

Current status of the HIV epidemic among migrants and commercial sex workers in the Netherlands

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Introduction

The International Organization of Migration (IOM) is organizing a consultation on “*EU partnership for universal access by mobile populations*” at the IOM headquarters in Geneva the 10th and 11th September 2007.

The objective of this consultation is to formulate priority policy and programme recommendations for the October AIDS Coordinators meeting in Lisbon, Portugal, on the 12th and 13th of October, 2007. The October meeting is organized in the frame of the EU Presidency and within the Portuguese Ministry of Health programme entitled “*Translating principles into action*”.

In this context, the Netherlands has agreed to conduct a short country situation analysis. In this report the current status of the HIV epidemic among migrants and commercial sex workers is described.

Background information on the Netherlands

The Netherlands is located in western Europe, bordering the North Sea to the west and north, Belgium to the south and Germany to the east (Figure 1).¹

Figure 1 Map of the Netherlands



Source: World Factbook 2004

In 2006 the Netherlands had a population of 16.3 million.² It is densely populated; with more than 450 inhabitants per km².¹

Native Dutch (both parents born in the Netherlands) make up 80.7% of the population in 2006. Migrants account for 19.3% of the population (3.1 million), of whom 45% from western countries and 55% from non-western countries.²

The formal head of the Kingdom of the Netherlands is the King or Queen (since 1980 Queen Beatrix Wilhelmina Armgard), but only the government holds executive power. The parliament, with a bicameral system in place since 1815, represents the population. Its two chambers have the power to legislate. As no political party has a majority, a coalition of several parties is necessary to form a Cabinet. Until 2002, the coalition was led by the Social Democrats, since then by the Christian Democrats.¹

Health care system in the Netherlands

In the Netherlands, it is compulsory for everyone to be insured for health care. Insurance is an important instrument for sharing risks and ensuring that medical care is available to all those who need it. The government remains responsible for the accessibility, affordability and quality of health care.

In the Netherlands, public health services, primary care and secondary care are separate modalities. Primary health care is well developed and is provided by family physicians (general practitioners=GP), district nurses, home care givers, midwives, physiotherapists, social workers, dentists and pharmacists. Each patient is supposed to be on a GP patient list and must be referred to specialist physicians or the hospital by the family physician. Secondary and tertiary care in hospitals is largely provided in private not-for-profit organizations. ¹

Public health services

The Netherlands has a regional network of municipal public health services (Gemeentelijke Gezondheidsdienst=GGD), which implement child health services, vaccinations, environmental health, health protection and health promotion activities. Regional Public health includes all aspects of regional infectious disease control (including sexually transmitted infections (STI)), general hygiene, school health and public health education, and the dissemination of information on rearing children. On a regional and national level, the function of the Health Care Inspectorate (IGZ) is to advise, supervise and monitor.

The public health tasks are supported by the primary care system as well as by national institutes and university departments in the various public health areas. Many of these organizations are funded or facilitated by the government, in particular the Ministry of Health. The Centre for Infectious Disease Control of the National Institute for Public Health and the Environment (RIVM), funded by the Ministry of Health, is responsible for infectious disease surveillance and supports research into strengthen infectious disease control.

All these institutional efforts contribute to Dutch health policy development, and to its implementation and evaluation and these institutes interact in various ways with the health education system and contribute to the advancement of international health sciences. ¹

HIV policy in the Netherlands

The government aims to encourage and enable its citizens to make healthy choices as much as possible (for example safe sexual behaviour). The responsibility and the ultimate choice for a healthy lifestyle in this connection remains with individual citizens themselves. Organizations in the fight against HIV and other STIs focus on healthy choices with regard to the prevention of HIV and other STIs through a broad range of prevention activities. The Centre for Infectious Disease Control is responsible for control, and as such for surveillance of the epidemics, and identifies further relevant research to support control.

The Special Medical Procedures Act (WBMV) states that the treatment of an HIV infection is still very complex. Two things need special attention in this regard: the side effects and the development of a virus that will become resistant to the existing medicines. Most people in the Netherlands agree that experts should provide an optimal treatment of HIV and effective counseling in connection with that treatment. This expertise can only be guaranteed if a center has a minimum number of patients. For that reason, the Ministry of Health, Welfare and Sport has decided that the treatment of HIV will fall under the Special Medical Procedures Act (WBMV) as from January 1, 2002 (Borst-Eilers, 2001). As a result, HIV may only be treated in 24 hospitals, regionally spread over the country, the HIV treatment centers. The requirements that HIV treatment centers must meet are referred to in this Act.³

Prevention of HIV in the Netherlands

According to the Dutch government, Civil Society including NGO's plays a crucial role in the fight against HIV. In the Netherlands HIV is mostly a problem within risk groups.³ Six distinct risk groups have been identified:

1. Men having sex with men (MSM)
2. (Injecting) Drug Users (IDU)
3. Migrants from HIV endemic countries
4. Young people
5. Sex workers and their clients
6. People living with HIV/AIDS.

For each risk group, an NGO has been identified to coordinating HIV prevention programs targeted at such a risk group. These NGO's receive funding from the government for this, and include:

- STI Aids Netherlands (SANL, a major STI and HIV NGO in Netherlands) coordinates prevention programs for several risk groups: migrants from HIV endemic countries, young people and sex workers and their clients. This NGO also carries out coordination between different programs (stimulating cooperation, preventing overlap and filling in gaps), and provide information for the general public and intermediaries;
- Hiv Vereniging Nederland, the advocacy group for people with HIV (coordinates prevention programs for people living with HIV/AIDS)
- Schorer, national center of expertise on health care for gay men and lesbians. Schorer focuses on the prevention of HIV and other STIs and offers one-on-one 'buddy' care for gay men with HIV or AIDS. Schorer is responsible for prevention programs targeted towards MSM;
- The Rutgers Nisso Group, which focuses on sexual and reproductive health (for young people);
- Mainline and the Trimbos Institute (Netherlands Institute of Mental Health and Addiction), both of which focus on drug users (responsible for the prevention programs for drug users).

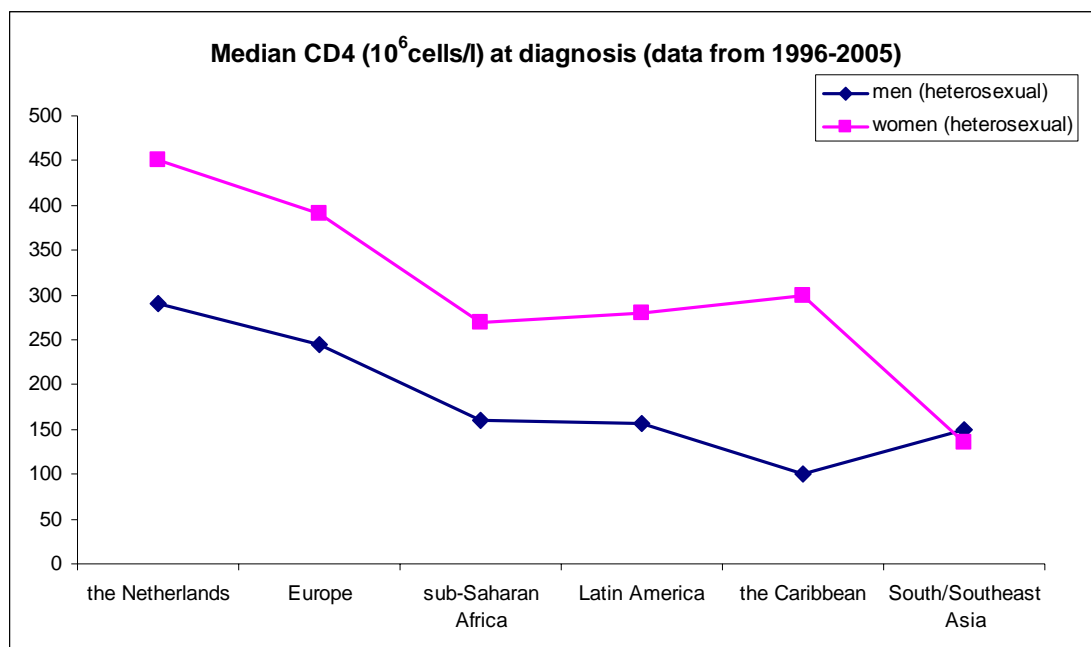
Three modes of prevention can be distinguished. Primary prevention methods promote safer sex, preventing new infections. Secondary prevention aims at early detection of HIV infection. Tertiary prevention is closely related to treatment and care; it is meant to prevent avoidable suffering from HIV/AIDS for people who are HIV infected. Lately, the focus has shifted from primary prevention to access to voluntary HIV/STI testing and counseling (VTC).⁴

HIV testing policy

After HAART became available in 1996, the Netherlands shifted from a restrictive testing policy to an active testing policy in 1999.⁵ People are supposed to consult their general practitioner for an HIV test. Additionally, for anonymous STI and HIV testing people can visit low threshold testing facilities (STI clinics). These free of charge, municipality run facilities are targeted at risk groups and at those who want to be tested anonymously. Although this active testing policy is successful, infected people are regularly diagnosed late. The percentage of people knowing their positive HIV status is estimated at 60%. In two STI clinics an opting-out policy on HIV-testing is implemented and this procedure will be evaluated in 2008.

As mentioned, in the Netherlands, migrants of HIV endemic countries have been identified as one of the groups at high risk of acquiring HIV. Although this group is specifically targeted in primary prevention and active testing promotions, no specific screening is carried out among migrants from HIV endemic countries. From the HIV surveillance data we can conclude that the biggest concern in this group is the late diagnoses of HIV with a poor prognosis as a result.⁶ As is shown in Figure 2, the median number of CD4 cells at diagnosis is lower in heterosexual men and women from HIV endemic regions compared to Dutch heterosexuals. In the Netherlands, all pregnant women are screened for HIV since 2004. This results on average in an earlier HIV diagnosis and thus higher median CD4 cell counts than in men (Figure 2).

Figure 2 Median CD4 count at diagnosis in heterosexuals from different regions of origin (data from 1996-2005)



Data used from Report 2006 HIV Monitoring Foundation (HMF), Amsterdam

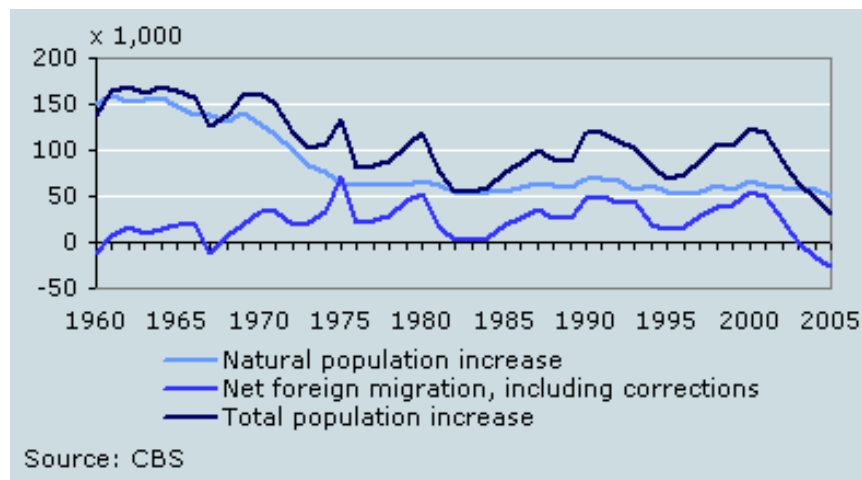
Treatment of HIV in the Netherlands

HIV treatment is well taken care of in the Netherlands. As described above, HIV treatment takes place in 24 decentralized HIV treatment centers. This regional concentration of expertise ensures that optimal care can be offered with regard to the often rather complex medical problems of HIV/AIDS. Four of the HIV treatment centers are specialized in the treatment of children with HIV. Next to medical treatment, patients receive care from nurses who are trained in the field of HIV/AIDS. If necessary, the nurses can refer patients for psychosocial counseling or support.^{4,7}

Migrants in the Netherlands

In 2006, 3.1 million migrants live in the Netherlands (19.3% of the total population) of whom 1.4 million western migrants and 1.7 million non-western migrants. The majority of the non-western migrants originate from Turkey (364333; 21%), Surinam (331890; 19%), Morocco (323239; 19%), and the Netherlands Antilles and Aruba (129683; 8%).² The most numerous groups of foreign immigrants in the Netherlands arrive for the purpose of asylum, for the purpose of labour, as family reunionists or as family forming migrants. Asylum migration depends on several factors such as the political situation in the countries of origin and the asylum policies in the Netherlands in relation to asylum policies in other European countries.⁸ Recent population developments in the Netherlands vary widely from those recorded in most other countries of the EU-15. In 2000 and 2001, more than 130 thousand immigrants entered the Netherlands; in 2002, the number of immigrants was down to 120 thousand and the decline has continued, however the numbers of asylum seekers slightly increased at the end of 2005 and in 2006 (data not shown in Figure 3). In 2005, an estimated 94 thousand immigrants came to settle in the Netherlands, the lowest number since 1988.⁹

Figure 3 Population growth in the Netherlands



In this period emigration was rising dramatically and this caused net migration to drop. The rise in emigration is seen especially in persons born in the Netherlands, as well in autochthonous Dutch as in second generation migrants. Net migration shifted from positive (over 50 thousand) in 2000 and 2001 to negative (27 thousand) in 2005. As a result of negative net migration and a declining birth rate, population growth in the Netherlands fell dramatically to just 30 thousand in 2005, the lowest number since 1900. The Dutch growth rate per 1,000 in the population was the lowest (excluding Germany) in the EU-15.⁹

Health care for asylum seekers and illegal migrants

In 2002, the number of illegal migrants in the Netherlands was estimated at a range from 46,000 – 116,000 migrants. Due to shifting policy, this number might have changed considerably.

Illegal migrants have the right of access to medical care if that care is necessary (if there is a serious health risk for the person involved or for his/her environment). The Ministry of Health has arranged financial support for first and second line care for illegal migrants. Though, in practice this may lead to delayed health care seeking.^{4 10} For asylum seekers, HIV is not sufficient reason to receive a status. HIV positive asylum seekers and illegal migrants have the right of access to treatment for their HIV infection.

Initiatives on AIDS prevention, testing and sexual health, with active involvement of asylum seekers, have been developed by a NGO (Aserag) in collaboration with municipal public health service North Netherlands and MOA North Netherlands. The effect of this participatory intervention to enlarge the sexual health and increase HIV testing in asylum seekers will be assessed.¹¹

Commercial sex workers in the Netherlands

In the Netherlands, the estimated number of sex workers varies between 24,000 and 31,000¹². In 2000 the brothel prohibition was lifted and prostitution has become a legal profession for sex workers aged 18 and older and who work voluntary; sex workers have access to the social security system and they have to pay income tax. An evaluation of this legislation in Amsterdam, showed that it has led to an increase in illegal prostitution and the social position of sex workers has not improved.¹³ The lifting of the brothel ban split the prostitution sector in two. On the one hand registered clubs and brothels who are able to do so abide by the law, although illegal and underage prostitutes also work there. On the other hand there is a grey unregistered sector consisting of street prostitution, prostitutes working from home, escort services and telephone prostitution.¹⁴ An estimated 45% of all prostitutes work in brothels and clubs, 20% works in the window prostitution, 15% in escort services, 5% on the street, 5% at home and 10% in other places.¹⁵

Many of the prostitutes working in the Netherlands are foreigners. For 1999 the share of foreign prostitutes was estimated to be at least 68 percent. A considerable share of these worked illegally, i.e. without a residence permit which allows them to work. There is evidence that illegal prostitutes work in both the regulated and the illegal sectors. Trafficking seems to play an important part in this respect, especially with regard to women from Eastern Europe.¹⁴

Health care for commercial sex workers

In the Netherlands, no mandatory testing on HIV (and STI) exists for sex workers. Some brothels and clubs have their sex workers screened at a regular basis, but no formal guidelines exist. As every other citizen in the Netherlands, legal sex workers have access to health care. For illegal sex workers, entry into care is more difficult. As described before, municipal public health services carry out all aspects of regional infectious disease control, including control of STI. Most public health services in big cities offer in their STI clinics special consultations for sex workers. Moreover, outreach activities are carried out to actively reach street-based and establishment-based sex workers for an STI and/or HIV test. However, it remains difficult to reach hidden (illegal) prostitution.

HIV and TB surveillance in the Netherlands

HIV surveillance

The Centre for Infectious Disease Control (CIb) of the National Institute for Public Health and the Environment is appointed by the Ministry of Health as the Surveillance Unit of HIV and STI in the Netherlands. For the surveillance of HIV in the Netherlands the basis is formed by data from the nationally comprehensive STI clinics, where a high risk population is being screened, as well as by data collected by the blood donation services and the HIV Monitoring Foundation (HMF, in Dutch SHM) which monitors since 2002 data on all HIV-infected patients who are registered at one of the 24 HIV Treatment Centres whether or not they were being treated with HAART. HMF's mission is to study the natural history of HIV and the effects of treatment, as well as to further knowledge and understanding of the HIV epidemic and the course of HIV infection in both treated and untreated patients.⁶ We are still exploring how best to access and analyze screening data collected among pregnant women.

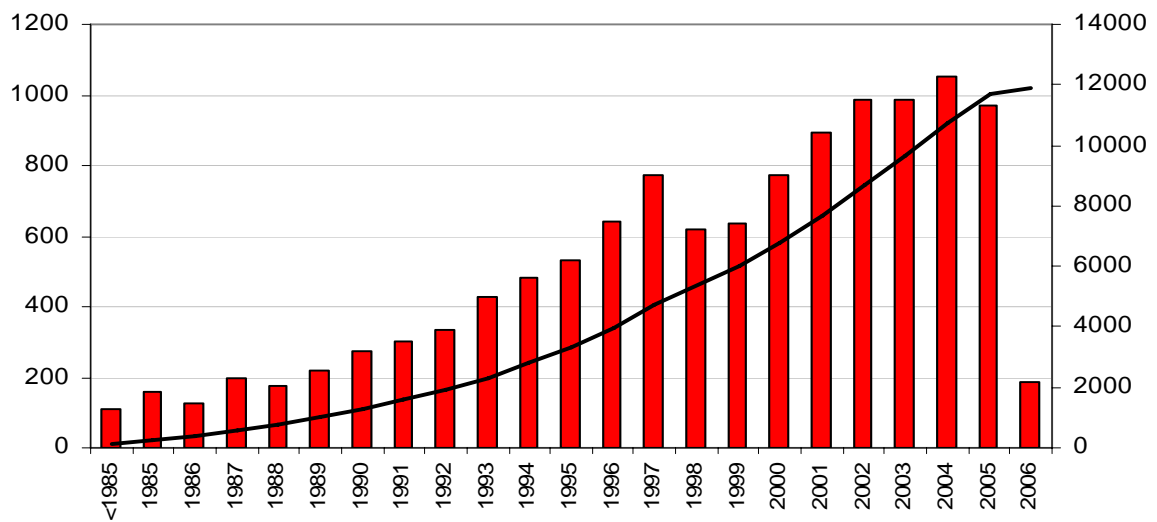
HIV epidemiology

According to WHO criteria the Netherlands has a concentrated HIV epidemic with a low HIV prevalence in the general population and relatively high HIV prevalence (> 5%) in at least one subpopulation. In the Netherlands, the HIV prevalence is high among men having sex with men (MSM) and injecting drug users (IDU). In 2005, the estimated prevalence of HIV in the general population is 0.2%. The total number of adults (15-49 years) living with HIV/AIDS in the Netherlands is estimated at 18,500 [10,000-28,000].¹⁶

HIV cases

In June 2006, a cumulative total of 11866 HIV cases with a known year of diagnosis had been registered by the HIV treatment centres in the national database of the HIV Monitoring Foundation (HMF) [www.hiv-monitoring.nl], Figure 4. For 197 cases the year of diagnosis was unknown (excluded from the analysis). In 2005, 970 new cases of HIV were diagnosed. Of all registered cases, 9170 (77%) were men and 2696 (23%) were women. 98.7% of the individuals were infected with HIV-1, 0.6% with HIV-2 and 0.7% with both HIV-1 and HIV-2.¹⁷

Figure 4 Number of HIV cases (right axis: cumulative), by year of HIV diagnosis



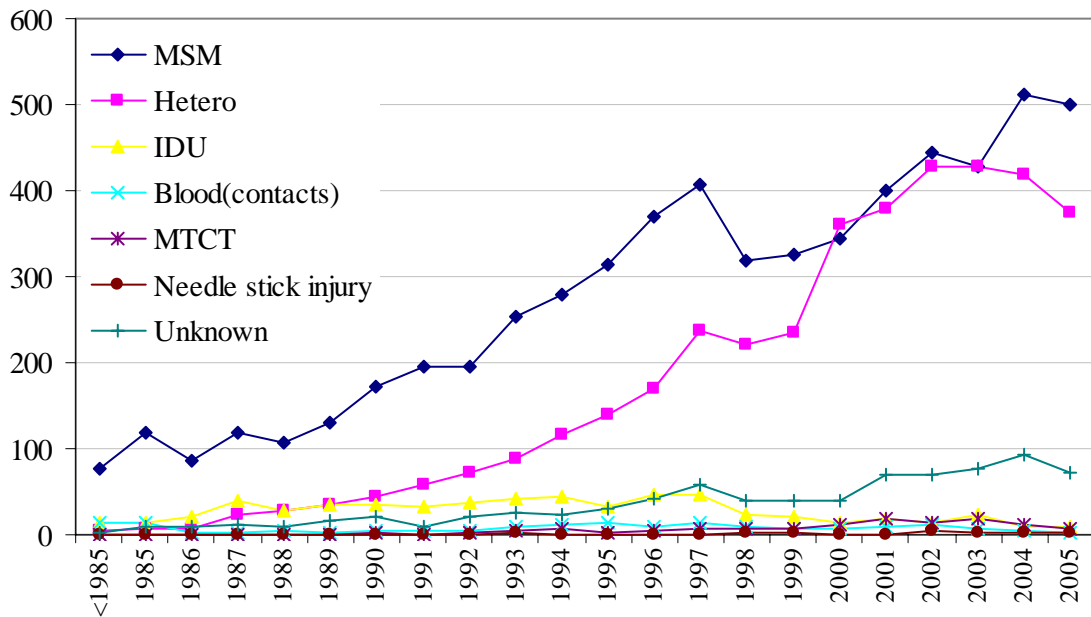
Footnote: only HIV patients with a known date of diagnosis are included (ATHENA: 1996-2001, national registration from 2002 to date (HMF), 2006: patients registered by June 1st)

Source: HIV and Sexually Transmitted Infections in the Netherlands in 2005 (Cib)¹⁷

Transmission risk groups

Until 2000, the most frequently reported transmission route for HIV infection was male-to-male sexual contact (Figure 5). Thereafter, the absolute number of HIV diagnoses among heterosexuals increased up to the same level as MSM. In 2004, however, the absolute number of HIV diagnoses among MSM increased again and exceeded the number of diagnoses among heterosexuals. In 2005, 52% of the HIV infections were diagnosed among MSM. Heterosexuals accounted for 39% of new diagnoses in 2005 and only one percent of the HIV infections were diagnosed in IDU.¹⁷

Figure 5 Number of HIV cases, by year of HIV diagnosis and transmission risk group



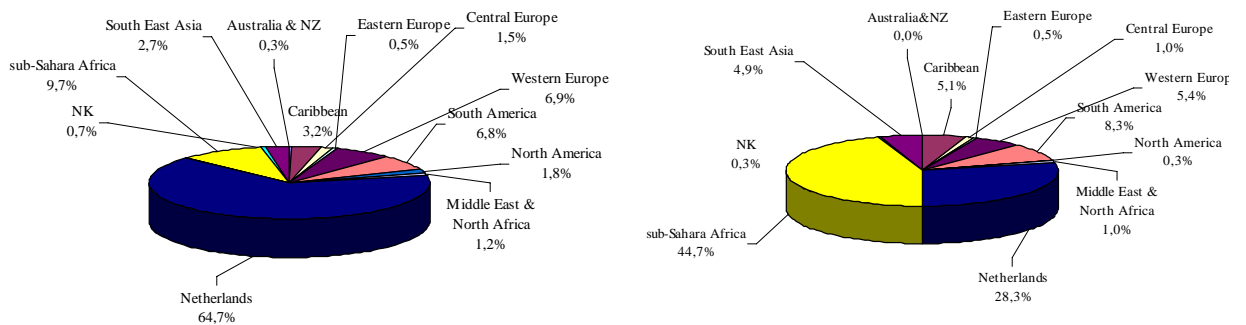
Footnote: only HIV patients with a known date of diagnosis are included (ATHENA: 1996-2001, national registration from 2002 to date; MSM: men having sex with men, IDU: injecting drug use, MTCT: mother to child transmission)

Source: HIV and Sexually Transmitted Infections in the Netherlands in 2005 (Clb)¹⁷

Region of origin

Overall, more than half (56%) of the HIV infected individuals originated from the Netherlands. The largest non-Dutch group consisted of sub-Saharan Africans (SSA), 18% of the HIV cases. The second largest non-Dutch group (11%) comprised individuals from the Caribbean and Latin America, predominantly Surinamese and Antilleans (67%). Most HIV infected men originated from the Netherlands (65%), whereas the largest group among women were those from sub-Saharan Africa (45%), Figure 6).¹⁷

Figure 6 Geographic distribution of HIV cases, by sex (men: left, women: right)



Source: HIV and Sexually Transmitted Infections in the Netherlands in 2005 (Clb)¹⁷

The majority of MSM originated from the Netherlands (74%, Table 1). Other frequently reported regions were Western Europe (8%), Latin America (6%), the Caribbean (3%) and South (East) Asia (3%). Most IDU were from the Netherlands (67%), other Western European countries (17%), and Latin America (4%). The majority of the heterosexuals originated from sub-Saharan Africa (44%) and the Netherlands (30%, Table 1.¹⁷

Table 1: Number of HIV cases, by transmission risk group and region of origin

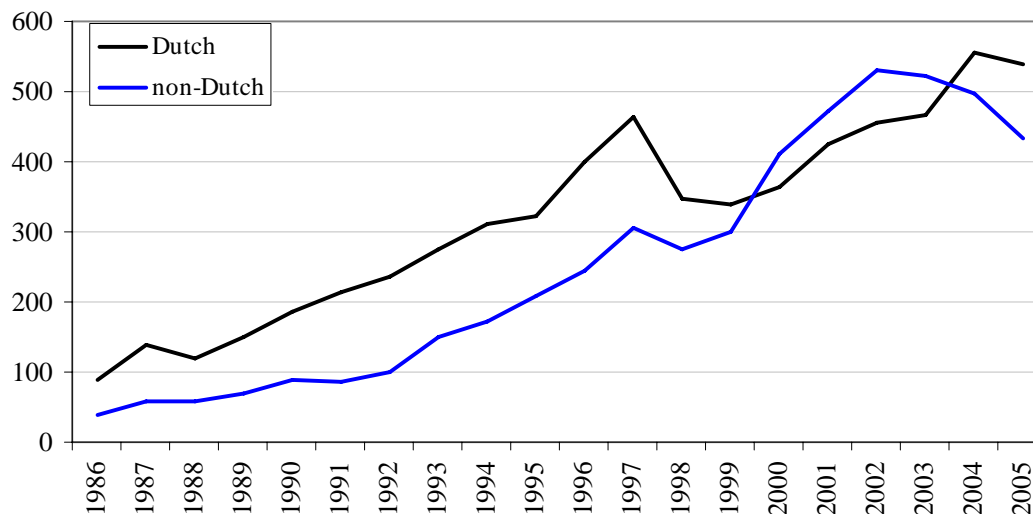
Region of origin	MSM (%)	Heterosexual (%)	IDU (%)
The Netherlands	4593 (74%)	1179 (30%)	403 (67%)
Western Europe	474 (8%)	132 (3%)	101 (17%)
Central Europe	69 (1%)	63 (2%)	9 (1%)
Eastern Europe	22 (0.4%)	15 (0.4%)	15 (2%)
Sub-Saharan Africa	82 (1%)	1759 (44%)	7 (1%)
Caribbean	174 (3%)	217 (5%)	9 (1%)
Latin America	389 (6%)	375 (9%)	23 (4%)
North America	145 (2%)	6 (0.2%)	6 (1%)
North Africa & Middle East	32 (0.5%)	61 (2%)	13 (2%)
Australia & Pacific	20 (0.3%)	1 (0%)	1 (0.2%)
South (East) Asia	176 (3%)	163 (4%)	12 (2%)
Not reported/not known	39 (0.6%)	9 (0.2%)	8 (1%)
Total	6235	3989	607

Footnote: MSM: men having sex with men; IDU: injecting drug user

Source: HIV and Sexually Transmitted Infections in the Netherlands in 2005 (Cib)¹⁷

The proportion of Dutch HIV infected individuals gradually decreased from 71% in 1992 to 46% in 2002. After 2002, the proportion of Dutch individuals increased again up to 55% in 2005.

Figure 7 Proportion of Dutch and non-Dutch HIV patients



Footnote: only HIV patients with a known date of diagnosis are included (ATHENA: 1996-2001, national registration from 2002 to date) Source: HIV and Sexually Transmitted Infections in the Netherlands in 2005 (Cib)¹⁷

Most HIV infected individuals were between 25 and 49 years of age at diagnosis (66%). Men had a median age of 36 years, whereas women were younger: 30 years. In general, non-Dutch individuals were younger than Dutch.

After 2002, the number of HIV diagnoses among heterosexual men of Dutch origin started to rise from approximately 40 HIV diagnoses to 60 cases per year ($p < 0.001$). After 2004, a similar pattern was observed for women of Dutch origin. An opposite trend during that same period was observed for heterosexual men and women originating from SSA ($p < 0.001$). Of the heterosexual men of Dutch origin diagnosed after 2002, the majority was over 30 years (90%) at time of diagnosis and 54% was over 40 years. Seventy three percent of these men reported to have acquired the infection in the Netherlands. Another country frequently reported as country of infection was Thailand (12%). Of the Dutch heterosexual women who were recently diagnosed (2004 or thereafter), 67% was over 30 years and 42% was over 40 years. Of these women, 89% reported the Netherlands as most likely country of HIV infection and 11% reported risk abroad.¹⁷

New HIV diagnoses in 2005

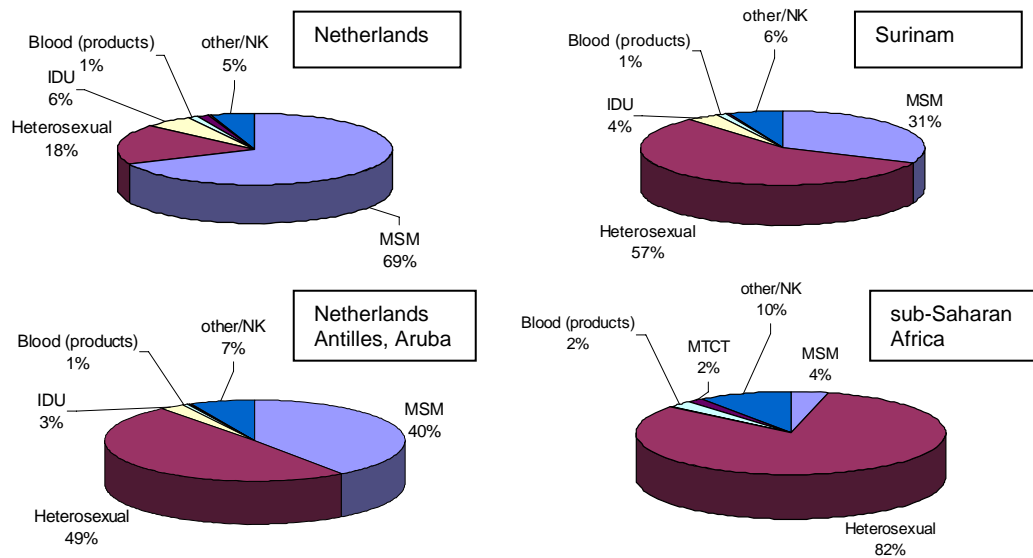
Of the 970 new HIV diagnoses in 2005, 746 (77%) were male and 224 (23%) were female. Of those, 90% were infected sexually: 39% through heterosexual contact and 52% through MSM. Of all men, 67% acquired the infection through sex with men. Of all women, 95% acquired the infection through heterosexual contact. Injecting drug use accounted for 1% ($n=10$) of the new diagnoses and risk through blood (products) for 0.3% ($n=3$). For 8%, the transmission risk group was undetermined. In 2005, 35% of the cases were diagnosed in Amsterdam (2004: 31%) and 38% (2003: 42%) in Rotterdam, The Hague and Utrecht. Of the newly diagnosed cases, 55% came from the Netherlands, 18% from sub-Saharan Africa, 11% from Latin America and the Caribbean.¹⁷

HIV among migrant populations

Of all registered HIV patients, 43% were born abroad. The majority (41%) of the migrants originated from sub-Saharan Africa, 25% from Latin America/Caribbean, 15% from Western Europe and 7% from South (East) Asia. Figure 8 shows the distribution of transmission risk groups among HIV patients for different regions of origin. The largest risk group among the Dutch population was MSM (68%), while MSM only accounted for 4% of the infections among sub-Saharan Africans.

The proportions of MSM among individuals from Surinam and the Netherlands Antilles were 32% and 40%, respectively.

Figure 8 HIV infected individuals, by transmission risk group and region of origin



Footnote MTCT: mother to child transmission; IDU: injecting drug use; MSM: men having sex with men; NK: not known
 Source: HIV and Sexually Transmitted Infections in the Netherlands in 2005 (CIb) ¹⁷

Seventy-seven percent of the individuals from sub-Saharan Africa, for whom the country of infection was known (71%), were infected in sub-Saharan Africa. Among Surinamese individuals (country of infection known: 61%), only 25% were infected in Surinam and 73% in the Netherlands. Thirty-eight percent of the individuals from the Netherlands Antilles/Aruba were infected in their region of origin. Most people from Turkey and Morocco reported to have been infected in the Netherlands.

For HIV patients from Surinam or the Netherlands Antilles, the country of infection differed between risk groups: MSM from Surinam or the Netherlands Antilles and heterosexuals from Surinam more often acquired the infection in the Netherlands; whereas heterosexuals from The Netherlands Antilles/ Aruba more often became infected in the country of origin.

Age at diagnosis

Among heterosexual women, African women were the youngest at diagnosis (median age: 28.7 years). Dutch and Western European women were the oldest: 32 and 33 years. Among heterosexual men, Asian men were the oldest (42 years), and African the youngest (34 years). The median age at diagnosis showed no clear trend over time between 2000-2005 for heterosexuals from sub-Saharan Africa, Latin America/Caribbean and the Netherlands. The median age of MSM clearly increased over time, from 32 years in 1987 to 41 years in 2005 for Dutch men and from 28 years in 1987 to 36 years in 2005 for non-Dutch MSM.

Table 2 Median age (years) of heterosexual population, by region of origin and sex

Region of origin	Men (age/IQR)	Women (age/IQR)	Total (age/IQR)
The Netherlands	40.4 (33.1-48.9)	32.3 (26.2-42.2)	36.5 (29.2-46.0)
Western Europe	35.9 (32.5-45.6)	32.7 (28.2-40.5)	35.1 (29.9-42.8)
Sub-Saharan Africa	33.7 (28.3-38.5)	28.7 (24.0-34.1)	30.6 (25.0-35.8)
Caribbean	36.4 (30.4-42.9)	30.9 (24.7-39.0)	33.2 (26.9-40.1)
Latin America	37.5 (32.1-46.5)	30.9 (26.8-37.9)	34.1 (28.5-41.5)
South (East) Asia	42.1 (35.3-48.9)	30.5 (27.4-34.9)	32.4 (28.1-39.7)

Footnote: IQR= interquartile range

Source: HIV and Sexually Transmitted Infections in the Netherlands in 2005 (Clb)¹⁷

Anonymous unlinked HIV surveys

Sub-Saharan Africans, Surinamese and Antilleans form relatively large migrant populations in the Netherlands. However, little is known about these groups and the determinants of risk behaviour in the country of origin. To obtain more insight in risk behaviour, 'intercultural mixing' (sexual contact between various ethnic groups), and the potential to further spread of HIV, anonymous unlinked surveys were conducted among these populations.

In 2002, the RIVM started HIV surveys among Surinamese, Antilleans and sub-Saharan Africans. Inclusion criteria were as follows:

- Participant or (at least) one parent is born in Surinam, the Netherlands Antilles or sub-Saharan Africa;
- Currently living in the Netherlands;
- Aged between 18-55 years.

Locations for recruitment (for instance festivals, churches, sports events, and community centres) were determined in the course of social mapping together with migrant organizations and the local municipal health service. Between 2002 and 2005, three surveys were conducted in Rotterdam, Amsterdam and The Hague, in collaboration with the local municipal health services.¹⁸⁻²⁰ Results are summarized in Table 3.

Table 3 HIV prevalence and risk behaviour amongst migrants

	Region	Year of survey	HIV prevalence	Condom use ^v steady partner	Condom use ^v casual partner	Condom use ^v casual partner in country of origin
Surinamese	Rotterdam	2002/2003	0.0%	9%	43%	77%
	Amsterdam	2003/2004	0.7% [0.1-2.5%]	15%	53%	65%
	The Hague	2005	0.7% [0.2-2.0%]	12%	46%	73%
Antilleans/ Arubans	Rotterdam	2002/2003	0.0%	9%	36%	26%
	Amsterdam	2003/2004	0.0%	9%	44%	67%
	The Hague	2005	0.6% [0.1-2.1%]	12%	53%	73%
Cape Verdeans	Rotterdam	2002/2004	1.0% [0.1-3.8%]	12%	51%	81%
Ghanaian	Amsterdam	2003/2004	0.6% [0-3.1%]	26%	57%	42%
	The Hague	2005	1.8% [0.6-4.3%]	12%	71%	75%

^v Condom use: last 6 months always used condoms

Source: HIV and Sexually Transmitted Infections in the Netherlands in 2005 (C1b)¹⁷

HIV among commercial sex workers and clients

Commercial sex workers (CSW) have many sexual contacts, and their clients may form a bridge to the general population. The anonymous unlinked HIV surveys were also targeted at these potential risk groups. The main purpose was to investigate HIV prevalence, sexual risk behaviour with clients and non-commercial partners, and the mobility of CSW. Between 2002 and 2005, three surveys were conducted in Rotterdam, Amsterdam and The Hague, in collaboration with the local municipal health services.¹⁸⁻²⁰ CSW were recruited in street-based and establishment-based prostitution venues. Results show that condoms were frequently used with clients, although condom failure was often reported. Condom use with private partners was low. HIV was more prevalent among transgenders CSW and drug-using CSW than among female CSW, who have never injected drugs (Table 4). Of the HIV positive CSW, the majority was unaware of their infection. The mobility was high in CSW; 34% had worked in another city than the study city in the previous year and 29% had ever worked in the prostitution abroad.

In 2004, a pilot among 52 clients of CSW was conducted in Amsterdam to assess the feasibility of an HIV survey in this group. None of the clients were HIV infected and clients regularly use condoms with CSW (82%). However, condom use with steady and casual (non-commercial) partners was low. The results from these surveys suggest a potential risk for transmission of HIV to the general population, in particular through drug using and transgender CSW.

Table 4 HIV prevalence and risk behaviour among commercial sex workers

Region	HIV prevalence	Condom use ^v clients	Condom failure with clients*	Condom use ^v steady partner	Condom use ^v casual partner
Rotterdam (2002/2003)					
Total population CSW	7.5% [2.5-12.5%]	88%	49%	15%	25%
Street-based CSW	12.7% [3.9-21.5%]	84%	59%	15%	33%
Establishment-based CSW	1.9% [0.0-10.3%]	92%	38%	15%	17%
Amsterdam (2003/2004)					
Total population CSW	6.6% [3.5-9.7%]	79%	35%	10%	40%
Female CSW	3.1% [1.0-7.2%]	94%	31%	10%	36%
Drug using CSW	11.3% [2.8-19.9%]	40%	41%	0%	25%
Transsexual CSW	17.2% [5.8-35.8%]	70%	45%	17%	64%
The Hague (2005)					
Total population CSW	3.5% [1.5-6.8%]	79%	39%	11%	36%
Female CSW	0.0% [0-1.8%]	80%	38%	11%	37%
Drug using CSW	22.2% [3.9-56.2%]	78%	33%	0%	0%
Transsexual CSW	20.0% [7.7-38.9%]	68%	44%	17%	40%

^v Condom use: last 6 months always used condoms

* Regular condom failure with clients: last 6 months 'sometimes' or 'often' condom failure with clients

Source: HIV and Sexually Transmitted Infections in the Netherlands in 2005 (Cib)¹⁷

Epidemiology of Tuberculosis

Source: "Tuberculosis in the Netherlands 2005" Surveillance report. KNCV Tuberculosis Foundation.²¹

Infections with tuberculosis (TB) are notifiable by law in the Netherlands. Information on the epidemiology and surveillance of TB is collected by the KNCV Tuberculosis Foundation (www.tuberculose.nl). In 2006, 1026 cases diagnosed with TB were notified at the KNCV.^{21, 22} In 2006, the number of TB cases decreased considerably to the lowest number of cases ever registered in the Netherlands. The incidence of infectious (smear positive) pulmonary cases decreased even further.

Table 5 Number of TB cases in 2004 and 2005^{21, 22}

	Absolute number (all cases)	Incidence (all cases)
2006	1026	6.3
2005	1157	7.1
2004	1328	8.2

The incidence is highest among foreign born persons. The incidence of TB declined in the last decennium mostly among native Dutch persons from 5.0 per 100,000 in 1996 to 1.9 per 100,000 in 2006, a decline of 62%. The incidence among foreign born persons (first generation migrants) declined since 1996 with 41% to 40.6 per 100,000.²²

First generation Moroccan nationals were the largest group of foreign born TB patients in 2005 (12%). The incidence in this group was 80 per 100,000 inhabitants. Another large group were Somalians (6%), with a comparatively high incidence of 444 per 100.000. A similar high incidence was observed in other population groups from sub-Saharan Africa and South-east Asia. The TB incidence in these population groups approached the estimated TB incidence in the countries of origin as reported by WHO. In total 20% of TB patients originated from sub-Sahara Africa.²¹

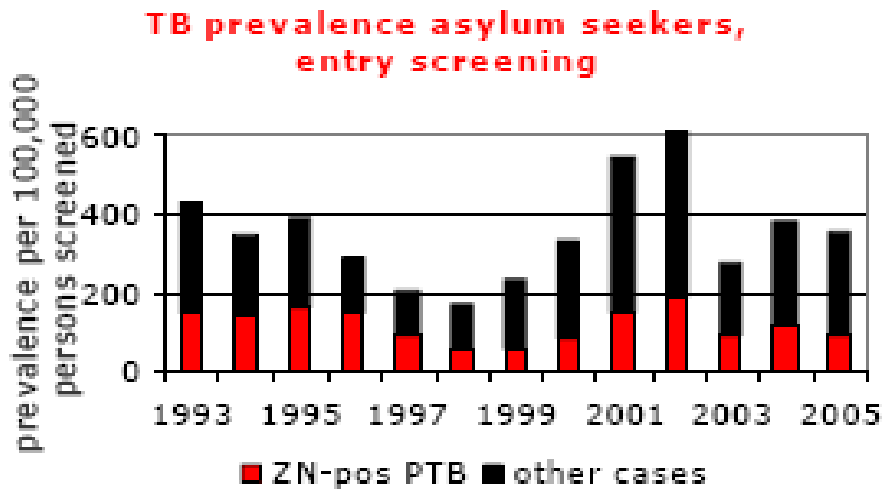
Active case finding

Active case finding is done by the Municipal Health Services (GGD) either through contact investigation among contacts of patients or through screening of high risk groups with an estimated TB incidence of more than 50 per 100,000 persons. Screening is done by chest X-ray (for active TB) and/or TST (for recent latent tuberculosis infection). Municipal Health TB specialists diagnosed 20% of all TB cases in 2005, 53% of the cases were diagnosed by pulmonologists and 24% by other clinicians.²¹

Screening of asylum seekers

The number of TB among asylum seekers found through screening decreased particularly, due to the decrease in number of asylum seekers who entered the Netherlands and a decrease of TB prevalence among asylum seekers. All incoming asylum seekers are screened within one week after arrival with a mobile X-ray unit. The coverage of this mandatory screening varied in the period 1993-2003 between 90% and 100%. In 3% of the persons screened in 2005 abnormalities on the chest X-ray required further clinical evaluation. In 23 (14%) of the suspect cases in 2005 active tuberculosis was confirmed. This is equivalent to 350 TB cases per 100,000 asylum seekers screened, of whom 91 per 100,000 (26%) with smear positive pulmonary TB.²¹

Figure 9 TB prevalence asylum seekers



Source: "Tuberculosis in the Netherlands 2005" Surveillance report. KNCV Tuberculosis Foundation ²¹

Screening of prisoners

Prisoners are screened within the first week of incarceration with a mobile X-ray unit. Coverage of this screening in 2005 was 100%. The prevalence of TB among new prisoners decreased from 368 per 100,000 in 1993 to 51 per 100,000 persons screened in 2005.²¹

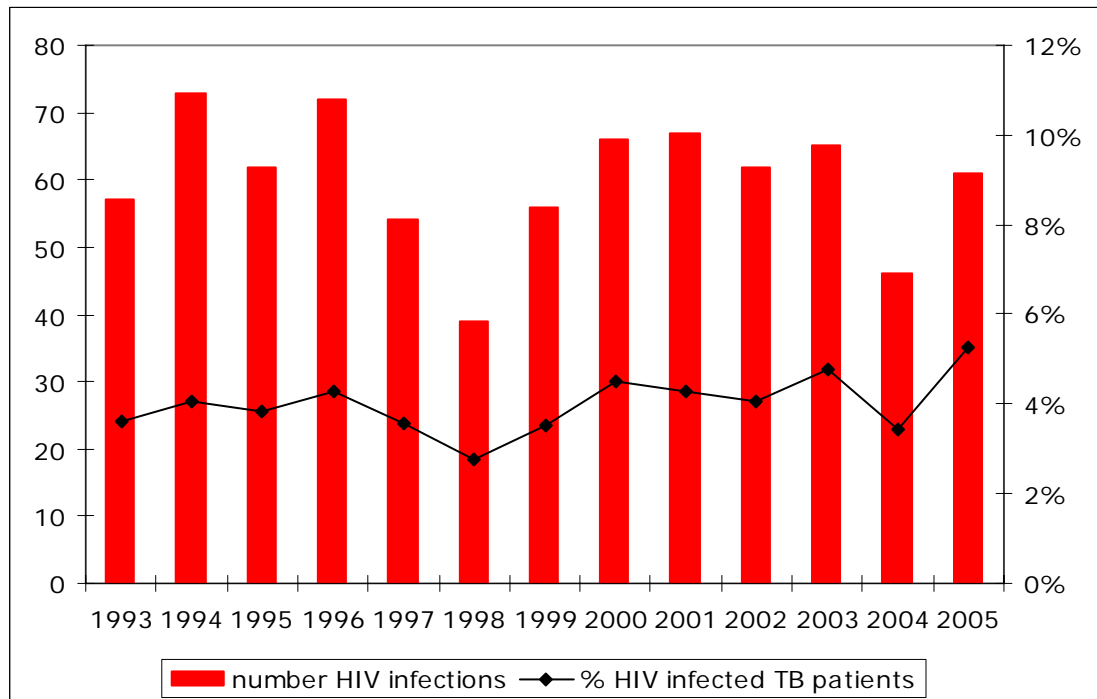
Contact investigation and Latent TB Infection (LTBI)

Municipal Health Services register cases of recent latent TB infection, of latent TB infection in immune compromised persons and in persons with fibrotic thoracic lesions in the NTR. In 2005 2191 new cases were reported, of whom 1440 cases (66%) detected through contact investigation. The total number of persons annually involved in contact investigations is on estimate 20-25,000 persons. Of persons with LTBI found in a contact investigation 64% started preventive treatment. Treatment outcome varied strongly by age group. Treatment was interrupted due to side effects in 22% of the cases of 35 years and older.²¹

Co-infections of HIV & TB in migrant populations

Of the registered TB patients in 2005, 61 (5.3%) were co-infected with HIV (Figure 10). HIV prevalence among TB patients is relatively stable over time. Simultaneous infections of HIV and TB are important to monitor, since TB increases the HIV viral burden, accelerates the clinical course of infection and might interfere with treatment effectiveness. Newly diagnosed TB can therefore be an important event in the identification and treatment of HIV infected persons.

Figure 10 Number and % of HIV co-infections in TB patients in the Netherlands



Source: KNCV Tuberculosis Foundation

Conclusions

In 2005, the estimated prevalence of HIV in the general population in the Netherlands is 0.2%. An estimated 18,500 [10,000-28,000] of adults (15-49 years) are living with HIV/AIDS in the Netherlands. Of those, 11866 HIV cases with known year of diagnoses were registered by one of the 24 HIV treatment centres in the national database of the HIV Monitoring Foundation. Of all registered HIV patients, 43% were born abroad. The majority (41%) of the migrants originated from sub-Saharan Africa, 25% from Latin America/Caribbean, 15% from Western Europe and 7% from South (East) Asia. In 2005, 1157 cases of tuberculosis were notified at the KNCV Tuberculosis Foundation. The incidence of infections with TB is highest among foreign born persons. Of the registered TB patients in 2005, 5.3% were co-infected with HIV.

In the Netherlands, migrants of HIV endemic countries form a risk group of acquiring HIV (and TB). No specific screening programmes for HIV exist for migrants, although the Netherlands has an active HIV testing policy. Furthermore, all pregnant women in the Netherlands are screened on HIV since 2004. In general, HIV/AIDS services with respect to access to testing and treatment in the Netherlands are fairly good. HIV infected migrants, including illegal migrants and asylum seekers, have access to treatment. In practice, the major concern is the treatment and diagnosis delay due to late testing of migrants compared to Dutch (especially in men). For undocumented illegal migrants and asylum seekers, lack of knowledge of the Dutch legal system may result in delayed testing and treatment. Moreover, stigma-related issues may well play a role in the testing behaviour of all migrants.

Commercial sex workers are another group at risk for HIV infection. Anonymous unlinked HIV surveys show that the HIV prevalence is high among transgender and drug-using sex workers. HIV prevalence is relatively low among female sex workers, who never injected drugs. The majority of the HIV positives in these surveys were not aware of their HIV infection. Although municipal public health services carry out outreach activities in this group and the active HIV testing policy is also aimed at sex workers, women involved in commercial sex work remain a vulnerable hard-to-reach group.

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