## MALDIVES AT A GLANCE

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (thousands)</td>
<td>314 (2010)</td>
</tr>
<tr>
<td>Annual population growth rate</td>
<td>1.5% (2010-2015)</td>
</tr>
<tr>
<td>Population aged 15-49 (thousands)</td>
<td>190 (2010)</td>
</tr>
<tr>
<td>Percentage of population in urban areas</td>
<td>40% (2010)</td>
</tr>
<tr>
<td>Crude birth rate (births per 1,000 population)</td>
<td>18.7 (2008)</td>
</tr>
<tr>
<td>Under 5 mortality rate (per 1,000 live births)</td>
<td>28 (2008)</td>
</tr>
<tr>
<td>Human Development Index (HDI)- Rank/Value</td>
<td>107/0.602 (2010)</td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>72.3 (2010)</td>
</tr>
<tr>
<td>Adult literacy rate</td>
<td>98.4 (2010)</td>
</tr>
<tr>
<td>Ratio of girls to boys in primary and secondary education (%)</td>
<td>98% (2006)</td>
</tr>
<tr>
<td>GDP per capita (PPP, $US)</td>
<td>5,475 (2009)</td>
</tr>
<tr>
<td>Per capita total health expenditure (Int.$)</td>
<td>514 (2007)</td>
</tr>
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</table>
HIV EPIDEMIOLOGY AND TRENDS

The first case of HIV was reported in 1987 in an expatriate, while the first Maldivian national with HIV was reported in 1991.\(^2\) The total estimated number of people living with HIV in the Maldives has remained at less than 100 since 2001, when HIV screening was initiated. HIV prevalence has remained at less than 0.1% among the general population of adults aged 15-49.\(^4\) As of 2007, 14 HIV cases of HIV had been reported and 10 people had died of AIDS.\(^1\) The first Biological and Behavioral Survey (BBS) was carried out in 2008 and found that among the vulnerable populations surveyed (female sex workers (FSWs), men who have sex with men (MSM), injecting drug users (IDUs), sea farers, resort workers, construction workers and youth), HIV was only detected among male resort workers at 0.2%.\(^10\)

Vulnerability Factors:
- Maldives comprises around 1,200 islands, of which 200 are inhabited. This geographical limitation makes it difficult to effectively reach targeted populations with HIV interventions such as HIV education, condom promotion and distribution, sexually transmitted infections management and treatment, among others. Indeed, as explored in this review, HIV prevention programme reach, testing update and knowledge about HIV are low among key affected populations and young people.
- In 2009 alone, 655,852 tourists visited the Maldives\(^11\) – double the entire population of the country. Although there is no evidence of sex tourism in Maldives, the great influx of people from all over the world could potentially introduce and increase risk behaviours, and then HIV.\(^12\)
- Sexually transmitted infections are present among key affected populations, as explored below. Moreover, recording and reporting systems of sexually transmitted infections is weak.\(^9\)
- Gender issues and cultural/religious barriers prevent condom promotion, and there are no specific programmes for women injecting drug users.\(^9\)
- Stigma and discrimination against people living with HIV persists within health care settings.\(^9\)

WHO ARE AT RISK OF HIV IN THE MALDIVES?

To date, the 2008 BBS is the most comprehensive and recent data available on HIV in the Maldives. As such, findings from this survey are widely relied upon in this Country Review. Table 1 summarizes HIV prevalence and samples surveyed.
Table 1: HIV prevalence among key affected populations, men in high risk occupation groups and youth (15-24), 2008

<table>
<thead>
<tr>
<th>Population</th>
<th>Number tested for HIV</th>
<th>HIV prevalence (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSWs</td>
<td>94</td>
<td>0</td>
</tr>
<tr>
<td>MSM</td>
<td>124</td>
<td>0</td>
</tr>
<tr>
<td>IDUs</td>
<td>278</td>
<td>0</td>
</tr>
<tr>
<td>Sea farers</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Resort workers</td>
<td>484</td>
<td>0.2</td>
</tr>
<tr>
<td>Construction workers</td>
<td>102</td>
<td>0</td>
</tr>
<tr>
<td>Youths</td>
<td>609</td>
<td>0</td>
</tr>
</tbody>
</table>


Sexually transmitted infections (STIs) other than HIV were detected among several populations in the BBS 2008, confirming the potential for HIV transmission. Syphilis was detected among resort workers with a prevalence of 1.2% while Hepatitis B was detected among resort workers, MSM, sea farers, construction workers and IDUs (Fig. 1). Moreover, Hepatitis C was detected among IDUs in both Male’ and Addu, implying that needle and syringe sharing is likely.

Figure 1: Sexually transmitted infection prevalence among MSM, IDUs and men in high risk occupation groups, 2008

**Injecting drug users**

In 2006, a UNICEF-sponsored situation assessment on HIV pointed to the rising use of intravenous drugs and needle sharing as the most important target area for prevention in the Maldives. More recently, the 2008 BBS found that 74% of male IDUs and only 29% of female IDUs used sterile injecting equipment at the last injection. By region, 31% and 23% of IDUs in Male’ and Addu, respectively reported that they used an already-used needle or syringe the last time they injected.

IDUs reportedly engage in a number of sexual risk behaviours (Fig. 2). A large number of IDUs also bought sex in the year preceding the BBS (38% in Male’ and 52% in Addu), while some also sold sex (16% in Male’ and 4% in Addu). In addition 59% of IDUs had unprotected sex in the past 12 months. More specifically, unprotected sex during a male-to-male relationship was approximately 56% in Male’ and 100% in Addu; unprotected sex with a permanent partner was around 94% in Male’ and 96% in Addu; unprotected sex with a non-regular partner was 90% in Male’ and 98% in Addu; unprotected sex when selling sex was 90% in Male’ and 100% in Addu; and unprotected sex when buying sex was around 83% in Male’ and 98% in Addu.

**Figure 2: Percentage of IDUs with selected sexual behaviours in the past 12 months, 2008**

![Bar chart showing percentage of IDUs with selected sexual behaviours](source: Prepared by [www.aidsdatahub.org](http://www.aidsdatahub.org) based on Maldives, Biological and Behavioral Survey, 2008)

**Female sex workers and their clients**

The nature of FSWs’ work was characterized by the BBS 2008 (Table 2). Notably, FSWs in Male’ (n=34) reportedly had four clients per week, while those in Addu (n=68) had two clients per week. Most FSWs worked in the streets. Clients of FSWs in Male’ had a wide range of occupations, but were mainly unemployed, from the private sector, businessmen/traders, government employees, resort workers and the police. In Addu, 22% of clients were policemen, followed by resort workers and manual labourers.
Table 2: Selected sexual behaviours among FSWs in Male’ and Addu, 2008

<table>
<thead>
<tr>
<th></th>
<th>Male’</th>
<th>Addu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration of selling sex (years)</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Median age at first sex work (years)</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>Median number of clients per week</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>


The BBS 2008 found consistent condom use in the last 12 months to be low among FSWs in both Male’ (12%) and Addu (2%). Findings also revealed that in Male’ and Addu, 29% and 21% of FSWs encouraged their clients to use condoms, respectively. Unprotected sex in the past week was high among FSWs in the two sentinel sites as well as with all types of partners (Fig. 3). Among those practicing anal sex, all had had unprotected sex. Unprotected sex with a permanent or steady partner was 80% in Male’ and 100% in Addu. Unprotected sex with a non-regular partner was 88% among FSW in Male’ and 98% in Addu. Further, unprotected sex with a client was 88% in Male’ and 98% in Addu.

Figure 3: Percentage of FSWs who reported unprotected sex in the last week by type of partner and residence, 2008

Unquestionably, FSWs and their clients are not isolated populations: they engage in sexual relationships with spouses, boyfriends and other key affected groups. Further, their clients may be married or have other sexual partners. Moreover, FSWs’ risk-taking behaviour may also place them into more than one at-risk population. This range in risk-taking behaviour and population interaction places multiple populations at increased risk. For instance, in Male’ in 2008, 91% of FSWs’ clients are married or have a girlfriend, 54% of FSWs had a non-client sex partner in the past 12 months, 32% had ever injected drugs and 39% had had sex partners who inject. In Addu, 91% of the clients of FSWs were married or had a girlfriend, 64% of FSWs had sex with a non-client in the past 12 months, and 9% of FSWs had had partners who inject drugs.
Occupational cohorts of men were included as sample populations in the 2008 BBS due to the fact that they were known to be frequent clients of sex workers. It was found that 6% of sea farers, 4% of resort workers and 2% of construction workers reported having had sex with a FSW in the last 12 months. Among them, 67% of sea farers, 41% of resort workers and 0% of construction workers reported consistent condom use with FSWs.

Unprotected sex among sea farers, resort workers and construction workers with a variety of types of partners was high, according to the BBS (Fig. 4). All construction workers and resort workers who had anal sex with a male partner had done so without protection (none of the sea farers sampled had had sex with another male). Unprotected sex with a permanent/steady partner in the last month was 96% among both sea farers and construction workers and 92% among resort workers. Unprotected sex with a non-regular partner in the last month was 75% among construction workers, 56% among resort workers and 25% among sea farers. Unprotected sex with a FSW in the last month was 100% among construction workers, 59% among resort workers and 33% among sea farers.

Figure 4: Percentage of surveyed populations having unprotected sex in the last month by type of partner, 2008

Men who have sex with men

In the six months preceding the BBS, 44% of MSM in Male’ and 18% in Addu had sold sex to another man. In Male’, 29% of MSM had bought sex from a man in the past six months, while 18% had in Addu. Many MSM in the Maldives also have sex with women. The 2008 BBS found that 29% (n=69) of MSM in Male’ and 26% (n=57) in Addu were married. Furthermore, 75% of MSM reported that they had sex with women in the past 12 months. In Male’, 29% of MSM sold sex to a woman and 49% bought sex from a woman in the previous 6 months. Meanwhile in Addu, 5% had sold sex to a woman and 16% had bought sex from a woman. Figure 5 summarizes these sexual behaviours taken by MSM. It is also noteworthy that 16% and 25% of MSM in Male’ and Addu, respectively, reported ever having injected drugs.
Condom use among MSM with both male partners (in the last 6 months) and female partners (in the last 12 months) is low. Sixty-seven percent of MSM in Male’ and 86% of MSM in Addu had unprotected sex with a male consensual and paying partner in the last 6 months. Sixty-seven percent in Male’ and 78% in Addu had unprotected sex with a male client in the last 6 months. Further, 82% in Male’ and 98% in Addu had unprotected sex with a female in the last 12 months (Fig. 6).10
Young people

More than two-fifths (41%) of the total population of the Maldives is comprised of young people under 25 years of age. According to the 2009 DHS, very few young women aged 15-24 had sex before age 18, less than 1% had sex by age 15, while 6% reported having sex by age 18.

The 2008 BBS reveals that 34% in young people aged 15-24 Male' and 50% in Laamu have ever had sex. The median age of sexual debut was 20 years old. 17% of young people in Male' and 34% in Laamu also reported pre-marital sex. Condom use during pre-marital sex was below 50%. Twenty-five percent and 37% in Male' and Laamu, respectively, had sex with a permanent partner. Three percent in Male' and 9% in Laamu had sex with a non-regular partner. Some youth reported paying for sex (9 males and 1 female in Male') and some reported selling sex (in Laamu 1 male and 1 female in Laamu). One male youth in Male' reported having consensual anal sex with another male.

A previous reproductive health survey (UNFPA, 2004) identified young people as being at risk of HIV infection. The survey reported that one in 10 unmarried youth aged 15-24 had had sexual intercourse – 14% of young men and 5% young women. Almost two-thirds of those who had had sex reported that their first sexual intercourse was before the age of 18. About 4% said that someone from their own age group had involved them in unwanted sex activity, and also 4% said that someone older than them had involved them in such activity. Condom use was low in the 2004 study, with 45% of young people reporting that they never used a condom and only 12% reporting always used a condom during sexual intercourse.

Knowledge about HIV

Comprehensive knowledge about HIV – that is, the ability to correctly identify ways or preventing sexual transmission of HIV and reject major misconceptions about HIV – was 42% among the surveyed population of ever-married women 15-49 years of age in the 2009 DHS, lower among younger women aged 20-24 at 36% and lower still among 15-19 year olds at 22%. Knowledge increased with age as well as education (i.e. from 20% for those with primary education to 63% for those with more than secondary education). In addition, women from urban areas and Malé were found to be more knowledgeable than women living elsewhere.

Comprehensive knowledge about HIV has not been assessed among key populations in the Maldives; however, certain knowledge-related indicators were assessed in the 2008 BBS. Results showed a very broad range in knowledge of HIV prevention and misconceptions among key populations. Interestingly, the highest percentage of knowledge that “limiting sex to one uninfected partner and using condoms every time they have sex as means of prevention” was among IDUs in Male’, while the lowest was also among IDUs – in Addu (Fig. 7). The percentage of key affected populations who could identify major misconceptions about HIV transmission was higher than prevention knowledge (Fig. 8). Knowledge that a healthy looking person may have HIV was good across all key affected populations, ranging from 82% among FSWs in Male’ to 95% among IDUs in Addu. Of note, levels of knowledge across all four questions rarely correlate among surveyed populations.
Figure 7: Percentage of key affected populations who had correct knowledge of HIV prevention, by selected site 2008


Figure 8; Percentage of key affected populations who could identify major misconceptions about HIV transmission, by selected site 2008

Table 3 shows that knowledge of prevention and the ability to identify misconceptions about HIV transmission was more consistent across males in high-risk occupations – being high overall among sea farers and resort workers and low among construction workers (BBS, 2008). The 2008 BBS also revealed that knowledge of prevention was very similar among young people aged 15-24 in Male’ and Laamu; however, misconceptions were more persistent among those in Laamu (Table 3). Interestingly, though not strictly comparable to the 2008 BSS, results from the 2009 Demographic and Health Survey (DHS), show that knowledge of prevention and the ability to identify misconceptions about HIV transmission was generally high among young women 15-24 years of age. These findings are summarized in Table 3.

Table 3: Percentage of surveyed populations who had correct knowledge of HIV prevention and who could identify major misconceptions about HIV transmission, BSS 2008 and DHS 2009

<table>
<thead>
<tr>
<th>Survey and Indicators</th>
<th>Sea Farers</th>
<th>Resort workers</th>
<th>Construction Workers</th>
<th>Young people (Male’)</th>
<th>Young people (Laamu)</th>
<th>Young women (ever married)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. HIV can be prevented by having one uninfected partner (%)</td>
<td>BSS</td>
<td>BSS</td>
<td>BSS</td>
<td>BSS</td>
<td>BSS</td>
<td>DHS</td>
</tr>
<tr>
<td></td>
<td>94</td>
<td>82</td>
<td>52</td>
<td>69</td>
<td>71</td>
<td>92</td>
</tr>
<tr>
<td>2. HIV can be prevented by using condoms every time they have sex (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>46</td>
<td>47</td>
<td>16</td>
<td>34</td>
<td>44</td>
<td>76</td>
</tr>
<tr>
<td>3. A healthy looking person may have HIV (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>79</td>
<td>85</td>
<td>43</td>
<td>89</td>
<td>88</td>
<td>65</td>
</tr>
<tr>
<td>3. HIV is not transmissible by mosquito bites (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>74</td>
<td>55</td>
<td>32</td>
<td>55</td>
<td>44</td>
<td>67</td>
</tr>
<tr>
<td>5. HIV is not transmissible by sharing food with people living with HIV (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>95</td>
<td>82</td>
<td>38</td>
<td>84</td>
<td>77</td>
<td>75</td>
</tr>
</tbody>
</table>

Source: Prepared by www.aidsdatahub.org based on Maldives, Biological and Behavioral Survey (BSS), 2008 and Demographic and Health Survey (DHS), 2009

*For HIV-related indicators, the 2009 DHS sampled only ever-married women 15-49 years of age
NATIONAL RESPONSE

Law and policy related issues

The Maldives has a number of criminal laws that make key affected populations hard to identify, monitor and reach with HIV prevention programmes. The possession of drugs is illegal by virtue of the psychotropic substances is law number 17/77 as amended in 1995 and 2001. Sex work is also illegal. Sharia law also carries heavy penalties for homosexuality – of banishment for 9 months to 1 year or a whipping of 10 to 30 strokes.

Governance

Four years before HIV was detected in the country, the Government of Maldives began its AIDS Control Programme. The National AIDS Council, a multisectoral agency with representatives from different sectors and NGOs, coordinates this programme.

One of the country’s key initiatives was the development of the first National Strategic Plan (2002-2006), which focused on: sustaining high commitment and integrated response at various levels; preventing transmission of HIV in the country; strengthening the country's capacity to respond to HIV; providing adequate care and support to infected persons and people living with HIV; promoting safe practices and behaviour amongst target groups; decreasing STI prevalence; and mitigating the social and economic impact of HIV.

More recently, the National Strategic Plan on HIV/AIDS 2007-2011 was approved in 2007, and aims to limit HIV transmission, provide care for infected people, and mitigate the impact of the epidemic through seven strategic directions:

• Provide age and gender-appropriate prevention and support services to key populations at higher risk: drug users, sex workers and men who have sex with men;
• Reduce and prevent vulnerability to HIV infection in adolescents and young people;
• Provide HIV prevention services in the workplace for highly vulnerable workers;
• Provide treatment, care and support services to people living with HIV;
• Ensure safe practices in the healthcare system;
• Build and strengthen capacity and commitment to lead, coordinate and provide a comprehensive response to the epidemic;
• Strengthen the strategic information system to respond to the epidemic.

Among the HIV-related interventions being implemented in the country are: public health education; peer education; awareness-building; blood-product screening; care for and treatment of people living with HIV; harm reduction; condom provision; and HIV testing services.

There are various NGOs operating in the Maldives that work on providing educational services (radio, peer educations, or seminars). UNFPA and WHO have been providing technical and financial support for HIV awareness and prevention programmes. The Government of Italy, through UNDP, is funding a drug abuse prevention programme.
**HIV prevention programmes**

Although there is a national drug control master plan (2006-2010), which works towards drug supply and demand reduction with prevention efforts and rehabilitation activities, there is no comprehensive harm reduction programme for IDUs. In addition, condom distribution programmes are not available for key affected populations. Thus, it is not surprising that according to the 2008 BBS, less than 50% of all the respondents (MSM, IDU, FSW, Sea Farers, Resort Workers, Construction Workers and Youth), except MSM in Male’, were reached with HIV prevention programmes (Fig. 9). With regards to HIV testing, less than 40% of individuals in all the groups, except again the sea farers, had been tested in the previous 12 months (Fig. 10). Less than 50% even knew a place they could have an HIV test. Less than 15% of IDUs had access to clean needles and syringes through programmes.

Majority of the HIV tests were mandatory testing for pre-surgery, medical, work permit and screening blood donors and done without counselling. Of those tested, the key affected populations are almost negligible. Smaller percentage of young people aged 15-24 were reached by an HIV prevention programme in 2008 (30% in Male’ and 22% in Laamu). Also, only 11% in Male’ and 12% in Laamu were tested for HIV.

**Figure 9: Percentage of surveyed tested for HIV in the past 12 months and reached with HIV prevention programme, 2008**

![Figure 9](source: Prepared by www.aidsdatahub.org, based on Maldives, Biological and Behavioral Survey, 2008)

**Antiretroviral treatment, Prevention of Mother-to-Child Transmission**

It is estimated that only 17% of those in need of antiretroviral therapy are receiving it (based on WHO 2010 guidelines). In terms of prevention of mother-to-child transmission (PMTCT), 67% of pregnant women were tested for HIV in 2009. Meanwhile, PMTCT coverage (both for HIV infected mothers and infants born to HIV infected mothers) were reported to be zero percentage in 2009.
ECONOMICS OF AIDS

The most recent data indicates that, in 2006, the Ministry of Health allocated US$ 120,000 to the HIV/AIDS Program and US$131,000 was provided by external sources (include WHO, British Council, UNFPA and UNICEF). As of 2006, there was an estimated $1,769,766 in unmet finances. The Ministry of Health was forecast to allocate US$ 329,000 to the National HIV/AIDS Program and related activities between 2006 and the end of 2010, and the total amount provided by external sources is projected to decline to approximately $82,000 by 2010.
REFERENCES