



Fact sheets on sustainable development goals: health targets

HIV

At global level, international and domestic investments in response to HIV are paying off, with the number of new infections declining each year. However, progress remains uneven and inequitable. HIV remains one of the world's most significant public health threats and a challenge to the achievement of the Sustainable Development Goals (SDGs). In particular, in the European Region, HIV remains a major concern among key populations (1). Hence, an urgent and accelerated health system response, with action across all sectors, is required to end the HIV epidemic.

Overview

HIV infection, if not treated timely, weakens the immune system (2). As the virus destroys and impairs the function of immune cells, infected individuals gradually become immunodeficient, resulting in increased susceptibility to a wide range of infections, cancers and other diseases. The term AIDS is used for the most advanced stage of HIV infection where any of more than 20 opportunistic infections or HIV-related cancers occur. It can take from 2 to 15 years for AIDS to develop, depending on the individual.

HIV can be transmitted through exchange of a variety of body fluids from infected individuals, such as blood, breast-milk, semen and vaginal secretions. Individuals cannot become infected through ordinary day-to-day contact such as kissing, hugging, shaking hands or sharing personal objects, or contaminated food or water.



HIV and SDGs: facts and figures



End the epidemic of HIV/AIDS: although the annual rate of AIDS cases has continued to decline steadily in western Europe and the European Union/European Economic Area (EU/EEA), it more than doubled in eastern Europe between 2006 and 2015 (3).

- While the number of new HIV infections were falling globally, within the European Region the rate of new diagnoses rose by 59% in 2006–2015 (from 11.1 to 17.6 per 100 000 population) (3).
- With 153 000 new HIV cases in 2015, the highest annual number since reporting began in the 1980s, the cumulative number of people diagnosed with HIV in the WHO European Region in 2015 rose to more than 2 million (3).
- The HIV epidemic in the European Region is mainly concentrated in certain key populations: people who inject drugs, men who have sex with men, transgender people, sex workers, prisoners and migrants. The sexual partners of people in these groups are also considered key populations (Fig. 1) (1).

End preventable deaths of newborn and children under 5 years: the European Region is moving towards elimination of mother-to-child transmission of HIV and congenital syphilis (4). The majority of Member States in the eastern part of the European Region have adopted the WHO-recommended "option B+" for prevention of mother-to-child transmission: all pregnant women living with HIV initiate lifelong antiretroviral therapy regardless of CD4 cell count or clinical stage to prevent vertical HIV transmission, and for the benefit of their own health and health of their sexual partners (1,4).

- Three Member States have successfully confirmed their elimination of mother-to-child transmission of HIV and syphilis using the WHO global validation criteria, and more are preparing to undertake the process (1).
- Coverage with antiretroviral medicine to prevent mother-to-child transmission for pregnant women living with HIV in the European Region is among the highest reported globally (75–95%), as is the high rate of early infant diagnosis (70%) and HIV testing and counselling for pregnant women (75%) (1).

End the epidemics of communicable diseases: the high rates of coinfection with tuberculosis (TB), hepatitis B and hepatitis C among people living with HIV (PLHIV) (1) highlight the need for testing patients with TB and hepatitis for HIV and vice versa, along with counselling and rapid treatment.

- TB is the most common AIDS-defining illness in the European Region (3) and a leading cause of death among PLHIV (1).
- Between 2011 and 2015, new TB/HIV coinfections increased by 40% (5).
- It is estimated that in the European Region there are 27 000 people coinfecting with TB and HIV, of whom only 61% are detected and 36% offered antiretroviral treatment. In this population, treatment success remains low (41%) (5).
- Of the estimated 2.3 million PLHIV who are coinfecting with hepatitis C virus globally, 27% are living in eastern Europe and central Asia (1).
- Among HIV-positive people who inject drugs, it is estimated that 83% are coinfecting with hepatitis C in the eastern part of the European Region and 70% in the west and centre (1).
- Many of the individuals coinfecting with TB or viral hepatitis may have many other health and social issues that require attention through integrated and people-centred care (1).

Strengthen the prevention and treatment of substance dependence: changing patterns of drug use, including more frequent injections and sharing needles, represent a challenge for HIV programmes in the European Region (1).

- The rate of HIV transmission attributable to injecting drug use is low in the majority of European Region Member States, but it remains considerable in the eastern part of the Region where in 2015, it accounted for almost half of all new HIV diagnoses with a known mode of transmission (1,3).
- In several Member States, access to preventive measures, harm-reduction programmes, including drug-dependence treatment, has increased. However, a few others do not implement evidence-based prevention policies and interventions for people who inject drugs at all or not at sufficient scale (1).

Ensure universal access to sexual and reproductive health care services: such services are important for the prevention of HIV transmission and early diagnosis. These include promoting safer sex; targeted distribution and promotion of condoms; vaccination against hepatitis B and human papillomavirus; and counselling and testing for HIV, viral hepatitis and other sexually transmitted infections. Pre- and postexposure prophylaxis of HIV is an additional prevention choice for people at substantial risk of HIV infection (6).

Achieving universal coverage: achieving the 90–90–90 targets requires a shift in the way health systems operate. Low rates of coverage with antiretroviral therapy impede the full realization of the HIV prevention benefits of treatment at the population level. It is equally important to monitor treatment outcomes.

- The European Region has made substantial progress in expanding the number of people receiving antiretroviral therapy, reaching 1.12 million people being treated in 2016. This trend has been observed in all Member States (Box 1) (1). The most pronounced increase was in the eastern part of the Region, with a three-fold increase between 2010 and 2016. Despite these efforts, only 28% of the estimated number of PLHIV in eastern Europe and central Asia were receiving treatment in 2016, far below the global average of 53% (1,8).
- In some parts of the European Region, viral load monitoring is not being used routinely (1).
- Despite the increase in the overall numbers of people being tested, HIV-testing strategies are not sufficiently targeted at key populations (9).
- Health financing: many Member States experience financial constraints and some are heavily dependent on donor funding to deliver their national HIV programmes (1). With changing donor priorities and their progressive withdrawal from the European Region, it is critical that many Member States increase domestic funding for HIV programmes and expand the rollout of equitable and sustainable health financing systems (1).

Support research and development for essential medicines and vaccines: gaps remain in terms of knowledge, technology and innovation regarding the course of the HIV response.

- Innovation is needed beyond the biomedical field to include innovations related to communication, behaviour change, service delivery and economic modelling (1).
- A particular focus should be given to the development of innovative service-delivery models that effectively reach key populations with HIV prevention and testing services and engage and retain them in the entire continuum of HIV services (1).



In all regions of the world, punitive laws, policies and practices continue to violate human rights and maintain structural conditions that leave populations without access to HIV services and vulnerable to HIV-related discrimination (10).

- In 2015, the rate of newly diagnosed HIV cases was highest in the east of the European Region (47.5 per 100 000 population), almost seven times higher than in the west (6.3 per 100 000) and 17 times higher than in the EU/EEA (2.8 per 100 000) (3).
- Irrespective of geographical location, the HIV epidemic remains concentrated in key populations in the WHO European Region. Injecting drug use remains one of the main modes of transmission in the east of the Region, and transmission through sex between men dominates in the western and central areas. The latter continues to increase in all parts of the Region, including in the eastern part, where it is highly stigmatized and is generally underreported (3).
- A gender disparity has also been observed in the rate of new HIV diagnoses in the Region: in 2015 the rate was higher among men (10.9 per 100 000 population) than women (4.4 per 100 000 population). The overall male-to-female ratio was 3.3 (3).
- People in prisons and other closed settings are particularly at risk of acquiring HIV, hepatitis B and hepatitis C because of risks associated with unsafe intravenous drug use and sex. The prevalence of drug use, including injecting drug use, is particularly high in prisons in the eastern part of the European Region (1).
- Evidence suggests migrants (including refugees and asylum seekers) experience inequities with respect to their state of health and the accessibility and quality of health services available to them (11).
 - In 2015, migrants (people originating from outside of the reporting country) represented 27% of people newly diagnosed with HIV in the European Region, including 18% non-European migrants and 9% European migrants. A proportion of these patients, even those originating from HIV endemic areas, acquired HIV after arrival in the EU/EEA (3).

Commitment to act

The United Nations General Assembly in June 2016 made a commitment to immediately and decisively fast track the response against HIV and AIDS (12). At the European Regional Committee in September 2016, Member States reinvigorated the political commitment to end the AIDS epidemic as a public health threat by aiming at zero new HIV infections, zero AIDS-related deaths and zero HIV-related discrimination by 2030 in a world where people with HIV are able to live long and healthy lives (13).

During this session, Member States of the European Region adopted the Action plan for the health sector response to HIV in the European Region (1), aligned with the WHO global health sector strategy on HIV 2016–2021 (14), the UNAIDS Strategy 2016–2021 (10) and the SDGs.

Box 1. Leaving no one behind...

“Treat all” approach: in 2015, newly available evidence suggested earlier use of antiretroviral therapy resulted in better clinical outcomes for PLHIV compared with delayed treatment. WHO published an early-release guideline in 2015 and a second edition of the Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection in 2016 (7), which recommended initiation of antiretroviral therapy in everyone living with HIV regardless their CD4 cell count (i.e. as early as the person is diagnosed with HIV and regardless of the state of their immune defences at that point).

The guidelines contain key recommendations to “treat all” PLHIV, including children, adolescents, adults, pregnant and breastfeeding women and people with coinfections, and on how to expand coverage of services for HIV treatment to reach all PLHIV.

Several countries in eastern Europe have revised their policy and introduced the treat-all approach, providing treatment to all PLHIV regardless of CD4 cell count, in accordance with 2016 WHO guidelines (7).

The Action plan encourages Member States to review and revise their HIV strategies and targets based on the best possible data available on the HIV situation, prioritizing key populations and reflecting the country context (Box 2). The Action plan advocates for an urgent and accelerated people-centred response to HIV by the health sector (1). Following the principles of universal health coverage, the continuum of HIV services and the promotion of a public health approach, the Action plan promotes action and specifies fast-track actions in the following five strategic directions:

- information for focused action: know your HIV epidemic and response in order to implement a tailored response;
- interventions for impact: all people should receive the full range of HIV services they need;
- delivering for equity: all people should receive the services they need and services that are of sufficient quality to have an impact;
- financing for sustainability: all people should receive the services they need without experiencing financial hardship; and
- innovation for acceleration: changing the course of the response to achieve ambitious targets.

Box 2. Intersectoral action

Integrated care for key populations: people who inject drugs are at much greater risk of infection with HIV and TB. Treatment for drug dependence, such as opioid-substitution therapy, helps such people to maintain treatment for HIV and TB and improves treatment outcomes. Services for these three problems are usually provided in different locations, so the time and effort required to access them discourages people from seeking and maintaining treatment. In spite of emerging evidence and experience from the European Region, including from Estonia and Ukraine, information is lacking on effective strategies for integrated treatment globally and, therefore, WHO is encouraging research to identify the best delivery models for collaborative TB/HIV interventions for the key populations, including people who inject drugs (15).

Portugal's drug policy and approach to integrated care provide opportunities for shifting the focus on drug dependence from criminal justice to public health, for exploring treatment options and for promoting healthy recovery, focusing on people's needs, not diseases (16).

An external assessment of this model of service integration showed that integrating services for HIV, TB and drug-dependence treatment improved the accessibility and quality of care for people who inject drugs. Key factors in delivering such effective, combined care include:

- widespread and uninterrupted access to opioid-substitution therapy in community and specialized health care settings;
- the involvement of outreach teams;
- a client-centred approach; and
- effective multiagency collaboration.

In addition to integrated treatment services, interventions that provide social support and promote dignity are vital to ensuring access (16).

Three of these strategic directions (i.e. interventions for impact, delivering for equity, financing for sustainability) represent the three dimensions of the universal health coverage.

An immediate, fast-tracked global response will effectively end the epidemic as a global public health threat. Modelling undertaken by the Joint United Nations Programme on HIV/AIDS (UNAIDS) shows that, in combination with high-impact prevention packages and a strengthened commitment to protect human rights, an accelerated testing and treatment effort would result in reduced new adult HIV infections worldwide, avert millions of infections in children, prevent millions of AIDS-related deaths, save billions of dollars in additional costs for HIV treatment and enable countries to reap a 15-fold return on investments in HIV prevention and treatment (17).

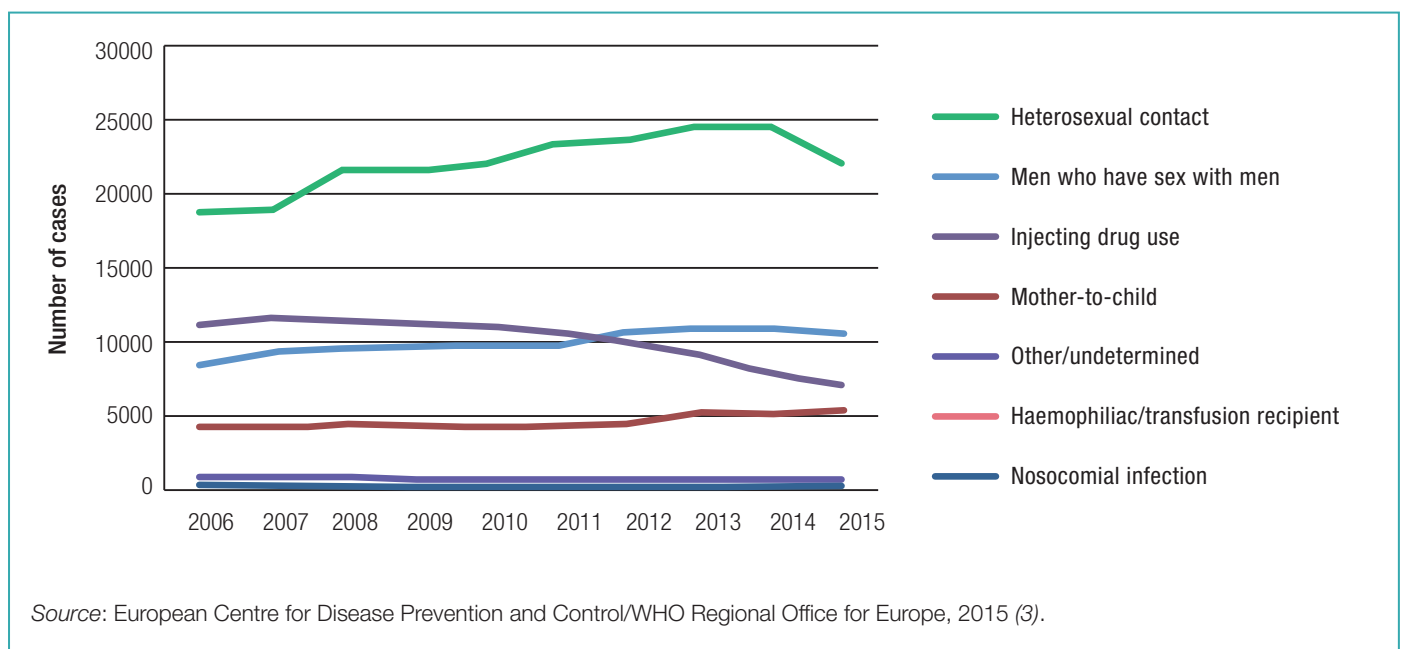
Monitoring progress

The WHO Regional Office for Europe is developing a joint monitoring framework for the SDG, Health 2020 and noncommunicable diseases indicators¹ to facilitate reporting in Member States and to provide a consistent and timely way to measure progress. HIV compromises all Health 2020 targets (18). The following, as proposed in the global indicators framework of the United Nations Economic and Social Council (ECOSOC), will support monitoring progress in ending the HIV epidemic (19). In addition, disease-specific monitoring processes (3,20) for Member State reporting to WHO will support tracking of progress towards the HIV-specific targets outlined in the Action plan (1).

ECOSOC indicator

3.3.1. Number of new HIV infections per 1000 uninfected population, by sex, age and key populations

Fig. 1. New HIV diagnosis by transmission mode and year of diagnosis, WHO European Region, 2006–2015



WHO support to its Member States

WHO provides evidence-based strategies, normative guidance and technical and policy support to Member States in undertaking national programme assessments and scaling up HIV treatment, care, testing and prevention services to enable a comprehensive and sustainable response to the HIV epidemic. More specifically, the WHO Regional Office for Europe supports Member States in:

- integrating WHO guidelines into national policies;
- implementing WHO recommendations in practice; and
- facilitating policy dialogue and fostering political commitment of Member States in implementing evidence-based intervention to reach accelerated response to the HIV epidemic in the European Region.

Partners

WHO collaborates with the following partners to end the AIDS epidemic:

- European Centre for Disease Control and Prevention
- European Monitoring Centre for Drugs and Drug Addiction

<> EUR/RC67/Inf.Doc./1: joint monitoring framework: proposal for reducing the reporting burden on Member States.

- Global Fund to Fight AIDS, Tuberculosis and Malaria
- UNAIDS and cosponsors
- The US President's Emergency Plan for AIDS Relief
- United States Centers for Diseases Prevention and Control
- Other multilateral donors and development agencies, civil society and people living with HIV are represented in all the WHO regional advisory committees.

Resources

- Action plan for the health sector response to HIV in the WHO European Region (2016)
<http://www.euro.who.int/en/health-topics/communicable-diseases/hiv/aids/publications/2016/action-plan-for-the-health-sector-response-to-hiv-in-the-who-european-region.-draft-5.4-2016>
- Global health sector strategy on HIV, 2016-2021
<http://apps.who.int/iris/bitstream/10665/246178/1/WHO-HIV-2016.05-eng.pdf?ua=1>
- Relevant technical consolidated guidelines on HIV
<http://www.who.int/hiv/pub/guidelines/en/>
- HIV/AIDS surveillance in Europe 2015
<https://ecdc.europa.eu/sites/portal/files/media/en/publications/Publications/HIV-AIDS-surveillance-Europe-2015.pdf>

Key definitions

- **90–90–90 targets:** targets proposed by UNAIDS that call for a scaling up of HIV testing so that 90% of people with HIV are aware of their infection, 90% of people diagnosed with HIV are linked to antiretroviral treatment and 90% of those taking antiretroviral drugs adhere to treatment and have undetectable levels of HIV in their blood (10).
- **Continuum of services for HIV:** emphasizes a sequence of services needed to achieve desired impacts and includes services for HIV vulnerability and risk reduction, prevention, diagnosis, treatment and chronic care (7).
- **Key populations:** groups with a high risk and disproportionate burden of HIV in all epidemic settings. They frequently face legal and social challenges that increase their vulnerability to HIV, including barriers to accessing HIV prevention, treatment and other health and social services. Key populations include men who have sex with men, people who inject drugs, people in prisons and closed settings, sex workers, and transgender people and migrants. The sexual partners of people in these groups are also considered key populations (1).
- **Option B+:** the approach in which all pregnant women living with HIV initiate lifelong antiretroviral therapy regardless of CD4 cell count or clinical stage to prevent vertical HIV transmission, and for the benefit of their own health and the health of their sexual partners (4).

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