by 28% between 2007 and 2008 with a 38% increase in trafficking convictions and a 20% increase in possession offences. Cocaine powder convictions continued to rise in 2008 with a 19% increase for both trafficking and possession.

Cannabis convictions fell substantially in 2005 after the introduction of the cannabis warning for personal possession and remained stable in 2006 and 2007. In 2008, however, convictions increased by 14% including a 12% increase in possession convictions. Cannabis trafficking convictions increased by 26% which is consistent with increasing reports of cannabis farm discoveries around this time.

Table 9.3: Drug offences where the offender was found guilty or issued a caution in the United Kingdom,2001 to 2008 by individual drug

YEAR								
	2001	2002	2003	2004	2005*	2006*	2007*	2008*
Amphetamines	4,950	5,820	6,163	6,249	6,864	7,422	7,478	7,822
Cannabis	72,691	83,152	85,768	82,845	54,813	55,984	55,563	63,103
Cocaine powder	3,090	6,990	7,905	9,382	12,028	15,470	19,216	22,874
Crack cocaine	1,460	1,830	2,270	2,450	3,734	4,076	4,613	5.895
Ecstasy	7,880	6,590	5,940	6,209	6,337	6,233	7,189	5,107
Heroin	12,380	11,860	11,277	12,412	15,629	15,741	16,557	17,926
LSD	150	90	150	90	183	172	165	156
Total	103,080	113,465	117,532	122,459	118,706	124,344	135,655	149,203

*Data since 2005 are on an all offence basis; data for 2000 to 2004 are based on principal drug offence.

Source: Standard Table 11

9.2.2 Other drug-related crime

Amongst those entering drug treatment in Scotland during 2008/09, a quarter (25%) stated that they funded their drug use through crime (ISD 2010a).

Drug driving

The Association of Chief Police Officers (ACPO) ran a national drink and drug driving campaign throughout June 2010. Results show that 22.3% of drivers asked to carry out a field impairment test on suspicion of drug driving failed the test. This is a decrease from just over one-third in the 2009 campaign.²⁴¹

Trends in drug use amongst drug driving offenders

Officer (2009) used data from cases submitted for analysis to the Scottish Police Services Authority's forensic laboratory to explore trends in drug use amongst Scottish drivers arrested under Section 4 of the *Road Traffic Offenders Act 1988.*²⁴² Data showed that there was a significant increase in the presence of benzodiazepines from 39% of cases between 1996 and 2000 to 85% in 2003 and 83% in 2008. Cannabinoids were consistently present ranging from 36% in 2003 to 53% in 2008 while cocaine was detected in around 15 to 25% of cases. There has been an increase in the detection of opiates since the analysis carried out between 1996 and 2000. Furthermore, there has been a substantial increase in polydrug use with 83% of cases testing positive for two or more drugs in 2008 compared to 28% between 1996 and 2000.

²⁴¹ See: http://www.acpo.police.uk/pressrelease.asp?PR_GUID={515834F9-3E8C-4B5F-9FAD-274ACB7ECC19}

²⁴² UK law states that a person can be prosecuted under Section 4 of the Act if they drive or attempt to drive whilst unfit through drink or drugs.

Drug driving testing mechanisms

The Northern Ireland Assembly (2010) published a research paper looking at drug driving testing mechanisms used globally.

9.3 Prevention of drug-related crime

9.3.1 Drug Interventions Programme (DIP) in England and Wales

DIP remains the primary method of engaging drug-using offenders with drug treatment services. In 2008/09, there were 10,893 new adult entries to structured treatment²⁴³ from arrest referral/DIP in England, accounting for 13% of all new treatment entrants and 48% of all criminal justice referrals (NTA 2009).

Data from the Home Office (Home Office 2009) show that in 2008/09, 57,900 adults commenced treatment in England and Wales through DIP. This includes Tier 2 treatment and those who commenced Tier 3/4 treatment within 28 days and cannot be compared to the NTA figure above.

Drug Interventions Programme: Wales Annual Report

The annual report for DIP in Wales 2008/09 (Hardy and Williams 2009) outlines DIP progress in each of the Welsh police force areas. It shows that case work volume has increased with the number of contacts up by seven per cent. The number of clients treated through the rapid access prescribing service has increased by 17% and performance vis-à-vis key performance indicators has improved slightly.

9.3.2 Re-offending

In England and Wales a cohort of 20,934 drug-misusing offenders was identified between 1 January 2008 and 31 March 2008 through their contact with the Criminal Justice System and then matched to the Police National Computer (PNC). Their offending was monitored through offences committed in the 12 months following identification, proven in court. During the 12 months following identification, individuals in the cohort were convicted of a total of 54,462 proven offences. This equates to a baseline rate of offending of 2.60 offences per individual. Sixty-one per cent of the cohort were convicted of at least one offence in the 12 months following identification. Twenty-five per cent were convicted of either one or two offences, while 16% were convicted of more than five offences. Comparing proven offending rates by different ways in which drug-misusing offenders were initially identified reveals that those individuals identified as drug misusers on release from prison and who also tested positive for Class A drugs following an arrest, had a rate of proven offencing that was markedly higher than any other group of offenders in the cohort (5.59 proven offences per individual) (Home Office 2010d).

Data from Scotland show that the two-year re-offending rate of a 2006/07 cohort of drug offenders was 45%. The most common offence for reconviction amongst this cohort was another drug offence (23%), violent crime (19%) and breach of the peace (18%). Looking at disposal type, those sentenced to a DTTO were most likely to re-offend with 86% of the 2006/07 cohort doing so in two years, an increase from the previous year's level of 81%. The average number of reconvictions for those given a DTTO was 3.7 over two years with almost half (49%) of the cohort receiving a custodial sentence within two years (Scottish Government 2010h).

Data from Northern Ireland show that the two-year re-offending rate of those convicted of drug offences in 2005 was 47% (NIO 2009)

²⁴³ Data refer to new entrants to Tier 3 and 4 adult drug treatment in England.

Policing of new psychoactive substances

The Association of Chief Police Officers issued guidance on the policing of new psychoactive substances in December 2009 to support the classification of synthetic cannabinoids, GBL, BZP and related piperazines. This guidance has since been updated to include advice on mephedrone and related cathinone derivatives and naphyrone (ACPO 2010a). It provides operational guidance for policing these substances which includes options for greater collaboration with local authorities such as engaging with headshops to ensure that they are fully aware of the legal status of recently controlled substances and to make them aware that the police maintain an interest in their activities.

9.4 Interventions in the criminal justice system

Structural Reform Plan

In July 2010 the Ministry of Justice published its Draft Structural Reform Plan (MOJ 2010b). It states that a full examination of sentencing policy will be conducted: "to ensure that it helps to cut crime, protects the public, punishes offenders and reduces re-offending. In particular, to ensure that sentencing for drug use helps offenders come off drugs." It suggests that the rehabilitation of offenders could be contracted out to third parties in the voluntary and private sector under a trial payment by results scheme. Other actions include the creation of a prison capacity strategy which considers the use of alternative forms of secure, treatment-based accommodation for mentally ill and drugs offenders.

Criminal justice and addiction

The Centre for Social Justice, a think-tank, published its green paper on criminal justice and addiction. Its main recommendations include the abolition of central targets, the creation of new governance structures, police reform, courts and sentencing reform and more localism. It also advocates the use of secure community rehabilitation centres for those needing specialist treatment as well as punishment (The Centre for Social Justice 2010).

9.4.1 Sentencing for drug offenders

Sentencing for drug offences

Following a consultation exercise carried out in 2009 (see 2009 UK Focal Point report), the Sentencing Advisory Panel (SAP) published advice to the Sentencing Guidelines Council on sentencing for drug offences (SAP 2010). The advice suggests that the seriousness of a drug offence should be determined by the quantity of drug and the role of the offender rather than purity or street value. The class the drug is in should be the starting point for sentencing ranges and differentiation within classes should be based on quantity not type of drug. In addition to the aggravating and mitigating factors contained in previous guidelines (Sentencing Guidelines Council 2004), the advice provides further drug offence specific factors. Factors indicating higher culpability are:

- supply or offer to supply a drug on or in the vicinity of a school;
- targeting of premises where there are vulnerable people who are susceptible to persuasion or coercion;
- offender used or permitted a person under 18 years old to deliver controlled drug; and
- pressure, influence or intimidation (violent or otherwise) exerted on another to commit an offence.

Factors indicating lower culpability are:

- mistaken belief of offender regarding type of drug;
- offence not commercially motivated; and
- inducement to supply falling short of entrapment.

Factors identified as indicating a more serious degree of harm include: supply to prisoners; possession of a knife or other weapon; and exposure of others to danger. Offender mitigation factors include: drugs used to help a medical condition; an offender's vulnerability was exploited; pressure, intimidation or coercion; and impact of sentence on offender's dependency.

The advice provides matrices to determine the appropriate sentence based on four levels of drug quantity and three levels of offender involvement.

England and Wales

In 2008 41,869 persons were proceeded against in court for drug offences in England and Wales, a decrease of 14% on the previous year (48,923). Of those proceeded against, 93% were found guilty with females (89%) less likely to be found guilty than males (94%).

Of the 39,028 sentenced for drug offences during 2008, 20.8% were given immediate custody (Table 9.4), with a large majority of those found guilty of import/export offences receiving this sanction (92.2% compared to only 4.6% of possession offences). The use of immediate custody for drug offences increased from 18.4% in 2007 and this increase was seen for all types of drug offence. There was a decrease in the use of community sentences from 23% in 2007 to 19% in 2008, which was reflected across all offence types particularly possession with 20% receiving a community sentence in 2008 compared to 25% in 2007.

A fine remained the most likely sentence for those found guilty of possession offences (47.7%) which is reflected in the fact that over a third of all offences (34.6%) were given a fine (MOJ 2009).

 Table 9.4: Number and percentage of offenders aged 21 and over receiving each disposal for drug offences in England and Wales, 2008 by offence type

	IMMEI CUST	DIATE ODY	SUSPE SENT	NDED ENCE	COMM SENTE	UNITY NCES	FIN	E	отн	ER	TOTA SENTEN	AL ICED
	n	%	n	%	n	%	n	%	n	%	n	%
Import/export	732	92.2	14	1.8	14	1.8	21	2.6	13	1.6	794	100
Trafficking*	5,726	55.2	1,790	17.3	1,804	17.4	555	5.4	496	4.8	10,371	100
Possession	1,237	4.6	555	2.1	5,364	20.0	12,793	47.7	6,883	25.7	26,832	100
Other	436	42.3	174	16.9	179	17.4	136	13.2	106	10.3	1,031	100
Total	8,131	20.8	2,533	6.5	7,361	18.9	13,505	34.6	7,498	19.2	39,028	100

*Includes production, supply, and possession with intent to supply **Source:** MOJ 2009 The class of drug had an effect on the type of sentence given with Class A offenders more likely to go to prison for import offences (98.6%) and possession offences (7.0%) compared to Class C offenders (88.0% and 2.1% respectively).

Table 9.5 shows that the average prison sentence is longer for more serious offences and those in a higher drug class.

Table 9.5: Average sentence length (months) for offenders aged 21 and over given immediate custodyin England and Wales, 2008 by offence type and drug class

DRUG CLASS	IMPORTATION	TRAFFICKING	POSSESSION
Class A	90.7	41.8	4.9
Class B	51.3	19.5	2.7
Class C	27.8	11.6	2.3

Source: MOJ 2009

Sentencing under the Drugs Act 2005

Between 2005 and 2008 there were 12 instances where an offender received a custodial sentence for offences committed under the terms of the Drugs Act 2005.²⁴⁴ (HC Deb, 14 June 2010, c286W).

Scotland

In Scotland during 2008/09, there were 7,251 drug offenders found guilty at court. The most common penalty was a monetary sanction (52%) followed by imprisonment (19%) and a community sentence (15%) (Scottish Government 2010i).

9.4.2 Drug offenders in prison

Of the 93,621 receptions to prison in England and Wales in 2009, nine per cent (8,397) were for drug offences. The proportion of all receptions that were for drug offences was slightly higher for females (9.4%) than for males (8.9%) (MOJ 2010c). Adults aged 21 years and over (9.6%) were more likely to be entering prison for drug offences than those aged 18 to 20 years old (6.7%) and those aged 16 to 17 years old (4.9%).

On June 30th 2009, 15.6% of all those in prison under an immediate custodial sentence were drug offenders. Only 3.9% of these were for possession offences with the majority (72.7%) for supply or possession with intent to supply. Those guilty of import/export offences accounted for 17.8% of all drug offenders. For adults over the age of 21 years, the proportion of all offenders who were drug offenders was 16.6% with females (27.5%) much more likely to be in prison for drug offences than males (16.0%) albeit in substantially lower numbers.

²⁴⁴ The Drugs Act 2005 made provisions for the drug testing of offenders arrested for certain 'trigger' offences. If testing positive for Class A drugs, a police officer can require the offender to attend an initial and follow-up assessment. Failure to attend an appointment and stay for its duration is an offence in itself and the offender is liable for prosecution.

9.4.3 Alternatives to prison	
England and Wales	
Conditional Cautioning	

Conditional cautioning with a DIP drug rehabilitative condition is available across England and Wales. Applied at the prosecution stage, it offers early intervention for less serious offences or less persistent offenders. This allows drug using offenders to engage with treatment even if they are leaving the criminal justice system and not going on to court. Since its introduction in 2006, 2,769 cautions have been administered with a DIP condition (up to June 2010). Annual figures are provided in Table 9.6.

Table 9.6: Number of cautions administered with a DIP condition by year in England and Wales, 2006/07 to 2009/10

YEAR	TOTAL CONDITIONS ADMINISTERED
2006/07	114
2007/08	592
2008/09	983
2009/10	921

Source: Crown Prosecution Service

Drug Rehabilitation Requirements

The Drug Rehabilitation Requirement (DRR) continues to be the intervention used at conviction stage for drug misusing offenders in England and Wales (see SQ31). In 2009/10 the National Offender Management Service delivered 15,696 commencements, a fall of 11% since 2008/09 (17,642 commencements). The reduction is partly due to police initiatives which divert offenders from charge and a change in focus which means that targets are now more focused on completion not commencement. Pursuant to that, in 2009/10 the completion rate increased from 47% to 56%, with the number of completions increasing by 21% to 8,944 (7,380 in 2008/09).

A delivery review of DRRs is being undertaken across all probation trusts with a focus on 10 areas where implementation and best practice will be explored.

A National Audit Office (NAO) (2010) report into problem drug use recommended that an effectiveness evaluation of the outcomes of DRRs be undertaken to look at the impact on offending levels and drug use and to improve completion rates.

Drug testing in the Criminal Justice System

Research undertaken by Powell et al. (2009) used drug testing data from clients on a DTTO²⁴⁵ in England to examine changes in drug use from the first to final months of their order.²⁴⁶ Overall, the average percentage

²⁴⁵ DTTOs in England and Wales were replaced by DRRs in April 2005.

²⁴⁶ Drug test results from 317 offenders given a DTTO in one probation area in England between November 2000 and September 2004 were used to examine changes in drug use. Only the 224 offenders with known outcome and at least two months of drug testing data were included in the statistical analysis. This was supplemented with semi-structured interviews with 17 DTTO staff on their opinions of DTTOs. Offenders took an average of 1.7 tests per week ranging from one to 15 per month. Changes in drug use were measured by the change in the percentage of negative drug tests from first to final month.
of negative tests per client increased from 30% in the first month of the order to 36% in the final month. The authors found that changes in drug use were related to the sentencing court and whether offenders started their DTTO from custody or the community, with the latter showing a better improvement in drug use albeit from a higher initial level. As expected, time spent on a DTTO was positively correlated with an increase in the proportion of negative drug tests and those who completed their order successfully showed greater improvement. Qualitative interviews with staff showed that they generally thought of drug testing as positive and motivating but believed that positive drug tests should result in sanctions for the offender.

Intensive Alternatives to Custody

Pilot schemes on intensive alternatives to custody continue in England and Wales for all offenders not just drug users. One area, Dyfed-Powys, is focussing on offenders with a drug or alcohol treatment need. An evaluation of the pilots is underway.

Secure treatment based accommodation

The Coalition Government has announced its intention to explore alternative forms of secure, treatmentbased accommodation for mentally ill and drug-misusing offenders (see section 1.3.1).

Scotland

There are a number of interventions at different levels of the criminal justice system in Scotland (see SQ31). Diversion from prosecution schemes refer an offender to social work or other agencies when it is believed that formal criminal justice proceedings are not necessary. In 2007/08, there were 51 diversion from prosecution commencements where the offender was referred to drug treatment or education. There were 405 probation order commencements with a condition of drug treatment/education and 601 Drug Treatment and Testing Order (DTTO) commencements (ISD Scotland 2010a).

Court data show that there were 881 DTTOs handed out by Scottish courts in 2008/09, a seven per cent increase since 2007/08. Two-thirds of these (66%) were for crimes of dishonesty such as shoplifting (37%) and housebreaking (10%).

Of the 542 DTTOs terminated in 2008/09, 40% were due to successful completion with 36% revoked due to a breach (Scottish Government 2010j). Data for 2007/08 show that completion rates for females (27%) were lower than for males (39%). However, in 2008/09 completion rates for females increased to 38%. Table 9.7 shows the reasons for DTTO terminations since 2003/04. Caution should be taken when making comparisons over time due to changes in recording and reporting requirements.

	2003	8/04	200	4/05	200	5/06	200	6/07	200	7/08	2008	8/09
	n	%	n	%	n	%	n	%	n	%	n	%
Successfully completed	74	36.1	120	38.1	186	40.0	210	38.2	183	37.3	215	39.7
Revoked due to review	21	10.2	32	10.2	81	17.4	76	13.8	68	13.8	83	15.3
Revoked due to breach	82	40.0	133	42.2	154	33.1	208	37.8	173	35.2	193	35.6
Transfer out of area	2	1.0	-	-	4	0.9	2	0.4	7	1.4	8	1.5
Death	-	-	1	0.3	4	0.9	1	0.2	2	0.4	3	0.6
Other	26	12.7	29	9.2	36	7.7	53	9.6	58	11.8	40	7.4
Total	205	100	315	100	465	100	550	100	491	100	542	100

Table 9.7: Reasons for the termination of DTTOs in Scotland, 2003/04 to 2008/09

Source: ISD Scotland 2010a; Scottish Government 2010j

Data show that 37% of DTTO breach applications in 2008/09 resulted in the order being revoked and the offender given a custodial sentence, up from 34% in 2007/08. In 12% of cases, no action was taken by the court, a decrease from 15% in 2007/08 (Scottish Government 2010j).

Drug Treatment and Testing Orders II (DTTO II) Pilot in Scotland

A two year pilot of Drug Treatment and Testing Orders for lower tariff offenders (DTTO II) commenced in June 2008 in Edinburgh, East Lothian, Midlothian and Borders. The pilot extended the use of DTTOs to offenders who would not otherwise be facing a custodial sentence and permitted their use by Justices of the Peace Courts in the pilot areas. Orders were typically 12 months in duration, rather that 18 months, with less frequent court reviews. It was hoped to particularly target female offenders and offenders earlier in their criminal careers.

A process evaluation of the orders examined the 18-month period of the pilot up to the end of November 2009 (Scottish Government, 2010k). Forty-nine per cent of the 59 offenders given a DTTO II were female, in contrast to 22% on 'standard' DTTOs in Scotland in 2008/09. The average age of clients was 27.4 years old which appears similar to the average age of all DTTOs, where the highest incidence was in the 26-30 age group in 2008-09 (Scottish Government, 2010j). Only 11 offenders could have completed their order by the end of the evaluation and eight had done so, but monitoring of larger samples at the six and nine month stages suggested that revocation rates continued to be low (Scottish Government, 2010k). Most clients reported a reduction in drug taking (supported by drug test results) and improvements in living arrangements.

Following the process evaluation, the pilots have been extended until the end of March 2012 to permit longer-term monitoring of a larger sample.

Criminal Justice and Licensing (Scotland) Act 2010

The *Criminal Justice and Licensing (Scotland) Act 2010* came into effect on 6th August 2010. It introduces a presumption against short prison sentences of three months or less and creates the Community Payback Order, which can include a drug treatment requirement. This replaces the probation order with a condition of drug treatment/education while the Drug Treatment and Testing Order (DTTO) remains the intervention used for high tariff offenders.

Dedicated Drug Courts in England and Wales

Dedicated Drug Courts (DDC) have been piloted in England and Wales since December 2005 when two courts were opened in Leeds and West London (see 2008 UK Focal Point report). After carrying out a process evaluation, a further four courts were opened in January 2009 in Barnsley, Bristol, Cardiff and Salford. A qualitative process evaluation of these courts is being undertaken and is due to report in Autumn 2010. A summary of research exploring the feasibility of conducting an impact evaluation of DDCs was published in March 2010 (MOJ 2010d). Two feasible designs were identified, a randomised controlled trial and between area comparison, with the latter deemed to be more cost-effective and less risky. However, the authors state that to determine the effect of DDCs, the sample size would have to be large enough to identify impact, which has both time and cost implications. While an impact evaluation would assist policymakers to decide whether to extend DDCs into other areas, the authors stressed the difficulty in determining rates of continued drug use.

Review of Glasgow and Fife Drug Courts

A review of the Glasgow and Fife Drug Court pilots in Scotland, which have been running since October 2001 and August 2002 respectively, was published in 2010 (Scottish Government 2010I). The review found that there was a large amount of support for the work of the Drug Courts amongst stakeholders. Data on successful completion of Drug Court orders show that, over the period 2004 to 2008, 53% of orders in Glasgow were completed and 38% in Fife. While not directly comparable, the Scotland wide completion rate for DTTOs between 2005/06 and 2007/08 was 35%.

Across the two courts, 70% of offenders had been reconvicted within one year and 82% within two years, a similar reconviction rate to those given DTTOs before Drug Courts were introduced. Analysis also showed that frequency of reconviction between DTTOs and Drug Courts was similar.

Using cost data and successful completion rates, the review shows that the average cost of a completed Drug Court Order between 2007/08 and 2008/09 was €58,431 (£46,442) for Glasgow and €61,350 (£48,737) for Fife. This compares with an average cost of a successfully completed non Drug Court DTTO in 2007/08 of €52,478 (£35,897).

9.4.5 Research

Criminogenic need of male and female offenders

A study comparing the criminogenic²⁴⁷ need of male and female offenders serving community sentences²⁴⁸ found that, unlike in the majority of previous research, there was no difference in drug use between males and females (Palmer et al. 2010). Differences existed for alcohol use, mental health and relationship problems. There was a significantly greater association between drug use and relationship problems for women compared to men. The authors conclude that there may be gender-specific criminogenic needs which demonstrates the need for gender-specific needs assessments and interventions.

²⁴⁷ Factors producing or leading to crime.

²⁴⁸ File information obtained from the Offender Assessment System (OASys) for 6,453 male offenders and 1,045 female offenders serving community sentences in the East Midlands was used to assess level of need in four areas relating to alcohol use, drug use, mental health and relationships. Assessments, carried out by probation staff through interviews, provided an assessment score which was entered on OASys.

Healthcare issues of detainees in police custody

Research looking at the healthcare issues of detainees in police custody in London²⁴⁹ found that around onethird (34%) of detainees reported being dependent on heroin and the same proportion on crack cocaine (Payne-James 2010). Prevalence of self-reported dependence on benzodiazepines was 17%, 21% on cannabis and 25% on alcohol. One-third (33%) of detainees had used illicit drugs in the previous 24 hours. The authors found that only a minority of those reporting drug dependence were in contact with a drug team.

9.5 Drug use and problem drug use in prisons

9.5.1 Prevalence, patterns of use and risk behaviours

England and Wales

Problem drug use and prison

Prisoner surveys carried out in 2008/09 by Her Majesty's Inspectorate of Prisons (HMIP) during full prison inspections in England and Wales²⁵⁰ found that between six per cent and 55% of prisoners in individual prisons reported having a drug problem before they entered that establishment.²⁵¹ When grouped by prison type, the range was between eight per cent (open/resettlement prisons) and 38% (women's prisons) (HMIP 2009a). Looking at individual prisons, between 0% and 23% of prisoners reported developing a drug problem while in that prison. Grouped by prison type, prisoners in open/resettlement prisons were least likely to report developing a drug problem in that prison (1%) and prisoners in women's establishments (14%) were most likely to reporting developing a problem in that prison.

Mandatory Drug Testing in prisons in England and Wales

Data from mandatory drug testing in prisons in England and Wales show that 7.8% of prisoners tested positive for illicit drugs in 2009/10, a similar proportion to the previous year (7.7%). However, buprenorphine was included in 2009/10 and therefore comparisons with previous years should be made with caution. Buprenorphine was first added to the panel of drugs tested for in 2008 and analysis shows that, had this been included in the overall rate in 2008, the positive test rate would have risen to 9.2%. This demonstrates that there has actually been a reduction in positive tests which corresponds with the reduction in positive rates for cannabis (from 3.7% in 2008/09 to 3.0% in 2009/10) and opiates (from 3.4% in 2008/09 to 2.8% in 2009/10).

Availability of drugs in prisons

Prisoner surveys carried out by HMIP in 2008/09 found that the proportion of prisoners reporting it easy or very easy to obtain drugs in prison ranged from 11% to 65% across individual prisons. Grouped by prison type, the range was 27% to 42% (HMIP 2009a).

Drug offences and seizures in prison

Data show that, in 2009, there were 8,000 drug offences committed by prisoners inside prison, the majority of which (81%) were for unauthorised use of a controlled drug, with a further 13% for possession of a controlled drug (MOJ 2010c).

²⁴⁹ Two-hundred and one detainees who were seen by a forensic medical examiner in police custody within the Metropolitan Police Service of London were invited to complete a detailed questionnaire about their health issues. One-hundred and sixty-eight gave consent giving a response rate of 83.6%. Questionnaires were completed by forensic medical examiners.

²⁵⁰ A survey of a random sample of prisoners representative of the total population of prisoners is carried out for all full inspections. Prisons in England and Wales are inspected at least once every five years. Results for 2008/09 are from 32 prisons across eight prison types.

²⁵¹ This refers to drug problems before entering an individual prison not the prison system in general.

In 2008/09 there were a total of 5,069 drug seizures in prison (HC Deb, 23 March 2010, c185W). Cannabis (n=1,731) was the most seized individual drug followed by heroin (n=776) although 'other' drugs were seized in higher numbers (n=2,160).

Coming Clean: Combating drug misuse in prisons

Research carried out by Policy Exchange, a think-tank, included a survey asking prisoners in England and Wales about their drug use (Chambers 2010).²⁵² Thirty-five per cent of respondents reported using drugs while in prison with 30% reporting the use of cannabis, 22% the use of heroin and 10% the use of cocaine. The most common frequency of use amongst those reporting drug use while in prison was less than once a month (43%) although, combining two categories²⁵³, 46% reported use of drugs at least once a week. Forty-four per cent of prisoners said they could get hold of drugs easily with over half (53%) believing that visitors are the main source of getting drugs into prisons. Other sources were reported to be prisoners entering prison for the first time (35%), drugs being thrown over the prison wall (23%) and prison officers or other staff (23%).

Respondents were sceptical about the role mandatory drug testing (MDT) can play in helping prisoners stay off drugs with only one-quarter believing it helps. The author of the report suggests that some prisons manipulate the MDT process to maintain low positive rates and therefore meet performance targets by excluding prisoners heavily suspected of using drugs.

The report concludes that the scale of drug misuse in prison needs to be properly measured and that MDT should be replaced. It claims that more needs to be done to restrict the supply of drugs into prison including addressing the issue of staff corruption. While cutting the supply of drugs and the use of mobile phones may help, the author suggests that, to make a lasting impact, treatment services need to assist prisoners to become drug-free rather than relying on methadone maintenance.

Scotland

The Scottish Prisoner Survey 2009

Results from the Scottish Prisoner Survey 2009 (ST12) show that:

- use of drugs in the 12 months prior to imprisonment was reported by 67% of prisoners, with cannabis (53%) and cocaine (41%) the most commonly used drugs;
- just under half (45%) of prisoners reported being under the influence of drugs at the time of their offence and 19% reported committing their offence to get money for drugs;
- one-fifth (22%) reported receiving treatment before they were imprisoned and half of prisoners (51%) reported being assessed for drug use upon admission to prison;
- a fifth of prisoners (22%) reported using drugs in the last month while in prison; and
- fifteen per cent had used heroin in the last month while in prison, 13% cannabis and four per cent cocaine.

²⁵² The questionnaire was placed in the prisoner newspaper Inside Times. It used a self-selecting, unrepresentative sample of literate prisoners (previous estimates show that 48% of prisoners have reading skills at or below Level 1 (SEU 2002)). Between December 2009 and January 2010, 704 responses from both males and females were received.

²⁵³ Combination of more than twice a week (30%) and about once a week (16%).

Figure 9.1 shows that, while prevalence of drug use prior to imprisonment has remained stable since 2005, the use of drugs in the past month while in prison has fallen from 34% to 22%.





Source: Standard Table 12

Addiction Prevalence Testing

Data show that, of the 1,112 addiction prevalence tests carried out on reception to prison in Scotland during 2008/09, 71% were positive for illegal drugs, an increase from 64% in 2007/08 (ISD Scotland 2010a). The most common drugs detected were benzodiazepines (49%), cannabis (42%) and opiates (36%) (Table 9.8) Of those tested leaving prison (n=724), 29% were positive for illegal drugs, an increase from 26% in 2007/08. When drugs prescribed as part of a treatment programme are included, this rises to 40%. The most common drugs detected on release from prison were benzodiazepines (14%), opiates (12%) and cannabis (9%).

Table 9.8: Results of drug testing on reception to and prior to release from Scottish prisons, 2008/09

DRUG	% POSITIVE TESTS ON RECEPTION	% POSITIVE TESTS PRIOR TO RELEASE
Amphetamines	2	1
Barbiturates	-	0
Benzodiazepines	49	14
Buprenorphine	3	3
Cannabis	42	9
Cocaine	6	0
Methadone	4	5
Opiates	36	12
All drugs	71	29

Source: ISD Scotland 2010a

9.6 Responses to drug-related health issues in prisons

9.6.1 Strategy and policy

Prison drug treatment strategy review group

In 2006 the Secretary of State for Health and the Home Secretary agreed to a review of how existing resources for drug treatment in prisons could be used more effectively. Price Waterhouse Coopers (PWC) was commissioned to undertake the review and a full report of their findings and recommendations was published in June 2008 (see 2008 UK Focal Point report). Following the review Lord Patel was asked by Ministers to chair the Prison Drug Treatment Strategy Review Group, a review group tasked with looking at drug treatment in prisons in England. The aim of the Review Group was to raise the ambition about what can be achieved in regard to drug treatment in prisons, and also to consider efficiencies and improve cost effectiveness. The Review Group worked on the basis that the recommendations should not need additional money to implement them, but would focus on:

- improving the quality of drug treatment for people in prison and on release from prison, through the development of clear standards and outcomes;
- increasing innovation in terms of service delivery, commissioning and partnership working to contribute to a reduction in re-offending and reduced mortality from accidental drugs overdose or chronic health problems such as blood borne viruses; and
- achieving efficiencies and improving cost effectiveness within the drug treatment system in prison and for people on release from prison.

The final report of the Review Group was published in September 2010 (Patel 2010). It focuses on drug treatment and interventions for people in prison, people moving between prisons and the continuity of care for people on release from prison. The report outlines the evidence gathered and work carried out by the Review Group²⁵⁴ and summarises their conclusions and recommendations. Key recommendations were to:

- achieve efficiencies and improve cost effectiveness by developing, for the first time in England, a unified cross-Government drug treatment and interventions strategy for moving people between prison and on release;
- shift focus and resources towards reducing offending outcomes and better health outcomes, through a national health and criminal justice outcomes model;
- shift focus and resources to develop a streamlined, autonomous and accountable commissioning system that is coherent, cost-effective and enables more effective decision-making by local commissioners and partnerships;
- refocus and increase ambition quality and innovation in service delivery through an updated national drug treatment and interventions framework that covers both community and prisons; and
- increase social capital by identifying 'Recovery Champions' in the community and prisons to reduce poor social cohesion in local communities and support the creation and expansion of volunteering, co-operatives, charities and social enterprise.

Scottish Prison Service strategy

The Scottish Prison Service (SPS) published a strategy framework for managing substance misuse in custody stating that recovery will be the explicit aim of treatment and rehabilitation services (SPS 2010). The strategy recognises the importance of providing a range of treatment and rehabilitation services and integrating with other prison services to address the complex needs of prisoners. A range of blood-borne virus services will also be made available in all prisons. The strategy also lists a number of desired outcomes of this strategy including:

- a reduction in the number of prisoners misusing drugs;
- an increase in the numbers of prisoners being initiated on hepatitis C treatment;
- an increase in the number of prisoners attending community appointments following release from prison; and
- a reduction in the number of drug-related deaths soon after release from prison.

9.6.2 Drug treatment system

Integrated Drug Treatment System (IDTS)

An independent evaluation of the IDTS in England is being carried out. The quantitative element, focused on IDTS outcomes, is led by Kings College, Institute of Psychiatry and the qualitative element focused on delivery process and participants' views, is led by the National Centre for Social Research.²⁵⁵ Anticipated outcomes include:

²⁵⁴ The review looked at evidence from over 160 high quality peer reviewed papers and also consisted of a service user and carer consultation with over 550 responses from drug users, ex-drug users and their families.

²⁵⁵ See: http://www.natcen.ac.uk/study/independent-evaluation-of-the-integrated-drug-treatment-system-in-prisons

- the extent to which IDTS is implemented, including integration of clinical and psychosocial services;
- whether IDTS standards are raised to those of NTA models of care;
- service user views and behaviour whilst in custody and three months following release; and
- the impact of IDTS, methadone maintenance in particular, on: overall mortality, including post release drug related deaths, suicide, reconviction, contact, and engagement with the community treatment system.

The evaluation began in 2008 and is due to be completed in 2011, with a final report to be published in 2012.

Guidance

Updated guidance on continuity of care for prisoners in IDTS prisons was issued in September 2009 (DH and MOJ 2009). The guidance sets out the client management pathway and addresses issues such as the continuity of mental health care, prescribing regimes and psychosocial support. It also states how transfers between criminal justice teams and different prisons should be dealt with and establishes protocols for ensuring the continuation of treatment after release from prison. This guidance was updated and a letter sent to notify users of the change to the guidance in March 2010.

Commissioning healthcare in prisons

The Care Quality Commission's analysis of Primary Care Trusts (PCTs) as commissioners of prison health care in 2008/09 concluded that there was no improvement since 2007/08 in the implementation of drug treatment systems in prisons (CQC 2010). The analysis found that only six of the 21 PCTs inspected had adopted IDTS and often not in all prisons within that PCT. However, the report concedes that this may be due to the phased national roll-out of IDTS in prisons.

9.6.3 Drug treatment amongst offenders

England and Wales

Data show that in 2008/09, 64,767 prisoners received clinical drug treatment in England and Wales, 70% of whom were on a detoxification programme with the remainder on a maintenance prescribing programme. In addition, there were 10,757 non-clinical treatment programme starts by prisoners in England and Wales. The majority of these (n=9,647) were cognitive behavioural therapy (CBT) programmes with a further 854 commencing a 12-Step programme and 256 accessing a Therapeutic Community intervention (NOMS statistics 2008/09).

The Counselling, Assessment, Referral, Advice and Throughcare service (CARATs) provides a gateway to support, information, non-clinical structured interventions and resettlement for prisoners with drug misuse problems. In 2008/09 there were 66,600 initial assessments carried out by the CARAT teams. This is a slight increase of one per cent from the previous year and an increase of 13% from 2004/05.

Results from HMIP's 2008/09 prisoner surveys showed that, grouped by prison type, between 63% and 93% of those reporting drug or alcohol problems had received help in their current prison (HMIP 2009a).

Dual diagnosis treatment in prisons

In the 2008/09 HMIP Annual Report, it was reported that dual diagnosis services for drug and alcohol users with mental health problems remained patchy. While some inspected prisons had good services and employed dual diagnosis practitioners others did not despite a high level of need (HMIP 2009b).

Scotland

In Scotland in 2008/09, 4,596 prisoners undertook an integrated case management substance misuse assessment, accounting for 22% of all recorded entries to prison and 95% of those who were offered an assessment (ISD Scotland 2010).

An audit of methadone prescribing in prisons showed that, on a given day in December 2008, 1,487 prisoners were being prescribed methadone, accounting for 19% of the prison population. While the number of prisoners receiving methadone increased by 10% from 2007 (n=1,354), the proportion of all prisoners remained the same. Table 9.9 shows the increase since 2004 in both the number and proportion of Scottish prisoners using methadone.

Table 9.9: Number and proportion of all prisoners prescribed methadone on a given day in Scottish prisons, 2004 to 2008

DATE	NUMBER	PERCENTAGE
17 th December 2004	845	14
30 th December 2005	984	16
8 th December 2006	1,228	17
14 th December 2007	1,354	19
12 th December 2008	1,487	19

Source: ISD Scotland 2010

9.7 Reintegration of drug users after release from prison

In HMIP's 2008/09 prisoner surveys, grouped by prison type, between eight per cent and 34% believed they would have a drug problem on release from prison with between 40% and 80% of prisoners reporting that they knew who in their prison could help them contact external drug or alcohol agencies on release (HMIP 2009a).

The HMIP Annual Report for 2008/09 (HMIP 2009b) states that nine out of 10 prisons inspected had good links with community drug interventions programmes, often involving DIP workers attending establishments to meet prisoners approaching release. Some prisons reported providing a 'gate pick-up' service for those being released although treatment differed between those living locally and those living further afield.

10. Drug markets

10.1 Introduction

The United Kingdom Threat Assessment of Serious Organised Crime 2009/10 states that, "the United Kingdom illegal drugs market remains attractive to organised criminals." Class A drugs (including heroin and cocaine) and other drugs at varying levels of purity are widely available throughout the UK, although the crack cocaine and heroin markets in Northern Ireland are much smaller (SOCA 2009).

Most of the identified drug supply chains to the United Kingdom follow well-established trafficking routes. Cannabis continues to be imported in large quantities to the United Kingdom from Europe, but there has been a large increase in domestic cannabis cultivation over the past few years. Throughout the UK, large commercial cannabis cultivation operations have been discovered and there is increasing evidence of involvement by South East Asian criminal gangs and recently by White British criminals.

The overall picture of United Kingdom drugs distribution appears increasingly complex and diverse, and is better described as a network as distribution occurs through long chains. Many traffickers in the United Kingdom, particularly White British criminals, import and distribute more than one type of drug. London, Birmingham and Liverpool continue to be important centres for drugs distribution but other smaller cities and towns are also involved. In Scotland, the main source of heroin is from Liverpool via the Glasgow area.

In general the quantity of seizures has been rising in the United Kingdom, cannabis being the most seized drug. The number of herbal cannabis seizures has increased since the introduction of cannabis warnings and there have been increasing seizures of cannabis plants. However, seizures mainly of Class A drugs have achieved short-term disruptions rather than a sustained reduction in the size of the United Kingdom drugs market.

Purity of cocaine powder has fallen substantially at street level since 2003 and crack cocaine purity has also fallen. The price of cocaine powder, heroin and ecstasy has decreased since 2003 while the price of other drugs has remained relatively stable. When adjusting for purity, however, cocaine powder prices have risen since 2003.

The most recent estimate of the size of the illicit drug market in the United Kingdom is €7.7 billion (£5.3 billion) in 2003/04, with a wide margin of error of €5.8 billion (£4 billion) to €9.5 billion (£6.6 billion). In Scotland the size of the illicit drug market has been estimated at €2.1 billion (£1.4 billion) for 2006.

10.2 Availability and supply

10.2.1 Availability in the general population

'Legal Highs' available for online purchase

In 2009, the United Kingdom saw a large increase in the use of 'legal highs'²⁵⁶ (see section 2.8). Schmidt et al. (2010)²⁵⁷ assessed the 'legal highs' available for purchase online and the product information supplied. The authors found online retailers easy to identify but stated that they had been fewer in number than anticipated. Of the identified products, 47% were pills or tablets, 30% were smoking blends, 18% were a single plant material, four per cent were powders, and one per cent were liquids. The average

²⁵⁶ 'Legal highs' were defined as synthetic substances that were produced and packaged to mimic illicit drugs (Schmidt et al. 2010).

²⁵⁷ Websites were identified using the terms "buy legal highs + UK" using two search engines. Thirty-nine unique websites met the criteria from which 1,308 products were purchased and evaluated. The survey was conducted prior to the banning of piperazines.

product price was €10.88 (£9.69). Product information was extremely limited with 40% not listing any ingredient, 92% not listing any side effects, and only 56% providing clear effect claims. Despite being sold as 'legal highs' many products were listed as "not for human consumption."

10.2.2 Availability amongst school children and young people

Data on the availability of drugs amongst school children is available from *Smoking, Drinking and Drug Use among young people in England in 2009* (Fuller and Sanchez 2010) (see section 2.4.1).

In 2009, 33% of pupils aged 11 to 15 years reported ever being offered drugs, with cannabis the drug most likely to be offered (21% of pupils). Older pupils were more likely to have been offered drugs than younger pupils; 10% of 11 year olds, 28% of 13 year olds and 56% of 15 year olds reported being offered drugs in the last year. Twenty-eight per cent of pupils believe it is easy to obtain drugs with 14% believing it is easy to obtain cocaine powder.

Trends

Overall, there has been a downward trend in the proportion of pupils offered drugs from 42% in 2001 to 33% in 2009 (Figure 10.1). The proportion of pupils who report being offered cannabis fell from 27% in 2001 to 21% in 2009 and there have also been large decreases in the proportion offered volatile substances (20% in 2001 to 14% in 2009) and ecstasy (10% in 2001 to 7% in 2009). In 2009 eight per cent of pupils report being offered cocaine powder, similar to levels in previous years.



Figure 10.1: Proportion of pupils in England who have ever been offered individual drugs, 2001 to 2009

Source: Fuller and Sanchez 2010

Since 2005, there has been a downward trend in the proportion of school pupils reporting it easy to obtain drugs. In 2009, 28% reported that it was easy to obtain drugs compared to 33% between 2001 and $2005.^{258}$

²⁵⁸ Questions on ease of obtaining drugs are asked every two years.

Sources of supply

In 2009, drug users were most likely to report friends as the source from which they obtained drugs (73%). Girls were more likely to obtain drugs from a boyfriend/girlfriend than boys (6% compared to 0%). Only one per cent of school children reported obtaining drugs from a stranger. The most common place for pupils to obtain drugs was in an outdoor area such as a park or on the street (40%). Fourteen per cent of pupils reported obtaining drugs at school, a similar level to previous years.

10.2.3 Production, sources of supply and trafficking patterns within the country and from and towards other countries

Production, sources of supply and trafficking patterns to the United Kingdom

Information on the supply of drugs is provided by the Serious Organised Crime Agency (SOCA).

Heroin

Well-established trafficking routes exist in the UK. Over 95% of the heroin sold in the UK is derived from Afghan opium. A variety of trafficking routes from source to intended destination are used. The relative significance of these routes is difficult to assess (SOCA 2010). The majority of the heroin arriving in the UK will have transited through Iran, entering from either Pakistani Baluchistan or Afghanistan. Once in Iran, the heroin is transported across Turkey, from where a large proportion is moved overland through the Balkans to the EU en route to the Netherlands. The heroin is then stored in the Netherlands before entering the UK.

Due to location and good transport links, heroin traffickers in Turkey have been able to gain control of most of the supply of heroin to Western Europe, including the UK. SOCA assess that traffickers with ethnic connections to Turkey continue to dominate the supply of heroin to the UK; forensic analysis of samples seized in the UK has proven the drug has emanated from a small number of trafficking groups in Turkey and the surrounding area.

Cocaine

Colombian drug gangs continue to lead in the trade of cocaine but due to Colombian Government initiatives, production is reducing. This has lead to consequent increase in the production and trafficking of cocaine by neighbouring countries Peru and Bolivia. SOCA reports that there is evidence of bulk movement of cocaine through Argentina, Bolivia, Brazil, Ecuador, Guyana and Peru. In October 2009, the British Government signed a Memorandum of Understanding with Venezuela, formalising joint counternarcotics policies in a bid to tackle problems with supply and demand. Prior to the agreement joint work has proven successful, as since mid-2008, there has been an appreciable decline in the trafficking of cocaine by air from Venezuela to West Africa. This has caused a proportionate decrease in cocaine trafficking via West Africa, with seizures from this region between January and March 2009 being one tenth of those recorded for the same period in 2008.

From South America to Europe (Spain, the Netherlands and Belgium being favoured destinations), the majority of cocaine is transported by bulk maritime shipments. To avoid exposure, cocaine is often loaded onto maritime vessels in international waters; on occasion, this is executed by air-drops to vessels at sea. Locations in which this is common are off the Colombian and Venezuelan coast, but also Brazil, Guyana, and Suriname to a smaller extent. Recent evidence highlights that routes through the Balkans are being used to transport bulk shipments of cocaine in Europe.

Direct flights (particularly to the Netherlands and Spain) using couriers or airfreight shipments, as well as through mail by fast parcels sent directly to the UK, are used for smaller shipments. Inclusively, these smaller shipments add up to significant amounts.

In 2010, the Home Affairs Committee reported the findings from its inquiry into the cocaine trade in the UK (Home Affairs Committee 2010). The report suggests that cocaine powder use has permeated all levels of society and is no longer a drug used exclusively by the rich and famous.

The Committee praised the success of Operation Airbridge, a campaign initiated in 2002 and run jointly with Jamaican authorities to intercept drug couriers, in particular those concealing drugs internally, before they embarked onto a UK bound flight. The Committee has urged the Government to build upon this operation by developing similar ones in other countries and stressed the importance of intercepting cocaine upstream before it enters the UK.

The Committee's report made a number of recommendations that were considered by the Government.

In its response to the Home Affairs Committee report (HM Government 2010b), specifically the statement that the UK is one of the largest consumers of cocaine powder worldwide, the Government states that, with street level purity often as low as five per cent, the estimated amount of South American cocaine imported into the UK annually is between 25 to 30 tonnes,²⁵⁹ equating to around five per cent²⁶⁰ of the cocaine produced globally.

Synthetic drugs

The Netherlands and Belgium, in collaboration with British criminals, dominate the synthetics market from the EU to the UK. However, Lithuania and Poland are emerging as centres for smaller-scale synthetic drug production so becoming involved in trafficking synthetic drugs to the UK.

Overall, trends in the location and production of synthetics remain largely unchanged but the sophistication and capacity of producers is increasing. To enhance profit, as the industry is perceived as relatively low risk, some organised crime groups who are traditionally involved in trafficking cocaine and heroin are reported to be expanding into the synthetic drugs trade.

Cannabis

Cannabis continues to be the most widely used illegal drug in the UK (see section 2.2). Substantial quantities of cannabis resin and herbal cannabis are imported into the UK, with the market becoming increasingly dominated by sinsemilla. There has been an increase in the domestic production of skunk in the UK over recent years; the Association of Chief Police Officers (ACPO) estimates that in the UK, the demand for skunk is around 92 tonnes per year.

The illegal drug trade in the United Kingdom

It has been suggested that individuals of Vietnamese origin control the operation of large-scale domestic cannabis factories (SOCA 2009). Silverstone (2010) and Silverstone and Savage (2010)²⁶¹ examined organised crime specifically cannabis cultivation amongst the UK Vietnamese community. Around half of those interviewed knew somebody involved in the cannabis trade. The authors identified two key actors: investors and farmers. Farmers are typically illegal immigrants (and occasionally children) from North Vietnam while investors, who rent the houses and oversee the sale of cannabis are more likely to be longer-term residents of the UK. The authors suggest that Vietnamese involvement in the cannabis trade is limited to cultivation and sale at a wholesale level.

²⁵⁹ During the course of the inquiry, SOCA produced a revised updated estimate of 25-30 (from 34-45) tonnes of cocaine entering into the UK for 2008/09 published in The United Kingdom Threat Assessment of Serious Organised Crime 2008/09, paragraph 205 (p.33).

²⁶⁰ See page 5: http://www.official-documents.gov.uk/document/cm79/7910/7910.asp

²⁶¹ Both studies involved interviews conducted in 2007-08, 45 law enforcement personnel in both the UK and Vietnam and 34 Vietnamese residents in the UK, 24 of whom were illegal immigrants.

10.3 Seizures

Previous data have been provided for the United Kingdom. Data are presented for England and Wales from 2004 to 2008/09 and for Northern Ireland from 2004 to 2009/10. At the time of writing, seizures data for Scotland were not available.

10.3.1 Drug seizures in England and Wales

In 2008/09, the total number of drug seizures was 241,090, an increase of six per cent on the previous year²⁶² (Table 10.1). There has been a large increase in seizures since the introduction of the cannabis warning in 2004 which has seen the number of seizures more than double. Despite increasing by seven per cent in 2008/09 the increase in cannabis seizures is smaller than in previous years. The increase in the number of cocaine powder seizures (threefold increase since 2004) is also likely to have influenced the overall increase in seizures.

The proportion of all seizures that involve cannabis is around 77%. As a result of increasing domestic cultivation of cannabis, there has been a large increase in the number of cannabis plant seizures since 2004 although this appears to have slowed in 2008/09. The largest increase in the number of seizures was for cannabis resin (15.9%). This rise was wholly attributable to police seizures; seizures by the UK Border Agency (UKBA) fell by eight per cent. The proportion of all cannabis seizures that were cannabis resin increased from 17.8% in 2007/08 to 19.2% in 2008/09. Cannabis continues to be imported into the UK despite increasing domestic cultivation with UKBA making over three thousand seizures in 2008/09.

The number of cocaine powder seizures continued to rise with a year-on-year increase of around 4,000 seizures since 2004. The number of UKBA cocaine powder seizures has remained stable since 2004, decreasing by 18% in 2008/09 while the number of police seizures has increased substantially. The number of ecstasy seizures increased until 2001 and then fell to a stable level between 2003 and 2005 before increasing in 2006/07. Since then the number of ecstasy seizures has decreased and the number is now at its lowest level since 1998. For the first time in the last 10 years there has been a decrease in crack cocaine seizures.

DRUG	2004	2005	2006/07*	2007/08	2008/09	% CHANGE FROM 2007/08
Amphetamines	6,494	7,825	8,465	8,852	7,735	-12.6
Cannabis – herbal	43,109	76,149	109,638	137,468	145,094	+5.5
Cannabis – resin	35,183	41,414	32,575	30,859	35,758	+15.9
Cannabis plants	2,924	4,319	5,795	8,526	9,372	+9.9
Cocaine powder	8,322	12,554	16,949	21,381	24,604	+15.1
Crack cocaine	5,154	6,692	6,943	7,567	6,612	-12.6
Ecstasy type substances	6,246	6,678	8,172	7,163	5,206	-27.3
Heroin	11,648	14,050	13,920	14,167	13,273	-6.3
LSD	144	204	169	145	131	-9.7
Total	112,923	169,802	196,099	228,131	241,090	+5.7

Table 10.1: Number of seizures of drugs by law enforcement agencies in England and Wales, 2004 to 2008/09

*in 2006/07 data moved to a financial year basis

Source: Hand and Singh Rishiraj 2009

²⁶² Data are different to that published previously. This is due to Merseyside Police indicating that previous data have been under-reported. Historical data for this police force have been estimated based on the level of under-reporting.

Police seizures accounted for 97% of the number of seizures in 2008/09 but the UK Border Agency (UKBA)²⁶³ was responsible for seizing the largest quantity of drugs. The amount of heroin seized in 2008/09 increased by 42% from 2007/08 despite a decrease in the number of seizures (Table 10.2). This is due to an increase in UKBA heroin seizures (68 in 2007/08 and 171 in 2008/09), which are larger than police seizures although the average weight of heroin per UKBA seizure decreased from 10.2kgs in 2007/08 to 6.1kgs in 2008/09.

While the number of cocaine powder seizures increased by around one-fifth in 2008/09, the quantity of cocaine powder seized decreased by just over 19%. Half of all police cocaine powder seizures are under one gram in weight.

The quantity of herbal cannabis seized increased by 59% in 2008/09 with a large increase in the quantity seized by UKBA (72% increase) despite a decrease in the number of UKBA herbal cannabis seizures. The quantity of cannabis resin seized increased for both the police and UKBA. The quantity of cannabis plants again increased with an average of 69 plants per seizure compared to 63 the previous year.

The quantity of ecstasy seized continued to fall and was 46% lower than in 2007/08. Between 1999 and 2006/07 an average of 5.1 million ecstasy tablets were seized per year but over the past two years this has dropped considerably to an average of 770,000 per year. In 2008/09 the quantity of amphetamine seized increased by 58% with the UKBA reporting six seizures of amphetamine over 100kg in weight compared to three the previous year.

Table 10.2: Quantity of seizures of drugs by law enforcement agencies in England and Wales, 2004 to 2008/09

DRUG	UNIT	2004	2005	2006/07*	2007/08	2008/09
Amphetamines	Kg	1,270	2,148	1,433	1,857	2,939
Cannabis – herbal	Kg	22,493	21,522	27,069	20,970	33,360
Cannabis – resin	Kg	65,279	51,843	20,789	17,435	31,798
Cannabis plants	Plant	93,270	219,593	363,002	535,055	643,296
Cocaine powder	Kg	4,808	3,968	3,364	3,612	2,916
Crack cocaine	Kg	140	52	61	37	33
Ecstasy	Tablet (000s)	4,890	3,105	6,941	997	543
Heroin	Kg	2,218	1,964	1,058	1,095	1,552
LSD	Dose (000s)	38	1,135	6	3	20

*in 2006/07 seizures data moved to a financial year basis **Source:** Hand and Singh Rishiraj 2009

²⁶³ Including Her Majesty's Revenue & Customs.

10.3.2 Drug seizures in Northern Ireland

In 2009/10, there were 3,319 drug seizures in Northern Ireland, an increase of four per cent from the previous year (Table 10.3). The number of herbal cannabis seizures has increased substantially from 131 in 2004/05 to 1,434 in 2009/10 with a 60% increase in the last year. Unlike in England and Wales, the number of cannabis resin seizures in Northern Ireland remained stable until 2009/10 when the number decreased by 31%. This may suggest that, as in the rest of the UK, herbal cannabis is growing in popularity in Northern Ireland with cannabis resin becoming less common. The number of cocaine powder seizures has increased substantially since 2004/05 and increased by 37% in 2009/10. Similar to England and Wales, the number of ecstasy seizures has decreased over the past two years.

DRUG	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Amphetamines	147	138	188	132	95	129
Cannabis – herbal	131	180	486	811	897	1,434
Cannabis – resin	1,841	2,086	1,438	1,480	1,630	1,118
Cannabis plants	43	45	105	115	173	158
Cocaine powder	87	168	278	405	345	474
Crack cocaine	0	0	0	0	1	0
Ecstasy	317	256	411	436	353	204
Opiates (powder)	14	30	43	38	46	55
LSD	9	15	7	6	10	8
Total	2,402	2,767	2,590	2,968	3,198	3,319

 Table 10.3: Number of seizures of drugs by police in Northern Ireland, 2004/05 to 2009/10

Source: PSNI 2006b; PSNI 2010b

Due to the reporting of relatively small quantities of some drugs, large seizures can have a disproportionate effect on overall quantities and changes should be interpreted with care. In 2009/10, the quantity of cannabis plants fell substantially from the previous year (Table 10.4) reflecting the impact of Operation Mazurka carried out in 2008/09, which led to a large number of cannabis farm discoveries (see 2009 UK Focal Point report). The quantity of opiates seized increased substantially from the previous year due to one major seizure of heroin powder in July 2009. In line with the decrease in the number of seizures, the amount of cannabis resin seized also decreased in 2009/10. Despite fewer seizures of ecstasy tablets in 2009/10, the quantity of seizures increased from 34,404 tablets in 2008/09 to 54,434 in 2009/10.

DRUG	UNIT	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Amphetamines	Kg	79	74	18	13	6	95
Cannabis – herbal	Kg	20	69	27	70	249	216
Cannabis – resin	Kg	933	426	3684	78	743	127
Cannabis plants	Plant	574	1,504	1,448	4,006	30,904	5,484
Cocaine powder	g	21,332	27,124	36,140	17,883	24,152	27,485
Crack cocaine	g	0	0	0	0	7	0
Ecstasy	Tablet (000s)	351	92	119	245	34	54
Opiates (powder)	g	5.1	321.8	592.4	106.5	130.7	8,623
LSD	Dose	8,146	308	127	186	169	261*

Table 10.4: Quantity of seizures of drugs by police in Northern Ireland, 2004/05 to 2009/10

*2009/10 is for dose. Previous years have combined doses and microdots.

Source: PSNI 2006b; PSNI 2010b

10.3.3 Cannabis factory discoveries

A report published by the Association of Chief Police Officers (ACPO 2010b)²⁶⁴ shows that the number of cannabis factories discovered in the UK doubled between 2007/08 and 2009/10 (Table 10.5). In 2009/10 an average of 572 factories per month were discovered, a rate of 11 factories per 100,000 population. In 2008/09 and 2009/10 ACPO estimate the street value of seized plants to be around €177 million (£150 million)²⁶⁵.

²⁶⁴ Information about UK cannabis factories was captured using self-report spreadsheets and intelligence questionnaires administered to every police force and agency throughout the UK between April 2008 to March 2010.

²⁶⁵ This figure is based on SOCA's street price estimate of £80 per ounce of herbal cannabis (SOCA UKTA 2009).

Table 10.5: Total number of cannabis factories discovered and the number of plants seized in the UnitedKingdom, 2007/08 to 2009/10

	2007/08	2008/09	2009/10	TOTAL
Total number of commercial cannabis factories	3,032	4,951	6,866	14,849
Number of plants recovered	501,905	576,790	749,927	1,828,622

Source: ACPO 2010b

10.3.4 Other seizures

Operation Klaxon

Operation Klaxon, established by the Scottish Crime and Drug Enforcement Agency (SCDEA) to investigate the activities of Scottish organised crime gangs involved in the international importation of Class A drugs, produced upstream seizures of approximately 35 Kilos of cocaine in Columbia and the Dominican Republic during 2009/10 (SCDEA 2010).

Heroin seizures and heroin use in Scotland

Research by McKeganey et al. (2009) used the quantity of heroin seized by police forces²⁶⁶ and estimates²⁶⁷ of the amount of heroin consumed over a twelve month period in Scotland to assess the impact of seizures on the heroin market. The authors estimate that, for the period 2000 to 2006, the amount of heroin seized by Scottish police amounted to approximately one per cent of the total amount consumed.

10.4 Price/purity

10.4.1 Price of drugs at street level

Law enforcement agencies²⁶⁸ collect national data on drug prices while DrugScope conducts a random snapshot of drug prices in different areas of the United Kingdom.²⁶⁹

Law enforcement agencies

Data provided by SOCA suggest that in the last year, the mean price of skunk cannabis has increased²⁷⁰ (Table 10.6). The price of crack cocaine and ecstasy has decreased while the price of other drugs has remained stable. However, when adjusting for purity, there has been a large increase in the price of cocaine powder since 2008 (see section 10.4.3).

²⁶⁶ Data on heroin seizures by Scottish police forces was supplied by the Scottish Executive for the years 2000 to 2006.

²⁶⁷ The methodology for estimating heroin consumption used PDU estimates of the number of heroin users in Scotland (Hay et al. 2001 and Hay et al. 2004), estimated at 46,687 individuals in 2003 and estimates of the yearly consumption of heroin per user from the Drug Outcome Research in Scotland (DORIS) study. Using the average consumption of 0.88g per day per user, the total heroin consumption over a 12 month period was calculated at 10,705kg.

²⁶⁸ Data are derived from returns by police forces in the United Kingdom. The information is obtained from a number of sources including: prisoner interviews, informants, test purchases, recording procedures and intelligence (see Standard Table 16 for further information on methodology).

- ²⁶⁹ Information collected by journalists from Druglink, the organisation's magazine, who call 100 drug services, DATs, police forces and service user advocates in 20 areas of the United Kingdom.
- ²⁷⁰ The methodology used provides a 'typical' price rather than a mathematical mean of all police force areas. This may explain the large increase in price as changes are likely to be in £5 denominations.

		PRICE PER GF	RAM EXCEPT V	VHERE OTHER	WISE STATED	
DRUG	2004	2005	2006	2007	2008	2009
	EXCH RATE: £1=€1.4739	EXCH. RATE: £1=€1.4629	EXCH. RATE: £1=€1.467	EXCH RATE: £1=€1.4619	EXCH RATE: £1=€1.2588	EXCH RATE: £1=€1.1233
Amphataminaa	£8.00	£10.00	£9.00	£9.00	£10.00	£10.00
Amphetamines	€11.79	€14.63	€13.20	€13.16	€12.59	€11.23
Cappabia barb*	£2.54	£2.64	£2.68	£3.95	£2.85	£2.85
Cannabis herb*	€3.74	€3.86	€3.93	€5.77	€3.59	€3.20
Connobio rogin*	£2.00	£1.94	£2.12	£2.82	£2.85	£2.85
Carriadis resiri	€2.95	€2.84	€3.11	€4.12	€3.59	€3.20
Cannabis				£6.21	£5.63	£7.15
(sinsemilla)				€9.08	€7.09	€8.03
Cassing pourder	£51.00	£49.00	£49.00	£46.00	£40.00	£40.00
Cocarrie powder	€75.17	€71.68	€71.88	€67.24	€50.35	€44.93
Crock coocine**	£18.00	£19.00	£18.00	£65.00	£65.00	£60.00
Crack cocaine""	€26.53	€27.80	€26.41	€95.02	€81.82	€67.40
Footooy (por tablet)	£4.00	£4.00	£3.00	£3.00	£3.00	£2.50
Ecsiasy (per lablel)	€5.90	€5.85	€4.40	€4.39	€3.78	€2.81
Harain	£55.00	£54.00	£52.00	£48.00	£45.00	£45.00
Heroin	€81.06	€79.00	€76.28	€70.17	€56.65	€50.55
	£3.00	£3.00	£3.00	£3.50	£3.00	
LOD (per dose)	€4.32	€4.39	€4.40	€5.12	€3.78	

Table 10.6: Law enforcement agencies: Mean price of illegal drugs in the United Kingdom, 2004 to 2009

Note: The source data were provided rounded, usually to the nearest pound.

*Before 2007 the cannabis values were based on the price for an ounce. In 2007 this changed to being based on a usual street deal of 1/8oz. The price has been converted to gram equivalent.

**Crack cocaine prices before 2007 were provided per rock (0.2g) not per gram. Prices after 2007 cannot be compared to earlier prices.

Source: Standard Table 16

DrugScope street drug trends

Similar to the findings from law enforcement agencies, DrugScope report that the price of skunk cannabis has increased in the past year (Table 10.7). This, it is suggested, is due to a number of factors including an increasing trend towards smaller deals, which increases the price per gram and the impact of police activity against large-scale cannabis farms, which increases the costs for traffickers (Daly 2010). Prices for most other drugs have remained stable although there has been a decrease in the price of MDMA powder. There are little data on the purity of MDMA powder so it is unknown whether the drop in price is linked to purity levels.

	PRI	CE PER GRAM E	XCEPT WHERE C	THERWISE STAT	ED
DRUG	2006	2007	2008	2009	2010
	EXCH. RATE: £1=€ 1.470	EXCH. RATE: £1=€1.4619	EXCH. RATE: £1=€1.2588	EXCH. RATE: £1=€1.1233	EXCH. RATE: £1=€1.1752
Amphotominoo	£9.70	£9.80	£9.00	£9.00	£9.00
Amphetamines	€14.23	€14.33	€11.33	€10.11	€10.40
Cannabis herb*	£2.47	£3.07	£3.14	£4.43	£4.29
(standard quality)	€3.62	€4.49	€3.95	€4.98	€4.96
Cappabia ragin*	£1.91	£1.94	£1.80	£3.00	£3.71
Cannabis resin"	€2.80	€2.84	€2.27	€3.37	€4.29
Cannabis	£4.27	£4.73	£4.63	£5.71	£7.14
(high quality)*	€6.26 €6.91 £43.00 £43.00	€5.83	€6.41	€8.25	
Cooping powder	£43.00	£43.00	£42.00	£39.00	£42.00
Cocali le powder	€63.08	€62.86	€52.87	€43.81	€48.55
Katamina	£28.00	£25.00	£20.00	£22.00	£20.00
Retainine	€41.08	RATE: 1.470CXCH. RATE: £1=C1.4619EXCH. RATE: £1=C1.2588EXCH. RATE: £1=C1.2388EXCH. RATE: £1=C1.2383EXCH. £1=C1E9.70SE9.80SE9.00SE9.	€23.12		
Footooy (por tablat)	£3.00	£2.40	£2.30	£2.00	£2.65
Ecslasy (per lablel)	€4.40	€3.51	€2.90	€2.25	€3.06
Horoin	£46.00	£43.00	£49.00	-	£50.00
TIEIOIT	€67.48	€62.86	€61.68	-	€57.80
	£40.00	£38.00	£39.00	£36.00	£32.00
MDMA powder	€58.68	€55.55	€49.09	€40.44	€36.99

Table 10.7: DrugScope: Mean price of drugs at street level in the United Kingdom, 2006 to 2010

*Until 2008, cannabis prices were converted from ounce prices but in 2009 they were converted from quarter ounce prices. **Source:** Daly 2010

10.4.2 Purity of drugs at street level and composition of drugs/tablets

Purity of drugs at street level

Table 10.8 shows the mean percentage purity for drugs seized by police in England and Wales.²⁷¹ There has been a downward trend in the purity of all cocaine since 2005 with a sharp decline in the purity of crack cocaine during the last year. The purity of heroin has increased slightly and remains higher than it was in 2003 and 2004. While the MDMA content of ecstasy tablets increased in 2009, this was based on a very small sample. Apart from heroin, the mean purity of all substances has decreased since 2003. However, Standard Table 14 shows that, for each individual drug, the range of purities detected is large.

DRUG	2003	2004	2005	2006	2007	2008*	2009*
Amphetamines	10.8	9.0	10.1	10.6	10.9	7.8	8.0
Cocaine powder	51.2	42.4	42.7	34.5	33.2	28.8	20.3
Crack cocaine	69.6	63.7	64.8	49.5	52.3	43.1	27.1
Ecstasy**	64.5	66.7	66.3	48.0	51.8	33.1	43.5
Heroin (brown)	32.7	39.9	46.5	43.5	49.8	42.7	44.4

Table 10.8: Mean percentage purity of certain drugs seized by police in England and Wales, 2003 to 2009

*From 2008 data have been provided by both FSS and LGC Forensics. Previous data were supplied from FSS only. **mg of MDMA base per tablet.

Source: Standard Table 14

Findings from Project Endorse

Project Endorse, a SOCA initiative carried out forensic analysis on all seizures of heroin, cocaine and amphetamines above 25g (see 2009 UK Focal Point report). Key findings on purities and adulterants are published on the SOCA website²⁷² and summarised below.

Cocaine powder

At the point of manufacture, the purity of the cocaine powder that ultimately reached the UK was approximately 90%. At importation the mean purity was 75% with levamisole the most common adulterant prior to importation. After importation, the cocaine powder was heavily diluted with a mean purity at local dealer level of 21% with end users often buying a product at around 10% purity. Benzocaine was the most frequently used adulterant after levamisole and added almost exclusively within the UK with SOCA suggesting that more benzocaine may be imported into the UK to supply the market than cocaine powder.

Crack cocaine

Findings from the project support the view that crack cocaine is largely produced within the country rather than imported. The purity of crack cocaine is low with more than half of samples containing less than 20% cocaine. Adulteration patterns mirror those for cocaine powder apart from the use of phenacetin, which occurs in the majority of samples.

²⁷¹ Police seizures are used as a proxy for the purity of street-level drugs although there will also be some large seizures. Data are from the Forensic Science Service (FSS) and LGC Forensics.

²⁷² See: http://www.soca.gov.uk/threats/drugs/forensic-intelligence

Heroin

The purity of heroin that reaches the UK is consistent at the point of manufacture with a diamorphine content of around 67%. Data suggest that two-thirds of the heroin powder entering the UK may be unadulterated but almost all is adulterated prior to reaching the street. Caffeine and paracetamol are the most common adulterants found in heroin and may occur both before importation and between wholesale and final distribution.

Amphetamine

Amphetamine entering the UK is heavily contaminated with chemicals from the manufacturing process and has been adulterated with caffeine in most cases. Imported products and large seizures are often in paste form with a purity at importation of 17 to 21%. There is some evidence that wholesale adulteration occurs within the UK with the weighted average of street level amphetamine at around six per cent with the majority being closer to one per cent.

Adulterants commonly detected in drugs

A guide to the adulterants, bulking agents and contaminants found in illicit drugs has been published based upon a literature review of published and unpublished sources (Cole et al. 2010). The public health implications of adulterated and contaminated drugs are discussed (see section 7.4).

Composition of tablets

Analysis from samples provided to the FSS²⁷³ from mid-2005 to 2008/09, shows that there has been a downward trend in the number MDMA records since late 2006 (Figure 10.2). This decline may be due to shortages of PML and BMK (the precursors needed for MDMA production) as international controls become more stringent. With the decline in MDMA records from late 2006, the FSS data show a corresponding increase in piperazine records, surpassing the number of MDMA records in mid-2008 and increasing until piperazines were controlled in late 2009. The sharp increase in the number of records of tablets containing cathinone derivatives in late 2009 runs in tandem with the decrease in the number of piperazine records while MDMA records continued to fall.

²⁷³ From 2008, the records include the combined records of LGC Forensics and FSS. Prior to 2008, the information about records analysed were provided by the FSS only.

Figure 10.2: Forensic Science Service seizure records of MDMA, Piperazines and Cathinone derivatives, 2005 to 2009



Source: FSS

Despite an increase in cathinone records, they accounted for only two percent of all FSS and LGC Forensics tablet records in 2009 with 89% of all cathinones found to be 4-Methylmethcathinone (mephedrone). Of all the tablet analyses carried out by the FSS and LGC Forensics in 2009, only 16% contained MDMA as the single scheduled substance compared to 2005, when 99.8% of tablets contained MDMA as the single scheduled substance (see ST15).

Content of products bought as 'legal highs'

Davies et al. (2010)²⁷⁴ assessed the consistency of content of 'legal highs' available to purchase. The most commonly seen active drug type was piperazines followed by cathinones and caffeine/ephedrine. The authors found an association between cost and drug type with cathinones the most expensive followed by piperazines and then caffeine/ephedrine. Whilst most products did not vary in content over the six month study period, there was significant variation in one quarter of the products. The authors suggest that this variation carries potential toxicity risks for consumers.

10.4.3 Purity-adjusted price

Cocaine powder

While the mean wholesale purity level of cocaine powder is 63%, the mean purity at street-level has dropped to 20% demonstrating that cocaine powder is being extensively cut within the UK to maintain profit margins. While the price of cocaine powder has fallen since 2003, the purity-adjusted price²⁷⁵ (indexed to 2003) has almost doubled (Table 10.9). Figure 10.3 shows that, indexed to 2003, purity levels have fallen more than price.

²⁷⁴ For a six-month period starting in January 2009, 26 legal highs were purchased on a monthly basis from five different internet sites. Products were analysed to assess if there were changes in content over this period.

²⁷⁵ Prices have not been adjusted for inflation.

Table 10.9: Purity-adjusted price of cocaine powder per gram in the United Kingdom, 2003 to 2009: indexed to 2003

	l i i i i i i i i i i i i i i i i i i i
£55 £61.58 £58.75 £72.70 £70.94 £71.11	£100.89
€79.51 €90.76 €85.95 €106.63 €103.71 €89.51	€113.33

Source: Standard Tables 14 and 16

Figure 10.3: Price and purity of cocaine powder in England and Wales, 2003 to 2009: indexed to 2003



Source: Standard Tables 14 and 16

Heroin

The purity-adjusted price of heroin (indexed to 2003) has decreased by 47% since 2003 with the largest decrease seen after the fall of the Taliban in 2003 (Table 10.10). Since 2007 the purity-adjusted price has been relatively stable.

Table 10.10: Purity-adjusted price of heroin per gram in the United Kingdom, 2003 to 2009: indexed to 2003

DRUG	2003	2004	2005	2006	2007	2008	2009
Heroin	£62.00	£45.08	£37.97	£39.09	£31.52	£34.46	£33.11
	€89.63	€66.44	€55.55	€57.35	€46.08	€43.38	€37.19

Source: Standard Tables 14 and 16

Part B: Selected Issues





11. History, methods and implementation of national treatment guidelines

11.1 Introduction

The United Kingdom has a long tradition of providing guidance for professionals involved in the provision of drug treatment. There are a large number of guidelines covering a wide range of topics, settings and client groups. This chapter provides an overview of the development of treatment guidelines in the UK, the framework within which they operate, their content, the groups they address and the methods of implementation. Finally, a selection of UK guidelines will be compared with relevant WHO guidelines.

The definition of treatment guidelines used by the EMCDDA is as follows:

"Guidelines are systematically developed statements to assist practitioners and patient decisions about appropriate interventions for specific circumstances. Commonly guidelines include a set of recommendations or steps that can be followed when implementing an intervention. For example, quality guidelines for treatment may refer to treatment processes e.g. guidance for binding levels of assessment, individual treatment planning, informed consent, pathways of care, referrals. They may also include the evaluation processes that refer e.g. to binding documentation (entry/discharge), retention, supervision, evaluation of client satisfaction, outcomes. The content of guidelines is commonly based on the available research evidence."

11.2 Historical, cultural and institutional context

The Pharmacy Act 1868 was the first instance of drug control in the UK, stipulating a list of drugs including opium that were only to be sold by pharmaceutical chemists. The combined use of alcohol and drugs was incorporated into the *Inebriates Act 1898*, which covered drug taking as well as alcohol, if the substance was ingested through drinking. In this era, treatment was provided through institutionalisation involving physical, mental and moral reform.

In the 1920s, the disease model of addiction had been widely accepted (Berridge, 1984). In 1921, the Home Office regulation had tightened the controls over dangerous drugs but still allowed doctors to use them in the practice of their profession. However, there was not a clear consensus as to what was appropriate medical practice in this area. Hence, the Rolleston Committee on morphine and heroin addiction was established in 1924 by the Home Office, constituted of nine doctors, which reported to the Minister of Health. The *Rolleston report* was published in 1926 (Ministry of Health 1926). It provided recommendations for the secure provision of medication using dangerous drugs and for the gradual withdrawal from drugs of dependence. But it also established the medical consensus that maintenance prescribing for opiate addiction was a legitimate approach in some cases; alongside addressing other issues such as the use of psychotherapeutic approaches, re-education of the will and improvements in social conditions of the patient.

In February 1956, the Home Office issued a publication entitled *The Duties of Doctors and Dentists under the Dangerous Drugs Act and Regulations 1956* (Home Office 1956) giving guidance to doctors and dentists about the possession and supply of dangerous drugs and warning that there had been cases in which doctors and dentists had been convicted of offences related to diversion of prescribed dangerous drugs "to the gratification of their own addiction".

In the late 1950s, new synthetic opiates were being manufactured and doctors started to use them for therapeutic purposes and found that they had addictive properties.

In the 1958, the Department of Health and Social Security (DHSS) set up an Interdepartmental Committee, known as the Brain Committee, to review, 'in the light of more recent developments', the advice given by the earlier Rolleston Committee. The first Brain Report was published in 1961 (HM Government 1961) and effectively endorsed the main conclusions of the earlier Rolleston Report. However, the report was publicly criticised for failing to recognise the extent of the problems of addiction in Great Britain. In the early 1960's, heroin addiction had started to increase - mainly in London. Hence, the Brain Committee was re-convened in July 1964, and the second Brain Report was published in 1965 (HM Government 1965). The second report recognised that there was a major problem with addiction to cocaine and heroin and that the main source of supply was over-prescribing by a small number of doctors. It recommended that further measures were required to deal with the problems and that only doctors on the staff at specialist drug dependency treatment centres be licensed to prescribe these particular substances for the management of addicts; and that it should be a statutory offence for other doctors to prescribe these drugs to an addict for the treatment of addiction. The Committee recommended increased prescriptionwriting requirements for dangerous drugs and the establishment of a register of all addicts. The latter action was mainly to avoid the prescribing by more than one doctor to the same patient at the same time; it had only limited effect in this regard and was discontinued in 1997. An advisory committee was also recommended to keep under review the whole developing problem of drug addiction.

The *Drugs (Prevention of Misuse) Act 1964* controlled amphetamines in the United Kingdom and was later used to control LSD. In response to increasing drug problems and with the emergence also of a 'Black Market' in drugs from illicit sources, the law was subsequently changed. *The Misuse of Drugs Act 1971* (and the Regulations of 1973), repealed the majority of previous legislations and made it unlawful for individuals to possess or supply a controlled drug unless an exception or exemption applied. This Act forms the basis of current UK drug laws.

The first UK guidelines for the clinical management of drug misuse, *Guidelines of good clinical practice in the treatment of drug misuse* were issued in 1984 by the DHSS in the context of a growing drug problem. The committee consisted of experts from the medical profession, who based their assessment of good practice largely on their experience rather than from a substantial body of research evidence, which was not available at the time. It was hoped that the guidelines would help reduce the cases where prescribing practice might be seen as irresponsible. The guidelines have since been revised in 1991 (DH et al. 1991), 1999 (DH et al. 1999) and 2007 (DH and the devolved administrations 2007). The revisions show a change in approach to drug treatment in the UK over the years, with a greater balance developing between abstinence-oriented, maintenance-oriented and other harm reduction approaches. In the latter editions, the opinion of experts still remains a key element but the guidelines are able to draw on a much wider and more in-depth, peer-reviewed evidence base.

The historical development of treatment for drug misuse in the UK has occurred in the context of a uniquely long experience in the use of prescribed opiate substitution therapy, the development of specialist addiction teams to manage the emerging increasing demands for treatment; and, derived from both of these sources of experience, the development of authoritative and increasingly detailed treatment guidelines. Within this framework, there is still the flexibility for both the practitioner and service user to exercise choice, with an emphasis on person-centred treatment. Whilst the UK clinical guidelines do not create any statutory obligations on doctors, and do continue to allow clinical freedom, they are seen, for example, as important evidence of professional consensus when relevant regulatory bodies are reviewing cases of possible poor professional conduct in the management of addicts.

11.3 Framework and institutional context

Health is a devolved responsibility in the UK. Consequently, guidance has been developed at both a UK and at a national level (with deferring guidance bodies involved). For instance, England, Scotland, Wales and Northern Ireland, all have their own guidance on drug treatment service frameworks. However, there are some guidelines that have been developed to apply across the UK, requiring collaborative work between professional bodies from all four countries. The most relevant example of this type of

collaborative work is *Drug misuse and dependence – UK guidelines on clinical management* (DH and the devolved administrations 2007). In the development of these treatment guidelines, officials of the Government and the devolved administrations were given observer status. It is usual practice to allow such officials only stakeholder or observer status in the development of such authoritative guidelines, to ensure the independence of, and credibility for, the final published documents.

In England, there are 149 local drugs partnerships, commonly named Drug Action Teams (DATs). They are responsible for developing effective partnership working between all local agencies involved with the misuse of drugs. The local partnerships lead on the commissioning of drug services, monitor and report on performance and communicate plans, activities and performance to stakeholders.

In 2001, the National Treatment Agency for Substance Misuse (NTA) was established in England as a special health authority within the National Health Service (NHS) to "...improve the availability, capacity and effectiveness of treatment for drug misuse in England".²⁷⁶ The NTA has nine regional teams that are involved in the providing support and quality assurance for DATs on their commissioning. One of the key functions of the NTA is the promotion of best practice by providing drug workers with information and guidance on effective drug treatments. Consequently, in England, the NTA are one of the key publishers of drug treatment guidance documents.

In Scotland, a new framework for drugs and alcohol was agreed in 2009 by the Scottish Government, the Convention of Scottish Local Authorities (COSLA) and the NHS. This established 30 Alcohol and Drugs Partnerships (ADPs) operating in specific geographic areas as part of local community planning. ADPs are responsible for developing local outcome-based strategies and co-ordinating community services to address problem drug and alcohol abuse, based on the needs of an area. ADPs are now more closely aligned within Community Planning Partnerships (CPPs) and this is intended to help ensure effective and integrated planning and commissioning of services to help connect local action to reduce health inequalities with the aims of local drugs and alcohol strategies. ADPs consist of senior officials from statutory and non-statutory bodies and are supported by National Support Co-ordinators seconded to the Scottish Government.

In Northern Ireland, four Drugs and Alcohol Coordination Teams (DACTs), North, South, East and West, cover different district council areas. The DACTs operate as multi-agency partnerships consisting of members within statutory and non-statutory agencies. Currently, DACTs are working on implementing the *New Strategic Direction (NSD) for Alcohol and Drugs 2006 – 2011* (DHSSPNI 2006) and so aiming to reduce alcohol and drug-related harm in Northern Ireland. Each team develops a Local Action Plan (LAP), which reflects local need and is essential for implementing the NSD at local level.

Wales has 22 Community Safety Partnerships (CSPs) based in each local authority area. The CSPs consist of local organisations that work collaboratively to reduce crime and substance misuse providing holistic support for substance misusers at a local level. For a comprehensive explanation of funding for drug services in the UK, please refer to Chapter 13.

Clinical governance is a systematic process for monitoring and improving the quality of treatment for all organisations and individuals that provide and that commission drug treatment for drug misusers. The implementation of clinical governance is commonly broken down into a range of domains of activity, and is a statutory requirement for the main organisations that commission treatment for drug misusers, and is either a statutory or a contractual requirement for providers of treatment. One of the key components of clinical governance is the existence of a comprehensive programme of quality improvement activities, including professional and skills development, and use of up-to-date evidence to inform current practice. A central component of quality improvement practice is the use of clinical audit. Local clinical audits are undertaken by services to monitor if they are delivering interventions in line with locally determined standards or guidance and whether they are producing expected outcomes. Findings of such audits will be used to plan improvements. The NTA has produced the document Auditing Drug Treatment (NTA 2008) which facilitates the comparison of audit outcomes, standards or criteria with current clinical guidance.

²⁷⁶ See: http://www.nta.nhs.uk/about-story.aspx

Apart from Technology Appraisals produced by the National Institute for Health and Clinical Excellence (NICE), which are covered by a legal direction requiring Primary Care Trusts (PCTs) to make funding available for recommended treatments, UK and/or local national-level treatment guidelines have no specific statutory status. The guidelines are not meant to provide a rigid protocol for practitioners, nor do they override the responsibility of the clinician to make appropriate decisions for treatment in consultation with the patient (or guardians/carers where appropriate). However, where guidelines are not followed, practitioners are expected to record the rationale for their decisions and be prepared to defend them should their clinical practice come under scrutiny from their professional bodies.

11.3.1 National Institute for Health and Clinical Excellence (NICE)277

NICE is an independent organisation that is responsible for producing national guidance documents to promote good health and to treat and prevent ill health. All NICE guidelines are based on an assessment of the available evidence on clinical and cost-effectiveness and are developed through extensive consultation with external organisations. NICE develops their guidelines according to certain basic principles: multidisciplinary involvement in the development of recommendations, and, where possible, based on systematic reviews and critical appraisals of the evidence base. The Department of Health commissions NICE to develop health guidance. Table 11.1 shows the three types of guidance relevant to drug treatment produced by NICE.²⁷⁸

Table 11.1: Types of NICE guidance

TYPE OF NICE GUIDANCE	DESCRIPTION OF THE GUIDANCE CONTENT
Technology Appraisals	Provides guidance on the use of new and existing treatments, procedures and medicines.
Clinical Guidelines	Guidance on appropriate treatment for specific illnesses, conditions and diseases.
Public Health Guidance	Guidance for the NHS and other bodies to promote good health, harm-reduction and avoidance of ill health.

Country status

Whilst NICE was originally established in 1999 to provide guidance to the NHS in England and Wales, Scotland and Northern Ireland have both implemented NICE guidance according to their needs. Consequently, the status of NICE guidance differs throughout the UK as shown in table 11.2.

²⁷⁷ See: http://www.nice.org.uk/aboutnice/whatwedo/what_we_do.jsp

²⁷⁸ NICE also produce other types of guidance such as interventional procedures, medical technologies guidance.

Table 11.2: Status of NICE guidance across the United Kingdom

COUNTRY	WHICH NICE GUIDANCE APPLY		
England	Clinical Guidelines		
	Technology Appraisals		
	Public Health Guidance		
Wolce	Clinical Guidelines		
Wales	Technology Appraisals		
	Clinical Guidelines (with advice on implementing in the context of the health service in Northern Ireland from the Department of Health, Social Services and Public Safety)		
Northern Ireland	Technology Appraisals (with advice on implementing in the context of the health service in Northern Ireland from the Department of Health, Social Services and Public Safety)		
Scotland	Multiple Technology Appraisals (with advice on implementing in the context of the health service in Scotland from NHS Quality Improvement Scotland)		

Source: NICE

Whilst final decisions on referrals are taken by Department of Health Ministers, NICE oversees the process for selecting topics for referral to its work programme and operates an open system whereby anyone can suggest a topic for referral through its website. Suggestions for guidance topics come from a variety of sources:

- members of the general public, patients, carers;
- health professionals (who can all make suggestions online or by post);
- the Department of Health's national clinical directors and policy teams;
- the National Horizon Scanning Centre (which identifies new and emerging health technologies that may require assessment); and
- within NICE itself.

Topic suggestions are assessed by NICE against a published set of selection criteria and are then reviewed by one of six consideration panels, which are composed of experts of the particular field, generalists who hold good knowledge of the health service, public health and the public sector, and patient and carer representatives. The panel then makes recommendations to the Department of Health where the Health Minister finally selects and refers topics for NICE to produce guidance.

NICE Technology appraisals²⁷⁹

NICE produces both single technology appraisals (where a single technology is assessed for a single condition) and multiple technology appraisals (which cover more than one technology or one technology for more than one condition). The Centre for Health Technology Evaluation within NICE is responsible for developing technology appraisals.

Technology appraisal recommendations are produced by the independent advisory Technology Appraisal Committee. Members are appointed for a three-year term and are drawn from patient and carer organisations, academia, the NHS and the pharmaceutical and medical devices industry. The committee is organised into four branches and once a member has been allocated to a specific branch, they will remain within that branch for the duration of their term.

Consultee organisations are identified from national groups representing patients and carers, bodies representing health professionals, manufacturer(s) or sponsor(s) of the technology in development, the Department of Health (DH), the Welsh Assembly Government (WAG), specialised commissioning groups, primary care trusts, and local health boards.

NICE invites commentator organisations to take part in the appraisal process and comment on the documents produced during this process. Unlike consultee organisations, they cannot comment on the final recommendations made by the Technology Appraisal Committee. Commentator organisations consist of members from manufacturers of comparator technologies, for instance, National Health Service (NHS) Quality Improvement Scotland, relevant research groups working in the area and other groups such as the NHS Confederation, Social Services and Public Safety for Northern Ireland and professional or patient organisations covering Wales.

In England, the NHS must make funding available for technologies recommended by NICE's technology appraisal guidance within three months of guidance publication.

In 2009, NICE published the documents *Guide to the Single Technology Appraisal (STA) Process* (NICE 2009a) and *Guide to the Multiple Technology Appraisal Process* (NICE 2009b) to describe the process undertaken in the development of single and multiple technology appraisals. The process for developing single and multiple technology appraisals is shown in Figure 11.1.

²⁷⁹ See: http://www.nice.org.uk/aboutnice/whatwedo/abouttechnologyappraisals/about_technology_appraisals.jsp



Figure 11.1: Process of NICE Technology Appraisal Development

NICE Clinical guidelines²⁸⁰

These guidelines are produced for use by health professionals and NHS organisations and provide best practice guidance across a whole care pathway for a specific disease. Clinical guidelines can help assess the level of individual clinical practice, for training purposes, to ensure patients are in a position where they can make informed decisions and ultimately to improve communication between patients and health professionals. The National Clinical Guideline Centre (NCGC), hosted by the Royal College of Physicians, is commissioned by NICE to develop the scope of the guideline. NICE has four national collaborating centres (NCCs) to help develop the clinical guidelines by harnessing the expertise of the royal medical colleges, professional bodies and patient/carer organisations. Each NCC is a professionally led group. For drug misuse issues, this would be the National Collaborating Centre for Mental Health and it is led jointly at the British Psychological Society and the Royal College of Psychiatrists. The management board of the NCC for mental health comprises all the relevant professional bodies and national organisations as partners.

Once a guideline topic has been announced, stakeholder organisations from England and Wales (which may include national patient and carer organisations and providers and commissioners of services), are encouraged to register their interest. Individuals may also contribute to the guideline development but are required to register online as an appropriate registered stakeholder.

A guideline development group is set up consisting of technical experts, health professionals and representatives of patient and carer groups. This group looks at the available evidence, supported by the independent reviews of evidence produced by the NCC, and will be asked to make comments on draft guidelines before submitting their final recommendations.

There will be a minimum of one public consultation, during which registered stakeholders are able to make comments on the draft guideline. An independent guideline review panel will then review the draft guideline, ensuring that comments made by the stakeholders have been considered.

Once the development group finalises its recommendations, the NCC produces the final guidance. This guidance will be formally approved by NICE and then issued to the NHS.

NICE produced the *Guidelines Manual 2009* (NICE 2009c) which provides information about how the clinical guidelines have been developed and advice on the practical aspects of guideline development.

NICE Public Health Intervention Guidance²⁸¹

Public health topics are prioritised by NICE's public health consideration panel and referred to NICE by Ministers. As with the clinical guidelines, stakeholders are requested to register their interest soon after the intervention topic is published with a scope on the content of the guideline being produced.

A synopsis of the evidence is prepared, which will also include an economic appraisal of the intervention. This process may be conducted by an independent research body or by NICE itself. Registered stakeholders may be asked to submit additional evidence at any time during the development stage.

A draft intervention guidance document is produced once the Public Health Interventions Advisory Committee (PHIAC) has reviewed the evidence. A consultation period of the draft guidance will be issued to the stakeholders for eight weeks. During this period, stakeholders may also comment on the evidence reviews upon which the draft guidance is based. During this consultation period, the draft intervention guidance is also field tested. A fieldwork report is produced by appropriate professionals, commissioners and practitioners, which is then submitted to the PHIAC.

²⁸⁰ See: http://www.nice.org.uk/aboutnice/whatwedo/aboutclinicalguidelines/about_clinical_guidelines.jsp

²⁸¹ See: http://www.nice.org.uk/aboutnice/whatwedo/aboutpublichealthguidance/about_public_health_guidance.jsp
PHIAC reviews both the comments from the stakeholder consultation and the fieldwork report making appropriate changes to produce the final guidance document. This document is then approved by NICE before it is published.

NICE published the document *Methods for development of NICE public health guidance 2009* (NICE 2009d) which provides information on the methods used for the development of public health guidance.

NICE: working with the devolved administrations

In Scotland, the Scottish Intercollegiate Guidelines Network (SIGN)²⁸² is responsible for producing clinical guidelines for NHS Scotland. Both NICE and SIGN are members of the Appraisal of Guidelines, Research and Evaluation (AGREE) collaboration.²⁸³ Consequently, NICE and SIGN work with the AGREE collaboration to ensure that their guidelines are as complementary as possible so avoiding duplication of work. This is accomplished by NICE and SIGN developing their guidelines according to the same basic principles: multidisciplinary involvement in the development of recommendations, which are based upon systematic reviews, and critical appraisals of the evidence base.

In Northern Ireland, the NICE Clinical Guidelines and Public Health Guidance documents that have been endorsed act as standards that the Health and Personal Social Services (HPSS) are expected to achieve over time.

In Wales, the Welsh Assembly Government (WAG) has an agreement in place with NICE covering NICE technology appraisals, clinical guidelines and interventional procedure guidance, which all continue to apply in Wales. Although clinical guidelines issued by NICE are not subject to the Assembly's three months funding Direction, the WAG expects NHS bodies in Wales to take full account of the recommendations made by the Institute when commissioning and delivering services to patients.

The health standards for Wales, set out by the Welsh Assembly Government, ensures that services across the health care setting provide services in line with the clinical guidelines and technology appraisals produced by NICE.

11.3.2 Role of guidelines in the development of treatment quality

Each country in the UK has a minimum standard of health care set by the Government and the devolved administrations. Drug treatment services are required to meet these standards to facilitate a framework for continuous improvement.

11.4 Treatment guidelines: narrative description

Current UK guidelines are based upon a biopsychosocial model of treatment²⁸⁴ and they recognise that there may be multiple attempts at recovery from drug dependence. The guidelines reinforce the role of clinical staff, in ensuring that individuals with drug misuse difficulties have the same entitlement to NHS and social care services as other patients.

²⁸² See: http://www.sign.ac.uk/

²⁸³ See: http://www.nice.org.uk/aboutnice/howwework/developingniceclinicalguidelines/guidelinedevelopmentgroups/ scottishintercollegiateguidelinesnetworksign/scottish_intercollegiate_guidelines_network_sign.jsp

²⁸⁴ The socio-medical model of health focuses on the social factors that contribute to health and well-being in society.

Due to the large number of guidelines that exist in the UK, a select number of guidelines have been chosen for discussion. *Drug misuse and dependence: UK guidelines on clinical management* (DH et al. 2007) is unique in its applicability across the UK and provides a skeletal framework from which devolved administrations can develop locally appropriate guidance. *Models of Care for Treatment of Adult Drug Misusers* (NTA 2006) is not a typical clinical guideline per se but is evidence-based guidance on a commissioning framework for drug services. It was developed with the assistance of clinical experts and with reference to the evidence base on effective interventions. It provides guidance on the different types of services needed in a system of care to provide the wide range of interventions required to meet the needs of drug misusers. The guidelines produced by NICE were chosen as they contain key messages from NICE about drug treatment, and because they are also used to inform other guidelines.

The following framework guideline will be reviewed:

1. Models of Care for Treatment of Adult Drug Misusers: Update 2006 (NTA 2006).

Clinical treatment guidelines to be discussed are:

- 1. Drug misuse and dependence UK guidelines on clinical management (DH et al. 2007);
- 2. Drug misuse Opioid detoxification (NICE 2007c);
- 3. Methadone and buprenorphine for the management of opioid dependence (NICE 2007a);
- 4. Naltrexone the management of opioid dependence (NICE 2007b); and
- 5. Drug misuse Psychosocial interventions (NICE 2007d).

The guidelines complement each other and it is recommended that they are used in conjunction with each other.

11.4.1 Models of Care for Treatment of Adult Drug Misusers: Update 2006

This document (NTA 2006), applicable in England, sets out the service framework for commissioning and provision of drug misuse treatment services. This guideline provides managers, joint commissioners, providers and users of drug treatment services with a four-tiered framework for providing drug treatment (Table 11.3). The tiers refer to the level of interventions provided with many agencies providing interventions from a variety of tiers. The degree of individual need and support usually increases with each tier (NTA 2006). *Models of Care Update 2006*, is due to be updated and the update is likely to reflect a greater focus on the achievement of recovery.

Table 11.3:	iers of drug treatment provision in England	

TIER	INTERVENTIONS	SETTINGS
1	 Provision of drug-related information and advice Drug treatment and screening assessment Referral to specialised drug treatment Partnership working with specialised drug treatment teams 	 General healthcare Social care Education Criminal justice (those that do not have a main focus on drug treatment)
2	 Triage assessment and referral for structured drug treatment Brief psychosocial interventions Harm reduction interventions (including needle exchange) Aftercare 	 Outreach Primary care Pharmacies Criminal justice Community
3	 Community-based specialised drug treatment Co-ordinated care planned treatment Drug specialist liaison Harm reduction activities A range of pharmacological interventions Psychosocial interventions Care planned and structured day care programmes Liaison services with mental health, acute medical and social care services 	 Specialised drug treatment services in community and/or inpatient settings Primary care Pharmacies
4	 Inpatient specialist drug and alcohol assessments Stabilisation Inpatient detoxification/assisted withdrawal Residential rehabilitation units Range of drug halfway houses or supportive accommodation Crisis intervention units 	Specialised residential substance misuse units/wards

Source: NTA 2006

To review the framework for drug treatment, the NTA works in partnership with the Care Quality Commission (CQC), creating detailed criteria for reviewing drug treatment services on an annual basis. Known as Improvement Reviews, these compare the functions of local providers and commissioners of services against specified criteria and those stipulated by the Standards for Better Health.

11.4.2 Drug misuse and dependence – UK guidelines on clinical management

The 2007, *Drug misuse and dependence – UK guidelines on clinical management (from here on referred to as the 2007 UK Clinical Guidelines) (DH et al. 2007)*, were developed to update and replace the 1999 guidelines due to advances in the evidence base for drug treatment and clinical practice. The clinical guidelines provide practical guidance for all clinicians but in particular those providing pharmacological interventions (DH et al. 2007).

The clinical guidelines were developed alongside the guidelines produced by NICE in 2007 (NICE 2007a-d). They cover the management and treatment of drug misusers using a broader approach than the NICE guidelines although it is intended that they be used in conjunction with NICE guidelines.

In 2007, DH (England) and the devolved administrations commissioned the NTA to provide a secretariat for the independent working group and separate user and carer advisory groups. The terms of reference were to update the 1999 Clinical Guidelines document, which was the only widely recognised authoritative guideline on drug treatment in the UK up to 2007.

The working group included addiction psychiatrists, general practitioners, nurses, pharmacists, service users and carer representatives and representatives from professional organisations/groups, with Government departments, NICE, the NTA and some named individuals (refer to the guideline for an identified list) granted observer status.

Independent reviewers were commissioned to advise the working group on the current evidencebase for a range of drug-related treatment issues. Recommendations, and the evidence behind these recommendations, were provided to the working group for consideration and rating. The working group also considered information from NICE guidelines and other relevant research and guidance. Through consensus building, the working group reached a conclusion on the best available evidence. The working group chose not to rate their recommendations (and the evidence for these), in order to be in a position where recommendations could be made on important subjects where there was not a substantial research evidence base but where guidance would be of practical use to clinicians.

The NTA managed the consultation process and members of the working group were fully involved. All consultation responses were provided for comment to the working group with their comments taken into consideration for redrafting the guideline document.

For the topics that presented the most consultation comments, a meeting was held by the group to hold further discussions or to reach a consensus. Sections on blood-borne infections and child protection were amended or clarified as a result of this process. For blood-borne infections, there was an increase in detail provided on hepatitis C and information was added on common bacterial infections seen frequently amongst drug misusers. Regarding the child protection amendments, the final document clarified the increased responsibility that now falls to clinicians to identify children who may be at risk of harm as a result of drug-misusing parents.

The clinical guidelines are applicable across drug treatment services and cover a wide range of components such as clinical governance, health improvement and other essential elements of treatment provision.

For more detailed information about individual guidelines, please refer to the guidance document but as a guide for topics covered refer to Table 11.4.

Table 11.4: Chapter topics from Drug misuse and dependence: UK guidelines on clinical management

CHAPTER	INTERVENTIONS COVERED
3	Essential elements of treatment provision, including: • Assessment • Delivery of treatment • Drug testing
4	Psychosocial components of treatment, including:Psychosocial interventionsNICE guidelinePractitioner competencies
5	Pharmacological interventions, including:PrescribingOpioid detoxificationStimulants
6	Health considerations, including:Blood-borne infectionsPreventing drug-related deaths
7	Specific treatment situations and populations, including:PrisonsPregnancy and neonatal careOlder current and ex-drug misusers
Annexes	Covers a range of topics such as drugs and driving, injectable opioid treatment and writing prescriptions, amongst others.

11.4.3 Drug Misuse - Opioid detoxification

This clinical guideline produced by NICE, makes recommendations for the treatment of people who are undergoing opioid detoxification in community, residential, inpatient and prison settings (NICE 2007c). Other substances are only dealt with when they are likely to impact on opioid detoxification. To ensure effectiveness of the recommendations outlined in the guideline, it is recommended that key working takes place to co-ordinate care plans. The guideline is aimed at clinicians and service commissioners. Primarily, the guideline makes recommendations based on the available evidence for the use of agonists, antagonists and adjunctive medications, stating clearly, where and when opioid detoxification is, or is not, appropriate.

The guideline recommends that treatment for opioid detoxification should be primarily pharmacological but that the evidence base suggests that psychosocial interventions, such as contingency management, should be considered for provision during detoxification.

The guideline recommends that after providing information, advice and support a clinical assessment of the service user should be completed. The assessment should document current and previous levels of opioid use, history of treatment and treatment compliance and identify any other substances that are being used (which may interfere with detoxification). Before commencing detoxification, in collaboration with the service user, several factors need to be explored: the level of dependence; the stability of an individual's mental health and other substance use; the pharmacology of the preferred detoxification medication and its interaction effects with other medication being used; and the setting in which the detoxification will occur. Opioid detoxification should take place within a community-based programme with residential detoxification only considered for people with co-morbid physical and/or mental health problems, or for detoxification from multiple substances. The recommended duration for opioid detoxification in an inpatient/residential setting is four weeks and within community settings, twelve weeks.

The first-line pharmacological treatments that should be offered for opioid detoxification are the opioid agonist methadone or the partial agonist buprenorphine. To decide between the two, clinicians are expected to review each client on a case-by-case basis, taking into account if either substance is currently being used or if the service user has a preference.

It is recommended that lofexidine, but not clonidine is routinely offered in opioid detoxification, where such adjunctive medication is needed. Again, there is a list of criteria that practitioners are advised to consider before providing a prescription.

It is recommended that ultra-rapid detoxification from opioid dependency, under general anaesthesia or heavy sedation should not be offered through the NHS due to the high level of risk involved.

11.4.4 Methadone and buprenorphine for the management of opioid dependence

This NICE technology appraisal guidance for doctors, non-medical prescribers and Patient Group Directions (PGDs) recommends flexible prescribing regimens for oral formulations (NICE 2007a). The dose given is to be assessed on a case-by-case basis. To avoid misuse, it is advised that methadone and buprenorphine should be administered as supervised consumption daily for at least the first three months, the regime only being relaxed when compliance is assured. Both drugs should only be administered in a supportive programme of care.

The guidance recommends that methadone is to be used in opioid dependence at an initial dose of 10 to 40 mg daily which is increased by up to 10 mg daily (with a maximum weekly increase of 30 mg). It is advised that a typical effective maintenance dose is within the range of 60 to 120 mg a day.

For buprenorphine, the guidance recommends that an initial recommended once-daily dose of 0.8 to 4 mg should be used and adjusted according to response. The guidance recognises that a more typical starting dose of 4mg a day is often used, with an adequate maintenance dose of between 12 and 24 mg a day. The maximum daily dose recommended is 32 mg.

11.4.5 Naltrexone for the management of opioid dependence

This NICE technology appraisal guidance document, recommends naltrexone for relapse prevention treatment in highly motivated individuals who have completed detoxification and are aiming for abstinence (NICE 2007b). The guidance addresses doctors, non-medical prescribers and PGDs. Naltrexone should be provided as part of a programme of supportive care where the user has been fully informed of the possible adverse effects and should only be administered under supervision. Through a process of regular review, if the misuse of naltrexone occurs, treatment should be discontinued. It is recommended that naltrexone only be provided for people who are highly motivated to remain in an abstinence programme.

11.4.6 Drug misuse - psychosocial interventions

This clinical guideline produced by NICE, is a comprehensive non-medical guidance document for the treatment of drug misuse (NICE 2007d). The guideline makes recommendations for the role of psychosocial interventions in combination with pharmacological interventions and as stand-alone interventions in the treatment of people who misuse opioids, stimulants and cannabis. It is applicable across all tiers of interventions recommended for drug treatment, with the level of interventions provided, dependent on an individual's level of need. Typically, Tiers 1 and 2 are 'low-intensity' interventions such as motivational interviewing and self-help while Tiers 3 and 4 are 'higher intensity' interventions such as contingency management or more structured forms of counselling. The guideline is aimed at practitioners and commissioners but may be of interest to service users, advocates and family members. It is acknowledged that the guideline will also influence the work of occupational health and social services.

The guideline covers a wide range of settings. The psychosocial interventions recommended in the full clinical guideline summarises the analysis of the evidence for a broad range of interventions, including contingency management, Cognitive Behavioural Therapy (CBT) and psychodynamic therapy. The quick reference guide of this guideline highlights those interventions that have particularly strong evidence and so prioritises these recommendations.

11.5 Existing list of guidance

Guidance documents on the management of drug misuse in the UK have been developed for specific settings (e.g. community), specific populations (e.g. young people) and for professional groups (e.g. psychiatrists and general practitioners with an interest in addictions). Consequently, there are a large number of guidance documents covering a broad range of topics. The majority of these documents are consistent with key messages contained within the 2007 NICE suite of guidance and the 2007 UK Clinical Guidelines. This section lists current drug treatment guidance in the UK. They are differentiated by whether they address practice issues (Table 11.5) or the drug treatment system (Table 11.6)

Table	11.5:	Current	UK and	Inational	practice	treatment	quidance
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DATE	PUBLICATION TITLE	WHERE RELEVANT	TYPES OF INTERVENTIONS	GROUPS ADDRESSED	LEAD AUTHORS
Mar-10	Updated guidance for prison based opioid maintenance prescribing.	England	Pharmacological	Clinicians working with prisoners	DH
Mar-10	Guidance and training protocol for the development of the introduction of take home Naloxone	Wales	Pharmacological	Community Safety Partnerships, providers	WAG, National Working Group
Nov-09	Treatment of Offenders	Wales	Arrest Referral Service, psychosocial and pharmacological	Planners, commissioners and providers	WAG
Oct-09	Guidance for the pharmacological management of substance misuse among young people in secure environment	England	Prescribing protocols & observation	PCT Prison Health Leads, Senior MPs in young offender institutes, Doctors for LA secure children's homes	NTA
Jul-09	Towards successful treatment completion - a good practice guide	England	Client-centred	Providers, joint commissioners, service users and advocacy groups	NTA
Mar-09	Guidance for the pharmacological management of substance misuse among young people	England	Prescribing protocols & observation	Young persons specialist substance misuse service providers, commissioners, doctors, NMPs, PCTs	NTA

DATE	PUBLICATION TITLE	WHERE RELEVANT	TYPES OF INTERVENTIONS	GROUPS ADDRESSED	LEAD AUTHORS
Feb-09	Needle and syringe programmes: providing people who inject drugs with injecting equipment	England	Needle and syringe programmes	NHS, NSPs, DAATs, pharmacies, Las, wider public, voluntary and community sectors, injecting drug users and their families/ advocates.	NICE
Oct-08	Good Practice in Harm Reduction	England	Highlights good practice in harm reduction	Drug service treatment providers Drug treatment commissioners Users of drug treatment services	NTA
Dec-07	Non-medical prescribing, patient group directions and minor ailment schemes in the treatment of drug misusers	England	Minor ailment schemes, PGD's, NMP's	Chief executives of primary care, strategic health authorities, LAs. Directors of adult social services, GPs, commissioners and service providers.	NTA
Sep-07	Drug misuse and dependence - UK guidelines on clinical management	UK	Psychosocial, Pharmacological	Drug treatment commissioners and clinicians	DH, SG, WAG, NI Executive
Jul-07	Drug misuse - Psychosocial Interventions	England Wales and Northern Ireland	Psychosocial and Psychological	Drug treatment commissioners and clinicians, service users and advocates.	NICE
Jul-07	Drug misuse - Opioid detoxification	England Wales and Northern Ireland	Pharmacological and Psychosocial	GPs, NMPs, PGDs service users	NICE
Jan-07	Naltrexone for the management of opioid dependence	UK	Pharmacological	GPs, NMPs, PGDs, service users	NICE
Jan-07	Methadone and buprenorphine for the management of opioid dependence	UK	Pharmacological	GPs, NMPs, PGDs, service users	NICE
Dec-06	Clinical Management of Drug Dependence in the Adult Prison Setting - Including Psychosocial Treatment as a Core Part	England	Reception screening, pharmaceutical management of opioids	PCT Ces, SHA Ces, SHA and PCT Prison Health Leads	DH

DATE	PUBLICATION TITLE	WHERE RELEVANT	TYPES OF INTERVENTIONS	GROUPS ADDRESSED	LEAD AUTHORS
Aug-06	Psychological Therapy and Psychosocial interventions in the Treatment of Substance Misuse	Wales	Psychological and psychosocial	Commissioners, manager and providers	WAG
May-06	Treating drug misuse problems: evidence of effectiveness	England	Pharmacological, psychosocial and psychological	Providers, commissioners, service users and carers	NTA
Feb-06	Integrated Drug Treatment System - The First 28 days: Psychosocial Support	England	3 phase CARAT (tiers 2 & 3)	Commissioners, NDPDU, ADCs, Establishment Drug Strategy co-ordinators, CJIT workers, Offender Managers, Healthcare teams, CARAT workers, managers and providers of community treatment services	NTA
Jun-05	Retaining clients in drug treatment	England	Retention	Providers and commissioners	NTA
Mar-05	Every Child Matters: Change for children - young people and drugs	England	Prevention and early intervention	Prevention & early intervention	HO & DfES
Feb-04	Northern Ireland Guidelines on Substitution Treatment for Opiate Dependence	Northern Ireland	Substitute prescribing	GPs, specialist treatment agencies	DH, SSPS
Jan-04	Reducing Drug- Related Deaths: guidance for drug treatment providers	England	Harm-reduction	Providers of services across all tiers	NTA
May-03	Injectable heroin (and injectable methadone) - Potential roles in drug treatment	England	Drug treatment modality	Drug treatment practitioner, NMP's, GP's	NTA
Oct-02	Psychostimulants: A practical guide	Scotland	Pharmacological, psychosocial and acupuncture	DATs, service providers and practitioners	PSWG, SDF, EIU

DATE	PUBLICATION TITLE	WHERE RELEVANT	TYPES OF INTERVENTIONS	GROUPS ADDRESSED	LEAD AUTHORS
May-10	Routes to Recovery: Psychosocial interventions for drug misuse. A framework and toolkit for implementing NICE-recommended treatment interventions	England and Wales	Implementation of psychosocial interventions	Practitioners, service managers and commissioners	NTA and BPS
Jan-10	Commissioning for recovery. Drug treatment, reintegration and recovery in the community and prisons: a guide for drug partnerships	England	Commissioning	Drug partnerships and commissioning staff in community and prison settings	NTA
Dec-09	Guidance for the planning and provisions of substance misuse services to children and young people in the care of youth offending services	Wales	Care planning and the delivery of interventions	Youth offending team partnerships, children and young people's partnerships, Community Safety Partnerships and substance misuse action teams	WAG and Health Challenge Wales
Dec-09	Substance Misuse Service and System Improvement - National Core Standards for Substance Misuse Services in Wales	Wales	Standards required for treatment	Responsible Authorities of CSPs, providers and citizens	WAG, Health Challenge Wales
Sep-09	Prisons Integrated Drug Treatment System: Continuity of Care Guidance	England	Assessment of need	Commissioning managers, drug partnership boards, PCTs, and prison stakeholders	DH, Ministry of Justice
Jul-09	Undertaking needs assessment: drug treatment. Recovery and reintegration in the community and prisons	England	Assessment of need	Commissioning managers, drug partnership boards, PCTs, and prison stakeholders	NTA

Table	11.6:	Current	UK and	l national	contextual	quidance

DATE	PUBLICATION TITLE	WHERE RELEVANT	TYPES OF INTERVENTIONS	GROUPS ADDRESSED	LEAD AUTHORS
Jul-09	Clinical governance in drug treatment: A good practice guide for providers and commissioners	England and Wales	Clinical Governance	Service providers, commissioners and service users	NTA
May-09	Residential drug treatment service: a summary of good practice	England	Tier 4	Commissioning managers, DATs, Tier 4 NHS and voluntary sector treatment providers	NTA
May-09	Residential drug treatment services: good practices in the field	England	Tier 4 set-up by service review	Commissioning managers, DATs, Tier 4 NHS and voluntary sector treatment providers	NTA
Jan-09	Planning, commissioning and delivering the training and employment pathway for PDU's (Updated April 2009)	England	Practice development	Jobcentre Plus advisors and drug coordinators, commissioners and providers of treatment services	NTA
Dec-08	Auditing drug misuse treatment	England and Wales	Auditing	Drug partnerships, service providers, commissioners and commissioning managers	NTA
Oct-08	Integrated drug treatment system in prisons (IDTS) treatment plans 2009/2010.	England and Wales	Preparing annual treatment plans	Joint commissioning managers, PCT commissioners and prison establishments receiving IDTS funding for the delivery of drug treatment	NTA
Sep-08	Supporting and involving carers: a guide for commissioners and providers	England	Commissioning	Commissioners and providers	NTA
Sep-08	Improving the quality and provision of Tier 4 interventions as part of client treatment journeys: A best practice guide	England	Quality and provision of tier 4 treatments	Treatment service managers, joint commissioners, providers and users of drug treatment services	NTA

DATE	PUBLICATION TITLE	WHERE RELEVANT	TYPES OF INTERVENTIONS	GROUPS ADDRESSED	LEAD AUTHORS
Jul-08	Guidance on good practice for the provision of services for children and, younger people who use or misuse substances in Wales	Wales	Prescribing, education, needle exchange, assessments, detoxification, group, family and individual therapy, self-help, specialised interventions, transition planning	Planners and service providers	WAG
Apr-08	Substance Misuse Treatment Framework Carers and Families of Substance Misusers A Framework for the Provision of Support and Involvement	Wales	User involvement	Adult carers, adult family members, service providers, commissioners	WAG
Aug-07	Needs assessment guidance for adult drug treatment	England	Needs assessment	Commissioners, providers, clinicians, users and other interested groups	NTA
Jul-07	Good practice in care planning	England	Care planning practice	Treatment providers, commissioners and service providers	NTA
Jun-07	Good Practice Framework for the Provision of Substance Misuse Services to Homeless People and those with Accommodation Problems	Wales	Outreach services (Tier 2) & partnership working	Service providers, commissioners, planners, homelessness agencies, housing authorities, CSPs	WAG
Oct-06	Models of residential rehabilitation for drug and alcohol misusers	England	Residential rehabilitation - group work, life skills, vocational, family, supportive programmes, community treatment, resettlement, withdrawal treatment	Local, regional and supra-regional commissioners, care managers,	NTA
Jul-06	Models of care for treatment of adult drug misusers: Update 2006	England	Four-tiered framework	Managers, joint commissioners, providers and service users	NTA

DATE	PUBLICATION TITLE	WHERE RELEVANT	TYPES OF INTERVENTIONS	GROUPS ADDRESSED	LEAD AUTHORS
Feb-06	Best practice guidance for commissioners and providers of pharmaceutical services for drug users. Service specification (Tier 2 or 3)	England	Commissioning	Commissioners and providers of pharmaceutical services in primary and secondary care	NTA
Feb-06	New Strategic Direction for Alcohol and Drugs	Northern Ireland	Service framework	service commissioners, co- ordinators and joint commissioning group, DAT co-ordinators, strategic partnerships, treatment providers	DHSSPS
Jun-05	Young people's substance misuse treatment services - essential elements	England	Four-tiered framework	service commissioners, co-ordinators and joint commissioning group, DAT co-ordinators, strategic partnerships, treatment providers	NTA

11.5.1 On-going guidance development

Unless otherwise stated, guidance in the UK does not have a pre-determined date for review. However, some guidance, such as the NICE technology appraisals will be reviewed at a set date (month and year). NICE consults with relevant organisations to decide whether the guidance needs to be updated and, if so, how. The time between guidance publication and review will vary depending on available evidence and knowledge of when ongoing research will be reported. Technology appraisals can be reviewed before the review date if there is new significant evidence that is likely to change the recommendations. After gathering relevant information and completing a literature search, a review proposal is produced. NICE's Guidance Executive considers and signs off guidance documents on a weekly basis. The group consists of NICE executive directors, guidance directors and the communications director. For technology appraisals, the Guidance Executive will use information from the review proposal to decide if the published guidance should be updated. The Guidance Executive then decides on the most appropriate course of action (Table 11.7).

GUIDANCE NEEDS UPDATING	GUIDANCE DOES NOT NEED UPDATING
Appraisal planned to update the published guidance	Guidance is valid and does not require an update because the evidence base is not likely to change substantially, i.e. gets designated as a static guideline
Appraisal planned that combines the published guidance with the one or more related pieces of published guidance or ongoing appraisals	Defer the update to a future date
Update the published guidance with another guidance producing centre	Incorporate the guidance into a clinical guideline

Table 11.7: Possible actions for updating NICE guidance

Source: NICE

The NTA review their guidelines on a case-by-case basis with different processes for review depending upon the guideline being reviewed.

11.6 Implementation process

Virtually all drug treatment organisations have a statutory or contractual obligation for appropriate clinical governance, and clinicians have professional obligations for standards of care through their established regulatory bodies. This will include proper consideration and application of evidence-based guidance and guidelines for effective treatment. In addition, commissioners of services may reflect elements of current guidance in contracts or service level agreements with providers. Commissioners and providers are also expected to implement services that address specific needs at a local level.

Due to services having the flexibility to implement guidelines in a way that addresses the level of need at a local level, there is no single model for effective implementation of treatment guidelines within the UK.

11.6.1 Guideline adoption

In England and Wales, the NHS must provide funding for recommendations made by NICE technology appraisals within three months of their publication.

Table 11.8: NICE guidance adoption in the NHS

TYPE OF GUIDANCE	RECOMMENDATIONS FOR NHS ORGANISATIONS
Clinical Guideline	Review current management of clinical conditions and consider the resources and time needed to implement the guideline
Technology Appraisal	Fund and resource medicines and treatment recommended usually within three months of NICE issuing guideline
Public Health Guidance	Review current practice and consider the resources and time needed to implement the guideline

Source: NICE

11.6.2 Strategy of dissemination and implementation

In England, *Models of care: Update 2006* does not in itself provide recommendations for implementation and dissemination but the NTA has produced multiple guidance documents for commissioners, service managers and practitioners on how to develop services in line with the models of care framework (see Tables 11.5.1 and 11.5.2).

The 2007 UK clinical guidelines do not provide their own framework for dissemination and implementation but, across the UK, a range of documents has been produced, including service frameworks that provide organisations with guidance on how to implement the UK clinical guidelines (see Tables 11.5.1 and 11.5.2). The 2007 UK clinical guidelines and NICE clinical guideline and technology appraisals were launched together at regional events from Autumn 2007, with agreement reached between the NTA and NICE on joint dissemination in order to maximise the impact of dissemination and to enable effective and consistent communication.

NICE has produced a range of 'how to' guides to help with the implementation of their guidance at a local level with topics such as *How to put NICE guidance into practice* (NICE 2005) (which covers the dissemination and implementation process of their clinical guidelines and technology appraisals) and *How to use NICE guidance to commission high quality services* (NICE 2009e).

For NICE technology appraisals, it is recommended that guidance implementation teams assess the relevance of the guidance to their service, if there will be an impact on the existing health community and if so, where partnership working can be implemented. A baseline assessment should then be completed, assessing the current practice against that recommended in the guidance. If current practice is not in line with the guidance recommendations, then an action plan and cost assessment needs to be produced. The action plan will identify areas needing work and the implementation team will allocate actions and assign responsibility according to the interests of individuals within the implementation team. Funding will need to be provided within three months from the date NICE issues the technology appraisal (unless otherwise stated). Dissemination of the guidance then occurs within the service. The implementation process is reviewed and monitored with feedback of progress being provided to the NHS trust board.

Guidance specific tools have been published, with particular reference to costing tools for implementation. *Drug misuse - naltrexone: costing statement* (NICE 2007e) and *Drug misuse - methadone and buprenorphine: costing template and costing report* (NICE 2007f) are tools to help services assess the financial impact of implementing NICE guidance.

Practical implementation of treatment guidance

The flexibility in the implementation of guidance documents by services and practitioners was demonstrated in a project conducted by Luty et al. (2010),²⁸⁵ which showed that despite guidance documents e.g. 'Methadone and buprenorphine for the management of opioid dependence' (NICE 2007a) recommending higher doses of methadone be prescribed, it was more common for practitioners to prescribe lower doses of methadone; only half the teams reported 10 service users on doses over 60mg. These prescribing policies were supported by just over half of the service users, who recommended a maximum dose of 80mg of methadone. Regarding supervised consumption of methadone, just over half of the service users were opposed to the recommendation in the UK Clinical Guidelines (DH et al. 2007) that a pharmacist should supervise initial consumption of methadone. Consequently, the authors suggest that community drug teams may come under pressure from service users to permit take-away doses of methadone as findings from the study suggest that one-fifth of service users who are prescribed methadone are done so on a take-away basis. Even though benzodiazepines for symptomatic relief during opiate detoxification is supported by the 2007 UK Clinical Guidelines, the study found that less than half of the community drug teams would prescribe benzodiazepines for this purpose; the authors suggest that this is because the evidence base for this intervention remains weak. Despite the provision of guidelines for injectable opioids e.g. 2007 UK Clinical Guidelines (DH et al. 2007) and Injectable heroin (and injectable methadone) - Potential roles in drug treatment (NTA 2003), three-guarters of community drug teams would not prescribe injectables of heroin or methadone at all, whilst 60% of service users opposed the use of injectable prescriptions from private facilities.

11.6.3 Factors supporting and complicating implementation

NICE have created a 'Shared Learning Database' that enables organisations that have implemented NICE guidance to share tips, ideas and examples of their implementation process.

In 2007, the Department of Health implemented 'Payment by Results' for NHS services. This process aims to provide financial gains for services that prove to be efficient and supportive of patient choice and diversity. It aims to encourage sustainable activities that reduce waiting times. As guidance produced in the UK has proven clinical and cost-effectiveness, 'Payment by Results' may be a scheme that encourages the implementation of guidelines.

11.6.4 Future developments

NICE currently plans holding a stakeholder consultation on the draft guidance, *Psychosis with substance misuse*, which is due to be published in March 2011. NICE regularly considers whether there is sufficient evidence to suggest that a review of existing guidance is necessary and expects to consult on plans to consider a review of the technology appraisals, *Methadone and buprenorphine for managing opioid dependency and Naltrexone for the management of opioid dependence*. It will also consider updating the public health guidance on *Interventions to reduce substance misuse amongst vulnerable young people*. In 2011 NICE is expected to consider the need to review its clinical guidelines on Drug misuse: opioid detoxification (NICE 2007c) and *Drug misuse: psychosocial interventions* (NICE 2007d).

In addition to guidance specifically addressing drug misuse, the treatment of drug misuse may be covered in broader guidelines such as the recently published clinical guideline, *Pregnancy and complex social factors: a model for service provision for pregnant women with complex social factors* (NICE 2010).

²⁸⁵ Conducted as a postal and telephone survey, and directed to the prescribing doctors of 140 community drug teams in England and Wales. Prescribing policies for substitute prescriptions, including the prevalence of supervised methadone consumption, the use of higher doses of methadone, injectables and prescribed benzodiazepines, were surveyed from 120 drug teams (giving a 86% response rate). Through a second survey, 104 clients from community drugs teams in Essex commented on various aspects of prescribing policies.

11.7 Comparison with World Health Organisation guidelines

Pharmacological treatment of opiate dependence

As part of the selected issue, Focal Points are requested to compare national guidelines on pharmacological treatment of opiate dependence with the World Health Organisation (WHO) guidelines, *Guidelines for the psychosocially assisted pharmacological treatment of opioid dependence* (WHO 2009). There are a number of UK guidelines that cover aspects of the treatment of opiate dependence – relating to different specific treatments or different settings. However, the document *Drug misuse and dependence - UK guidelines on clinical management* (DH et al. 2007) is consistent with, or incorporates recommendations from, the other main UK guidance documents. It the UK guidelines document most equivalent in scope to the WHO document and so is used as the main comparator in the following discussion.

As in the WHO guidelines, the first-line treatment recommended in the 2007 UK clinical guidelines for opioid dependence is induction and stabilisation on opioid agonist treatment. The relevant section on opioid maintenance prescribing in the 2007 UK clinical guidelines recognises that most will require agonist treatment for longer than just a few months but also that a few patients can achieve abstinence rapidly. The opioid agonists recommended by WHO for the pharmacological treatment of opioid dependence, methadone and buprenorphine, are also the ones recommended within the UK. In the UK, it is recommended that if both methadone and buprenorphine are equally suitable, methadone should be prescribed as first choice (as recommended in the NICE technology appraisal on methadone and buprenorphine – because of the greater cost-effectiveness of the former). However, the 2007 UK clinical guidelines make clear that the choice initially should be made on a case-by-case basis, taking patient and prescriber preferences in to account. The WHO guideline is slightly stronger in its statement that, in general, methadone is recommended over burprenorphine. However, both the UK and WHO guidelines do make clear that good outcomes are seen with both drugs and that there may be benefits from making both available.

The 2007 UK clinical guidelines also very closely match WHO recommendations on the appropriate dosage level for methadone and buprenorphine, both initially for induction and subsequently for stabilisation and maintenance. There are some differences of detail. The WHO guideline suggests stabilisation on 8 to 24mg per day of buprenorphine, whilst in the UK, it is recommended that most patients need an average daily dose of 12 to 16 mg for effective maintenance treatment (with some needing up to 32 mg). Also, the WHO guideline states that initial methadone dose should be 20 mg or less, whilst in the 2007 UK clinical guidelines it is suggested that in general, the initial daily dose will be in the range of 10 to 30 mg. In the UK, it is stated that with heavily dependent misusers who are tolerant, and where the clinician is experienced or competent, a first dose can be up to 40 mg but that it is unwise to exceed this dose. A similar caveat in the WHO guideline recognises that some patients with high levels of neuroadaptation may be given up to 30 mg as a starting dose as long as the risks of fatal overdose are taken in to account in balancing risks. The speed of escalation of doses during the induction and stabilisation phases are very similar.

The WHO recommendation of supervision in the early phase of treatment followed by take-home doses in the right circumstances is also a feature of 2007 UK clinical guidelines.

The WHO guideline recommends consideration of the use of naltrexone, following completion of opioid withdrawal in those who are motivated to cease opioid use completely. It suggests it is likely to be most useful for those with a reasonable chance of remaining abstinent, where a significant other can administer and supervise it, and alongside routinely offered psychosocial treatment. This is a very similar recommendation to that given in the NICE technology appraisal on naltrexone. The UK guideline summarise the recommended use of naltrexone in detoxified formerly opioid-dependent people who are highly motivated to remain in an abstinence-based programme, only under adequate supervision, in those who have been fully informed of the potential adverse effects of treatment, and receive the medication as part of a wider programme of supportive care.

For pregnant women who are dependent on opioids, maintenance treatment is generally recommended using methadone in both the UK and WHO guidelines but both also recognise that it is appropriate to consider continuing with buprenorphine treatment if this is already working.

The 2007 UK clinical guidelines on the use of drugs for opioid detoxification are generally similar to the WHO guidelines. Tapering doses of methadone and buprenorphine, as well as the alpha-adrenergic agonists – particularly lofexidine, are recommended by the WHO and in the UK. Both guidelines also advise against the combination of opioid antagonists with heavy sedation. There is a discrepancy in the descriptions of duration of detoxification between the two guidelines. The WHO document refers to typical durations of dose tapers of five days for buprenorphine and 10 days for methadone and it also notes that gradual reduction can reduce the severity and increase the length of opioid withdrawal but reduce the rate of successful completion of withdrawal. For methadone, the WHO guideline does note though that a further 10 to 14 days may be needed before initiation of naltrexone is appropriate. In contrast, the UK guidelines document states that the process of opioid detoxification may vary from person to person, usually lasting about 28 days as an inpatient or up to 12 weeks as an outpatient.

In the UK, it is recommended, in line with the WHO guidelines, that clients receiving pharmacological treatment are routinely offered psychosocial support.

12. Mortality related to drug use: a comprehensive approach and public health implications

12.1 Introduction

This chapter considers the increased risk of mortality associated with problem drug use (PDU). Previous research has suggested that the mortality risk of PDU is up to 20 times greater than that for the general aged matched population. Data on drug-related deaths (DRDs)²⁸⁶ in the UK have shown an increase of 82% between 1996 and 2009 (from 1,152 to 2,092) (see section 6.4.1).

Whilst data on DRDs focuses largely on drug-induced deaths (e.g. overdoses, poisonings) and the acute toxicity of drugs, DRDs can also be related to the chronic toxicity of the drugs and drug-related infectious diseases, leading to chronic conditions. There are a range of health problems which have been associated with PDU such as liver diseases (due to hepatitis C infection and/or heavy alcohol use), cancer and cardiovascular problems. In addition, there are also external causes of death related to drugs or to the social exclusion and living conditions of drug users (e.g. violence, accidents, suicide). It is reported that whilst DRD and infectious disease indicators are established data sources, data regarding other factors such as suicide and chronic health conditions amongst PDUs are not always as widely available in the UK.

Mortality cohort studies of PDUs can determine overall and cause-specific mortality rates and estimate the excess mortality compared to the general population. Large-scale longitudinal cohort studies can test hypotheses about, for example, the reasons for changes in the observed numbers of drug-induced deaths or AIDS deaths among injectors, as well as to monitor the overall risk and detect changing patterns in the causes of death.

The aim of this chapter is to provide a detailed overview of recent mortality cohort studies²⁸⁷ conducted in the UK to explore the specific causes of death, mortality patterns, risk and protective factors.

12.2 Recent follow-up mortality cohort studies among PDUs

There have been two national prospective cohort studies among problem drug users (PDUs) in the United Kingdom since 1995 which have published mortality data, one conducted in England and one in Scotland (Table 2.1) (see section 12.3).

NAME OF STUDY	COUNTRY	TIMESCALE	NOTES	AUTHORS
NTORS ²⁸⁸ (National Treatment Outcomes Research Study)	England	1995 to 2000	First large-scale prospective cohort study of treatment outcomes in the UK	Gossop et al.1998; 2001; 2002
DORIS (Drug Outcomes Research in Scotland)	Scotland	2001/02 to 2004/05	Prospective cohort study of treatment effectiveness	Bloor et al. 2008, McKegany et al. 2008

Table 12.1: Recent national mortality cohort studies in the United Kingdom

²⁸⁶ EMCDDA definition. These deaths are known as 'overdoses', 'poisonings' or 'drug-induced deaths'. See: http://www. emcdda.europa.eu/themes/key-indicators/drd.

²⁸⁷ Published since 2000.

²⁸⁸ The Drug Treatment Outcomes Research Study (DTORS), a follow-up to NTORS was carried out in England between 2006 and 2007, but at the time of writing has only published outcomes data and not mortality information (Donmal et al. 2009, Jones et al. 2009). There have also been several regional cohort studies among PDUs in the United Kingdom (Table 12.2) (see section 12.4).

NAME OF STUDY	COUNTRY/ REGION	TIMESCALE	NOTES	AUTHORS
Mortality study of a cohort of drug users in treatment in the North West of England	England, North West	2003/04 to 2007/08	Retrospective study linking death records with drug treatment records (NDTMS)	Hurst et al. 2009, Beynon et al. 2010
Heroin users in specialist treatment in South East England	England, South East	1997 to 2001	Retrospective cohort study of heroin users in drug treatment linking death records with treatment and health records	Hickman et al. 2003
Cohort of Scottish drug users prescribed Methadone	Scotland, Tayside	1993 to 2004	Retrospective study linking death records with methadone prescriptions, hospital records, psychiatric records	McCowan et al. 2009
Edinburgh addiction cohort	Scotland, Edinburgh	1980 to 2007	Record linkage and follow-up of drug injectors identified through primary care medical centre	Kimber et al. 2010, Macleod et al. 2010

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12.3 National studies

12.3.1 England: National Treatment Outcomes Research Study (NTORS)					
Time					
1995 to 2000					
Place					
England					

Participants

Cohort of 1,075 individuals who were in drug treatment²⁸⁹ in 1995.

Design of study

Prospective, longitudinal cohort study. Participants were followed up on average: after one year (at 1.2 years); two years (at 2.2 years); and four to five years (at 4.4 years). NTORS was the first large-scale study of treatment effectiveness in England (Gossop et al. 2001). After one year outcome data were collected for 72% of the cohort (n=769) and follow-up interviews were conducted with 753 participants (Gossop et al. 1998).

²⁸⁹ Clients were recruited from 54 treatment agencies, in one of four treatment modalities, delivered in residential (specialist inpatient treatment and rehabilitation programmes) or community settings (methadone maintenance treatment (MMT) and methadone reduction programmes). The aim was to be representative of the main UK treatment modalities.

Survival probability

In the first 12 months of the NTORS study, 1.5% (n=16) of the cohort were known to have died (Gossop et al.1998). After four years, five per cent of the cohort were known to have died (n=53). The majority (87%, n= 46) of deaths were males, with a gender ratio of around 7:1 (compared to 3:1 for the whole cohort). The mean age of death was 30.6 years (Gossop et al. 2002).

After five years, six per cent of the cohort were known to have died (n=62) (Gossop et al. 2001).

The annual mortality rate of the cohort was reported as 1.2%. The authors estimate that this is approximately six times higher than would occur in the general (age-matched) population (Gossop et al. 2002).

Cause specific mortality

After one year it was reported that the majority of deaths were due to overdose. There was one suicide and one death was AIDS related (Gossop et al.1998). After four years cause of death data were available for 50 cases (94% of deaths at that time), with drug overdose reported in the majority (68%, n=34) of cases. Of those deaths, the specific drugs mentioned were: opiates only (n=15); benzodiazepines only (n=1); drugs and alcohol (n=6); and mixed drugs (n=10). Other causes of death recorded included violent deaths²⁹⁰ in 14% of cases with the remaining deaths (18%, n=9) categorised as 'due to medical causes'²⁹¹ (Gossop et al. 2002). Across the whole five year period of the study the majority of deaths were due to overdoses (61%, n=38). Other main causes of death were: medical illness;²⁹² violent deaths (14% of cases); and two AIDS related deaths (Gossop et al. 2001; 2002).

12.3.2. England: Drug Treatment Outcomes Research Study (DTORS)

In England between February 2006 and March 2007, DTORS²⁹³ was carried out with PDUs entering treatment as a follow-on study to NTORS. Mortality data has not been published from this study and there are currently no plans to do so. However, a series of reports focusing on other treatment outcome measures, including health and risk behaviour, are available. In the final publication, a reduction in sharing of equipment, injecting and the risk of overdose was recorded. Prior to the baseline interview (at the start of treatment) nine per cent of participants stated that they had overdosed in the previous three months. At the first and second follow-up interviews this rate had reduced to four per cent (Donmall et al. 2009). It is reported that client's mental well-being improved significantly between baseline and the first follow-up interview (the SF12²⁹⁴ score increased from 35 to 40), however, it remained below the UK norm of 52. There were no significant changes in physical well-being reported (mean scores were 48, 49 and 48 at each stage of the interview process), although these were already close to the UK norm score of 51 (Jones et al. 2009).

²⁹⁰ This includes murder; suicide by hanging; and death from multiple injuries.

²⁹¹ This included deaths from pneumonia, AIDS, infections or other medical complications.

²⁹² Figure not reported but second most common cause.

²⁹³ Longitudinal, prospective cohort study of treatment outcomes of 1,796 drug users in England. The initial aim was to interview clients as they entered treatment and conduct follow-up interviews with them after three months and then again at 12 months. DTORS followed on from the NTORS study. Three and five months after recruitment, 886 clients were re-interviewed. Just over a quarter (28%, n=504) of the original sample were re-interviewed a year later (between 11 to 13 months). A further 245 participants were re-interviewed once only (between six and 12 months after starting treatment).

²⁹⁴ The SF12 scale is a standardised measurement of health outcomes and is used to measure changes in mental and physical well-being.

12.3.3 Scotland: DORIS (Drug Outcomes Research in Scotland)

Time
2001/02 to 2004/05

Place

Scotland

Participants

A cohort of 1,033²⁹⁵ PDUs starting a new treatment episode between 2001 and 2002 and aged 15 to 54. The majority (88%) had used heroin in the previous three months and it was the main drug for 81%.

Design of study

Prospective cohort study of treatment effectiveness. It followed up PDUs²⁹⁶ recruited from treatment settings over a 33 month period. It is the largest study of its kind in Scotland and followed a similar methodology to the NTORS study in England (Gossop et al. 2002) employing some of the same questions and measures. Data were collected via face-to-face interviews²⁹⁷ at baseline (DORIS1) and in three further follow-ups (DORIS2, DORIS3 and DORIS4). A total of 668 participants were interviewed at all four stages of the study (65%) (McKeganey et al. 2008).

Survival probability

During the study period around four per cent (n=38) of the cohort died.

Crude death rate

The number of deaths (n=38) was used to calculate a crude death rate²⁹⁸ per 1,000 person years, reported as 13 for all deaths in the cohort²⁹⁹ (95% confidence interval (CI) 10 to 18). This was broken down by gender as follows:

- males 14 (95% Cl 9 to 20); and
- females 13 (95% Cl 6 to 23).

For DRDs the crude death rate per 1,000 person years was eight (95% CI 5 to 12). This was broken down by gender as follows:

- males seven (95% Cl 4 to 13); and
- females eight (95% Cl 3 to 17) (Bloor et al. 2008).

²⁹⁵ Twenty-six members of the cohort were recruited in Needle Exchange Services (NES) and have been excluded from much of the analyses as there is some debate as to whether NES constitutes a drug treatment service, leaving the cohort at 1,007.

²⁹⁶ Recruited from 33 treatment agencies across the country and across a range of treatment modalities, including five prison drug treatment programmes (n=448) for 45% of the cohort.

²⁹⁷ At baseline (DORIS1) the first 275 participants provided saliva samples in order to compare levels of self-reported recent drug use and OMT (oral mucosal transudate) test results. At DORIS2 and DORIS3 all interviewees were asked to provide saliva samples to test for hepatitis C. At DORIS4 (33 months) 695 of the original sample were re-interviewed.

²⁹⁸ Person years are calculated as the difference between the dates of death and of the initial DORIS interview.

²⁹⁹ Reported as 13.49 per 1,000 person years in McKeganey et al. 2008.

McKeganey et al. (2008) report that the crude death rate for all deaths amongst the cohort (13.49) is 'commensurate' with similar cohort studies of drug users, but much higher than for a similar age and gender-matched cohort from the general Scottish population. They go on to estimate that the participants in this study were '12 times more likely to die than their non-drug-using peers' (McKeganey et al. 2008).

Standardised Mortality Ratio (SMR)

The Standardised Mortality Ratio (SMR) for the DORIS cohort was reported as 1,244 (95% credible interval 876 to 1,678). The SMR for males in this cohort was given as 834 (95% credible interval 549 to 1,182) (Bloor et al. 2008).³⁰⁰

Discussion of results

It is reported that the death rates in the DORIS cohort were nearly identical to those recorded in the English NTORS study. The authors go on to say that there is currently no trend data available regarding deaths in Scottish drug users (although there is DRD data but it excludes infections, assaults etc.) (Bloor et al. 2008).

The majority of participants (88%) had used heroin in the previous three months; most had ever injected a drug (77%) and over half (59%) had done so in the previous three months (McKeganey et al. 2008).

Participants were asked to respond to a self-reported measure of health status (SF-36³⁰¹) and it was reported that their physical and mental health scores were significantly worse than the general UK population. During the third round of interviewing, participants were asked to provide oral fluid (saliva) samples for anonymous hepatitis C (HCV) screening. Of the 757 suitable samples just over a third (37.8%) tested positive, with substantial regional differences (McKeganey et al. 2008).

The authors state that other studies have reported that the population of Scotland, in comparison to England, has inferior health and a greater age standardised mortality level. They posit that this may be, at least in part, due to a higher PDU prevalence and a higher proportion of DRDs (McKeganey et al. 2008).

This suggestion is further explored in a secondary analysis of DORIS, where Bloor et al. (2008) discuss higher death rates in Scotland than in England and Wales in terms of a 'Scottish effect'. They report that this effect has been growing over time and cannot solely be accounted for by disparities in deprivation levels between the two countries. They posit that PDU may be the reason behind some of the differences in mortality rates.

To test the 'Scottish effect' the authors calculated the attributable risk fraction of deaths among drug users in England and compared it to that of Scotland. They calculated that the overall attributable risk fraction for all deaths of drug users was 17.3% in Scotland and 11.1% for England (16.3% and 10.7% respectively for males) (Bloor et al. 2008).

The authors conclude that PDU 'carries a high mortality' (even though it is a low prevalence risk behaviour) and estimate that mortality rates amongst PDUs in Scotland are around 12 times greater than amongst the general population. They suggest that a higher prevalence of PDUs in Scotland, when compared to England, can account for around a third of its excess mortality, estimating that 32% of excess mortality in Scotland can be attributed to drug use (95% credible interval 22.3% to 43.0%).

³⁰⁰ The authors calculated an age standardised mortality for the whole population of Scotland and estimated it at 196 per 100,000 (95% credible interval 191 to 201). When estimated deaths in drug users were excluded the SMR for Scotland was calculated as 162 (95% credible interval 150 to 173).

³⁰¹ A validated health status questionnaire (Ware and Sherbourne 1992) measuring self-perceived health status across eight dimensions (physical functioning, social functioning, role limitations due to physical problems, role limitations due to emotional problems, mental health, energy/vitality, pain and general health perceptions).

Cause specific mortality

The majority of deaths (58%, n=22) were classified as drug-related. The deaths that were not recorded as drug-related included:

- six suicides (including three overdoses of paracetamol, amitriptyline or colchine);
- two assaults;
- three infections due to drug abuse;
- one overdose of 'undetermined intent' (involving fluoxetine and propranolol);
- one hypothermia/exposure;
- one due to alcoholic liver disease;
- one due to endocarditis³⁰²; and
- one death that could not be determined (Bloor et al. 2008).

12.3.4 Studies currently being funded in the UK

The UK Medical Research Council has funded, within its Addiction Research Strategy, a three-strand study entitled 'Incidence, prevalence, harms and intervention effects for problem and injecting drug use: crime, morbidity and mortality'.³⁰³ This will develop more precise, better validated, and consistent estimates of key harms associated with PDU/IDU and the effects of intervention.

Strand A will analyse secondary data for a cohort (n=300,000 approximately) of opiate /crack cocaine users in England, exploring the timing of mortality (and crime) events relative to treatment entries and exits. This is to ascertain whether the probability of these events occurring is changed during treatment or treatment transitions, and the persistence of any protective effect following discharge.

Strand B will focus on IDU death rates, and trends therein, in Scotland, whilst testing the application of Bayesian Capture Recapture to a common set of national sources. It will determine whether IDUs' death-rates by age-group and sex are regionally and nationally consistent.

Strand C represents the first comprehensive attempt simultaneously to model PDU/IDU prevalence, mortality and crime data together, using a Multi-Parameter Evidence Synthesis framework. It will test the consistency of the available data and produce a coherent model for England of drug use, mortality and crime. This will be cross-validated by several entirely independent data sources.

Results from this study are expected from mid-2012.

³⁰² See: http://www.nhs.uk/conditions/endocarditis/Pages/Introduction.aspx

³⁰³ See: http://www.mrc.ac.uk/Ourresearch/ResearchInitiatives/Addictionresearch/Fundingawarded/index.htm

12.4 Regional mortality cohort studies in the UK

12.4.1 England: regional studies
Cohort of drug users in treatment in North West England
Time
2003/04 to 2007/08
Place
North West England
Participants

PDUs recorded on the National Drug Treatment Monitoring System (NDTMS) as being in structured treatment in the North West of England and who died between 2003/04 and 2007/08.

Design of study

A retrospective cohort study, using record linkage between the NDTMS drug treatment database and Office for National Statistics (ONS) death records.³⁰⁴ Deaths were grouped by age (under 40 and 40 and over at the time of death). Analysis of the cause of death was conducted and deaths were categorised as 'drug-related' (DRD) or 'not drug-related' (non-DRD) according to the UK drug strategy definition³⁰⁵ (Hurst et al. 2009). In a further analysis of these data, the causes of death (drug-related compared to not drug-related) were examined by age category (Beynon et al. 2010).

Discussion of results

Over the five years of analysis a total of 508 individuals were known to have died. Four out of the 508 deaths did not have a recorded cause of death on the death certificate. The authors report that, of the 504 deaths where cause was recorded, the majority were classified as non-DRD (65%, n=328) according to the UK drug strategy definition, with 'disparate' reasons for death. Just over a third (35%, n=176) could be classified as DRD according to the UK drug strategy definition (Hurst et al. 2009).

Age

It was reported that there was a significant difference in the age of death between DRD cases and those who died from other causes. On average, individuals who had died as a result of a DRD died approximately five years earlier than individuals who died from other causes (median age of death 35.77 years compared to 40.67 years) (Beynon et al. 2010; Hurst et al. 2009). Statistical analysis showed that between 2003/04 and 2007/08 there was a significant increase in the median age of death for the whole cohort (from 36.46 years to 41.38 years) with a greater increase reported in the non-DRD group (4.70 years in the DRD group compared to 5.82 years in the non-DRD group). It was also reported that older drug users (in this case those aged 40 and over) were more than three times (3.27) more likely to have died as a result of a non-drug related death than those who were aged under 40 (Beynon et al. 2010).

³⁰⁴ Mortality data reported to the NDTMS in the North West of England between the years of 2003/04 and 2007/08 were matched to ONS records of cause and date of death. Death certificates were analysed to establish all causes of mortality amongst the cohort.

³⁰⁵ The definition used to measure deaths for the United Kingdom Drug Strategy, is where the underlying cause is drug abuse, drug dependence, or poisonings where any of the substances scheduled under the Misuse of Drugs Act 1971 are involved.

Injecting history

In the majority of cases (85%, n=427), self-reported injecting history³⁰⁶ was available. Of those cases, 63% (n=269) had a self-reported history of injecting drug use (IDU) and these individuals were significantly more likely to have died from a DRD in comparison to those without a history of injecting (39% compared to 25%).

Primary drug

It was reported that, between 2005/06 and 2007/08, individuals who died during that period were more likely to have stated heroin or methadone (79.55% and 12.78% respectively)³⁰⁷ as their main drug when compared to the general treatment population in 2007/08 (63.89% and 5.58% respectively) (Hurst et al 2009).

Underlying cause of death

Out of the total deaths that were identified (n=508), an inquest took place in 55% of cases (n=281). The following causes of death were reported:

- 16% misuse of drugs/drug dependency (n=81);
- 12% misadventure (n=60);
- 10% accidental (n=49);
- 7% natural causes (n=38);
- 6% suicides (n=28); and
- 5% open verdicts (n=25).

There was no inquest for the remaining 227 deaths (45%).

DRDs

The underlying or secondary cause of death (as recorded on the death certificate) of those categorised as a DRD (according to the UK drug strategy definition) was:

- harmful or dependant use of opioids³⁰⁸ in 49 cases (28%); and
- harmful or dependent multiple drug use³⁰⁹ in 52 cases (30%).

³⁰⁶ Client self-reported IDU upon entry to treatment as current injectors or having previously injected drugs at some point.

³⁰⁷ Data regarding the main problematic drug used by clients entering treatment were collected by NDTMS from 2005/06 onwards.

³⁰⁸ International Classification of Diseases (ICD) 10 codes F111 and F112.

³⁰⁹ ICD 10 codes F191 and F192.

Table 12.3 shows the most common underlying causes of death amongst the non-DRD group as recorded on the death certificate. Over the five years of the study the most common underlying causes of non-DRDs amongst this cohort were diseases of the liver, the majority of which (80%, n=47) were alcohol-related. Viral hepatitis was recorded as the underlying cause in 5.79% of non-DRDs (n=19). This was more common amongst individuals who had a recorded history of IDU (10 compared to 7 without a recorded history of injecting³¹⁰). The majority of viral hepatitis deaths amongst the non-injectors were from hepatitis C (71.42%, n=5). In 2004/05 there were six deaths associated with viral hepatitis, none of which were attributable to hepatitis C (acute or chronic hepatitis B). There were no data on specific cause of death for other years.

Table 12.3: Most common underlying causes (mortality category) of the non-drug-related deaths occurringamongst North-West England drug treatment clients confirmed dead between 2003/04 and 2007/08

MORTALITY CATEGORY/ UNDERLYING CAUSE	TOTAL	%
Diseases of the liver	59	17.99
Malignant neoplasms	45	13.72
Chronic lower respiratory diseases	24	7.32
Intentional self-harm	24	7.32
Accidents	23	7.01
Viral hepatitis	19	5.79
Cerebrovascular diseases	18	5.49
Influenza and pneumonia	18	5.49
Events of undetermined intent	15	4.57
Ischaemic heart disease	15	4.57
Other forms of heart disease	12	3.66

Source: Hurst et al. 2009

HIV

There was one recorded death with HIV as the underlying cause. This individual had a self-reported history³¹¹ of IDU.

Limitations to cause specific mortality information

Specific cause of death as recorded on the death certificate was not provided for all deaths in this study. In most cases only the mortality category (underlying cause of death) is provided.

³¹⁰ In two cases injecting history was unknown.

 $^{^{\}scriptscriptstyle 311}$ Recorded on the North West NDTMS database.

South East England: heroin users in specialist treatment

Time

1997 to January 2001

Place

London, South East England

Participants

Cohort of 881 heroin users who were in drug treatment.³¹² Mean age was 28.

Design of study

Retrospective cohort study using record linkage to ONS death certificates and the NHS central register (Hickman et al. 2003).

Survival probability

Thirty-three individuals died during the study period.

The overall mortality rate was 1.61 (95% Cl 1.13 to 2.23) per 100 person years. Mortality was higher amongst:

- males (1.83; 95% Cl 1.28 to 2.67);
- those over 30 years of age (2.56; 95% Cl 1.61 to 4.05); and
- injectors³¹³ (1.90; 95% Cl 1.35 to 2.74) (Table 12.4).

³¹² Recruited from 15 specialist drug agencies in London, from first reports to the Drug Misuse Database (DMD) (the predecessor to NDTMS in England).

³¹³ Those who reported injecting heroin when they were first recorded on the DMD.

Table 12.4: Mortality rate of a cohort of problem heroin users in specialist treatment in London between1997 and 2001

					MORTALITY RATE PER 10 PERSON-YEARS	
	n	NUMBER DEAD	% DEAD	PERSON-YEARS	OVERALL	95% CI
Gender						
Males	656	28	4.3	1,523.51	1.83	1.28-2.67
Females	225	5	2.2	551.86	0.91	0.37-2.19
Age						
Under 25	376	8	2.1	906.85	0.88	0.44-1.75
25 to 29 years	193	7	3.6	461.14	1.53	0.73-3.18
30 years and over	312	18	5.8	707.38	2.56	1.61-4.05
Injecting status						
Injecting	673	30	4.5	1,564.84	1.90	1.35-2.74
Non-injecting	208	3	1.4	510.54	0.58	0.18-1.83
Total	881	33	3.7	2,075.37	1.61	1.13-2.23

Source: Hickman et al. 2003

Cause specific mortality

The most common underlying cause of death amongst this cohort was drug overdose in 52% of cases (n=17). A further 12% of deaths were related to drug misuse (n=4). Nearly a quarter of deaths were unrelated to drug misuse or the acute toxicity of drugs (24%, n=8), although the authors argue that some deaths, such as those from hepatitis C, will have been as a result of IDU (Table 12.5).

 Table 12.5:
 Underlying cause of death on death certificates of a cohort of problem heroin users in specialist treatment in London between 1997 and 2001

UNDERLYING CAUSE OF DEATH	n	%
Overdose mentioning heroin/morphine	9	27
Overdose, opiate	8	24
Drug misuse (no mention of specific drug)	4	12
Unascertained	4	12
Liver/ hepatitis C virus	3	9
Injury	2	6
Heart disease	1	3
Bronchopneumonia	1	3
Meningitis	1	3
Total	33	100

Source: Hickman et al. 2003

Standardised Mortality Rate

The SMR for this cohort was 17 times higher than that of the non-heroin using general population in London aged between 15 and 59 years. It was reported as 17.7 for females (95% Cl 10 to 28) and 16.8 for males (95% Cl 11 to 23).

12.4.2 Scotland: regional studies

Tayside: General Practice (GP) patients receiving methadone in primary care

Time

1993 to 2004

Place

Tayside, Scotland

Participants

A total of 2,378 heroin users prescribed and dispensed liquid methadone by a GP between January 1993 and February 2004.

Design of study

Retrospective cohort study, using record linkage. Records of hospital or psychiatric unit admissions; dispensed prescribing; standard morbidity register; laboratory data relating to urine drug and the General Register Office for Scotland (GROS) mortality data were linked to each individual.

Hospital admission and prescribing records were used to establish co-morbidity for each person and they were placed in one of three groups: low; medium or high co-morbidity.

Length of methadone treatment and mean daily dose were calculated from prescription records and some individuals were categorised as below, within or above the recommended methadone maintenance range. They were also grouped as 'on treatment' or on a 'break' from methadone at the time of death.

Prescribing records were also used to establish if the individual was taking any of the following medications: benzodiazepines; antipsychotics; antidepressants; and opioid analgesics.

The aim of the study was to identify all-cause mortality and 'drug dependent cause-specific mortality' amongst the cohort and to 'assess predictors of mortality in a population of people prescribed methadone' (McCowan et al. 2009).

Survival probability

Eight per cent of the cohort died after 12 years (n=181). The majority of the cohort, (70%, n=127) were still taking methadone when they died. Cause of death was available for 92% of cases (n=166).

Cause specific mortality³¹⁴

The principal causes of death reported for the 166³¹⁵ cases were:

- 36% drug dependence/ related (n = 60);
- 12% cancer (n=20);
- 8% accidents, trauma, self harm (n=13);
- 8% HIV related (n=14);
- 7% endocarditis, cardiovascular (n=11);
- 5% liver disease, hepatitis C (n=9);
- 3% pneumonia and related (n=5); and
- 20% other (n=34).

Risk/protective factors among PDUs

The authors assessed associated risk and protective factors in methadone maintenance and concluded that several elements of care provision can have an influence on the risk of death to an individual.

They reported that an increase in all-cause mortality was associated with increasing co-morbidity, overuse of methadone higher than recommended limits and a history of psychiatric admissions (this was most strongly associated).

A history of psychiatric admissions was independently associated with an increased risk of drug dependence-related cause specific mortality.

Prescription of benzodiazepines was (most) strongly associated with drug dependent death. The results suggest that prescription of antipsychotics and antidepressants could be a protective factor in relation to drug dependence/related death.

³¹⁴ According to ICD 9 and ICD 10 codes.

³¹⁵ A further 15 deaths were reported as unknown as they were recorded as dead by community health records but there was no GRO record available to ascertain the cause of death.

It was reported that a relatively small number of individuals in this study overused methadone. This increased their relative risk of death, when compared to those who took the correct dosage of methadone, by over one and a half times.

Protective factors against all-cause mortality were longer duration of methadone use; increased time since last methadone prescription was filled in; and a history of having urine testing (irrespective of result). The authors posit that it is likely that these individuals are stabilised on methadone and are being monitored by service providers or have succeeded in completing a reduction programme.

Edinburgh: 'The Edinburgh Addiction Cohort'

Time 1980 to 2007 Place Edinburgh, Scotland

Participants

A total of 794³¹⁶ IDUs registered at a medical practice between 1980 and 2006. Mean age at recruitment was 26.7 years, mean age at first injection was 19.9 years.

Design of study

A retrospective cohort study involving record linkage (Scottish Morbidity Records, general, mental health and cancer acute inpatient and day case records) and follow-up interviews were carried out between 2005 and 2006. A total of 432 IDUs were interviewed about their early life, substance use, health and social experiences.³¹⁷ The majority (70%, n=302) were currently receiving opiate substitution treatment (OST) (Kimber et al. 2010).

Survival probability

At the start of the follow-up period in October 2005, 223 individuals had died. Twenty-nine per cent (228) of the cohort had died at the end of the follow-up period in October 2007.³¹⁸ Out of the total cohort whose medical records were accessed (n=655), 189 (29%) of participants were HIV antibody positive. Median duration from time of first injection to death in this cohort was 41 years. For individuals with HIV it was 24 years.

Cause specific mortality

During the study period a HIV epidemic was occurring in the local area surrounding the medical practice where the cohort was recruited. The majority of deaths recorded for this cohort (45%) were HIV-related. Other leading causes of death were drug overdose in nearly a quarter of cases and liver disease in 16% of cases (Table 12.6). The authors concluded that most deaths could be attributed to IDU, with 49% having died before they achieved long-term cessation of injecting.

³¹⁶ The records of 794 patients at a primary care medical centre in Edinburgh with a history of IDU were selected for this study. Follow-up via interview and/or record linkage was carried out on 82% (655) of individuals.

³¹⁷ In an earlier study using the same dataset, a control group of patients from the same practice (living and deceased) were selected and matched to each case for sex and age. The control group were also asked the same questions when interviewed (Macleod et al. 2010).

³¹⁸ The additional five individuals who died during the follow-up period had been interviewed.

PRIMARY CAUSE OF DEATH	ALL DEATH	IS (n= 228)	DEATHS BE TERM CESSA	FORE LONG TION (n=112)
	n	%	n	%
HIV	102	45	43	38
Injury:				
Drug overdose*	55	24	43	38
Suicide**	15	7	8	7
Homicide	1	<1	0	0
Liver:				
Liver disease	26	11	8	7
Alcohol-related	11	5	2	2
Other causes:				
Cardiovascular disease	7	3	4	4
Injecting-related	2	1	2	2
Lung/throat cancer	2	1	1	1
Respiratory disease	2	1	0	0
Unascertained	2	1	1	1
Other	3	1	0	0

Table 12.6: Cause of death amongst a cohort of drug users in Edinburgh between 1980 and 2007

*Including 12 deaths from ingested substances after long term injecting cessation.

**Six of 15 suicides were drug overdoses classified as intentional self-harm: paracetamol (n=3), insulin (n=1), nifedipine (n=1), dihydrocodeine and alcohol (n=1).

Source: Kimber et al. 2010

Risk/protective factors among PDUs

The risk of death³¹⁹ fell by 13% (95% Cl 17% to 9%) for each additional year of OST prior to long-term cessation.³²⁰

OST was inversely related to achieving long-term cessation. The authors conclude that whilst OST cumulatively reduces the mortality risk over time amongst IDUs, it does not reduce the length of time an individual injects.

³¹⁹ After adjustment for sex, HIV status, calendar period, history of prison and overdose, and age at first injection.

³²⁰ Defined here as at least five consecutive years without injecting before last follow-up or death.

12.5 Complementary sources with drug-related mortality information

There are two main types of source in the UK for information on 'acute' DRDs; General Mortality Registers (GMRs) and a Special Mortality Register.

There are three GMRs, held at the General Register Offices for: England and Wales;³²¹ Scotland; and Northern Ireland.³²² A Special Mortality Register is held at the National Programme on Substance Abuse Deaths (np-SAD)³²³ based at St George's, University of London. These all use ICD-10 codes.

The Scottish Crime and Drug Enforcement Agency (SCDEA) collates information on DRDs (mainly accidental overdoses) reported to police forces. At the start of 2009 in Scotland, the National Drug-Related Deaths (NDRD) database commenced operation. This collects data about the circumstances around DRDs alongside demographic information about the deceased (see section 7.1). At the time of writing it had not published any data.

12.5.1 Np-SAD

The 2010 np-SAD Annual Report (Ghodse et al. 2010a) shows that 2,170 DRDs in the UK were notified to the np-SAD database in 2009 (see section 6.4.2). The main causes of death for each constituent country are shown in Table 12.7.

 Table 12.7: Underlying cause of death amongst notifications to np-SAD in 2009 for England, Northern Ireland, Scotland and Wales

UNDERLYING CAUSE OF DEATH	COUNTRY			
	England	Northern Ireland	Scotland	Wales
Accidental poisoning	65.9%	27.7%	95.6%	80.4%
Intentional self-poisoning	11.4%	4.6%	0.0%	6.9%
Poisoning of undetermined intent	10.2%	61.5%	0.0%	3.9%
Other causes	12.5%	6.2%	4.4%	8.8%
Total Number of deaths	1,524	65	479	102
Rate of drug-related deaths*	3.62	4.62	11.16	5.39

*Per 100,000 population aged 16 and over

³²¹ Data analysed by the Office for National Statistics (ONS).

³²² Data analysed by the Northern Ireland Statistics and Research Agency (NISRA).

³²³ Np-SAD uses data from inquests into drug-related deaths reported by coroners in England, Wales, Northern Ireland, Guernsey, Jersey and the Isle of Man; Procurators Fiscal in Scotland and the Scottish Crime and Drug Enforcement Agency.

England: North West DRDs

Using information from np-SAD, Beynon et al. $(2007)^{324}$ examined the characteristics of DRDs (n=70) in Liverpool, North West England between January 2004 and June 2005. Deaths were categorised by np-SAD as either 'drug abuser' or 'non-drug abuser' and differences between individual deaths in those categories were explored.

It was reported that non-drug abusers were significantly older at the time of death than drug abusers (median age of 53.59 years compared to 38.23 years). Heroin/morphine was detected in half the drug abusers and in 14% of non-drug abuser cases. Non-drug abusers were significantly more likely to have died from toxicity-related deaths (91% compared to 50% of drug abusers). Most of these deaths were related to opioid analgesics, antipsychotic drugs and antidepressants. Significant differences in the profiles of illicit drugs found present in non-drug abusers when compared to drug abusers were reported, including fewer cases involving 'problematic' drugs such as crack cocaine and heroin.

The authors conclude that deaths of individuals reported in np-SAD are not always from those who abused illicit drugs; it also includes deaths attributed to prescribed medications which has implications for public health interventions and drug treatment. The authors go on to say that deaths related to viral and bacterial infections were not included by np-SAD as a DRD, and such deaths may contribute to a considerable amount of drug-related mortality. They also suggest that other national and European DRD definitions also do not include deaths associated with problematic drug use, for example those caused by chronic hepatitis C infection.

12.5.2 Other studies

England: North West NDTMS data

A cross-sectional study of problematic drug users in structured treatment in the North West of England in 2003/04 was carried out using NDTMS data (Beynon and McVeigh 2007).³²⁵ The aim of the study was to identify the proportion of deaths attributed to drug-related and non-drug related causes and to ascertain if substance use played a role 'in the residual causes of mortality'. The data were analysed to identify if there were variations in gender and age of individuals who died from drug-related or non-drug related causes. It was reported that of all clients in structured treatment in the North West of England between 1st April 2003 and 31st March 2004 (n=27,810), 0.4% (n=103) died during that period of time.

Cause of death was accessible via the death certificate for 102 of 103 cases. The research team classified each death as either DRD or non-DRD (according to the UK Drug Strategy definition).³²⁶ Following analysis into the individual causes of deaths for this cohort, it was reported that just under a third (29%, n=30) of cases could be classified as a DRD (14%, n=14 cases were due to 'misuse of drugs/drug dependency'), whilst the majority of cases (71%, n=72) were classed as non-DRDs. These individuals were significantly older than those in the DRD group. The authors concluded that it is likely that a sizeable number of deaths in this study categorised as 'non drug-related' were probably related to substance use (68%, n=49), particularly those due to infections (n=16) which accounted for 16% of all deaths (7 of which were from pneumonia). Seven individuals died from alcohol-related liver disorders. Other specific causes included: cellulitis; deep vein thrombosis; cerebral infarction; myocardial infarction; asthma; and volatile substance inhalation.

³²⁴ The authors analysed coroners' records for DRDs in that period, as recorded by the np-SAD monitoring system, to establish if there was a difference in the causes of death and/or demographics of 'drug abusers/dependents' and 'nondrug abusers/dependents'. The research team looked at NDTMS data and Drug Interventions Programme (DIP) records to establish if individuals categorised by np-SAD as drug abusers/dependents' were in contact with treatment or criminal justice interventions. From a total of 70 DRDs, half of the individuals were recorded by np-SAD as drug abusers.

³²⁵ This study uses the same data sources as Hurst et al. 2009 and Beynon et al. 2010, reported in section 12.4.1.

³²⁶ Where the underlying cause is drug abuse, drug dependence or poisonings where any of the substances scheduled under the Misuse of Drugs Act 1971 are involved.

An inquest took place in 52% of cases (n=54) and the following causes of death were reported:

- 19 accidental/ misadventure (18%);
- 14 misuse of drugs/drug dependency (13%);
- six open verdicts (6%);
- seven suicides (7%); and
- eight natural causes (8%).

England and Wales: deaths amongst newly released prisoners

Farrell and Marsden (2008) investigated DRDs among newly released prisoners in England and Wales.³²⁷ They recorded 442 deaths, of which 261 (59%) were drug-related. In the year following release, the drug-related mortality rate was 5.2 per 1,000 population among men and 5.9 per 1,000 population among women.

All-cause mortality in the first and second weeks following release for men was 37 and 26 deaths per 1,000 per annum, respectively (95% of which were drug-related). There were 47 and 38 deaths per 1,000 per annum, respectively, among women, all of which were drug-related. In the first year after prison release, there were 342 male deaths (45.8 were expected in the general population) and there were 100 female deaths (8.3 expected in the general population). DRDs were attributed mainly to substance use disorders and drug overdose. Coronial records cited the involvement of opioids in 95% of deaths, benzodiazepines in 20%, cocaine in 14% and tricyclic antidepressants in 10%. They concluded that newly released prisoners are at an acute risk of DRD.

12.5.3 Mortality among AIDS cases

Data on prevalence of HIV amongst IDUs are available from laboratory and clinician reports and the Unlinked Anonymous Monitoring (UAM) survey of HIV and Hepatitis in Injecting Drug Users (see section 6.2.1).³²⁸

In 2009, HIV prevalence in the UK amongst IDUs was 1.5%, a higher level than in the 1990s, but similar to that seen in recent years. Prevalence levels amongst IDUs in London are higher than the national average, at around four per cent (HPA et al. 2010a).

The HPA reported in 2009 that a total of 5,023 cases of HIV infection acquired through IDU had been recorded in the UK (4.9% of all diagnoses). It is estimated that approximately one in 73 IDUs are infected with HIV. It has been suggested that transmission rates have increased amongst IDUs since 2002 with around one in 400 infected within three years of initiation into injecting in 2002, to one in 77 in 2008 (HPA et al. 2009). One-hundred and seventy new diagnoses of HIV infection acquired through injecting drug use (IDU) were reported in 2008 (2.3% of new diagnoses). In 2008, 1,489 individuals infected via IDU were accessing HIV care in 2008 (2% of those accessing care). This has increased year on year since the late 1990s (HPA 2009a).

³²⁷ Using a national sample of 48,771 male and female sentenced prisoners released during 1998/2000 with all recorded deaths included to November 2003.

³²⁸ Data are taken from a voluntary self-reported surveillance questionnaire issued by drug agencies to participants who have ever injected drugs. Participants are also asked to provide an oral fluid sample which is tested for antibodies to HIV (anti-HIV), hepatitis C (anti-HCV) and hepatitis B core antigen (anti-HBc). It is a multi-site survey managed by the Health Protection Agency (HPA) and involving over 70 specialist drug agencies in England, Wales and Northern Ireland. Data on viral infections amongst current and former IDUs, including hepatitis C, hepatitis B and HIV prevalence are collected, in addition to risk/ protective behaviours and uptake of healthcare. Data have been collected since 1990 and are irreversibly anonymous.
In 2009 there were 53 AIDS deaths among individuals that were probably infected through IDU. This represents around 10% of all AIDS deaths in that year (HPA et al. 2010b).

Figure 12.1: New HIV and AIDS diagnoses by year of diagnosis, and AIDS deaths amongst individuals probably infected through injecting drug use in England, Northern Ireland and Wales, 1994 to 2009



Source: HPA et al. 2010b329

Data from the CD4 Surveillance Scheme³³⁰ showed that in 2007 16% of IDUs had an average count of less than 200 cells/mm³ and therefore were at a high risk of infection throughout that year (n=134). Basing this result on Survey of Prevalent HIV Infections Diagnosed (SOPIHD)³³¹ 2007 figures, this equates to approximately 200 IDUs (HPA 2008).

12.5.4 Mortality due to infectious disease

Amongst IDUs, transmission of hepatitis C infection is at a higher level than in the 1990s. It is estimated that nearly half of IDUs, who participated in the UAM survey, are infected with hepatitis C (HPA 2010a) (see section 6.2.2).

³²⁹ Data to the end of December 2009. Will include some records of the same individuals which are unmatchable because of differences in the information supplied. Numbers will rise as further reports are received, particularly for recent years.

- ³³⁰ The CD4 surveillance scheme monitors national trends in immunosuppression among HIV-infected adults in England, Northern Ireland and Wales by analysis of CD4 T-lymphocyte counts. A CD4 count of less than 200 cells/mm3 at any particular time is an indicator of high risk of opportunistic infection at that time. A patients' yearly average CD4 cell count is calculated to estimate the proportion of those at a high risk of infection (those with an average count of less than 200 cells/mm3). Over 60 laboratories currently participate in the scheme.
- ³³¹ The SOPHID collects residential and epidemiological data on the number of individuals accessing HIV-related treatment or care within a calendar year. It has been running since 1995. CD4 Surveillance collates all CD4 cell counts of all HIVinfected individuals aged 15 or more measured at NHS laboratories; these are linked to form a longitudinal dataset for each patient and linked to reports of HIV diagnoses and SOPHID reports. Scottish data collected by Health Protection Scotland (HPS) (formerly SCIEH) and paediatric data (children aged under 15) collected by the National Study of HIV in Pregnancy and Childhood (NSHPC) and the Collaborative HIV Paediatric Study (CHIPS) are included in the final UK totals.

A study of IDUs in Bristol found that more than half who were HCV positive were undiagnosed with the infection (Hickman et al. 2009b). The all-cause and overdose mortality rates for IDUs were 0.75% and 0.4% respectively; and the SMR was 7.8 (95% CI 5.4 to 10.8).

McDonald et al. (2009) examined all-cause, liver-related and drug-related mortality and excess risk of death from these causes in a large cohort of HCV-mono-infected and HIV-co-infected persons in Scotland.³³² A total of 1,715 HCV mono-infected and 305 HIV co-infected persons died of any cause during the follow-up period (mean of 5.4 and 6.4 years, respectively). Significant excess mortality was observed in both HCV mono-infected and HIV co-infected populations from liver-related underlying causes (SMR 25, 95% CI 23 to 27; and SMR 37, 95% CI 26 to 52 for the two groups, respectively) and drug-related causes (SMR 25, 95% CI 23 to 27; 39, 95% CI 28 to 53).

In England, between 1999 and July 2008, there were 379 first diagnoses of end-stage liver disease (ESLD)³³³ in people with hepatitis C reported from centres participating in an end-stage liver disease study (HPA 2009b). Of those cases where risk exposure is known (n=252), 63% (n=151) reported IDU as the risk for acquisition of infection. Time from start of exposure to first diagnosis of ESLD was 25 years (n=90).³³⁴

Between December 2009 and 30th September 2010, 51 heroin users in the UK were infected with anthrax (Bacillus anthrax). Sixteen individuals died and it is thought the outbreak is due to a batch of contaminated heroin (see section 6.2.3).³³⁵

12.6 Public health perspectives

The future burden of hepatitis C

Hutchinson et al. (2005) estimated the current and future burden of hepatitis C amongst IDUs in Scotland, in an attempt to quantify the possible requirements of public health measures (i.e. treatment, prevention). They reported that in 2003 around 90% of individuals in Scotland with a hepatitis C diagnosis had previously injected drugs.

The statistical modelling utilised in this study included an estimated annual rate of mortality for IDUs in Scotland of one to two per cent³³⁶ and assumed that mortality of IDUs in Scotland was two to five times higher than for the general population.³³⁷ The aim was to estimate the numbers of individuals at different stages of disease progression.

The authors estimated that the number of IDUs in Scotland with hepatitis C who will go on to develop decompensated cirrhosis³³⁸ would double between 2000 and 2020. They also go on to predict increases in mean prevalence of hepatitis C infection amongst IDUs and also an increase in the severity of disease as individuals get older. They report that around 42,900 IDUs were estimated to be living in Scotland in 2003 and of those, three quarters (n= 32,200) were thought to have chronic hepatitis C and thus at risk of cirrhosis. It is posited that at that time around 60 to 80% of individuals with hepatitis C were undiagnosed. They go on to say that around 750 IDUs had died as a result of liver failure (no start date but to end of 2003 and mainly over the last decade) and 352 IDUs had died from AIDS.

³³⁴ For the whole cohort not necessarily IDUs.

- ³³⁶ Unrelated to hepatitis C and HIV.
- ³³⁷ Average annual age and sex-specific rates and from causes unrelated to hepatitis C and HIV.

³³² Cohort consisted of 20,163 cases confirmed to be infected with hepatitis C between 1991 and 2005.

³³³ Defined as 'a patient with hepatitis C or B who is suffering from decompensated cirrhosis, as demonstrated by the presence of ascites, bleeding varices or hepatic encephalopathy, or hepatocellular carcinoma'.

³³⁵ See: http://www.documents.hps.scot.nhs.uk/news/anthrax-press-release-2010-04-12.pdf

³³⁸ Decompensated cirrhosis is the final stage of the hepatitis C cycle that relates to liver damage. It is usually at this point that there is a significant risk of life-threatening complications.

13. Cost of drug-related treatment

Due to the complex nature of drug treatment funding and differences in funding arrangements across the United Kingdom, this chapter has been written based on adult drug treatment in England only.

13.1 Introduction

The National Treatment Agency (NTA) for Substance Misuse is a special health authority established in 2001 to improve the availability, capacity and effectiveness of treatment for drug misuse in England. Part of the NTA's mandate is to ensure that public money is spent to best effect, on treatment that works and meets the needs of the local population. Local partnerships are responsible for using central government and local funding to pay for treatment from the NHS and voluntary sector organisations.³³⁹ While there are private treatment providers with fees paid directly by clients, the majority of drug treatment is publicly funded.

13.2 Funding sources for drug treatment in England

Funding streams for drug treatment in England are complex with monies allocated at both a central and local level. In addition, various projects may be funded through grant awarding bodies such as the Big Lottery Fund.

Each year the local partnerships provide the NTA with local treatment plans, which set out their local priorities and how they will be achieved. As part of the process of treatment planning, information is collected on planned treatment spend by source. The most recent treatment plans from each of the 149 local partnerships are publicly available on the NTA's website³⁴⁰ and aggregated data for 2008/09 are presented here.

In 2008/09 local partnerships reported funding of €921.25 million (£731.85 million).³⁴¹ The largest single contribution was from the Pooled Treatment Budget (PTB), which is primarily funded by the Department of Health with a contribution from the Ministry of Justice for the treatment elements of Drug Rehabilitation Requirements (DRRs).³⁴² In 2008/09 Drug Action Teams (DATs) reported €444 million (£353 million) worth of funding through the PTB for adult drug treatment. The way the PTB funding is allocated to the local partnerships via the Primary Care Trusts (PCT) (health) changed in 2007/08. Prior to this, funding had been allocated based on deprivation measures, which led to a wide variation in funding per person in treatment. The current formula allocates resources based on need and efficiency. It is calculated by taking into account caseload complexity of the local treatment population; the mix of cases of problem and other drug users; area cost differential; and a move to equalise the central contribution per person. This has meant that funding for some areas has decreased while for others it has increased. To allow the change to be managed, it has been phased in gradually with the maximum reduction in 2008/09 set a five per cent, 15% in 2009/10 and 30% in 2010/11.

Other sources of funding are also available to local partnerships. Table 13.1 shows aggregated funding source data taken from local treatment plans for 2008/09.

³³⁹ In circumstances where NHS or voluntary sector drug treatment provision is unavailable, appropriate treatment may be procured from the private sector if it is good value for money.

³⁴⁰ See regional pages: http://www.nta.nhs.uk/regional.aspx

³⁴¹ Funding derived from a 'bottom up' methodology may not match funding information provided using a 'top-down' method of central government allocations. This is due to local plans being of variable quality and missing plans from some local areas.

³⁴² See Chapter 9 and SQ31 for more information about DRRs.

FUNDING SOURCE	FUNDING (£)
Pooled Treatment Budget (PTB) for adults	352,927,118
PTB underspend for 2007/08	15,102,653
Drug Interventions Programme main grant	106,400,178
Police	2,452,225
Primary Care Trust mainstream	139,598,782
Social Services	39,805,509
Section 31/28a funding	11,004,236
Probation partnerships	4,492,418
Supporting People	33,656,021
Other	19,355,228
Department of Health Tier 4 Capital grant	21,914,496
Total	731,849,875

Table 13.1: Source of funding from local treatment plans in England, 2008/09

Source: Local Treatment Plans

Another large source of funding is PCT mainstream monies, which totalled around €176 million (£140 million) in 2008/09. This is the contribution of local NHS organisations to drug treatment from their centralised health budget. It is expected that this funding is maintained year on year. In addition, the Department of Health has provided further funding for the development of in-patient treatment and residential rehabilitation services in the form of a Tier 4 capital grant.

The Drug Interventions Programme³⁴³ (DIP) main grant also provides large amounts of funding although the majority is for the operation of the programme. However, some monies are used for the provision of drug treatment services such as rapid prescribing. Similarly, Supporting People funding is aimed at providing housing services for drug users but some monies are used for drug treatment.

13.3 Expenditure on drug treatment

As part of the local treatment planning process, the local partnerships also complete a template showing how funding from different sources will be spent. This planning process is aided by the existence of unit costs data, which provide an indication of how much different types of services cost.

Treatment planning for 2008/09 was informed by 2006/07 unit costs. A further unit costs data exercise was carried out in 2009 covering 2007/08 costs, which will inform subsequent treatment planning (see section 13.5.1). Aggregated data show that in 2008/09, 45% of funding was allocated for structured community based treatment, 16% for DIP and 13% for residential and inpatient drug treatment services (Table 13.2).

Table 13.2: Local partnership funding allocation in England, 2008/09

COMMISSIONED	% OF OVERALL FUNDING
Commissioning System	5.5
Workforce Development	1.2
User Involvement	0.7
Carer Involvement	0.6
Harm Reduction Strategy	4.0
Non-drug treatment specific services	4.6
Open access drug treatment services	9.7
Structured community based treatment services	45.3
Residential and inpatient drug treatment services	13.1
Drug Interventions Programme	15.5

Source: Local treatment plans, NTA website

In total, Table 13.3 shows that €412.9 million (£328 million) was allocated for structured community based treatment in 2008/09, €119.6 million (£95 million) for residential and inpatient treatment and €88 million (£70 million) for open access drug treatment services. Almost €50.4 million (£40 million) was allocated for the commissioning system.

Just over half of the PTB funding (53%) was allocated for structured community based treatment services, 14% for open access drug treatment services and eight per cent for residential and inpatient drug treatment services (Table 13.3). Other expenditure items include the Harm Reduction Strategy (7%), commissioning system (8%) and DIP (5%). An even larger proportion of PCT mainstream funding was allocated for structured community based treatment services (72%) and residential treatment (16%) while social services funding was most likely to be used for residential/inpatient treatment services (52%). DIP funding was mainly allocated for the programme itself, which focuses on improving access to treatment and diverting drug users who commit crime into treatment rather than on providing treatment services. However, around €12.6 million (£10 million) was allocated for treatment services in 2008/09, the majority of which was for structured community based services. Of the €119.6 million (£95 million) allocated for residential and inpatient services, where the majority of funding comes from the PTB, local mainstream funding from PCTs and social services provided a large amount of the money allocated for residential and inpatient services.

SOURCE OF FUNDING	ADULT DRUG TREATMENT POOLED TREATMENT BUDGET	PTB UNDERSPEND FROM 2007/08	DIP	POLICE	PRIMARY CARE TRUST	SOCIAL SERVICES	SECTION 31/28A FUNDING	PROBATION PARTNERSHIP	SUPPORTING PEOPLE	OTHER	DH CAPITAL	TOTAL FUNDING
Commissioning System	26.44	1.62	2.62	0.03	0.93	0.89	0.00	0.00	3.58	3.55		39.65
Workforce Development	5.71	0.55	0.56	0.00	0.95	0.07	0.02	0.01	0.00	0.49		8.36
User Involvement	4.33	0.31	0.12	0.00	0.11	0.06	0.02	0.00	0.03	0.15		5.13
Carer Involvement	3.27	0.25	0.06	0.00	0.25	0.15	0.01	0.00	0.09	0.14		4.23
Harm Reduction Strategy	24.63	0.41	0.24	0.01	3.40	0.08	0.10	0.00	0.04	0.28		29.19
Non-drug treatment specific services	10.60	0.76	0.93	0.03	1.89	0.54	0.02	0.45	16.49	1.28		33.00
Open access drug treatment services	48.25	1.73	2.41	0.03	8.13	3.51	1.85	0.40	1.29	2.38		69.98
Structured community based treatment services	186.74	6.44	7.38	0.32	92.27	11.21	11.07	1.14	3.56	8.03		328.16
Residential and inpatient drug treatment services	26.73	1.30	0.38	0.00	20.61	19.56	2.16	0.00	4.58	0.77	18.60	94.68
Drug Interventions Programme	17.22	0.25	84.44	2.22	0.39	1.66	0.01	2.38	2.03	1.79		112.38
Total	353.91	13.62	99.14	2.64	128.94	37.71	15.26	4.37	31.69	18.87	18.60	724.75

Table 13.3: Planned expenditure by funding source of local partnerships in England, 2008/09 (£ millions)

Source: Local treatment plans, NTA website

13.4 Prison drug treatment funding and expenditure

Drug treatment services in prisons are funded separately from community drug treatment services. In 2008/09 the Ministry of Justice (MOJ) allocated €27.4 million (£21.8 million) to prison establishments to run accredited drug treatment programmes such as the 12-step programme and Therapeutic Communities (Table 13.4). A further €41.5 million (£33 million) was provided for the operation of the Counselling, Assessment, Referral, Advice and Throughcare Service (CARATS), which provides case management and also delivers psychosocial treatments such as Cognitive Behavioural Therapy (CBT).

A further €14.2 million (£11.3 million) was provided in the form of a permanent transfer from MOJ to PCTs for the commissioning of clinical drug treatment in prisons with the Department of Health providing €29.2 million (£23.2 million) for the clinical aspect of the Integrated Drug Treatment System (IDTS). The IDTS is currently in the fourth wave of a national roll out in prisons and funds the development of enhanced clinical services for drug treatment in prisons with the aim of providing better services and improving integration between clinical services and CARATs.

Table 13.4: Funding streams for prison drug treatment in England, 2008/09

DESCRIPTION	FUNDING STREAM	FUNDING 2008/09
Accredited drug treatment programmes (prison)	MOJ/NOMS	£21.8 million
CARATs and IDTS non clinical (prisons)	MOJ/NOMS	£33 million
Prison clinical services	MOJ/NOMS	£11.3 million
Prison clinical services (IDTS)	DH	£23.2 million

Source: Government departments

The responsibility for commissioning drug treatment services in prisons depends on the funding stream. The National Offender Management Service (NOMS) commissions drug treatment programmes and other non-clinical prison services such as CARATs through the regional Directors of Offender Management but funding for clinical services is via PCTs, who commission services locally in consultation with the local DAT.

In a review of prison-based funding carried out during 2007 (PriceWaterhouseCoopers 2008), the authors criticised funding arrangements for being fragmented and therefore inflexible. They recommended more streamlined commissioning and the pooling of health and criminal justice funding streams to support this, which they argued would provide efficiency savings and more effective joined-up services.

The NTA is responsible for monitoring and evaluating the implementation of IDTS in prisons in England. While IDTS funded prisons provide treatment plans including expenditure profiles to the NTA, these are not publicly available so no breakdown of expenditure is available.

13.5.1 Unit costs of drug treatment

The NTA has constructed a unit costs of substance misuse dataset to assist local partnerships with local area service planning. In 2009, unit costs data were updated using 2007/08 data. The exercise involved a set of expenditure and staffing questions completed by the local partnerships via a web-based tool. On the basis of this information, and activity data from the National Drug Treatment Monitoring System (NDTMS), unit costs data for different treatment interventions were calculated at an agency, partnership, regional and national level.

In 2007/08 there were a full-time equivalent of 4,880 staff members working in drug treatment across England. Data by intervention type/modality show that inpatient detoxification is far more costly than other interventions, at a national average unit cost of €199.46 (£136.44) per day treated and €6,431.28 (£4,399.26) per person treated. This compares with €9.96 (£6.81) per day treated and €2,373.83 (£1,623.80) per person treated for specialist prescribing (Table 13.5). However, despite the lower unit cost, the widespread use of specialist prescribing means that this is the modality with the highest overall expenditure.

Table 13.5: Unit costs of treatment per person treated and day treated in England, 2007/08 by treatment modality

TREATMENT TYPE	SERVIC	E USERS IN TRE	ATMENT	DAYS IN TREATMENT			
	Number	Total cost	Unit cost	Number	Total cost	Unit cost	
Inpatient detoxification	3,355	£14,759,514	£4,399.26	108,179	£14,759,514	£136.44	
Specialist prescribing	81,102	£131,693,142	£1,623.80	19,351,098	£131,693,142	£6.81	
Primary Care keyworking	44,419	£9,654,841	£217.36	-	-	-	
Structured day care	13,757	£20,634,904	£1,499.96	1,917,670	£20,634,904	£10.76	
Structured psychosocial treatments	29,518	£28,244,570	£956.86	5,207,569	£28,244,570	£5.42	
Other structured treatments	34,449	£33,201,992	£963.80	5,085,070	£33,201,992	£6.53	

Source: National Treatment Agency

Data are disaggregated into three cost categories: pay; non-pay; and indirect costs. Pay costs are the highest component of treatment costs, accounting for over half of expenditure for all treatment types apart from specialist prescribing (48%). A third of specialist prescribing costs are for non-pay elements such as medication. Inpatient detoxification costs were mostly taken up by pay (59%) and indirect costs such as overheads (31%) (Table 13.6).

Table 13.6: Breakdown of costs for drug treatment interventions in England, 2007/08 (%)

INTERVENTION TYPE	PAY	NON-PAY	INDIRECT
Inpatient detoxification	58.6%	10.3%	31.2%
Specialist prescribing	48.4%	33.5%	18.1%
Primary Care keyworking	59.1%	14.0%	26.9%
Structured day programmes	54.8%	24.9%	20.4%
Structured psychosocial interventions	60.0%	18.2%	21.8%
Other structured treatments	58.8%	20.5%	20.8%

Source: National Treatment Agency

The data show wide regional variations in unit costs with the adjusted unit cost³⁴⁴ of inpatient detoxification per person particularly high in London €5,332 (£4,236) and lowest in the West Midlands³⁴⁵ €2,426 (£1,927). Similar regional differences can be seen in the cost of structured psychosocial treatment per person; the adjusted unit cost in the East Midlands €1,751 (£1,198) was twice that of the North West €779 (£533). Commissioners are encouraged to look at unit costs data in comparison with regional and national averages and identify where efficiency savings can be made.

13.5.2 Prescription costs

The British National Formulary provides data on the costs of drugs such as methadone and buprenorphine. Data on the number of prescriptions and the net ingredient cost of drugs dispensed in the community are available from the NHS Information Centre.³⁴⁶ In 2008 the net ingredient cost of methadone prescriptions for the treatment of drug dependence was €41.3 million (£32.8 million), a cost of €15.5 (£12.35) per item dispensed.³⁴⁷ The net ingredient cost of buprenorphine was €24.5 million (£19.5 million), a cost of €19.5 million), a cost of €39.97 (£31.75) per item dispensed (Table 13.7).

 Table 13.7: Total net ingredient cost and cost per prescription of drugs used for the treatment of drug dependence in England, 2008

DRUG	NET INGREDIENT COST (£000s)	COST PER PRESCRIPTION (£)
Methadone hydrochloride	32,779	12.35
Buprenorphine hydrochloride	19,451	31.75
Buprenorphine hydrochloride/Naloxone hydrochloride	1,654	32.89
Naltrexone Hydrochloride	368	27.91
Lofexidine Hydrochloride	109	34.88

Source: NHS Information Centre (2009)

³⁴⁴ The adjusted unit cost applies a market forces factor to the unit cost taking into account the higher cost of living in some parts of the country.

³⁴⁵ Due to very small numbers of clients receiving inpatient detoxification in the North East, this region has been excluded from the analysis.

³⁴⁶ See: http://www.ic.nhs.uk/statistics-and-data-collections/primary-care/prescriptions/prescription-cost-analysis-2008

³⁴⁷ Refers to the cost of the drug before discounts and does not include any dispensing costs or fees. It does not include any adjustment for income obtained where a prescription charge is paid at the time the prescription is dispensed or where the patient has purchased a pre-payment certificate.

13.5.3 Other sources of cost data

A research study carried out as part of the Department of Health's Drug Misuse Research Initiative (ROUTES) estimated the range of costs of 'treatment as usual' in addition to assessing cost effectiveness (see section 13.6.2) (Raistrick et al. 2007). A total of 401 clients from seven geographically diverse agencies were recruited to the study. A number of outcome measures were used and treatment costs were estimated for individual clients. The total average cost of treatment per client over the six-month period was €547 (£374) excluding the cost of prescribed drugs and €946 (£647) including prescribed drugs. The range of treatment costs excluding drugs was €241 - €1,341 (£165 - £917). The authors present costs per event type for each of the seven treatment agencies but the accuracy of the data is variable with some based upon estimated financial information and others taken from full financial accounts. The study found that the key factors influencing treatment costs across agencies were:

- the number of events per episode of treatment;
- the complexity of the case mix;
- the amount of drugs prescribed; and
- the gender mix.

The agencies with the highest number of events also had the highest cost per episode of treatment and those with more complex and difficult problems were more costly to treat. Regression analysis showed that the cost of treating females was significantly higher than for males. Looking at costs from a provider perspective, the key factors influencing costs were:

- the grade of the staff involved in the event;
- the total overhead costs of the service; and
- the type of treatment provided.

Results from the cost-effectiveness analysis are presented below (section 13.6.2).

13.6 Economic evaluations

This section summarises the results from economic evaluations of drug treatment. As the Cross-Government Drugs Research Strategy published in February 2010 (HM Government 2010a) (see section 1.3.4) states, it is essential to understand the cost effectiveness and value for money in the areas of treatment, prevention and other demand-side interventions. The reader who is unfamiliar with economic evaluation is referred to the BMJ series of occasional notes on economics (e.g. Raftery 1998).

13.6.1 Cost effectiveness and treatment outcomes

Two major prospective treatment cohort studies have taken place in England: the National Treatment Outcomes Research Study (NTORS), which took place between 1995 and 2000; and the Drug Treatment Outcomes Research Study (DTORS), which took place between 2006 and 2008. Both estimated the cost impact of drug treatment but only the DTORS study incorporated health outcomes. In each study, a single group of drug misusers was followed up over time. Unlike a randomised controlled trial, in which we can be confident that differences in outcomes are due to differences in treatment allocation, variation over time in factors other than treatment may have influenced the outcomes of these studies.

NTORS

Based on two-year outcome data from NTORS, Godfrey et al. (2004) presented an economic analysis of the costs of drug misuse treatment using self-reported data at baseline, one year and two year follow-up. The study estimated costs for the use of health and social care services, criminal justice resources and criminal activity and drew on unit cost data from a number of sources. With patients acting as their own controls, the authors estimated that treatment generated a cost-benefit ratio of 9.5:1, with the majority of savings attributed to a reduction in criminal activity. Marginal health-care costs, it was found, were higher in the two years after entry into treatment than over the two previous years but no costs were calculated for improvements in drug users' quality of life (QALY)³⁴⁸ or for the impact of treatment on premature deaths. For crime costs both the cost to the criminal justice system and the victim costs of crime were included, the latter accounting for 75% of the overall crime costs. However, other costs to society such as childcare and the impact on family functioning were not calculated. Overall, the average cost of index treatment (interventions provided by NTORS agencies) for clients at two years was €5,415 (£3,674) per person, totalling €2.95 million (£2.0 million) over the period. However, before commencing index treatment, clients reported receiving addiction treatment valued at €4.3 million (£2.9 million) and this continued after baseline with a combined total cost for index and non-index treatment of €6.5 million (£4.4 million) in the two-year follow-up period, an additional investment in treatment services of €2.2 million (£1.5 million).

DTORS

A cost effectiveness analysis was published based on resource use and health outcomes from DTORS, and a range of sources of unit used self-reported data at first and second follow-up over an 11 month period (Davies et al. 2009). Drug misusers again acting as their own controls, the analysis looked at the use of health care services, offending behaviour, the impact on children in care, and the use of accommodation services. The study also estimated QALY values at baseline and follow-up. Structured drug treatment led to net savings and net improvements in health measured in QALYs. Even if policy makers were willing to pay as little as €1.1 (£1) to gain one QALY, the results demonstrated that there is a high likelihood that treatment is cost effective (probability of 0.8). If a QALY is valued at €33,873 (£30,000) (the upper bound of NICE's reference range of €22,582-33,873 (£20,000-30,000)), the overall net monetary benefit of structured drug treatment compared with no drug treatment is estimated to be €7,370 (£6,527). This is due to a reduction in health, social care and criminal costs of €13,358 (£11,831) over an average 51 week follow-up period, compared with the cost of structured drug treatment of €5,116 (£4,531). The authors estimate that drug treatment gives a cost-benefit ratio of 2.5:1. While the cost-benefit ratio differs substantially from NTORS (see above), the different methods and values of unit costs data used means it is not possible to conclude that drug treatment is less cost-effective now than during the period over which NTORS was carried out. Limitations to the study include the lack of a control group, which makes it difficult to attribute changes in behaviour to the intervention alone.

13.6.2 Cost-effectiveness of 'treatment as usual'

In the final report to the Department of Health on the *Cost and Cost-effectiveness of Treatment as Usual in Drug Misuse Services* (Drummond et al. 2004), the change in QALYs was used to assess cost-effectiveness. The mean change per service user was a gain of 0.29 QALYs in six months.³⁴⁹ Using a societal perspective and taking only participants with complete treatment data (n=251), treatment dominates no treatment as the cost of treatment is more than compensated for by the large reduction in societal costs. While the incremental cost-effectiveness ratio (ICER) based on treatment costs only was calculated as €41,019.83 (£27,830.81)³⁵⁰, consideration of all costs yielded a saving of €64,909.44 (£44,039.24) per QALY. The authors note that, in the absence of a no treatment control group, cost-effectiveness could be over-estimated or under-estimated.

³⁴⁸ Quality-adjusted life years.

³⁴⁹ Calculated by 'the area under the curve' (Richardson and Manca 2004).

 $^{^{350}}$ Cost-effectiveness ratio = Cost of treatment/QALY.

Cognitive behavioural therapy for opiate users in methadone maintenance treatment

A randomised controlled trial carried out as part of the Department of Health's Drug Misuse Research Initiative (DMRI), investigated the cost-effectiveness of cognitive behaviour therapy (CBT) for opiate users in methadone maintenance treatment (MMT) using MMT only (usual treatment) as a control (Drummond et al., 2004). The primary outcome measure was the reduction in the number of days of heroin use and secondary outcomes included QALYs gained. No statistically significant differences were found between the two groups in terms of heroin use. The QALY assessment showed a slightly greater QALY improvement, although again not significantly so, in the MMT group compared with the CBT plus MMT group. However, the CBT plus MMT group showed a larger reduction in costs than the MMT group. As a result of these findings, a cost-effectiveness acceptability curve showed that CBT plus MMT would be preferred over MMT alone in about 70% of instances over a reasonable range of values for a QALY (up to €73,695 (£50,000)). The study was hampered by poor recruitment and implementation of the intervention with those randomised to the CBT group receiving an average of only four CBT sessions instead of the planned 24 and 38% receiving no sessions at all. Given these difficulties, which the authors acknowledge, the small numbers on which the results were based (between 20 and 25 in each group) and the differences in baseline costs and quality of life between the two groups, the results should be treated with caution.

National Institute for Health and Clinical Excellence (NICE) technology appraisals

Two technology appraisals were published by NICE in 2007 assessing the use of methadone and buprenorphine maintenance (NICE 2007a) and naltrexone (NICE 2007b) for the management of opioid dependence (see Chapter 11 for a description of NICE's role). As part of these appraisals, an estimation of the cost-effectiveness of treating opioid dependent clients with these drugs was carried out.

Cost-effectiveness of methadone and buprenorphine for the management of opioid dependence

The Assessment Group identified 11 published economic evaluations, which met the inclusion criteria for review; eight assessed the cost-effectiveness of MMT, one the cost-effectiveness of buprenorphine (BMT), and two compared MMT with BMT. Despite the studies being of high quality, none was carried out in the UK and the parameters, effectiveness data, perspectives and comparators used meant results were not generalisable to the NHS. The Assessment Group also reviewed the cost-effectiveness analysis of buprenorphine provided by its manufacturer, Schering-Plough (Connock et al. 2006).

A model was developed to assess the cost-effectiveness of MMT compared to BMT and to compare both with no treatment over a 12 month period.³⁵¹ From a healthcare provider perspective, the analysis found that MMT dominated³⁵² BMT and, when compared with no treatment, resulted in an ICER of €20,098 (£13,700) per QALY gained. When comparing BMT with no treatment, the ICER was estimated to be €38,728 (£26,400). From a wider societal perspective including crime costs (both costs to the criminal justice system and victim costs), MMT dominated both BMT and no treatment and BMT was dominant over no treatment. The finding that both drug treatments were cost-effective compared to no treatment held up under a number of sensitivity analyses, although the authors highlight the impact on results of including victim costs in the societal perspective analysis (Connock et al. 2006). The guidance concluded that MMT should be the first choice treatment but BMT should be used in cases where clinical and patient factors make MMT a more risky choice.

³⁵¹ The model used a decision tree with Monte Carlo simulation. The parameters used for the model, the sources of resource use and cost data and the method used for the estimation of QALYs are explained in further detail in the Assessment Report (Connock et al. 2006).

³⁵² Less costly and more effective.

Cost effectiveness of naltrexone for the management of opioid dependence

The Assessment Group did not identify any published economic evaluations of the cost-effectiveness of naltrexone for relapse prevention and the manufacturer did not submit evidence (Adi et al. 2006). A decision analytical model was developed to assess the cost-effectiveness of naltrexone and psychosocial support compared with psychosocial support alone over a 12 month time period.³⁵³ The reference case used an NHS perspective and estimated the ICER of naltrexone plus psychosocial support to be €62,348 (£42,500) per QALY gained. The probability of naltrexone being cost effective did not rise much above 50% regardless of the level of willingness to pay for an additional QALY. This is due to uncertainty around the clinical effectiveness of naltrexone, particularly the paucity of evidence on the level of drug use while in treatment (Adi et al. 2006). From a societal perspective, naltrexone plus psychosocial support dominated psychosocial support alone although a one-way sensitivity analysis excluding victim crime costs gave an ICER of €74,817 (£51,000) per QALY gained. The guidance concludes that the cost-effectiveness of naltrexone has probably been under-estimated for highly motivated individuals who prefer to remain opiate free. Therefore it suggests continuation of the use of naltrexone in a restricted manner within the NHS.

³⁵³ The model used a decision tree with Monte Carlo simulation. The parameters used for the model, the sources of resource use and cost data and the method used for the estimation of QALYs are explained in further detail in the Assessment Report (Adi et al. 2006).

Part C: Bibliography and Annexes





Bibliography

ACMD (2006).

Pathways to Problems: Hazardous use of tobacco, alcohol and other drugs by young people in the UK and its implications for policy. Home Office, London. Available: http://www.ias.org.uk/pathways/pathways.pdf [accessed 05.10.10]

ACMD (Advisory Council on the Misuse of Drugs) (2010a).

Consideration of the cathinones. Home Office, London. Available: http://drugs.homeoffice.gov.uk/publication-search/acmd/acmd-cathinodes-report-2010? [accessed 15.04.10]

ACMD (Advisory Council on the Misuse of Drugs) (2010b).

Consideration of naphthylpyrovalerone analogues and related compounds. Home Office, London. Available: http://www.homeoffice.gov.uk/publications/drugs/acmd1/naphyrone-report?view=Binary [accessed 15.10.10]

ACMD (2010c).

Pathways to Problems: A follow-up report on the implementation of recommendations from Pathways to Problems. Home Office, London. Available:

http://www.homeoffice.gov.uk/publications/drugs/acmd1/acmd-pathways-to-problems-report?view=Binary [accessed 05.10.10]

ACPO (Association of Chief Police Officers) (2010a).

Guidance on policing new psychoactive substances. Association of Chief Police Officers of England, Wales and Northern Ireland, London. Available:

http://www.acpo.police.uk/asp/policies/Data/Guidance_Policing_New_Psychoactive_Substances_website.pdf [accessed 05.08.10]

ACPO (2010b).

Findings from the UK National Problem Profile Commercial Cultivation of Cannabis. Association of Chief Police Officers of England, Wales and Northern Ireland, London. Available: http://www.acpo.police.uk/default.asp [accessed 16.09.10]

Adfam and Drugscope (2009).

Recovery and drug dependency: a new deal for dependency. Adfam, London. Available: http://www.drugscope.org.uk/OneStopCMS/Core/CrawlerResourceServer.aspx?resource=49672b5001c947a5a e27bd17ccf953ae&mode=link&guid=d53fbd12c60241dcb65fc05ac2eb2328 [accessed 10.05.10]

Adfam (2010).

Adfam's manifesto for families. 5 key challenges for supporting families affected by drug and alcohol use. Adfam, London. Available: http://www.adfam.org.uk/docs/Adfam_manifesto_2010.pdf [accessed 18.10.10]

Adi Y, Juarez-Garcia A, Wang D et al. (2006).

Oral naltrexone as a treatment for relapse prevention in formerly opioid dependent drug users – a systematic review and economic evaluation. West Midlands Health Technology Assessment Collaboration, Birmingham. Available: http://www.nice.org.uk/nicemedia/live/11603/33799/33799.pdf [accessed 14.04.10]

The Anti-Social Behaviour Act 2003.

The Stationery Office, London. Available: http://www.legislation.gov.uk/ukpga/2003/38/contents [accessed 18.10.10]

Apoola, A. and Brunt, L. (2010).

A randomised controlled study of mouth swab testing versus same day blood tests for HIV infection in young people attending a community drug service. Drug and Alcohol Review (early online access).

The Armed Forces Act 1996.

The Stationery Office, London. Available: http://www.legislation.gov.uk/ukpga/1996/46/contents [accessed 19.10.10]

Ashton, H., Nodiyal, A., Green, D., Moore, B. and Heather, N. (2009).

Acupuncture or counselling: outcomes and predictors of treatment choice in a non-statutory addiction service. Journal of Substance Use 14 (3-4) 151-160.

Ashton, T. and Hempenstall, C. (2009).

Research into the financial benefits of the Supporting People programme, 2009. Communities and Local Government, London. Available:

http://www.communities.gov.uk/documents/housing/pdf/1274439 [accessed 24.08.10]

Audit Scotland (2009).

Drug and alcohol services in Scotland. Audit Scotland, Edinburgh. Available: http://www.audit-scotland.gov.uk/docs/health/2009/nr 090326 drugs alcohol.pdf [accessed 28.09.10]

Bailey, R. Fuller, E. and Ormston, R. (2010).

Smoking, drinking and drugs: reaction to reform. In A. Park, J. Curtice, K. Thomson, M. Phillips, E. Clery and S. Butt (Eds.) British Social Attitudes. The 26th Report. National Centre for Social Research, London.

Barnard, M., Webster, S., O'Connor, W., Jones, A. and Donmall, M. (2009).

The Drug Outcomes Research Study (DTORS): Qualitative Study. Home Office Research Report 26. Home Office, London. Available:

http://rds.homeoffice.gov.uk/rds/pdfs09/horr26c.pdf [accessed 17.05.10]

Bartholomew, J., Holroyd, S. and Heffernan, T.M. (2010).

Does cannabis use affect prospective memory in young adults? Journal of Psychopharmacology 24 241-246.

Bauld, L., Hay, G., McKell, J. and Carroll, C. (2010).

Problem drug users' experiences of employment and the benefits system. Research Report No. 640. Department for Work and Pensions, London. Available: http://research.dwp.gov.uk/asd/asd5/rports2009-2010/rrep640.pdf [accessed 13.08.10]

Beddoes, D., Sheikh, S., Khanna, M., Pralat, R. (2010).

The impact of drugs on different minority groups: A review of the literature. United Kingdom Drug Policy Commission, London. Available: http://www.ukdpc.org.uk/resources/ethnic_groups.pdf [accessed 17.08.10]

nttp://www.ukapc.org.uk/resources/etnnic_groups.pdf [accessed 17.08.

Bennett, T. and Holloway, K. (2010).

Is UK drug policy evidence based? International Journal of Drug Policy (early online access).

Berridge, V. (2004).

Punishment or treatment? Inebriety, drink, and drugs, 1860-2004. The Lancet 364 4-5.

Best, D., Rome, A., Hanning, K. A., White, W., Gossop, M., Taylor, A. and Perkins, A. (2010)

Research for Recovery: A Review of the Drugs Evidence Base. Scottish Government, Edinburgh. http://www.scotland.gov.uk/Publications/2010/08/18112230/0 [accessed 29.09.10]

Beynon, C.M., Bellis, M. A. Church, E. and Neely, S. (2007).

When is a drug-related death not a drug-related death? Implications for current drug-related death policies in the UK and Europe. Substance Abuse Treatment, Prevention, and Policy 2 25.

Beynon, C.M. and McVeigh, J. (2007).

The role of substance use in non-drug related deaths: a cross-sectional study of drug treatment clients in the North West of England. Journal of Substance Use 12 39-47.

Beynon, C.M. and McVeigh, J., Hurst, A. and Marr, A. (2010).

Older and sicker: Changing mortality of drug users in treatment in the North West of England. International Journal of Drug Policy (early online access).

Bloodworth, A. and McNamee, M. (2010).

Clean Olympians? Doping and anti-doping: The views of talented young British athletes. International Journal of Drug Policy 21 276-282.

Bloor, M.J., Gannon, M., Hay, G., Jackson, G., Leyland, A. and McKeganey, N.P. (2008).

Contribution of problem drug users' deaths to excess mortality in Scotland: secondary analysis of cohort study. BMJ 2008; 337:a478, doi:10.1136/bmj.a478

Bonell, C.P., Hickson, F.C.I., Weatherburn, P. and Reid, D.S. (2009).

Methamphetamine use among gay men across the UK. International Journal of Drug Policy 21 (3) 224-246.

Bonell, C., Sorhaindo, A., Strange, V., Wiggins, M., Allen, E., Fletcher, A. et al. (2010).

A pilot whole-school intervention to improve school ethos and reduce substance use. Health Education 110 (4).

The British Liver Trust (2009).

A Professional's Guide to Hepatitis C and Injecting Drug Use. The British Liver Trust, Ringwood. Available: http://www.britishlivertrust.org.uk/content/retrieve.aspx?id=594&name=a81577dc5111c9d0f953073e877f39d4 &type=docs [accessed 21.05.10]

Browne, K., McGlynn, N. and Lim, J. (2009).

Drugs & Alcohol - Additional Findings Report. Count Me In Too: LGBT Lives in Brighton & Hove. University of Brighton, Brighton. Available: http://www.spectrum-lgbt.org/cmiToo/06/Download.htm [accessed 16.09.10]

Charles, V. and Weaver, T. (2010).

A qualitative study of illicit and non-prescribed drug use amongst people with psychotic disorders. Journal of Mental Health 19 1 99-106.

Cabinet Office (2010).

The Coalition: our programme for government. Cabinet Office, London. Available: http://www.cabinetoffice.gov.uk/media/409088/pfg_coalition.pdf [accessed 07.06.10]

Care Quality Commission (CQC) (2010).

Commissioning healthcare in prisons 2008/09. Care Quality Commission and Her Majesty's Inspectorate of Prisons, London. Available:

http://www.cqc.org.uk/publications.cfm?fde_id=15740 [accessed 02.06.10]

Catch 22 (2009).

Positive Futures Annual Review 2008/09. Catch 22, London. Available: http://www.posfutures.org.uk/index.asp?m=794&t=About+us [accessed 03.06.10]

The Centre for Drug Misuse Research (2006).

Estimating the Prevalence of Problem Opiate and Problem Cocaine Use in Northern Ireland. Drug and Alcohol Information and Research Unit, Department of Health, Social Services and Public Safety Northern Ireland, Belfast. Available:

http://www.dhsspsni.gov.uk/opiate_cocaine.pdf [accessed 21.05.10]

The Centre for Social Justice (2010).

Green paper on criminal justice and addiction. The Centre for Social Justice, London. Available: http://www.centreforsocialjustice.org.uk/client/downloads/CSJ_Green_paper_criminal_justice_07%2007_WEB.pdf [accessed 24.08.10]

Chamberlain, T., George, N., Golden, S., Walker, F. and Benton, T. (2010).

TellUs4 National Report. National Foundation for Educational Research, London. Available: http://www.education.gov.uk/research/data/uploadfiles/DCSF-RR218 FinRep.pdf [accessed 03.06.10]

Chambers, M. (2010).

Coming Clean: Combating Drug Misuse in Prisons. Policy Exchange, London. Available: http://www.policyexchange.org.uk/images/publications/pdfs/Coming_Clean_-_Jun__10.pdf [accessed 15.09.10]

Cherry, S., Williams, H., Oyefeso, A. and Bennett, J. (2010).

Injecting other users: A pilot study in an area of high prevalence of drug-related deaths. Journal of Substance Use 14 (5) 289-294.

Clair, J., Martin, L., Bond, A.J., O'Ryan, D., Davis, P. and Curran, H.V. (2009).

An experimental study of aggressive and neutral interpretative bias in opiate-dependent and opiate-abstinent men. Journal of Psychopharmacology 23 428-435.

Clarke, D.D, Ward, P., Bartle, C.and Truman, W. (2010).

Killer crashes: fatal road traffic accidents in the UK. Accident Analysis and Prevention 42 764-770.

Cole, C., Jones, L., McVeigh, J., Kicman, A., Syed, Q. and Bellis, M.A. (2010).

A Guide to Adulterants, Bulking Agents and Other Contaminants Found in Illicit Drugs. Liverpool John Moores University, Liverpool. Available:

http://www.cph.org.uk/showPublication.aspx?pubid=632 [accessed 21.05.10]

Committee of Public Accounts (2010).

Tackling problem drug use: Thirtieth Report of Session 2009-10. HC 456. The Stationery Office, London. Available: http://www.publications.parliament.uk/pa/cm200910/cmselect/cmpubacc/456/456.pdf [accessed 19.05.10]

Connock M, Juarez-Garcia A, Jowett S et al. (2006).

Methadone and buprenorphine for the management of opioid dependence: a systematic review and economic evaluation. West Midlands Health Technology Assessment Collaboration, Birmingham. Available: http://www.nice.org.uk/nicemedia/live/11605/33820/33820.pdf [accessed 14.04.10]

Copello, A., Templeton, L. and Powell, J. (2009).

Adult family members and carers of dependent drug users: prevalence, social cost, resource savings and treatment responses. UKDPC, London. Available: http://www.ukdpc.org.uk/resources/UKDPC Families of drug users research report final.pdf [accessed 15.10.10]

Conrod, P.J., Castellanos-Ryan, N. and Strang, J. (2010).

Brief, personality-targeted coping skills interventions and survival as a non-drug user over a 2-year period during adolescence. Archives of General Psychiatry 67(1) 85-93.

Conrod, P.J. and Woicik, P. (2002).

Validation of a four-factor model of personality risk for substance abuse and examination of a brief instrument for assessing personality risk. Addictive Biology 7 (3) 329-346.

Craig, L., Fisk, J.E., Montgomery, C., Murphy, P.N. and Wareing, M. (2010).

Is emotional intelligence impaired in ecstasy-polydrug users? Journal of Psychopharmacology 24 221-231.

The Criminal Justice and Licensing (Scotland) Act 2010.

The Stationery Office, London. Available: http://www.legislation.gov.uk/asp/2010/13/contents/enacted [accessed 20.10.10]

DAIRU (Drug and Alcohol Information and Research Unit) (2003).

Statistics from the Northern Ireland Needle and Syringe Exchange Scheme: 1 April 2002 – 31 March 2003. Statistical Bulletin DAIRU 3/2003. Department of Health, Social Services and Public Safety, Belfast. Available: http://www.dhsspsni.gov.uk/needle exchange mar03.pdf [accessed 09.08.10]

DAIRU (Drug and Alcohol Information and Research Unit) (2004).

Statistics from the Northern Ireland Needle and Syringe Exchange Scheme: 1 April 2003 – 31 March 2004. Statistical Bulletin DAIRU 2/2004. Department of Health, Social Services and Public Safety, Belfast. Available: http://www.dhsspsni.gov.uk/needle_exchange_mar04.pdf [accessed 09.08.10]

DAIRU (Drug and Alcohol Information and Research Unit) (2005).

Statistics from the Northern Ireland Needle and Syringe Exchange Scheme: 1 April 2004 – 31 March 2005. Statistical Bulletin DAIRU 3/2005. Department of Health, Social Services and Public Safety, Belfast. Available: http://www.dhsspsni.gov.uk/needle exchange mar05.pdf [accessed 09.08.10]

DAIRU (Drug and Alcohol Information and Research Unit) (2006).

Statistics from the Northern Ireland Needle and Syringe Exchange Scheme: 1 April 2005 – 31 March 2006. Statistical Bulletin DAIRU 2/2006. Department of Health, Social Services and Public Safety, Belfast. Available: http://www.dhsspsni.gov.uk/needle_exchange_mar06.pdf [accessed 09.08.10]

DAIRU (Drug and Alcohol Information and Research Unit) (2007).

Statistics from the Northern Ireland Needle and Syringe Exchange Scheme: 1 April 2006 – 31 March 2007. Statistical Bulletin DAIRU 3/2007. Department of Health, Social Services and Public Safety, Belfast. Available: http://www.dhsspsni.gov.uk/nses_annual_bulletin_2006-07.pdf [accessed 09.08.10]

Daly, M. (2009).

Commercial breakdown. Street drug trends survey 2009. Druglink September/October 2009, 4-7.

Daly, M. (2010).

Booze, bans and bite-size bags. Street drug trends survey 2010. Druglink September/October 2010, 6-9.

Davies, L., Jones, A., Vamvakas, G., Dubourg, R. and Donmall, M. (2009).

The Drug Treatment Outcomes Research Study (DTORS): Cost effectiveness analysis. Home Office Research Report 25. Home Office, London. Available:

http://www.homeoffice.gov.uk/rds/pdfs09/horr25c.pdf [accessed 17.03.10]

Davies, S., Wood, D.M., Smith, G., Button, J., Ramsey, J., Archer, R., Holt, D.W and Dargan, P.I. (2010).

Purchasing 'legal highs' on the Internet—is there consistency in what you get? Q J Med. (early online access).

DCSF (Department for Children, Schools and Families) (2007).

The Children's Plan: Building brighter futures. Department for Children, Schools and Families, London. Available: http://www.dcsf.gov.uk/publications/childrensplan/index.shtml [accessed 15.05.10]

DCSF (2009a).

Outcome Indicators for Children Looked after. Twelve months to 30 September 2009 England. Department for Children, Schools and Families, London. Available:

http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000930/SFR_08_2010_Commentary.pdf [accessed 19.10.10]

DCSF (Department for Children, Schools and Families) (2009b).

Independent Review of the proposal to make Personal, Social, Health and Economic (PSHE) education statutory. Department for Children, Schools and Families, London. Available: http://publications.dcsf.gov.uk/eOrderingDownload/FINAL%20Macdonald%20PSHE%20Review.pdf [accessed 25.05.10]

Department for Children, Schools and Families (DCSF), Department for Health (DH), and the National Treatment Agency (NTA) (2009).

Joint guidance on development of local protocols between drug and alcohol treatment services and local safeguarding and family services. Department for Children, Schools and Families, London. Available: http://www.dcsf.gov.uk/everychildmatters/ download/?id=7211 [accessed 02.06.10]

DH (Department of Health) (1984).

Guidelines of good clinical practice in the treatment of Drug Misuse. Her Majesty's Stationery Office, London.

DH (Department of Health) (2001).

The Government Response to the Advisory Council on the Misuse of Drugs Report into Drug Related Deaths. Department of Health, London. Available:

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4015217 [accessed 13.05.10]

DH (Department of Health) (2002a).

Mental Health policy implementation: dual diagnosis and good practice. Department of Health, London. Available: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4009058 [accessed 12.05.10]

DH (Department of Health) (2002b).

Models of care for substance misuse treatment: promoting quality, efficiency and effectiveness in drug misuse treatment services. Department of Health, London. Available:

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4008118 [accessed 20.10.10]

DH (Department of Health) (2004).

Hepatitis C Action Plan for England. Department of Health, London. Available: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4084521 [accessed 20.10.10]

DH (Department of Health) (England) and the devolved administrations (2007).

Drug Misuse and Dependence: UK Guidelines on Clinical Management. Department of Health (England), the Scottish Government, Welsh Assembly Government and Northern Ireland Executive, London. Available: http://www.nta.nhs.uk/uploads/clinical_guidelines_2007.pdf [accessed 09.06.10]

DH (Department of Health and MOJ (Ministry of Justice) (2009).

Prisons Integrated Drug Treatment System: Continuity of care guidance. Department of Health, London. Available: http://www.nta.nhs.uk/uploads/idts_continuity_of_care_guidance_updated_september_2009.pdf [accessed 11.05.10]

DH (Department of Health) and NTA (National Treatment Agency for Substance Misuse) (2007). Reducing Drug-related Harm: An Action Plan. Department of Health, London. Available: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_074850 [accessed 12.05.10]

DH (Department of Health), Scottish Office Home and Health Department, Welsh Office (1991). Drug Misuse and Dependence. Guidelines on Clinical Management. Her Majesty's Stationery Office, London.

DH (Department of Health), the Scottish Office Department of Health, Welsh Office, Department of Health and Social Services (Northern Ireland) (1999).

Drug Misuse and Dependence - Guidelines on Clinical Management. The Stationery Office, London.

DHSSPSNI (Department of Health, Social Services and Public Safety Northern Ireland) (2006).

New Strategic Direction for Alcohol and Drugs (2006 – 2011). Department of Health, Social Services and Public Safety Northern Ireland, Belfast. Available:

http://www.dhsspsni.gov.uk/nsdad-finalversion-may06.pdf [accessed 29.03.09]

DHSSPSNI (Department of Health, Social Services and Public Safety Northern Ireland) (2007).

Action plan for the prevention, management and control of Hepatitis C in Northern Ireland. Department of Health, Social Services and Public Safety Northern Ireland, Belfast. Available: http://www.dhsspsni.gov.uk/hepatitisc-actionplan-2007.pdf [accessed 12.05.10]

DHSSPSNI (Department of Health, Social Services and Public Safety Northern Ireland) (2010a).

New Strategic Direction for Alcohol and Drugs 2006-2011. NSD Update. Department of Health, Social Services and Public Safety, Belfast. Available:

http://www.dhsspsni.gov.uk/nsd update report - april 2010.pdf [accessed 24.08.10]

DHSSPNI (Department of Health, Social Services and Public Safety Northern Ireland) (2010b).

Priorities for action 2010/11. Department of Health, Social Services and Public Safety, Belfast. Available: http://www.dhsspsni.gov.uk/priorities_for_action_2010-11.pdf [accessed 21.05.10]

Donmall, M., Jones, A. Davies, L. and Barnard, M. (2009).

Summary of key findings from the Drug Treatment Outcomes Research Study (DTORS) Research Report 23. Home Office, London. Available: http://rds.homeoffice.gov.uk/rds/pdfs09/horr23.pdf [accessed 26.04.10]

The Drugs (Prevention of Misuse) Act 1964. Her Majesty's Stationery Office, London.

The Drugs Act 2005. The Stationery Office, London. Available: http://www.legislation.gov.uk/uksi/2005/3053/contents/made [accessed 15.10.10]

DrugScope (2010).

Young people's drug and alcohol treatment at the crossroads. Available: http://www.drugscope.org.uk/OneStopCMS/Core/CrawlerResourceServer.aspx?resource=29EFADFA-E438-4BC7-ABE0-CD46E9B4B308&mode=link&guid=3450fe47647746a886740032f23a4f5d [accessed 17.05.10]

Drummond C, Kouimtsidis C, Reynolds, M. et al. (2004).

The effectiveness and cost effectiveness of cognitive behaviour therapy for opiate misusers in methadone maintenance treatment: a multicentre, randomised controlled trial. University of London, London.

DWP (Department for Work and Pensions) (2008).

No one written off: reforming welfare to reward responsibility. Green Paper. The Stationery Office, London. Available: http://www.dwp.gov.uk/policy/welfare-reform/legislation-and-key-documents/no-one-written-off [accessed 07.06.10]

Farrell, M. and Marsden, J. (2008).

Acute risk of drug-related death among newly released prisoners in England and Wales. Addiction 103 251–255.

Flatley, J., Kershaw, C., Smith, K., Chaplin, R. and Moon, D. (2010).

Crime in England and Wales 2009/10. Home Office, London. Available: http://rds.homeoffice.gov.uk/rds/pdfs10/hosb1210.pdf [accessed 17.08.10]

Fletcher, A., Bonell, C. and Rhodes, T. (2009).

New counter-school cultures: female students' drug use at a high-level achieving school. British Journal of Sociology of Education 30 5 549-562.

Flint, J., Crawford, J., Parr, J. and Powell, R. (2010).

A Process Evaluation of Celtic Against Drugs and Rangers Positive Choices. Scottish Government, Edinburgh. http://www.scotland.gov.uk/Publications/2010/01/07144803/0 [accessed 29.9.10]

Fountain, J. (2009a).

Issues surrounding drug use and drug services among the Black African communities in England. National Treatment Agency for Substance Misuse, London. Available: http://www.nta.nhs.uk/publications/documents/2 black african final.pdf [accessed 18.10.10]

Fountain, J. (2009b).

Issues surrounding drug use and drug services among the Black Caribbean communities in England. National Treatment Agency for Substance Misuse, London. Available: http://www.nta.nhs.uk/publications/documents/3 black caribbean final.pdf [accessed 18.10.10]

Fountain, J. (2009c).

Issues surrounding drug use and drug services among the Chinese and Vietnamese communities in England. National Treatment Agency for Substance Misuse, London. Available: http://www.nta.nhs.uk/publications/documents/5 chinese vietnamese final.pdf [accessed 18.10.10]

Fountain, J. (2009d).

Issues surrounding drug use and drug services among the Kurdish, Turkish Cypriot and Turkish communities in England. National Treatment Agency for Substance Misuse, London. Available: http://www.uclan.ac.uk/iscri/files/CE_sub_misuse_kurdish_turkish_cypriot_turkish_final.pdf [accessed 18.10.10]

Fountain, J. (2009e).

Issues surrounding drug use and drug services among the South Asian communities in England. National Treatment Agency for Substance Misuse, London. Available: http://www.uclan.ac.uk/iscri/files/CE sub misuse south asian final.pdf [accessed 18.10.10]

Frischer, M., Heatlie, H. and Hickman, M. (2004).

Estimating the prevalence of problematic and injecting drug use for Drug Action Team areas in England: a feasibility study using the Multiple Indicator Method. Home Office online report 34/04. Home Office, London. Available: http://www.homeoffice.gov.uk/rds/pdfs04/rdsolr3404.pdf [accessed 21.05.10]

Fuller, E., Jotangia, D. and Farrell, M. (2009).

Drug misuse and dependence. In S. McManus, H. Meltzer, T. Brugha, P. Bebbington and J. Jenkins. (Eds.) Adult psychiatric morbidity in England, 2007: The results of a household survey. The Health and Social Care Information Centre (ICNHS), London. Available:

http://www.ic.nhs.uk/pubs/psychiatricmorbidity07 [accessed 16.09.09]

Fuller, E. and Sanchez. M.(2010).

Smoking, drinking and drug use among young people in England in 2009. NHS Information Centre for Health and Social Care (ICNHS), London. Available:

http://www.ic.nhs.uk/webfiles/publications/Health%20and%20Lifestyles/sdd2009/SDD_2009_Report.pdf [accessed 29.07.10]

Gazzard, B.G. and BHIVA Treatment Guidelines Writing Group (2008).

British HIV Association Guidelines for the treatment of HIV-1-infected adults with antiretroviral therapy 2008. HIV Medicine 9(8) 563-608.

Ghodse, H., Corkery, J., Ahmed, K., Naidoo, V., Oyefeso, A., and Schifano, F. and (2010a).

Drug-related deaths in the UK: Annual Report 2010. International Centre for Drug Policy, St George's, University of London, London. Available:

http://www.sgul.ac.uk/about-st-georges/divisions/faculty-of-medicine-and-biomedical-sciences/mental-health/ icdp/website-pdfs/np-sad-11th-annual-report-240810-final.pdf [accessed 24.08.10]

Ghodse, H., Ahmed, K., Corkery, J., Naidoo, V. and Schifano, F. (2010b).

Trends in UK deaths associated with abuse of volatile substances, 1971-2008. Report 23. International Centre for Drug Policy, St George's, University of London. Available:

http://www.sgul.ac.uk/about-st-georges/divisions/faculty-of-medicine-and-biomedical-sciences/mental-health/ icdp/website-pdfs/vsa-annual-report-23-2010-final-version.pdf [accessed 24.08.10]

Godfrey, C., Stewart, D. and Gossop, M. (2004).

Economic analysis of costs and consequences of the treatment of drug misuse: 2 year outcome data from the National Treatment Outcome Research Study (NTORS). Addiction 99 697-707.

Gordon L, Tinsley L, Godfrey C, Parrott S. (2006).

The economic and social costs of Class A drug use in England and Wales, 2003/04. In Singleton, N., Murray, R. and Tinsley, L (eds). Measuring different aspects of problem drug use: methodological developments. Home Office Online Report. Home Office, London. Available: http://www.homeoffice.gov.uk/rds/pdfs06/rdsolr1606.pdf [accessed 15.10.10]

The provide the providence of the providence of

Gossop, M., Marsden, J. and Stewart, D. (1998).

NTORS at one year: the National Treatment Outcome Research Study - Changes in substance use, health and criminal behaviour one year after intake. Department of Health, London. Available: http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/ dh_4076746.pdf [accessed 26.04.10]

Gossop, M, Marsden, J. and Stewart, D. (2001).

NTORS after five years (National Treatment Outcome Research Study) Changes in substance use, health and criminal behaviour in the five years after intake. National Addiction Centre, London.

Gossop, M. Stewart, D., Treacy, S. and Marsden, J. (2002).

A prospective study of mortality among drug misusers during a 4-year period after seeking treatment. Addiction 97 (1) 39-47.

Gould, A. and Stratford, N. (2002).

Illegal drugs: highs and lows. In A. Park, J. Curtice, K. Thomson, L. Jarvis and C. Bromley (Eds.) British Social Attitudes. The 19th Report. National Centre for Social Research. London.

GROS (General Register Office Scotland) (2010).

Drug-Related Deaths in Scotland in 2009. General Register Office (Scotland), Edinburgh. Available: http://www.gro-scotland.gov.uk/files2/stats/drug-related-deaths/drd2009/drd2009.pdf [accessed 25.08.10]

Grover, C. and Paylor, I. (2010).

No one written off? Welfare, work and problem drug use. Drugs: Education, prevention and policy (early online access).

Hadjiefthyvoulou, F., Fisk, J.E., Montgomery, C. and Bridges, N. (2010).

Everyday and prospective memory deficits in ecstasy/polydrug users. Journal of Psychopharmacology (early online access).

Hamilton, R., McGlone, L., MacKinnon, J. R., Russell, H.C., Bradnam, M.S. and Mactier, H. (2010).

Ophthalmic, clinical and visual electrophysiological findings in children born to mothers prescribed substitute methadone in pregnancy. British Journal of Ophthalmology. (early online access).

Hand, T. and Singh Rishiraj, A. (2009).

Seizures of Drugs in England and Wales, 2008/09. Home Office, London. Available: http://rds.homeoffice.gov.uk/rds/pdfs09/hosb1609.pdf [accessed 16.09.10]

Hardy, M. and Williams, L. (2009).

Drug Interventions Programme: Wales Annual Report 2008/09. Welsh Assembly Government, Cardiff. Available: http://wales.gov.uk/docs/dsjlg/publications/commsafety/091019dipreporten.pdf [accessed 17.08.10]

Harwin, J. (2009).

The Family Drug and Alcohol Court Evaluation Project. Available: http://www.brunel.ac.uk/doc/1321/FDACIRAugust200920090914.pdf [accessed 05.05.10]

HAS (Health Advisory Service) (2001).

Substance misuse and mental health co-morbidity (dual diagnosis). Standards for Mental Health Services. Health Advisory Service, London.

Hay, G., McKeganey, N. and Hutchinson, S. (2001).

Estimating the national and local prevalence of problem drug misuse in Scotland. Centre for Drug Misuse, University of Glasgow. Available: www.drugmisuse.isdscotland.org/publications/local/Prevalence.pdf [accessed 21.05.10]

Hay, G., Gannon, M., McKeganey, N., Hutchinson, S. and Goldberg, D. (2004).

Estimating the national and local prevalence of problem drug misuse in Scotland. Centre for Drug Misuse Research, University of Glasgow and Scottish Centre for Infection and Environmental Health, Glasgow. Available: http://www.drugmisuse.isdscotland.org/publications/abstracts/prevalence3.htm [accessed 21.05.10]

Hay, G., Gannon, G., MacDougall, J., Millar, T., Eastwood, C. and McKeganey, N. (2006).

Local and national estimates of the prevalence of opiate use and/or crack cocaine use (2004/05). In Singleton, N., Murray, R. and Tinsley L. Measuring different aspects of problem drug use: methodological developments. Home Office Online Report 16/06. Home Office, London. Available: http://rds.homeoffice.gov.uk/rds/pdfs06/rdsolr1606.pdf [accessed 21.05.10]

Hay. G., Gannon, M., MacDougall, J., Millar, T., Eastwood, C. and McKeganey, N. (2007).

National and regional estimates of the prevalence of opiate use and/or crack cocaine use 2005/06: a summary of key findings. Home Office Online Report 21/07. Home Office. London. Available: http://rds.homeoffice.gov.uk/rds/pdfs07/rdsolr2107.pdf [accessed 21.05.10]

Hay, G. and Bauld, L. (2008).

Population estimates of problematic drug users in England who access DWP benefits: A feasibility study. Department for Work and Pensions, London.

Hay, G., Gannon, M., MacDougall, J., Millar, T., Williams, K., Eastwood, C. and McKeganey, N. (2008).

National and regional estimates of the prevalence of opiate use and/or crack cocaine use 2006/07: a summary of key findings. Home Office Research Report 9. Home Office, London. Available: http://rds.homeoffice.gov.uk/rds/pdfs08/horr09.pdf [accessed 21.05.10]

Hay, G., Gannon, M. Casey, J. and McKeganey, N. (2009).

Estimating the National and Local Prevalence of Problem Drug Misuse in Scotland, Executive Report. University of Glasgow, Glasgow. Available:

http://www.drugmisuse.isdscotland.org/publications/local/Prevalence_2009.pdf [accessed 21.05.10]

Hay, G., Gannon, M., Casey, J. and Millar, T. (2010a).

Estimates of the Prevalence of Opiate Use and/or Crack Cocaine Use, 2008/09: Sweep 5 report. University of Glasgow, Glasgow. Available:

http://www.nta.nhs.uk/uploads/glasgowprevalencestudysweep5-technicalreport2008-09[0].pdf [accessed 07.10.10]

Hay, G., Gannon, M., Casey, J. and Millar, T. (2010b).

National and regional estimates of the prevalence of opiate and/or crack cocaine use 2008–09: a summary of key findings. NTA, London. Available:

http://www.nta.nhs.uk/uploads/summaryprevalanceestimates2008-2009.pdf [accessed 07.10.10]

Hickman, M., Peter Vickerman, P., Macleod, J., Lewis, G., Zammit, S. Kirkbride, J. and Jones, P. (2009a).

If cannabis caused schizophrenia, how many cannabis users may need to be prevented in order to prevent one case of schizophrenia? England and Wales calculations. Addiction 104 1856-1861.

Hickman, M., Hope, V., Coleman, B., Parry, J., Telfer, M., Twigger, J. et al. (2009b).

Assessing IDU prevalence and health consequences (HCV, overdose and drug-related mortality) in a primary care trust: implications for public health action. Journal of Public Health 31 (3) 374-382.

Hickson, F., Bonell, C., Weatherburn, P. and Reid, D. (2010).

Illicit drug use among men who have sex with men in England and Wales. Addiction Research & Theory 18 1 14-22.

HM (Her Majesty's) Government. (1961).

Drug Addiction: Report of the Interdepartmental Committee (First Brain Report). Her Majesty's Stationery Office, London.

HM (Her Majesty's) Government. (1965).

Drug Addiction: The Second Report of the Interdepartmental Committee. (Second Brain Report). Her Majesty's Stationery Office, London.

HM (Her Majesty's) Government (2008a).

Drugs: protecting families and communities. The 2008 drug strategy. Home Office, London. Available: http://drugs.homeoffice.gov.uk/publication-search/drug-strategy/drug-strategy-2008 [accessed 29.03.09]

HM (Her Majesty's) Government (2008b).

Drugs: Protecting families and communities. Action Plan 2008-2011. Home Office, London. Available: http://webarchive.nationalarchives.gov.uk/20100419085703/http://drugs.homeoffice.gov.uk/publication-search/ drug-strategy/drug-action-plan-2008-20112835.pdf?view=Binary [accessed 23.08.10

HM (Her Majesty's) Government (2010a).

The Cross-Government Drugs Research Strategy. Home Office, London. Available: http://drugs.homeoffice.gov.uk/.../drug-strategy/cross-gov-drugs-resech-strategy2835.pdf? [accessed 04.03.10]

HM (Her Majesty's) Government (2010b).

The cocaine trade. The Government reply to the Seventh Report from the Home Affairs Committee Session 2009-10 HC 74. The Stationery Office, London. Available: http://rds.homeoffice.gov.uk/rds/pdfs09/hosb1609.pdf [accessed 16.09.10]

HM (Her Majesty's) Treasury (2010).

Treasury Minutes on the Tenth to the Eleventh and the Fourteenth to the Thirty Second Reports from the Committee of Public Accounts Session 2009-10. The Stationery Office, London. Available: http://www.official-documents.gov.uk/document/cm78/7885/7885.pdf [accessed 24.08.10]

HMIP (Her Majesty's Inspectorate of Prisons) (2009a).

Annual Report 2008-2009. Survey summaries. HMIP, London. Available: http://www.justice.gov.uk/inspectorates/hmi-prisons/docs/Survey_summaries_2008-9_web_rps.pdf [accessed 24.08.10]

HMIP (Her Majesty's Inspectorate of Prisons) (2009b).

Annual Report 2008-2009. HMIP, London. Available:

http://www.justice.gov.uk/inspectorates/hmi-prisons/docs/HMIP_AR_2008-9_web_published_rps.pdf [accessed 24.08.10]

Hoare, J. (2009).

Drug Misuse Declared: Findings from the 2008/09 British Crime Survey. Home Office Statistical Bulletin 12/09. Home Office, London. Available:

http://www.homeoffice.gov.uk/rds/pdfs09/hosb1209.pdf [accessed 16.09.10]

Hoare, J. and Moon, D. (Editor) (2010).

Drug Misuse Declared: Findings from the 2009/10 British Crime Survey. England and Wales. Home Office, London. Available:

http://rds.homeoffice.gov.uk/rds/pdfs10/hosb1310.pdf [accessed 16.09.10]

Home Affairs Committee (2010).

Seventh Report: The Cocaine Trade. House of Commons, London. The Stationery Office, London. Available: http://www.publications.parliament.uk/pa/cm200910/cmselect/cmhaff/74/7402.htm [accessed 16.09.10]

Home Office (1956).

The Duties of Doctors and Dentists under the Dangerous Drugs Act and Regulations. Her Majesty's Stationery Office, London. Available:

http://www.the-shipman-inquiry.org.uk/getdocument.asp?docid=WM1700556 [accessed 25.10.10]

Home Office (2009).

2009 Departmental Report. Home Office, London. Available: http://webarchive.nationalarchives.gov.uk/20100418065544/ http://www.homeoffice.gov.uk/documents/hoannual-report-09/ho-annual-report-20092835.pdf?view=Binary [accessed 24.08.10]

Home Office (2010a).

Draft Structural Reform Plan. Home Office, London. Available: http://www.homeoffice.gov.uk/publications/about-us/corporate-publications/structural-reform-plan/pdf-version?view=Binary [accessed 24.08.10]

Home Office (2010b).

2010 Drug Strategy. Consultation Paper. Home Office, London. Available: http://www.homeoffice.gov.uk/publications/consultations/cons-drug-strategy-2010/ [accessed 24.08.10]

Home Office (2010c).

User Guide to Home Office Crime Statistics. Home Office, London. Available: http://rds.homeoffice.gov.uk/rds/pdfs10/crimestats-userguide.pdf [accessed 18.10.10]

Home Office (2010d).

Drug Misusing Offenders: Results from the 2008 cohort for England and Wales. Home Office, London. Available: http://rds.homeoffice.gov.uk/rds/pdfs10/misc0210.pdf [accessed 24.08.10]

Hope, V. D., Hickman, M., Ngui, S. L., Jones, S., Telfer, M., Bizzarri, M., Ncube, F. and Parry, J. V. (2010a). Measuring the incidence, prevalence and genetic relatedness of hepatitis C infections among a community recruited sample of injecting drug users, using dried blood spots. Journal of Viral Hepatitis (early online access).

Hope, V.D., Marongiu, A., Parry, J.V. and Ncube, F. (2010b).

The extent of injection site infection in injecting drug users: findings from a national surveillance study. Epidemiology and Infection (early online access).

HPA (Health Protection Agency) (2008).

CD4 Surveillance Scheme. Centre for Infections, Health Protection Agency, London. Available: http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb C/1203064758366 [accessed 20.10.10]

HPA (Health Protection Agency) (2009a).

HIV in the United Kingdom: 2009 Report. Health Protection Agency, London. Available: http://www.hpa.org.uk/webc/HPAwebFile/HPAweb C/1259151891830 [accessed 20.10.10]

HPA (Health Protection Agency) (2009b).

Hepatitis C in the UK 2009 Report. Health Protection Agency, London. Available: http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1259152221464 [accessed 21.05.10]

HPA (Health Protection Agency) (2010).

Data tables - Unlinked Anonymous Monitoring Survey of Injecting Drug Users: data to the end of 2009. (July 2010) Health Protection Agency, Online publication. Available:

http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1254510660636 [accessed 10.08.10]

HPA (Health Protection Agency), Health Protection Scotland, National Public Health Service for Wales, Communicable Disease Surveillance Centre (CDSC) Northern Ireland, Centre for Research on Drugs & Health Behaviour (CRDHB) (2009).

Shooting Up Infections among injecting drug users in the United Kingdom 2008 An update: October 2009. Health Protection Agency, London. Available:

http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1254510657318 [accessed 27.10.09]

HPA (Health Protection Agency), Health Protection Scotland, National Public Health Service for Wales, Communicable Disease Surveillance Centre (CDSC) Northern Ireland, Centre for Research on Drugs & Health Behaviour (CRDHB) (2010a).

Shooting Up Infections among injecting drug users in the United Kingdom 2009 An update: November 2010. Health Protection Agency, London. Available:

http://www.hpa.org.uk/web/HPAwebFile/HPAweb C/1287143384395 [accessed 02.11.10]

HPA (Health Protection Agency) Centre for Infections, Health Protection Scotland and UCL Institute of Child Health (2010b).

Injecting Drug Users. United Kingdom New HIV Diagnoses to end of December 2009. Unpublished HIV Diagnoses Surveillance SHA Tables No. 2:2009 Table 1.Health Protection Agency, London. Available: http://www.hpa.org.uk/web/HPAwebFile/HPAweb C/1219735626104 [accessed 21.10.10]

Hurst, A., Beynon, C., Marr, A. and McVeigh, J. (2009).

Patterns of mortality amongst individuals in contact with drug treatment services in the North West of England - 5 years of data capture. Liverpool John Moores University, Liverpool. Available: http://www.cph.org.uk/showPublication.aspx?publd=550 [accessed 18.09.09]

Hutchinson, S.J., Bird, S.M. and Goldberg, D.J. (2005).

Modeling the current and future disease burden of hepatitis C among injection drug users in Scotland. Hepatology 42 (3) 711-723.

The Inebriates Act 1898.

Available:

http://www.statutelaw.gov.uk/content.aspx?LegType=All+Legislation&searchEnacted=0&extentMatchOnly=0& confersPower=0&blanketAmendment=0&sortAlpha=0&PageNumber=0&NavFrom=0&parentActiveTextDocl d=1066177&ActiveTextDocld=1066177&filesize=18677 [accessed 25.10.10]

ISD (Information Services Division) (2010a).

Drug Misuse Statistics Scotland 2009. Information Services Division, National Health Service Scotland, Edinburgh. Available:

http://www.isdscotland.org/isd/6164.html [accessed 13.10.10]

ISD (Information Services Division) Scotland (2010b).

Injecting Equipment Provision in Scotland, 2008/09. Information Services Division, National Health Service Scotland, Edinburgh. Available:

http://www.drugmisuse.isdscotland.org/publications/local/injecting provision2010.pdf [accessed 29.09.10]

Jackson, P. G. and Hilditch, C. J. (2010).

A review of evidence related to drug driving in the UK: A report submitted to the North Review team. Department for Transport: London. Available:

http://northreview.independent.gov.uk/docs/NorthReview-ReviewofEvidence.pdf [accessed 27.08.10]

Jones, A., Weston, S., Moody, A., Millar, T., Dollin, L., Anderson, T. and Donmall. M. (2007).

The drug treatment outcomes research study (DTORS): baseline report. Research Report 3. Home Office, London. Available:

http://www.homeoffice.gov.uk/rds/pdfs07/horr03c.pdf [accessed 22.05.10]

Jones, A., Donmall, M., Millar, T., Moody, A., Weston, S. Anderson, T. et al. (2009).

The Drug Treatment Outcomes Research Study (DTORS): Final outcomes report 3rd Edition. Home Office Research Report 24.Home Office, London. Available:

http://rds.homeoffice.gov.uk/rds/pdfs09/horr24c.pdf [accessed 28.05.10]

Jones, L., Pickering, L., Sumnall, H,R,, McVeigh J, and Bellis, M.A. (2010).

Optimal provision of needle and syringe programmes for injecting drug users: A systematic review. International Journal of Drug Policy 21 335-342.

Kershaw, C., Nicholas, S. and Walker, A. (2008).

Crime in England and Wales 2007/08. Findings from the British Crime Survey and police recorded crime. Statistical Bulletin 07/08. Home Office, London. Available: http://www.homeoffice.gov.uk/rds/pdfs08/hosb0708.pdf [accessed 15.09.10]

Kimber J., Copeland L., Hickman M., Macleod J., McKenzie J., De Angelis D. and Robertson J. R. (2010).

Survival and cessation in injecting drug users: prospective observational study of outcomes and effect of opiate substitution treatment. BMJ (early online access).

King, L.A. and Corkery, J.M. (2010).

An index of fatal toxicity for drugs of misus. Human Psychopharmacology 25 (2) 162-6.

The Lancet (2010).

A collapse in integrity of scientific advice in the UK. The Lancet 375 1319.

Lloyd, C. (2010).

Sinning and sinned against: The stigmatisation of problem drug users. United Kingdom Drug Policy Commission, London. Available:

http://www.ukdpc.org.uk/resources/Stigma_Expert_Commentary_final.pdf [accessed 07.10.10]

Lloyd, C. and McKeganey, N. (2010).

Drugs research: An overview of evidence and questions for policy. Joseph Rowntree Foundation, London. Available: http://www.jrf.org.uk/sites/jif/drugs-research-overview-full.pdf [accessed 19.08.10]

Lobbana, F., Barrowclough, C., Jeffery, S., Bucci, S., Taylor, K., Mallinson, S., Fitzsimmons, M. and Marshall, M. (2010).

Understanding factors influencing substance use in people with recent onset psychosis: A qualitative study. Social Science and Medicine 70 1141–1147.

Luty, J., O'Gara, C., Sessay, M. and Sarkhel A. (2010).

A survey of community drug team prescribing policies and client views. Journal of Substance Use 15 (1) 51-59.

McAloney, K. McCrystal, P. and Percy, A. (2010).

Sex, drugs and STDs: Preliminary findings from the Belfast Youth Development Study. Drugs: Education, Prevention, and Policy (early online access).

McCowan, C., Kidd, B., and Fahey, T. (2009).

Factors associated with mortality in Scottish patients receiving methadone in primary care: retrospective cohort study. British Medical Journal 338 (164): b2225.

McCrystal, P., Mayock, P. and Hannaford, S. (2010).

A Study of Cocaine Use in Northern Ireland 2009. Department of Health, Social Services and Public Safety, Belfast. Available:

http://www.tcd.ie/childrensresearchcentre/assets/pdf/Publications/Cocaine_Use.pdf [accessed 16.09.10]

McDonald, S.A., Hutchinson, S.J., Bird, S.M., Mills, P.R., Dillon, J., Bloor, M. et al. (2009).

A population-based record linkage study of mortality in hepatitis C-diagnosed persons with or without HIV co-infection in Scotland. Statistical Methods in Medical Research 18 (3) 271-283.

McDonald, S.A., Hutchinson, S.J., Bird, S.M., Robertson, C., Mills, P.R., Dillon, J.F. and Goldberg, D.J. (2010a).

Hospitalisation for an alcohol-related cause among injecting drug users in Scotland: Increased risk following diagnosis with hepatitis C infection. International Journal of Drug Policy (early online access).

McDonald, S. A., Hutchinson, S. J, Mills, P. R., Bird, S. M., Robertson, C., Dillon, J. F. et al. (2010b).

Diagnosis of hepatitis C virus infection in Scotland's injecting drug user population. Epidemiology and Infection 138 (03) 393-402.

McElrath, K. (2002).

Prevalence of problem opiate use in Northern Ireland. Department of Health, Social Services and Public Safety Northern Ireland, Belfast. Available: http://www.dhsspsni.gov.uk/heroin_use_ni.pdf [accessed 21.05.10]

McKeganey, N., Bloor, M., McIntosh, J. and Neale, J. (2008).

Key findings from the Drug Outcome Research in Scotland (DORIS) study. University of Glasgow Centre for Drug Misuse Research, Glasgow. Available: http://www.gla.ac.uk/media/media 101969 en.pdf [accessed 26.03.10]

McKeganey, N., Casey, J., McGallagly, J. and Hay, G. (2009).

Heroin seizures and heroin use in Scotland. Journal of Substance Use 14 (3-4) 240-249.

MacLeod, J., Copeland, L., Hickman, M., McKenzie, J., Kimber, J., De Angelis, D. and Robertson J.R. (2010).

The Edinburgh Addiction Cohort: recruitment and follow-up of a primary care based sample of injection drug users and non drug-injecting controls. BMC Public Health 10 101 (early online access).

MacLeod, P., Page, L., Kinver, A., Iliasov, A. and Williams, R. (2010).

2008-09 Scottish Crime and Justice Survey: Drug Use. Scottish Government Social Research. The Scottish Government, Edinburgh. Available:

http://openscotland.net/Publications/2010/02/19144504/0 [accessed 16.09.10]

Mackridge, A. J. and Scott, J. (2009).

Experiences, attitudes and training needs of pharmacy support staff providing services to drug users in Great Britain: A qualitative study. Journal of Substance Use 14 (6) 375-384.

Marsden, J. and Stillwell, G. (2010).

Effective Community Treatment for Drug Misusers: Outcome monitoring at Blenheim CDP. Available: http://www.blenheimcdp.org.uk/data/files/blenheim cdp outcome monitoring report.pdf [accessed 17.05.10]

Mayet, S., Manning, V., Sheridan, J., Best, D. and Strang, J. (2010).

The virtual disappearance of injectable opioids for heroin addiction under the 'British System'. Drugs: Education, Prevention & Policy 17 5 496-506.

Martinus, T., McAlaney, J., McLaughlin, L.J. and Smith, H. (2010).

Outdoor music festivals: Cacophonous consumption or melodious moderation? Drugs: education, prevention and policy (early online access).

Measham, F., Moore, K., Newcombe, R. and Welch, Z. (2010).

Tweaking, Bombing, Dabbing and Stockpiling: The emergence of mephedrone and the perversity of prohibition. Drugs and Alcohol Today 10 1.

Mills, K. and Knight, T. (2009).

Offering substance misuse services to Accession Eight migrants in London: Findings from a qualitative study. Drugs: Education, prevention and policy (early online access).

Miller, P and Plant, M. (2010 in press).

Parental guidance about drinking: Relationship with teenage psychoactive substance use. Journal of adolescence (article in press).

Ministry of Health. (1926).

Rolleston Report Departmental Committee on Morphine and Heroin Addiction. Her Majesty's Stationery Office, London.

The Misuse of Drugs Act 1971.

Her Majesty's Stationery Office, London. Available: http://www.legislation.gov.uk/ukpga/1971/38/contents [accessed 18.09.10]

MOJ (Ministry of Justice) (2009).

Criminal Statistics 2008, England and Wales. Supplementary tables. Vol. 5. Ministry of Justice, London. Available: http://www.justice.gov.uk/publications/docs/criminal-statistics-2008-v5.zip [accessed 21.04.10]

MOJ (Ministry of Justice) (2010a).

Statistics on race and the criminal justice system. Statistical tables. Ministry of Justice, London. Available: http://www.justice.gov.uk/publications/docs/stats-on-race-in-the-cjs-supplementary-tablesa.zip [accessed 17.08.10]

MOJ (Ministry of Justice) (2010b).

Draft Structural Reform Plan. Ministry of Justice, London. Available: http://www.justice.gov.uk/about/docs/moj-structural-reform-plana.pdf [accessed 17.08.10]

MOJ (Ministry of Justice) (2010c).

Offender management caseload statistics 2009. Ministry of Justice, London. Available: http://www.justice.gov.uk/publications/docs/omcs-2009-complete-210710a.pdf [accessed 24.08.10]

MOJ (Ministry of Justice) (2010d).

The feasibility of conducting an impact evaluation of the Dedicated Drug Court pilot. Research Summary 2/10. Ministry of Justice, London. Available:

http://www.justice.gov.uk/publications/docs/drug-court-pilot-research-summary-2-10.pdf [accessed 05.05.10]

Morgan, C.J.A., Rothwell, E., Atkinson, H., Mason, O., Curran, H. V. (2010a).

Hyper-priming in cannabis users: A naturalistic study of the effects of cannabis on semantic memory function. Psychiatry Research 176 213–218.

Morgan, C.J.A., Muetzelfeldt, L. and Curran, H.V. (2010b).

Consequences of chronic ketamine self-administration upon neurocognitive function and psychological wellbeing: a 1-year longitudinal study Addiction 105 (1) 121-133.

Munro, A. and Bloor, M. (2009).

A feasibility study for a schools-based, peer-led, drugs prevention programme, based on the ASSIST programme: the results Centre for Drug Misuse occasional paper. University of Glasgow Centre for Drug Misuse Research, Glasgow. Available:

http://www.gla.ac.uk/media/media_135833_en.pdf [accessed 20.10.10]

NAO (National Audit Office) (2010).

Tackling problem drug use. The Stationery Office, London. Available: http://www.nao.org.uk/idoc.ashx?docld=dc466c1f-6ad3-4163-bd33-4a8facce1899&version=-1 [accessed 05.04.10]

NatCen (National Centre for Social Research) and NFER (the National Foundation for Educational Research) (2010).

Smoking, drinking and drug use among young people in England: Findings by region, 2006 to 2008. The NHS Information Centre for Health and Social Care, London. Available: http://www.ic.nhs.uk/pubs/sdd0608region [accessed 16.09.10]

Newcombe, R. (2009).

Mephedrone. The Use of Mephedrone (M-cat, Meow) in Middlesbrough. Lifeline Publications, Manchester.

NHS Information Centre. (2009).

Prescription Costs Analysis: England 2008. Tables. NHS Information Centre, London. Available: http://www.ic.nhs.uk/statistics-and-data-collections/primary-care/prescriptions/prescription-cost-analysis-2008 [accessed 29.03.10]

NICE (National Institute for Health and Clinical Excellence) (2005).

How to put NICE guidance into practice: A guide to implementation for organisations. NICE, London. Available: http://www.chsrf.ca/kte_docs/NICE%20%20How+to+guide+implementation%5b1%5d.pdf [accessed 19.05.10].

NICE (National Institute for Health and Clinical Excellence) (2007a).

Methadone and buprenorphine for the management of opioid dependence. NICE technology appraisal guidance 114. London: National Institute for Health and Clinical Excellence. Available: http://guidance.nice.org.uk/TA114/Guidance/pdf/English [accessed 14.04.10]

NICE (National Institute for Health and Clinical Excellence) (2007b).

Naltrexone for the management of opioid dependence. NICE technology appraisal guidance 115. National Institute for Health and Clinical Excellence, London. Available: http://guidance.nice.org.uk/TA115/Guidance/pdf/English [accessed 14.04.10]

NICE (National Institute for Health and Clinical Excellence) (2007c).

Drug misuse: opioid detoxification. National Institute for Health and Clinical Excellence, London. Available: http://www.nice.org.uk/CG052 [accessed 19.05.10].

NICE (National Institute for Health and Clinical Excellence) (2007d).

Drug misuse: psychosocial interventions. National Institute for Health and Clinical Excellence, London. Available: http://www.nice.org.uk/CG51 [accessed 19.05.10]

NICE (National Institute for Health and Clinical Excellence) (2007e).

Drug misuse - naltrexone: costing statement. National Institute for Health and Clinical Excellence, London. Available: http://www.nice.org.uk/nicemedia/live/11604/33816/33816.pdf [accessed 19.05.10]

NICE (National Institute for Health and Clinical Excellence) (2007f).

Drug misuse - methadone and buprenorphine: costing template and costing report. National Institute for Health and Clinical Excellence, London. Available:

http://www.nice.org.uk/nicemedia/live/11606/33837/33837.xls [accessed 19.05.10].

NICE (National Institute for Health and Clinical Excellence) (2009a).

Guide to the single technology appraisal process. National Institute for Health and Clinical Excellence, London. Available:

http://www.nice.org.uk/media/913/06/Guide to the STA-proof 6-26-10-09.pdf [accessed 19.05.10].

NICE (National Institute for Health and Clinical Excellence) (2009b).

Guide to the multiple technology appraisal process. National Institute for Health and Clinical Excellence, London. Available:

http://www.nice.org.uk/media/916/6B/Guide_to_the_MTA-proof_8-26-10-09.pdf [accessed 19.05.10].

NICE (National Institute for Health and Clinical Excellence) (2009c).

The Guidelines Manual 2009. National Institute for Health and Clinical Excellence, London. Available: http://www.nice.org.uk/aboutnice/howwework/developingniceclinicalguidelines/ clinicalguidelinedevelopmentmethods/GuidelinesManual2009.jsp [accessed 16.09.10]

NICE (National Institute for Health and Clinical Excellence) (2009d).

Methods for development of NICE public health guidance. National Institute for Health and Clinical Excellence, London. Available: Methods for development of NICE public health guidance [accessed 16.09.10]

NICE (National Institute for Health and Clinical Excellence) (2009e).

How to use NICE guidance to commission high quality services. National Institute for Health and Clinical Excellence, London. Available:

http://www.nice.org.uk/usingguidance/implementationtools/howtoguide/ UseNICEGuidanceCommissionHighQualityServices.jsp [accessed 19.05.10].

NICE (National Institute for Health and Clinical Excellence) (2010).

Pregnancy and complex social factors: A model for service provision for pregnant women with complex social factors. National Institute for Health and Clinical Excellence, London. Available: http://www.nice.org.uk/nicemedia/live/13167/50822/50822.pdf [accessed 20.10.10]

NIO (Northern Ireland Office) (2009).

Digest of information on the Northern Ireland Criminal Justice System 9. Statistics and Research Branch Northern Ireland Office, Belfast. Available:

http://www.nio.gov.uk/digest_of_information_on_the_northern_ireland_criminal_justice_system_9.0.pdf [accessed 06.04.10]

NISRA (Northern Ireland Statistics and Research Agency) (2010).

Drug-Related Deaths and Deaths due to Drug Misuse registered in Northern Ireland (1998-2008). Northern Ireland Statistics and Research Agency, Belfast. Available: http://www.nisra.gov.uk/archive/demography/publications/drug_deaths/Drug_Tables_08.xls [accessed 17.06.10]

North, P. (2010).

Report of the review of drink and drug driving law. Department for Transport, London. Available: http://northreview.independent.gov.uk/docs/NorthReview-Report.pdf [accessed 24.08.10]

Northern Ireland Assembly (2010).

Drug driving testing mechanisms used globally. Research Paper 34/10. Northern Ireland Assembly, Belfast. Available: http://www.niassembly.gov.uk/researchandlibrary/2010/3410.pdf [accessed 05.05.10]

NTA (National Treatment Agency for Substance Misuse) (2003).

Injectable heroin (and injectable methadone) - Potential roles in drug treatment National Treatment Agency for Substance Misuse, London. Available:

http://www.nta.nhs.uk/uploads/nta injectable heroin and methadone 2003 summary.pdf [accessed 19.05.10].

NTA (National Treatment Agency for Substance Misuse) (2006).

Models of Care for Treatment of Adult Drug Misusers. National Treatment Agency for Substance Misuse, London. Available:

http://www.nta.nhs.uk/uploads/nta modelsofcare update 2006 moc3.pdf [accessed 09.06.10]

NTA (National Treatment Agency for Substance Misuse) (2007).

The 2007 user satisfaction survey of Tier 2 and 3 service users in England. National Treatment Agency for Substance Misuse, London. Available:

http://www.nta.nhs.uk/uploads/nta_2007_user_satis_survey_tier2and3_service_users_england.pdf [accessed 30.09.10]

NTA (National Treatment Agency for Substance Misuse) (2008).

Auditing drug misuse treatment. National Treatment Agency for Substance Misuse, London. Available: http://www.nta.nhs.uk/uploads/auditing_drug_misuse_treatment_1208.pdf [accessed 16.09.10].

NTA (National Treatment Agency for Substance Misuse) (2009).

Statistics from the National Treatment Monitoring System (NDTMS) 1 April 2008 – 31 March 2009. National Treatment Agency for Substance Misuse, London. Available:

http://www.nta.nhs.uk/areas/facts_and_figures/0809/docs/ndtms_annual_report_200809.pdf [accessed 15.10.09]

NTA (National Treatment Agency for Substance Misuse) (2010a).

NTA Business Plan 2010-2011. National Treatment Agency for Substance Misuse, London. Available: http://www.nta.nhs.uk/uploads/nta_business_plan_2010_11[0].pdf [accessed 30.09.10]

NTA (National Treatment Agency for Substance Misuse) (2010b).

Commissioning for recovery. National Treatment Agency for Substance Misuse, London. Available: http://www.nta.nhs.uk/uploads/commissioning for recovery january 2010.pdf [accessed 17.04.10]

NTA (National Treatment Agency for Substance Misuse) (2010c).

Powder cocaine: How the treatment system is responding to a growing problem. National Treatment Agency for Substance Misuse, London. Available:

http://www.nta.nhs.uk/uploads/ntapowdercocaine1march2010d.pdf [accessed 17.05.10]

NTA (National Treatment Agency for Substance Misuse) (2010d).

A long-term study of the outcomes of drug users leaving treatment. National Treatment Agency for Substance Misuse, London. Available:

http://www.nta.nhs.uk/uploads/outcomes_of_drug_users_leaving_treatment2010.pdf [accessed 07.10.10]

NTA (National Treatment Agency for Substance Misuse) (2010e).

Statistics from the National Drug Treatment Monitoring System (NDTMS), 1 April 2009 – 31 March 2010. National Treatment Agency for Substance Misuse, London. Available:

http://www.nta.nhs.uk/uploads/ndtmsannualreport2009-10finalversion.pdf [accessed 07.10.10]

NTA (National Treatment Agency for Substance Misuse) (2010f).

Substance misuse among young people: The data for 2008/09. National Treatment Agency for Substance Misuse, London. Available:

http://www.nta.nhs.uk/uploads/nta substance misuse among yp 0809.pdf [accessed 17.05.10]

Officer, J. (2009).

Trends in drug use of Scottish drivers arrested under Section 4 of the Road Traffic Act – A 10 year review. Science and Justice 49 237-241.

OFMDFMNI (Office of the First Minister and Deputy First Minister for Northern Ireland) (2006).

Our Children and Young People – Our Pledge: A 10 year strategy for children and young people in Northern Ireland, 2006-2016. Office of the First Minister and Deputy First Minister for Northern Ireland, Belfast. Available: http://www.allchildrenni.gov.uk/ten-year-strategy.pdf [accessed 21.05.10]

Oliver, P., Keen, J., Rowse, G., Ewins, E., Griffiths, L. and Mathers, N. (2010).

The effect of time spent in treatment and dropout status on rates of convictions, cautions and imprisonment over 5 years in a primary care-led methadone maintenance service. Addiction 105 732-739.

Palmer, E., Jinks, J. M. and Hatcher, R. M. (2010).

Substance use, mental health, and relationships: a comparison of male and female offenders serving community sentences. International Journal of Law and Psychiatry 33 (2) 89-93.

Parkin, S. and Coomber, R. (2010).

Fluorescent blue lights, injecting drug use and related health risk in public conveniences: Findings from a qualitative study of micro-injecting environments. Health & Place 16 (4) 629-637.

Patel, K. (2010).

The Patel report: Reducing drug-related crime and rehabilitating offenders. Department for Health, London. Available: http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/ dh 119850.pdf [accessed 20.10.10]

Pates, R.M., McBride, A., Arnold, K. and Ball, N. (2001).

Towards an holistic understanding of injecting drug use: An overview of needle fixation. Addiction Research 9 (1) 3–17.

Pates, R. M. and Gray N. (2009).

The development of a psychological theory of needle fixation. Journal of Substance Use 14 (5) 312-324.

Pates, R. M. Arnold, K. A. and McBride A. J. (2009).

The identification of needle fixation: The development of the NEFPRO, a clinical screening tool. Journal of Substance Use 14 (5) 306-311.

Patterson, S., Weaver, T. and Crawford, M. (2010).

Drug service user groups: Only a partial solution to the problem of developing user involvement. Drugs: Education, Prevention and Policy 17(1) 84-97.

Payne-James, J.J., Green, P.G., Green, N., McLachlan, G.M.C., Munro, M.H.W.M. and Moore, T.C.B. (2010). Healthcare issues of detainees in police custody in London, UK. Journal of Forensic and Legal Medicine 17

(1) 11-17.

The Pharmacy Act 1868.

PHIRB (Public Health Information and Research Branch) (2008).

Statistics from the Northern Ireland Needle and Syringe Exchange Scheme: 1 April 2007 – 31 March 2008. Statistical Bulletin PHIRB 2/2008. Department of Health, Social Services and Public Safety, Belfast. Available: http://www.dhsspsni.gov.uk/nses annual bulletin 2007-08.pdf [accessed 09.08.10]

PHIRB (Public Health Information and Research Branch) (2009a).

Statistics from the Northern Ireland Substitute Prescribing Database: 31 March 2009. Statistical Bulletin PHIRB 3/2009. Available:

http://www.dhsspsni.gov.uk/sp-report-2008-2009.pdff [accessed 18.05.10]

PHIRB (Public Health Information and Research Branch) (2009b).

Statistics from the Northern Ireland Needle and Syringe Exchange Scheme: 1 April 2008 – 31 March 2009. Statistical Bulletin PHIRB 2/2009. Department of Health, Social Services and Public Safety, Belfast. Available: http://www.dhsspsni.gov.uk/nses annual bulletin 2008-09.pddf [accessed 09.08.10]

PHIRB (Public Health Information and Research Branch) (2010a).

Statistics from the Northern Ireland Drug Addicts Index. Department of Health, Social Services and Public Safety, Belfast. Available:

http://www.dhsspsni.gov.uk/drug addicts stats09.pdf [accessed 21.05.10]

PHIRB (Public Health Information and Research Branch) (2010b).

Statistics from the Northern Ireland Needle and Syringe Exchange Scheme: 1 April 2009 – 31 March 2010. Department of Health, Social Services and Public Safety, Belfast. Available: http://www.dhsspsni.gov.uk/nses_annual_bulletin_2009-10.pdf [accessed 09.08.10]

Pirona, A. and Morgan, M.J. (2010).

An investigation of the subacute effects of ecstasy on neuropsychological performance, sleep and mood in regular ecstasy users. Journal of Psychopharmacology 24 175-185.

Povey, D., Hand, T., Rishiraj, A. S. and Mulchandani, R. (2010).

Police powers and procedures, England and Wales 2008/09. Home Office Statistical Bulletin 06/10. Available: http://rds.homeoffice.gov.uk/rds/pdfs10/hosb0610.pdf [accessed 14.07.10]

Povey, D., Smith, K., Hand, T. and Dodd, L. (2009).

Police powers and procedures, England and Wales, 2007/08. Home Office Statistical Bulletin. Home Office, London. Available:

http://www.homeoffice.gov.uk/rds/pdfs09/hosb0709.pdf [accessed 15.10.09]

Powell, C., Bankart, J., Christie, M., Bamber, D. and Arrindell T. (2009).

Drug testing in the Criminal Justice System: Solutions to a costly commodity. Journal of Substance Use 14 (6) 393-407.

PriceWaterhouseCoopers (2008).

Review of prison-based drug treatment funding. Report to the Department of Health and Ministry of Justice. PriceWaterhouseCoopers, London. Available: http://www.justice.gov.uk/news/docs/prison-drug-treatment-funding.pdf [accessed 17.03.10]

The Prince's Trust (2010).

YouGov Youth Index. The Prince's Trust, London. Available: http://www.princes-trust.org.uk/pdf/Youth Index 2010.pdf [accessed 16.09.10].

The Proceeds of Crime Act 2002.

The Stationery Office, London. Available: http://www.legislation.gov.uk/ukpga/2002/29/contents [accessed 19.19.10]

PSNI (Police Service of Northern Ireland) (2004a).

Recorded Crimes and Clearances. 1st April 2003 – 31st March 2004. PSNI Statistics: Annual Statistical Report. Statistical Report No. 1. Police Service of Northern Ireland, Belfast. Available: http://www.psni.police.uk/recorded_crime_2003-04.pdf [accessed 14.07.10]

PSNI (Police Service Northern Ireland) (2004b).

Drug Seizures and Arrests 2002/03. Police Service Northern Ireland, Belfast. Available: http://www.psni.police.uk/drugs seizures and arrests 2003-04.pdf [accessed 07.08.10]

PSNI (Police Service of Northern Ireland) (2006a).

Recorded Crimes and Clearances. 1st April 2005 – 31st March 2006. PSNI Statistics: Annual Statistical Report. Statistical Report No. 1. Police Service of Northern Ireland, Belfast. Available: http://www.psni.police.uk/recorded_crime_2005-06.pdf [accessed 14.07.10]

PSNI (Police Service Northern Ireland) (2006b).

Drug Seizures and Arrests 2004/05. Police Service Northern Ireland, Belfast. Available: http://www.psni.police.uk/drugs_seizures_and_arrests_2004-05.pdf [accessed 07.08.10]

PSNI (Police Service of Northern Ireland) (2008a).

Recorded Crimes and Clearances. 1st April 2007 – 31st March 2008. PSNI Statistics: Annual Statistical Report. Statistical Report No. 1. Police Service of Northern Ireland, Belfast. Available: http://www.psni.police.uk/stats1_recorded_crime.pdf [accessed 07.08.10]

PSNI (Police Service of Northern Ireland) (2008b).

Drug Seizures and Arrests. 1st April 2007 – 31st March 2008. PSNI Statistics: Annual Statistical Report. Statistical Report No. 4. Police Service of Northern Ireland, Belfast. Available: http://www.psni.police.uk/drug_seizures_and_arrests_summary_2007-08.pdf [accessed 20.10.10]

PSNI (Police Service of Northern Ireland) (2010a).

Recorded Crimes and Clearances. 1st April 2009 – 31st March 2010. PSNI Statistics: Annual Statistical Report. Statistical Report No. 1. Police Service of Northern Ireland, Belfast. Available: http://www.psni.police.uk/1._recorded_crime_200910.pdf [accessed 14.07.10]

PSNI (Police Service of Northern Ireland) (2010b).

Drug Seizures and Arrests. 1st April 2007 – 31st March 2008. PSNI Statistics: Annual Statistical Report. Statistical Report No. 4. Police Service of Northern Ireland, Belfast. Available: http://www.psni.police.uk/4._08_09_drug_seizures_and_arrests.pdf [accessed 20.10.10]

Raftery J. (1998)

Economic evaluation: an introduction. BMJ 316 1013-1014. Available: http://www.bmj.com/cgi/content/full/316/7136/1013 [accessed 20.10.10]

Raistrick D, Tober G, Lui S et al. (2007).

Cost and cost effectiveness of treatment as usual in drug misuse services. Leeds Addiction Unit, Leeds.

Ramsey, L., Bond, A. and Pope, S. (2009).

An audit of a stimulant clinic: Changes in drug use, drug beliefs and motivational ratings. Journal of Substance Use 14 (3-4) 179-188.

Richardson, G. and Manca, A. (2004).

Calculation of quality adjusted life years in the published literature: a review methodology and transparency. Health Economics 13 1203-1210.

The Road Traffic Offenders Act 1988.

The Stationery Office, London. Available: http://www.legislation.gov.uk/ukpga/1988/53/contents [accessed 20.10.10]

Roe, B., Beynon, C., Pickering, L. and Duffy, P. (2010).

Experiences of drug use and ageing: health, quality of life, relationship and service implications. Journal of Advance Nursing 66 9 1968-1979.

SACDM (Scottish Advisory Committee on Drug Misuse) (2005).

Scottish Advisory Committee on Drugs Misuse (SACDM) Working Group on Drug Related Deaths: Report and Recommendations. Scottish Government, Edinburgh. Available: http://www.scotland.gov.uk/Publications/2005/08/04154654/46563 [accessed 13.05.10]

SAP (Sentencing Advisory Panel) (2010).

Sentencing for drug offences. Sentencing Advisory Panel, London.

SCDEA (Scottish Crime & Drug Enforcement Agency) (2010).

Transforming our approach so communities can flourish. SCDEA Annual Report 2009-2010. SCDEA, Scotland. Available:

http://www.sdea.police.uk/Downloads/SDEA-Annual-Report/SCDEA%20Annual%20Report%202009%20-%20 2010.pdf [accessed 16.09.10]

Schmidt, M.M, Sharma, A., Schifano, F. and Feinmann, C. (2010).

"Legal highs" on the net—Evaluation of UK-based Websites, products and product information. Forensic Science International (early online access).

Scottish Drugs Forum (2010).

Effective services for substance misuse and homelessness in Scotland: The recommendations of the Advisory Group on Homelessness and Substance Misuse. SDF, Edinburgh. Available: http://www.sdf.org.uk/sdf/files/AGHSU%20Recommendations%20Paper.29.1.10..pdf [accessed 05.05.10]

Scottish Executive (2006a).

More Choices, More Chances: A Strategy to Reduce the Proportion of Young People not in Education, Employment or Training in Scotland.Scottish Executive, Edinburgh. Available: http://www.scotland.gov.uk/Publications/2006/09/15093626/0 [accessed 21.05.10]

Scottish Executive (2006b).

Hepatitis C Action Plan for Scotland Phase I: September 2006 – August 2008. Scottish Executive, Edinburgh. Available:

http://www.scotland.gov.uk/Publications/2006/09/15093626/0 [accessed 21.05.10]

Scottish Government (2008a).

The Road to Recovery. A New Approach to Tackling Scotland's Drug Problem. Scottish Government, Edinburgh. Available:

http://www.scotland.gov.uk/Publications/2008/05/22161610/0 [accessed 15.05.09]

Scottish Government (2008b).

The Early Year's Framework. Scottish Government, Edinburgh. Available: http://www.scotland.gov.uk/Publications/2009/01/13095148/0 [accessed 15.05.10]

Scottish Government (2008c).

Hepatitis C Action Plan for Scotland Phase II: May 2008 - March 2011. Scottish Government, Edinburgh. Available: http://www.scotland.gov.uk/Publications/2008/05/13103055/17 [accessed 13.05.10]
Scottish Government (2008d).

Effective services for substance misuse and homelessness in Scotland: Evidence from an international review. Scottish Government, Edinburgh. Available: http://www.scotland.gov.uk/Resource/Doc/233172/0063910.pdf [accessed 05.05.10]

Scottish Government (2010a).

Scottish Social Attitudes Survey 2009: Public Attitudes to Drugs and Drug Use in Scotland. Scottish Government, Edinburgh. Available: http://www.scotland.gov.uk/Publications/2010/05/19111419/0 [accessed 16.09.10].

Scottish Government (2010b).

A wait off our shoulders: A guide to improving access to recovery focused drug and alcohol treatment services in Scotland. Scottish Government: Edinburgh. Available: http://www.scotland.gov.uk/Publications/2010/06/02115503/0 [accessed 17.09.10]

Scottish Government (2010c).

National Forum on Drug Related Deaths in Scotland: Drug Death Matters newsletter July 2010. Scottish Government, Online Publication. Available: http://www.drugmisuse.isdscotland.org/publications/local/drugs_deaths_newsletter_ed9.pdf [accessed 18.08.10]

Scottish Government (2010d).

National Forum on Drug Related Deaths in Scotland: Annual Report 2009-10. Scottish Government, Online Publication. Available:

http://www.scotland.gov.uk/Publications/2010/07/30140320/0 [accessed 18.08.10]

Scottish Government (2010e).

Guidelines for services providing injecting equipment: Best practice recommendations for commissioners and injecting equipment provision (IEP) services in Scotland. Scottish Government, Edinburgh. Available: http://www.scotland.gov.uk/Publications/2010/03/29165055/0 [accessed 21.05.10]

Scottish Government (2010f).

Scotland's People Annual report: Results from 2009 Scottish Household Survey. Scottish Government, Edinburgh. Available: http://www.scotland.gov.uk/Publications/2010/08/25092046/0 [accessed 29.09.10]

Scottish Government (2010g).

Recorded crime in Scotland 2009/10. Statistical Bulletin Crime and Justice Series. Scottish Government, Edinburgh. Available:

http://www.scotland.gov.uk/Resource/Doc/323661/0104236.pdf [accessed 07.09.10]

Scottish Government (2010h).

Reconviction rates in Scotland: 2006/07 and 2007/08 offender cohorts. Statistical Bulletin. Scottish Government, Edinburgh. Available:

http://www.scotland.gov.uk/Publications/2010/08/27112240/0 [accessed 01.10.10]

Scottish Government (2010i).

Criminal proceedings in Scottish Courts. Statistical Bulletin. Scottish Government, Edinburgh. Available: http://www.scotland.gov.uk/Resource/Doc/304494/0095533.pdf [accessed 04.05.10]

Scottish Government (2010j).

Criminal justice social work statistics 2008/09. Statistical Bulletin. Scottish Government, Edinburgh. Available: http://www.scotland.gov.uk/Resource/Doc/301471/0094050.pdf [accessed 07.06.10]

Scottish Government (2010k).

Process Evaluation of the Drug Treatment and Testing Orders II (DTTO II) Pilots. Available: http://www.scotland.gov.uk/Publications/2010/04/26095317/0 [accessed 05.07.10]

Scottish Government (2010l).

Review of the Glasgow and Fife Drug Courts. Available: http://openscotland.net/Publications/2010/01/20104607/0 [accessed 05.05.10]

Sentencing Guidelines Council (2004).

Overarching principles: Seriousness. Available: http://www.sentencing-guidelines.gov.uk/docs/Seriousness guideline.pdf [accessed 21.04.10]

Silverstone, D. (2010).

The Policing of Vietnamese Organized Crime within the UK. Policing (early online access).

Silverstone, D. and Savage, S. (2010).

Farmers, factories and funds: organised crime and illicit drugs cultivation within the British Vietnamese community. Global Crime 11 (1) 16-33.

Soar, K., Parrott, A. and Turner, J. (2009).

Attributions for psychobiological changes in ecstasy/MDMA and other polydrug users. Journal of Psychopharmacology 23 745-758.

SOCA (Serious Organised Crime Agency) (2009).

United Kingdom Threat Assessment 2008/09. Serious Organised Crime Agency, London. Available: http://www.soca.gov.uk/about-soca/library [accessed 16.09.10]

SOCA (Serious Organised Crime Agency) (2010).

Annual Report and Accounts 2009/10. Serious Organised Crime Agency, London. Available: http://www.soca.gov.uk/about-soca/library [accessed 16.09.10]

SPS (Scottish Prison Service) (2010).

SPS strategy framework for the management of substance misuse in custody. Scottish Prison Service: Edinburgh. Available:

http://www.sps.gov.uk/MultimediaGallery/955534be-30f0-4a66-a8b8-e5a830316920.pdf [accessed 17.08.10]

SSAC (Social Security Advisory Committee) (2010a).

The Social Security (Claimants Dependent on Drugs) (Pilot Scheme) Regulations 2010. Available: http://www.ssac.org.uk/pdf/press_21.pdf [accessed 05.05.10]

SSAC (Social Security Advisory Committee) (2010b).

Report on the Social Security (Welfare Reform Drugs Recovery Pilot Scheme) Regulations 2010. Available: http://www.ssac.org.uk/pdf/SSAC-drugs-pilot-report.pdf [accessed 16.09.10]

Stead, M., Stradling, R., MacNeil, M., MacKintosh, A.M., Minty, S., McDermott, L. and Eadie, D. (2010).

Bridging the gap between evidence and practice: A multi-perspective examination of real-world drug education Drugs: Education, Prevention, and Policy. 17 (1) (early online access).

Strang, J., Metrebian, N., Lintzeris, N., Potts, L., Carnwath, T. et al. (2010a).

Supervised injectable heroin or injectable methadone versus optimised oral methadone as treatment for chronic heroin addicts in England after persistent failure in orthodox treatment (RIOTT): a randomised trial. The Lancet 375 1885-1895.

Strang, J., Hall, W., Hickman, M. and Bird, S.M. (2010b).

Impact of supervision of methadone consumption on deaths related to methadone overdose (1993-2008): analyses using OD4 index in England and Scotland. BMJ (early online access).

Templeton, L. (2009).

Use of a structured brief intervention in a group setting for family members living with substance misuse. Journal of Substance Use 14 (3-4) 211-220.

Thanacoody, R.H., Jay, J. and Sherval, J. (2009).

The association between drug related deaths and prior contact with hospital-based services. Scottish Medical Journal 54(4) 7-10.

Toner, S. and Freel, R. (2010).

Experience of Drug Misuse: Findings from the 2008/09 Northern Ireland Crime Survey. Research and Statistical Bulletin 1/2010. Department of Justice, Belfast. Available:

http://www.dojni.gov.uk/index/statistics-research/stats-research-publications/nics_2008-09_drugs_bulletin.pdf [accessed 16.09.10].

UKDPC (The UK Drug Policy Commission) (2010a).

The Impact of Drugs on Different Minority Groups: A Review of the UK Literature. Part 1: Ethnic Groups The UK Drug Policy Commission, London. Available:

http://www.ukdpc.org.uk/resources/ethnic_groups.pdf [accessed 30.09.10]

UKDPC (The UK Drug Policy Commission) (2010b).

The Impact of Drugs on Different Minority Groups: A Review of the UK Literature. Part 2: Lesbian, Gay, Bisexual and Transgender Groups The UK Drug Policy Commission, London. Available: http://www.ukdpc.org.uk/resources/LGBT groups.pdf [accessed 30.09.10]

UKDPC (The UK Drug Policy Commission) (2010c).

The Impact of Drugs on Different Minority Groups: A Review of the UK Literature .Part 3: Disabled People. The UK Drug Policy Commission, London. Available: http://www.ukdpc.org.uk/resources/disabled_people.pdf [accessed 30.09.10]

WAG (Welsh Assembly Government) (2004).

WAG (Welsh Assembly Government) (2008a).

Working Together to Reduce Harm The Substance Misuse Strategy for Wales 2008-2018. Welsh Assembly Government, Cardiff. Available:

http://new.wales.gov.uk/topics/housingandcommunity/safety/publications/strategy0818/?lang=en [accessed 29.03.10]

WAG (Welsh Assembly Government) (2008b).

Working Together to Reduce Harm. The Substance Misuse Strategy. Three-year Implementation Plan 2008-11. Welsh Assembly Government, Cardiff. Available:

http://new.wales.gov.uk/topics/housingandcommunity/safety/publications/strategy0818/?lang=en [accessed 29.03.09]

WAG (Welsh Assembly Government) (2009).

Substance misuse in Wales 2008/09. Available: http://wales.gov.uk/docs//dsilg/publications/commsafety/091006submisuse0809en.pdf [accessed 21.05.10]

WAG (Welsh Assembly Government) (2010a).

Working together to reduce harm. Substance Misuse Annual Report 2009. Available: http://wales.gov.uk/topics/housingandcommunity/safety/substancemisuse/publications/annualreport09/?lang=en [accessed 22.01.10]

WAG (Welsh Assembly Government) (2010b).

Substance misuse in Wales 2009/10. Welsh Assembly Government, Cardiff. Available: http://wales.gov.uk/docs/dsjlg/publications/commsafety/101020submisuse0910en.pdf [accessed 20.10.10]

WAG (Welsh Assembly Government) (2010c).

Blood Borne Viral Hepatitis Action Plan for Wales 2010-2015. Welsh Assembly Government, Cardiff. Available: http://wales.gov.uk/docs/phhs/publications/100226actionplanen.pdf [accessed 21.05.10]

Walker, A., Flatley, J., Kershaw, C. and Moon, D. (2009).

Crime in England and Wales 2008/09. Available: http://www.homeoffice.gov.uk/rds/pdfs09/hosb1109vol1.pdf [accessed 13.09.10]

Ware, J. and Sherbourne, C. (1992).

The MOS 36-item Short Form Health Survey (SF-36), I. conceptual framework and item selection, Medical Care, 30 473-483. The Welfare Reform Act 2009. The Stationery Office, London. Available: http://www.legislation.gov.uk/ukpga/2009/24/contents [accessed 15.10.10]

Wells, C. (2009).

Deaths related to drug poisoning in England and Wales, 2008. Health Statistics Quarterly 43 48-55. ONS, Newport. Available:

http://www.statistics.gov.uk/pdfdir/dgdths0809.pdf [accessed 17.06.10]

Wells, C. (2010).

Deaths related to drug poisoning in England and Wales, 2009. ONS Statistical Bulletin. ONS, Newport. Available: http://www.statistics.gov.uk/pdfdir/dgdths0810.pdf [accessed 26.08.10]

Welsh, S. (2009).

Preventing Smoking and Cannabis use in Secondary Schools: the CASE and CASE+ programme. University of Glasgow Centre for Drug Misuse Research, Glasgow. Available: http://www.gla.ac.uk/media/media 135834 en.pdf [accessed 29.03.10]

WHO (World Health Organisation) (2009).

Guidelines for the psychosocially assisted pharmacological treatment of opioid dependence. World Health Organisation, Geneva. Available:

http://www.who.int/substance_abuse/publications/opioid_dependence_guidelines.pdf [accessed: 20.10.10]

Wilkins, L. Bissell, P. and Meier, P.S. (2010).

Risky injecting practices associated with snowballing: A qualitative study. Drug and Alcohol Review 29 (3) 256-262.

Winstock, A. (2010).

Mixmag Drugs Survey. Mixmag, London. Mixmag 25 44-53.

Wood, D.M. and Dargan, P.I. (2010).

Putting cocaine use and cocaine-associated cardiac arrhythmias into epidemiological and clinical perspective. British Journal of Clinical Pharmacology 69 (5) 443-447.

Wood, D.M., Davies, S., Puchnarewicz, M., Button, J., Archer, R. Ovaska, H. et al. (2010a).

Recreational Use of Mephedrone (4-Methylmethcathinone, 4-MMC) with Associated Sympathomimetic Toxicity, Journal of Medical Toxicology (early online access).

Wood, D.M., Greene, S. L. and Dargan, P. I. (2010b).

Clinical pattern of toxicity associated with the novel synthetic cathinone mephedrone. Emergency Medicine Journal (early online access).

YouthNet (2010).

High or dry? Young people and drugs. YouthNet. Online Publication. Available: http://www.youthnet.org/mediaandcampaigns/keyfactsandfigures/high_or_dry_report_into_drug_use [accessed 18.08.10]

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List of abbreviations used in the text

A&E	Accident and Emergency	СВТ	Cognitive Behavioural Therapy
ACD	Appraisal Consultation	ССТУ	Closed Circuit Television
ACMD	Advisory Council on the Misuse	CGRPD	Cross-Government Research Programme on Drugs
АСРО	of Drugs Association of Chief Police	CHIPS	Collaborative HIV Paediatric Study
	Officers	CI	Confidence Interval
ADHD	Attention Deficit Hyperactivity Disorder	CJIT	Community Justice Intergrated Team
ADPs	Alcohol and Drug Partnerships	CJS	Criminal Justice System
AGREE	Appraisal of Guidelines, Research and Evaluation	COFOG	United Nations Classification of the Euroctions of Government
AIDS	Acquired Immunodeficiency Syndrome	CoSLA	Partnership between Scottish
APB	Area Planning Boards		Government
APMS	Adult Psychiatric Morbidity Survey	СРР	Community Planning Partnerships
ASB	Anti-Social Behaviour	CQC	Care Quality Commission
ASBO	Anti-Social Behaviour Order	CRC	Capture, Re-Capture
BCS	British Crime Survey	CSPs	Community Safety Partnerships
BHIVA	British HIV Association	DATs	Drug Action Teams
BME	Black and Minority Ethnic	DAATs	Drug and Alcohol Action Teams
BMJ	British Medical Journal	DACTs	Drug and Alcohol Co-
ВМК	Benzyl-methyl-ketone		ordination leams
BMT	Buprenorphine Maintenance Therapy	DAIRU	Drug and Alcohol Information and Research Unit
BSA	British Social Attitudes survey	DBS	Dried Blood Spot
BYDS	Belfast Youth Development	DCSF	Department for Children, Schools and Families
BZP	Benzylpiperazine	DDC	Dedicated Drug Courts
CAPI	Computer Assisted Personal	DfES	Department for Education and Skills
CARAT	Counselling Assessment	DfT	Department for Transport
	Referral, Advice and Through- care Services	DH	Department of Health

DHSS	Department of Health and	FSS	Forensic Science Service
DUCCDC	Social Security	GBL	Gamma-butyrolactone
003353	Services and Public Safety	GHB	Gamma hydroxybutyrate
DHSSPSNI	Department of Health, Social	GMR	General Mortality Register
	Services and Public Safety Northern Ireland	GP	General Practitioner
DIP	Drug Interventions Programme	GRO	General Register Office
DMD	Drug Misuse Database	GROS	General Register Office for
DMRI	Drugs Misuse Research Initiative	ЦАС	Scotland
DORIS	Drug Outcome Research in Scotland	HBSC	Health Behaviour in School Age
DRD	Drug-Related Deaths	HBc	Hepatitis B core antigen
DRR	Drug Rehabilitation	HBV	Hepatitis B Virus
		HCV	Hepatitis C Virus
DSDC	Commission	HEAT	Health Improvement. Efficiency.
DSMIV	Diagnostic and Statistical		Access, Treatment Targets
	Manual of Mental Disorders, Fourth Edition	HIV	Human Immunodeficiency Virus
DTOC	Drug Testing on Charge	НМ	Her Majesty
DTORS	Drug Treatment Outcomes Research Study	HMIP	Her Majesty's Inspectorate of Prisons
DTTO	Drug Treatment and Testing Order	HMRC	Her Majesty's Revenue and Customs
DWP	Department for Work and	HPA	Health Protection Agency
	Pensions	HPS	Health Protection Scotland
EDDRA	Exchange on Drug Demand Reduction Action	HPSS	Health and Personal Social Services
EI	Emotional Intelligence	ICD-9	International Statistical
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction		Classification of Diseases and Related Health Problems – ninth edition
ERG	Evidence Review Group	ICD-10	International Statistical
ESLD	End Stage Liver Disease		Classification of Diseases and
ESPAD	European School Survey Project on Alcohol and Other Drugs		Related Health Problems – tenth edition
EU	European Union	ICER	Incremental cost-effectiveness
FAD	Final Appraisal Determination	IDTS	Integrated Drug Treatment
FIP	Family Intervention Projects		System

IDU(s)	Injecting Drug User(s)	NCGC	National Clinical Guideline
IEP	Injecting Equipment Provision	NDEO	Centre
IQ	Intelligence Quotient	NDEC	National Drug Evidence Centre
ISCD	Independent Scientific Committee on Drugs	NDPDU	National Drug Programme Delivery Unit
ISD	Information Services Division	NDRD	National Drug Related Deaths
JRF	Joseph Rowntree Foundation	NDRDD	National Drug-related Deaths Database
JSA	Jobseekers Allowance	NDTMS	National Drug Treatment
KPI	Key Performance Indicator		Monitoring System
LA	Local Authority	NES	Needle Exchange Services
LAP	Local Action Plan	NESI	Needle Exchange Surveillance Initiative
LGBT	Lesbian, Gay, Bisexual and Transgender	NF	Needle Fixated
LHB	Local Health Board	NFER	National Foundation for Educational Research
LSD	Lysergic Dyethylamide acid	NEFPRO	Needle Fixation Profile
MDMA	3,4-Methylenedioxy-n- methylamphetamine	NHS	National Health Service
MDT	Mandatory Drug Testing	NICE	National Institute for Clinical
МІМ	Multiple Indicator Method	NICS	Northorn Iroland Crimo Survoy
ММТ	Methadone Maintenance	NIO	Northern Ireland Office
мој	Ministry of Justice	NISRA	Northern Ireland Statistics and
MRC	Medical Research Council		Research Agency
MRSA	Methicillin-resistant	NNF	Non-needle Fixated
MITCA	Staphylococcus aureus	NOMS	National Offender Management Service
MSM	Men who have Sex with Men	np-SAD	National Programme on
MTA	Multiple Technology Appraisal Process		Substance Abuse Deaths
N-Alive	NALoxone InVEstigation	NSD	New Strategic Direction for Alcohol and Drugs
NAO	National Audit Office	NSHPC	National Study of HIV in
NART	National Adult Reading Test		Pregnancy and Childhood
NAS	Neonatal Abstinence	NTA	National Treatment Agency
	Syndrome	NTORS	National Treatment Outcomes Research Study
NatCen	National Centre for Social Research	OASys	Offender Assessment System
NCC	national collaborating centres	ост	Outbreak Control Team

ОМТ	oral mucosal transudate	SCJS	Scottish Crime and Justice
ONS	Office for National Statistics		Survey
OST	Opiate Substitution Treatment	SCVS	Scottish Crime and Victimisation Survey
p2w	Progress2work	SDF	Scottish Drugs Forum
РСТ	Primary Care Trust	SDMD	Scottish Drug Misuse Database
PDI	Partnership Drugs Initiative	SDRC	Scottish Drugs Recovery
PDU	Problem Drug Use(rs)		Consortium
PGDs	Patient Group Directions	SHA	Strategic Health Authority
PHIAC	Public Health Interventions Advisory Committee	SIGN	Scottish Intercollegiate Guidelines Network
PHIRB	Public Health Information and Research Branch	SMID	Scottish index of Multiple Deprivation
PI	Padua Inventory	SMAF	Substance Misuse Action Fund
PMQ	Prospective Memory	SMR	Special Mortality Register
	Questionnaire	SOCA	Serious Organised Crime Agency
PNC	Police National Computer	SOPIHD	Survey of Prevalent HIV
PSA	Public Service Agreement	0.00	Infections Diagnosed
PSHE	Personal, Social and Health Education	SPS	Scottish Prison Service
PSNI	Prison Service Northern Ireland	SSA	Social Attitudes Survey
РТВ	Pooled Treatment Budget	SSAC	Social Security Advisory Committee
PWC	Price Waterhouse Coopers	STA	Single Technology Appraisal
QALY	Quality of Life	STI	Sexually Transmitted Infection
RCT	Randomised Controlled Trial	SVR	Sustained Virologic Response
RIOTT	Randomised Injecting Opioid	ТВ	Tuberculosis
	Treatment Trial	TDI	Treatment Demand Indicator
RNA	Ribonucleic Acid	ТОР	Treatment Outcomes Profile
SACDM	Scottish Advisory Committee on Drugs Misuse	UAM	Unlinked Anonymous Monitoring survey
SALSUS	Scottish Schools Adolescent	UK	United Kingdom
	Survey	UKBA	UK Border Agency
SAP	Sentencing Advisory Panel	UKDPC	United Kingdom Drug Policy
SCDEA	Scottish Crime and Drug		Commission
	Enforcement Agency	VSA	Volatile Substance Abuse
SCIEH	Scottish Centre for Infection and Environmental Health	WAG	Welsh Assembly Government
		WHO	World Health Organisation

List of standard tables and structured questionnaires

NUMBER	TITLE	SOURCE
ST01	Basic results and methodology of population surveys on drug use	England and Wales - British Crime Survey (BCS) Scotland – Scottish Crime and Justice Survey (SCJS) Northern Ireland – Northern Ireland Crime Survey (NICS); Drug Prevalence Survey
ST02	Methodology and results of school surveys on drug use	England – Smoking, Drinking and drug use amongst school children in England Scotland – Scottish Adolescent Lifestyle and Substance Use Survey (SALSUS) Northern Ireland – Young Persons Behavioural and Attitudes Survey (YPBAS)
ST05	Acute/direct related deaths	General Mortality Registers (GMRs) for England and Wales, Scotland and Northern Ireland
ST06	Evolution of acute/direct related deaths	General Mortality Registers (GMRs) for England and Wales, Scotland and Northern Ireland
ST07	National prevalence estimates on problem drug use	Home Office; NHS ISD Scotland; DHSSPSNI; Welsh Assembly Government
ST08	Local prevalence estimates on problem drug use	Home Office; NHS ISD Scotland
ST09	Prevalence of hepatitis B/C and HIV infection among injecting drug users	Health Protection Agency (HPA); Health Protection Scotland (HPS); National Public Health Service for Wales (NPHSW); Communicable Disease Surveillance Centre Northern Ireland
ST10	Syringe availability	Northern Ireland Needle & Syringe Exchange Scheme (NSES)
ST11	Arrests/Reports for drug law offences	Ministry of Justice; Scottish Government; Northern Ireland Office; Northern Ireland Police Service (NIPS)
ST12	Drug use among prisoners	Scottish Prison Service
ST13	Number and quantity of seizures of illicit drugs	Home Office; Her Majesty's Revenue & Customs (HMRC); Scottish Government; Scottish Crime and Drug Enforcement Agency (SCDEA); Northern Ireland Police Service (NIPS)
ST14	Purity at street level of illicit drugs	Forensic Science Service (FSS); LGC Forensics Ltd
ST15	Composition of tablets sold as illicit drugs	Forensic Science Service (FSS)
ST16	Price in Euros at street level of illicit drugs	Serious Organised Crime Agency (SOCA)
ST24	Access to treatment	National Drug Treatment Monitoring System (NDTMS) in England

NUMBER	TITLE	SOURCE
SQ25	Universal prevention	Consultation with relevant UK government officials
SQ26	Selective and indicates prevention	Consultation with relevant UK government officials
SQ28	Social reintegration	Consultation with relevant UK government officials
SQ31	Treatment as an alternative to imprisonment	Consultation with relevant UK government officials
ST34	TDI data	National Drug Treatment Monitoring System (NDTMS) in England, the Scottish Drug Misuse Database, the Welsh National Database for Substance Misuse; and the Northern Ireland Drug Misuse Database

Appendix A: United Kingdom prevalence estimates from population surveys

By combining data from the British Crime Survey (BCS) 2008/09, the Northern Ireland Crime Survey (NICS) 2008/09 and the Scottish Crime and Justice Survey (SCJS) 2008/09, estimates of drug use have been produced for the United Kingdom.

Table A.1: Percentage of 16 to 59 year olds reporting having used individual drugs in lifetime, last year and last month in the United Kingdom, 2008/09

	BRITISH CRIME SURVEY 2008/09	NORTHERN IRELAND CRIME SURVEY 2008/09	SCOTTISH CRIME AND JUSTICE SURVEY 2008/09	UNITED KINGDOM ESTIMATE		
Lifetime prevalence						
Any illicit drug	36.8	27.5	33.5	36.2		
Amphetamines	12.3	7.4	10.1	12.0		
Cannabis	31.1	20.6	30.4	30.7		
Cocaine	9.4	4.6	9.2	9.2		
Ecstasy	8.6	7.9	9.9	8.7		
Heroin	0.7	0.8	1.2	0.7		
LSD	5.5	4.4	6.5	5.6		
Magic mushrooms	7.4	5.1	7.4	7.3		
Last year prevalence						
Any illicit drug	10.1	6.7	10.3	10.0		
Amphetamines	1.2	0.6	1.4	1.2		
Cannabis	7.9	5.0	8.4	7.9		
Cocaine	3.0	1.1	3.8	3.0		
Ecstasy	1.8	1.1	2.5	1.8		
Heroin	0.1	0.1	0.3	0.1		
LSD	0.2	0.4	0.5	0.2		
Magic mushrooms	0.5	0.2	0.4	0.5		
Last month prevalence						
Any illicit drug	5.9	3.8	6.0	5.8		
Amphetamines	0.4	0.1	0.5	0.4		
Cannabis	4.6	2.8	4.8	4.5		
Cocaine	1.5	0.5	1.7	1.5		
Ecstasy	0.6	0.5	1.0	0.6		
Heroin	0.0	0.0	0.1	0.0		
LSD	0.1	0.2	0.2	0.1		
Magic mushrooms	0.1	0.1	0.2	0.1		
Net response	28,538	2,204	7,467	N/A		

Source: England & Wales : Standard Table 01; Northern Ireland : Toner & Freel, 2010

Scotland: on-line tables from Scottish Crime and Justice Survey 2008/09 available at http://www.scotland.gov.uk/Topics/Statistics/Browse/Crime-Justice/Datasets/SCJSVol3dem. **Table A.2:** Percentage of 16 to 34 year olds reporting having used individual drugs in lifetime, last year and last month in the United Kingdom, 2008/09

	BRITISH CRIME SURVEY 2008/09	NORTHERN IRELAND CRIME SURVEY 2008/09	SCOTTISH CRIME AND JUSTICE SURVEY 2008/09	UNITED KINGDOM ESTIMATE
Lifetime prevalence				
Any illicit drug	46.3	38.4	44.9	45.9
Amphetamines	15.4	11.8	14.4	15.2
Cannabis	40.5	30.7	41.5	40.3
Cocaine	14.9	9.0	15.7	14.8
Ecstasy	13.8	15.1	17.4	14.1
Heroin	0.7	1.0	1.4	0.8
LSD	6.1	6.9	8.5	6.3
Magic mushrooms	8.6	7.5	9.1	8.6
Last year prevalence				
Any illicit drug	18.1	13.8	19.0	18.0
Amphetamines	2.3	1.4	2.4	2.3
Cannabis	14.4	10.4	15.6	14.4
Cocaine	6.2	2.6	7.7	6.2
Ecstasy	3.9	2.9	5.2	4.0
Heroin	0.1	0.0	0.4	0.9
LSD	0.5	1.0	1.1	0.6
Magic mushrooms	1.2	0.4	0.9	1.2
Last month prevalence				
Any illicit drug	10.6	8.0	10.9	10.6
Amphetamines	0.8	0.2	0.8	0.8
Cannabis	8.2	5.8	8.6	8.2
Cocaine	2.9	1.3	3.7	2.9
Ecstasy	1.2	1.4	2.2	1.3
Heroin	0.1	0.0	0.2	0.1
LSD	0.1	0.6	0.4	0.1
Magic mushrooms	0.2	0.3	0.5	0.2
Net response	9,744	805	2,485	N/A

Source: Standard Tables provided for the United Kingdom Focal Point.

Table A.3: Percentage of 16 to 24 year olds reporting having used individual drugs in lifetime, last year and last month in the United Kingdom, 2008/09

	BRITISH CRIME SURVEY 2008/09	NORTHERN IRELAND CRIME SURVEY 2008/09	SCOTTISH CRIME AND JUSTICE SURVEY 2008/09	UNITED KINGDOM ESTIMATE		
Lifetime prevalence						
Any illicit drug	42.9	35.2	41.3	42.5		
Amphetamines	10.1	7.8	9.3	10.0		
Cannabis	37.0	27.5	38.7	36.8		
Cocaine	12.4	6.6	13.7	12.3		
Ecstasy	9.9	12.2	13.8	10.3		
Heroin	0.4	1.2	0.7	0.4		
LSD	2.5	3.4	3.4	2.6		
Magic mushrooms	6.3	5.8	4.6	6.1		
Last year prevalence						
Any illicit drug	22.6	18.2	23.5	22.5		
Amphetamines	2.7	2.2	3.1	2.7		
Cannabis	18.7	13.8	20.3	18.7		
Cocaine	6.6	2.9	8.0	6.6		
Ecstasy	4.4	4.4	6.1	4.5		
Heroin	0.0	0.0	0.3	0.0		
LSD	0.8	2.2	1.3	0.9		
Magic mushrooms	1.5	0.7	0.9	1.4		
Last month prevalence						
Any illicit drug	13.1	10.2	13.2	13.0		
Amphetamines	1.0	0.5	1.1	1.0		
Cannabis	10.4	6.7	10.6	10.3		
Cocaine	3.7	1.7	4.2	3.7		
Heroin	0.0	0.0	0.2	0.0		
LSD	0.2	1.2	0.4	0.2		
Magic mushrooms	0.3	0.7	0.5	0.3		
Net response	5,509	286	1,004	N/A		

Source: Standard Tables provided for the United Kingdom Focal Point



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