

Metadata – HIV Detection rate

Description	<p>Number of new HIV infections detected and registered in a given calendar year</p> <p>Rates of new HIV infections registered in a given calendar year per 100,000 population.</p>
Rationale	<p>HIV is one of the most important communicable diseases in Europe. It is an infection associated with serious morbidity, high costs of treatment and care, significant mortality and shortened life expectancy. It is also a perfectly avoidable infection, since the transmission is largely preventable by behavioural measures (safe sex, safe injection). Therefore its incidence in a defined population is an indicator of the success/failure of health promotion. It is also an indicator of the ECHI shortlist [1].</p> <p>As the true incidence rate cannot be known, the detection rate is used as a proxy of the incidence</p>
Primary Data source	<p>Sciensano : National Surveillance Program of HIV/AIDS</p>
Indicator source	<p>Sciensano National Surveillance Program of HIV/AIDS for national detection rates</p> <p>Sciensano: Health Status report calculations for regional detection rates</p> <p>European HIV/AIDS Surveillance system organised by the European Centre for Disease Control /WHO-Europe, for international comparisons (European Centre for Disease Control /WHO Regional Office for Europe) [2].</p>
Periodicity	<p>Yearly</p>
Technical definitions	<p>A case of HIV infection is defined according to the European AIDS and HIV surveillance case definitions. In Belgium, a case must be confirmed in one among the 7 references laboratories. The reference labs report the case to the national surveillance system (Sciensano HIV-AIDS Surveillance Program).</p> <p>ECDC and the WHO Regional Office for Europe jointly coordinate HIV/AIDS surveillance in Europe. The surveillance data on HIV and AIDS diagnoses are collected and submitted annually by the national HIV/AIDS surveillance programs in the Member States to The European Surveillance System (TESSy).</p>
Calculations	<p>The detection rates are calculated as the number of newly diagnosed cases registered in the National Surveillance System, divided by the mid-year population of the same year</p>
Limitations	<p>As the HIV infection long remains asymptomatic, people are not necessarily aware of being infected, and can live for a while before searching for a diagnosis. This results in an under-diagnosis of the existing cases.</p> <p>Moreover, the actual year of infection is often not known.</p> <p>Therefore, the reported rates are not incidence rates but diagnostic rates.</p> <p>The place of residence was unknown in a large proportion of the cases before 2016. It is not sure that missing places of residence are distributed at random. Therefore, we could not make imputations, and trends in regional rates are difficult to interpret.</p>
International comparisons	<p>Availability: yes</p> <p>The international comparability of the notification rate is limited, since the national surveillance systems are different between countries. Factors such as underreporting and reporting delay affect the countries figures and their ranking. There are also differences in the way to handle with double registration.</p>

Metadata – HIV Prevalence

Description	Total estimated number of people living with HIV in Belgium in a given year.
Rationale	Estimating the current burden of the infection Estimating the importance of the hidden epidemic (as HIV is asymptomatic, a proportion of the people infected with HIV are not aware of their status)
Primary Data source	Sciensano : National Surveillance Program of HIV/AIDS
Indicator source	Sciensano : National Surveillance Program of HIV/AIDS
Periodicity	Yearly
Calculation,	The prevalence is estimated through a mathematical model provided by ECDC
Limitations	Missing data for any variable included in the model (as the way of transmission) increase uncertainty.
International comparisons	Availability: yes Comparability : limited

References List

1. European Commission. The European Core Health Indicators (ECHI) shortlist.
https://ec.europa.eu/health/indicators_data/echi_en
2. European Centre for Disease Prevention and Control/WHO Regional Office for Europe. HIV/AIDS surveillance in Europe 2019 – 2018 data. Stockholm: ECDC; 2019.
<https://www.ecdc.europa.eu/sites/default/files/documents/HIV-annual-surveillance-report-2019.pdf>