



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive



HIV in Ireland

2013 Report

HSE-Health Protection Surveillance Centre (HPSC)

25-27 Middle Gardiner Street

Dublin 1

Ireland

www.hpsc.ie

May 2014

CONTENTS

Acknowledgements	3
Suggested citation	3
Key Findings – 2013 HIV data	4
1. HIV new diagnoses - 2013	6
1.1 Gender	7
1.2 Age at diagnosis	8
1.3 Probable route of transmission	10
1.4 Geographic Origin (based on country of birth)	12
1.5 Area of residence	13
1.6 Stage of Infection – CD4 Counts	14
1.7 Stage of Infections – AIDS	16
1.8 Antiretroviral (ART) treatment	16
1.9 Co-infections with STIs	17
1.10 Previously tested positive	18
1.11 Previously tested negative	18
2. Deaths due to HIV and AIDS	19
3. Men who have sex with men (MSM)	20
4. Heterosexuals	22
5. People who inject drugs (PWID)	24
Technical Notes	25
Other sources of data	25
References	25
Appendix: 2013 Tables	26

ACKNOWLEDGEMENTS

The Health Protection Surveillance Centre (HPSC) would like to sincerely thank all who have contributed to this report – the National Virus Reference Laboratory (NVRL), Microbiology Laboratories, the Departments of Public Health, Consultants in Infectious Disease/GUM and all other clinicians involved. Data on paediatric infections were provided by the Infectious Disease Unit, Our Lady’s Hospital for Children (OLHC), Crumlin.

This report was prepared by Kate O’Donnell, Joanne Moran and Dr. Derval Igoe, May 2014.

SUGGESTED CITATION

HSE. Health Protection Surveillance Centre. HIV in Ireland, 2013. Dublin: Health Protection Surveillance Centre; 2014.

KEY FINDINGS – 2013 HIV DATA

In 2013, 344 people were newly diagnosed with HIV in Ireland, giving a rate of 7.5 per 100,000 population. Since 2010, the annual rate of new HIV diagnoses has been relatively stable in Ireland, ranging from 7.0 to 7.5 per 100,000 population.

In 2013, 75% of new HIV diagnoses were in men and 25% in women, giving a rate of 11.4 per 100,000 among men and 3.7 per 100,000 among women and a male-to-female ratio of 3:1. The median age of adult cases at HIV diagnosis was 34 years (range: 19 to 70 years). Young people (aged 15-24 years) accounted for 12% of new diagnoses and those over 50 years of age accounted for 11%.

The rate of new diagnoses (per 100,000) was highest in HSE-East (14.6 per 100,000) and lowest in the HSE-Northwest (1.9 per 100,000).

Probable route of transmission was known for 91% of new diagnoses in 2013, a similar proportion to 2012 (94%). As has been found in recent years, the highest proportion of new HIV diagnoses in 2013 was among men who have sex with men (MSM) although this proportion dropped from 49% in 2012 to 46% in 2013.

Heterosexual contact was the second most commonly reported mode of transmission, accounting for 38% of new diagnoses in 2013 (39% in 2012). Among heterosexual cases, over half (57%) were among individuals originating from countries with generalised epidemics¹, 14% had a partner originating from a country with a generalised epidemic and 7% had a high-risk partner or a partner known to be HIV positive.

Five percent of new diagnoses (18 cases) were among people who inject drugs (PWID), a similar figure to that in recent years (4% to 7% from 2010 to 2013). Of the new diagnoses among PWID, 59% were Irish-born and 18% were born in central and eastern Europe. Over 80% of PWID newly diagnosed with HIV in 2013 were co-infected with hepatitis C.

Mother to child transmission (MTCT) accounted for 0.9% of new diagnoses in 2013 (3 cases). Two cases were born in sub-Saharan Africa and one in Eastern Europe. There were no MTCT cases identified in children born in Ireland in 2013.

There was an improvement in the quality of information on stage of infection, as measured by the CD4 cell count at time of HIV diagnosis. In 2013, CD4 count was reported for 88% of cases (303/344 cases), up from 73% in 2012. Overall, 50% were reported as late presenters compared with 48% in 2012 and 52% in 2011. The proportion diagnosed late varied by risk group and was highest among heterosexuals (59% in males and females), followed by 56% among PWID and was lowest among MSM (37%). In 2013, 25% of people were severely immuno-compromised at diagnosis, compared with 24% in 2012 and 33% in 2011. Of the 344 new diagnoses, 8% were diagnosed with an AIDS defining illness at the time of their HIV diagnosis.

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

More emphasis on the benefits of early testing, and ready access to HIV testing are needed to improve the proportions presenting late, which will not only benefit the individual detected early, but reduce the likelihood of transmission to others.

Table 1: Key Points, new HIV diagnoses 2013

Number of HIV diagnoses		344
Rate of diagnoses (per 100,000 population)		7.5
Age	Median age of adult cases	34 years
	Age Range of adult cases	19 to 70 years
Gender	Males	258 (75.1%)
	Females	86 (24.9%)
	Male to female ratio	3:1
Route of Transmission	Men who have sex with men (MSM)	159 (46.2%)
	Heterosexual	131 (38.1%)
	PWID (People who inject drugs)	18 (5.2%)
	Mother to Child transmission (MTCT)	3 (0.9%)
	Other	2 (0.6%)
	Unknown	31 (9.0%)
Geographic origin	Born in Ireland	141 (41.0%)
	Born Abroad	174 (50.6%)
	Unknown	29 (8.4%)
Stage of Infection	Late (CD4 <350 cells/mm ³)	150/303 (49.5%)
	Very late (CD4 <200 cells/mm ³)	77/303 (25.4%)
	Concurrent AIDS diagnosis	27 (7.8%)

1. HIV NEW DIAGNOSES - 2013

This report presents data on cases of HIV notified in Ireland during 2013. HIV was made a notifiable disease in Ireland in September 2011 and since January 2012, cases of HIV have been notified via the national Computerised Infectious Disease Reporting (CIDR) system. Further information on the enhanced HIV surveillance system can be found at

<http://www.hpsc.ie/hpsc/A-Z/HIVSTIs/HIVandAIDS/SurveillanceDocuments/File,13903,en.pdf>.

Completed surveillance report forms were received for 313 (91%) of new diagnoses (as of May 14th 2014). Please note that information from previous years is updated on an ongoing basis in CIDR, and so information from previous years represents our current understanding and most up to date data, and may not correspond exactly with what was reported in previous annual reports. Similarly, data for 2013 may be updated further in due course and will be reported on in subsequent annual reports

In 2013, 344 people were newly diagnosed with HIV in Ireland, giving a crude notification rate of 7.5 per 100,000 population (see figure 1). This compares with 340 new diagnoses in 2012. The annual rate of newly diagnosed cases in Ireland has been stable since 2010 (ranging from 7.0 to 7.5 per 100,000). A rate of 6.6 per 100,000, ranging from 0.0 to 15.8, was reported in Western Europe in 2012 (1).

Since the early 1980's and to the end of 2013, 6,979 people have been newly diagnosed with HIV in Ireland. However, this number does not represent the number of people living with HIV (PLHIV) in Ireland, as it does not take factors such as death and migration into account. A study of the number of people engaged in HIV in care in Ireland in 2009/2010 found that 3,254 patients accessed HIV outpatient care in six centres in Ireland over a 12 month period (2).

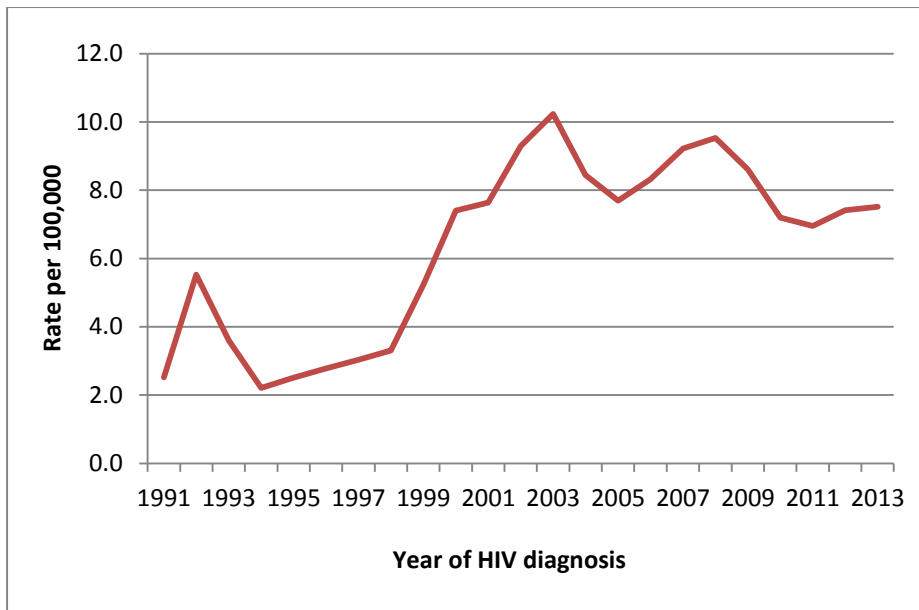


Figure 1: New HIV diagnoses (per 100,000 population), 1991 to 2013

1.1 GENDER

Two hundred and fifty eight (75%) new diagnoses were in men (11.4/100,000) and 86 (25%) were in women (3.7/100,000 population), giving a male female ratio of 3:1. The male to female ratio in western Europe was 3.1 in 2012 (1).

Of the 86 female cases newly diagnosed in 2013, information on pregnancy status was available for 64 (74%). Of these, 14 women (22%) were pregnant at HIV diagnosis

Figure 2 describes the trends in newly diagnosed HIV infection in males and females from 2003 to 2013.

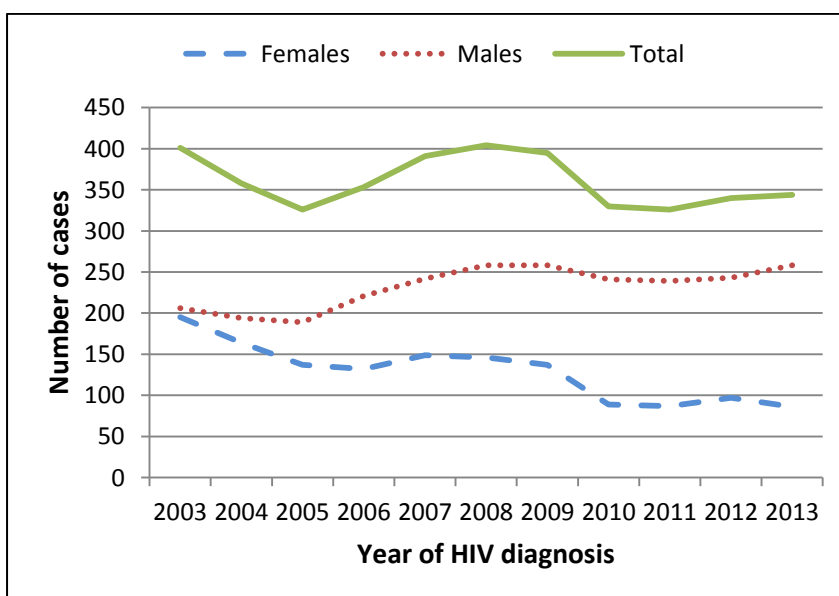


Figure 2: New HIV diagnoses by gender, 2003 to 2013

1.2 AGE AT DIAGNOSIS

The median age of adult cases at HIV diagnosis was 34 years (range: 19 to 70 years). The median age in male cases was 35 years (range: 19-70 years) and 33.5 years (range: 19 to 56 years) in female cases.

The highest proportion (38%) of new HIV diagnoses was reported in 25-34 year olds, while 12% were reported among young adults (15-24 years). There were 39 new diagnoses (11%) among those aged 50 years and older.

Figure 3 shows the rate (per 100,000 population) of new diagnoses in 2013 among males and females. The highest rate of new diagnoses in males occurred in those aged 25-29 years, followed by those aged 30-34 years. The highest rate among females was in those aged 30-34 years.

Figure 4 shows the age profile of cases among MSM, heterosexual males, heterosexual females and PWID.

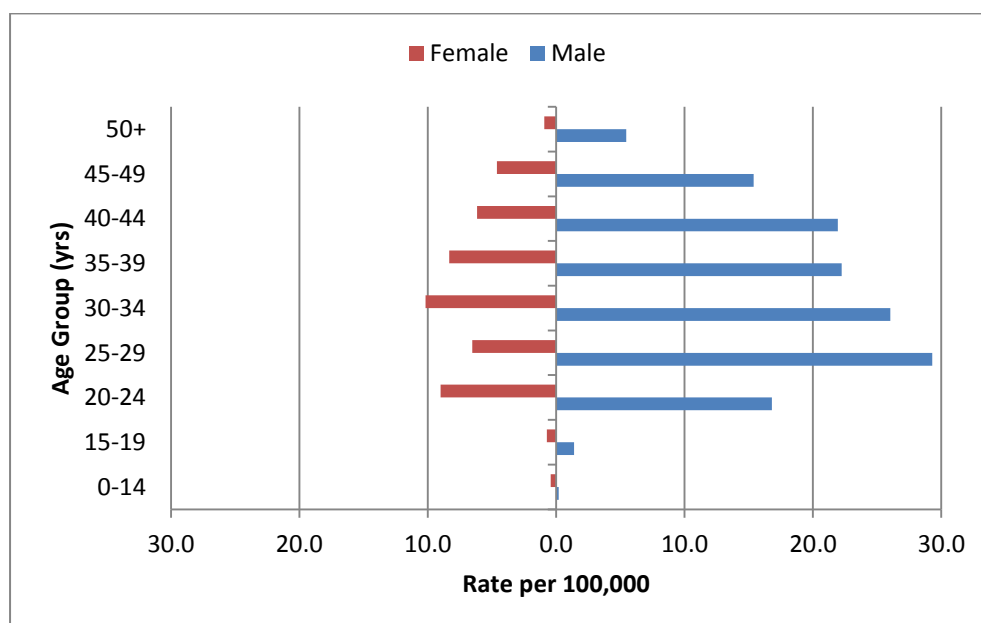


Figure 3: Rate of new HIV diagnoses (per 100,000 population) among male and females, 2013

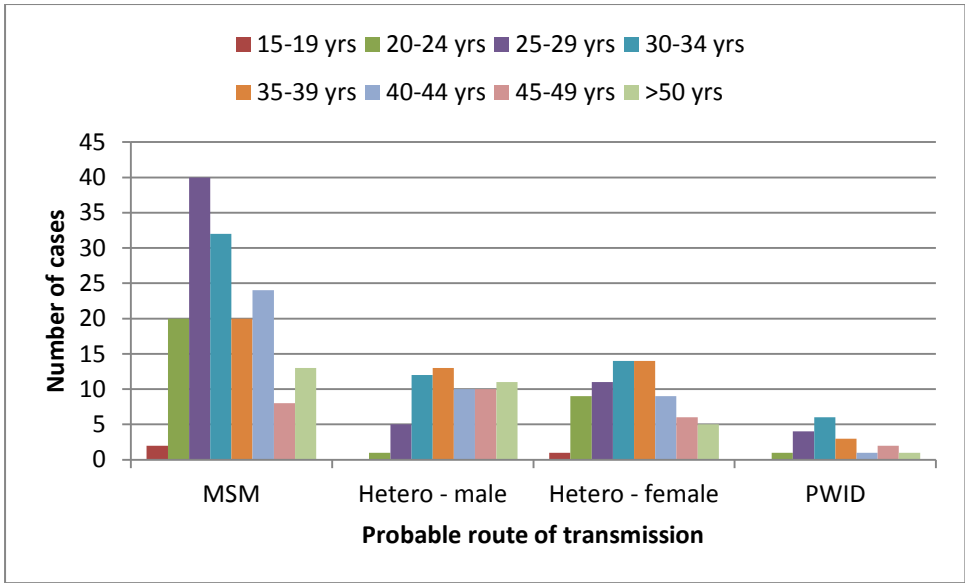


Figure 4: Age profile of new HIV diagnoses by probable route of transmission, 2013.

1.3 PROBABLE ROUTE OF TRANSMISSION

Information on probable route of transmission was available for 313 (91%) new diagnoses in 2013. MSM accounted for the highest number of new diagnoses (159, 46%) as has been the case since 2009 (table 2, figure 5). Heterosexual contact accounted for 131 new diagnoses (38%), which is very similar to recent years. There were 18 new diagnoses among PWID (5%) and three cases where the route of transmission was identified as Mother to Child transmission (MTCT). The country of infection was sub-Saharan Africa for two children and eastern Europe for one child. The probable route of transmission for two cases was reported as “Other”. For 31 new diagnoses (9%), information on the probable route of transmission was unavailable. For the purpose of this report, the categories “Other” and “MTCT” are included in the category “Other/Unk” for most of the tables and figures.

Further information on new diagnoses among MSM, heterosexuals and PWID is available later in the report (pages 20-22).

The Rainbow Clinic in the Our Lady’s Children’s Hospital in Crumlin reported that there were 93 babies born to HIV infected mothers in Ireland during 2013. At the time of this report, (based on serial HIV PCR testing); 75 infants are not infected. Eighteen infants remain of indeterminate status (i.e. do not meet the criteria for HIV infection and are <18 months at time of test), including 3 babies who died (all non-HIV related). There were no cases of mother to child transmission in Ireland in 2013 (Personal communication; Michelle Goode, May 2014).

Table 2: New HIV diagnoses by probable route of transmission, 2003 to 2013

Route of transmission	MSM		PWID		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	23	7.0	127	38.5	9	2.7	37	11.2	330
2011	145	44.5	17	5.2	125	38.3	3	0.9	36	11.0	326
2012	168	49.4	13	3.8	133	39.1	5	1.5	21	6.2	340
2013	159	46.2	18	5.2	131	38.1	3	0.9	33	9.6	344

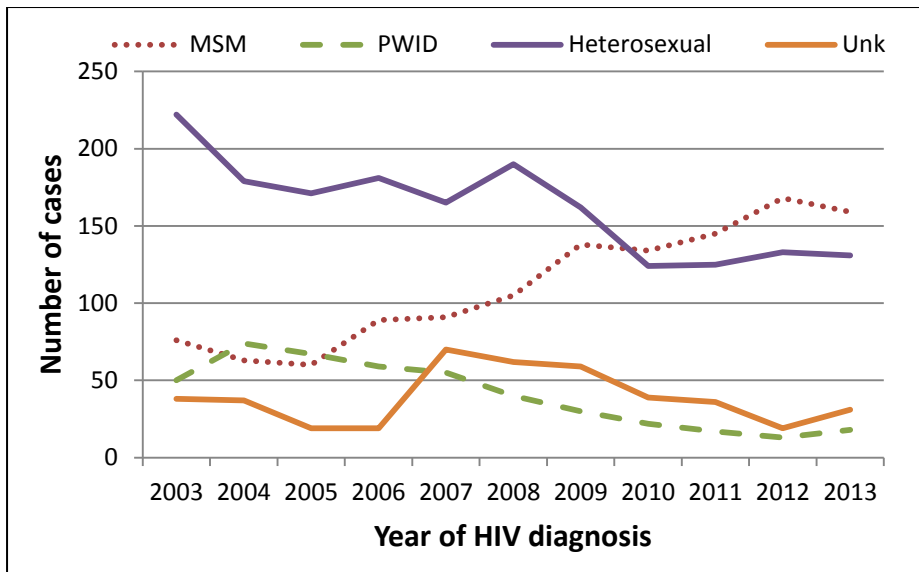


Figure 5: New HIV diagnoses by probable route of transmission, 2003 to 2013

1.4 GEOGRAPHIC ORIGIN (BASED ON COUNTRY OF BIRTH)

Of the 344 new diagnoses in 2013, 141 (41%) were born in Ireland and 174 (51%) were born abroad. Information on geographic origin was unavailable for 29 cases (8%).

Of the 174 not born in Ireland, 75 were born in sub-Saharan Africa, 34 were born in Latin America, 33 were born in central and eastern Europe and 16 were born in western Europe.

Figure 6 shows for each route of transmission, the proportions by geographic origin. Geographic origin varied by route of transmission. Just over half of MSM were born in Ireland, with 20% from Latin America, whereas just over half of heterosexual cases were from sub-Saharan Africa, and 28% were Irish born.

Further information on geographic origin, ethnicity and probable country of infection is available in Appendix 1.

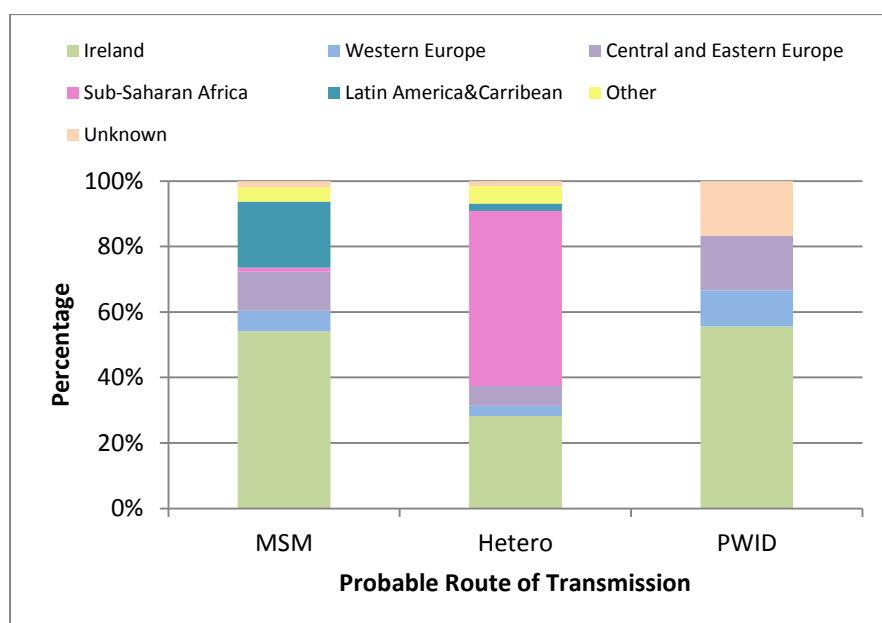


Figure 6: Proportions of new HIV diagnoses by geographic origin for each probable route of transmission, 2013

1.5 AREA OF RESIDENCE

The rate (per 100,000 population) of new HIV diagnoses by HSE area of residence² is shown in table 3. In 2013 the rate was highest in HSE-East (14.6 per 100,000) and lowest in the HSE-Northwest (1.9 per 100,000). Figure 7 shows the breakdown of cases by probable route of transmission and HSE area. Appendix 2 shows the HSE area and respective counties.

Table 3: Number of new HIV diagnoses and rate by HSE area of residence, 2013

HSE Area	Number	Rate per 100,000
East	236	14.6
Midlands	10	3.5
Midwest	23	6.1
Northeast	14	3.2
Northwest	5	1.9
Southeast	12	2.4
South	33	5.0
West	11	2.5
Total	344	7.5

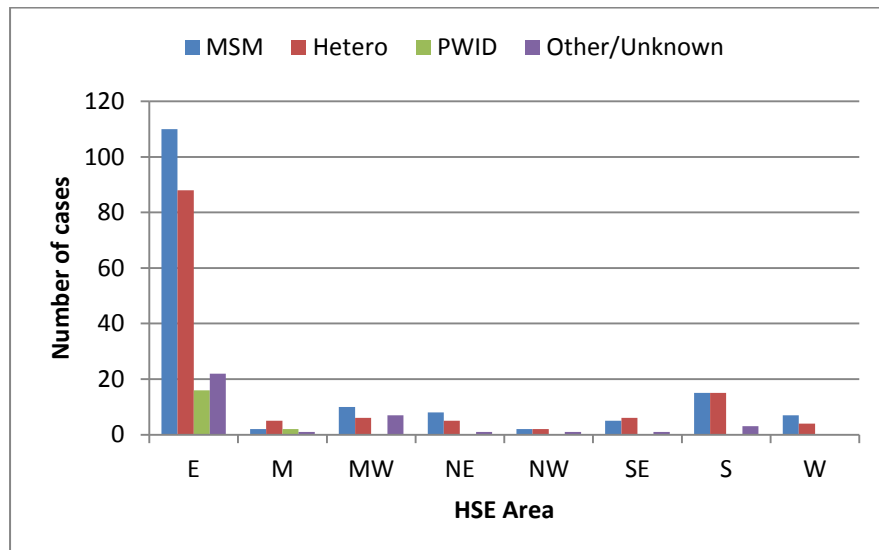


Figure 7: New HIV diagnoses by probable route of transmission and HSE area.

² If information on area of residence is not available, cases are assigned to the HSE area of the clinician or the laboratory.

1.6 STAGE OF INFECTION – CD4 COUNTS

Definition:

Late stage of diagnosis: CD4 count of less than <350 cells/mm³ at diagnosis
Severely immuno-compromised: CD4 count of <200 cells/mm³ at diagnosis.

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 (3). In addition, prompt HIV diagnosis and appropriate treatment can provide an opportunity to prevent further HIV transmission.

CD4 count at diagnosis was available for 303 of 344 cases (88%) in 2013. This is an improvement compared to 2012 and 2011 data which had CD4 counts on 73% and 70% respectively. During 2013, 50% of cases (where CD4 count was supplied) presented at a late stage of infection. This compares with 48% in 2012 and 52% in 2011. The proportion of late presenters in EU and EEA countries in 2012 was 49% (1). Twenty five percent were severely immuno-compromised at diagnosis compared with 24% in 2012 and 33% in 2011.

More emphasis on the benefits of early testing, and ready access to HIV testing are needed to improve the proportions presenting late, which will not only benefit the individual detected early, but reduce the likelihood of transmission to others.

Table 4 presents the 2013 data by CD4 count and gender, probable route of transmission, age group and region of origin.

- The proportion diagnosed late was highest among heterosexuals (59% in males and females), followed by 56% among PWID and was lowest in MSM (37%).
- By age group, the highest proportion diagnosed late was in those aged 45-49 years (74%).
- By region of origin, 65% of those born in sub-Saharan Africa were diagnosed late compared to 30% diagnosed late among those born in Latin America.

Figure 8 describes the proportion diagnosed late in all risk groups in 2011, 2012 and 2013. The proportion being diagnosed late has decreased in PWID (from 85% in 2011 to 57% in 2013) and heterosexual males (from 67% in 2011 to 59% in 2013) but has increased in heterosexual females (from 54% in 2011 to 59% in 2013). The proportion diagnosed late in 2013 in MSM (38%) is the same as in 2012.

Table 4: CD4 counts in newly diagnosed HIV cases, by gender, probable route of transmission, age group and region of origin, 2013

		Number with CD4 count available	% with CD4 <200	% with CD4 <350
Total		303	25.4	49.5
Gender	Female	71	32.4	60.6
	Male	232	23.3	46.1
Route of Transmission	MSM	147	14.5	37.4
	PWID	16	18.8	56.3
	Hetero- male	59	35.6	59.3
	Hetero - female	61	32.7	59.0
Age Group (yrs)	20-24	28	7.1	35.7
	25-29	59	16.9	44.1
	30-34	61	24.6	41.0
	35-39	50	28.0	48.0
	40-44	44	31.8	59.1
	45-49	27	40.7	74.1
	50+	32	34.4	56.3
Region of origin	Ireland	128	22.7	48.4
	Western Europe	15	13.3	46.7
	Central and Eastern Europe	30	23.3	43.3
	Latin America	33	12.1	30.3
	Sub-Saharan Africa	68	39.7	64.7

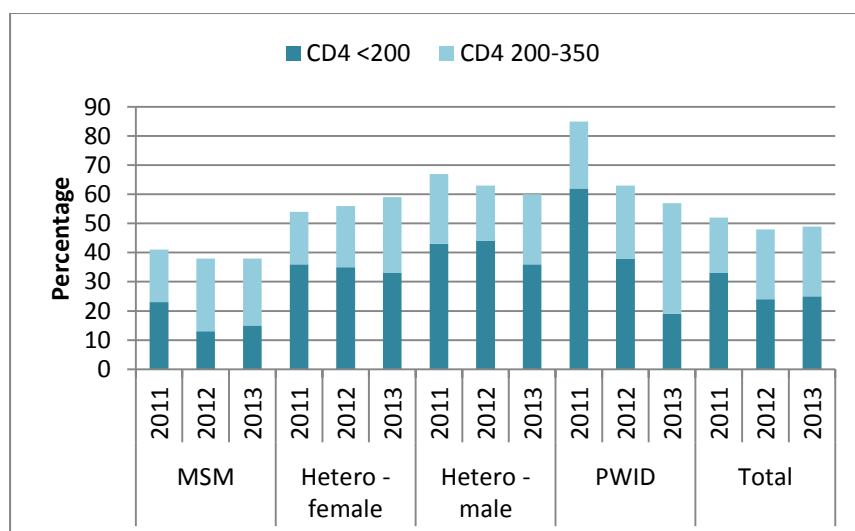


Figure 8: Late diagnosis of HIV infection (CD4 count <350) among newly diagnosed cases, by probable route of transmission, 2011 to 2013

1.7 STAGE OF INFECTIONS – AIDS

Since the start of 2012, data on AIDS cases have only been collected where an AIDS defining illness is reported at the time of HIV diagnosis. Of the 344 new HIV diagnoses in 2013, 27 (8%) were diagnosed with an AIDS defining illness at the time of their HIV diagnosis. Of the 27 cases, 17 were heterosexual, seven were MSM, one was a PWID, and probable mode of transmission was not known for two cases. Where information was available on country of birth (n=22), most were Irish. See table 5 for further details.

During 2013, the most commonly reported AIDS-defining illnesses were PCP (Pneumocystis pneumonia) (44%) and oesophageal candidiasis (18%). The most common indicative illness among both MSM and heterosexuals was PCP. There were two cases of pulmonary TB, both in heterosexuals.

Table 5: Summary table of reported AIDS cases, 2013

Number of AIDS cases	Number	%
Heterosexual	17	63.0
MSM	7	25.9
PWID	1	3.7
Born in Ireland	13	48.1
Born in sub-Saharan Africa	9	33.3

1.8 ANTIRETROVIRAL (ART) TREATMENT

Of the 344 new diagnoses in 2013, information on whether or not antiretroviral treatment (ART) was indicated was provided for 244 (71%) cases. Of these 244 cases, clinicians reported that treatment was indicated for 135 cases (55%). Of the 135 cases where treatment was indicated, it was reported that 112 (83%) individuals were started on ART, 17 (13%) were not started on ART and in 6 (4%) cases, the information on initiation of ART was not known.

1.9 CO-INFECTIONS WITH STIS

People co-infected with HIV and sexually transmitted infections (STIs) are more likely to transmit HIV during sex (4). Table 6 presents data on co-infections with syphilis, chlamydia, gonorrhoea and hepatitis B and C.

Of the 344 new HIV diagnoses in 2013, 4% were co-infected with chlamydia and 5% with gonorrhoea. Fourteen percent were co-infected with syphilis although this included all stages of syphilis and not only acute infection. Eighteen (5%) cases were co-infected with hepatitis B (including one acute case) and 29 (8%) were co-infected with hepatitis C (no acute cases)³.

Co-infection rates varied by probable route of transmission. Over eighty percent of new diagnoses among PWID were co-infected with hepatitis C at the time of their HIV diagnosis. Among MSM, 10% were co-infected with gonorrhoea and 8% were co-infected with chlamydia. A quarter of MSM with newly diagnosed HIV infection were co-infected with syphilis but this includes all stages of syphilis and not just infectious syphilis.

Table 6: Co-infections with HIV by probable route of transmission, 2013

Co-infection with	MSM		Hetero		PWID		Total	
	No.	%	No.	%	No.	%	No.	%
Chlamydia	13	8.2	1	0.8	0	0	14	4.1
Gonorrhoea	16	10.1	1	0.8	0	0	17	4.9
Syphilis	38	23.9	9	6.9	0	0	48	14.0
Hepatitis B	7	4.4	10	7.6	0	0	18	5.2
Hepatitis C	5	3.1	8	6.1	15	83.3	29	8.4

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

1.10 PREVIOUSLY TESTED POSITIVE

Among the 344 new diagnoses in 2013, 55 (16%) were reported to have previously tested HIV positive in another country. Of those, 25 were MSM, 24 were heterosexual and two were among PWID. A further 203 (59%) did not have a previous positive test, and information on previous positive HIV testing was not available for the remaining 86 cases (25%).

Table 7 describes the year of diagnosis of cases with a previous positive test in another country.

Table 7: 2013 new diagnoses in Ireland, with previous HIV positive test in another country

Cases with a previous positive test	55
<i>In 2012 or 2013</i>	18
<i>In 2007-2011</i>	15
<i>Pre 2007</i>	14
<i>Unknown</i>	8

1.11 PREVIOUSLY TESTED NEGATIVE

Of the new diagnoses in 2013, 130 (38%) were reported to have previously tested negative for HIV. Table 8 describes the new diagnoses by probable route of transmission and history of a previous negative test.

The largest proportion with a previous negative test were among PWID (56%), followed by MSM (55%) with 23% of heterosexual cases having a previous negative test. Almost one in every four (22%) MSM newly diagnosed with HIV were infected relatively recently, in either 2012 or 2013 (had a previous negative test in either 2012 or 2013).

Table 8: New diagnoses in Ireland by probable route of transmission and history of a previous negative test, 2013 cases

	MSM		Hetero		PWID		Other/Unk*		Total	
	No	%	No	%	No	%	No	%	No	%
Previous negative test - in 2012/2013	35	22.0	3	2.3	2	11.1	1	2.8	41	11.9
Previous negative test - pre 2012	45	28.3	25	19.1	6	33.3	1	2.8	77	22.4
Previous negative test - year unknown	7	4.4	2	1.5	2	11.1	1	2.8	12	3.5
No previous negative test reported	33	20.8	43	32.8	4	22.2	2	5.6	82	23.8
Unknown	39	24.5	58	44.3	3	16.7	31	86.1	131	38.1
Total	159	100.0	131	100.0	18	100.0	36	100.0	344	100.0

2. DEATHS DUE TO HIV AND AIDS

Since the start of 2012, data on deaths in people living with HIV and AIDS are only recorded if the death occurred at the time of HIV diagnosis. In 2013, there were three deaths reported at the time of HIV diagnosis, two were AIDS related deaths and the cause of death was not reported for the third case.

The data presented in table 9 are taken from the CSO Vital Statistics 2012 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/>

There were 16 deaths reported in 2012, 13 in males and 3 in females.

Table 9: Number of deaths reported in 2012 where cause of death is AIDS or HIV (Source: Vital Statistics Reports, CSO).

	Age Group (years)					Total
	15-24	25-34	35-44	45-54	55+	
Male	0	1	7	3	2	13
Female	0	1	1	1	0	3
Total	0	2	8	4	2	16

3. MEN WHO HAVE SEX WITH MEN (MSM)

MSM are the population most affected by HIV in Ireland, and in 2013 accounted for the highest proportion of new diagnoses (46%). This is slightly lower than the proportion reported in 2012 (49%). Male to male transmission is the predominant mode of transmission in EU/EEA countries, accounting for 40% of the total number of diagnoses in 2012 (1).

Of the 159 new diagnoses among MSM in 2013

- Median age at HIV diagnosis was 32 years (range 19-68 years). The median age at diagnosis among MSM has decreased in recent years (from 37 years in 2005).
- The largest number of new diagnoses among MSM occurred in 25-29 year olds followed by 30-34 year olds. Eight percent of newly diagnosed MSM were over 50 years old.
- Just over half (54%) were born in Ireland, 20% in Latin America, 12% in central and eastern Europe and 6% in western Europe.
- The number of cases among foreign-born MSM has increased in recent years. Figure 9 shows the trends in new diagnoses among MSM born in Ireland, Latin America & Caribbean, central & eastern Europe and western Europe.
- Where CD4 count was reported (92% of cases), 37% were diagnosed late including 15% who were severely immuno-compromised. This is very similar to the proportion diagnosed late among MSM in EU/EEA countries in 2012 (38%).
- Seven MSM (4%) were diagnosed with an AIDS defining illness at the time of their HIV diagnosis. The most common indicative illness in 2013 among MSM was PCP (57%).
- 10% of MSM with newly diagnosed HIV infection were co-infected with gonorrhoea and 8% were co-infected with chlamydia. 24% of newly diagnosed MSM were co-infected with syphilis but this includes all stages of syphilis, rather than infectious syphilis alone.
- Of the new diagnoses among MSM, 15% (n=24) of MSM had previously tested HIV positive in another country.
- Almost one in every four (22%) MSM newly diagnosed with HIV were infected relatively recently, in either 2012 or 2013 (had a previous negative test in either 2012 or 2013).

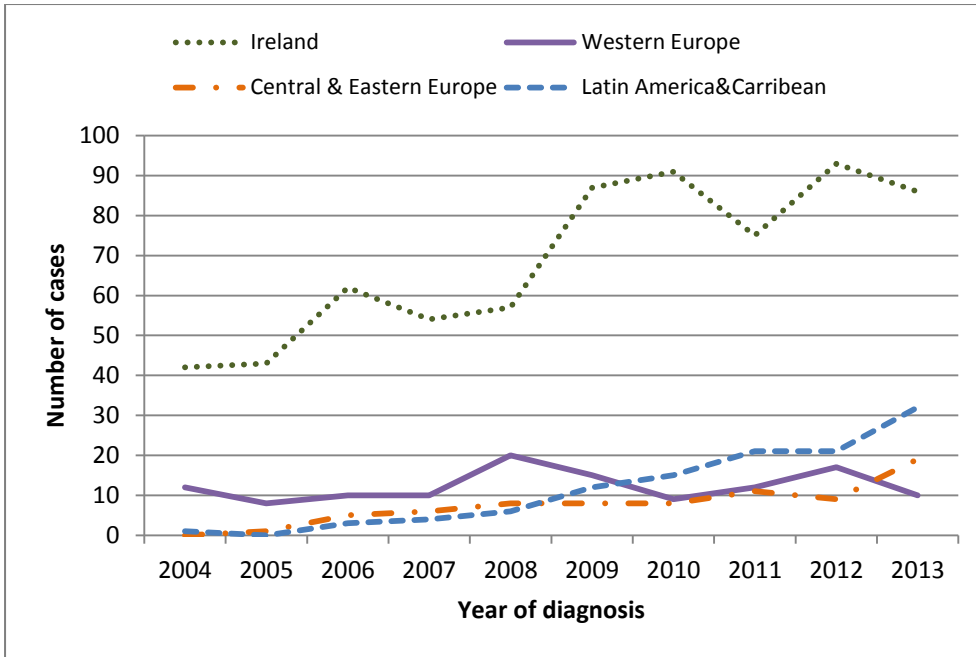


Figure 9: New HIV diagnoses among MSM by region of birth, 2003 to 2013

4. HETEROSEXUALS

In 2013, 131 (35%) newly diagnosed cases were heterosexually acquired, a similar number to 2012 (133 cases). Since 2010, the number of new diagnoses among heterosexuals has remained stable between 127 and 133 cases.

Of the 131 heterosexual cases newly diagnosed in 2013,

- 69 (53%) were female and 62 (47%) were male
- Median age at diagnosis was 36 years (range 19 to 70), 39 years in males (range 24 to 70 years) and 33.5 years in females (range 19 to 55 years)
- 70 (53%) were born in sub-Saharan Africa (41 female and 29 male) and 37 (28%) were born in Ireland (21 male and 16 female)
- Over half of the heterosexually acquired cases (57%) were reported as originating from countries with a generalised HIV epidemic (mainly sub-Saharan Africa)⁴. A further 14% had a sexual partner from a country with a generalised HIV epidemic and 7% had a high-risk partner (PWID or bisexual) or a partner known to be HIV positive. A further 22% were presumed to be infected heterosexually with no further information reported. Figure 10 shows the number of heterosexual cases originating in a country with a generalized epidemic and all other heterosexual cases from 2003 to 2013
- Where CD4 count was available (for 91% of cases), 59% of heterosexual cases were diagnosed late including 34% who were severely immuno-compromised. The proportion diagnosed late in male heterosexuals decreased from 67% in 2011 to 59% in 2013. The proportion diagnosed late in female heterosexuals increased from 54% in 2011 to 59% in 2013
- 17 cases (13%) were diagnosed with an AIDS defining illness at the time of their HIV diagnosis in 2013 (10 male and 7 female)
- Of the new diagnoses among heterosexuals, 18% (24) were previously diagnosed HIV positive in another country.

⁴ A generalised HIV epidemic is where greater than 1% of the general population is HIV positive

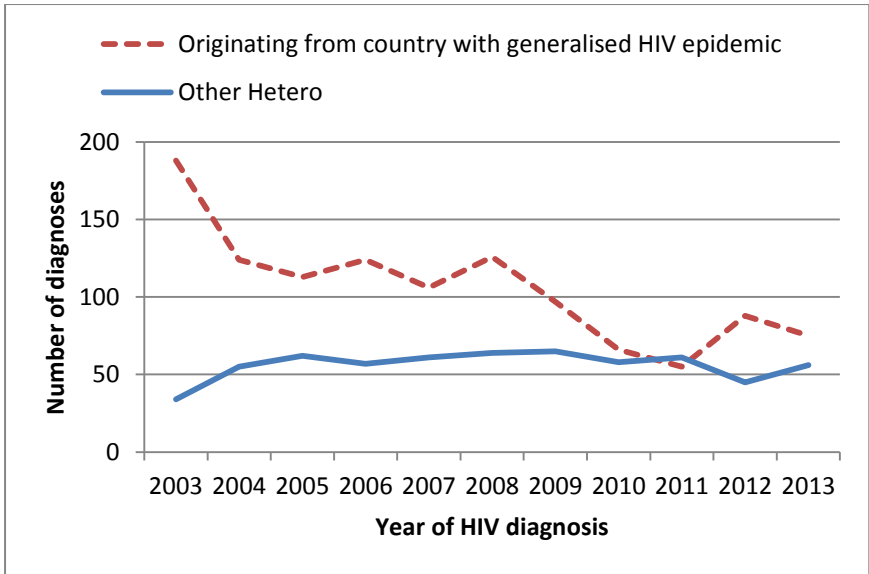


Figure 10: Trends in new diagnoses by heterosexual subcategory, 2003 to 2013

5. PEOPLE WHO INJECT DRUGS (PWID)

In 2013, 5% (18 cases) of the new diagnoses were among PWID. This is similar to the number diagnosed in the last four years (ranging from 13 to 23 cases since 2010).

Of the 18 new diagnoses among PWID,

- 12 (67%) were male and 6 (33%) were female
- Median age at diagnosis was 33.5 years (range: 23 to 56 years)
- 10 (59%) were born in Ireland, 3 (18%) were born in central and eastern Europe and one (6%) was born in western Europe. Country of birth was not unknown for three.
- Where information was available (in 44% of cases), the median duration of injecting drug use was 10 years.
- Where CD4 count was reported (in 89% of cases), 56% of new cases were diagnosed late including 19% who were severely immuno-compromised. The proportion diagnosed late in 2013 is lower than in 2012 (63%) and 2011 (85%).
- One PWID was diagnosed with an AIDS defining illness at the time of HIV diagnosis.
- 15 (83%) of PWID newly diagnosed with HIV were co-infected with Hepatitis C. Of the new diagnoses among PWID, 11% (2) were previously diagnosed positive in another country.

TECHNICAL NOTES

- Data for this report were extracted from CIDR on 14th May 2014 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.
- For the purposes of this report, the categories “Other” and “Mother to Child Transmission” were included in the category “Other/Unk” for many of the tables and figures.

OTHER SOURCES OF DATA

- 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/>
- Reports on HIV antenatal screening can be found at <http://www.hpsc.ie/A-Z/HIVSTIs/HIVandAIDS/AntenatalHIVTesting/ReportsonAntenatalHIVTestinginIreland/>
- 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/>
- Data on laboratory testing of HIV can be found at <http://www.hpsc.ie/A-Z/HIVSTIs/HIVandAIDS/SurveillanceDocuments/>

REFERENCES

1. European Centre for Disease Prevention and Control/WHO Regional Office for Europe. HIV/AIDS surveillance in Europe 2012. Stockholm: European Centre for Disease Prevention and Control; 2012.
2. Tuite H, Horgan M, Mallon PWG, McConkey S, Mooka B, Mulcahy F, Walsh C, O'Hora A, O'Flanagan D, Bergin C, Fleming C. Antiretroviral treatment and viral load responses in HIV-infected patients accessing specialist care in Ireland. In: 22nd European Congress of Clinical Microbiology and Infectious Diseases (ECCMID); 2012 March 31st -April 3rd ; London. Available at http://registration.akm.ch/einsicht.php?XNABSTRACT_ID=145623&XNSPRACHE_ID=2&XNKONGRESS_ID=161&XNMASKEN_ID=900
3. The UK Collaborative Cohort (UK CHIC) Steering Committee. Late diagnosis in the HAART era: proposed common definitions and associations with mortality. *AIDS* 2010; 24(5): 723-727.
4. Fleming DT, Wasserheit JN. From epidemiological synergy to public health policy and practice: the contribution of other sexually transmitted diseases to sexual transmission of HIV infection. *Sex Transm Infect* 1999 Feb;75(1):3-17

APPENDIX 1: 2013 TABLES

Table A1: HIV diagnoses by age group and route of transmission, 2013

Age Group	MSM		Hetero - Male		Hetero - Female		PWID		Other/Unk		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
<15	0	0.0	0	0.0	0	0.0	0	0.0	3	8.3	3	0.9
15-19	2	1.3	0	0.0	1	1.4	0	0.0	0	0.0	3	0.9
20-24	20	12.6	1	1.6	9	13.0	1	5.6	6	16.7	37	10.8
25-29	40	25.2	5	8.1	11	15.9	4	22.2	1	2.8	61	17.7
30-34	32	20.1	12	19.4	14	20.3	6	33.3	6	16.7	70	20.3
35-39	20	12.6	13	21.0	14	20.3	3	16.7	5	13.9	55	16.0
40-44	24	15.1	10	16.1	9	13.0	1	5.6	2	5.6	46	13.4
45-49	8	5.0	10	16.1	6	8.7	2	11.1	4	11.1	30	8.7
>50	13	8.2	11	17.7	5	7.2	1	5.6	9	25.0	39	11.3
Total	159	100.0	62	100.0	69	100.0	18	100.0	36	100.0	344	100.0

Table A2: HIV diagnoses by age group and gender, 2013

Age Group (yrs)	Male		Female		Total	
	N	%	N	%	N	%
<15	1	0.4	2	2.3	3	0.9
15-19	2	0.8	1	1.2	3	0.9
20-24	24	9.3	13	15.1	37	10.8
25-29	49	19.0	12	14.0	61	17.7
30-34	50	19.4	20	23.3	70	20.3
35-39	40	15.5	15	17.4	55	16.0
40-44	36	14.0	10	11.6	46	13.4
45-49	23	8.9	7	8.1	30	8.7
50+	33	12.8	6	7.0	39	11.3
Total	258	100.0	86	100.0	344	100.0

Table A3: HIV diagnoses by route of transmission and geographic origin, 2013

Geographic Origin	MSM		Hetero		PWID		Other/Unk*		Total	
	N	%	N	%	N	%	N	%	N	%
Ireland	86	54.1	37	28.2	10	55.6	8	3.1	141	41.0
Western Europe	10	6.3	4	3.1	2	11.1	0	0	16	4.7
Central and Eastern Europe	19	11.9	8	6.1	3	16.7	3	12.5	33	9.6
Sub-Saharan Africa	2	1.3	70	53.4	0	0.0	3	21.8	75	21.8
Latin America&Caribbean	32	20.1	3	2.3	0	0.0	0	0	35	10.2
Other	7	4.4	7	5.3	0	0.0	1	0	15	4.4
Unknown	3	1.9	2	1.5	3	16.7	21	62.5	29	8.4
Total	159	100.0	131	100.0	18	100.0	36	100	344	100.0

Table A4: HIV diagnoses by route of transmission and ethnicity, 2013

Ethnicity	MSM		Hetero		PWID		Other/Unk		Total	
	N	%	N	%	N	%	N	%	N	%
White	110	69.2	41	31.3	15	83.3	7	13.0	173	50.3
Black African	1	0.6	58	44.3	0	0.0	4	7.4	63	18.3
Black Other	3	1.9	2	1.5	0	0.0	0	0.0	5	1.5
Mixed background	5	3.1	2	1.5	0	0.0	0	0.0	7	2.0
Other	7	4.4	4	3.1	0	0.0	1	1.9	12	3.5
Not known	33	20.8	24	18.3	3	16.7	24	44.4	84	24.4
Total	159	100.0	131	100.0	18	100.0	54	100.0	344	100.0

Table A5: HIV diagnoses by route of transmission and probable region of infection, 2013

Probable region of infection	MSM		Hetero		PWID		Other/Unk		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Ireland	84	52.8	35	26.7	10	55.6	2	5.6	131	38.1
Sub-Saharan Africa	2	1.3	50	38.2	0	0.0	3	8.3	55	16.0
Western Europe	13	8.2	5	3.8	1	5.6	2	5.6	21	6.1
Central and Eastern Europe	3	1.9	5	3.8	2	11.1	3	8.3	13	3.8
Latin America&Caribbean	15	9.4	0	0.0	0	0.0	0	0.0	15	4.4
Other	3	1.9	5	3.8	0	0.0	0	0.0	8	2.3
Unknown	39	24.5	31	23.7	5	27.8	26	72.2	101	29.4
Total	159	100.0	131	100.0	18	100.0	36	100.0	344	100.0

Table A6: Reason for HIV test by route of transmission and reason for test, 2013

Reason for Test	Female	Male	Total	MSM	Hetero	PWID	Oth/Unk	Total
Antenatal	15	0	15	0	15	0	0	15
Asylum seeker	13	9	22	0	22	0	0	22
Positive partner	6	17	23	9	11	3	0	23
STI screen	3	65	68	56	12	0	0	68
Risky behaviour	3	53	56	47	0	8	1	56
Symptomatic	22	54	76	21	46	3	6	76
Other	9	17	26	7	11	2	6	26
Unknown	15	43	58	19	14	2	23	58
Total	86	258	344	159	131	18	36	344

Table A7: Subcategories of heterosexual transmission, 2013

Heterosexual transmission sub category	Number	%
Originating from country with generalised HIV epidemic	75	57.3
Sex with a person from a country with generalised HIV epidemic	18	13.7
Sex with a person known to be HIV+	7	5.3
Sex with a high risk partner	2	1.5
Presumed to be infected heterosexually, data on risk factors and HIV status of partners not known	29	22.1
Total	131	100

Appendix 2: HSE areas and respective counties

HSE Area	County
East	Dublin
	Kildare
	Wicklow
Midlands	Laois
	Longford
	Offaly
	Westmeath
Midwest	Clare
	Limerick
	Tipperary North
Northeast	Cavan
	Louth
	Meath
	Monaghan
Northwest	Donegal
	Leitrim
	Sligo
Southeast	Carlow
	Kilkenny
	Tipperary South
	Waterford
Southeast	Wexford
	Cork
Southeast	Kerry
West	Galway
	Mayo
	Roscommon