

Introduction

This report presents, for the 52 countries of the WHO European Region:

- cases of newly diagnosed HIV infections and AIDS reported by 31 December 2004;
- complementary information on annual numbers of diagnostic HIV tests performed and the AIDS case definition for surveillance purposes used in each country.

Most data are presented and discussed within three geographic areas: the West, the Centre and the East (see Technical note) and also for the 25 countries of the European Union (EU). HIV data are shown in Tables 1-10; AIDS data in Tables 11-25. Time trends are illustrated in Figures 1, 2 and 5-7 and geographic distributions in Figures 3 and 4 (maps).

Reporting of HIV diagnoses has become a key surveillance instrument for monitoring the HIV epidemic in Europe. It has progressively replaced AIDS surveillance which, since 1996 with the introduction and widespread use of highly active antiretroviral treatment (HAART), has become less reflective of the underlying trends in HIV infection. Although widely implemented in Europe, the coverage of HIV case reporting remains incomplete in western Europe where two of the most affected countries—Italy and Spain—have not yet implemented HIV reporting at national level. In countries with recently implemented or modified HIV reporting systems, reported HIV infections may include a large, but decreasing over time, proportion of prevalent infections diagnosed several years ago [see Table 1].

Surveillance data on reported HIV infections should be interpreted with further caution because they do not represent HIV incidence. These data include many individuals infected in previous years and depend on uptake of HIV testing and patterns of reporting, both of which may vary between countries and over time. To help interpret HIV reporting data, total numbers of HIV tests performed annually for diagnostic purposes (i.e. unlinked anonymous tests and blood donations excluded) are collected as background information on HIV testing patterns [Table 26].

Updated information on the AIDS case definition for surveillance purposes used in each country is presented in Table 27.

Reporting of cases of HIV infection and AIDS

In 2004, a total of 71 755 newly diagnosed HIV cases were reported in the whole of the WHO European Region. Of these, 70% (49 929 cases) were reported in the East, 28% (20 229) in the West and 2% (1597) in the Centre;

21 164 cases (29%) were reported in the EU, but data are not available for Italy and Spain, two of the most affected countries in the West. These figures show little change from those reported in 2003 (72 843 cases, of which 68% in the East) [Table 1].

A total of 10 855 AIDS cases were diagnosed in 2004, of which 66% (7199) were in the West, 28% in the East and 6% in the Centre. While the total number of AIDS cases continued to decrease (from 11 633 in 2003 to 10 855 in 2004; -7%), the number of cases in the East increased by 39% (from 2193 to 3057), following a similar increase between 2002 and 2003 (+40%) [Table 11].

HIV and AIDS in the European Union

The European Union (EU) comprises 25 countries: 16 countries in the West, 6 in the Centre and 3 in the East.

HIV diagnoses reported in 2004

A total of 21 164 newly diagnosed HIV infections were reported in 2004 in 23 of the 25 EU countries (data were not available for Italy and Spain). This represents 29% of all HIV infections reported in 2004 in the whole of the WHO European Region [Table 1].

Reporting rates were highest in two of the Baltic States (568 cases per million population in Estonia, 141 cases per million in Latvia) and in Portugal (280 cases per million).

After excluding 4874 cases with no transmission group reported (23% of the total), 56% (9059 cases) were infected through heterosexual contact (HC), 31% (4975) were homo/bisexual men (HBM) and 12% (1961) were injecting drug users (IDU) [Tables 2-4].

Information on geographic origin was unavailable in 4 countries (Austria, Cyprus, Estonia, Netherlands) which reported 11% of all cases in the EU. In the remaining 19 countries, after excluding 5001 (27%) cases with origin not reported, 55% (7579 of 13 756 cases) originated from the country of report and 33% (4551) from sub-Saharan Africa. These proportions varied greatly by country, with persons originating from sub-Saharan Africa accounting for 0-6% of cases in the countries of the Centre and East, but for over 40% of cases in Ireland (43%), Sweden (43%), Belgium (50%) and the United Kingdom (60%) [Table 9].

Recent trends in HIV diagnoses

Recent trends are based on the 20 EU countries with data from a consistent HIV reporting system for the last 4 years (i.e. excluding France, Italy, Malta, Netherlands, Spain) [Table 1].

Over the last 4 years, the total number of new HIV diagnoses reported in these 20 countries increased steadily, from 14 028 in 2001 to 17 281 in 2004 (+23%). The number of reported cases increased by 69% in the United Kingdom (by far the largest increase), by 20% overall in the remaining 10 countries in the West and by 17% in the Centre, but decreased markedly (-49%) in the Baltic states, following a sharp peak in 2001 (2353 cases, essentially among IDU in Estonia and Latvia (85% of cases)) [Table 1].

Excluding Austria and Estonia (data by transmission group not available for all years), the number of new HIV diagnoses in 18 EU countries increased by 48% (from 4987 in 2001 to 7385 in 2004) among HC and by 35% among HBM (from 2922 to 3946), but decreased by 31% (from 2678 to 1836) among IDU [Tables 2-4].

AIDS cases diagnosed in 2004 and estimated number of persons living with AIDS

A total of 7236 AIDS cases were diagnosed in 24 of the EU countries in 2004 (67% of all AIDS cases diagnosed in the WHO European Region), data not available for Cyprus [Table 11].

Incidence rates were highest in Portugal (80 cases per million population) and Spain (43 per million). Rates have risen to relatively high levels in two of the Baltic states—Latvia (40 per million) and Estonia (20 per million)—but remain low (<5 per million) in the countries of the Centre.

After excluding 607 cases with no transmission group reported (8% of the total), 45% (3006) were HC, 30% (1995) were IDU and 23% (1502) were HBM [Tables 12-14].

Excluding Finland and Spain, where geographic origin was unreported for over 85% of cases, the country or subcontinent of origin was reported for 97% (5287/5447) of cases. Among these cases, 3700 (70%) originated from the country of report and 1026 (19%) from sub-Saharan Africa. Persons originating from sub-Saharan Africa accounted for <1% of cases in all 9 countries of the Centre and East, but for 40% or more in Ireland (40%), Belgium (42%) and the United Kingdom (59%).

Among a cumulative total of 262 962 persons diagnosed with AIDS since the beginning of the epidemic, 147 788 (56%) were known to have died by the end of 2004, including 2164 who died in 2004 [Table 24]. These figures suggest that around 115 000 persons having experienced an AIDS-defining illness were alive in the EU at the end of 2004.

Recent trends in AIDS diagnoses

In the EU as a whole, AIDS incidence has continued to decrease slowly, by an average of around 7% per year since 2000. Similar trends are observed in most countries of the West.

In Poland, which accounts for most of the AIDS cases reported in EU countries of the Centre, AIDS incidence—while remaining relatively low—increased in 2003 (144 cases, +22% compared with 2002) and again in 2004 (190 cases, +32%).

Concomitantly, in the Baltic states, the number of AIDS cases increased by around 40% per year, from 33 cases in 2000 to 139 cases in 2004.

HIV and AIDS in the West

The West comprises 23 of the 52 countries of the WHO European Region.

HIV diagnoses reported in 2004

A total of 20 229 newly diagnosed HIV infections were reported in 2004 in 18 countries (data are not available for Italy, Monaco, Norway, San Marino and Spain). Among these cases, 5690 (28%) were less than 30 years old and 7157 (35%) were female [Tables 1, 7].

After excluding 3262 cases with no transmission group reported (16% of the total), 56% (9432 cases) were HC, 30% (5075) were HBM and 10% (1662) were IDU. Almost all the women were infected by HC (5432, 91% of female cases), while among male cases, HBM still constitute the largest group (5075 cases, 48%) [Table 6].

Heterosexual contact is now the most frequent mode of transmission in most western countries, but HBM remain predominant in Denmark, Germany, Greece and the Netherlands [Tables 2-4].

Information on geographic origin was provided by 15 of the 18 countries (Austria, Israel, Netherlands excepted) who reported 90% (18 275) of all cases reported in the West. Of these cases, 6646 (51% after excluding cases with unknown origin) originated from the country of report and 4739 (36%) from sub-Saharan Africa. These proportions vary greatly by country (see EU section) [Table 9].

Among cases known to originate from sub-Saharan Africa, 94% (4269) were infected by heterosexual contact (cases with unknown transmission group excluded) [Table 10].

AIDS cases diagnosed in 2004

In 2004, a total of 7199 AIDS cases were diagnosed in 20 countries of the West (data not yet available for Monaco, Norway and San Marino). Of these, 890 (12%) were less than 30 years of age, 1222 (17%) were 50 years or older and 1962 (27%) were female [Tables 11, 19].

The country with the highest incidence is Portugal (80 cases per million population) [Table 11].

After excluding 578 cases with no transmission group reported (8% of the total), 47% (3113) were HC, 28% (1875) were IDU and 23% (1517) were HBM [Tables 12-14].

The most frequent AIDS indicative diseases were tuberculosis and *Pneumocystis carinii* pneumonia, each reported in almost a quarter of the cases [Table 21].

Information on geographic origin was available for 97% (5229/5410) of the cases diagnosed in 18 countries (Finland, Spain excluded); of these, 67% (3508) originated from the country of report and 21% (1102) from sub-Saharan Africa. These proportions vary greatly by country (see EU section) [Table 22].

Among 1114 cases in persons known to originate from sub-Saharan Africa and with known transmission group, 96% (1074) were infected through heterosexual contact [Table 23].

HIV and AIDS in the Centre

The Centre comprises 14 of the 52 countries of the WHO European Region.

HIV diagnoses reported in 2004

A total of 1597 newly diagnosed HIV infections were reported in 2004 in 13 countries of the Centre (data not yet available for Bulgaria). Among these cases, 643 (40%) were less than 30 years old and 473 (30%) were female [Tables 1, 7].

For 606 (38%) of these cases, the transmission group was not reported. Of the remaining cases, 50% (497 cases) were HC, 22% (217) were IDU and 21% (210) were HBM. Women accounted for 44% of heterosexually-acquired HIV infections (221 cases) [Table 6].

Poland (656 cases, 17 per million population) and Romania (293 cases, 13 per million) account for well over half (59%) of the reported cases. In Poland, 62% (407) of cases were reported with unknown transmission group; of the remaining cases, 74% (184) were IDU. In Romania, on the other hand, 81% (178) of a total of 220 cases reported with

known transmission group were infected heterosexually [Tables 1-4].

In the 10 countries which provided information on geographic origin (Croatia excluded), the vast majority (94%) of new HIV diagnoses were reported in persons originating from the country of report (1149/1222 cases) [Table 9].

AIDS diagnoses and deaths in 2004

In 2004, a total of 599 AIDS cases were diagnosed in 12 countries of the Centre (data not yet available for Bulgaria and Cyprus). Just over a third (35%) of these cases were under 30 years of age and 29% were female [Tables 11, 19].

Romania accounted for 40% (238) of the cases and has the highest AIDS incidence rate (10.7 per million population), although this decreased by 3.7 cases per million from 2003 to 2004.

Excluding 88 cases (15%) with transmission group not reported, almost half of the cases (219, 43%) were infected through heterosexual contact, predominantly in Romania (109 cases). Of the 108 cases among IDU, 89 (82%) were in Poland.

Of 333 AIDS deaths in 2004, 106 (37%, excluding 46 cases with transmission group not reported) were of persons nosocomially infected (including transfusion recipients) in Romania, most of whom were infected as infants in the late 1980s to early 1990s.

HIV and AIDS in the East

The East comprises 15 of the 52 countries of the WHO European Region.

HIV diagnoses reported in 2004

A total of 49 929 newly diagnosed HIV infections were reported in 2004 in the 15 countries of the East. Among these cases, 31 939 (64%) were less than 30 years old and 20 187 (40%) were female [Tables 1, 7].

For 21 593 (43%) of these cases, the transmission group was not reported. Of the remaining cases, almost two-thirds (65%, 18 455) were IDU and one-third (34%, 9666) HC; only 1% (157) were reported as HBM. Women accounted for two-thirds (67%, 6447) of heterosexually-acquired infections [Table 6].

Reporting rates were highest in Estonia (568 per million population), the Russian Federation (239 per million) and

Ukraine (212 per million), which together accounted for 90% (44 930) of all cases reported in the East. In the Russian Federation, more than half (57%, 19 218) of the total of 33 969 cases were reported with unknown transmission group; of the remaining cases, 69% (10 200) were IDU. In Ukraine, 59% (5778) of the 9829 cases with known transmission group were IDU; the transmission group was not reported for 389 (4%) of the total of 10 218 cases [Tables 1-4].

Recent trends in HIV diagnoses

In the East, reports of newly diagnosed HIV infections began to increase in 1995, slowly at first and then, from 1998 (13 760 cases), much more rapidly, to reach a peak of 98 555 cases reported in 2001. Since then, reported numbers have decreased, with around 50 000 new cases reported in each of the last two years (2003 and 2004).

Throughout this period, the vast majority (88% or more) of HIV cases were reported in the Russian Federation or Ukraine, predominantly among drug users. Sharp peaks in the number of reported cases were observed in both these countries, but four years later in the Russian Federation (peak in 2001) than in Ukraine (1997) [Figure 7]. In Ukraine, the annual number of cases has been re-increasing since 2000 and, in 2004 (10 218 cases), exceeded the level of the earlier peak (8717 cases in 1997).

The above trends reflect essentially the trends among IDU. However, cases in persons infected heterosexually have increased continuously in both the Russian Federation and Ukraine and in the East as a whole [Figures 2, 7] and the ratio of IDU cases to HC cases has fallen steadily from 14 in 2000 to 1.9 in 2004.

AIDS diagnoses and deaths in 2004

In the East, data for the Russian Federation are unavailable since 2000 and data for 2004 are not yet available for Kyrgyzstan and Uzbekistan. In the remaining 12 countries, a total of 3057 AIDS cases were diagnosed in 2004. Of these, 985 (32%) were under 30 years of age and 842 (28%) were female [Tables 11, 19].

The vast majority of these cases were diagnosed in Ukraine (2541 cases), which has the highest incidence rate (53 per million population).

Excluding 99 (3%) cases with unreported transmission group, 77% (2279 cases) were IDU [Table 13].

The most frequent AIDS indicative disease is tuberculosis (56% of adult/adolescent cases) [Table 21].

Of the 1069 AIDS deaths in 2004, 81% (868) were in Ukraine [Table 24].

Recent trends in AIDS diagnoses and AIDS deaths

In the East, AIDS incidence—increasing slowly since 1995—has been increasing more rapidly since 2001 and, in 2004, exceeded for the first time that in the West [Figure 1].

In the absence of data from the Russian Federation, most cases have been reported in Ukraine (53 per million in 2004), although HIV case reporting rates have been consistently higher in the Russian Federation than in Ukraine. AIDS incidence has also increased in recent years in Latvia (40 per million in 2004), Georgia (20 per million), Estonia (20 per million) and Moldova (17 per million).

Since 1997, IDU represent more than three quarters of AIDS cases among the three main transmission groups (HC, HBM and IDU), but HC cases are also increasing [Figure 2].

AIDS deaths increased by 20% between 2003 and 2004, following a 66% increase between 2002 and 2003 [Table 24].

Total HIV tests performed

Table 26 presents the total numbers of HIV tests performed annually for diagnostic purposes (i.e. unlinked anonymous tests and blood donations excluded). They provide a crude measure of HIV testing activities but do not inform on who is being tested nor to what extent testing is targeted at high risk populations.

HIV tests

These are numbers of HIV tests performed, not numbers of persons tested, and may include repeat tests performed on the same person. The testing rate is therefore likely to overestimate the true rate of testing in the population. Furthermore, data are derived from different sources in different countries and may not be exhaustive in all countries, and hence may not always be comparable. In many countries of the West, such data are not systematically collected; in some cases estimates are available.

Information on HIV testing

Availability of information on HIV testing varies widely between the countries:

- in the West, while data or estimates for at least 1 year during the period 2000-2004 were available for 16 of the 23 countries, data for 2004 were as yet available for only 7 countries;
- in the Centre and in the East, data for at least 1 year during 2000-2004 were available for all the countries; data for 2004 were available for 12 of the 14 countries in the Centre and 11 of the 15 countries in the East;
- in the EU, data for at least 1 year were available for 20 of the 25 countries and data for 2004 for 14 countries.

Testing rates in 2004 (or latest year available)

In 2004, the Russian Federation still had one of the highest testing rates, with 126 tests per 1000 population and the largest number of tests (17 909 234). San Marino, with a very small population, reported a similarly high testing rate (127 per 1000: 3517 tests). Testing rates were higher than 50 per 1000 in 5 other countries, all in the EU: Austria (86 per 1000), Cyprus (82 per 1000), France (76 per 1000 in 2003), Belgium (53 per 1000 in 2002) and Portugal (50 per 1000 in 2003).

In 11 countries, the last reported testing rate was below 10 tests per 1000 population: Albania, Armenia, Bosnia and Herzegovina, Croatia, Georgia, Greece (EU), Ireland (EU, 2000), FYR Macedonia, Poland (EU, 2003), Serbia and Montenegro, Tajikistan (2003). All but one of these countries reported less than 50 new HIV diagnoses per million population in 2004. In Ireland, where 75-100 new HIV diagnoses per million population have been reported annually in 2000-2004, recent information on numbers of HIV tests is not available (5.7 tests per 1000 population in 2000).

Among 7 of the 8 countries reporting more than 100 new HIV diagnoses per million population in 2004 (Estonia, Latvia, Luxembourg, Portugal, Russian Federation, Switzerland and Ukraine), the testing rate in 2004 ranged from 32 tests per 1000 population in Ukraine and Luxembourg to 51 per 1000 in Portugal (2003) and 126 per 1000 in the Russian Federation. Information on HIV testing was not available for the United Kingdom (122 new HIV diagnoses per million in 2004).

Trends in number of tests performed

Because of missing data, trends in HIV testing could be fully assessed in less than half of the countries of the WHO European Region.

Overall, the number of HIV tests performed from 2000 to 2004 has increased in countries with medium or low testing rates. In Moldova, the annual number of HIV tests quadrupled between 2000 (40 459 tests) and 2004 (160 978 tests; 38 per 1000 population). In Serbia and Montenegro, the annual number of HIV tests almost tripled between 2000 (10 919) and 2004 (30 517) but the testing rate was still only 2.9 per 1000 population.

In some countries in the East with initially higher testing rates, the number of HIV tests performed from 2000 to 2004 has decreased: Kyrgyzstan (-28%), Russian Federation (-13%), Latvia (-5%).

Among countries reporting more than 100 new HIV diagnoses per million population in 2004, the annual number of HIV tests performed increased over the last 4 years in Estonia (+47%), Ukraine (+32%) and Portugal (+22% in 2000-2003), but decreased in the Russian Federation (-13%) and Latvia (-5%).

AIDS case definition for surveillance purposes: national practices

Table 27 shows which AIDS case definition is currently used for surveillance purposes in each country of the WHO European Region.

The recommended 1993 European AIDS case definition for surveillance purposes¹ is used in all but one of the 25 countries of the European Union.

Within the WHO European Region as a whole, the European definition is used in a clear majority—at least 34—of the 52 countries. However, in at least 12 countries, all but one in central and eastern Europe, either the 1993 CDC case definition² (in 8 countries) or another definition (4 countries) is used. Information is currently unavailable for 6 countries.

Further efforts are needed to standardise the case definition used for surveillance purposes across the WHO European Region.

References

1. European Centre for the Epidemiological Monitoring of AIDS. 1993 revision of the European AIDS surveillance case definition. AIDS Surveillance in Europe, Quarterly Report 1993; No. 37: 23-8.
2. Centers for Disease Control (CDC). 1993 revised classification system for HIV infection and expanded surveillance case definition for AIDS among adolescents and adults. MMWR 1992; 41: No. RR-17.