THAILAND AT A GLANCE

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<tr>
<td>Total population (in thousands)</td>
<td>68,139 (2010)</td>
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<tr>
<td>Annual population growth rate</td>
<td>0.5% (2010-2015)</td>
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<td>Population aged 15-49 (thousands)</td>
<td>37,383 (2008)</td>
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<td>Percentage of population in urban areas</td>
<td>34% (2010)</td>
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<td>Crude birth rate (births per 1,000 population)</td>
<td>14.5 (2008)</td>
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<td>Under-5 mortality rate (per 1,000 live births)</td>
<td>14 (2008)</td>
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<td>Human development index (HDI) – Rank/Value</td>
<td>92/0.654 (2010)</td>
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<td>Life expectancy at birth (years)</td>
<td>69.3 (2010)</td>
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<td>Adult literacy rate</td>
<td>93.5% (2005-2008)</td>
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<td>Ratio of girls to boys in primary and secondary education (%)</td>
<td>103 (2001)</td>
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<td>GDP per capita (PPP, $US)</td>
<td>7,995 (2009)</td>
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<td>Per capita total health expenditure (Int.$)</td>
<td>286 (2007)</td>
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HIV EPIDEMIOLOGY AND TRENDS

From 1984 when the first case of AIDS was reported in Thailand to 1988, huge numbers of HIV infections and AIDS cases were reported, resulting from multiple transmission routes: injecting drug use, heterosexual sex, homosexual sex, and mother-to-child infection. Despite this complexity, Thailand was one of the few countries to have demonstrated success in the 1990s in slowing down the spread of the HIV epidemic – largely due to its policy of 100% condom use in the commercial sex industry. Indeed, Thailand has had one of the most effective national responses to the HIV epidemic in the world, particularly in the scale and scope of widespread impact.

More recently, the estimated number of people living with HIV has dropped from 640,000 in 2001 to 530,000 in 2009 as has the HIV prevalence among adults aged 15-49 years, from 1.7% to 1.3%. In addition, an estimated 210,000 women (aged 15 and above) were infected (slightly down from 220,000 in 2001). Moreover, 10,000 children (aged 0-14) were estimated to be living with HIV in 2009 (down from 30,000 in 2001) and there were an estimated 28,000 AIDS deaths – down from 52,000 in 2001 (Figure 1).

Figure 1: Estimated number of adults and children living with HIV, new infections and AIDS deaths, 1990-2009

WHO IS AT RISK OF HIV IN THAILAND?

Heterosexual transmission accounts for the bulk of new infections. However, it is noteworthy that the composition of the infected population is very diverse and quite different from what it had been at the initial stage of the epidemic. A decade ago, around 80% of HIV infections occurred among female sex workers (FSWs) and their clients. Based on recent estimates, around one-third of new infections occur in women infected by husbands or sex partners (Figure 2). Homosexual transmission is estimated to contribute to 28% of new HIV infections. Meanwhile, injecting drug use accounts for 8% of transmission.

Figure 2: Percent distribution of estimated new HIV infections by population group, 2008

![Figure 2: Percent distribution of estimated new HIV infections by population group, 2008](source: Prepared by [www.aidsdatahub.org](http://www.aidsdatahub.org) based on Bureau of AIDS, TB and STI, DDC, MOPH, cited in WHO, HIV/AIDS in the South-East Asia Region, 2009)
Figure 3 shows a continuing downward trend of HIV prevalence among FSWs from 2003 to 2009; however, the epidemic among MSM is considered to be emerging. Although decreasing in Bangkok from 30.7% in 2007 to 24.7% in 2009, a prospective study carried out from 2006 to 2008 (n=1,292) showed HIV incidence around 6% each of the three years. The trend among IDUs has been fluctuating, dropping from 46.8% in 2003 to approximately 29% in 2007, only to rise again to 38.7% in 2009.8,10

**Figure 3: Trends in HIV prevalence among key affected populations, 2003 – 2009**


### Female sex workers

Since 1993, there has been a steady decline in HIV prevalence among FSWs.8 Among direct FSWs (brothel-based), HIV prevalence peaked at 28.3% in 1993 then decreased significantly to 16.0% in 1999 to 4.6% in 2006 and to 2.8% in 2009.10 In addition, among indirect FSWs, HIV prevalence has essentially remained below 10%, peaking at 10.1% in 1996 and then slowly decreasing to 3.5% in 2007 and falling even further to 1.7% in 2009 (Fig. 4).
Regional disparities in HIV prevalence are marked, with FSWs in the Central and Northern regions more likely to be infected with HIV than those in other parts of the country. The decline in prevalence appears to have occurred in all regions, including among direct SWs in Bangkok with the latest prevalence in 2009 reported by sentinel surveillance (HSS) at 5.3%, followed by the northern provinces (3.7%), southern (2.8%), and north-eastern (1.6%). The latest prevalence among indirect SWs in the south was 2.2%, followed by the central region, including Bangkok, (2.0%), the northeast (1.8%), and the north (1.0%). Moreover, it is important to note that – although HIV prevalence among indirect SWs declined slightly after 2004 – incidence during that period has risen from 0.2% per year in 2004 to 0.7% per year in both 2007 and 2008.

However, an integrated bio-behavioural survey in 2007 using respondent-driven sampling in Bangkok (n=707) and Chiang Rai (n=366) found higher rates of HIV prevalence among non establishment based SWs. Indeed, HIV prevalence in Bangkok was found to be 20% among indirect SWs and 2.5% among direct SWs. In Chiang Rai, HIV prevalence was 10% among indirect SWs and 2.6% among direct SWs. Besides the difference in the settings of SWs, the results are likely to be higher than those found in the HSS given that respondent-driven sampling typically involves recruitment from populations already accessing HIV and sexually transmitted infection (STI) services (and thus often infected or particularly vulnerable upon inclusion).

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Figure 4: Trends in HIV prevalence among direct and indirect FSWs, 1993 – 2009


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HIV incidence surveillance in Thailand uses the BED-Capture Enzyme Immuno Assay (CEIA), as results are still of questionable accuracy – Thailand triangulates with other surveillance data to clearly understand the HIV epidemic.
STI surveillance among SWs during 1999-2008 found that STI prevalence among SWs is on the rise. In 2008, the prevalence of STIs among SWs was 1.8% among women and 15.2% among men. The 2010 UNGASS report stated that between 0 and 2.2% of FSWs had gonorrhea, and 5% to 16% had chlamydia. In the 2006 and 2007 IBBS, the prevalence of non-specific urethritis (NSU) was 10% and 11%, respectively. The prevalence of gonorrhea was low, but stable at 1.6% and 1.2% in 2006 and 2007, respectively.

An independent study offering voluntary counselling and testing (VCT) for HIV and syphilis to women attending three public STI clinics in Bangkok (n=684) from May 2004 to June 2006 found much higher levels of HIV and STI, particularly among street-based FSWs. HIV prevalence among the street-based FSWs, brothel-based FSWs and other women not reporting sex work were 45.8% (38/83), 4.2% (10/236) and 9.9% (28/284), respectively. The prevalence of syphilis among these populations was 13.3%, 2.1%, and 2.6%, respectively.

Injecting drug users

HIV prevalence among IDUs is showing no signs of decline. Until 1999, HIV prevalence among IDUs was between 30-50% and as of 2009, overall HIV prevalence had reached 38.7% \( ^2 \) with higher prevalence seen in specific sites ranging from 40.5% in Bangkok (n=126), to 50% in Lampang (n=2), 52.4% in Samut Prakan (n=21) and as high as 75% in Yala (n=20) (Fig. 5). \( ^12 \)

Figure 5: Trends in HIV prevalence among IDUs, selected sentinel sites, 2001 – 2009

![Figure 5: Trends in HIV prevalence among IDUs, selected sentinel sites, 2001 – 2009](image-url)

**Men who have sex with men and Male sex workers**

The first ‘outbreak’ of HIV in Thailand was detected among MSM in 1985, but attention soon shifted to the HIV epidemic in IDUs and heterosexuals – in fact, MSM are not currently included as an HSS sentinel population. In contrast to the overall heterosexual epidemic in the country, which peaked in the mid 1990s and had been steadily decreasing, the history of the HIV epidemic among MSM is less well known and MSM had been receiving relatively limited attention. Nationally, it is estimated that there are around 95,000 men who have sex with men (MSM) and 10,000 male sex workers (MSWs).

Figure 6 shows generally increasing trends in HIV prevalence among MSM across three cities. Most recently in 2009, HIV prevalence among MSM was found to be 24.7% in Bangkok. A survey conducted by the Bureau of Epidemiology in 2007 found HIV prevalence among MSM in Bangkok, Chiang Mai and Phuket to be 24.6% overall (30.7% in Bangkok, 16.9% in Chiang Mai and 20% in Phuket). In Bangkok there was an increase in the proportion of those over 29 years testing HIV positive, from 29.7% in 2005 to 37.7% in 2007. In Chiang Mai those aged 23-28 years experienced the greatest increase, from 16.1% in 2005 to 29.8% in 2007. Phuket recorded statistically significant increases in HIV prevalence across all age groups.

A similar study carried out by the Bureau the following year (2008) in the provinces of Udon Thani and Pattalung, reported HIV prevalence at a much lower 5% (n=500). Additional data from the Thai Red Cross Anonymous Clinic in Bangkok showed that, out of the 1,289 MSM who visited the clinic, 26% were HIV positive.

**Figure 6: Trends in HIV prevalence among MSM, selected sentinel sites, 2003 – 2009**

Based on the annual survey of commercial sex establishments (CSE), HIV prevalence among male sex workers (MSWs) decreased from 20.7% in 2007 to 14.2% in 2009. Among transgenders (TG, men who accept their gender and identity as a woman), HIV prevalence remained relatively stable in Chiang Mai at 16.8% in 2007 (as compared to 17.6% in 2005, recent data was not available for Bangkok or Phuket).

**Young people**

Young Thai people continue to be at risk of HIV infection. After experiencing a decline from 0.95% in 2002 to 0.45% in 2004, HIV prevalence among young people aged 15-24 years had increased to 0.64% in 2006 and was 0.58% in 2009. This trend, if confirmed in the next wave of surveys, carries implications for the Thai labour force and might also contribute to a reversal in the currently declining national epidemic.

**Migrants and mobile populations**

The scarcity of data makes it difficult to track trends in the HIV epidemic among migrants. The total number of documented and undocumented migrant workers in Thailand is estimated at 2.5 million and about 1.4 million migrants from Myanmar, Lao PDR and Cambodia were registered to work in Thailand in 2009. Previous estimates had run as high as 3.7 million documented and undocumented workers. Based on sentinel surveillance data, HIV prevalence among migrants rose from 0.84% in 2007 to 1.2% in 2008. Similarly, prevalence among fishing boat crew rose from 1.25% in 2007 to 2.5% in 2008. Of note, two to three times higher HIV prevalence has been found in pregnant migrant women as compared to Thai pregnant women in selected provinces.

Undocumented migrant workers are most vulnerable to health hazards and communicable diseases because of the lack of affordable health care services. Moreover, stigma, discrimination and fear of arrest on the parts of migrants pose important barriers in their accessibility to HIV prevention and care services. To address these issues, the National AIDS Plan (2007-2011) prioritized migrant workers as well as displaced persons, ethnic minorities and Thai laborers abroad. Through the national network of government and non-government agencies working on HIV/AIDS among migrants, access and coverage of HIV prevention services in the public and private sector have been expanded with increased participation of the NGOs and the target beneficiaries.
VULNERABILITY & KNOWLEDGE

Vulnerability factors
- Awareness of HIV status is declining particularly among the key affected populations of sex workers and MSM.
- A large portion of IDUs use non-sterile injecting equipment.
- Low levels of comprehensive knowledge about HIV among the general population and key affected populations.
- High levels of sexual networking among key affected populations and the general population.
- Thailand is a major destination country for migrant workers and is a source, transit and destination country for trafficked persons.

Knowledge of HIV and AIDS

Levels of comprehensive HIV knowledge (the ability to both correctly identify ways of preventing the sexual transmission of HIV and to reject major misconceptions about HIV) among young people was found to be 18.6% in 2004 among vocational students, 31.2% in 2006 national sexual behaviour survey, and 46% among young women in 2005 (Multiple Indicator Cluster Survey, MICS 2005-2006). In terms of the self-perception for risk of HIV infection among 15-24 year olds in the last 12 months, based on the national sexual behaviour survey in 2006, 81% felt they had no risk at all, another 10% felt some risk and an additional 1.8% and 0.7% felt moderate and high risk, respectively. The felt risk was mainly due to unprotected sex (15%), have sex with sex workers (16%), and visit sex worker or are not faithful to one partner (18%) for those who expressed being at risk.

Findings from the 2009 BSS revealed improved comprehensive knowledge among both FSWs and MSWs compared to 2007: 41.3% for females and 29.3% for males (Fig. 7). However, there was no change in knowledge among MSM, with approximately 25% having comprehensive knowledge in both 2007 and 2009. Although IDUs were not surveyed in the 2009, the 2007 BSS found their comprehensive knowledge to be the highest among key affected populations – at 49.1%.
Condom use

The above figures for comprehensive knowledge among key affected populations point to an incongruence between HIV knowledge and practice of safe sex. Although about 50% of IDUs could correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission, only 35% in 2007 and 42% in 2008 used a condom at last sex (Fig. 8). Conversely, the majority of both FSWs and MSM are practicing protected sex with their clients/partners despite their very low comprehensive HIV knowledge. Condorn use was among FSWs 92% in 2009 and 88% among MSM at last anal sex when last reported for 2007.

Figure 7: Percentage of key affected populations with comprehensive HIV knowledge, 2007 and 2009

Figure 8: Percentage of key affected populations who used a condom at their last sexual encounter, 2007 -2009
Consistent condom use among MSM – that is, those who report always using a condom in the past three months – was lower than the figure reported for last sex. In 2007, this usage was reported by 66% in Bangkok, 44% in Phuket and 36% in Chiang Mai, while in 2008 the figures were 56% and 57% in Udorn and Patalung, respectively.\(^8\)

Another survey carried out in 2005 among 450 bisexual men and 1,125 MSM in Bangkok, Chiang Mai, and Phuket, found HIV prevalence to be 8% among bisexual men and 21% among MSM.\(^9\) The following information was obtained regarding condom use:

- 78% of bisexual men and 63% of MSM always use a condom with male partners;
- 44% of bisexual men always use a condom with female partners;
- 84% of bisexual men and 77% of MSM always used a condom with male paying partners (receiving money, gifts, or valuables in exchange for sex).

The combination of unprotected sex and sharing of drug injection equipment among IDUs adds further impetus to the potential spread of the HIV epidemic not only within their network but also to others in the general population. In 2008, only 63% of IDUs reported the use of sterile injecting equipment at last injection.\(^8\) Condom use was quite low and although not strictly comparable, the percentage of IDUs in Bangkok reporting condom use at last sex was 35% in 2007 (program monitoring data) and 42% in 2008 (IBBS using respondent driven sampling, RDS).\(^8\)

Specific surveys among vocational students found that the percentage of young women and men aged 15-24 who had sexual intercourse before the age of 15 was 6% in 2003 and 12% in 2005.\(^9\) Meanwhile, the 2006 National Sexual Behavior Survey of Thailand, covering young people aged 18-24 whether in school or out of school, attained a figure of 5% (n=3,020).\(^9\) According to the same survey, sexual intercourse with multiple partners in the last 12 months was 18% among young males and 1% among young females. This behaviour was most common in those aged 18-19 (24%) as compared to the slightly older age group of 20-24 (18%). Condom use in the last sexual intercourse was 63% among those aged 15-19 and only 49% among those aged 20-24.\(^9\)

Among the general adult population (18-59 years old) in 2006, condom use at last casual sex was reported by a significantly higher percentage of males than females, 47% vs. 16%, respectively (Fig. 9).\(^22\) Young people aged 18-24 reported a higher percentage of condom use at last casual sex than those aged 25-59, 63% vs. 40%, respectively.\(^22\)
Harm reduction among IDUs

Although injecting drug use is illegal and widely discriminated against – many IDUs are afraid to access harm reduction and other health services;24 injecting drug users (IDUs) are a priority population in the National AIDS Plan. Until recently, the government had not strongly supported harm reduction initiatives, in particular needle exchange initiatives, with the provision of needles and syringes prohibited;25 however, in 2009 the Ministry of Health (MoH) signed a memorandum of understanding (MoU) for cooperation on harm reduction for IDU among the Office of the Permanent Secretary for Health, the Department of Medical Services, the Department of Disease Control (DDC), the National Health Security Office (NHSO), and the Office of the Narcotics Control Board (ONCB).8

A 2008 community-based study of IDUs in Bangkok (n=238, among whom 66 were female) found a high rate of syringe sharing.26 Overall, 30% of participants reported borrowing a used syringe in the past 6 months, among whom 65% reported borrowing multiple times. Syringe borrowing was positively associated with difficulty accessing syringes and injecting with other people on a frequent basis. The main reasons given for experiencing difficulty accessing syringes included: being too far from syringe outlets (34%), pharmacies being closed (14%) and being refused syringes at pharmacies (9%).

Figure 9: Percentage of population (18-59 yrs) who reported the use of a condom at last casual sex, 2006

HOW MIGHT HIV AFFECT THAILAND IN THE FUTURE?

In 2006, a model based on empirical data from existing household surveys was developed to simulate the magnitude of HIV & AIDS-related health care expenditure and income effects on the consumption expenditure of households with people living with HIV & AIDS (PLHIV) in four countries, namely Cambodia, India, Thailand and Vietnam, and to project the aggregate impact of AIDS on poverty between 2003 and 2015. The analysis showed that in Thailand, compared with the nearby countries of Vietnam, India and Cambodia, a larger portion of health care costs is shouldered by the government. Consumption expenditure in households with PLHIV would decrease between 34% and 38% if antiretrovirals (ARVs) were used. If ARVs were not used, consumption expenditure would decrease between 59% and 72%. This illustrates the importance of ARV use in reducing the income effect of HIV & AIDS on the household. Households in the poorest quintile (Q5) are most likely to fall into poverty when a household member contracts AIDS. In addition, households with PLHIV not using ARVs, even in the highest consumption quintile (Q1), would fall deeper into poverty.

NATIONAL RESPONSE

Law and policy related issues

• Thailand does not have laws that criminalize homosexual behaviour.

• Sex work is illegal in Thailand; however the National Program on HIV Prevention urges that it be tolerated for the sake of keeping prevention strategies accessible. Police reportedly target the carrying or distribution of condoms as evidence of sex work, thus discouraging the availability and use of condoms.

• As abovementioned, injecting drug use is illegal and widely discriminated against.

• In 2006, the Act on Protection of People Living with HIV/AIDS was drafted – and later annulled – given its incompatibility with the protection of human rights.

Governance

Thailand has been recognized as a successful case in controlling the HIV epidemic by its strong national response. The history of Thailand’s national response can be divided into 3 distinct phases of action, as below.

Phase 1 - Public health focused: The first health-focused phase was when HIV & AIDS was considered an issue of infectious disease and health. The response was quite limited and rested mainly under the auspices of the Ministry of Public Health (MOPH). A case reporting system was established; however it failed to detect the rapid spread of HIV infections. Evidence that HIV could spread widely among the Thai population did not become apparent until HIV testing was introduced in 1988 in government methadone treatment centers for drug users. The results showed that HIV prevalence was very high (up to 40%). The finding came simultaneously with approval by the Cabinet of the Medium-Term Programme for the Prevention and Control of HIV/AIDS. This was a fundamental working framework for different sectors (government, private and NGOs). It is also noted that during this period, funding for HIV & AIDS programmes came mostly from external sources, while internal contributions were limited.
Phase 2 - Socially focused and multisectoral phase (1991-1996): In 1991-1992, the HIV/AIDS prevention and control programme became a national priority. With the establishment of the National AIDS Prevention and Control Committee, chaired by the Prime Minister, the five-year AIDS control programme and budget was brought to the highest level. This effort benefited from the participation of civil society and non-governmental organizations (NGOs). A massive public information campaign on AIDS was launched through the mass media.

Phase 3 – The holistic phase (1997-present): With the growing number of AIDS cases and the diversity of HIV the epidemic among various populations, it has become apparent that HIV & AIDS will not be confined within high-risk groups. Capacity building to all communities was given a strong focus during this period which gave the Thai national response new responsibilities. Thailand developed a series of National AIDS Strategies (1997-2001, 2002-2006, and 2007-2011) with active participation from a wide spectrum of agencies and sectors, including networks of PLWHAs. A number of specific strategies to strengthen the HIV policy response were carried out, among which include:

- continuing review, refinement and formulation of HIV prevention, care and treatment policies and plans at national and local levels (e.g. enhancing HIV in the workplace programmes, scaling up prevention of mother-to-child transmission, among others);
- continuing mobilization of support and involvement of key agencies, organizations and sectors in HIV prevention, care and treatment programmes/activities;
- reinforcement of traditional community support networks;
- integration of life skills training into school curricula;
- expansion of health promotion activities, and medical care for those with HIV in both public health and community settings.

HIV Prevention programmes

As of 2009, 1,014 health facilities were reported to be providing HIV testing and counselling services. Among key affected populations, HIV testing decline across all populations from 2007 to 2009, except for IDUs, among whom data was only collected in 2008 (Fig. 10). The most recent data indicates that testing is highest among IDUs – 59.7% in 2008 – followed by female and male sex workers, 36% and 35.2% in 2009, respectively and MSM at 21.3% in 2009.
Figure 10: Percentage of key affected populations who received HIV testing in the last 12 months and knew the results, 2007 – 2009


According to the 2006 National Sexual Behavioural Survey of Thailand, 19% of men and women aged 18-49 were tested for HIV in the last 12 months and knew their results (n=5,208). Slightly more women (22%) than men (16%) underwent HIV testing.

**Antiretroviral treatment, prevention of mother-to-child transmission**

The government strives to achieve universal access to treatment and in early 2007 it announced that it was breaking patents on drugs to treat HIV. Based on 2010 WHO ART guidelines, ART coverage among people living with HIV in 2010 is 67% (55-85%) which is up from 61% (50-78%) in 2009.

In 2010, 94% of pregnant women were counselled and tested for HIV which showed an increase from 82% in 2009. Based on the data from UNGASS country progress reports, the proportion of HIV-positive pregnant women who received ARVs to reduce the risk of mother-to-child transmission has increased from 89.8% in 2005 to 94.7% in 2009 (Fig. 11). Regarding infants, an estimated 62 to >95% of infants born to HIV infected women received ARV prophylaxis for PMTCT in 2010.
ECONOMICS OF AIDS

In 2009, the total expenditure on HIV was approximately US$ 214 million, up from US$ 209 million in 2008. This is equivalent to $414 per capita expenditure per person living with HIV. The total expenditure on HIV accounted for 0.081% of GDP in 2007, equivalent to 2.7% of total health expenditure. Domestic public funding shouldered most (93%) of the expenditure, representing a continued trend in increasing self-reliance on HIV program financing on the part of the Royal Thai Government (Fig. 12).
Figure 12: Amount of domestic and international HIV expenditures and % shared by government, 2007 – 2009

The bulk of expenditure went to care and treatment (76.1%), followed by prevention (13.7%) and program management (3.5%) (Fig. 13). Of the US$ 29 million dollars spent on prevention in 2009, 4% was allocated towards harm reduction programmes for IDUs, 1% went towards prevention programmes for MSM and 0.4% to prevention programmes for sex workers and their clients.
Thailand received funding from the Global Fund from Rounds 1, 2, 3, 8 and SSF. The total amount received is more than US$ 200 million. Also, with US$2.5 million annually, the Thai Ministry of Public Health and the U.S. Centers for Disease Control collaborated on activities related to HIV prevention and alleviation. Multilateral organizations in are WHO, UNFPA, UNIFEM, UNODC, UNDP, World Bank, IOM, ILO, UNHCR and UNAIDS. Total support from these organizations was US$ 1.4 million in 2008 and US$ 1.7 million in 2009.

References


