## Bhutan at a Glance

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value (Year)</th>
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<tbody>
<tr>
<td>Total population (in thousands)</td>
<td>708.5 (2010)</td>
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<tr>
<td>Annual population growth rate</td>
<td>1.7% (2010-2015)</td>
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<tr>
<td>Percentage of population in urban areas</td>
<td>35% (2010)</td>
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<tr>
<td>Crude birth rate (births per 1,000 population)</td>
<td>21.1 (2009)</td>
</tr>
<tr>
<td>Under-5 mortality rate (per 1,000 live births)</td>
<td>81 (2008)</td>
</tr>
<tr>
<td>Human development index (HDI) – Rank/Value</td>
<td>132/0.619 (2007)</td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>65.7 (2007)</td>
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<tr>
<td>Adult literacy rate</td>
<td>52.8% (2007)</td>
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<td>Ratio of girls to boys in primary and secondary education (%)</td>
<td>100 (2009)</td>
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<tr>
<td>GDP per capita (PPP, $US)</td>
<td>4,837 (2007)</td>
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<tr>
<td>Per capita total health expenditure (Int.$)</td>
<td>188 (2007)</td>
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HIV EPIDEMIOLOGY AND TRENDS

Bhutan is considered a low HIV prevalence country, with an estimated prevalence of 0.2% among adults aged 15-49 as of 2009; there are an estimated fewer than 1,000 [<1,000-1,500] adults and children currently living with HIV in the country (Fig. 1). Among young people aged 15-24, prevalence is estimated to be less than 0.1% among women and 0.1% among men. The first case of HIV was identified and reported in 1993 and, as of July 2010, the Ministry of Health had a total of 217 reported HIV cases among the country’s population of about 700,000. These figures also include 18 children between 1 to 12 years of age who acquired HIV through mother-to-child transmission. Among these reported cases, 107 were females and 110 were males, and the majority (73) were in the 30-39 year old age group (Fig. 2).

Figure 1: Estimated adult HIV prevalence vs new HIV infections, 1990-2009

![Figure 1: Estimated adult HIV prevalence vs new HIV infections, 1990-2009](image1)


Figure 2: Total number of reported cases (n=217) by gender and age group, through July 2010

![Figure 2: Total number of reported cases (n=217) by gender and age group, through July 2010](image2)

Even though the number of reported HIV cases was small, both the Government and the development agencies are concerned that the current HIV situation could potentially become a public health issue in the future. Given that almost 80% of AIDS cases in Bhutan were undetected during the last 6 years, the virus could be circulating silently amongst the Bhutanese population without identification. In fact, 15 out of 20 dzongkhas (administrative divisions) in Bhutan had reported HIV infections by 2006.\textsuperscript{11}

**WHO IS AT RISK OF HIV IN BHUTAN?**

Most (90%) of HIV infections are attributed to unsafe sexual practices – such as multiple partners, casual sex and low condom use – followed by mother-to-child transmission (8%), and intravenous drug use and blood transfusion (1% each) (Fig. 3).\textsuperscript{10}

**Figure 3: Mode of HIV transmission for reported cases, 1993 - July 2010**

![Figure 3](source)

The current surveillance system does not adequately measure the prevalence of HIV among key populations at higher risk.\textsuperscript{12} Moreover, because the sentinel survey methodology relies on passive case reporting (all tests done at facilities during a period of few months), it does not produce sufficient sample sizes in the populations typically considered to be at higher risk – such as injecting drug users (IDUs), sex workers and men who have sex with men (MSM).\textsuperscript{12} However, the first Behavioural Surveillance Survey (BSS) was carried in 2008 among drug users, bar girls as a proxy for sex workers, the following four groups of a) Royal Bhutanese Police and b) Army (RBP and RPA, respectively), c) taxi drivers d) truckers as proxies for clients of sex workers, and non-Bhutanese migrants.\textsuperscript{13}
Injecting drug users

There are no official estimates of the number of drug users or IDUs in Bhutan. Although injecting drug use is not presently a widespread problem in Bhutan, border towns of neighbouring countries such as Nepal, India and China are all areas of concern. For instance, a 2004 study along the Bhutanese border with West Bengal State in India found that HIV prevalence among IDUs (n=228) was almost 12%.14 Thirty-six percent of those IDUs had shared needles with a partner and 52% visited sex workers within the last year. Another significant finding was that almost 50% of the IDUs included in the study had Hepatitis C (Fig. 4).14

Figure 4: Percentage of injecting drug users with selected risk behaviours in the last year along the Bhutanese border with West Bengal in India, 2004

A rapid situation and response assessment, conducted in 2005-2006 among 200 drug users, found that half of the respondents were in the age group of 21-30 years, 16% were married, 24% were employed and 3% were illiterate.15 Nineteen percent had ever injected drugs. The proportion of participants reporting condom use at last sex was: 55% with casual, non-commercial, non-regular partners; 55% with commercial sex partners; and 36% with regular sex partners. Among those who injected, 43% reported lending their syringe or needle to others at last injection, yet none of the respondents reported borrowing a syringe or needle from others at last injection. Only a third (34%) of the drug users believed that they were at risk of getting infected with HIV, although 39% had been tested for HIV.

In addition, a small sample (n=23) of the partners of drug users were also surveyed with the following results: nearly half (47.8%) had ever used drugs themselves and less than a third (30.4%) had used a condom at last sex. In addition, a relatively high percentage had ever heard of HIV/AIDS (82.6%) and around two-thirds knew about modes of HIV transmission – contaminated needles at 65.2%, blood transfusion at 69.6% and mother-to-child at 69.6%.16
Sex workers and their clients

Sex workers remain largely hidden among society and it has been difficult to define the true magnitude of sex work in Bhutan.\textsuperscript{12} Anecdotal evidence reveals that the number of sex workers has risen primarily in urban areas along border towns, but that they are also operating in the interior districts of the country.\textsuperscript{12} According to an HIV and Mobility in South Asia report, sex workers on both sides of the border are reluctant to visit health facilities to seek treatment, collect condoms, or use testing services.\textsuperscript{17}

Given the limitations to surveillance mentioned above, very little is known about HIV transmission and infection among sex workers and their clients. Among the 217 HIV cases detected as of July 2010, 10 (around 5\%) were among individuals reporting sex worker as their occupation.\textsuperscript{10} One small study in Phoensoling (n=60) found that 3.3\% of sex workers tested positive for HIV, 72\% for syphilis and 3.4\% for Hepatitis.\textsuperscript{18}

Men who have sex with men

While it is acknowledged that 90\% of reported HIV cases are attributable to sexual transmission, little is known about the heterosexual vs. homosexual nature of this transmission. This is largely due to the fact that strong social and cultural taboos stigmatize male-to-male sex in Bhutan, making this group difficult to monitor.\textsuperscript{12}

Despite these issues, MSM are included as a target group in the 2008 National Strategic Plan, given experiences in other countries wherein MSM are disproportionately impacted by HIV.

Young people

Bhutan has a large youth population – almost 52\% of the total population is below the age of 25 years.\textsuperscript{19} Though no national-level data is available, a survey of high school students in 2006 revealed that misconceptions about HIV persist among young people: 48\% thought that HIV could be transmitted by mosquito bites; 66\% believed that donating blood was risky; 69\% HIV/AIDS was curable if treated early; and 76\% felt that people living with HIV and AIDS should be isolated to avoid spreading the risk of infection.\textsuperscript{20}

Migrants and mobile populations

There are nearly 20,000 foreign workers in Bhutan – primarily a migrant receiving country – mostly from Northeast India and Nepal, specifically from areas in these countries with concentrated HIV epidemics. There is evidence of unprotected sexual practices with multiple partners among mobile and migrant populations with porous borders cited as a central factor to these multiple partnerships. A 2003 study of mobile groups, such as long-distance drivers and traders, migrant workers, and the armed forces, found migrant workers had had up to 12 sex partners, soldiers up to 20, and truck drivers up to 280.\textsuperscript{17} When entering Bhutan, a medical check-up is required, however, testing for HIV is not. With these high risk behaviors in mind, little has been done in terms of HIV prevention programming for these groups in Bhutan.\textsuperscript{17}

For more on HIV among migrants in the region, please see the HIV & Migration Regional Profile, available at \url{http://www.aidsdatahub.org/en/regional-profile/hiv-and-migration}.
Knowledge of HIV and AIDS

The 2008 BSS found that although knowledge among drug users on individual modes of transmission of HIV was good, less than a third (32.2%) had comprehensive knowledge. Similar results for comprehensive knowledge were observed among bar girls in Phuentsholing at 32%; however, much lower in Thimphu at 14.3%. The figures were even lower among non-Bhutanese migrants in Thimpu (4.6%) and Mongar (5.0%).

A recent rapid assessment (2009) which sought to identify and characterize the key venues in the capital city Thimpu where people meet new sexual partners, found that almost all males and females, 98% and 95%, respectively, reported that they had heard of HIV/AIDS. In addition, 26% of males and 23% females also felt that they were at risk of being infected with HIV, increasing to 33% among those men who had engaged in transactional sex.

According to an HIV/AIDS Behavior Survey among the general population carried out in 2006, knowledge on HIV prevention by condom use during sex was higher among urban (94%) than rural (84%) males and also higher among urban (87%) than rural (79%) females. In addition, knowledge on HIV prevention by having a faithful partner was higher among urban (21%) than rural (9%) males and higher among urban (22%) than rural (9%) females.

Regarding misconceptions, overall 21% of respondents thought sharing food/water with HIV infected person could spread HIV (14% urban, 37% rural) and overall 71% thought a healthy looking person could be HIV positive (72% urban, 68% rural).

Condom Use

According to the 2008 BSS, the reported condom use among drug users during the last sex was 83.8%, while condom use among male drug users with non-commercial and commercial female partners was 62.2% and 69.7%, respectively. Among bar girls from Thimphu and Phuentsholing who had sex in the last month, 52.2% and 66.7% respectively reported using a condom. Very few (6%) of the bar girls in both cities could show a condom, but most girls knew where condoms were available, around a third reported easy access to condoms. Of those males reporting sex with a sex worker in the past year, condom use was lowest among migration workers (44%) and Royal Bhutanese Police (61%) in Thimpu and highest among truckers (97%) in Thimpu and taxi drivers (100%) in Phuentsholing.

The 2009 rapid assessment revealed that about half of the men and women who visited the key venues in the capital city, 47% and 53% respectively, reported that they had used condom at last sex with their most recent sexual partner, highest among men (86%) when the partner was a sex worker or stranger, and lowest among men (24%) with their spouse; a similar pattern was found among female respondents.

The general population survey (2006) showed condom use at last sex among married respondents having extramarital sex in the last six months was generally high at 80%, higher among urban (84%) and rural (75%) males as compared to urban (44%) and rural (36%) females. Although premarital sex was quite low, among unmarried respondents reported having premarital sex, condom use was generally high at 74%, higher among urban (78%) and rural (75%) males as compared to urban (45%) and rural (61%) females. Consistent condom use during high risk sex was not investigated.

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8Bars/restaurants, public places, hotels/restaurants, karaoke, discos and cafes
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Vulnerability factors

• The spread of sex work from border towns to interior districts of some provinces.
• Bhutan borders countries experiencing concentrated HIV epidemics. For example, there are major epidemics among IDUs and sex workers in neighbouring North-Eastern states of India.
• Low literacy rates, especially among rural women.
• Denial, stigma and discrimination.
• There is a need for behavioural surveillance studies in order to properly assess risk behaviours and vulnerability factors, including condom use, knowledge about HIV, update of HIV testing and coverage of prevention and outreach programs.
• High prevalence of other sexually transmitted infections: Little is known about the exact dynamics and magnitude of sexually transmitted diseases (STDs) in Bhutan. However, syndromic case reporting reveals that gonorrhoea is the most common STD, with an estimated annual incidence rate affecting about 2% of the adult population. The prevalence rate of syphilis is around 2%. One study amongst 345 military personnel found that 5.3% tested positive for syphilis and 6.2% for Hepatitis B.23

NATIONAL RESPONSE

Governance

Bhutan has shown strong political commitment to HIV and AIDS prevention and control. Her Majesty Queen Ashi Sangay Choden Wangchuk is the United Nations Population Fund (UNFPA) Goodwill Ambassador. She is a strong advocate of reproductive health, including HIV prevention issues.

The Royal Government of Bhutan acted early to initiate an HIV and AIDS prevention programme in 1988, five years before the first HIV case was detected in Bhutan. In 1993, a National AIDS Committee (NAC) was established to oversee and coordinate multisectoral efforts and was restructured to form the National HIV/AIDS Commission (NHAC) in 2004.10 This Commission closely guides HIV and AIDS policy formulation and advises on strategic responses.10

The Tenth Five-Year Plan (2008-2013) of the Government has identified HIV/AIDS/STI prevention as one of the most important programmes for addressing emerging health issues. In 2008, the National Strategic Plan for the Prevention and Control of STIs and HIV and AIDS (NSP) was developed in collaboration with government and non-government agencies and development partners.10 The strategic goals of the NSP are:10
• to integrate STI and HIV prevention into the core activities of multisectoral partners
• to create a supportive environment that facilitates the implementation of programmes and services, and reduces stigma and discrimination towards women and men living with or affected by HIV and AIDS and
• to improve the quality and coverage of the national response to HIV and AIDS and STIs.
National policies/guidelines and strategies:
- Technical Strategy for Prevention and Control of STIs;
- Behaviour Change Communication Strategy;
- National HIV/AIDS and STI Prevention and Control Project: Operational Manual; and
- Condom Social Marketing Plan.

Law and policy related issues

Sex work is illegal in Bhutan. The Penal Code of Bhutan, 2004 provides for penalties for sex workers and their clients. As a result, sex workers remain largely hidden among society and it has been difficult to define the true magnitude of sex work in Bhutan.12

In addition, male-to-male sex is illegal in Bhutan. Bhutan's Penal Code, 2004 makes punishable “unnatural sex, if the defendant engages in sodomy or any other sexual conduct that is against the order of nature” with imprisonment from one month to a year.24

The Bhutan Penal Code of 2004 recognizes human trafficking as a fourth-degree felony and child trafficking as a third-degree felony. In October 2009, the National Commission for Women and Children (NCWC) organized its first National Consultation on Human Trafficking and HIV/AIDS and Promoting Cross-Border Cooperation in collaboration with other national partners, including the Ministry of Home and Cultural Affairs (MoHCA), Ministry of Labor and Human Resources (MoLHR), the Royal Court of Justice, and the Royal Bhutan Police. There was an emphasis on the need for a multi-sectoral approach to address the issue of trafficking in women and children and its nexus with HIV.17

HIV Prevention programmes

Basic Health Units (BHUs) and Outreach Clinics provide HIV information and education, syndromic treatment of STIs, counselling, and referral for HIV testing. In 2008, voluntary counselling and testing competencies in strategically selected BHUs were initiated. At the district hospital level, screening for syphilis, HIV testing and antiretroviral treatment (ART), monitoring, counselling, and follow-up activities are conducted.12

Antiretroviral therapy, Prevention of Mother-to-Child Transmission

Antiretroviral therapy (ART) has been available since 2004 and, as of July 2010, there were a total of 59 individuals who had been put on treatment (13 have since died).10

In 2007, 19% of pregnant women were counselled and tested for HIV (Fig. 5).25 As of 2008, 19 HIV positive pregnant women were reported to have received ART for prevention of mother-to-child transmission.26 At the same time, over 95% infants born to HIV positive mothers had received ART to reduce the risk of mother-to-child transmission and 70% infants were receiving cotrimoxazole prophylaxis within 2 months of birth.
ECONOMICS OF AIDS

The World Bank supported the financing of HIV interventions with a grant of US$ 5.7 million covering the period 2004-2009. Additional support was provided by the Global Fund as well as UNFPA, UNICEF, UNAIDS, UNDP and WHO. Funding for the five-year period beginning in 2008 would have significant gaps (Fig 6). While a total of US$ 11.2 million is estimated to be required, only US$ 6.4 million has been committed, leaving a financing gap of US$ 4.8 million.

Figure 6: Financial resources needed for HIV interventions, 2008-2013

References