## ITALIAN DATA ABOUT HIV INFECTION AND AIDS CASES 1982-2010

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## The surveillance of new HIV diagnoses

Italy's surveillance system of new HIV diagnoses records data on persons who test HIV positive for the first time. The system was established by a decree of the Ministry of Health in 2008 and receives data from the country's Regions and Provinces. Some Regions had already collected data on new diagnoses before the system existed, as early as 1985. In 2010, 14 of the 21 Regions, and 3 Provinces provided data (Figure 1), covering 72.1% of the country's population. National coverage is expected to increase to 95% in 2011 and 100% in 2012.

In 2009, among persons with Italian nationality, 4.6 new diagnoses per 100,000 population were reported; among non-nationals, there were 22.5 new diagnoses per 100,000 population (Figure 2). In 2009, almost one third of the persons diagnosed with HIV positive were of foreign nationality (Figure 3). Moreover, a north-south gradient in new diagnoses is evident, with the incidence being on average lower in South Italy, compared to the North.

Regarding trends over time, the annual incidence of new HIV diagnoses has remained stable over the past 10 years (Figure 4). The median age of newly diagnosed cases has increased over time: in 2009, it was 39 years for males and 36 years for females (Figure 5). The proportion of women with a new HIV diagnosis increased from 1985 until the mid-1990s and decreased after 2003: the male/female ratio was 2.3 in 2003 and 3.1 in 2009. Cases attributable to heterosexual contact or contact among men who have sex with men (MSM) are steadily increasing, accounting for 79% of all reported cases in 2009 (Figure 6).

In 2009, one third of the persons with a new HIV diagnosis were diagnosed at an advanced stage of illness, with significant impairment to their immune systems (CD4 count below 200 cells/mm<sup>3</sup>) (Figure 7).

## The surveillance of AIDS

The AIDS surveillance system records data on new diagnoses of AIDS. The system was created in 1984 and has national coverage. Since the beginning of the epidemic in 1982, about 63,000 cases of AIDS have been reported and nearly 40,000 of them have died.

The number of new AIDS cases reported each year has decreased since 1996, mainly because of antiretroviral therapies introduced in Italy in the same year. These therapies increase the survival and reduce the mortality of persons living with HIV, resulting in a gradual increase in the total number of persons living with AIDS (Figure 8).

The exposure modalities of persons with AIDS have changed over the past 10 years: the proportion of cases attributable to injecting drug use has decreased, whereas the contribution of sexual contact (heterosexual or MSM) has increased (Figure 9).

In the past 10 years, there has been a growing proportion of persons with a new AIDS diagnosis who did not know that they were HIV-positive or who discovered that they were positive only a short time before being diagnosed with AIDS. As a result, only one third of persons diagnosed with AIDS has undergone antiretroviral therapy before the AIDS diagnosis (Figure 10).

Data from Italy's HIV and AIDS surveillance systems are available on the website of the Istituto Superiore di Sanità (Italian National Institute of Health) at www.iss.it, under "Publications" and, within this, under "Notiziario".

Questions about HIV infection and AIDS may be directed to the AIDS Helpline (800 861061) of the Istituto Superiore di Sanità. The service is free and anonymous; specialized staff answer calls from Monday to Friday, from 1 p.m. to 6 p.m.

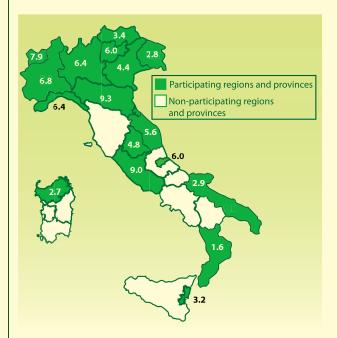


Figure 1 - Incidence of new HIV diagnoses (per 100,000 population), 2009

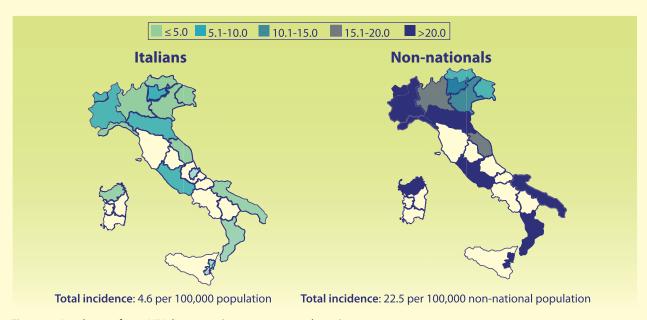


Figure 2 - Incidence of new HIV diagnoses (per 100,000 population), 2009

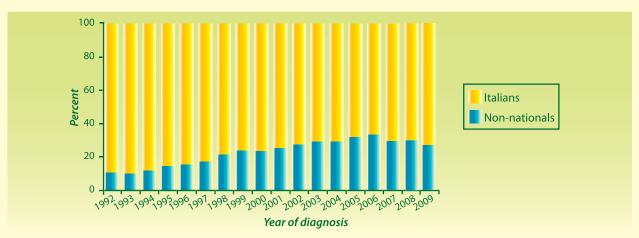


Figure 3 - Percent distribution of new HIV diagnoses among Italians and non-nationals, by year of diagnosis

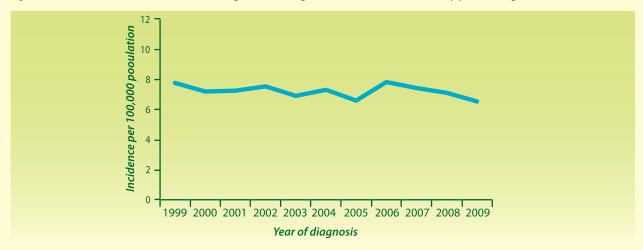


Figure 4 - Incidence of new HIV diagnoses (per 100,000 population), by year of diagnosis (Piemonte, Veneto, Provincia Autonoma di Trento, Provincia Autonoma di Bolzano, Friuli-Venezia Giulia, Lazio, Modena, Sassari)

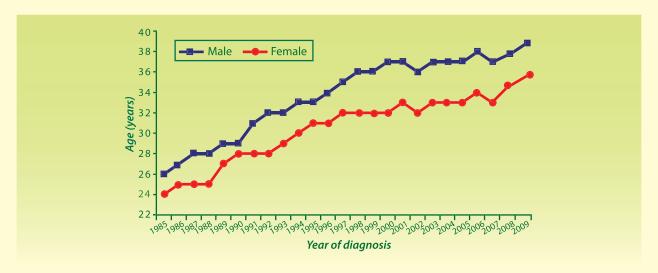


Figure 5 - Median age of new HIV diagnoses, by year of diagnosis

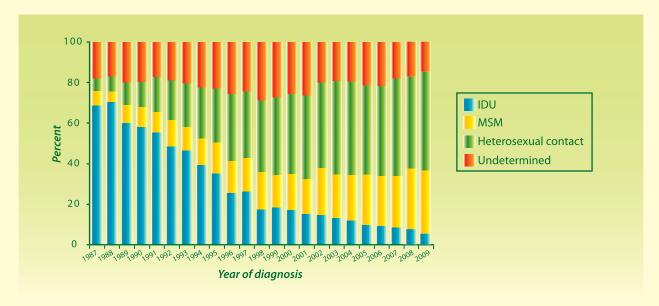


Figure 6 - Percent distribution of new HIV diagnoses, by exposure category and year of diagnosis

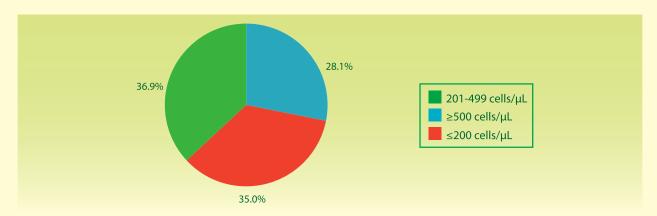


Figure 7 - New HIV diagnoses: CD4 count at HIV diagnosis, 2009 (Piemonte, Lombardia, Liguria, Umbria, Puglia, Sassari, Catania)

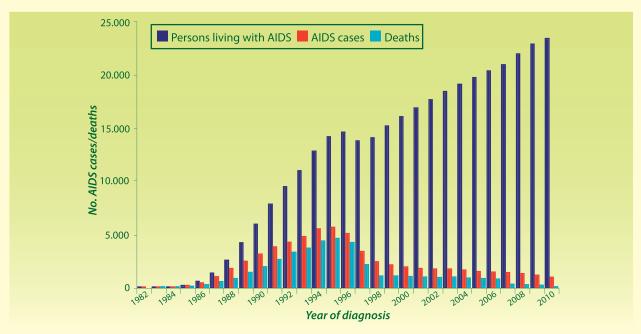


Figure 8 - AIDS diagnoses, AIDS related deaths, and persons living with AIDS

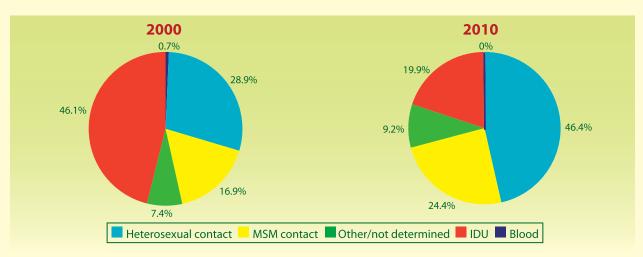


Figure 9 - Distribution of AIDS cases by exposure category: comparison between 2000 and 2010

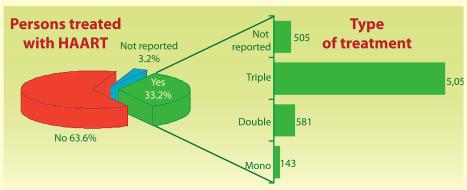


Figure 10 - Use of HAART and type of pre-AIDS treatment among 18,920 persons with a new AIDS diagnosis, 1996-2010

