Estimates of the Prevalence of Opiate Use and/or Crack Cocaine Use, 2009/10: Sweep 6 report

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Abstract

This report provides estimates of the prevalence of opiate and/or crack cocaine use at the Government Office Region and national level in England for 2009/10. It is a follow up to the four reports that provided prevalence estimates for 2004/05 (Hay *et al.* 2006), 2005/06 (Hay *et al.* 2007a), 2006/07 (Hay *et al.* 2008) and 2008/09 (2010). Estimates of the prevalence of opiate use, crack cocaine use and drug injecting (by users of opiates and/or crack cocaine) are also presented. Two prevalence estimation methods have been used; the capture-recapture method and the multiple indicator method. The capture-recapture method examines the overlap between different sources of data on individual drug users that are available at the local level to estimate the size of the hidden drug using population at the DAT area level. The multiple indicator method models the relationship between the capture-recapture estimates and readily available drug indicator data, such as numbers of drug offences in an area. It then applies that relationship to the areas where capture-recapture estimates are not available and provides estimates of drug use for those areas. The DAT area estimates are then summed to provide regional and national estimates.

In total there were an estimated 306,150 opiate and/or crack cocaine users aged 15 to 64 in England in 2009/10 (95% confidence interval (CI) 299,094 – 316,916). This converts to 8.93 per thousand population aged 15 to 64 (95% CI 8.72 – 9.24). The estimated prevalence of opiate use was 7.70 per thousand population aged 15 to 64 (95% CI 7.58 – 7.90) and the estimated prevalence of crack cocaine use was 5.37 per thousand (95% CI 5.18 – 5.70). The estimated prevalence of drug injecting was 3.01 per thousand population aged 15 to 64 (95% CI 2.92 – 3.14). Nationally, there was a decrease in prevalence of opiate and/or crack cocaine use between 2008/09 and 2009/10; this decrease was statistically significant. There was a slight increase in the prevalence of opiate use from 262,428 in 2008/09 (95% confidence interval (CI) 258,782 – 268,517) to 264,072 in 2098/10 (95% confidence interval (CI) 260,023 – 271,048). The estimates for the period 2009/10 also show a decrease in the levels of crack cocaine use, but this was not statistically significant.

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Overview

Information about the prevalence of opiate and / or crack cocaine use is an essential part of the evidence base used to formulate policy, inform service provision, and assess the wider population impact of interventions. Although direct enumeration is not possible, indirect techniques can provide estimates of drug misuse prevalence. This research uses data sources that are available at the local and national level to estimate the prevalence of opiate and / or crack cocaine use.

Estimates are provided for the 149 Drug Action Team (DAT) areas and nine Government Office Regions in England. Two established prevalence estimation methods are used; the capture-recapture method and the multiple indicator method.

The capture-recapture method has been used to estimate the prevalence of opiate and / or crack cocaine use in the majority of DAT areas in England. The multiple indicator method provided local estimates in the remaining DAT areas. The national estimate for opiate and / or crack cocaine use was derived as the sum of the 149 DAT area estimates.

Data sources

Four sources of data were available within which individual opiate and/or crack users (OCUs), opiate users and crack cocaine users could be identified. These sources of data are drug treatment, probation, police and prison data. Police data do not include sufficient information to identify drug injectors, therefore the fourth source used in the injecting analyses was community assessments carried out within the Drug Interventions Programme (DIP).

Persons resident in each DAT area, in contact with these sources during 2009/10, known to be using heroin, methadone, other opiate drugs, or crack cocaine were included in the analysis. Only those aged 15 to 64 were included. The overlap between data sources was determined via comparison of initials, date of birth and gender within each DAT area. Established statistical modelling techniques were used to examine this overlap and to produce prevalence estimates stratified by age group, gender, and DAT area of residence.

Methods

Two methods have been used to estimate the local and national prevalence; the capture-recapture method, which was used in 90 out of the 149 DAT areas (60%) to obtain opiate and/or crack use prevalence estimates and the multiple indicator method, which was used in the remaining 59 DAT areas. The capture-recapture method uses information on the overlap between data sources that are available at the local level (i.e. information on the number of individuals appearing in more than one data source) to provide estimates of the size of the hidden population (i.e. opiate and / or crack cocaine users not identified from any data source). The multiple indicator method models the relationship between the prevalence of opiate and / or crack cocaine drug use and readily available indicators such as aggregate numbers of drug users in treatment or committing drug-related crimes in those areas where these prevalence estimates are available. It can therefore provide prevalence estimates for areas where capture-recapture estimates are not available.

Results

Table 1 presents the national estimates and their associated 95% confidence intervals. Total estimates for opiate and/or crack use (OCU), opiate use and crack use for each Government Region are shown in Tables 2[1] to 4.

Table 1: **National prevalence estimates and rates per 1,000 population aged 15 to 64 with 95% confidence intervals.**

Drug	Estimate	95% Confidence Interval	Rate	95% Confidence Interval
OCU	306,150	299,094 – 316,916	8.93	8.72 – 9.24
Opiate	264,072	260,023 – 271,048	7.70	7.58 – 7.90
Crack	184,247	177,534 – 195,526	5.37	5.18 – 5.70
Injecting	103,185	100,085 – 107,544	3.01	2.92 – 3.14

Table 2: **Estimated number of opiate and/or crack (OCU) users by Government Region.**

Government Office Region	OCU Estimate	95% CI	
East of England	24,158	20,766	28,022
East Midlands	25,772	22,581	29,108
London	51,445	49,394	54,087
North East	18,605	17,452	20,052
North West	50,343	48,750	52,633
South East	36,145	31,521	40,764
South West	27,694	25,394	30,067
West Midlands	34,368	31,855	37,238
Yorkshire and the Humber	37,620	35,314	40,313
ENGLAND	**306,150**	**299,094**	**316,916**

Table 3: **Estimated number of opiate users by Government Region.**

Government Office Region	Opiate Estimate	95% CI	
East of England	19,968	17,771	22,286
East Midlands	21,786	20,463	23,488
London	42,511	41,085	44,124
North East	16,470	15,824	17,504
North West	43,613	42,083	45,758
South East	30,656	28,003	33,740
South West	24,725	23,378	26,487
West Midlands	30,566	29,007	32,465
Yorkshire and the Humber	33,777	32,421	35,499
ENGLAND	**264,072**	**260,023**	**271,048**

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1   In the body of the report, data within tables are provided at the Government Office Region level. Full tables at the DAT area level are provided in accompanying reports.

Table 4:   Estimated number of crack cocaine users by Government Region.

Government Office Region	Crack Estimate	95% CI	
East of England	13,771	10,634	16,928
East Midlands	13,061	10,117	16,159
London	42,422	40,389	44,965
North East	8,565	7,175	11,892
North West	30,192	27,067	33,624
South East	21,021	17,141	25,917
South West	14,890	12,531	17,773
West Midlands	21,133	18,697	23,884
Yorkshire and the Humber	19,191	16,995	23,645
ENGLAND	**184,247**	**177,534**	**195,526**

Table 5:   Estimated number of drug injectors by Government Region.

Government Office Region	Injectors Estimate	95% CI	
East of England	8,018	6,804	9,369
East Midlands	9,180	8,015	10,384
London	13,056	12,366	14,363
North East	7,686	7,202	8,279
North West	17,794	16,912	18,928
South East	11,376	9,667	13,321
South West	11,444	10,342	12,716
West Midlands	11,244	10,021	12,587
Yorkshire and the Humber	13,387	12,126	14,684
ENGLAND	**103,185**	**100,085**	**107,544**

Thus in total there are an estimated 306,150 opiate and/or crack users in England (95% CI 299,094 to 316,916), this corresponds to 8.93 per thousand of the population aged 15 to 64 (95% CI 8.72 to 9.24). In terms of opiate users, there are an estimated 264,072 people (95% CI 260,023 to 271,048) in England who use those drugs (7.70 per thousand population aged 15 to 64, 95% CI 7.58 to 7.90) whereas it is estimated that 184,247 people (95% CI 177,534 to 195,526) use crack cocaine (5.37 per thousand population aged 15 to 64, 95% CI 5.18 to 5.70). It should be noted that the majority of people using crack cocaine are also using opiates and that crack cocaine may neither be their main drug of use or indeed the drug that is causing them the most problems. There were an estimated 103,185 drug injectors, 95% CI 100,085 – 107,544. (Table 5)

Tables 6 to 8 present the prevalence rates per thousand of the population aged 15 to 64, again by Government Region for opiate and/or crack use, opiate use and crack cocaine use.

Table 6: Estimated prevalence (rate per 1,000 population aged 15 to 64) of opiate and/or crack use by Government Region.

Government Office Region	OCU Estimate	95% CI	
East of England	6.44	5.53	7.47
East Midlands	8.76	7.68	9.90
London	9.45	9.08	9.94
North East	10.84	10.17	11.69
North West	11.08	10.72	11.58
South East	6.56	5.72	7.39
South West	8.24	7.56	8.95
West Midlands	9.74	9.03	10.55
Yorkshire and the Humber	10.75	10.09	11.52
ENGLAND	**8.93**	**8.72**	**9.24**

Table 7: Estimated prevalence (rate per 1,000 population aged 15 to 64) of opiate use by Government Region.

Government Office Region	Opiate Estimate	95% CI	
East of England	5.32	4.74	5.94
East Midlands	7.41	6.96	7.98
London	7.81	7.55	8.11
North East	9.60	9.22	10.20
North West	9.59	9.26	10.07
South East	5.56	5.08	6.12
South West	7.36	6.96	7.88
West Midlands	8.66	8.22	9.20
Yorkshire and the Humber	9.65	9.27	10.15
ENGLAND	**7.70**	**7.58**	**7.90**

Table 8: Estimated prevalence (rate per 1,000 population aged 15 to 64) of crack cocaine use by Government Region.

Government Office Region	Crack Estimate	95% CI	
East of England	3.67	2.83	4.51
East Midlands	4.44	3.44	5.49
London	7.79	7.42	8.26
North East	4.99	4.18	6.93
North West	6.64	5.95	7.40
South East	3.81	3.11	4.70
South West	4.43	3.73	5.29
West Midlands	5.99	5.30	6.77
Yorkshire and the Humber	5.48	4.86	6.76
ENGLAND	**5.37**	**5.18**	**5.70**

In terms of regional differences, the North West Government Office Region has the largest prevalence of opiate and/or crack use at just over 11 per thousand population aged 15 to 64 followed closely by the North East and Yorkshire & the Humber at just under 11 per thousand. The East of England has the lowest prevalence at around 6 per thousand. When comparing opiate use prevalence, the highest prevalence rates are again in the North East, North West

and Yorkshire & the Humber at around 10 per thousand. London has a higher estimated prevalence of crack cocaine use at just under 8 per thousand population, in comparison to prevalence of 7 per thousand in the North West and between around 4 and 6 per thousand in all other Government Office Regions.

Discussion and Conclusion

These estimates are the results of the second follow-up to a three-year project. This follow-up was carried out three years after the final sweep of the original project, so could therefore be considered as 'sweep 6'. As far as possible, the results of this 6th sweep can be compared with the results of the previous sweeps. This study has demonstrated that it is possible to provide estimates of the prevalence of opiate and/or crack use as well as the prevalence of opiate use and crack cocaine use at the local, Government Office Region and national level and across successive years. Nationally, there was a decrease in the prevalence of opiate and/or crack cocaine use between 2008/09 and 2009/10 and this decrease was statistically significant. The prevalence rate for opiate use slightly increased; this increase was not statistically significant. There was a decrease in the levels of crack cocaine use; however that decrease was not statistically significant.

1. Introduction

Information about the number of people who use illicit drugs such as heroin, other opiates or cocaine is a key element of the evidence base used to formulate policy and inform service provision and provides a context in which to understand the population impact of interventions to reduce drug related harm. To direct resources effectively, it is desirable to know about the prevalence of drug use at the local level. To determine the extent to which treatment may reduce harm to communities, it is necessary to know what proportion of the number of drug users in any given area is engaging with treatment. Direct enumeration of those engaged in a largely covert activity such as the use of heroin is not possible and large, household surveys such as the British Crime Survey tend to underestimate numbers of those individuals whose drug use is the most problematic and whose lives are often the most chaotic. However, indirect techniques can be applied to provide estimates of drug use prevalence.

This report describes the results of the sixth sweep of a three year research project to use data sources that are available at the local and national level to provide estimates of the prevalence of opiate and/or crack use in all Drug Action Team areas (DATs) in England and thus provide regional and national prevalence estimates. The same methodological approach was used in this sweep as in the third one which was published by the Home Office - http://rds.homeoffice.gov.uk/rds/pdfs08/horr09.pdf

Prevalence estimates are presented at the Government Office Region and national level. Changes in the prevalence between sweep 5 (2008/09) and sweep 6 (2009/10) of opiate and/or crack use (OCU), opiate use and crack cocaine use are also presented at the Government Office Region and national level, along with information on changes in the prevalence of opiate and/or crack use by age group (15 to 24, 25 to 34 and 35 to 64 years of age). As injecting estimates were not derived in 2008/09, comparisons are made with the sweep 3 (2006/07) estimates.

2. Methods

This research applies two methods, the capture-recapture method and the multiple indicator method (also called the multivariate indicator method or MIM), to estimate the prevalence of opiate and/or crack use in England in 2009/10. These two methods appear to offer the most cost-effective and straightforward approach to establishing valid local and national prevalence estimates. The benefits of these methods are that: they do not rely exclusively on drug users self reported use of substances; it is possible to provide estimates of prevalence stratified by key characteristics such as age and gender; they use a standard set of procedures that are tried and tested and allow for replication; they build upon existing routinely collected data. More details of these methods and the implications for their use can be found in the report of the first two sweeps of this project (Hay *et al*, 2006; Hay *et al*, 2007a) and in a technical report (Hay *et al*, 2007b). This chapter provides a brief overview of the methods and a description of the changes from the first three years of the project.

As with the first five sweeps of the project, the first stage of the estimation process was to attempt to obtain capture-recapture (CRC) estimates for all DAT areas. These CRC estimates were then used as anchor points for a multiple indicator method (MIM) model which was used to provide estimates for those areas for which it had not proved possible to obtain a CRC estimate.

The capture-recapture analysis procedure

In simple terms, the capture-recapture analysis involves testing a series of statistical formulae, or 'models', to find one that best matches, or 'fits' the pattern of overlap between data sources. A value, known as the Akaike Information Criterion (AIC) (Hook and Regal, 1997), can be useful in gauging goodness of fit. This model is then used to calculate the number of opiate and/or crack users who do not appear in any source. This estimate is then added to the total number of known opiate and/or crack users, to provide an overall estimate of prevalence.

The first stage of analysis involved testing how well a simple model, that assumed all samples were independent of each other, matched the observed overlap in the contingency table. Increasingly complex models, representing dependencies between single pairs of data samples ('one-way') and then two pairs of samples ('two-way') were then tested. The model that best matched the overlap was chosen using objective statistical criteria; more complex models were only chosen if they provided a better match (on comparing AIC values) than lower-level models. All capture-recapture analyses were carried out using the GLIM4 statistical package.

In most DAT areas, all four sources of data were available to estimate the prevalence of opiate and/or crack use and opiate use. Attempts were made to produce capture-recapture estimates in all 149 DAT areas but in the smallest DAT areas there were too few data to carry out this analysis (City of London).

In the first stage of the analysis, the 22 simplest models were applied to the overlap data from each of the remaining 148 DAT areas in England. This was initially carried out on unstratified data, i.e. not splitting by gender or age group. This process was then repeated for the data stratified by age group (three strata) and by gender (two strata) giving five stratified estimates. At this stage the data were not stratified by both the age group and gender (e.g. young males, females aged 35 to 64). Such an approach to stratification would have given another six stratified estimates.

Various methods were used to explore whether the model fitted to the unstratified data was a good fit (in particular if the AIC value was less than zero) and whether the resultant estimate was valid. This included checking whether the lowest deviance value indicated a good fit (a lower deviance value signifies a better fit of the model to the observed data), checking whether the estimate derived from applying the best model was similar to a weighted estimate (calculated as a weighted mean of the available 22 estimates) and whether the unstratified estimate was similar to the sum of the stratified estimate for both the age-stratified and

gender-stratified model / estimates. In addition, it was considered whether each estimate was credible (i.e. not unfeasibly low or high in comparison with the known drug using population or underlying general population).

Thus to summarise, if the model fitted to the unstratified data did not offer a valid estimate, then either the summed gender-specific or age group-specific estimates were considered (with gender-specific estimates preferred if there was no discernable difference between the two approaches; again to ensure that the national confidence interval was not excessively wide). If the models fitted at this stage again did not offer a valid estimate then the approach taken was to stratify the males into three age groups but keep the female data unstratified. This was particularly important as, across the country, there were few data on female opiate and/or crack users over the age of 34. If that approach did not work, then the analyses were run on the six age and gender strata and those estimates were considered. If none of those unstratified estimates were deemed to be appropriate then any stratified analysis where the AIC value for one stratum was less than five was considered. If none of those approaches provided a valid estimate then a multiple indicator estimate was used instead.

As with the first three sweeps, estimates stratified by age group, were obtained by first estimating the estimated proportion of drug users falling in each stratum in each DAT area then applying these estimated proportions to the total prevalence estimates for that area, whether it was obtained using capture-recapture method or the multiple indicator method. Estimates stratified by gender were also derived in a similar manner.

Once the OCU and opiate use capture-recapture estimates for each case definition were obtained, they were compared against each other at the DAT area level. The first comparison was between the opiate use estimate and the OCU estimate. While on one level it might be argued that the opiate use estimate should always be less than the OCU estimates, instances where the opiate use estimate was up to 10% greater than the OCU estimate were still felt to be credible, particularly when considered in conjunction with their associated confidence intervals. Where the opiate capture-recapture estimate was more than 10% greater than the OCU estimate, both analyses were re-examined and one or more of the estimates was substituted with a multiple indicator method estimate.

To a certain extent the approach described above was carried out to estimate the prevalence of crack cocaine use at the DAT area level. As with the previous sweep, estimates of crack cocaine use stratified by age group or gender were used to derive DAT area level estimates. The crack cocaine estimates were also compared to opiate and/or crack use estimates to ensure consistency and where it was not possible to obtain a valid or feasible crack cocaine estimate using the capture-recapture method then a multiple indicator estimate was used instead. As in the first and second sweeps of the study, if it was not possible to obtain an opiate and/or crack use prevalence estimate using the capture-recapture method for any given DAT area then the multiple indicator method was used to estimate the prevalence of crack cocaine use. The injecting analyses did not stratify by age group or gender.

3. Data and Analysis

Case definitions

The case definition of the prevalence estimates depends heavily on the case definitions used by the contributing sources. Moreover, the case definitions of the resultant prevalence estimates need to reflect case definitions that are common across all data sources. The study therefore employed the following as the case definition for problem drug use:

- Use of opiates and/or the use of crack cocaine.

It should be noted that the case definition focuses on the 'use' of opiates and/or crack cocaine rather than the 'misuse' of these drugs or addiction to either drug. The case definition does not include the use of cocaine in a powder form, the use of amphetamine, ecstasy or cannabis, or the injecting of drugs by people who do not use opiates or cocaine.

The study also provides separate estimates of the prevalence of opiate use, and of the prevalence of crack cocaine use. Estimates of the number of drug injectors who use either opiate and / or crack cocaine are also presented This definition of drug injecting does not include people who would, for example, inject amphetamines but do not use either opiates or crack cocaine.

All data refer to the financial year from 1st April 2009 to 31st March 2010. The age range employed within the study is from 15 to 64 and where the estimates have been stratified by age group, these are 15 to 24, 25 to 34 and 35 to 64 years of age. To derive age from date of birth, the individual's age on the 1st of October 2009 (the mid-point in the financial year 2009/10) was calculated and those who were under the age of 15 or over the age of 64 were excluded. Individuals with missing data fields, such as gender, forename initial or surname initial were also excluded, as were individuals where it was not possible to assign DAT area of residence (or those that were resident outside England).

Due to the case definitions outlined above and the confidence intervals associated with each estimate the figures must be used with care. More information on the how the estimates can be used and the limitations associated with them can be found in Man (2007).

Data

Data used in the capture-recapture analysis

Four main sources of data on opiate and/or crack use, which were suitable for use in the capture-recapture analyses, were available at the national level:

- The National Drug Treatment Monitoring System (NDTMS)
- The National Probation Service Offender Assessment System (OASys)
- Drug users convicted under the Misuse of Drugs Act (1971) for offences involving possession (or possession with intent to supply) heroin, methadone and/or crack cocaine from the Police National Computer (PNC)
- Drug Interventions Programme assessments completed in prisons (DIP-Prison).

In addition, Drug Interventions Programme assessments completed in the community (DIP-community) were employed within the drug injecting analyses as Police data did not include information on an individual's injecting status.

Data sources used in the Multiple Indicator Method analysis

There is a wide range of indicator data that may be correlated with drug use prevalence at the DAT area level that could be useful within a multiple indicator analysis. Three main types of indicator data were available to be used within this second sweep of the study; data that are

currently in the public domain (e.g. published data on crime or income support claimants), data that are not currently in the public domain but have been provided to the study team (e.g. drug-related hospital admissions) and data that have been collected for use within the capture-recapture analyses (such as the NDTMS data).

As in the fourth sweep of the study, a decision was made not to use crime data as these data referred to the place where the crime was committed, not the place where the person responsible for the crime lived. Therefore such indicator data could artificially inflate the estimates for some places where crimes are committed by people who do not live there (e.g. Westminster). Although the exclusion of this data from the analysis can improve the precision of estimates at local level its effect on the national estimates is negligible. Population density was used as an indicator in sweeps one, two and three but it was not used in sweep five or this current sweep.

Multiple Indicator Method analyses

In this chapter the specific application of the multiple indicator method within this sweep of the study is considered. All of the indicator data and the anchor point data were converted to rates per 1,000 population aged 15 to 64 prior to inclusion in the analyses.

The capture-recapture analyses derived estimates of the prevalence of different types of problem drug use (opiate and/or crack cocaine use; opiate use; crack use; injecting drug use). From these estimates a set of anchor point DAT areas were constructed for use within the multiple indicator analyses. Overall there were 90 DAT areas that were used as anchor points in the final multiple indicator analyses, although other provisional multiple indicator analyses were carried out to examine the credibility of the capture-recapture estimates and their use in a multiple indicator model.

The number of DAT areas that were used as multiple indicator anchor points is summarised by Government Office Region in Table 3.1. There were three DAT areas (Bolton, Hackney and South Tyneside) which, although a capture-recapture estimate was available, the estimates were not included as anchor points. This was because inclusion of those DAT areas in the multiple indicator analyses would have unduly influenced the analyses[2].

Table 3.1:   **Summary of the number of DAT areas used as multiple indicator anchor points by Government Office Region.**

Government Office Region	Number of DAT Areas	OCU	Opiate	Crack	Injecting
East of England	10	7	6	7	6
East Midlands	9	1	4	1	3
London	33	15	14	14	23
North East	12	8	8	8	8
North West	22	17	14	13	14
South East	19	12	12	12	14
South West	15	10	11	7	7
West Midlands	14	12	11	10	10
Yorkshire and the Humber	15	8	9	7	6
ENGLAND	**149**	**90**	**89**	**79**	**91**

The DAT areas that were used as anchor points in the OCU multiple indicator analyses are shown as the darker shaded areas in Figure 3.1 (map).

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2   As signified by the large value of the Cook's distance for that anchor point in the regression analysis

Fig 3.1: Map showing the opiate and/or crack user anchor point areas (darker shaded areas).
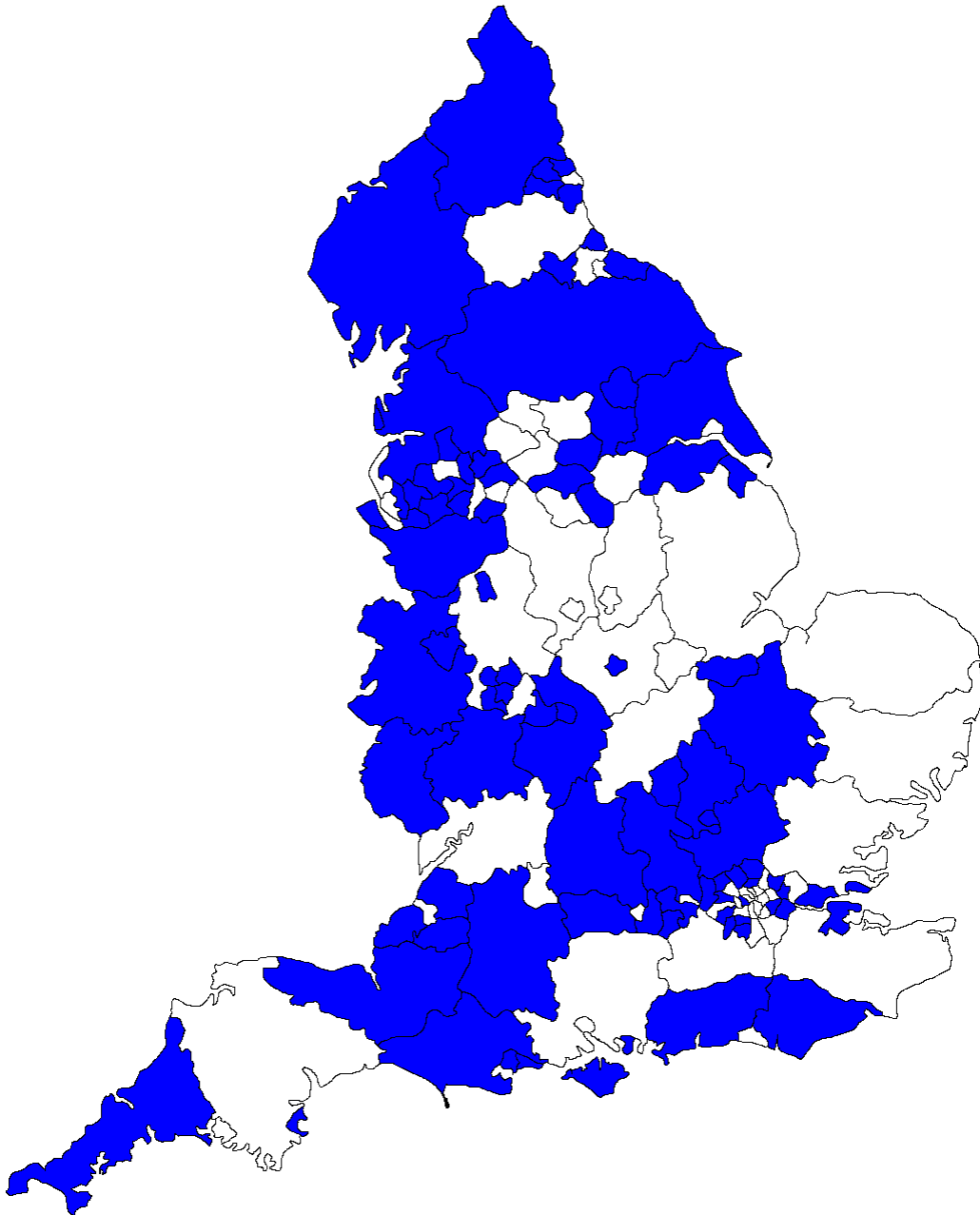
With approximately 90 anchor points available there was no need to use a technique known as principal component analyses that multiple indicator studies often use to ensure that the number of indicators is effectively less than the number of available anchor points (a prerequisite of the regression analysis), instead, the stepwise regression method (simple linear multiple regression with Normal errors) in Minitab release 13.30 was used. For each different drug definition only one multiple indicator model was constructed for the whole of England and we did not include Government Office Region as a categorical indicator.

The stepwise regression approach considers all available indicators and only includes a particular indicator in the final regression model if it is significantly related to the available prevalence estimates. The stepwise regression approach alternates at each step between

adding significant or deleting non-significant indicators[3] and can result in models that offer a good fit to the available data with a minimal number of indicators. This is in contrast to the forward selection approach which starts with no indicators in the model and keeps including indicators until there are no more significant indicators, and the backward elimination approach which starts with all indicators in the model and removes non-significant ones until all remaining ones are significantly related to the available prevalence estimates. The stepwise regression approach resulted in the following indicators remaining in the best regression model (in order of significance starting with the most significant indicator):

- NDTMS
- DIP-Prison
- PNC-Police

This model explained 84% of the variance (i.e. provided a good fit to the available data) with the first indicator (NDTMS) explaining 81% of the variance.

Analysis: prevalence of opiate use, crack cocaine use and drug injecting

The general approach outlined above for opiate and/or crack use was also taken to estimating the prevalence of opiate use or crack cocaine use and the prevalence of drug injecting. The stepwise regression approach resulted in the following indicators remaining in the best regression models (in descending order of significance) for each definition;

Opiate use:

- NDTMS
- DIP-Prison

Crack cocaine use:

- NDTMS
- Probation

For the opiate use analyses, the indicators explained 94% of the variance (69% for crack cocaine). The only significant indicator for the injecting analyses was the NDTMS data which explained 83% of the variance.

As described in the Sweep 2 Technical Report (Hay *et al*. 2007b), comparisons between the opiate use and crack cocaine use and the opiate and/or crack cocaine use estimates were made to gauge the validity of the different estimates. Capture-recapture estimates for each definition were compared with multiple indicator estimates. The impact of including capture-recapture estimates that unduly influenced the multiple indicator model was also considered. This 'consistency checking' will always have some element of subjectivity in it due to the issue of having to have consistency of estimates derived from two different methods across three case definitions.

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3   In these analyses α to enter and α to remove were both set to 0.15

4. Results

In this section we first provide a summary of the overall results relating to the prevalence estimates at the national and regional level for 2009/10. We then present a series of tables describing the age group and gender estimates for 2009/10 and then compare the estimates of the prevalence of opiate and/or crack use for sweep 6 (2009/10) against those derived for sweep 5 (2008/09). These comparisons across time are made for the estimated number of opiate and/or crack users. The changes in absolute numbers do not take into account any difference in the underlying population size in the 15 to 64 age group. A negative difference shows that there appears to have been a decrease in prevalence whereas a positive difference suggests an increase. A 95% confidence interval is given for each estimate. Similar tables are provided to consider changes over time for opiate use and crack cocaine use, whereas tables presenting changes over time for injecting make comparisons with sweep 3 (2006/07).

Prevalence estimates

In total there were 90 areas where the capture-recapture analyses offered valid estimates of the prevalence of opiate and/or crack use. In those areas the prevalence of opiate and/or crack use was provided by the capture-recapture estimate whereas in the remaining 59 areas the multiple indicator estimates were used. There were 89 areas that had capture-recapture estimates for opiate use and in terms of crack cocaine use, 79 areas had capture-recapture estimates. There were 91 areas with injecting capture-recapture estimates. The decision to use a capture-recapture estimate instead of a multiple indicator method estimate was always taken on the basis of the validity of the capture-recapture estimate, both in terms of how well the capture-recapture model fitted the available data and how feasible the estimate was compared to the known population and the estimates for other drugs.

There were an estimated 306,150 opiate and/or crack users in 2009/10, in England, (95% CI 299,094 to 316,916). This corresponds to 8.93 per thousand population aged 15 to 64 (95% CI 8.72 to 9.24). In terms of opiate users, there were an estimated 264,072 people in England who use those drugs (7.70 per thousand population aged 15 to 64) whereas it is estimated that 184,247 people use crack cocaine (5.37 per thousand population aged 15 to 64). It should be noted that the majority of people using crack cocaine are also using opiates and that crack cocaine may neither be their main drug of use or indeed the drug that is causing them the most problems. There were an estimated 103,185 drug injectors which corresponds to 3.01 per thousand population aged 15 to 64.

Table 4.1 summarises the national prevalence estimates along with their associated confidence intervals.

Table 4.1: **National prevalence estimates and rates per thousand aged 15 to 64 with 95% confidence intervals**

Drug	Estimate	95% Confidence Interval	Rate	95% Confidence Interval
OCU	306,150	299,094 – 316,916	8.93	8.72 – 9.24
Opiate	264,072	260,023 – 271,048	7.70	7.58 – 7.90
Crack	184,247	177,534 – 195,526	5.37	5.18 – 5.70
Injecting	103,185	100,085 – 107,544	3.01	2.92 – 3.14

Table 4.2 presents the prevalence estimates by Government Office Region for OCU, opiate use, crack cocaine use and drug injecting. Table 4.3 presents the prevalence estimates per thousand of the population aged 15 to 64. Confidence intervals for these estimates are shown in the later tables which consider the difference between the two sweeps.

Table 4.2:   **Estimated number of opiate and/or crack users (OCUs), opiate users, crack cocaine users and drug injectors by Government Office Region.**

Government Office Region	OCU	Opiate	Crack	Injecting
East of England	24,158	19,968	13,771	8,018
East Midlands	25,772	21,786	13,061	9,180
London	51,445	42,511	42,422	13,056
North East	18,605	16,470	8,565	7,686
North West	50,343	43,613	30,192	17,794
South East	36,145	30,656	21,021	11,376
South West	27,694	24,725	14,890	11,444
West Midlands	34,368	30,566	21,133	11,244
Yorkshire and the Humber	37,620	33,777	19,191	13,387
ENGLAND	**306,150**	**264,072**	**184,247**	**103,185**

Table 4.3:   **Estimated prevalence of opiate and/or crack use (OCU), opiate use, crack cocaine use and drug injecting by Government Office Region (per thousand population aged 15 to 64).**

Government Office Region	OCU	Opiate	Crack	Injecting
East of England	6.44	5.32	3.67	2.14
East Midlands	8.76	7.41	4.44	3.12
London	9.45	7.81	7.79	2.40
North East	10.84	9.60	4.99	4.48
North West	11.08	9.59	6.64	3.91
South East	6.56	5.56	3.81	2.06
South West	8.24	7.36	4.43	3.40
West Midlands	9.74	8.66	5.99	3.19
Yorkshire and the Humber	10.75	9.65	5.48	3.83
ENGLAND	**8.93**	**7.70**	**5.37**	**3.01**

In terms of regional differences, the North West Government Office Region has the highest prevalence of opiate and/or crack use at 11.08 per thousand population aged 15 to 64 followed by the North East at 10.84 and Yorkshire & the Humber at 10.75. The East of England and the South East have the lowest prevalence of opiate and/or crack use 6.44 and 6.56 per thousand, respectively. When considering opiate use prevalence, the highest prevalence rates are in Yorkshire & the Humber at 9.65 per thousand and the North East at 9.60. The lowest prevalence rates of opiate use are in the East of England and the South East at 5.32 and 5.56 per thousand, respectively. London has the highest estimated prevalence of crack cocaine use at 7.79 per thousand population compared to a prevalence of 6.64 in the North West. The North East has the highest injecting prevalence at 4.48.

Stratified Prevalence Estimates: Age group

Information on the differing prevalence of opiate and/or crack use in three different age groups is presented in Tables 4.4 to 4.6. The prevalence estimates (and 95% confidence intervals) are presented first, then the estimates as percentages of the total number of OCUs within the age groups 15 to 24, 25 to 34 and 35 to 64, followed by the corresponding prevalence rates.

Table 4.4:   Estimated number of opiate and/or crack users (OCUs) by age group and Government Office Region with 95% confidence intervals.

Government Office Region	15 to 24 years			25 to 34 years			35 to 64 years		
	Estimate	95% CI		Estimate	95% CI		Estimate	95% CI	
East of England	3,946	3,419	4,753	8,985	7,686	10,361	11,227	9,592	13,049
East Midlands	4,850	4,223	5,668	11,832	10,306	13,306	9,090	7,918	10,351
London	8,430	8,228	9,529	16,967	16,070	17,823	26,048	24,699	27,263
North East	3,026	2,852	3,318	9,483	8,811	10,238	6,095	5,717	6,590
North West	6,262	6,124	7,234	16,356	15,677	17,185	27,724	26,480	28,901
South East	5,783	5,093	6,794	13,692	11,878	15,381	16,670	14,558	18,775
South West	3,842	3,627	4,513	10,931	9,896	11,817	12,921	11,821	13,967
West Midlands	5,006	4,671	5,501	16,697	15,342	18,137	12,665	11,670	13,762
Yorkshire and the Humber	6,027	5,426	7,161	16,692	15,463	17,844	14,902	13,823	15,994
ENGLAND	**47,173**	**46,944**	**50,798**	**121,636**	**117,920**	**125,442**	**137,341**	**133,424**	**141,512**

Table 4.5 **Estimated age group breakdown for opiate and/or crack use by Government Office Region with 95% confidence intervals. (Row percentages)**

Government Office Region	15 to 24 years			25 to 34 years			35 to 64 years		
	%	95% CI		%	95% CI		%	95% CI	
East of England	16.33	15.82	17.58	37.19	36.15	37.98	46.47	45.19	47.52
East Midlands	18.82	17.70	20.74	45.91	44.31	46.97	35.27	33.84	36.56
London	16.39	16.18	18.10	32.98	31.86	33.66	50.63	49.06	51.21
North East	16.27	15.90	17.05	50.97	49.63	51.87	32.76	31.85	33.74
North West	12.44	12.20	14.07	32.49	31.38	33.34	55.07	53.55	55.63
South East	16.00	15.51	17.27	37.88	36.62	38.55	46.12	45.01	47.06
South West	13.87	13.61	15.78	39.47	38.05	40.08	46.66	45.37	47.42
West Midlands	14.57	14.08	15.49	48.58	47.63	49.22	36.85	36.07	37.52
Yorkshire and the Humber	16.02	14.67	18.66	44.37	42.68	45.51	39.61	38.02	40.71
ENGLAND	**15.41**	**15.41**	**16.26**	**39.73**	**39.14**	**39.88**	**44.86**	**44.21**	**45.03**

Table 4.6: **Opiate and/or crack use prevalence rates per thousand population, by age group and Government Office Region with 95% confidence intervals.**

Government Office Region	15 to 24 years			25 to 34 years			35 to 64 years		
	Estimate	95% CI		Estimate	95% CI		Estimate	95% CI	
East of England	5.59	4.84	6.73	12.78	10.93	14.73	4.79	4.09	5.57
East Midlands	8.01	6.97	9.35	22.54	19.63	25.35	5.02	4.37	5.72
London	8.51	8.31	9.62	11.30	10.70	11.87	8.83	8.37	9.24
North East	8.30	7.82	9.10	30.86	28.67	33.32	5.84	5.48	6.31
North West	6.53	6.38	7.54	19.68	18.86	20.68	10.06	9.61	10.49
South East	5.42	4.78	6.37	13.58	11.78	15.25	4.85	4.24	5.46
South West	5.72	5.40	6.72	18.97	17.17	20.50	6.12	5.60	6.61
West Midlands	6.83	6.38	7.51	25.56	23.48	27.76	5.91	5.45	6.42
Yorkshire and the Humber	7.84	7.06	9.31	24.98	23.14	26.70	7.23	6.70	7.76
ENGLAND	**6.87**	**6.84**	**7.40**	**17.95**	**17.41**	**18.52**	**6.65**	**6.46**	**6.85**

Table 4.6 shows that there is regional variation in the age distribution of opiate and/or crack use. The North West has the highest prevalence rate in the 35 to 64 age range which, at just over than 10 per thousand, is much greater than the other Government Office Regions. London has the highest prevalence rate in the 15 to 24 age range, but at around 9 per thousand population is not much higher than that found in the North East. Meanwhile the North East has the highest prevalence rate in the 25 to 34 age range which, at just fewer than 31 per thousand, is much greater than the other Government Office Regions.

Stratified Prevalence Estimates: Gender

Information on the differing prevalence of opiate and/or crack use for males and females is presented in Tables 4.7 to 4.9. The prevalence estimates (and 95% confidence intervals) are presented first, then the estimates as percentages of the total number of OCUs within the male and female categories, followed by the corresponding prevalence rates.

Table 4.7:   Estimated number of opiate and/or crack users (OCUs) by gender and Government Office Region with 95% confidence intervals.

Government Office Region	Female			Male		
	Estimate	95% CI		Estimate	95% CI	
East of England	6,030	5,215	7,186	18,128	15,454	20,964
East Midlands	5,656	4,911	6,526	20,117	17,629	22,658
London	10,024	9,704	11,061	41,421	39,459	43,395
North East	4,551	4,290	5,183	14,054	12,992	15,010
North West	12,711	12,335	14,039	37,632	35,958	39,160
South East	8,560	7,597	9,921	27,585	23,869	30,920
South West	7,018	6,577	7,841	20,676	18,793	22,396
West Midlands	7,756	7,209	8,611	26,612	24,567	28,746
Yorkshire and the Humber	8,734	8,237	9,599	28,887	26,997	30,850
ENGLAND	**71,040**	**70,558**	**75,300**	**235,110**	**228,179**	**242,029**

Table 4.8   Estimated gender breakdown for opiate and/or crack use by Government Office Region with 95% confidence intervals. (Row percentages)

Government Office Region	Female			Male		
	%	95% CI		%	95% CI	
East of England	24.96	24.49	26.13	75.04	73.87	75.51
East Midlands	21.94	21.34	23.03	78.06	76.97	78.66
London	19.48	19.07	21.04	80.52	78.96	80.93
North East	24.46	23.74	26.92	75.54	73.08	76.26
North West	25.25	24.67	27.49	74.75	72.51	75.33
South East	23.68	23.34	25.10	76.32	74.90	76.66
South West	25.34	24.94	27.23	74.66	72.77	75.06
West Midlands	22.57	22.12	23.74	77.43	76.26	77.88
Yorkshire and the Humber	23.21	22.82	24.61	76.79	75.39	77.18
ENGLAND	**23.20**	**23.20**	**24.07**	**76.80**	**75.93**	**76.80**

Table 4.9:   Opiate and/or crack use prevalence rates per thousand population, by gender and Government Office Region with 95% confidence intervals.

Government Office Region	Female			Male		
	Estimate	95% CI		Estimate	95% CI	
East of England	3.22	2.78	3.83	9.65	8.23	11.16
East Midlands	3.86	3.35	4.45	13.64	11.96	15.37
London	3.71	3.60	4.10	15.10	14.38	15.81
North East	5.28	4.98	6.02	16.45	15.21	17.57
North West	5.59	5.43	6.18	16.56	15.82	17.23
South East	3.09	2.74	3.58	10.05	8.70	11.27
South West	4.17	3.91	4.66	12.31	11.19	13.33
West Midlands	4.39	4.08	4.88	15.09	13.93	16.30
Yorkshire and the Humber	5.02	4.73	5.51	16.43	15.36	17.55
ENGLAND	**4.15**	**4.12**	**4.40**	**13.69**	**13.29**	**14.10**

Table 4.9 shows the regional variation in the gender distribution of opiate and/or crack use. The North West has the highest prevalence rates for both females and males compared to any other Government Office Regions where around 6 females per thousand population and around 17 males per thousand population are opiate and/or crack users. The South East region has the lowest prevalence rate for females while the East of England has the lowest rate for males with around 3 and 10 per thousand population respectively.

Comparing estimates from different sweeps

Table 4.10 presents information on the change between sweep 5 and sweep 6 in the opiate and/or crack use estimates at the Government Office Region and national level. A negative difference, for example between sweep 5 and sweep 6, demonstrates that the prevalence has decreased. Where there has been a statistically significant difference, this has been noted by *↓ (for a decrease) or *↑ (for an increase).

Table 4.10:   **Estimated number of opiate and/or crack users by Government Region in 2008/09 (sweep 5) and 2009/10 (sweep 6).**

Government Office Region	Sweep 5			Sweep 6			Difference			
	Estimate	95% CI		Estimate	95% CI		Estimate	95% CI		
East of England	22,871	20,725	25,243	24,158	20,766	28,022	1,287	-2,951	5,840	
East Midlands	26,034	23,904	28,059	25,772	22,581	29,108	-262	-4,253	3,825	
London	62,769	61,065	65,168	51,445	49,394	54,087	-11,324	-14,371	-8,202	*↓
North East	18,480	17,912	19,392	18,605	17,452	20,052	125	-1,433	1,598	
North West	52,055	50,263	54,344	50,343	48,750	52,633	-1,712	-4,461	1,121	
South East	35,092	31,895	38,777	36,145	31,521	40,764	1,053	-4,491	7,236	
South West	27,549	26,231	29,178	27,694	25,394	30,067	145	-2,672	2,905	
West Midlands	37,125	35,053	39,579	34,368	31,855	37,238	-2,757	-6,509	745	
Yorkshire and the Humber	39,254	37,634	42,154	37,620	35,314	40,313	-1,634	-5,158	1,321	
ENGLAND	**321,229**	**316,684**	**329,025**	**306,150**	**299,094**	**316,916**	**-15,079**	**-26,261**	**-3,478**	*↓

Confidence intervals for the differences between sweeps were specifically calculated for those comparisons therefore they cannot be derived from directly comparing the upper or lower bounds across sweeps.

Table 4.11: Estimated number of opiate users by Government Region in 2008/09 (sweep 5) and 2009/10 (sweep 6).

Government Office Region	Sweep 5 Estimate	95% CI		Sweep 6 Estimate	95% CI		Difference Estimate	95% CI	
East of England	18,828	17,246	20,834	19,968	17,771	22,286	1,140	-1,834	3,891
East Midlands	21,787	20,341	23,366	21,786	20,463	23,488	-1	-1,992	2,267
London	44,117	42,953	45,769	42,511	41,085	44,124	-1,606	-3,775	283
North East	15,664	15,291	16,362	16,470	15,824	17,504	806	-172	1,849
North West	44,717	43,383	46,437	43,613	42,083	45,758	-1,104	-3,369	1,339
South East	28,736	26,566	31,359	30,656	28,003	33,740	1,920	-1,771	5,513
South West	23,859	22,960	25,030	24,725	23,378	26,487	866	-927	2,812
West Midlands	30,658	28,932	32,266	30,566	29,007	32,465	-92	-2,288	2,531
Yorkshire and the Humber	34,062	32,934	35,815	33,777	32,421	35,499	-285	-2,577	1,783
ENGLAND	**262,428**	**258,782**	**268,517**	**264,072**	**260,023**	**271,048**	**1,644**	**-5,306**	**9,369**

Table 4.12: Estimated number of crack cocaine users by Government Region in 2008/09 (sweep 5) and 2009/10 (sweep 6).

Government Office Region	Sweep 5 Estimate	95% CI		Sweep 6 Estimate	95% CI		Difference Estimate	95% CI	
East of England	14,758	12,058	17,203	13,771	10,634	16,928	-987	-5,064	3,013
East Midlands	13,921	12,050	15,922	13,061	10,117	16,159	-860	-4,404	2,952
London	42,726	40,950	44,863	42,422	40,389	44,965	-304	-3,115	2,948
North East	8,133	7,319	9,354	8,565	7,175	11,892	432	-1,429	3,642
North West	29,041	27,055	31,435	30,192	27,067	33,624	1,151	-2,873	5,044
South East	22,073	18,907	25,463	21,021	17,141	25,917	-1,052	-6,539	4,958
South West	15,559	14,099	17,439	14,890	12,531	17,773	-669	-3,875	2,449
West Midlands	22,354	20,221	24,749	21,133	18,697	23,884	-1,221	-4,622	2,253
Yorkshire and the Humber	20,132	18,289	22,161	19,191	16,995	23,645	-941	-3,924	3,538
ENGLAND	**188,697**	**182,894**	**196,506**	**184,247**	**177,534**	**195,526**	**-4,450**	**-15,633**	**7,748**

Thus comparing the estimated numbers between sweep 5 and sweep 6, there has been a significant decrease in the number of opiate and/or crack cocaine users. The estimated number of opiate users has slightly increased and the number of crack cocaine users has decreased but not significantly.

Table 4.13:   Estimated number of opiate and/or crack users aged 15 to 24 by Government Region in 2008/09 (sweep 5) and 2009/10 (sweep 6).

Government Office Region	Sweep 5			Sweep 6			Difference			
	Estimate	95% CI		Estimate	95% CI		Estimate	95% CI		
East of England	3,863	3,514	4,400	3,946	3,419	4,753	83	-709	931	
East Midlands	5,023	4,595	5,504	4,850	4,223	5,668	-173	-977	767	
London	10,315	10,104	11,304	8,430	8,228	9,529	-1,885	-2,678	-912	*↓
North East	3,710	3,558	4,056	3,026	2,852	3,318	-684	-1,075	-352	*↓
North West	6,997	6,916	7,812	6,262	6,124	7,234	-735	-1,410	-9	*↓
South East	7,043	6,426	8,428	5,783	5,093	6,794	-1,260	-2,852	-189	*↓
South West	4,215	4,046	4,816	3,842	3,627	4,513	-373	-958	262	
West Midlands	6,865	6,360	7,614	5,006	4,671	5,501	-1,859	-2,622	-1,117	*↓
Yorkshire and the Humber	7,114	6,619	8,196	6,027	5,426	7,161	-1,087	-2,319	26	
ENGLAND	**55,145**	**55,104**	**58,618**	**47,173**	**46,944**	**50,798**	**-7,972**	**-10,433**	**-5,467**	*↓

Table 4.14: Estimated number of opiate and/or crack users aged 25 to 34 by Government Region in 2008/09 (sweep 5) and 2009/10 (sweep 6).

Government Office Region	Sweep 5			Sweep 6			Difference			
	Estimate	95% CI		Estimate	95% CI		Estimate	95% CI		
East of England	8,785	7,883	9,699	8,985	7,686	10,361	200	-1,414	1,969	
East Midlands	12,097	10,995	13,086	11,832	10,306	13,306	-265	-2,245	1,755	
London	20,733	19,888	21,548	16,967	16,070	17,823	-3,766	-5,005	-2,535	*↓
North East	9,122	8,726	9,537	9,483	8,811	10,238	361	-452	1,226	
North West	17,855	17,013	18,705	16,356	15,677	17,185	-1,499	-2,603	-270	*↓
South East	13,262	11,825	14,439	13,692	11,878	15,381	430	-1,571	2,739	
South West	11,588	10,847	12,261	10,931	9,896	11,817	-657	-1,865	596	
West Midlands	17,449	16,283	18,605	16,697	15,342	18,137	-752	-2,543	1,118	
Yorkshire and the Humber	18,250	17,212	19,561	16,692	15,463	17,844	-1,558	-3,292	-19	*↓
ENGLAND	**129,141**	**126,101**	**131,926**	**121,636**	**117,920**	**125,442**	**-7,505**	**-12,019**	**-2,209**	*↓

Table 4.15: Estimated number of opiate and/or crack users aged 35 to 64 by Government Region in 2008/09 (sweep 5) and 2009/10 (sweep 6).

Government Office Region	Sweep 5			Sweep 6			Difference			
	Estimate	95% CI		Estimate	95% CI		Estimate	95% CI		
East of England	10,223	9,237	11,234	11,227	9,592	13,049	1,004	-905	3,110	
East Midlands	8,915	8,163	9,690	9,090	7,918	10,351	175	-1,231	1,629	
London	31,720	30,443	32,874	26,048	24,699	27,263	-5,672	-7,445	-3,910	*↓
North East	5,649	5,428	6,000	6,095	5,717	6,590	446	-61	943	
North West	27,202	26,003	28,231	27,724	26,480	28,901	522	-1,074	2,204	
South East	14,787	13,158	16,461	16,670	14,558	18,775	1,883	-686	4,773	
South West	11,746	11,055	12,441	12,921	11,821	13,967	1,175	-137	2,479	
West Midlands	12,812	11,986	13,839	12,665	11,670	13,762	-147	-1,635	1,176	
Yorkshire and the Humber	13,890	13,221	15,002	14,902	13,823	15,994	1,012	-493	2,247	
ENGLAND	**136,943**	**134,091**	**140,083**	**137,341**	**133,424**	**141,512**	**398**	**-4,852**	**5,591**	

Tables 4.13 to 4.15 compare the age-specific opiate and/or crack cocaine estimates between sweep 5 and sweep 6. There were decreases in the 15 to 24 age group and the 25 to 34 age group estimates, both were statistically significant. There was, however, a non significant increase in the number of opiate and/or crack cocaine users in the older 35 to 64 age group.

Table 4.16 compares the estimated number of drug injectors by Government Office Region between sweep 6 and sweep 3.

Table 4.16:   Estimated number of drug injectors by Government Region in 2008/09 (sweep 3) and 2009/10 (sweep 6).

	Sweep 3			Sweep 6		
Government Office Region	**Estimate**	**95% CI**		**Estimate**	**95% CI**	
East of England	7,300	5,817	8,918	8,018	6,804	9,369
East Midlands	9,936	8,647	11,394	9,180	8,015	10,384
London	18,678	17,945	20,462	13,056	12,366	14,363
North East	6,857	6,472	7,352	7,686	7,202	8,279
North West	20,074	18,878	21,722	17,794	16,912	18,928
South East	10,951	10,345	11,910	11,376	9,667	13,321
South West	13,918	13,003	14,983	11,444	10,342	12,716
West Midlands	12,085	11,084	13,234	11,244	10,021	12,587
Yorkshire and the Humber	17,010	16,189	17,907	13,387	12,126	14,684
ENGLAND	**116,809**	**114,637**	**121,279**	**103,185**	**100,085**	**107,544**

There has been a significant decrease in the number of injectors between sweep 3 (2006/07 and sweep 6 (2008/09). This decrease is particularly apparent in London

5. Discussion and Conclusion

This report has presented estimates for the prevalence of problem drug use (defined as opiate and/or crack cocaine), opiate use, crack cocaine use and drug injecting for the financial year 2009/10. A similar approach was taken to producing these estimates as for the three consecutive sweeps for the years 2004/05, 2005/06 and 2006/07. Comparisons between the results of the fifth sweep (2008/09) and the sixth sweep (2009/10) at the Government Office Region and national level have been presented in this report.

Nationally, there was a decrease in prevalence of opiate and/or crack cocaine use between 2008/09 and 2009/10 and this decrease was statistically significant. However the individual prevalence rate for opiate use increase slightly between the two sweeps and the crack cocaine estimate decreased but not at a significant level There were statistically significant decreases in the prevalence of opiate and/or crack cocaine use within the 15 to 24 and 25-34 age groups and an increase in the number of opiate and/or crack cocaine users in the older 35 to 64 age group. The prevalence of drug injecting has also significantly decreased, however that comparison is with estimates for 2006/07.

The study has again demonstrated that it is possible to use the capture-recapture method and the multiple indicator method to successfully estimate the prevalence of opiate and/or crack cocaine use in a systematic manner.

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