SU Drugs Project

Phase 1 Report: Understanding the Issues

Project aim:
  To identify the mix of policies which will substantially reduce the harms caused by drugs to users and others

Summary of the report's main findings

- All drugs have an adverse impact; but heroin and crack are by far the most addictive, expensive and harmful drugs

- Heroin and/or crack users cause harm to the health and social functioning of users and society as a whole, but users also commit substantial amounts of crime to fund their drug use (costing £16bn a year). Including health and social functioning harms, the harms arising from drug use amount to £24bn a year

- There are an estimated 280,000 heroin and/or crack users: at any one time, only 20% of high harm causing users are receiving treatment, whilst 80% are not

- Over the course of a year, two thirds of high harm causing users engage with either treatment or criminal justice, but:
  - those engaging with treatment tend not to stay with it for long
  - many of those engaging with criminal justice are not formally identified as users or do not have their use dealt with
  - a third of high harm causing users do not engage with either treatment or the criminal justice system

- The drugs supply business is large, highly flexible and very adaptable; over time the industry has seen consumption grow and prices reduce

- Interventions at every stage of the production, trafficking, wholesaling and dealing process have resulted overall in modest seizure rates of up to ~20% of total production

- Even if supply-side interventions were more effective, it is not clear that the impact on the harms caused by serious drug users would be reduced

There are seven commonly used controlled drugs

HEROIN and other opiates
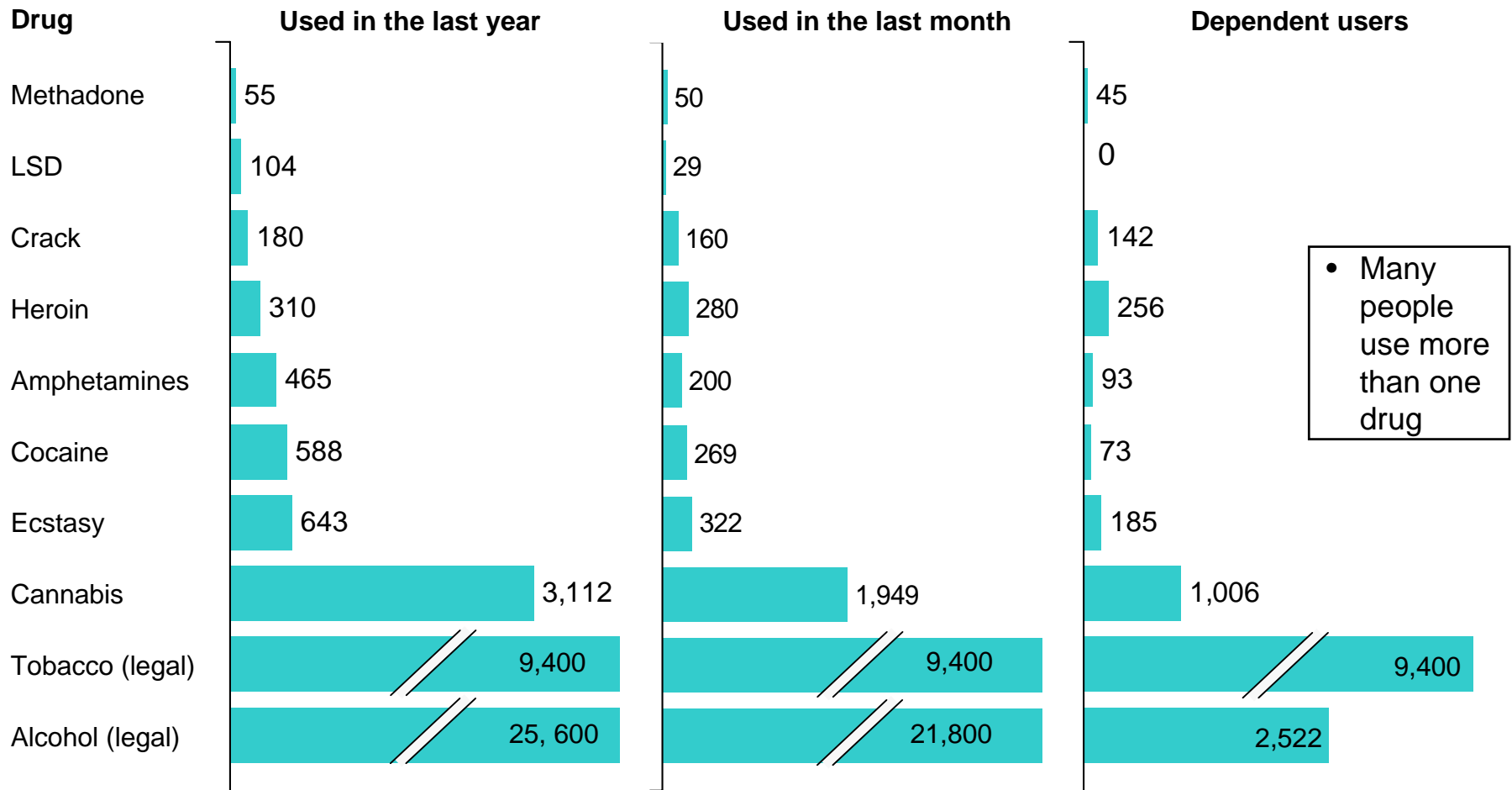
CRACK COCAINE

COCAINE
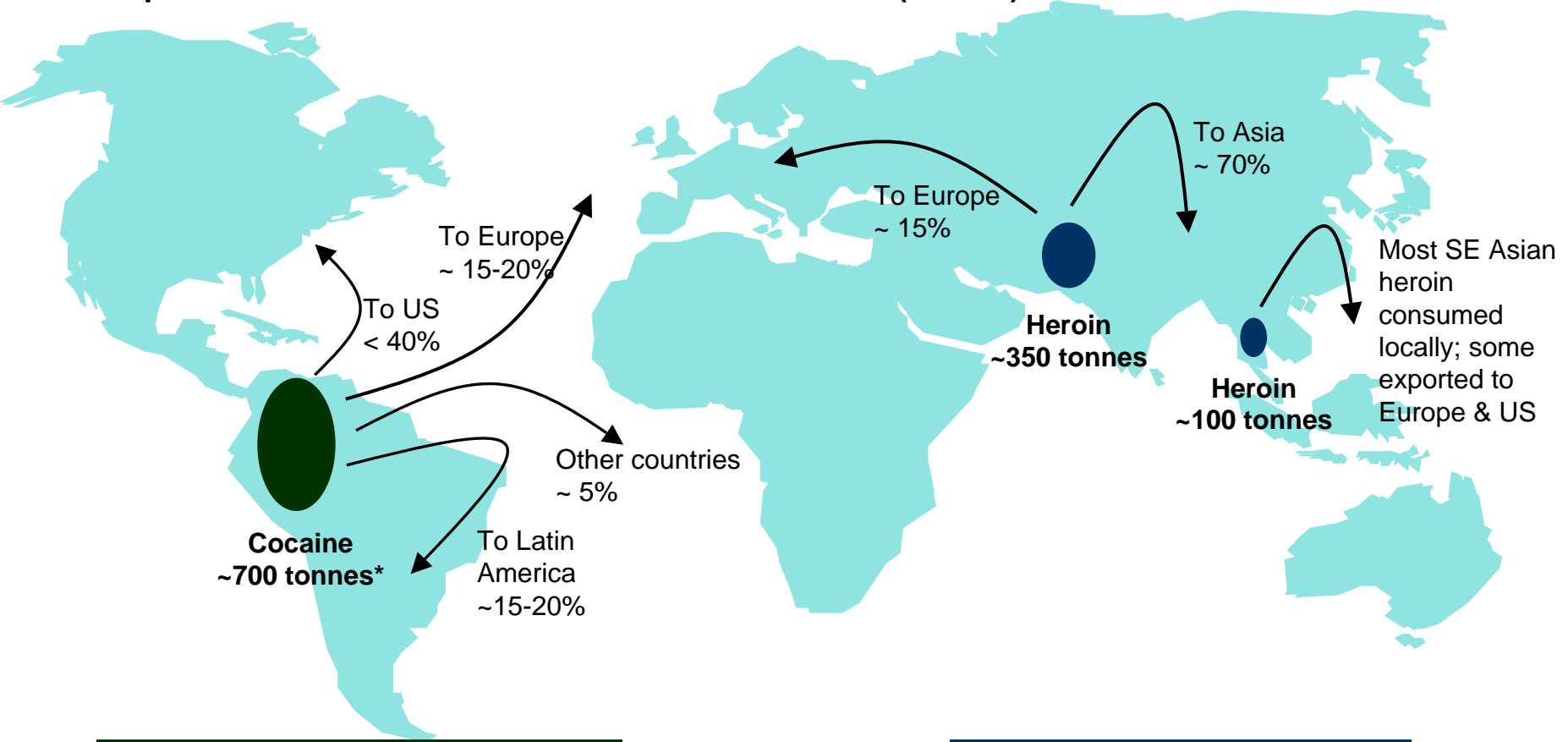
AMPHETAMINES

ECSTASY

CANNABIS

LSD

Over 3 million people in the UK use illegal drugs every year, with more than half a million using the most serious drugs

Number of users in England and Wales, 000s

Drug	Used in the last year	Used in the last month	Dependent users
Methadone	55	50	45
LSD	104	29	0
Crack	180	160	142
Heroin	310	280	256
Amphetamines	465	200	93
Cocaine	588	269	73
Ecstasy	643	322	185
Cannabis	3,112	1,949	1,006
Tobacco (legal)	9,400	9,400	9,400
Alcohol (legal)	25, 600	21,800	2,522

- Many people use more than one drug

Source: British Crime Survey 2000 and team analysis

Drugs come from many different countries and via many different routes

Annual production and distribution of heroin and cocaine (tonnes)

To Asia ~ 70%

To Europe ~ 15%

Heroin ~350 tonnes

Heroin ~100 tonnes

Most SE Asian heroin consumed locally; some exported to Europe & US

To Europe ~ 15-20%

To US < 40%

Other countries ~ 5%

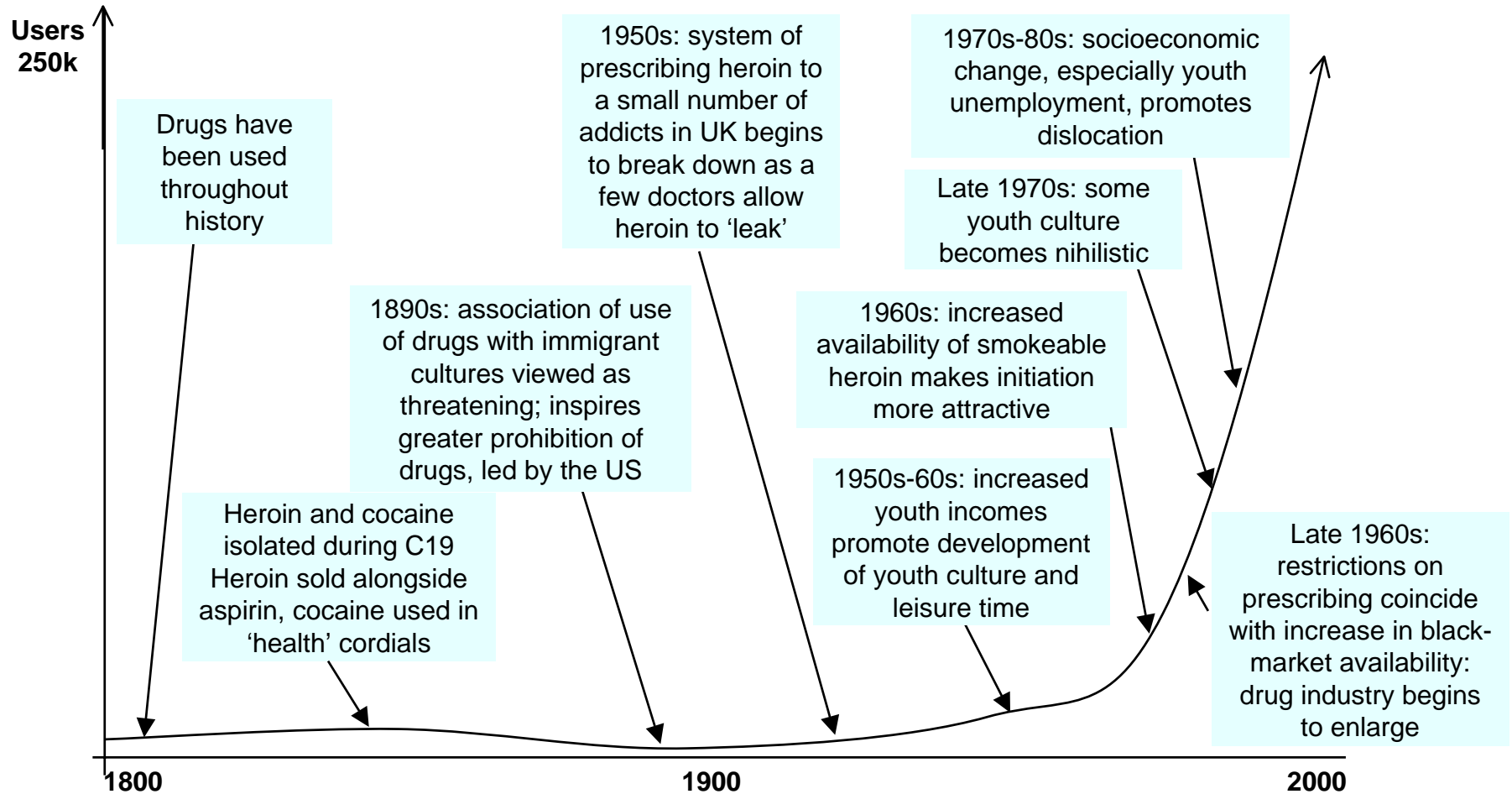**Cocaine ~700 tonnes***

To Latin America ~15-20%

Cocaine seizures en route ~ 20-25% of total production

Heroin seizures en route ~ 15% of total production

Source: HMG data, UN documents. *Note that ~15 tonnes of heroin are produced in Latin America for the US market

Far more drugs are used now than in the past, though they have been used for centuries

Indicative numbers of dependent users of heroin and cocaine/crack in the UK from 1800

Users
250k

Drugs have been used throughout history

Heroin and cocaine isolated during C19 Heroin sold alongside aspirin, cocaine used in 'health' cordials

1890s: association of use of drugs with immigrant cultures viewed as threatening; inspires greater prohibition of drugs, led by the US

1950s: system of prescribing heroin to a small number of addicts in UK begins to break down as a few doctors allow heroin to 'leak'

1950s-60s: increased youth incomes promote development of youth culture and leisure time

1960s: increased availability of smokeable heroin makes initiation more attractive

Late 1970s: some youth culture becomes nihilistic

1970s-80s: socioeconomic change, especially youth unemployment, promotes dislocation

Late 1960s: restrictions on prescribing coincide with increase in black-market availability: drug industry begins to enlarge

1800 1900 2000

Source: *Heroin Addiction and Drug Policy*, J. Strang and M.Gossop, 1994; 'A Brief History of British Drugs Policy 1950-2001', R. Yates, 2002; 'Social and Historical context of drug policy in UK', G. Stimson, 1991; 'Cocaine: global histories' P. Gootenburg, 1990; *The Pursuit of Oblivion* R. Davenport-Hines 2001, and others. Pre: 1890s, numbers reflect opium rather than heroin use.
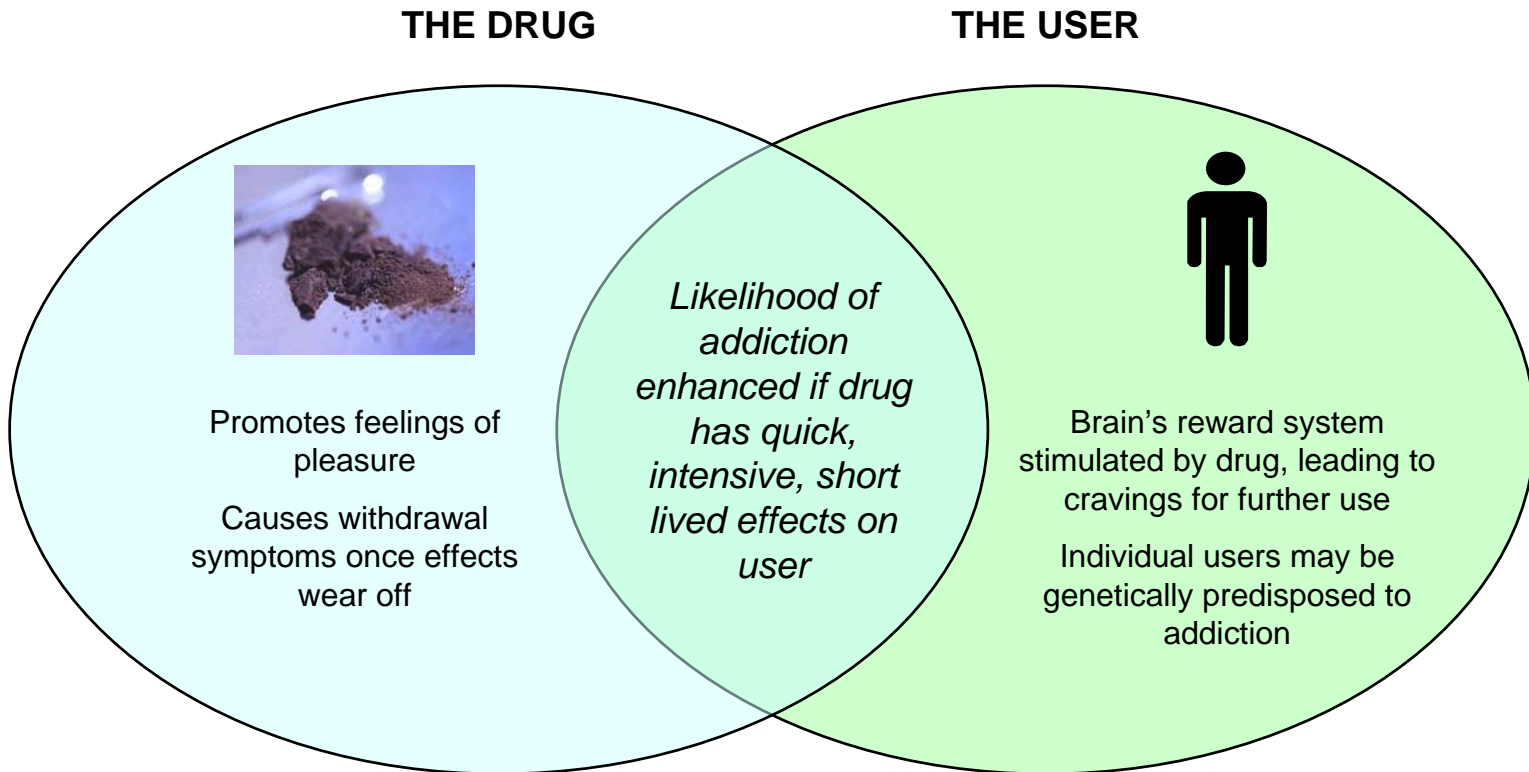
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The individual characteristics of both the drug and of the user contribute to addiction

Interaction between the characteristics of the drug and the characteristics of the user

THE DRUG

THE USER

Promotes feelings of pleasure

Causes withdrawal symptoms once effects wear off

Likelihood of addiction enhanced if drug has quick, intensive, short lived effects on user

Brain's reward system stimulated by drug, leading to cravings for further use

Individual users may be genetically predisposed to addiction

Different drugs affect the user in different ways

Drug Group	Examples	Effect of drug
OPIATES	Heroin, methadone	• Opiates promote feelings of euphoria and relax the central nervous system • Users experience severe withdrawal symptoms if regular use ceases • Heroin takes effect more quickly than methadone and lasts for shorter period
STIMULANTS	Cocaine, crack amphetamines, ecstasy	• Stimulants promote feelings of confidence and energy • Users will not experience physical withdrawal but may become anxious and paranoid after use • Crack cocaine and methamphetamines (which are smoked) take effect within seconds and effects wear off within minutes – the extremes experienced with these drugs can lead to psychotic behaviour
SEDATIVES	Cannabis	• Cannabis promotes feelings of calm and pleasure • Heavy use may lead to feelings of paranoia and anxiety
HALLUCINOGENS	LSD	• LSD is a hallucinogenic drug - users see unusual visions and colours

Source: Team analysis based on variety of sources

The qualities of heroin and crack make them more addictive than other drugs

Qualities of drugs and their potential to lead to addiction

Very addictive ↑ / Hardly addictive ↓

Drug	Speedy effect?	Intense effect?	Short-lasting effect?	Physical withdrawal symptoms?	Potential addictiveness
Heroin	✓ ✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓
Crack	✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓	✓	✓ ✓ ✓ ✓ ✓
Cocaine	✓ ✓ ✓	✓ ✓	✓ ✓ ✓ ✓	✓	✓ ✓ ✓
Amphetamines	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	✓	✓ ✓ ✓
Tobacco	✓ ✓ ✓ ✓ ✓	✓	✓ ✓ ✓	✓	✓ ✓ ✓
Methadone	✓ ✓	✓ ✓	✓	✓ ✓ ✓ ✓	✓ ✓ ✓
Alcohol	✓ ✓	✓	✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓
Ecstasy	✓	✓ ✓ ✓	✓ ✓	✓	✓ ✓
Cannabis	✓ ✓ ✓	✓	✓ ✓	✓	✓ ✓
LSD	✓	✓ ✓ ✓	✓		✓

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Heavy use of crack, cocaine and heroin is very expensive to support

Cost of drug use for a heavy user

Drug	Unit of measure	Cost per unit (£)	Estimated units used per week	Total cost (£/week)
Crack Cocaine	0.2g 'Rock'	21	25	525
Cocaine	1g	60	7	420
Heroin	1g	60	5	300
Amphetamines	1g	9	10	90
Cannabis	2g	6	15	89
Methadone*	100ml	4	18	67
Ecstasy	Tablet	6	10	65
Alcohol	10ml	1	50	65
Tobacco	Cigarette	0	280	56
LSD	Paper Square	3	5	15
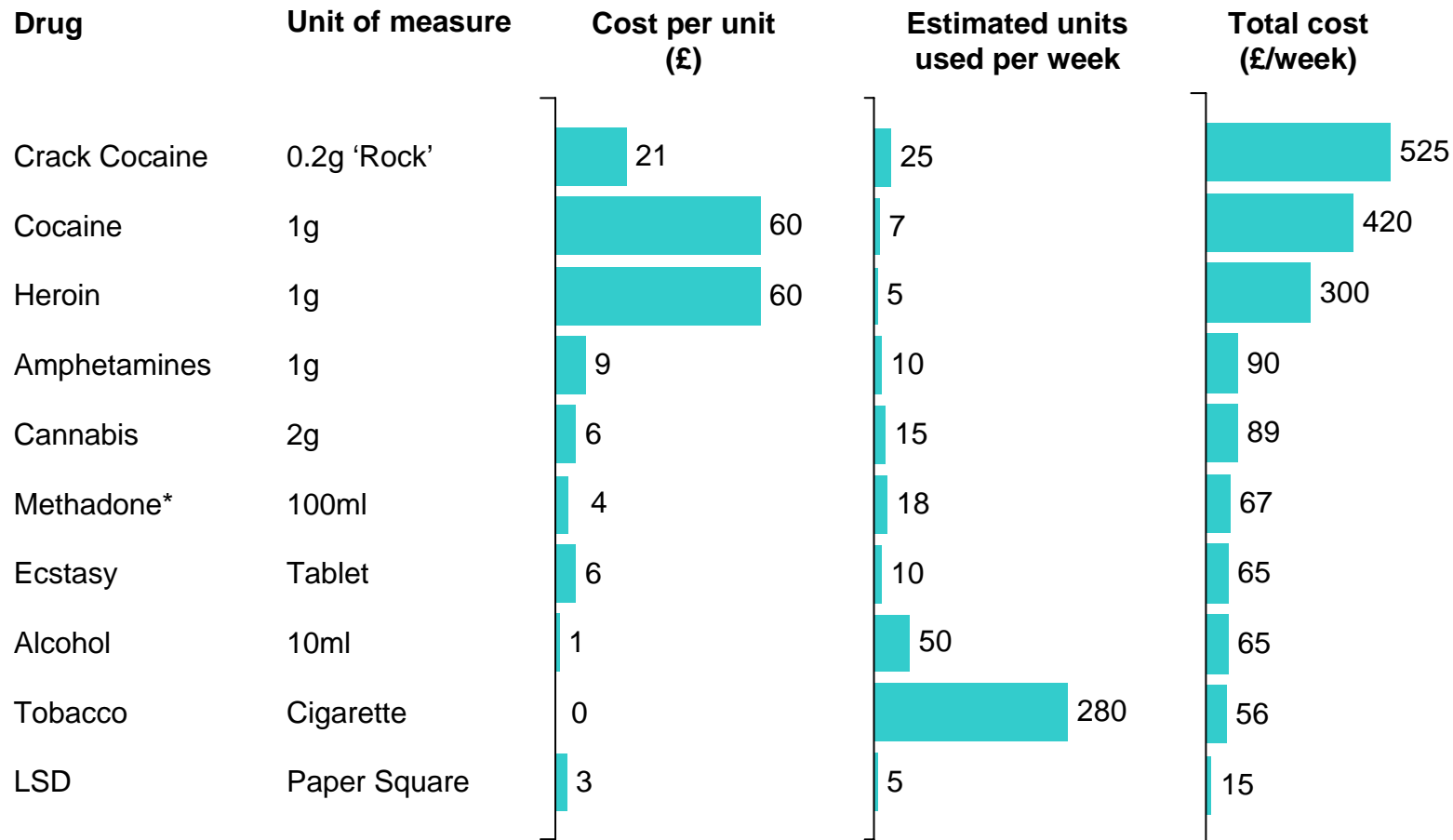
- The more addictive and expensive a drug, the more disruptive it will be to a user

* Price for prescribed methadone - street price may vary greatly from this
Source: NCIS "A guide to drug prices and drug valuation in the UK" May to August 2002; Maudsley Hospital cocaine user records; 'Drug Users and Drug Dealers', Brownsberger, ed., 2001

Significant harms attach to drug use

HEALTH

- Drugs can cause direct health harms, including death and mental illness
- The individual method of use can cause specific health harms, e.g., infected needles spread disease
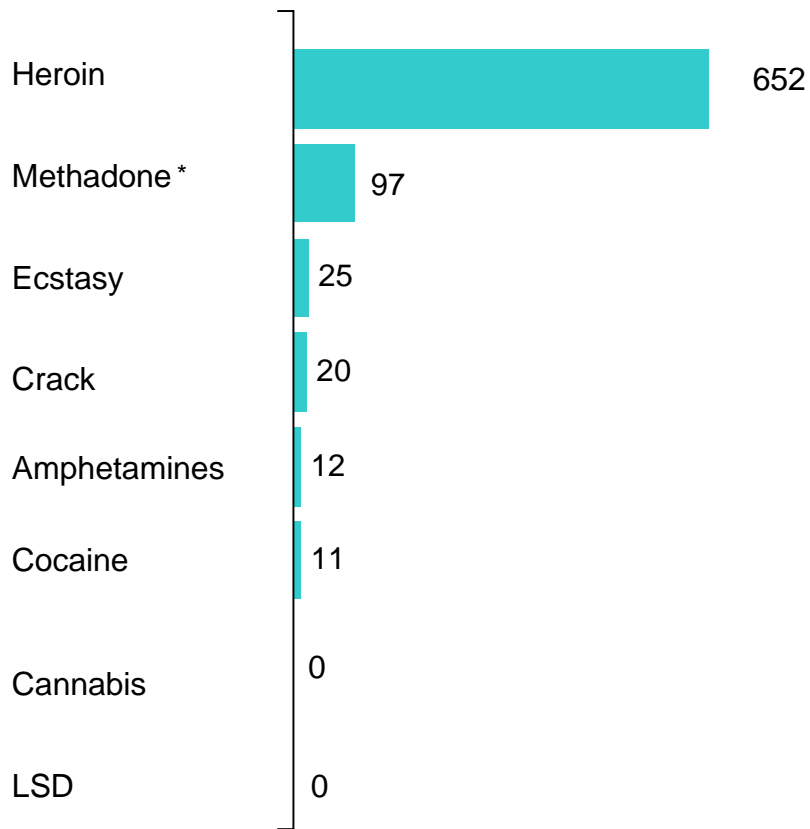
SOCIAL FUNCTIONING

- Both the effect of drugs and the lifestyle associated with drug use have an impact on a user's ability
  - to work
  - to care for dependents
  - to form relationships

CRIME

- Most users commit crime to fund their habit
- Some drugs can induce violent behaviour

Heroin and methadone cause the most acute deaths per year

Acute deaths per annum as a result of illegal drug use

| Drug	Deaths
Heroin	652
Methadone *	97
Ecstasy	25
Crack	20
Amphetamines	12
Cocaine	11
Cannabis	0
LSD	0

- Acute deaths caused by overdose or poisoning are recorded here, not chronic deaths caused by long-term health damage arising from drug use
- Heroin and methadone deaths are caused by overdose
- Ecstasy deaths are contributed to by drinking too little or too much water while using the drug
- 1:100 regular heroin users die each year, but only 1:100,000 cocaine users
- In comparison, alcohol causes 6,000 acute and chronic deaths per year, and tobacco smoking around 100,000

* Methadone deaths will be chiefly those who have not had the drug prescribed
Sources: ONS Health Statistics Quarterly 17, 'Deaths relating to drug poisoning'

Injecting drugs, common practice with heroin use, leads to high levels of infection with serious diseases

- Injecting users share needles and infected needles spread diseases
- Drug users then pass diseases on to non-users through other means, for example sex, causing wider public health harms

Number of past and current injectors infected as a result of intravenous drug use
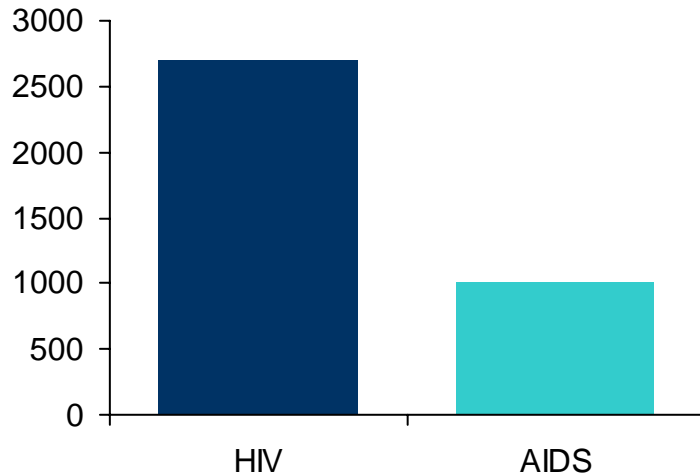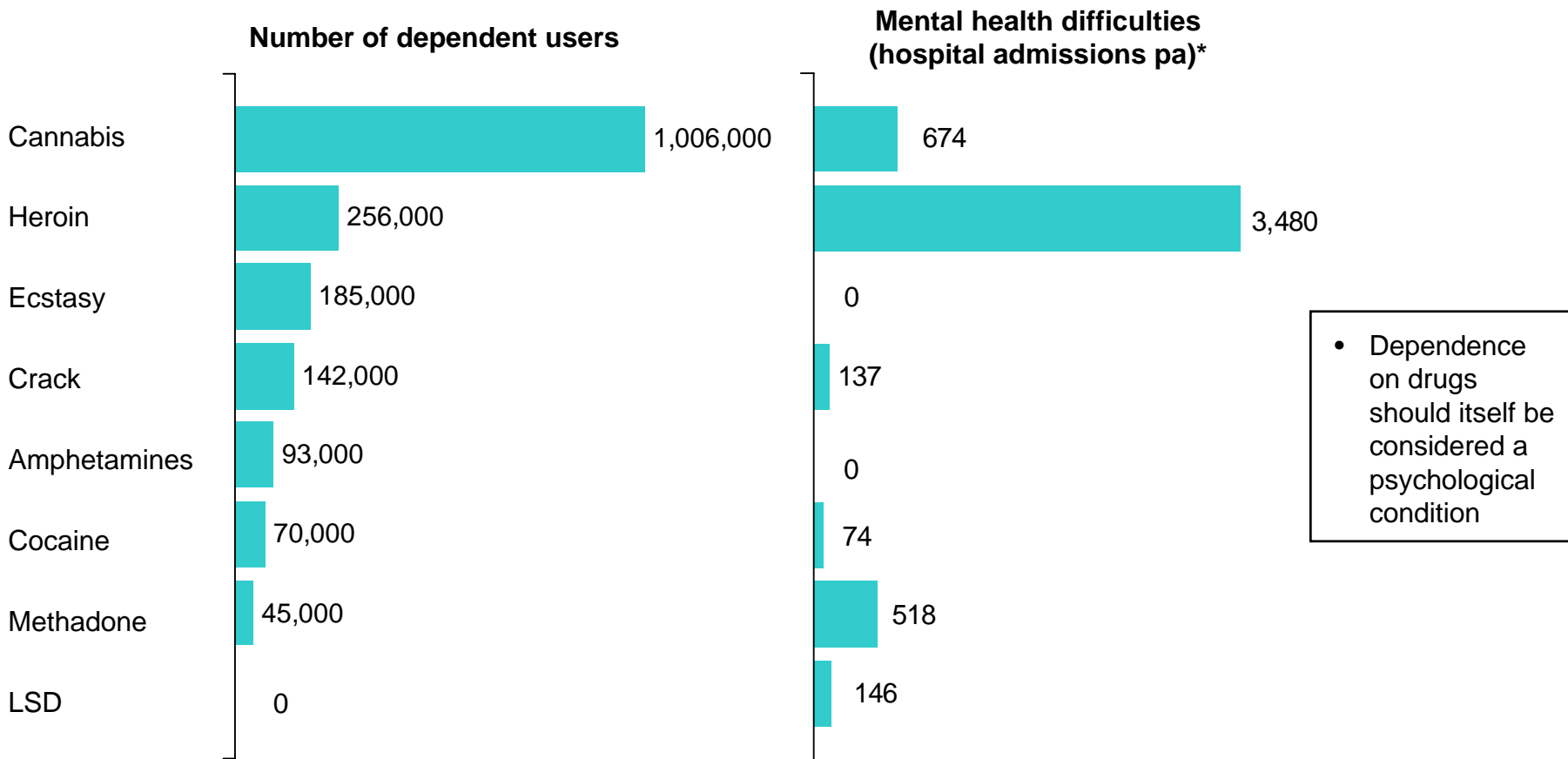

- HIV infection will lead eventually to individuals developing AIDS and to premature death
- Treatment to delay the onset of AIDS is expensive
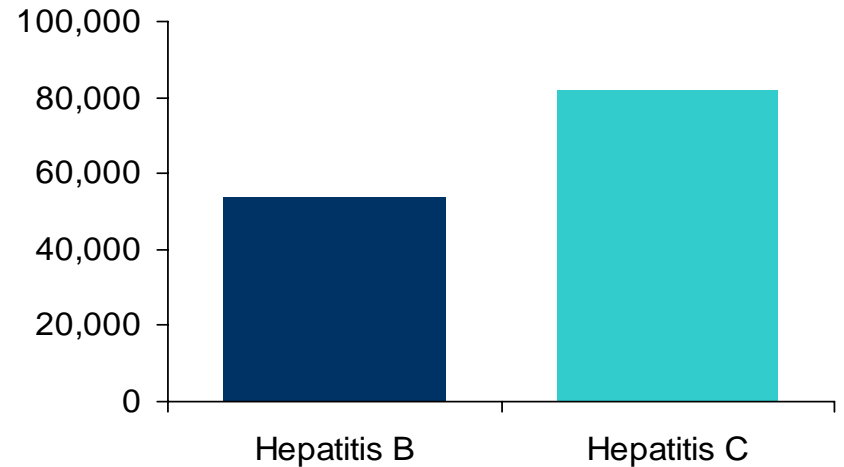
- Hepatitis B and Hepatitis C are both chronic liver diseases
- Around 20% of those infected with Hepatitis C will die of the disease

Source: 'Economic and social costs of Class A drug use', Home Office 2002

Drugs cause, or are associated with, psychological damage to the user

Psychological damage caused by use of illegal drugs

Number of dependent users

Mental health difficulties (hospital admissions pa)*

Drug	Number of dependent users	Mental health difficulties
Cannabis	1,006,000	674
Heroin	256,000	3,480
Ecstasy	185,000	0
Crack	142,000	137
Amphetamines	93,000	0
Cocaine	70,000	74
Methadone	45,000	518
LSD	0	146

- Dependence on drugs should itself be considered a psychological condition

* These figures show hospital admissions where the drug was recorded as the major reason for admission
Sources: Department of Health HES Statistics, British Crime Survey 2001/2, Psychiatric Morbidity Survey

Reduced social functioning of dependent drug users leads to harms for both the users themselves and for their children

Drug dependent users - particularly heroin and/or crack users - spend a lot of time acquiring the money to buy drugs; then purchasing and taking drugs

Many problems with social functioning may be the cause of drug use rather than the result - it is difficult to establish the direction of causation

Drug use reduces capacity for work

- 80% of dependent heroin users are unemployed
- 34% of users have been sacked from jobs

Drug users become excluded from normal society

- 65% of heroin users say friends are all users

Drug users' children suffer

- Mood swings and chaotic lifestyles of drug users can lead to neglect and abuse of children
- Children are brought up in environment where drug-taking and crime as seen as normal
- ~10,000 children of heroin addicts are in care

Drug users' behaviour disrupts community life

- Discarded needles and dealing impact on the safety and health of communities

Source: 'Opiates, criminal behaviour and methadone treatment', Coid et al,

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Heroin and crack cause the greatest harms to the health and social functioning of users and others

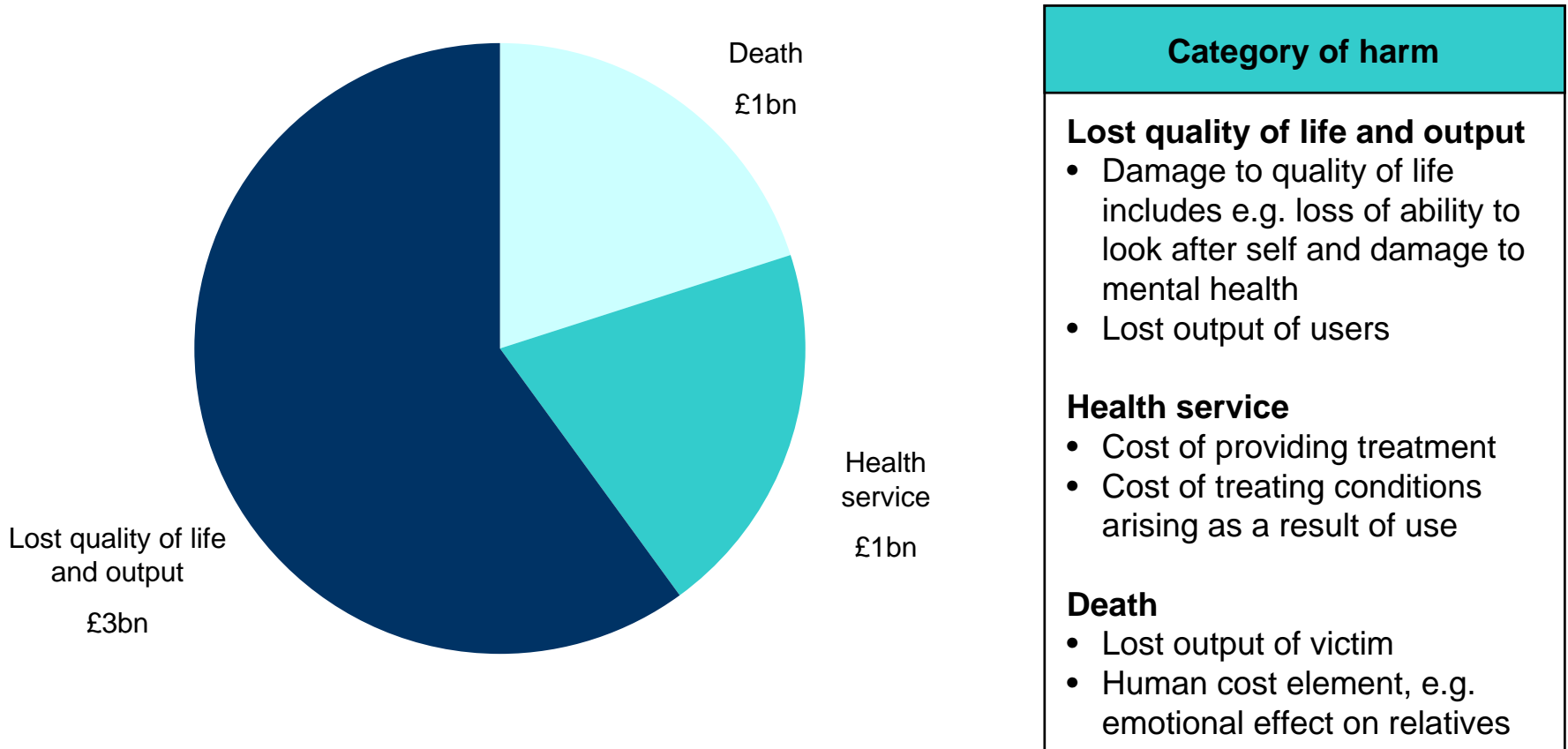**Damage to health and social functioning caused by illegal drugs**

Drug	Acute health damage	Long-term physical damage	Long-term mental damage	Harms from injection	Damage to social functioning	TOTAL health & social harms
Heroin	✔ ✔ ✔	✔ ✔ ✔	✔ ✔ ✔	✔ ✔ ✔	✔ ✔ ✔	✔ ✔ ✔
Crack	✔	✔ ✔ ✔	✔ ✔	✔	✔ ✔ ✔	✔ ✔ ✔
Methadone	✔ ✔	✔ ✔	✔		✔	✔
Cocaine	✔	✔	✔	✔	✔	✔
Amphetamines	✔	✔	✔	✔	✔	✔
Cannabis	✔	✔	✔ ✔		✔	✔
Ecstasy	✔	✔	✔		✔	✔
LSD			✔ ✔		✔	

Heroin and crack cause the most damage to health and social functioning

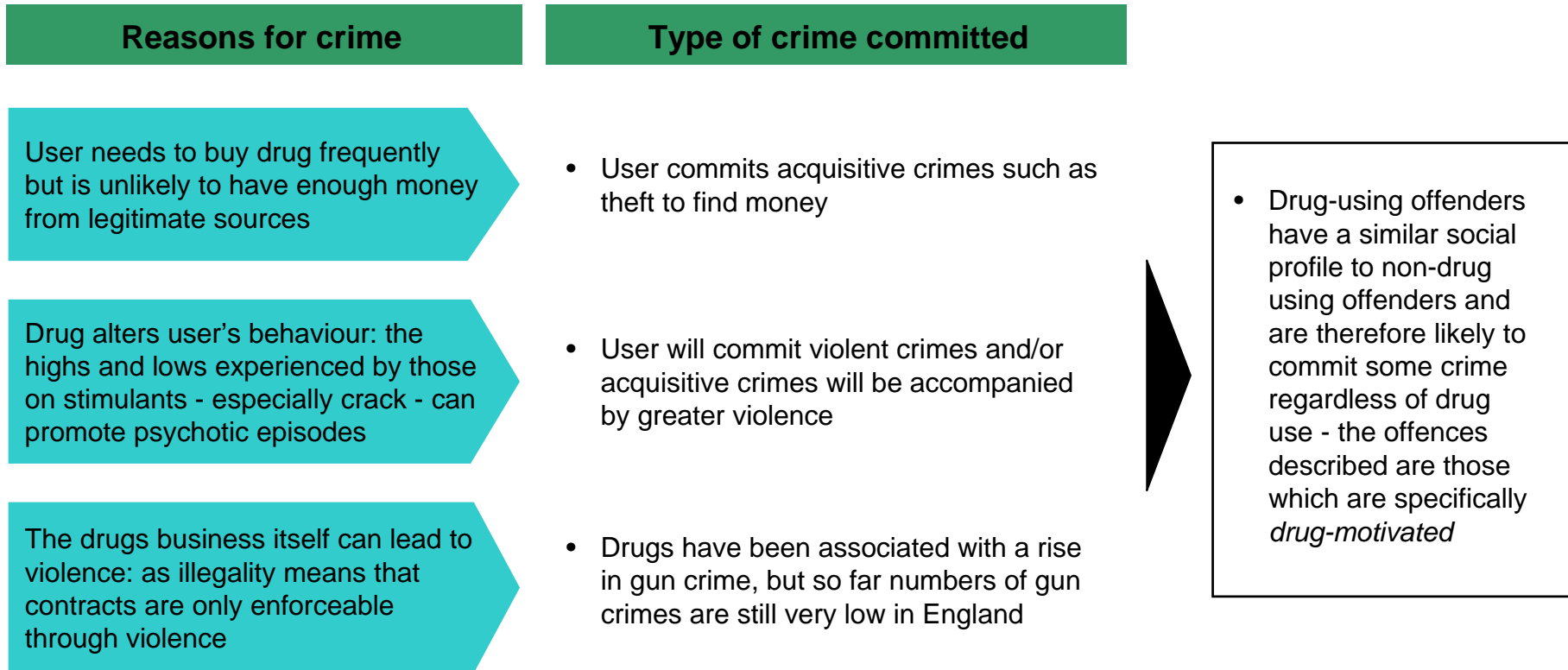* Social functioning is weighted as equal to the other four categories amalgamated

The cost of harms to health and social functioning from heroin and/or crack use are estimated at £5bn per year

Cost of damage to health and social functioning of heroin and/or crack users arising from use

Pie chart segments:
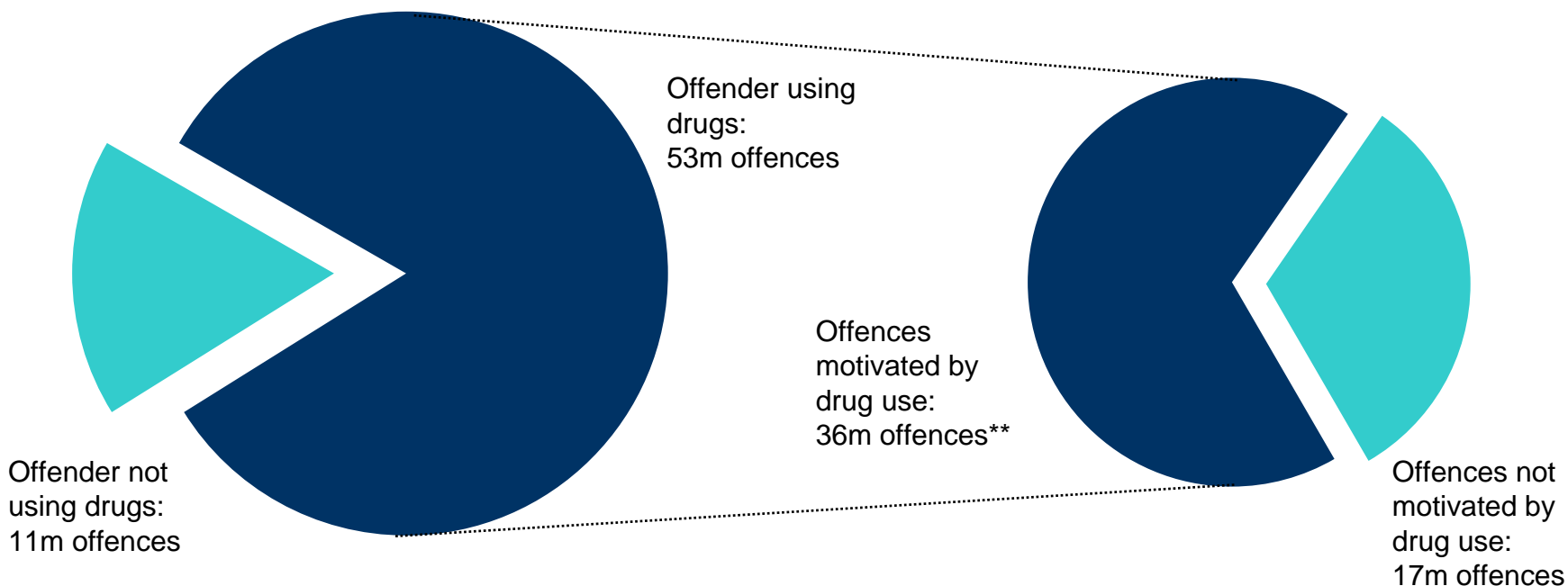- Death £1bn
- Health service £1bn
- Lost quality of life and output £3bn

Category of harm
Lost quality of life and output • Damage to quality of life includes e.g. loss of ability to look after self and damage to mental health • Lost output of users
Health service • Cost of providing treatment • Cost of treating conditions arising as a result of use
Death • Lost output of victim • Human cost element, e.g. emotional effect on relatives

Source: Team analysis

Crime harms arise from the users' need to pay for drugs; the behaviour drug use causes; and the activities of suppliers

Reasons for crime	Type of crime committed

User needs to buy drug frequently but is unlikely to have enough money from legitimate sources

Drug alters user's behaviour: the highs and lows experienced by those on stimulants - especially crack - can promote psychotic episodes

The drugs business itself can lead to violence: as illegality means that contracts are only enforceable through violence

- User commits acquisitive crimes such as theft to find money

- User will commit violent crimes and/or acquisitive crimes will be accompanied by greater violence

- Drugs have been associated with a rise in gun crime, but so far numbers of gun crimes are still very low in England

- Drug-using offenders have a similar social profile to non-drug using offenders and are therefore likely to commit some crime regardless of drug use - the offences described are those which are specifically *drug-motivated*

Drug users are estimated to commit 36m drug-motivated crimes each year, 56% of the total number of crimes

All crime, committed by drug users and non users*
64m offences

Crimes committed by drug users, whether drug-motivated or not drug-motivated
53m offences

Offender using drugs:
53m offences

Offences motivated by drug use:
36m offences**

Offender not using drugs:
11m offences

Offences not motivated by drug use:
17m offences

* Offences of possession or supply of drugs were not included because the victims (i.e. the user and society at large) and costs of offences of possession or supply were already taken account of in the other harms we have analysed. Drug user defined as self-reported use of drugs from slide 4 in last 30 days
** Data from NEW ADAM was to make an estimate of the proportion of drug users' crimes which are specifically motivated by drug use
Source: Team analysis, NEW ADAM survey of arrestees 1999-2002, 'Economic and social costs of crime', Home Office 2000

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Drug-motivated offences are estimated to be responsible for around a third of the total cost of crime

Cost of drug-motivated crimes*

£58bn

£19bn**

Cost of all crime   Cost of drug-motivated crime
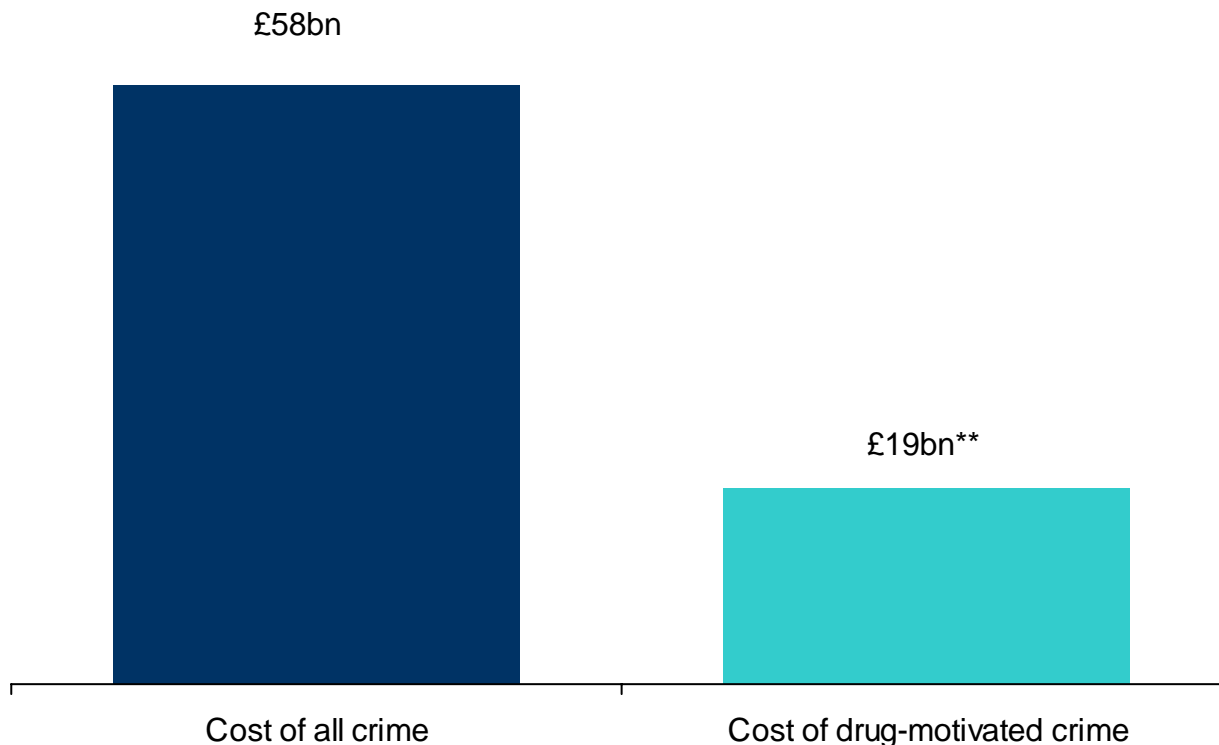
- Drug motivated crime accounts for 33% of the cost of all crime, while accounting for 56% of the volume

- The substantial contribution of drug-motivated crime to all crime was recognised in the Home Office's updated Drugs Strategy

- In comparison, the cost of crime linked to alcohol is estimated to be ~£12bn per year

* Includes: security expenditure, property stolen, emotional impact on victim, lost output and expenditure on criminal justice system
** This is an estimate within a range of £14-20bn
Source: Team analysis, based on NEW ADAM survey of arrestees 1999-2002, 'Economic and social costs of crime'

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Drug-motivated crime is skewed towards property crime rather than high victim trauma crimes

Cost of all crime
£58bn

High trauma
£22bn

No trauma
£17bn

Low trauma
£7bn

Medium trauma
£12bn

Cost of drug-motivated crime
£19bn

High trauma
£4bn

No trauma
£6bn

Low trauma
£3bn

Medium trauma
£6bn

High victim trauma
Violence
Sexual
Robbery

Medium victim trauma
Domestic burglary
Non-domestic burglary
Theft from/of vehicle
Common assault

Low victim trauma
Criminal damage
Shoplifting

No victim trauma
Fraud
Traffic
Other

Source: Team analysis, NEW ADAM survey of arrestees 1999-2002, 'Economic and social costs of crime'

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Drug use is responsible for the great majority of some types of crime, such as shoplifting and burglary

Percentage of different crimes motivated by drug use
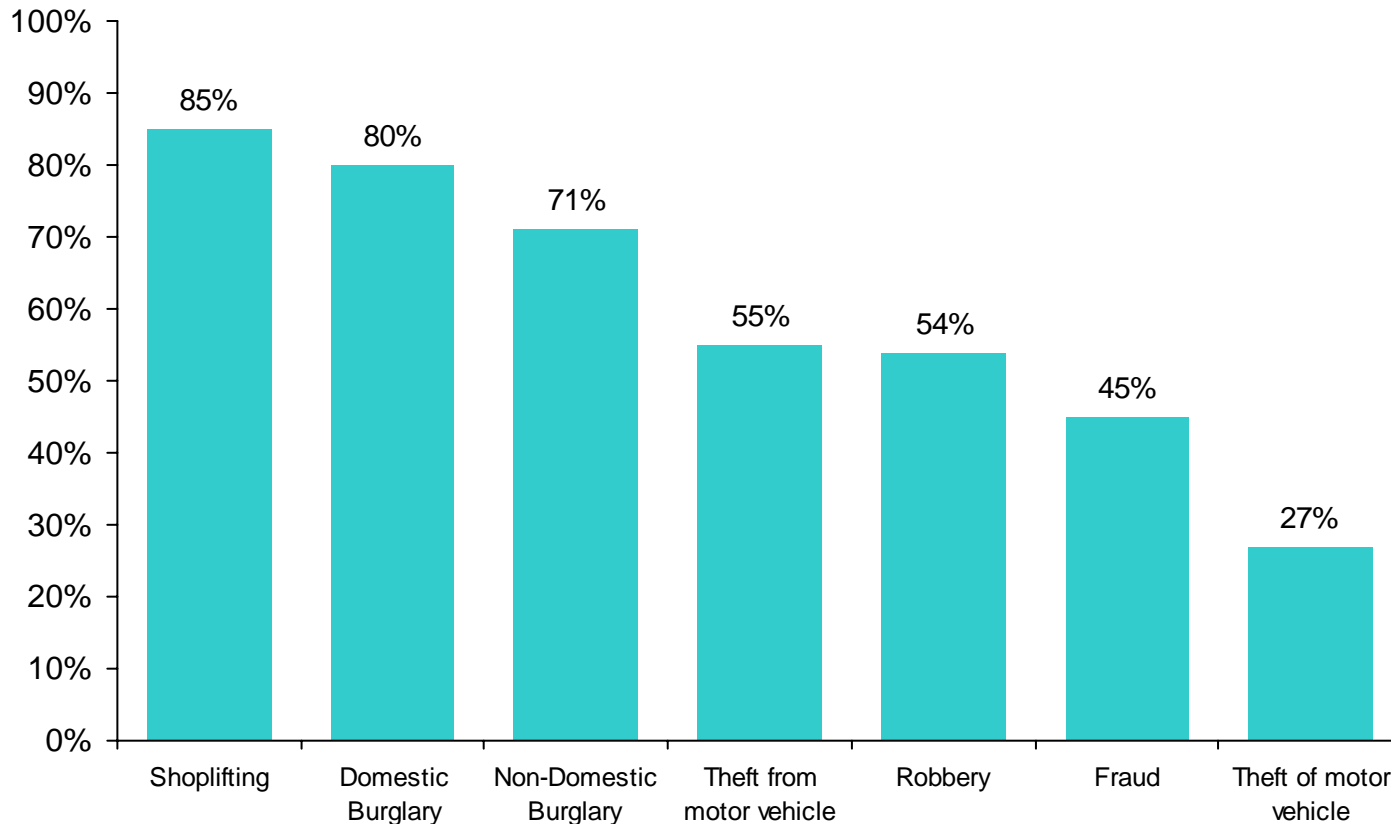
However, drug use is still linked to some violent crime, including ~130 homicides in a year

- While a lower proportion of drug-motivated crimes is high trauma than other categories of crime, a significant number of violent crimes are nonetheless associated with drugs

Stranger & acquaintance violence

Drug-motivated 345,000

Not drug-motivated 1,469,000

Muggings

Drug-motivated 238,000

Not drug-motivated 208,000
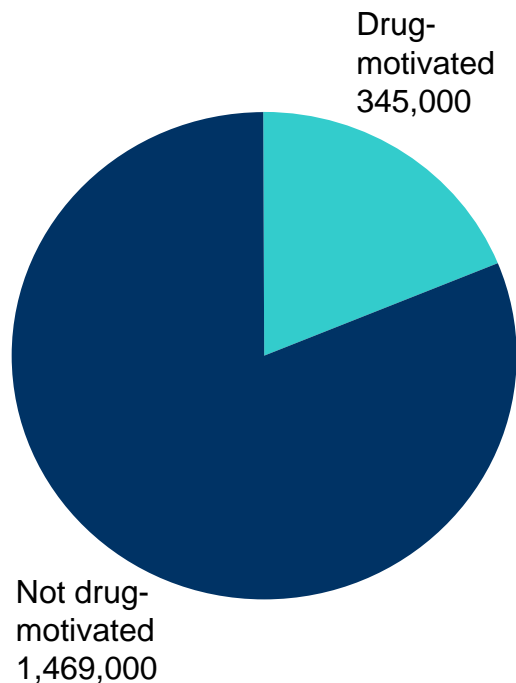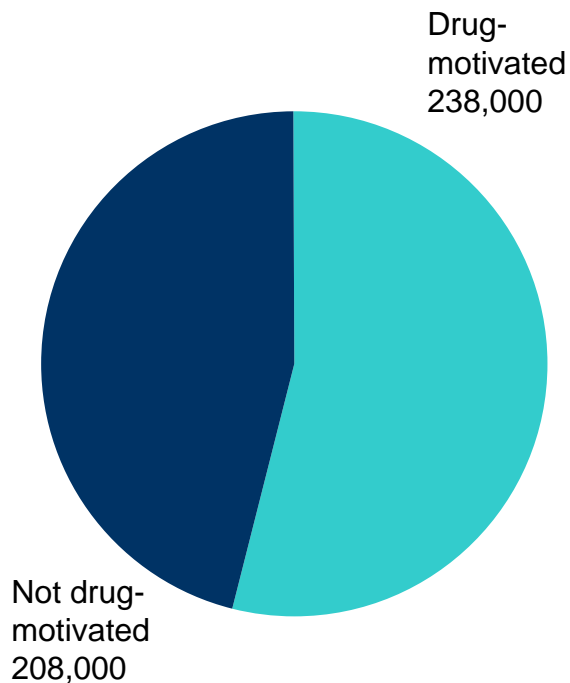
Homicide

Drug-motivated 130

Not drug-motivated 750

Sources: BCS 2001/2; NEW ADAM survey of arrestees 1999-2002; 'Crack and homicide in NYC 1988', P. Goldstein et al, 1989
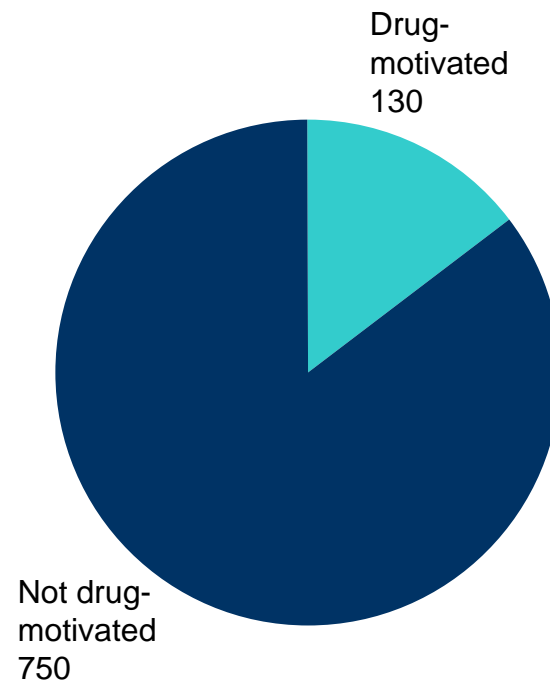
Drug-motivated crime has risen over the last 7 years, while other crime has remained stable or fallen

Changes in drug-motivated and non-drug-motivated crime since 1995*

Index (1995Q1 = 100)
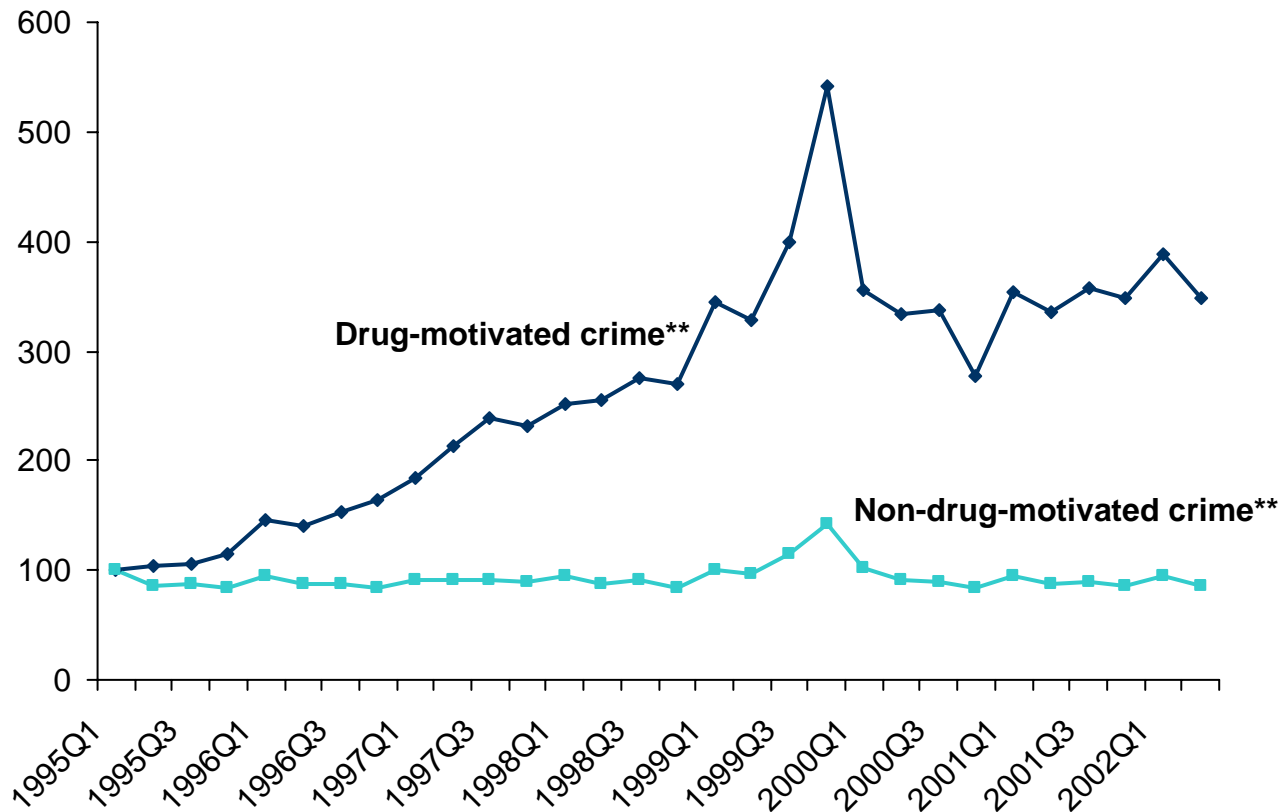
- Home Office work shows that drug-motivated crime has risen, while other crime has remained relatively stable

* NB: analysis based on conviction data which may mirror the efficiency of the CJS rather than actual crimes committed

** Includes acquisitive and violent crimes

Source: 'A volume index for drug-related crime: measurement using individual conviction histories', S. Pudney & C. Goulden, Home Office, not yet published.; the peak in 1999 has not been fully explained but is thought to be due to reporting anomalies.

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Driving under the influence of drugs causes 200 deaths per year - most from opiates, stimulants or a combination

Deaths caused by driving under the influence of illegal drugs each year in England
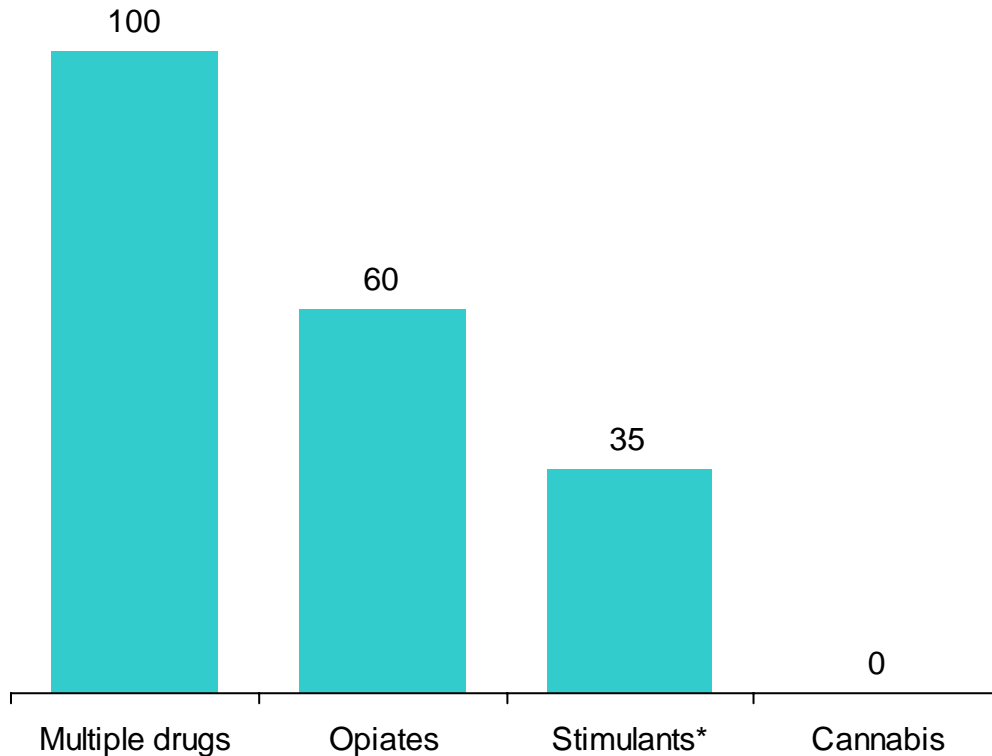
- The pharmacological effect of illegal drugs can impair judgement, so driving while under the influence of illegal drugs can be dangerous

- Different drugs have different effects - extensive tests on cannabis, for example, suggest it is unlikely to cause deaths from driving, though this is not definitive

* including cocaine and amphetamines
Source: Team analysis based on 'The incidence of drugs and alcohol in road accident fatalities' TRL 49, Inquiry into the Effects of Drugs on Road Safety in Victoria, DfT road accident statistics

The 280,000 users of heroin and/or crack are responsible for the vast majority of the cost of drug-motivated crime

Cost of drug-motivated crime by drugs used

£19bn total

Crime motivated by offenders' use of heroin and/or crack £16bn

Crime motivated by offenders' use of drugs other than heroin and/or crack* £3bn
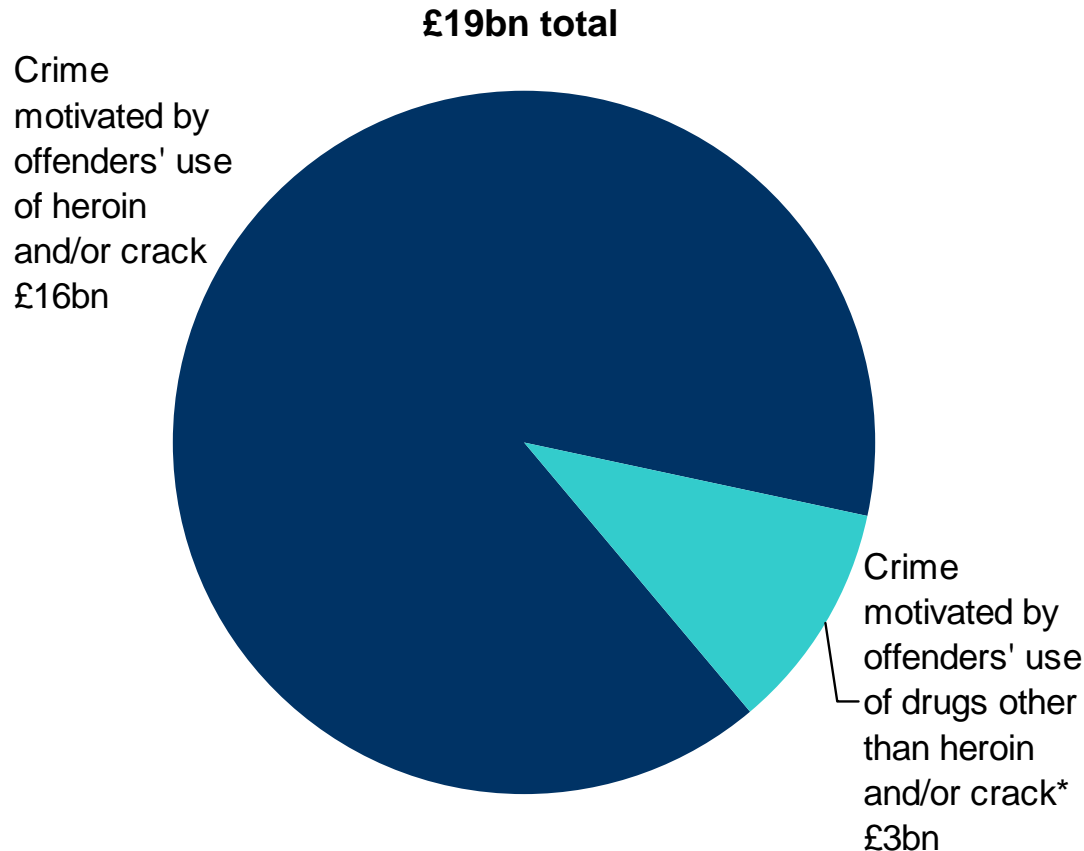
- 280,000 users of heroin and/or crack are responsible for 87% of the cost of drug-motivated crime

- Many heroin and crack users also take other drugs, but it is the use of heroin and crack that drives their criminal behaviour

- Very few people who only use cocaine commit crime as a result of their drug use

* Includes: amphetamines, cannabis, cocaine, ecstasy, LSD and methadone
Source: NEW ADAM, 'Economic and social costs of crime'

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The 120,000 users who take both heroin and crack commit nearly three-quarters of the crime associated with these drugs

Cost of heroin and crack users' crime, by drug(s) used

£16bn total

Crack not
heroin
£1bn

Heroin not
crack
£4bn

Both crack &
heroin
£11bn

Source: Team analysis, NEW ADAM survey of arrestees 1999-2002, 'Economic and social costs of crime'

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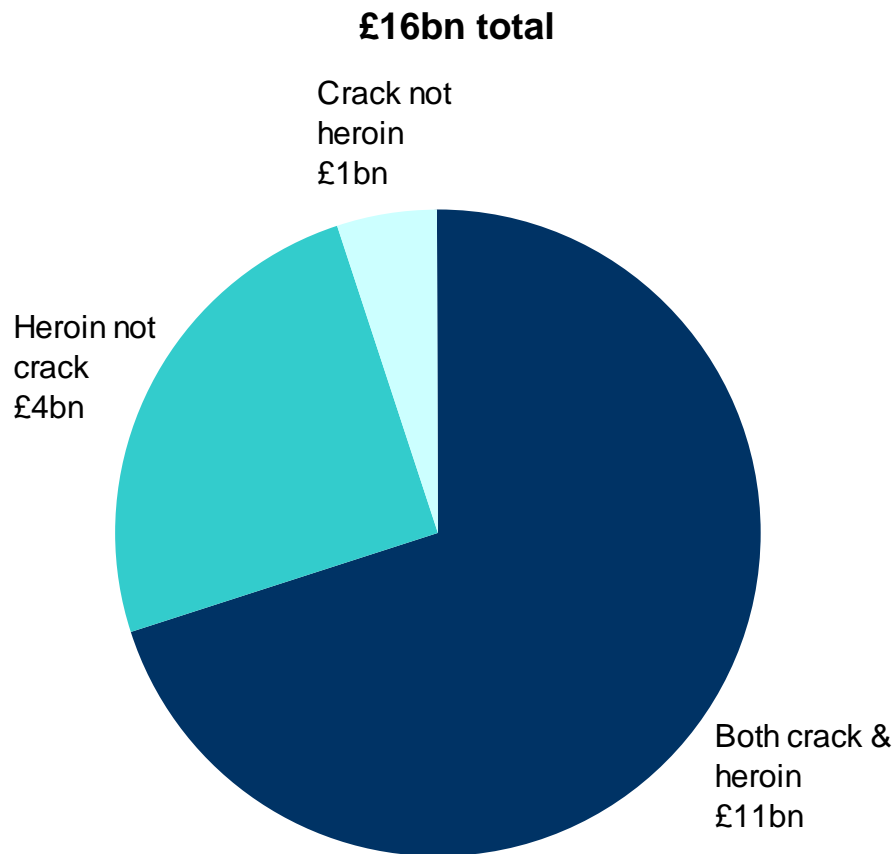
The 30,000 highest offending heroin and/or crack users commit more than half of all drug-motivated crime

Cost of drug-motivated crime, split by top 10% of most offending heroin and/or crack users and by the remainder of drug users

£19bn total

Other drug motivated offenders £8bn

Top 10% of offenders (30,000 users) using heroin and/or crack £11bn
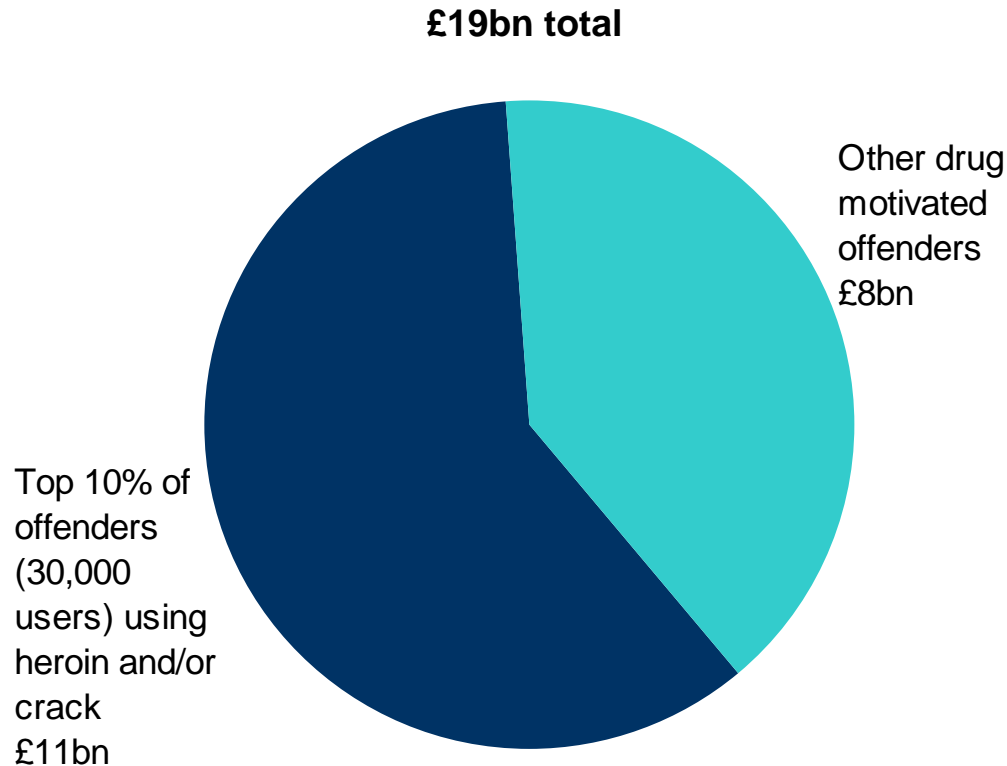
- 30,000 people (10% of heroin and/or crack users) commit:
    - 21m offences per year (an average of 680 offences each per year)
    - around a third of the volume of all crime

- We have not yet identified any characteristics of this group of 30,000 which are significantly different from those of other heroin and/or crack users

- We will do further work to understand this group

The highest offending heroin and/or crack users could be responsible for crime costing over £360,000 per user per year

Estimated cost of crime per user per year
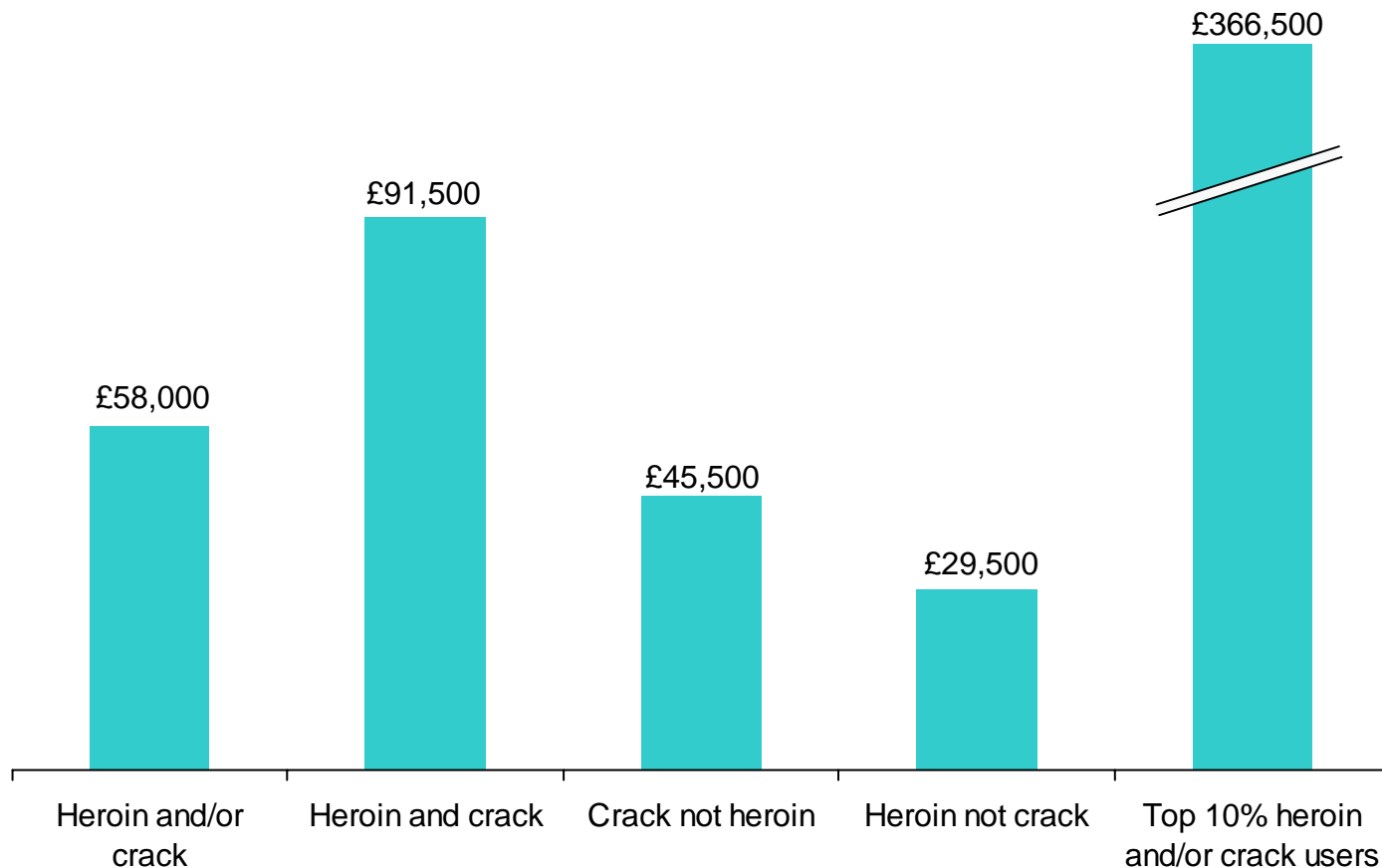
Source: Team analysis, NEW ADAM survey of arrestees 1999-2002, 'Economic and social costs of crime'
NB as before, these exclude crimes of possession or supply of drugs

# Users of heroin and/or crack cause high levels of every kind of harm

	HEALTH harms	SOCIAL FUNCTIONING harms	CRIME harms	TOTAL harms
Heroin and crack users	**High** - users at high risk of overdose and infection from injecting	**High** - daily heroin use and crack binges seriously affect ability to work and care for others	**High** - heroin and crack associated with very high cost of offending	✔ ✔ ✔ ✔ ✔
Crack not heroin users	**Medium** - long term threat of heart disease	**High** - crack binges seriously affect ability to work and care for others	**High** - crack users responsible for high cost of crime	✔ ✔ ✔ ✔
Heroin not crack users	**High** - users at high risk of overdose and infection from injecting	**High** - daily use of heroin seriously affects ability to work and care for others	**Medium** - users commit slightly lower cost of crime than those also taking crack	✔ ✔ ✔ ✔

Source: Team analysis

In comparison, users of other drugs do not cause significant harms

	HEALTH harms	SOCIAL FUNCTIONING harms	CRIME harms	TOTAL harms
Cocaine, amphetamines,	**Medium** - unlikely to cause death, though can lead to cardiac problems and some mental illness	**Medium** - very heavy use may affect ability to work and care for others	**Low** - use unlikely to motivate crime	✔ ✔
Cannabis, ecstasy, LSD	**Low** - unlikely to cause significant health damage	**Medium** - very heavy use may affect ability to work and care for others	**Low** - use unlikely to motivate crime	✔

Source: Team analysis, from previous sources

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Users of heroin and/or crack are by far the drug users who cause the most harm, both to themselves and to society

Scale of crime, health and social harms caused by the users of different drugs to themselves and to society
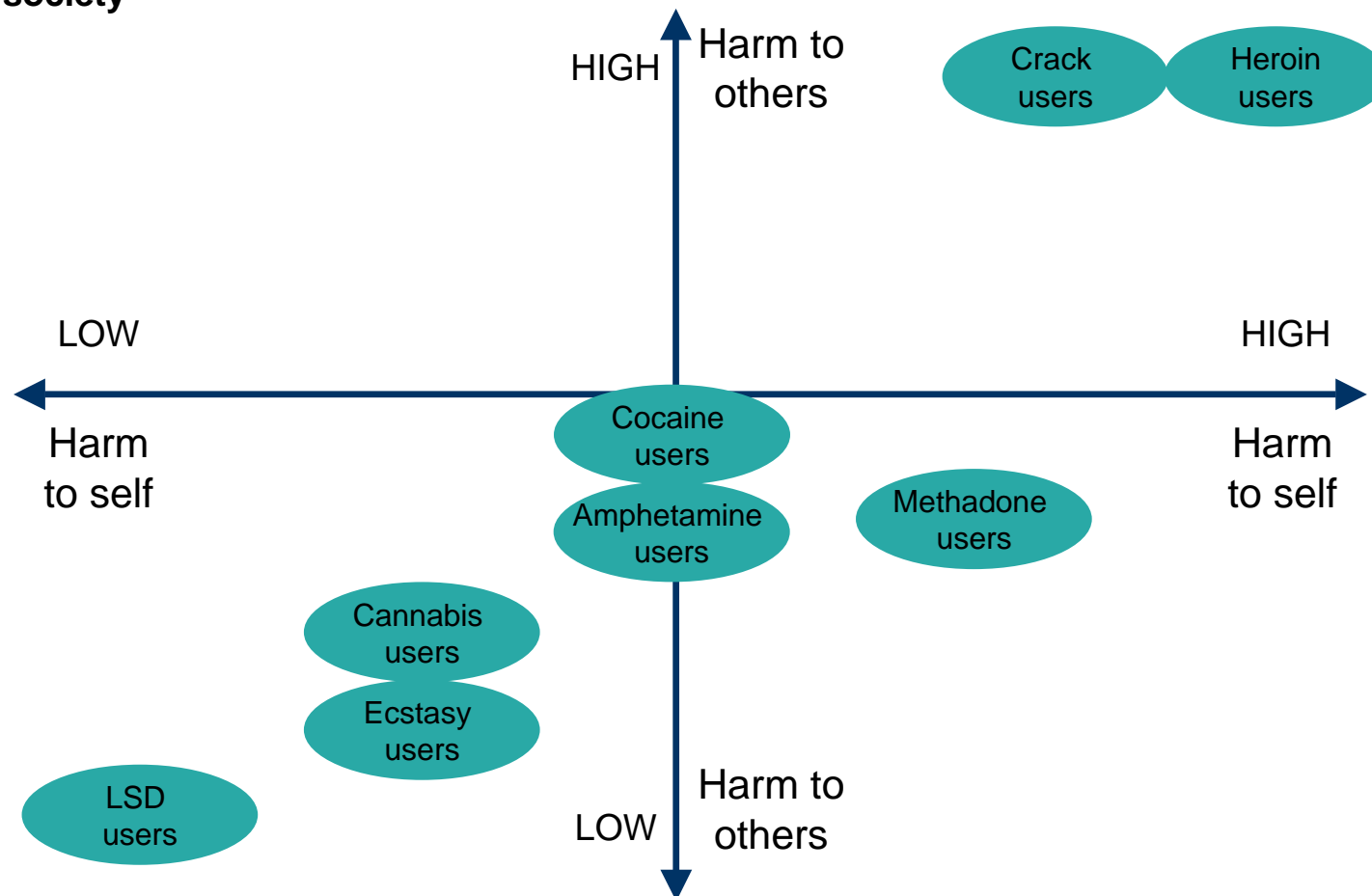
- Our subsequent analysis will focus on heroin and/or crack users as they are the 'high harm causing users'

- This analysis supports the emphasis of the government Drugs Strategy

Source: Team analysis

35

The total cost of all harms caused by heroin and/or crack users is £21bn, with crime harms by far the most costly

Harms caused by heroin and/or crack users per year
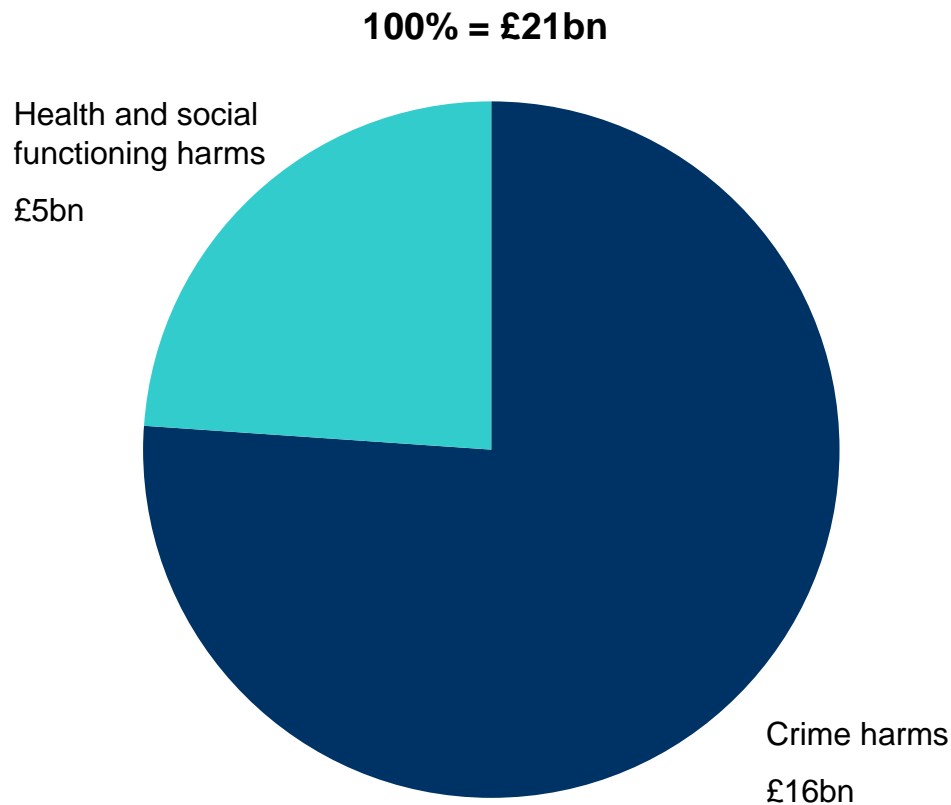
100% = £21bn

Health and social functioning harms

£5bn

Crime harms

£16bn

Source: Team analysis

The use of high harm causing drugs has risen dramatically over the last 30 years

**Dependent opiate and cocaine users known to treatment services, by year**

Legend:
- Addicts notified to HO
- Number in treatment
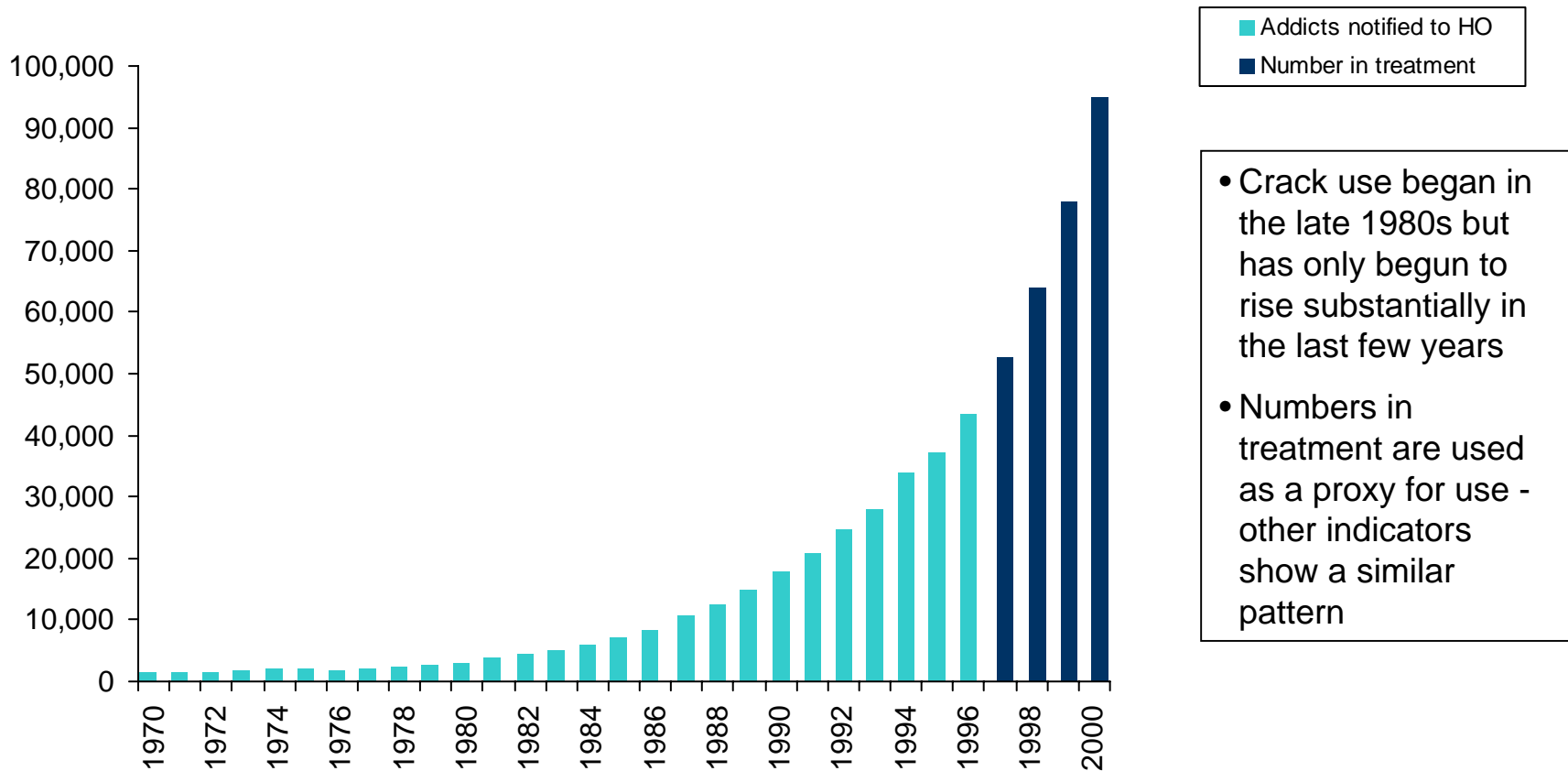
- Crack use began in the late 1980s but has only begun to rise substantially in the last few years

- Numbers in treatment are used as a proxy for use - other indicators show a similar pattern

Sources: Home Office Addicts Index, Regional Drugs Misuse Treatment Databases. NB it is not possible to separate opiates from cocaine.

There are an estimated 280,000 high harm causing drug users in England

OPIATE AND CRACK USERS

136,000 — Heroin not crack**

Crack and heroin** → **120,000**

22,000 ← Crack not heroin
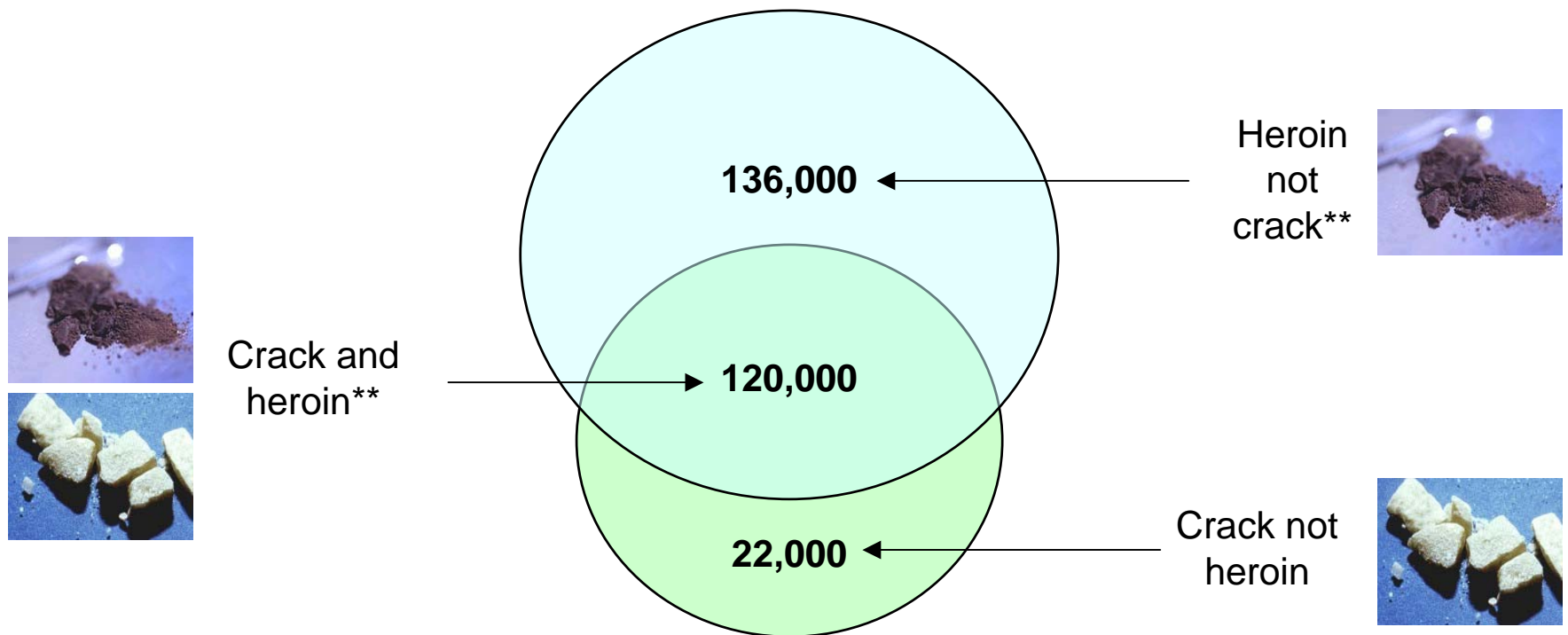
In addition, there are 15,000 ex-high harm causing users in prison who are likely to relapse on release

N. B. This estimate has a range of 200,000-400,000
** Includes other opiates such as methadone being used in treating users
Source: Team analysis, DH treatment statistics, NEW ADAM, Arrest Referral statistics

The 280,000 high harm causing drug users are more likely to be found in deprived urban centres

Health authority areas in England with the highest and lowest proportions of high harm causing users
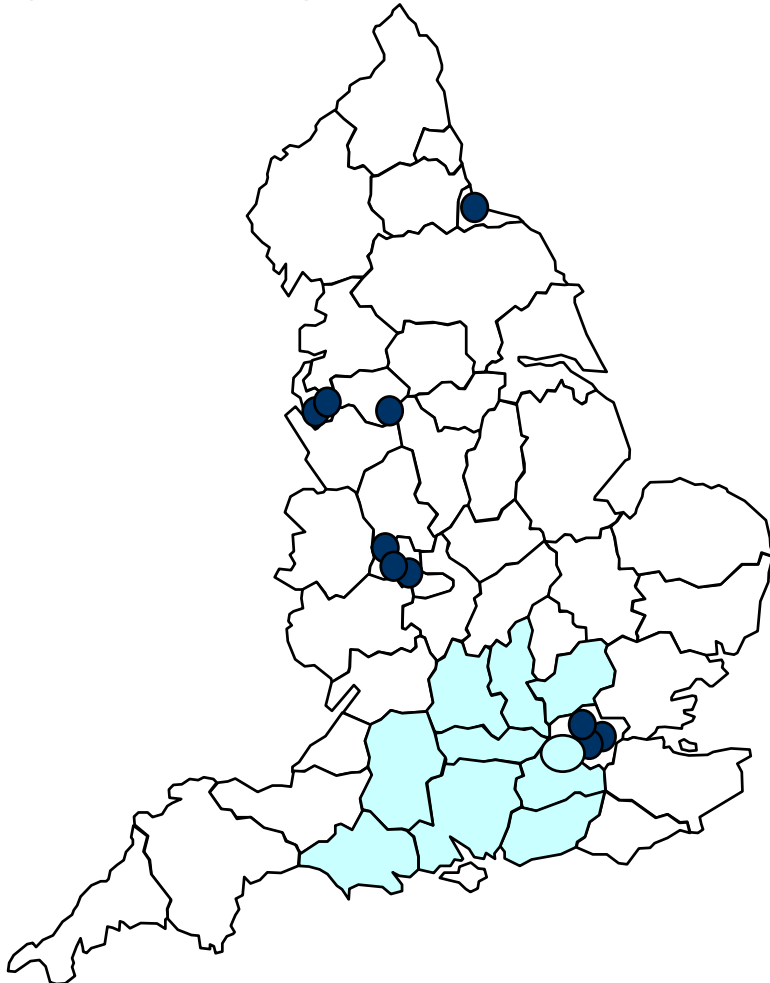
Highest ten areas (problem drug users per 1000 population 15-44 yrs)			
Liverpool	31	Tees	25
E London	31	St Helen's	24
Manchester	28	Wolverhampton	23
Lambeth	25	Camden & Islington	22
Birmingham	25	Sandwell	22

Lowest ten areas (problem drug users per 1000 population 15-44yrs)			
East Surrey	4	Buckinghamshire	6
West Surrey	4	Hertfordshire	7
N and Mid Hants	5	Berkshire	7
Oxfordshire	6	Kingston & Richm'd	7
W Sussex	6	Wiltshire	7

Source: Team analysis based on University of York formula for allocating resources for dealing with drug misuse.
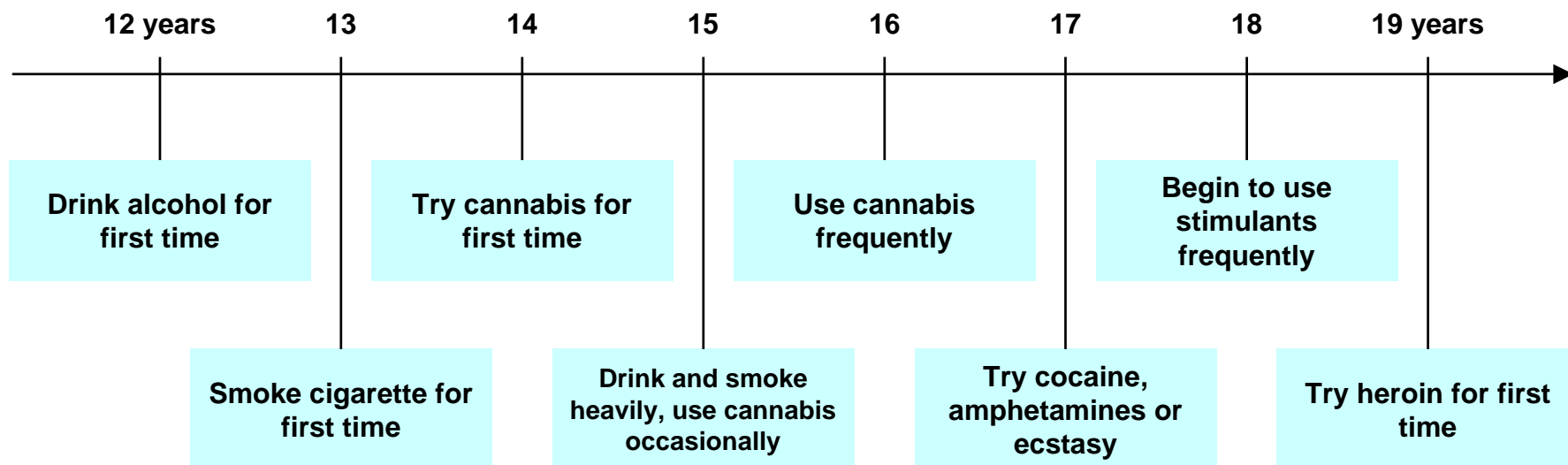
High harm causing users share many characteristics, though there are some differences

Indicative pictures of users

		AGE/ GENDER/ ETHNICITY	TREATMENT HISTORY	CRIMINAL JUSTICE HISTORY
Heroin and crack users		25 up Male White	Been in treatment several times, probably for heroin use, which started before crack use	Multiple arrests and spells in prison for short periods. Possibility of one or two longer sentences for violent crime
Crack not heroin users		20 up Male Disproportionately black	Unlikely to have spent much time in treatment	Multiple arrests and spells in prison for short and long periods
Heroin not crack users		20 up Male White	Been in treatment several times	Multiple arrests and spells in prison for short periods

High harm causing drug users share risk factors with young offenders and tend to drink and smoke before taking drugs
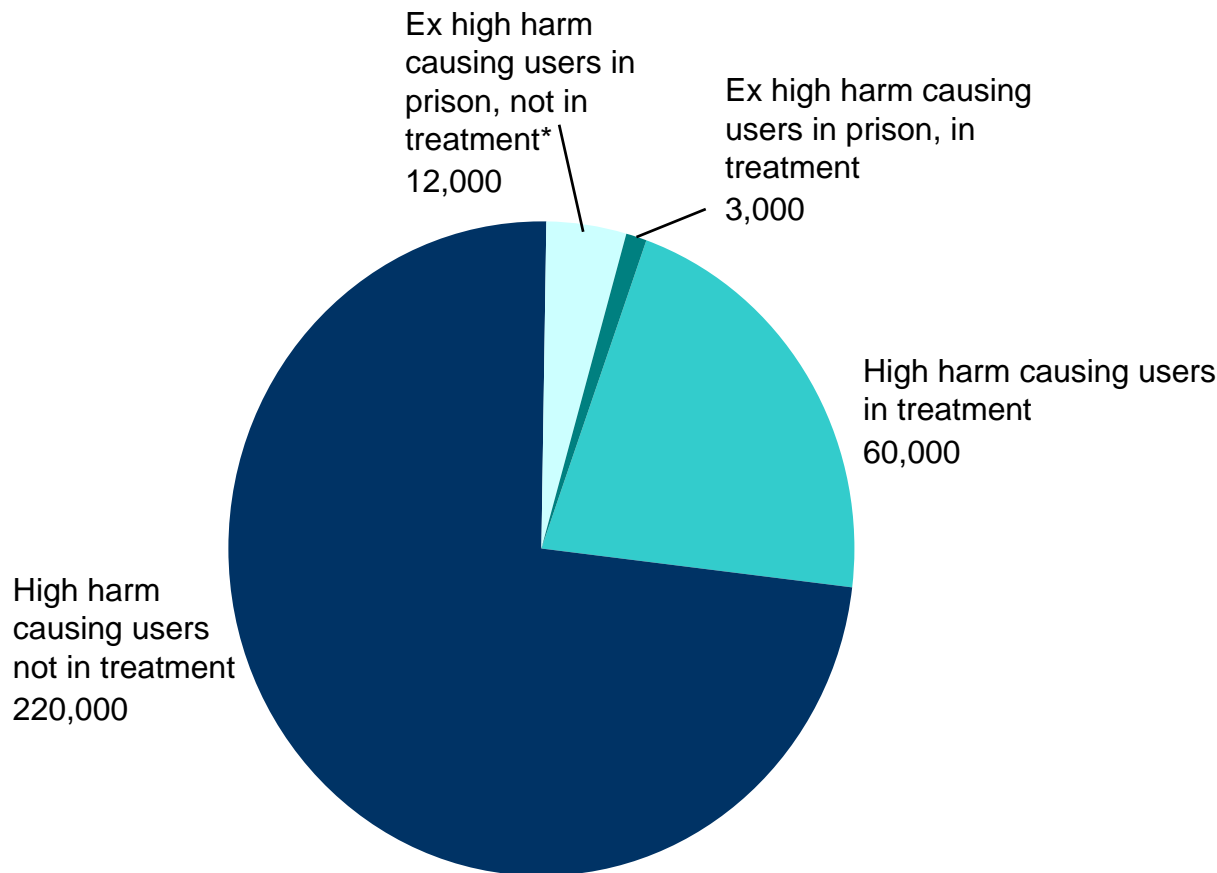
Indicative pattern of drug use

12 years	13	14	15	16	17	18	19 years

Drink alcohol for first time

Try cannabis for first time

Use cannabis frequently

Begin to use stimulants frequently

Smoke cigarette for first time

Drink and smoke heavily, use cannabis occasionally

Try cocaine, amphetamines or ecstasy

Try heroin for first time

- Family background - and specifically family conflict - is a key risk factor for heavy drug use
- Socioeconomic background can contribute to family risk factors such as conflict and also makes it more likely young people will come into contact with drugs
- These risk factors lead initially to young offending, which almost always precedes early experimentation with less harmful drugs such as cannabis, followed by heavy use of heroin and/or crack
- While light use of recreational drugs always precedes heavy use of heroin and/or crack, the key indicators for heavy use later are family background, criminal behaviour and recreational drug use in early to mid teens

At any one time, over 220,000 high harm causing drug users are *not* engaged in treatment

Snapshot of high harm causing users' interaction with treatment

Ex high harm causing users in prison, not in treatment*
12,000

Ex high harm causing users in prison, in treatment
3,000

High harm causing users in treatment
60,000

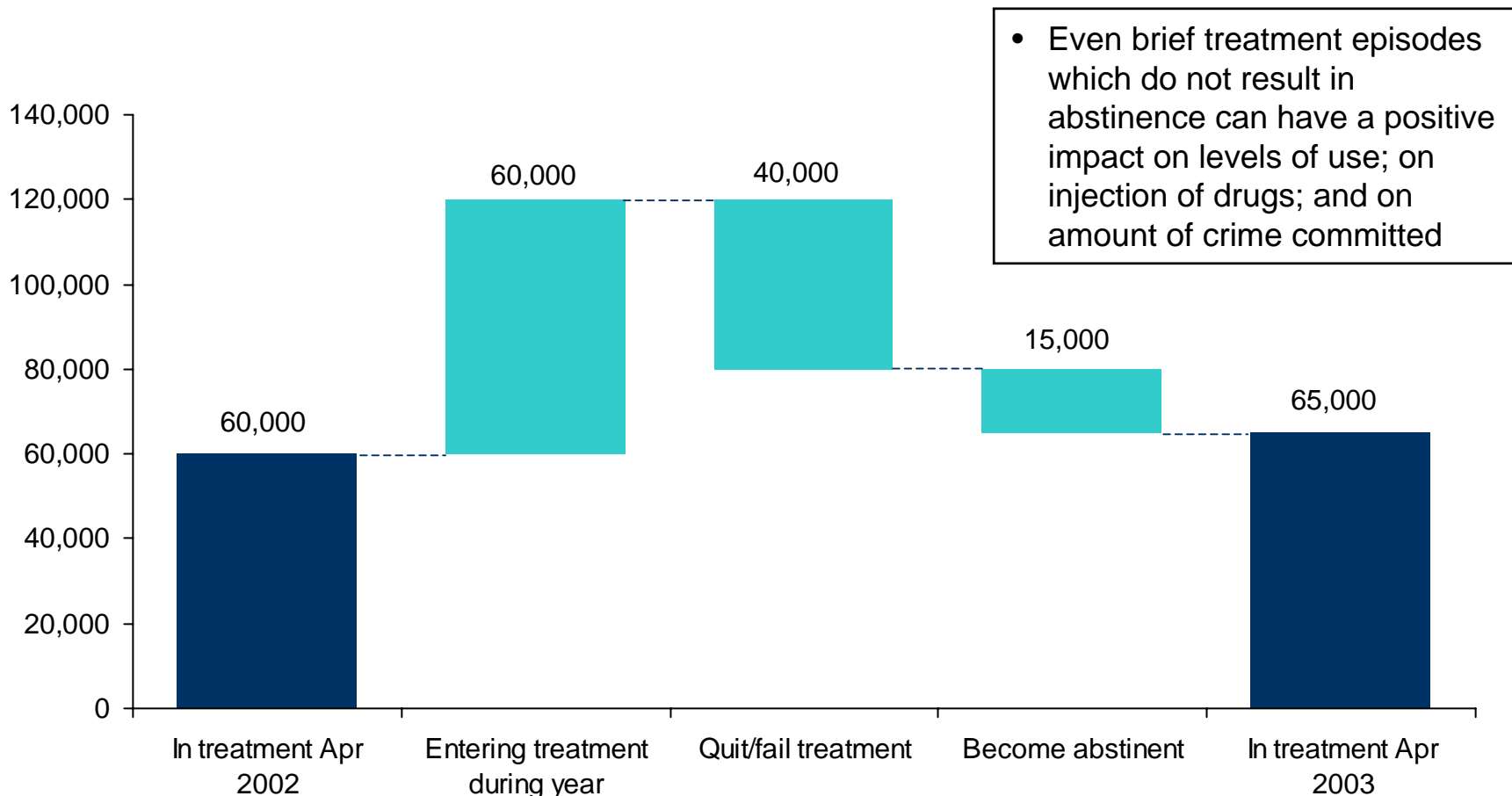High harm causing users not in treatment
220,000

- Treatment outside prison can take place in the community or in residential settings

- Community interventions include methadone maintenance or weekly counselling

- Residential treatment includes detoxification and/or intensive counselling/therapy

* Included because a high proportion are likely to re-use on release
Source: Team analysis based on DH Treatment statistics, Home Office Prison statistics and Probation statistics, 2002

Less than half of high harm causing drug users engage with treatment each year

High harm causing users in treatment, entering treatment and moving out of treatment during the course of a year

- Even brief treatment episodes which do not result in abstinence can have a positive impact on levels of use; on injection of drugs; and on amount of crime committed

Source: Team analysis based on Regional Drug Misuse Database and others

# A particularly low proportion of crack users are engaged in treatment

Percentage of users in treatment at any one time, according to drug/s used
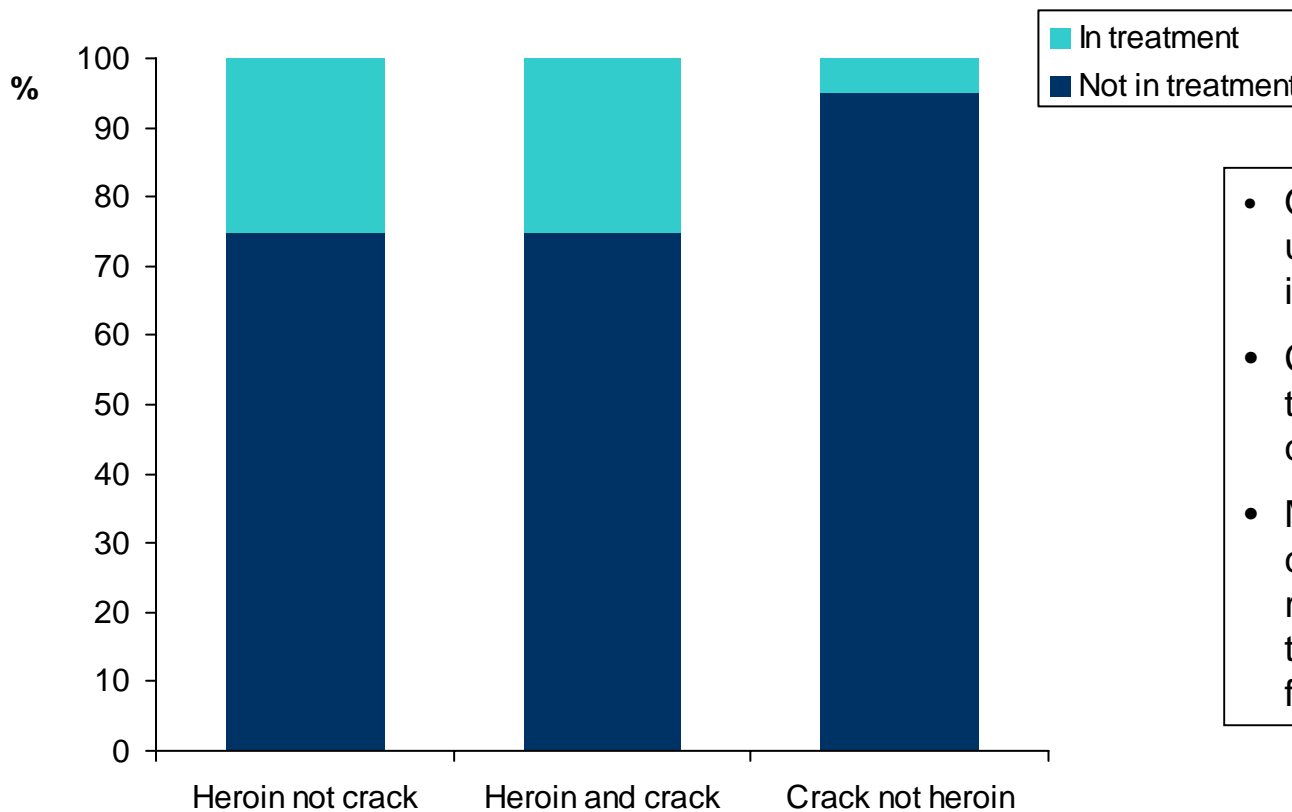
- Only ~1,000 crack-only users (5% of whole) are in treatment

- Crack use can be difficult to treat and capacity is currently very limited

- Many of the heroin and crack users will be receiving treatment for their heroin use but not for their crack use

Source: Team analysis based on previous analyses and DH treatment statistics

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High harm causing drug users engage frequently with the criminal justice system - nearly half are arrested every year

High harm causing users arrested in the course of a year

280,000

130,000

High harm causing users
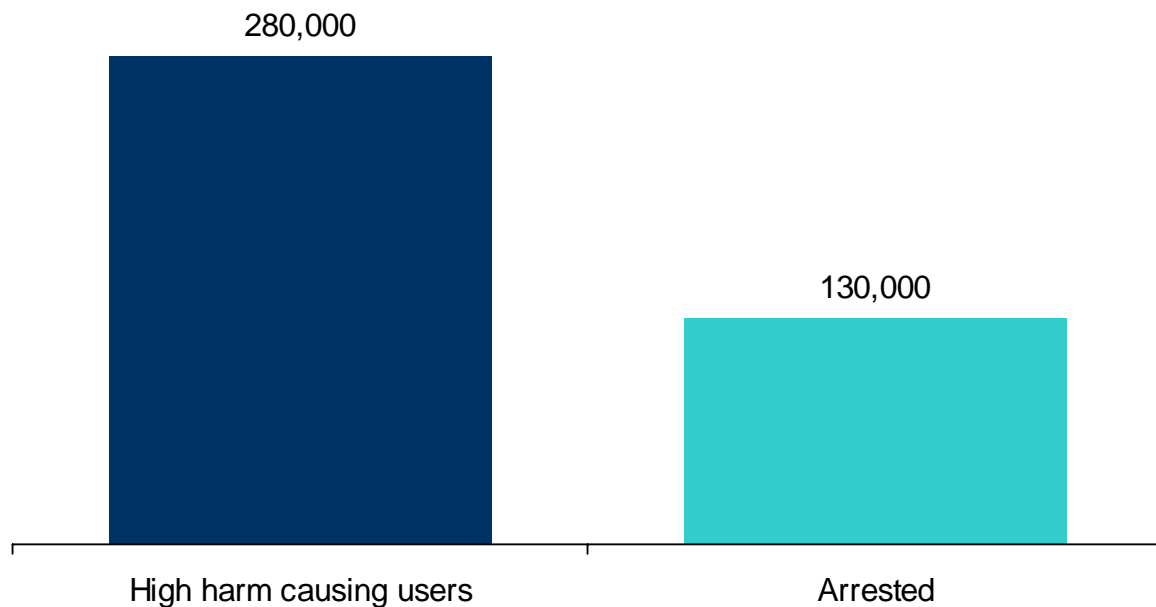
Arrested

- Crack users - especially those who do not use heroin as well - are much more likely to be arrested than other high harm causing users

Source: Team analysis based on NEW ADAM

Of high harm causing drug users arrested, less than 1 in 5 are referred to treatment - and less than 1 in 25 actually attend

High harm causing users referred to treatment through Arrest Referral

130,000

20,000

5,000

High harm causing
users arrested

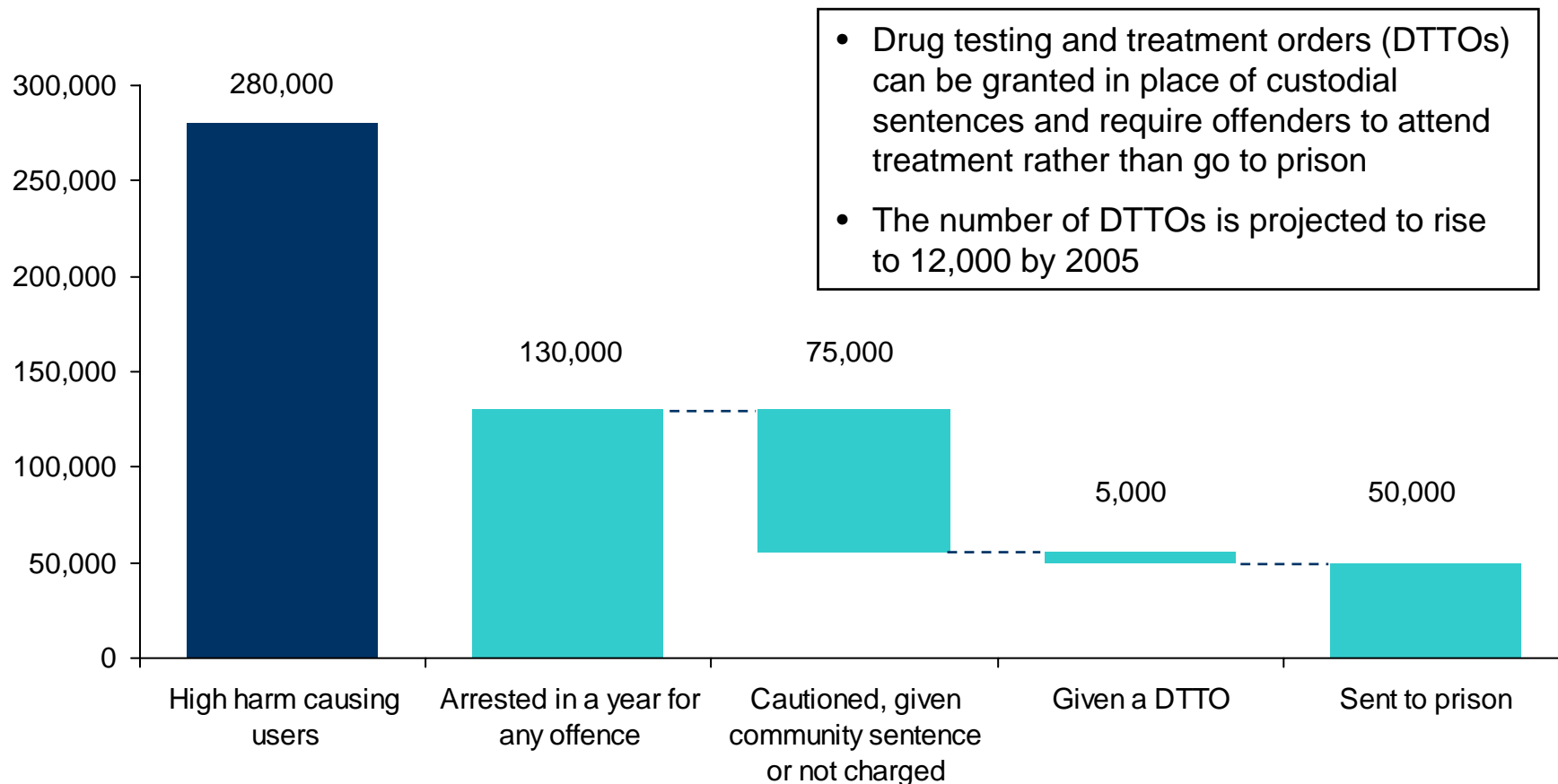Referred to
treatment

Engage with
treatment services
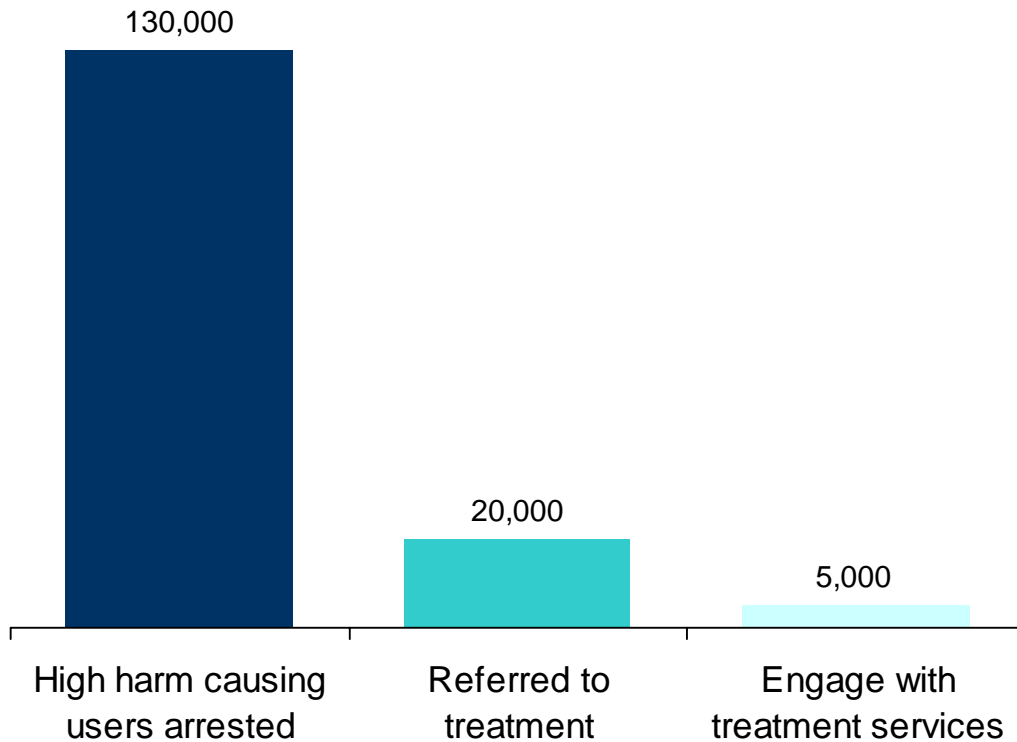
- Arrest Referral is an informal system which aims to identify drug users among arrestees and refer them to treatment

- Arrestees are assessed for drug dependence by interview

- Drug testing of those arrested for a 'trigger offence'* is currently being rolled out to 30 BCUs. It is intended to identify more users among arrestees, and identify users with greater certainty

- Currently there are no sanctions if the arrestee does not engage with treatment after referral. However, the Criminal Justice White Paper suggests that those not taking up treatment should not be bailed

* 'Trigger offences' are those typically linked to drug use, e.g. mugging, shoplifting, drugs offences, burglary
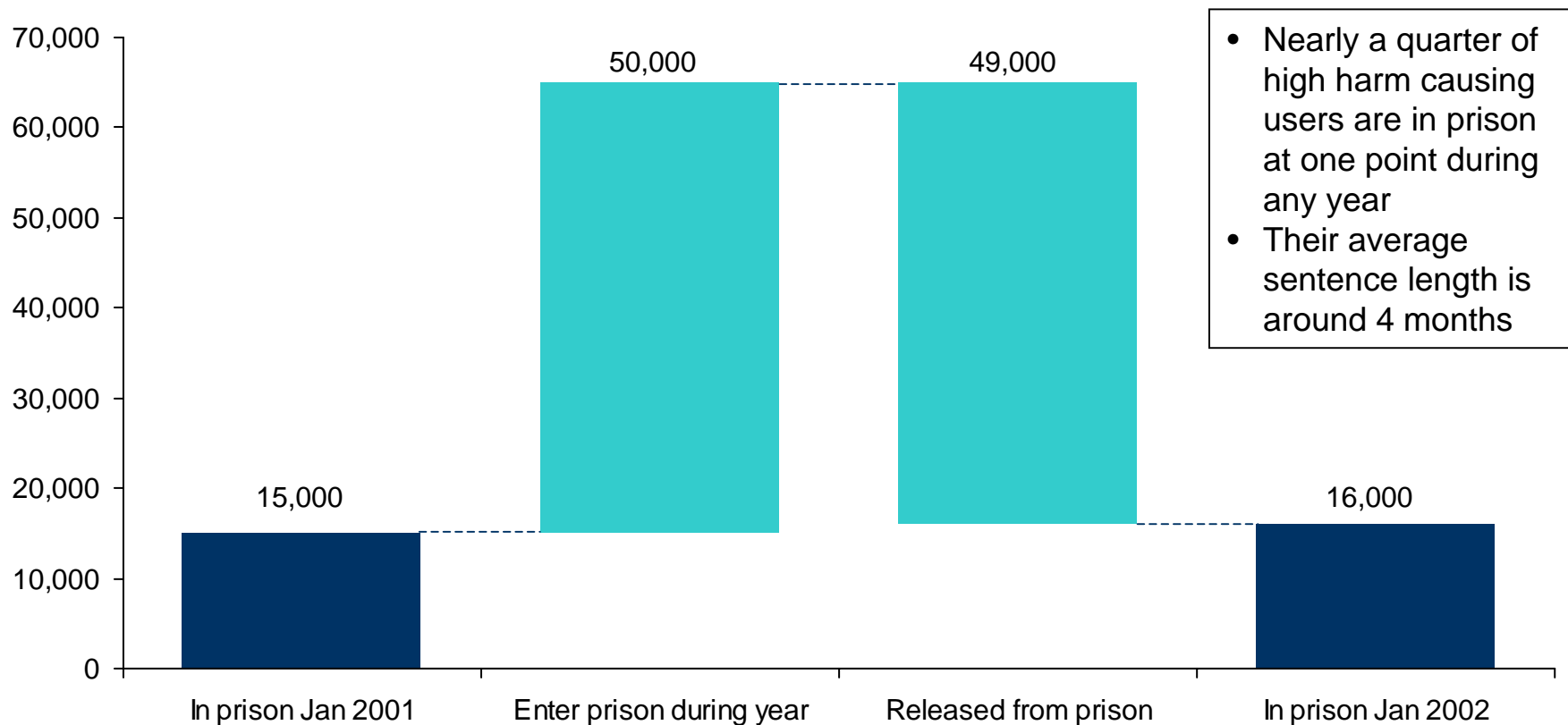Source: Arrest Referral Statistical Update 2001

Only 5,000 high harm causing drug users receive a sentence each year specifically addressing their drug use

High harm causing users passing through the criminal justice system in the course of a year

- Drug testing and treatment orders (DTTOs) can be granted in place of custodial sentences and require offenders to attend treatment rather than go to prison

- The number of DTTOs is projected to rise to 12,000 by 2005

Chart values:
- High harm causing users: 280,000
- Arrested in a year for any offence: 130,000
- Cautioned, given community sentence or not charged: 75,000
- Given a DTTO: 5,000
- Sent to prison: 50,000

Source: Team analysis based on NEW ADAM and Home Office Prison statistics

Many high harm causing users enter prison each year, and most leave again within a year

High harm causing users in prison, entering prison and leaving prison during a year

- Nearly a quarter of high harm causing users are in prison at one point during any year
- Their average sentence length is around 4 months

Source: Team analysis, based on Prison statistics 2001, NEW ADAM, ONS Psychiatric Morbidity of Prisoners 1998, Criminality Survey 2000

Of high harm causing users entering prison, a minority have access to specialised treatment

High harm users entering prison in a year with access to specialist treatment units

Entering prison with access to treatment
10,000

Entering prison without access to treatment
40,000
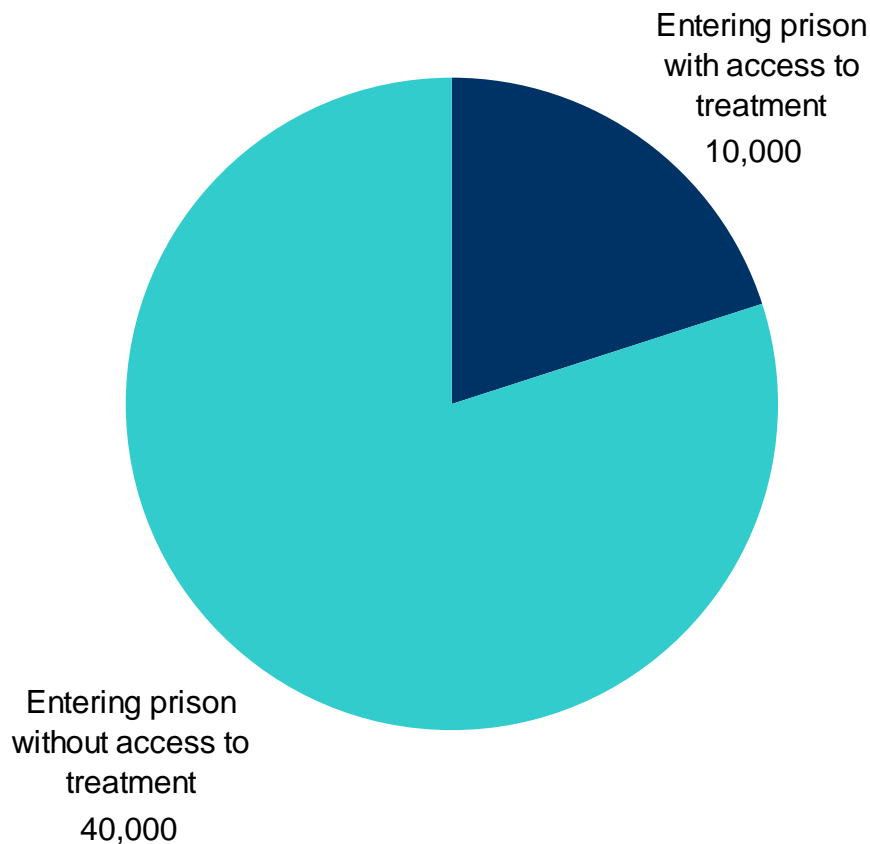
- Prisoners are assessed for health needs on arrival in prison, including drug problems

- Most high harm users are imprisoned for minor offences and short periods; as a result they are most likely to enter local prisons - which are less likely than higher security prisons to have specialist drug treatment services
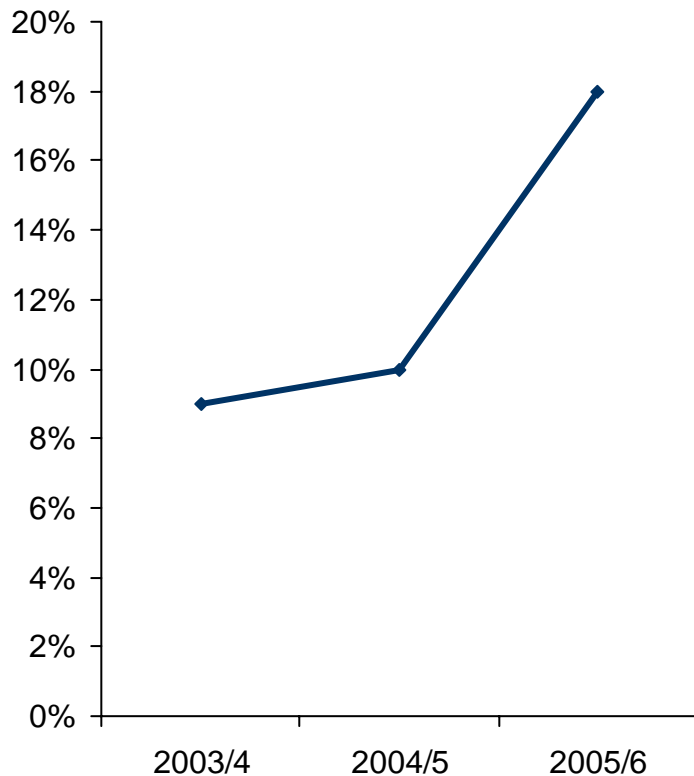
Source: Team analysis, based on analysis for previous slide plus NAO and SEU Reducing Reoffending reports, 2002.

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In sum, the majority of high harm causing users have contact with treatment or criminal justice each year - but a third do not

Interactions of high harm causing users with the treatment and criminal justice system over the course of a year

All high harm causing users
280,000

Arrested (not sent to prison) 80,000

Arrested (and in treatment) 25,000

In treatment (community and residential) 120,000

In treatment (and in prison) 40,000

Arrested (and sent to prison) 50,000

In contact with treatment and/or criminal justice over the course of a year 185,000

Not in contact with treatment or criminal justice 95,000
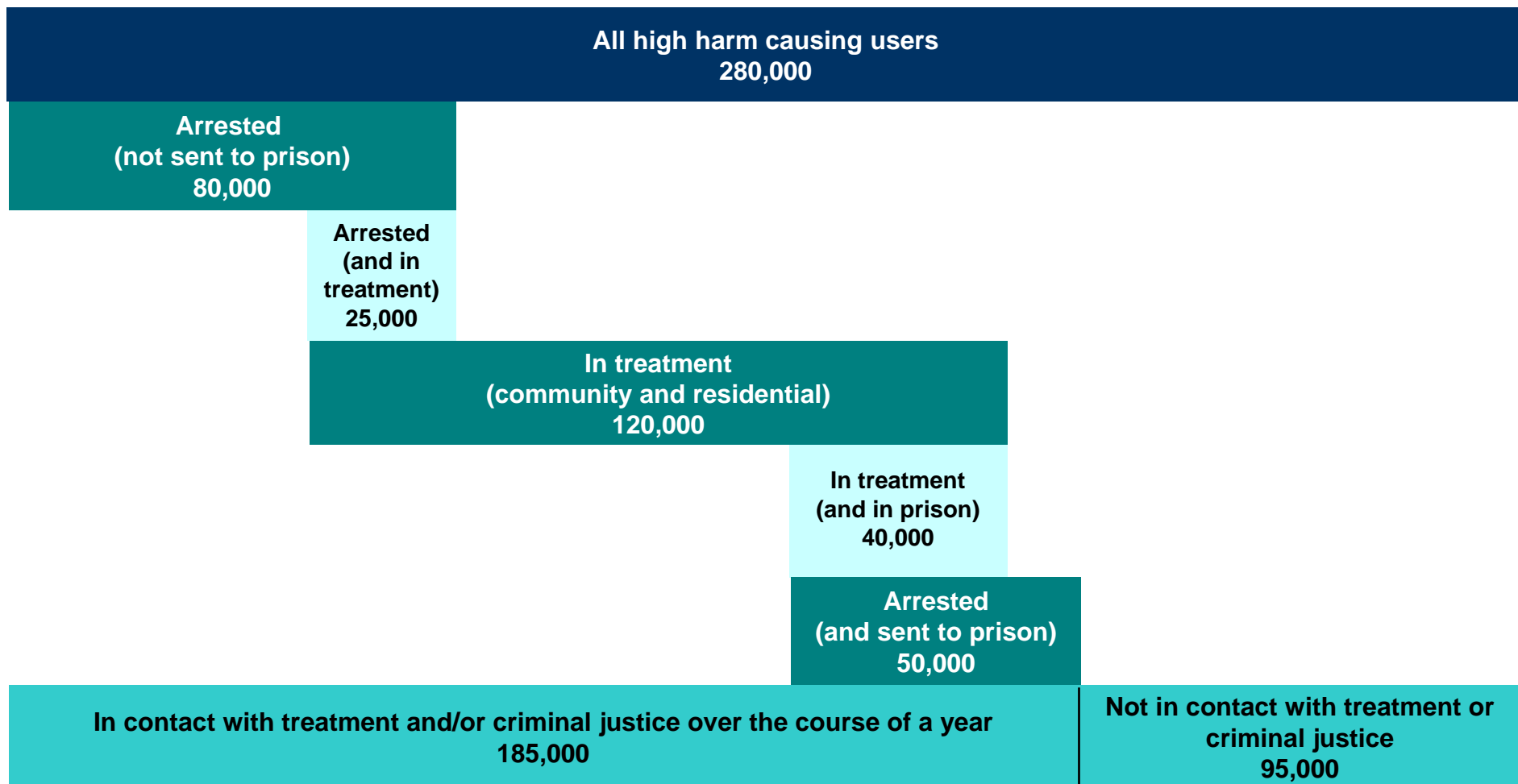
Planned additional treatment capacity may be insufficient to deal with the scale of high harm causing use

Cumulative real growth in treatment resources from 2002/3, by year

- Treatment resources come from two sources: a ringfenced budget (the pooled treatment budget) and mainstream budgets (e.g. NHS, local authorities)
- Over the Spending Review period the pooled treatment budget will increase by 57% in cash terms
- But over the same period funding from mainstream treatment budgets is projected to remain roughly constant
- After allowing for price increases, total treatment resources will increase by around 18% over the period 2002/3 - 2005/6
- The picture is far from uniform across the country: the increase in resources will vary widely

However:
- Current treatment capacity appears to be well below need
- The mismatch is particularly acute for crack users who cause disproportionate harm
- The effectiveness and efficiency of treatment services and the scope for their expansion and improvement will be examined in Phase 2

Source: NTA, Team analysis

Main conclusions on drug consumption

THE DRUGS

- Heroin and crack are the most addictive drugs, and some of the most expensive

THE HARMS

- Drug use (especially of heroin and crack) damages health and quality of life
- Drug use causes users to commit crime
    - heroin and/or crack users commit most crime
    - the worst offenders use heroin and crack in combination

THE USERS

- The vast majority of heroin and/or crack users are not in prison or in treatment at any one time
- Two-thirds of high harm users will come into contact with treatment and/or criminal justice in the course of a year
- When users do come into contact with services
    - they do not engage for long
    - they are not identified and dealt with as users

Summary of analysis of the drugs supply market

Production

- Interventions to reduce production are complex, time-consuming and expensive to achieve. They often result in displacement of production elsewhere

Trafficking

- Traffickers have adapted effectively to government interventions. They run highly profitable businesses and can withstand temporary shocks to their profitability. Interventions have been short-lived or have had a negligible impact on the retail market

Money laundering

- Cash is of critical importance for traffickers, but the money laundering business has become increasingly sophisticated and difficult to disrupt

UK market

- The UK drugs business is highly fluid; dealers manipulate purity and alter the weights sold to maintain revenue

Impact of intervention

- Even if supply interventions did successfully increase price, the evidence is not sufficiently strong to prove that this would reduce harm. However, shortages in local availability when they do occur can influence short-term demand and drive users into treatment

Poverty often leaves farmers in drug growing regions few options but to grow illicit crops

Poverty and weak agricultural sectors in drug-growing regions leave farmers with a lack of viable alternatives that can match illicit crop returns:

- Coca bush and poppy are amongst the few crops that grow successfully on the poor quality land available to farmers

- High population densities and a lack of non-agricultural opportunities provide plentiful manpower for the labour-intensive cultivation process

- Farmers often have no access to licit markets that offer stable or reliable cash incomes, as in the northern Highlands of Thailand before intervention

- There is typically limited (or costly) access to the infrastructure necessary to transport alternate crops or products to markets

- There is a lack of knowledge about how to grow other crops productively
  - Plan Colombia found that some farmers were using outdated growing techniques that limited productivity and therefore viability

Source: UNODC, team analysis

Additional factors beyond poverty have also helped to entrench farmers' cultivation of illicit crops

A range of additional factors help drive cultivation patterns:

- Debts denominated in illicit crops force farmers into an ongoing crop cultivation cycle
  - landlords and drug traders extend credit to farmers, such as in Afghanistan
  - this credit must usually be paid back in harvested opium and so even if the farmers were able to raise cash, they would still be tied into growing the crop
  - illicit crops can become the only reliable means of exchange
    - this forces farmers to grow the crop just to buy the goods necessary for survival

- A lack of access to land forces farmers to grow illicit crops
  - due to the profits that they can make, landowners only lease land if tenants agree to cultivate illicit drug crops
  - illicit crops are in any case often well-suited to the terrain and the workforce

- Cultural factors support the production of illicit crops
  - widespread consumption of drugs in producer areas is traditional
  - in Bolivia, cultivation for personal use is legal

- Powerful interests drive continued production of illicit crops
  - farmers and their families can face violence from drug traders if they try to stop growing illicit crops (as seen in the Andean area)
  - officials corrupted by drug traders have an interest in hindering alternative incomes for farmers

Source: Team analysis

Western influence in production areas is limited because a drugs economy thrives where the rule of law has failed, or where international norms have been breached

**Typical conditions in major drug-producing countries**

- Large-scale drug cultivation often occurs in weak or failing states, and is enabled by the interaction of several related political factors
  - a lack of central government control in key production areas
  - the presence of anti-government movements
  - widespread corruption of individual officials or whole sectors of the government apparatus
- Organised trafficking groups take advantage of this breakdown of the rule of law by
  - working closely with anti-government groups or individuals
    - FARC in Colombia are connected to major Colombian traffickers
    - influential governors in Afghanistan support, and profit from, traffickers' activities
  - working with corrupt elements in the government, or actively bringing about that corruption to subvert law enforcement
    - the embedding of criminality within parts of the government is particularly difficult to remove
- 'Pariah states' can be directly implicated in the large-scale production of drugs, e.g., the Taleban

Failing states

- Drugs lock countries into a vicious spiral leading towards state failure
  - whilst the breakdown of the rule of law is a necessary factor for widespread drugs cultivation, the profits of the drugs industry themselves drive further political destabilisation

Drug crop eradication alone appears not to limit illicit crops in the long term

Manufacture of cocaine*

Metric Tonnes

Legend:
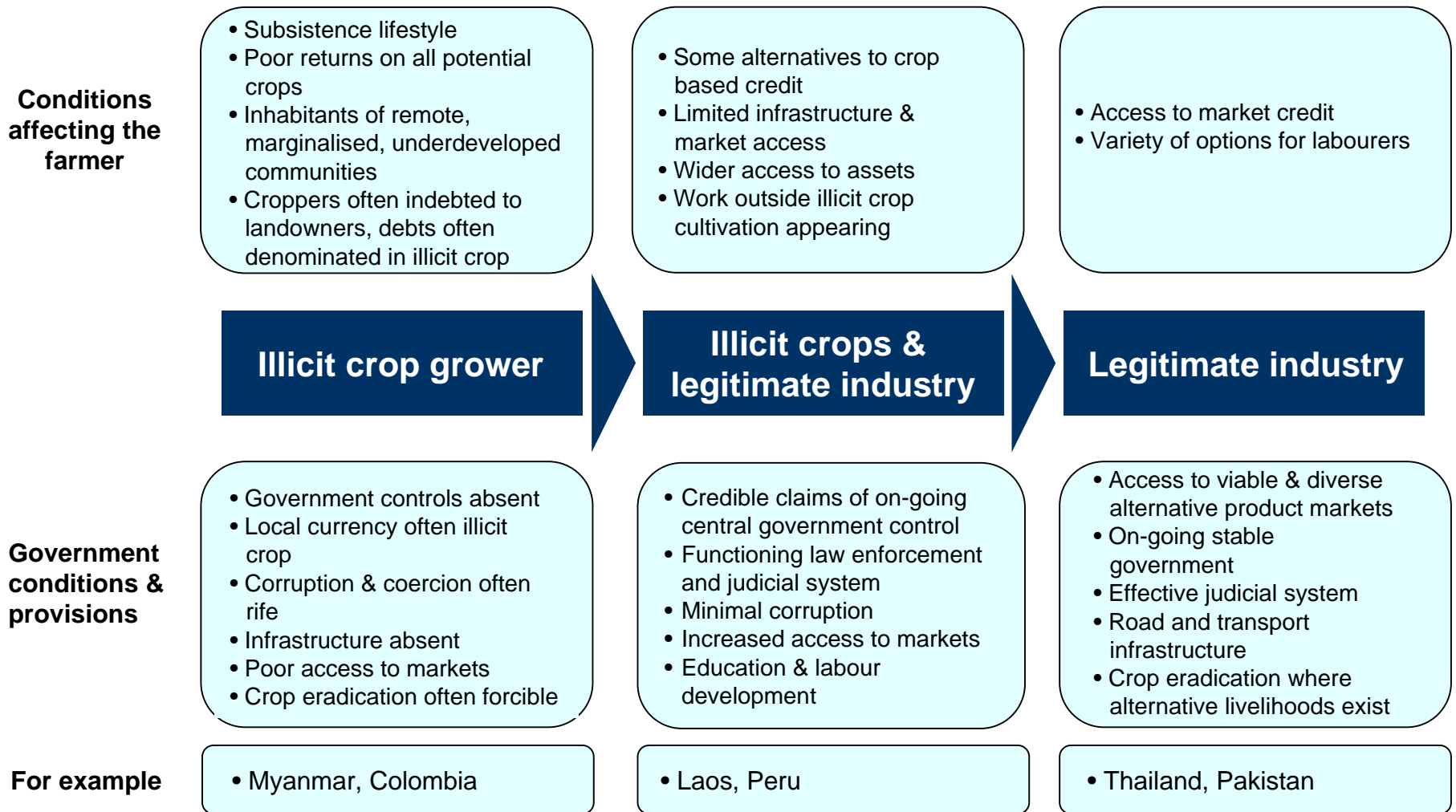- Colombia
- Bolivia
- Peru
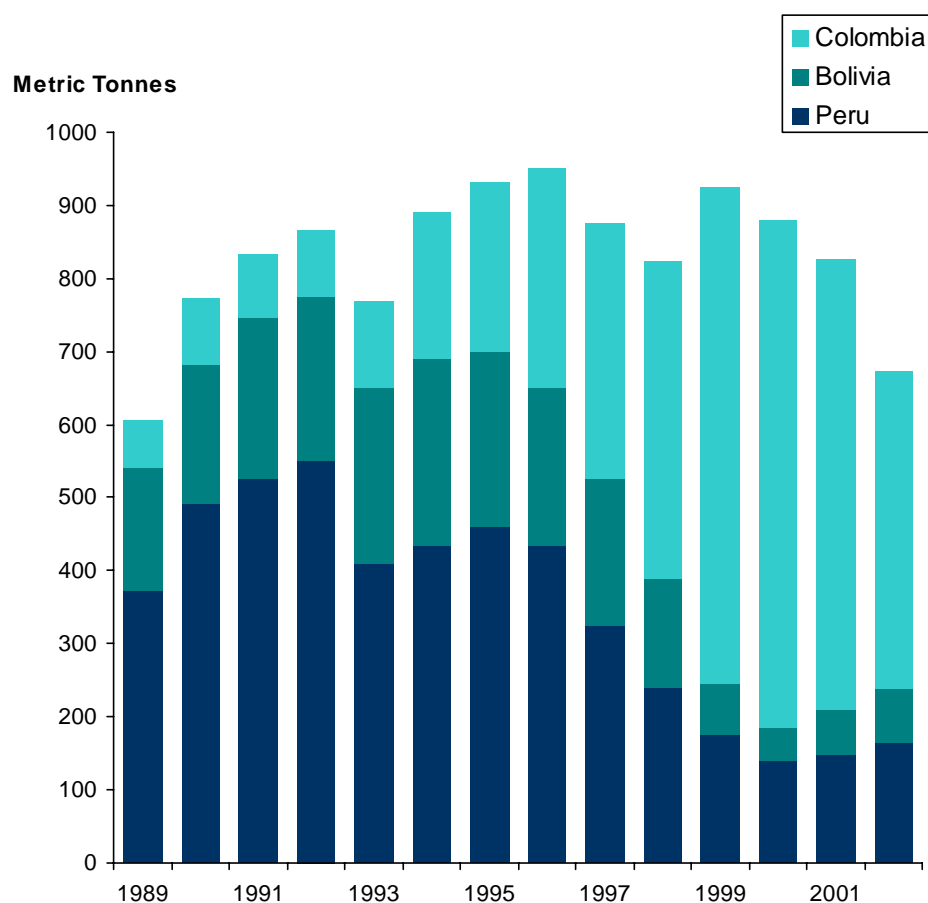
- Uncompensated crop eradication alone has not worked as a method of reducing acres under plantation in the long term
  - eradication does not address the forces that drive farmers to grow the crops in the first place
- Farmers and crop buyers respond in different ways to eradication programs
  - different cultivation techniques, e.g., use of smaller plots or interspersed with other crops
  - displacement: crops grown in new areas in-country, as well as in other countries
  - prices in the eradicating country are driven up, encouraging farmers furtively to return to growing
- Effective efforts at eradicating coca growing in Colombia is thought to have displaced crops to Peru and Bolivia. Whether this displacement will outstrip the reduction achieved in Colombia remains to be seen
- Eradication has been successful, as in Thailand and Pakistan, but only when undertaken following a comprehensive set of interventions designed to address the underlying drivers of cultivation

Source: UNODC, team analysis
* Potential production based on coca bush cultivation

Weaning farmers off a dependence on illicit crops is a time-consuming, complex and expensive process of state-building

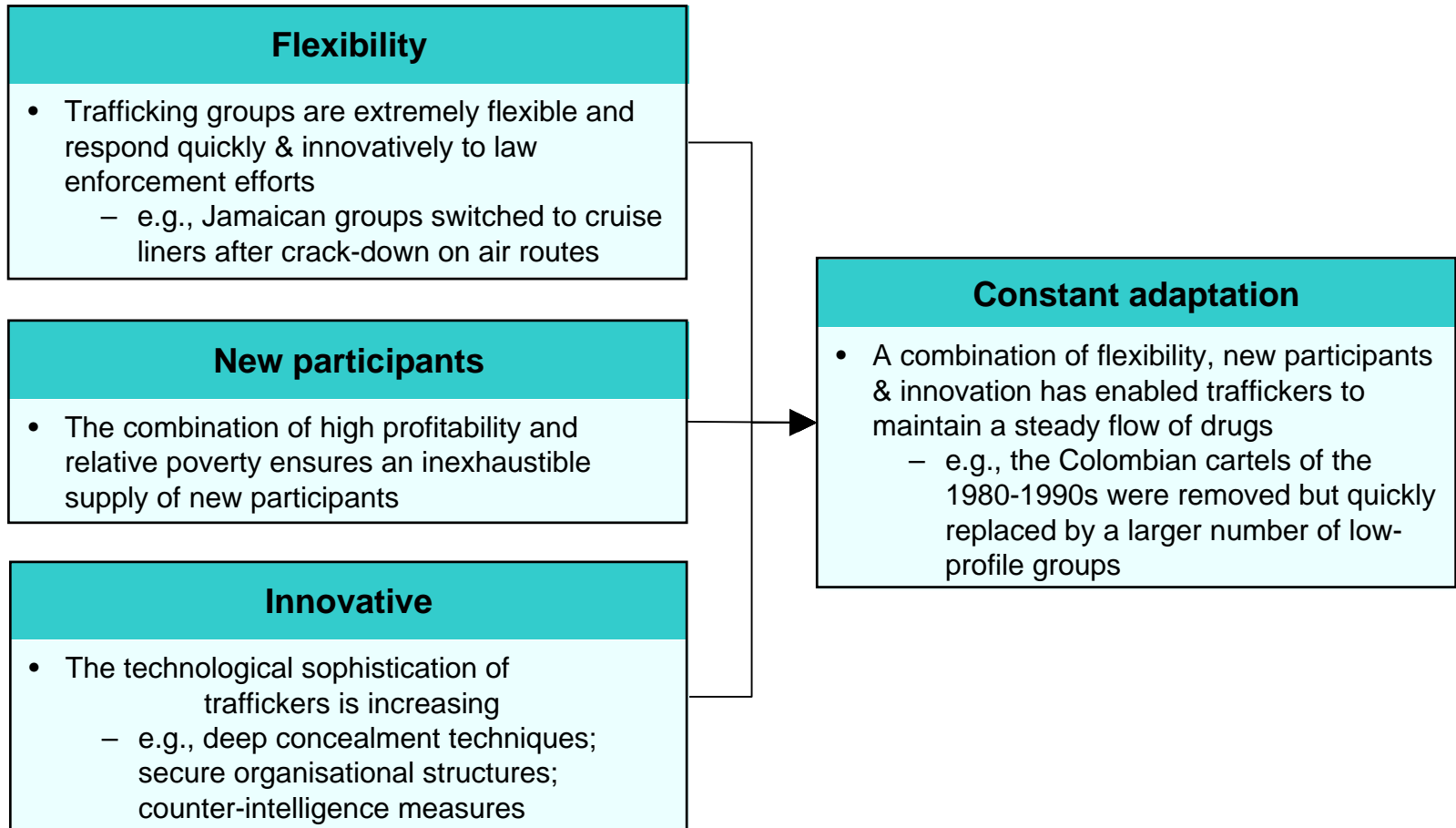|	**Illicit crop grower**	**Illicit crops & legitimate industry**	**Legitimate industry**
Conditions affecting the farmer	• Subsistence lifestyle • Poor returns on all potential crops • Inhabitants of remote, marginalised, underdeveloped communities • Croppers often indebted to landowners, debts often denominated in illicit crop	• Some alternatives to crop based credit • Limited infrastructure & market access • Wider access to assets • Work outside illicit crop cultivation appearing	• Access to market credit • Variety of options for labourers
Government conditions & provisions	• Government controls absent • Local currency often illicit crop • Corruption & coercion often rife • Infrastructure absent • Poor access to markets • Crop eradication often forcible	• Credible claims of on-going central government control • Functioning law enforcement and judicial system • Minimal corruption • Increased access to markets • Education & labour development	• Access to viable & diverse alternative product markets • On-going stable government • Effective judicial system • Road and transport infrastructure • Crop eradication where alternative livelihoods exist
For example	• Myanmar, Colombia	• Laos, Peru	• Thailand, Pakistan

The capacity of the drugs industry to source and supply heroin and cocaine is enhanced by the wide diversity of routings, methods and types/scales of organisations involved

Characteristics of some principal drug-trafficking groups

|	**Colombians**	**Jamaicans**	**Turks**	**Gulf-based**	**West Africans**
Drug	Cocaine; some heroin to the US	Cocaine	Heroin	Heroin	Cocaine, heroin & other drugs
Variation in routes & transport types	**High:** exit via Colombia, Ecuador, Venezuela; sea transportation includes containers, mother ships, fast boats	**Low:** operate from Jamaica and Eastern Caribbean using air couriers	**Medium:** operate via a range of European road transport routes, as well as sea routes	**Not known:** likely to be **medium**, particularly using containers via a potentially wide range of routes	**High:** worldwide operations using air couriers, particularly to service second-tier markets.
Size of consignments	**High:** consignments can be over 10 tonnes in size, though smaller in the EU	**Low-Medium:** up to 1 kg for internal concealment; up to ~50kg in freight	**Medium:** consignments can be up to 100s of kgs, usually repeat transactions with trusted UK wholesale customers	**Medium-High:** traffick multi-tonne consignments	**Low-Medium:** usually small but frequent operations, though some larger
Degree of central organisation	**High:** sophisticated and with international reach	**Low:** small groups operating independently	**Medium:** tightly knit distribution networks, often based on clan and extended family ties	**High:** highly-organised trafficking operations, well protected by senior officials in the Gulf states	**Low:** fluid & opportunistic groups come together for particular operations
Numbers of players involved	**Medium:** over 160 principal groups estimated to be operating	**Medium:** several dozens of similarly-sized players operating	**Medium:** 30-50 major groups operating	**Low:** probably a few key traffickers	**Medium:** many groups operating
Degree of integration in the supply chain	**Medium/High:** source drugs direct from rebel groups; maintain control over consignment into destination country, but small UK distribution network	**Medium:** source drugs from other traffickers, but have access to significant UK distribution network	**Medium:** source drugs from other traffickers, but have access to significant UK distribution network	**Not known:** but unlikely to have significant distribution capacity downstream	**Low:** no vertically-integrated supply chain maintained – no distribution capacity

Source: HMG data

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The drugs trafficking business is innovative and flexible in response to law enforcement interventions

Flexibility

- Trafficking groups are extremely flexible and respond quickly & innovatively to law enforcement efforts
  - e.g., Jamaican groups switched to cruise liners after crack-down on air routes

New participants

- The combination of high profitability and relative poverty ensures an inexhaustible supply of new participants

Innovative

- The technological sophistication of traffickers is increasing
  - e.g., deep concealment techniques; secure organisational structures; counter-intelligence measures

Constant adaptation

- A combination of flexibility, new participants & innovation has enabled traffickers to maintain a steady flow of drugs
  - e.g., the Colombian cartels of the 1980-1990s were removed but quickly replaced by a larger number of low-profile groups

Source: HMG data, team analysis

The high profitability of the drugs business is derived from a premium for taking on risk, as well as from the willingness of drug users to pay high prices

Price mark-up for shipping across a border : product comparisons

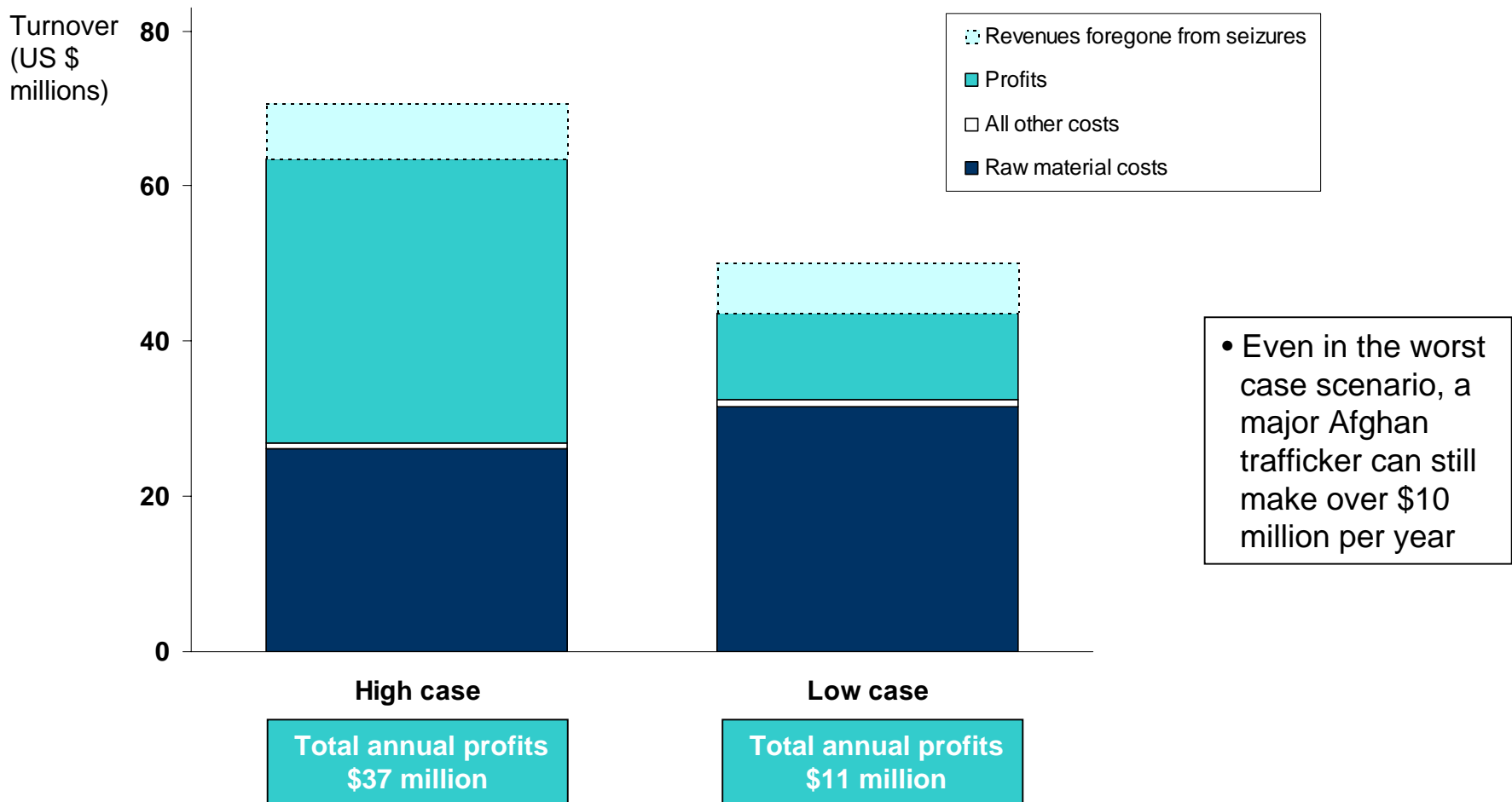% mark-up
(price at import
compared to
price at export)
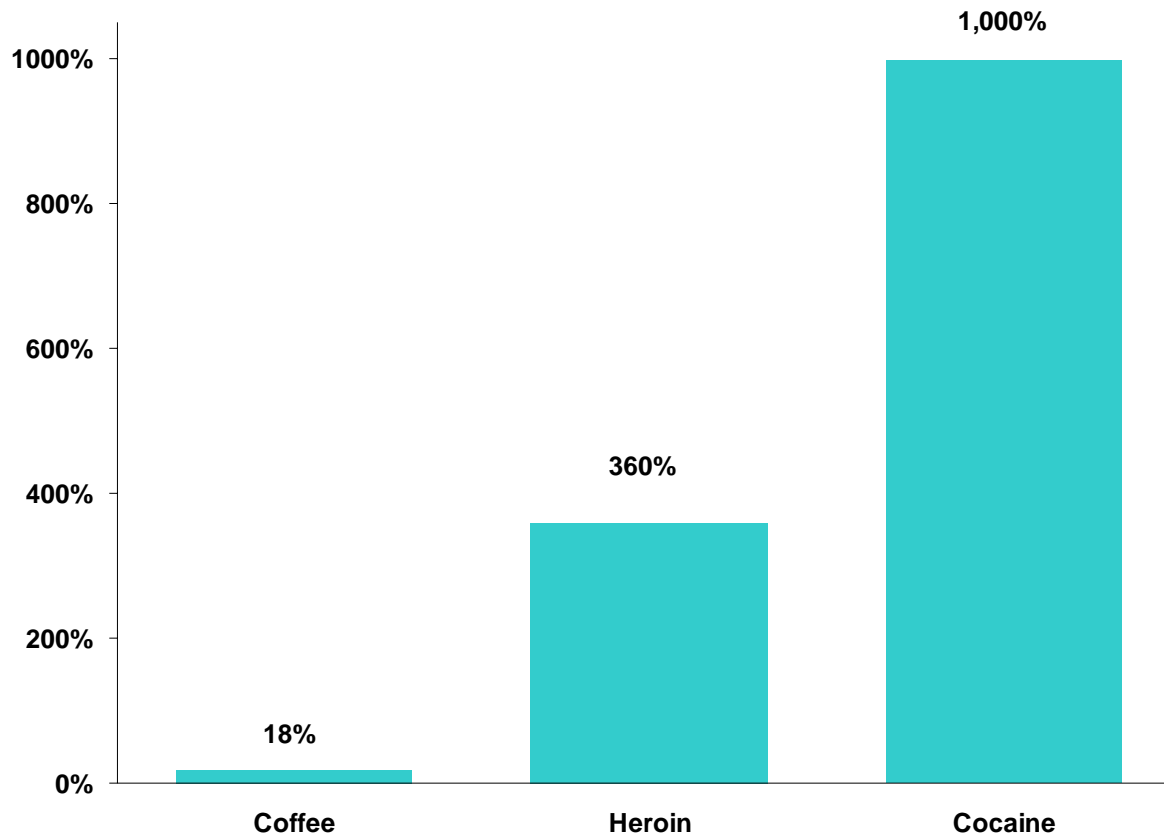
Source: Reuter and Greenfield (2001), HMG data, team analysis. Cocaine mark-up is Colombia to Spain; heroin mark-up is from Iran to UK

The appetite for risk varies between individual traffickers, making the impact of increasing risk unpredictable

- Individual traffickers have different tolerances to risk
  - some employ a range of risk-minimisation techniques, particularly for personal risk e.g. using go-betweens when dealing with purchasers; as a result, they perceive risks to themselves as being quite low
  - others actually appear to enjoy the risks of "taking on" law enforcement agencies by being more closely involved in operational activities
  - traffickers may take more risks earlier in their careers in order to establish themselves
  - variation in risk tolerance may reflect cultural differences between different ethnic groups

- Quantitative estimates of personal risk appear to bear out these differing perceptions of risk
  - undercapitalised risk-toleraters are up to 10 times more likely to be apprehended by law enforcement agencies than well-capitalised risk-minimising principals

- Risk-minimisers benefit from the same high prices charged by risk-toleraters, despite taking on less risk
  - so risk-minimising traffickers may actually benefit from increasing levels of risk because overall prices are driven up

Source: ISDD report to HMCE

Seizures only have a limited impact on profitability for traffickers

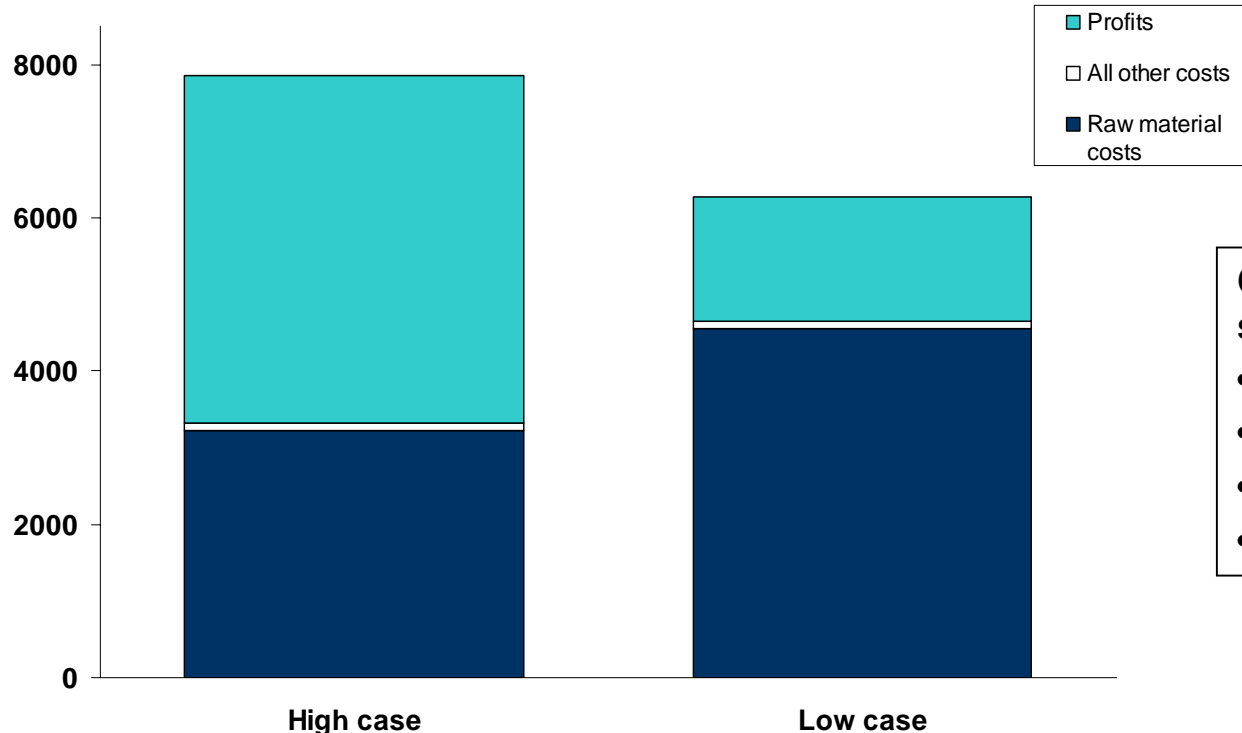**Modelled total annual turnover for a major Afghan trafficker**

Turnover (US $ millions)

Legend:
- Revenues foregone from seizures
- Profits
- All other costs
- Raw material costs

High case — Total annual profits $37 million

Low case — Total annual profits $11 million

- Even in the worst case scenario, a major Afghan trafficker can still make over $10 million per year

Source: HMG data, team analysis. Data is for trafficker processing base and shipping to Turkey. 'High case' refers to low costs (including product costs), high sale price, and low seizure rates; vice versa for 'Low case'.

Despite the commodity nature of drugs, profit margins for traffickers can be even higher than those of luxury goods companies

Modelled profits per kg for a major Afghan trafficker

Profits per kg (US$)

Legend:
- Profits
- All other costs
- Raw material costs

High case
Profits per kg = $4,500
Profit margin* = 58%

Low case
Profits per kg = $1,600
Profit margin* = 26%

Comparable private sector profit margins
- Exxon = 8%
- P&G = 7%
- Gucci = 30%
- LVMH = 48%

* Profit margin = profit/revenues
Source: HMG data, team analysis. Data is for for each kg of heroin processed and successfully shipped to Turkey. Costs of seizure are reflected in lower revenues . 'High case' refers to low costs (including product costs), high sale price, and low seizure rates; vice versa for 'Low case'.

Major upstream interruptions to drug production can drive up prices in the producing region

Variations in opiate production and price in South West Asia
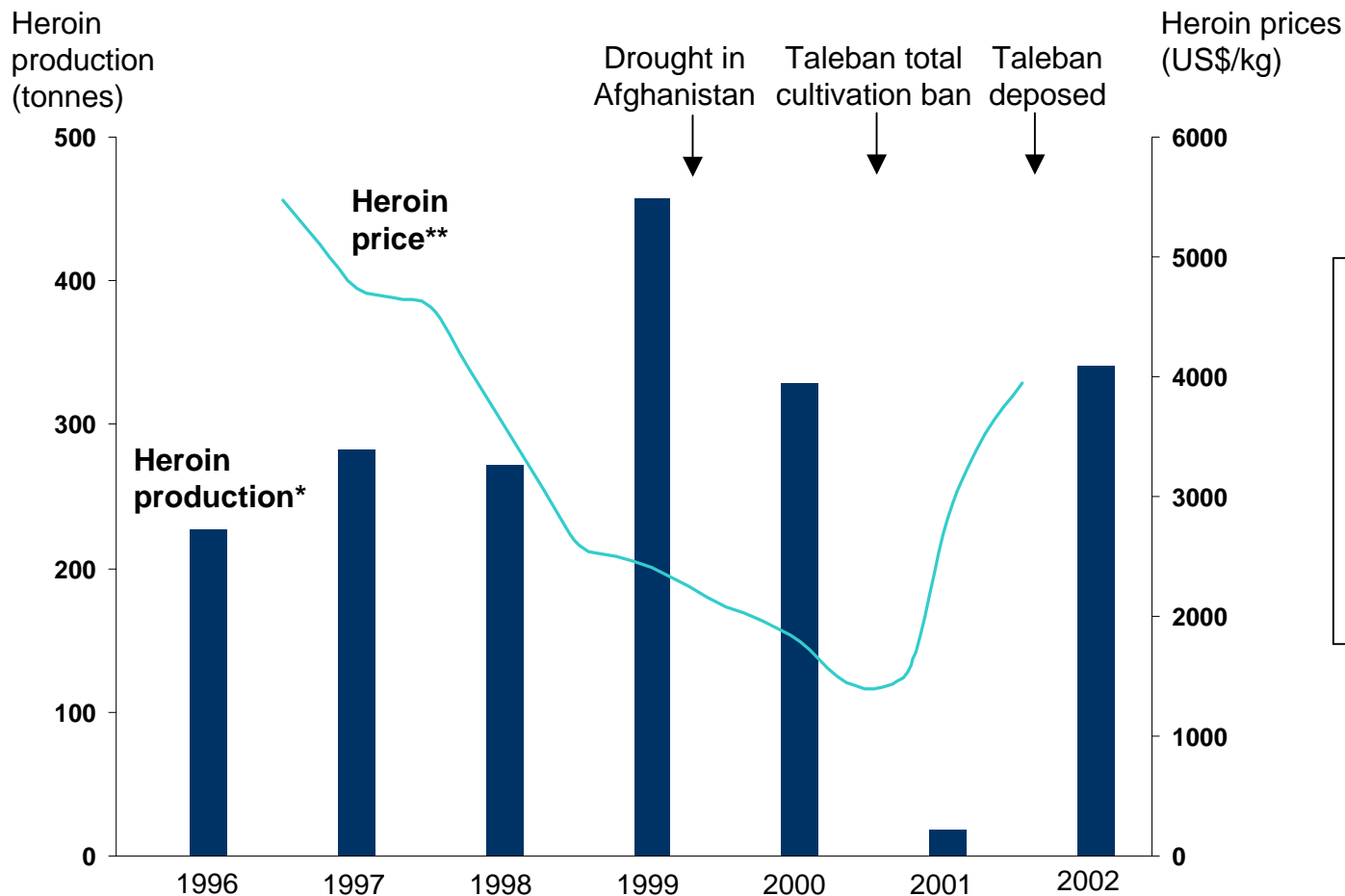
- Natural and political events in Afghanistan significantly reduced production levels

- This reduction in supply drove up heroin prices

Source: UNDCCP - Global illicit drug trends 2002 * Afghanistan + Pakistan ** Average of Iran, Pakistan, Tajikistan

The impact on street prices of shortages upstream is minimised, however, because drug traffickers do not pass on the increase in costs

Variations in price between Turkey and the UK

	September 2001 (£/kg)	September 2002 (£/kg)	Price increase
Morphine base imported into Turkey	670	1,670	~150%
Processed heroin sold in Turkey	3,330	5,000	~50%
Heroin sold in UK	13,000	16,000	~25%
Trafficker mark-up *	~1,850 %	~850 %	

- Although September 11th caused a 150% increase in morphine prices in Turkey, the cost of heroin purchased in the UK increased by only 25%

- Instead of passing on price increases to their UK customers, Turkish traffickers were prepared to see their profit margins cut

* For a vertically-integrated trafficker sourcing morphine in Turkey and selling heroin in the UK. Mark-ups do not factor in other costs. Whilst purity changes have not been factored in, latest evidence suggests that Turkish purity dipped until end-2001, and then started increasing through 2002. Source: HMG data / NCS.

Western government interventions have tended to have a short-lived or negligible impact on retail prices downstream

Governmental interventions against the cocaine trade in Colombia

US retail cocaine prices ($ per pure gram, 2000 prices)

'War on Drugs' begins *

Peruvian shoot-down policy **

Plan Colombia

Cocaine price to retail user

Cocaine price to wholesale distributor

Year
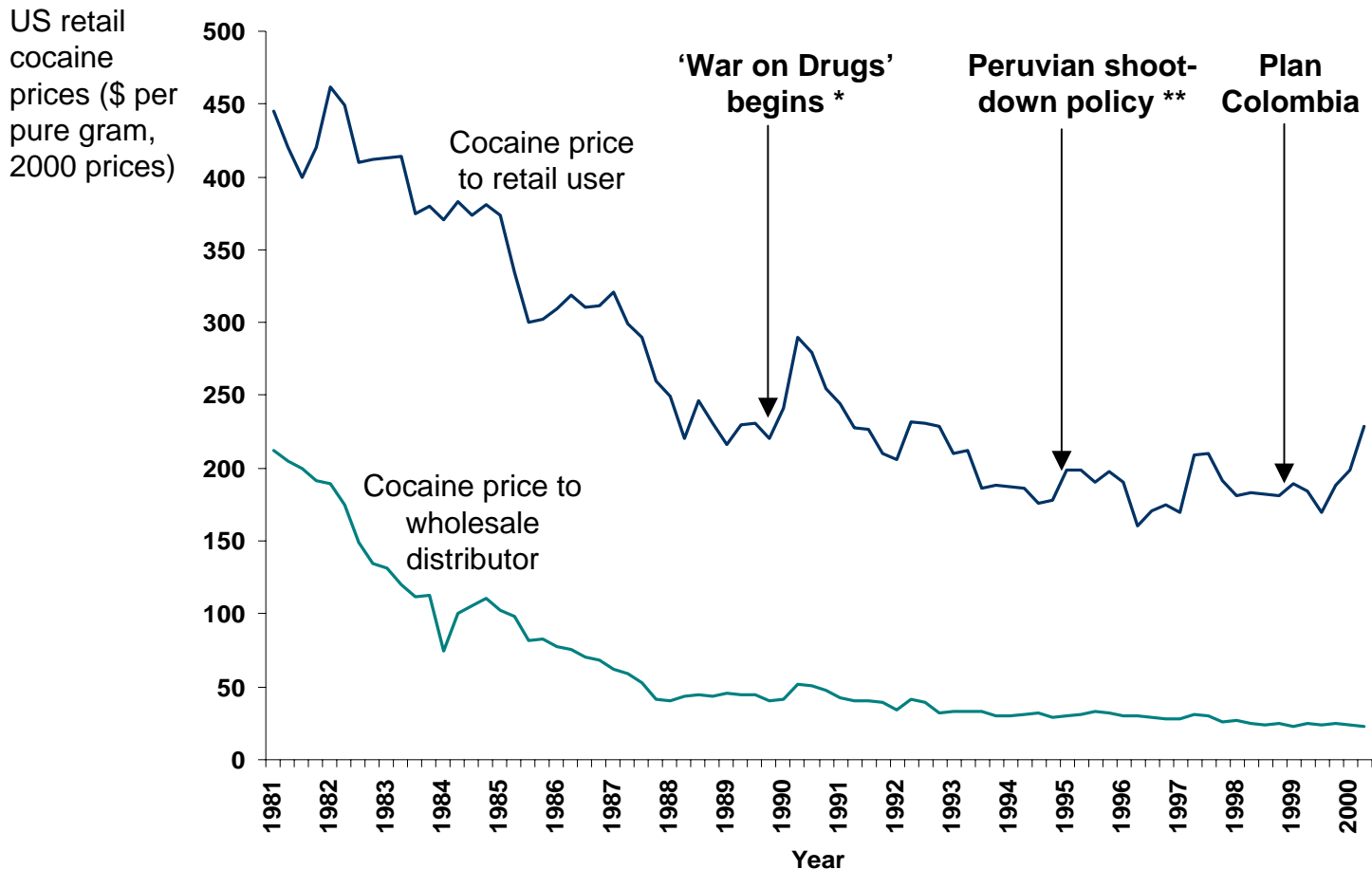
- The impact of US & Colombian interventions against the cocaine trade appears to be small and short-lived

- Wholesale price is a better indicator of the impact of upstream intervention than retail price

* US/Colombian campaign against the cartels
** Unidentified light planes flying between Peru & Colombia
Source: ONDCP, 2001, US Institute for Defence Studies

The high seizure rates required to put a major trafficker out of business pose a substantial challenge to law enforcement

Profit margins for a major trafficker at different seizure rates

**Example:
Afghan traffickers**

Seizure Rates	High case	Low case
10%	58%	26%
25%	49%	14%
40%	37%	bust
60%	5%	bust

- A sustained seizure rate of over 60% is required to put a successful trafficker out of business
  - anecdotal evidence suggests that seizure rates as high as 80% may be needed in some cases
- Sustained successful interventions on this scale have never been achieved
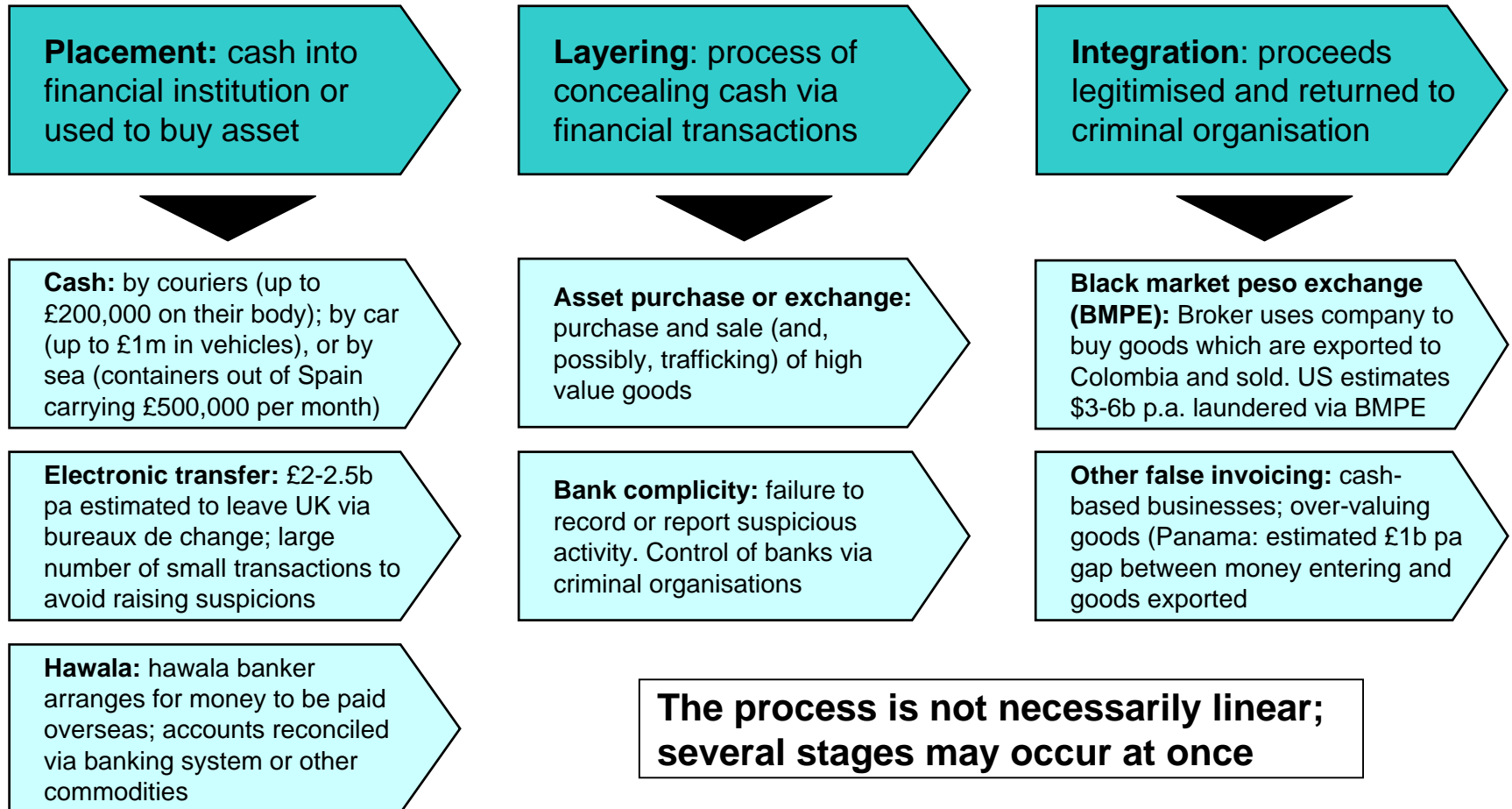
Source: HMG data, team analysis

Cash is of vital importance to the drugs business

- The trafficking of drugs generates significant volumes of cash; if it is to be used or enjoyed by those involved in the drugs business it needs to flow back across borders and to be legitimised within the financial system

- Managing the flows of cash is of vital importance to drugs traffickers
  - traffickers rely on current sales to pay for future imports
  - where traffickers make use of credit, they rely on proceeds to pay off their debts

- The most challenging tasks for drugs traffickers are
  - getting cash into the legitimate financial system
    - criminal organisations are likely either to make small deposits in financial institutions or to use cash-based businesses to achieve this
  - moving cash across borders
    - many traffickers will physically carry cash across borders (£1m weighs around 20 Kg in sterling, 15 Kg in dollars, and 3 Kg in Euros)
    - electronic transfer is widely used, mainly via money service businesses

Source: Team analysis

Money laundering is a highly complex process

There are three key phases:

Placement: cash into financial institution or used to buy asset

Layering: process of concealing cash via financial transactions

Integration: proceeds legitimised and returned to criminal organisation

Cash: by couriers (up to £200,000 on their body); by car (up to £1m in vehicles), or by sea (containers out of Spain carrying £500,000 per month)

Asset purchase or exchange: purchase and sale (and, possibly, trafficking) of high value goods

Black market peso exchange (BMPE): Broker uses company to buy goods which are exported to Colombia and sold. US estimates $3-6b p.a. laundered via BMPE

Electronic transfer: £2-2.5b pa estimated to leave UK via bureaux de change; large number of small transactions to avoid raising suspicions

Bank complicity: failure to record or report suspicious activity. Control of banks via criminal organisations

Other false invoicing: cash-based businesses; over-valuing goods (Panama: estimated £1b pa gap between money entering and goods exported

Hawala: hawala banker arranges for money to be paid overseas; accounts reconciled via banking system or other commodities

The process is not necessarily linear; several stages may occur at once

The money laundering business has become increasingly sophisticated and difficult to disrupt

- The money laundering business has become sophisticated, global and flexible. Its importance is highly valued by drugs traffickers
  - money laundering has become increasingly sophisticated
    - traffickers, especially for cocaine, place more emphasis on trusted contacts (often family members) for managing the proceeds than for trafficking the product
    - the management of proceeds has become increasingly separate from the trafficking of product
    - the increase in fees paid by drugs traffickers for money laundering services demonstrates increased professionalisation (fees have increased from 6-8% in early 1980s to 20-25% now)
  - traffickers will seek and find the weakest link in law enforcement; despite significant progress in the UK, countries with poor controls/enforcement will continue to be used
    - the Gulf: poor banking supervision; money laundering laws still in draft; patronage of governing elite
    - the Turkish Republic of Northern Cyprus: relative lack of financial regulation
    - Central America: Panama legislation not to be enacted until 2005

➡️ While money laundering legislation may be effective in targeting specific trafficking groups, it is less likely to have a long-term strategic impact in disrupting the flows of drugs money

- New money laundering patterns may emerge which will make it even more difficult to tackle
  - for example, we may see an increased use of internet, purchase/control of banks, increasing use of hawala in response to money laundering legislation

Source: HMG data, team analysis

The UK heroin, cocaine and crack market is estimated to have a value in excess of £4 billion per annum

UK drugs market estimates*

	Heroin	Crack	Cocaine
Estimated User Numbers**	260,000	140,000	250,000
Estimated Average Annual Spend per User	~£10,000	~£10,000	~£5,500
Derived Retail Market Size	~£1,9bn	~£1bn	~£1,4bn
Price per gram	£60	£105	£60
Derived retail tonnes	31	10	22

- The entire estimated UK supply of heroin and cocaine could be transported into the country in five standard-sized shipping containers

* These estimates are conservative, and may underestimate true market value
** These numbers are not additive. Total heroin and/or crack user population is estimated at 280,000
Source: HMC&E, Team analysis

The long term decline in the real price of drugs, against a backdrop of rising consumption, indicates that an ample supply of heroin and cocaine has been reaching the UK market

Real purity-adjusted retail prices*

£/pure gram,
2000 prices

Heroin

Cocaine

Crack

Note: prices would have fallen even further had traffickers not had to face the risk of apprehension or seizure by law enforcement
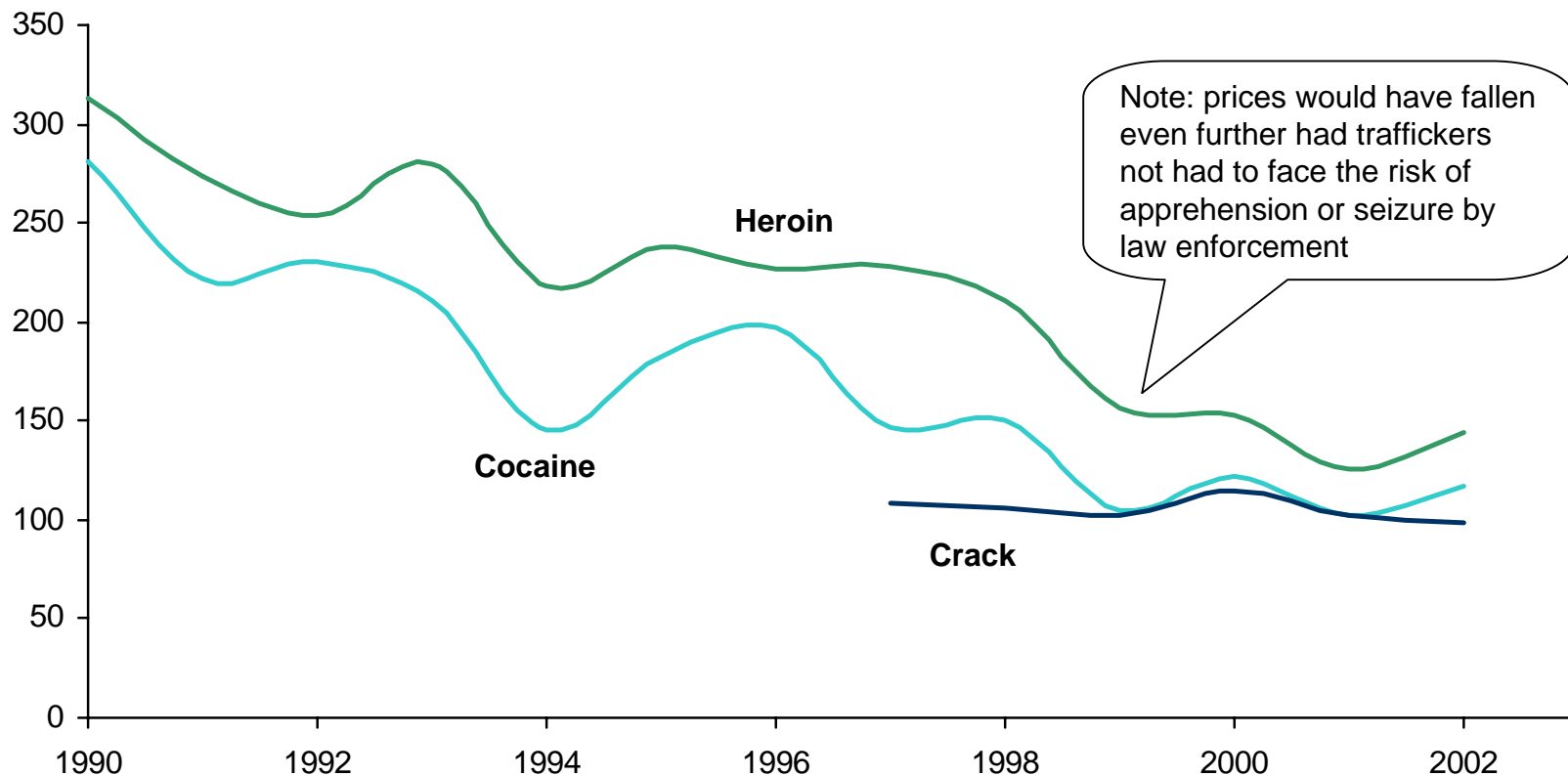
* Real purity adjusted prices show a different trend to nominal unadjusted purity prices. Nominal prices have remained largely stable, while purity has risen over time. This leads to falling real purity adjusted prices
Source: NCIS Streetwise, Forensic Science Service Drug Abuse Trends

UK importers and distributors make significant annual profits

Indicative profits of key players in the distribution of drugs in the UK

£m Annual
Profit
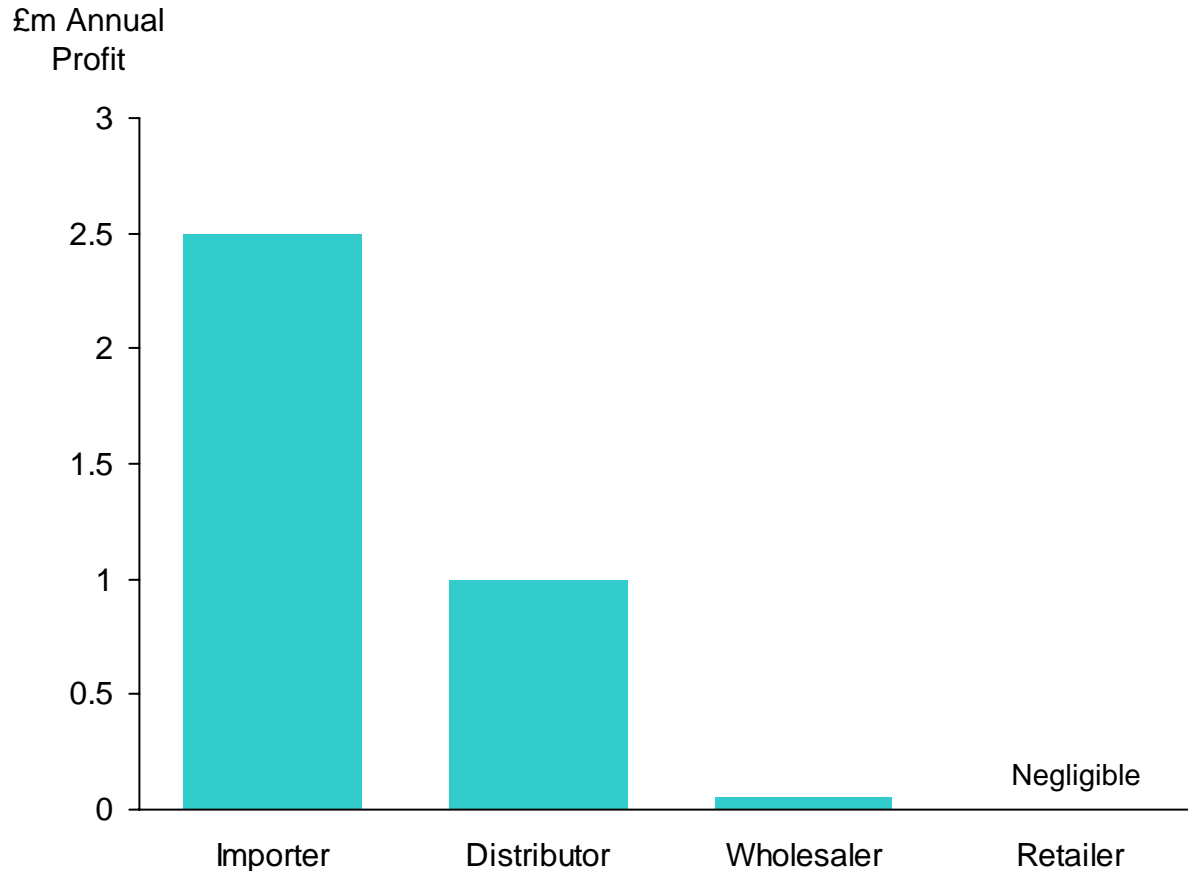
Source: Team analysis. Note that the margin of error in these averages ranges from 25% to 75%

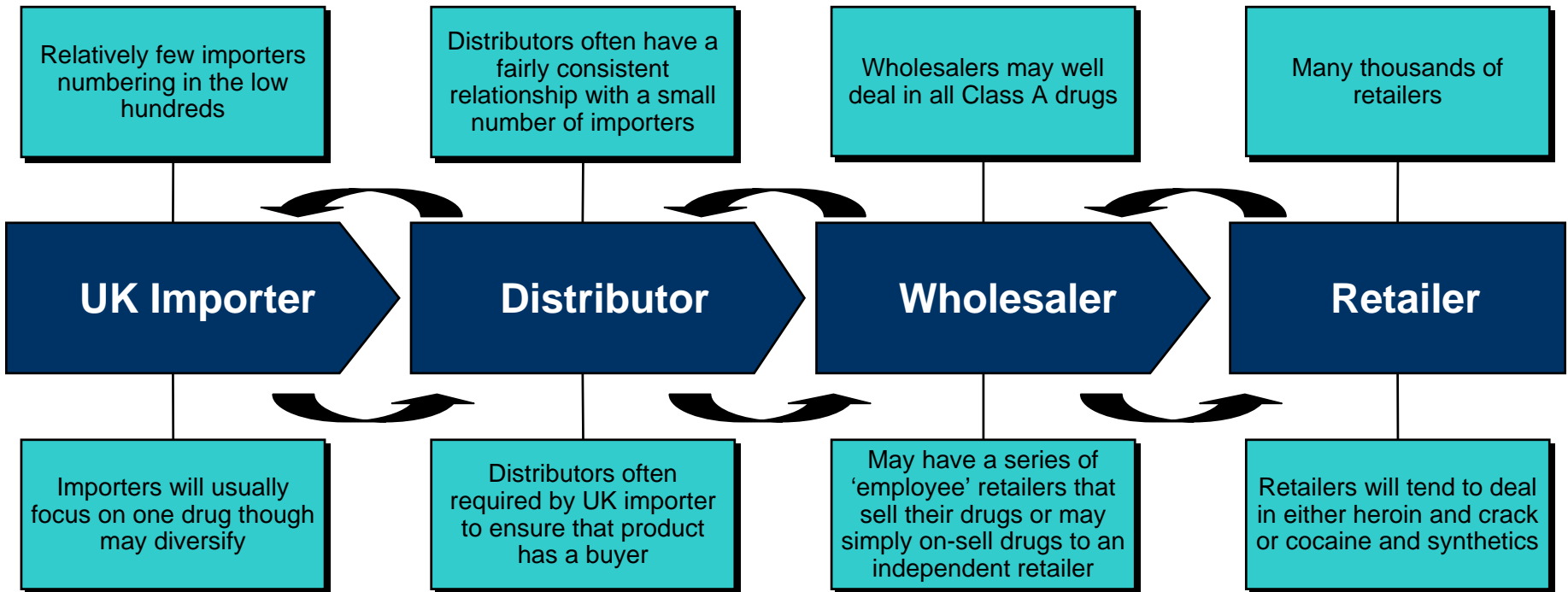# UK importers and suppliers make enough profit to absorb the modest cost of drug seizures

Profitability in the UK supply chain

Monthly Supply (kg per dealer) / Heroin Price (£/g)

Legend:
- Dealer profit*
- Heroin Cost
- Monthly kg/dealer

Volume of heroin

Categories: UK Importer, Distributor, Wholesaler, Retailer
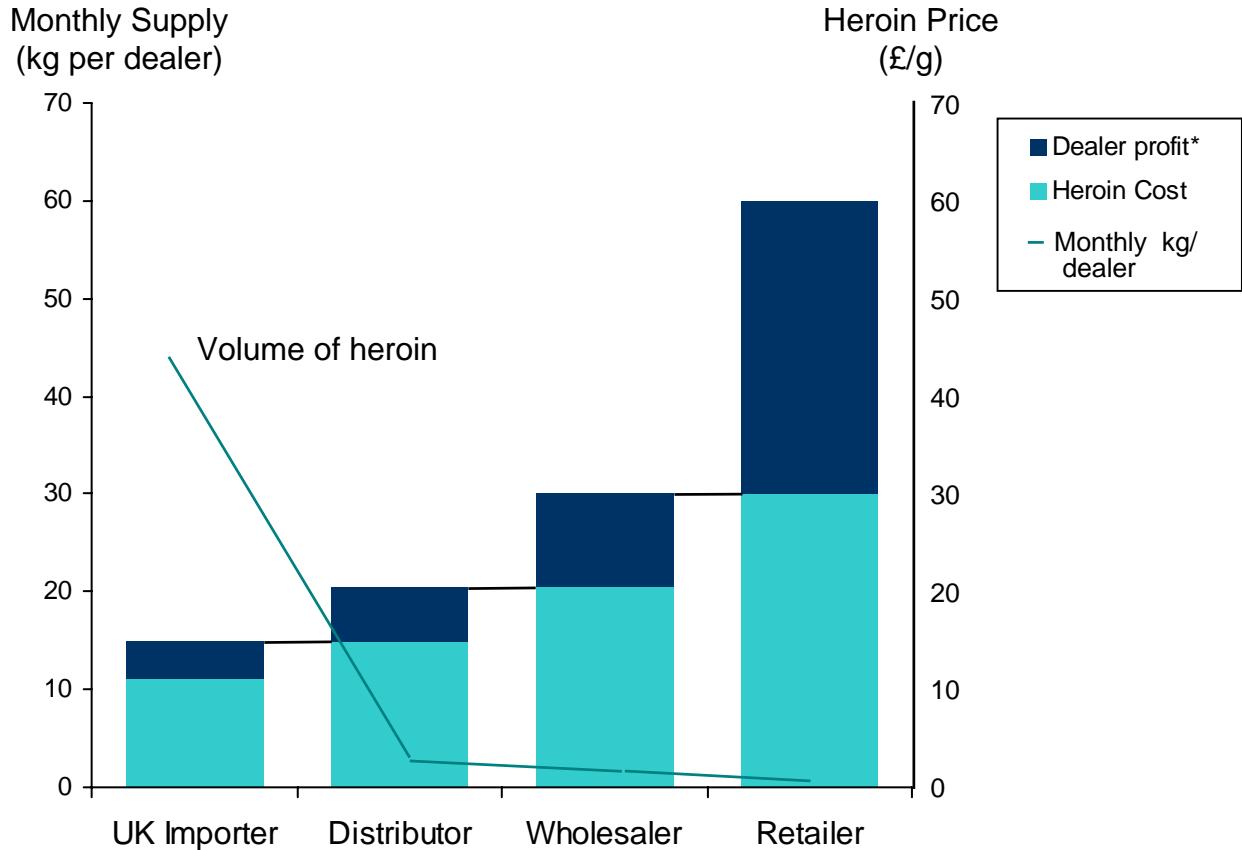
- While retail dealers make most profit per gram, they sell only very small quantities
- Differences between drugs:
  - Heroin: retail profits are highest per gram, but absolute returns increase up the chain
  - Crack: appears to mirror heroin patterns
  - Cocaine: too little is known about cocaine trading to know whether it is similar to crack or heroin
- Because upstream UK suppliers enjoy high profits, they are more able to absorb the cost of interception. Thus upstream seizures may temporarily impact street availability, but are unlikely to threaten the viability of any individual business

* Total revenue less cost of product
Source: Team analysis, NCIS Streetwise

The lure of higher profits encourages suppliers to move up the supply chain

Relatively few importers numbering in the low hundreds	Distributors often have a fairly consistent relationship with a small number of importers	Wholesalers may well deal in all Class A drugs	Many thousands of retailers

UK Importer	**Distributor**	**Wholesaler**	**Retailer**

Importers will usually focus on one drug though may diversify	Distributors often required by UK importer to ensure that product has a buyer	May have a series of 'employee' retailers that sell their drugs or may simply on-sell drugs to an independent retailer	Retailers will tend to deal in either heroin and crack or cocaine and synthetics

- Moving up the supply chain requires the funds to bank-roll consignments before revenue is received

- There are often more than four links in the supply chain

- Some supply chains will be formed specifically for a particular consignment; others are more enduring

- Individuals' positions in the chain are fluid and they will operate in different roles e.g. as a retailer on one drug consignment and as a wholesaler on a simultaneous but separate consignment

Source: Team analysis

Cocaine retailers maintain revenues by adjusting purity, not price, so that their prices remains stable
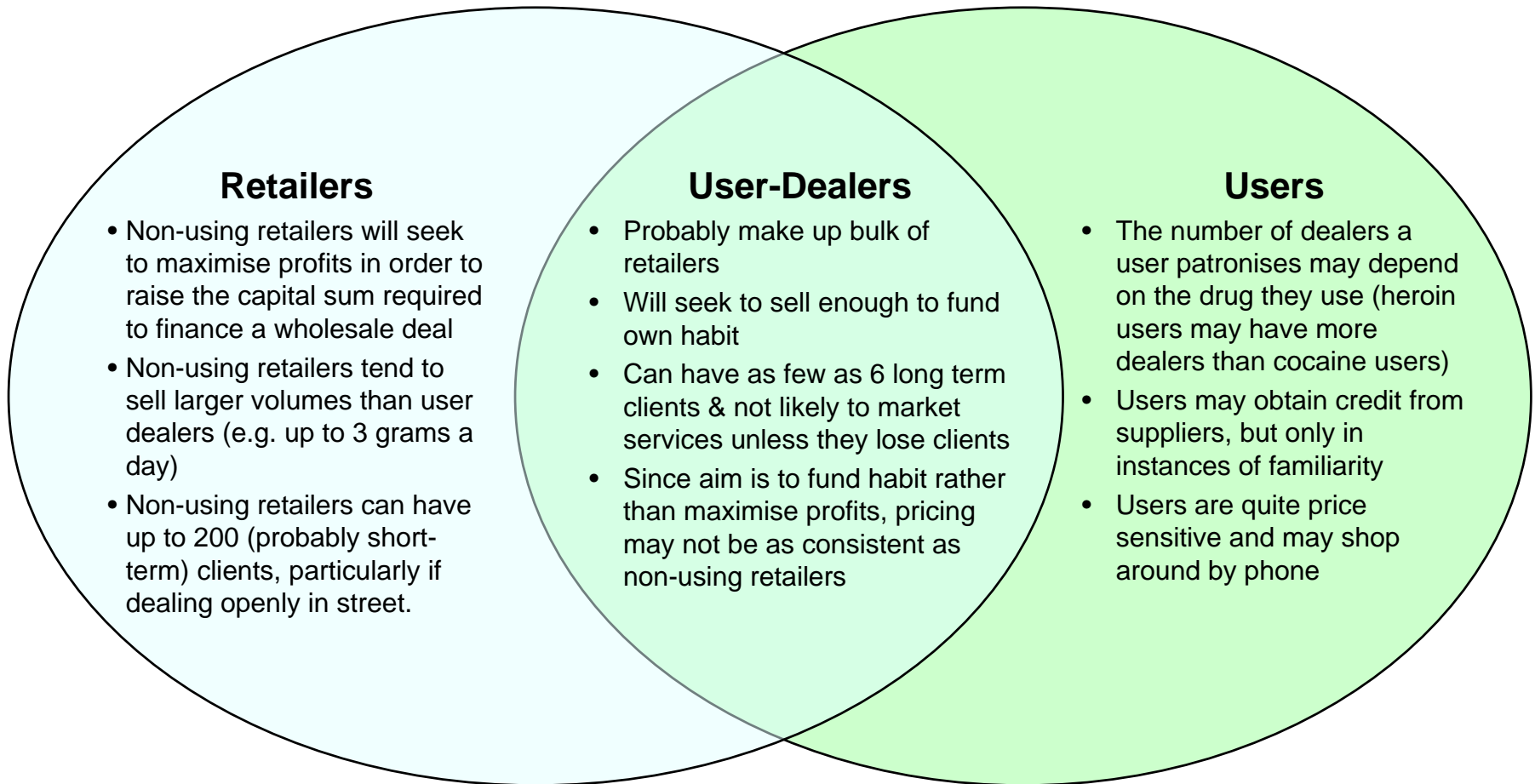
Nominal retail cocaine prices and purity
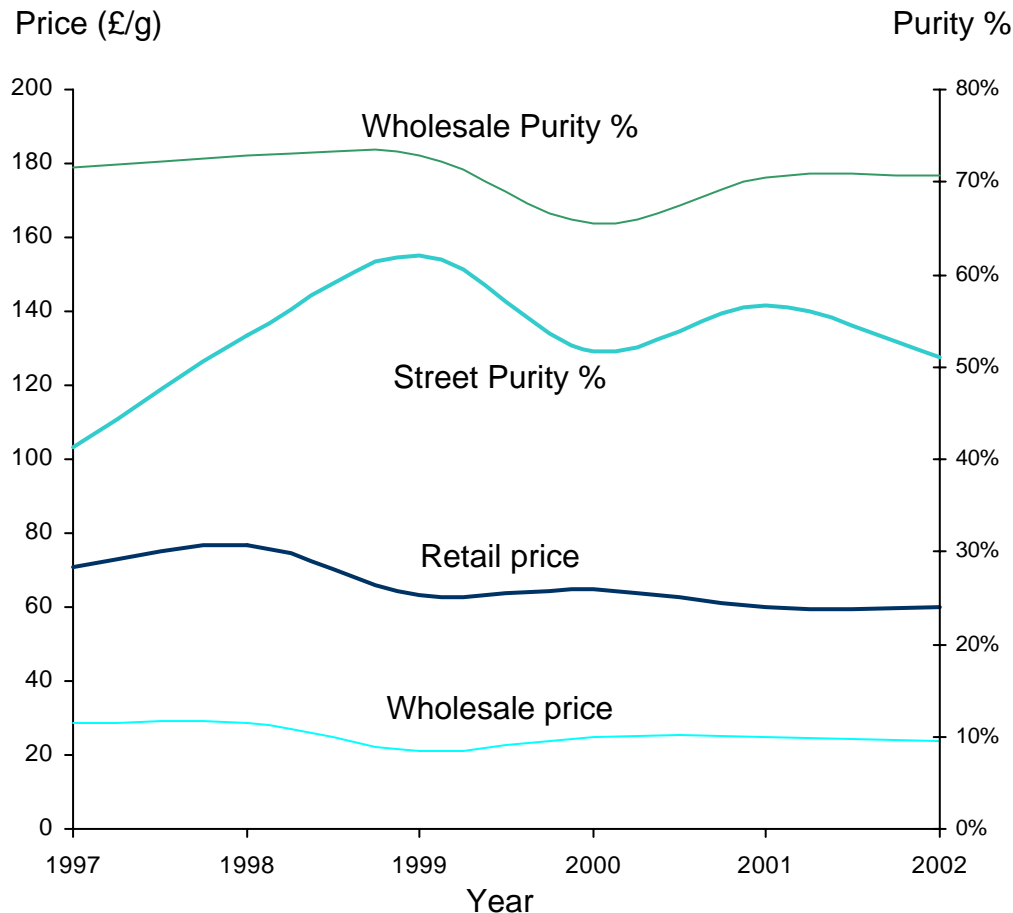
UK retailer tactics

- Nominal retail prices have remained steady
- Street purity, on the other hand, has oscillated up and down around the 50% mark
- Dealers appear to keep prices constant and to adjust purity to cope with short-term fluctuations in supply
  - a shortfall leads to a reduction in purity, so drug retailers maintain their revenues
- Heroin retailers do not appear to react in the same way. They may alter the size of unit sold more frequently instead. Further research is needed here
- Cocaine retailer behaviour means purity can play a role in tracking street volume trends

Source: NCIS Streetwise, Forensic Science Service Drug Abuse Trends

The user-dealer relationship will vary between individuals but has some common characteristics

The retailer-user relationship

Retailers

- Non-using retailers will seek to maximise profits in order to raise the capital sum required to finance a wholesale deal
- Non-using retailers tend to sell larger volumes than user dealers (e.g. up to 3 grams a day)
- Non-using retailers can have up to 200 (probably short-term) clients, particularly if dealing openly in street.

User-Dealers

- Probably make up bulk of retailers
- Will seek to sell enough to fund own habit
- Can have as few as 6 long term clients & not likely to market services unless they lose clients
- Since aim is to fund habit rather than maximise profits, pricing may not be as consistent as non-using retailers

Users

- The number of dealers a user patronises may depend on the drug they use (heroin users may have more dealers than cocaine users)
- Users may obtain credit from suppliers, but only in instances of familiarity
- Users are quite price sensitive and may shop around by phone

Source: Team analysis

Less is known about the UK drugs market than about drug production and trafficking overseas

- Data across the UK drug supply chain has not been consistently collected, analysed and interpreted
  - UK drug suppliers are numerous, operate in a fluid fashion and adapt effectively to surveillance efforts

- As a result, there are still significant gaps in government knowledge about the UK market in drugs
  - the typical number of links in the domestic supply chain is estimated at between 4 and 7, but there is insufficient evidence to be certain
  - the buy and sell rates at the various points in the chain (other than wholesale and retail) are largely unknown; revenues and profits along the chain can only be estimated
  - though the numbers of individuals involved in the chain can be estimated, there is little hard evidence or intelligence available

The drugs industry is a large employer worldwide, but with comparatively few personnel involved in cross-border trafficking into the West

Worldwide cocaine industry

Coca leaf production & processing 100s of 1000s

FARC & AUC (base sales, cocaine processing & sales) ~10's of 1000s of rebels

Some involvement in trafficking industry estimated ~10,000

Important involvement in trafficking ~6,000

~40 'Major League' traffickers in Colombia

80-120 major importers into UK

100s of major distributors in UK

1000s of wholesalers in UK

10s of 1000s of retailers in UK

Worldwide heroin industry

Involved in poppy production ~500,000

Opium collection, basic processing, selling ~10s of 1000s

1000s employed in secondary processing and transportation work

100s of minor traffickers out of production areas

<20 'Major League' traffickers out Afghanistan / Pakistan

~20 heads of major Turkish family groups importing into Europe

30-50 major importers into UK

120-160 major distributors in UK

~1,500 wholesalers in UK

10s of 1000s of retailers in UK

- In addition to the concentration of the industry around a relatively small number of major traffickers, there are certain geographical choke-points

  - The Netherlands in particular is a major entrepot for the European class A drugs industry

Exports of cocaine to Europe and the UK account for a small proportion of total production

Estimated cocaine production, and consumption in Europe and UK

~700 tonnes (100% purity)

Production in Andean region (100%) — Export to Europe (~20%) — UK retail (<5%)

Cocaine manufacture*

Legend: Colombia, Bolivia, Peru

Y-axis: Metric Tonnes (0–1000)
X-axis: 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002
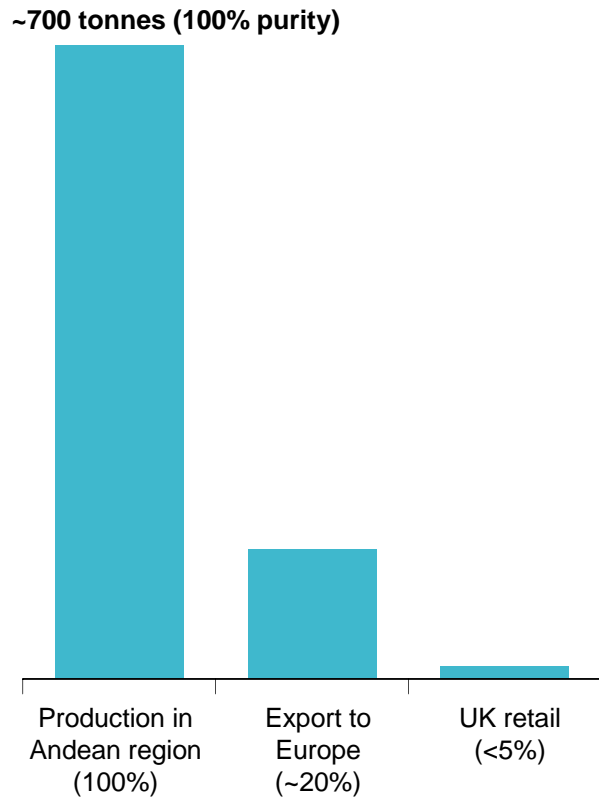
Source: HMG data, UN documents
Note: UK retail volumes based on retail purity of c.50%
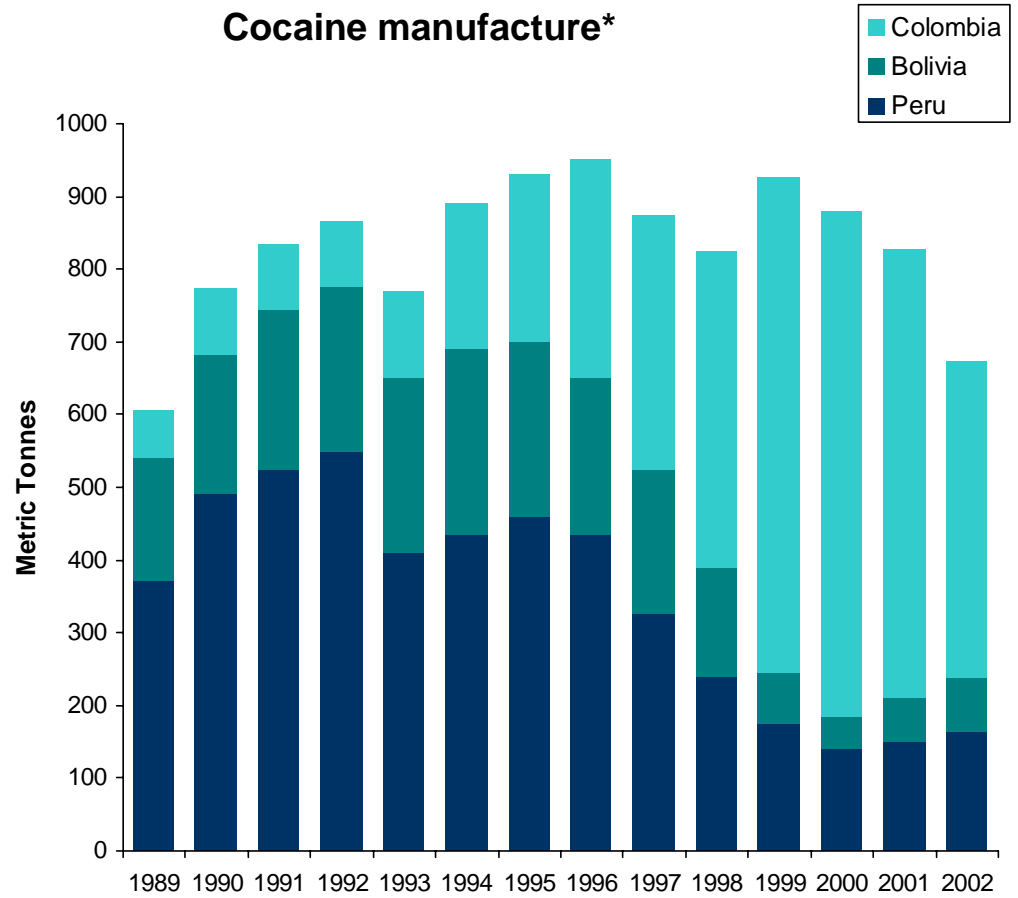
* Potential production based on coca bush cultivation
Source: UNDCCP Global Illicit Drug Trends 2002

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Exports of heroin to Europe and the UK also account for a small proportion of total production

Estimated heroin production, and consumption in Europe and UK

Heroin manufacture *
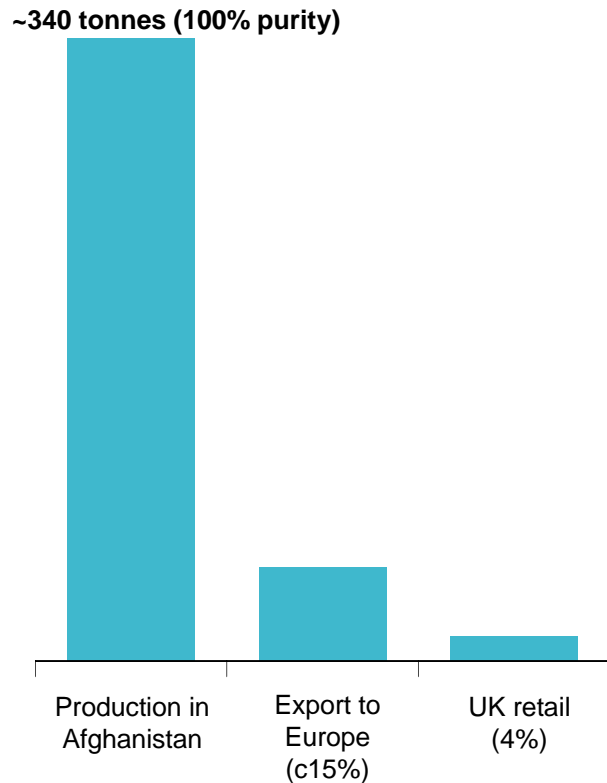
Source: HMG data, UNODC
Note: UK retail volumes based on retail purity of c.40%
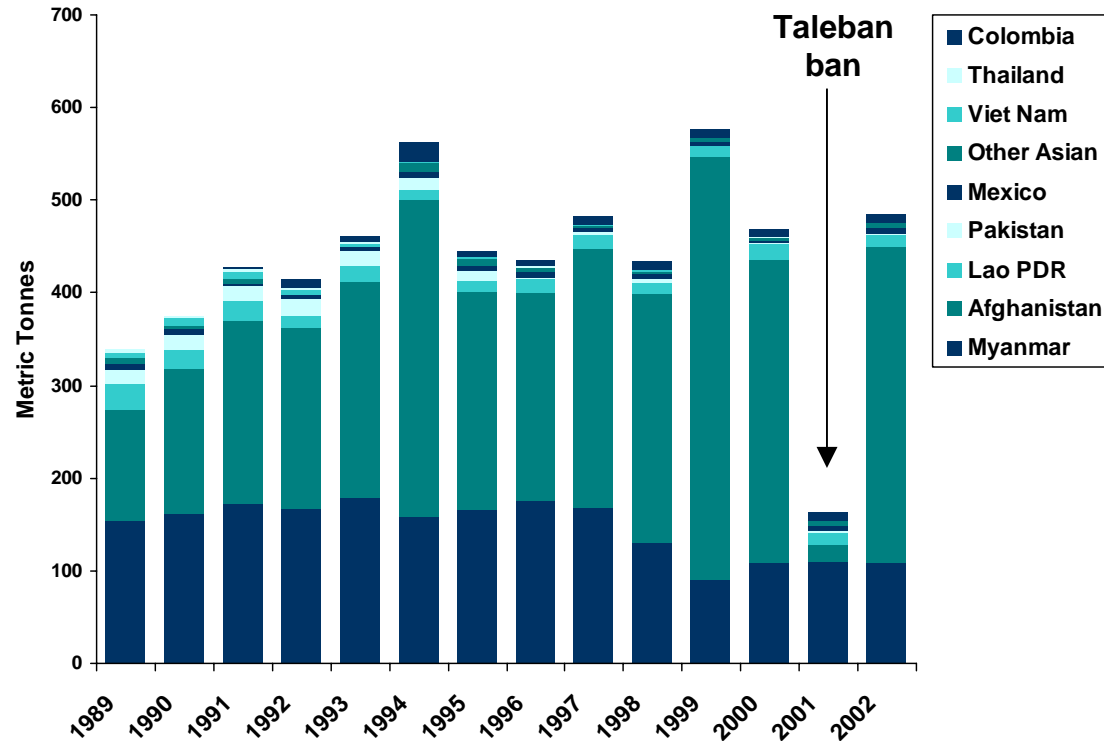
Source: UN DCCP Global Illicit Drug Trends 2002.
* Estimate for countries other than Afghanistan in 2002 based on 2001 data; potential production based on opium cultivation

Although some drugs are seized, falling prices and rising consumption over time suggest that the market receives an ample supply

Estimated worldwide cocaine seizures

Production in Andean region (100% purity) | Total seizures (~23%) | UK seizures (~1%)
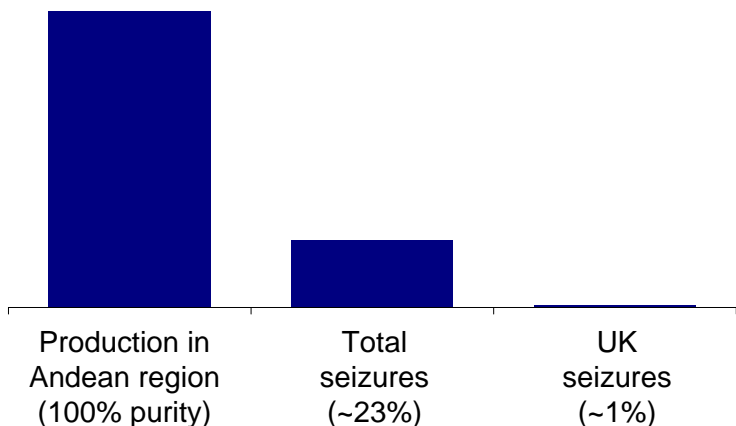
Estimated worldwide heroin seizures

Production in Afghanistan (100% purity) | Total seizures (~15%) | UK seizures (~1%)

Estimated UK seizures

UK (Kg)

- Quantity after seizure
- Seizures

Heroin 10% | Crack <1% | Cocaine 15%
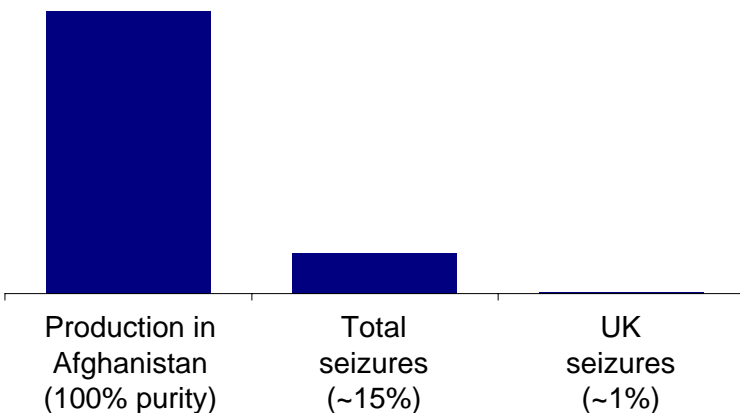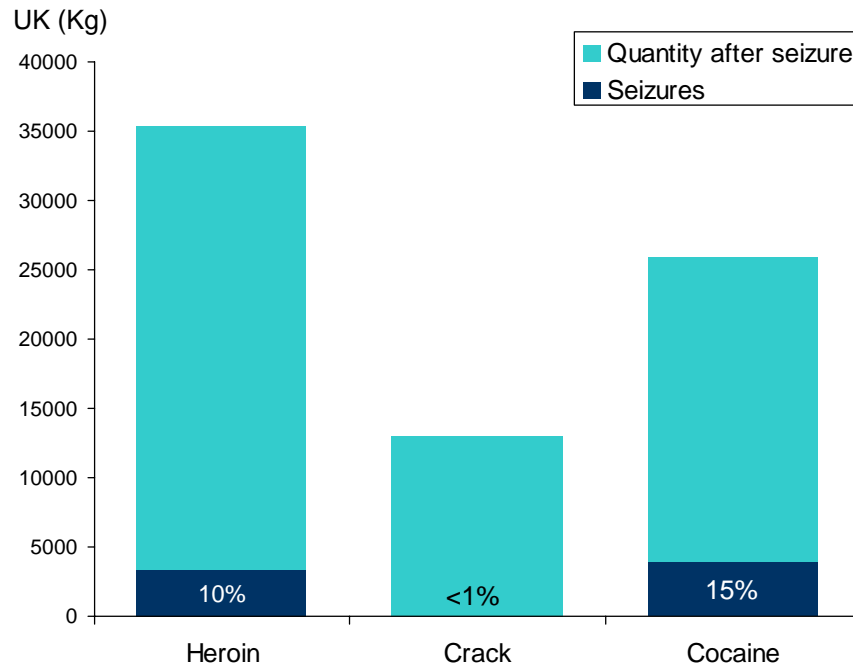
- Despite seizures, real prices for heroin and cocaine in the UK have halved over the last ten years

Note: HMG data, UN documents

In summary, government can make a range of interventions in the supply chain which have different advantages and disadvantages

Objective	Nature of Intervention	Value of intervention
Reducing quantities of drugs released into supply chain	Compensated forced eradication	Release resources into local communities… but very expensive & encourages further planting by farmers
	Uncompensated forced eradication	Increases risks of illegal cultivation to farmers… but increases social tensions in poor communities, benefits anti-government groups & displaces cultivation to new regions
	Comprehensive set of alternative development interventions	By targeting causes of illicit cultivation, has a high impact on overall production levels & is sustainable… but is expensive, takes time & requires development of good governance in source country… and displaces cultivation to other countries
Seizing drugs before they reach the UK	Upstream supply chain seizures	Larger consignment sizes mean bigger seizures… but proximity to source means that consignments are low in value & easy to replace, and there is no assurance that consignments are UK-bound
	Downstream supply chain seizures (e.g. at UK border)	Proximity to UK means that seizures will directly reduce flow of drugs into the UK market, & consignments are of high value & harder to replace, but small consignment sizes mean smaller seizures & it is impossible to disrupt the large number of routes completely
Disrupting distribution networks within the UK	Targeting higher-level dealers (distributors and wholesalers)	Removes drugs before they hit the streets in small quantities…but resource-intensive & relatively little known about this part of the market
Disrupting retailer activity within the UK	Targeting street dealers	High visibility policing helps reduce anti-social street dealer behaviour…but street dealers replaced quickly & only tiny quantities of drugs removed from circulation
Reducing financial rewards for drugs-trafficking	Targeting proceeds and assets of drug groups	Attacks profits & hence rationale of drugs-traffickers…but is resource-intensive & technical, and money-laundering modus operandi likely to change as law enforcement focuses on this area

Conclusions on the drugs supply market

- Over the past 10-15 years, despite interventions at every point in the supply chain, cocaine and heroin consumption has been rising, prices falling and drugs have continued to reach users
  - government interventions against the drug business are a cost of business, rather than a substantive threat to the industry's viability
  - however, by increasing risk, government interventions are likely to have slowed the decline in prices

Current policies are underpinned by an assumption that reducing drug availability and increasing price reduce harm

- Supply-side interventions may impact on price, purity, and/or availability. Current supply-side policies focus on seizing drugs and disrupting the business in order to reduce availability and increase price. The implicit assumption is that this will lead to a reduction in harm by
  - reducing consumption amongst the most problematic users
  - inhibiting the initiation of new users
  - buying 'breathing space' for demand-side policies to take effect

- For all of this to hold true, evidence would need to demonstrate that overall levels of harm respond to changes in price, purity and/or availability to the drug user
  - e.g., that seizures, by reducing availability and/or increasing price, thereby reduce crime-motivated harms as well as health and social functioning harms
  - and that supply-side policies <u>can</u> successfully reduce availability and increase price

Source: Team analysis

There have been few instances of drug availability reducing and prices increasing

The Impact of the Australian Heroin Drought

- The best evidence we have of the effects of a sharp reduction in availability, and a consequent increase in price, is from the Australian heroin drought, in Christmas 2000.

- The drought had an impact on the availability, purity and price of heroin in Australia
  - availability was down
  - purity was reduced
  - the price of heroin increased

- However, the cause of the drought is unclear
  - the Australian government argued that law enforcement played a key role
  - but there were also severe droughts at the same time in source countries
  - and the drought may have been due to marketing by Asian crime syndicates to promote methamphetamines

Effect of the drought on perceived availability

% of respondents

Effect of the drought on perceived purity of heroin

% of respondents

Effect of drought on perceived cost of heroin

% of respondents
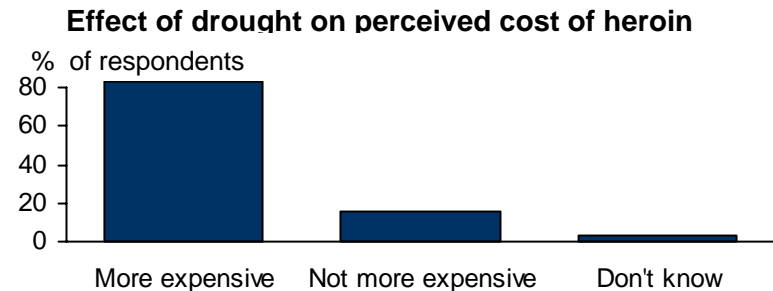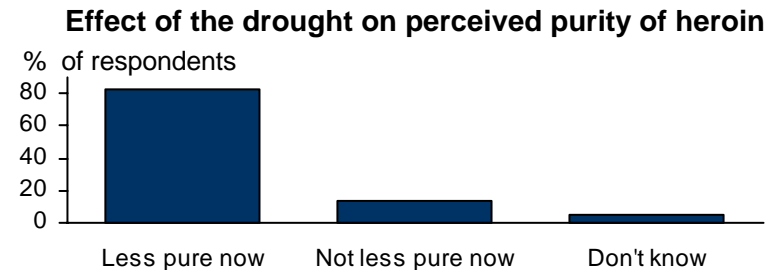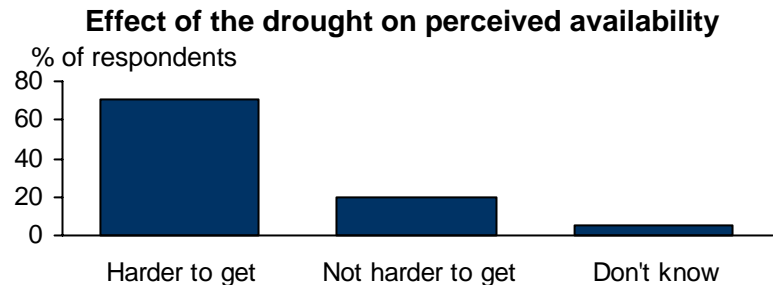
Source: Weatherburn D et al, 'The Australian heroin drought and its implications for drug policy', in *Contemporary Issues in Crime and Justice*, 2001

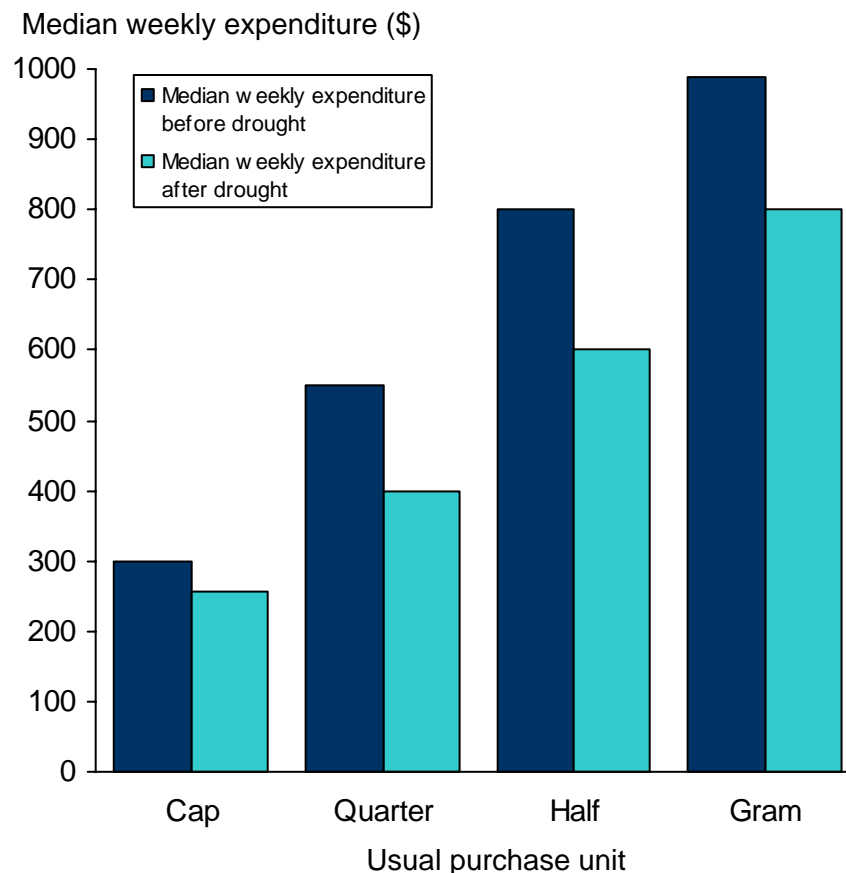# The consumption of drugs does appear to react both ways to changes in price

When prices rise

- In Australia, there was a sharp drop in positive tests for opiates after the drought, and total expenditure on drugs appears to have fallen, at least amongst regular users.

When prices fall

- In the UK, heroin and cocaine consumption has at least doubled over the last 10 years whilst real purity adjusted prices have halved

- Recent academic literature argues that price **increases** may reduce consumption significantly, but there is a wide range of estimates about the scale of the impact
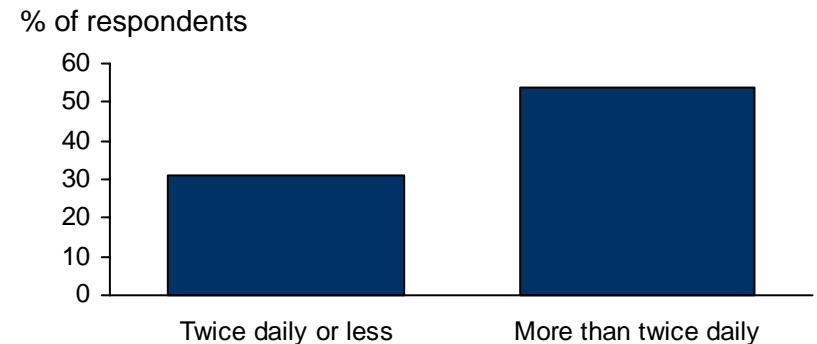 - conversely, **falling** prices may have contributed to the significant increase in initiation rates

Effect of the drought on median weekly heroin expenditure

Median weekly expenditure ($)

Legend:
- Median weekly expenditure before drought
- Median weekly expenditure after drought

Usual purchase unit

Source: Team analysis, Weatherburn D et al, 'The Australian heroin drought and its implications for drug policy', in *Contemporary Issues in Crime and Justice*, 2001
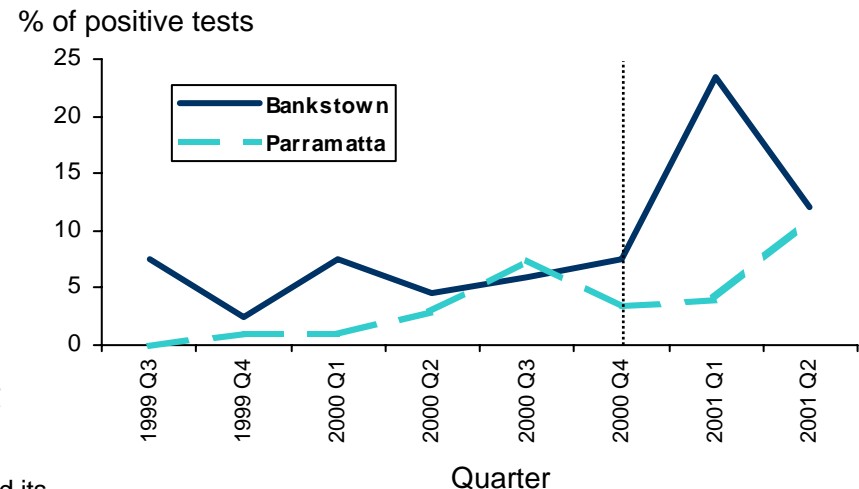
98

Even though overall consumption may drop as prices go up, those who cause most harm, however, may be more willing to pay higher prices to maintain their habit

- In the Australian drought, heavy users were less responsive to price increases and committed more crime
  - after the drought, 42% committed more crime (of those who used heroin more than twice a day, over half reported more crime)
  - and user-dealers in Oslo have proved much more willing to pay higher prices than ordinary users
- Reduced consumption of one drug may also be offset by increased consumption of another harmful drug
  - during the heroin drought, cocaine use increased, especially among heavy users
- It is possible, therefore, that price increases may even increase overall harm, as determined users commit more crime to fund their habit and more than offset the reduction in crime from lapsed users
- BUT it is also plausible that sustained price rises - at a far higher level than has hitherto been achieved - could have a significant long-term effect as users either face difficulties in increasing criminal income to fund consumption and become incarcerated, or seek treatment

Percentage reporting more crime by level of heroin use

% of respondents

Trends in positive urine tests to cocaine (September 1999 to June 2001)

% of positive tests

Source: Team analysis, Weatherburn D et al, 'The Australian heroin drought and its implications for drug policy', in *Contemporary Issues in Crime and Justice*, 2001
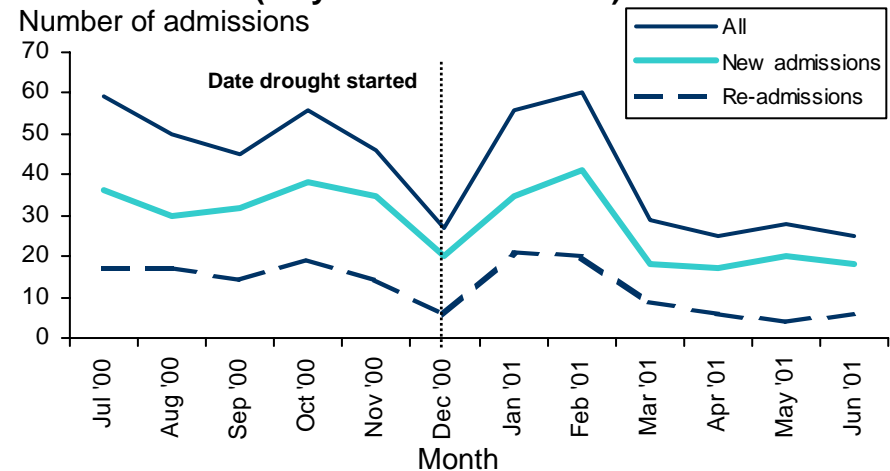
99

Successful seizures appear most likely to lead to purity changes rather than to price changes, but the consequential impact on harm is unclear

- Evidence on prices in the UK suggests that nominal prices tend to be held steady at street level whilst purity levels may vary
  - dealers appear to show a tendency to dilute purity (particularly for cocaine), or reduce the size of unit sold, in response to drug shortages rather than to increase price
  - this response may be because dealers fear losing customers if they raise price
  - as a result, dealers maintain their income and users' expenditure (and therefore crime harms) remains steady even where volumes fluctuate, reducing the harm impact of successful seizures

- Fluctuating purity levels may also have an adverse impact on health harms
  - reduced purity may increase health harms by increasing risk of overdose when higher purity levels return

- Short-term shortages in drugs supply tend to be manifested through changes in purity (or transaction size) rather than changes in nominal prices
  - this maintains total expenditure levels despite the reduced volume of drugs on the street, thereby reducing the potential impact of seizures on harm
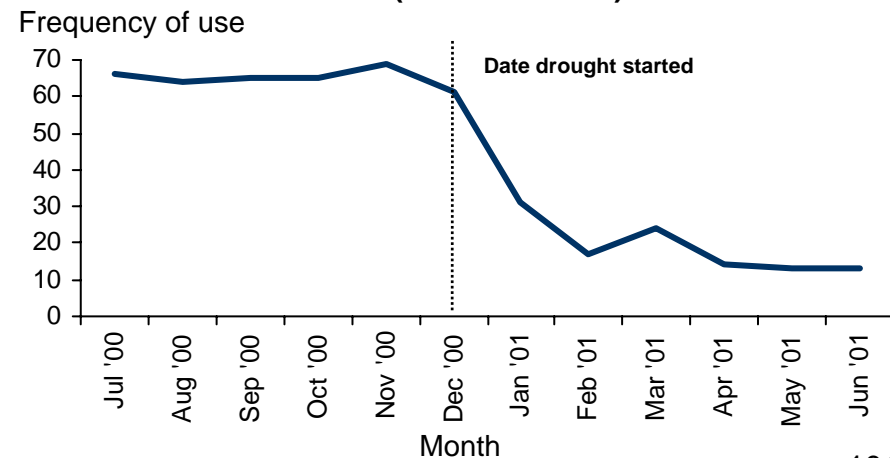
Source: Team analysis

Reductions in local availability may have a greater impact on harms than changes in price or purity

- The most pronounced effect of the Australian heroin drought was in its positive impact on treatment and overdose levels
  - it prompted a sharp upturn of admissions and re-admissions to methadone treatment
  - re-admissions appear to have stabilised at a lower level after the drought, suggesting that the positive impacts may have been sustained
  - the drought also resulted in fewer overdoses: there were 74% fewer overdose administrations in the first half of 2001 than in the last half of 2000
- Local absence of availability may therefore have a greater beneficial impact on harms than changes to other supply chain variables
- *If* interventions were successfully to reduce local availability, even for a period, they might bring a sustainable benefit in reducing demand
- The harm impact is complex, however, as the shortage in Australia pushed up both prices and the volume of crime committed by heavy users

Source: Team analysis, Weatherburn D et al, 'The Australian heroin drought and its implications for drug policy', in *Contemporary Issues in Crime and Justice*, 2001

Admissions to methadone in Cabramatta, Australia (July 2000 to June 2001)

Number of admissions

Trends in Narcan use (for overdoses) in Cabramatta

Frequency of use

101

The supply side outcomes that are most likely to reduce some harms tend to be those that are hardest to achieve

Outcome of intervention	Impact on harm	Ease of achieving
Higher prices	Increases some harms, reduces others • Heavy users tend to be price resistant and may commit more crime; higher prices may lead to more dangerous methods of use (injecting) • BUT higher prices appear likely to reduce initiation rates, and sustained price increases may prompt heavy users to seek treatment	Very difficult • Overall prices have been falling
Reduced purity	Slightly increases harm • Reduced purity may actually increase harms by increasing risk of overdose when higher purity levels returned, and by enabling dealers to increase real prices	Least difficult • Analysis of the UK market suggests that purity is the first thing to change in response to shortages in drugs supply
Reduced availability	Reduces some harms, increases others • Reduced availability can push more people into treatment • Lower availability is likely to reduce initiation rates • But the most addicted high harm causing users may commit more crime to fund the purchase of ever more expensive drugs	Very difficult • There is no evidence to suggest that law enforcement can create such droughts

Source: Team analysis

Conclusions at the end of the first phase of the project

- The rising use of serious drugs over the past twenty years has had an increasingly adverse impact on users, their families and the rest of society

- The drugs supply market is highly sophisticated, and attempts to intervene have not resulted in sustainable disruption to the market at any level. As a result:
  - the supply of drugs has increased
  - prices are low enough not to deter initiation
  - but prices are high enough to cause heavy users to commit high levels of crime to fund their habits

- The 280,000 high harm causing heroin and/or crack users engage frequently with treatment and/or criminal justice but either remain engaged for short periods of time and/or do not have their use identified. There is scope for the state to deal more effectively with users when they come into contact with government services and substantially to reduce the harms the cause

Phase 2: next steps

- To identify policies which will substantially reduce the harms caused by drug users, both to society and to themselves

In particular to :

- Define a rationale for intervention in the drugs supply chain, such that interventions in the market help to reduce harm
- Identify which interventions with users and potential users will most reduce harm
- Propose the most cost-effective means overall of reducing harms through interventions both with users and in the supply chain