



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive



HIV in Ireland

2012 Report

HSE-Health Protection Surveillance Centre (HPSC)

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Key Findings - 2012

In 2012, 341 people were newly diagnosed with HIV in Ireland (crude notification rate of 7.4 per 100,000 population). The annual number of newly diagnosed HIV infections had been decreasing since 2008; however in 2012 there has been a slight increase (7%) compared with 2011. A rate of 5.7 per 100,000 population (ranging from 0.9 to 27.3) was reported in the European Union and European Economic Area (EU/EEA) in 2011 (1).

The highest proportion of new diagnoses (49%) in 2012 was among men who have sex with men (MSM) and this proportion has been increasing since 2004. Male to male transmission is the predominant mode of transmission in EU/EEA countries, accounting for 39% of the total number of diagnoses in 2011 (1).

Heterosexual contact accounted for 38% of new diagnoses in 2012. Among the heterosexual cases, 63% were among individuals originating from countries with generalised epidemics¹, 8% had a high-risk partner or a partner known to be HIV positive, and 6% had a partner originating from a country with a generalised epidemic. The number of heterosexual cases originating in a country with a generalised HIV epidemic had been decreasing since 2008 but increased slightly in 2012.

Four percent of new diagnoses were among Injecting Drug Users (IDUs) and this proportion has been declining since 2004. However, recent HIV outbreaks among IDU in Greece and Romania demonstrate how infection can spread rapidly among this population, and highlight the need to maintain preventive services (2). In 2012, 69% of IDUs newly diagnosed with HIV infection were co-infected with Hepatitis C.

Five Mother to Child Transmission (MTCT) cases were newly diagnosed. The probable countries of infection for all cases were in sub-Saharan Africa. No MTCT cases were identified in children born in Ireland in 2012.

Almost half of new HIV diagnoses in 2012 (48%) were born abroad with 123 (36%) born in Ireland. Of the 162 not born in Ireland, 52% were born in sub-Saharan Africa, 15% were born in Latin America, 13% were born in Central and Eastern Europe and 12% were born in Western Europe. Information on geographic origin was unavailable for 56 cases.

Of the newly diagnosed cases in 2012 with CD4 count available (249 of 341 cases; 73%), 48% were reported as late presenters (CD4 count of <350 cells/mm³), compared with 52% in 2011 (CD4 count available for 224/319 cases; 70%). The proportion of late presenters in EU and EEA countries in 2011 was 49% (1). The proportion of those diagnosed late varied by risk group and

¹ A generalised HIV epidemic is where greater than 1% of the general population is HIV positive

was highest among heterosexual males (64%) and IDUs (63%). In 2012, 24% of people were severely immuno-compromised at diagnosis (CD4 cell count <200 cells/mm³), compared with 33% in 2011. This is the second year that information on late diagnosis, i.e. CD4 count is available nationally and the reduction seen in late diagnoses in 2012 is encouraging, but the proportion needs to continue to drop further.

In 2012 overall, 16% of individuals newly diagnosed with HIV were co-infected with one or more STI (Chlamydia/Gonorrhoea/Syphilis), 7% were co-infected with Hepatitis C and 5% with Hepatitis B. One in four MSM (27%) were co-infected with an STI while 69% of IDUs were co-infected with Hepatitis C.

Of the 341 new diagnoses, 10% were diagnosed with an AIDS defining illness at the time of their HIV diagnosis. Of the 34 cases, 19 were heterosexual, 13 were MSM and 2 were IDU. During 2012, the most commonly reported AIDS-defining illnesses were PCP (Pneumocystis pneumonia)(32%), Kaposi 's sarcoma (24%), TB (24%) and Candidiasis (12%).

Some of the changes noted this year may be due to recent changes in the surveillance system for HIV. In September 2011, the voluntary surveillance system was changed to a mandatory system when HIV became a notifiable disease in Ireland. Also, starting in January 2012, all notifications are entered in the national Computerised Infectious Disease Reporting system (CIDR).

1. HIV new diagnoses - 2012

This report presents data on cases of HIV that were diagnosed and notified in Ireland during 2012. HIV was made a notifiable disease in Ireland in September 2011 and since January 2012, notifications of HIV are reported via the Computerised Infectious Disease Reporting (CIDR) system. Further information on the surveillance system can be found at <http://www.hpsc.ie/hpsc/A-Z/HIVSTIs/HIVandAIDS/SurveillanceDocuments/File,13903,en.pdf>.

Weekly, Quarterly and Annual reports on the epidemiology of HIV in Ireland can be found at <http://www.hpsc.ie/hpsc/A-Z/HIVSTIs/HIVandAIDS/SurveillanceReports/>

In 2012, 341 people were newly diagnosed with HIV in Ireland, giving a crude notification rate of 7.4 per 100,000 population. The annual numbers newly diagnosed had decreased since 2008, however in 2012 there was a 7% increase compared with 2011 figures.

To the end of 2012, 6,629 people have been newly diagnosed with HIV in Ireland since the early 1980's. This number does not however represent the number of people living with HIV (PLHIV) in Ireland, as it does not take factors such as death and migration into account. The number of people living with HIV in Ireland is not known. A recent study found that 3,254 patients accessed HIV outpatient care in six centres in Ireland over a 12 month period in 2009/2010 (3).

Completed surveillance report forms were received for 289 (85%) of new diagnoses (as of April 13th 2013).

The key findings from 2012 are summarised in table 1 below. Figure 1 displays the trends in the rate of new diagnoses between 1991 and 2012.

Table 1: Summary table, new HIV diagnoses 2012

| | | |
|--------------------------------------|---|-----------------|
| Number of new diagnoses | | 341 |
| Rate (per 100,000 population) | | 7.4 |
| Age | Median Age | 33 years |
| | Age Range | 3 to 71 years |
| Gender | Males | 244 (71.6%) |
| | Females | 97 (28.4%) |
| | Male to female ratio | 2.5 |
| Prob Route of Transmission | MSM | 166 (48.7%) |
| | Heterosexual | 130 (38.1%) |
| | IDU | 13 (3.8%) |
| Geographic origin | Born in Ireland | 123 (36.1%) |
| | Born Abroad | 162 (47.5%) |
| Stage of Infection | Late (CD4 <350 cells/mm ³) | 119/249 (47.8%) |
| | Very late (CD4 <200 cells/mm ³) | 60/249 (24.1%) |
| | Concurrent AIDS diagnosis | 34 (10.0%) |
| Co-infections | With an STI | 53 (15.5%) |
| | With Hepatitis C | 25 (7.3%) |
| | With Hepatitis B | 17 (5.0%) |

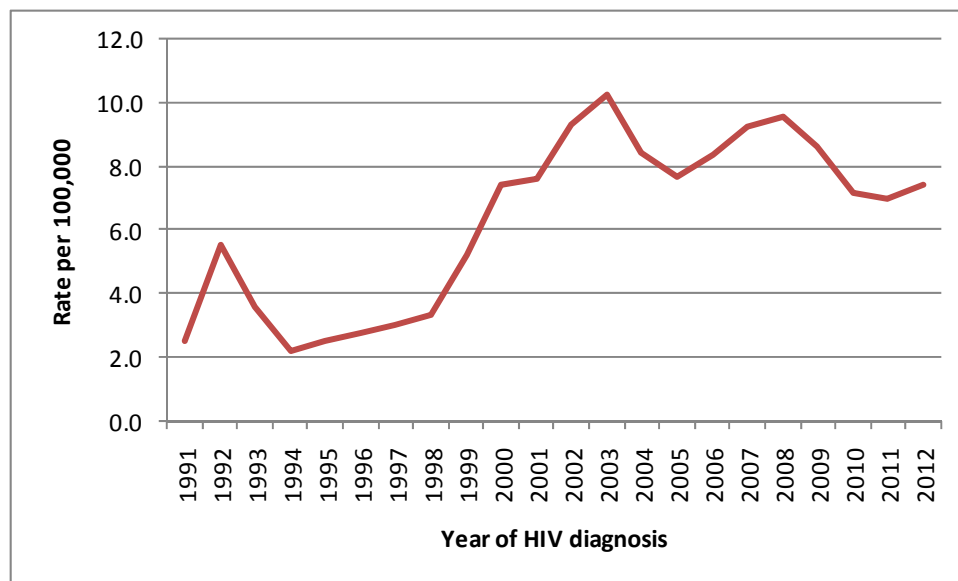


Figure 1: New HIV diagnoses (per 100,000 population), 1991 to 2012

Probable route of transmission

MSM accounted for the highest number of new diagnoses in 2012 (49%) as has been the case since 2009. Heterosexual contact accounted for 130 new diagnoses (38%) and there were 13 new diagnoses among IDU (4%).

There were five cases where the route of transmission was identified as Mother to Child transmission (MTCT). In all of these cases, the country of infection was recorded as sub-Saharan Africa.

The Rainbow Clinic in the Our Lady's Children's Hospital in Crumlin reported that there were 97 babies born to HIV infected mothers in Ireland during 2012. At the time of this report, (based on serial HIV PCR testing); 88 infants are not infected, and 9 remain of indeterminate status (i.e. do not meet the criteria for HIV infection and are <18 months at time of test). There were no mother to child transmissions in Ireland in 2012 (Personal communication; Michelle Goode).

The probable route of transmission was unknown or unreported for 7% of new diagnoses in 2012 which is less than in recent years.

Table 2 and Figure 2 show new diagnoses from 2003 to 2012 by probable route of transmission.

Table 2: New HIV diagnoses by probable route of transmission, 2003 to 2012

| Prob Route Transmission | MSM | | IDU | | Hetero | | MCT | | Other/Unk | | Total |
|-------------------------|-----|------|-----|------|--------|------|-----|-----|-----------|------|------------|
| | No. | % | No. | % | No. | % | No. | % | No. | % | |
| 2003 | 76 | 19.0 | 50 | 12.5 | 222 | 55.4 | 11 | 2.7 | 42 | 10.5 | 401 |
| 2004 | 63 | 17.6 | 74 | 20.7 | 179 | 50.0 | 3 | 0.8 | 39 | 10.9 | 358 |
| 2005 | 60 | 18.4 | 67 | 20.6 | 171 | 52.5 | 3 | 0.9 | 25 | 7.7 | 326 |
| 2006 | 89 | 25.2 | 59 | 16.7 | 181 | 51.3 | 2 | 0.6 | 22 | 6.2 | 353 |
| 2007 | 91 | 23.3 | 55 | 14.1 | 165 | 42.2 | 6 | 1.5 | 74 | 18.9 | 391 |
| 2008 | 105 | 26.0 | 40 | 9.9 | 190 | 47.0 | 7 | 1.7 | 62 | 15.3 | 404 |
| 2009 | 138 | 34.9 | 30 | 7.6 | 162 | 41.0 | 5 | 1.3 | 60 | 15.2 | 395 |
| 2010 | 134 | 40.6 | 22 | 6.7 | 124 | 37.6 | 9 | 2.7 | 41 | 12.4 | 330 |
| 2011 | 140 | 43.9 | 16 | 5.0 | 116 | 36.4 | 3 | 0.9 | 44 | 13.8 | 319 |
| 2012 | 166 | 48.7 | 13 | 3.8 | 130 | 38.1 | 5 | 1.5 | 27 | 7.9 | 341 |

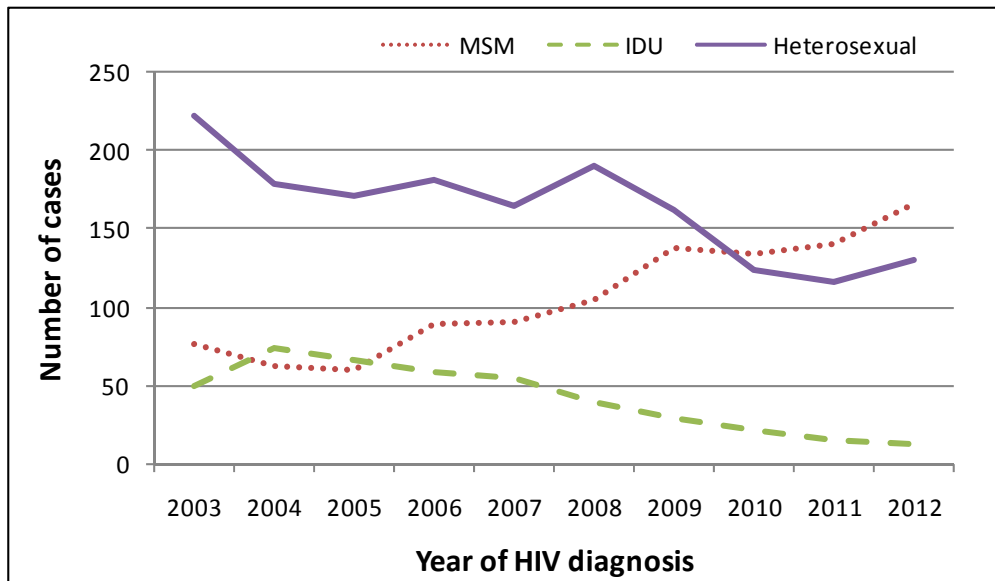


Figure 2: New HIV diagnoses by probable route of transmission, 2003 to 2012

Gender

Men accounted for 72% of new diagnoses in 2012 with women accounting for 28%. This gives a rate of HIV infection of 10.7 per 100,000 among men and 4.2 per 100,000 among women and a male-to-female ratio of 2.5.

Figure 3 describes the trends in newly diagnosed HIV infection in males and females from 2003 to 2012.

Of the 97 female cases newly diagnosed in 2012, 23% (n=22) were reported to be pregnant at HIV diagnosis and 58% (n=56) were not pregnant at diagnosis (status of the remaining 19 women was unknown).

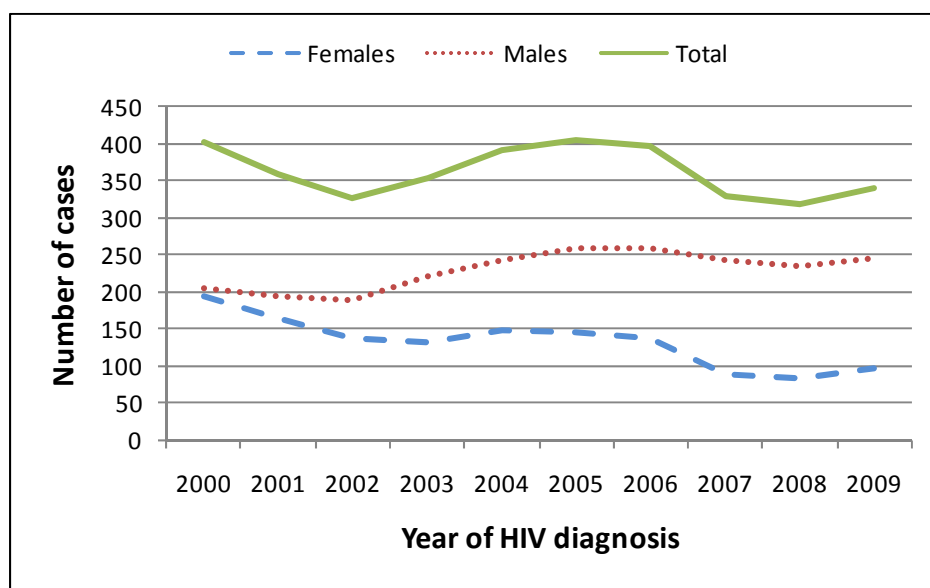


Figure 3: New HIV diagnoses by gender, 2003 to 2012

Age

In 2012, the mean age of new diagnoses was 35 years and the median age was 33 years (range 3 to 71 years).

The largest number of new diagnoses occurred among men aged 30-34 years (52 cases), followed by men aged 25-29 years (48 cases). The highest number of new diagnoses in women was in those aged 30-34 years (25 cases). Young people (aged 15-24) accounted for 11.1% (n=38) of new diagnoses and persons aged 50 and over accounted for 9%.

Geographic Origin (based on country of birth)

Of the 341 new diagnoses in 2012, 123 (36%) were born in Ireland and 162 (48%) were born abroad. Information on geographic origin was unavailable for 56 cases.

Of the 162 not born in Ireland, 84 were born in sub-Saharan Africa, 24 were born in Latin America, 21 were born in Central and Eastern Europe and 20 were born in Western Europe. The number of new diagnoses among those born in sub-Saharan Africa increased from 63 in 2011 to 84 in 2012.

Figure 4 shows the 2012 new diagnoses by probable route of transmission and geographic origin. Geographic origin varied by route of transmission. The majority of MSM were born in Ireland whereas the majority of heterosexual cases were from sub-Saharan Africa.

Further information on geographic origin, ethnicity and probable country of infection is available in Table A3, A4 and A5 in the Appendix.

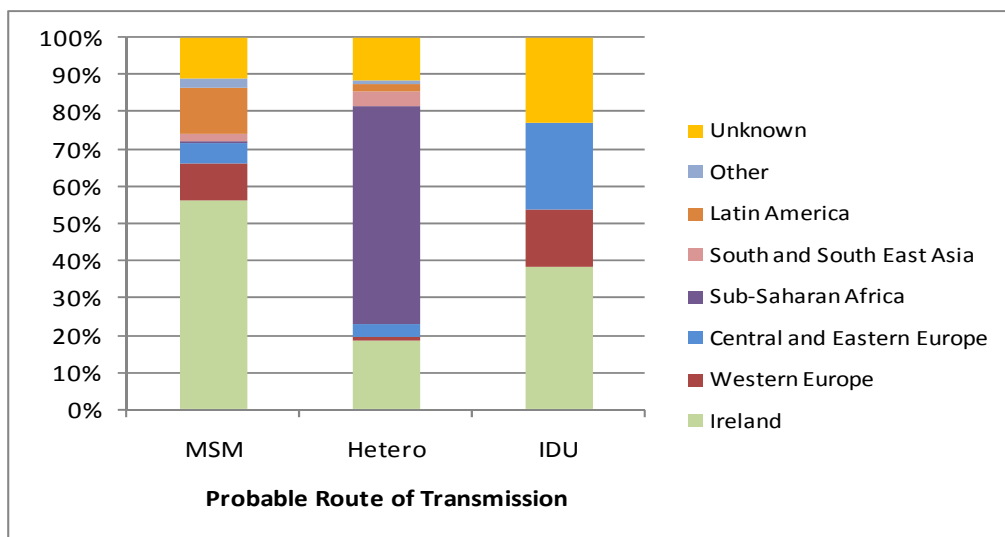


Figure 4: New HIV diagnoses by geographic origin and probable route of transmission, 2012

2. Men who have sex with men (MSM)

During 2012, there were 166 new diagnoses of HIV among MSM which is the highest number ever reported in this risk group. MSM are the population most affected by HIV in Ireland.

Between 2005 and 2012 (see Figure 5), there has been a four-fold increase in the number of new diagnoses among those aged between 25-29 and 30-34 years.

Of the 166 new diagnoses among MSM in 2012

- Median age was 32 years (range 18-71 years). The largest number of new diagnoses among MSM occurred in those aged 25-29 years followed by those aged 30-34 years. Ten percent of newly diagnosed MSM were aged over 50.
- 56% were born in Ireland, 13% in South America, 10% in Western Europe and 5% in Central and Eastern Europe.
- One in four MSM (27%) with newly diagnosed HIV infection were co-infected with an STI at the time of HIV diagnosis. 19% of newly diagnosed MSM were co-infected with Syphilis.
- Where CD4 count was reported, 39% of MSM were diagnosed late (CD4 count <350 cells/mm³) including 13% who were severely immuno-compromised (see Table 5).
- 13 MSM (8%) were diagnosed with an AIDS defining illness at the time of their HIV diagnosis in 2012. The most common indicative illnesses among MSM were PCP (54%) and Kaposi's sarcoma (38%).

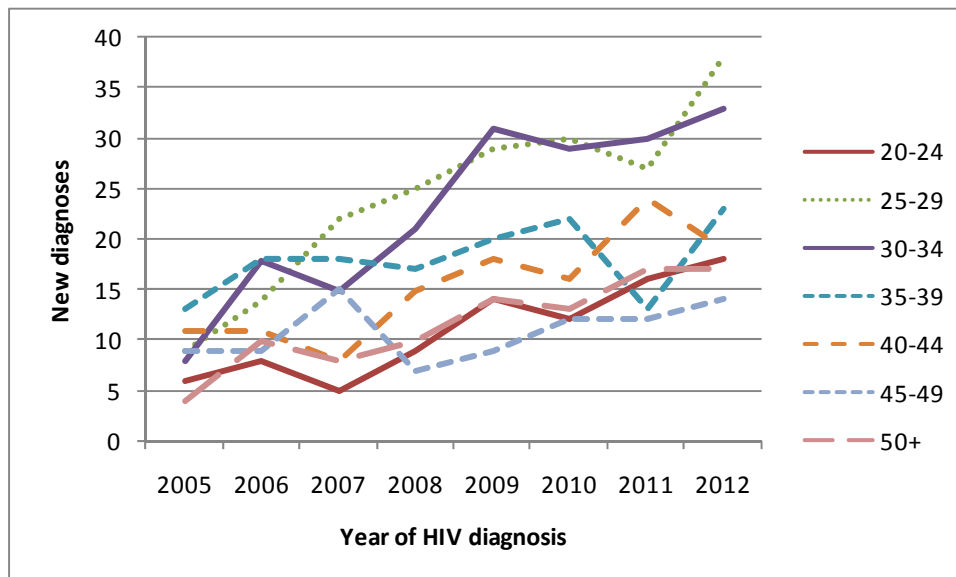


Figure 5: Trend in age group of new HIV diagnoses among MSM, 2005 to 2012

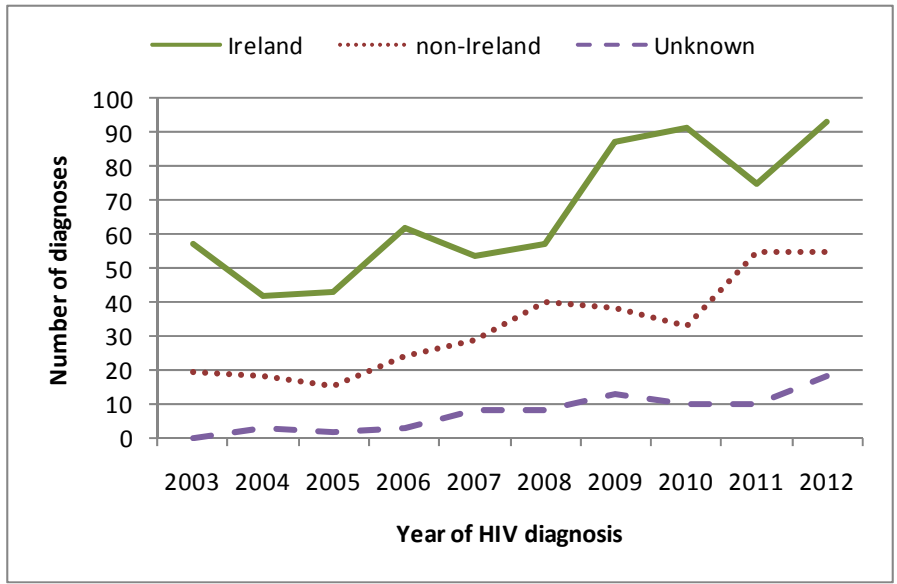


Figure 6: New HIV diagnoses among MSM by country of birth (Irish/non-Irish), 2003 to 2012

3. Heterosexuals

In 2012, 130 (38%) newly diagnosed cases were infected via heterosexual sex. This was a 12% increase from 2011. The increase in heterosexual cases is due to a rise in the number of cases originating in a county with a generalised HIV epidemic (see figure 7).

Between 2011 and 2012, the number of cases aged between 35-39 years doubled, from 16 to 32 (see Figure 8).

Of the 130 heterosexual cases newly diagnosed in 2012,

- 84 were women and 46 were men.
- Median age was 35 years (range 16 to 73), 36 years in men (range 16 to 73 years) and 33 years in women (range 20 to 55 years).
- 63% of heterosexual cases were born in a country with a generalised HIV epidemic², 7% had a high-risk partner (IDU or bisexual) or a partner known to be HIV positive and 6% had sex with a person from a country with a generalised HIV epidemic
- Where CD4 count was available, 59% of heterosexual cases were diagnosed late including 42% who were severely immuno-compromised. The proportion diagnosed late was higher in male heterosexuals (64%) than female heterosexuals (56%).
- 19 cases (15%) were diagnosed with an AIDS defining illness at the time of their HIV diagnosis in 2012. The most common indicative illnesses among heterosexuals were pulmonary TB (21%) and extrapulmonary TB (21%).

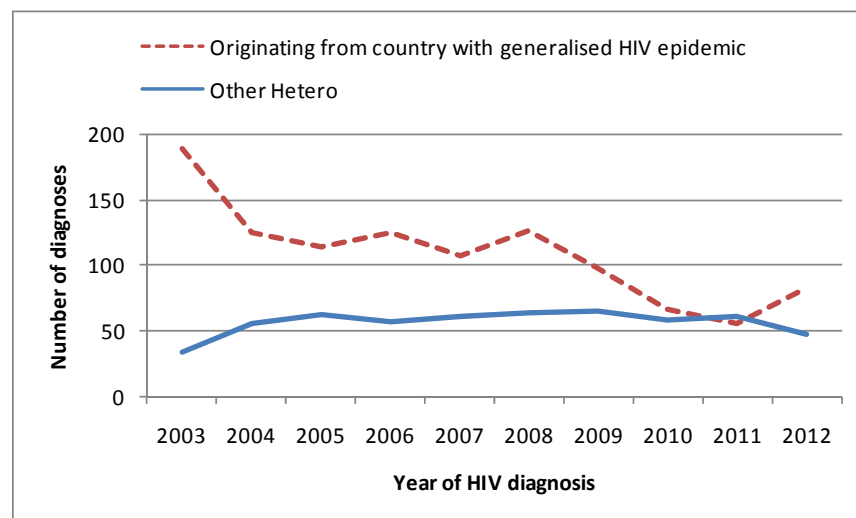


Figure 7: Trends in new diagnoses by heterosexual subcategory, 2003 to 2012

² A generalised HIV epidemic is where greater than 1% of the general population is HIV positive

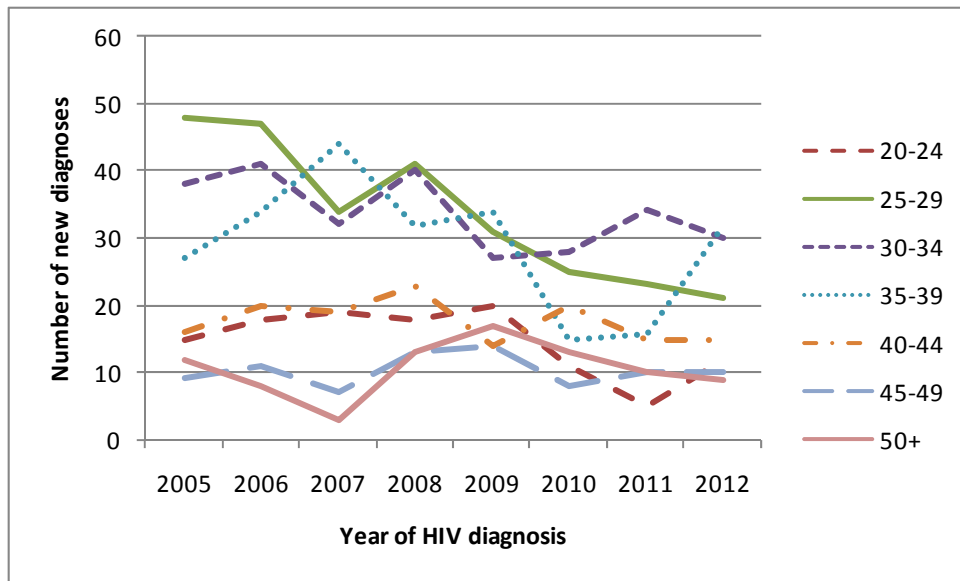


Figure 8: Trend in age group of new HIV diagnoses among heterosexual cases, 2005 to 2012

4. Injecting Drug Users (IDUs)

In 2012, 4% (13 cases) of the new diagnoses were among IDUs. The number of new diagnoses among IDUs has been steadily decreasing from 74 in 2004 to 13 in 2012 (a decline of 82%)

Of the 13 IDU cases,

- 10 were men and 3 were women
- Median age was 34 years (range 22 to 50 years)
- 5 were born in Ireland, 3 were born in Central and Eastern Europe and 2 were born in Western Europe.
- Where CD4 count was reported, 63% of IDUs in 2012 were diagnosed late including 38% who were severely immuno-compromised.
- 69% of IDUs newly diagnosed with HIV infection were co-infected with Hepatitis C.
- Two IDUs (15%) were diagnosed with an AIDS defining illness at the time of their HIV diagnosis in 2012.

5. Co-infections with STIs

People co-infected with HIV and sexually transmitted infections (STIs) are more likely to transmit HIV during sex (4).

Of the 341 new HIV diagnoses in 2012, 16% were co-infected with one or more STI (Chlamydia/Gonorrhoea/Syphilis), 7% were co-infected with Hepatitis C and 5% were co-infected with Hepatitis B³.

Co-infection rates varied by mode of transmission: One in four MSM (27%) with newly diagnosed HIV infection were co-infected with an STI compared to one in 20 heterosexuals (5%). Sixty nine percent of IDUs with newly diagnosed HIV infection were co-infected with Hepatitis C.

Table 3 presents data on co-infections with syphilis, chlamydia, gonorrhoea and Hepatitis B and C.

Table 3: Co-infections with HIV by probable route of transmission, 2012

| Co-infection with | MSM | | Hetero | | IDU | | Total | |
|--|-----|------|--------|-----|-----|------|-------|------|
| | No. | % | No. | % | No. | % | No. | % |
| Chlamydia or Gonorrhoea or Syphilis | 44 | 26.5 | 6 | 4.6 | 1 | 7.7 | 53 | 15.5 |
| Chlamydia | 10 | 6.0 | 3 | 2.3 | 0 | 0.0 | 13 | 3.8 |
| Gonorrhoea | 12 | 7.2 | 1 | 0.8 | 0 | 0.0 | 13 | 3.8 |
| Syphilis | 31 | 18.7 | 5 | 3.8 | 1 | 7.7 | 39 | 11.4 |
| Hepatitis B | 5 | 3.0 | 10 | 7.7 | 1 | 7.7 | 17 | 5.0 |
| Hepatitis C | 7 | 4.2 | 7 | 5.4 | 9 | 69.2 | 25 | 7.3 |

³ Data on co-infections are obtained from questions on the enhanced surveillance forms.

6. Stage of Infection – CD4 Counts

Late HIV diagnosis, where a person is unaware of their HIV status for many years, carries an increased risk of HIV-related illness and death (5). In addition, prompt HIV diagnosis and appropriate treatment can provide an opportunity to prevent further HIV transmission. For the purpose of this report, late stage of diagnosis was defined as a CD4 count of less than <350 cells/mm³ at diagnosis and advanced HIV infection was defined as a CD4 count of <200 cells/mm³ at diagnosis.

CD4 count at diagnosis was available for 249 of 341 cases (73%) in 2012. During 2012, 48% of cases (where CD4 count was supplied) presented at a late stage of infection. This compares with 52% in 2011 (where CD4 count was available for 224 of 319 cases (70%)). Twenty four percent were severely immuno-compromised at diagnosis compared with 33% in 2011.

Table 4 presents the 2012 data by CD4 count and sex, age group, ethnicity and probable route of transmission. The proportion diagnosed late was highest among heterosexual males (64%) and IDUs (63%) followed by heterosexual females (56%) and MSM (39%) – see figure 9. By ethnicity, late diagnosis was higher among black individuals (59%) compared with white (43%). Seventy three percent of diagnoses among older adults (aged 50+) were diagnosed late.

Table 4: CD4 counts in newly diagnosed HIV cases, by gender, probable route of transmission, age group and ethnicity, 2012

| | | CD4 Count | | |
|-----------------------------------|-----------------------|-----------|----------|----------|
| | | <200 (%) | <350 (%) | >350 (%) |
| Total | | 24.1 | 47.8 | 52.2 |
| Gender | Female | 33.3 | 55.1 | 44.9 |
| | Male | 20.6 | 45 | 55 |
| Prob Route of Transmission | MSM | 13.4 | 38.8 | 61.2 |
| | IDU | 37.5 | 62.5 | 37.5 |
| | Hetero- male | 44.4 | 63.9 | 36.1 |
| | Hetero - female | 34.8 | 56.1 | 43.9 |
| Age Group (yrs) | 20-24 | 15.4 | 26.9 | 73.1 |
| | 25-29 | 18.9 | 45.3 | 54.7 |
| | 30-39 | 23.1 | 48.4 | 51.6 |
| | 40-49 | 33.3 | 52.9 | 47.1 |
| | 50+ | 31.8 | 72.7 | 27.3 |
| Ethnicity | Black | 38.5 | 58.5 | 41.5 |
| | White | 17.3 | 43.3 | 56.7 |
| | Other/mixed ethnicity | 17.6 | 41.2 | 58.8 |

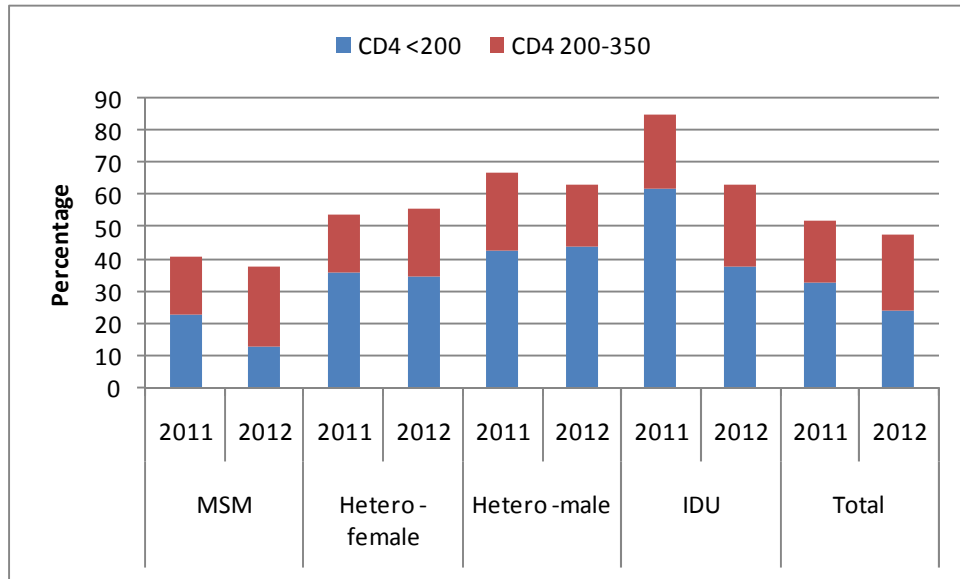


Figure 9: Late diagnosis of HIV infection (CD4 count <350) among newly diagnosed cases, by probable route of transmission, Ireland 2011 - 2012

7. Stage of Infections – AIDS

Since the start of 2012, data on AIDS cases have only been collected where an AIDS defining illness was reported at the time of HIV diagnosis. Of the 341 new HIV diagnoses in 2012, 34 (10%) were diagnosed with an AIDS defining illness at the time of their HIV diagnosis. Of the 34 cases, 19 were heterosexual, 13 were MSM and 2 were IDU. See table 5 for further details.

During 2012, the most commonly reported AIDS-defining illnesses were PCP (Pneumocystis pneumonia) (32%), Kaposi's Sarcoma (24%), Pulmonary TB (12%), Extrapulmonary TB (12%) and Oesophageal candidiasis (12%). The most common indicative diseases among MSM were PCP (54%) and Kaposi's Sarcoma (39%), for heterosexuals – pulmonary TB (21%) and extrapulmonary TB (21%).

Table 5: Summary table of reported AIDS cases, 2012

| Number of AIDS cases | 34 |
|-----------------------------------|------------|
| Heterosexual | 19 (55.9%) |
| MSM | 13 (38.2%) |
| IDU | 2 (5.8%) |
| Born in Ireland | 12 (35.3%) |
| Born in sub-Saharan Africa | 11 (32.3%) |

8. Testing history

Table 6, 7a and 7b present the testing history (previous positive test and previous negative test) of the 2012 cases.

Of the new diagnoses in 2012,

- 51 (15%) were reported to have previously tested positive in another country.
- 119 (35%) were reported to have previously tested negative, with 49% of MSM, 31% of IDUs and 25% of heterosexual cases with a previous negative test.

Table 6: 2012 new diagnoses in Ireland, with previous HIV positive test in another country

| | |
|--|-----------|
| Cases with a previous positive test | 51 |
| <i>In 2011 or 2012</i> | 10 |
| <i>In 2006-2010</i> | 25 |
| <i>Pre 2005</i> | 13 |
| <i>Unknown</i> | 3 |

Table 7a: 2012 new diagnoses in Ireland by probable route of transmission and history of a previous negative test

| Previous HIV Negative test | MSM | | Hetero | | IDU | | Other/Unk | | Total | |
|----------------------------|------------|--------------|------------|--------------|-----------|--------------|-----------|--------------|------------|--------------|
| | No. | % | No. | % | No. | % | No. | % | No. | % |
| Yes | 81 | 48.8 | 33 | 25.4 | 4 | 30.8 | 1 | 3.1 | 119 | 34.9 |
| No | 40 | 24.1 | 44 | 33.8 | 2 | 15.4 | 4 | 12.5 | 90 | 26.4 |
| Unknown | 45 | 27.1 | 53 | 40.8 | 7 | 53.8 | 27 | 84.4 | 132 | 38.7 |
| Total | 166 | 100.0 | 130 | 100.0 | 13 | 100.0 | 32 | 100.0 | 341 | 100.0 |

Table 7b: 2012 new diagnoses with a previous HIV negative test by probable route of transmission and year of test

| | MSM | Hetero | IDU |
|---|-----------|-----------|----------|
| HIV negative test In 2012 | 14 | 4 | 0 |
| HIV negative test in 2011 | 29 | 5 | 0 |
| HIV negative test pre 2011 | 36 | 21 | 4 |
| HIV negative test – year unknown | 2 | 3 | 0 |
| Total | 81 | 33 | 4 |

9. Antiretroviral (ART) treatment

Of the new diagnoses in 2012, antiretroviral treatment was indicated for 115 cases. Of the 115 where treatment was indicated, 98 individuals were commenced on ART (see Table 9).

Information on whether or not ART was indicated was unavailable for 134 cases (39.2%) in 2012.

Table 9: Antiretroviral treatment indicated/started in new diagnoses, 2012

| | Antiretroviral treatment started | | | Total |
|------------------------------------|----------------------------------|----|-----------|-------|
| | Yes | No | Not known | |
| Antiretroviral treatment indicated | 98 | 15 | 3 | 115 |

10. HIV testing – 2012

The figures on the number of HIV tests performed in 2012 were obtained from 10 laboratories who responded to a survey regarding HIV testing and are displayed in Tables 10 and 11.

It is important to note that the calculated testing rates are likely to over-estimate the true rate of testing in the population as the numbers reported are not of individuals who have been tested but of tests performed. This includes repeated tests on the same individual.

The higher number of tests in females reflects the HIV voluntary antenatal screening programme which is in place in all maternity units in Ireland.

Testing rates in Europe in 2011 ranged from 8.3 per 1000 population in Poland to 98.3 per 1,000 population in Austria (1).

Table 10: Number of HIV tests performed in 2010 to 2012

| Year | Number of labs | Total number of tests | Tests per 1000 population | Total positives | Total negatives |
|------|-----------------|-----------------------|---------------------------|-----------------|-----------------|
| 2010 | 14 | 180,055 | 39.2 | 1463 | 178,591 |
| 2011 | 14 | 184,521 | 40.2 | 1365 | 183,156 |
| 2012 | 10 ⁴ | 175,488 | 38.2 | 1291 | 174,197 |

Table 11: Number of HIV tests performed by gender, 2010 to 2012

| Year | Total number of tests | Total males | Total females | Total sex unknown |
|------|-----------------------|-------------|---------------|-------------------|
| 2010 | 180,055 | 52,115 | 126,112 | 1828 |
| 2011 | 184,521 | 55,482 | 127,490 | 1549 |
| 2012 | 175,488 | 55257 | 118455 | 1776 |

⁴ One laboratory which provided data in 2010 and 2011 no longer tests for HIV

11. Deaths due to HIV and AIDS – 2011

Please note: These data are taken from the CSO Vital Statistics 2011 Annual Report and are the latest annual figures available at this time. The Vital Statistics reports can be found on the CSO web site at <http://www.cso.ie/en/releasesandpublications/birthsdeathsandmarriages/>

Table 12 describes the number of deaths where the cause of death was reported as AIDS (HIV disease) in 2011. There were 10 deaths, 8 in males and 2 in females.

Table 12: Number of deaths where cause of death is AIDS or HIV (Source: Vital Statistics Reports, CSO).

| | Age Group (Years) | | | | Total |
|--------|----------------------|-------|-------|-------|-------|
| | 25-34 | 35-44 | 45-54 | 55-64 | |
| Male | 4 | 3 | 0 | 1 | 8 |
| Female | 0 | 1 | 0 | 1 | 2 |
| Total | 4 | 4 | 0 | 2 | 10 |

12. Technical Note

Data for this report were extracted from CIDR on 13th April 2013 and were correct at the time of publication.

Percentages are rounded up in the text and are provided to one decimal place in the tables.

The case definition for HIV can be found on the HPSC website at <http://www.hpsc.ie/hpsc/NotifiableDiseases/CaseDefinitions/>

The enhanced surveillance form for HIV can be found at <http://www.hpsc.ie/hpsc/A-Z/HIVSTIs/HIVandAIDS/SurveillanceDocuments/Surveillanceforms/>

13. References

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Appendix: 2012 Tables

Table A1: HIV diagnoses by age group and probable route of transmission, 2012

| Age Group | MSM | | Hetero - M | | Hetero - F | | IDU | | Other/Unk | | Total | |
|--------------|------------|--------------|------------|--------------|------------|--------------|-----------|--------------|-----------|--------------|------------|--------------|
| | N | % | N | % | N | % | N | % | N | % | N | % |
| <15 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 0.0 | 5 | 1.5 |
| 15-19 | 4 | 2.4 | 1 | 2.2 | 0 | 0.0 | 0 | 0.0 | 1 | 3.7 | 6 | 1.8 |
| 20-24 | 18 | 10.8 | 2 | 4.3 | 10 | 11.9 | 1 | 7.7 | 1 | 3.7 | 32 | 9.4 |
| 25-29 | 38 | 22.9 | 6 | 13.0 | 15 | 17.9 | 3 | 23.1 | 3 | 11.1 | 65 | 19.1 |
| 30-34 | 33 | 19.9 | 9 | 19.6 | 21 | 25.0 | 4 | 30.8 | 10 | 37.0 | 77 | 22.6 |
| 35-39 | 23 | 13.9 | 15 | 32.6 | 17 | 20.2 | 2 | 15.4 | 4 | 14.8 | 61 | 17.9 |
| 40-44 | 19 | 11.4 | 5 | 10.9 | 10 | 11.9 | 1 | 7.7 | 3 | 11.1 | 38 | 11.1 |
| 45-49 | 14 | 8.4 | 3 | 6.5 | 7 | 8.3 | 1 | 7.7 | 1 | 3.7 | 26 | 7.6 |
| >50 | 17 | 10.2 | 5 | 10.9 | 4 | 4.8 | 1 | 7.7 | 4 | 14.8 | 31 | 9.1 |
| Total | 166 | 100.0 | 46 | 100.0 | 84 | 100.0 | 13 | 100.0 | 32 | 100.0 | 341 | 100.0 |

Table A2: HIV diagnoses by age group and gender, 2012

| Age Group | Female | | Male | | Total |
|--------------|-----------|--------------|------------|--------------|------------|
| | N | % | N | % | |
| <15 | 2 | 2.1 | 3 | 1.2 | 5 |
| 15-19 | 0 | 0.0 | 6 | 2.5 | 6 |
| 20-24 | 12 | 12.4 | 20 | 8.2 | 32 |
| 25-29 | 17 | 17.5 | 48 | 19.7 | 65 |
| 30-34 | 25 | 25.8 | 52 | 21.3 | 77 |
| 35-39 | 18 | 18.6 | 43 | 17.6 | 61 |
| 40-44 | 10 | 10.3 | 28 | 11.5 | 38 |
| 45-49 | 8 | 8.2 | 18 | 7.4 | 26 |
| >50 | 5 | 5.2 | 26 | 10.7 | 31 |
| Total | 97 | 100.0 | 244 | 100.0 | 341 |

Table A3: HIV diagnoses by probable route of transmission and geographic origin, 2012

| Geographic Origin | MSM | | Hetero | | IDU | | Other/Unk | | Total | |
|----------------------------|------------|--------------|------------|--------------|-----------|--------------|-----------|--------------|------------|--------------|
| | N | % | N | % | N | % | N | % | N | % |
| Ireland | 93 | 56.0 | 24 | 18.5 | 5 | 38.5 | 1 | 3.1 | 123 | 36.1 |
| Western Europe | 17 | 10.2 | 1 | 0.8 | 2 | 15.4 | 0 | 0.0 | 20 | 5.9 |
| Central and Eastern Europe | 9 | 5.4 | 5 | 3.8 | 3 | 23.1 | 4 | 12.5 | 21 | 6.2 |
| Sub-Saharan Africa | 1 | 0.6 | 76 | 58.5 | 0 | 0.0 | 7 | 21.8 | 84 | 24.6 |
| South and South East Asia | 3 | 1.8 | 5 | 3.8 | 0 | 0.0 | 0 | 0.0 | 8 | 2.3 |
| Latin America | 21 | 12.7 | 3 | 2.3 | 0 | 0.0 | 0 | 0.0 | 24 | 7.0 |
| Other | 4 | 2.4 | 1 | 0.8 | 0 | 0.0 | 0 | 0.0 | 5 | 1.5 |
| Unknown | 18 | 10.8 | 15 | 11.5 | 3 | 23.1 | 20 | 62.5 | 56 | 16.4 |
| Total | 166 | 100.0 | 130 | 100.0 | 13 | 100.0 | 32 | 100.0 | 341 | 100.0 |

Table A4: HIV diagnoses by probable route of transmission and ethnicity, 2012

| Ethnicity | MSM | | Hetero | | IDU | | Other/Unk | | Total | |
|---------------|------------|--------------|------------|--------------|-----------|--------------|-----------|--------------|------------|--------------|
| | N | % | N | % | N | % | N | % | N | % |
| White Irish | 75 | 45.2 | 18 | 13.8 | 4 | 30.8 | 1 | 3.1 | 98 | 28.7 |
| White Other | 35 | 21.1 | 4 | 3.1 | 2 | 15.4 | 3 | 9.4 | 44 | 12.9 |
| Black African | 0 | 0.0 | 68 | 52.3 | 0 | 0.0 | 5 | 15.6 | 73 | 21.4 |
| Black Other | 1 | 0.6 | 4 | 3.1 | 0 | 0.0 | 0 | 0.0 | 5 | 1.5 |
| Other | 13 | 7.8 | 6 | 4.6 | 0 | 0.0 | 1 | 3.1 | 20 | 5.9 |
| Unknown | 42 | 25.3 | 30 | 23.1 | 7 | 53.8 | 22 | 68.8 | 101 | 29.6 |
| Total | 166 | 100.0 | 130 | 100.0 | 13 | 100.0 | 32 | 100.0 | 341 | 100.0 |

Table A5: HIV diagnoses by probable route of transmission and probable region of infection, 2012

| Probable country of infection | MSM | | Hetero | | IDU | | Other/Unk | | Total | |
|-------------------------------|------------|--------------|------------|--------------|-----------|--------------|-----------|--------------|------------|--------------|
| | No. | % | No. | % | No. | % | No. | % | No. | % |
| Ireland | 91 | 54.8 | 25 | 19.2 | 5 | 38.5 | 1 | 3.1 | 122 | 35.8 |
| Sub-Saharan Africa | 1 | 0.6 | 49 | 37.7 | 0 | 0.0 | 6 | 18.8 | 56 | 16.4 |
| Western Europe | 7 | 4.2 | 4 | 3.1 | 1 | 7.7 | 0 | 0.0 | 12 | 3.5 |
| Central and Eastern Europe | 2 | 1.2 | 2 | 1.5 | 1 | 7.7 | 1 | 3.1 | 6 | 1.8 |
| Latin America | 7 | 4.2 | 2 | 1.5 | 0 | 0.0 | 0 | 0.0 | 9 | 2.6 |
| Other | 6 | 3.6 | 5 | 3.8 | 0 | 0.0 | 0 | 0.0 | 11 | 3.2 |
| Unknown | 52 | 31.3 | 43 | 33.1 | 6 | 46.2 | 24 | 75.0 | 125 | 36.7 |
| Total | 166 | 100.0 | 130 | 100.0 | 13 | 100.0 | 32 | 100.0 | 341 | 100.0 |

Table A6: HIV diagnoses by HSE area⁵ and probable route of transmission, 2012

| HSE area | MSM | Hetero | IDU | Other/Unk | Total | Rate (per 100,000) |
|-----------------|------------|------------|-----------|-----------|------------|--------------------|
| HSE East | 127 | 88 | 10 | 19 | 244 | 15.1 |
| Other HSE areas | 39 | 42 | 3 | 13 | 97 | 3.3 |
| Total | 166 | 130 | 13 | 32 | 341 | 7.4 |

Table A7: Reason for HIV test by gender and probable route of transmission, 2012

| Reason for Test | Female | Male | Total | MSM | Hetero | IDU | Other/Unk | Total |
|----------------------------|-----------|------------|------------|------------|------------|-----------|-----------|------------|
| Antenatal | 19 | - | 19 | - | 17 | - | 2 | 19 |
| Asylum seeker screening | 11 | 3 | 14 | - | 13 | - | 1 | 14 |
| Positive partner | 7 | 16 | 23 | 12 | 10 | 1 | - | 23 |
| Risky behaviour/STI screen | 8 | 86 | 94 | 76 | 17 | 1 | - | 94 |
| Symptomatic | 19 | 54 | 73 | 35 | 33 | 5 | - | 73 |
| Other | 18 | 30 | 48 | 15 | 22 | 2 | 9 | 48 |
| Unknown | 15 | 55 | 70 | 28 | 18 | 4 | 20 | 70 |
| Total | 97 | 244 | 341 | 166 | 130 | 13 | 32 | 341 |

⁵ This is based on area of residence. If area of residence is not provided, this is based on area where HIV infection is diagnosed.