



Drug treatment in the North West of England 2007/08



Ayesha Hurst
Adam Marr
Jim McVeigh
Mark A Bellis

Results from the National Drug Treatment Monitoring System [NDTMS]



National Treatment Agency
for Substance Misuse

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Ayesha Hurst, Adam Marr, Jim McVeigh & Mark A. Bellis

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Key Points

- During 2007/08, there were 38573 individuals in contact with specialist drug treatment services in the North West of England. There has been a 3.15% increase in the number of individuals in contact with treatment in comparison to 2006/07.
- The number in contact with structured drug treatment varied dependent on D(A)AT of residence. In Trafford, there were 779 individuals in contact with treatment. In contrast, Lancashire had 5261 individuals in contact with treatment.
- The prevalence of individuals in contact with treatment also varied dependent on D(A)AT of residence. In Stockport 7.15 per 1,000 population aged 15-44 were in contact with treatment in comparison to 26.29 per 1,000 population in Blackpool.
- There were differences in the penetration levels of opiate and/or crack users in contact with treatment from 27.65% in Salford to 70.61% in Halton.
- The majority of individuals in contact with treatment in 2007/08 were male (71.83%) and white (95.58%).
- In comparison to 2006/07, there has been a decrease in the number of 30-34 year olds in contact with treatment. In contrast, there has been an increase in the number of individuals aged 45 years and older. There has been a significant increase in the average age of those in contact with treatment between 2006/07 and 2007/08. The number of those aged 45 and older in contact with treatment varied from 6.50% in Bolton to 16.45% in Wirral.
- 63.89% of reported primary problematic drug use of those in contact with treatment was attributed to heroin use.
- Whilst only 3.00% of primary problematic drug use was attributed to crack cocaine, this figure rose to 25.43% when all problematic use was considered. The proportion of problematic drug use attributed to cocaine has increased from 11.89% in 2006/07 to 12.73% in 2007/08.
- The main route of referral into treatment in 2007/08 was via self-referral. Referrals from the Criminal Justice System accounted for 22.24% of all referrals into treatment, a slight increase in proportion from 2006/07 (22.16%).
- The majority of drug treatment interventions involved specialist prescribing (52.49%).
- The majority of most recent treatment episodes were ongoing at the end of the financial year (66.72%). When only individuals who had completed treatment were considered, 29.74% were discharged from treatment as 'dropped out' with 31.49% having been discharged from treatment as 'treatment complete' or 'treatment complete drug free'.

Reader Information

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This report, along with previous NDTMS reporting by the Centre for Public Health, Liverpool John Moores

University, is available on the CPH website (www.cph.org.uk/ndtms). The NDTMS regional team, based within the North West Public Health Observatory at the Centre for Public Health, Liverpool John Moores University, also produces monthly reports providing timely information from the NDTMS dataset, along with quarterly themed reports, based on particular aspects of the data. These reports are also available on the website.

The Centre for Public Health, Liverpool John Moores University would welcome feedback on the contents of the report. Any comments or queries should be directed to the following person:

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Introduction

This publication details the results of the National Drug Treatment Monitoring System (NDTMS) in the North West of England during 2007/08. The NDTMS was introduced in April 2001 to collect data on all clients in contact with structured treatment services (i.e. high threshold tier 3 and 4 services as defined by the Models of Care, see National Treatment Agency (NTA), 2002). NDTMS figures are used as a key source for monitoring the number of people in contact with drug treatment services. In 1998, the Government released its ten year drug strategy, Tackling drugs to build a better Britain. One of the key objectives of this strategy was to double the number of people in contact with structured drug treatment between 1998 and 2008. This publication details information on those in contact with drug treatment during the final year of this drug strategy. Therefore, this report provides information on the number, and profile, of individuals in contact with treatment during 2007/08 to provide context for

the transitional period at the end of the current drug strategy and for the introduction of the new drug strategy, Drugs: protecting families and communities, the 2008 drug strategy. This report provides an overview of the NDTMS data for the region and also provides some comparisons to previous years; 2003/04, 2005/06 and 2006/07. The report offers supplementary detailed information to build on the national figures quoted by the National Drug Evidence Centre (NDEC) and the NTA. The report only includes data for those individuals resident within the region who were in contact with treatment services within the North West.

The results of this report were compiled by the NDTMS regional team, based within the North West Public Health Observatory at the Centre for Public Health, Liverpool John Moores University. This regional team collects data from all structured drug treatment providers in the North West on behalf of the NTA.

New Developments

Drugs: protecting families and communities, the 2008 drug strategy

During 2007/08, the Government released Drugs: protecting families and communities, the 2008 drug strategy, detailing the main focus of policy for the next ten years, 2008-18. The 2008 Drug Strategy highlights how drug use impacts upon families and communities, the requirement for appropriately targeted funding, the necessity for effective partnership working amongst institutions and the need for acknowledgement amongst drug users of their responsibility to engage in drug treatment. The strategy has four main themes:

- Protecting communities through robust enforcement to tackle drug supply, drug related crime and anti-social behaviour

- Preventing harm to children, young people and families affected by drug misuse
- Delivering new approaches to drug treatment and social reintegration
- Public information campaigns, communications and community engagement.

In terms of drug treatment, the new drug strategy focuses on targeting those drug users at most risk (including young people, women crack users, particular Black and Minority Ethnic communities (BME), sex workers or parents with dependent children), the wider use of new treatment approaches, improvement in the quality and effectiveness of treatment and the development of links between structured treatment and housing, training and employment services.

Treatment Effectiveness

With the introduction of Drugs: protecting families and communities, the 2008 drug strategy, the Government has launched a new measure of treatment effectiveness. The new indicator measures the percentage change in the number of Problematic Drug Users (PDUs) (those using opiates and/ or crack cocaine) in treatment in the financial year. Effective treatment will now relate to those who are still in continuous treatment, who have been discharged from the treatment system after 12 weeks or, if discharged prior to 12 weeks, were successfully discharged in a care planned way as a percentage change from the 2007/08 baseline. This new measure will include those PDUs aged under 18. Treatment effectiveness measures have been introduced to be used alongside partnership prevalence estimates for opiate and/ or crack cocaine users provided through Home Office estimates with a view to increasing treatment penetration where performance is below the national average.

The Treatment Outcomes Profile (TOP)

In October 2007, the Treatment Outcomes Profile (TOP) was incorporated into routine NDTMS reporting. The TOP monitors the progression of individuals throughout their structured drug treatment journey on four main measures:

- Drug and alcohol use
- Injecting risk behaviour
- Criminal activity
- Health and social functioning

The TOP has been developed as a short interview between a key worker and a client at assessment and then subsequently as part of the care planning and review process. The outcomes are gauged by determining any changes in these measures over time. The TOP has been designed to be the new national outcomes monitoring tool and since its introduction, has been used on all clients aged 16 and over in contact with structured treatment.

NDTMS within structured alcohol services

Prior to 2008/09, NDTMS has only collected data on clients in specialist drug treatment. During 2008/09, this routine monitoring has been expanded to collect data on clients receiving specialist alcohol treatment interventions to address their problematic alcohol misuse. The project will implement data collection on all clients receiving specialist alcohol treatment, where the provision of specialist treatment is in line with that prescribed in Models of Care for Alcohol Misuse (MoCAM). The data collection will not include tier 2 and unstructured alcohol treatment (e.g. AA), or treatment in other parts of the NHS for secondary complications arising out of the misuse of alcohol (e.g. treatment for liver disease).

During 2008/09, the National Audit Office (NAO) will be carrying out a study into the provision of interventions with the potential to reduce harm to health and the burden of harmful drinking on the NHS. It is intended that the collection of NDTMS alcohol data will support the NAO's work.

Amendments to the Young Persons NDTMS reference data

During 2008/09, the NTA introduced key amendments to the young persons NDTMS reference data. These modifications affect the following:

- Streamlining of young people's specialist substance misuse interventions and change in terminology from treatment modalities to treatment interventions
- Changes and clarification of referral sources including referrals from the young people's criminal justice system
- New discharge codes

These revisions to the young person's dataset further improve service monitoring to improve ease of completion for young people's services. These changes came into effect in July 2008.

Number of people in contact with treatment services and prevalence

Regional results

During 2007/08 there were 38573 individuals in contact with structured drug treatment services. There has been a 3.15% increase in levels of treatment engagement from 2006/07, when the equivalent figure was 37396 (Khundakar et al., 2007a) and a rise of 8.75% from 2005/06 (n=35469) (Khundakar et al., 2006). There was an increase in the number of new presentations to treatment in 2007/08 (n=18416) in comparison to 2006/07 (n=17663), 2005/06 (n=17057) and 2003/04 (n=14745).

Variations between local areas within the region

There were considerable variations between the number of residents from the 22 D(A)ATs in contact with structured drug treatment services, ranging from 779 in Trafford to 5261 in Lancashire. There were also variations in the number of new and ongoing clients in each of the D(A)ATs. The proportion of new clients varied from 30.36% in Wirral to 59.82% in Trafford. Whilst the proportion of new clients rose in several areas between 2006/07 and 2007/08 (for example in Trafford the proportion of new clients rose from 47.30% in 2006/07 to 59.82% in 2007/08), it fell in areas such as Knowsley (61.27% in 2006/07 to 50.68% in 2007/08).

Table 1 shows the number of individuals in contact with structured drug treatment services according to D(A)AT of residence. This table includes deprivation scores for the North West D(A)ATs. These scores have been included as deprivation may be one contributory factor in determining the number of problematic drug users in an area (ACMD, 1998). Table 1 reveals that several areas with high deprivation levels also had a high number of its population in contact with drug treatment services. D(A)ATs with high levels of deprivation, such as Liverpool and Manchester had a relatively high prevalence of those in contact with drug treatment. Whilst those areas with high levels of deprivation had comparable levels of drug users in drug treatment, areas with low levels of deprivation, such as Cheshire, Stockport and Trafford, also had low prevalence levels of those in treatment per 1,000 population (7.81, 7.15 and 7.74 per 1,000 population respectively).

Table 1: Number of people in contact with treatment services in 2007/08, prevalence, deprivation scores and ranks, by D(A)AT of residence

D(A)AT	New		Ongoing ¹		Total in contact ²		Prevalence (per 1000 aged 15-44) ³	Deprivation score ⁴	Deprivation rank (1 = highest, 22 = lowest)
	No.	Row %	No.	Row %	No.	Col %	No.		
Blackburn with Darwen	532	50.43	523	49.57	1055	2.63	16.00	35.83	6
Blackpool	895	56.43	691	43.57	1586	3.96	26.29	37.66	4
Bolton	889	49.83	895	50.17	1784	4.45	15.36	29.67	11
Bury	475	50.42	467	49.58	942	2.35	11.04	21.42	17
Cheshire	979	41.95	1355	58.05	2334	5.83	7.81	14.90	22
Cumbria	822	44.99	1005	55.01	1827	4.56	9.15	21.20	18
Halton	385	44.66	477	55.34	862	2.15	15.57	32.61	8
Knowsley	670	50.68	652	49.32	1322	3.30	18.38	43.20	3
Lancashire	2923	55.56	2338	44.44	5261	13.14	10.18	22.28	16
Liverpool	2411	54.97	1975	45.03	4386	10.95	18.41	46.97	1
Manchester	1303	35.70	2347	64.30	3650	9.11	13.07	44.50	2
Oldham	571	48.06	617	51.94	1188	2.97	11.12	30.82	9
Rochdale	807	48.32	863	51.68	1670	4.17	16.45	33.89	7
Salford	548	46.68	626	53.32	1174	2.93	10.68	36.51	5
Sefton	954	56.22	743	43.78	1697	4.24	14.25	25.13	15
St Helens	528	46.81	600	53.19	1128	2.82	14.13	29.82	10
Stockport	424	45.94	499	54.06	923	2.30	7.15	18.06	19
Tameside	592	51.26	563	48.74	1155	2.88	11.77	28.78	12
Trafford	466	59.82	313	40.18	779	1.94	7.74	17.33	21
Warrington	406	44.86	499	55.14	905	2.26	10.39	17.89	20
Wigan and Leigh	841	53.03	745	46.97	1586	3.96	11.70	26.91	14
Wirral	862	30.36	1977	69.64	2839	7.09	20.27	27.90	13

While there has been an increase in the number of people in contact with drug treatment services in all D(A)ATs across the North West between 2001/02 and 2007/08, the proportional rise has not been consistent. Table 2 and figure 1 demonstrate that the percentage rise in the number of clients contacting treatment services between 2001/02 and 2007/08 varied from 36.91% in Trafford to 329.88% in

Cumbria. Halton and Knowsley D(A)ATs also experienced a substantial percentage increase of those in contact with treatment services from 2001/02 to 2007/08 (175.40% and 195.75% respectively). Lancashire and Liverpool D(A)ATs had the largest increase in individuals between 2001/02 and 2007/08 (n=2151 and 2036 individuals respectively).

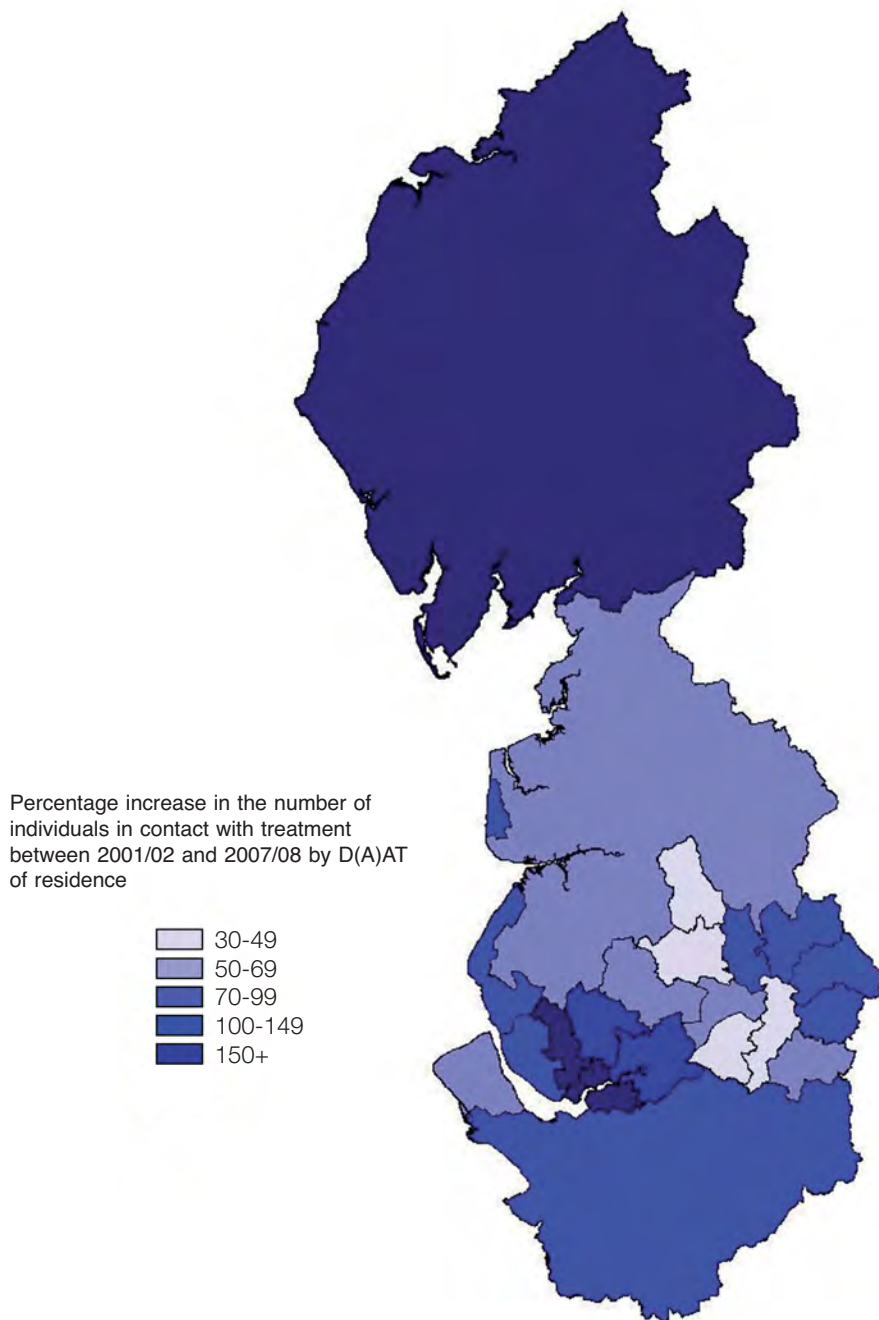
^{1, 2, 3, 4} For explanation and methodological notes please refer to methodological section at end of report

Table 2: Percentage increase of number in treatment 2001/02 to 2007/08, by D(A)AT of residence

D(A)AT	2001/02	2003/04	2005/06*	2006/07	2007/08	Increase in individuals 01/02 to 07/08	% Increase 01/02 to 07/08
Blackburn with Darwen	755	765	935	1089	1055	300	39.74
Blackpool	920	1086	1628	1509	1586	666	72.39
Bolton	1228	1179	1875	1870	1784	556	45.28
Bury	541	853	1083	1009	942	401	74.12
Cheshire	1187	1773	2196	2335	2334	1147	96.63
Cumbria	425	926	1412	1609	1827	1402	329.88
Halton	313	538	713	903	862	549	175.40
Knowsley	447	694	904	1229	1322	875	195.75
Lancashire	3110	3782	4720	4929	5261	2151	69.16
Liverpool	2350	2771	4120	4062	4386	2036	86.64
Manchester	2481	2722	3216	3614	3650	1169	47.12
Oldham	671	812	1141	1127	1188	517	77.05
Rochdale	938	1333	1594	1790	1670	732	78.04
Salford	701	1357	1121	1234	1174	473	67.48
Sefton	882	1158	1607	1544	1697	815	92.40
St Helens	492	797	1004	1131	1128	636	129.27
Stockport	580	616	987	957	923	343	59.14
Tameside	630	969	1165	1132	1155	525	83.33
Trafford	569	511	778	704	779	210	36.91
Warrington	449	606	841	962	905	456	101.56
Wigan and Leigh	1008	1451	1561	1452	1586	578	57.34
Wirral	1797	2117	2635	2810	2839	1042	57.99

*JMU figures equivalent to NTA figures in April 2006. Official NTA figures for numbers in treatment in 2005/06 were finalised in October 2007 and superseded the figures produced on 28th April 2006.

Figure 1: Percentage increase in the number of individuals contacting drug treatment services by D(A)AT of residence between 2001/02 and 2007/08



The identification of the actual number of those in treatment residing within each D(A)AT is an essential element of monitoring progress in the development of drug treatment provision. However, it fails to take into consideration the number in treatment in relation to the general population of each D(A)AT. Therefore, table 3 and figure 2 display the prevalence levels of people in contact with treatment (aged 15-44) per 1,000 of the general population in each D(A)AT for 2005/06 to 2007/08. Whilst regionally, 1.20%

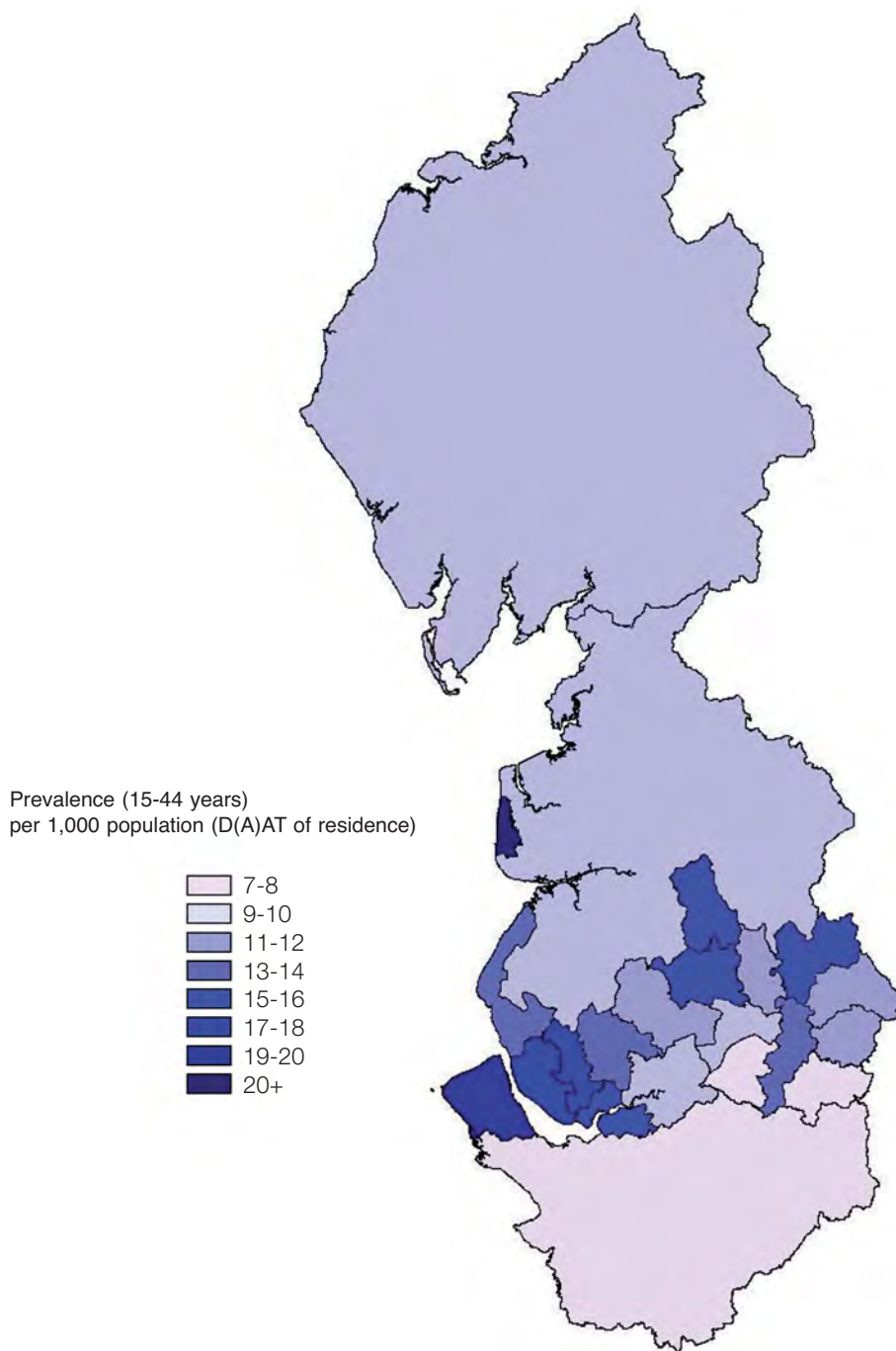
of the population aged between 15-44 were in contact with treatment services, figure 2 shows that the prevalence rates of those in contact with treatment varied considerably between North West D(A)AT areas. In Blackpool, 26.29 of every thousand residents (2.63%) aged 15-44 were in contact with treatment services. In contrast, 7.15 (0.72%) of the population in Stockport, aged 15-44, were in contact with services.

Table 3: Prevalence levels of those in contact (15-44) 2005/06 to 2007/08 per 1,000 population

DAAT	Prevalence 2005/06 15-44†	Prevalence 2006/07 15-44	Prevalence 2007/08 15-44
Blackburn with Darwen	14.82	16.96	16.00
Blackpool	28.01	25.05	26.29
Bolton	16.26	15.91	15.36
Bury	13.06	12.03	11.04
Cheshire	7.78	8.14	7.81
Cumbria	7.17	7.96	9.15
Halton	13.33	16.46	15.57
Knowsley	12.99	17.88	18.38
Lancashire	9.47	9.65	10.18
Liverpool	18.20	16.75	18.41
Manchester	13.00	13.47	13.07
Oldham	11.10	11.06	11.12
Rochdale	16.21	18.02	16.45
Salford	10.58	11.45	10.68
Sefton	13.83	13.06	14.25
St Helens	13.02	14.73	14.13
Stockport	8.02	7.59	7.15
Tameside	12.29	11.69	11.77
Trafford	8.04	7.11	7.74
Warrington	9.50	10.96	10.39
Wigan and Leigh	11.53	10.72	11.70
Wirral	19.86	20.83	20.27

† Prevalence rate calculated from 2003 D(A)AT population estimates

Figure 2: Prevalence levels for the number of 15-44 year olds in contact with treatment services per 1,000 of D(A)AT of residence population, 2007/08

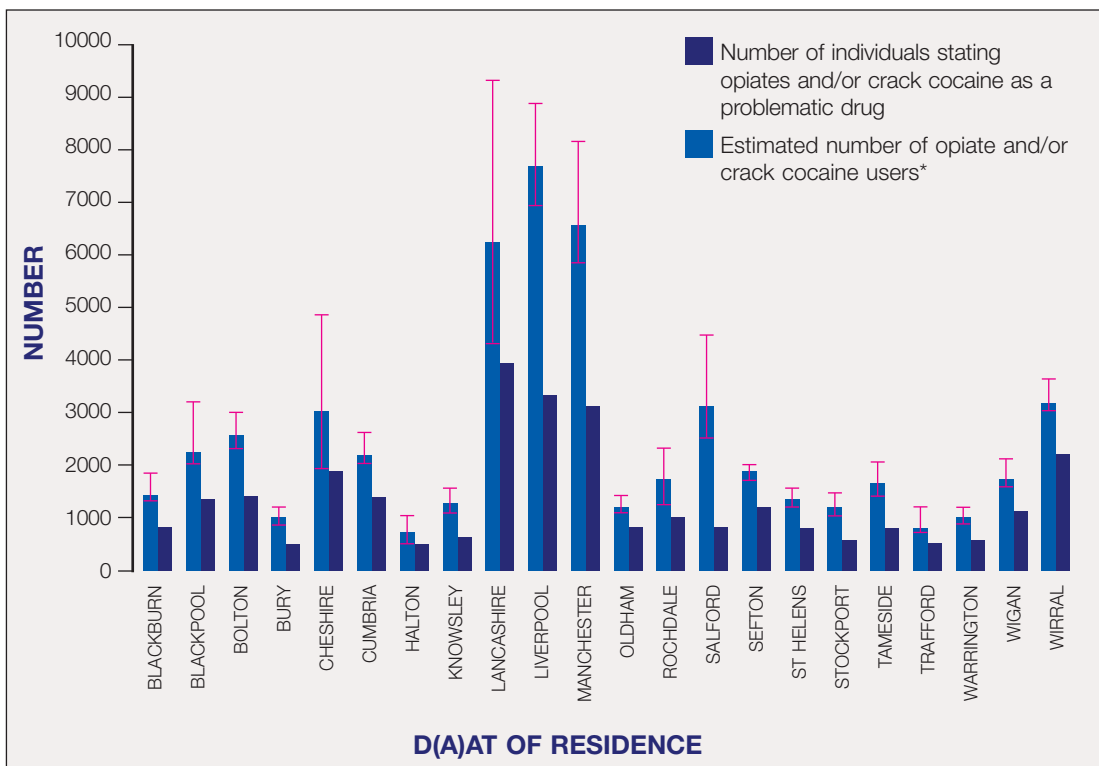


Number of Problematic Drug Users (PDUs) in contact with treatment

The number of PDUs (opiate and/or crack users) in contact with treatment within a D(A)AT area has become increasingly important due to the introduction of the new measure of treatment effectiveness in 2008/09 (see page 7 of this report). Figure 3 and table 4 display the number of opiate and/or crack users in contact with structured treatment alongside the prevalence estimates for PDUs in each D(A)AT area. Whilst estimates of the

number of PDUs resident within a D(A)AT area have been calculated from 2005/06 datasets (see Hay et al., 2007), table 4 shows that there are variations in the penetration levels of problematic users entering treatment dependent on D(A)AT of residence, from 27.65% in Salford to 70.61% in Halton. Lancashire and Liverpool D(A)AT areas had the highest numbers of opiate and/or crack users in contact with treatment (n=4028 and 3373 respectively).

Figure 3: Estimates of number of problematic opiate and/or crack cocaine users (2005/06 estimate) and actual number in contact with treatment in 2007/08 by D(A)AT of residence



* Estimates of prevalence from Hay et al. (2007)

Table 4: Number of opiate and/or crack users in contact with treatment (aged 15-64) by DA(A)T of residence (2007/08) and penetration rate of estimated opiate and/or crack users in contact with treatment

D(A)AT	Number of opiate and/or crack users in contact with treatment 07/08 aged 15-64	Penetration Rate
Blackburn with Darwen	834	56.35
Blackpool	1387	59.17
Bolton	1470	55.51
Bury	568	54.88
Cheshire	1946	63.78
Cumbria	1446	63.59
Halton	531	70.61
Knowsley	716	53.83
Lancashire	4028	63.94
Liverpool	3373	43.60
Manchester	3160	47.56
Oldham	833	64.93
Rochdale	1075	59.96
Salford	868	27.65
Sefton	1220	63.84
St Helens	834	60.83
Stockport	643	51.94
Tameside	873	51.75
Trafford	552	62.59
Warrington	642	62.63
Wigan and Leigh	1181	66.69
Wirral	2229	68.42
Total	30409	55.34

Prevalence by postcode area⁵

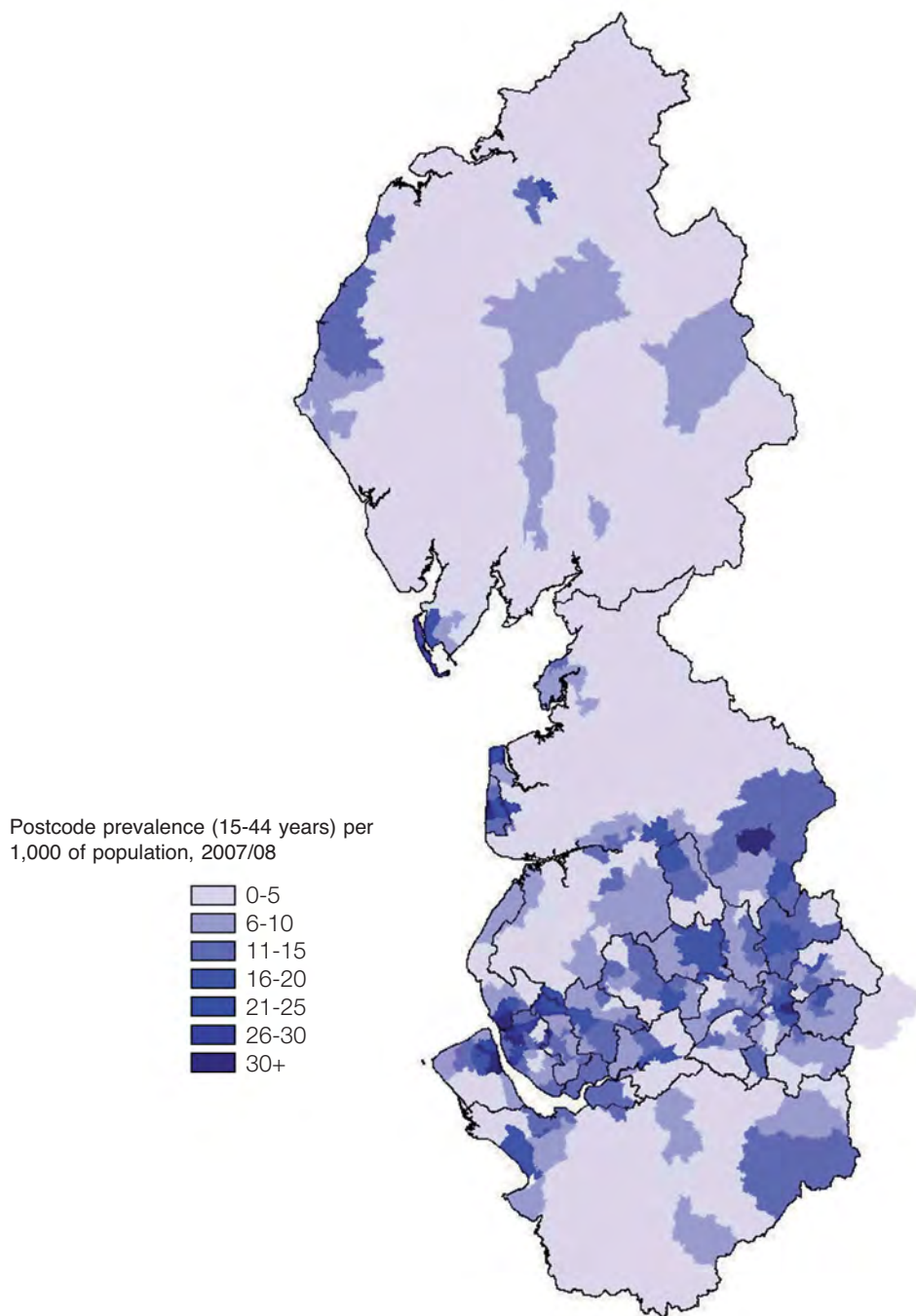
Variations in levels of deprivation occur within D(A)ATs as well as between D(A)ATs in the North West. Some D(A)ATs contain certain areas with high levels of deprivation, whilst also housing particular areas with low levels of deprivation (Noble et al., 2008). There are also variations in the prevalence of those in treatment per 1,000 of population within D(A)AT areas themselves. Therefore, prevalence levels of those in contact with treatment services per 1,000 population in all North West postcode areas have also been incorporated in this report.

Figure 4 illustrates the number of people per 1,000 of population (aged 15-44) from each postcode

district ('incodes' e.g. BB1 or L1) in the region in contact with treatment services during 2007/08. The map demonstrates high concentrations of people in contact with services around areas such as Merseyside and Greater Manchester. The postcode area of CH41 in the Birkenhead area of Wirral had the highest proportion of clients per thousand of the 15-44 year old population (68.13 per 1,000 population), followed by FY1 in Blackpool (41.60 per 1,000 population). High concentrations of 15-44 year olds in contact with treatment services were also found in the L20 (35.96 per 1,000 population) and L5 (38.83 per 1,000 population) postcode areas of Sefton and Liverpool.

⁵ For explanation and methodological notes please refer to methodological section at end of report

Figure 4: Number of people in contact with drug treatment services per 1,000 of the population (aged 15-44) of postcode districts (with D(A)AT boundaries overlaid), 2007/08



Demographics of treatment population⁶

This section describes the demographic characteristics of North West residents in contact with structured drug treatment services in the North West in 2007/08. A person may be counted more than once if they were resident in more than one D(A)AT area during the reporting year (n= 40053 including double counting).

Table 5 provides a summary of results for each of the 22 North West D(A)ATs in terms of gender, ethnicity, age and referral source.

Table 5: Gender, ethnicity, age and Criminal Justice referral by D(A)AT of residence, 2007/08

D(A)AT of Residence	Male		White†		Under 25		Total individuals*	CJS referrals**		Total episodes**
	No.	%	No.	%	No.	%	No.	No.	%	No.
Blackburn with Darwen	816	77.35	939	93.15	203	19.24	1055	544	39.48	1385
Blackpool	1090	68.73	1572	99.49	208	13.11	1586	627	24.46	2572
Bolton	1289	72.25	1668	93.87	290	16.26	1784	651	28.24	2308
Bury	691	73.35	866	92.52	293	31.10	942	344	32.54	1060
Cheshire	1691	72.45	2252	98.13	445	19.07	2334	415	15.22	2744
Cumbria	1252	68.53	1770	99.16	339	18.56	1827	423	18.75	2264
Halton	635	73.67	848	98.95	163	18.91	862	210	17.06	1235
Knowsley	941	71.18	1295	98.78	324	24.51	1322	278	16.97	1640
Lancashire	3641	69.21	4869	96.23	1006	19.12	5261	1832	24.47	7558
Liverpool	3102	70.73	4096	96.11	488	11.13	4386	1326	21.40	6400
Manchester	2616	71.67	3144	87.53	362	9.92	3650	920	19.84	4657
Oldham	870	73.23	1013	85.63	314	26.43	1188	218	16.58	1366
Rochdale	1177	70.48	1528	92.66	487	29.16	1670	357	17.66	2052
Salford	877	74.70	1109	94.87	202	17.21	1174	333	23.53	1416
Sefton	1201	70.77	1675	99.17	270	15.91	1697	643	26.23	2457
St Helens	868	76.95	1118	99.29	193	17.11	1128	309	21.09	1465
Stockport	674	73.02	881	95.97	168	18.20	923	214	19.21	1114
Tameside	850	73.59	1105	95.92	197	17.06	1155	368	26.84	1385
Trafford	575	73.81	685	89.90	183	23.49	779	355	36.83	1011
Warrington	676	74.70	891	98.56	163	18.01	905	145	12.28	1183
Wigan and Leigh	1174	74.02	1552	98.73	276	17.40	1586	530	23.69	2270
Wirral	2079	73.23	2817	99.30	350	12.33	2839	607	17.99	3380
Regional total*	27708	71.83	36294	95.58	6760	17.53	38573	11649	22.24	52922

*The regional total does not equal the sum of the D(A)AT figures as some individuals were resident in more than one D(A)AT but are only counted once in the regional figure

** Each individual resident within a D(A)AT may have received one or more episodes of care at one or more treatment agencies during 2007/08

† Ethnicity percentages calculated from total treatment population where ethnicity is stated

⁶For explanation and methodological notes please refer to methodological section at end of report

Gender

Over two-thirds (71.83%) of all individuals resident in the region who were in contact with a treatment service in the North West during 2007/08 were male. The gender composition of those in contact with treatment services was consistent with previous regional findings in 2001/02 to 2006/07. Table 5 demonstrates that there was some variation from this rate between the 22 D(A)ATs, from 68.53% males in Cumbria to 77.35% males in Blackburn with Darwen.

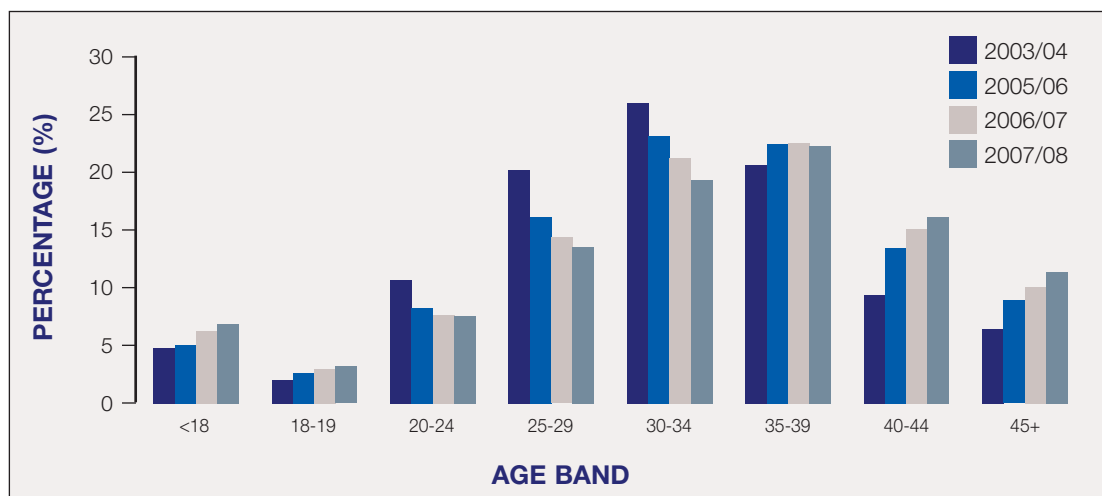
Age⁷

The average (mean) age of individuals in contact with treatment services in 2007/08 was 33.75. The majority of individuals in contact with services in 2007/08 were over thirty (n=26622, 69.02%), with 41.56% (n=16032) in their thirties. Of those in contact with services during 2007/08, 27.45% (n=10590) were 40 years or above. Those in their twenties accounted for 20.94% (n=8079) of those in treatment, with 6.89% (n=2657) under 18 years of age. The proportions of people in contact with treatment services in 2007/08 according to age

band are presented in figure 5. Figure 5 also offers comparisons of the proportion of individuals in each age band in 2003/04, 2005/06 and 2006/07.

There was a 3.15% increase of individuals in contact with treatment services in comparison to 2006/07, which has resulted in an increase of individuals in contact in almost all age bands during 2007/08 in comparison to 2006/07. Whilst there has been an increase in individuals across all age bands, this increase has not been consistent across each band. There was a decrease in the number of individuals aged 30-34 (n=7448) in comparison to 2006/07 (n=7912). In contrast there has been an increase in the number of those aged 45 and older (n= 4387) in comparison to 2006/07 (n=3776). Figure 5 demonstrates that there has been a downward trend in the proportion of those in contact with treatment aged 20-34 between 2003/04 and 2007/08 but an increase in the proportion aged over 40 during the same period. During 2003/04, 9.46% of those in contact with treatment were aged 40-44. This percentage rose to 16.08% in 2007/08. During this period, the proportion of those aged 45 and older also rose from 6.42% in 2003/04 to 11.37% in

Figure 5: Age distribution of structured drug treatment clients, 2003/04, 2005/06, 2006/07 and 2007/08



⁷For explanation and methodological notes please refer to methodological section at end of report

2007/08. This proportional increase in the age of clients between 2006/07 and 2007/08 was statistically significant ($t=3.87$ $p<0.01$). This trend indicates an ageing treatment population within drug services in the North West of England. This finding is corroborated by research indicating an ageing population of people in contact with treatment services and syringe exchange services. An ageing treatment population may have implications for future public health policy in the area, as there may be changing requirements within the client group (Beynon et al., 2007a; Hurst et al., 2008).

Figure 6 displays the actual number of individuals in contact with treatment aged under 25, 25-39 and 40 and above. Whilst year on year, the actual number of under 25s and over 40s has increased, figure 6 shows that this increase has not been proportionate between these two age groups. The number of over

40s has increased at a faster rate in comparison to the under 25s, and in the 25-39 age group there has been a decrease in actual numbers of individuals between 2005/06 and 2007/08.

The average (mean) age of those in contact with treatment services varied dependent on D(A)AT of residence. The mean age of those in contact with treatment services resident in Bury D(A)AT (mean age 30.80) was low in comparison to other D(A)ATs such as Wirral (mean age 36.58) and Manchester (mean age 36.21). Liverpool, with the highest deprivation score in the North West, also had a high mean age of those in contact with treatment services in the region (mean age 36.42 years). However, the correlation between average age and deprivation score was not significant. Figure 7 reveals that the distribution of age ranges were not consistent throughout all North West D(A)ATs.

Figure 6: Number of individuals in contact with treatment aged <25, 25-39 and 40+ during 2003/04, 2005/06, 2006/07 and 2007/08

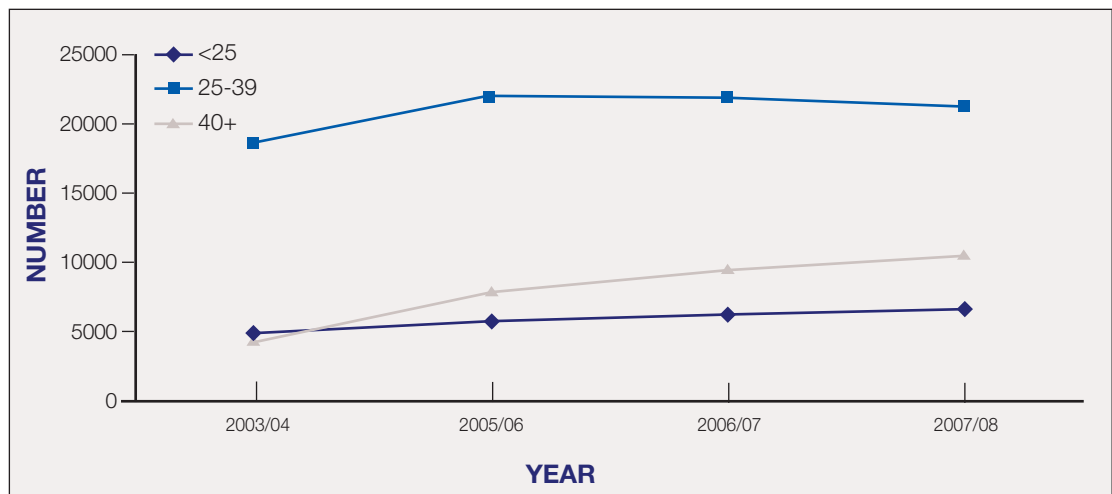
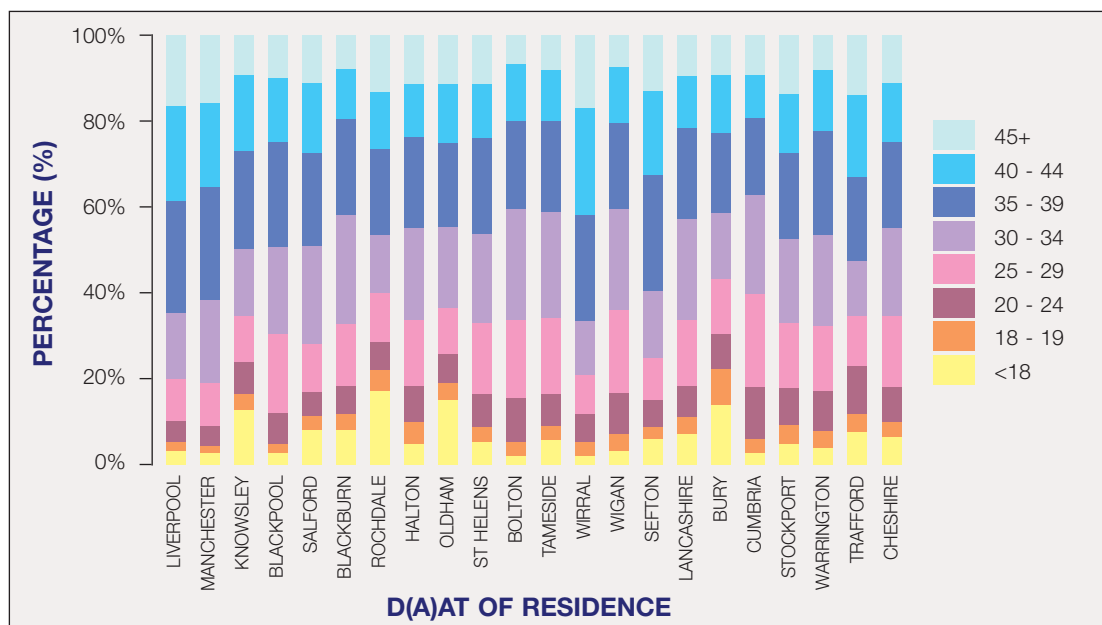


Table 6: Average (mean) age of individuals in contact with treatment by D(A)AT of residence and deprivation score

D(A)AT of Residence	Average (mean) age	Deprivation score
Blackburn with Darwen	32.33	35.83
Blackpool	33.85	37.66
Bolton	32.54	29.67
Bury	30.80	21.42
Cheshire	33.01	14.90
Cumbria	32.09	21.20
Halton	33.16	32.61
Knowsley	32.39	43.20
Lancashire	32.55	22.28
Liverpool	36.42	46.97
Manchester	36.21	44.50
Oldham	31.79	30.82
Rochdale	31.77	33.89
Salford	33.73	36.51
Sefton	34.94	25.13
St Helens	33.23	29.82
Stockport	33.65	18.06
Tameside	32.41	28.78
Trafford	33.62	17.33
Warrington	33.04	17.89
Wigan and Leigh	32.33	26.91
Wirral	36.58	27.90

Figure 7: Age bands by D(A)AT of residence (ordered by level of deprivation), 2007/08



Whilst Bury and Rochdale D(A)AT areas had a relatively high proportion of those aged less than 20 in contact with services (31.10% and 29.16% respectively), Liverpool and Manchester D(A)ATs had a relatively low proportion of under 20s in treatment services (11.13% and 9.92% respectively). Whilst only 6.50% of clients in Bolton were aged over 45, this age group accounted for 15.39% and 16.45% of the treatment population in Liverpool and Wirral respectively. This disparity in the proportion of young people in contact with treatment across D(A)ATs may be a reflection of the historical characteristics of drug use within different areas in the North West. Research suggests that central urban areas experienced an earlier epidemic of drug use in comparison to more rural areas. Drug use trends commonly emerge in urban centres and then diffuse to surrounding areas (McVeigh et al., 2003). This may explain why certain urban centres with earlier epidemics of drug use, such as Liverpool, Wirral and Manchester, now have a smaller proportion of younger people in treatment in comparison to areas with relatively recent increases in levels of problematic drug use. It may also be as a result of increased investment in young peoples services in certain areas. Whilst Liverpool had a low proportion of under 25s in contact with treatment, this DAAT area had the second highest number of under 25s when compared to other North West D(A)ATs.

Ethnicity⁸

The vast majority (95.58%) of all individuals were recorded as White. This figure is similar to previous regional NDTMS reporting (Khundakar et al., 2007a; Bullock et al., 2005; Jones and Beynon, 2003). Regionally, no other ethnic group accounted for more than one percent of those in contact with treatment services. This is consistent with reporting showing that, whilst the North West had the highest treatment rate amongst all ethnic groups in England as a whole, it was not apparent in individual minority ethnic groups (for example, the South West had the highest rates amongst Black populations, with the West Midlands and South West having the highest rates among the Mixed ethnicity populations) (Association of Public Health Observatories, 2005).

Whilst, on the whole, there were a very low percentage of Black and Minority Ethnic (BME) individuals in contact with treatment services, there was greater ethnic diversity among the residents of some D(A)ATs. In D(A)ATs such as Blackpool, Cumbria, Sefton, St. Helens and Wirral, less than one percent of all clients fell into BME categories. In contrast, there were considerably more people from BME groups in contact with treatment services from Manchester (12.47%), Oldham (14.37%), and Trafford (10.10%).

The average age of those who stated their ethnicity as BME (32.90 years) was lower than those who stated their ethnicity as White (33.76 years). This difference in average age between the two groups was significant ($t=3.63$, $p<0.01$).

Table 7: Age bands of individuals in contact with treatment by ethnicity, 2007/08

Age Bands	Ethnicity			
	White	%	BME	%
<18	2469	6.80	173	10.30
18-19	1148	3.16	58	3.45
20-24	2721	7.50	122	7.27
25-29	4856	13.38	262	15.60
30-34	7003	19.30	326	19.42
35-39	8110	22.35	322	19.18
40-44	5886	16.22	206	12.27
45+	4101	11.30	210	12.51

⁸ For explanation and methodological notes please refer to methodological section at end of report

Table 8 reveals that, amongst some particular ethnicities, there was a high proportion of under 25s in comparison to those who stated their ethnicity as White. Of those individuals that stated their ethnicity as White and Black African, 32.88% were under 25 and in those stated as Bangladeshi,

35.51% were under 25. Whilst the numbers within these particular ethnic groups were low, this may demonstrate that these groups may have different treatment needs and access issues in comparison to White populations (Fountain et al., 2003).

Table 8: Proportion of under 25s and 25 and over in contact with treatment by ethnicity, 2007/08

Ethnicity	Age group			
	<25	%	25+	%
White British	6265	17.55	29430	82.45
White Irish	27	10.55	229	89.45
Other white	46	13.41	297	86.59
White and black Caribbean	50	22.94	168	77.06
White and black African	24	32.88	49	67.12
White and Asian	19	28.36	48	71.64
Other mixed	28	20.59	108	79.41
Indian	12	17.91	55	82.09
Pakistani	74	26.91	201	73.09
Bangladeshi	38	35.51	69	64.49
Other Asian	23	14.84	132	85.16
Caribbean	25	18.12	113	81.88
African	9	19.15	38	80.85
Other black	28	17.39	133	82.61
Chinese	4	17.39	19	82.61
Other	19	8.96	193	91.04

Drug use⁹

The NDTMS records the primary problematic drug of those in contact with drug treatment services, along with possible secondary and tertiary problematic substances. Regionally, the majority of individuals in contact with treatment services who identified a main problematic drug stated heroin (n=24539, 63.89%), a proportion similar to 2006/07. This was followed by cannabis (n=4612, 12.01%) and cocaine (n=2851, 7.42%). The proportion of individuals stating cocaine as their primary problematic substance has increased in comparison to 2005/06 (n=1853, 5.75%) and 2006/07 (n=2303, 6.28%). This is consistent with an increasing trend in demand for cocaine treatment across Europe (EMCDDA, 2007). A large proportion

of individuals that stated cocaine as a primary problematic substance stated alcohol as a secondary problematic substance (n=648, 40.65%). The concomitant use of alcohol and cocaine could pose significant public health issues due to increased toxicity from the simultaneous use of these substances (EMCDDA, 2007).

Of the 38573 individuals in contact with treatment services, 22577 stated a secondary problematic drug and 8466 stated a tertiary problematic drug. Whilst only 3.0% of individuals (n=1151) stated crack cocaine as their main problematic substance, table 9 shows that a large minority of individuals stated this

substance as a secondary problematic drug (n=7617, 33.74% of stated secondary use). There has been an increase in the proportion of individuals stating crack as a secondary problematic drug in comparison to 2006/07 (n=6898, 31.79%). There was a strong interaction between individuals stating heroin as their primary problematic substance and those stating crack cocaine as their secondary problem drug. Of those stating crack as a secondary drug,

7364 (96.68%) stated heroin as their primary problematic drug. This is consistent with evidence that suggests an increased prevalence of crack use in the UK, usually in combination with opiates (Rhodes et al., 2006, 2007; Sumnall et al., 2005). Alcohol¹⁰ was stated as a secondary problematic substance by 15.97% of those that stated more than one problematic drug.

Table 9: Main, secondary and tertiary problematic drugs for those in contact with treatment during 2007/08

Drug Stated	Drug 1	Percentage of stated drug 1 (%)	Drug 2	Percentage of stated drug 2 (%)	Drug 3	Percentage of stated drug 3 (%)
Alcohol	0	0.00	3605	15.97	1339	15.82
Amphetamines	1338	3.48	1015	4.50	422	4.98
Anti-depressants	14	0.04	40	0.18	44	0.52
Barbiturates	19	0.05	9	0.04	1	0.01
Benzodiazepines	332	0.86	1900	8.42	1401	16.55
Cannabis	4612	12.01	2363	10.47	1584	18.71
Cocaine	2851	7.42	1388	6.15	654	7.73
Crack	1151	3.00	7617	33.74	1001	11.82
Ecstasy	218	0.57	373	1.65	340	4.02
Hallucinogens	41	0.11	40	0.18	40	0.47
Heroin	24539	63.89	1262	5.59	164	1.94
Methadone	2142	5.58	2354	10.43	1126	13.30
Other Drugs	788	2.05	375	1.66	167	1.97
Other Opiates	257	0.67	181	0.80	129	1.52
Poly Drug	12	0.03	11	0.05	1	0.01
Solvents	92	0.24	35	0.16	47	0.56
Tranquilisers	2	0.01	9	0.04	6	0.07

⁹ For explanation and methodological notes please refer to methodological section at end of report

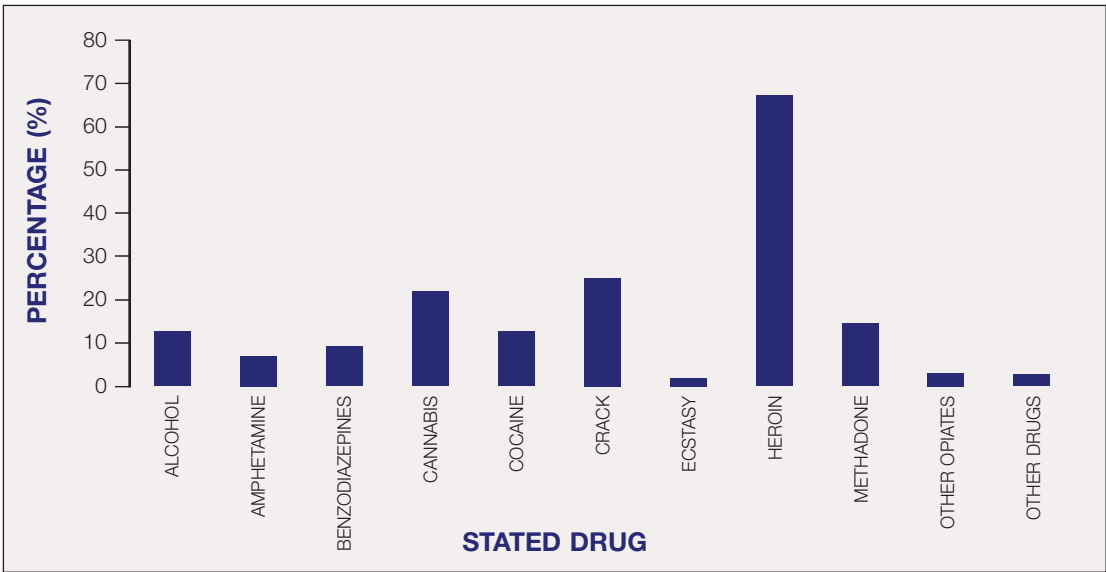
¹⁰ For explanation and methodological notes please refer to methodological section at end of report

Whilst the NDTMS records the main problematic drug of those in contact with treatment services, analysis of an individuals main drug does not reflect the fact that the majority of those entering drug treatment use more than one drug (EMCDDA, 2007). Therefore, analysis of the impact of drug use needs to take into account the complex picture of inter-related drug consumption. For this reason, the next section of the report records the drug profile of individuals (incorporating primary, secondary and tertiary recorded drugs) to gain a better understanding of polydrug use in the area.

All stated drug use

Whilst 3.00% of main problematic drug usage was attributed to crack cocaine use, this figure rose to 25.43% (n=9769) when all problematic drug usage was considered. A large proportion of those in contact with treatment services stated heroin as one of their problematic drugs (n=25945, 67.55%). Cannabis use contributed to 22.23% (n=8538) of all stated drug use, with 14.58% of individuals reporting the problematic use of methadone (n=5601). There has been an increase in the proportion of clients stating the problematic use of cocaine between 2006/07 (n=4365, 11.89%) and 2007/08 (n=4891, 12.73%).

Figure 8: All stated problematic substance use of individuals in contact with treatment services, 2007/08



Drug use and age

The majority of individuals aged under 18 stated cannabis as a problematic drug (n=2429, 91.73%). Only 1.55% (n=41) of under 18s stated heroin to be a problematic drug. Table 10 reveals that, whilst the proportion of individuals stating cannabis as a

problematic substance drops with increasing age, the proportion of those stating heroin (with the exception 45s and older) and methadone as a problematic substance increases with each older age group. This is similar to previous reporting years (see Khundakar et al, 2007 a).

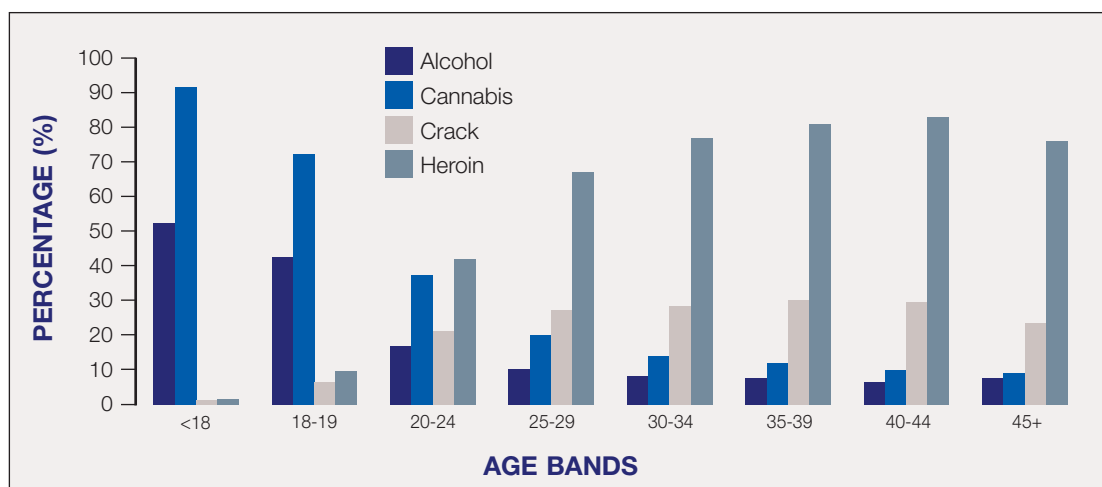
Table 10: All problematic substance use by age group of structured drug treatment clients, 2007/08

Stated Drug	Age Bands (%)							
	<18	18-19	20-24	25-29	30-34	35-39	40-44	45+
Alcohol	52.38	42.41	17.16	10.14	8.20	7.65	6.86	7.48
Amphetamine	5.63	11.22	9.40	7.76	7.19	6.52	7.13	6.58
Benzodiazepines	0.57	2.15	7.21	10.52	12.19	10.90	9.19	8.29
Cannabis	91.73	72.44	37.52	19.97	14.18	12.02	10.08	9.51
Cocaine	19.60	35.81	31.00	17.92	10.48	7.98	6.24	6.24
Crack	1.28	6.35	21.19	27.17	29.12	30.51	29.73	23.83
Ecstasy	13.78	13.12	5.79	1.83	0.90	0.50	0.31	0.35
Heroin	1.55	9.82	41.99	67.12	77.19	81.22	82.90	76.20
Methadone	0.34	0.83	6.80	11.39	16.20	17.66	19.11	20.83
Other opiates	0.15	0.58	2.46	3.86	4.04	3.45	3.32	5.16
Other drugs	11.52	5.78	3.19	3.17	2.52	2.33	2.33	2.90

Heroin accounted for a larger proportion of problematic use in those aged 25 and over in comparison to under 25s. Whilst heroin was reported as a problematic drug for 20.33% (n=1371) in under 25s, this proportion rose to 77.61% (n=24574) in over 25s. Problematic cannabis use was reported in larger proportions amongst under 25s (n=4389, 65.08%) in comparison to over 25s (n=4149, 13.10 %).

Those who reported the use of heroin were significantly older (mean 36.33 years) than those who did not report the use of this drug (mean age 28.31 years of non heroin users, $t=83.33$ $p<0.001$). Conversely, those who reported the use of cannabis (mean age 26.16 years) were significantly younger in comparison to those who did not report its use (mean age of non cannabis users, 35.89 years, $t=-91.75$ $p<0.001$).

Figure 9: Proportion of alcohol, cannabis, crack and heroin by age bands, 2007/08



Drug use and ethnicity

A significantly greater proportion of clients identified as BME reported the problematic use of crack (n=498, 29.70% in comparison to n=9191, 25.40% of those identified as White) ($\chi^2=15.73$ $p<0.001$). A significantly greater proportion of those identified as BME also stated cannabis as a main problematic drug (n=460, 27.43% of reported drug use by BME, n=8024, 22.17% of White problematic users) ($\chi^2=$

25.70 $p<0.001$). In contrast, the proportion of individuals reporting the problematic use of heroin was higher amongst those stated as White (n=24470, 67.61% of Whites, n=1063, 63.39% of BME population), ($\chi^2= 12.78$ $p<0.001$). Findings are consistent with research that has found considerable variation in patterns of drug use across different ethnic groups (Bashford et al., 2003, Wanigaratne et al., 2003).

Table 11: All problematic substance use by ethnicity, 2007/08

Problematic substance	Ethnicity			
	No. White	%	No. BME	%
Alcohol	4718	13.04	182	10.85
Amphetamine	2696	7.45	49	2.92
Benzodiazepines	3470	9.59	68	4.05
Cannabis	8024	22.17	460	27.43
Cocaine	4671	12.91	172	10.26
Crack	9191	25.40	498	29.70
Ecstasy	878	2.43	44	2.62
Heroin	24470	67.61	1063	63.39
Methadone	5413	14.96	138	8.23
Other opiates	1193	3.30	102	6.08
Other	1198	3.31	71	4.24

¹¹ For explanation and methodological notes please refer to methodological section at end of report

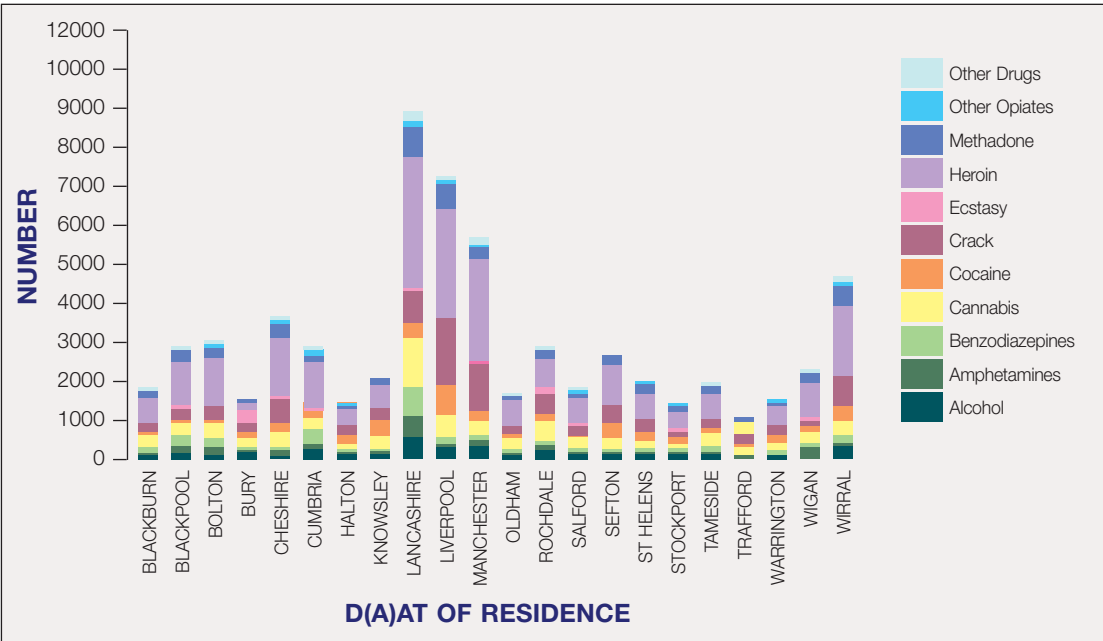
Table 12: All problematic substance use by D(A)AT of residence, 2007/08

D(A)AT	Problematic Substance										
	Alcohol	Ampheta mines	Benzodia zepines	Cannabis	Cocaine	Crack	Ecstasy	Heroin	Methado ne	Other Opiates	Other
Blackburn with Darwen	150	112	140	329	65	222	27	768	133	60	23
Blackpool	260	116	348	316	101	347	29	1310	288	42	69
Bolton	163	231	255	369	138	391	42	1322	269	100	57
Bury	219	84	53	326	162	241	54	523	32	19	41
Cheshire	178	104	146	385	230	713	40	1620	428	91	82
Cumbria	273	218	408	336	133	49	53	1283	212	169	60
Halton	157	71	48	226	203	261	33	433	159	27	27
Knowsley	203	47	41	462	353	369	31	642	127	29	13
Lancashire	650	589	847	1333	462	858	151	3662	891	166	237
Liverpool	414	69	163	671	791	1920	38	3018	787	56	74
Manchester	372	182	133	484	251	1289	60	2886	388	96	125
Oldham	173	70	89	332	93	183	17	763	71	28	61
Rochdale	339	125	116	565	186	541	66	941	233	24	68
Salford	159	102	74	290	104	263	27	753	135	43	57
Sefton	213	40	78	323	373	501	40	1118	233	23	50
St Helens	180	74	83	261	186	323	34	747	247	40	39
Stockport	166	95	37	209	144	184	27	554	73	49	44
Tameside	132	81	185	302	151	248	21	768	217	66	34
Trafford	79	26	21	236	95	250	16	378	81	23	10
Warrington	135	44	106	218	206	235	43	561	115	39	33
Wigan and Leigh	92	270	116	304	193	177	36	1054	193	47	43
Wirral	377	108	210	471	411	773	66	1985	527	135	96

There were regional variations in the stated problematic use of various drugs reported to the NDTMS. The highest proportion of stated heroin use was found in Blackpool (n=1310, 82.65%). In contrast, only 55.58% (n=523) of stated problematic use in Bury was attributed to the use of heroin. Bury, Knowsley and Rochdale D(A)ATs had a high proportion of stated cannabis use (34.64%, 35.00% and 34.18% respectively). Bury and Rochdale D(A)AT areas also had a high proportion of stated

alcohol use (23.27% and 20.51% respectively) in comparison to the regional average (12.84%). The high proportions of cannabis and alcohol use in these D(A)AT areas are likely to be linked to the high levels of under 18s in contact with treatment in these areas. Liverpool D(A)AT had a high proportion of clients stating crack as a problematic drug (n=1920, 44.54%) in comparison to other D(A)ATs such as Cumbria (n=49, 2.68%).

Figure 10: Stated problematic substance use by D(A)T of residence, 2007/08



Referral sources, modality types and treatment outcomes

During 2007/08, each individual in treatment (n=38573) may have received more than one episode of care at one or more treatment agencies. In turn, each agency may have provided the individual with one or more modality of treatment. Therefore, to provide the fullest possible understanding of the ways in which people are referred into services, the types of treatment provided and the outcomes of individuals within services, results for each recorded episode are presented here (n=52922).

Referrals

In this section of the report, all episodes of treatment in 2007/08 are recorded, regardless of whether an individual entered treatment on more than one occasion over the year (n= 52922 including double counting). Of the treatment episodes recorded by the NDTMS in the North West in 2007/08, the largest source (36.39%) of referral was 'self', followed by referrals via the Criminal Justice System (22.24%). There has been an increase in actual referrals from the CJS between 2006/07 (n=11509) and 2007/08 (n=11649).

Figure 11: Referral source of those in contact with drug treatment, 2007/08

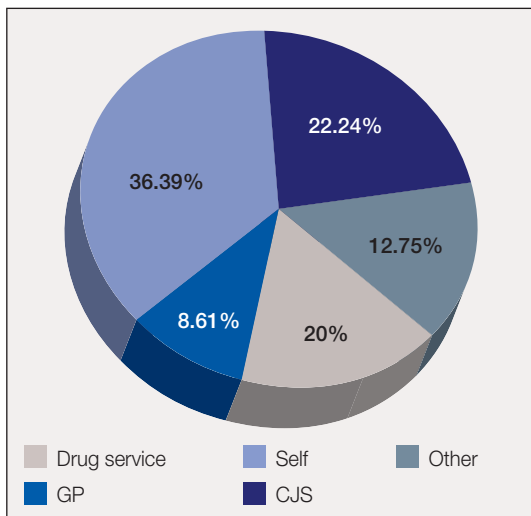


Table 13 reveals that the proportion of episodes referred from the CJS varied from 12.28% in Warrington to 39.48% in Blackburn with Darwen. Blackpool and Sefton D(A)ATs had a high proportion of referrals from drug services (46.23% and 44.68%

respectively), with Cumbria and Liverpool D(A)AT areas having a high percentage of referrals from GP services (26.33% and 20.76% respectively) in comparison to the regional average (8.61%).

Table 13: Referral source by D(A)AT of residence (all treatment episodes)

D(A)AT	Referral Source %				
	Drug service	GP	Self	CJS	Other
Blackburn with Darwen	9.65	6.02	36.79	39.48	8.06
Blackpool	46.23	1.37	20.44	24.46	7.49
Bolton	14.36	4.99	44.86	28.24	7.55
Bury	13.81	8.51	27.44	32.54	17.69
Cheshire	10.12	9.02	54.26	15.22	11.37
Cumbria	9.84	26.33	30.32	18.75	14.76
Halton	23.56	8.77	36.72	17.06	13.89
Knowsley	16.48	5.37	34.74	16.97	26.43
Lancashire	20.56	5.77	38.93	24.47	10.27
Liverpool	24.23	20.76	23.64	21.40	9.97
Manchester	18.81	4.70	36.95	19.84	19.69
Oldham	6.77	6.01	51.71	16.58	18.94
Rochdale	12.37	7.13	41.86	17.66	20.98
Salford	15.05	4.38	44.81	23.53	12.23
Sefton	44.68	3.84	17.01	26.23	8.24
St Helens	14.33	7.44	45.46	21.09	11.67
Stockport	14.81	3.59	50.27	19.21	12.12
Tameside	12.18	7.08	43.62	26.84	10.28
Trafford	28.32	6.02	19.61	36.83	9.23
Warrington	18.63	5.50	55.12	12.28	8.47
Wigan and Leigh	17.43	2.06	52.30	23.69	4.51
Wirral	19.02	12.50	30.25	17.99	20.24
Regional Percentage	20.00	8.61	36.39	22.24	12.75

Referral source and age

Whilst regionally, the main source of referral into drug treatment was via self-referral, the proportion of people referred via this route was dependent on age. 24.01% of episodes in under 25 age range self-referred into treatment services, whilst 38.64% (n=17133) of episodes amongst 25 and over were referred via this source. The majority of episodes of treatment for under 18s came from 'other' referral

sources, including Connexions, Social Services, and education services. A large proportion of under 25 referrals came from the Criminal Justice System (CJS) (n=2549, 31.70%). Those referred via the CJS were significantly younger (mean age 31.63 years) than those referred via drug services (mean age 36.19 years $t=37.74$ $p<0.001$), GPs (mean age 37.38 $p<0.001$) and self-referral (mean age 34.80 $t=32.11$ $p<0.001$).

Table 14: Referral source by age group (all treatment episodes)

Age bands	Referral Source (%)				
	Drug service	GP	Self	CJS	Other
<18	1.09	1.26	7.07	33.11	57.47
18-19	5.11	3.36	17.96	39.85	33.72
20-24	14.89	5.43	38.88	27.71	13.08
25-29	19.35	6.06	40.75	25.61	8.23
30-34	20.74	7.81	39.60	23.58	8.27
35-39	22.93	9.42	38.78	20.22	8.64
40-44	23.42	11.85	36.47	17.47	10.79
45+	24.84	14.24	36.87	12.96	11.09

* Other includes A&E, syringe exchange, psychiatry, Community Care Assessment (CCA), employment services, education services, Pupil Referral Unit (PRU), Connexions, Social Services, sex worker projects, general hospital, relative, concerned other, psychological services, Child and Adolescent Mental Health Services (CAMHS) and Looked After Children (LAC)

Referral source and ethnicity

There were variations in the proportion of referrals from certain sources dependent on the ethnicity of the client entering treatment. Percentages in table 15 total over 100% as an individual can have multiple treatment episodes during the year, resulting in more than one referral source. An individual can also state more than one drug within each treatment episode. Those who classed their ethnicity as BME were more likely to have been referred into treatment via CJS (23.25%) and via self-referral (39.71%) in comparison to those who stated their ethnicity as White (22.06% and 36.36% respectively).

Referral source and drug use

There were variations in the proportion of referrals stating heroin as a problematic drug, dependent

on referral route into treatment. Referrals from drug services and GPs were more likely to state heroin as a problematic drug (77.18% and 76.47% respectively) in comparison to referrals from CJS and other referral sources (71.09% and 47.55% respectively). Referrals from other referral sources are significantly younger in comparison to drug service and GP referrals. Individuals who stated heroin as a problematic drug were significantly older in comparison to those who do not state this drug ($t=83.83$ $p<0.001$). Therefore, the younger cohort of individuals from other referral sources may be a reason for the low proportion of referrals from this source stating the use of heroin. Individuals referred via the CJS were more likely to state the problematic use of crack cocaine in comparison to all other referral sources (35.73%).

Table 15: Drug use by referral source (all treatment episodes)

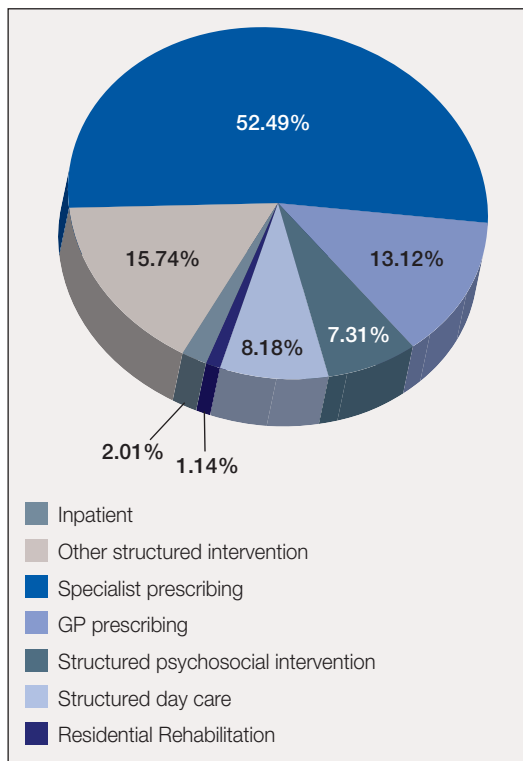
Problematic Substance	Referral Source									
	Drug service	%	GP	%	Self	%	CJS	%	Other	%
Alcohol	893	8.55	278	6.22	1823	9.62	1552	13.37	1515	22.81
Amphetamines	599	5.73	228	5.10	1356	7.15	843	7.26	573	8.63
Benzodiazepines	1141	10.92	495	11.07	2001	10.55	1148	9.89	377	5.68
Cannabis	1297	12.42	570	12.75	3134	16.53	2799	24.11	2643	39.79
Cocaine	941	9.01	410	9.17	2136	11.27	1505	12.96	1023	15.40
Crack	3107	29.74	1066	23.84	5206	27.46	4149	35.73	1258	18.94
Ecstasy	89	0.85	54	1.21	256	1.35	293	2.52	374	5.63
Heroin	8062	77.18	3419	76.47	14508	76.52	8254	71.09	3160	47.57
Methadone	2465	23.60	846	18.92	2640	13.92	1169	10.07	682	10.27
Other Opiates	373	3.57	250	5.59	705	3.72	319	2.75	187	2.81
Other Drugs	418	4.00	102	2.28	377	1.99	304	2.62	453	6.82

Modalities of treatment¹¹

During 2007/08 a proportion of those in contact with treatment accessed numerous types of services (e.g. receiving a prescription and attending counselling). The following section details the modalities of treatment entered (n=60076) during 2007/08. According to NTA guidelines (see <http://www.nta.nhs.uk/areas/ndtms/docs/core%20d>

ata%20set/ndtms_core_data_set_guidance_yp_services_v5.0.pdf), young persons' (YP) specific services have separate YP specific modalities of treatment. These YP modality codes for tier 3/ 4 modalities of treatment are only used in specific YP services, with adult services only using adult modality codes. Therefore, this section of the report has been divided between adult and YP modalities.

Figure 12: Adult treatment modalities, 2007/08

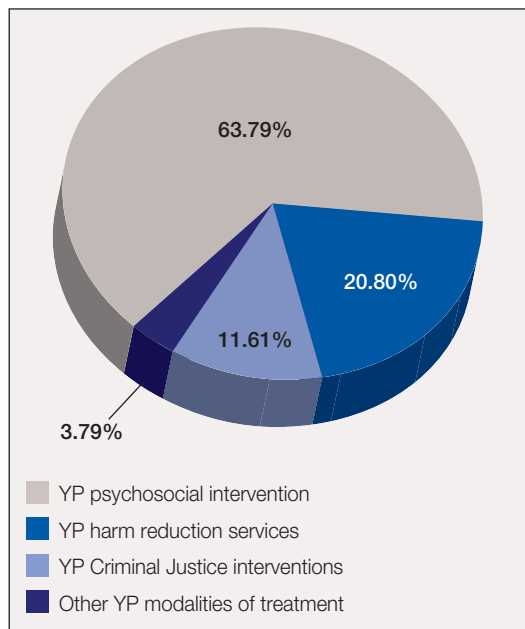


Adult treatment modalities

The majority of modalities of treatment during 2007/08 in the North West of England involved specialist prescribing (n=28141, 52.49%). Very few modalities of treatment involved tier 4 treatment (inpatient treatment, n=1078, 2.01%, residential rehabilitation, n=611, 1.14%).

¹² For explanation and methodological notes please refer to methodological section at end of report

Figure 13: YP treatment modalities, 2007/08



YP modalities of treatment

The majority of YP treatment modalities involved YP psychosocial interventions (n=3379, 63.79%), with 615 YP Criminal Justice Interventions (11.61%). Very few treatment interventions involved YP inpatient treatment (0.07%) or YP residential rehabilitation (0.09%).

*Other YP modalities of treatment= YP work with parents and carers, YP shared care schemes, YP specialist pharmacological interventions, YP inpatient interventions

Drug use and modality of treatment entered

When all modalities of treatment were considered, there were variations in the use of various drugs dependent on the treatment intervention entered. Percentages in table 16 total over 100% as an individual can have multiple modalities of treatment during the year. An individual can also state more than one drug within each episode of treatment.

Inpatient treatment interventions and residential rehabilitation interventions were more likely to involve those stating crack cocaine as a problematic substance (41.49% and 48.43%) in comparison to other interventions such as GP prescribing (25.06%). Specialist prescribing and GP prescribing interventions had very high levels of reported heroin use (90.40% and 87.26% respectively).

Table 16: Drug use by all adult interventions of treatment (all adult modalities of treatment)

Problematic Substance	Modality of treatment %						
	Inpatient treatment	Specialist prescribing	GP prescribing	Structured psychosocial	Structured day programme	Residential rehabilitation	Other structured intervention
Alcohol	12.09	4.40	4.00	15.25	15.63	18.68	14.36
Amphetamines	4.47	4.89	3.37	9.02	13.57	7.27	10.10
Benzodiazepines	16.09	12.02	11.51	5.97	7.93	9.92	7.55
Cannabis	12.93	9.48	8.35	22.72	28.42	19.50	21.10
Cocaine	7.35	4.33	4.42	22.52	18.11	14.71	24.48
Crack	41.49	32.18	25.06	36.12	26.02	48.43	29.65
Ecstasy	0.47	0.27	0.38	3.02	2.77	0.66	2.04
Heroin	76.74	90.40	87.26	52.33	55.84	80.99	54.64
Methadone	44.74	16.64	22.17	13.39	15.35	8.93	8.83
Other Opiates	4.47	3.46	4.68	4.08	4.72	4.79	3.24
Other Drugs	3.72	1.63	1.27	3.62	5.28	5.62	3.65

When only YP interventions of treatment were considered, a different pattern of substance use emerged in comparison to adult modalities of treatment. There were low levels of heroin and crack use in YP interventions, in contrast to all adult interventions. There was a high level of cocaine use amongst YP interventions, in particular other YP

interventions (incorporating YP work with parents and carers, YP shared care schemes, YP specialist pharmacological interventions and YP inpatient interventions) (69.01%). The levels of cannabis use were higher in all YP interventions of treatment in comparison to adult interventions.

Table 17: Drug use by all YP interventions of treatment (all YP modalities of treatment)

Problematic substance	YP Modality of treatment %			
	YP psychosocial	YP harm reduction	YP criminal justice	Other YP intervention
Alcohol	25.48	24.73	30.09	16.47
Amphetamine	3.92	4.37	2.43	3.71
Benzodiazepines	0.40	1.34	0.31	2.55
Cannabis	42.87	39.84	44.51	29.47
Cocaine	46.35	45.53	38.28	69.01
Crack	1.21	1.65	0.71	7.89
Ecstasy	7.24	6.84	5.41	5.80
Heroin	1.68	3.16	0.78	15.55
Methadone	0.22	0.26	0.08	2.55
Other opiates	0.12	0.35	0.08	0.46
Other	5.04	6.19	4.08	4.18

Modality exit status

A recent addition to the core NDTMS dataset has been modality exit status. This field details the reasons for exit from a specific modality of treatment. As an individual can have several modalities of treatment within a treatment episode, the modality exit status can provide a more accurate indicator of specific treatment interventions within a treatment episode than the overall discharge reason for a whole treatment episode. Table 18 provides the modality

exit status for all adult modalities of treatment ending during the 2007/08 financial year. GP prescribing interventions were most likely to result in a mutually agreed planned exit (60.99%). Structured psychosocial interventions and structured day care interventions had a high proportion of unilateral unplanned exits (42.02% and 43.40% respectively). Residential rehabilitation and inpatient treatment had a high level of withdrawn interventions of treatment (15.86% and 13.26% respectively).

Table 18: Modality exit status for all interventions ending during 2007/08 (all modalities of treatment)

Modality	Modality exit status		
	Mutually agreed planned exit (%)	Client's unilateral unplanned exit (%)	Intervention withdrawn (%)
Inpatient	48.99	37.75	13.26
Other structured intervention	54.76	40.41	4.83
Specialist prescribing	55.42	39.65	4.93
GP prescribing	60.99	33.06	5.94
Structured psychosocial intervention	49.42	42.02	8.56
Structured day care	52.98	43.40	3.62
Residential rehabilitation	51.46	32.69	15.86

Treatment outcomes

The following section details the discharge reasons for individuals exiting their final episode of treatment during 2007/08. The majority of individuals in the North West were still engaged in an ongoing treatment episode at the end of 2007/08 (66.72%).

When only individuals who have been discharged from their latest treatment episode are considered, differences between D(A)ATs in terms of discharge reasons are revealed. As shown in table 19 and figure 14, Bury and Warrington D(A)ATs had high proportions of individuals discharged from treatment as 'treatment complete, drug free' (25.15% and 24.34% respectively). In contrast, only 3.63% of those discharged from treatment in Cumbria were 'treatment complete, drug free'. Stockport D(A)AT had a high proportion of discharges as 'treatment

complete' (50.15%), in comparison to other areas such as Warrington (6.64%). There were variations in the proportion of final treatment episodes that resulted in a discharge to prison from 1.89% in Knowsley to 16.98% in Bolton. The highest proportion of discharge reasons of 'dropped out' was found in Tameside and Manchester (45.30% and 44.99% respectively). There has been a substantial increase in the proportion of those declining treatment in Sefton D(A)AT from 1.01% in 2006/07 to 18.02% in 2007/08. A number of North West D(A)ATs had over 2% of their discharges resulting from the death of the client. In recognition of the importance of deaths within treatment services, the Centre for Public Health, Liverpool John Moores University, continues to monitor the causes of death amongst those reported to the NDTMS (Beynon et al., 2007b; Hurst et al., 2007).

Figure 14: Discharge reason by D(A)AT of residence, 2007/08

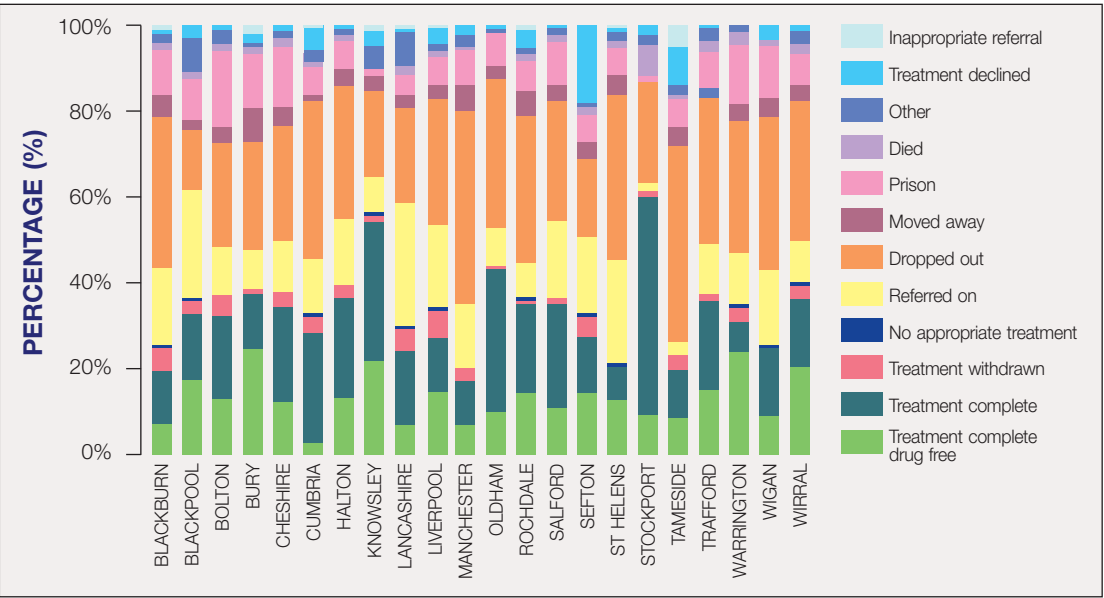


Table 19: Discharge reasons for those exiting final episode of treatment by D(A)AT of residence, 2007/08

D(A)AT	Discharge reason (%)											
	Treatment complete drug free	Treatment complete	Treatment withdrawn	No appropriate treatment	Referred on	Dropped out	Moved away	Prison	Died	Other	Treatment declined	Inappropriate referral
Blackburn with Darwen	7.59	13.01	4.88	0.27	17.62	35.23	5.15	10.57	1.36	1.90	1.08	1.36
Blackpool	17.79	15.81	2.57	0.59	25.10	14.03	2.17	9.68	1.19	7.91	3.16	0.00
Bolton	13.84	19.03	5.19	0.00	11.01	23.74	3.93	16.98	2.04	3.14	0.94	0.16
Bury	25.15	12.87	1.46	0.00	8.48	25.15	7.89	12.28	1.17	1.17	1.75	2.63
Cheshire	13.28	21.68	3.19	0.67	11.43	25.88	4.37	13.95	2.52	1.18	1.34	0.50
Cumbria	3.63	25.73	3.49	0.73	12.21	36.19	2.03	6.10	0.58	3.34	5.23	0.73
Halton	13.46	23.85	2.45	0.31	15.29	30.58	3.98	6.42	1.53	0.92	0.92	0.31
Knowsley	22.64	31.66	1.68	0.42	8.60	19.71	3.35	1.89	0.00	4.82	3.35	1.89
Lancashire	7.82	17.02	4.60	1.02	28.17	22.09	2.86	5.37	1.38	7.77	1.12	0.77
Liverpool	15.50	11.83	6.80	0.49	19.55	29.04	3.00	6.50	1.16	1.78	3.80	0.55
Manchester	7.86	10.44	2.58	0.22	14.32	44.99	5.38	8.40	0.65	3.12	1.83	0.22
Oldham	10.79	32.58	0.90	0.00	8.09	35.06	2.70	8.09	0.45	0.45	0.90	0.00
Rochdale	15.31	20.30	0.83	0.33	8.32	33.44	6.16	6.82	2.00	1.33	3.16	2.00
Salford	11.49	23.96	1.47	0.49	17.11	27.63	4.16	10.02	1.47	0.98	1.22	0.00
Sefton	14.84	13.78	3.71	0.71	17.84	18.20	4.06	6.01	1.77	0.71	18.02	0.35
St Helens	13.61	7.10	0.89	0.30	24.26	37.28	5.03	5.92	1.48	2.37	0.89	0.89
Stockport	10.21	50.15	1.50	0.00	1.80	22.82	1.80	7.51	1.50	0.60	2.10	0.00
Tameside	9.65	10.64	3.71	0.00	2.97	45.30	4.46	6.44	0.25	2.72	8.91	4.95
Trafford	15.67	21.00	1.33	0.00	11.67	33.00	2.67	8.33	2.33	3.00	1.00	0.00
Warrington	24.34	6.64	3.54	1.33	11.50	30.53	3.98	13.72	2.65	1.77	0.00	0.00
Wigan and Leigh	9.86	15.28	0.58	0.39	17.79	34.43	4.64	12.38	0.58	0.58	3.29	0.19
Wirral	21.00	16.16	2.87	0.91	9.52	31.57	3.63	7.55	2.42	2.87	1.36	0.15
Regional Total	13.06	18.43	3.33	0.49	15.13	29.74	3.34	8.06	1.38	3.18	3.10	0.75

0.65% of individuals had a discharge reason of 'Not Known'

Methodology and References

Methodology

The NDTMS is the official national method of monitoring the prevalence of drug treatment in England. It is commissioned by the NTA and managed through nine regional centres. The system was established in March 2001 and replaced the Drug Misuse Database (DMD).

The NDTMS measures the number of people 'in contact' with structured drug treatment services (i.e. tier 3 and 4 services, as defined by Models of Care, NTA, 2002). Low threshold interventions, such as open access and syringe exchange services are not recorded.

The NDTMS measures the number of people 'in contact' with drug treatment services (i.e. those presenting to treatment, which is not necessarily the number of people in drug treatment). It is possible that there may be a period of time between presentation and the actual commencement of treatment, during which the individual may lose contact with service. Therefore, an individual presenting for treatment may actually never receive treatment. NDTMS results are, therefore, described in terms of the number of individuals in contact with services rather than numbers of people actually in treatment. For more information about the NDTMS see www.nta.nhs.uk.

Where analyses have been reported at D(A)AT level, the results have been presented in terms of geographic areas in which the client was resident, not the area in which the treatment was provided.

During 2007/08, data were collected using a database system. Treatment services submit a core dataset that includes information on all of their clients. This information is then provided to the North West Public Health Observatory at the Centre for Public Health, Liverpool John Moores University, for verification.

Methodological notes

1) 'New' individuals are those whose latest treatment episode began in 2007/08. New individuals may not be starting treatment for the first time but could also be returning to services after having previously been in contact. 'Ongoing' individuals are those who began their treatment episode on or before 31st March 2007.

2) The total number of clients in each D(A)AT quoted in this report differ slightly to those produced nationally by National Drug Evidence Centre (NDEC). This is due to methodological differences between North West NDTMS (CPH, Liverpool John Moores University) and NDEC. NDEC figures include North West residents who were in contact with services outside of the region.

3) Data from North West Public Health Observatory, based within the Centre for Public Health, Liverpool John Moores University. Data derived from 2005 prevalence estimates. Data sourced from the Office of National Statistics (ONS).

4) Data from North West Public Health Observatory, based within the Centre for Public Health, Liverpool John Moores University. Data sourced from the Office of National Statistics (ONS)

5) Data from North West Public Health Observatory, based within the Centre for Public Health, Liverpool John Moores University. Data derived from 2005 prevalence estimates. Data sourced from the Office of National Statistics (ONS).

6) In order to conserve space in this summary paper, the results for each of these four areas are reduced into two categories: gender: male/female; ethnicity: white/non-white; age: under 25/25+; referral source: criminal justice system (CJS) referrals/ non-CJS referrals.

7) Age was calculated from the 31st March 2008 (the final day of the reporting period). This is in contrast to the calculation of age by NDEC and the NTA. Only those clients aged between 9 and 75 inclusively were included in all analysis.

8) Data were missing from 1.6% of ethnicity records.

9) Data not specified for 0.43% of primary problematic drug records.

10) Alcohol data were only included for individuals stating this substance as a secondary or tertiary drug. Clients who stated alcohol as a primary problematic substance were excluded from all analysis in this report. From 2008/09, NDTMS will include data on those who state alcohol as a primary problematic drug in contact with structured drug or alcohol treatment.

11) 2.18% of records did not state a modality due to either a client not commencing a modality of treatment or non recording of data.

References

- Advisory Council on the Misuse of Drugs (1998). **Drug Misuse and the Environment**. London, Home Office.
- Association of Public Health Observatories (2005). **Indications of Public Health in the English Regions. 4: Ethnicity and Health**. APHO.
- Bashford, J.; Buffin, J. and Patel, K. (2003). **The Department of Health's Black and minority ethnic drug misuse needs assessment project: Report 2 – The findings**. Preston: Centre for Ethnicity and Health.
- Beynon, C. M.; McVeigh, J. and Bellis, M.A. (2003). **Drug Treatment in Cheshire and Merseyside: The first year of the National Drug Treatment Monitoring System (NDTMS)**. Liverpool: Liverpool John Moores University.
- Beynon C. M.; McVeigh J. and Roe B. (2007a). Problematic drug use, ageing and older populations; trends in the age of drug users in contact with drug treatment and syringe exchange programmes. **Ageing & Society**, 27, 799-810.
- Beynon C. M. and McVeigh J. (2007b). The role of Substance use in non-drug related deaths: a cross sectional study of drug treatment clients in the North West of England. **Journal of Substance Use**. 12 (1) 39-47.
- Bullock, A.; Weston, S.; McVeigh J. and Bellis, M. A. (2005). **Drug Treatment in the North West of England, 2003/04**. Liverpool: Liverpool John Moores University.
- European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (2007). **Annual report 2006: the state of the drugs problem in Europe**. Luxembourg: EMCDDA. ISBN 978-92-9168-288-1
- European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). (2007). **Cocaine and Crack Cocaine: A Growing Public Health Issue**. Luxembourg: EMCDDA. Available at: <http://www.emcdda.europa.eu/publications/selected-issues/cocaine>
- Fountain J.; Bashford J.; Winters M. and Patel K (2003). **Black and minority ethnic communities in England: a review of the literature on drug use and related service provision**. London: National Treatment Agency.
- Frischer, M.; Heatlie.; H and Hickman, M.. (2004). **Estimating the prevalence of problematic and injecting drug use for drug action team areas in England: a feasibility study using the Multiple Indicator Method**. London, Home Office.
- Hay, G.; Gannon, M.; MacDougall J.; Millar, T.; Eastwood, C. and McKeganey, N. (2007). **Estimates of the prevalence of opiate use and/ or crack cocaine use (2005/06) North West region**. London, Home Office.
- Home Office. (2008). **Drugs: protecting families and communities – 2008-18 strategy**. London: Home Office. Available at: <http://drugs.homeoffice.gov.uk/publication-search/drug-strategy/drug-strategy-2008-2018?view=Binary>
- Hurst, A.; Beynon, C.; Marr, A. and McVeigh, J. (2007). **NDTMS themed report: Patterns of mortality in injecting and non-injecting drug users in contact with treatment services in the North West of England, 2003/04-2005/06**. Liverpool: Liverpool John Moores University.
- Hurst, A.; Beynon, C.; Marr, A. and McVeigh, J. (2008). **Does the North West of England have an ageing drug treatment population?** Liverpool: Liverpool John Moores University.
- Jones, A. and Beynon, C. (2003) **Treating Drug Misuse in the North West of England: National Drug Treatment Monitoring System (NDTMS) individual data for the North West of England, 2001/02 – summary report**. Liverpool: Liverpool John Moores University.
- Khundakar, A.; Marr, A.; McVeigh, J. and Bellis, M. A. (2006). **Drug treatment in the North West of England 2005/06. Results from the National Drug Treatment Monitoring System (NDTMS)**. Liverpool: Liverpool John Moores University.
- Khundakar, A.; Marr, A.; McVeigh, J. and Bellis, M. A. (2007a). **Drug treatment in the North West of England 2006/07. Results from the National Drug Treatment Monitoring System (NDTMS)**. Liverpool: Liverpool John Moores University.
- Khundakar, A.; Duffy, P.; Marr, A.; McVeigh, J. and Bellis, M. A. (2007b). **Referrals into structured drug treatment in the North West of England from the Criminal Justice Services in 2005/06**. Liverpool: Liverpool John Moores University.
- McVeigh, J.; Hughes, K.; Hounsborne, J. and Bellis, M. A. (2003) **Over a Decade of Drug Use Epidemiology**. Liverpool: Liverpool John Moores University.
- National Treatment Agency for Substance Misuse (2002) **Models of Care for treatment of adult drug misusers**. London: National Treatment Agency for Substance Misuse.
- Noble, M.; McLennan D.; Wilkinson K.; Whitworth A.; Barnes, H. and Dibben, C. (2008). **The English Indices of Deprivation 2007**. London: Department for Communities and Local Government.
- Rhodes, T.; Stoneman, A.; Hope, V.; Hunt, N. and Judd, A (2006). Groin injecting in the context of crack cocaine and homelessness: from 'risk boundary' to 'acceptable risk'? **International Journal of Drug Policy**, 17, 164-70.
- Rhodes, T.; Briggs, D.; Kimber, J.; Jones, S. and Holloway, G. (2007). Crack-heroin speedball injection and its implications for vein care: qualitative study. **Addiction**, 102, 1782-1790.
- Sumnall, H. R.; Bellis, M. A., Cole, J.C. and McVeigh, J. (2005). Crack-cocaine injection: a retrospective analysis of clients in Merseyside specialist drug treatment agencies. **Drugs Education Prevention Policy**, 13, 213-21
- Wanigaratne S.; Dar K.; Abdulrahim D. and Strang J. (2003) Ethnicity and drug use: exploring the nature of particular relationships among diverse populations in the United Kingdom. **Drugs: Education, prevention, and policy** 10.

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