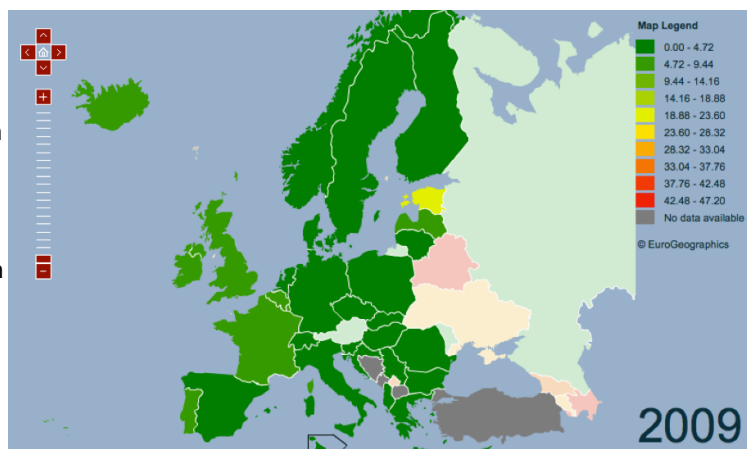


### HIV/AIDS in Europe: The basics

HIV/AIDS was considered a disease predominantly affecting men, however, this is no longer the case. According to WHO/UNAIDS' latest global estimate, women make up over 50% of the people infected with HIV, rising to 60% in sub-Saharan Africa.<sup>i</sup> Globally, HIV is the leading cause of death and disease in women of reproductive age.<sup>ii</sup>

HIV has become a growing health concern for women in Europe, particularly in Eastern Europe, where one of the steepest rises in HIV rates among women in the world has occurred.<sup>iii</sup> The proportion of women living with HIV has been increasing in the last 10 years. The World Health Organization (WHO) cites gender inequalities as a key driver of the epidemic in women.<sup>iv, v</sup>



HIV cases newly diagnosed in females (per 100,000) in 2009<sup>vi</sup>

Annually, over 50,000 people are diagnosed with HIV in the EU and neighboring countries.<sup>vii</sup> Between 2000 and 2009, the number of individuals with HIV in Eastern Europe has nearly tripled. Over the last decade, the rate of new HIV infections from heterosexual contact has increased by 150%.<sup>viii</sup> In Western Europe, the rate of heterosexual transmission of HIV doubled between 1997 and 2002.

According to the European Centre for Disease Prevention and Control's *2013 Surveillance Report*, around 28 000 diagnosed cases of HIV infections were reported in 29 EU/EEA countries, a rate of 5.7 per 100 000 population. However, the report cautions that this number is likely to be higher due to the delay in reporting HIV diagnoses in a number of countries.<sup>ix</sup>

### What is HIV/AIDS?

The Human Immunodeficiency Virus (HIV) attacks the immune system, weakening the body's ability to fight off infections and disease, leading to a progressive failure of the immune system and leaving the body vulnerable to life-threatening opportunistic infections. The last stage of HIV is Acquired Immune Deficiency Syndrome (AIDS); it can take years for HIV to progress into AIDS. There is no cure, but many medications have been developed to slow the progression of the disease.<sup>x, xi</sup>

The modes of transmission include unprotected sexual intercourse (vaginal or anal), sharing of needles and syringes for injecting drugs, transfusion of contaminated blood or its products and mother-to-child transmission (MTCT). It is important for women to understand that the virus can be spread from mother to child during pregnancy, childbirth or breast-feeding.<sup>xii, xiii</sup>

### HIV/AIDS: why gender matters

Their biological make-up and society's gender norms, make women and girls more susceptible than men to sexually transmitted infections, including HIV. According to the WHO report, gender inequalities in HIV are a key driver of the epidemic in several ways:<sup>xiv, xv</sup>

- Gender norms related to masculinity can encourage men to have more sexual partners and older men to have sexual relations with much younger women. In some settings, this contributes to higher infection rates among young women (15-24 years) compared to young men.
- Homophobia stigmatises men having sex with men, and makes them and their partners vulnerable to HIV.
- Norms related to femininity can prevent women, especially young women, from accessing HIV information and services. Only 38% of young women have accurate, comprehensive knowledge of HIV/AIDS according to the 2008 UNAIDS global figures.
- Violence against women (physical, sexual and emotional), which is experienced by 10 to 60% of women (ages 15-49 years) worldwide, increases vulnerability to HIV. Forced sex can contribute to HIV transmission due to tears and lacerations resulting from the use of force. Women who fear or experience violence often lack the power to ask their partners to use condoms or refuse unprotected sex. Fear of violence can prevent women from learning and/or sharing their HIV status and accessing treatment.
- A main risk factor for women in Europe for HIV transmission presently is the undisclosed risk behaviour of their male sexual partners.

### HIV testing and women

Strategies for HIV testing vary across Europe, but widespread, unacceptably high rates of late diagnosis among women suggests that current testing strategies are not adequately reaching the female population.<sup>xvi</sup> Research has found, for example, that women miss chances for HIV testing more than men and are more impacted by the potential negative effects of HIV testing such as the disclosure to partners.

### The biological dimension

Some studies suggest that HIV/AIDS varies between women and men. The rate of disease progression can vary and the standard predictors of disease progression such as viral load are not always as accurate for women as they are for men. A man and woman may have the same viral load, yet the disease may progress at a faster rate in women. The reasons for these differences are not fully understood.<sup>xviii</sup>

Women generally are more susceptible to sexually transmitted infections (STIs) than men. This includes HIV infections. The rate of male-to-female transmission during intercourse is about twice to four times that of female-to-male transmission.<sup>ix</sup> Pre-existing infections of Herpes (HSV-2), chlamydia and the Human Papilloma Virus (HPV) increase the risk of HIV transmission. Young women, particularly below the age of 24, appear to be much more vulnerable to HIV. This increased susceptibility occurs because their genital tracts are not yet mature and may be more prone to tears and abrasions during sexual intercourse.<sup>xx</sup>

Age also impacts HIV transmission susceptibility. Post-menopausal women have an elevated risk of HIV infection due to a thinned uterus lining and increased vaginal dryness. When controlling for other factors, women with HIV live longer than HIV positive men. Although ageing women are making up an increasing proportion of the total HIV positive population, little data exists on older women with HIV. Studies that include ageing women do not have a large enough sample size to draw useful conclusions.<sup>xxi</sup>

### HIV/AIDS and pregnancy

Most HIV infection in children results from mother-to-child transmission (MTCT). However, only 1.5-2% of MTCT occurs through the placenta during pregnancy. If the expectant mother remains healthy, such transmission is less likely to happen. Most transmission happens during labor and through breastfeeding.<sup>xxii, xxiii</sup>

If pregnant women with HIV do not receive drug treatment during pregnancy, delivery and postpartum, it is estimated that in 25% of cases, their infants will acquire HIV. However, with a multi-care approach to pregnancy and delivery, the likelihood of HIV transmission to the infant is reduced to less than 2%. Specifically, the risk of HIV transmission during childbirth is 10-20% if no prevention is undertaken. Approximately 15% of babies born to HIV-positive women will become infected if they breastfeed for 24 months or longer.<sup>xxiv, xxv</sup>

Currently, steps can be taken to prevent MTCT. During pregnancy women with HIV are treated with a drug regimen developed specifically for that case of at least three different HIV medications. Women with HIV should tell their doctors about the medicines they are taking as some anti-HIV medications may cause issues during pregnancy such as birth defects that develop during the first few months of pregnancy; the long-term effects of some medications on babies are unknown. Pregnancy registers are useful safety tools. During childbirth, HIV-positive pregnant women receive intravenous AZT as well as oral tablets. After delivery, babies receive liquid AZT for 6 weeks.<sup>xxvi</sup>

Various factors increase the risk of MTCT transmission:<sup>xxvii</sup>

- Stage of HIV
- Labor and childbirth issues
- Breastfeeding
- Smoking
- Substance and drug abuse
- Malnutrition
- Vitamin A deficiency
- Other infections, including STIs

One of the key strategies of the *WHO European Action Plan for HIV/AIDS 2012-2015* is to eliminate MTCT through HIV testing and counseling of all pregnant women. Pregnant women who are HIV positive must be provided with antiretroviral therapy (ART) during/after pregnancy and their vulnerable infants must be given ART as well. Access to safe infant formula must be ensured. Access and support, in particular, for HIV-positive women with unintended pregnancies is needed for effective policy.<sup>xxviii</sup>

	EU/EEA countries*
Number of HIV cases	27 116
Rate per 100 000 population	5.7
<b>Percentage of cases**</b>	
Age 15-24 years	11%
Female	26%
<b>Selected transmission modes</b>	
Heterosexual***	24%
Men who have sex with men	38%
Injecting drug use	4%
Unknown	18%

\* No data from Austria or Liechtenstein.

\*\* Cases with unknown age and gender excluded from the percentages.

\*\*\* Excludes individuals originating from countries with generalised epidemics.

**Characteristics of the newly diagnosed cases of HIV infection reported in EU/EEA countries, 2010<sup>xvii</sup>**

### Gender inequality, discrimination and stigma

According to WHO Europe, high-risk populations in Europe face many obstacles to access HIV services, including discrimination, stigma and barriers within the healthcare system. Disadvantaged and vulnerable population groups often do not have access to or are reached by health services to prevent, diagnose and treat HIV infection. It is estimated one-third of people living with HIV in the EU/EEA and up to 60% in Eastern Europe do not know they are infected with HIV due to both limited access to and low utilisation of HIV testing and counseling.<sup>xxix</sup>

Throughout Europe, high-risk individuals, who are often socially marginalised and in need of HIV treatment, are the least likely to receive treatment. Antiretroviral therapy (ART) access rates in some European countries are the lowest in the world with only 19% (half of the global average) of adults needing ART in low-and middle-income countries in Europe receiving it. These inequalities in access throughout the WHO European region persist; ART access in Western Europe is one of the best in the world, but drastically lags behind in Eastern Europe. For example, a majority of people with HIV are injection drug users; however only 25% of these drug users are receiving ART in Eastern Europe.<sup>xxx</sup>

Therefore, rapid testing must be targeted at high-risk population groups including pregnant women. The health needs of female injection drug users, of the women whose partners inject drugs and of sex workers throughout the region, especially in Eastern Europe, need to be targeted by HIV healthcare services.

Support must be given to end sex and gender-based violence, which often is associated with the transmission of HIV to women.<sup>xxxi</sup> Poverty frequently impedes HIV treatment, as therapies are expensive. Women with limited financial resources are especially susceptible. In comparison to men, women are more likely to be excluded from health plans. Women often put the needs of their families over their own health needs, negatively impacting effective treatment.<sup>xxxi</sup>

	WHO European Region*	West*	Centre	East
Number of HIV cases	118 335	25 659	2 478	90 198
Rate per 100 000 population	13.7	6.6	1.3	31.7
<b>Percentage of cases</b>				
Age 15–24 years**	12%	10%	17%	13%
Female	38%	27%	19%	42%
<b>Transmission mode**</b>				
Heterosexual	43%	24%***	24%	48%
Men who have sex with men	20%	39%	29%	0.7%
Injecting drug use	23%	4%	4%	43%
Unknown	13%	16%	41%	6%

Characteristics of the newly diagnosed cases of HIV infection reported in WHO European region, by area, 2010<sup>xxxiii</sup>

### HIV and female sex workers

Sex workers are among the groups most vulnerable and seriously affected by HIV/Aids due to the nature of their work, the number of sexual partners, an unsafe working environment, inability to negotiate condom use, or not having access to health services. Laws, regulation and policies criminalise or stigmatise sex workers. A review published in 2013 on the HIV risk among female sex workers in Europe shows that HIV is low for those who don't inject drugs, which is the primary risk factor for them. HIV in female sex workers is the highest in Eastern European countries. Additionally, female sex workers are vulnerable to various forms of violence. The review concludes that interventions for HIV prevention should be included in strategies that address the social welfare of sex workers, highlighting the need to target the social determinants of health and inequality, including regarding access to services, experience of violence and migration.<sup>xxxiv</sup>

### Women in HIV/AIDS drug trials

Globally, almost half of women living with HIV/AIDS are women. However, historically, women have been underrepresented in clinical trials for HIV/AIDS medications, making it difficult to draw conclusions on gender-based differences with regard to HIV treatment efficacy and effectiveness. Lack of scientific research makes fighting HIV more difficult in women than in men. For example, in the 18 randomised controlled trials of new HIV drugs submitted to the Food and Drug Administration (FDA) from 2000 and 2008, only 15% of patients enrolled were women. Women from minority and ethnic groups have been particularly underrepresented in trials.<sup>xxxv</sup>

Much is unknown how HIV treatments impact on women. More information specifically on drug absorption, drug toxicology and side effects in women is needed. In future, treatment studies need to explore the impact of biological factors such as hormone variation (from menstruation, pregnancy, and menopause) on drug absorption and efficacy. HIV medication interacting with other medication taken by women, such as birth control pills and hormone replacement therapy (HRT), is not sufficiently studied.<sup>xxxvi</sup>

Women encounter various barriers to enrolling in drug trials, which often require a significant time commitment and potentially unpaid time off work. Often, pharmaceutical companies and hospitals do not provide child-care services or compensation of expenses. Women are reluctant to disclose their HIV status to employers, which can be necessary to take time off from work. Women have been kept from drug trials due to the pregnancy potential. Many women often lack the necessary socio-economic support to enable them to participate in trial.<sup>xxxvii</sup>

### WHO European Region—the East-West Divide of HIV/AIDS

Approximately 2.2 million people were living with HIV in 2012 in the WHO European Region (53 countries), and the numbers continue to rise. Alarmingly, around half of those people with HIV do not know that they are infected. HIV represents a growing threat for women in the eastern region of Europe. Despite some progress in achieving access to HIV prevention, treatment, care and support, the response to the HIV epidemic still faces many challenges such as unknown HIV status, late treatment initiation, low access to treatment, co-infection with tuberculosis and hepatitis.<sup>xxxviii</sup>

The eastern part of the WHO European Region has the fastest growing HIV epidemic in the world. HIV/AIDS is estimated to have tripled since 2000. For World AIDS Day 2013, the WHO European Region released figures which show that new HIV infections are 3 times higher in the east than in the west of Europe. While reported AIDS cases declined by 54% in the West, the number of people newly diagnosed with AIDS increased by 113% in the eastern part of Europe from 2006 and 2012. For the same period, reported deaths among people with AIDS decreased by 14% across the Region as a whole, but increased by 58% in the East. HIV testing and counseling, as well as early diagnosis, need to be stepped up to allow for earlier treatment with ART.<sup>xxxix</sup>

The number of new HIV infections acquired through heterosexual contact has increased by 150% in the last decade. Women comprise of up to 50% of new cases in some Eastern European countries. In Russia, for instance, women aged 15-24 are contracting HIV at twice the rate as men of the same age.<sup>xi</sup> According to Dr. Jean-Elie Malkin, the UNAIDS Regional Director for Eastern Europe and Central Asia, "*Women [in Eastern Europe] are especially at risk of HIV due to multiple factors such as economic vulnerability, fearing or experiencing violence, and difficulties in negotiating for safe sex.*"<sup>xii</sup> Much of the rise in HIV transmission in Eastern Europe is due to injection drug use and heterosexual intercourse.<sup>xiii</sup> Although the majority of HIV-positive drug users are men, this affects their female partners.<sup>xiiii</sup>

In Western Europe, the spread of HIV remains concentrated among men who have sex with men as well as among migrant populations—both men and women—especially those from countries with HIV epidemics.<sup>xiv,xv</sup> Thus, the primary mode of transmission varies significantly, and the focus of the interventions will have to respond accordingly. However, in all countries the populations most at risk for HIV are marginalised groups that often lack access to proper health care, information and prevention services.

HIV is a serious threat to public health in Europe. The EU urgently needs to address the expanding HIV epidemic in its neighbouring countries, including the former members of the Soviet Union, by developing a clear plan of action to support these countries in the fight against infectious diseases.

### European activities

Commission communication on combating HIV/AIDS in the EU and neighbouring countries: The 2009 document identifies policies to help reduce the rate of new HIV infections and improve the quality of life for people living with HIV/AIDS throughout Europe. The EU policies support stakeholders in EU and neighbouring countries to improve access to prevention, treatment, care and support; to reach migrants from countries with a high prevalence of HIV and to improve policies targeting the populations most at risk.<sup>xvi</sup>

WHO European Action Plan for HIV/AIDS 2012-2015: The Plan's vision and goals for the European Region are **zero new HIV infections, zero AID-related deaths and zero discrimination** in a world in which people living with HIV are able to live long, healthy lives. The Plan aims to eliminate new HIV infections, discrimination with regard to diagnosis and treatment and reduce AIDS-related deaths in Europe. It targets national authorities of ministries' of health and other related services, such as justice, education and social welfare, throughout Europe.<sup>xvii</sup>

WHO European Region: New Consolidated Guidelines for ART: In June 2013, WHO published new consolidated guidelines on the use of ART. These Guidelines call on all countries to initiate treatment in adults living with HIV when their CD4 cell counts fall to or below 500 cells/mm<sup>3</sup>: when their immune systems are still strong. Implementation of the new guidelines needs to be encouraged to make more people in the Region eligible for ART, to prevent more people from developing AIDS and reduce further transmission of HIV infection. With the right therapy, started at the right time, people with HIV can now expect to live long and healthy lives. This therapy also protects their sexual partners and infants as the risk of transmitting the virus is greatly reduced.

Joint Action on HIV/AIDS Prevention (2013-2015): Following the strategy for combating HIV/AIDS in the EU and neighbouring countries, the Joint Action uses a public health approach to ensure more effective HIV/AIDS prevention in the EU and neighbouring countries. The Joint Action focuses on vulnerable populations. It aims to increase the effectiveness of HIV prevention using quality assurance and improvement tools. Importantly, it will train at least 60 experts in participating countries to provide capacity building and technical assistance to programmes/projects applying these tools, ensure that experts have the skills for providing technical support, and develop, adopt and disseminate a Charter for Quality in HIV Prevention.<sup>xviii</sup>

The European Commission has set up two groups that meet twice annually to encourage cooperation:

- 1) **HIV/AIDS Think Tank:** This group is comprised of representatives from EU Member States and neighbouring countries to exchange information on HIV and to strengthen cooperation throughout Europe with regard to HIV/AIDS diagnosis, treatment and care.
- 2) **HIV/AIDS Civil Society Forum:** The Forum consists of experts, including major European networks and NGOs that make recommendations on HIV/AIDS policy formulation and implementation.<sup>xix</sup>

### Steps for Policy Action

#### 1) **Improve existing EU data collection on HIV/AIDS.**

Currently, HIV/AIDS data collection throughout Europe remains limited. Annual data about incidence and prevalence should be improved, particularly with regard to Eastern Europe, to better understand the full scope of the HIV/AIDS epidemic. The interaction and influence of major risk factors disaggregated by gender and age must be included in order to fully understand HIV trends. More data on hard to reach high risks groups is needed.

#### 2) **Implement policy, programmes and interventions that target women, especially socio-economic disadvantaged women, drug users, sex workers and migrant workers.**

It is imperative that women's unique vulnerabilities to HIV are considered in prevention, support and treatment programmes. Diagnosis, treatment and care throughout Europe, especially in Eastern Europe, need to be stepped up to reduce HIV in women. Programmes and interventions must be tailored to the unique needs of women to enable them to have better control over their own bodies and lives.

#### 3) **Ensure that clinical trials include sufficient numbers of women to allow for safer antiretroviral medicines use in women.**

Women continue to be underrepresented in clinical trials with regard to HIV/AIDS treatments. Trials need to be designed to support and encourage female participation to improve our knowledge about the efficacy and effectiveness of treatment in women. More research is needed to understand the interaction of HIV treatments with other medications, such as birth control, HRT and the impact and safety of these treatments in pregnant women.

#### 4) **Support and develop policy and programmes for pregnant women with regard to HIV/AIDS.**

Ensure that pregnant women with HIV/AIDS receive the proper support during pregnancy, delivery and postpartum to eliminate mother-to-child-transmission of HIV/AIDS in Europe.

#### 5) **Reduce the burden of HIV/Aids in Eastern European countries by improving HIV testing, diagnosis, treatment and care.**

Strategies for HIV testing vary across Europe and current HIV testing must be improved to reduce the unacceptably high rates of late diagnosis among women in Eastern Europe. Health services must be strengthened to allow for faster diagnosis and treatment to prevent the spread of the HIV epidemic. Interventions to prevent HIV in female sex workers should be included in strategies that address their social welfare and target the social determinants of health and inequality.

#### 6) **Support the implementation of the WHO Action Plan 2012-2015 and the revised ART Guidelines to step up access to HIV prevention, testing, treatment and care for all population groups throughout the European Region to avoid the HIV epidemic spreading across the borders to the European Union.**

Infectious diseases do not stop at the borders. It is in the interest of EU governments to protect their citizens by actively supporting the fight against HIV/AIDS in neighbouring countries.

#### 7) **Fully implement the Dublin Declaration as the key European policy document whose implementation is monitored by the European Centre of Disease Control and Prevention (ECDC).**

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