

Trends on incidence and mortality of AIDS in the European Union (1985-2001)

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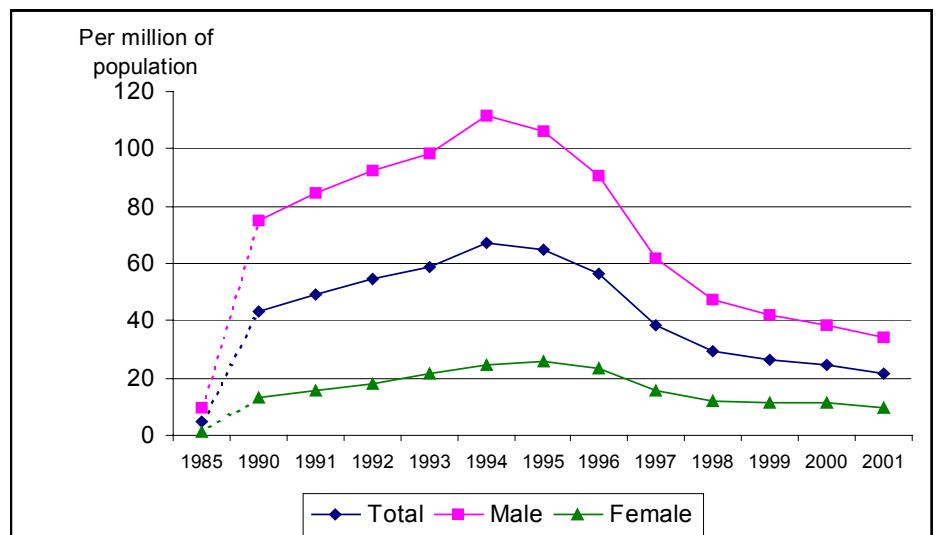
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Although the acquired immunodeficiency syndrome (AIDS) was first recognised in 1981, it was not until 1983 that the human immunodeficiency virus (HIV) was discovered, and it was recognised that AIDS was the result of an advanced HIV infection.

In 2001, 8 210 new AIDS cases (adjusted for reporting delays) were reported from the EU countries, bringing the cumulative total in the EU to 232 407 cases (of which 18 before 1981). For the seventh consecutive year since the start of the epidemic, the annual number of new reported cases decreased (by 11% between 2000 and 2001). Annual AIDS incidence per million (adjusted for reporting delays) was estimated at 21.8 in 2001 having decreased by 10.7% since 2000 in the EU. At present this corresponds to one new case per 40 000 Europeans compared to four such new cases some years ago.

1994 was the turning point in the annual incidence of AIDS in the EU when the figure of 24 886 new cases was reached. The annual incidence of AIDS has decreased by 66% comparing 1994 and 2001. The most pronounced decrease (31.6%) during these last seven years happened between 1996 and 1997, coinciding with the increased use of highly active antiretroviral treatment (HAART). In the following years this tendency continued, but the rate of decrease has slowed down, according to data adjusted for reporting delays. Since the introduction of HAART, a fall in the incidence of AIDS in all categories of transmission has been observed. HAART focuses on early initiation of aggressive combination antiretroviral regimens to maximally suppress viral replication, preserve immune function and reduce the development of resistance.

Figure 1: AIDS reported cases by million of population by year of diagnosis and sex, EU-15 (adjusted for reporting delays)



Statistics in focus

POPULATION AND SOCIAL CONDITIONS

THEME 3 – 18/2002

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Similar patterns of levelling off of new cases are apparent in most Member States. Significant decreases were observed for the years 1995/2001 in Spain (-69%), which nevertheless was for ten years the Member State with the most significant incidence and in Italy (-70%) and France (-72%) which have for a long time shown the second-highest incidence in the EU. In 2001 Portugal, experienced an increase of 13% and has been, since 1998, the country with the highest adjusted incidence, due especially to a relatively recent epidemic among injecting drug users (IDU). Trends in AIDS

incidence were affected by the progressive implementation of the 1993 revision of the European case definition, which resulted in an unusually large increase in 1994 followed by a relative decrease in 1995. However, trends since 1995 should be affected only minimally. The recent decline in AIDS incidence results from the increasing use of HAART since 1996 and the patterns of past HIV incidence which peaked in the mid 1980s. Registers of cases of AIDS are a useful and necessary source of information for monitoring changes in the epidemic.

Table 1: AIDS reported cases by year of diagnosis (adjusted for reporting delays). Cumulative total non adjusted

| | EU-15 | B | DK | D | EL | E | F | IRL | I | L | NL | A | P | FIN | S | UK |
|-------|--------|------|------|-------|------|-------|-------|-----|-------|-----|------|------|------|-----|------|-------|
| 1985 | 1803 | 69 | 38 | 308 | 14 | 175 | 583 | 7 | 198 | | 67 | 28 | 29 | 4 | 34 | 247 |
| 1990 | 15752 | 205 | 197 | 1539 | 143 | 3909 | 4319 | 68 | 3134 | 9 | 419 | 165 | 254 | 15 | 132 | 1244 |
| 1991 | 18027 | 257 | 210 | 1757 | 185 | 4556 | 4655 | 72 | 3827 | 12 | 447 | 199 | 299 | 26 | 138 | 1387 |
| 1992 | 19972 | 250 | 209 | 1883 | 190 | 5060 | 5193 | 72 | 4261 | 12 | 512 | 193 | 411 | 21 | 127 | 1578 |
| 1993 | 21793 | 254 | 239 | 1975 | 171 | 5465 | 5521 | 75 | 4814 | 20 | 480 | 236 | 550 | 25 | 182 | 1786 |
| 1994 | 24886 | 258 | 236 | 2044 | 213 | 7354 | 5763 | 75 | 5524 | 13 | 488 | 167 | 670 | 43 | 187 | 1851 |
| 1995 | 24151 | 248 | 214 | 1872 | 215 | 7061 | 5289 | 53 | 5662 | 15 | 538 | 206 | 775 | 41 | 195 | 1767 |
| 1996 | 20952 | 205 | 158 | 1565 | 233 | 6548 | 4008 | 56 | 5051 | 13 | 458 | 139 | 932 | 24 | 134 | 1428 |
| 1997 | 14321 | 123 | 109 | 996 | 170 | 4716 | 2266 | 30 | 3370 | 10 | 341 | 98 | 933 | 19 | 76 | 1064 |
| 1998 | 11057 | 114 | 74 | 821 | 120 | 3466 | 1918 | 18 | 2418 | 9 | 241 | 97 | 918 | 15 | 58 | 770 |
| 1999 | 9962 | 102 | 74 | 743 | 128 | 2906 | 1796 | 25 | 2121 | 5 | 179 | 99 | 973 | 10 | 67 | 729 |
| 2000 | 9197 | 118 | 58 | 685 | 125 | 2565 | 1735 | 13 | 1907 | 10 | 105 | 84 | 922 | 16 | 55 | 793 |
| 2001 | 8210 | 107 | 73 | 558 | 86 | 2297 | 1527 | 15 | 1681 | 4 | 44 | 43 | 1044 | 17 | 41 | 666 |
| Total | 234513 | 2814 | 2358 | 21210 | 2260 | 63067 | 54947 | 713 | 49713 | 153 | 5416 | 2120 | 9159 | 326 | 1782 | 18455 |

Table 2: AIDS incidence rate by million of population by year of diagnosis (adjusted for reporting delays)

| | EU-15 | B | DK | D | EL | E | F | IRL | I | L | NL | A | P | FIN | S | UK |
|------|-------|------|------|------|------|-------|------|------|------|------|------|------|-------|-----|------|------|
| 1985 | 5.0 | 7.0 | 7.4 | 4.0 | 1.4 | 4.6 | 10.6 | 2.0 | 3.5 | 5.5 | 4.6 | 3.7 | 2.9 | 0.8 | 4.1 | 4.4 |
| 1990 | 43.3 | 20.6 | 38.4 | 19.5 | 14.1 | 100.7 | 76.3 | 19.4 | 55.3 | 23.7 | 28.1 | 21.5 | 25.6 | 3.0 | 15.5 | 21.7 |
| 1991 | 49.3 | 25.7 | 40.8 | 22.0 | 18.1 | 117.2 | 81.8 | 20.4 | 67.4 | 31.2 | 29.8 | 25.6 | 30.3 | 5.2 | 16.1 | 24.0 |
| 1992 | 54.4 | 24.9 | 40.5 | 23.5 | 18.5 | 129.9 | 90.8 | 20.3 | 75.1 | 30.8 | 33.8 | 24.5 | 41.7 | 4.2 | 14.7 | 27.3 |
| 1993 | 59.1 | 25.2 | 46.1 | 24.4 | 16.5 | 139.9 | 96.0 | 21.0 | 84.5 | 50.6 | 31.5 | 29.6 | 55.7 | 4.9 | 20.9 | 30.7 |
| 1994 | 67.2 | 25.5 | 45.4 | 25.1 | 20.5 | 188.0 | 99.7 | 20.9 | 96.7 | 32.4 | 31.8 | 20.8 | 67.7 | 8.5 | 21.4 | 31.8 |
| 1995 | 65.0 | 24.5 | 41.0 | 23.0 | 20.6 | 180.2 | 91.2 | 14.7 | 98.9 | 36.9 | 34.9 | 25.6 | 78.2 | 8.0 | 22.1 | 30.2 |
| 1996 | 56.2 | 20.2 | 30.1 | 19.1 | 22.3 | 166.9 | 68.8 | 15.5 | 88.1 | 31.5 | 29.6 | 17.3 | 93.9 | 4.7 | 15.2 | 24.3 |
| 1997 | 38.3 | 12.1 | 20.7 | 12.1 | 16.2 | 120.0 | 38.7 | 8.2 | 58.6 | 23.9 | 21.9 | 12.1 | 93.9 | 3.7 | 8.6 | 18.1 |
| 1998 | 29.5 | 11.2 | 14.0 | 10.0 | 11.4 | 88.1 | 32.7 | 4.9 | 42.0 | 21.2 | 15.4 | 12.0 | 92.2 | 2.9 | 6.6 | 13.0 |
| 1999 | 26.5 | 10.0 | 14.1 | 9.1 | 12.2 | 73.8 | 30.5 | 6.7 | 36.8 | 11.6 | 11.4 | 12.3 | 97.5 | 1.9 | 7.6 | 12.3 |
| 2000 | 24.4 | 11.5 | 11.0 | 8.3 | 11.9 | 65.0 | 29.3 | 3.5 | 33.1 | 23.2 | 6.7 | 10.5 | 92.3 | 3.1 | 6.3 | 13.3 |
| 2001 | 21.8 | 10.5 | 13.9 | 6.8 | 8.1 | 58.0 | 25.0 | 4.2 | 29.4 | 9.5 | 2.8 | 5.3 | 105.8 | 3.3 | 4.7 | 11.3 |

Transmission categories

Cumulative data to the end of 2001 show that in the EU 40.6% of AIDS cases resulted from injecting drug users (IDU), 30.4% from homosexual or bisexual contacts, and 19.2% from heterosexual contacts.

These proportions vary widely between EU countries: thus, in Spain and Italy the proportion of homo/bisexual contacts is around 15%, and that of IDU over 60% or more. By contrast, homo/bisexual contacts formed over 60% in Denmark, Finland, the Netherlands and the United Kingdom, with small proportions of IDU.

For Belgium another pattern is evident: homo/bisexual contacts 36%, IDU 6%, but heterosexual contacts 45%. For Germany, less than 9% heterosexual contacts, 64% homo/bisexual contacts and 14% IDU.

Since the start of the epidemic, there has been an evolution in the characteristics of AIDS cases. In 1985, the highest incidence of AIDS was found in the homo/bisexual male transmission category, but since 1990 a continuous decrease of the proportion of AIDS cases in this category has been observed.

Table 3: Percentage of AIDS cases by transmission category over total cumulative cases (not adjusted cases), EU-15

| | Injecting drug user (IDU) | Heterosexual contact | Homo/bisexual Male | Mother to child | Homo/bisexual male and IDU | Haemophiliac and coagulation disorder | Transfusion recipient |
|-------|---------------------------|----------------------|--------------------|-----------------|----------------------------|---------------------------------------|-----------------------|
| 1985 | 15.0 | 8.9 | 61.0 | 2.5 | 3.3 | 4.8 | 2.8 |
| 1990 | 40.0 | 11.0 | 38.6 | 1.5 | 1.9 | 1.9 | 2.2 |
| 1991 | 40.4 | 12.1 | 36.7 | 1.5 | 1.6 | 1.9 | 2.0 |
| 1992 | 40.5 | 13.9 | 35.7 | 1.3 | 1.4 | 1.5 | 1.7 |
| 1993 | 41.1 | 15.7 | 33.4 | 1.3 | 1.3 | 1.4 | 1.5 |
| 1994 | 42.9 | 17.2 | 31.0 | 1.1 | 1.4 | 1.3 | 1.1 |
| 1995 | 42.9 | 19.0 | 29.3 | 1.3 | 1.3 | 1.0 | 1.0 |
| 1996 | 43.7 | 21.4 | 26.5 | 0.9 | 1.1 | 0.9 | 0.7 |
| 1997 | 42.4 | 23.7 | 23.7 | 1.1 | 1.0 | 0.5 | 0.7 |
| 1998 | 39.0 | 27.1 | 23.2 | 0.9 | 0.8 | 0.4 | 0.5 |
| 1999 | 36.7 | 29.8 | 22.7 | 0.8 | 0.7 | 0.4 | 0.6 |
| 2000 | 33.5 | 33.1 | 22.3 | 0.9 | 0.7 | 0.4 | 0.5 |
| 2001 | 33.2 | 36.5 | 19.6 | 0.5 | 0.7 | 0.4 | 0.5 |
| Total | 40.6 | 19.2 | 30.4 | 1.2 | 1.3 | 1.2 | 1.2 |

The homo/bisexual male category which exceeded 60% in the first years of the epidemic fell to 19.6% in 2001. Conversely, the proportion of AIDS cases due to heterosexual transmission category has increased progressively, rising from 9% in 1985 to 36.5% in 2001. The percentage of cases of AIDS in the IDU transmission category has fallen in the last few years, from 43.7% in 1996 to 33.2% in 2001, although this remains the most important transmission category (40.6% of total cumulative cases) in the EU. Within these IDU cases of AIDS in the EU there are three times more men than women. The proportion of AIDS cases caused by mother-to-child transmission has considerably decreased, by 80% between 1985 and 2001, which is probably explained by the recommendation to treat pregnant women infected by

HIV with zidovudine to prevent vertical transmission. However the use of antiretroviral drugs in pregnancy requires some considerations about the potential adverse short- or long-term effects on the foetus and newborn. Since 1985 the number of cases for haemophiliac disorder and transfusion recipients has also fallen by 88%. As soon as it was realised that the causative agent of AIDS could be transmitted through blood, members of the groups recognised to be at higher risk were asked not to donate. Since October 1985, when suitable tests became available, all donations should have been screened for HIV antibody. Finally 4.9% of the total cumulative cases represents a group with a few cases of nosocomial infection, some cases of occupational exposure in healthcare workers and cases with no or insufficient information to allow classification.

Table 4: Percentage of AIDS cases by transmission category over total cumulative cases (not adjusted), by country

| | Injecting drug user (IDU) | Heterosexual contact | Homo/bisexual Male | Mother to child | Homo/bisexual male and IDU | Haemophiliac and coagulation disorder | Transfusion recipient |
|-------|---------------------------|----------------------|--------------------|-----------------|----------------------------|---------------------------------------|-----------------------|
| EU-15 | 39.4 | 17.6 | 32.6 | 1.3 | 1.4 | 1.5 | 1.6 |
| B | 6.5 | 45.4 | 36.3 | 3.8 | 0.5 | 0.5 | 4.4 |
| DK | 8.1 | 18.7 | 64.2 | 0.8 | 0.8 | 1.8 | 1.3 |
| D | 14.1 | 8.6 | 63.5 | 0.5 | 1.4 | 2.8 | 1.5 |
| EL | 3.8 | 18.1 | 56.5 | 0.9 | 0.8 | 5.2 | 2.7 |
| E | 63.4 | 13.3 | 13.7 | 1.4 | 1.5 | 1.2 | 0.6 |
| F | 22.6 | 21.8 | 42.9 | 1.2 | 1.1 | 1.1 | 3.4 |
| IRL | 39.4 | 14.0 | 34.8 | 3.5 | 1.4 | 4.6 | 0.4 |
| I | 59.2 | 17.6 | 15.6 | 1.4 | 1.8 | 0.7 | 0.9 |
| L | 16.7 | 19.2 | 50.6 | 0.6 | 0.6 | 2.6 | 3.2 |
| NL | 10.8 | 16.1 | 67.4 | 0.7 | 0.8 | 1.3 | 1.0 |
| A | 24.6 | 15.3 | 37.2 | 1.2 | 0.9 | 3.8 | 2.1 |
| P | 49.9 | 27.8 | 15.6 | 0.8 | 1.0 | 0.7 | 1.4 |
| FIN | 3.9 | 26.2 | 62.7 | 0.9 | : | 0.3 | 2.4 |
| S | 11.2 | 25.2 | 55.8 | 0.9 | : | 2.3 | 3.0 |
| UK | 6.2 | 20.7 | 63.4 | 2.3 | 1.7 | 3.7 | 0.9 |

Incidence by sex and age

Table 5: Cases (not adjusted) of AIDS by age group (% over cumulative total)

| | EU-15 | B | DK | D | EL | E | F | IRL | I | L | NL | A | P | FIN | S | UK |
|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <1 | 0.6 | 1.4 | 0.3 | 0.1 | 0.4 | 0.6 | 0.5 | 0.6 | 0.5 | 0.0 | 0.3 | 0.6 | 0.5 | 0.6 | 0.4 | 1.0 |
| 1-4 | 0.5 | 1.6 | 0.3 | 0.2 | 0.6 | 0.6 | 0.5 | 1.8 | 0.5 | 0.6 | 0.3 | 0.7 | 0.3 | 0.0 | 0.5 | 0.9 |
| 5-14 | 0.5 | 1.4 | 0.2 | 0.3 | 0.8 | 0.4 | 0.4 | 1.7 | 0.4 | 0.6 | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | 0.8 |
| 15-24 | 5.5 | 3.8 | 3.6 | 3.4 | 5.0 | 7.6 | 4.2 | 7.2 | 4.8 | 3.8 | 2.8 | 5.9 | 11.6 | 2.4 | 9.8 | 4.3 |
| 25-29 | 19.1 | 12.7 | 12.1 | 12.6 | 13.7 | 23.8 | 16.8 | 24.3 | 21.2 | 10.9 | 12.1 | 16.7 | 22.1 | 9.0 | 16.8 | 15.8 |
| 30-34 | 26.6 | 21.3 | 20.1 | 22.0 | 20.0 | 29.9 | 24.3 | 26.4 | 31.0 | 21.2 | 21.1 | 23.9 | 21.6 | 25.0 | 20.4 | 23.0 |
| 35-39 | 18.9 | 20.2 | 17.9 | 19.5 | 17.7 | 17.8 | 19.1 | 17.7 | 19.9 | 19.9 | 21.3 | 18.0 | 16.1 | 16.9 | 17.2 | 19.7 |
| 40-49 | 17.8 | 23.1 | 28.4 | 25.4 | 21.4 | 12.4 | 20.7 | 14.6 | 14.0 | 23.1 | 29.0 | 21.9 | 16.0 | 28.9 | 20.7 | 23.4 |
| 50-59 | 7.1 | 9.5 | 12.6 | 12.9 | 10.6 | 4.1 | 8.6 | 4.9 | 5.2 | 15.4 | 9.9 | 7.7 | 7.0 | 11.4 | 9.1 | 8.3 |
| >60 | 3.4 | 4.9 | 4.6 | 3.6 | 8.3 | 2.5 | 4.8 | 0.6 | 2.4 | 4.5 | 2.8 | 4.1 | 4.4 | 5.4 | 4.7 | 2.9 |

There was an increase in the proportion of women with AIDS between 1986 (11.0%) and 2000 (22.9%), due to the increasing weight of the heterosexual transmission category. In 2000, on average in Western Europe, 14% of heterosexually infected women had a "high risk" partner (IDU, bisexual, etc), while 36% had a partner from a country with a generalised epidemic. 19.1% of AIDS cases within EU were recorded in the 25-29 age group, and 26.6% within 30-34 age group. The distribution by age groups is very similar in EU countries with the exception in the 15-24 age group for which Portugal (11.6%) presents twice the EU average (5.5%) and the 50-59 age group, for which Luxembourg (15.4%) and Germany (12.9%) are also around twice the EU average (7.1%). The average age of diagnosis

of AIDS is higher in cases of homo/bisexual men than in cases of heterosexual transmission, and the average age of diagnosis of both groups is higher than in the IDU group. The average age at the diagnosis of AIDS has increased over time, from less than 30 years until 1988 to 38.7 years in 2001. This increase has been particularly noticeable for the IDU group, going from 26 years in the middle of the 80s to 36.0 years in 2001. In the remaining categories there is also a progressive shift in the age of diagnosis of AIDS towards older ages but it is not so pronounced. The figures show a lower incidence in new cohorts; the highest incidence in the older cohorts could maybe be related to a difference in life style.

AIDS indicative diseases

Table 6: AIDS indicative diseases (not adjusted cases) diagnosed in 2001 in adult/adolescent men and women (%), EU-15

| | Men | Women | Total |
|--|------|-------|-------|
| Pneumocystitis carinii | 22.2 | 21.0 | 21.9 |
| Oesophageal candidiasis | 13.0 | 14.9 | 13.4 |
| Pulmonary tuberculosis | 11.9 | 12.1 | 11.9 |
| Extrapulmonary tuberculosis | 9.9 | 9.0 | 9.7 |
| Toxoplasmosis | 6.4 | 8.8 | 6.9 |
| HIV wasting syndrome | 5.8 | 4.8 | 5.6 |
| Kaposi's sarcoma | 6.5 | 2.3 | 5.5 |
| Recurrent pneumonia | 2.7 | 3.5 | 2.9 |
| Cryptococcosis | 2.8 | 2.2 | 2.6 |
| HIV encephalopathy | 2.8 | 2.2 | 2.6 |
| Progressive multifocal leukoencephalopathy | 2.6 | 2.0 | 2.5 |
| Herpes simplex virus disease | 1.0 | 1.7 | 1.1 |

The diagnosis of AIDS requires the presence of at least one of the so-called opportunistic illnesses indicative of AIDS in a person infected by HIV. HAART has improved the immune situation of HIV infected people and has contributed to reduce the frequency of all these illnesses. In 2001 pneumonia caused by *Pneumocystis carinii* was the most frequent opportunistic illness (and also the most life-threatening) being present in 22.2% of men and 21.0% of women diagnosed with AIDS in the EU. Oesophageal candidiasis (caused by *Candida albicans* the most common HIV-related fungus infection) was the second most frequent opportunistic illness in 2001 (13.0% of men and 14.9% of women).

Tuberculosis (pulmonary and extrapulmonary together) occupies for the two sexes together the second place. In 41% of the cases of AIDS diagnosed in 1994 tuberculosis was present. This percentage has decreased to 21.6% in 2001. This fall has probably been due to the increased use of prophylaxis and tuberculosis prevention for HIV positive persons. Another well known opportunistic illness is Kaposi's sarcoma (KS), traditionally the most noticeable external sign of AIDS because spots and lesions appear on the skin. The number of KS cases has also decreased significantly since HAART was introduced (from 21% in the 90s to 5.5% in 2001).

New HIV diagnoses

The current decline in AIDS incidence does not mean, however, that HIV incidence is declining. In 1999, a reporting system for HIV was established in 12 of the 15 Member States of the EU at national or regional level. Nine countries began to report before 1991, Germany in 1993, Spain, Greece and Luxembourg in 1999 and in Austria and France the system has yet to be implemented. In Italy, the Netherlands and Spain, the HIV reporting system has only just started in some regions and data are not included in Table 7. Cases of HIV infection are reported by laboratories in four countries, by clinicians in two and by both in nine countries. A cumulative total of 119 710 HIV cases in EU (only for 10 Member States) were reported by end 2001. For these 10 countries, a total of 10 632 HIV cases and 2 616 AIDS cases were reported in 2001. All countries reported more cases of HIV than AIDS with ratios ranging, in 2001, from 2.4 in Portugal and 2.5 in Germany to 10.0 in Luxembourg and 9.0 in Belgium. Reporting of HIV infection must be interpreted with caution, because these reports do not provide an

accurate measurement of the incidence and prevalence of HIV infection. The proportion of HIV infected individuals who are diagnosed and reported varies according to the phase of the epidemic, HIV testing patterns and characteristics of surveillance systems. Annual numbers of HIV infections reported in the 90s were relatively stable in some countries and decreased in others. The comparison of HIV and AIDS reported data suggests that the level of HIV transmission has remained relatively stable in the EU in recent years and that the sudden decline of AIDS incidence has been due mainly to the effect of HAART.

In other parts of the world HIV is a catastrophe. In many countries AIDS will negatively affect the whole development of society for decades to come. Large increases in the number of HIV infected persons are seen in Asia (especially India), in Africa (especially South Africa) and in other parts of Europe (especially former USSR countries).

Table 7: HIV and AIDS compare reporting data on 2001

| | Cumulative HIV cases reported to end 2001 | HIV cases in 2001 | | AIDS cases in 2001 | | HIV/AIDS ratio 2001 | |
|---------------|---|-------------------|------------------|--------------------|------------------|---------------------|------|
| | | Number | rate per million | Number | rate per million | | |
| EUR-15 | : | 119710 | 10632 | 54.4 | 2616 | : | 4.1 |
| B | 1986 | 14876 | 961 | 94.5 | 107 | 10.5 | 9.0 |
| DK | 1990 | 3341 | 301 | 56.8 | 74 | 13.9 | 4.1 |
| D | 1993 | 18251 | 1377 | 16.7 | 558 | 6.8 | 2.5 |
| EL | 1999 | 5859 | 427 | 40.1 | 87 | 8.1 | 4.9 |
| E | 1999 | : | : | : | : | : | : |
| F | : | : | : | : | : | : | : |
| IRL | 1985 | 2645 | 299 | 79.6 | 16 | 4.2 | : |
| I | 1985 | : | : | : | : | : | : |
| L | 1999 | 511 | 40 | 92.0 | 4 | 9.5 | 10.0 |
| NL | 1989 | : | : | : | : | : | : |
| A | : | : | : | : | : | : | : |
| P | 1983 | 18995 | 2543 | 257.5 | 1045 | 105.8 | 2.4 |
| S | 1985 | 5645 | 277 | 31.0 | 42 | 4.7 | 6.6 |
| FIN | 1986 | 1361 | 128 | 24.7 | 17 | 3.3 | 7.5 |
| UK | 1984 | 48226 | 4279 | 72.6 | 666 | 11.3 | 6.4 |

Some prospective indications

In the last five years there has been a remarkable reduction in the incidence of AIDS in the EU, but still the incidence is high. The current situation is characterised by a balance of factors that act in opposite directions. On one hand there are prevention campaigns and HAART, but on the other hand there are the persistence of high prevalences of HIV infection in some groups, a

series of circumstances that limits the effectiveness of HAART, problems in access and continuity of treatments and the late diagnosis of HIV infection. This last factor remains important because more than a third of the people that developed AIDS did not know that they were HIV infected.

Mortality due to AIDS

Table 8: Standardised death rate due to AIDS per 100 000 of population

| | EU-15 | B | DK | D | EL | E | F | IRL | I | L | NL | A | P | FI | S | UK |
|-----------------|---------|---|-----|-----|-----|------|------|-----|------|-----|-----|-----|------|-----|-----|-----|
| | Males | | | | | | | | | | | | | | | |
| 1994 | 7.8 | : | 7.6 | 4.2 | 1.2 | 18.9 | 13.7 | 1.3 | 11.7 | 5.7 | 4.9 | 3.5 | 11.4 | 0.8 | 1.6 | 1.8 |
| 1995 | 8.2 | : | 8.3 | 4.0 | 1.1 | 21.9 | 13.2 | 2.5 | 12.4 | 2.3 | 4.5 | 3.4 | 16.2 | 1.2 | 1.5 | 1.6 |
| 1996 | 7.1 | : | 5.1 | 3.0 | 1.0 | 21.0 | 9.5 | 1.6 | 11.2 | 0.9 | 3.6 | 2.1 | 18.3 | 1.0 | 1.3 | 1.6 |
| 1997 | 3.7 | : | : | 1.5 | 0.5 | 11.2 | 3.5 | 0.8 | 5.8 | 1.7 | 1.9 | 1.2 | 16.0 | 0.2 | 0.8 | 0.8 |
| 1998 | 2.9 | : | : | 1.1 | : | 7.1 | 2.7 | 0.5 | : | 1.7 | 1.2 | 1.2 | 14.0 | 0.2 | 0.5 | 0.5 |
| 1999 | 2.0 | : | : | 1.1 | : | 7.1 | : | 0.7 | : | 1.3 | 1.4 | 0.9 | 15.4 | 0.2 | : | 0.5 |
| | Females | | | | | | | | | | | | | | | |
| 1994 | 1.7 | : | 1.1 | 0.6 | 0.3 | 4.5 | 2.9 | 0.4 | 3.0 | 0.8 | 0.5 | 0.7 | 1.9 | 0.2 | 0.3 | 0.2 |
| 1995 | 1.8 | : | 1.0 | 0.7 | 0.2 | 5.0 | 2.9 | 0.4 | 3.5 | 0.5 | 0.7 | 0.6 | 2.8 | 0.1 | 0.5 | 0.2 |
| 1996 | 1.8 | : | 0.8 | 0.5 | 0.2 | 5.1 | 2.4 | 0.3 | 3.5 | 0.4 | 0.4 | 0.6 | 3.7 | 0.1 | 0.3 | 0.3 |
| 1997 | 0.9 | : | : | 0.3 | 0.1 | 2.4 | 0.8 | 0.1 | 1.9 | : | 0.3 | 0.2 | 3.0 | 0.0 | 0.2 | 0.2 |
| 1998 | 0.7 | : | : | 0.2 | : | 1.4 | 0.7 | 0.2 | : | 0.5 | 0.3 | 0.2 | 3.2 | : | 0.1 | 0.1 |
| 1999 | 0.5 | : | : | 0.2 | : | 1.5 | : | 0.2 | : | 0.4 | 0.2 | 0.3 | 3.4 | 0.1 | : | 0.1 |
| : Not available | | | | | | | | | | | | | | | | |

According to Eurostat data on causes of death based on death certificates and as obtained from General Mortality Registers in the Member States of the EU, at least 7 259 persons (5 783 men and 1 476 women) died from AIDS in the EU in 1998. In terms of proportion of total deaths in the EU that represents only 0.2% (0.31 % for men and 0.01% for women). Between 1994 and 1998, 72 024 persons (58 338 men and 13 686 women) died from AIDS in the EU. In the total pattern of mortality AIDS is certainly not a leading cause of death in comparison with other groups of diseases such as circulatory diseases, malignant neoplasms or accidents.

But AIDS is a significant cause of death for the 25-34 age group where according to the figures for 1998 the most common causes of death amongst men were accidents (27.5%), suicides (14.8%), AIDS (13.7%), and circulatory diseases (7.6%). Amongst women 25-34 age group, tumours (22.0%) are the prime cause of death, followed by accidents (15.6%), AIDS (12.1%), suicides (10.2%) and circulatory diseases (9.9%). For the other groups of age AIDS is, for the moment, a minor cause of death.

The SDR (Standardised Death Rate) per 100 000 men has also fallen (by 75%) for the EU from 8.2 in 1995 to 2.0 in 1999. Portugal is now the MS with the highest

SDR (15.4) and one of the few countries presenting an increasing trend of deaths due to AIDS. For Spain the highest SDR was noted in 1995 (21.9), and in 1998 this figure decreased to 7.1. The number of AIDS deaths has also fallen significantly in Italy and Denmark. In the case of women the SDR has decreased from 1.8 in 1995 and 1996 to 0.7 in 1998. Portugal, Italy and Spain still shows the highest female AIDS mortality at, respectively, 3.4, 1.9 and 1.4. So, despite some shortcomings of both sources for monitoring, a real and significant change has been observed both in the number of reported cases and in the number of deaths.

In terms of crude death rates (CDRs) and according to 1994/1996 regional Eurostat data (three years average) at NUTS 2 level, the regions with the most significant crude number of deaths of AIDS per 100 000 inhabitants were for men: Lisboa e Vale do Tejo (35.8), Madrid (31.8), Balears (30.8), Ile-de-France (28.4), Catalunya (27.8), País Vasco (27.4), Lombardia (25.7), Provence-Alpes-Côte d'Azur (24.6), Comunidad Valenciana (24.5), Ceuta y Melilla (24.4), Liguria (23.6), Andalucía (23.2), Emilia-Romagna (19.6), Sardegna (19.2), Lazio (17.7), Berlin (16.5), Hamburg (15.7) and Noord-Holland (15.6). For women the distribution by regions was very similar to that for men with 8.7 (País Vasco) as the highest value.

➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

The European Centre for the Epidemiological Monitoring of AIDS (EuroHIV) provides a surveillance network covering the 51 countries of the WHO European region, in collaboration with WHO and UNAIDS. Since 2000 EuroHIV is located in the Institut de Veille Sanitaire (InVS), in Saint-Maurice, France. EuroHIV is supported by European Commission DG SANCO, and its aim is to plan, develop and manage the European HIV/AIDS surveillance system. This includes the collection, analysis and dissemination of epidemiological data (<http://www.eurohiv.org>), with the objectives of describing and better understanding the HIV/AIDS epidemic and improving prevention and control.

In each country, a single institution is responsible for the quality of data on reporting and for bringing data from different sources together and for reporting to the European centre. Data on HIV and AIDS cases are reported to EuroHIV in a standard format. Figures disseminated by Eurostat are based on the Euro HIV data.

For surveillance purposes, cases attributable to more than one mode of transmission are counted once only. The definition for heterosexual transmission varies slightly between countries. The transmission category 'other/undetermined' includes cases of occupational exposure in healthcare workers and cases with no or insufficient information to allow classification.

No adjustments are made for under-reporting or under-diagnosis, so the data presented do not take into account cases

which will never be reported or diagnosed. National estimates of under-reporting range from 0 per cent to 25 per cent for AIDS cases, and are not available for HIV cases.

Because of reporting delays (time between diagnosis of an AIDS case and reporting to national level), EuroHIV suggests that the incidence trends are best assessed by examining data by year of diagnosis, with adjustment for reporting delay, rather than by year of report. Reporting delays varies widely between countries and transmission groups, and may be as long as several years in some cases. Overall, approximately one-third of the cases are reported by the end of the quarter within which they were diagnosed, and between 10% and 15% are reported more than one year after diagnosis.

Different case definitions are used in different countries, depending on population factors (children, adults, relative occurrence of opportunistic infections) and on the laboratory infrastructure and training available, but the countries participating in the surveillance of AIDS in Europe use a uniform AIDS case definition definitively adopted in 1993. The European definition for AIDS differs from the definition used in the USA in that it does not include CD4+ T-lymphocyte count criteria. The WHO clinical case definition for AIDS is used in countries having limited diagnostic resources.

The characteristics of national HIV reporting were explored in a preliminary survey in 1997 and updated in 1999. Individual anonymous data (or, if not possible, aggregated data) on HIV infections diagnosed at any clinical stage are collected

from national HIV/AIDS surveillance institutes taking part in AIDS reporting.

Data on absolute number of deaths is collected by Eurostat (at national and regional NUTS 2 level). The coding is based on the initial cause of death (section b) of the death certificate. Causes of death are defined on the basis of the WHO's International Classification of Diseases (ICD). All EU countries use the ninth or the tenth revision of the Classification.

The crude death rate for the total population (all ages) by sex and by cause is a weighted average of the age-specific mortality rates. The weighting factor is the age distribution of the population whose mortality is being observed. Comparing the crude death rates from two or more populations (countries, regions, ...) is a comparison of a combination of different age-specific death rates and different population structures. So it does not reflect the 'real' mortality difference but includes also the effect of the population structure on the total number of deaths and on the crude death rates.

The standard death rate (SDR) is the death rate of a population of a standard age distribution. As most causes of death vary significantly with people's age and sex, the use of standard death rates improves comparability over time and between countries, as they aim at measuring death rates independently of different age structures of populations. For reasons of international comparability SDRs used here are calculated by Eurostat on the basis of the standard European population as defined by the WHO.

Further information:

➤ Reference publications

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➤ Databases

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