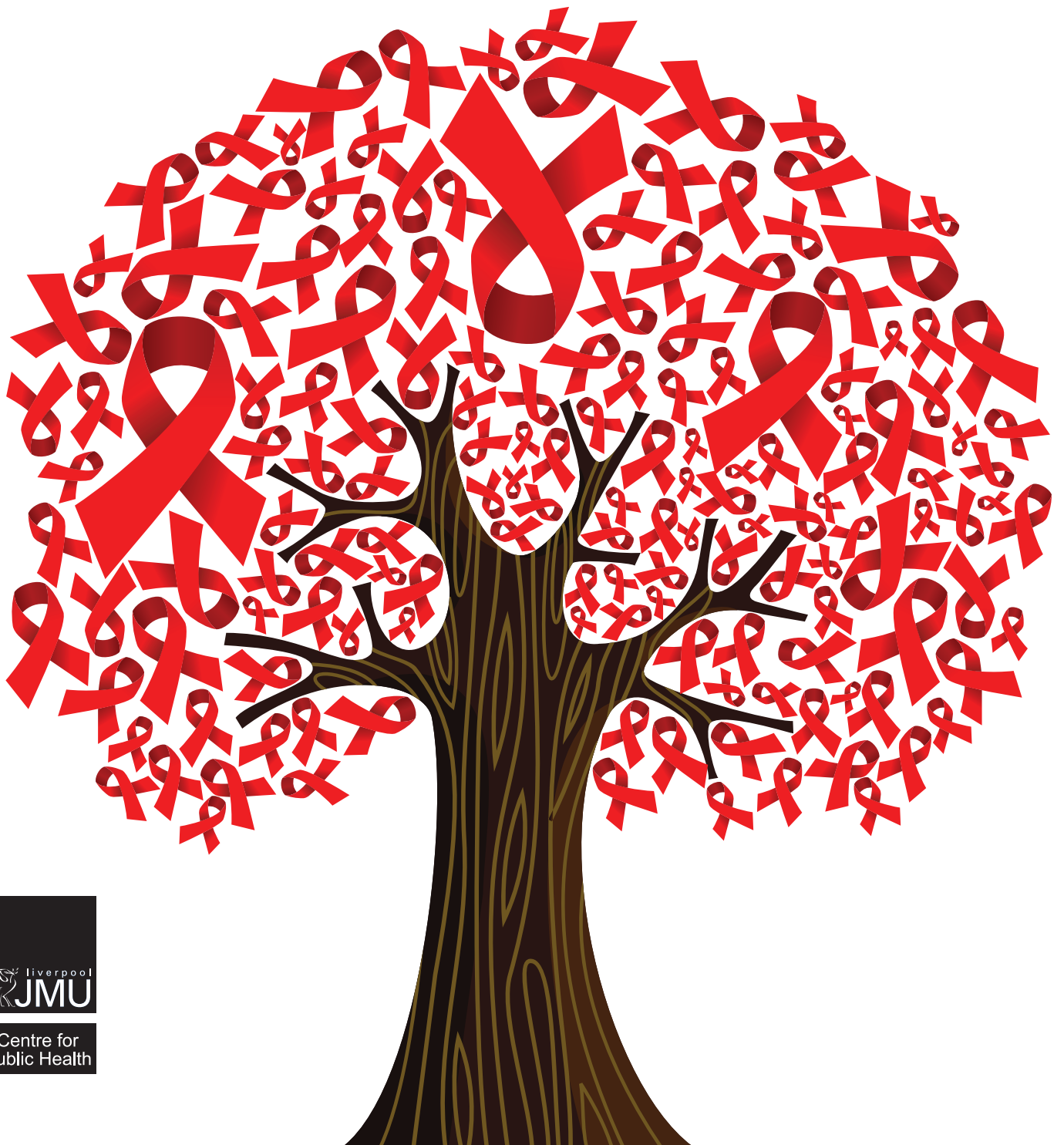


HIV & AIDS

In the North West of England 2011

Jane Harris | Suzy C. Hargreaves | Ann Lincoln | Jim McVeigh | Qutub Syed | Mark A. Bellis



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Executive Summary

In 2011, 6,993 HIV positive individuals accessed treatment and care from statutory treatment centres in the north west of England, representing a 6% increase on the number reported in 2010 (6,576 individuals). Prevalence in north west England was 149 per 100,000 adult population, a slight rise on the previous year (142 per 100,000). There were 789 new cases reported in 2011, representing a 7% increase from 2010 (735 new cases) continuing the fluctuating trend seen in recent years. New cases were classed as people who were new to the database in 2011, were not seen at a statutory treatment centre in north west England since 1994 and included transfers from elsewhere in the country.

This is the sixteenth annual report of the North West HIV/AIDS Monitoring Unit, presenting data on HIV positive individuals accessing treatment and care in north west England. A total of 39 statutory centres provided treatment and care for HIV positive individuals. Information is provided by local authority (LA), primary care trust (PCT) and treatment centre. Due to limited space, not all analyses by LA or PCT can be included. However, additional breakdowns can be found on the North West Public Health Observatory website (www.nwpho.org.uk/hiv2011).

New cases represented 11% of all cases, the same proportion as in 2010. The two dominant modes of HIV exposure were sex between men (MSM) and heterosexual sex at 44% and 42% respectively (tables 2.1 and 2.2). The number infected through other routes (injecting drug use, blood tissue and mother to child) remained relatively low. The largest proportion of HIV positive individuals presenting for care were categorised as asymptomatic (62%). However, all four deaths among new cases in 2011 were due to an AIDS-related illness which emphasises the need to ensure that HIV positive individuals seek treatment at an early stage of their disease so as to maximise the effectiveness of treatment and improve prognosis.

Sex between men (MSM) continues to be the predominant mode of exposure (51%) for all individuals who access treatment in north west England. However, there is considerable variation at both county and local authority (LA) level. Of those whose infection route was known, 61% of Lancashire's and 57% of Cheshire's HIV positive residents were infected through sex between men, compared with 39% of Merseyside's HIV positive population. At local authority level, the numbers infected through MSM range from 82% in Rossendale to 21% in Hyndburn while the numbers infected through heterosexual sex range from 71% in Hyndburn to 13% in Rossendale (table 3.2). Greater Manchester had 89 individuals infected through injecting drug use (IDU) which

accounts for 70% of all residents of north west England infected through this route.

The global HIV situation continues to influence north west England; just over a third (34%) of all HIV cases were exposed to HIV abroad with the majority (70%) contracted in sub-Saharan Africa (figure 3.2 and table 3.8). A further ten per cent were infected in South and South-East Asia and a similar proportion were infected in Western Europe (7%). Of those infected in Western Europe, the majority (28%) were infected in Spain. The majority (81%) of individuals infected abroad were infected through heterosexual sex, with the vast majority of these infected in sub-Saharan Africa (80%). Amongst new cases, 25% were reported to have been infected abroad, with 28% of these cases contracted in Zimbabwe.

Amongst those for who ethnicity was known, 66% of cases presenting for treatment and care in 2011 were of white ethnicity. Those from black and minority ethnic groups (BME) make up 33% of HIV positive individuals accessing treatment and care in north west England, a substantial over representation compared with the proportion of BME groups in the north west England population as a whole (9%). The characteristics of HIV positive individuals from BME groups, especially those from black African backgrounds, are distinctly different from those from the white population. Those from BME groups are younger, more likely to have been infected through heterosexual sex, more likely to be female (tables 3.4, 3.5 and 3.7).

This report includes information on the residency status of those in treatment and care for HIV in north west England (table 2.9 and table 3.13). This level of information is not routinely collected at a national level, notwithstanding concern over the health of vulnerable population groups such as asylum seekers. The number of individuals classed as non-UK nationals represented 15% of all cases and six percent of new cases, a decrease on previous years. Nearly half of non-UK nationals were classified as asylum seekers (48%) and nearly two-thirds (65%) were female. Nearly three-fifths (58%) of non-UK nationals were asymptomatic compared with 51% of UK nationals.

During 2011, over half (51%) of individuals accessing treatment and care were using triple antiretroviral therapy (ART). Amongst those who were asymptomatic, 72% were using ART, an increase compared with 2010 (table 3.6). During 2011, asymptomatic HIV positive individuals accumulated 20,613 outpatient visits. People who had died from a cause unrelated to AIDS had the highest mean number of outpatient visits (10.2 per person) while those who died from an AIDS-

related illness spent the greatest mean number of days as inpatients (19.3 days).

During 2011, 2,405 HIV positive individuals were reported to the North West HIV/AIDS Monitoring Unit by nine community sector organisations. The overall number of individuals seen was 30% lower than in 2010. Of those accessing community sector organisations in 2011, 27% did not attend a statutory service during the same year and 19% had never been seen by the statutory sector (table 4.3). This illustrates the continuing contribution of community sector organisations to the care of HIV positive individuals for whom these organisations may be the sole provider of care. This has particular significance for regional funding of HIV services, since individuals exclusively accessing community sector organisations are not included in national statistics which determine the distribution of funds for the care of HIV positive people.

In 2011, four social service departments in north west England were able to contribute information on 109 HIV positive individuals. The majority of individuals with HIV seen by social service departments also accessed statutory sector services in 2011 (table 5.1)

Information on trends for new and all cases of HIV in the north west from 2001 to 2011 are presented in chapter 6 and give an overall view of the changing pattern of HIV in north west England.

It is hoped that the tables and figures presented in this report, and the extra analysis available on the website (www.nwpho.org.uk/hiv2011) provide the relevant north west HIV/AIDS information needed. In recognition of the evolving and dynamic nature of HIV, any comments and suggestions for improving the usefulness of this report in future years are welcomed.

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1. Introduction

Over the past sixteen years the North West HIV/AIDS Monitoring Unit has collected, collated, analysed and disseminated data on the treatment and care of HIV positive individuals in north west England^[1-15]. This report aims to provide a comprehensive and timely summary of the epidemiology of HIV. It begins with a global and national overview before focussing on north west England. In chapter 2, we present analyses of new HIV cases in north west England and in chapter 3, analyses of all HIV cases presenting for treatment and care in the region. Information on the community sector and social care are presented in chapters 4 and 5, followed by trend data in chapter 6.

Due to limited space, not all analyses by local authority (LA) or primary care trust (PCT) can be included here. However, additional tables can be found on the North West Public Health Observatory website: www.nwpho.org.uk/hiv2011.

We hope that the tables and figures presented within this report and the extra analyses available on the website provide the relevant north west England HIV information required. In recognition of the evolving and dynamic nature of HIV, any comments and suggestions for improving the usefulness of this report in future years are welcomed.

Global Perspectives on HIV and AIDS^{*[16]}

Globally, there are more people than ever living with HIV due to increases in new diagnoses and greater access to antiretroviral therapy (ART) resulting in fewer AIDS-related deaths. However, the proportion of individuals living with HIV has stabilised in the past decade. There were an estimated 34 [31.6 – 35.2][†] million people infected with HIV globally at the end of 2010. There were 2.7 [2.4–2.9] million new HIV infections, a 15% decrease from 2001. An estimated 390,000 children aged under 15 years were infected in 2010, mostly from transmission in-utero, during delivery or post-partum through breastfeeding. There are thought to be 3.4 [3–3.8] million children aged under 15 years now living with HIV (at least 90% live in sub-Saharan Africa). The number of new infections in 2010 was an estimated 390,000 [340,000 – 450,000], 30% lower than in 2002 and 2003 when new infections amongst children reached a peak of 560,000 [500,000 – 630,000]. This is mainly due to expansion of services to prevent mother to child transmission. UNAIDS estimate that antiretroviral prophylaxis for pregnant women

has averted more than 350,000 new infections in children since 1995.

Continued improvement in national HIV surveillance systems and estimates feed into the global epidemiological system. For example, estimates of HIV incidence among key population groups in Morocco in 2009 were used to optimize resources for future prevention interventions. The work found that preventative spending in 2008 had not matched the distribution of new infections and the 2012-2016 National Strategic Plan now proposes that 63% of prevention spending should be targeted towards key groups, including 13% each for IDUs and MSM and 23% for sex workers and their clients.

It has been noted by UNAIDS that the past decade has been one of extraordinary progress in the global response to HIV. This has been attributed in part to the substantial increase in access to HIV treatment in recent years, particularly in preventing mother to child transmission. Around 50% of pregnant women in need of it were receiving therapy to prevent mother to child transmission in 2010 and the UN General Assembly on AIDS aims to eliminate mother to child transmission by 2015. In 2010, an estimated 6.6 million people in low and middle income countries were receiving antiretroviral therapy (ART), this is almost half of those eligible and represents an increase of around 1.35 million on 2009 figures. This increase is strongly contributing to the global decline in the number of HIV-related deaths. The annual number of AIDS deaths declined from 2.2 [1.9–2.6] million in 2005 to 1.8 [1.6–1.9] million in 2010. An estimated 250,000 [220,000-290,000] of these deaths were among children under the age of 15 which represents a 20% decline since 2005. An estimated 70,000 deaths are said to have been averted in 2010 due to increased access to ART and UNAIDS calculations suggest that increased access to ART has averted 2.5 million deaths since 1995.

Despite advances, there are multiple challenges that must be tackled before universal access to treatment, prevention and care is achieved. UNAIDS reiterate that AIDS continues to be a major health priority; AIDS-related illness is one of the leading causes of death worldwide especially among women of reproductive age; almost one in five maternal deaths is linked to HIV. The number of persons living with HIV continues to rise and numbers of new infections continue to increase at a faster rate than numbers of people starting treatment. UNAIDS consider the global HIV response to be at a pivotal juncture where current responses are reaching their limits and past gains are at risk. Global solidarity in the response to AIDS is thus called for. The UNAIDS 2011-2015 strategy is centred around “getting to zero”; namely zero new infections, zero AIDS-related deaths and zero discrimination.

* Unless otherwise stated, global data and information have been sourced from UNAIDS HIV & AIDS Global Progress Report 2011

† Figures in brackets indicate the reported range in estimated incidence from UNAIDS.

However, not all regions and countries conform to these overall trends. Epidemiological patterns are evolving by region and country, with changing characteristics among populations at greatest risk of infection. The Middle East and North Africa and Eastern Europe and Central Asia have both seen rises in the number of new HIV infections and AIDS-related deaths in recent years. Marginalised groups including sex workers, men who have sex with men (MSM), transgender people, injecting drug users (IDUs), migrants and prisoners continue to be disproportionately affected. These groups are frequently omitted from National AIDS plans and strategies and often face significant barriers to accessing HIV services. Women also continue to be disproportionately affected in some regions, especially sub-Saharan Africa where the rate of infection among women is 1.4 times the rate among men. The 2011-2015 Joint UN Strategy for HIV and AIDS calls for zero discrimination to achieve coverage for the most vulnerable groups^[17].

Important prevention programme gaps identified by UNAIDS include failure to match national AIDS strategies to national epidemiology, or failures to target focused HIV prevention programmes towards the population groups most at risk. Successful prevention programmes must combine components tailored to different population groups and in different settings and incorporate relevant behavioural and structural interventions with biomedical advances. There is also a need to include people living with HIV in programme planning, implementation and monitoring. To address these needs, UNAIDS has developed an outcome framework for 2011-2015 with ten targets (box 1)^[18].

Box 1: Ten Targets: UNAIDS Outcome Framework, 2011 – 2015

- Reduce sexual transmission of HIV by 50%;
- Reduce transmission of HIV amongst IDUs by 50%;
- Eliminate new HIV infections among children and substantially reduce AIDS-related maternal deaths;
- Reach 15 million receiving ART;
- Reduce tuberculosis related deaths in those living with HIV by 50%;
- Close the global AIDS resource gap and reach US\$ 22-24 billion investment in low and middle income countries;
- Eliminate gender inequalities and empower women and girls to protect themselves from HIV transmission;
- Promote laws and policies that eliminate HIV-related stigma and discrimination;
- Eliminate HIV related restrictions on entry, stay and residency;
- Integrate and strengthen the global response to the AIDS pandemic and eliminate parallel systems.

Sub-Saharan Africa

Sub-Saharan Africa remains the global epicentre of the HIV pandemic. Around 12% of the world’s population reside in sub-Saharan Africa and yet the region is home to approximately two-thirds (68%) of the global total of HIV infection. There were an estimated 22.9 [21.6–24.1] million people living with HIV in 2010 and 1.9 [1.7–2.1] million of these were new infections. Around 70% of all new infections in 2010 were acquired in the region. Nearly two-thirds (66%) of the global number of AIDS-related deaths in 2010 were in sub-Saharan Africa.

Globally, HIV incidence fell by more than a quarter in 33 countries between 2001 and 2009 and this included 22 sub-Saharan African countries including Ethiopia, Zambia, Nigeria, Zimbabwe and South Africa. Despite this decline, prevalence in South Africa remains high at 1.5% [1.3%-1.8%] and the country continues to have the highest HIV positive population of any nation world-wide (an estimated 5.6 million people). The epidemics in several countries are levelling off at unacceptably high rates including Lesotho, Mozambique and Swaziland; adult prevalence in Swaziland was 26% in 2009^[19].

Changes in behaviour, including increasing condom use, delaying the age of first sexual encounters and reductions in the number of sexual partners have led to declining HIV incidence in a number of sub-Saharan countries. For example, incidence in both urban Zimbabwe and Malawi^[20] has fallen to 1% in 2010, annually avoiding 35,000 and 15,000 new infections, respectively.

A decline in HIV prevalence among young people has been seen in 21 of 24 countries with a prevalence of 1% or higher due to encouraging trends in behaviour change. In the 19 countries where sufficient data were available, 11 saw a decrease in the percentage of young men with multiple partners in the past 12 months; seven saw a significant increase in the number of men using a condom during high risk sex; and eight saw a decrease in the number of young men and women having sex before the age of 15. A significant drop in HIV prevalence amongst women attending antenatal clinics has been seen in 12 countries including Ethiopia, Zimbabwe and Nigeria and many high prevalence countries have seen increases in voluntary circumcision among men with 232,287 circumcisions performed in Kenya by the end of 2010^[21].

AIDS-related deaths in the region have fallen by just over 14% since 2001. There were an estimated 1.2 [1.1-1.4] million deaths from AIDS-related causes in 2010 compared with 1.4 [1.3-1/6] million in 2001. This decline in the number of AIDS-related deaths is largely due to the scaling up of treatment; in

2010 an estimated 49% [46%-52%] of eligible adults and children received antiretroviral therapy, this equates to over 5 million people and is a substantial increase from the 2% receiving it in 2001. A study of mortality data in the Zimbabwean cities of Harare and Bulawayo found that there has been a 19% fall in crude death rates since the introduction of antiretroviral therapy in 2003-04^[22]. Similarly, the availability of free ART between 2004 and 2006 in Malawi led to a 10% decline in AIDS-related deaths in a rural population in the north of the country^[23]. However, there is still progress to be made in the region and the majority of people receive antiretroviral therapy too late. Several countries in Southern Africa have seen a significant rise in mortality in the past 20 years; in 2010 the probability of dying aged 15-60 years is 600 per 1,000 for men and 500 per 1,000 for woman in Malawi, Namibia, Swaziland, Lesotho, Zambia and Zimbabwe^[24]. Further reductions in AIDS-related mortality can be achieved in sub-Saharan Africa but only through the development of stronger and expanded systems which monitor the health status of HIV positive individuals and provide access to treatment at the appropriate time.

Heterosexual intercourse remains the driving force behind the epidemic in sub-Saharan Africa and unprotected sex with multiple partners and having other sexually transmitted infections are the greatest risk factors. Women and girls continue to be disproportionately affected and there has been little change over the past decade. Women accounted for 59% of those living with HIV in sub-Saharan Africa in 2010 and 14 women in sub-Saharan Africa become infected for every 10 men. This results from social, legal and economic disadvantage, as well as their relatively greater physiological susceptibility to infection. Increasing proportions of HIV infection are occurring within married or cohabiting couples and often these HIV-discordant couples are unaware of one another's HIV status^[25]. Research suggests that in 47% of these serodiscordant relationships it is the female partner who is HIV positive and a large proportion of these women are the widowed partners of infected men, or those who have divorced following HIV diagnosis.

Although the epidemic in sub-Saharan Africa is characterised by heterosexual transmission, it has become evident that the epidemic is becoming more varied. Unprotected paid sex, injecting drug users (IDU) and sex between men (MSM) are continuing to become increasingly significant factors in the epidemics of many countries. In Kenya, for example, HIV infections among paid sex work is linked to 14% of new infections (through sex workers, clients and partners of clients)^[26] and incidence among female sex workers in north-central Nigeria^[27] and Dar es Salaam in the United Republic of Tanzania^[28] is 12% and 30% respectively. Injecting drug use is the primary mode of transmission in Mauritius (an estimated 47% of IDUs in Mauritius are HIV-positive^[29]) and a significant

factor in Tanzania, and Kenya. Sex between men is illegal and stigmatised in many countries in sub-Saharan Africa, yet research shows that it is widespread in many sub-Saharan cities and the needs of MSM in HIV prevention should be recognised. More than 50% of the population of men who have sex with men surveyed in Cape Town in 2008 and 28% of those in the port city of Durban were found to be HIV positive^[30], as well as 17% of MSM in Lagos, Botswana, Malawi and Namibia collectively^[31,32]. Evidence suggests that the majority of men who have sex with men in sub-Saharan Africa will also have sex with women. According to survey data, 82% of men who have sex with men in Senegal report also having sex with women^[33] and amongst men who have sex with men surveyed in Malawi, Botswana and Namibia 34% were married or had a stable female partner^[32].

Prevention strategies in sub-Saharan Africa do not always correctly target the drivers of national epidemics. Prevention programmes inadequately cover older people, those in stable relationships, drug users, and men who have sex with men.

Asia

In Asia, there were an estimated 4.8 [4.3 – 5.3] million people living with HIV in 2010, of whom 360,000 [300,000 – 450,000] were newly infected, a 20% fall from 450,000 [410,000 – 500,000] in 2001. Over 90% of those infected with HIV in the region are living in China, India, Thailand, Indonesia, Vietnam, Malaysia and Myanmar with 49% living in India alone. There were an estimated 310,000 [260,000 – 340,000] AIDS-related deaths in 2010; the highest number of deaths outside sub-Saharan Africa. However, these overall trends conceal some regional variations, for example much of the population living with HIV in Indonesia are resident in the Papua and West Papua provinces and in China 53% of the HIV burden is in just five provinces^[34].

The proportion of women living with HIV in Asia has stabilised; with women accounting for about 35% of HIV cases in 2010. The majority of women are infected through unprotected sex with their male partners. In 2010, there were 110,000 [75,000-140,000] children under the age of 15 living with HIV and 22,000 [16,000-30,000] new infections, a 23% decline since 2001. However, the trends vary across Asia with East Asia seeing a 31% increase in infections among children in the same period. The epidemics in many Asian countries began among injecting drug users, sex workers and MSM and these remain the main population groups at risk. An estimated 16% of the 4.5 million people who inject drugs in Asia are thought to be HIV positive and the prevalence is much higher in some places. For example, Thailand and Myanmar have a prevalence of 38% and 36%, respectively^[35] and studies in Thailand have suggested that prevalence is between 30 – 50% in some parts of the country^[36]. Levels of HIV among female

sex workers vary considerably and prevalence is increasing in Afghanistan, Indonesia and Pakistan. However, HIV transmission is expanding into lower-risk populations through transmission to the sexual partners of those at most risk. Recent studies into the male clients of sex workers have found prevalence of 5.6% among six districts of Karnataka in India and 1.5% in three cities in China's Sichuan Province. Male clients then transmit HIV to their female spouses and partners and very few intervention programmes exist for this at-risk group^[35]. A study conducted in eight Cambodian cities found a HIV prevalence of 1.6% among men with sexual partners other than their wives or girlfriends^[37].

While MSM transmission is under-researched in this region, evidence suggests a rise in HIV prevalence amongst this group. High prevalence is reported in several countries; a recent study in China estimates prevalence could be as high as 5.6%^[38]. Changes in mobility combined with social factors such as internet dating and soft drug use are instrumental in spreading HIV amongst men who have sex with men. Surveys suggest that a significant proportion of men who have sex with men in Asia will also have sex with women; however, the risk of living with HIV appears to be significantly higher for men who only have sex with men.

There were around 922,000 people receiving antiretroviral therapy (ART) in the region by the end of 2010, around 39% of the 2.3 million people in need of it^[39]. The level of ART coverage varies by country and Cambodia is one of only eight countries in the world which provides ART to 80% of those eligible for it^[36].

Eastern Europe and Central Asia

The estimated number of people living with HIV in Eastern Europe and Central Asia has more than tripled since 2001, rising from 410,000 [340,000 – 490,000] to 1.5 [1.3–1.7] million in 2010. The number of new cases has also begun to rise in recent years. In 2010 there were 160,000 [110,000-200,000] new cases compared with 130,000 [110,000 – 160,000] two years earlier. Rising prevalence is particularly severe in Ukraine and the Russian Federation, where it exceeded 1% in 2009 and together the two countries account for 90% of all new infections in the region. AIDS-related deaths are also rising in the region, with an estimated 83,000 [69,000 – 100,000] deaths in 2010; around an eleven-fold increase compared with the number in 2001.

HIV infection in the region continues to be centred around injecting drug use, paid sex work and, to a smaller degree, men who have sex with men. It is thought that around 37% of the 1.5 - 2 million injecting drugs users in the Russian Federation are living with HIV and prevalence is thought to be as high as 59% in St Petersburg and 64% in Yekaterinburg. The

crossover with IDUs and sex work increases the risk of further transmission. Around 30% of sex workers in the Russian Federation also inject drugs,^[40,41] and in the Ukraine HIV prevalence among sex workers who also inject drugs is around 35%^[42]. There is also increasing transmission among sexual partners of injecting drug users and the proportion of women living with HIV is growing. In 2009, 45% of those living with HIV in the Ukraine are women (a rise from 41% in 2004). An estimated 35% of these women are thought to be injecting drug users and 50% are likely to have been infected with HIV by partners who inject drugs.

A small proportion of new infections is due to unprotected sex between men; accounting for less than 1% of new HIV infections in 2010. Nevertheless, small survey data shows that there are regional variations in the prevalence of HIV amongst men who have sex with men; with a prevalence of up to 5% in Georgia and 6% in the Russian Federation.

An estimated 129,000 people were receiving ART in the region in 2010; around 23% of the 570,000 [500,000-600,000] people estimated to be in need of it. Around 65% of children and young people under the age of 15 in need of ART were receiving it in 2010^[39].

Caribbean

As a region, the Caribbean has the second highest level of adult HIV infection after sub-Saharan Africa with an adult prevalence of 0.9% [0.8%- 1.0%]. In 2010, an estimated 200,000 [170,000 – 220,000] people were living with HIV in the Caribbean. There were an estimated 12,000 new infections (a decline of about one-third from 20,000 in 2001) and approximately 9,000 deaths due to AIDS-related illnesses in 2010. Although overall prevalence in the region was below 1% there were substantial variations in HIV prevalence between countries with five of the seven larger countries in the region exceeding 1%. The number of children infected with HIV has dropped significantly in recent years; since 2001 the number has declined by 60% to 1,200 [1,000 – 1,700] in 2010 and the number of AIDS-related deaths among children has fallen by 47% to 1,000 [<1,000 – 1,300].

The main mode of HIV transmission in the Caribbean is unprotected heterosexual sex and the Caribbean remains the only region outside of sub-Saharan Africa where there is a higher proportion of women and girls (53%) living with HIV than men and boys. Paid sex contributes significantly to heterosexual transmission with surveys reporting an extremely high rate of infection in sex workers. This is the main driver of infection, with prevalence ranging from 24% in parts of Suriname to 2% in the Dominican Republic. MSM transmission also features in all the regions epidemics to a varying degree, with sex between men being illegal in a

number of countries. Prevalence between men who have sex with men is thought to be as high as 19% in Guyana and 8% in the Bahamas. A survey in Jamaica found that around 31% of men who have sex with men responding were infected and nearly 60% of these men had not disclosed their HIV status to their partner^[43]. Injecting drug use makes a significant contribution to HIV incidence in Bermuda and Puerto Rico where it accounted for 40% of HIV incidence in males and 27% of new infections in females in 2006^[44].

In 2010, approximately 60,300 of the 100,000 [91,000 – 110,000] people in need of it were receiving ART, representing 60% coverage^[39].

Latin America

An estimated 1.5 [1.2–1.7] million people were living with HIV in Latin America in 2010, a continued growth from 1.1 [1.0 to 1.3] million in 2001. This increase is largely due to the wider availability of antiretroviral therapy. Brazil is home to around a third of people living with HIV in Latin America; however, an early and well-co-ordinated response to HIV has meant that a potentially larger epidemic in the country has been avoided. Adult prevalence in Brazil has never exceeded 1%.

An estimated 100,000 [73,000 – 140,000] new cases were reported along with an estimated 67,000 [45,000–92,000] AIDS-related deaths. Among children, an estimated 42,000 [30,000-54,000] were living with HIV compared with 47,000 [23,000 – 94,000] in 2001. The number of new cases among children under 15 years of age was relatively low, at 3,900, a 38% decline since 2001. The number of AIDS-related deaths among children has also declined by 37% since 2001. In 2010, 11,700 pregnant women were receiving ART, an estimated 64% of those in need of it^[39].

The main mode of transmission in the region continues to be MSM. A 2007 study found that MSM are 33% as likely to be infected with HIV as men in the general population^[45]. Surveys have found that prevalence among MSM is as high as 26% in Mexico and 21% in Bolivia, and nine out of 14 countries have a prevalence of at least 10%^[46]. However, prevention and treatment strategies do not sufficiently focus on MSM; with Peru being the only country reporting more than 5% of prevention spending being directed towards MSM.

Around 37% of MSM in five Central American countries report having unprotected sex with both men and women. Several studies have revealed high HIV prevalence among female sex workers. For example, a study in Buenos Aires found a prevalence of 3% among sex workers surveyed^[47]. Injecting drug use (IDU) is another significant route of infection in the region especially in the south. Mexico alone has a sizeable epidemic with 220,000 adults and children living with HIV. The

crossover between IDU and sex worker populations plays a key role in the Mexican epidemic especially on the US border where HIV prevalence among female sex workers in Tijuana and Ciudad Juarez is as high as 12%^[48].

HIV prevention programmes among sex workers appear to be having an impact on transmission, with increasing use of condoms leading to a drop in HIV infections. Reported high condom use rates among female sex workers have coincided with low HIV prevalence with zero prevalence reported among female sex workers in Santiago, Chile^[49]. In 2010, 64% (461,000 people) of the 690,000 [590,000-780,000] people in need of ART were receiving it^[39].

North America, Western and Central Europe

In 2010, there were an estimated 2.2 [1.9 – 2.7] million people living with HIV in North America, Western and Central Europe. More than half (around 1.2 million) of people infected with HIV in the region live in the United States. There were 88,000 [56,000 – 150,000] new HIV infections and an estimated 30,000 [26,000–37,000] people died from an AIDS-related illness in 2010. Since 2004, the epidemic in this region has stabilized with little change in incidence of AIDS-related deaths.

The epidemic continues to grow, reflecting the increasing availability of ART. However, trends vary considerably across the region. The number of new diagnoses in Latvia, Portugal and Romania has fallen by more than 20%^[50], while many other countries are seeing an increase including Hungary, Bulgaria and Lithuania.

MSM continues to be the main mode of transmission in the regions. Overall in 2010, 39% of new infections in western Europe were in MSM^[50]. Increasing numbers of MSM living with HIV have been seen in the US, Canada, the UK, Belgium, France, Germany, the Netherlands, Slovenia and Spain. In the US, MSM account for 2% of the overall population yet represent 57% of new HIV infections. Thus, men outnumber women in both prevalence and new infections. In 2010 women accounted for 27% of infections in Western Europe^[50] and 21% in the United States^[51].

Some racial and ethnic minorities are disproportionately impacted by HIV. For example in the United States, African Americans accounted for 50% of new cases between 2005-2008 but represented only 14% of the population^[52]. This increase of new cases is particularly marked among black men who have sex with men. An African American male living in the United States is eight times more likely to acquire HIV than his Caucasian counterpart^[52]. Immigrants living with HIV are also becoming a key feature of epidemics in a number of European countries. Heterosexual infection accounted for 24%

of cases in the European Union but many were infected abroad (mostly in sub-Saharan Africa, Asia and the Caribbean). In 2010, 38% of new cases infected through heterosexual transmission in the EU were infected in sub-Saharan Africa^[50].

Middle East and North Africa^[53]

Overall prevalence in the Middle East and North Africa remains relatively low but rising numbers of new infections mean that the region has the fastest growing epidemic outside sub-Saharan Africa. There were an estimated 91,400 [62,300 – 139,900] new cases in 2010, of which 7,400 [5,300 – 9,900] were children. Overall, an estimated 470,000 [350,000 – 570,000] people were living with HIV at the end of 2010 (excluding Afghanistan and Pakistan). The number of AIDS-related deaths have more than doubled in the past ten years from 8,300 [6,300 – 11,000] in 2001 to 39,000 [28,000 – 53,000] in 2010. Epidemics in the region are relatively small scale, with the exception of southern Sudan, Djibouti and Somalia, where HIV prevalence is growing in the general population and consistently exceeds 1% amongst pregnant women. However, even in these countries of considerable prevalence, HIV is mainly transmitted amongst higher risk groups^[54].

More generally, HIV transmission is concentrated amongst female sex workers, MSM and IDU. IDU-related HIV infection is a growing concern in this region, with nearly a million people (0.2% of the population) injecting drugs and a tendency to share non-sterile injecting equipment^[54]. Libya has the largest concentration of injecting drug users in the region with 22% of this population living with HIV in 2010, followed by Pakistan (21%), The Islamic Republic of Iran (13%) Afghanistan (7%) and Egypt (6.7%).

The criminalisation of same sex activities in many countries means that MSM remain a relatively hidden group within the Middle Eastern and North African populations and services for MSM are rare^[55]. It has been suggested that concentrated HIV epidemics amongst MSM may exist in up to half of countries in the region although there is a paucity of definitive data to support this^[56]. An estimated 6% of MSM in Egypt, 5% in Tunisia and between 8-9% of MSM in Sudan are HIV positive^[57,58]. Many men who have sex with men also have sex with women. Evidence suggests that HIV transmission through paid sex networks is still quite low; although at a much higher prevalence than in the general population. Insufficient data means it is not possible to determine the extent to which HIV is being transmitted to the male clients of sex workers and their respective partners.

Access to antiretroviral therapy in the region remains low at just 8%. There have, however, been improvements in access in individual countries resulting in a 25% increase (15,548 to

19,483) from 2009 to 2010. The highest coverage in the region is in Oman (45%), Lebanon (37%) and Morocco (30%) but countries are still falling short of the universal access goals^[53]. ART coverage amongst pregnant women is just 4%, with only 600 of the 14,700 pregnant women in need of ART receiving it in 2010^[39].

Oceania

There were an estimated 54,000 [48,000 – 62,000] people living with HIV in Oceania in 2010, of which 3,300 [2,400 – 4,200] were newly infected. Epidemics in this area are mostly small, the exception to this is Papua New Guinea, the region's only generalized epidemic, where new cases continue to rise. There were 1,600 AIDS-related deaths in the region in 2010.

The HIV epidemics in this region are largely driven by sexual transmission. Heterosexual sex is the main driver in Papua New Guinea while men who have sex with men dominate the epidemics in Australia, New Zealand and smaller Pacific Islands. In 2010, MSM accounted for 86% of new infections in Australia^[59]. Injecting drug use is a minor factor in the Oceania epidemic as a whole but does feature significantly in some parts of the region. For example, in the five years from 2006-2010 IDU accounted for 22% of HIV cases among Australian Aboriginals and Torres Strait Islanders^[59].

There has been a steady increase in the number of women diagnosed with HIV and women accounted for around 44% of adults living with HIV in Oceania in 2010. In general, mother to child transmission is not a significant factor in the region's epidemic. An estimated 4,600 [3,600-4800] children were living with HIV in this region in 2010 and amongst these 500 [<500-<1,000] were newly diagnosed.

Global access to treatment and prevention

At the third United Nations General Assembly High Level Meeting on HIV/AIDS in 2011, countries agreed to “achieve universal access to HIV prevention, treatment, care and support” to be realised by 2015^[17]. These global commitments supplement the health-related United Nations Millennium Development Goals,^[60] which established targets to combat HIV/AIDS as well as to reduce child mortality, improve maternal health, malaria and other major diseases by 2015. A key vision of the latest strategy is “getting to zero”; zero new infections, zero AIDS-related deaths and zero discrimination. The strategy comprises three strategic directions; revolutionizing HIV prevention, moving in to the next phase of HIV treatment, care and support and advancing human rights and gender equality for the HIV response.

UNAIDS state that in order to revolutionize HIV prevention, national programmes need to prioritise marginalised groups

and the sectors of the population most at need. In particular they aim to half transmission among young people, men who have sex with men and paid sex workers and eliminate transmission among injecting drug users and from mother to child^[17]. Prevention programmes for these marginalised groups remain low, among reporting countries only 42 had needle and syringe exchange programmes and 113 countries reported programmes for MSM and for paid sex workers. Testing coverage also varies among these groups; average uptake of HIV testing is 23% for injecting drug users, 32% for MSM and 49% for paid sex workers. In 2010, HIV testing and counselling was received by 35% of pregnant women in low and middle income countries and five of the 22 priority countries for eliminating mother to child transmission reached 80% ART coverage among pregnant women in need.

In order to achieve their goals, UNAIDS want to couple increased prevention among marginalised groups with targeting HIV hotspots (such as megacities) and rapid adoption of scientific breakthroughs ensuring equitable access to cost-effective and high quality prevention programmes. New scientific innovations such as trials of tenofovir based vaginal gel as a woman-controlled prevention option are proving promising and these trials should be scaled up to confirm results at an international level. The development of an HIV vaccine remains challenging but promising recent trials^[61] along with new ART prevention trials have brought a new impetus to vaccine research. Recent trials among HIV serodiscordant couples have suggested that early initiation of ART can reduce rates of sexual transmission^[62] and this along with successful pre-exposure prophylaxis trials^[63] are unifying prevention and treatment programmes.

In 2010, more people were receiving antiretroviral therapy than ever before, with an estimated 6.6 million in low and middle income countries receiving it. This was a 27% rise from the previous year, and an increase of 1.4 million people. By the end of 2010, ten middle to low income countries had achieved the universal access target of 80% of those eligible receiving ART, this includes three countries with generalised epidemics (Botswana, Rwanda and Namibia). Considerable progress has been made but coverage in low and middle income countries is uneven with 84% of the people receiving ART living in just 20 countries. According to the new 2010 WHO guidelines, overall coverage for those in middle and low income countries (for those with a CD4 count of <350 cells per mm) remains at less than 50% and late presentation for treatment is still common in many countries. On average there has been a 1.3 million annual increase in people receiving ART between 2008 and 2010 which is an insufficient increase to meet the UN High Level Meeting on HIV/AIDS target of 15 million people by 2015.

Children and marginalised groups are still less likely to receive antiretroviral therapy. In low and middle income countries only 23% of the 2 [1.8-2.3] million children estimated to be in need of ART were receiving it in 2010 compared with 51% of adults. Globally, only Europe and Central Asia have higher coverage levels among children. In general, coverage among women is higher than men with 53% of women receiving ART in 109 low and middle income countries compared with 40% of men. However, this figure does not reveal regional variations, in both the Caribbean and Latin America; coverage is higher among men than women.

Recent studies suggest increasing levels of ART resistance since the rollout of treatment across sub-Saharan Africa with resistance prevalence in east Africa as high as 7.4% after eight year roll out. Although these increasing rates are not entirely unexpected in view of expanding global ART coverage, they are still concerning and emphasise the need for enhanced surveillance and increased drug resistance prevention efforts on a national scale^[64].

Considerable work is needed if the target of universal access is to be met and this is made more challenging due to the current economic climate. In 15 years time the majority of the 34 [31-35] million living with HIV will require antiretroviral therapy. In 2010 UNAIDS launched the Treatment 2.0 initiative to improve and ensure the sustainability of treatment programmes in low and middle income countries. The Treatment 2.0 framework calls for a lowering of drug costs and optimizing drug treatment through the development of a “smarter, better pill”. It couples this with adapting treatment delivery by mobilizing communities and providing access to point of care diagnostics^[65].

HIV and AIDS in the United Kingdom

New diagnoses of HIV, AIDS and deaths of HIV positive individuals in the UK are reported to the Health Protection Agency (HPA) and the Scottish Centre for Infection and Environmental Health (SCIEH), who compile the data into surveillance tables^[66].

The HPA report that the cumulative total of reported new HIV infections for the UK reached 120,716 by the end of 2011 (table 1.1). Of these, 6,150 were newly diagnosed in 2011 (figure adjusted for underreporting). We anticipate the current unadjusted estimate of 5,594 new diagnoses for 2011 will be updated as HPA refine the final year dataset. Figures 1.1 and table 1.1 compare the trend of new cases of HIV infection in the UK with those specific to north west England^[66]. As with previous years, close to half of all individuals newly diagnosed with HIV reside in London (2,533 of 5,061 in England and of 5,594 in the UK). Similarly, over half

of all cases living with HIV reside in London (60,637 of 111,327 in England and 120,756 in the UK)^[66]. National policy will thus continue to be shaped by a strong bias towards the needs of London and the south east of England, with an under-representation of other regions^[66-70]. For the epidemiology of HIV in north west England, see chapters 2 and 3 of this report, which are based on surveillance data of treatment and care of HIV positive individuals in the region.

An additional tool for monitoring the HIV epidemic in the UK is provided by the unlinked anonymous HIV seroprevalence programme conducted by the HPA and the Institute of Child Health. Part of the programme involves the testing of blood samples that have been taken for other purposes (for example antenatal screening and syphilis serology) after having irreversibly removed patient identifying details. This allows estimations of the extent of undiagnosed HIV infection in high risk groups as well as in the general population. The monitoring programme has been operating throughout England and Wales since 1990 and provides low cost estimates of current HIV prevalence^[66]. Results of the programme, combined with other HPA surveillance programmes, estimates that by the end of 2010, there were 91,500 persons (diagnosed and undiagnosed) living with HIV in the UK, of whom a quarter (24%, 22,200) were unaware of their infection^[71].

Men who have sex with men

The HPA recorded a cumulative total of 53,161 estimated cases of HIV (44% of all diagnoses) acquired through sex between men (MSM) by the end of 2011. Amongst these, 2,681 were reported in 2010 and 2,475 in 2011. As noted previously, 2011 data are subject to reporting delays. To account for this, HPA have reported adjusted estimates, resulting in an estimate of 2,880 for 2010 and 3000 for 2011. Using adjusted figures, the HPA estimate that the number of new diagnoses in MSM has more than doubled from 2002 to 2011 (from 1,980 to 3,000).

Where probable country of infection was reported, 76% of new diagnoses reported by the end of December 2011 who were infected through sex between men, were most likely infected in the UK^[66]. Even though these figures as a whole remain high, the shape of the epidemic has changed in the UK

over the past two decades. The overall proportion of new HIV diagnoses in the UK attributed to sex between men has decreased from 58% in 1996 to 44% (based on observed figures) in 2011 (figure 1.2).

The 1980s saw substantial reductions in risky behaviours amongst MSM in response to HIV/AIDS. However, towards the end of the 1990s, the trends of sexual risk-taking behaviour appeared to increase again. Changes in risky sexual behaviour were reported in Dougan et al.'s longitudinal study that recruited males in gyms in London^[72]. Between 1998 and 2003, the percentage of males reporting high-risk sexual behaviour with a casual partner increased from 6.7% to 16.1%. This study recommended that sexual health promotion should target high-risk practices with casual partners since these, and not practices with steady partners, seem to account for the recent increase in high-risk behaviour^[72].

There is evidence that the recent increase in diagnoses of HIV in MSM in the UK is strongly influenced by an increase in uptake of HIV testing. Analysis of routine data from GUM clinics, the unlinked anonymous screening programme and CD4 surveillance in the UK revealed a substantial increase in the uptake of HIV testing that may explain the rise in HIV diagnoses^[73]. In 2010, half of all adults diagnosed with HIV were diagnosed late (i.e. with a CD4 cell count of less than 350 per mm³ within three months of diagnosis), including 28% who were severely immunocompromised at diagnoses (i.e. with a CD4 cell count of <200 per mm³). The proportion diagnosed late was lower amongst MSM (39%) than amongst heterosexual women (58%) and heterosexual men (63%)^[71].

The most recent Sigma Research's Gay Men's Sex Survey was carried out in 2010 and conducted in partnership with health promotion agencies, organisations and websites across the UK, amongst men who reported having had sex with a man in the previous year and/or had a non-heterosexual sexual identity. The survey found that that 28% of all males responding in England, and 36% of those in north west England, had never been tested for HIV^[74, 75]. The latest national survey found that living with diagnosed HIV is most common amongst men in London and north west England; men with lower educational qualifications; men with many sexual partners (particularly those with 30 or more partners per year) and men of black or non-British white ethnicity^[74].

Table 1.1: Cumulative number of HIV diagnoses in the north west of England and the UK by infection route to December 2011

Source: Adapted from table 4, United Kingdom New HIV Diagnoses to end of December 2011, HPA

	Infection route						Total
	MSM*	Injecting Drug Use	Heterosexual	Blood/Tissue**	Mother to Child†	Other/Undetermined	
North West	4578 (52.4%)	308 (3.5%)	3335 (38.2%)	211 (2.4%)	126 (1.4%)	175 (2%)	8733
Total UK††	53161 (44%)	5541 (4.6%)	54371 (45%)	1979 (1.6%)	2097 (1.7%)	3567 (3%)	120716

Will include some records of the same individuals which are unmatched because of differences in the information supplied.

Numbers will rise as further reports are received, particularly for recent years.

* Includes 881 men who also reported injecting drug use.

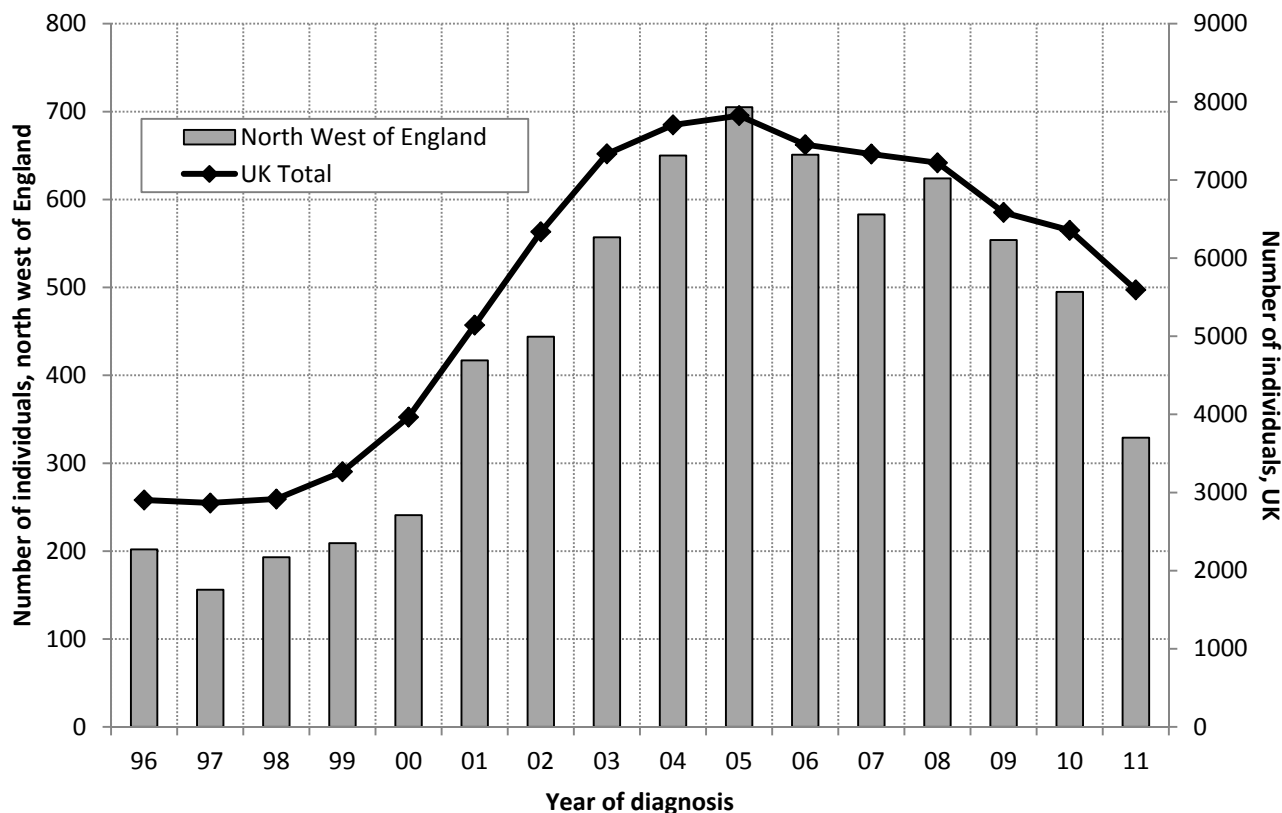
** All infections acquired through receipt of blood/tissue products diagnosed since 2002 were acquired outside of the UK.

† Includes individuals born outside but diagnosed in the United Kingdom.

†† Includes 46 cases where region is not known but excludes 36 cases where sex was not stated and 4 cases where sex and region was not stated.

Figure 1.1: Number of new HIV diagnoses in the north west of England and the UK, by year of diagnosis to December 2011

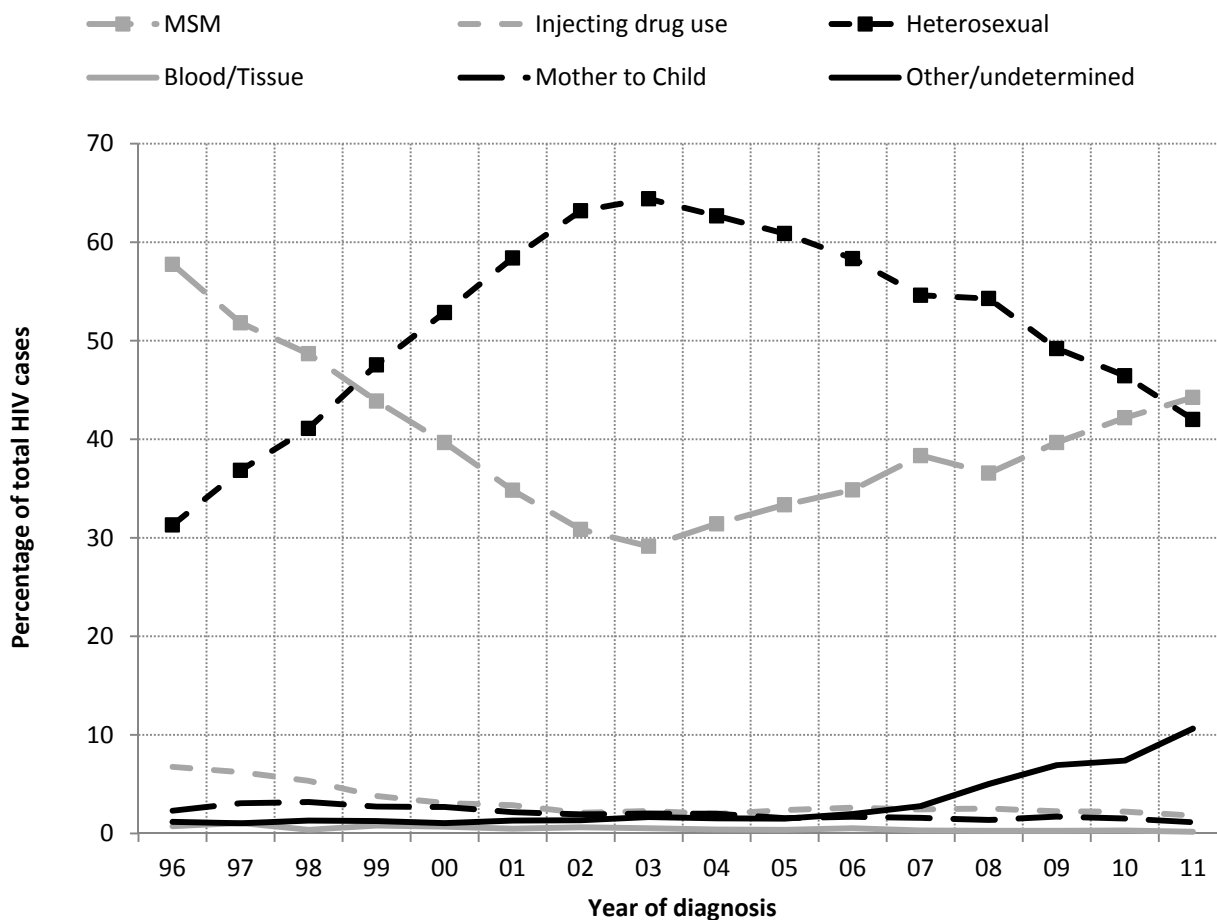
Source: Adapted from table 3, United Kingdom New HIV Diagnoses to end of December 2011, HPA



Numbers, particularly for recent years, will rise as further reports are received.

Figure 1.2: Infection route of HIV cases in the UK, by year of diagnosis to December 2011

Source: Adapted from table 2, United Kingdom HIV Diagnoses to end of December 2011, HPA



Heterosexual sex

There has been a decline in the numbers of new HIV diagnoses in the UK since 2005 and now this year-on-year change has come to an end. The decline was mainly due to a decrease in the number of new diagnoses amongst heterosexuals acquiring HIV abroad, whilst new diagnoses acquired heterosexually within the UK have increased^[71]. However, the proportion of new diagnoses amongst MSM in 2011 has reached the highest level recorded in north west England in the last decade (44%, compared with 42% acquired through heterosexual sex) (figure 1.2).

Of those HIV positive individuals infected through heterosexual sex in 2010, the majority (61%) were female^[66]. Figure 1.3 shows the number of cases acquired through heterosexual sex categorised by whether they were exposed in the UK through sex with high risk or lower risk partners or exposed abroad. The number of individuals exposed abroad peaked in 2002 and has since declined; the number is now

becoming closer to the number of those infected through heterosexual sex within the UK.

Anonymous testing of all pregnant women can be used as an indicator of the prevalence of HIV in the general heterosexual population. Data from 2009 (the most recent year for which data were available) reveal that the prevalence of HIV amongst pregnant women in England was 222 per 100,000 population (figure 1.4)^[76].

Africa is the predominant global region of transmission for HIV infections acquired abroad with 74% of all those HIV infections acquired through heterosexual sex (unadjusted 2011 figures) probably being acquired in sub-Saharan Africa^[66]. This is also reflected in the epidemiology of HIV in north west England; of those new cases in 2011 that were infected abroad, two-thirds were exposed in sub-Saharan Africa (see chapter 2, figure 2.2). Individuals from black and minority ethnic (BME) communities make up a large

proportion of heterosexually transmitted HIV cases in the UK, with black Africans constituting the largest proportion (86% cumulative to the end of December 2011)^[66]. These communities have close connections with sub-Saharan countries, the region which is home to two-thirds of the global total of adults and children estimated to be living with HIV/AIDS at the end of 2010^[19]. However, HIV is often stigmatised within African communities, which can prevent individuals from accessing services^[77] and disclosing their status to friends and family for extra support^[78].

Injecting drug use

Injecting drug use (IDU) accounts for 4.6% of the total diagnosed HIV infections in the UK to date^[66] (table 1.1). The proportion of new infections acquired by this route in 2011 remained stable at 2% (figure 1.2). Other blood borne infections, such as hepatitis B and C, are more infectious than HIV and can be transmitted during episodes of indirect sharing (for example sharing of filters, spoons or water when preparing drugs). The HPA run a voluntary anonymous testing programme across England, Wales and Northern Ireland through specialist agencies. People who inject drugs provide a biological specimen for testing for HIV, hepatitis B and hepatitis C. In 2009, there was a phased change in the sample type from oral fluid to dried blood spot. The sensitivities for all three infections are close to 100% with the blood spot sample; whereas the sensitivities for hepatitis B and C were much lower with the oral fluid. Consequently, the data for more recent years will give an even more accurate picture of the prevalence amongst this group. While HIV prevalence remains fairly low, hepatitis B and C have risen significantly. North west England has the second highest prevalence of hepatitis B (27% in 2010) after London (33% in 2010). North west England also has the highest prevalence of hepatitis C in the country (65%)^[79]. Since HIV is less infectious than hepatitis C, those individuals who have had sufficient high risk exposure via IDU to acquire HIV are also likely to have been infected with hepatitis C. Having both infections makes the treatment of each more difficult to manage, increases the progression of hepatic disease and, for women, increases the probability of transmission of HIV to an infant during pregnancy or birth (see review in north west report on hepatitis C[80]). The level of sharing of injecting-related equipment has declined over recent years. However, people who inject drugs still report injecting practices that put them at risk of acquiring blood borne viruses. The HPA recommend diagnostic testing for HIV and hepatitis C (and hepatitis B where appropriate) and care pathways for those infected^[81]. Analyses have revealed that in north west England people infected by IDU tend to suffer poorer health^[82].

Anonymous testing of injecting drug users attending specialist agencies reveals that, in north west England, the prevalence

of HIV amongst injectors is low (1.8% compared with 4.1% in London in 2010)^[79]. Low prevalence amongst drug users in the UK compared with other countries in Europe has been attributed to harm reduction strategies such as needle and syringe exchange programmes^[83].

Blood or tissue

Since HIV screening and heat treatment were introduced for donated blood products in 1985, infection by this route has been rare. This is clearly indicated by the abrupt decline from 8% of all infections reported before and during 1991 to just 0.2% in 2011 (figure 1.2). The small number of UK diagnoses via blood/tissue products since 2002 were all acquired outside the UK^[66]. After 1985, HIV infection via blood transfusions in the UK were rare occurrences and either the result of donations collected during the HIV infection window period (i.e. before antibodies had developed in the donor's blood) or people infected prior to screening who have only recently developed HIV-related disease^[84]. When 5,579 transfusion recipients at 22 London Hospitals were followed up nine months after their transfusion; none had been infected with HIV as a result, suggesting that the current risk of transmission from a transfusion in the UK is very low^[85].

Between 1979 and 1985 about a fifth of patients with haemophilia in the UK were infected with HIV after treatment with contaminated clotting factor concentrates. Co-infection with the hepatitis C virus was also common and has contributed to high mortality amongst these individuals^[86]. A small proportion of individuals with haemophilia infected with HIV in the early 1980s are still alive and well, but there have been an increasing number of deaths from liver disease in this patient group as a consequence of co-infection with hepatitis C^[86].

Mother to child

During 2010, approximately 657,500 (31%) HIV tests in England were conducted in antenatal settings. The proportion of pregnant women accepting recommended routine antenatal HIV tests was high, at 96%, in 2010^[71]. The prevalence of HIV in women giving birth was highest in London (389 per 100,000) the prevalence in the rest of England, despite a five times increase in the past decade, is relatively low (143 per 100,000)^[76]. In 2011, 63 mother to child infections were reported. These figures will inevitably increase as the year progresses due to reporting delays of vertically transmitted HIV as the presence of maternal antibodies for up to 18 months after birth confounds the diagnosis. In 2010, 96 mother to child infections were reported, a decrease of 16 from 2009^[66].

The proportion of children presenting with HIV who were born outside the UK increased from 20% in the period 1994-1995 to

60% in the period 2000-2002^[87]. In 2011, 62% of children diagnosed with HIV in the UK were born outside the UK^[71]. HIV prevalence in mothers varies by global region and country of birth. Cumulative HIV data from HPA for 1995-2011 identified that, of 1,768 total mother to child diagnoses, 1,421 (80%) were in persons of black African ethnicity, and 106 (6%) were white^[66].

Interventions such as using antiretroviral therapy to keep down viral load, Caesarean sections and avoidance of breast feeding have all been successful at reducing the rates of vertical transmission from around 32% to 4%^[88]. The British HIV Association (BHIVA) updated their guidelines for the treatment of pregnant women in 2012^[89]. Currently, the main obstacle that prevents successful intervention is lack of knowledge by the mother of her HIV status. It is national policy to offer an HIV test to all pregnant women in order to increase the uptake of testing to 90%^[90,91]. The HPA North

West's antenatal screening report showed a regional HIV antenatal screening uptake rate of 97% in 2011, well above the 90% government target and uptake has remained high since 2010 (also 97%). The highest uptake was in Cumbria and Lancashire (99%) with Cheshire and Merseyside achieving an uptake rate of 98%, followed by Greater Manchester (95%); all above the government target^[92].

In the UK by 2011, there were 13,191 children born to HIV-infected women (cumulative total), of whom 78% (10,279 children) were uninfected, 7% (914 children) were infected and the remainder are currently of undetermined HIV status. In north west England, by the end of 2011 there were 763 births to HIV-infected women (cumulative total) of which 73% (559 children) were uninfected and 7% (54 children) were infected (the rest are currently of undetermined status)^[66].

Figure 1.3: Number of heterosexually acquired HIV cases in the UK by year of report to December 2011

Source: Adapted from table 5, United Kingdom New HIV Diagnoses to end of December 2011, HPA

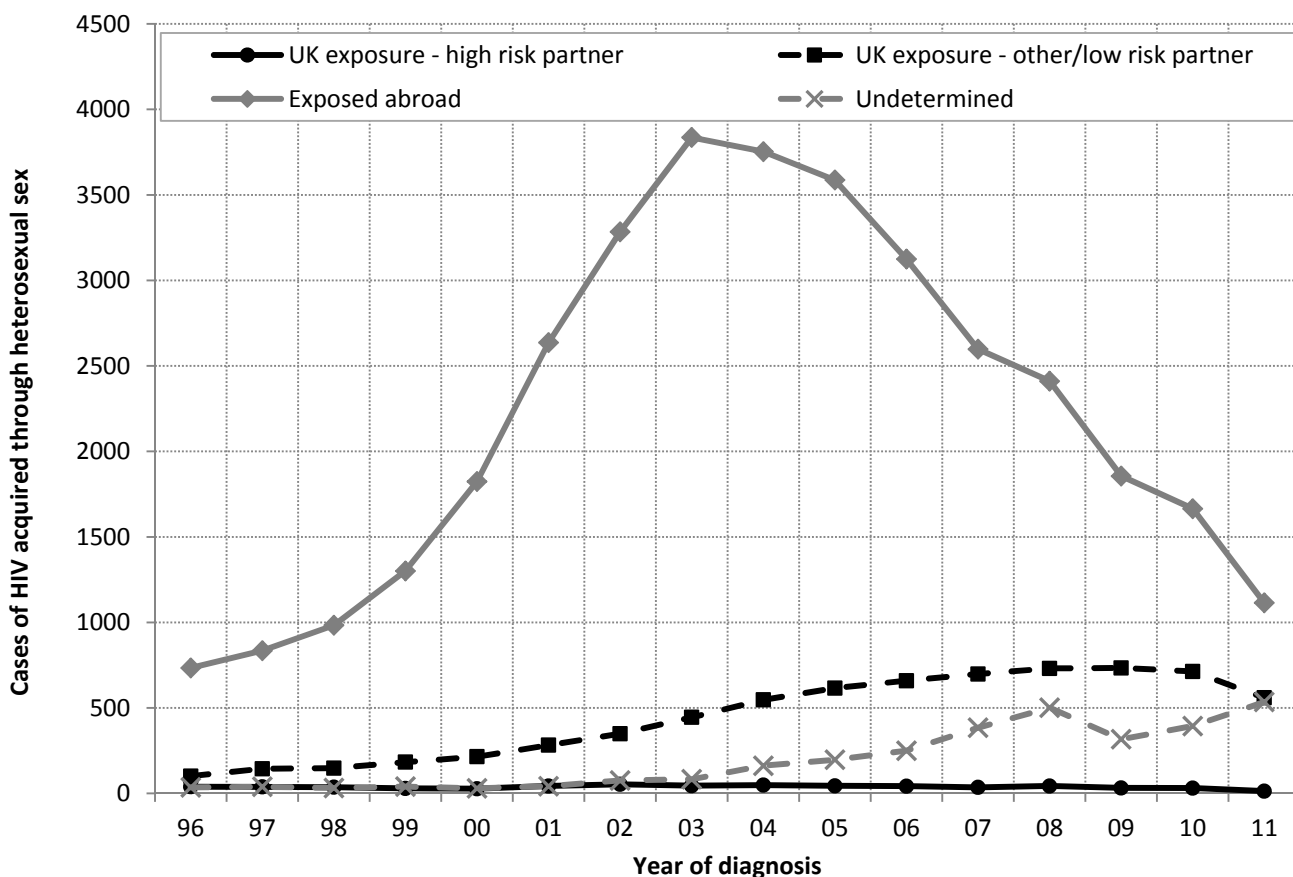
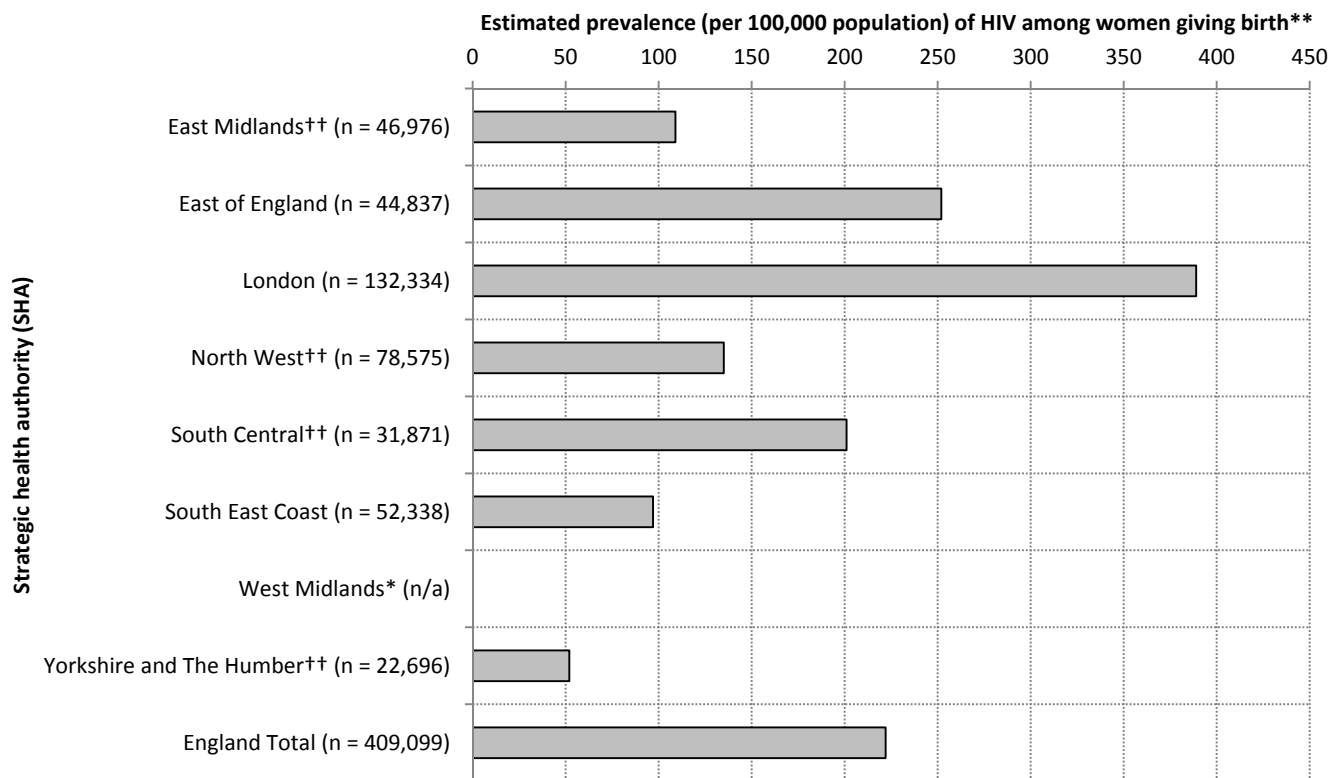


Figure 1.4: HIV prevalence amongst pregnant women in England, 2009 (newborn infant dried blood spots collected for metabolic screening)

Source: Adapted from data from the Unlinked Anonymous Dried Blood Spot Survey of newborn infants with NSHPC reports of live births to diagnosed HIV infected women, HPA



These data are preliminary and need to be considered with caution.

*Data for West Midlands SHA were unavailable for 2009

** Estimated prevalence of women giving birth who are HIV-infected in 2009 in that SHA. These data should be interpreted as an estimated prevalence and the number of positives should not be considered as the definitive number of HIV-infected women giving birth in that SHA.

† n = total tested; this is the total less insufficient samples and opt-outs.

††Data for East Midlands, North West, South Central and Yorkshire & The Humber were only collected between Jan-Sept. Data for the final 3 months of 2009 were imputed to provide estimates for the full year

For those children who are born with HIV in the UK, the prognosis has improved due to the advent of triple therapy: they are living longer, are less likely to require hospital admission and are less likely to progress to AIDS, as is the case in other developed countries^[93]. Consequently, services are being developed to address the needs of this group as they become young adults^[94].

HIV in non-UK nationals

Globally, migrants are at greater risk of HIV infection than resident populations, irrespective of their country of origin^[95]. In the UK, asylum seekers suffer the highest levels of absolute material deprivation, marginalisation and stigmatisation. The prevalence of HIV amongst this group is likely to reflect that of their country of origin. Asylum seekers in the UK currently have access to HIV care whilst seeking asylum. This is also the case for asylum seekers who have been refused asylum but are appealing. In 2008, a High Court ruling granted free HIV care to unsuccessful asylum seekers but following a

Department of Health appeal this is no longer the case and failed asylum seekers are no longer considered exempt from charges^[96, 97]. Currently asylum seekers are entitled to NHS care without charge while their application for refuge in the UK is outstanding. However, the House of Lords Select Committee on HIV and AIDS in the United Kingdom recommended that HIV should be added to the list of conditions in the National Health Service (Charges to Overseas Visitors) Regulations 1989, for which treatment is provided free of charge to all those accessing care, regardless of residence status^[98]. In February 2012, the UK Government indicated that it was willing to accept an amendment to the health and social care bill enabling this change in the regulations^[99].

In previous years, due to the policy of dispersal without reference to medical needs, many asylum seekers found themselves in areas where the medical services were unaware and unprepared for their health status and sometimes lacked sufficient expertise^[100]. An inquiry by the All-Party

Parliamentary Group on AIDS concluded that while resident in the UK, asylum seekers were at an increased risk of developing HIV that is resistant to treatment if dispersed away from their source of treatment and support^[101]. This is due to the 95% adherence to antiretroviral therapy that is required to have the greatest effect in treating the virus. As a result of this, the National Asylum Support Service (NASS) produced new guidelines on the dispersal of HIV positive asylum seekers. These require the consent of the person's consultant to dispersal and advance arrangements being made for continuity of care where the person is to be relocated^[102]. Further guidelines on the detention and removal of asylum seekers with HIV were published in June 2009 offering advice for healthcare and community sector professionals on ensuring continuity of care and antiretroviral therapy^[103].

During 2011, the UK received 25,455 asylum applications (including dependents), a 12% increase compared with 2010 (22,644, including dependents)^[104]. The most recent data (to the end of quarter one, 2012) show that 5,428 asylum applicants residing in north west England receiving supported accommodation from NASS, with a further 168 receiving subsistence only support. Within north west England, the largest numbers of asylum seekers in supported accommodation are located in Liverpool (1,114), Manchester (747) and Salford (724)^[105]. On a national level, no data are collected on how many asylum seekers seek treatment for HIV. Information for north west England about those known to be non-UK nationals is presented in tables 2.9 (chapter 2) and 3.13 (chapter 3).

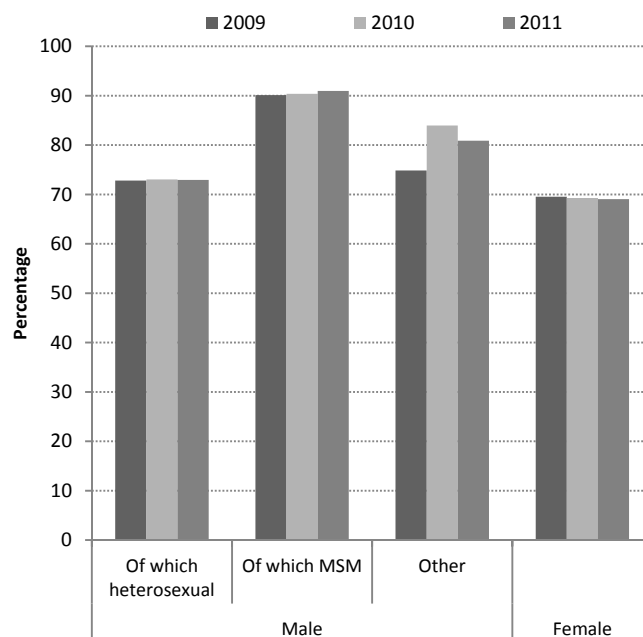
Testing for HIV

An estimated 2.1 million HIV tests were conducted in England in 2010. With the assumption that seven percent of these tests were repeat tests, the HPA estimate that 3.7% of the population of England were tested for HIV in 2010. Nearly half (47%) and almost a third (31%) of tests were performed in STI clinics and antenatal settings, respectively. Additionally, one in four HIV tests performed in 2010 were done in primary care settings^[71]. Guidelines recommend that a test should be considered in areas where HIV prevalence exceeds 2 in 1,000 population (in the PCT or local authority) for all men and women registering in general practice and all general medical admissions. They also recommend universal HIV testing in: GUM or sexual health clinics; antenatal services; termination of pregnancy services; drug dependency programmes; and, health care services for those diagnosed with TB, hepatitis B, hepatitis C and lymphoma^[106]. The Department of Health funded a number of pilot programmes to investigate the feasibility and acceptability of testing programmes outside traditional testing settings to assess ways in which the testing guidelines may be implemented. The majority of the pilot sites found a positivity rate of at least one per thousand tests,

which is the threshold for cost-effectiveness, with the highest rates reported in community based projects^[107]. Figure 1.5 shows the uptake rate of HIV testing in north west England in GUM clinics. The uptake in men is split into infection route. The uptake rate is the percentage of 'offered' in which an HIV test was accepted. 'Offered' is defined as the number of new GUM episodes in which (a maximum of) one HIV test was offered. Little has changed in terms of uptake rates for each group between 2009 and 2011. However, figure 1.5 illustrates that amongst men, the uptake rates are higher amongst those who identified as MSM (91% in 2011) than those who identified as heterosexual (73% in 2011). The rate of uptake of testing amongst females (65% in 2011) was slightly lower than that amongst men overall (75% in 2011, data not shown). Amongst the prisoner population in north west England, uptake of testing was 84% in 2011, the same as the uptake rate for England. Amongst sex workers, the uptake was 92% in north west England, much higher than the overall rate for England (78%). However, it must be noted that the uptake data on both the prisoner and sex worker population are significantly underreported^[108].

Figure 1.5: HIV test uptake in north west England by sex and male sexual orientation, 2009 - 2011

Source: Adapted from table 4e HIV test uptake in the north west, HPA



HIV and AIDS in north west England 2011

Figure 1.1 and table 1.1 use data taken from the HPA New HIV Diagnoses Surveillance Tables to illustrate the status of the HIV/AIDS epidemic in north west England in comparison with the rest of the UK. This information is useful for monitoring trends both nationally and regionally. For the most accurate and detailed information about people living with HIV in north west England, see the comprehensive overview in chapters 2 to 6 of this report.

By the end of 2011, a cumulative total of 8,733 HIV infections in north west England had been reported to the HPA (figure 1.1), including 495 new diagnoses during 2010 (although this figure will increase as more reports are received)^[66, 109]. There were 33 newly diagnosed AIDS cases recorded in 2011, bringing the cumulative total to 1,867, 7% of the total number of AIDS cases reported in the UK^[66].

The pattern of HIV exposure amongst people living with HIV in north west England differs from that of the UK. The north west has a higher proportion of infections amongst MSM (52%, compared with the UK figure of 44%), and a lower proportion of people infected through heterosexual sex (38% compared with 45%) (table 1.1). As in previous years, the proportion of individuals exposed through the receipt of contaminated blood or blood products in north west England is approximately one-third higher than the national figure. At least part of this is likely to be due to patients from other areas attending specialist haematology units in the region and in some cases moving residence for convenience of treatment.

The data in figure 1.4 are derived from the anonymous seroprevalence survey conducted by the HPA, which use newborn infant dried blood spots to show the level of HIV infection in pregnant women. Annual figures for 2009, the most recent year for which data were available, show an HIV prevalence of 222 per 100,000 population amongst women giving birth in England. The prevalence amongst pregnant women in the north west has remained stable at 135 per 100,000 population^[92].

Sexual health in north west England

The epidemiology of HIV in north west England needs to be set in the context of general sexual health in the region. Most recent STI data showed that between 2009 and 2011, the north west of England saw a decrease in the total number of new STIs of 6% (along with decreases in four other areas). All areas in England saw an increase in the total number of services provided; the north west had the fourth smallest increase of 10%, while the north east had a 34% increase in the total number of services^[110]. Although total number of new STIs decreased in north west England, this decrease has

only been in recent years and the numbers are still high. High rates of STIs also place a significant burden on the economy: it was estimated that the direct medical cost of newly acquired STIs in the north west was almost £60 million in 2003^[111]. This estimate was based on the lifetime cost of treating STIs and included the expense of treating acute STIs and the sequelae of untreated or inadequately treated acute STIs. The presence of STIs in the population not only serves as an indicator of sexual risk-taking behaviour, but also increases the probability of HIV transmission^[112].

Monitoring HIV and AIDS in north west England

Over the past 16 years, the North West HIV/AIDS Monitoring Unit has collected, collated, analysed and disseminated data on the treatment and care of HIV positive individuals in the north west. The NHS information strategy for 2012 supports this level of clinical and public health monitoring. The strategy recognises that transparent and open data are essential to make informed evidence-based decisions on health services^[113]. In view of the sensitive nature of the information collected, data are anonymised and the Caldicott principles and recommendations (relating to data confidentiality and security) applied^[114].

Data were collected from over 40 statutory treatment centres including GUM clinics; haematology clinics, infectious disease units and a number of other specialist units and clinics^[1-15]. The data form part of the Survey of Prevalent Diagnosed HIV infections (SOPHID) national dataset. In 2011, midyear web tables were produced for the eighth time to provide a timely update of HIV epidemiology and treatment to provide analysis of the changing patterns of disease and characteristics of prevalence and inform funding and planning, development and evaluation^[115]. In addition, data are used at Primary Care Trust (PCT), Local Authority (LA) and regional level to assist in service planning, development and evaluation. Figure 1.6 shows the number of people with HIV who contacted statutory treatment centres in north west England between 1996 and 2011 and represent the most accurate and comprehensive source of data related to HIV and AIDS in the north west of England. The data collected by the North West HIV/AIDS Monitoring Unit from across the region over the last 16 years illustrate the increasing number of people accessing HIV services. The number of HIV positive individuals attending treatment centres has increased (6%) from 2010 to 2011. The continuing increase in size of the HIV positive population is in part due to the decreased number of people dying from AIDS-related illness, but is also due to continuing numbers of new cases. A full account of the epidemiology of HIV and AIDS in north west England is given in chapters 2 and 3 of this report.

The North West HIV/AIDS Monitoring Unit also collects data from HIV/AIDS community sector organisations across the region (chapter 4). For the last eight years, data have also been included from social services departments from across north west England; providing data on HIV positive service users (chapter 5).

Methodology of monitoring HIV and AIDS in north west England

Statutory treatment centres are prompted to report electronic data on all HIV positive individuals seen at their clinic with up-to-date details from the most recent reporting period, including all new cases either transferred from another clinic or newly diagnosed. The names of HIV positive individuals are not collected: a one-way encryption of the individual's surname, the soundex code, is used. This in combination with sex and date of birth defines a unique individual.

Demographic data collected for each person include: clinic number; soundex; date of birth; sex; postcode; ethnicity; residency status; transmission route of HIV; vital status; whether they were exposed abroad and country of exposure. For the purposes of this report, men who acquired HIV through sex with men (MSM) and who were also injecting drug users (IDUs) were included in the MSM category. Male to female transsexuals who acquired HIV through sex with men were recorded as male and age groups refer to the age of individuals at the end of December 2011, or at death. Ethnic group classifications are those used by the HPA HIV and STI Department, for SOPHID. Residency categories are adapted from the National Asylum Support Service (NASS) categories. The data requested on each individual include: number of outpatient visits; inpatient stays; home visits; day cases; latest CD4 counts and viral loads and dates taken; details of any antiretroviral therapy (ART) they are being prescribed; whether they are pregnant; clinical stage and the date they were last seen. Individuals are categorised as receiving the highest level of ART and as the most advanced stage of disease reported from any treatment centre during the period. Additionally, for those who died, information on cause and date of death is requested.

The dataset was finalised on the 12th July 2012, after which time analyses were conducted and no further changes to the raw data were made.

Community sector organisations are prompted annually to send basic data on the individuals attending their service. This information includes: soundex code, date of birth, sex, route of infection, ethnicity, residency status and pregnancy status. Data are collected from social service departments in a similar way to community organisations. Individuals reported to community sector and social services are matched to the statutory sector database by soundex, date of birth and sex, and any unknown information is updated from the statutory sector database.

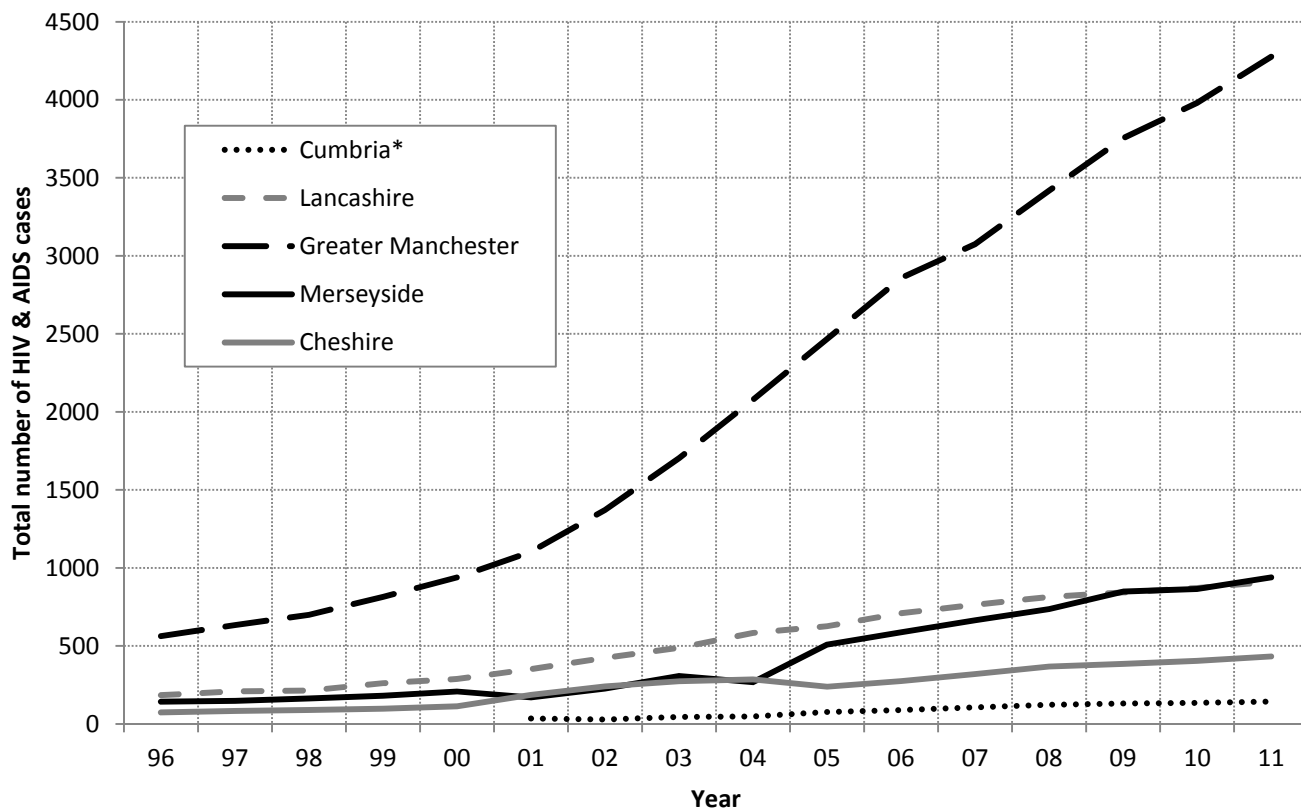
New cases are classed as individuals who are new to the north west database in 2011 and have not been seen at a statutory treatment centre in north west England since 1994. New cases include transfers from outside of the region so new cases in the north west treatment and care database are not necessarily new diagnoses. However, whilst slightly overestimating the number of new diagnoses, new cases remain an accurate proxy measure of new diagnoses in north west England.

We encourage service providers to download a spreadsheet with pre-defined data collection fields from our secure document gateway and upload their completed data in the same way. All the large north west centres provide data this way and an increasing number of the smaller centres now submit data electronically. The remainder send details on paper forms. The vast majority of community sector organisations and social services departments send electronic data via the document gateway.

All service providers are asked to provide full postcodes to enable mapping to LA and PCT of residence (using postcode data supplied by the North West Public Health Observatory). Partial postcodes are mapped to a particular LA and PCT if more than 90% of individual postcodes within a partial postcode area map to one LA or PCT.

Figure 1.6: Total number of HIV and AIDS cases seen in statutory treatment centres in the north west of England 1996-2011 by county

Source: HIV & AIDS in the North West of England annual reports^[1-15].



*Prior to 2001, area of residence was by health authority and did not include Cumbria

This method provides a good degree of accuracy when all but the last digit of the postcode is available with 97% matching to a PCT. However, if only the first part of the postcode (e.g. M12) is provided this allows only 86% to match to a PCT, and some first part postcodes do not even match to a single region. Partial postcodes that could not be mapped to LA or PCT were allocated to a county if

possible, or coded as unknown. Analyses are displayed by county, LA and PCT.

For reasons of space, it is not possible to present all breakdowns at LA and PCT level. However, additional tables are available on the North West Public Health Observatory website:

www.nwpho.org.uk/hiv2011.

2. New Cases 2011

During 2011, 789 new HIV and AIDS cases presented to statutory treatment centres in north west England. This number represents a 7% increase from 2010 (735 cases)^[15] compared with decreases seen in recent years. New cases are defined as individuals seen in north west England in 2011 but not during the years 1995 to 2010 and include new cases who died during the year.

Data on newly reported cases of HIV assist in the identification of trends and represent the most up-to-date information on the characteristics of HIV infection and transmission. Such information is valuable not only for planning and evaluating the success of prevention activities, but also for predicting future cases of HIV and its impact on treatment and care services in north west England. The aim of this chapter is to present information relating to new cases and, where appropriate, references are made to corresponding data from previous north west reports^[1-15]. For reasons of confidentiality and space, it is not possible to present all breakdowns at local authority (LA) or primary care trust (PCT) level. However, additional tables are available on the North West Public Health Observatory website: (www.nwpho.org.uk/hiv2011).

For the purposes of this report, men who acquired HIV through sex between men (MSM) and who are also injecting drug users (IDU) are included in the MSM category. Male to female transsexuals who acquired HIV through sex with men are recorded as males, and age groups refer to the age of individuals at the end of December 2011, or at death.

Figure 2.1 illustrates the number of new HIV cases per 100,000 adult population (aged 15-59 years) who attended statutory centres and resided in north west England during 2011[‡]. The population sizes for each LA used in the calculations are published by the Office for National Statistics (ONS) and are estimates based on 2011 census data. The rate per 100,000 population of diagnosed HIV in 2011 across the region (amongst individuals with known area of residence within north west England) is 17 per 100,000 population. Manchester LA has the highest rate (54 per 100,000), followed by Salford with 47 and Blackpool with 29 new cases per 100,000 population.

Figure 2.2 shows the probable global region and country of HIV infection for new cases of HIV probably acquired outside the UK who presented in north west England for treatment and care in 2011. Twenty-five percent of new cases (200

individuals) contracted their infection abroad, over two-thirds (67%) of which were acquired in sub-Saharan Africa. A further 11% were exposed in South and South-East Asia, followed by Eastern Europe and Central Asia and Western Europe (6% each). Of the 200 new cases who probably acquired their infection abroad, the probable country of exposure is known for 184 individuals (92%). Individuals reported to have been infected in Zimbabwe continue to dominate the statistics, accounting for 28% of newly reported infections thought to have been acquired abroad (56 cases). There were a high number of infections acquired in Nigeria (15 cases; 8%) a slight increase (7%) compared with 2010. Overall, 134 new people presented for treatment and care in north west England who were thought to have been infected in 19 different countries across sub-Saharan Africa. Infections from South and South-East Asia were mostly acquired in Thailand, which accounts for the second largest number of new cases infected outside the UK (17 cases; 9%). The largest number of infections in Western Europe were acquired in Portugal (three individuals; 25%).

Table 2.1 illustrates the age distribution, stage of HIV disease and ethnicity of the new HIV and AIDS cases by infection route and sex. Eleven percent of all reported cases in 2011 were seen for the first time in the region in this year. The majority of newly reported cases (66%) occur in people between the ages of 25 and 44 years, with the greatest proportion amongst those aged between 25 and 29 years (17%). Exposure through heterosexual and sex between men accounts for the highest proportion (44% and 42%, respectively) of new cases. Ninety percent of young people aged 15-24 years, for whom route of exposure was known, were infected with HIV during sex (either sex between men or heterosexual sex).

The number of new infections attributed to injecting drug use (IDU) remains relatively low and has risen from six individuals in 2010 to 13 individuals in 2011. During the year, 11 new cases of vertical transmission (mother to child) were reported from north west treatment centres, an increase of 83% from 2010. Four new cases were attributed to having received contaminated blood or tissue. The infection route for 88 new cases (11%) has not yet been determined.

HIV positive individuals categorised as asymptomatic continue to represent the largest proportion of new cases (62%), maintaining the observation that many HIV positive individuals are contacting services at a relatively early stage of their HIV disease. Of the four individuals classed as new cases who died during 2011, all had an AIDS-defining illness. Importantly, 11% of new cases who first presented in the region were diagnosed with AIDS by the end of 2011

[‡] Rate of new cases per 100,000 adult population (age 15-59 years) calculations exclude those with unknown area of residence and those living outside the region.

(including those who had died from an AIDS-related illness). This was a slightly lower proportion than seen in 2010 but despite this and continued efforts to raise awareness, a minority of individuals continue to present too late to benefit from life-prolonging treatment.

As in previous years, the majority of new HIV cases, for whom ethnicity was known, were of white ethnicity (65%), with 35% of cases occurring in a minority ethnic group. Black Africans account for 74% of minority ethnic cases, with black African females exposed through heterosexual sex making up 14% of all new cases reported in 2011. Of all the females infected through heterosexual sex, 24% were white, compared with 59% who were of black African ethnicity. Of all the individuals infected through MSM, 88% were of white ethnicity.

Table 2.2 shows the LA of residence and the infection route of new HIV cases presenting in north west England for treatment and care in 2011. Although the infection route for 51% of all HIV positive individuals accessing treatment and care in 2011 was attributed to sex between men (chapter 3, table 3.1), this proportion was lower for new cases with 44% infected via this route. Across the counties there were large differences in the route of infection. In Cumbria in 2011 (as in 2010) there were more cases infected via MSM (eight individuals; 42%) than through heterosexual sex (seven individuals; 37%). In Greater Manchester and Cheshire, there were similar numbers of new cases infected via MSM (47% and 46%, respectively) and through heterosexual sex (45% and 43%, respectively). Of those infected through MSM and residing in Lancashire, nearly a third (31%) resided in Blackpool, an area with a large gay community. Manchester also has a large gay community and correspondingly, Greater Manchester accounted for 65% of new cases resident in north west England exposed through sex between men, with the second highest proportion (16%) in Lancashire.

Table 2.3 presents the breakdown of stage of HIV disease by LA. The widespread distribution of new HIV positive individuals demonstrates the importance of HIV prevention initiatives in every county. Residents of Greater Manchester accounted for over half (56%) of new HIV and AIDS cases presenting for treatment and care in north west England. Proportionately, Cumbria had the highest recorded percentage of AIDS cases (16%; three out of 19 cases), while nearly three-quarters (70%) of those with HIV living in Merseyside were asymptomatic. Nearly all new cases who received care in north west England during 2011 (whose residential details were known) were resident within the region (96%).

Table 2.4 illustrates new HIV and AIDS cases by stage of HIV disease, infection route and sex presenting in north west

England for treatment and care in 2011, by those resident in north west England, and total new cases treated in north west England. The figures show that 62% of new cases residing in north west England were asymptomatic, 12% were symptomatic, and 11% were diagnosed with AIDS (including those who had died from an AIDS-related illness). The predominant route of HIV exposure amongst female new cases seen for treatment and care continues to be heterosexual sex (86%).

Table 2.5 shows new HIV cases presenting in north west England for treatment and care in 2011 by ethnicity and age group, by those resident in north west England and total new cases treated. Of north west residents, those aged between 40 and 44 years represented the largest group of new cases accessing treatment and care (17%). Half of those with HIV resident in north west England were aged between 25 and 39 years. New cases tended to be younger (median age of 37 years) than all cases (median age 42 years), demonstrating the continuing need to encourage younger people at risk of HIV exposure to access services. The majority of new cases treated in the region in 2011 whose ethnicity was known were white (65%), the same level as the corresponding data for all cases (chapter 3, table 3.5). Of those HIV positive individuals whose ethnicity was known, 35% were from a black and minority ethnic (BME) group. This indicates a substantial over-representation of new HIV cases within BME communities, when compared with their overall proportion within the north west England population (9%)^[116]. The incidence of diagnosed HIV is five and a half times higher in BME communities than in the white population in north west England. This illustrates the need for specialist services such as the Black Health Agency (BHA) and specialist projects within the community service sector to provide care and support for communities that have already been identified as having shorter life expectancies, together with poorer physical and mental health^[17].

Table 2.6 illustrates the sex, stage of HIV disease and infection abroad by ethnicity of new HIV cases presenting in north west England for treatment and care in 2011. The majority of women for whom ethnicity was known and who were treated in the region for the first time in 2011 were from a BME group (71%). Black Africans accounted for 59% of all new cases in women for whom ethnicity is known. Whilst in the white population the gender distribution is highly biased towards males (88%), 55% of the new cases in the BME group were female.

Considerable differences in presentation by stage of disease amongst ethnic groups were reported prior to 2002. For example, in 2001, 17% of white and 28% of BME individuals presented for the first time with AIDS, and in 2000 the margin

was wider with 16% of white individuals already having AIDS compared with 34% of BME communities. However, in 2011, as in more recent years, individuals from black and minority ethnic communities (for whom ethnicity and stage of disease were known) were almost as likely to present while still asymptomatic (69%) as were white individuals (75%). The proportion of individuals of white ethnicity (whose stage of disease was known) who were symptomatic was slightly smaller at 12% than individuals from BME groups where 18% were symptomatic. The proportion with AIDS (including those who had died from an AIDS-related illness) was the same (13%) for BME groups as for white individuals. This suggests that those from both white and BME groups are becoming more likely to access care at an earlier stage of their disease, which will hopefully increase their life expectancy.

Thirty-nine percent of new cases of HIV and AIDS in 2011 (where area of exposure is known) were infections reported to have been contracted outside the UK. The exposure route for 283 cases is currently unknown, which could lead to an underestimation of the figures contracted abroad. For those whose exposure was known, 86% of those of white ethnicity were infected in the UK, while 89% of black Africans with HIV were infected outside the UK.

Table 2.7 shows the global region of HIV exposure by infection route for new HIV cases who presented in north west England for treatment and care in 2011. Of those infected abroad, the proportion infected through sex between men is 8%, the same as in 2010. For those new individuals reported to have been infected with HIV in the UK, and for whom infection route is known, sex between men was the predominant mode of exposure (72%). The vast majority (74%) of individuals with heterosexually acquired HIV, whose infections were contracted abroad, were acquired in sub-Saharan Africa, with a further 12% in South and South-East Asia.

Eastern Europe and Central Asia accounted for the largest proportion of new cases acquired through sex between men abroad (27%; 4 individuals) reflecting the rise in MSM cases in this region in recent years. Seven out of the 13 new cases who were infected by IDU were thought to be infected in the UK. However, a further two were infected in Eastern Europe and Central Asia. IDU remains a major transmission route of HIV in many European countries^[16]. Although the risk of contracting HIV through IDU is relatively low in the UK due to low prevalence of HIV amongst this group, sharing injecting equipment remains a significant risk.

Table 2.8 illustrates the distribution of new HIV cases between north west treatment centres and by infection route. The treatment centre with the largest number of new cases in 2011 was Manchester Centre for Sexual Health (MRIG) with

approximately 26% of new cases (208/789). As in previous years, large numbers of new cases were also seen at the Royal Liverpool University Hospital department of GUM and Tropical and Infectious Disease Unit (RLG) and North Manchester Regional Infectious Disease Unit (NMG). In line with the overall increase in number of new cases, most treatment centres had an increase in numbers between 2010 and 2011. The centres with the greatest increase in new cases were the Countess of Chester Hospital Sexual Health Department (CHR; an 150% increase) and The Goodman Centre for Sexual Health in Salford (SALG; an 83% increase).

Table 2.9 presents the residency status of new HIV cases categorised by sex, age group, infection route, ethnicity, stage of HIV disease and area of residence. Of the 789 new cases, 552 cases (70%) are known to be UK nationals, and 50 (6%) were non-UK nationals, a significant reduction from previous years. Two-thirds (66%) of non-UK nationals were asymptomatic, a similar proportion to UK nationals with asymptomatic HIV (62%).

Table 2.10 displays new HIV cases by infection route and PCT of residence. The figures show that Manchester PCT had the largest proportion of new HIV cases in treatment and care in north west England (24%; 193 individuals), followed by Liverpool PCT with 8% (64 individuals).

Table 2.11 shows new HIV cases by stage of disease and PCT of residence. Amongst those that were asymptomatic, a quarter resided in Manchester PCT, followed by the next largest proportion (11%) in Salford PCT. Further analyses by PCT can be found on the North West Public Health Observatory website (www.nwpho.org.uk/hiv2011).

Figure 2.1: Number of new cases of HIV per 100,000 adult population by local authority of residence, 2011
Crude rate based on the number of new cases of HIV and AIDS residing in north west England and accessing the region's treatment centres per 100,000 of the adult (aged 15- 59 years) population.

Per 100,000 Population

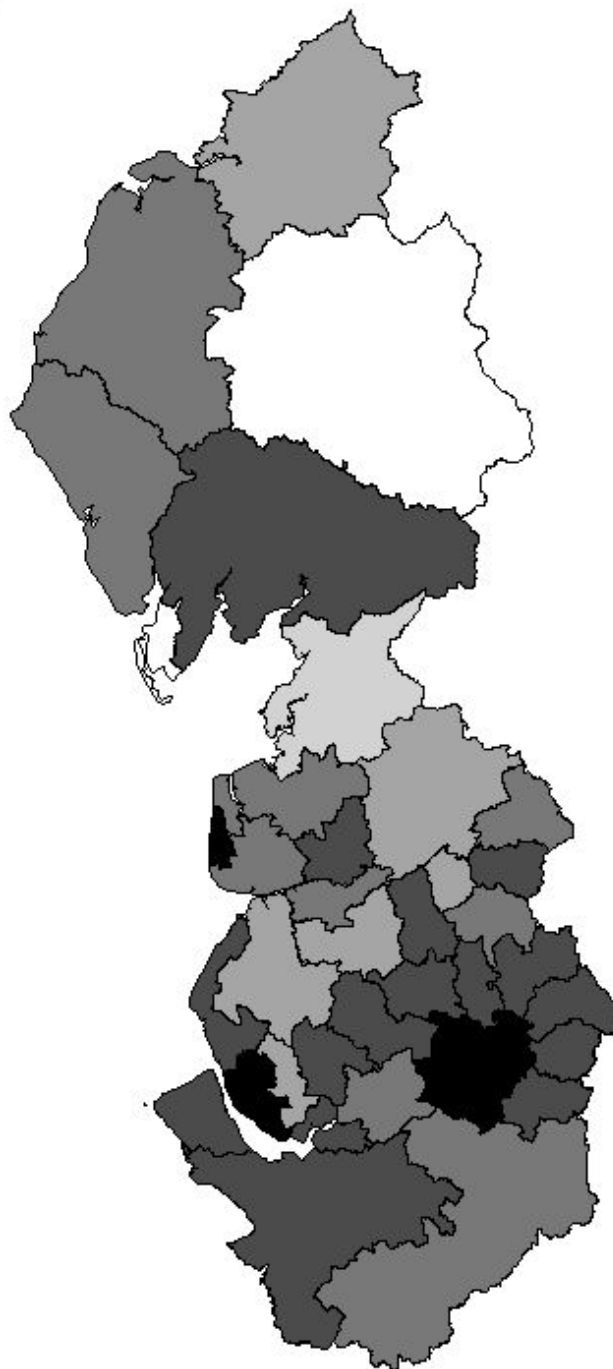
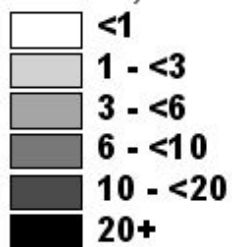
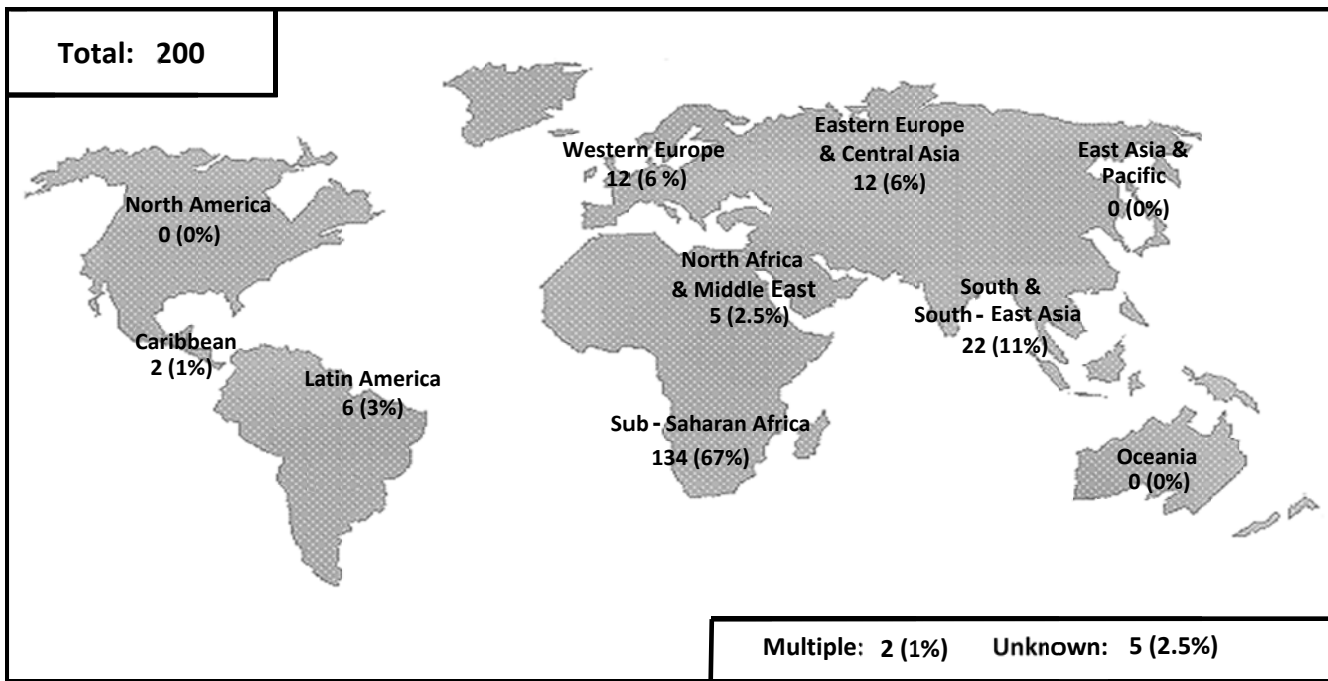


Figure 2.2: Global region and country of infection for new HIV and AIDS cases in north west England who probably acquired their infection outside the UK, 2011



Sub-Saharan Africa	134 (67%)
Angola	1 (0.5%)
Botswana	1 (0.5%)
Cameroon	6 (3%)
Congo	4 (2%)
Cote d'Ivoire	1 (0.5%)
Dem. Republic of Congo	1 (0.5%)
Ghana	2 (1%)
Guinea	1 (0.5%)
Kenya	1 (0.5%)
Malawi	12 (6%)
Mozambique	2 (1%)
Namibia	2 (1%)
Nigeria	15 (7.5%)
Rwanda	1 (0.5%)
Sierra Leone	1 (0.5%)
South Africa	6 (3%)
Uganda	3 (1.5%)
Zambia	11 (5.5%)
Zimbabwe	56 (28%)
Unknown	6 (3%)
Multiple	1 (0.5%)

South & South-East Asia	22 (11%)
Bangladesh	1 (0.5%)
Cambodia	1 (0.5%)
Iran	2 (1%)
Singapore	1 (0.5%)
Thailand	17 (8.5%)

Eastern Europe & Central Asia	12 (6%)
Czech Republic	2 (1%)
Latvia	6 (3%)
Poland	3 (1.5%)
Romania	1 (0.5%)

Western Europe	12 (6%)
Denmark	1 (0.5%)
France	1 (0.5%)
Germany	1 (0.5%)
Italy	2 (1%)
Netherlands	1 (0.5%)
Portugal	3 (1.5%)
Spain	2 (1%)
Unknown	1 (0.5%)

Caribbean	2 (1%)
Barbados	1 (0.5%)
St Lucia	1 (0.5%)

North Africa & Middle East	5 (2.5%)
Libyan Arab Jamahiriya	1 (0.5%)
Morocco	1 (0.5%)
United Arab Emirates	2 (1%)
Unknown	1 (0.5%)

Latin America	6 (3%)
Argentina	1 (0.5%)
Brazil	3 (1.5%)
Nicaragua	1 (0.5%)
Venezuela	1 (0.5%)

Multiple	2 (1%)
Unknown	5 (2.5%)
Total (100%)	200

Table 2.1: Age distribution, stage of HIV disease and ethnic group of new HIV and AIDS cases by infection route and sex, 2011

		Infection Route											Total (100%)	
		MSM	Injecting Drug Use		Hetero- sexual		Blood/ Tissue		Mother to Child		Undeter- mined			
		M	M	F	M	F	M	F	M	F	M	F		
Age Group	0-14									1	4			5
	15-19	10			1	4			3	2	1		21	
	20-24	33		1	2	15				1	3	1	56	
	25-29	77	2	1	16	34					6		136	
	30-34	61	1		15	32	1				15	4	129	
	35-39	42	4	1	26	31		1			17	3	125	
	40-44	55	2		29	28	1				13	5	133	
	45-49	31	1		19	21		1			5	3	81	
	50-54	18			21	11					3		53	
	55-59	10			6	5					2	2	25	
60+	7			7	6					4	1	25		
Stage of HIV Disease	Asymptomatic	227	5	1	82	108	1	1	2	3	48	10	488	
	Symptomatic	28	3	1	22	29			2	2	3	2	92	
	AIDS	26	1	1	18	20	1	1			10	5	83	
	AIDS-Related Death				2	2							4	
	Unknown	63	1		18	28				2	8	2	122	
Ethnicity	White	304	6	3	73	44	2	1		1	59	10	503	
	Black Caribbean	3			2	5					1		11	
	Black African	3	3		57	110		1	4	5	7	6	196	
	Black Other	1				1							2	
	Indian/Pakistani/Bangladeshi	6			3	1						1	11	
	Other Asian/Oriental	1				9					1		11	
	Other/Mixed	20	1		6	8							35	
	Unknown	6			1	9				1	1	2	20	
Total	344	10	3	142	187	2	2	4	7	69	19	789		
%	43.6	1.3	0.4	18	23.7	0.3	0.3	0.5	0.9	8.7	2.4			

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.
Age groups refer to the age of individuals at the end of December 2011, or at death.

Table 2.2: Local authority of residence of new HIV and AIDS cases by infection route, 2011

	Local Authority of Residence	Infection Route					Undetermined	Total (100%)
		MSM	Injecting Drug Use	Heterosexual	Blood/Tissue	Mother to Child		
Cumbria	Carlisle	1 (33.3%)		2 (66.7%)				3
	Allerdale	4 (80%)		1 (20%)				5
	Copeland	1 (25%)		2 (50%)			1 (25%)	4
	South Lakeland	2 (28.6%)	1 (14.3%)	2 (28.6%)			2 (28.6%)	7
	Cumbria Total	8 (42.1%)	1 (5.3%)	7 (36.8%)			3 (15.8%)	19
Lancashire	Lancaster			1 (100%)				1
	Wyre	4 (80%)		1 (20%)				5
	Fylde	2 (50%)		2 (50%)				4
	Blackpool	16 (66.7%)		7 (29.2%)			1 (4.2%)	24
	Blackburn with Darwen	5 (35.7%)	1 (7.1%)	6 (42.9%)		1 (7.1%)	1 (7.1%)	14
	Ribble Valley	1 (100%)						1
	Pendle	3 (50%)		2 (33.3%)	1 (16.7%)			6
	Hyndburn	1 (50%)		1 (50%)				2
	Burnley	4 (66.7%)		2 (33.3%)				6
	Rosendale	3 (75%)		1 (25%)				4
	Preston	5 (35.7%)	1 (7.1%)	6 (42.9%)		1 (7.1%)	1 (7.1%)	14
	South Ribble	4 (66.7%)		2 (33.3%)				6
	Chorley	2 (100%)						2
	West Lancashire	1 (33.3%)		2 (66.7%)				3
	Lancashire Unknown	1 (100%)						1
Lancashire Total	52 (55.9%)	2 (2.2%)	33 (35.5%)	1 (1.1%)	2 (2.2%)	3 (3.2%)	93	
Greater Manchester	Wigan	11 (47.8%)		11 (47.8%)		1 (4.3%)		23
	Bolton	10 (41.7%)		13 (54.2%)			1 (4.2%)	24
	Bury	12 (57.1%)		8 (38.1%)			1 (4.8%)	21
	Rochdale	3 (15.8%)		14 (73.7%)		1 (5.3%)	1 (5.3%)	19
	Oldham	6 (42.9%)	1 (7.1%)	6 (42.9%)		1 (7.1%)		14
	Salford	36 (51.4%)	2 (2.9%)	30 (42.9%)	1 (1.4%)	1 (1.4%)		70
	Manchester	93 (48.2%)	4 (2.1%)	85 (44%)	1 (0.5%)	3 (1.6%)	7 (3.6%)	193
	Tameside	9 (42.9%)	1 (4.8%)	8 (38.1%)			3 (14.3%)	21
	Trafford	15 (48.4%)		15 (48.4%)		1 (3.2%)		31
	Stockport	13 (56.5%)		9 (39.1%)	1 (4.3%)			23
	Unknown Greater Manchester	2 (50%)		2 (50%)				4
	Greater Manchester Total	210 (47.4%)	8 (1.8%)	201 (45.4%)	3 (0.7%)	8 (1.8%)	13 (2.9%)	443
Merseyside	Sefton	2 (11.1%)		8 (44.4%)			8 (44.4%)	18
	Liverpool	6 (9.4%)	1 (1.6%)	25 (39.1%)			32 (50%)	64
	Knowsley	3 (75%)					1 (25%)	4
	Wirral	7 (33.3%)		12 (57.1%)			2 (9.5%)	21
	St Helens	7 (53.8%)		4 (30.8%)			2 (15.4%)	13
	Unknown Merseyside	1 (25%)		1 (25%)			2 (50%)	4
	Merseyside Total	26 (21%)	1 (0.8%)	50 (40.3%)			47 (37.9%)	124
Cheshire	Halton	5 (45.5%)		4 (36.4%)			2 (18.2%)	11
	Warrington	7 (63.6%)		4 (36.4%)				11
	Cheshire West and Chester	10 (45.5%)		10 (45.5%)			2 (9.1%)	22
	Cheshire East	6 (35.3%)		8 (47.1%)			3 (17.6%)	17
	Cheshire Total	28 (45.9%)		26 (42.6%)			7 (11.5%)	61
Total North West Residents		324 (43.8%)	12 (1.6%)	317 (42.8%)	4 (0.5%)	10 (1.4%)	73 (9.9%)	740
	Isle of Man	1 (100%)						1
	Out of Region	14 (48.3%)		7 (24.1%)			8 (27.6%)	29
	Unknown	5 (26.3%)	1 (5.3%)	5 (26.3%)		1 (5.3%)	7 (36.8%)	19
Total		344 (43.6%)	13 (1.6%)	329 (41.7%)	4 (0.5%)	11 (1.4%)	88 (11.2%)	789

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

Table 2.3: Local authority of residence of new HIV and AIDS cases by stage of HIV disease, 2011

	Local Authority of Residence	Stage of Disease					Total (100%)
		Asymptomatic	Symptomatic	AIDS	AIDS-Related Death	Unknown	
Cumbria	Carlisle	2 (66.7%)	1 (33.3%)				3
	Allerdale	3 (60%)	1 (20%)			1 (20%)	5
	Copeland	3 (75%)		1 (25%)			4
	South Lakeland	4 (57.1%)	1 (14.3%)	2 (28.6%)			7
	Cumbria Total	12 (63.2%)	3 (15.8%)	3 (15.8%)		1 (5.3%)	19
Lancashire	Lancaster	1 (100%)					1
	Wyre					5 (100%)	5
	Fylde					4 (100%)	4
	Blackpool		1 (4.2%)	1 (4.2%)		22 (91.7%)	24
	Blackburn with Darwen	7 (50%)	2 (14.3%)	4 (28.6%)		1 (7.1%)	14
	Ribble Valley	1 (100%)					1
	Pendle	3 (50%)	2 (33.3%)	1 (16.7%)			6
	Hyndburn	2 (100%)					2
	Burnley	5 (83.3%)				1 (16.7%)	6
	Rossendale	2 (50%)	1 (25%)			1 (25%)	4
	Preston	8 (57.1%)	2 (14.3%)			4 (28.6%)	14
	South Ribble	3 (50%)	1 (16.7%)	1 (16.7%)	1 (16.7%)		6
	Chorley	1 (50%)	1 (50%)				2
	West Lancashire	3 (100%)					3
	Unknown Lancashire	1 (100%)					1
Lancashire Total	37 (39.8%)	10 (10.8%)	7 (7.5%)	1 (1.1%)	38 (40.9%)	93	
Greater Manchester	Wigan	19 (82.6%)	1 (4.3%)	3 (13%)			23
	Bolton	19 (79.2%)	2 (8.3%)	1 (4.2%)		2 (8.3%)	24
	Bury	18 (85.7%)	3 (14.3%)				21
	Rochdale	13 (68.4%)	4 (21.1%)	1 (5.3%)		1 (5.3%)	19
	Oldham	9 (64.3%)	1 (7.1%)	3 (21.4%)		1 (7.1%)	14
	Salford	53 (75.7%)	5 (7.1%)	8 (11.4%)	1 (1.4%)	3 (4.3%)	70
	Manchester	120 (62.2%)	25 (13%)	22 (11.4%)	1 (0.5%)	25 (13%)	193
	Tameside	9 (42.9%)	6 (28.6%)	4 (19%)		2 (9.5%)	21
	Trafford	24 (77.4%)	2 (6.5%)	2 (6.5%)	1 (3.2%)	2 (6.5%)	31
	Stockport	6 (26.1%)	2 (8.7%)	2 (8.7%)		13 (56.5%)	23
	Unknown Greater Manchester	1 (25%)	2 (50%)			1 (25%)	4
	Greater Manchester Total	291 (65.7%)	53 (12%)	46 (10.4%)	3 (0.7%)	50 (11.3%)	443
Merseyside	Sefton	15 (83.3%)		2 (11.1%)		1 (5.6%)	18
	Liverpool	49 (76.6%)	1 (1.6%)	5 (7.8%)		9 (14.1%)	64
	Knowsley	4 (100%)					4
	Wirral	7 (33.3%)	7 (33.3%)	7 (33.3%)			21
	St Helens	9 (69.2%)	2 (15.4%)	1 (7.7%)		1 (7.7%)	13
	Unknown Merseyside	3 (75%)		1 (25%)			4
	Merseyside	87 (70.2%)	10 (8.1%)	16 (12.9%)		11 (8.9%)	124
Cheshire	Halton	8 (72.7%)		1 (9.1%)		2 (18.2%)	11
	Warrington	6 (54.5%)		1 (9.1%)		4 (36.4%)	11
	Cheshire West and Chester	12 (54.5%)	8 (36.4%)	1 (4.5%)		1 (4.5%)	22
	Cheshire East	9 (52.9%)	3 (17.6%)	3 (17.6%)		2 (11.8%)	17
	Cheshire Total	35 (57.4%)	11 (18%)	6 (9.8%)		9 (14.8%)	61
Total North West Residents		462 (62.4%)	87 (11.8%)	78 (10.5%)	4 (0.5%)	109 (14.7%)	740
	Isle of Man	1 (100%)					1
	Out of Region	16 (55.2%)	3 (10.3%)	4 (13.8%)		6 (20.7%)	29
	Unknown	9 (47.4%)	2 (10.5%)	1 (5.3%)		7 (36.8%)	19
Total		488 (61.9%)	92 (11.7%)	83 (10.5%)	4 (0.5%)	122 (15.5%)	789

Table 2.4: New HIV and AIDS cases by stage of HIV disease, infection route and sex, 2011

	Stage of disease	Infection Route										Total (100%)	
		MSM	Injecting Drug Use		Heterosexual		Blood/Tissue		Mother to Child		Undetermined		
		M	M	F	M	F	M	F	M	F	M		F
Total North West Residents	Asymptomatic	218	5		82	103	1	1	2	3	39	8	462
	Symptomatic	26	3	1	21	27			2	2	3	2	87
	AIDS	25	1	1	18	19	1	1			7	5	78
	AIDS-Related Death				2	2							4
	Unknown	55	1		16	27				1	8	1	109
	Total	324	10	2	139	178	2	2	4	6	57	16	740
%	43.8	1.4	0.3	18.8	24.1	0.3	0.3	0.5	0.8	7.7	2.2		
All individuals treated in North West	Asymptomatic	227	5	1	82	108	1	1	2	3	48	10	488
	Symptomatic	28	3	1	22	29			2	2	3	2	92
	AIDS	26	1	1	18	20	1	1			10	5	83
	AIDS-Related Death				2	2							4
	Unknown	63	1		18	28				2	8	2	122
	Total	344	10	3	142	187	2	2	4	7	69	19	789
%	43.6	1.3	0.4	18	23.7	0.3	0.3	0.5	0.9	8.7	2.4		

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

Table 2.5: New HIV and AIDS cases by age category and ethnicity, 2011

	Age Group	Ethnicity							Total (100%)	
		White	Black Caribbean	Black African	Black Other	Indian/Pakistani/Bangladeshi	Other Asian/Oriental	Other/Mixed		Unknown
Total North West Residents	0-14			4					1	5
	15-19	11		6					1	19
	20-24	31	2	5		3	1	5	3	50
	25-29	88	4	23	1	3	4	8		131
	30-34	78		27	1		4	9	5	124
	35-39	65	2	43				4	1	115
	40-44	80		38		2		5	1	126
	45-49	47		23					3	73
	50-54	33	2	13			1	1		50
	55-59	19		4				1		24
	60+	18		4		1				23
	Total	470	10	190	2	9	10	34	15	740
%	63.5	1.4	25.7	0.3	1.2	1.4	4.6	2		
All individuals treated in North West	0-14			4					1	5
	15-19	12		7				1	1	21
	20-24	34	2	6		3	1	6	4	56
	25-29	90	4	23	1	4	5	8	1	136
	30-34	80		28	1	1	4	9	6	129
	35-39	74	2	44				4	1	125
	40-44	86		39		2		5	1	133
	45-49	52		24					5	81
	50-54	35	3	13			1	1		53
	55-59	20		4				1		25
	60+	20		4		1				25
	Total	503	11	196	2	11	11	35	20	789
%	63.8	1.4	24.8	0.3	1.4	1.4	4.4	2.5		

Age groups refer to the ages of individuals at the end of December 2011, or at death.

Table 2.6: Sex, stage of HIV disease and HIV exposure abroad of new HIV and AIDS cases by ethnic group, 2011

		Ethnicity							Total (100%)	
		White	Black Caribbean	Black African	Black Other	Indian/Pakistani/Bangladeshi	Other Asian/Oriental	Other/Mixed		
Sex	Male	444 (77.8%)	6 (1.1%)	74 (13%)	1 (0.2%)	9 (1.6%)	2 (0.4%)	27 (4.7%)	8 (1.4%)	571
	Female	59 (27.1%)	5 (2.3%)	122 (56%)	1 (0.5%)	2 (0.9%)	9 (4.1%)	8 (3.7%)	12 (5.5%)	218
Stage of Disease	Asymptomatic	315 (64.5%)	8 (1.6%)	110 (22.5%)	2 (0.4%)	7 (1.4%)	7 (1.4%)	27 (5.5%)	12 (2.5%)	488
	Symptomatic	50 (54.3%)	1 (1.1%)	33 (35.9%)		1 (1.1%)	2 (2.2%)	4 (4.3%)	1 (1.1%)	92
	AIDS	53 (63.9%)		24 (28.9%)			2 (2.4%)	3 (3.6%)	1 (1.2%)	83
	AIDS-Related Death	2 (50%)		2 (50%)						4
	Unknown	83 (68%)	2 (1.6%)	27 (22.1%)		3 (2.5%)		1 (0.8%)	6 (4.9%)	122
HIV Exposure Abroad	UK	275 (89.9%)	2 (0.7%)	16 (5.2%)	1 (0.3%)	2 (0.7%)	1 (0.3%)	7 (2.3%)	2 (0.7%)	306
	Abroad	46 (23%)	6 (3%)	132 (66%)		2 (1%)	6 (3%)	6 (3%)	2 (1%)	200
	Unknown	182 (64.3%)	3 (1.1%)	48 (17%)	1 (0.4%)	7 (2.5%)	4 (1.4%)	22 (7.8%)	16 (5.7%)	283
	Total	503 (63.8%)	11 (1.4%)	196 (24.8%)	2 (0.3%)	11 (1.4%)	11 (1.4%)	35 (4.4%)	20 (2.5%)	789

Table 2.7: Global region of exposure by infection route for new HIV and AIDS cases, 2011

Region of HIV Exposure	Infection Route						Total (100%)
	MSM	Injecting Drug Use	Hetero-sexual	Blood/Tissue	Mother to Child	Undetermined	
Abroad	15 (7.5%)	3 (1.5%)	163 (81.5%)	1 (0.5%)	8 (4%)	10 (5%)	200
<i>Caribbean</i>			2				2
<i>Eastern Europe & Central Asia</i>	4	2	3		1	2	12
<i>Latin America</i>	3	1	2				6
<i>North Africa & Middle East</i>	2		2	1			5
<i>South & South-East Asia</i>	2		19			1	22
<i>Sub-Saharan Africa</i>	1		120		7	6	134
<i>Western Europe</i>	1		10			1	12
<i>Multiple</i>	2						2
<i>Unknown</i>			5				5
UK	212 (69.3%)	7 (2.3%)	74 (24.2%)			13 (4.2%)	306
Unknown	117 (41.3%)	3 (1.1%)	92 (32.5%)	3 (1.1%)	3 (1.1%)	65 (23%)	283
Total	344 (43.6%)	13 (1.6%)	329 (41.7%)	4 (0.5%)	11 (1.4%)	88 (11.2%)	789

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

Table 2.8: Distribution of treatment for new HIV and AIDS cases by infection route, 2011

Treatment Centre	Infection Route						Total (100%)
	MSM	Injecting Drug Use	Hetero-sexual	Blood/Tissue	Mother to Child	Undetermined	
APH	8 (53.3%)		7 (46.7%)				15
BLAG	24 (66.7%)		11 (30.6%)			1 (2.8%)	36
BLKG	6 (40%)	1 (6.7%)	7 (46.7%)			1 (6.7%)	15
BOLG	18 (50%)		18 (50%)				36
BURG	7 (63.6%)		4 (36.4%)				11
BURY	2 (40%)		3 (60%)				5
CHR	13 (52%)		12 (48%)				25
CUMB	3 (42.9%)		4 (57.1%)				7
HAL	3 (50%)		3 (50%)				6
LCN		1 (20%)	4 (80%)				5
LEI	1 (9.1%)		5 (45.5%)			5 (45.5%)	11
MAC	3 (42.9%)		3 (42.9%)			1 (14.3%)	7
MGP	9 (100%)						9
MRIG	115 (55.3%)	3 (1.4%)	81 (38.9%)	3 (1.4%)	3 (1.4%)	3 (1.4%)	208
NMG	34 (31.5%)	5 (4.6%)	52 (48.1%)		7 (6.5%)	10 (9.3%)	108
NMGG	9 (52.9%)		5 (29.4%)			3 (17.6%)	17
NOBL	1 (100%)						1
OLDG	2 (28.6%)	1 (14.3%)	4 (57.1%)				7
PG	12 (57.1%)	1 (4.8%)	6 (28.6%)		1 (4.8%)	1 (4.8%)	21
RLG	16 (13.3%)	1 (0.8%)	42 (35%)			61 (50.8%)	120
RLI		1 (50%)	1 (50%)				2
ROCG	7 (53.8%)		6 (46.2%)				13
SALG	17 (40.5%)		24 (57.1%)			1 (2.4%)	42
SHH	7 (77.8%)		2 (22.2%)				9
SPG	1 (11.1%)		7 (77.8%)			1 (11.1%)	9
STP	9 (52.9%)		7 (41.2%)	1 (5.9%)			17
TAMG	4 (57.1%)	1 (14.3%)	2 (28.6%)				7
TRAG	5 (41.7%)		7 (58.3%)				12
WAR	4 (44.4%)		5 (55.6%)				9
WGH			2 (50%)			2 (50%)	4
WITG	23 (65.7%)		12 (34.3%)				35
WORK	2 (66.7%)		1 (33.3%)				3
WYTH	2 (28.6%)		5 (71.4%)				7

For a definition of the abbreviated statutory treatment centres please refer to the glossary at the back of the report.
Columns cannot be totalled as some individuals may attend two or more treatment locations, thus exaggerating the totals.
Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

Table 2.9: Residency status of new cases by sex, age group, infection route, ethnicity, stage of HIV disease and area of residence, 2011

		Residency Status							Total
		UK National	Asylum Seeker	Overseas Student	Temporary Visitor	Refugee	Other*	Unknown	
Sex	Male	454 (82.2%)	6 (37.5%)	6 (40%)	2 (40%)	2 (33.3%)	4 (50%)	97 (51.9%)	571 (72.4%)
	Female	98 (17.8%)	10 (62.5%)	9 (60%)	3 (60%)	4 (66.7%)	4 (50%)	90 (48.1%)	218 (27.6%)
Age Group	0-14	2 (0.4%)						3 (1.6%)	5 (0.6%)
	15-19	13 (2.4%)						8 (4.3%)	21 (2.7%)
	20-24	41 (7.4%)	1 (6.3%)	1 (6.7%)	1 (20%)		1 (12.5%)	11 (5.9%)	56 (7.1%)
	25-29	101 (18.3%)	3 (18.8%)	4 (26.7%)		1 (16.7%)	3 (37.5%)	24 (12.8%)	136 (17.2%)
	30-34	88 (15.9%)	1 (6.3%)	3 (20%)	1 (20%)	2 (33.3%)	2 (25%)	32 (17.1%)	129 (16.3%)
	35-39	82 (14.9%)	6 (37.5%)	4 (26.7%)	1 (20%)	1 (16.7%)		31 (16.6%)	125 (15.8%)
	40-44	93 (16.8%)	2 (12.5%)	2 (13.3%)		1 (16.7%)		35 (18.7%)	133 (16.9%)
	45-49	52 (9.4%)	1 (6.3%)	1 (6.7%)	2 (40%)		2 (25%)	23 (12.3%)	81 (10.3%)
	50-54	40 (7.2%)	2 (12.5%)			1 (16.7%)		10 (5.3%)	53 (6.7%)
	55-59	21 (3.8%)						4 (2.1%)	25 (3.2%)
60+	19 (3.4%)						6 (3.2%)	25 (3.2%)	
Infection Route	MSM	306 (55.4%)		3 (20%)	1 (20%)		1 (12.5%)	33 (17.6%)	344 (43.6%)
	Injecting Drug Use	10 (1.8%)						3 (1.6%)	13 (1.6%)
	Heterosexual	182 (33%)	16 (100%)	12 (80%)	4 (80%)	6 (100%)	7 (87.5%)	102 (54.5%)	329 (41.7%)
	Blood/Tissue	2 (0.4%)						2 (1.1%)	4 (0.5%)
	Mother to Child	3 (0.5%)						8 (4.3%)	11 (1.4%)
	Unknown	49 (8.9%)						39 (20.9%)	88 (11.2%)
Ethnicity	White	441 (79.9%)		1 (6.7%)			2 (25%)	59 (31.6%)	503 (63.8%)
	Black Caribbean	10 (1.8%)						1 (0.5%)	11 (1.4%)
	Black African	66 (12%)	16 (100%)	12 (80%)	3 (60%)	5 (83.3%)	3 (37.5%)	91 (48.7%)	196 (24.8%)
	Black Other	1 (0.2%)						1 (0.5%)	2 (0.3%)
	Indian/Pakistani/Bangladeshi	6 (1.1%)						5 (2.7%)	11 (1.4%)
	Other Asian/Oriental	6 (1.1%)			1 (20%)		1 (12.5%)	3 (1.6%)	11 (1.4%)
	Other/Mixed	18 (3.3%)		2 (13.3%)	1 (20%)	1 (16.7%)	1 (12.5%)	12 (6.4%)	35 (4.4%)
Unknown	4 (0.7%)					1 (12.5%)	15 (8%)	20 (2.5%)	
Stage of HIV Disease	Asymptomatic	342 (62%)	9 (56.3%)	9 (60%)	3 (60%)	5 (83.3%)	7 (87.5%)	113 (60.4%)	488 (61.9%)
	Symptomatic	62 (11.2%)	3 (18.8%)		2 (40%)	1 (16.7%)	1 (12.5%)	23 (12.3%)	92 (11.7%)
	AIDS	50 (9.1%)	1 (6.3%)	2 (13.3%)				30 (16%)	83 (10.5%)
	AIDS-Related Death	1 (0.2%)						3 (1.6%)	4 (0.5%)
	Unknown	97 (17.6%)	3 (18.8%)	4 (26.7%)				18 (9.6%)	122 (15.5%)
Area of Residence	Cumbria	14 (2.5%)					1 (12.5%)	4 (2.1%)	19 (2.4%)
	Lancashire	80 (14.5%)		2 (13.3%)				11 (5.9%)	93 (11.8%)
	Greater Manchester	290 (52.5%)	7 (43.8%)	12 (80%)	4 (80%)	5 (83.3%)	6 (75%)	119 (63.6%)	443 (56.1%)
	Merseyside	84 (15.2%)	9 (56.3%)					31 (16.6%)	124 (15.7%)
	Cheshire	53 (9.6%)			1 (20%)		1 (12.5%)	6 (3.2%)	61 (7.7%)
	Out of Region**	22 (4%)				1 (16.7%)		7 (3.7%)	30 (3.8%)
	Unknown	9 (1.6%)		1 (6.7%)				9 (4.8%)	19 (2.4%)
Total (100%)		552	16	15	5	6	8	187	789

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

Age groups refer to the age of individuals at the end of December 2011, or at death.

* Includes residency status defined as 'Migrant Worker', 'Dependent', and 'Other'.

** Includes Isle of Man.

Table 2.10: Primary care trust (PCT) of residence of new HIV and AIDS cases by infection route, 2011

PCT of Residence	Infection Route						Total (100%)
	MSM	Injecting Drug Use	Hetero-sexual	Blood/Tissue	Mother to Child	Undetermined	
Cumbria	8 (42.1%)	1 (5.3%)	7 (36.8%)			3 (15.8%)	19
North Lancashire	6 (60%)		4 (40%)				10
Blackpool	16 (66.7%)		7 (29.2%)			1 (4.2%)	24
Blackburn with Darwen	5 (35.7%)	1 (7.1%)	6 (42.9%)		1 (7.1%)	1 (7.1%)	14
East Lancashire	12 (63.2%)		6 (31.6%)	1 (5.3%)			19
Central Lancashire	12 (48%)	1 (4%)	10 (40%)		1 (4%)	1 (4%)	25
Unknown Lancashire	1 (100%)						1
Ashton, Leigh & Wigan	11 (47.8%)		11 (47.8%)		1 (4.3%)		23
Bolton	10 (41.7%)		13 (54.2%)			1 (4.2%)	24
Bury	12 (57.1%)		8 (38.1%)			1 (4.8%)	21
Heywood, Middleton & Rochdale	3 (15.8%)		14 (73.7%)		1 (5.3%)	1 (5.3%)	19
Oldham	6 (42.9%)	1 (7.1%)	6 (42.9%)		1 (7.1%)		14
Salford	36 (51.4%)	2 (2.9%)	30 (42.9%)	1 (1.4%)	1 (1.4%)		70
Manchester	93 (48.2%)	4 (2.1%)	85 (44%)	1 (0.5%)	3 (1.6%)	7 (3.6%)	193
Tameside & Glossop	11 (47.8%)	1 (4.3%)	8 (34.8%)			3 (13%)	23
Trafford	15 (48.4%)		15 (48.4%)		1 (3.2%)		31
Stockport	13 (56.5%)		9 (39.1%)	1 (4.3%)			23
Unknown Greater Manchester	2 (50%)		2 (50%)				4
Sefton	2 (11.1%)		8 (44.4%)			8 (44.4%)	18
Liverpool	6 (9.4%)	1 (1.6%)	25 (39.1%)			32 (50%)	64
Knowsley	3 (75%)					1 (25%)	4
Wirral	7 (33.3%)		12 (57.1%)			2 (9.5%)	21
Halton & St Helens	12 (50%)		8 (33.3%)			4 (16.7%)	24
Unknown Merseyside	1 (25%)		1 (25%)			2 (50%)	4
Warrington	7 (63.6%)		4 (36.4%)				11
Western Cheshire	10 (58.8%)		7 (41.2%)				17
Central and Eastern Cheshire	6 (27.3%)		11 (50%)			5 (22.7%)	22
Isle of Man	1 (100%)						1
Out of Region	12 (44.4%)		7 (25.9%)			8 (29.6%)	27
Unknown	5 (26.3%)	1 (5.3%)	5 (26.3%)		1 (5.3%)	7 (36.8%)	19
Total	344 (43.6%)	13 (1.6%)	329 (41.7%)	4 (0.5%)	11 (1.4%)	88 (11.2%)	789

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

Table 2.11: Primary care trust (PCT) of residence of new HIV and AIDS cases by stage of disease, 2011

PCT of Residence	Stage of Disease					Total (100%)
	Asymptomatic	Symptomatic	AIDS	AIDS-Related Death	Unknown	
Cumbria	12 (63.2%)	3 (15.8%)	3 (15.8%)		1 (5.3%)	19
North Lancashire	1 (10%)				9 (90%)	10
Blackpool		1 (4.2%)	1 (4.2%)		22 (91.7%)	24
Blackburn with Darwen	7 (50%)	2 (14.3%)	4 (28.6%)		1 (7.1%)	14
East Lancashire	13 (68.4%)	3 (15.8%)	1 (5.3%)		2 (10.5%)	19
Central Lancashire	15 (60%)	4 (16%)	1 (4%)	1 (4%)	4 (16%)	25
Unknown Lancashire	1 (100%)					1
Ashton, Leigh & Wigan	19 (82.6%)	1 (4.3%)	3 (13%)			23
Bolton	19 (79.2%)	2 (8.3%)	1 (4.2%)		2 (8.3%)	24
Bury	18 (85.7%)	3 (14.3%)				21
Heywood, Middleton & Rochdale	13 (68.4%)	4 (21.1%)	1 (5.3%)		1 (5.3%)	19
Oldham	9 (64.3%)	1 (7.1%)	3 (21.4%)		1 (7.1%)	14
Salford	53 (75.7%)	5 (7.1%)	8 (11.4%)	1 (1.4%)	3 (4.3%)	70
Manchester	120 (62.2%)	25 (13%)	22 (11.4%)	1 (0.5%)	25 (13%)	193
Tameside & Glossop	11 (47.8%)	6 (26.1%)	4 (17.4%)		2 (8.7%)	23
Trafford	24 (77.4%)	2 (6.5%)	2 (6.5%)	1 (3.2%)	2 (6.5%)	31
Stockport	6 (26.1%)	2 (8.7%)	2 (8.7%)		13 (56.5%)	23
Unknown Greater Manchester	1 (25%)	2 (50%)			1 (25%)	4
Sefton	15 (83.3%)		2 (11.1%)		1 (5.6%)	18
Liverpool	49 (76.6%)	1 (1.6%)	5 (7.8%)		9 (14.1%)	64
Knowsley	4 (100%)					4
Wirral	7 (33.3%)	7 (33.3%)	7 (33.3%)			21
Halton & St Helens	17 (70.8%)	2 (8.3%)	2 (8.3%)		3 (12.5%)	24
Unknown Merseyside	3 (75%)		1 (25%)			4
Warrington	6 (54.5%)		1 (9.1%)		4 (36.4%)	11
Western Cheshire	12 (70.6%)	4 (23.5%)			1 (5.9%)	17
Central and Eastern Cheshire	9 (40.9%)	7 (31.8%)	4 (18.2%)		2 (9.1%)	22
Isle of Man	1 (100%)					1
Out of Region	14 (51.9%)	3 (11.1%)	4 (14.8%)		6 (22.2%)	27
Unknown	9 (47.4%)	2 (10.5%)	1 (5.3%)		7 (36.8%)	19
Total	488 (61.9%)	92 (11.7%)	83 (10.5%)	4 (0.5%)	122 (15.5%)	789

3. All Cases 2011

During 2011, a total of 6,993 individuals living with HIV accessed treatment and care from statutory treatment centres in north west England, representing a 6% increase in the size of the HIV positive population (from 6,576 individuals in 2010). This is a slightly larger increase than that seen between 2009 and 2010 (5%). The aim of this chapter is to provide information on the demographics and characteristics of these 6,993 individuals and, where appropriate, references are made to corresponding data from previous reports^[1-15]. For reasons of confidentiality and space, it is not possible to present all breakdowns at local authority (LA) and primary care trust (PCT) level. However, additional tables are available on the North West Public Health Observatory website: (www.nwpho.org.uk/hiv2011).

Epidemiology of HIV in north west England

Figure 3.1 illustrates the crude adult population prevalence (aged 15-59 years) of HIV based on all cases residing in north west England and attending statutory treatment centres within north west England during 2011[§]. The population sizes for each LA used in the prevalence calculations are published by the Office for National Statistics (ONS) and are estimates based on 2011 census data. Across north west England, the prevalence of HIV was 149 per 100,000 population aged 15 to 59 years. There were considerable differences between LAs: the prevalence in Manchester was 555 per 100,000, in Salford was 431 per 100,000 and in Blackpool was 360 per 100,000. These three areas all had prevalence above the threshold whereby testing is recommended in general settings including testing for all medical admissions and all new registrations in general practice (two per 1,000, i.e. 200 per 100,000). This threshold (based on analysis from the USA) is deemed to be that at which it is cost effective to screen the whole population^[106]. The areas with the lowest prevalence were Hyndburn (30 per 100,000), West Lancashire (33 per 100,000) and Copeland (34 per 100,000 population).

Figure 3.2 illustrates the global region and country of infection for those 2,409 HIV positive individuals presenting for treatment in north west England in 2011 who were probably infected abroad. Of all the infections contracted outside the United Kingdom, 70% were contracted in sub-Saharan Africa. This high proportion reflects the impact of the pandemic in sub-Saharan Africa where the prevalence of HIV is extremely high^[16]. Ten percent of people who were infected abroad were infected in South and South-East Asia, with a similar proportion (7%) in Western Europe. The exact country of

infection is known for 2,232 individuals (93%). The infections acquired outside the UK were spread across 107 different countries, with the largest number of infections contracted in Zimbabwe (32%). Thailand represents the second largest number of infections acquired outside the UK (171 individuals; 7%). Exposure in sub-Saharan Africa was spread across 36 countries. Of those exposed in Western Europe, the largest number were infected in Spain (50 individuals), reflecting the extent of the Spanish epidemic^[117], the large number of people who travel between the United Kingdom and Spain, and the increased propensity to take risks when on holiday^[118-120].

Table 3.1 shows the infection route and sex of all HIV and AIDS cases presenting in north west England for treatment in 2011, categorised by age group, stage of HIV disease and ethnicity. Sex between men (MSM) remains the most common route of infection amongst people with HIV (51% of all cases). However the proportion of people infected through heterosexual sex has increased over the past 15 years, from 15% in 1996 to 42% in 2011. The percentage of individuals exposed to HIV via injecting drug use (IDU), those infected by contaminated blood or tissue and vertical transmission all remain low at up to 2% per route.

On average, those who were infected through heterosexual sex were younger (median age 41 years) than those infected through MSM (43 years) and IDU (42 years). The overall age distribution is concentrated in the 30-49 year age range, accounting for just over two-thirds of all cases (67%) and shows little deviation from previous years. New cases were more likely to be under 25 years (10%, see chapter 2, table 2.1) compared with all cases (5%). The proportion of HIV positive individuals in the older age groups (50 years and over) has increased slightly each year (from 17% in 2009 and 19% in 2010 to 20% in 2011) and is a large increase from 7% in 1996. This ageing cohort effect is likely to be due to the effectiveness of antiretroviral therapy and subsequent improved prognosis and longevity of many HIV positive individuals.

The proportion of individuals with HIV who died during the year decreased from 9% in 1996 to under 1% in 2011. Of the 25 individuals who died in 2011, nearly half (48%) died of an AIDS-related condition (a decrease from 51% in 2009 and 68% in 2010) and 13 (52%) died from other causes.

Amongst those for whom ethnicity was known (6,934 individuals), 66% were white. Those from black and minority ethnic (BME) communities make up 33% of the total HIV positive population accessing care in north west England,

[§] Prevalence per 100,000 adult population (aged 15-59 years) calculations exclude those with unknown area of residence and those living outside the region.

with black Africans representing the greatest proportion within BME groups (82%).

Table 3.2 shows LA and county of residence by infection route. Although MSM continues to be the dominant mode of HIV transmission (51%) amongst those with HIV who are resident in north west England, there is considerable variation at county level. Of those whose infection route was known, 61% of Lancashire's and 57% of Cheshire's HIV positive residents were infected via MSM compared with 39% of Merseyside's HIV positive residents. There is an even greater variation across LAs: the proportion of all cases infected through sex between men ranged from 82% in Rossendale (although absolute numbers were relatively low (32/39)) and 79% in Blackpool (253/319) to 21% in Hyndburn. Hyndburn in Lancashire was also the LA with the greatest proportion of infections acquired via heterosexual sex (71%), although absolute numbers were, again, relatively low (20/28), therefore the percentage should be interpreted with caution. Fifty-eight percent (290 individuals) of the HIV positive population living in Liverpool LA were infected through heterosexual sex. Manchester LA had the largest number of HIV positive residents infected through MSM (1,038 cases) and through heterosexual sex (847 cases). The county of Greater Manchester had the highest number of HIV positive individuals infected through IDU (89 individuals) which accounts for 70% of all residents of north west England infected by this route.

Table 3.3 illustrates the LA, county of residence and clinical stage of HIV disease for all HIV and AIDS cases presenting to a treatment centre in north west England in 2011. The data refer to the clinical condition of individuals when last seen in 2011; individuals who died are presented in separate categories. The largest proportion of people with HIV live in Greater Manchester (61% of the total number of people seen in north west England). As in previous years, the vast majority of people treated in north west England were also resident in north west England (96%). The proportion of people at different stages of HIV disease will impact on the funding of HIV treatment and care, since those at a more advanced stage require more hospital care^[69]. There is variation between stages of disease across the counties, from 41% of Lancashire's residents presenting as asymptomatic to 63% for Merseyside.

Table 3.4 gives a breakdown of ethnicity and county by infection route and sex. Of those infected through heterosexual sex who were treated in north west England, 68% were from BME/mixed background, compared with 31% who were white. In contrast, of those infected via MSM, 94% were of white ethnicity and only 5% were from BME/mixed ethnic backgrounds. Individuals from black and minority

ethnic or of mixed ethnicity are substantially over-represented amongst the HIV positive population when compared with their proportion in the population as a whole (33% of all cases, compared with 9% of the north west England population)^[116]. Prevalence in BME communities is five times higher than in the white population. The proportion of the HIV positive population from BME/mixed backgrounds varies between counties, with Greater Manchester and Merseyside having the largest proportion (at 40% and 37%, respectively) whilst Cumbria has the smallest proportion (13%).

Table 3.5 shows a breakdown of age by ethnicity for all residents of north west England and for all those individuals treated for HIV in north west England. Of all those who accessed treatment and care in north west England, black African individuals tended to be younger (46% aged between 25 and 39 years) than white individuals (35% aged 25 to 39 years).

Table 3.6 shows the distribution of total HIV and AIDS cases by stage of HIV disease, county and level of antiretroviral therapy (ART). Over half of individuals (51%) were using triple therapy, followed by 29% using quadruple or more. Amongst those residents of north west England with AIDS, 97% were on ART. Amongst those who were asymptomatic, 72% were on ART. There was little variation between the proportion of individuals on ART between counties, ranging from 81% in Greater Manchester and in Cheshire to 87% in Cumbria.

Table 3.7 gives a breakdown of ethnicity by sex, stage of HIV disease and whether or not HIV was acquired abroad. Although overall there were more males (73%) than females with HIV, nearly two-thirds (65%) of black Africans and of those defined as other Asian/Oriental were female. The largest proportion of HIV positive individuals were asymptomatic (52%), followed by symptomatic individuals (23%). Amongst white HIV positive individuals, half were asymptomatic and the majority of black Africans (55%) were asymptomatic. In contrast to the 13% of white individuals infected abroad, 77% of those classed as from BME groups were exposed to HIV abroad.

Table 3.8 illustrates the global region of exposure and route of infection of all HIV cases. Over a third (34%) of all cases reported were exposed to HIV abroad, up from 19% in 1998. The majority (81%) of those infected abroad were infected through heterosexual sex, the vast majority of these were infected in sub-Saharan Africa (80%). Heterosexual sex was the most common route of infection in those infected in sub-Saharan Africa (93%), the Caribbean (87%), South and South-East Asia (80%), North Africa and Middle East (60%), East Asia and Pacific (57%) and Eastern Europe and Central Asia (47%). In contrast, those infected in North America, Oceania,

Western Europe, and Latin America were more likely to be infected via MSM (82%, 79%, 59% and 53%, respectively).

Care of HIV positive people by statutory treatment centres

Table 3.9 presents the number of HIV positive people seeking care by infection route and treatment centre (for a definition of the abbreviated treatment centres, see the glossary). The Infectious Disease Unit at North Manchester General Hospital (NMG) provides care for the greatest number of HIV positive individuals (1,693). Manchester Centre for Sexual Health at Manchester Royal Infirmary (MRIG) provided treatment for 1,448 individuals, the Royal Liverpool University Hospital department of GUM and Tropical and Infectious Disease Unit (RLG) provided care for 834 individuals and Blackpool Sexual Health Services (BLAG) provided care for 407 individuals with HIV in 2011. There is considerable variation in the profile of HIV positive individuals between different treatment centres. Ninety eight percent of individuals attending a specialist general practice in Manchester (MGP) had been exposed to HIV via sex between men compared with the overall rate of 51% (table 3.1) of all HIV cases. Treatment of individuals exposed through contaminated blood or blood products is primarily undertaken by specialist haematology units at Manchester Royal Infirmary (MRIH) and Royal Liverpool University Hospital (RLH).

Table 3.10 refers to the highest level of ART prescribed by specific treatment centres during 2011. The Infectious Disease Unit at North Manchester General Hospital (NMG, which sees the most individuals) prescribed triple or more ART to 99% of their patients. There are few individuals prescribed mono or dual therapy in accordance with the latest British HIV Association guidelines^[121].

Table 3.11 illustrates the distribution of all HIV cases presenting in north west England for treatment in 2011 by LA of residence and the number of statutory treatment centres attended. The majority (93%) attended only one treatment centre. However, this varied across counties: residents of Lancashire, Cumbria and Cheshire were more likely to attend only one treatment centre (97%, 96% and 96%, respectively) than people residing in Merseyside (93%) and Greater Manchester (91%). It should be noted that these numbers refer only to treatment centres within north west England. Attendance at multiple treatment centres could be due to a change in residence or simultaneously accessing treatment and care from more than one treatment centre.

Table 3.12 shows the total and mean number of outpatient visits, day cases, inpatient episodes, inpatient days and home visits per HIV positive individual treated at each centre. MRIG and NMG provided the highest number of outpatient visits,

each accounting for over a fifth (22% each) of all attendances. NMG also provided the highest number of day cases (80% of the total), inpatient episodes (44% of the total) and inpatient days (45%), with the Department of GUM and Tropical and Infectious Disease Unit at RLG providing the next highest number of inpatient episodes (18%).

Some of the treatment centres provided a significant number of home visits, with Liverpool Community Nursing (LCN) providing half of the total home visits, followed by NMG (32%) and Alder Hey Children's Hospital in Liverpool (AHC; 17%). LCN provided the highest number of home visits per HIV positive person (15.8 per patient).

Asymptomatic HIV positive individuals accumulated a total of 20,613 outpatient visits. People who had died from a cause unrelated to AIDS had the highest mean number of outpatient visits (10.2). Individuals who died from an AIDS-related illness during 2011 spent the greatest mean number of days as inpatients (19.3 days).

HIV in non-UK nationals

Table 3.13 shows the residency status of all individuals who accessed treatment and care in north west England in 2011 by sex, age group, infection route, ethnicity, stage of HIV disease and area of residence. A total of 1,060 (slightly fewer than the 1,234 individuals seen in 2010) individuals were known to be non-UK nationals (15% of the total HIV positive population). The residency status of 9% was unknown. Nearly half the non-UK nationals were classified as asylum seekers (48%). Refugees (19%) and overseas students (11%) were the other main categories. Nearly two-thirds (65%) of HIV positive non-UK nationals were female, compared with 17% of UK-national HIV positive individuals. There was also a large difference in the proportion of heterosexual cases between UK national and non-UK nationals (30% compared with 92%). Non-UK nationals were younger (median age 39) than UK-national HIV positive population (median age 42 years). The majority (95%) of asylum seekers were black African. Most of the known HIV positive non-UK nationals were resident in Greater Manchester (70%), with the next largest number living in Merseyside (20% of the total).

Fifty eight percent of non-UK nationals were reported to be asymptomatic, suggesting that individuals usually access treatment while still healthy and thus may benefit from life prolonging treatment. In UK nationals, 51% were classified as asymptomatic. A similar proportion of non-UK and UK nationals had an AIDS diagnosis (22% and 21%, respectively). A similar proportion of non-UK nationals (0.1%) and UK nationals (0.4%) died in 2011.

Table 3.14 shows Primary Care Trust (PCT) of residence by infection route. Several PCTs have a larger proportion of individuals infected through heterosexual sex than through MSM. The highest proportions of individuals infected through heterosexual sex lived in Blackburn with Darwen PCT (61%), Liverpool PCT and Bolton PCT (both 58%). Seventy nine percent of those residing in Blackpool PCT were infected through sex between men. Seven percent of HIV positive people living in Sefton PCT were infected through IDU, substantially higher than the north west England average of 2%. Amongst those residing outside north west England, those infected through blood/tissue and mother to child were over represented (6% mother to child compared with 2% overall

and 3% blood/tissue compared with 1% overall), suggesting that these individuals are travelling from elsewhere to specialist treatment centres^[122].

Table 3.15 displays PCT of residence of all HIV and AIDS cases by stage of HIV disease. There are 13 PCTs where asymptomatic individuals represent a larger proportion than those who are symptomatic or have an AIDS-related illness, including six where the proportion who are asymptomatic is 65% or more (Bolton; Sefton; Liverpool; Knowsley; Warrington; and Western Cheshire). Further analyses by PCT can be found on the North West Public Health Observatory website (www.nwpho.org.uk/hiv2011).

Figure 3.1: Number of cases of HIV per 100,000 population by local authority of residence, 2011

Crude rate based on the number of adult cases of HIV and AIDS (aged 15 – 59) residing in north west England and accessing the region's treatment centres per 100,000 of the population

Per 100,000 population

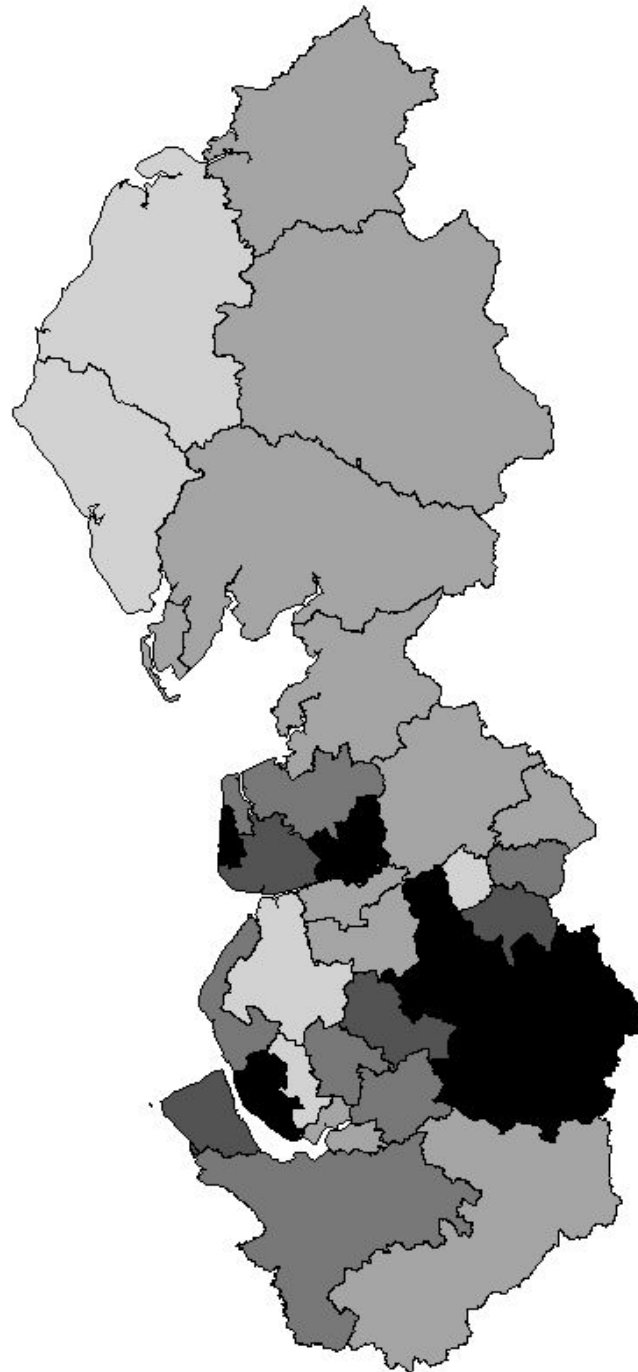
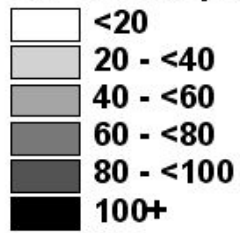
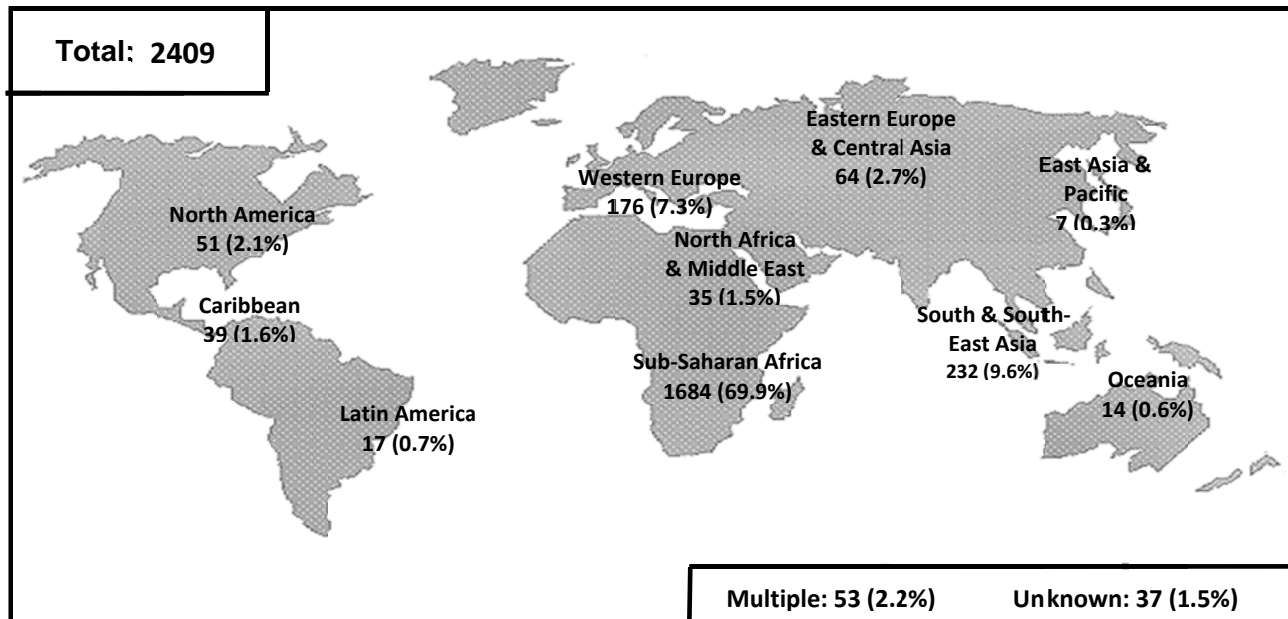


Figure 3.2: Global region and country of infection for all HIV and AIDS cases in north west England who probably acquired their infection outside the UK, 2011



Sub-Saharan Africa	1684 (69.9%)
Angola	13 (0.5%)
Botswana	22 (0.9%)
Burundi	10 (0.4%)
Cameroon	42 (1.7%)
Cape Verde	1 (0.04%)
Central African Republic	1 (0.04%)
Chad	1 (0.04%)
Congo	46 (1.9%)
Cote d'Ivoire	13 (0.5%)
Dem. Republic of Congo	11 (0.5%)
Equatorial Guinea	2 (0.1%)
Eritrea	17 (0.7%)
Ethiopia	19 (0.8%)
Gabon	1 (0.04%)
Gambia	10 (0.4%)
Ghana	22 (0.9%)
Guinea	7 (0.3%)
Kenya	50 (2.1%)
Lesotho	1 (0.04%)
Liberia	5 (0.2%)
Malawi	128 (5.3%)
Mozambique	5 (0.2%)
Namibia	5 (0.2%)
Niger	1 (0.04%)
Nigeria	105 (4.4%)
Rwanda	14 (0.6%)
Senegal	1 (0.04%)
Sierra Leone	10 (0.4%)
Somalia	18 (0.7%)
South Africa	111 (4.6%)
Swaziland	5 (0.2%)
Tanzania	18 (0.7%)
Togo	1 (0.04%)
Uganda	39 (1.6%)
Zambia	90 (3.7%)
Zimbabwe	774 (32.1%)
Unknown	61 (2.5%)
Multiple	4 (0.2%)

South & South-East Asia	232 (9.6%)
Bangladesh	2 (0.1%)
Brunei Darussalam	1 (0.04%)
Cambodia	2 (0.1%)
Dem. Republic of Timor-Leste	1 (0.04%)
India	15 (0.6%)
Indonesia	2 (0.1%)
Iran	5 (0.2%)
Malaysia	2 (0.1%)
Pakistan	14 (0.6%)
Philippines	3 (0.1%)
Singapore	4 (0.2%)
Sri Lanka	1 (0.04%)
Thailand	171 (7.1%)
Vietnam	2 (0.1%)
Unknown	5 (0.2%)
Multiple	2 (0.1%)

Eastern Europe & Central Asia	64 (2.7%)
Belarus	1 (0.04%)
Croatia	2 (0.1%)
Czech Republic	2 (0.1%)
Estonia	3 (0.1%)
Georgia	1 (0.04%)
Latvia	19 (0.8%)
Poland	28 (1.2%)
Romania	4 (0.2%)
Russian Federation	3 (0.1%)
Unknown	1 (0.04%)

Oceania	14 (0.6%)
Australia	13 (0.5%)
New Zealand	1 (0.04%)

North America	51 (2.1%)
Canada	5 (0.2%)
United States of America	46 (1.9%)

Caribbean	39 (1.6%)
Barbados	2 (0.1%)
Jamaica	32 (1.3%)
St Lucia	2 (0.1%)
Trinidad and Tobago	1 (0.04%)
Unknown	2 (0.1%)

Western Europe	176 (7.3%)
Austria	1 (0.04%)
Balearics	2 (0.1%)
Belgium	4 (0.2%)
Canary Islands	9 (0.4%)
Denmark	1 (0.04%)
Finland	2 (0.1%)
France	13 (0.5%)
Germany	18 (0.7%)
Gibraltar	1 (0.04%)
Greece	5 (0.2%)
Italy	14 (0.6%)
Malta	2 (0.1%)
Netherlands	13 (0.5%)
Norway	1 (0.04%)
Portugal	24 (1%)
Republic of Ireland	4 (0.2%)
Slovenia	1 (0.04%)
Spain	50 (2.1%)
Sweden	1 (0.04%)
Unknown	7 (0.3%)
Multiple	3 (0.1%)

North Africa & Middle East	35 (1.5%)
Cyprus	2 (0.1%)
Egypt	3 (0.1%)
Iraq	1 (0.04%)
Israel	1 (0.04%)
Kuwait	1 (0.04%)
Libyan Arab Jamahiriya	3 (0.1%)
Morocco	3 (0.1%)
Saudi Arabia	1 (0.04%)
Sudan	10 (0.4%)
Turkey	3 (0.1%)
United Arab Emirates	5 (0.2%)
Unknown	2 (0.1%)

Latin America	17 (0.7%)
Argentina	1 (0.04%)
Brazil	11 (0.5%)
Colombia	1 (0.04%)
Guatemala	1 (0.04%)
Mexico	1 (0.04%)
Nicaragua	1 (0.04%)
Venezuela	1 (0.04%)

Multiple	53 (2.2%)
Unknown	37 (1.5%)

East Asia & Pacific	7 (0.3%)
China	5 (0.2%)
Hong Kong	1 (0.04%)
Taiwan	1 (0.04%)

Total 2409

Table 3.1: Age distribution, stage of HIV disease and ethnicity of all HIV and AIDS cases by infection route and sex, 2011

		Infection Route										Total (100%)	
		MSM	Injecting Drug Use		Hetero-sexual		Blood/Tissue		Mother to Child		Undetermined		
		M	M	F	M	F	M	F	M	F	M		F
Age Group	0-14								30	52			82
	15-19	12			1	8			23	18	2		64
	20-24	92	1	2	14	51			3	9	5	2	179
	25-29	300	7	6	64	169	5		1		11		563
	30-34	476	10	2	130	355	5				23	5	1006
	35-39	539	22	6	198	393	6	2			27	5	1198
	40-44	682	25	3	258	338	14	1			28	7	1356
	45-49	640	16	4	209	221	6	5			18	6	1125
	50-54	395	16	4	126	107	7	2			11	2	670
	55-59	216	2	1	80	47	3	2			7	3	361
60+	203	6		109	47	7	4			12	1	389	
Stage of HIV Disease	Asymptomatic	1824	38	15	625	1006	9	5	14	32	77	16	3661
	Symptomatic	926	36	9	238	336	19	4	28	26	12	6	1640
	AIDS	695	29	4	299	346	22	7	15	19	42	6	1484
	AIDS-Related Death	3			2	4					2	1	12
	Death Unrelated to AIDS	8	1		1	2	1						13
	Unknown	99	1		24	42	2			2	11	2	183
Ethnicity	White	3359	92	28	505	395	50	8	8	12	121	14	4592
	Black Caribbean	25	1		25	37				1	1		90
	Black African	23	6		589	1176		2	42	56	13	10	1917
	Black Other	7	1		3	7							18
	Indian/Pakistani/Bangladeshi	39	1		28	17	2	2		1	1	2	93
	Other Asian/Oriental	15			12	53	1	2	1	2	2	1	89
	Other/Mixed	63	2		22	32		2	6	6	2		135
	Unknown	24	2		5	19				1	4	4	59
Total	3555	105	28	1189	1736	53	16	57	79	144	31	6993	
%	50.8	1.5	0.4	17	24.8	0.8	0.2	0.8	1.1	2.1	0.4		

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category. Age groups refer to the age of individuals at the end of December 2011, or at death.

Table 3.2: Local authority of residence of all HIV and AIDS cases by infection route, 2011

	Local Authority of Residence	Infection Route						Total (100%)
		MSM	Injecting Drug Use	Hetero-sexual	Blood/Tissue	Mother to Child	Undetermined	
Cumbria	Carlisle	18 (48.6%)	1 (2.7%)	14 (37.8%)	1 (2.7%)		3 (8.1%)	37
	Allerdale	17 (77.3%)		5 (22.7%)				22
	Eden	11 (73.3%)		4 (26.7%)				15
	Copeland	4 (26.7%)		7 (46.7%)	1 (6.7%)	1 (6.7%)	2 (13.3%)	15
	South Lakeland	13 (39.4%)	2 (6.1%)	14 (42.4%)	1 (3%)	1 (3%)	2 (6.1%)	33
	Barrow-in-Furness	6 (30%)		14 (70%)				20
	Unknown Cumbria	1 (100%)						1
	Cumbria Total	70 (49%)	3 (2.1%)	58 (40.6%)	3 (2.1%)	2 (1.4%)	7 (4.9%)	143
Lancashire	Lancaster	20 (46.5%)		20 (46.5%)	1 (2.3%)	1 (2.3%)	1 (2.3%)	43
	Wyre	32 (65.3%)		17 (34.7%)				49
	Fylde	28 (65.1%)	1 (2.3%)	13 (30.2%)		1 (2.3%)		43
	Blackpool	253 (79.3%)	2 (0.6%)	58 (18.2%)	4 (1.3%)	1 (0.3%)	1 (0.3%)	319
	Blackburn with Darwen	28 (27.5%)	4 (3.9%)	62 (60.8%)	2 (2%)	2 (2%)	4 (3.9%)	102
	Ribble Valley	6 (40%)		9 (60%)				15
	Pendle	19 (63.3%)	1 (3.3%)	6 (20%)	2 (6.7%)		2 (6.7%)	30
	Hyndburn	6 (21.4%)		20 (71.4%)		1 (3.6%)	1 (3.6%)	28
	Burnley	15 (44.1%)		17 (50%)	1 (2.9%)		1 (2.9%)	34
	Rossendale	32 (82.1%)	1 (2.6%)	5 (12.8%)		1 (2.6%)		39
	Preston	52 (46.8%)	2 (1.8%)	51 (45.9%)		4 (3.6%)	2 (1.8%)	111
	South Ribble	18 (52.9%)	1 (2.9%)	13 (38.2%)		1 (2.9%)	1 (2.9%)	34
	Chorley	18 (56.3%)	1 (3.1%)	11 (34.4%)			2 (6.3%)	32
	West Lancashire	13 (50%)		11 (42.3%)	2 (7.7%)			26
	Unknown Lancashire	5 (83.3%)		1 (16.7%)				6
	Lancashire Total	545 (59.8%)	13 (1.4%)	314 (34.5%)	12 (1.3%)	12 (1.3%)	15 (1.6%)	911
Greater Manchester	Wigan	82 (43.4%)	1 (0.5%)	96 (50.8%)	3 (1.6%)	4 (2.1%)	3 (1.6%)	189
	Bolton	91 (32.6%)	7 (2.5%)	162 (58.1%)	4 (1.4%)	12 (4.3%)	3 (1.1%)	279
	Bury	118 (57.3%)	4 (1.9%)	76 (36.9%)	1 (0.5%)	3 (1.5%)	4 (1.9%)	206
	Rochdale	52 (30.6%)	9 (5.3%)	96 (56.5%)	3 (1.8%)	6 (3.5%)	4 (2.4%)	170
	Oldham	54 (35.1%)	5 (3.2%)	89 (57.8%)	2 (1.3%)	3 (1.9%)	1 (0.6%)	154
	Salford	432 (65.9%)	9 (1.4%)	201 (30.6%)	2 (0.3%)	5 (0.8%)	7 (1.1%)	656
	Manchester	1038 (52%)	43 (2.2%)	847 (42.4%)	6 (0.3%)	40 (2%)	24 (1.2%)	1998
	Tameside	90 (49.7%)	3 (1.7%)	80 (44.2%)		2 (1.1%)	6 (3.3%)	181
	Trafford	126 (53.2%)	5 (2.1%)	92 (38.8%)	4 (1.7%)	6 (2.5%)	4 (1.7%)	237
	Stockport	118 (62.1%)	3 (1.6%)	55 (28.9%)	3 (1.6%)	5 (2.6%)	6 (3.2%)	190
	Unknown Greater Manchester	11 (68.8%)		5 (31.3%)				16
	Greater Manchester Total	2212 (51.7%)	89 (2.1%)	1799 (42.1%)	28 (0.7%)	86 (2%)	62 (1.4%)	4276
	Merseyside	Sefton	37 (33.3%)	8 (7.2%)	51 (45.9%)	2 (1.8%)	1 (0.9%)	12 (10.8%)
Liverpool		150 (30.2%)	7 (1.4%)	290 (58.4%)	3 (0.6%)	11 (2.2%)	36 (7.2%)	497
Knowsley		20 (60.6%)	1 (3%)	9 (27.3%)			3 (9.1%)	33
Wirral		69 (40.8%)	2 (1.2%)	90 (53.3%)	2 (1.2%)	3 (1.8%)	3 (1.8%)	169
St Helens		46 (64.8%)		21 (29.6%)	1 (1.4%)		3 (4.2%)	71
Unknown Merseyside		17 (29.3%)		38 (65.5%)			3 (5.2%)	58
Merseyside Total		339 (36.1%)	18 (1.9%)	499 (53.1%)	8 (0.9%)	15 (1.6%)	60 (6.4%)	939
Cheshire	Halton	25 (53.2%)	1 (2.1%)	17 (36.2%)		1 (2.1%)	3 (6.4%)	47
	Warrington	45 (51.7%)		38 (43.7%)	1 (1.1%)	2 (2.3%)	1 (1.1%)	87
	Cheshire West and Chester	84 (54.5%)	2 (1.3%)	59 (38.3%)	2 (1.3%)	5 (3.2%)	2 (1.3%)	154
	Cheshire East	83 (60.6%)	1 (0.7%)	45 (32.8%)	3 (2.2%)		5 (3.6%)	137
	Unknown Cheshire	4 (57.1%)		3 (42.9%)				7
	Cheshire Total	241 (55.8%)	4 (0.9%)	162 (37.5%)	6 (1.4%)	8 (1.9%)	11 (2.5%)	432
Total North West Residents		3407 (50.8%)	127 (1.9%)	2832 (42.3%)	57 (0.9%)	123 (1.8%)	155 (2.3%)	6701
Isle of Man		10 (43.5%)		12 (52.2%)	1 (4.3%)			23
Out of Region		115 (55%)	3 (1.4%)	62 (29.7%)	6 (2.9%)	12 (5.7%)	11 (5.3%)	209
Abroad		1 (33.3%)		2 (66.7%)				3
Unknown*		22 (38.6%)	3 (5.3%)	17 (29.8%)	5 (8.8%)	1 (1.8%)	9 (15.8%)	57
Total		3555 (50.8%)	133 (1.9%)	2925 (41.8%)	69 (1%)	136 (1.9%)	175 (2.5%)	6993

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

* Includes four people of no fixed abode and three people who declined to give any residential information.

Table 3.3: Local authority of residence of all HIV and AIDS cases by stage of HIV disease, 2011

	Local Authority of Residence	Stage of HIV Disease					Total (100%)	
		Asymptomatic	Symptomatic	AIDS	AIDS Related Death	Death Unrelated to AIDS		Unknown
Cumbria	Carlisle	18 (48.6%)	6 (16.2%)	12 (32.4%)			1 (2.7%)	37
	Allerdale	17 (77.3%)	2 (9.1%)	2 (9.1%)			1 (4.5%)	22
	Eden	7 (46.7%)	6 (40%)	2 (13.3%)				15
	Copeland	11 (73.3%)	2 (13.3%)	2 (13.3%)				15
	South Lakeland	15 (45.5%)	9 (27.3%)	9 (27.3%)				33
	Barrow-in-Furness	12 (60%)	1 (5%)	7 (35%)				20
	Unknown Cumbria	1 (100%)						1
	Cumbria Total	81 (56.6%)	26 (18.2%)	34 (23.8%)			2 (1.4%)	143
Lancashire	Lancaster	27 (62.8%)	7 (16.3%)	9 (20.9%)				43
	Wyre	17 (34.7%)	13 (26.5%)	14 (28.6%)			5 (10.2%)	49
	Fylde	12 (27.9%)	16 (37.2%)	10 (23.3%)		1 (2.3%)	4 (9.3%)	43
	Blackpool	108 (33.9%)	107 (33.5%)	74 (23.2%)	1 (0.3%)	3 (0.9%)	26 (8.2%)	319
	Blackburn with Darwen	51 (50%)	30 (29.4%)	18 (17.6%)			3 (2.9%)	102
	Ribble Valley	5 (33.3%)	6 (40%)	4 (26.7%)				15
	Pendle	10 (33.3%)	12 (40%)	7 (23.3%)		1 (3.3%)		30
	Hyndburn	12 (42.9%)	8 (28.6%)	8 (28.6%)				28
	Burnley	19 (55.9%)	6 (17.6%)	8 (23.5%)			1 (2.9%)	34
	Rossendale	13 (33.3%)	18 (46.2%)	6 (15.4%)			2 (5.1%)	39
	Preston	49 (44.1%)	35 (31.5%)	23 (20.7%)			4 (3.6%)	111
	South Ribble	16 (47.1%)	9 (26.5%)	8 (23.5%)	1 (2.9%)			34
	Chorley	15 (46.9%)	10 (31.3%)	7 (21.9%)				32
	West Lancashire	12 (46.2%)	9 (34.6%)	5 (19.2%)				26
	Unknown Lancashire	3 (50%)	2 (33.3%)	1 (16.7%)				6
Lancashire Total	369 (40.5%)	288 (31.6%)	202 (22.2%)	2 (0.2%)	5 (0.5%)	45 (4.9%)	911	
Greater Manchester	Wigan	121 (64%)	30 (15.9%)	37 (19.6%)	1 (0.5%)			189
	Bolton	190 (68.1%)	33 (11.8%)	54 (19.4%)			2 (0.7%)	279
	Bury	97 (47.1%)	67 (32.5%)	40 (19.4%)		1 (0.5%)	1 (0.5%)	206
	Rochdale	82 (48.2%)	36 (21.2%)	45 (26.5%)			7 (4.1%)	170
	Oldham	85 (55.2%)	32 (20.8%)	36 (23.4%)			1 (0.6%)	154
	Salford	372 (56.7%)	153 (23.3%)	120 (18.3%)	2 (0.3%)	1 (0.2%)	8 (1.2%)	656
	Manchester	1024 (51.3%)	489 (24.5%)	436 (21.8%)	4 (0.2%)	1 (0.1%)	44 (2.2%)	1998
	Tameside	89 (49.2%)	51 (28.2%)	38 (21%)		1 (0.6%)	2 (1.1%)	181
	Trafford	113 (47.7%)	60 (25.3%)	60 (25.3%)	1 (0.4%)		3 (1.3%)	237
	Stockport	79 (41.6%)	59 (31.1%)	31 (16.3%)	2 (1.1%)		19 (10%)	190
	Unknown Greater Manchester	7 (43.8%)	7 (43.8%)	1 (6.3%)			1 (6.3%)	16
	Greater Manchester Total	2259 (52.8%)	1017 (23.8%)	898 (21%)	10 (0.2%)	4 (0.1%)	88 (2.1%)	4276
Merseyside	Sefton	74 (66.7%)	18 (16.2%)	17 (15.3%)			2 (1.8%)	111
	Liverpool	356 (71.6%)	49 (9.9%)	81 (16.3%)			11 (2.2%)	497
	Knowsley	24 (72.7%)	4 (12.1%)	5 (15.2%)				33
	Wirral	56 (33.1%)	55 (32.5%)	57 (33.7%)		1 (0.6%)		169
	St Helens	43 (60.6%)	17 (23.9%)	10 (14.1%)			1 (1.4%)	71
	Unknown Merseyside	38 (65.5%)	6 (10.3%)	14 (24.1%)				58
	Merseyside Total	591 (62.9%)	149 (15.9%)	184 (19.6%)		1 (0.1%)	14 (1.5%)	939
Cheshire	Halton	27 (57.4%)	5 (10.6%)	7 (14.9%)			8 (17%)	47
	Warrington	58 (66.7%)	8 (9.2%)	16 (18.4%)			5 (5.7%)	87
	Cheshire West and Chester	90 (58.4%)	30 (19.5%)	31 (20.1%)		1 (0.6%)	2 (1.3%)	154
	Cheshire East	54 (39.4%)	44 (32.1%)	36 (26.3%)		1 (0.7%)	2 (1.5%)	137
	Unknown Cheshire	4 (57.1%)	1 (14.3%)	2 (28.6%)				7
	Cheshire Total	233 (53.9%)	88 (20.4%)	92 (21.3%)		2 (0.5%)	17 (3.9%)	432
Total North West Residents		3533 (52.7%)	1568 (23.4%)	1410 (21%)	12 (0.2%)	12 (0.2%)	166 (2.5%)	6701
Isle of Man		10 (43.5%)	6 (26.1%)	7 (30.4%)				23
Out of Region		86 (41.1%)	56 (26.8%)	58 (27.8%)		1 (0.5%)	8 (3.8%)	209
Abroad		1 (33.3%)	1 (33.3%)	1 (33.3%)				3
Unknown*		31 (54.4%)	9 (15.8%)	8 (14%)			9 (15.8%)	57
Total		3661 (52.4%)	1640 (23.5%)	1484 (21.2%)	12 (0.2%)	13 (0.2%)	183 (2.6%)	6993

* Includes four people of no fixed abode and three people who declined to give any residential information.

Table 3.4: All HIV and AIDS cases by infection route, sex, county of residence and ethnicity, 2011

	Ethnicity	Infection Route										Total (100%)	
		MSM	Injecting Drug Use		Hetero-sexual		Blood/Tissue		Mother to Child		Undetermined		
		M	M	F	M	F	M	F	M	F	M		F
Cumbria	White	69	3		26	17	2			1	4	2	124
	BME/mixed	1			4	11		1	1			1	19
	Total	70	3		30	28	2	1	1	1	4	3	143
	%	49.0	2.1		21.0	19.6	1.4	0.7	0.7	0.7	2.8	2.1	
Lancashire	White	532	12		108	77	7	2		3	13		754
	BME/mixed	13	1		41	87	1	2		5	4	1	156
	Unknown					1							1
	Total	545	13		149	165	8	4	5	7	14	1	911
%	59.8	1.4		16.4	18.1	0.9	0.4	0.5	0.8	1.5	0.1		
Greater Manchester	White	2065	60	18	181	138	19	3	6	4	36	6	2536
	BME/mixed	125	10		505	960	2	4	29	46	8	7	1696
	Unknown	22	1		4	11				1	3	2	44
	Total	2212	71	18	690	1109	21	7	35	51	47	15	4276
%	51.7	1.7	0.4	16.1	25.9	0.5	0.2	0.8	1.2	1.1	0.4		
Merseyside	White	322	11	6	100	86	5	2		1	46	5	584
	BME/mixed	16			102	208		1	5	9	5	3	349
	Unknown	1	1		1	2					1		6
	Total	339	12	6	203	296	5	3	5	10	52	8	939
%	36.1	1.3	0.6	21.6	31.5	0.5	0.3	0.5	1.1	5.5	0.9		
Cheshire	White	236	2	2	65	46	6			1	9		367
	BME/mixed	5			17	33			4	3	1	1	64
	Unknown					1							1
	Total	241	2	2	82	80	6		4	4	10	1	432
%	55.8	0.5	0.5	19.0	18.5	1.4		0.9	0.9	2.3	0.2		
Out of region*	White	116	2	1	19	28	7		2	2	7	1	185
	BME/mixed	9			8	18			5	3	2		45
	Unknown					1						1	2
	Total	125	2	1	27	47	7		7	5	9	2	232
%	53.9	0.9	0.4	11.6	20.3	3.0		3.0	2.2	3.9	0.9		
Abroad	White	1			1	1							3
	Total	1			1	1							3
	%	33.3			33.3	33.3							
Unknown**	White	18	2	1	5	2	4	1			6		39
	BME/mixed	3			2	5				1	2		13
	Unknown	1				3						1	5
	Total	22	2	1	7	10	4	1		1	8	1	57
%	38.6	3.5	1.8	12.3	17.5	7.0	1.8		1.8	14.0	1.8		
Total	White	3359	92	28	505	395	50	8	8	12	121	14	4592
	BME/mixed	172	11		679	1322	3	8	49	66	19	13	2342
	Unknown	24	2		5	19				1	4	4	59
	Total	3555	105	28	1189	1736	53	16	57	79	144	31	6993
%	50.8	1.5	0.4	17.0	24.8	0.8	0.2	0.8	1.1	2.1	0.4		

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

* Includes Isle of Man.

** Includes four people of no fixed abode and three people who declined to give any residential information.

Table 3.5: Age group of all HIV and AIDS cases by ethnicity, 2011

	Age Group	Ethnicity								Total
		White	Black Caribbean	Black African	Black Other	Indian/Pakistani/Bangladeshi	Other Asian/Oriental	Other/Mixed	Unknown	
Total North West Residents	0-14	8	1	54			1	7	1	72
	15-19	19		34		1	2	3	1	60
	20-24	110	5	37	1	4	1	8	4	170
	25-29	370	22	110	2	8	10	15	6	543
	30-34	551	16	329	2	19	16	28	13	974
	35-39	627	15	436	4	9	26	28	7	1152
	40-44	833	7	404	4	21	10	21	9	1309
	45-49	769	12	255	3	8	7	8	7	1069
	50-54	484	6	132	2	6	7	5	1	643
	55-59	279	3	50		7	2	4	1	346
	60+	315	1	36		5	3	1	2	363
	Total	4365	88	1877	18	88	85	128	52	6701
%	65.1	1.3	28.0	0.3	1.3	1.3	1.9	0.8		
All individuals treated in North West	0-14	11	1	59			1	9	1	82
	15-19	21		36		1	2	3	1	64
	20-24	114	5	40	1	4	1	9	5	179
	25-29	387	22	110	2	9	11	15	7	563
	30-34	574	16	333	2	21	17	29	14	1006
	35-39	664	15	443	4	9	27	28	8	1198
	40-44	868	7	413	4	22	11	22	9	1356
	45-49	815	13	260	3	9	7	9	9	1125
	50-54	506	7	135	2	6	7	6	1	670
	55-59	292	3	51		7	2	4	2	361
	60+	340	1	37		5	3	1	2	389
	Total	4592	90	1917	18	93	89	135	59	6993
%	65.7	1.3	27.4	0.3	1.3	1.3	1.9	0.8		

Age groups refer to the ages of individuals at the end of December 2011, or at death.

Table 3.6: All HIV and AIDS cases by stage of HIV disease, level of antiretroviral therapy and county of residence, 2011

	Stage of HIV Disease	Level of Antiretroviral Therapy					Total (100%)
		None	Mono	Dual	Triple	Quadruple or More	
Cumbria	Asymptomatic	14		1	50	16	81
	Symptomatic	1			14	11	26
	AIDS	1			21	12	34
	AIDS-Related Death						
	Death Unrelated to AIDS						
	Unknown	2					2
	Cumbria Total	18 (12.6%)		1 (0.7%)	85 (59.4%)	39 (27.3%)	143
Lancashire	Asymptomatic	102			186	81	369
	Symptomatic	15	1	1	172	99	288
	AIDS	6			115	81	202
	AIDS-Related Death				1	1	2
	Death Unrelated to AIDS	2			1	2	5
	Unknown	27			15	3	45
	Lancashire Total	152 (16.7%)	1 (0.1%)	1 (0.1%)	490 (53.8%)	267 (29.3%)	911
Greater Manchester	Asymptomatic	673	2	7	1113	464	2259
	Symptomatic	56		2	593	366	1017
	AIDS	33		2	483	380	898
	AIDS-Related Death	5		2		3	10
	Death Unrelated to AIDS				2	2	4
	Unknown	64		1	13	10	88
	Greater Manchester Total	831 (19.4%)	2 (0.05%)	14 (0.3%)	2204 (51.5%)	1225 (28.6%)	4276
Merseyside	Asymptomatic	144	1	10	262	174	591
	Symptomatic	16	1	2	72	58	149
	AIDS	4	2	7	92	79	184
	AIDS-Related Death						
	Death Unrelated to AIDS				1		1
	Unknown	5	1		6	2	14
	Merseyside Total	169 (18%)	5 (0.5%)	19 (2%)	433 (46.1%)	313 (33.3%)	939
Cheshire	Asymptomatic	61		3	119	50	233
	Symptomatic	4			57	27	88
	AIDS	2			53	37	92
	AIDS-Related Death						
	Death Unrelated to AIDS				1	1	2
	Unknown	13	1		2	1	17
	Cheshire Total	80 (18.5%)	1 (0.2%)	3 (0.7%)	232 (53.7%)	116 (26.9%)	432
Total North West Residents	Asymptomatic	994	3	21	1730	785	3533
	Symptomatic	92	2	5	908	561	1568
	AIDS	46	2	9	764	589	1410
	AIDS-Related Death	5		2	1	4	12
	Death Unrelated to AIDS	2			5	5	12
	Unknown	111	2	1	36	16	166
	Total North West Residents	1250 (18.7%)	9 (0.1%)	38 (0.6%)	3444 (51.4%)	1960 (29.2%)	6701
Total	Isle of Man	3	1		11	8	23
	Out of Region	33		3	112	61	209
	Abroad	1			2		3
	Unknown*	24			19	14	57
	Total	1311 (18.7%)	10 (0.1%)	41 (0.6%)	3588 (51.3%)	2043 (29.2%)	6993

* Includes four people of no fixed abode and three people who declined to give any residential information.

NB. Some individuals who are on unusually high or low ART combinations may be taking part in clinical trials.

Table 3.7: Ethnicity of all HIV and AIDS cases by sex, stage of HIV disease and exposure abroad, 2011

		Ethnicity							Total (100%)	
		White	Black Caribbean	Black African	Black Other	Indian/Pakistani/Bangladeshi	Other Asian/Oriental	Other/Mixed		Unknown
Sex	Male	4135 (81%)	52 (1%)	673 (13.2%)	11 (0.2%)	71 (1.4%)	31 (0.6%)	95 (1.9%)	35 (0.7%)	5103
	Female	457 (24.2%)	38 (2%)	1244 (65.8%)	7 (0.4%)	22 (1.2%)	58 (3.1%)	40 (2.1%)	24 (1.3%)	1890
Stage of HIV Disease	Asymptomatic	2311 (63.1%)	62 (1.7%)	1057 (28.9%)	10 (0.3%)	49 (1.3%)	46 (1.3%)	86 (2.3%)	40 (1.1%)	3661
	Symptomatic	1159 (70.7%)	14 (0.9%)	394 (24%)	3 (0.2%)	21 (1.3%)	17 (1%)	25 (1.5%)	7 (0.4%)	1640
	AIDS	975 (65.7%)	12 (0.8%)	423 (28.5%)	5 (0.3%)	19 (1.3%)	25 (1.7%)	20 (1.3%)	5 (0.3%)	1484
	AIDS-Related Death	7 (58.3%)		4 (33.3%)				1 (8.3%)		12
	Death Unrelated to AIDS	12 (92.3%)		1 (7.7%)						13
	Unknown	128 (69.9%)	2 (1.1%)	38 (20.8%)		4 (2.2%)	1 (0.5%)	3 (1.6%)	7 (3.8%)	183
Exposure Abroad	UK	3424 (94.1%)	34 (0.9%)	71 (2%)	3 (0.1%)	34 (0.9%)	12 (0.3%)	50 (1.4%)	9 (0.2%)	3637
	Abroad	604 (25.1%)	40 (1.7%)	1597 (66.3%)	9 (0.4%)	44 (1.8%)	64 (2.7%)	45 (1.9%)	6 (0.2%)	2409
	Unknown	564 (59.6%)	16 (1.7%)	249 (26.3%)	6 (0.6%)	15 (1.6%)	13 (1.4%)	40 (4.2%)	44 (4.6%)	947
Total		4592 (65.7%)	90 (1.3%)	1917 (27.4%)	18 (0.3%)	93 (1.3%)	89 (1.3%)	135 (1.9%)	59 (0.8%)	6993

Table 3.8: Global region of HIV exposure by infection route of all HIV and AIDS cases, 2011

Region of HIV Exposure	Infection Route						Total (100%)
	MSM	Injecting Drug Use	Hetero-sexual	Blood/Tissue	Mother to Child	Undetermined	
Abroad	295 (12.2%)	31 (1.3%)	1947 (80.8%)	21 (0.9%)	82 (3.4%)	33 (1.4%)	2409
Caribbean	4		34	1			39
East Asia & Pacific	3		4				7
Eastern Europe & Central Asia	16	12	30	1	2	3	64
Latin America	9	1	7				17
North Africa & Middle East	10	1	21	1	2		35
North America	42	2	6	1			51
Oceania	11		3				14
South & South-East Asia	32	1	186	5	1	7	232
Sub-Saharan Africa	20	4	1559	9	75	17	1684
Western Europe	104	10	56	3	1	2	176
Multiple	36		14			3	53
Unknown	8		27		1	1	37
UK	2809 (77.2%)	88 (2.4%)	609 (16.7%)	44 (1.2%)	39 (1.1%)	48 (1.3%)	3637
Unknown	451 (47.6%)	14 (1.5%)	369 (39%)	4 (0.4%)	15 (1.6%)	94 (9.9%)	947
Total	3555 (50.8%)	133 (1.9%)	2925 (41.8%)	69 (1%)	136 (1.9%)	175 (2.5%)	6993

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

Table 3.9: Distribution of treatment for all HIV and AIDS cases by infection route, 2011

Treatment Centre	Infection Route						Total (100%)
	MSM	Injecting Drug Use	Hetero-sexual	Blood/Tissue	Mother to Child	Undetermined	
AHC					25 (100%)		25
APH	50 (44.6%)		60 (53.6%)		1 (0.9%)	1 (0.9%)	112
BLAG	317 (77.9%)	3 (0.7%)	82 (20.1%)	2 (0.5%)	2 (0.5%)	1 (0.2%)	407
BLK	2 (100%)						2
BLKG	29 (25.4%)	4 (3.5%)	76 (66.7%)	1 (0.9%)		4 (3.5%)	114
BOLG	129 (35.6%)	8 (2.2%)	224 (61.9%)	1 (0.3%)			362
BURG	24 (42.9%)	2 (3.6%)	28 (50%)			2 (3.6%)	56
BURY	28 (46.7%)		32 (53.3%)				60
CHR	83 (56.8%)	2 (1.4%)	61 (41.8%)				146
CUMB	32 (54.2%)	1 (1.7%)	22 (37.3%)	1 (1.7%)		3 (5.1%)	59
FGH	7 (31.8%)	1 (4.5%)	13 (59.1%)	1 (4.5%)			22
HAL	15 (68.2%)		6 (27.3%)			1 (4.5%)	22
LCN	15 (31.3%)	2 (4.2%)	31 (64.6%)				48
LEI	40 (54.8%)		27 (37%)	1 (1.4%)		5 (6.8%)	73
MAC	35 (64.8%)	1 (1.9%)	14 (25.9%)	1 (1.9%)		3 (5.6%)	54
MGP	214 (97.7%)	2 (0.9%)	3 (1.4%)				219
MRIG	837 (57.8%)	16 (1.1%)	554 (38.3%)	23 (1.6%)	4 (0.3%)	14 (1%)	1448
MRIH			2 (6.9%)	27 (93.1%)			29
NMG	798 (47.1%)	68 (4%)	682 (40.3%)	7 (0.4%)	94 (5.6%)	44 (2.6%)	1693
NMGG	122 (61%)		72 (36%)			6 (3%)	200
NOBL	8 (53.3%)		7 (46.7%)				15
OLDG	36 (40.9%)	1 (1.1%)	50 (56.8%)			1 (1.1%)	88
PG	99 (47.4%)	4 (1.9%)	94 (45%)	1 (0.5%)	5 (2.4%)	6 (2.9%)	209
RLG	287 (34.4%)	14 (1.7%)	448 (53.7%)	8 (1%)	5 (0.6%)	72 (8.6%)	834
RLH				10 (100%)			10
RLI	19 (44.2%)	1 (2.3%)	20 (46.5%)	1 (2.3%)	1 (2.3%)	1 (2.3%)	43
ROCG	33 (39.3%)	2 (2.4%)	48 (57.1%)	1 (1.2%)			84
SALG	110 (50.7%)	2 (0.9%)	104 (47.9%)			1 (0.5%)	217
SHH	40 (64.5%)		22 (35.5%)				62
SPG	30 (33.7%)	6 (6.7%)	49 (55.1%)			4 (4.5%)	89
STP	94 (59.5%)	2 (1.3%)	56 (35.4%)	1 (0.6%)		5 (3.2%)	158
TAMG	33 (62.3%)	1 (1.9%)	19 (35.8%)				53
TRAG	5 (41.7%)		7 (58.3%)				12
WAR	30 (54.5%)		24 (43.6%)			1 (1.8%)	55
WGH	14 (50%)		12 (42.9%)			2 (7.1%)	28
WHIT			1 (50%)			1 (50%)	2
WITG	269 (75.6%)	4 (1.1%)	82 (23%)	1 (0.3%)			356
WORK	12 (63.2%)		5 (26.3%)	1 (5.3%)	1 (5.3%)		19
WYTH	4 (23.5%)	1 (5.9%)	12 (70.6%)				17

For a definition of the abbreviated treatment centres please refer to the glossary at the back of the report.

Columns cannot be totalled vertically as some individuals may appear in more than one row (i.e. those attending two or more treatment locations), thus exaggerating the totals.

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

Table 3.10: Distribution of treatment for all HIV and AIDS cases by level of antiretroviral therapy, 2011

Treatment Centre	Level of Antiretroviral Therapy				Total (100%)
	Mono	Dual	Triple	Quadruple or More	
AHC			11 (52.4%)	10 (47.6%)	21
APH	1 (1.2%)	6 (7.1%)	48 (56.5%)	30 (35.3%)	85
BLAG		1 (0.3%)	221 (67%)	108 (32.7%)	330
BLK				1 (100%)	1
BLKG			51 (58%)	37 (42%)	88
BOLG			231 (75.7%)	74 (24.3%)	305
BURG			27 (61.4%)	17 (38.6%)	44
BURY		1 (2.1%)	34 (72.3%)	12 (25.5%)	47
CHR		1 (0.7%)	91 (67.9%)	42 (31.3%)	134
CUMB		1 (2%)	40 (80%)	9 (18%)	50
FGH			10 (55.6%)	8 (44.4%)	18
HAL	1 (9.1%)	5 (45.5%)	4 (36.4%)	1 (9.1%)	11
LEI			35 (60.3%)	23 (39.7%)	58
MAC			34 (82.9%)	7 (17.1%)	41
MRIG	1 (0.1%)	6 (0.6%)	654 (62.6%)	383 (36.7%)	1044
MRIH		1 (3.8%)	12 (46.2%)	13 (50%)	26
NMG	2 (0.1%)	6 (0.4%)	858 (56.5%)	653 (43%)	1519
NMGG			116 (80.6%)	28 (19.4%)	144
NOBL			6 (46.2%)	7 (53.8%)	13
OLDG			46 (63.9%)	26 (36.1%)	72
PG			119 (65%)	64 (35%)	183
RLG	5 (0.7%)	17 (2.5%)	385 (55.7%)	284 (41.1%)	691
RLH			4 (44.4%)	5 (55.6%)	9
RLI			29 (70.7%)	12 (29.3%)	41
ROCG		1 (1.6%)	43 (67.2%)	20 (31.3%)	64
SALG			104 (68%)	49 (32%)	153
SHH		1 (2.1%)	27 (57.4%)	19 (40.4%)	47
SPG			44 (68.8%)	20 (31.3%)	64
STP		2 (1.5%)	92 (68.1%)	41 (30.4%)	135
TAMG			23 (71.9%)	9 (28.1%)	32
WAR		2 (5.1%)	31 (79.5%)	6 (15.4%)	39
WGH			19 (73.1%)	7 (26.9%)	26
WHIT			1 (50%)	1 (50%)	2
WITG		2 (0.7%)	213 (76.1%)	65 (23.2%)	280
WORK			7 (46.7%)	8 (53.3%)	15
WYTH			5 (45.5%)	6 (54.5%)	11

LCN, & MGP are support services and TRAG refer patients to other centres and as such do not prescribe ART.

NB. Some individuals who are on unusually high or low ART combinations may be taking part in clinical trials.

Columns cannot be totalled vertically as some individuals may appear in more than one row (i.e. those attending two or more treatment locations), thus exaggerating the totals.

Table 3.11: Local authority of residence of all HIV and AIDS cases by number of treatment centres attended, 2011

	Local Authority of Residence	Treatment Centres Attended			Total (100%)
		One	Two	Three	
Cumbria	Carlisle	35 (94.6%)	2 (5.4%)		37
	Allerdale	22 (100%)			22
	Eden	14 (93.3%)	1 (6.7%)		15
	Copeland	15 (100%)			15
	South Lakeland	32 (97%)	1 (3%)		33
	Barrow-in-Furness	18 (90%)	2 (10%)		20
	Unknown Cumbria	1 (100%)			1
	Cumbria Total	137 (95.8%)	6 (4.2%)		143
Lancashire	Lancaster	43 (100%)			43
	Wyre	49 (100%)			49
	Fylde	42 (97.7%)	1 (2.3%)		43
	Blackpool	312 (97.8%)	7 (2.2%)		319
	Blackburn with Darwen	91 (89.2%)	11 (10.8%)		102
	Ribble Valley	13 (86.7%)	2 (13.3%)		15
	Pendle	30 (100%)			30
	Hyndburn	26 (92.9%)	2 (7.1%)		28
	Burnley	31 (91.2%)	3 (8.8%)		34
	Rosendale	36 (92.3%)	3 (7.7%)		39
	Preston	111 (100%)			111
	South Ribble	34 (100%)			34
	Chorley	31 (96.9%)	1 (3.1%)		32
	West Lancashire	26 (100%)			26
	Unknown Lancashire	6 (100%)			6
Lancashire Total	881 (96.7%)	30 (3.3%)		911	
Greater Manchester	Wigan	187 (98.9%)	2 (1.1%)		189
	Bolton	273 (97.8%)	6 (2.2%)		279
	Bury	197 (95.6%)	8 (3.9%)	1 (0.5%)	206
	Rochdale	160 (94.1%)	10 (5.9%)		170
	Oldham	146 (94.8%)	8 (5.2%)		154
	Salford	583 (88.9%)	72 (11%)	1 (0.2%)	656
	Manchester	1790 (89.6%)	206 (10.3%)	2 (0.1%)	1998
	Tameside	174 (96.1%)	7 (3.9%)		181
	Trafford	211 (89%)	25 (10.5%)	1 (0.4%)	237
	Stockport	173 (91.1%)	17 (8.9%)		190
	Unknown Greater Manchester	15 (93.8%)	1 (6.3%)		16
	Greater Manchester Total	3909 (91.4%)	362 (8.5%)	5 (0.1%)	4276
Merseyside	Sefton	107 (96.4%)	4 (3.6%)		111
	Liverpool	454 (91.3%)	43 (8.7%)		497
	Knowsley	32 (97%)	1 (3%)		33
	Wirral	163 (96.4%)	6 (3.6%)		169
	St Helens	64 (90.1%)	7 (9.9%)		71
	Unknown Merseyside	54 (93.1%)	4 (6.9%)		58
	Merseyside Total	874 (93.1%)	65 (6.9%)		939
Cheshire	Halton	42 (89.4%)	4 (8.5%)	1 (2.1%)	47
	Warrington	82 (94.3%)	5 (5.7%)		87
	Cheshire West and Chester	153 (99.4%)	1 (0.6%)		154
	Cheshire East	131 (95.6%)	6 (4.4%)		137
	Unknown Cheshire	5 (71.4%)	2 (28.6%)		7
	Cheshire Total	413 (95.6%)	18 (4.2%)	1 (0.2%)	432
Total North West Residents		6214 (92.7%)	481 (7.2%)	6 (0.1%)	6701
	Isle of Man	22 (95.7%)	1 (4.3%)		23
	Out of Region	206 (98.6%)	2 (1%)	1 (0.5%)	209
	Abroad	3 (100%)			3
	Unknown*	47 (82.5%)	9 (15.8%)	1 (1.8%)	57
	Total	6492 (92.8%)	493 (7%)	8 (0.1%)	6993

* Includes four people of no fixed abode and three people who declined to give any residential information.

Table 3.12: Distribution of total and mean number of outpatient visits, day cases, inpatient episodes, inpatient days and home visits by treatment centre and stage of HIV disease, 2011

		Outpatient Visits		Day Cases		Inpatient Episodes		Inpatient Days		Home Visits	
		Total	Mean	Total	Mean	Total	Mean	Total	Mean	Total	Mean
Treatment Centre	AHC	102	4.08			1	0.04	4	0.16	255	10.20
	APH	548	4.89	2	0.02	17	0.15	89	0.79	4	0.04
	BLAG	2116	5.20			20	0.05	99	0.24	1	0.002
	BLK	6	3.00								
	BLKG	600	5.26	12	0.11	15	0.13	134	1.18		
	BOLG	2207	6.10			5	0.01	79	0.22		
	BURG	317	5.66			5	0.09	85	1.52	5	0.09
	BURY	246	4.10								
	CHR	748	5.12	5	0.03	17	0.12	151	1.03		
	CUMB	290	4.92	1	0.02	6	0.10	6	0.10	1	0.02
	FGH	79	3.59								
	HAL	151	6.86			1	0.05	1	0.05		
	LCN	180	3.75							760	15.83
	LEI	444	6.08	2	0.03	8	0.11	26	0.36	1	0.01
	MAC	376	6.96								
	MGP	1229	5.61								
	MRIG	8919	6.16			43	0.03	396	0.27		
	MRIH	121	4.17	2	0.07	9	0.31	95	3.28		
	NMG	9076	5.36	178	0.11	226	0.13	2579	1.52	484	0.29
	NMGG	674	3.37	4	0.02	2	0.01	6	0.03		
	NOBL	99	6.60								
	OLDG	428	4.86								
	PG	1098	5.25			15	0.07	564	2.70	1	0.005
	RLG	3984	4.78			91	0.11	788	0.94		
	RLH	40	4.00			2	0.20	6	0.60		
	RLI	178	4.14								
	ROCG	321	3.82								
	SALG	1245	5.74			1	0.005	105	0.48		
	SHH	422	6.81			5	0.08	27	0.44	1	0.02
	SPG	548	6.16	1	0.01	1	0.01	36	0.40		
	STP	681	4.31								
	TAMG	218	4.11								
TRAG	35	2.92			1	0.08	1	0.08			
WAR	284	5.16							3	0.05	
WGH	109	3.89			4	0.14	29	1.04			
WHIT	6	3.00									
WITG	2268	6.37									
WORK	108	5.68	15	0.79	2	0.11	12	0.63	6	0.32	
WYTH	58	3.41			16	0.94	396	23.29			
Stage of HIV Disease	Asymptomatic	20613	5.63	35	0.01	132	0.04	1288	0.35	557	0.15
	Symptomatic	9532	5.81	85	0.05	133	0.08	995	0.61	399	0.24
	AIDS	9376	6.32	101	0.07	213	0.14	2853	1.92	527	0.36
	AIDS-Related Death	50	4.17			11	0.92	232	19.33		
	Death Unrelated to AIDS	132	10.15			15	1.15	170	13.08	24	1.85
	Unknown	856	4.68	1	0.01	9	0.05	176	0.96	15	0.08
	Total	40559	5.80	222	0.03	513	0.07	5714	0.82	1522	0.22

Table 3.13: Residency status of all cases of HIV and AIDS by sex, age group, infection route, ethnicity, stage of HIV disease and area of residence, 2011

		Residency Status							Total
		UK National	Asylum Seeker	Overseas Student	Temporary Visitor	Refugee	Other***	Unknown	
Sex	Male	4408 (82.6%)	160 (31.6%)	51 (42.1%)	23 (47.9%)	70 (34.5%)	72 (39.6%)	319 (53.4%)	5103 (73%)
	Female	928 (17.4%)	346 (68.4%)	70 (57.9%)	25 (52.1%)	133 (65.5%)	110 (60.4%)	278 (46.6%)	1890 (27%)
Age Group	0-14	39 (0.7%)	6 (1.2%)			2 (1%)	8 (4.4%)	27 (4.5%)	82 (1.2%)
	15-19	39 (0.7%)	2 (0.4%)			1 (0.5%)	10 (5.5%)	12 (2%)	64 (0.9%)
	20-24	126 (2.4%)	13 (2.6%)	4 (3.3%)	1 (2.1%)	7 (3.4%)	5 (2.7%)	23 (3.9%)	179 (2.6%)
	25-29	435 (8.2%)	33 (6.5%)	14 (11.6%)	4 (8.3%)	12 (5.9%)	15 (8.2%)	50 (8.4%)	563 (8.1%)
	30-34	688 (12.9%)	106 (20.9%)	27 (22.3%)	8 (16.7%)	30 (14.8%)	42 (23.1%)	105 (17.6%)	1006 (14.4%)
	35-39	834 (15.6%)	130 (25.7%)	24 (19.8%)	9 (18.8%)	46 (22.7%)	32 (17.6%)	123 (20.6%)	1198 (17.1%)
	40-44	1019 (19.1%)	100 (19.8%)	25 (20.7%)	10 (20.8%)	46 (22.7%)	35 (19.2%)	121 (20.3%)	1356 (19.4%)
	45-49	916 (17.2%)	64 (12.6%)	20 (16.5%)	6 (12.5%)	26 (12.8%)	22 (12.1%)	71 (11.9%)	1125 (16.1%)
	50-54	567 (10.6%)	35 (6.9%)	5 (4.1%)	3 (6.3%)	23 (11.3%)	6 (3.3%)	31 (5.2%)	670 (9.6%)
	55-59	319 (6%)	10 (2%)	1 (0.8%)	5 (10.4%)	7 (3.4%)	4 (2.2%)	15 (2.5%)	361 (5.2%)
60+	354 (6.6%)	7 (1.4%)	1 (0.8%)	2 (4.2%)	3 (1.5%)	3 (1.6%)	19 (3.2%)	389 (5.6%)	
Infection Route	MSM	3398 (63.7%)	8 (1.6%)	6 (5%)	7 (14.6%)	2 (1%)	23 (12.6%)	111 (18.6%)	3555 (50.8%)
	Injecting Drug Use	114 (2.1%)	1 (0.2%)				2 (1.1%)	16 (2.7%)	133 (1.9%)
	Heterosexual	1585 (29.7%)	484 (95.7%)	114 (94.2%)	40 (83.3%)	197 (97%)	136 (74.7%)	369 (61.8%)	2925 (41.8%)
	Blood/Tissue	62 (1.2%)	2 (0.4%)				2 (1.1%)	3 (0.5%)	69 (1%)
	Mother to Child	66 (1.2%)	11 (2.2%)			4 (2%)	19 (10.4%)	36 (6%)	136 (1.9%)
	Undetermined	111 (2.1%)		1 (0.8%)	1 (2.1%)			62 (10.4%)	175 (2.5%)
Ethnicity	White	4366 (81.8%)	9 (1.8%)	6 (5%)	8 (16.7%)	2 (1%)	33 (18.1%)	168 (28.1%)	4592 (65.7%)
	Black Caribbean	73 (1.4%)	3 (0.6%)	2 (1.7%)	1 (2.1%)	2 (1%)	3 (1.6%)	6 (1%)	90 (1.3%)
	Black African	628 (11.8%)	480 (94.9%)	109 (90.1%)	32 (66.7%)	195 (96.1%)	129 (70.9%)	344 (57.6%)	1917 (27.4%)
	Black Other	13 (0.2%)	1 (0.2%)				1 (0.5%)	3 (0.5%)	18 (0.3%)
	Indian/Pakistani/Bangladeshi	73 (1.4%)	4 (0.8%)	2 (1.7%)	1 (2.1%)		5 (2.7%)	8 (1.3%)	93 (1.3%)
	Other Asian/Oriental	65 (1.2%)	5 (1%)		4 (8.3%)	1 (0.5%)	4 (2.2%)	10 (1.7%)	89 (1.3%)
	Other/Mixed	97 (1.8%)	4 (0.8%)	2 (1.7%)	2 (4.2%)	3 (1.5%)	6 (3.3%)	21 (3.5%)	135 (1.9%)
	Unknown	21 (0.4%)					1 (0.5%)	37 (6.2%)	59 (0.8%)
Stage of HIV Disease	Asymptomatic	2712 (50.8%)	322 (63.6%)	65 (53.7%)	25 (52.1%)	104 (51.2%)	99 (54.4%)	334 (55.9%)	3661 (52.4%)
	Symptomatic	1342 (25.1%)	84 (16.6%)	23 (19%)	10 (20.8%)	41 (20.2%)	39 (21.4%)	101 (16.9%)	1640 (23.5%)
	AIDS	1117 (20.9%)	95 (18.8%)	29 (24%)	12 (25%)	54 (26.6%)	42 (23.1%)	135 (22.6%)	1484 (21.2%)
	AIDS-Related Death	6 (0.1%)				1 (0.5%)		5 (0.8%)	12 (0.2%)
	Death Unrelated to AIDS	13 (0.2%)							13 (0.2%)
	Unknown	146 (2.7%)	5 (1%)	4 (3.3%)	1 (2.1%)	3 (1.5%)	2 (1.1%)	22 (3.7%)	183 (2.6%)
Area of Residence	Cumbria	131 (2.5%)			4 (8.3%)		4 (2.2%)	4 (0.7%)	143 (2%)
	Lancashire	826 (15.5%)	20 (4%)	5 (4.1%)	1 (2.1%)	15 (7.4%)	15 (8.2%)	29 (4.9%)	911 (13%)
	Greater Manchester	3081 (57.7%)	280 (55.3%)	110 (90.9%)	34 (70.8%)	171 (84.2%)	147 (80.8%)	453 (75.9%)	4276 (61.1%)
	Merseyside	660 (12.4%)	185 (36.6%)	3 (2.5%)	3 (6.3%)	14 (6.9%)	6 (3.3%)	68 (11.4%)	939 (13.4%)
	Cheshire	397 (7.4%)	13 (2.6%)	2 (1.7%)	1 (2.1%)	1 (0.5%)	6 (3.3%)	12 (2%)	432 (6.2%)
	Out of Region*	197 (3.7%)	7 (1.4%)		5 (10.4%)	2 (1%)	3 (1.6%)	18 (3%)	232 (3.3%)
	Abroad	2 (0.04%)					1 (0.5%)		3 (0.04%)
	Unknown**	42 (0.8%)	1 (0.2%)	1 (0.8%)				13 (2.2%)	57 (0.8%)
Total (100%)		5336	506	121	48	203	182	597	6993

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

Age groups refer to the ages of individuals at the end of December 2011, or at death.

* Includes Isle of Man.

** Includes four people of no fixed abode and three people who declined to give any residential information.

***Includes residency status defined as 'Migrant worker', 'Dependant' and 'Other'.

Table 3.14: Primary care trust of residence of all HIV and AIDS cases by infection route, 2011

PCT of Residence	Infection Route						Total (100%)
	MSM	Injecting Drug Use	Heterosexual	Blood/Tissue	Mother to Child	Undetermined	
Cumbria	70 (49%)	3 (2.1%)	58 (40.6%)	3 (2.1%)	2 (1.4%)	7 (4.9%)	143
North Lancashire	80 (59.3%)	1 (0.7%)	50 (37%)	1 (0.7%)	2 (1.5%)	1 (0.7%)	135
Blackpool	253 (79.3%)	2 (0.6%)	58 (18.2%)	4 (1.3%)	1 (0.3%)	1 (0.3%)	319
Blackburn with Darwen	28 (27.5%)	4 (3.9%)	62 (60.8%)	2 (2%)	2 (2%)	4 (3.9%)	102
East Lancashire	78 (53.4%)	2 (1.4%)	57 (39%)	3 (2.1%)	2 (1.4%)	4 (2.7%)	146
Central Lancashire	101 (49.8%)	4 (2%)	86 (42.4%)	2 (1%)	5 (2.5%)	5 (2.5%)	203
Unknown Lancashire	5 (83.3%)		1 (16.7%)				6
Ashton, Leigh & Wigan	82 (43.4%)	1 (0.5%)	96 (50.8%)	3 (1.6%)	4 (2.1%)	3 (1.6%)	189
Bolton	91 (32.6%)	7 (2.5%)	162 (58.1%)	4 (1.4%)	12 (4.3%)	3 (1.1%)	279
Bury	118 (57.3%)	4 (1.9%)	76 (36.9%)	1 (0.5%)	3 (1.5%)	4 (1.9%)	206
Heywood, Middleton & Rochdale	52 (30.6%)	9 (5.3%)	96 (56.5%)	3 (1.8%)	6 (3.5%)	4 (2.4%)	170
Oldham	54 (35.1%)	5 (3.2%)	89 (57.8%)	2 (1.3%)	3 (1.9%)	1 (0.6%)	154
Salford	432 (65.9%)	9 (1.4%)	201 (30.6%)	2 (0.3%)	5 (0.8%)	7 (1.1%)	656
Manchester	1038 (52%)	43 (2.2%)	847 (42.4%)	6 (0.3%)	40 (2%)	24 (1.2%)	1998
Tameside & Glossop	97 (50.3%)	4 (2.1%)	83 (43%)		3 (1.6%)	6 (3.1%)	193
Trafford	126 (53.2%)	5 (2.1%)	92 (38.8%)	4 (1.7%)	6 (2.5%)	4 (1.7%)	237
Stockport	118 (62.1%)	3 (1.6%)	55 (28.9%)	3 (1.6%)	5 (2.6%)	6 (3.2%)	190
Unknown Greater Manchester	11 (68.8%)		5 (31.3%)				16
Sefton	37 (33.3%)	8 (7.2%)	51 (45.9%)	2 (1.8%)	1 (0.9%)	12 (10.8%)	111
Liverpool	150 (30.2%)	7 (1.4%)	290 (58.4%)	3 (0.6%)	11 (2.2%)	36 (7.2%)	497
Knowsley	20 (60.6%)	1 (3%)	9 (27.3%)			3 (9.1%)	33
Wirral	69 (40.8%)	2 (1.2%)	90 (53.3%)	2 (1.2%)	3 (1.8%)	3 (1.8%)	169
Halton & St Helens	71 (60.2%)	1 (0.8%)	38 (32.2%)	1 (0.8%)	1 (0.8%)	6 (5.1%)	118
Unknown Merseyside	17 (29.3%)		38 (65.5%)			3 (5.2%)	58
Warrington	45 (51.7%)		38 (43.7%)	1 (1.1%)	2 (2.3%)	1 (1.1%)	87
Western Cheshire	67 (54.5%)	2 (1.6%)	48 (39%)	1 (0.8%)	5 (4.1%)		123
Central and Eastern Cheshire	100 (59.5%)	1 (0.6%)	56 (33.3%)	4 (2.4%)		7 (4.2%)	168
Unknown Cheshire	4 (57.1%)		3 (42.9%)				7
Out of Region	108 (54.8%)	2 (1%)	59 (29.9%)	6 (3%)	11 (5.6%)	11 (5.6%)	197
Isle of Man	10 (43.5%)		12 (52.2%)	1 (4.3%)			23
Abroad	1 (33.3%)		2 (66.7%)				3
Unknown*	22 (38.6%)	3 (5.3%)	17 (29.8%)	5 (8.8%)	1 (1.8%)	9 (15.8%)	57
Total	3555 (50.8%)	133 (1.9%)	2925 (41.8%)	69 (1%)	136 (1.9%)	175 (2.5%)	6993

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

* Includes four people of no fixed abode and three people who declined to give any residential information.

Table 3.15: Primary care trust of residence of all HIV and AIDS cases by stage of disease, 2011

PCT of Residence	Infection Route						Total (100%)
	Asymptomatic	Symptomatic	AIDS	AIDS-Related Death	Death Unrelated to AIDS	Unknown	
Cumbria	81 (56.6%)	26 (18.2%)	34 (23.8%)			2 (1.4%)	143
North Lancashire	56 (41.5%)	36 (26.7%)	33 (24.4%)		1 (0.7%)	9 (6.7%)	135
Blackpool	108 (33.9%)	107 (33.5%)	74 (23.2%)	1 (0.3%)	3 (0.9%)	26 (8.2%)	319
Blackburn with Darwen	51 (50%)	30 (29.4%)	18 (17.6%)			3 (2.9%)	102
East Lancashire	59 (40.4%)	50 (34.2%)	33 (22.6%)		1 (0.7%)	3 (2.1%)	146
Central Lancashire	92 (45.3%)	63 (31%)	43 (21.2%)	1 (0.5%)		4 (2%)	203
Unknown Lancashire	3 (50%)	2 (33.3%)	1 (16.7%)				6
Ashton, Leigh & Wigan	121 (64%)	30 (15.9%)	37 (19.6%)	1 (0.5%)			189
Bolton	190 (68.1%)	33 (11.8%)	54 (19.4%)			2 (0.7%)	279
Bury	97 (47.1%)	67 (32.5%)	40 (19.4%)		1 (0.5%)	1 (0.5%)	206
Heywood, Middleton & Rochdale	82 (48.2%)	36 (21.2%)	45 (26.5%)			7 (4.1%)	170
Oldham	85 (55.2%)	32 (20.8%)	36 (23.4%)			1 (0.6%)	154
Salford	372 (56.7%)	153 (23.3%)	120 (18.3%)	2 (0.3%)	1 (0.2%)	8 (1.2%)	656
Manchester	1024 (51.3%)	489 (24.5%)	436 (21.8%)	4 (0.2%)	1 (0.1%)	44 (2.2%)	1998
Tameside & Glossop	93 (48.2%)	57 (29.5%)	40 (20.7%)		1 (0.5%)	2 (1%)	193
Trafford	113 (47.7%)	60 (25.3%)	60 (25.3%)	1 (0.4%)		3 (1.3%)	237
Stockport	79 (41.6%)	59 (31.1%)	31 (16.3%)	2 (1.1%)		19 (10%)	190
Unknown Greater Manchester	7 (43.8%)	7 (43.8%)	1 (6.3%)			1 (6.3%)	16
Sefton	74 (66.7%)	18 (16.2%)	17 (15.3%)			2 (1.8%)	111
Liverpool	356 (71.6%)	49 (9.9%)	81 (16.3%)			11 (2.2%)	497
Knowsley	24 (72.7%)	4 (12.1%)	5 (15.2%)				33
Wirral	56 (33.1%)	55 (32.5%)	57 (33.7%)		1 (0.6%)		169
Halton & St Helens	70 (59.3%)	22 (18.6%)	17 (14.4%)			9 (7.6%)	118
Unknown Merseyside	38 (65.5%)	6 (10.3%)	14 (24.1%)				58
Warrington	58 (66.7%)	8 (9.2%)	16 (18.4%)			5 (5.7%)	87
Western Cheshire	84 (68.3%)	19 (15.4%)	17 (13.8%)		1 (0.8%)	2 (1.6%)	123
Central and Eastern Cheshire	60 (35.7%)	55 (32.7%)	50 (29.8%)		1 (0.6%)	2 (1.2%)	168
Unknown Cheshire	4 (57.1%)	1 (14.3%)	2 (28.6%)				7
Out of Region	82 (41.6%)	50 (25.4%)	56 (28.4%)		1 (0.5%)	8 (4.1%)	197
Isle of Man	10 (43.5%)	6 (26.1%)	7 (30.4%)				23
Abroad	1 (33.3%)	1 (33.3%)	1 (33.3%)				3
Unknown*	31 (54.4%)	9 (15.8%)	8 (14%)			9 (15.8%)	57
Total	3661 (52.4%)	1640 (23.5%)	1484 (21.2%)	12 (0.2%)	13 (0.2%)	183 (2.6%)	6993

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

*Includes four people of no fixed abode and three people who declined to give any residential information.

4. Community Sector 2011

Community sector organisations have long played a fundamental role in the recognition of HIV/AIDS and in addressing the needs of HIV positive individuals^[123, 124]. They are identified in the Department of Health's AIDS Service Grant circular as key providers of social care^[125]. In north west England, community sector organisations continue to provide a wide range of services including counselling, information, training, awareness-raising campaigns, complementary therapies, advocacy, free condoms, financial assistance, fundraising, support groups and help lines. Some also offer medical services such as nurse-led sessions run by local PCT staff. The majority of organisations provide services for a variety of people living with HIV and some run special sessions for women, gay men, African people and young people. Many organisations also provide care and support to the friends and family of those affected by HIV. Recent research has shown that those not known to the statutory sector were significantly more deprived than those accessing both community sector and statutory services and those accessing the statutory services alone^[126]. These data show that the community sector provide services to some of the most vulnerable HIV positive people in north west England. Research into the economics of HIV in the region established that seven community sector organisations annually contribute one million pounds worth of services over and above those purchased by the statutory sector^[69]. During 2011, 2405 HIV positive individuals were reported to the North West HIV/AIDS Monitoring Unit by nine community sector organisations in the north west England. The overall number of individuals seen by the nine organisations in 2011 was 30% lower than in 2010 (2,405 compared with 3,460).

It is important to note that not all HIV/AIDS community sector organisations are able to provide attributable data (soundex, date of birth and sex) for the report. Organisations such as South Lancashire HEAL/Lancashire AIDS Line are not included in the tables, but nonetheless make a valuable contribution to the provision of care. Similarly, the amount of attributable data provided by each community sector organisation do not necessarily reflect the overall service provision since organisations often provide support for all those affected by HIV (including families, partners and carers of HIV positive people). For all community sector organisations, where information relating to infection route and ethnicity was not available, data have been updated from that provided from the statutory care providers. Matching between databases relies on the same attributable data being provided by the community and statutory sector, underlining the need for accuracy in recording of soundex codes, dates of birth and sex. Tables 4.1 and 4.2 illustrate key characteristics of all individuals accessing care from individual community sector organisations, and will include duplicate information as some individuals attend more than one organisation. Table 4.3 is

concerned with those HIV positive individuals accessing community sector care as a whole and contains only unique individuals. Where appropriate, references are made to corresponding data from previous north west reports^[1-15].

Community sector organisations have contributed data to the North West HIV/AIDS Monitoring Unit since 1995 and consistently appear to provide services to a broader population than the statutory sector alone^[1-15]. In 2011, 27% of individuals seen by community sector organisations did not access care in the statutory sector and 19% of individuals have never been treated by the statutory sector in north west England (table 4.3).

There have been some changes to the community sector organisations reporting in this chapter. Whilst Armistead (ARM) is hosted by NHS Liverpool Community Health, the services provided are non-clinical support services. ARM data have been included in the community sector section for the first time where previously they were included in the statutory data shown in chapters 2 and 3. Signposts have been added to the social service section in chapter 5. Two community service organisations have closed; Body Positive Blackpool and Body Positive North West (BPNW). The latter provided some activity data for 2011 but there has been a significant decline in numbers compared with previous years.

Table 4.1 illustrates demographic information on the number of HIV positive individuals presenting to nine community sector organisations in north west England during 2011, and the number who also presented at statutory agencies during 2011 or prior to 2011. Over half of organisations reported a decline in their client numbers compared with the previous year: Barnardo's in Manchester (BARM, 10%); the Black Health Agency (BHA, 12%); Body Positive Cheshire and North Wales (BP Cheshire N Wales, 7%); Body Positive North West (BPNW, 63%); George House Trust (GHT, 1%). Armistead (ARM, 20%) and SHIVER (118%) saw an increase in client numbers compared with the previous year. The number of clients at CLASS and Sahir House remained unchanged. There is some variation in the proportion of community sector clients also seen by the statutory sector in 2011, ranging from 82% at Sahir House in Liverpool to 50% at BHA. A significant number of individuals have never been seen at statutory centres. For example, 259 individuals at GHT have never had contact with the statutory sector. These data suggest that the community sector may be the sole provider of care and support for a substantial number of HIV positive individuals.

Table 4.1 also categorises individuals accessing community sector organisations in 2011 according to sex, age group, infection route, ethnicity and residency. The majority of clients seen at community organisations in 2011 were infected

through sex with men and for four community organisations providing data in 2011 the largest proportion of individuals presenting for support acquired HIV through sex between men (ARM, 92%; BPNW, 56%; GHT, 54% and BP Cheshire N. Wales, 54%). For a further two organisations the main route of infection was heterosexual sex (BHA, 95% and BARM, 49%) with a high proportion of female users in both of these organisations (BARM, 80% and BHA, 76%). The majority of clients seen by SHIVER (88%) were infected through injecting drug use and four out of the nine community sector organisations (BP Cheshire N. Wales, BPNW, GHT, SHIVER) reporting in 2011 had clients infected via injecting drug use.

The majority of clients at all community sector organisations were aged between 25 and 49 years. BARM treated the most clients aged 14 years or under (16 individuals, 14% of all those seen at BARM), as would be expected for an organisation specialising in the needs of young people. BARM provides support for families with young people affected by HIV. In some cases the HIV positive client is a parent, in other cases it is the young person.

The differing profiles and characteristics of HIV positive clients accessing north west community sector organisations in part reflects the different range of services provided and the varying strategies used to encourage HIV positive people to use the services.

For most community sector organisations, the majority of individuals seen in 2011 were of white ethnicity; ranging from 92% at SHIVER to 59% at GHT. BHA, a specialist service for black and minority ethnic communities, provided care for a large proportion of HIV positive black Africans (95%), as did BARM (93%). GHT provided care for the largest number of HIV positive black Africans (590 individuals), a decrease of 8% since 2010 (643 individuals).

The majority of clients seen by community sector organisations in 2011 were resident in north west England, ranging from everyone at CLASS, ARM and SHIVER to 99% at BARM and at BHA, 97% at BPNW and GHT and 96% at Sahir House. BP Cheshire and North Wales was the only community sector organisation with a significant proportion of HIV positive clients from outside the region (27%), reflecting the proximity of the organisation to Wales and the West Midlands and the specific services it provides in North Wales.

Table 4.2 illustrates the crossover of care of HIV positive individuals between north west community sector organisations and the statutory organisations during 2011. The distribution of statutory treatment and care of community sector clients in part reflects the geographical

location of the community sector organisations. However, the Infectious Disease Unit at North Manchester General Hospital (NMG), the largest HIV treatment centre in north west England (chapter 3, table 3.9), accounts for a significant number of presentations to community sector organisations across the whole region (668). In addition, there were 502 presentations to community sector organisations made by individuals also seen at the Manchester Centre for Sexual Health (MRIG) in 2011.

Table 4.3 illustrates the sex, infection route, ethnicity and residency status of HIV positive individuals accessing the community sector in north west England in 2011 by attendance at the statutory sector during the year. Unlike tables 4.1 and 4.2, this table only contains one record for each individual and represents information on unique individuals rather than all those attending all organisations. Due to the relatively high proportion of individuals for whom infection route is unknown the percentages in the table are calculated on those for whom the information is known. The predominant route of exposure to HIV amongst community sector clients during 2011 was sex between men, accounting for 53% of cases. This is almost the same proportion as were accessing the statutory sector for whom route of exposure has been determined (52%; chapter 3, table 3.2). Forty two percent of clients seen in the community sector were infected through heterosexual sex matching the 43% in the statutory sector amongst individuals with a known route of infection (chapter 3, table 3.2). This has increased since 2001 when only 19% of community sector clients were heterosexually exposed. In 2011, the majority of community sector clients were male (69%), primarily due to the relatively high rates of HIV infection acquired through sex between men. As with HIV positive individuals accessing the statutory sector (66%, chapter 3, table 3.7), the majority of community sector clients are of white ethnicity (61%) but this varies between services (table 4.1).

Table 4.3 also shows that 27% of individuals (653 out of 2,405) using community sector organisations did not attend a statutory sector service during 2011 and 19% have never been seen by the statutory sector. The profile of those who have never presented to the statutory sector is quite distinct: they are less likely to be MSM (39% compared with 56% accessing both the community and statutory sector in 2011 or prior to this) and more likely to be heterosexually infected (54% compared with 39%). They are more likely to be black African (48% compared with 30%) and more likely to be an asylum seeker (15% compared with 5%). Those who have attended the statutory sector in the past but not in 2011 are more likely to be male (73%), MSM (62%), white (63%) and a UK national (62%).

Table 4.1: Attendance by HIV positive individuals at community sector organisation in north west England, by statutory sector attendance, sex, age group, infection route, ethnicity, residency status and north west England residency, 2011

		Community Sector Organisation								
		ARM	BARM	BHA	BP Cheshire N. Wales	BPNW	CLASS	GHT	Sahir	SHIVER
Statutory Sector Attendance	Never seen	8 (22.2%)	43 (37.4%)	37 (48.7%)	46 (22.8%)	37 (9.7%)	6 (31.6%)	259 (15.5%)	32 (14.5%)	6 (25%)
	Seen in 2011	28 (77.8%)	70 (60.9%)	38 (50%)	144 (71.3%)	306 (79.9%)	12 (63.2%)	1262 (75.7%)	181 (82.3%)	17 (70.8%)
	Seen prior to 2011		2 (1.7%)	1 (1.3%)	12 (5.9%)	40 (10.4%)	1 (5.3%)	147 (8.8%)	7 (3.2%)	1 (4.2%)
Sex	Male	36 (100%)	23 (20%)	18 (23.7%)	151 (74.8%)	293 (76.5%)	13 (68.4%)	1166 (69.9%)	142 (64.5%)	17 (70.8%)
	Female		92 (80%)	58 (76.3%)	51 (25.2%)	90 (23.5%)	6 (31.6%)	502 (30.1%)	78 (35.5%)	7 (29.2%)
Age Group	0-14		16 (13.9%)			3 (0.8%)		12 (0.7%)	2 (0.9%)	
	15-19		21 (18.3%)		1 (0.5%)	3 (0.8%)	1 (5.3%)	14 (0.8%)	4 (1.8%)	
	20-24	2 (5.6%)	3 (2.6%)	3 (3.9%)	6 (3%)	6 (1.6%)	2 (10.5%)	37 (2.2%)	10 (4.5%)	3 (12.5%)
	25-29	2 (5.6%)	3 (2.6%)	3 (3.9%)	24 (11.9%)	18 (4.7%)	1 (5.3%)	134 (8%)	13 (5.9%)	3 (12.5%)
	30-34	6 (16.7%)	19 (16.5%)	9 (11.8%)	29 (14.4%)	36 (9.4%)	2 (10.5%)	275 (16.5%)	27 (12.3%)	2 (8.3%)
	35-39	10 (27.8%)	18 (15.7%)	17 (22.4%)	23 (11.4%)	61 (15.9%)	3 (15.8%)	313 (18.8%)	45 (20.5%)	2 (8.3%)
	40-44	5 (13.9%)	21 (18.3%)	15 (19.7%)	40 (19.8%)	75 (19.6%)	6 (31.6%)	322 (19.3%)	37 (16.8%)	3 (12.5%)
	45-49	6 (16.7%)	10 (8.7%)	13 (17.1%)	32 (15.8%)	84 (21.9%)	2 (10.5%)	273 (16.4%)	41 (18.6%)	6 (25%)
	50-54	3 (8.3%)	1 (0.9%)	5 (6.6%)	21 (10.4%)	54 (14.1%)	1 (5.3%)	158 (9.5%)	26 (11.8%)	2 (8.3%)
	55-59	1 (2.8%)		4 (5.3%)	11 (5.4%)	24 (6.3%)	1 (5.3%)	75 (4.5%)	11 (5%)	1 (4.2%)
60+	1 (2.8%)	3 (2.6%)	7 (9.2%)	15 (7.4%)	19 (5%)		55 (3.3%)	4 (1.8%)	2 (8.3%)	
Infection Route	MSM	33 (91.7%)			108 (53.5%)	215 (56.1%)	9 (47.4%)	895 (53.7%)	35 (15.9%)	
	Injecting drug use				1 (0.5%)	5 (1.3%)		20 (1.2%)		21 (87.5%)
	Heterosexual	2 (5.6%)	56 (48.7%)	72 (94.7%)	72 (35.6%)	110 (28.7%)	9 (47.4%)	709 (42.5%)	9 (4.1%)	2 (8.3%)
	Blood/tissue		1 (0.9%)		1 (0.5%)	7 (1.8%)		1 (0.1%)	1 (0.5%)	
	Mother to child		38 (33%)		1 (0.5%)	7 (1.8%)	1 (5.3%)	20 (1.2%)		
Undetermined	1 (2.8%)	20 (17.4%)	4 (5.3%)	19 (9.4%)	39 (10.2%)		23 (1.4%)	175 (79.5%)	1 (4.2%)	
Ethnicity	White	31 (86.1%)	3 (2.6%)	2 (2.6%)	170 (84.2%)	288 (75.2%)	15 (78.9%)	985 (59.1%)	143 (65%)	22 (91.7%)
	Black Caribbean	1 (2.8%)	1 (0.9%)	2 (2.6%)		2 (0.5%)	1 (5.3%)	13 (0.8%)	2 (0.9%)	
	Black African	2 (5.6%)	107 (93%)	72 (94.7%)	25 (12.4%)	73 (19.1%)	3 (15.8%)	590 (35.4%)	66 (30%)	2 (8.3%)
	Black Other					6 (1.6%)		21 (1.3%)	2 (0.9%)	
	Indian/Pakistani/Bangladeshi					2 (0.5%)		1 (0.1%)		
	Other Asian/Oriental	1 (2.8%)			2 (1%)	3 (0.8%)		29 (1.7%)	3 (1.4%)	
	Other/Mixed		4 (3.5%)		5 (2.5%)	9 (2.3%)		27 (1.6%)	2 (0.9%)	
Unknown	1 (2.8%)						2 (0.1%)	2 (0.9%)		
Residency	UK National	34 (94.4%)	3 (2.6%)	6 (7.9%)	177 (87.6%)	299 (78.1%)	16 (84.2%)	969 (58.1%)	41 (18.6%)	23 (95.8%)
	Asylum Seeker		33 (28.7%)	43 (56.6%)	2 (1%)	24 (6.3%)		99 (5.9%)	1 (0.5%)	1 (4.2%)
	Overseas Student		3 (2.6%)	1 (1.3%)		1 (0.3%)		23 (1.4%)		
	Migrant Worker			1 (1.3%)	2 (1%)	6 (1.6%)		97 (5.8%)	1 (0.5%)	
	Temporary Visitor		2 (1.7%)	1 (1.3%)	1 (0.5%)	4 (1%)		10 (0.6%)		
	Other		8 (7%)	8 (10.5%)	15 (7.4%)	16 (4.2%)	3 (15.8%)	118 (7.1%)	2 (0.9%)	
	Refugee	1 (2.8%)	38 (33%)	16 (21.1%)	2 (1%)	28 (7.3%)		325 (19.5%)	1 (0.5%)	
	Dependent		21 (18.3%)		3 (1.5%)	1 (0.3%)		6 (0.4%)		
	Unknown	1 (2.8%)	7 (6.1%)			4 (1%)		21 (1.3%)	174 (79.1%)	
North West Resident	Resident Outside North West		1 (0.9%)	1 (1.3%)	54 (26.7%)	11 (2.9%)		43 (2.6%)	8 (3.6%)	
	North West Resident	36 (100%)	114 (99.1%)	75 (98.7%)	148 (73.3%)	372 (97.1%)	19 (100%)	1625 (97.4%)	212 (96.4%)	24 (100%)
Total		36	115	76	202	383	19	1668	220	24

For a definition of the abbreviated community sector organisation, please refer to the glossary at the back of the report.

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

Age groups refer to the ages of individuals at the end of December 2011, or at death.

Rows cannot be totalled horizontally as some individuals may appear in more than one row or column (i.e. those attending two or more organisations), thus exaggerating the totals.

Table 4.2: Distribution of statutory treatment for HIV and AIDS cases presenting to community sector organisations, 2011

Treatment Centre	Community Sector Organisation								
	ARM	BARM	BHA	BP Cheshire N.Wales	BPNW	CLASS	GHT	Sahir	SHIVER
AHC		1						2	
APH				1			1	16	
BLAG					8		16	1	16
BLKG		1			14		24		
BOLG		1			6		54		
BURG				1	6		10	2	
BURY			2		1		17		
CHR				63			2	1	
CUMB							4		
FGH							1		
HAL	2			8			1	2	
LCN	5				1		6	23	
LEI				29			2	1	
MAC				14			4		
MGP				1	14		66		
MRIG	1	14	16	1	86		379	5	
MRIH					2		1	1	
NMG		46	14	1	131		473	3	
NMGG		1		1	5		36		
NOBL								1	
OLDG		2			5		19		
PG					16	11	21		1
RLG	24			14	5		42	127	
RLI		2			3		7		
ROCG					1		22		
SALG		2	5	1	5		73	1	
SHH	2			2	2		7	16	
SPG	1				5	1	3	12	
STP			1		5		32		
TAMG					3		11		
WAR				19	1		4	1	
WGH							4		
WITG		1	2		20		56		
WORK							2		
WYTH					1				

For a definition of the abbreviated treatment centres and community sector organisations please refer to the glossary at the back of the report. Columns cannot be totalled vertically or horizontally as some individuals may appear in more than one row or column (i.e. those attending two or more treatment locations or community sector organisations), thus exaggerating the totals.

Table 4.3: HIV and AIDS cases presenting to the community and statutory sector by sex, infection route, ethnicity and residency status, 2011

		Statutory Sector Attendance			Total
		Never Seen	Seen in 2011	Seen Prior to 2011	
Sex	Male	263 (57.8%)	1254 (71.6%)	145 (73.2%)	1662 (69.1%)
	Female	192 (42.2%)	498 (28.4%)	53 (26.8%)	743 (30.9%)
Infection Route	MSM	150 (39%)	868 (55.8%)	113 (61.7%)	1131 (53.2%)
	Injecting drug use	7 (1.8%)	36 (2.3%)	2 (1.1%)	45 (2.1%)
	Heterosexual	208 (54%)	611 (39.3%)	64 (35%)	883 (41.6%)
	Blood/tissue	2 (0.5%)	5 (0.3%)	2 (1.1%)	9 (0.4%)
	Mother to child	18 (4.7%)	36 (2.3%)	2 (1.1%)	56 (2.6%)
	Sub Total (100%)	385	1556	183	2124
	Unknown	70	196	15	281
Ethnicity	White	206 (45.5%)	1139 (65.1%)	124 (62.9%)	1469 (61.2%)
	Black Caribbean	7 (1.5%)	11 (0.6%)	1 (0.5%)	19 (0.8%)
	Black African	218 (48.1%)	527 (30.1%)	62 (31.5%)	807 (33.6%)
	Black Other	7 (1.5%)	15 (0.9%)	3 (1.5%)	25 (1%)
	Indian/Pakistani/Bangladeshi	1 (0.2%)	2 (0.1%)		3 (0.1%)
	Other Asian/Oriental	5 (1.1%)	27 (1.5%)	3 (1.5%)	35 (1.5%)
	Other/Mixed	9 (2%)	29 (1.7%)	4 (2%)	42 (1.8%)
	Sub Total (100%)	453	1750	197	2400
Unknown	2	2	1	5	
Residency	UK	193 (46.3%)	1061 (66.7%)	118 (62.1%)	1372 (62.4%)
	Asylum Seeker	63 (15.1%)	83 (5.2%)	11 (5.8%)	157 (7.1%)
	Overseas Student	13 (3.1%)	6 (0.4%)	9 (4.7%)	28 (1.3%)
	Migrant Worker	21 (5%)	66 (4.1%)	13 (6.8%)	100 (4.5%)
	Temporary Visitor	6 (1.4%)	9 (0.6%)	2 (1.1%)	17 (0.8%)
	Other	44 (10.6%)	86 (5.4%)	16 (8.4%)	146 (6.6%)
	Refugee	73 (17.5%)	260 (16.3%)	21 (11.1%)	354 (16.1%)
	Dependent	4 (1%)	20 (1.3%)		24 (1.1%)
	Sub Total (100%)	417	1591	190	2198
	Unknown	38	161	8	207
Total	455	1752	198	2405	

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

5. Social Care Providers 2011

This is the tenth year that the North West HIV/AIDS Monitoring Unit has collected data related to the care and support of HIV positive individuals who access social service departments in north west England. Four social service departments were able to participate in this report. Data were collected on 109 individuals accessing HIV care and support in 2011.

Social services provide essential care to HIV positive people by ensuring that their needs are assessed and met with regard to welfare, benefits, housing, advocacy and other necessary community-based practical support. This is a crucial service to those affected by and infected with HIV and, for some, may be the only source of care (table 5.1). In 2010/2011, £25.5 million was made available for English local authorities through the AIDS Support Grant. Of this, £2.3 million was allocated to north west local authorities (9% of the national allocation)^[125]. It is important to note that not all clients will reveal their HIV status to social services; therefore these data represent only the number of people known to be HIV positive and accessing social services.

Table 5.1 illustrates the number of HIV positive individuals presenting to each social service department who provided us with data by sex, infection route, residency status and statutory sector attendance. All four social service departments providing data in 2011 reported more men who use social services than women. In Liverpool and Stockport the majority (53% and 48%, respectively) of individuals accessing social care were infected through heterosexual sex whereas amongst those seen by Signposts, MSM was the predominant route of infection (44%).

At all social service departments the residency category with the largest proportion was UK national. However, a large proportion of individuals seen by Liverpool (32%) and Stockport (29%) were refugees and 13% seen by Stockport social service department were asylum seekers.

The majority of individuals seen by each social service department had been seen at statutory services in north west England since monitoring began in 1995. All social service departments had a number of clients who were never seen by the statutory sector ranging from 45% of individuals seen by Stockport social service department to 22% seen by Liverpool social service department. This indicates that social services may be the sole provider of care and support to some individuals who do not access statutory services.

Table 5.2 illustrates those social service attendees who also accessed north west community service organisations in 2011. Every social service department aside from Blackburn had service users who also used community service organisations, with individuals seen by each social service department who provided data attending the largest voluntary organisation; GHT.

Table 5.3 illustrates the care provided by Renaissance, part of the Manchester Methodist Housing Association, categorised by infection route, and attendance in the statutory services and community service organisations. Data have been collected from Renaissance for six of the last seven years and, for comparison, data for all six years are presented. The table shows that 44% of individuals using Renaissance housing services in 2011 also accessed community service organisations in 2011. The predominant route of infection was split equally between MSM and heterosexual (50% each). This represents a change from previous years where MSM has been the predominant route of infection. This is a similar proportion of cases infected through sex between men in the statutory sector (51%; chapter 3, table 3.2).

Table 5.1: HIV and AIDS cases presenting to five social service departments by sex, infection route, residency status and statutory sector attendance, 2011

		Social Service Department				
		Blackburn	Liverpool	Signposts	Stockport	Total
Sex	Male	1 (100%)	33 (55.9%)	14 (77.8%)	18 (58.1%)	66 (60.6%)
	Female		26 (44.1%)	4 (22.2%)	13 (41.9%)	43 (39.4%)
Infection Route	MSM		14 (23.7%)	8 (44.4%)	11 (35.5%)	33 (30.3%)
	Injecting Drug Use		1 (1.7%)			1 (0.9%)
	Heterosexual		31 (52.5%)	5 (27.8%)	15 (48.4%)	51 (46.8%)
	Mother to child			1 (5.6%)	4 (12.9%)	5 (4.6%)
	Undetermined	1 (100%)	13 (22%)	4 (22.2%)	1 (3.2%)	19 (17.4%)
Residency	UK National		33 (55.9%)	17 (94.4%)	14 (45.2%)	64 (58.7%)
	Asylum Seeker		4 (6.8%)		4 (12.9%)	8 (7.3%)
	Migrant Worker			1 (5.6%)		1 (0.9%)
	Temporary Visitor				1 (3.2%)	1 (0.9%)
	Other		2 (3.4%)			2 (1.8%)
	Refugee		19 (32.2%)		9 (29%)	28 (25.7%)
	Dependant		1 (1.7%)		3 (9.7%)	4 (3.7%)
	Unknown	1 (100%)				1 (0.9%)
Statutory Sector Attendance	Never seen	1 (100%)	13 (22%)	6 (33.3%)	14 (45.2%)	34 (31.2%)
	Seen in 2011		41 (69.5%)	10 (55.6%)	17 (54.8%)	68 (62.4%)
	Seen prior to 2011		5 (8.5%)	2 (11.1%)		7 (6.4%)
Total (100%)		1	59	18	31	109

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

Table 5.2: Distribution of social service care for HIV and AIDS cases presenting to community sector organisations, 2011

	Community Sector Organisation						Total
	ARM	BARM	BP Cheshire N. Wales	BPNW	GHT	SAHIR	
Liverpool	4		1		3	21	29
Signposts					4		4
Stockport		2	1	4	12		19

Table 5.3: HIV and AIDS care provided by Renaissance housing association by statutory and community sector attendance and infection route, 2005-2011

		Year						
		2005	2006	2007	2008	2009*	2010	2011
Statutory sector attendance	Never seen		1 (4.2%)	2 (7.7%)	4 (12.5%)		5 (25%)	4 (25%)
	Seen in year of report	18 (100%)	21 (87.5%)	23 (88.5%)	28 (87.5%)		1 (5%)	12 (75%)
	Seen prior to year of report		2 (8.3%)	1 (3.8%)			14 (70%)	
Community sector attendance in same year	Seen in year of report	13 (72.2%)	23 (95.8%)	24 (92.3%)	27 (94.4%)		8 (40%)	7 (43.8%)
	Not seen in year of report	5 (27.8%)	1 (4.2%)	2 (7.7%)	5 (15.6%)		12 (60%)	9 (56.3%)
Infection Route	MSM	12 (66.7%)	16 (66.7%)	19 (73.1%)	20 (62.5%)		12 (60%)	8 (50%)
	Injecting Drug Use	1 (5.6%)	2 (8.3%)	2 (7.7%)	1 (3.1%)		1 (5%)	
	Heterosexual	5 (27.8%)	6 (25%)	5 (19.2%)	4 (12.5%)		7 (35%)	8 (50%)
	Unknown				7 (21.9%)			
Total (100%)		18	24	26	32		20	16

* Data not available for 2009

6. HIV Trends

The North West HIV/AIDS Monitoring Unit has been collecting and collating data on the treatment and care of HIV positive individuals since 1996. This chapter presents trends broken down by county and local authority of residence. Data from 1996 cannot be presented here due to space restrictions and it should be noted that some variables were introduced to the surveillance system in later years.

The number of people accessing HIV services in north west England has increased year on year since recording began, and has risen by 590% since 1996 (from 1,014 individuals in 1996 to 6,993 individuals in 2011). There has been a continued increase (6%) in the size of the HIV positive population from 2010 to 2011. This is slightly larger than the increase seen between 2009 and 2010 (5%). The rate of increase has been slowing from its peak between 2002-2003 (23%).

The number of new cases rose annually between 2000 and 2005, with the most dramatic increase in new cases seen between 2001 and 2002 (a rise of 37%). Since 2005, the numbers of new cases have been decreasing. However, between 2010 and 2011, there was an increase in new cases of 7%.

Figure 6.1 shows proportional changes in the number of new cases from 2000 to 2011 by sexual route of HIV infection. Overall there has been an increase in new cases by 136% since 2000. However, the most striking change is the 270% increase in heterosexual infections. This is a trend that has been noted nationally^[71] and is accompanied by an increasing proportion of infections contracted overseas and amongst BME individuals.

It should be noted that although heterosexual cases now dominate the statistics, the annual number of new cases acquired through MSM has shown an 83% increase between 2000 and 2011. This stresses the need to maintain and develop prevention strategies amongst this group.

Table 6.1 shows the infection route of new HIV cases from 2002 to 2011 subdivided by county of residence. The most common route of infection has altered over the years. In 2001, MSM still accounted for the majority of new HIV infections (51%) but by 2002 heterosexual sex overtook MSM for the first time as the main mode of HIV exposure and this continued until 2009. In 2010 the gap between MSM and heterosexual cases closed with both categories accounting for 37% of the total new cases and by 2011, there were more new cases infected through MSM (44%) than heterosexual (42%) once again. The number of infections acquired through IDU has remained low over the years; this may partly be due to

the early implementation of needle and syringe programmes across north west England. The data from 2011 show an 160% increase since 2002 of new cases of HIV transmitted through injecting drug use but also a 35% decrease since its peak in 2005 (20 new cases). The number of mother to child infections has increased by 22% from 2002 to 2011, with a dip in new cases in 2010. The continuing occurrence of new cases in mother to child transmission is linked to the high number of heterosexually infected HIV positive females, which in turn is linked to migration from high prevalence countries. Were it not for large improvements in diagnosis during pregnancy and effective prevention of HIV transmission to the infant (see chapter 1), the number of infected children would be much higher. The majority of new cases of mother to child transmission have occurred overseas prior to arrival in the UK (see table 2.7).

Across counties, Cumbria saw the largest increase in new cases since 2002 (90%), followed by Cheshire, which saw a 53% increase over the same period. All counties saw an increase in numbers of new cases between 2010 and 2011. Cheshire had the greatest increase (69%), followed by Cumbria (58%). The overall number of new MSM and heterosexual cases has risen since 2002 (50% and 30%, respectively). Lancashire and Merseyside both saw a decrease in the number of new cases infected through heterosexual sex between 2010 and 2011 (13% and 15%, respectively). However, Cheshire, Cumbria and Greater Manchester all had increases of 117%, 75% and 47%, respectively. All counties, with the exception of Merseyside, saw an increase in the number of new cases infected through MSM between 2010 and 2011, the largest increase (75%) seen in Cheshire. Merseyside had a decrease of 32% in the number of new cases infected through MSM. The greatest overall number of MSM cases remains in Greater Manchester (210 individuals). This is consistent with the fact that the Manchester area has a large gay community and evidence of high levels of sexual risk behaviour (as revealed in investigations of the syphilis outbreak^[127-130]).

Figure 6.2 illustrates proportional changes in the level of antiretroviral therapy (ART) prescribed to HIV positive individuals attending treatment and care between 2000 and 2011. Individuals are categorised by the highest level of combination therapy they received in a given year. Since 2002, the number of individuals on triple and quadruple or more therapy and the number not taking any antiretroviral drugs, have all increased in line with the increasing number of HIV cases. Mono and dual therapy use have remained low, in line with research^[131] and guidelines which define triple or more antiretroviral drugs as the most effective form of therapy^[121].

The small increase in 2007 in the use of mono and dual therapy may be due to data anomalies arising from the development of electronic reporting systems. Data from 2011 show that there has been a continued increase in the proportion of individuals prescribed triple and quadruple or more therapy.

Table 6.2 refers to the level of ART received by all HIV positive individuals accessing treatment and care in between 2002 and 2011 by county of residence. Between 2002 and 2011, those receiving triple or more therapy increased from 63% to 81% of all cases. From 2002 to 2007, around one-third (36%) of HIV positive individuals did not receive ART at the reporting time. Since then, this proportion has decreased to 19% in 2010 and the same proportion in 2011. Relatively few people are in receipt of monotherapy and the number prescribed this level of therapy in 2011 has decreased by 58% from its highest level in 2007. This type of therapy is preferred during pregnancy and so its use continues to fluctuate over time. Giving HIV positive pregnant women a single antiretroviral drug (e.g. Zidovudine) during pregnancy significantly reduces the chance of the infant becoming infected^[132], and remains a valid option for treatment during pregnancy (although the latest BHIVA guidelines are more complex)^[89]. With the ongoing high number of females with HIV infection, the use of monotherapy may continue to fluctuate in the future. The proportion taking dual therapy has remained constant since 2002 (less than 1% of all cases). Between 2002 and 2011, the largest percentage increase in the number of people in treatment for HIV was seen in Merseyside (220%), followed by Greater Manchester, rising from 1,363 to 4,276 (214%), Cumbria (180%), Cheshire (163%) and Lancashire (123%).

Table 6.3 shows the number of new cases of HIV from 2006 to 2011 subdivided by local authority (LA) of residence. Caution is needed when interpreting the percentage change for LAs with a small number of new cases. For example, some of the LAs with the largest proportional increases from 2006 to 2011 (e.g. Allerdale, South Lakeland, Pendle and Preston) are those that had very few cases in 2006.

Table 6.4 shows data for all cases of HIV presenting for treatment between 2006 and 2011, subdivided by LA of residence. Again, caution is needed when interpreting the percentage changes for those LAs with relatively small numbers of HIV cases. The total numbers of HIV cases have increased annually. Of the five counties, Cumbria has seen the largest percentage increase in cases since 2006 at 61%, followed by an increase of 60% in Merseyside, 58% in Cheshire, 50% in Greater Manchester and 28% in Lancashire. Manchester LA had the largest number of HIV positive residents in 2011 (1,998 individuals; a 42% increase since 2006 and a 5% increase from 2010). None of the LAs had fewer than 15 cases of HIV in 2011. The largest percentage increases since 2006 were seen in Barrow-in-Furness (from eight to 20; 150%), Pendle (from 12 to 30; 150%) and Wigan (from 86 to 189; 120%). Since 2006 the number of HIV positive people seen in treatment centres in north west England who reside outside north west England has increased by 26% (from 187 to 235 individuals).

Figure 6.1: Percentage change in new cases of HIV by selected infection route of HIV, 2000-2011

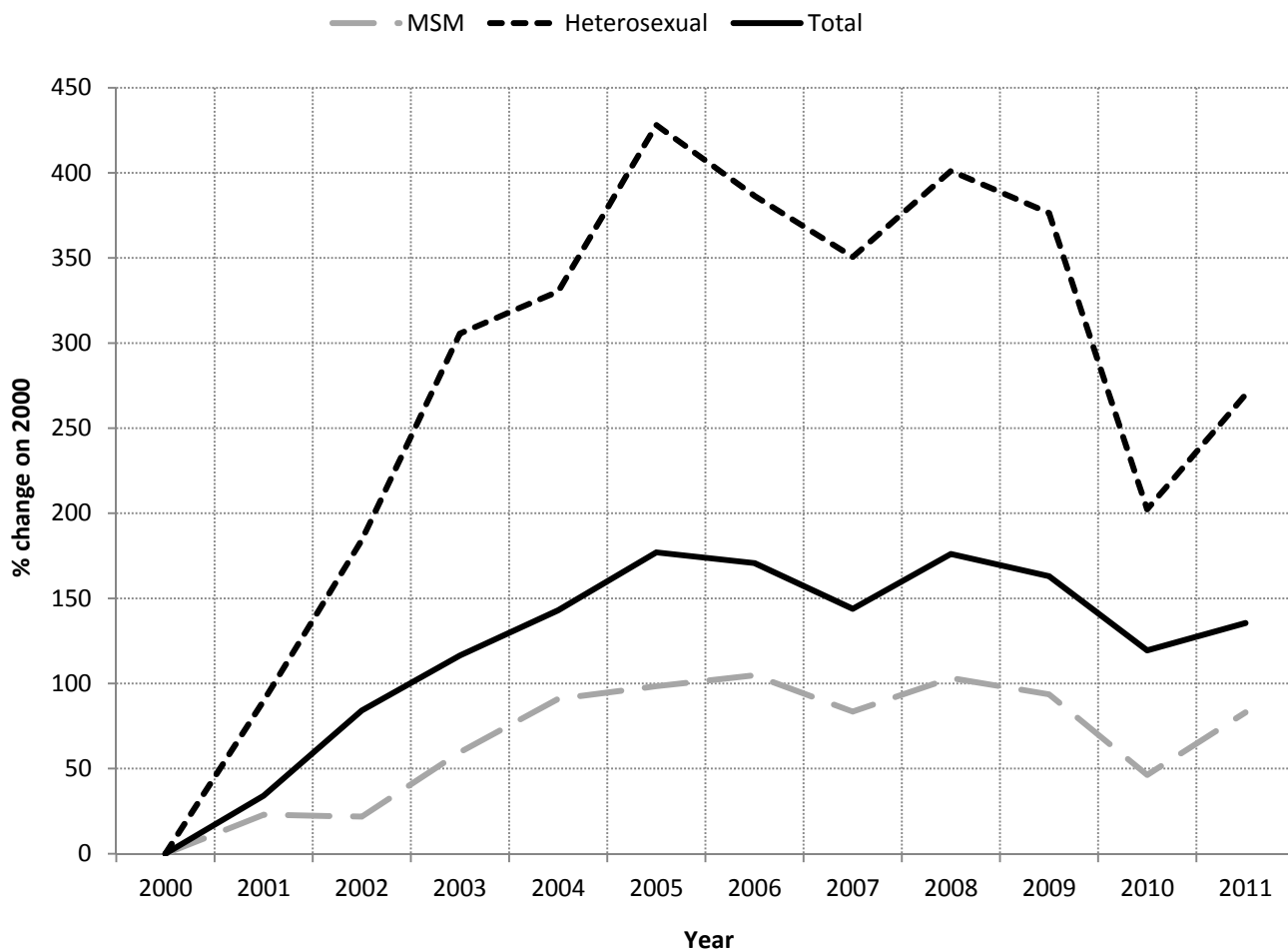


Figure 6.2: Percentage change in total cases of HIV by level of antiretroviral therapy, 2000-2011

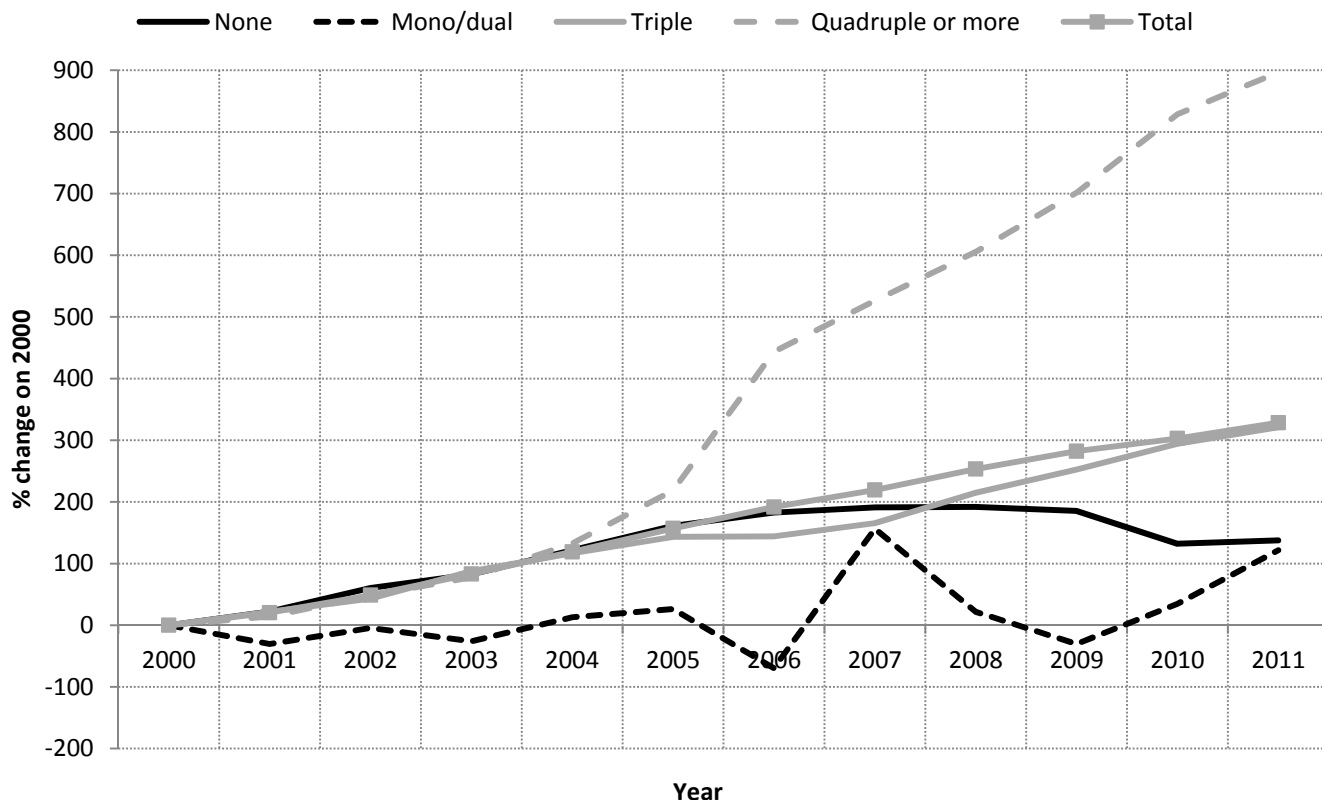


Table 6.1: Number of new HIV and AIDS cases by infection route of HIV and county of residence, 2002-2011

	Infection Route	Year										% Change 2002-2011	% Change 2010-2011
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		
Cumbria	MSM	5	4	6	10	8	8	7	11	7	8	60	14
	Injecting Drug Use	1		1			1	1			1	0	
	Heterosexual	4	4	3	1	5	6	14	4	4	7	75	75
	Blood/Tissue					1	1						
	Mother to Child						1						
	Undetermined		2	1	1	2		1	1	1	3		200
	Cumbria Total	10	10	11	12	16	17	23	16	12	19	90	58
Lancashire	MSM	24	58	64	68	48	38	59	53	37	52	117	41
	Injecting Drug Use	2		1	3	3	1		1	1	2	0	100
	Heterosexual	35	31	39	33	42	44	42	46	38	33	-6	-13
	Blood/Tissue			1				1			1		
	Mother to Child					2	1	1	2		2		
	Undetermined	26		1	5	11	5	7	4	5	3	-88	-40
	Lancashire Total	87	89	106	109	106	89	110	106	81	93	7	15
Greater Manchester	MSM	144	168	209	208	241	190	207	202	158	210	46	33
	Injecting Drug Use		3	11	9	9	7	6	6	4	8		100
	Heterosexual	145	219	226	288	278	239	269	250	137	201	39	47
	Blood/Tissue	1	3	1			2		1	1	3	200	200
	Mother to Child	8	6	10	6	12	10	10	10	4	8	0	100
	Undetermined	57	18	23	26	24	13	30	29	122	13	-77	-89
	Greater Manchester Total	355	417	480	537	564	461	522	498	426	443	25	4
Merseyside	MSM	17	21	31	18	33	43	39	49	38	26	53	-32
	Injecting Drug Use		1	2	5	2	1	2	6	1	1		0
	Heterosexual	50	68	65	81	68	63	70	91	59	50	0	-15
	Blood/Tissue												
	Mother to Child	1	1	1	3	2	5	3	3	2		-100	-100
	Undetermined	15	18	1	12	10	8	14	14	9	47	213	422
	Merseyside Total	83	109	100	119	115	120	128	163	109	124	49	14
Cheshire	MSM	23	20	10	25	26	29	38	24	16	28	22	75
	Injecting Drug Use	2	2	1	1			1	1			-100	
	Heterosexual	8	13	17	18	18	25	28	21	12	26	225	117
	Blood/Tissue			1			1						
	Mother to Child				2		3	1					
	Undetermined	7	4	1	2	4	1	3		8	7	0	-13
	Cheshire Total	40	39	30	48	48	59	71	46	36	61	53	69
Total North West Residents*	MSM	213	271	321	329	356	308	350	339	256	324	52	27
	Injecting Drug Use	5	6	16	18	14	10	10	14	6	12	140	100
	Heterosexual	243	335	351	421	411	377	423	412	250	317	30	27
	Blood/Tissue	1	3	2		1	4	1	1	1	4	300	300
	Mother to Child	9	7	12	11	16	20	15	15	6	10	11	67
	Undetermined	105	42	27	46	51	27	55	48	145	73	-30	-50
	Total	576	664	729	825	849	746	854	829	664	740	28	11
Total	MSM	229	300	359	373	385	345	382	364	275	344	50	25
	Injecting Drug Use	5	7	17	20	15	11	12	15	6	13	160	117
	Heterosexual	253	361	383	470	433	401	446	424	269	329	30	22
	Blood/Tissue	1	3	4		3	4	2	1	2	4	300	100
	Mother to Child	9	7	14	11	17	21	16	16	6	11	22	83
	Undetermined	120	47	37	54	54	35	67	61	177	88	-27	-50
	Total	617	725	814	928	907	817	925	881	735	789	28	7

Men who were exposed through sex with men (MSM) and are also injecting drug users are included in the MSM category.

*Individual county totals may not add up to Total North West Residents due to some individuals being categorised as living in the North West region but unknown area.

Table 6.2: Total number of HIV and AIDS cases by level of antiretroviral therapy and county of residence, 2002-2011

	ART	Year										% Change 2002-2011	% Change 2010-2011
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		
Cumbria	None	16	21	28	27	26	29	34	29	20	18	13	-10
	Mono		1										
	Dual									1	1		0
	Triple	31	31	29	36	43	51	59	70	81	85	174	5
	Quadruple or more	4	6	8	13	20	26	30	32	33	39	875	18
	Cumbria Total	51	59	65	76	89	106	123	131	135	143	180	6
Lancashire	None	122	129	304	207	209	190	184	163	157	152	25	-3
	Mono		2		1						1		
	Dual	8	3	1	4	1	4				1	-88	
	Triple	223	283	211	319	342	385	418	447	453	490	120	8
	Quadruple or more	55	52	42	95	157	185	212	233	261	267	385	2
	Lancashire Total	408	469	558	626	709	764	814	843	871	911	123	5
Greater Manchester	None	537	566	753	840	955	988	993	1007	782	831	55	6
	Mono	1	1	8	6	2	4	2		1	2	100	100
	Dual	7	2	5	4	1	21	2	7	7	14	100	100
	Triple	660	932	1091	1264	1207	1240	1494	1670	2038	2204	234	8
	Quadruple or more	158	192	223	353	693	822	927	1070	1152	1225	675	6
	Greater Manchester Total	1363	1693	2080	2467	2858	3075	3418	3754	3980	4276	214	7
Merseyside	None	96	149	155	181	202	211	218	217	165	169	76	2
	Mono	1	3	2	4		17	3	2	2	5	400	150
	Dual	2	1	3	2		5	13	3	13	19	850	46
	Triple	146	169	180	203	243	301	376	471	422	433	197	3
	Quadruple or more	48	59	86	118	142	130	126	155	262	313	552	19
	Merseyside Total	293	381	426	508	587	664	736	848	864	939	220	9
Cheshire	None	53	63	64	73	85	95	90	86	78	80	51	3
	Mono	1			1		1				1	0	
	Dual				2	2	1	1		1	3		200
	Triple	87	99	106	128	142	166	207	218	222	232	167	5
	Quadruple or more	23	30	28	35	45	57	70	80	103	116	404	13
	Cheshire Total	164	192	198	239	274	320	368	384	404	432	163	7
Total North West Residents*	None	825	929	1306	1328	1477	1513	1519	1502	1202	1250	52	4
	Mono	3	7	10	12	2	22	5	2	3	9	200	200
	Dual	17	6	9	12	4	31	16	10	22	38	124	73
	Triple	1147	1514	1625	1950	1977	2143	2554	2876	3216	3444	200	7
	Quadruple or more	288	339	389	614	1057	1220	1365	1570	1811	1960	581	8
	Total	2280	2795	3339	3916	4517	4929	5459	5960	6254	6701	194	7
Total	None	885	1007	1224	1441	1560	1606	1611	1575	1281	1311	48	2
	Mono	3	9	12	15	2	24	6	6	7	10	233	43
	Dual	19	8	14	14	5	35	22	10	24	41	116	71
	Triple	1218	1600	1847	2072	2080	2263	2682	3004	3360	3588	195	7
	Quadruple or more	304	364	477	653	1114	1284	1446	1643	1904	2043	572	7
	Total	2429	2988	3574	4195	4761	5212	5767	6238	6576	6993	188	6

*Individual county totals may not add up to Total North West Residents due to some individuals being categorised as living in north west England but unknown area.

Table 6.3: New cases of HIV and AIDS by local authority of residence, 2006-2011

	Local Authority of Residence	Year					% change 2006-2011	% change 2010-2011	
		2006	2007	2008	2009	2010			2011
Cumbria	Carlisle	3	3	6	7	3	3	0	0
	Allerdale	2	3	2	1	3	5	150	67
	Eden	5		3	1	1		-100	-100
	Copeland	2	2	2	2	2	4	100	100
	South Lakeland	2	5	6	1		7	250	
	Barrow-in-Furness	2	4	4	4	3		-100	-100
	Cumbria Total	16	17	23	16	12	19	19	58
Lancashire	Lancaster	7	3	5	9	4	1	-86	-75
	Wyre	8	3	5	3	3	5	-38	67
	Fylde	6	7	5	7	1	4	-33	300
	Blackpool	42	29	41	32	33	24	-43	-27
	Blackburn with Darwen	8	15	13	18	10	14	75	40
	Ribble Valley	3	1		1	1	1	-67	0
	Pendle	2	4	6	4	4	6	200	50
	Hyndburn	7	1	8			2	-71	
	Burnley	5	6	5	5	4	6	20	50
	Rossendale	2	1	2	5	4	4	100	0
	Preston	5	14	6	8	9	14	180	56
	South Ribble	3		5	4	3	6	100	100
	Chorley	6	1	7	7	3	2	-67	-33
	West Lancashire	2	4	2	2	1	3	50	200
	Unknown Lancashire				1	1	1		0
Lancashire Total	106	89	110	106	81	93	-12	15	
Greater Manchester	Wigan	18	18	18	21	24	23	28	-4
	Bolton	21	41	48	36	22	24	14	9
	Bury	27	9	26	24	12	21	-22	75
	Rochdale	23	27	20	24	16	19	-17	19
	Oldham	21	27	31	23	10	14	-33	40
	Salford	91	68	74	75	66	70	-23	6
	Manchester	283	209	249	214	211	193	-32	-9
	Tameside	20	11	20	26	13	21	5	62
	Trafford	30	32	20	18	26	31	3	19
	Stockport	27	13	13	10	24	23	-15	-4
	Unknown Greater Manchester	3	6	3	27	2	4	33	100
Greater Manchester Total	564	461	522	498	426	443	-21	4	
Merseyside	Sefton	16	13	13	31	9	18	13	100
	Liverpool	67	74	81	97	67	64	-4	-4
	Knowsley	4	4	6	11	7	4	0	-43
	Wirral	17	22	20	11	20	21	24	5
	St Helens	9	6	7	13	3	13	44	333
	Unknown Merseyside	2	1	1		3	4	100	33
Merseyside Total	115	120	128	163	109	124	8	14	
Cheshire	Halton	7	4	2	8	4	11	57	175
	Warrington	7	11	19	9	9	11	57	22
	Cheshire West and Chester*	20	26	18	15	9	22	10	144
	Cheshire East**	14	18	32	14	14	17	21	21
Cheshire Total	48	59	71	46	36	61	27	69	
Total North West Residents		849	746	854	829	664	740	-13	11
Isle of Man		4	2	2	1	1	1	-75	0
Out of Region		25	39	30	19	31	29	16	-6
Abroad			2						
Unknown		29	28	39	32	39	19	-34	-51
Total		907	817	925	881	735	789	-13	7

*Formerly Ellesmere Port & Neston, Chester and Vale Royal local authorities

**Formerly Macclesfield, Congleton and Crewe & Nantwich local authorities

Table 6.4: All cases of HIV and AIDS by local authority of residence, 2006-2011

	Local Authority of Residence	Year					% change 2006-2011	% change 2010-2011	
		2006	2007	2008	2009	2010			2011
Cumbria	Carlisle	22	26	30	36	38	37	68	-3
	Allerdale	12	16	18	19	20	22	83	10
	Eden	14	13	15	14	13	15	7	15
	Copeland	11	13	15	15	14	15	36	7
	South Lakeland	20	24	29	27	28	33	65	18
	Barrow-in-Furness	8	13	15	19	21	20	150	-5
	Unknown Cumbria	2	1	1	1	1	1	-50	0
	Cumbria Total	89	106	123	131	135	143	61	6
Lancashire	Lancaster	34	35	34	41	45	43	26	-4
	Wyre	44	46	49	45	47	49	11	4
	Fylde	42	46	49	52	48	43	2	-10
	Blackpool	269	291	315	310	312	319	19	2
	Blackburn with Darwen	60	70	78	89	98	102	70	4
	Ribble Valley	14	14	13	16	17	15	7	-12
	Pendle	12	16	20	23	24	30	150	25
	Hyndburn	26	21	28	26	26	28	8	8
	Burnley	24	27	27	28	25	34	42	36
	Rossendale	21	24	25	31	34	39	86	15
	Preston	86	96	96	99	103	111	29	8
	South Ribble	31	29	29	27	32	34	10	6
	Chorley	18	17	22	28	29	32	78	10
	West Lancashire	27	26	27	26	25	26	-4	4
	Unknown Lancashire	1	6	2	2	6	6	500	0
Lancashire Total	709	764	814	843	871	911	28	5	
Greater Manchester	Wigan	86	105	123	148	168	189	120	13
	Bolton	181	208	233	260	264	279	54	6
	Bury	139	151	166	178	184	206	48	12
	Rochdale	123	133	134	161	167	170	38	2
	Oldham	89	110	137	146	141	154	73	9
	Salford	424	443	501	542	603	656	55	9
	Manchester	1404	1505	1669	1790	1905	1998	42	5
	Tameside	111	108	129	148	157	181	63	15
	Trafford	160	179	184	198	207	237	48	14
	Stockport	135	123	134	145	167	190	41	14
	Unknown Greater Manchester	6	10	8	38	17	16	167	-6
Greater Manchester Total	2858	3075	3418	3754	3980	4276	50	7	
Merseyside	Sefton	75	83	81	106	95	111	48	17
	Liverpool	330	375	423	491	475	497	51	5
	Knowsley	26	29	38	47	36	33	27	-8
	Wirral	110	126	136	138	156	169	54	8
	St Helens	40	44	50	60	53	71	78	34
	Unknown Merseyside	6	7	8	6	49	58	867	18
	Merseyside Total	587	664	736	848	864	939	60	9
Cheshire	Halton	29	30	26	28	34	47	62	38
	Warrington	53	65	79	80	81	87	64	7
	Cheshire West and Chester*	110	135	150	153	157	154	40	-2
	Cheshire East**	81	90	113	123	132	137	69	4
	Unknown Cheshire	1					7	600	
	Cheshire Total	274	320	368	384	404	432	58	7
Total North West Residents		4517	4929	5459	5960	6254	6701	48	7
Isle of Man		19	21	23	22	29	23	21	-21
Out of Region		165	191	207	191	206	209	27	1
Abroad		3	3	1	1	3	3	0	0
Unknown		57	68	77	64	84	57	0	-32
Total		4761	5212	5767	6238	6576	6993	47	6

*Formerly Ellesmere Port & Neston, Chester and Vale Royal local authorities

**Formerly Macclesfield, Congleton and Crewe & Nantwich local authorities

Glossary of Service Providers

Statutory Treatment Centres

AHC	Alder Hey Children's Hospital, Haematology Treatment Centre, Eaton Road, Liverpool, L12 2AP. Tel: (0151) 228 4811
APH	Arrowe Park Hospital, Department of GUM, Arrowe Park Road, Upton, Wirral, Merseyside, CH49 5PE. Tel: (0151) 678 5111
BLAG	Blackpool Sexual Health Services, Whitegate Health Centre, 150 Whitegate Drive, Blackpool, FY3 9ES. Tel: (01253) 303 238
BLK	Blackburn Royal Infirmary, Haslingden Road, Blackburn, BB2 3HH. Tel: (01254) 263 555
BLKG	Blackburn Royal Infirmary, Department of GUM, Haslingden Road, Blackburn, BB2 3HH. Tel: (01254) 734 207
BOLG	Royal Bolton Hospital, Bolton Centre for Sexual Health, Minerva Road, Farnworth, Bolton, BL4 0JR. Tel: (01204) 390 390
BURG	GUM Clinic, St Peter's Centre, Church St, Burnley, Lancashire, BB11 2DL. Tel: (01282) 644 300
BURY	Fairfield General Hospital, Department of GUM, Rochdale Old Road, Bury, BL9 7TD. Tel: (0161) 764 6081
CHR	The Countess of Chester Hospital, Department of GUM, Liverpool Road, Chester, CH2 1HJ. Tel: (01244) 365 000
CUMB	Cumberland Infirmary, Department of GUM, Newtown Road, Carlisle, CA2 7HY. Tel: (01228) 523 444
FGH	Furness General Hospital, Dalton Lane, Barrow in Furness, Cumbria, LA14 4LF. Tel: (01229) 870 870
HAL	Halton General Hospital, Department of GUM, Hospital Way, Runcorn, Cheshire. WA7 2DA. Tel: (01928) 714 567
LCN	Liverpool Community HIV Specialist Nursing Team, Hartington Road Clinic, Hartington Road, Liverpool, L8 0SG. Tel: (0151) 285 2802
LEI	Leighton Hospital, Department of GUM, Middlewich Road, Crewe, Cheshire, CW1 4QJ. Tel: (01270) 255 141
MAC	Macclesfield GUM, New Alderley House, Victoria Road, Macclesfield SK10 3BL. Tel: (01625) 663 400/399
MGP	'The Docs' General Practice, Manchester, 55-59 Bloom Street, Manchester, M1 3LY. Tel: (0161) 237 9490
MRIG	Manchester Royal Infirmary, Manchester Centre for Sexual Health, Hathersage Centre, 280 Upper Brook Street, Manchester, M13 0FH. Tel: (0161) 276 5200
MRIH	Manchester Royal Infirmary, Manchester Haemophilia Comprehensive Care Centre, Oxford Road, Manchester, M13 9WL. Tel: (0161) 276 1234
NMG	North Manchester General Hospital, Infectious Disease Unit, Delaunays Road, Crumpsall, Manchester, M8 5RB. Tel: (0161) 795 4567
NMGG	North Manchester General Hospital, Department of GUM, Delaunays Road, Crumpsall, Manchester, M8 5RB. Tel: (0161) 795 4567
NOBL	Noble's Isle of Man Hospital, Department of GUM, Strang, Douglas, Isle of Man, IM4 4RJ. Tel: (01624) 650 000
OLDG	Sexual Health Oldham, Integrated Care Centre, 2 nd Floor, New Radcliffe Street, Oldham, OL1 1NL. Tel: (0300) 303 8565
PG	Royal Preston Hospital, Department of GUM, Sharoe Green Lane North, Fulwood, Preston, PR2 9HT. Tel: (01772) 716 565
RLG	Royal Liverpool University Hospital, Department of GUM and Tropical and Infectious Disease Unit, Prescott Street, Liverpool, L7 8XP. Tel: (0151) 706 2000
RLH	Royal Liverpool University Hospital, Roald Dahl Haemostasis and Thrombosis Centre, Prescott Street, Liverpool, L7 8XP. Tel: (0151) 706 2000
RLI	Royal Lancaster Infirmary, Ashton Road, Lancaster, LA1 4RP. Tel: (01524) 65944

ROCG	Bridge Sexual Health Centre/GUM Clinic, 2 nd Floor, Stonehill Block, Rochdale Infirmary, Whitehall Street, Rochdale, OL12 0NB. Tel: (01706) 517 655
SALG	The Goodman Centre for Sexual Health, Churchill Way, Salford, M6 5QX. Tel: (0161) 212 5717
SHH	St Helens Hospital, Department of GUM, Marshalls Cross Road, St Helens, WA9 3DA. Tel: (01744) 646 473
SPG	Southport & Formby District General Hospital, Department of GUM, Town Lane, Southport, Merseyside, PR8 6PN. Tel: (01704) 547 471
STP	Stepping Hill Hospital, Department of GUM, Poplar Grove, Stockport, Cheshire SK2 7JE. Tel: (0161) 483 1010
TAMG	Tameside and Glossop Centre for Sexual Health, Orange Suite, Ashton Primary Care Centre, 193 Old Street, Ashton-under-Lyne, OL6 6SR. Tel: (0161) 331 6000
TRAG	Trafford General Hospital, Department of GUM, Moorside Road, Urmston, Manchester, M41 5SL. Tel: (0161) 748 4022
WAR	Warrington Hospital, Department of GUM, Lovely Lane, Warrington, Cheshire, WA5 1QG. Tel: (01925) 635911
WGH	Westmorland General Hospital, Outpatients Department, Burton Road, Kendal, Cumbria, LA9 7RG. Tel: (01539) 732 288
WHIT	West Cumberland Hospital, Department of Haematology, Hensingham, Whitehaven, Cumbria, CA28 8JG. Tel: (01946) 693 181
WITG	Withington Hospital, South Manchester Centre for Sexual Health, Nell Lane, West Didsbury, Manchester, M20 2LR. Tel: (0161) 434 5555
WORK	Workington Community Hospital, Department of GUM, Park Lane, Workington, Cumbria, CA14 2RW. Tel: (01900) 705 000
WYTH	Wythenshawe Hospital, Southmoor Road, Wythenshawe, Manchester M23 9LT. Tel: (0161) 998 7070

Community Sector Organisations

ARM	The Armistead Centre	Tel: (0151) 227 1893
BARM	Barnardo's (Manchester)	Tel: (0161) 273 2901
BHA	The Black Health Agency	Tel: (0161) 226 9145
BP Cheshire and N. Wales	Body Positive Cheshire and North Wales	Tel: (01270) 653 150
BPNW	Body Positive North West	
CLASS	Central Lancashire HIV Advice and Support Services	Tel: (01772) 253840
GHT	George House Trust	Tel: (0161) 274 4499
Sahir	Sahir House	Tel: (0151) 237 3989
SHIVER	Sexual Health, HIV, Education and Responses	Tel: (01253) 311431

Social Service Departments

Bolton		Tel: (01204) 333365
Knowsley		Tel: (0151) 443 5626
Manchester		Tel: (0161) 822 1300
Salford		Tel: (0161) 607 1499
Signposts		Tel: (01524) 411541
Stockport		Tel: (0161) 474 3636

Additional providers of HIV care

Renaissance, Manchester Methodist Housing Association		Tel: (01204) 365 711
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List of Abbreviations

AIDS - Acquired immunodeficiency syndrome

ART – Antiretroviral therapy

BME – Black and minority ethnic groups

CHR – Clinician HIV report

CPH – The Centre for Public Health based at Liverpool John Moores University

GUM - Genito-Urinary Medicine

HIV - Human immunodeficiency virus

HPA – Health Protection Agency

IDU – Injecting drug use/user

LA – Local authority

LSOA – Lower super output area

MSM – Men who have sex with men

NASS – National Asylum Support Service

NAT – National AIDS trust

ONS – Office of national statistics

PCT – Primary care trust

SCIEH – Scottish Centre for Infection and Environmental Health

SOPHID - Survey of Prevalent HIV Infections Diagnosed

STI – Sexually transmitted infection

UNAIDS – Joint United Nations Programme on HIV/AIDS

WHO – World Health Organisation

Definition: New Cases

New cases are classed as individuals who are new to the north west database in 2011 and have not been seen at a statutory treatment centre in north west England since 1994. New cases include transfers from outside of the region so new cases in the north west treatment and care database are not necessarily new diagnoses. However, whilst slightly overestimating the number of new diagnoses, new cases remain an accurate proxy measure of new diagnoses in north west England.

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