

HIV&AIDS in Ireland 2008



Health Protection Surveillance Centre

Introduction

The Human Immunodeficiency Virus (HIV) and the consequences of infection continue to challenge the global community. In 2007, an estimated 33 million people were living with HIV, and of those, 1.7million 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 2008.

Table 1 below outlines some key findings from case based surveillance during 2008 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

| in the wire European Region and by geographical region | | | | | |
|--|------------|-----------|---------|------|--|
| | WHO | | Ireland | | |
| Indicator | ER 2007 | WEST 2007 | 2007 | 2008 | |
| No. of HIV cases | 48,892 | 24,202 | 391 | 405 | |
| Rate per million | 76.4 | 77.0 | 92.2 | 95.5 | |
| Percentage of cases | | | | | |
| Age 15-29 years | 33% | 26% | 44% | 39% | |
| Female | 33% | 31% | 38% | 36% | |
| Probable route of transmission** | | | | | |
| Heterosexual | 46% | 51% | 53% | 56% | |
| MSM | 20% | 40% | 27% | 31% | |
| IDU | 32% | 8% | 17% | 11% | |

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

WHO ER: WHO European Region

WHO West: WHO European Region West

**Unknowns excluded

From these data we can conclude that the HIV epidemic in WHO Europe, West is characterized 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 2007 and in 2008 suggest that while progress is being made, challenges remain.

2008 data

A total of 405 new HIV diagnoses were reported to the HPSC during 2008. This compares to 391 in 2007 and represents a 3.6% increase. The rate of newly diagnosed HIV infection in Ireland in 2008 was 95.5 per million population. The cumulative total number of HIV infections reported up to the end of December 2008 is 5,243.

Completed surveillance report forms were received for 322 (79.5%) of the newly diagnosed cases. Surveillance report forms for the remaining 83 (20.5%) cases are outstanding.

The total number of AIDS diagnoses reported to the end of December 2008 is 999 with reports of 28 new AIDS diagnoses in 2008. The total number of deaths among AIDS cases reported to the end of December 2008 is 411 with reports of three deaths among AIDS cases in 2008.¹

Figure 1 shows the number of HIV and AIDS diagnoses annually in Ireland from 1990 to 2008. HIV data from 2003 to 2007 have been updated and a detailed analysis can be found in the HIV and AIDS surveillance tables on the HPSC website at:

¹ 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.

http://www.hpsc.ie/hpsc/A-Z/HepatitisHIVAIDSandSTIs/HIVandAIDS/Surveillance Reports/

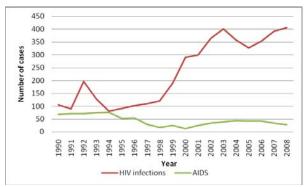


Figure 1: New HIV and AIDS diagnoses by year of diagnosis (1990 to 2008)

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 (2008)

| 11 ansimission and sex (2000) | | | |
|-----------------------------------|-----------|--------|--|
| Probable route of transmission | Sex | Number | |
| MSM | Male | 97 | |
| | Sub total | 97 | |
| Heterosexual contact | Male | 72 | |
| | Female | 105 | |
| | Unknown | 1 | |
| | Sub total | 178 | |
| Injecting Drug Use | Male | 27 | |
| | Female | 9 | |
| | Sub total | 36 | |
| Mother to Child | Male | 5 | |
| | Female | 2 | |
| | Sub total | 7 | |
| Undetermined | Male | 57 | |
| | Female | 30 | |
| | Unknown | - | |
| | Sub total | 87 | |
| Total | | 405 | |

The 318 reported cases of HIV with information available on probable route of transmission indicate that:

- the highest number of HIV, 56%, was reported as due to heterosexual transmission (178 cases)
- thirty percent (97 cases) of new infections were among MSM.

 eleven percent (36 cases) of new infections were among IDUs.

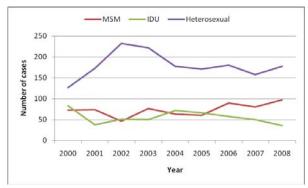


Figure 2: New HIV diagnoses in Ireland by exposure category (2000 to 2008)

With regard to HIV infection in children, there were seven new diagnoses in 2008. The probable route of transmission was mother to child transmission (MCT) for all seven cases.

In addition, there were 106 babies born to HIV infected mothers in Ireland during 2008; 86 are not infected, 18 remain of indeterminate status (i.e. do not meet the criteria for HIV infection and are <18 months at time of test) and two are infected. One of the two infected infants was born to a mother who was not known to be infected during pregnancy. The mother tested negative during pregnancy and later tested positive postnatally.

Sex

Of the 405 cases, 36% (146 cases) were female and 64% (258 cases) were male. Gender was unknown for one case. A breakdown of new cases by probable route of transmission and sex is shown in Table 2.

Of the 146 female cases newly diagnosed in 2008, 21 (14.4%) were reported to be pregnant at HIV diagnosis, 85 were not pregnant at diagnosis and the status of the remaining 40 is unknown.

Age

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

The median age at HIV diagnosis among the three major risk groups was

Heterosexual: 32 years (range 16-63 years)
IDUs: 33 years (range 21-61 years)
MSM: 34 years (range 19-67 years)

Table 3: Newly diagnosed HIV infections in Ireland by probable route of transmission and age group (2008)

| Age at HIV diagnosis | нс | IDU | MSM | мст | Un- known | Total |
|----------------------------|-----|-----|-----|-----|--------------|-------|
| <15 | - | - | - | 7 | - | 7 |
| 15-19 | 10 | | 1 | - | - | 11 |
| 20-24 | 16 | 3 | 9 | - | 6 | 34 |
| 25-29 | 39 | 6 | 23 | - | 18 | 86 |
| 30-34 | 38 | 11 | 17 | - | 24 | 90 |
| 35-39 | 31 | 8 | 17 | - | 12 | 68 |
| 40-44 | 20 | 6 | 14 | - | 14 | 54 |
| 45-49 | 11 | 1 | 7 | - | 5 | 24 |
| 50-54 | 8 | - | 2 | - | 2 | 12 |
| 55-59 | 4 | - | 5 | - | 3 | 12 |
| 60+ | 1 | 1 | 2 | - | 3 | 7 |
| Total | 178 | 36 | 97 | 7 | 87 | 405 |

Geographic origin

Analysis of 2008 cases by geographic origin² is presented in figure 3.

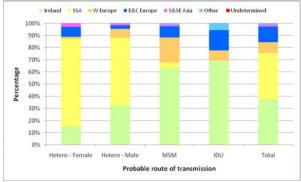


Figure 3: Newly diagnosed HIV infections in Ireland by probable route of transmission and geographic origin (2008)

The 312 reported cases of HIV with information available on geographic origin indicate that:

- 39% (123 cases) were born in Ireland, 39% (121 cases) were born in sub-Saharan Africa, 9% (28 cases) were born in Western Europe and 5% (17 cases) were born in Central Europe.
- Of the 178 cases acquired through heterosexual contact, 63% (112 cases: 73 female, 38 male, 1 unknown) were born in sub-Saharan Africa and 21% (37 cases: 22 male, 15 female) were born in Ireland.
- ² Classification by geographic origin is as used by ECDC. Geographic origin is based on country of birth.

- Among MSM, 57% (55 cases) were born in Ireland and 43% (42 cases) were born abroad.
- Among IDU, 70% (25 cases) were born in Ireland and 30% (11 cases) were born abroad.
- Of the seven MCT cases, two were babies born in Ireland in 2008 and the remaining five were older children who were born in sub-Saharan Africa.

Area of residence

A breakdown of new HIV diagnoses by area of residence in 2008 can be seen in Table 4.

Table 4: New HIV diagnoses by probable route of transmission and area of residence at diagnosis (2008)

| Probable route of transmission | East ³ | non- East | Un- known | Total |
|--------------------------------|-------------------|--------------|--------------|-------|
| Heterosexual | 105 | 50 | 23 | 178 |
| IDU | 22 | 12 | 2 | 36 |
| Mother to Child | 6 | 1 | 0 | 7 |
| MSM | 70 | 23 | 4 | 97 |
| Undetermined | - | 2 | 85 | 87 |
| Total | 203 | 88 | 114 | 405 |

Stage of infection - 2008

Table 5 describes the stage of infection for HIV cases diagnosed in 2008. Of the 305 cases where stage of infection was known, 240 were asymptomatic at time of HIV diagnosis and 21 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 (2008)

| Stage of Infection | Cases |
|----------------------|-------|
| Acute HIV Infection | 18 |
| Aysmptomatic | 240 |
| Symptomatic non-AIDS | 26 |
| AIDS | 21 |
| Unknown | 100 |
| Total | 405 |

³ Includes Dublin, Kildare and Wicklow

Discussion

The epidemiology of HIV in Ireland is complex. The data suggest that although the numbers are increasing, the epidemic is concentrated among a number of risk groups where the numbers may fluctuate from year to year. Due to the voluntary nature of the reporting system, it is likely that the number of case reports is an underestimate. In addition, each year 10-20% of case reports are incomplete.

In 2008, 405 cases of HIV, 28 AIDS cases and 3 deaths among AIDS cases were reported. This brings the cumulative total of HIV infections reported to 5,243. Since 2002, the yearly HIV total has been in excess of 320 new diagnoses.

Internationally, research suggests that a significant number of HIV positive persons are unaware of their status with estimates ranging from 20-30%. Evidence from the antenatal screening programme in Ireland suggests that, on average, 45% (range 70% in 2002, 30% in 2007) of HIV positive women do not know that they and their children are at risk. Fortunately, treatment is effective and if accessed early, the risk of vertical transmission is reduced significantly.

In contrast, the number of patients presenting with an AIDS related illness continues to decline and this is reflected in the sustained drop in reported AIDS cases since 2003. Similarly the number of AIDS related deaths has also declined. Although there is a general acceptance that case reports of AIDS related illnesses and AIDS related deaths underestimate the full extent of AIDS related morbidity and mortality, the trends are valid and welcome. The trends suggest that individuals are accessing care and treatment early which in turn improves clinical outcomes and life expectancy.

The positive impact of care and management on HIV related illness is evident. However, with an average of 320 new diagnoses each year, the demand and need for healthcare services, both clinical and diagnostic, grows. It is important to ensure that services are accessible to all and that the increasing demands do not compromise capacity to manage the increasing burden of illness safely and effectively.

In order to support and plan the delivery of services appropriately, there is a need to

- Review the governance and reporting arrangements of the HIV case based reporting system in order to improve the ascertainment and completeness of case reports;
- Assure access to early diagnosis, care and management. This is dependent on the provision of;
- Culturally and gender appropriate services which in turn requires a;
- Coherent framework for action at regional, national and International levels.

Acknowledgements

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