



Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive



## HIV & AIDS in Ireland 2009

### Health Protection Surveillance Centre

#### Introduction

The Human Immunodeficiency Virus (HIV) and the consequences of infection continue to challenge the global community. In 2008, an estimated 33.4 million people were living with HIV, and of those, 2.7 million were newly diagnosed. In Europe, the rate of reported cases of HIV infection has increased from 55 per million population in 2000 to 77 per million population by 2007.

The purpose of this report is to present data on those cases of HIV and AIDS that were reported to the Health Protection Surveillance Centre (HPSC) during 2009.

Table 1 below outlines some key findings from case based surveillance during 2009 and compares the findings with the most recent data from the European Centre for Disease Prevention and Control (ECDC). Among the indicators listed is the HIV prevalence among young people, aged 15–29 years. This is a core indicator as agreed during the 2001 Special Session of the UN General Assembly on HIV/AIDS (UNGASS).

**Table 1: Newly diagnosed cases of HIV infection reported in the WHO European Region and by geographical region**

Indicator	WHO		Ireland	
	ER 2007	WEST 2007	2008	2009
No. of HIV cases	48,892	24,202	404	395
Rate per million	76.4	77.0	95.3	93.2
<b>Percentage of cases</b>				
Age 15-29 years	33%	26%	39%	33%
Female	33%	31%	36%	35%
<b>Probable route of transmission**</b>				
Heterosexual	46%	51%	56%	47%
MSM	20%	40%	31%	42%
IDU	32%	8%	12%	9%

Source: ECDC 2007 report <http://ecdc.europa.eu/>

WHO ER: WHO European Region

WHO West: WHO European Region West

From these data we can conclude that the HIV epidemic in WHO Europe, West is characterised mainly by heterosexual transmission; in 2007, 26% of newly diagnosed cases were reported in individuals 15-29 years old and 31% were female. Data for Ireland in 2008 and in 2009 suggest that while progress is being made, challenges remain.

#### 2009 data

A total of 395 new HIV diagnoses were reported to the HPSC during 2009. This compares to 404 in 2008 and represents a 2.2% decrease. The rate of newly diagnosed HIV infection in Ireland in 2008 was 93.2 per million population. The cumulative total number of HIV infections reported up to the end of December 2009 is 5,637.

Completed surveillance report forms were received for 315 (80%) of the newly diagnosed cases. Surveillance report forms for the remaining 80 (20%) cases are outstanding.

The total number of AIDS diagnoses reported to the end of December 2009 is 1,038 with reports of 33 new AIDS diagnoses in 2009. The total number of deaths among AIDS cases reported to the end of December 2009 is 414 with reports of two deaths among AIDS cases in 2009.\*

Figure 1 shows the number of HIV and AIDS diagnoses annually in Ireland from 1990 to 2009. HIV data from 2003 to 2008 have been updated and a detailed analysis can be found in the HIV and AIDS surveillance tables on the HPSC website at:

<http://www.hpsc.ie/hpsc/A-Z/HepatitisHIVAIDSandSTIs/HIVandAIDS/SurveillanceReports/>

\* Data on AIDS cases and deaths among AIDS cases should be interpreted with caution due to considerable under-reporting and late reporting. It is expected that further reports, particularly relating to recent years, will be received and the number of AIDS cases will rise for recent years.

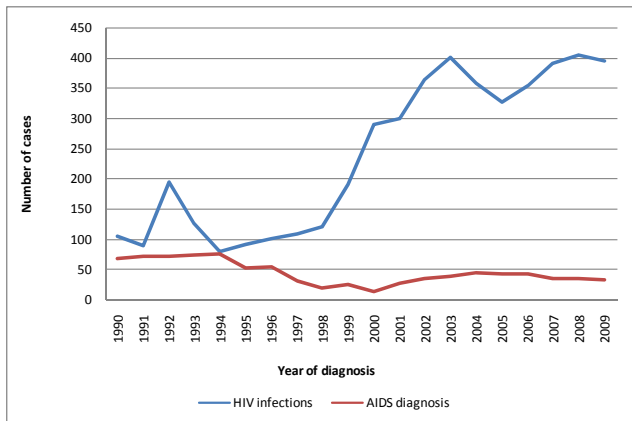


Figure 1: New HIV and AIDS diagnoses by year of diagnosis (1990 to 2009)

### Probable route of transmission

A breakdown by probable route of transmission can be seen in Table 2 and Figure 2.

Table 2: HIV diagnoses in Ireland - by probable route of transmission and sex (2009)

Probable route of transmission	Sex	Number
<b>MSM</b>	Male	138
	<b>Sub total</b>	<b>138</b>
<b>Heterosexual contact</b>	Female	96
	Male	60
	Unknown	0
	<b>Sub total</b>	<b>156</b>
<b>Injecting Drug Use</b>	Female	6
	Male	24
	<b>Sub total</b>	<b>30</b>
<b>Mother to Child</b>	Female	3
	Male	2
	<b>Sub total</b>	<b>5</b>
<b>Other</b>	Female	1
	Male	0
	Unknown	0
	<b>Sub total</b>	<b>1</b>
<b>Undetermined</b>	Female	31
	Male	34
	Unknown	0
	<b>Sub total</b>	<b>65</b>
<b>Total</b>		<b>395</b>

The 330 reported cases of HIV with information available on probable route of transmission indicate that:

- the highest number of HIV, 47.3%, was reported as due to heterosexual transmission (156 cases)
- 41.8% percent (138 cases) of new infections were among MSM.
- 9.1% percent (30 cases) of new infections were among IDUs.

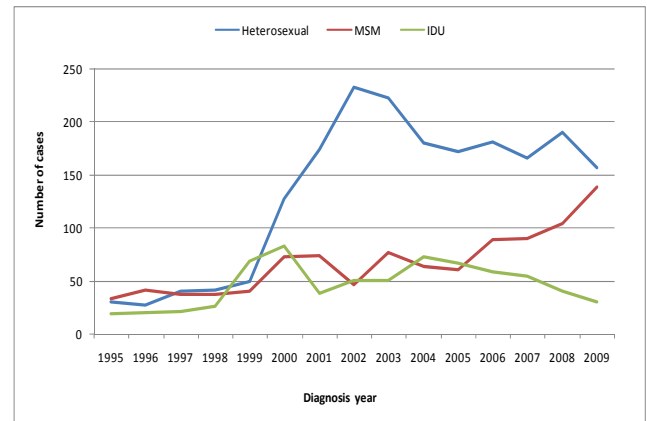


Figure 2: New HIV diagnoses in Ireland by exposure category (2000 to 2009)

With regard to HIV infection in children, there were five new diagnoses in 2009. The probable route of transmission was mother to child transmission (MCT) for all five cases.

In addition, there were 136 babies born to HIV 131 infected mothers (5 twin deliveries) in Ireland during 2009. Based on serial HIV PCR testing; 122 are not infected, 13 remain of indeterminate status (i.e. do not meet the criteria for HIV infection and are <18 months at time of test) and one is infected. The infected infant was born to a mother who was known to be infected during pregnancy and is originally from sub-Saharan Africa.

### Sex

Of the 395 cases, 34.7% (137 cases) were female and 65.3% (258 cases) were male. A breakdown of new cases by probable route of transmission and sex is shown in Table 2.

Of the 137 female cases newly diagnosed in 2009, 25 (12.9%) were reported to be pregnant at HIV diagnosis, 82 were not pregnant at diagnosis and the status of the remaining 30 is unknown.

### Age

A breakdown of cases by probable route of transmission and age group is shown in Table 3.

During 2009, the median age at HIV diagnosis among the three major risk groups was

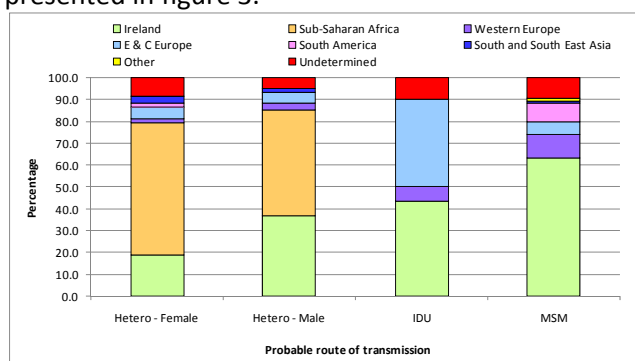
- Heterosexual: 35.6 years (range 16-73 years)
- IDUs: 35.9 years (range 22-57 years)
- MSM: 35.6 years (range 18-80 years)

**Table 3: Newly diagnosed HIV infections in Ireland by probable route of transmission and age group (2009)**

Age at HIV diagnosis	HC	IDU	MSM	MCT	Other	Unk	Total
<15	-	-	-	4	-	1	5
15-19	5	-	3	1	-	3	12
20-24	19	1	14	-	-	5	39
25-29	29	7	29	-	-	13	78
30-34	25	6	31	-	-	13	75
35-39	34	8	20	-	-	9	71
40-44	14	2	18	-	-	11	45
45-49	13	3	9	-	1	6	32
50-54	6	2	7	-	-	2	17
55-59	3	1	3	-	-	2	9
60+	8	-	4	-	-	-	12
<b>Total</b>	<b>156</b>	<b>30</b>	<b>138</b>	<b>5</b>	<b>1</b>	<b>65</b>	<b>395</b>

### Geographic origin

Analysis of 2009 cases by geographic origin<sup>†</sup> is presented in figure 3.



**Figure 3: Newly diagnosed HIV infections in Ireland by probable route of transmission and geographic origin (2009)**

The 307 reported cases of HIV with information available on geographic origin indicate that:

- 45.9% (141 cases) were born in Ireland, 31.3% (96 cases) were born in sub-Saharan Africa, 6.8% (21 cases) were born in Western Europe, 4.9% (15 cases) were born in Eastern Europe, 4.6% (14 cases) were born in South America and 4.2% (13 cases) were born in Central Europe.
- Of the 156 cases acquired through heterosexual contact, 56% (87 cases: 58 female and 29 male) were born in sub-Saharan Africa and 26% (40 cases: 18 female and 22 male) were born in Ireland.

<sup>†</sup> Classification by geographic origin is as used by ECDC. Geographic origin is based on country of birth.

- Among MSM, 63.0% (87 cases) were born in Ireland and 27.0% (38 cases) were born abroad.
- Among IDU, 43.3% (13 cases) were born in Ireland and 46.7% (14 cases) were born abroad.
- Of the five MCT cases, one was an infant born in Ireland in 2009 and the remaining four were older children born in sub-Saharan Africa.

### Area of residence

A breakdown of new HIV diagnoses by area of residence in 2009 can be seen in Table 4.

**Table 4: New HIV diagnoses by probable route of transmission and area of residence at diagnosis (2009)**

Probable route of transmission	East <sup>‡</sup>	non-East	Unknown	Total
Heterosexual	89	0	14	103
IDU	19	53	3	75
Mother to Child	3	8	1	12
MSM	87	1	20	108
Other	1	31	0	32
Undetermined	4	0	61	65
<b>Total</b>	<b>202</b>	<b>93</b>	<b>99</b>	<b>395</b>

### Stage of infection - 2009

Table 5 describes the stage of infection for HIV cases diagnosed in 2009. Of the 304 cases where stage of infection was known, 235 were asymptomatic at time of HIV diagnosis and 27 were diagnosed with AIDS at the same as HIV diagnosis (i.e. diagnosed "late").

**Table 5: Table 7: Newly diagnosed HIV infections in Ireland by stage of infection (2009)**

Stage of Infection	Cases
Acute HIV Infection	11
Asymptomatic	235
Symptomatic non-AIDS	30
AIDS	27
Unknown	91
<b>Total</b>	<b>395</b>

<sup>‡</sup> Includes Dublin, Kildare and Wicklow

## Discussion

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In 2009, 395 cases of HIV, 33 AIDS cases and two deaths in AIDS cases were reported. This brings the cumulative total of HIV infections reported to 5,637. Since 2002, the yearly HIV total has been in excess of 320 new diagnoses.

The key finding from this year's report is the number of MSM who have been newly diagnosed with HIV. The number rose from 97 in 2008 to 138 in 2009, representing a 42.3% increase over twelve months. The majority (63%) of these men was born in Ireland and most likely, acquired their infection in Ireland. Young men under the age of 30 yrs accounted for 35% of new diagnoses; the median age was 35.6 yrs.

The observed trend is consistent with the epidemic profile in many other western industrialized countries. According to Fenton, there has been a resurgence of bacterial and viral sexually transmitted infections<sup>1</sup>. He points to the recently observed outbreaks of lymphogranuloma Venereum and hepatitis C, especially among HIV-positive MSM. This not only points to the challenges of primary prevention but also to the tangible yet elusive challenge of secondary prevention. Many HIV positive men are aware of their diagnosis and although in care, are not immune to risk. A recent study by Mayer et al highlight the challenges facing secondary prevention among a cohort of urban, adult, educated HIV-positive MSM in Boston, USA<sup>2</sup>. Although many of the cohort had been in receipt of care for a decade or more, almost 10% had reported an STI in the previous twelve months; two-thirds reported syphilis and a third gonorrhoea. The majority were in receipt of antiretroviral treatment, yet only half had an undetectable viral load. A high prevalence of drug and alcohol use was reported in the previous three months. Half of the sample reported transmission risk behavior in the previous six months. As the authors of the study conclude, effective secondary HIV prevention intervention programmes targeting younger or more recently diagnosed MSM are an urgent priority.

We therefore conclude that if progress is to be made in reducing the risk of HIV transmission progress must be made in integrating primary and secondary prevention initiatives.

## Acknowledgements

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Report prepared by Sarah Jackson, Kate O'Donnell, Joanne Moran and Aidan O'Hora, 31<sup>st</sup> May 2010

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