

## “Initiation of drug use, injecting and treatment”

### Age specific analyses of NDTMS for ACMD(PWG) Pathways Work Programme

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**Note:**

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## Initiation of drug use, injecting and treatment

The National Drug Treatment Monitoring System (NDTMS) provides the largest source of information in England about problem drug users who have presented to a treatment service. These 'top end' problem drug users may not be wholly representative of the wider group of non-problematic drug users or indeed of those problematic users who have not yet accessed treatment. Nevertheless, this dataset provides a rich source of information.

NDTMS collects information on all individuals receiving a triage assessment for Tier 3 or 4 drug treatment. The paper based NDTMS system used in England between 2001 and 2004 included information on the self-reported age of first use of each reported drug used, the age at which any drugs were first injected and the age at which treatment for drug use was first received. Available English data from this period (covering eight of the nine English Government Office Regions for 2001 to 2003) was examined to illustrate:

- the ages at which specific drugs are first taken,
- the ages at which those drugs that lead individuals to seek treatment were first taken,
- the lag between first use of these drugs and first receipt of treatment, and
- the lag between first use of drugs, injecting and receiving treatment.

The data set employed for this analysis contained 140,000 individual treatment seekers, brief details of whom are presented in Table 1 below.

**Table 1: Basic characteristics of 140,000 sample**

Characteristic	%
Male	73
Female	27
<i>Main drug:</i>	
Heroin	68
Amphetamine	4
Cocaine	4
Crack	5
Cannabis	9
Others	10
<i>Ethnic category:</i>	
White	88
Other	12

### Age first used specific drugs

Table 2 illustrates the median starting ages of all drugs reported in the Regions for which the information was available (the North of England). The first use of these drugs follows a more or less expected pattern and illustrates potential key age groups in the onset of specific types of drug use, namely experimental, legal or low classification drugs (solvents, alcohol, cannabis) in the early teens, 'party' drugs (ecstasy,

hallucinogens, amphetamine) in the mid teens, 'problematic' drugs (heroin, cocaine, benzos) in the late teens and early twenties and crack and additional opiates through the remaining early twenties. The medians presented imply that 50% of all problematic drugs users included in this analysis started use of these specific drugs before or by the listed age.

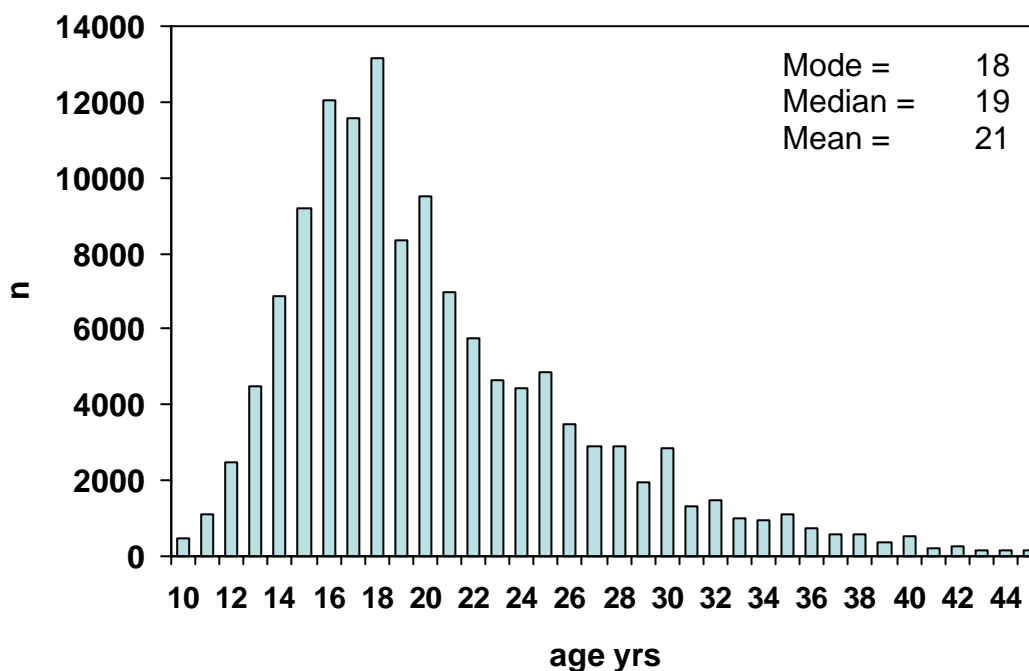
**Table 2: Median age of first use of drugs**

Drug	Median age 1 <sup>st</sup> use
Solvents	13
Alcohol	14
Cannabis	14
Ecstasy	16
Hallucinogens	16
Amphetamine	17
Heroin	19
Cocaine	20
Benzodiazepines	20
Crack	22
Methadone	22
Other opiates	24
Anti Depressants	26

### Age first use main drug

The remainder of this analysis concentrates on treatment seekers 'main drugs', namely the drug creating the primary problem or which caused them to seek treatment at the time of presentation to a service. Primary, problem drug use started at an average age of 19 years and the distribution of starting ages is presented in Figure 1 below.

**Figure 1: Distribution of first use of main problem drug.**



**Table 3: Proportion of users of selected drugs starting use by the age of 20 yrs**

Cannabis	94%
Amphetamine	75%
Heroin	59%
Cocaine	51%
Crack	42%

### Demographic differences in age of first use of main drug

Note: mean ages were used to enable tests of significance.

**Gender:** no overall difference in age of first use of drugs, although the females in the sample demonstrated later use of cannabis and amphetamine but earlier use of cocaine and crack (all by a difference of roughly one year,  $p < 0.005$ ).

**Ethnicity:** within the broad categories of White, Black and Asian, the age of first use generally differed between by approx 1 year between White and Asian clients, and a further 1.5 yrs between Asian and Black clients. The differences were drug specific, although the numbers available for analysis diminish for individual main drugs such that caution is required in interpreting the results. However, significant differences are listed below ( $p < 0.005$ ):

Heroin as main drug:

- White before Asian clients (by 1 year), Asian before Black clients (by 1.5 yrs)

Crack as main drug:

- White before Black clients (by 0.75 yrs)

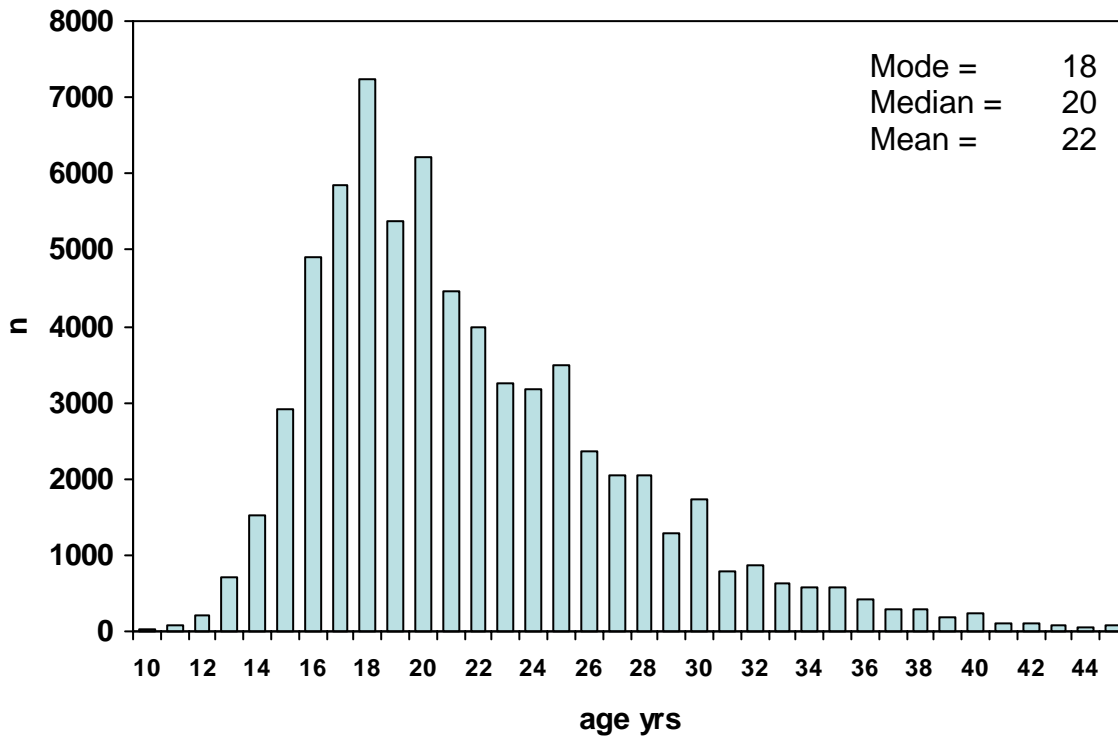
Cannabis as main drug:

- White before Asian clients (by 0.75 yrs)

**Regional variations:** many differences appeared between onset ages within English Regions, the most significant being the later onset (by 1 year) of main drug use by individuals attending services within London, primarily due to later use of heroin and the earlier onset of cannabis use (by 1 year) within the North West, Yorkshire & Humberside and North East.

### Age first injected

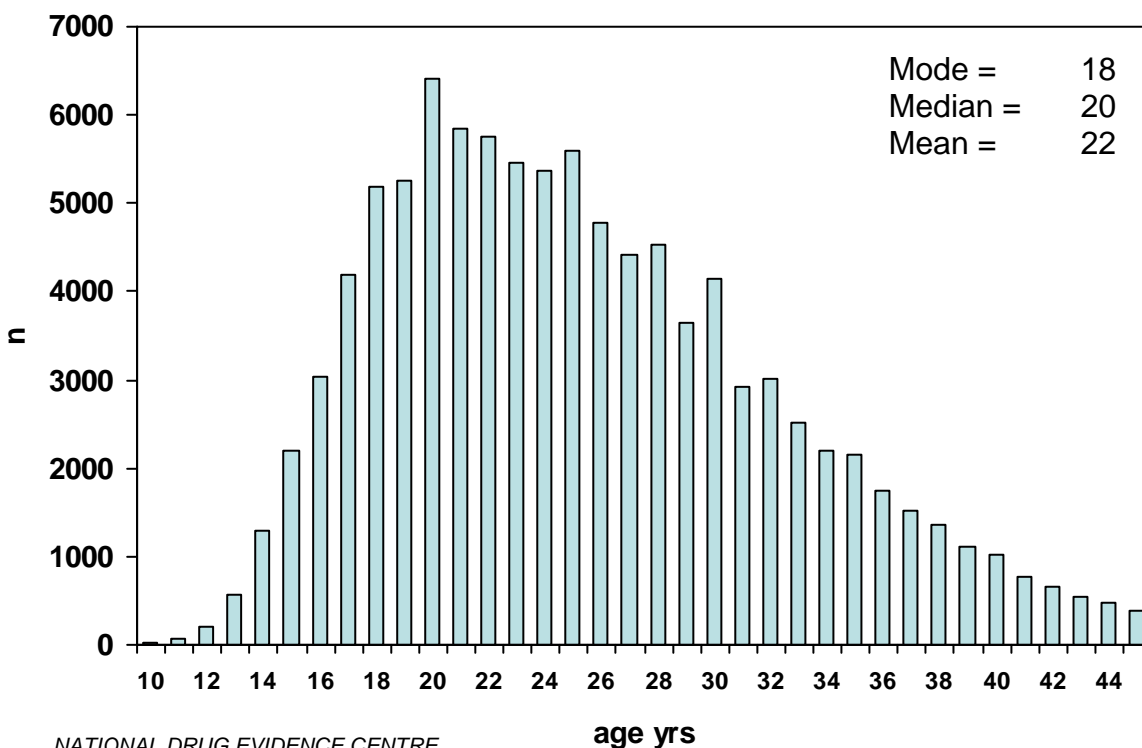
Figure 2: Distribution of age first injected any drug



Those treatment seekers who had injected first did so at a median age of 20 years. No significant differences appeared between males and females although Black and Asian clients first injected on average two to three years later than did White clients.

### Age first treated

Figure 3: Distribution of age first treated



Demographic differences were observable in the distribution of age of first treatment.

- Females were, on average, first treated when one year younger than males;
- Those in the Black ethnic category were first treated when three years older than their White or Asian counterparts;
- Those seeking treatment in London were first treated when at least two years older than in other areas of England.

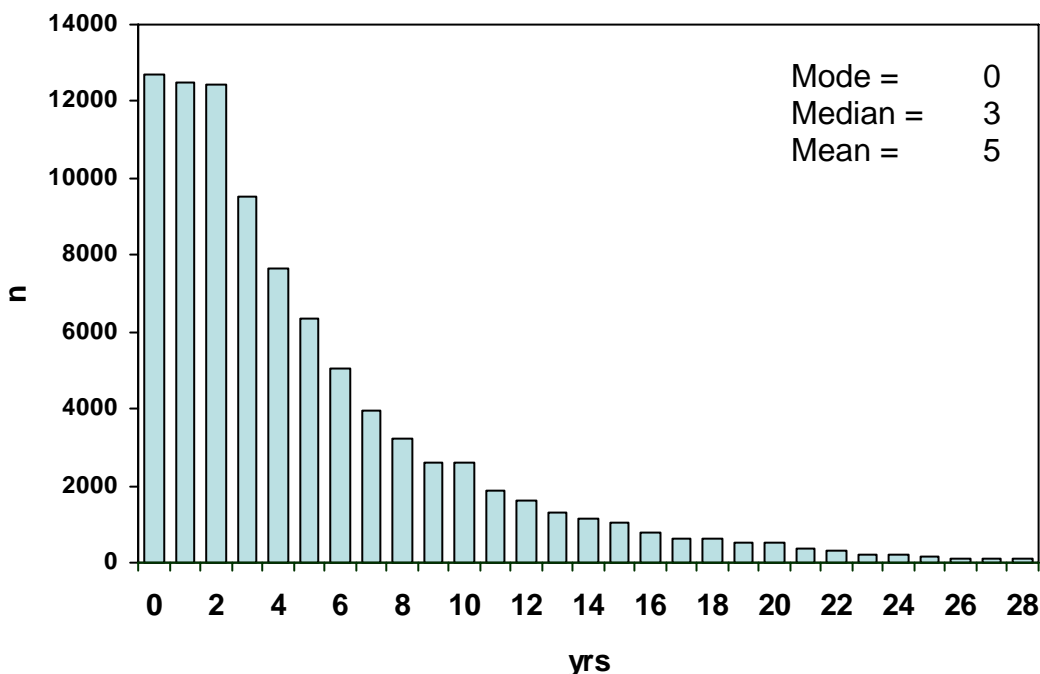
These results were also found when restricting the analysis to primary heroin users to control for any cross correlation between demographic categories and main drug types.

Given the differences in onset of different drugs it is clearly essential to look not only at age of first treatment but also at the lag between first use of problem drugs and subsequent treatment received.

### Lag between first main drug use and first treatment

Although the most common age of seeking treatment coincided with the age of first use of the main problem drug, the distribution of the lag between the two was stretched out over 20 years with an average lag of three years.

**Figure 4: Distribution of lag between first main drug use and first treatment**



The following results within the examination of lag between first stated main drug use and first treatment were significant:

- Males waited one year more than females to access treatment;

- Black clients waited 1.5 years longer than did White clients
- White clients waited 0.5 years longer than Asian clients.

Again, these results were confirmed with primary heroin users alone, to control for any cross correlation between demographic categories and main drug types.

### **Confirmation of results**

The variables: gender, ethnicity, main drug type and region of report were entered into a multiple regression model (converting all continuous dependents to an 'above or below median' categorical), to confirm that significant differences presented in this report existed independently of the effects of other variables.

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