



# HIV/AIDS SAARC REGION

UPDATE 2011



SAARC Tuberculosis and HIV/AIDS Centre (STAC)



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# Foreword

HIV epidemic is still a major challenge in the face of human development. The current estimated number of persons living with HIV globally in 2010 was 34 million [31.6 million–35.2 million]. The global incidence of HIV infection has stabilized and begun to decrease in many countries with generalized epidemics. The number of people receiving antiretroviral therapy continues to increase, with 6.65 million people getting treatment at the end of 2010.

The global HIV epidemic has surfaced as a formidable challenge to public health. SAARC Region has an estimated 2.5 million People Living with HIV/AIDS and India alone bears an estimated 2.39 million of that. HIV epidemic in the SAARC Region is a collection of different epidemics in Member States with their own characteristics and dynamics. The diversity existing in the region needs to be fully addressed and defined, in order to achieve the success in prevention and control activities.

The SAARC TB & HIV/AIDS Centre (STAC) has been coordinating the national efforts of Member States in combating HIV/AIDS epidemic. Along with the other regular activities, STAC brings out reports and publications regularly in order to disseminate information related to TB and HIV/AIDS. The STAC also strives hard in assisting the member states in achieving the strategy of zero new HIV infections, zero discrimination, and zero AIDS-related deaths.

SAARC HIV/AIDS Report–2011 incorporates updated information on HIV/AIDS as of December 2010. This is the 09<sup>th</sup> annual report on HIV/AIDS situation in the SAARC Region. It includes general information on HIV/AIDS and describes global, regional and SAARC Member States' HIV/AIDS situation. I hope that the information contained in this report help the SAARC Member States and the stakeholders who are engaged in the field of HIV/AIDS prevention and control in the region.

STAC is grateful to SAARC Member States for their cooperation and support extended in providing relevant information timely to compile this report in time. STAC also acknowledges with thanks the effort rendered by the Professionals and the support given by the General Services Staff of the centre for preparation of this report.

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# Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ART	Anti Retroviral Therapy
BCC	Behavior Change Communication
BSS	Behavioral Surveillance Survey
CPT	Cotrimoxazole Prophylaxis Therapy
CSW	Commercial Sex Worker
CVM	Condom Vending Machines
DNA	Deoxyribonucleic Acid
DOTS	Directly Observed treatment Short course
ICRC	International Committee of Red Cross
FSW	Female Sex Worker
HAART	Highly Active Antiretroviral Therapy
HIV	Human Immunodeficiency Virus
ICTC	Integrated Counseling Treatment center
IDU	Injecting Drug User
IPT	Isoniazid Preventive Therapy
MSM	Man having Sex with Man
MSW	Male Sex Worker
MTCT	Mother to Child Transmission
NACO	National AIDS Control Organization
NACP	National AIDS Control Programme
NASP	National AIDS STD Programme
NCASC	National Center for AIDS and STD control
NSACP	National STD and AIDS Control Programme
NGO	Non Governmental Organization
NTP	National TB Control Programme
PLHA	People Living with HIV/AIDS
PMTCT	Prevention of Mother to Child transmission

RNTCP	Revised National Tuberculosis Control Programme
SAARC	South Asian Association for Regional Cooperation
STAC	SAARC TB and HIV/AIDS Centre
STD	Sexually Transmitted Diseases
STI	Sexually Transmitted Infection
TB	Tuberculosis
UN	United Nations
UNAIDS	United Nation's Programme for AIDS
VCT	Voluntary counseling and Testing
WB	World Bank
WHO	World Health Organization

# SITUATION OF HIV/AIDS

## 1.1 INTRODUCTION

The South Asian Association for Regional Cooperation (SAARC) comprises Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. SAARC is a manifestation of the determination of the people of South Asia to work together towards finding solutions to their common problems in a spirit of friendship, trust and understanding and to create an order based on mutual respect, equity and shared benefits.

SAARC Tuberculosis and HIV/AIDS Centre (STAC) is one of the Regional Centres of SAARC, located in Kathmandu, Nepal. The Heads of State or Government of Member Countries of SAARC at their Fifth Summit held in Male from 22 to 23 November 1990 decided that SAARC Tuberculosis Centre would be set up in Nepal. It was established in 1992 and became fully functional in 1994. The initial mandate of the centre was to work for prevention and control of TB & HIV related TB in the Region. But later on its mandate has been extended to work for prevention & control of HIV/AIDS and TB/HIV co infection in the Region. The Centre has been renamed as **SAARC TB & HIV/AIDS centre** in November 2005. Since then the centre has been working for prevention and control of TB and HIV/AIDS in the Region by coordinating the efforts of the National Tuberculosis Control Programs (NTPs) and National AIDS Control Programs (NACPs) of Member States.

One of the main functions of this centre is to collect, analyze and disseminate latest relevant information in the field of TB and HIV/AIDS control in the region and elsewhere. In this regard the Centre has been publishing annual **SAARC Regional Epidemiological Reports on HIV/**



**AIDS** since 2003. This report is on the HIV/AIDS and TB/HIV Co-Infection situation in the SAARC region and is the ninth in its series.

The global HIV epidemic has emerged as a formidable challenge to public health, development and human rights. Sub-Saharan Africa still continues to bear the major brunt of the global epidemic.

The SAARC Member States have varied epidemiological patterns of human immunodeficiency virus (HIV) infection and acquired immunodeficiency syndrome (AIDS). In spite of different predominant HIV risk behaviors in the region, it has extremely diverse capabilities to develop and support public health prevention and control programmes. In reviewing the current epidemiology of HIV and AIDS within the SAARC region, this diversity needs to be fully addressed and defined. Despite these diversities, Member States are committed to take necessary actions and contain HIV and AIDS epidemic.

The HIV epidemic has had a variable impact in countries in the region. HIV epidemic is in different stages in each country. Through implementation of surveillance systems for HIV prevalence, as well as sexual and injecting risk behaviors study by some Member States, understanding of the many diverse HIV determinants of the epidemic in the region has improved substantially. Overall HIV prevalence rate in the SAARC Member States remains low, but there are major public health concerns regarding the future growth potential of HIV epidemic within the region.

The HIV epidemic is heterogeneously distributed within the region and within countries. Some countries are more affected than others and at country level there are variations in infection levels between different provinces, states or districts and between urban and rural areas. Actually the national picture is made up of a series of epidemics with their own characteristics and dynamics.

This report presents an overview of the HIV pandemic and a more detailed description of its epidemiology within the SAARC region. In addition, this report also contains progress in HIV/AIDS control in the region, impact of HIV and AIDS and contribution of STAC towards control of HIV/AIDS in the region.

# GLOBAL SITUATION OF HIV/AIDS

# 2

## 2.1 Global HIV Epidemic

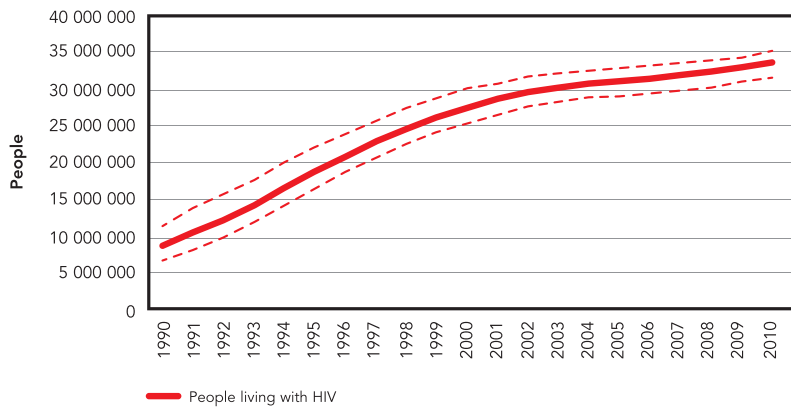
The global HIV epidemic has emerged as a formidable challenge to public health, development and human rights. In most of the countries affected by HIV, it has eroded improvements in life expectancy and mortality. In just 27 years, HIV has spread relentlessly from a few widely scattered “hot spots” to virtually every country in the world. Nearly twenty-seven years of experience with HIV prevention and more than ten years of experience with effective antiretroviral therapy have produced mountains of evidence about how to prevent and treat HIV.

At the end of 2010, an estimated 34 million people [31.6 million–35.2 million] were living with HIV worldwide, up 17% from 2001. This reflects the continued large number of new HIV infections and a significant expansion of access to antiretroviral therapy, which has helped reduce AIDS-related deaths, especially in more recent years.

The number of people dying of AIDS-related causes fell to 1.8 million [1.6 million–1.9 million] in 2010, down from a peak of 2.2 million [2.1 million–2.5 million] in the mid-2000s. A total of 2.5 million deaths have been averted in low- and middle-income countries since 1995 due to antiretroviral therapy being introduced, according to new calculations by UNAIDS. Much of that success has come in the past two years when rapid scale-up of access to treatment occurred; in 2010 alone, 700 000 AIDS related deaths were averted.

The proportion of women living with HIV has remained stable at 50% globally, although women are more affected in sub-Saharan Africa (59% of all people living with HIV) and the Caribbean (53%).

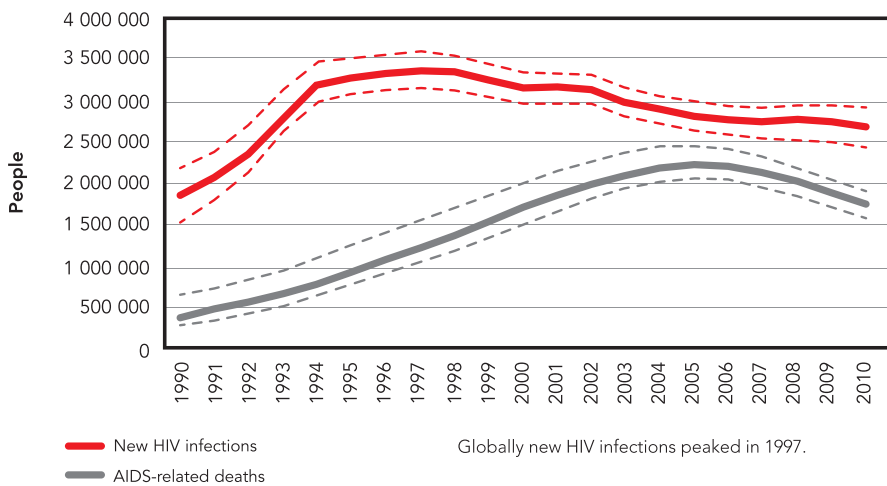
**Figure 01: Number of people living with HIV**



Source: UNAIDS World AIDS Day Report, 2011

There were 2.7 million [2.4 million–2.9 million] new HIV infections in 2010, including an estimated 390 000 [340 000–450 000] among children. This was 15% less than in 2001, and 21% below the number of new infections at the peak of the epidemic in 1997.

**Figure 02: Number of New HIV Infections and AIDS related Deaths**



Globally new HIV infections peaked in 1997.

Source: UNAIDS World AIDS Day Report, 2011

The number of people becoming infected with HIV is continuing to fall, in some countries more rapidly than others. HIV incidence has fallen in 33 countries, 22 of them in sub-Saharan Africa, the region most affected by the AIDS epidemic.

**Table 01: Global Summary of HIV/AIDS for 2001 and 2010**

	Adults and children living with HIV	Adults and children newly infected with HIV	Adult prevalence (%)	Adult and child deaths due to AIDS	Young people (15–24) prevalence (%)	
2010	34.0 million [31.6–35.2 million]	2.7 million [2.4–2.9 million]	0.8 [0.8–0.8]	1.8 million [1.6–1.9 million]	0.3 [0.3–0.3]	0.6 [0.5–0.6]
2001	28.6 million [26.7–30.9 million]	3.1 million [3.0–3.3 million]	0.8 [0.7–0.8]	1.9 million [1.7–2.2 million]	0.4 [0.4–0.4]	0.8 [0.7–0.8]

Source: UNAIDS World AIDS Day Report, 2011

## 2.2 Regional Variations

Sub-Saharan Africa remains the region most heavily affected by HIV. In 2010, about 68% of all people living with HIV resided in sub-Saharan Africa, a region with only 12% of the global population. Sub-Saharan Africa also accounted for 70% of new HIV infections in 2010, although there was a notable decline in the regional rate of new infections. The epidemic continues to be most severe in southern Africa, with South Africa having more people living with HIV (an estimated 5.6 million) than any other country in the world. Almost half of the deaths from AIDS-related illnesses in 2010 occurred in southern Africa. AIDS has claimed at least one million lives annually in sub-Saharan Africa since 1998. Since then, however, AIDS-related deaths have steadily decreased, as free antiretroviral therapy has become more widely available in the region.

The total number of new HIV infections in sub-Saharan Africa has dropped by more than 26%, down to 1.9 million [1.7 million–2.1 million] from the estimated 2.6 million [2.4 million–2.8 million] at the height of the epidemic in 1997. In 22 sub-Saharan countries, research shows HIV incidence declined by more than 25% between 2001 and 2009. This includes some of the world's largest epidemics in Ethiopia, Nigeria, South Africa, Zambia and Zimbabwe. The annual HIV incidence in South Africa, though still high, dropped by a third between 2001 and 2009 from 2.4% [2.1%–2.6%] to 1.5% [1.3%–1.8%]. Similarly, the epidemics in Botswana, Namibia and Zambia appear to be declining. The epidemics in Lesotho, Mozambique and Swaziland seem to be leveling off, albeit at unacceptably high levels.

## 2.3 HIV and AIDS in Asia

In Asia, the rate of HIV transmission appears to be slowing down: the estimated 360 000 [300 000–450 000] people who were newly infected with HIV in Asia in 2010 were considerably fewer than the 450 000 [410 000–500 000] estimated for 2001. Although the rate of HIV prevalence is substantially lower in Asia than in some other regions, the absolute size of the Asian population means it is the second largest grouping of people living with HIV. The incidence of HIV infection in South and South-East Asia appears to have peaked in the mid-1990s (at 440 000–465 000 people newly infected annually) and decreased markedly since then to about 270 000 [230 000–340 000] people acquiring HIV infection in 2010. In India, the country with the largest number of people living with HIV in the region, new HIV infections fell by 56%. About 4.8 million [4 300 000–5 300 000] people were living with HIV in Asia in 2010, 11% more than the 4.2 million [3 800 000–4 600 000] in 2001.

The prevalence of HIV among key populations at higher risk of infection – notably sex workers, people who inject drugs and men who have sex with men – is high in several Asian countries although over time, the virus is spreading to other populations. The overall trends in this region hide important variations in the epidemics, both between and within countries. In many Asian countries, national epidemics are concentrated in relatively few provinces. In China, for example, five provinces account for 53% of the people living with HIV, while a disproportionately large share of Indonesia's burden is found in its Papua and West Papua provinces.

An estimated 310 000 [260 000–340 000] people died from AIDS-related causes in 2010 – the largest death toll outside sub-Saharan Africa.

Although still low (under 1%), the percentages of female sex workers living with HIV have increased in Afghanistan, Indonesia and Pakistan, as HIV transmission in these countries expands among and beyond people who inject drugs. Many people who inject drugs also buy or sell sex, thus compounding the risk of HIV transmission.

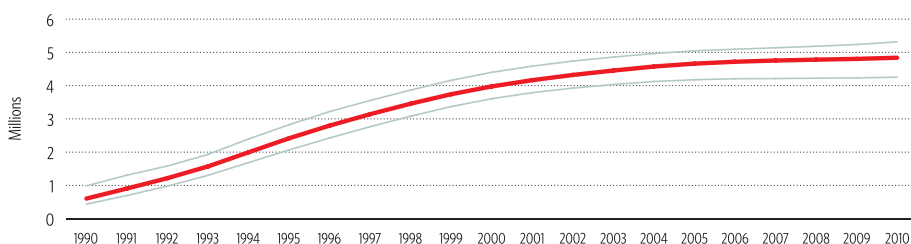
But there is also increasing evidence that intensive HIV prevention programmes among female sex workers can be highly effective. A prevention programme in Karnataka (India) was associated with a drop in HIV prevalence from 25% to 13% among female sex workers in three selected districts between 2004 and 2009 and from 1.4% to 0.8% among young antenatal clinic attendees between 2004 and 2008 in 18 districts.

In Mumbai and Thane, a similar programme was accompanied by a decline in HIV prevalence from 45% in 2004 to 13% in 2010 among brothel-based sex workers. Clients of sex workers make up the largest key population at higher risk in Asia: depending on the country, between 0.5% and 15% of adult men in the region are believed to buy sex.

In recent local studies, between 11% and 24% of people who inject drugs in Thailand tested HIV-positive, as did between 23% and 58% of those in various provinces in Viet Nam, more than 50% in parts of Indonesia and 23% in Rawalpindi and 52% in Mandi Bahauddin, cities in Punjab (Pakistan). Most countries in the region have been slow to introduce and expand harm reduction programmes. In such a context, the HIV prevalence tends to rise drastically, as it has in Pakistan (from 11% in 2005 to 21% in 2008).

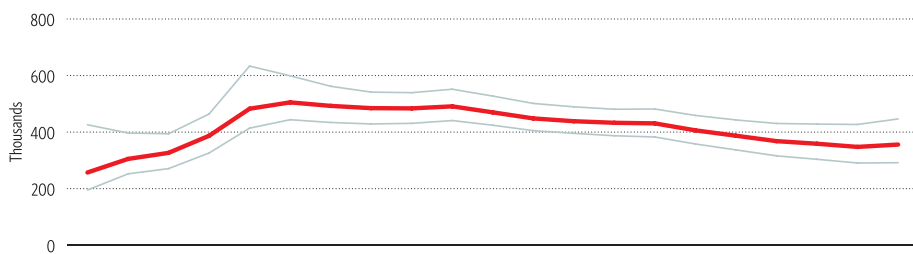
However, evidence also indicates that harm reduction efforts are working in Asia. In Bangladesh's capital, Dhaka, harm reduction programmes have been credited with slowing the spread of HIV among people who inject drugs. Prevalence in that key population at higher risk rose from 1.4% in 2000 to 7% in 2007, but modeling suggests it could have exceeded 40% in the absence of those programmes. There are signs that the HIV epidemic is slowing down in Asia Region as depicted in the following figures.

**Figure 03: Number of people living with HIV, Asia, 1990–2010**



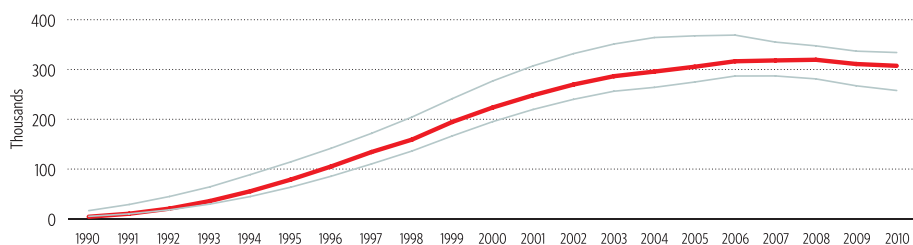
Source: Global HIV/AIDS Response Progress Report, 2011

**Figure 04: Number of people newly infected with HIV, Asia, 1990–2010**



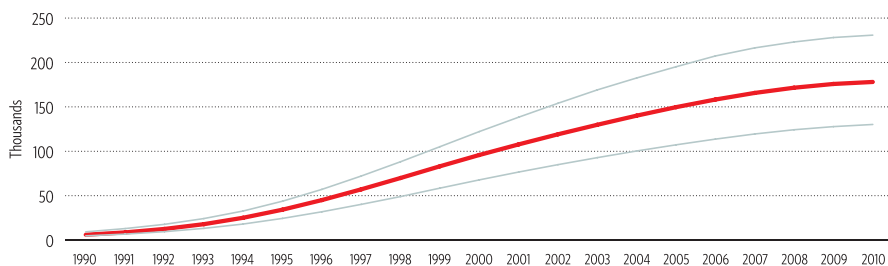
Source: Global HIV/AIDS Response Progress Report, 2011

**Figure 05: Number of people dying from AIDS-related causes, Asia, 1990–2010**



Source: Global HIV/AIDS Response Progress Report, 2011

**Figure 06: Number of children 0–14 years old living with HIV, Asia, 1990–2010**



Source: Global HIV/AIDS Response Progress Report, 2011

## 2.4 Decline in TB mortality

Without treatment and prophylaxis, people living with HIV have a 20–30 times higher lifetime risk of developing active tuberculosis, compared with people without HIV. In 2010, people living with HIV accounted for about 13% of all new tuberculosis cases worldwide, and about 360 000 people died from HIV-related tuberculosis. The number of tuberculosis deaths among people living with HIV has been declining since 2004. Close collaboration between HIV and tuberculosis programmes can accelerate this decline further to meet the global goal of halving the number of HIV-related tuberculosis deaths by 2015.

Tuberculosis care, cure and prevention should increase among people living with HIV. Less than a third of people living with HIV sought care for tuberculosis at a clinic in 2010. Halving HIV-related tuberculosis deaths requires this rate to double, together with an increase in tuberculosis cure rates from 70% to 85%, detection of at least 80% of tuberculosis cases among people living with HIV, and isoniazid preventive therapy reaching at least 30% of people living with HIV who do not have active tuberculosis.

Regular screening and testing should be offered in countries with high prevalence of HIV and tuberculosis, and more sensitive and specific diagnostic tools and algorithms should be used. An inexpensive daily dose of isoniazid significantly reduces the risk that latent tuberculosis will progress to active disease. At least 30% of people living with HIV who do not have active tuberculosis should receive isoniazid preventive therapy. Antiretroviral therapy should be initiated in a timely manner, because earlier treatment substantially reduces the odds of HIV-related tuberculosis illness and death. Meeting the global goal on halving the number of HIV related tuberculosis deaths by 2015 will also require the goal of universal access to HIV treatment to be met.

## 2.5 Key Findings of Global HIV Epidemic

- Globally, there were 2.7 million [2 400 000– 2 900 000] new HIV infections in 2010, including an estimated 390 000 [340 000–450 000] among children less than 15 years.
- Globally, the annual number of people newly infected with HIV continues to decline. In sub-Saharan Africa, an estimated 1.9 million [1 700 000–2 100 000] people became infected in 2010. This was 16% fewer than the estimated 2.2 million [2 100 000–2 400 000] people newly infected with HIV in 2001.



- The annual number of people dying from AIDS related causes worldwide is steadily decreasing from a peak of 2.2 million [2100 000-2 500 000] in 2005 to an estimated 1.8 million [1600 000-1900 000] in 2010. The number of people dying from AIDS related causes began to decline in 2005-2006 in sub Saharan Africa, South and South East Asia and the Caribbean and has continued subsequently.
- In 2010, an estimated 250 000 [220 000-290 000] children less than 15 died from AIDS related causes 20% fewer than in 2005.
- Not all regions and countries fit the overall trends, however. The annual number of people newly infected with HIV has risen in the Middle East and North Africa from 43 000 [31 000-57 000] in 2001 to 59 000 [40 000-73 000] in 2010. After slowing drastically in the early 2000, the incidence of HIV infection in Eastern Europe and Central Asia has been accelerating again since 2008.
- The trends in AIDS related deaths also differ. In Eastern Europe and Central Asia, the number of people dying from AIDS related causes increased more than 10 fold between 2001 and 2010 (from about 7800[6000-11000] to 90 000 [74 000-110 000]). In the same period, the number of people dying from AIDS related causes increased by 60% in the Middle East and North Africa (from 22000 [9700-38000] to 35 000 [25 000-42 000]) and more than double in East Asia (from 24 000 [16 000-45 000] to 56 000 [40 000- 76 000]).
- Introducing antiretroviral therapy has averted 2.5 million deaths in low and middle income countries globally since 1995. Sub Saharan Africa accounts for the vast majority of the averted deaths about 1.8 million.
- Providing antiretroviral prophylaxis to pregnant women living with HIV has prevented more than 350 000 children from acquiring HIV infection since 1995. Eighty-six percent of the children who avoided infection live in sub-Saharan Africa, the region with the highest prevalence of HIV infection among women of reproductive age.

# HIV/AIDS SITUATION IN THE SAARC REGION

# 3

HIV epidemic in SAARC region is also a collection of diverse epidemics in countries, provinces & districts. HIV/AIDS continues to be a major public health problem in the SAARC Region. All eight Member States of the SAARC region are designated as low prevalence countries. On the basis of latest available information this region is home for an estimated number of 2.56 million HIV infected people in 2010. Table 02 shows the estimated number of PLHA in eight Member States of the SAARC Region in the year 2010. Three countries, namely India, Nepal and Pakistan account for majority of the regional burden.

**Table 02: Adult HIV Prevalence Rates and Estimated Numbers of PLHA in SAARC Region, 2009/10**

Country	HIV Prevalence Rate (%)	Estimated No. of PLHA
Afghanistan*	<0.1	2,000
Bangladesh	<0.1	7,500
Bhutan	<0.1	<500
India*	0.31	2.39 million
Maldives*	<0.1	<100
Nepal	0.33	63,528
Pakistan	0.1	96,000
Sri- Lanka	<0.1	3000
<b>Regional</b>		<b>2.56 million</b>

*\*2009 HIV Country Data*

The overall adult HIV prevalence in SAARC region remains below 1%. However, there are important variations existing between countries. Bangladesh, India, Nepal and Pakistan have reported concentrated epidemics among most at risk populations. Of the estimated number of PLHA in SAARC region, 2.39 million were living in India alone in 2010.

The first HIV/AIDS infected persons were diagnosed in 1986 in India and Pakistan. By 1993, all SAARC Member States had reported the existence of HIV infection in their countries. The cumulative numbers of reported HIV/AIDS infected persons by Member States of the SAARC Region at the end of the year 2010 are given in Table 03.

**Table 03: Cumulative No. of Reported HIV & AIDS Cases by SAARC Member States, 2009/10**

Country	Cumulative Number of Reported HIV Positives	Cumulative Number of Reported AIDS Patients	Cumulative Number of Reported AIDS Death	Year of 1st HIV Positive Detected
Afghanistan*	636	-	-	1989
Bangladesh	2088	850	241	1989
Bhutan	217	84	34	1993
India**	1169050	-	-	1986
Maldives*	14	11	10	1991
Nepal	17058	7689	720	1988
Pakistan	4181	1849	-	1986
Sri Lanka	1317	340	152	1987

\*2009 HIV Country Data \*\*till Dec.2010

Sexual Transmission drives the HIV epidemic throughout most parts of India, accounting for nearly 90% of prevalence nationwide. The brothel based sex workers are more likely than home based sex workers to be infected with HIV and the risk is also more for currently unmarried sex workers in India. HIV transmission during injecting drug use is the primary mode of transmission in north-eastern parts of the country.

HIV epidemic in India is highly heterogeneous and appears to be stable or diminishing in some parts of the country while growing in others. HIV epidemic of Nepal is concentrated among most at risk populations and diverse in various regions/zones and districts.

HIV epidemic in Pakistan is a concentrated epidemic among IDUs and Hijra sex workers. IDU group is the core group which drives HIV epidemic in Pakistan and having the highest prevalence of 20.8%. The HIV prevalence among female sex workers in Pakistan is 01%. However, there is evidence of sexual networking between female sex workers and IDUs. The geographic trend of the epidemic is expanding from major urban cities and provincial capitals to smaller cities and towns.

Migration itself is not a high risk factor for HIV transmission. However, the circumstances in which migration occurs may increase vulnerability to infection. Cross-border migration of the sexual and drug-using networks along the India-Nepal border appears to be contributing to a two-way flow of HIV. Migrants are considerably more likely than non-migrants to delay seeking medical treatment for infectious diseases due to various factors which are held responsible for exclusion of them from basic health services in the settings to which they have migrated.

Women account for a significant proportion of people living with HIV in SAARC region. A large proportion of women appear to have acquired the virus from regular partners who acquired HIV infection during paid sex. In the region as a whole, HIV prevalence is low among general population, however, significantly higher among Most at Risk Populations [MARPs]. The low prevalence of HIV among the general population poses a significant threat as it undermines the gravity of the situation. When the infection gets established in the bridging groups such as clients of sex workers through them, HIV may spread to the low risk groups in the general population such as housewives at an exponential pace. As a result, generalized epidemics may arise in many parts of the region unless the responsible authorities take the timely decisions for implementation of appropriate timely prevention approaches to contain the HIV in the region. All the Member States have high levels of high risk factors to fuel the HIV epidemic further and faster. The identified prevailing high risk factors in the SAARC region are:

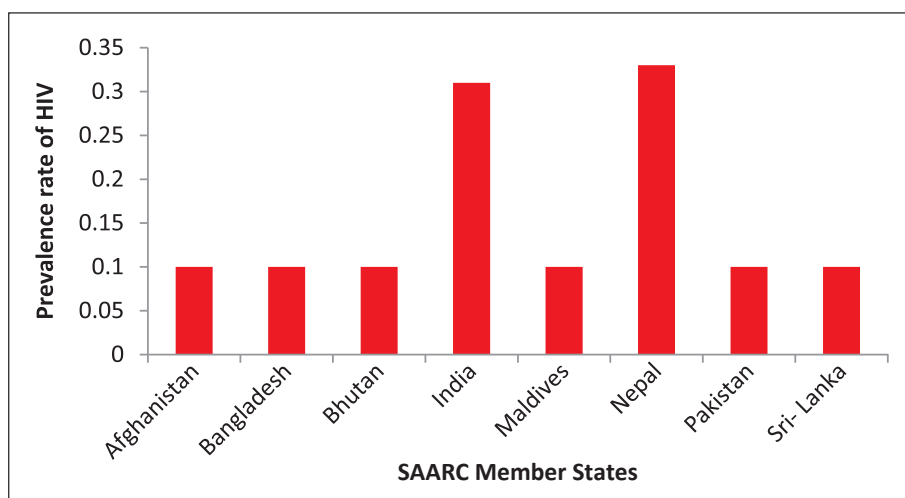
- Low level of literacy
- Poverty
- Rapid and unplanned urbanization
- Low status of women
- Discrimination and stigmatization

- High prevalence of Sexually Transmitted Infections
- High rates of internal and international migration
- Trafficking of women and children
- Low level of health care seeking behavior
- Social marginalization of population groups
- Low levels of condom use
- Unsafe injection practices in formal and informal health care settings
- Porous borders between some countries
- Growing numbers of Most At Risk Populations
- Civil war situations creating a huge group of internally displaced people

These identified risk factors create favorable conditions for the spread of virus across the SAARC region. In order to implement an effective prevention package for the region of SAARC, the diversity is to be considered. The factors responsible for diversity should be identified and addressed during designing as well as implementation phase.

The wide disparity between the estimated numbers of people living with HIV/AIDS and reported numbers of people living with HIV/AIDS is to be considered by both regional authorities responsible for the HIV prevention and care as well as by the National AIDS Control Programmes in prioritizing, designing and implementation of activities in HIV prevention and care continuum.

**Figure 07: Prevalence Rate of HIV in SAARC Member States, 2009/10**



Source: SAARC Member States

The figure 07 shows the prevalence rate of SAARC Member States it is evident that as per prevalence rate Nepal has highest prevalence rate among adults, followed by India.

**Table 04: Reported No. of Male & Female receiving ART in SAARC Region, Dec 2010**

Country	Male	Percentage	Female	Percentage	Total
Afghanistan	30	65	16	35	46
Bangladesh	302	65	163	35	465
Bhutan	30	53	27	47	57
India	223725	58	162261	42	385986
Maldives	2	100	0	0	2
Nepal	2803	58	2051	42	4854
Pakistan	1390	73	502	27	1892
Sri Lanka	151	59	105	41	256
<b>Regional</b>	<b>228433</b>	<b>58</b>	<b>165125</b>	<b>42</b>	<b>393558</b>

Source: Global HIV/AIDS Response Progress Report, 2011

Table 4 depicts that overall 58% of the males and 42% of the females received ART in the region while as per frequency India has the highest number of people on ART followed by Nepal.

**Table 05: Reported No. of Adult & Children receiving ART in SAARC Region, Dec 2010**

Country	Adult	Percentage	Children	Percentage	Total
Afghanistan	45	98	1	2	46
Bangladesh	442	95	23	5	465
Bhutan	54	95	3	5	57
India	401906	95	22896	5	424802
Maldives	2	100	0	0	2
Nepal	4579	94	288	6	4867
Pakistan	1792	95	100	5	1892
Sri Lanka	242	95	14	5	256
<b>Regional</b>	<b>409062</b>	<b>95</b>	<b>23325</b>	<b>5</b>	<b>432387</b>

Source: Global HIV/AIDS Response Progress Report, 2011

Table 5 depicts that overall 95% of the adults and 05% of the children received ART in the region while as per frequency India has the highest number of adults and children on ART followed by Nepal.

## COUNTRY PROFILES

# 4

- Afghanistan
- Bangladesh
- Bhutan
- India
- Maldives
- Nepal
- Pakistan
- Sri-Lanka



# Afghanistan

Islamic Republic of Afghanistan is one of the eight countries of the SAARC Region. Afghanistan is a land-locked country, surrounded by Pakistan, Iran, Turkmenistan, Uzbekistan, Tajikistan and China. The land area is 652,225 square kilometers. The primary administrative unit in Afghanistan is a Province which is governed by a Governor. Afghanistan consists of 34 Provinces and 398 Districts. Afghans comprise the second largest number of refugees and internally displaced people in the world.

## HIV/AIDS Situation

Systematic data on the prevalence of HIV/AIDS and other sexually transmitted infections are scarce. The current sources of data on HIV/AIDS are the Central Blood Bank, Kabul and the Voluntary Counselling and Testing Centres in Kabul which were established in 2005. The data of the Central Blood Bank indicates the detection of first HIV positive person in Afghanistan in 1989. Since 1989 till 2005 the Central Blood Bank reported 67 HIV positive cases out of 125,832 blood samples screened in the country using rapid testing kits. Of them 30 were refugees or returnees from neighbouring countries. According to the National data provided to the SAARC TB and HIV/AIDS Centre by the National AIDS Control Programme of Afghanistan, there were 636 HIV positives detected since 1989 till December 2009. The HIV epidemic is at an early stage in Afghanistan, and is concentrated among high risk groups, mainly injecting drug users (IDU) and their partners.

Emerging HIV epidemic of Afghanistan is likely to be fueled by a combination of injecting drug use and unsafe paid sex. According to the Afghanistan UNGASS Country Report 2010 issued on data in relation to 2008 and 2009 years, HIV prevalence among general population was

less than 0.5% and High Risk Groups identified were Injecting Drug Users [IDUs] who share needles, female sex workers and men who have sex with men.

According to the Integrated Bio-Behavioural Surveillance [IBBS] conducted among high risk groups in Kabul, Herat and Mazar in 2009, the HIV prevalence among IDUs was estimated to be 1 – 18%. Of the IDUs involved in this survey, 94% used sterile needles in their last injection. The improvement from 2005 to 2009 can be partly explained through the scaled up interventions directed to them and partly due to the selection bias of the same sites for the survey as well as for the interventions.

## **Risk and vulnerabilities**

Afghanistan is considered to be a country of low HIV prevalence but at high risk for rapid spread of HIV infection. The reasons for that are several:

- Over two decades of protracted armed conflict
- Extremely low socio-economic status of women
- Existing high levels of illiteracy
- Low levels of condom use
- Large numbers of internally and externally displaced Afghans
- Extremely poor social and public health infrastructure
- Drug production and drug trafficking
- Injecting drug use
- Low level of blood safety
- Unhygienic injecting practices

These risk factors warrant early interventions to prevent a potentially exponential spread of HIV in Afghanistan. The under mentioned risks and vulnerabilities that play a major role in spreading HIV/AIDS from most at risk populations through bridging groups to the general population require further investigation to track the magnitude of the problem and the trends over the years.

**Drug abuse:** Afghanistan is one of the largest producers of opium in the world. Opium and heroin abuse appear to be more severe in areas where those drugs are produced. All the Afghan drug users who had sex had never used a condom. Of the respondents, 6.3% had reported

injecting drug use and 43% of this group had shared injecting equipment, on an average shared with 4 – 6 users at one time. A recent UNODC and Ministry of Counter Narcotics Study reports that there were 920,000 estimated drug users [3.8% of the total population] in the country with an estimated 15% of 50,000 heroin users were injecting the drugs. According to IBBS in 2009, the key driver of the HIV epidemic in Afghanistan is shared needles by IDUs.

Latest IBBS in 2009 shows only 29% of IDUs could correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission. Risk behaviour of IDUs goes beyond just sharing of needles; high risk sexual activity with male and/or female is reported to occur. About 55% - 70% of IDUs have ever bought sex from a sex worker; 9% - 12% of the IDUs have bought sex within the period of six months prior to the IBBS in 2009. Of them, only 17% - 32% used a condom in their last sexual encounter. About 1% - 3% of the IDUs have had sex with another man.

**Commercial Sex Work:** The ORA International Study, conducted in 4 districts of Kabul province found that knowledge on HIV/AIDS among 126 sex workers was less than 1%. The same study revealed that only 1% of sex workers were using condoms.

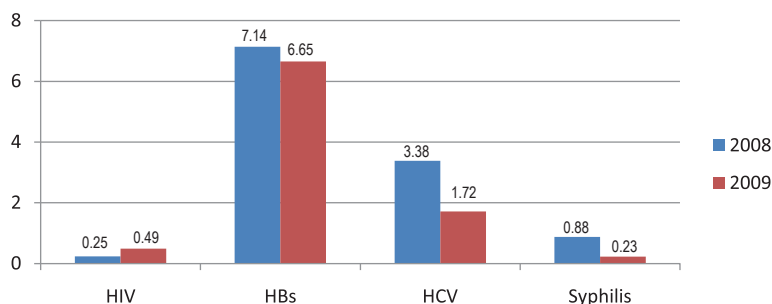
**Prisoners:** According to the recently conducted IBBS, the HIV sero-positivity rate among prisoners was 0.57% - 1.57%. There were 10590 prisoners and detainees in 35 prisons in Afghanistan in the year 2007.

**Mobile Populations [Refugees, Internally Displaced People, Long distance truckers and Migrant Workers]:** Refugees and internally displaced people are particularly vulnerable to HIV for various reasons. Among the subjecting to sexual abuse, violence and lack of access to information, education and basic preventive services are affecting them significantly. Over five million. Afghan truck drivers can be considered to be a high risk group for acquiring and transmitting HIV as they travel to the surrounding countries with the growing burden of HIV/AIDS and other sexually transmitted infections. These migrant workers are spending long periods away from their homes and families putting them at vulnerable position to indulge in risky behaviours. However, no data is available on risk behaviours and on HIV prevalence among Afghan migrant workers.

**Blood Safety:** The prevailing standard of the blood transfusion services through out Afghanistan is of primary concern to the National AIDS Control Programme. An estimated 22 hospitals in the

country out of 44 perform surgeries without systematically testing blood units for HIV prior to transfusion. Therefore, blood transfusion is of major concern in order to minimize blood borne infections including HIV/AIDS and Hepatitis B and C. Figure 08 illustrates the prevalence of transfusion transmissible infections among clients attending the VCT sites in Afghanistan from 2008 to 2009.

**Figure 08: Prevalence of Transfusion Transmissible Infections among clients of VCT sites in Afghanistan 2008 -2009**



**Condom use and knowledge on HIV/AIDS:** According to Afghanistan National Strategic Framework for HIV/AIDS, 2% of married women in South Eastern Region and 8% of them in Eastern Region of Afghanistan use some form of modern contraceptives. The most common form of contraception was Depot Medroxy Progesterone.

#### **Important Aspects of National Response:**

National AIDS Control Programme of Ministry of Public Health Afghanistan has already taken initiative to act early through a rigorous and comprehensive multi-sector response with the help of Afghanistan National AIDS Strategic Framework [2006 - 2010]. The Goal of the National Strategic Framework of Afghanistan is to maintain the low level of HIV prevalence in order to reduce the morbidity and mortality associated with HIV/AIDS by the end of 2010. National AIDS Control Programme of Afghanistan planned to achieve this goal by fulfilling following six objectives:

1. To strengthen strategic information to guide policy formation, programme planning and implementation in line with national targets as well as internationally agreed targets and commitments.
2. To gain political commitment and mobilize resources necessary to implement the National HIV/AIDS /STI Strategy
3. To ensure development and coordination of multi-sectoral HIV/AIDS response and develop institutional capacity of all the sectors involved.
4. To raise public awareness on HIV/AIDS and STI prevention and control, ensure universal access to behaviour change communication on HIV, especially targeting vulnerable and high risk groups
5. To ensure access to prevention, treatment and care services for high risk and vulnerable populations
6. To strengthen the health sector capacity to implement an essential package of HIV/AIDS prevention, treatment and care services within the framework of Basic Package of Health Services [BPHS] and Essential Package of Health Services [EPHS].

<b>Epidemiology, 2009/10</b>	
Population(mid-year)	24.5 Million
Children under 15 yrs	12,250,000
<b>Reported Number of people living with HIV/AIDS, as at the end of 2009</b>	
Cumulative HIV positive cases	636

Source: HIV/AIDS SAARC Region update, 2010

# Bangladesh

Bangladesh is a relatively small coastal country in south central Asia. To the South, Bangladesh has an irregular coastline fronting the Bay of Bengal and shares land borders with India and Myanmar. With a population of around 150 million, it is one of the most densely populated country in the world, with the highest densities occurring in and around the capital city of Dhaka. It is also a predominantly rural country, with only about one-quarter of the population living in urban areas. The estimated total population of the country in 2010 was about 150.05 million.

Although Bangladesh is still a low prevalence country for overall HIV rates (less than 1%), there are risk factors that could fuel the spread of HIV among high-risk groups and general population. It is clear that this situation may not continue if the risky behavior that increases vulnerability is not reduced among the high risk groups, vulnerable groups and also among general population.

## Status of HIV/AIDS

The first HIV positive case in this country was detected in 1989. Within the Southeast Asian region, Bangladesh continues to appear to have one of the lowest HIV prevalence rates, considerably less than one percent. Many risk factors that are prevalent in country make it more vulnerable to HIV infection. In addition, factors like religious and cultural values, family bondage help Bangladesh to remain a low prevalence country for HIV.

Among the possible reasons for the low HIV prevalence are: high levels of circumcision among men; until recently, low levels of injecting drug use (IDU); a history of NGO targeted interventions with high risk groups; and relatively low risk behaviors. There is however consensus that risk

factors for the spread of HIV are present in Bangladesh: a significant but somewhat hidden sex industry; low levels of condom use; increasing injecting drug use and persistent sharing practices; and rising HIV prevalence levels among IDUs.

**Table 06: Cumulative number of HIV/AIDS Cases & Mortality of Bangladesh, 2010**

Cumulative number of HIV/AIDS Cases & Mortality	Total
HIV positive cases	2088
Reported AIDS Cases	850
New HIV cases	343
Deaths due to AIDS cases	241

Source: NACP Bangladesh

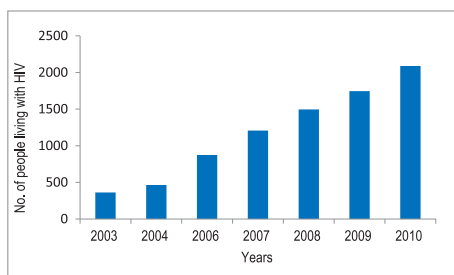
A cumulative total 2088 cases of HIV/AIDS have been confirmed and reported as of 2010 among them 343 were new HIV cases. A total of 850 AIDS cases were detected so far of which 241 have already died. However the estimate of HIV/AIDS remains at 7500 as of 2010.

## Activities carried out in Bangladesh for the prevention of HIV infection:

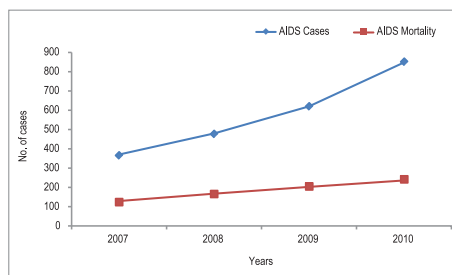
The three main objectives of the Global Fund Round 6 project address the priority areas in national HIV/AIDS strategy of Bangladesh

- To increase the coverage, quality and comprehensiveness of interventions for vulnerable populations at highest risk of HIV in Bangladesh
- To increase the coverage and quality of HIV prevention interventions for young people in Bangladesh with focus on those especially vulnerable to HIV
- To build capacity of government and NGO partners at national and district levels to scale up standardized, high quality intervention, to monitor and improve coverage and quality and to improve coordination

**Figure 08: No. of people living with HIV, Bangladesh**



**Figure 09: No. of AIDS cases and AIDS Mortality, Bangladesh (2007-2010)**



### Epidemiology, 2010

Population(mid-year)	150.05 Million
Estimated HIV/AIDS cases	7500
Cumulative HIV/AIDS cases	2088
Total AIDS cases	850
Total Cumulative Deaths	241
New HIV identified cases in 2010	343
New AIDS identified cases in 2010	231
New Deaths identified in 2010	37

Source: NACP Bangladesh



# Bhutan

Bhutan is a land locked country situated in the Himalayas, it has border with China and India. Bhutan has an area of 38,394 sq km and the altitude varying from 180m to 7,550 m above sea level. The total population of Bhutan is 6, 95,822 with a population density of 16.36 person/km. There are 20 districts in the country.

The Himalayan Kingdom of Bhutan, though isolated geographically, is not impervious to HIV/AIDS. Increasing cross-border migration and international travel, combined with behavioral risk factors of the population, Bhutan could face rapid growth of HIV. As the epidemic is at a very early stage, there is still time for vigorous action to stop its spread.

## Status of HIV/AIDS

The first case of HIV in Bhutan was reported in 1993. The prevalence of HIV is less than 0.1 percent of the population. Despite the low prevalence of HIV infection in Bhutan, the presence of a range of risk factors and vulnerabilities could fuel the spread of a widespread epidemic. These factors include high rates of sexually transmitted infections in the society, unprotected sex and internal and international migration, porous borders, spread of commercial sex work, risk of substance abuse, etc.

**Table 07: Cumulative HIV/AIDS Situation as at the end year 2010**

Cumulative number	Male	Female	Total
HIV positive	110	107	217

Source: NACP Bhutan

As of end of 2010, a total 217 HIV positive were reported to the National AIDS Control Programme. Among them 51% were males and 49% were females.

**Table 08: Services available for infected and affected persons in Bhutan, 2010**

Type of services	Number of Health facilities providing services till December	Public sector	Private sector
Health care facilities with Voluntary Counseling and testing (VCT)/ICTC	20	20	0
Health care facilities with Voluntary Counseling	15	15	0
Health care facilities with Laboratories facilities for CD4 Count	3	3	0
Health care facilities with ARV treatment First line regimens	3	3	
Health care facilities with ARV treatment Second line regimens	1	0	
Health care facilities with PMTCT services	20	20	
Health care facilities with post exposure Prophylaxis for health care workers	1	0	3
Coverage of Blood banks (Under NRCS District coverage)	20	20	
Treatment Link centers	17	17	
Targeted intervention sites and their types ( DIC/ICC)	2	0	

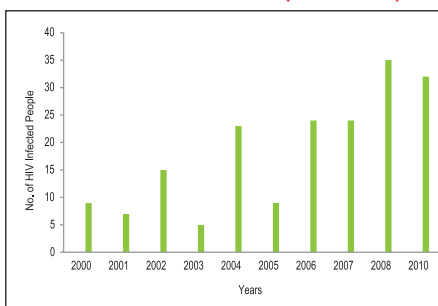
Source: NACP Bhutan

There are 20 Health care facilities with Voluntary Counseling and testing (VCT)/ICTC facilities and also 04 Health care facilities with post exposure Prophylaxis for health care workers facilities providing.

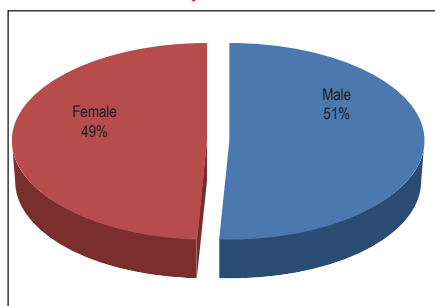
## Activities carried out in Bhutan for the prevention of HIV infection:

- Strengthening institutions and capacity of service providers.
- Care, support and treatment for HIV/AIDS and STIs
- Voluntary counseling and testing (VCT)
- Improving strategic information through research and surveillance
- Monitoring and Evaluation

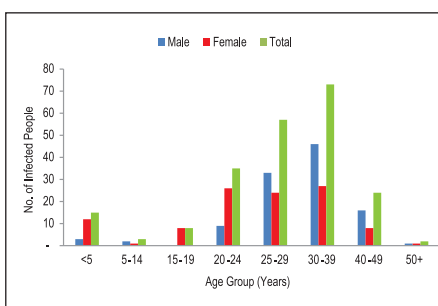
**Figure 10: Trend of Reported HIV Positive Cases, Bhutan (2000-2010)**



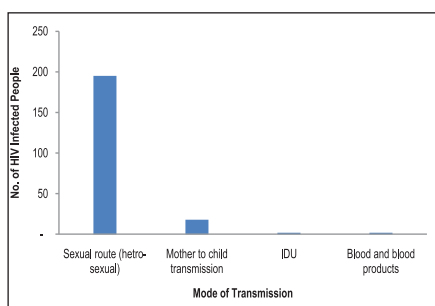
**Figure 11: Percentage of Sex distribution of Cumulative HIV positive in Bhutan, 2010**



**Figure 12: Cumulative No. of HIV positive in Bhutan, 2010**



**Figure 13: Mode of Transmission of HIV in Bhutan 2010**



Source: NACP Bhutan

Epidemiology, 2010	
Population(mid-year)	695,822
Children under 15 yrs	213,072
Male ≥ 15 years	255,922
Female ≥ 15 years	226,828
Cumulative numbers of HIV positive cases	
Total HIV positive cases	217
Male HIV positive cases	110
Female HIV positive cases	107

Source: NACP Bhutan

# India

India is one of the largest countries in southern Asia. Geographically it is the seventh largest and second most populous nation in the world. Its estimated total population in 2010 was 1,192,000,000 (RNTCP report, 2011) with over half a billion in the 15-49 year-old age group. India shares land borders with Bangladesh, Bhutan, China, Nepal, and Pakistan. The shift of population from rural to urban areas is slower in India than in most developing countries, but one-fourth of the total population is in urban areas.

## Status of HIV/AIDS

HIV epidemic in India is concentrated in Most at Risk Populations (MARPs). The HIV prevalence among the High Risk Groups, i.e., Female Sex Workers, Injecting Drug Users, Men who have Sex with Men and Transgenders is about 20 times higher than the general population. Based on HIV Sentinel Surveillance 2008-09, it is estimated that India has an adult prevalence of 0.31 percent with 23.9 lakh people infected with HIV, of which, 39 percent are female and 3.5 percent are children. The estimates highlight an overall reduction in adult HIV prevalence, HIV incidence (new infections) as well as AIDS related mortality in India.

One of the key characteristics of the recent round of estimations is that it allowed for generating estimates of the HIV incidence (number of new HIV infections per year). Analysis of epidemic projections revealed that the number of new annual HIV infections has declined by more than 50 percent during the last decade. It is estimated that India had approximately 1.2 lakh new HIV infections in 2009, as against 2.7 lakh in 2000. This is one of the most important evidence on the impact of the various interventions under NACP and scaled-up prevention strategies.

**Table 09: Population wise Coverage of Link Worker Schemes**

Types of Population	Estimated Population	Coverage(%)
High Risk Group	1,60,888	122.2*
Vulnerable population	27,49,177	72.8
PLHIV	57,723	51.2

\* Coverage exceeded mapped population

Source: NACO Annual Report India, 2010-11

**Table 10: Sources and Numbers of Referrals to ICTCs during April – December 2010**

Referral Unit	Male	Female	TS/TG	Total
NGO/CBO TI's	3,12,220	2,80,079	12,853	6,05,152
Non TI NGOs	1,08,344	78,709	1,889	1,88,942
OBG/Maternity Homes	1,26,289	1,29,663	3,636	2,59,588
RNTCP	2,45,431	1,22,579	281	3,68,291
Blood Bank	10,095	3,002	3	13,100
Government health facilities	12,41,202	10,36,485	2,788	22,80,475
ART centres	7,668	6,508	40	14,216
STI clinics	1,25,170	1,93,232	841	3,19,243
Care centres (CCC) & DIC	8,151	5,954	70	14,175
Private health facilities	91,899	68,546	122	1,60,567
Others	3,87,359	1,95,920	812	5,84,091
<b>Total In Referral</b>	<b>26,63,828</b>	<b>21,20,677</b>	<b>23,335</b>	<b>48,07,840</b>

Source: NACO Annual Report India, 2010-11

The table 10 depicted that about 48 lakhs persons have been referred in by different referring units including 22.8 lakhs from Government health facilities, 6.05 lakhs NGOs and 3.68 lakhs from RNTCP.

## Adult HIV Prevalence and Declining Trends of Adult HIV Prevalence

The estimated adult HIV prevalence in India was 0.32 percent (0.26% – 0.41%) in 2008 and 0.31 percent (0.25% – 0.39%) in 2009. The adult prevalence was 0.26 percent among women and 0.38 percent among men in 2008, and 0.25 percent among women and 0.36 percent among men in 2009.

The adult HIV prevalence at national level has continued its steady decline from estimated level of 0.41 percent in 2000 through 0.36 percent in 2006 to 0.31 percent in 2009. All the high prevalence states show a clear declining trend in adult HIV prevalence. HIV has declined notably in Tamil Nadu to reach 0.33 percent in 2009. A clear decline is also evident in HIV

prevalence among the young population (15-24 yrs) at national level, both among men and women. Stable to declining trends in HIV prevalence among the young population (15-24 yrs) are also noted in most of the states. However, rising trends are noted in some states including Odisha, Assam, Chandigarh, Kerala, Jharkhand and Meghalaya.

## **People Living with HIV/AIDS (PLHA)**

The total number of people living with HIV/AIDS (PLHA) in India is estimated at 23.9 lakh (19.3 – 30.4 lakh) in 2009. Children under 15 yrs account for 3.5 percent of all infections, while 83 percent are in the age group 15-49 years. Of all HIV infections, 39 percent (9.3 lakhs) are among women. The four high prevalence states of South India (Andhra Pradesh–5 lakhs, Maharashtra–4.2 lakhs, Karnataka–2.5 lakhs, Tamil Nadu–1.5 lakhs) account for 55 percent of all HIV infections in the country. West Bengal, Gujarat, Bihar and Uttar Pradesh are estimated to have more than one lakh PLHA each and together account for another 22 percent of HIV infections in India.

## **AIDS Related Deaths**

It is estimated that about 1.72 lakh people died of AIDS related causes in 2009 in India. Wider access to ART has resulted in a decline of the number of people dying due to AIDS related causes. The trend of annual AIDS deaths is showing a steady decline since the roll out of free ART programme in India in 2004.

## **Routes of Transmission**

Based on Programme data, unprotected sex (87.4% heterosexual and 1.3% homosexual) is the major route of HIV transmission, followed by transmission from Parent to Child (5.4%) and use of infected blood and blood products (1.0%). While Injecting Drug Use is the predominant route of transmission in north eastern states, it accounts for 1.6 percent of HIV infections.

## **Integrated Counseling and Testing Centre**

Integrated Counseling and Testing Centre (ICTC) is a place where a person is counseled and tested for HIV on his/her own volition (Client Initiated) or as advised by a health service provider (Provider Initiated). People who are found HIV-negative are supported with information and

counseling to reduce risks and remain HIV-negative. People, who are found HIV-positive, are provided psychosocial support and linked to treatment and care.

There are several contexts for providing HIV testing services; voluntary counseling and testing, prevention of parent to child transmission, screening of TB patients and diagnostic testing among symptomatic patients. In the year 2010-11, guidelines have been issued for ICTC Laboratory Technicians to conduct Syphilis Screening of the clients referred by STI Clinics to ensure comprehensive testing services under one roof.

## **Mobile ICTCs**

Mobile ICTCs are one way of taking a package of health services into the community. A mobile ICTC consists of a van with a room to conduct a general examination and counseling, and a space for the collection and processing of blood samples. A team of paramedical health-care providers (a health educator/ANM, Counselor and Lab Technician) can set up this temporary clinic with flexible working hours in hard-to-reach areas, where services are provided ranging from regular health check-up, syndromic treatment for STI/Reproductive Tract Infection (RTI) and other minor ailments, antenatal care, immunization, as well as HIV counseling and testing services. Mobile ICTCs can, thus, cater to a larger audience and be a more effective preventive intervention by ensuring the reach of services.

In addition to 5,233 stand alone ICTCs, 1,632 Facility Integrated ICTCs, 668 Public Private Partnership model ICTCs and 84 Mobile ICTCs are currently functional.

## **HIV-TB Collaborative Activities**

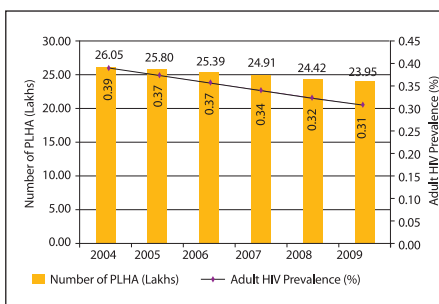
TB being, a major public health problem, in India accounts for 20-25 percent of deaths among PLHA. It is also noted that nationally about five percent TB patients registered under RNTCP also have HIV infection. This HIV positivity among TB patients varies across the states and districts in the country between one and 13%, and is related to HIV prevalence in the general population. As prevalence of TB infection in India is more than 40%, a large proportion of PLHA also is likely to be already infected with TB bacteria. Moreover, it is known that HIV makes an individual more prone to acquire TB infection as well as progress rapidly to TB disease.

The country is dealing effectively with HIV burden, TB associated HIV epidemic is posing an important challenge. This becomes even more critical in the presence of MDRTB/ X-DR TB in the community. The existence of HIV and TB together, greatly amplifies harmful effects of each other at individual level and contribute substantially to mortality among PLHIV.

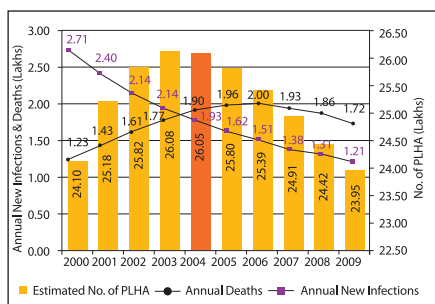


Therefore, HIV-TB programme level collaboration is a key strategy adopted by the Department of AIDS Control and Central TB division. The Department takes the lead in strengthening this coordination between the National AIDS Control Programme (NACP) and the Revised National TB Control Programme (RNTCP) at all levels.

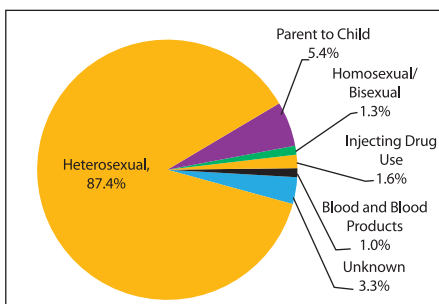
**Figure 14: Estimated Adult HIV Prevalence & Number of PLHA, India, 2004-09**



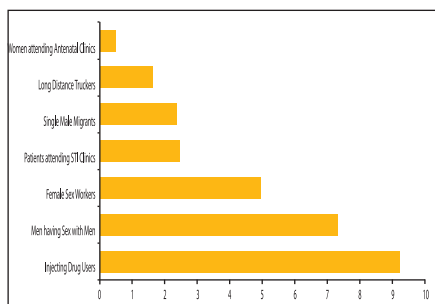
**Figure 15: Decline in No. of PLHA as a result of Greater Decline in New Infections, Despite Increased Survival of PLHA due to ART**



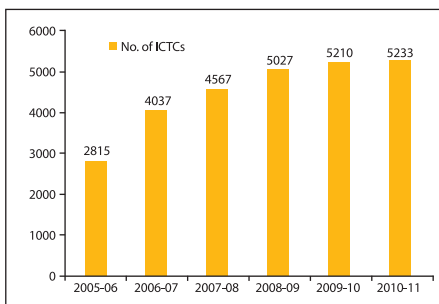
**Figure 16: Routes of Transmission of HIV, India, 2010-11 (till Jan. 11)**



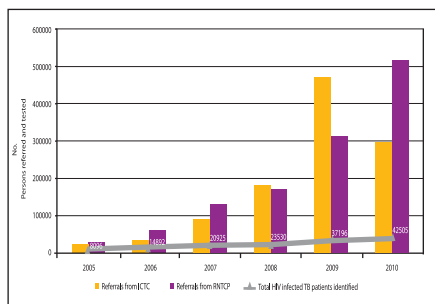
**Figure 17: HIV Prevalence: India, 2008-09**



**Figure 18: Scale up of ICTCs in Last Six Years**



**Figure 19: Scale up of HIV-TB Collaborative Activities India**



Source: NACO Annual Report India, 2010-11

## Strategy of the NACP-III

NACP-III has placed the highest priority on preventive efforts. At the same time, it seeks to integrate prevention with care, support and treatment through a four pronged strategy:

1. Preventing new infections in high risk groups and general population through saturation of coverage of high risk groups with targeted interventions and scaled up interventions in the general population;
2. Providing greater care, support and treatment to larger number of PLHA;
3. Strengthening the infrastructure, systems and human resources in prevention, care, support and treatment programmes at the district, state and national levels;
4. Strengthening the nationwide Strategic Information Management System.

Epidemiology, 2009/10	
Population(mid-year)	1192 Million
Children under 15 yrs	340 Million
Male ≥ 15 years	430 Million
Female ≥ 15 years	422 Million
<b>Estimated Number of people living with HIV/AIDS, as at the end of 2009</b>	
Children (less than 15 years):	83,650
Adults Male( ≥15 years):	1,376,350
Adults Female(≥ 15 years):	930,000
Estimated number of deaths due to AIDS during 2009	172,000

Source: NACO Annual Report India, 2010-11

# Maldives

Republic of Maldives is a country formed by a number of natural atolls plus a few islands and isolated reefs which form a pattern from North to South. The islands are located southwest of the Indian subcontinent stretching 860 km north to south and 80 – 129 km east to west. For administrative purposes, the Country has been organized into seven provinces which consist of twenty one administrative divisions [20 administrative "atolls" and Male' city].

The population of Maldives was over 319,738 as at the end of year 2010. Of which approximately one third of the population is living in the island of Male, the capital. The remaining two-thirds of the population are spread out over 198 islands.

## HIV/AIDS Situation

The first HIV positive person in Maldives was reported in 1991. There were 257 cumulative number of HIV positives among expatriate workers reported to the National AIDS Control Programme in Maldives as of December 2009. Only 14 cumulative total of Maldivians with HIV infection was reported to the centre as of December 2009. Of the 14 HIV positive nationals, 10 died. Twelve of the 14 HIV positives were males. As of December 2009, three HIV positives were on antiretroviral treatment. One of the 14 detected HIV positives was diagnosed as having TB and treated in 2004. Hence, only four reported HIV infected persons are living in Maldives.

All infections were reportedly acquired through heterosexual transmission. Despite the high level of drug use and the increasing popularity of injecting drug use, no needle or syringe related transmission has been reported yet. So far in Maldives, no mother to child transmission was reported.

Maldives is a low HIV prevalence country with the estimated prevalence among adult population was less than 0.1%. The estimated number of people living with HIV/AIDS was less than 100 as of December 2009. Total number of HIV tests carried out in Maldives was 27,753 in the year 2009. Mandatory testing was 44% of total number of tests done and was done for pre-surgery patients, medical, screening blood donors and work permit applicants. Number of voluntary counseling and testing was 1.35% of the total number of tests done and Maldives has to take measures to strengthen this important measure in prevention of HIV/AIDS.

The first Biological Behavioural Survey [BBS] on HIV/AIDS was carried out in 2008 among vulnerable populations surveyed. The vulnerable populations surveyed were female sex workers, MSMs, IDUs, sea farers, resort workers, construction workers and youth. However, HIV infection was found among male resort workers. The HIV prevalence rate among male resort workers was 0.2%.

## Risks and Vulnerabilities

Despite the low prevalence of HIV epidemic in the country, Maldives is not free from risks and vulnerabilities that may worsen the current HIV/AIDS situation. The recognized risks and vulnerabilities for the Maldives HIV epidemic are as follows.

- **Drug Use:** The prevalence of drug use is on the rise in Maldives and injecting drug is becoming more common. The National Narcotics Bureau reported that the estimated drug addict population was 3000 in 2006. About 3% of sexually active drug users reported same sex experiences in a study conducted by UNDP in 2002. It appears that rising prevalence of injecting drug use, combined with the practice of needle and syringe sharing is the most likely entry point for the HIV epidemic in Maldives.

- **High rates of sexual Practices and low level of condom use:** According to the findings of a reproductive health survey conducted in Maldives in 2004 with the help of UNFPA, 14% of male participants and 5% of female participants under the age of 18 years admitted that they were sexually active. Of the sexually active youth, 45% never used a condom.
- **Mobility:** Maldivian citizens go abroad for education and work. Therefore, they are away from their families for long periods of time. These persons may engage in high risk practices in relation to acquisition and transmission of HIV/AIDS and other sexually transmitted infections. There were 257 cumulative number of HIV positives among expatriate workers reported to the National AIDS Control Programme in Maldives, as of December 2009.
- **Awareness:** A reproductive health survey conducted in Maldives in 2004 with the help of UNFPA, found that 99% of the respondents had heard of HIV/AIDS. Of them 91% knew at least one way of HIV transmission. However, only 50% of the respondents agreed that condoms can prevent the transmission of HIV and 34% did not know that a healthy looking person may have HIV infection.

## Important Aspects of National Response

Maldives established the National AIDS Control Programme in 1987, four years before the first domestic HIV positive patient was reported. The National AIDS Council, a multi-sectoral representative body provides guidance to National AIDS Control Programme for HIV/AIDS prevention and control. It has launched a number of preventive activities with the aim of limiting the spread of HIV in the country. Some of them were public education, peer education, awareness creation workshops, blood and blood product screening etc. The general population has wide accessibility to condoms particularly in Male, the capital of Maldives. The government imposes a high level of screening for HIV/AIDS including mandatory screening of all returnees from an overseas stay of more than a year.

The National Strategic Plan 2002 – 2006 was developed in 2001. The goals of the strategic plan were to prevent HIV transmission in the country and to build the capacity of the country

to respond effectively to the possible spread of HIV/AIDS. The objectives of the strategic plan were as follows;

- To sustain high level political commitment and an integrated response at various levels, including the community
- To provide adequate care and support for people living with HIV/AIDS
- To promote safe practices and behaviour among target groups
- To decrease the prevalence of STIs
- To decrease the social and economic impact of HIV/AIDS

In addition to above, the strategic plan included strategies for better surveillance in order to improve the evidence base for policy making and programming, developing tools for behaviour change interventions and empowering young people in and out of schools with knowledge and life skills.

The Government of Maldives was a signatory to the Millennium Development Goals, agreeing to halt and begin to reverse the spread of HIV/AIDS by the year 2015. The Government commits to the under mentioned aspects in curtailing the HIV/AIDS epidemic in Maldives by its Millennium Development Goals Country Report in 2005.

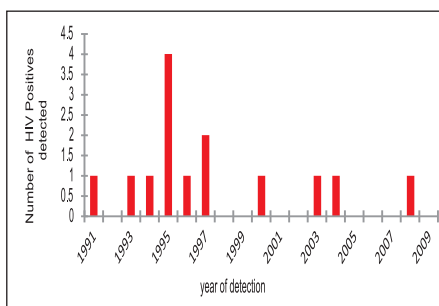
- Ensuring the sustained low prevalence of HIV/AIDS in the country
- Collecting the evidence on sexual behaviour of high risk groups and plan and implement the targeted interventions for them
- Strengthening the active surveillance system following international standards
- Improving accessibility to condoms
- Promotion of voluntary counseling and testing services in Maldives

National Strategic Plan on HIV/AIDS 2007 – 2011 has been developed and published by July 2007. This strategy aims to limit HIV transmission, provide care for infected people and mitigate the impact of HIV epidemic through seven strategic directions.

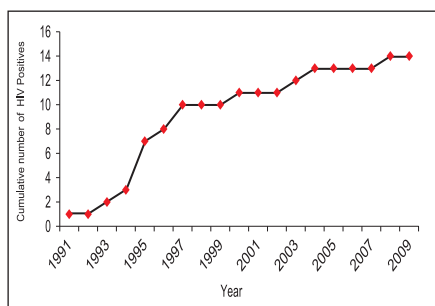
- Provide age and gender appropriate prevention and support services to high risk populations

- Reduce and prevent vulnerability to HIV infection among adolescents and young people
- Provide HIV prevention services in the work places
- Provide treatment, care and support services to PLHA
- Ensure safe practices in the health care 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.

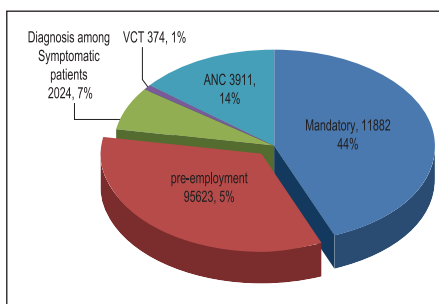
**Figure 20: Reported HIV Positives in Maldives 1991 – 2009**



**Figure 21: Cumulative number of Reported HIV Positives in Maldives, 1991 - 2009**



**Figure 22: Types of HIV testing in Maldives in 2009**



Source: HIV/AIDS SAARC Region update, 2010

<b>Epidemiology, 2009/10</b>	
Population(mid-year)	319738
Children under 15 yrs	88260
Male ≥ 15 years	116434
Female ≥ 15 years	115044
<b>Estimated Number of people living with HIV/AIDS, as at the end of 2009</b>	
Adults Male( ≥15 years):	04
Estimated number of deaths due to AIDS during the year 2009	10

Source: HIV/AIDS SAARC Region update, 2010



# Nepal

Nepal is a landlocked country sharing borders with India and China. It is made up of 75 districts divided into five different development regions (Far- Western, Mid-Western, Western, Central and Eastern). The population of Nepal is 25.88 Million (NCASC Report – 2010). The urban population in Nepal is mostly concentrated in the Kathmandu valley. Nepal has a market economy largely based on agriculture and tourism.

In Nepal, the topography, environmental degradation, poverty and economic migration are linked and they combine with other factors to increase the vulnerability to HIV.

## Status of HIV/AIDS

Nepal's HIV epidemic is largely concentrated in high-risk groups, especially sex workers (SW) and IDUs. Injection drug use appears to be extensive in Nepal and to significantly overlap with commercial sex. Another important factor is the high number of sex workers who migrate or are trafficked for work, thereby increasing HIV prevalence in the sex workers' network in Nepal more rapidly. There are many risk factors that put Nepal in danger of experiencing a widespread epidemic. Some of these include cultural, social and economic constraints to condom use, especially with commercial sex workers, and large number of internal and external migrants within Nepal and neighboring countries.

During the early 1990s, HIV sero-prevalence surveys detected HIV infections among STI patients and FSW throughout most regions in Nepal. IDUs in Nepal were initially believed to share injection equipment in relatively small and isolated networks. However, since the mid-1990s, an explosive increase in HIV infection (infecting about one-half of all IDUs throughout the country and nearly about two-third in the Kathmandu valley) has occurred.

**Table 11: Cumulative HIV/AIDS Situation Nepal, 2010**

Cumulative number	Male	Female	Total
HIV positive	11,061	5,997	17,058
Reported Advanced HIV Cases	4,672	3,017	7,689
Reported AIDS related Deaths	547	173	720
Adults Deaths( $\geq$ 15 years)	536	161	697
Children Deaths(less than 15 years)	11	12	23

Source: NCASC Nepal

**Table 12: Most At Risk Populations (MARPs) in Nepal, 2010**

MARPs	Estimated Size of the MARPs	If available, HIV prevalence among MARPS
Commercial Sex Workers	32,137	1.9%
MSM	140,691	2.6%
IDUs	28,439	8.9%
Migrants workers	1,485,499	1.3%
Clients of FSW	727,421	0.4%

Source: NCASC Nepal

In Nepal five Most At Risk Populations (MARPs) were present in which 1485,499 Migrants workers, 727421 Clients of FSW, 140,691 MSM, 32,137 Commercial Sex Workers and 28,439 IDUs.

**Table 13: Services available for infected and affected persons in Nepal, 2010**

Type of services	Number of Health facilities providing services till December	Public sector	Private sector
Health care facilities with Voluntary Counseling and testing (VCT)/ICTC	196	76	120
Health care facilities with Laboratories facilities for CD4 Count	14	14	
Health care facilities with Laboratories facilities for viral load	1	1	
Health care facilities with ARV treatment First line regimens	35	33	2
Health care facilities with ARV treatment Second line regimens	35	33	2
Health care facilities with PMTCT services	21	21	
Health care facilities with post exposure Prophylaxis for health care workers	75	35	40
Centers with social welfare facilities for HIV infected	1		
Coverage of Blood banks (Under NRCS District coverage)	47		47
Community Care Centers	30	0	30
Targeted intervention sites and their types ( DIC/ ICC)	157	0	157
Rehabilitation Centers for IDUs	19	0	19
OST Services for IDUs	3	3	0

Source: NCASC Nepal

There are 196 Health care facilities with Voluntary Counseling and testing (VCT)/ICTC facilities providing, 19 Rehabilitation Centers for IDUs facilities also providing services for affected persons.

**Table 14: Cumulative Number of HIV infected people on Anti-Retroviral Treatment, 2010**

HIV Infected People		Cumulative Number
<b>Children</b>		
	Male < 15 years of age	163
	Female < 15 years of age	122
<b>Adult</b>		
	Male ≥ 15 years of age	2,630
	Female ≥ 15 years of age	1,907
	TG	13

Source: NCASC Nepal

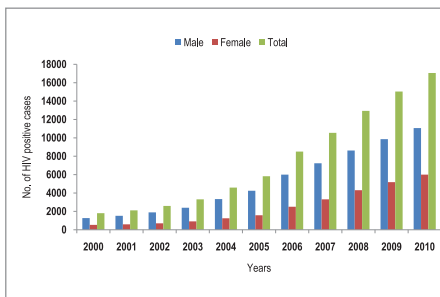
Table 14 explains Cumulative Number of HIV infected people on Anti-Retroviral Treatment in which 285 Children and 4537 were HIV infected adults. The Cumulative Number of HIV pregnant mothers who received ARV for PMTCT was 295. However, Cumulative Number of babies born to HIV pregnant mothers who received ARV for PMTCT was 327 (Since 2005/2006-2010).

Nepal did not conduct sentinel Surveillance on HIV/AIDS in 2010. However, Nepal conducted Behavioral Survey among High Risk Groups.

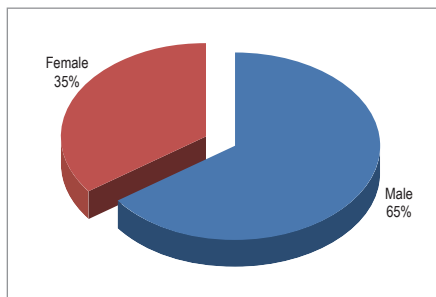
### **Some activities carried out in Nepal for the prevention of HIV infection:**

- Voluntary counseling and testing (VCT)
- Targeted prevention among MARPs
- Advocacy and social mobilization
- STI diagnosis
- HIV treatment from 35 ART sites
- Positive prevention
- Post- Exposure Prophylaxis (PEP) service
- Prevention of Mother to Child Transmission of HIV (PMTCT) services
- Stigma and Discrimination reduction
- Health System Strengthening and Community System Strengthening to ensure improved capacity of service providers and empowerment of beneficiaries
- Income generation activities for Risk and vulnerable communities

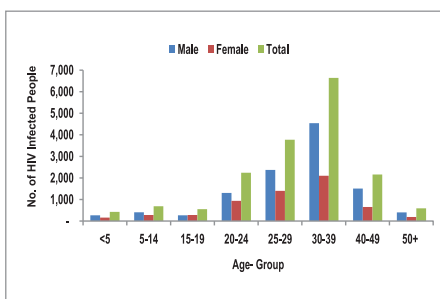
**Figure 23: Sex wise Trend of HIV Positive Cases (2000-2010)**



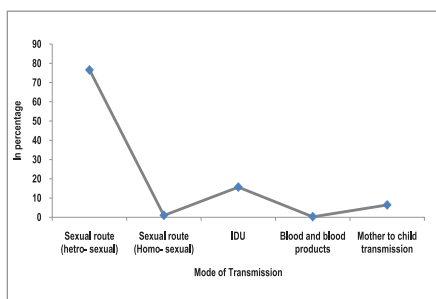
**Figure 24: Percentage of Sex distribution of Cumulative HIV positive in Nepal, 2010**



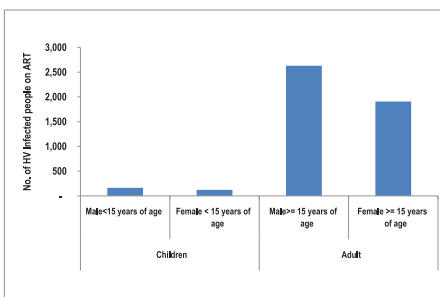
**Figure 25: Cumulative HIV infected persons by age group and sex, 2010**



**Figure 26: Percentage of HIV infected persons by mode of transmission, 2010**

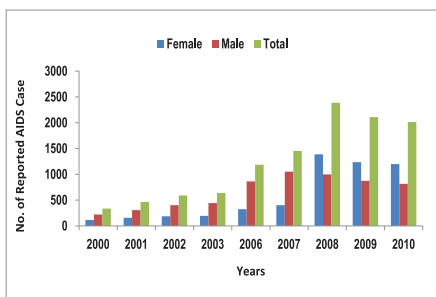


**Figure 27: Cumulative Number of HIV infected people on Anti-Retroviral Treatment, 2010**



Source: NCASC Nepal

**Figure 28: Year wise sex distribution of Reported AIDS cases in Nepal (2000-2010)**



Epidemiology, 2010	
Population(mid-year)	25.88 Million
Children under 15 yrs	9698365
Male ≥ 15 years	7991764
Female ≥ 15 years	8196607
<b>Estimated Number of people living with HIV/AIDS, as at the end of 2010</b>	
Children (less than 15 years):	3,545
Adults Male( ≥15 years):	39,690
Adults Female(≥ 15 years):	20,293
Estimated number of deaths due to AIDS during the year 2010	4,461
Cumulative Number of HIV pregnant mothers who received ARV for PMTCT	295
Cumulative Number of babies born to HIV pregnant mothers who received ARV for PMTCT	327

Source: NCASC Nepal

# Pakistan

Pakistan is Asia's seventh largest country occupying the northwestern portion of the Indian subcontinent. It is bounded to the west by Iran, to the north by Afghanistan, to the northeast by China, to the east and southeast by India, and to the south by the Arabian Sea. The estimated population is 173.51 million in 2010. Pakistan comprises of four provinces and 129 districts. The children population comprised of 62.162 million and adult population comprised of 111 million.

## Status of HIV/AIDS

The evidence of HIV was first documented in Pakistan in 1986. As of end 2010, an estimated 4181 people (adults and children) living with HIV with 0.1% HIV prevalence level that can be considered low. Pakistan is the second largest country in South Asia that stands only a few steps behind India and Nepal in terms of HIV epidemic. Presently, the country is in concentrated phase of HIV epidemic with HIV prevalence of more than 5% among injecting drug users (IDUs) in at least eight major cities. Due to the implementation of above highlighted HIV prevention and control strategies, the HIV in Pakistan has remained concentrated among high-risk group for last 7 years and its prevalence among general adult population is still below 0.1% i.e. 97,400 estimated cases in the whole country.

Despite substantial efforts by the Government of Pakistan and Development Partners, the Country is witnessing a surge in HIV prevalence among high risk groups over the past few years due to low coverage and resource constraints. Pakistan has been able to secure some funds under Global Fund Round-9 HIV grant and some interventions are also being supported by UN and other partners, the limited availability of funds to scale up services remains the biggest challenge to effectively implement the HIV prevention and control response.

**Table 15: Cumulative HIV/AIDS Situation Pakistan, 2010**

Cumulative number	Male	Female	Total
HIV positive	3226	832	4181
Reported AIDS Cases	1314	505	1849

Source: NACP Pakistan

As of end of 2010, a total 4181 HIV positive were reported to the National AIDS Control Programme. Among them 79% were males and 21% were females. The reported AIDS cases were 1849. The reported numbers of adult HIV infected persons are 1262 among which 1012 are males and 250 are females in the year 2010.

**Table 16: Most At Risk Populations (MARPs) in Pakistan, 2010**

MARPs	Estimated Size of the MARPs
Commercial Sex Workers (Female)	136000
MSM	63000
IDUs	91000
Hijra Sex Workers	43000

Source: NACP Pakistan

In Pakistan, there are four Most At Risk Populations (MARPs) present in which 136000 Commercial Sex Workers (Female), 63000 MSM, 91000 IDUs and 43000 Hijra Sex Workers were estimated Size of the MARPs.



**Table 17: Services available for infected and affected persons in Pakistan, 2010**

Type of services	Number of Health facilities providing services till December	Public sector	Private sector
Health care facilities with Voluntary Counseling and testing (VCT)/ICTC	14	11	03
Health care facilities with Voluntary Counseling	14	11	03
Health care facilities with Laboratories facilities for CD4 Count	03		
Health care facilities with Laboratories facilities for viral load	03		
Health care facilities with ARV treatment First line regimens	14		
Health care facilities with ARV treatment Second line regimens	14		
Health care facilities with PMTCT services	06	06	-
Health care facilities with post exposure Prophylaxis for health care workers	14	11	03

Source: NACP Pakistan

There are 14 Health care facilities with Voluntary Counseling and testing (VCT)/ICTC facilities providing and also 14 Health care facilities with Post Exposure Prophylaxis (PEP) for health care workers facilities providing.

**Table 18: Cumulative Number of adult HIV infected population on Anti-Retroviral Treatment Pakistan 2010**

HIV Infected People	Cumulative Number
Male ≥ 15 years of age	1314
Female ≥ 15 years of age	505

Source: NACP Pakistan

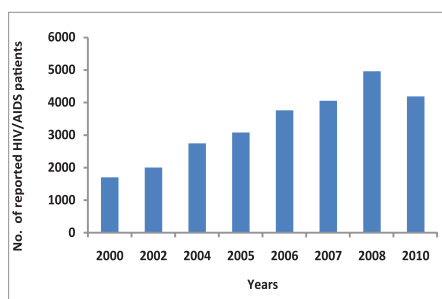
Table 18 explains Cumulative Number of HIV infected people on Anti-Retroviral Treatment overall 1819 HIV Infected adults were on ART.

## **Activities carried out in Pakistan for the prevention of HIV infection:**

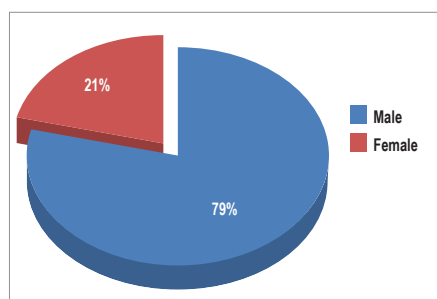
- Substantial expansion in the number and scope of HIV prevention interventions for high-risk groups and vulnerable populations through public sector financing.
- Strengthened role of public-private partnerships in service delivery i.e. partnership with over 350 NGOs under the umbrella of national and provincial AIDS consortia;
- Inclusion of condom promotion as an integral component of service delivery packages for high risk and vulnerable populations;
- Introduction of an extensive mass media campaign to raise awareness among general adult population about methods of HIV transmission and its prevention;
- The advocacy and communication efforts with political leaders, youth and some faith-based organizations have raised the level of concern and awareness among these strata;
- Active involvement of other ministries and departments like Ministry of Education, Ministry of Narcotics, Ministry of Religious Affairs and others in HIV prevention and control response;
- Development and implementation of protocols and operational guidelines in a number of areas like VCT guidelines, guidelines for laboratory diagnosis of HIV and AIDS, infection control guideline and guidelines for syndromic management of STIs and others
- Development and promulgation of National Blood Transfusion Safety Ordinance to prevent HIV spread through transfusion of blood and blood products;
- Establishment of fourteen Antiretroviral (ARV) treatment and care centers in tertiary hospitals to provide treatment to AIDS patients; ARVs are being provided free of cost to all the AIDS patients;
- A number of research studies to understand biological and behavioral trends of STIs and HIV among high-risk and bridge populations;
- HIV and AIDS Second Generation Surveillance (SGS) System in place since 2004 and the fourth round of Surveillance amongst High risk groups is currently underway;
- Development of National Monitoring and Evaluation (M & E) Framework to feed into policy and programme planning.

- Establishment of National Network of PLHIV and preparation of legislation dealing with human rights;
- Formulation of National HIV and AIDS Policy and Legislative Framework, the work on which is still under progress;
- Establishment of National Reference Laboratory with provision of HIV molecular epidemiology and effects on HIV transmission of infection with different subtypes;
- NACP has conducted a number of evaluation studies to have a better understanding of programme implementation and the extent to which interventions have been able to achieve their objectives.

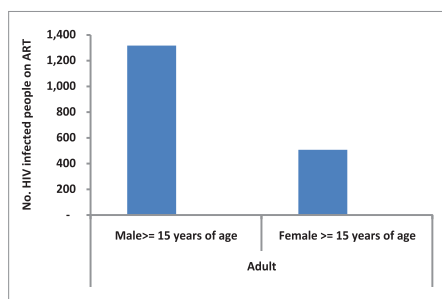
**Figure 29: Trend of Reported HIV Positive Cases, Pakistan (2000-2010)**



**Figure 30: Percentage of Sex distribution of Cumulative HIV positive in Pakistan, 2010**



**Figure 31: Cumulative Number of HIV infected people on Anti-Retroviral Treatment, 2010**



Source: NACP Pakistan

<b>Epidemiology, 2010</b>	
Population(mid-year)	173.51 Million
Children under 15 yrs	62.16 Million
Male ≥ 15 years	57.5 Million
Female ≥ 15 years	53.84 Million
<b>Estimated Number of people living with HIV/AIDS, as at the end of 2010</b>	
Children (less than 15 years):	123
Adults Male(≥ 15 years):	3226
Adults Female(≥ 15 years):	832

Source: NACP Pakistan

# Sri-Lanka

Sri-Lanka is an island country in the Indian Ocean, separated from the south- eastern coast of peninsular India. Its estimated population is 20.45 Million in 2010. The Sinhalese are the predominant ethnic group, constituting about three quarters of the population. Other ethnic groups include the Tamils and the Muslims.

## Status of HIV/AIDS

The first Sri-Lankan infected with HIV was reported in 1987 and the first indigenously transmitted HIV case was reported in 1989. The estimated number of people living with HIV/ AIDS in Sri Lanka in 2010 is 3000 and country has been classified as a low prevalence country with an estimated adult prevalence rate of less than 0.1%. Heterosexual transmission is the most common mode of transmission followed by homosexual/bisexual transmission.

**Table 19: Cumulative HIV/AIDS Situation Sri Lanka, 2010**

Cumulative number	Male	Female	Total
HIV positives	784	533	1,317
Reported Advanced HIV Cases	232	108	340
Reported AIDS related Deaths			221

Source: NSACP Sri Lanka

The cumulative number of HIV positive cases reported to the National STD/AIDS control Programme (NSACP) was 1317 of which 60% males and 40% females. Among them, 340 persons were reported as having AIDS. Reported number of AIDS deaths was 221.

**Table 20: Most at Risk Population of Sri Lanka, 2010**

MARP	Estimated size of the MARP	If available, HIV prevalence among MARP
Commercial Sex Workers	47,000	<1%
MSM	37,000	0.2%
Patients with STDs	200,000	
IDUs (DU)	40,000	
Prisoners	200,000	
Migrant workers	1.8 million	

Source: NSACP Sri Lanka

In Sri Lanka six Most At Risk Populations (MARPs) were present in which 1.8 million were Migrants workers, 37,000 were MSM, 47,000 were Commercial Sex Workers, 40,000 were IDUs and 200,000 were prisoners.

**Table 21: Service available for infected and affected persons, 2010**

Type of services	Number of Health Facilities planned to provide services till December 2010	Number of Health facilities actually providing services till December 2010
Health care facilities with Voluntary Counseling and Testing	30	30
Health care facilities with Voluntary Counseling	47	47
Health care facilities with Laboratory facilities for CD4 count	1	1
Health care facilities with Laboratory facilities for viral load	1	1
Health care facilities with ARV treatment - First line regimens	5	5
Health care facilities with ARV treatment - Second line regimens	5	5
Health care facilities with PMTCT services	5	5
Health care facilities with Post Exposure Prophylaxis for health care workers	108	30
Centres with social welfare facilities	12	12
Centres with facilities with Voluntary Counseling and referral	10	10

Source: NSACP Sri Lanka

There are 30 Health care facilities with Voluntary Counseling and testing (VCT)/ICTC facilities providing. Health care facilities with post exposure Prophylaxis for health care workers are 30. There are 12 Centres with social welfare facilities.

**Table 22: Cumulative Number of HIV infected people on Anti-Retroviral Treatment, 2010**

HIV Infected People		Cumulative Number
<b>Children</b>		
	Male < 15 years of age	14
	Female < 15 years of age	07
<b>Adult:</b>		
	Male ≥ 15 years of age	201
	Female ≥ 15 years of age	135

Source: NSACP Sri Lanka

Table 22 explains Cumulative Number of HIV infected people on Anti-Retroviral Treatment in which 21 Children and 336 adult were HIV Infected. The Cumulative Number of HIV pregnant mothers who received ARV for PMTCT was 13. However, Cumulative Number of babies born to HIV pregnant mothers who received ARV for PMTCT was 17.

Sri Lanka conducted sentinel Surveillance on HIV/AIDS in 2009 and there are 08 sentinel sites. However, Sri Lanka did not conduct Behavioral Survey recently.

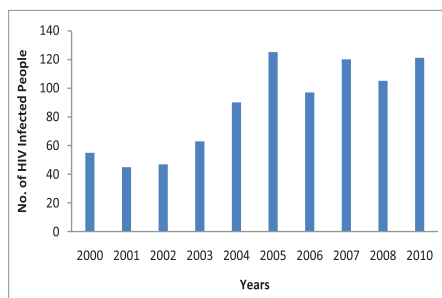
## **Activities carried out in Sri Lanka for the prevention of HIV infection:**

1. STI screening, care and treatment of patient and contact.
2. Provision of testing and counseling (T&C) services including VCT and Provider initiated testing and counseling
3. Surveillance (STI surveillance, HIV sentinel sero-surveillance, Behaviour surveillance, HIV case reporting, AIDS case reporting)
4. Implementation of Information, Education & Communication activities and Behaviour Change Communication strategies.
5. Condom promotion activities at institutional and community level.

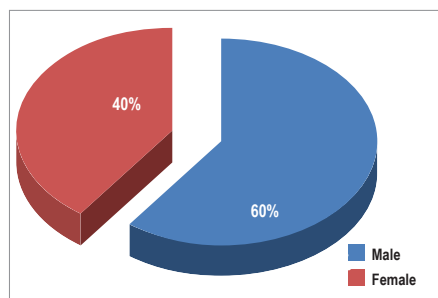
6. Planning and implementation of prevention interventions for MARP.
7. Provision of occupational post exposure prophylaxis services and promotion of standard precautions.
8. Training and capacity building of STI/HIV services among Healthcare staff and NGOs
9. Implementation of PMTCT programme including prophylaxis for MTCT, promotion of replacement feeding among infected mothers, antenatal screening of HIV in selected healthcare settings..
10. Paediatric HIV treatment, care and support.
11. Mandatory donor blood screening for HIV (3rd generation antibody ELISA)
12. Partnership with international organizations and local NGOs, CBOs.
13. Link with other programs in the MoH Sri Lanka, such as Health Education Bureau, Epidemiology unit, Respiratory disease control programme, National Blood Transfusion Service. Link with tertiary care services of MoH.
14. Program planning, coordination and strategic information management.
15. Link with HIV support services, Food supplement programme, financial assistance programmes .



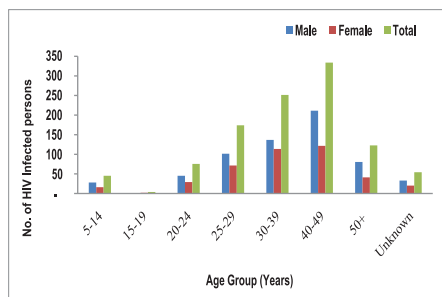
**Figure 32: Trend of Reported HIV Positive Cases, Sri Lanka (2000-2010)**



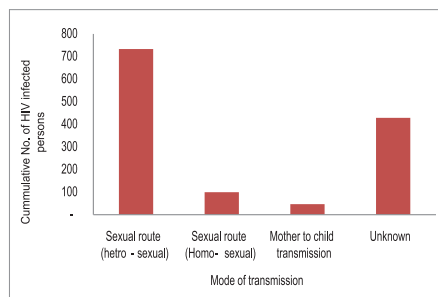
**Figure 33: Percentage of Sex distribution of Cumulative HIV positive in Sri Lanka, 2010**



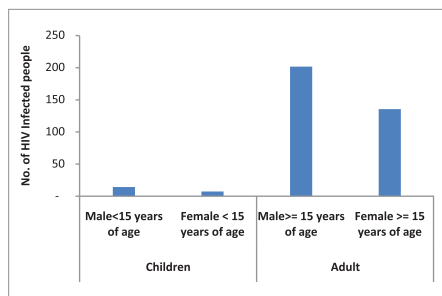
**Figure 34: Cumulative HIV infected persons by age group and sex, 2010**



**Figure 35: Cumulative No. of HIV infected persons by mode of transmission, 2010**



**Figure 36: Cumulative Number of HIV infected people on Anti-Retroviral Treatment, 2010**



Source: NSACP Sri Lanka

<b>Epidemiology, 2010</b>	
Population(mid-year)	20.45 Million
Children under 15 yrs	5331,000
Male ≥ 15 years	7,469,297
Female ≥ 15 years	7,350,988
<b>Estimated Number of people living with HIV/AIDS, as at the end of 2010</b>	
Children (less than 15 years):	35
Adults Male(≥ 15 years):	1830
Adults Female(≥ 15 years):	1030
Estimated number of deaths due to AIDS during the year 2010	152
Cumulative Number of HIV pregnant mothers who received ARV for PMTCT	13
Cumulative Number of babies born to HIV pregnant mothers who received ARV for PMTCT	17

Source: NSACP Sri Lanka

## TB/HIV CO-INFECTION

# 5

TB/HIV Co-infection poses a critical challenge for the health-sector and for people living with HIV and TB. HIV is the strongest risk factor for developing active TB disease. An HIV positive person is 21-34 times more likely to develop TB disease as compared to an HIV negative person.

Of the estimated 34 million people living with HIV globally, about one third are estimated to have concomitant latent infection with *Mycobacterium tuberculosis*. In 2010, of 8.8 million incident TB cases worldwide, 1.1 million were among people living with HIV. Sub-Saharan Africa continues to account for the global majority of the people living with HIV and TB, with an estimated 82% in 2010.

A total of 2.1 million people with TB were tested for HIV in 2010, equivalent to 34% of all notified TB cases. Of the people tested in 2010, 488 000 (23%) were HIV-positive. Globally, access to antiretroviral therapy for people diagnosed with TB increased modestly from 173 000 people in December 2009 to more than 200 000 at the end of 2010 (47) among 101 reporting countries. In 2010, 20% of the total estimated number of people with TB and HIV – or 46% of people with TB who tested positive for HIV – were receiving antiretroviral therapy.

WHO recommends the three I's for HIV and TB – intensified TB case-finding, isoniazid preventive treatment and TB infection control – to decrease the burden of TB among people with HIV. The SAARC TB & HIV/AIDS Center also includes a fourth 'I' in its Regional strategy on TB/HIV Co-infection (Revised) it states about the Integrated case management including ART & DOTS. In 2010, progress continued in expanding the availability of these interventions

in low- and middle-income countries. As of December 2010, among 119 countries providing data, 69 (58%) indicated that isoniazid preventive therapy (IPT) was part of their package of interventions for people living with HIV.

Globally, HIV testing among TB patients reached 34% in 2010, 59% in the African Region; Also in the year 2010, approximately 80% of TB patients known to be living with HIV were started on cotrimoxazole preventive therapy (CPT) and 46% were on antiretroviral therapy (ART); A large increase in screening for TB among people living with HIV and provision of isoniazid preventive therapy to those without active TB disease occurred.

The World Health Organization recommended interventions are collectively known as collaborative TB/ HIV activities. They include HIV testing of TB patients, provision of antiretroviral therapy (ART) and co-trimoxazole preventive therapy (CPT) to TB patients living with HIV, HIV prevention services for TB patients, intensified TB case-finding among people living with HIV, isoniazid preventive therapy (IPT) for people living with HIV who do not have active TB, and infection control in health- care and congregate settings. WHO recommends that ART should be provided to all TB patients living with HIV, irrespective of their CD4 count (and to all people living with HIV with a CD4 cell count  $\leq 350$ ) People living with HIV who are also infected with TB are about 21–34 times more likely to develop TB disease compared with those who are HIV-negative. Globally in 2010, there were an estimated 0.35 million deaths (range, 0.32 million–0.39 million) from TB among people who were HIV-positive.

Joint activities between national TB and HIV programmes are crucial to prevent, diagnose and treat TB among people living with HIV and HIV among people with TB. These include establishing mechanisms for collaboration, such as coordinating bodies, joint planning, surveillance and monitoring and evaluation; decreasing the burden of HIV among people with TB (with HIV testing and counseling for individuals and couples, co-trimoxazole preventive therapy, antiretroviral therapy and HIV prevention, care and support); and decreasing the burden of TB among people living with HIV (with the three I's for HIV and TB: intensified case-finding; TB prevention with isoniazid preventive therapy and early access to antiretroviral therapy; and infection control for TB). Initiating antiretroviral therapy for all people living with HIV with CD4 cell counts less than 350 cells per mm<sup>3</sup> or with active TB irrespective of CD4 count is important to prevent TB- and HIV-related transmission, morbidity and mortality. Integrating HIV

and TB services, when feasible, may be an important approach to improve access to services for people living with HIV, their families and the community.

**Table 23: HIV testing and provision of CPT, ART and IPT in the SAARC Region, 2010**

Country	TB patients with known HIV status		Tested TB patients that are HIV-positive		% HIV-positive TB patients started on		HIV-positive people screened for TB	HIV-positive people provided with IPT
	No.	%	No.	%	CPT	ART		
Afghanistan	5170	18	0	0	-	-	-	-
Bangladesh	1778	1	4	<1	100	0	347	64
Bhutan	-	-	-	-	-	-	-	-
India	480752	32	41476	9	90	57	199732	-
Maldives	-	-	-	-	-	-	-	-
Nepal	-	-	-	-	-	-	-	-
Pakistan	6289	2	22	<1	-	9	-	-
Sri Lanka	1015	10	-	-	-	-	-	3

Source: Global TB Report WHO, 2011

In India, in 2010, around 393,110 TB suspects were referred from ICTCs to RNTCP and of them about 35,547 were diagnosed as having TB and provided TB treatment. In the same period, about 480,752 TB patients (59% of total TB patients registered in states implementing Intensified TB/HIV package) were tested for HIV and of them about 41,476 were diagnosed as HIV-infected and linked to HIV care and support including CPT and ART.

In Afghanistan 5170 TB patients have known their HIV status in 2010. In Bangladesh 1778 TB patients have known their HIV status in 2010 among them 4 were HIV positives. And 347 HIV positive patients were screened for TB. In Pakistan 6289 TB patients have known their HIV status in 2010 among them 22 were HIV positives in 2010 while in Sri Lanka 1015 TB patients have known their HIV status in 2010.

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