

## Local fact sheet: HIV and AIDS in the Netherlands

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## I. Dutch demographics at a glance

Since 2002, Stichting HIV Monitoring (SHM) has officially been charged by the Dutch Ministry of Health, Welfare and Sport to monitor the HIV epidemic and the quality of HIV care in the Netherlands. Data is collected and maintained based on pseudonymised data from people living with HIV in care in the 26 officially acknowledged HIV treatment centres throughout the country.

The below data is from SHM's most recent report, Monitoring Report 2017. Human Immunodeficiency Virus (HIV) Infection in the Netherlands, which covers 2016 data.

POPULATION IN THE NETHERLANDS	17.2 million
POPULATION IN AMSTERDAM	838,338
POPULATION WITH HIV	22,900
MSM (MEN WHO HAVE SEX WITH MEN) WITH HIV	11,928
OTHER MEN WITH HIV	3,547
WOMEN WITH HIV	3,560
PEOPLE LINKED TO CARE	19,035
POPULATION UNAWARE OF THEIR HIV STATUS	2,600
NEW HIV DIAGNOSES	820
HIV DIAGNOSES AMONG MSM	67%
NEW HIV DIAGNOSES IN PEOPLE WHO ARE 50 YEARS OR OLDER	27%
NEW HIV DIAGNOSES THAT GO INTO CARE TOO LATE	43%
PEOPLE HAVE DIED FROM THE CONSEQUENCES OF AIDS	17

### Short history of HIV and AIDS in the Netherlands

The first AIDS patients in the Netherlands were admitted to hospital in 1981. Fear and uncertainty dominated the conversation about the mysterious illness.

In the following years, education proved to be the driving factor for success in the Netherlands. The Dutch were the first to spearhead large-scale needle exchange programmes to combat the spread of HIV among injecting drug users. The first information campaign targeting the Dutch population began in 1987 and was spearheaded by the government.

Dutch policy has focused on providing targeted education to affected groups, such as men who have sex with men (MSM), sex workers and people who inject drugs (PWID). While HIV and AIDS reached epidemic proportions in some countries due to lack of inclusion of

affected groups in national AIDS policy, the Netherlands became an international leader in the fight against AIDS.

## II. Key populations

### People who inject drugs (PWID)

- The Netherlands has a low rate of new HIV infections among people who inject drugs
- The HIV incidence in people who inject drugs has been stable since 2008<sup>1</sup>
- Between 2000 and 2012, two new infections were identified<sup>2</sup>
- The limited prevalence is likely due to the implementation of needle exchange programmes (see above)

### Men who have sex with men (MSM)

- In 2016, the majority (67%) of newly-diagnosed infections were in MSM<sup>3</sup>

### Sex workers

- The prevalence of HIV in sex workers in the Netherlands is extremely low
- An estimated 2% of sex workers in the Netherlands are HIV-positive<sup>4</sup>

### Children (0-12), adolescents (10-17) and young people (18-24)

- Patient population with HIV in care in 2016:
  - 134 children
  - 77 adolescents
  - 343 young people<sup>5</sup>

## III. The HIV epidemic

### PLWH (People Living with HIV)

- By the end of 2016, 22,900 individuals were estimated to be living with HIV in the Netherlands, of whom 2,600 were still undiagnosed<sup>6</sup>
  - 60% were originally from the Netherlands
  - 13% were originally from Sub-Saharan Africa
  - 7% were originally from South America
  - 6.5% were originally from other and unknown regions
  - 5% were originally from Western Europe
  - 4% were originally from the Caribbean
  - 3.5% were originally from South and South-East Asia
- In total, 20,264 individuals, or 89% of the total number estimated to be living with HIV, have been diagnosed, linked to care, and registered by SHM, while 19,136 individuals are considered to still be in care<sup>7</sup>

- The overall patient population with HIV in care in the Netherlands continues to age, with 46% currently older than 50 years (45% in 2015, 42% in 2014, and 39% in 2013)
- Since 2005, people living with HIV can take out life insurance in the Netherlands<sup>8</sup>

#### **CD4 count at diagnosis**

- 43% of newly diagnosed individuals are in the late stages of infection or already have AIDS<sup>9</sup>
- The proportion of individuals who are identified and start antiretroviral therapy (ART) earlier in their infection (including during primary HIV infection) continues to increase, particularly amongst MSM
- This is reflected in the CD4 count, both at diagnosis and at start of ART, gradually having risen over time to a median of 380 and 410 cells/mm<sup>3</sup>, respectively, in 2016<sup>10</sup>
- It is interesting to note that MSM in Amsterdam are now generally being diagnosed earlier in infection than elsewhere in the Netherlands<sup>11</sup>

#### **New diagnoses**

- By the end of 2016, there were approximately 820 new diagnoses in the Netherlands<sup>12</sup>
- In 2016, the majority (67%) of newly-diagnosed infections were in MSM<sup>13</sup>
- 25% of newly-diagnosed infections were acquired through heterosexual contact
- 8% of newly-diagnosed infections were acquired through other or unknown modes of transmission
- More than a quarter of all newly diagnosed individuals in 2016 were 50 years or older
- Since 2008, there has been a decreasing trend in the annual number of new HIV diagnoses to below 900 new diagnoses in recent years
- Over 95% of persons newly diagnosed with HIV entered specialised care within 6 weeks after diagnosis<sup>14</sup>

#### **Morbidity and mortality**

- Since the start of the epidemic in the Netherlands, 8,059 people have been diagnosed with AIDS, of which 4,987 people have died because of AIDS-related illnesses<sup>15</sup>
  - Deaths from AIDS are largely driven by late presentation and late entry into care, which once again stresses the importance of identifying and linking individuals to care earlier during the infection<sup>16</sup>
- There has been a sustained decline in death from AIDS, with a shift towards death from other causes<sup>17</sup>
  - Non-AIDS comorbidities, including non-AIDS-defining malignancies (NADM), cardiovascular disease (CVD) and chronic liver disease, comprise a sizable fraction of those other causes<sup>18</sup>

## IV. HIV prevention

### Highlights

- The core principles of Dutch HIV and AIDS policy are
  - The importance of prevention
  - The importance of linkage between prevention and care
  - Efforts to ensure low-threshold access to testing and treatment<sup>19</sup>
- HIV testing was made available in the Netherlands as early as 1985
- In 1987, the first public awareness campaign was initiated, focusing on proper condom use
- Today, HIV prevention also includes interventions such as PEP and PrEP
- The Netherlands was the first country in the world to set up a needle-exchange programme in 1984<sup>20</sup>. Until last year, the Netherlands, after the United States, Great Britain and France, was the fourth largest donor of the global AIDS response, with a contribution of \$214 million. In 2017, all Western donors reduced their funding<sup>21</sup>

### HIV testing

- The rates of testing for HIV appear to be increasing in the Netherlands
  - The proportion of individuals with a previously negative HIV test has increased (71% of MSM, 32% of other men and 40% of women diagnosed in 2016 had a known previous negative test)
- Of new diagnosis, 45% present late, resulting in a lower count of CD4 and a further developed infection<sup>22</sup>
- All pregnant women in the Netherlands are tested for HIV, free of cost
- For most other people, HIV testing is covered by health insurance. Those who are more likely to have STIs and/or HIV for various reasons can get tested for free at an STI Outpatient Clinic of the Public Health Service
- In 2016, MSM got tested for HIV six times more often than men who have sex with women<sup>23</sup>
- HIV testing is also available through the internet and the pharmacy. This allows you to test blood or saliva for HIV antibodies at home, though at-home testing is not the preferred method according to most HIV and AIDS organizations

### Condom use

- 55% of women and 42% of men did not use condoms during a one-night stand in 2017
- 89,2% of women and 87,2% of men in a relationship indicated they did not use a condom during vaginal sex with their partner in 2017<sup>24</sup>
- In 2016, MSM showed higher proportions of condom-less anal intercourse (CAI) with steady partners (39.6%) compared to casual partners (30.4%).<sup>25</sup>
- As early as 1986, there were reservations in the Netherlands, especially among HIV educators, about the feasibility of advocating abstinence as HIV prevention. In the

years that followed, research showed that a considerable number of gay men continued to have anal sex, and studies demonstrated the important role that anal sex played in the lives of many gay men. Based partly on these results, prevention campaigns began to focus on condom promotion for men who could not or would not refrain from anal sex. In 1992, the Nederlandse Commissie AIDS-Bestrijding, Dutch Commission to Fight AIDS (NCAB) advised that both abstinence and condom use were to be considered equivalent risk-reducing behavioural options, and that both behavioural options should be addressed in HIV prevention. From that moment, condom promotion became a standard component of HIV prevention for MSM in the Netherlands<sup>26</sup>

### **PEP**

- Post-Exposure Prophylaxis (PEP) involves the short-term use of ART to prevent infection in people who have recently been exposed to HIV
- In the Netherlands, PEP can be prescribed by an STI Outpatient Clinic of the Public Health Service (GGD) or at a hospital, preferably an HIV Treatment Centre or an Academic Hospital
- In the Netherlands, PEP is covered by health insurance, but has an obligatory deductible excess<sup>27</sup>

### **PrEP**

- Pre-Exposure Prophylaxis (PrEP) involves taking ART before engaging in behaviour(s) that place one at risk for HIV infection (such as unprotected sex) to reduce or prevent the possibility of HIV infection<sup>28</sup>
- PrEP in the Netherlands can be prescribed by all general practitioners
- With a doctor's prescription, PrEP is available at all Dutch pharmacies<sup>29</sup>
- The deployment of PrEP is still limited in the Netherlands because its use is not covered by basic health insurance
- Although the use of PrEP is widely supported by health organizations, the most important critique is that it could promote unsafe sex
- In March 2018, the Dutch Health Council, based on ongoing scientific research, recommended to the Ministry of Health that PrEP be reimbursed for high risk groups such as MSM<sup>30</sup>
- A decision from the Ministry on Health on reimbursement and implementation is pending
- Since January 2018, generic PrEP has become available in the Netherlands
- The cheapest medication costs approx. €50 per month if used daily<sup>31</sup>

### **Needle exchange programmes (Sputomruil)**

- A needle exchange programme (NEP) is a social service that allows people who inject drugs (PWID) to obtain hypodermic needles and associated paraphernalia at little or no cost

- In 1986, HIV incidence occurred in 7 out of 100 people who inject drugs (PWID)<sup>32</sup>
- HIV incidence in PWID has been stable since 2008, with between zero to less than one cases per 100 person-years<sup>33</sup>
- As follow up was restricted to a selection of PWID and inclusion stopped in 2014, trends in risk behaviour of PWID can only be presented until 2013<sup>34</sup>

## V. HIV treatment

### Treatment goals 90-90-90

- In 2017, Amsterdam became the first city in the world to reach the 90-90-90 target, set by the Joint United Nations Programme on HIV/AIDS (UNAIDS), with 94-90-94<sup>35</sup>
- As such, the Dutch Association of HIV-treating Physicians (NVHB) set out an ambition in their 2017-2022 HIV treatment plan, published on 1 December 2017, to achieve the 2030 goals of UNAIDS: 95-95-95 in 2022<sup>36</sup>
  - Visit the [UNAIDS website](#) for more details about the 90-90-90 goals

### HIV treatment figures

- As of December 2016, a total of 19,035 people with HIV are linked to care in the Netherlands
  - 18,824 adults and 211 children and adolescents are known to be in care in one of the 26 adult or 4 paediatric HIV treatment centres
  - Of these 19,035 adults and children, 97% (18,552) have used ART, and 91% (17,280) have suppressed viraemia to below 200 copies/ml at the time of their last available HIV RNA measurement
  - Those who had been diagnosed with HIV before 1990 and remained in care and on ART in 2016 (i.e., long-term survivors) had equally high levels of viral suppression<sup>37</sup>
- These results are substantial when compared to figures from some other parts of the world<sup>38</sup>
  - For instance, treatment coverage was 47% among people living with HIV in Asia and the Pacific, 58% in Latin America and just 24% for people living with HIV in the Middle East and North Africa<sup>39</sup>

### Drug resistance

- The proportion of people in the Netherlands with acquired drug resistance among those who experience virological failure remains low and continues to decline over time<sup>40</sup>

### Quality of care

- A total of 26 adult HIV treatment centres and 4 paediatric centres exist in the Netherlands
- For a complete overview, go to [www.hiv-monitoring.nl](http://www.hiv-monitoring.nl)

- The Dutch association of HIV-treating physicians (Nederlandse Vereniging van HIV Behandelaren, NVHB) has issued national guidelines for the treatment and monitoring of positive individuals in the Netherlands<sup>41</sup>
- Across most centres, an increasing proportion of individuals are starting ART sooner after entering into care, confirming that treatment centres are following new guidelines to offer ART to everyone with newly-diagnosed HIV regardless of CD4 count<sup>42</sup>
- By end of 2016, 19,136 patients were in care at one of the HIV treatment centres in the Netherlands
- Retention in care rates were highest in Dutch MSM (98%) and Dutch (non-MSM) men and women (93%) compared to non-Dutch MSM (89% and non-Dutch (non-MSM) men and women patients (85%)<sup>43</sup>
- In the Netherlands, the continuum of care shows a high retention in care rate for children currently aged less than 18 years<sup>44</sup>
- When young adults turn 18, they transition from paediatric HIV treatment centres to adult care

#### **HIV co-infections (HCV/HBV)**

- Screening for hepatitis C (HCV) and hepatitis B (HBV) co-infection has become part of the standard of HIV care in the Netherlands
- By 2016, the presence or absence of HBV or HCV infection is now documented for virtually all HIV-positive individuals
- Approximately 12% of individuals have been exposed to HCV, 6% are chronically infected with HCV, and 2% have an acute HCV infection
- An estimated 30% of HIV-positive individuals overall and 18% of MSM either had not been exposed to HBV or had not been successfully vaccinated and may remain at risk of acquiring HBV
- These findings illustrate the importance of continuing Dutch efforts to increase successful HBV vaccination rates in this subgroup, particularly in those who are not receiving a tenofovir-containing antiretroviral regimen<sup>45</sup>

#### **HIV in pregnant women and children**

##### *Pregnant women*

- By May 2017, a total of 2,355 pregnancies in 1,359 women had been registered among the total 4,525 HIV-positive women monitored by SHM
- 55% of the pregnant women had been diagnosed with HIV before the onset of pregnancy
- Since the introduction of ART in pregnant women, the risk of mother-to-child transmission has been dramatically reduced to less than 1%<sup>46</sup>
- The Netherlands maintains universal first trimester screening for HIV in pregnant women, which has made perinatal transmission of HIV extremely rare in the Netherlands<sup>47</sup>



### Children

- As of 31 December 2016, 590 HIV-1-positive children have been registered by SHM since 1998
- Of those, 330 had acquired HIV-1 through mother-to-child transmission and 239 through non-vertical transmission. For a small group of 21 children, the route of HIV-1 transmission was unknown<sup>48</sup>
- As of December 2016, a total of 211 children and adolescents were known to be in care in one of the 4 paediatric HIV treatment centres<sup>49</sup>

## VI. Amsterdam as a Fast Track City

- On World AIDS Day 2014 in Paris, Mayors from 27 cities in over 50 countries convened to sign the Paris Declaration on Fast-Track Cities, committing to accelerate and scale-up their local AIDS responses
- The focus is on:
  - Attaining 90-90-90 targets
  - Increasing utilisation of combination HIV prevention services
  - Reducing the negative impact of stigma and discrimination to zero
  - Establishing a common, web-based platform to allow for real-time monitoring of progress<sup>50</sup>
- One of Amsterdam's most impactful tools to attain the Fast Track Cities goals is the HIV Transmission Elimination Amsterdam (H-TEAM) collaboration (HIV Transmission Elimination AMsterdam)
  - Amsterdam's H-TEAM combines various innovative interventions to promote prevention, earlier testing for HIV and the direct treatment of infections, thus preventing the spread of the virus
  - The H-TEAM focuses specifically on the target groups with a higher risk, such as MSM
- On the Fast Track Cities website, there is a dashboard that shows how far the cities are in achieving the goals. The page about Amsterdam can be found [via this link](#)
- Additional cities have subsequently signed the Paris Declaration
- For an overview of the cities, please visit the website of the [International Association of Providers of AIDS Care \(IAPAC\)](#)

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