2012-13

HIV SENTINEL SURVEILLANCE

National Report 2012-2013

NACO
National AIDS Control Organisation
India's voice against AIDS
Ministry of Health & Family Welfare, Government of India

FOREWORD

HIV surveillance in India was started as early as 1985 when the Indian Council of Medical Research initiated surveillance among blood donors and patients with Sexually Transmitted Diseases. The system gradually evolved over the years, and in 1998 the National AIDS Control Organization (NACO) formalized the system for annual HIV Sentinel Surveillance (HSS) in the country. In subsequent years, India's HIV surveillance system witnessed major expansion in the number of sentinel sites covered as well as enhancement in data collected along with standardized guidelines and tools, rigorous monitoring and supervision, and increasing use of information technology.

Surveillance is "information for Action" and accordingly publishing and disseminating technical briefs and detailed reports are an integral component of NACO's HIV surveillance activities. NACO published a technical brief in 2013 to highlight the key findings on HIV levels and trends from the HSS 2012-13 (13th round). In continuation of the same, we are now bringing out this detailed national report to complement the technical brief of 2013. This report is a first of its kind, with a detailed analysis of the respondents' profile as well as differentials in HIV prevalence by various background characteristics of respondents, providing insights into our understanding of the sub-groups in the general population that are more likely to be at risk of acquiring HIV infection.

I commend the efforts of all experts and field teams that have partnered with us over the years, and have been involved in developing and implementing this robust and sustainable HIV surveillance system in the country. I would also congratulate the field staff at all sentinel sites and testing labs, the Project Directors and surveillance teams in the State AIDS Control Societies, staff of the Regional Institutes and National Institutes, Central Team Members and State Surveillance Teams who are responsible for implementation of HIV surveillance activities in the country. I appreciate the technical support extended by the CDC, WHO, UNAIDS and JSI in bringing out this detailed national report.

In the fight against the HIV/AIDS epidemic, there is continuous need to keep a close vigil on HIV levels, trends and differentials. To do this, the National AIDS Control Programme is committed to generating reliable and independent public health evidence. Having high quality, comparable data from a robust HIV surveillance system as well as dissemination of the same to policy makers and program managers is fundamental in this endeavor. That is what we seek to do through this report. I am confident you will find it useful.

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ACRONYMS

AIDS	Acquired immunodeficiency syndrome
AIIMS	All India Institute of Medical Sciences
ANC	Antenatal care
CDC	Centers for Disease Control and Prevention
CHC	Community health centre
CI	Confidence interval
CTM	Central team member
DAPCU	District AIDS prevention and control unit
ELISA	Enzyme-linked immunosorbent assay
EQAS	External quality assurance scheme
FSW	Female sex worker
HIV	Human immunodeficiency virus
HRG	High-risk group
HSS	HIV sentinel surveillance
IBBS	Integrated Biological and Behavioural Surveillance
ICMR	Indian Council of Medical Research
IDU	Injecting drug users
LDT	Long-distance truckers
M&E	Monitoring and evaluation
MSM	Men who have sex with men
NACO	National AIDS Control Organisation
NACP	National AIDS Control Programme
NARI	National AIDS Research Institute
NIHFW	National Institute of Health and Family Welfare
NIMS	National Institute of Medical Statistics
NRL	National reference laboratory
OBG	Obstetrics and gynaecology
PGIMER	Postgraduate Institute of Medical Education and Research
RI	Regional institute
RIMS	Regional Institute of Medical Sciences
SACS	State AIDS Control Society
SIMS	Strategic Information Management System
SMM	Single male migrant
SRL	State reference laboratory
STI	Sexually transmitted infection
TG	Transgender
TI	Targeted intervention
TOT	Training-of-trainer
UNAIDS	The Joint United Nations Programme on HIV/AIDS
UT	Union territory
WHO	World Health Organisation

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EXECUTIVE SUMMARY

India has one of the world's largest and most robust HIV sentinel surveillance (HSS) systems. Since 1998 it has helped the national government to monitor the trends, levels, and burden of HIV among different population groups and develop effective control measures. The HSS is implemented across the country with support from two national institutes and six regional public health institutes.

The 13th round of HSS was implemented during 2012-13 at 750 antenatal clinics (ANC) surveillance sites, covering 556 districts across 34 states and union territories (UTs) in the country. The methodology adopted during the HSS was consecutive sampling with unlinked anonymous testing. Specimens were tested for HIV following the two-test protocol. However, nine sites could not achieve the minimum required sample size and were excluded. A total of 2,94,732 ANC samples collected and tested from the 741 valid sites have been considered for the analysis in this report.

Review of the profile of the respondents showed that, at national level, three-fifths of respondents (60.8 percent) were 15-24 years old, with the median age of respondents 23 years. Eighty two percent of the respondents were literate. Nearly half of the ANC clinic attendees (46.3 percent) were primi-gravida (first pregnancy). Almost two-thirds of the respondents (62.8 percent) reported that they reside in rural areas. Around 84 percent of ANC clinic attendees reported that they were housewives. Non-agricultural labourer (19.1 percent), service (16.3 percent), skilled/semi-skilled worker (15.4 percent), and agricultural labourer (15.2 percent), were the predominant occupations among the spouses of the respondents. Only 6 percent of ANC clinic attendees reported that their spouse resides in another place for work for longer than six months.

The overall HIV prevalence among ANC clinic attendees, considered a proxy for prevalence among the general population, continued to be low at 0.35 percent (90 percent confidence interval [CI]: 0.33 percent-0.37 percent) at national level. The highest prevalence was recorded in Nagaland (0.88 percent), followed by Mizoram (0.67 percent), Manipur (0.64 percent), Andhra Pradesh (0.59 percent), and Karnataka (0.54 percent). Chhattisgarh (0.52 percent), Gujarat (0.50 percent), Maharashtra (0.40 percent), Delhi (0.40 percent), Punjab (0.37 percent), and Tamil Nadu (0.36 percent) are other states that recorded HIV prevalence higher than the national average. Bihar (0.34 percent), Rajasthan (0.32 percent), and Odisha (0.31 percent) recorded HIV prevalence slightly lower than the national average.

As in the 12th round of HSS (2010-11), all states have shown less than 1 percent HIV prevalence among ANC clinic attendees in this most recent 13th round (HSS 2012-13). However, at the district level, 37 districts showed HIV prevalence of 1 percent or more while another 130 districts showed moderate HIV prevalence between 0.5 percent and 1 percent. Site-wise analysis showed that overall, 80 sentinel sites have shown HIV prevalence of 1 percent or more among ANC clinic attendees. Of these, 27 sites were in the moderate/low prevalence states of Arunachal Pradesh, Bihar, Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh, Meghalaya, Odisha, Rajasthan, Uttar Pradesh, Uttarakhand, and West Bengal. Twelve sites across the country recorded a prevalence of 2 percent or more including three sites, one each in the moderate/low prevalence states of Chhattisgarh, Gujarat, and Rajasthan. It has also been

noted that while the number of high-prevalence sites has declined in erstwhile high-prevalence states, the number has increased in the low to moderate prevalence states over the last few years.

Analysis of HIV prevalence among ANC clinic attendees by background characteristics showed that HIV prevalence was higher among the older age group and lower among respondents with higher educational status. At the national level, HIV prevalence among ANC clinic attendees increased with the order of pregnancy. There is no significant difference in HIV prevalence among ANC clinic attendees by current place of residence (urban/ rural) at national level, though in some states HIV prevalence was higher among those residing in rural than those in urban areas. HIV prevalence was higher among respondents who were skilled/ semi-skilled workers, domestic servants, and non-agricultural labourers. HIV prevalence was higher among respondents whose spouses were truck drivers/helpers, followed by those whose spouses were hotel staff and local transport worker (auto/taxi driver). Respondents whose spouses were migrants had higher HIV prevalence than respondents whose spouses were not.

Data from consistent sites have been analysed to interpret HIV trends. An overall decline in HIV prevalence among ANC clinic attendees was noted at a national level as well as in the formerly high-prevalence states in the south and northeast regions of the country. However, rising trends among ANC clinic attendees were observed in some moderate/low prevalence states such as Chhattisgarh, Gujarat, Jharkhand, Punjab, Assam, Delhi, Haryana, Uttar Pradesh, and Uttarakhand.

The declining trend of the HIV epidemic in the country was corroborated by a decreasing number of sentinel sites that showed a prevalence of 1 percent or more. The number of surveillance sites among ANC increased from 476 in 2003 and 626 in 2006, to 750 sites in HSS 2012-13. However, during the same period, the number of ANC HSS sites showing a prevalence of 1 percent or more decreased from 140 in 2003 to 80 in 2012-13.

Intra-state variations existed with respect to the trends of HIV prevalence, even in the erstwhile high prevalence states. While some districts showed stable to declining trends, others showed rising trends of HIV prevalence and warrant focused attention. For example, in the state of Andhra Pradesh where overall trends of HIV prevalence among ANC clinic attendees were declining at state level, the districts of Cuddapah, Karimnagar, Nizamabad, Visakhapatnam, and Warangal showed rising trends over the last decade.

Thus, findings from the 13th round of HSS corroborated that the HIV epidemic in India is a declining epidemic at national level, with diversity in trends of epidemic at regional or state level, with low level of HIV prevalence in general population, heterogeneous in its geographic distribution, and with changing landscape of HIV spread.

The findings lend further support to the National AIDS Control Programme's (NACP) focus on states with rising trends of HIV prevalence with strategies to halt and reverse the epidemic, while ensuring higher coverage levels in erstwhile high-prevalence states to sustain the declines. Thirty-seven districts and 80 sites with high HIV prevalence need to be prioritized; especially those that have not shown a decline in prevalence to less than 1 percent despite focused prevention efforts for more than a decade. Special studies to understand the reasons and evolve more comprehensive strategies to address them should be conducted.

The National AIDS Control Programme (NACP) should be customized to specific aspects of the HIV epidemic and population groups that are at greater risk such as the young, people with limited or no literacy skills, migrants, and certain occupation groups. Among the occupation groups, truck drivers, hotel staff, and local transport workers among men, and skilled/semi-skilled workers, domestic servants, and non-agricultural labourers among women need to be prioritized. The findings also highlight the urgent need to undertake special studies to better characterise the changing patterns of the epidemic and the changing dynamics of transmission in the country, and refine programme strategies accordingly.

CHAPTER 1

INTRODUCTION

Surveillance is a vital component of any disease control programme. The purpose of surveillance is action. Providing meaningful insights for action at policy, strategy, planning, or implementation levels at the appropriate time is the key objective of surveillance.

The HIV epidemic in India is concentrated, with high prevalence among high-risk groups, moderate prevalence among bridge populations, and low prevalence among general population. Unprotected sex with female sex workers (FSW), injecting drug use (IDU), and unprotected anal sex between men are the three primary routes of HIV transmission in India.

HIV sentinel surveillance measures the prevalence of HIV in a specific risk group in a specific region at a specific time point. The HIV sentinel surveillance system in India is based on the HIV transmission dynamics mentioned above and monitors the HIV epidemic patterns among the following groups:

1. **High-risk groups**
    a. Female sex workers
    b. Men who have sex with men (MSM)
    c. Injecting drug users
    d. People who are TG (transgender)/eunuchs
2. **Bridge populations**
    a. Single male migrants
    b. Long-distance Truckers (LDTs)
    c. People attending STI or gynaecology clinics (currently discontinued)
3. **General population**
    a. Pregnant women attending ANC clinics in urban and rural areas

While ANC clinic attendees are considered proxy for general population, STI patients are considered proxy for people with high-risk behaviour (high-risk and bridge populations and their partners).

1.1. Objectives and Application of HIV Sentinel Surveillance

The key objectives of HIV sentinel surveillance in India are to:

1. Monitor trends in HIV prevalence over time.
2. Monitor the distribution and spread of HIV in different subgroups and geographical areas.
3. Identify emerging pockets of HIV epidemic in the country.

Applications of HIV sentinel surveillance data:

1. Estimate and project burden of HIV at state and national levels.
2. Support programme prioritization and resource allocation.
3. Assist evaluation of programme impact.
4. Provide evidence to advocacy efforts.

1.2. Evolution of HIV Sentinel Surveillance in India

HIV surveillance in India began in 1985 when the Indian Council of Medical Research (ICMR) initiated a surveillance activity among blood donors and patients with STIs. After the National AIDS Control Organisation (NACO) was established in 1992, sentinel surveillance for HIV in India was initiated in 1993-94 with 52 sentinel sites in selected cities. In 1998, NACO formalized annual sentinel surveillance for HIV infection in the country with 180 sentinel sites, of which 176 were valid.

The first major expansion of the surveillance network was in 2003. More than 200 rural antenatal care (ANC) sentinel sites were established at the community health centre (CHC) level in most of the districts in high-prevalence states as well as some districts in low-prevalence states in North India. However, half of these ANC rural sites, especially those in low prevalence states of North India, were discontinued in the next round because they could not achieve the required target sample size due to poor utilization rates. Another important expansion in 2003 was the addition of 30 FSW sites. Overall, 354 districts had at least one HSS site in 2003. From 2003 until 2005, the same sentinel sites continued with expansion to 83 FSW and 30 injecting drug user (IDU) sites.

2006 could be considered the watershed year for HSS development in India. The goal was to have at least one sentinel site in every district of India and new sentinel sites were added for all risk groups in that year. Key developments in 2006 included:

- Major expansion of STI and ANC urban sentinel sites in low-prevalence states of North India.
- Addition of rural ANC sites in high-prevalence states.
- Initiation of special ANC sites for 15-24-year-old pregnant women to monitor new infection.
- Expansion of sentinel sites among FSW, MSM and IDU.
- Initiation of sentinel sites among long-distance truckers (LDTs), single male migrants, and people who are transgender (TG).
- Introduction of composite sites in HSS that facilitated establishment of sentinel sites in places where it had been difficult to do so, such as rural areas and places with fewer HRG.

In 2006, the scale of surveillance operations increased; from 703 sites in high prevalence states in 2005 to 1,122 sites to cover the entire country. The surveillance was also expanded from being only clinic-based to also include TIs.

Five leading regional public health institutions in the country were involved to expand and strengthen the surveillance network and implementation. These regional institutes (RI) provided technical support, guidance, monitoring, and supervision for implementing HSS. Two more RIs were created in 2008. Supervisory structures were further strengthened with constitution of central and state surveillance teams, comprised of public health experts, epidemiologists, and microbiologists from several medical colleges and institutions.

During the subsequent three rounds of HSS (2007, 2008-09, and 2010-11), the focus was on expansion of surveillance among high-risk and bridge populations.

Key strategic HSS implementation improvements in these rounds included:

1. Technical validation of new sentinel sites by regional institutes before inclusion in surveillance and dropping poorly performing sites.
2. Introduced the dried blood spot method of sample collection from high-risk groups (HRGs) to overcome logistic problems at HRG sites.
3. Introduced informed consent at high-risk group sites to address ethical concerns.
4. Initiated random sampling methods of recruitment at HRG sites, taking advantage of the availability of updated line lists of HRGs at the TI projects.
5. Standardized training protocols across states with uniform session plans and materials, and adoption of a two-tier training plan with training-of-trainers (TOT) followed by training of site personnel.
6. Developed a four-tier supervisory structure: national-level central team; regional institutes; state surveillance teams; and State AIDS Control Society (SACS) teams.
7. Strengthened focus on supportive supervision and action-oriented monitoring.
8. Increased focus on quality of planning, training, implementation, and supervision and feedback.
9. Decreased number of testing laboratories for ANC and STD samples, limiting them to high- performing laboratories with enzyme-linked immunosorbent assay (ELISA) facilities to ensure high-quality testing and close supervision.
10. Developed a new web-based data management system to enhance data quality and ensure real-time monitoring of surveillance activities.
11. Initiated epidemiological investigation into unusual findings (sudden rise or decline in prevalence) to understand reasons and correct.
12. Conducted pre-surveillance sentinel site evaluation to assess preparedness of site for HSS and to obtain profile-related information.

Between 2008 and 2009, the annual frequency of HSS was shifted to bi-annual (every two years). STI sites were gradually being discontinued in 2008-09 and 2010-11. The 13th round of HSS was implemented at 763 sentinel sites (750 ANC and 13 STI sites). Most of the STI sites from the 12th round of HSS were phased out during HSS 2012-13. For high-risk and bridge populations, National Integrated Biological and Behavioral Surveillance (IBBS) was conducted to strengthen surveillance among these groups so HSS 2012-13 did not include high-risk groups. Table 1 below presents the scale up of sentinel sites in India since 1998.

Table 1. Scale up of No. of Sentinel Sites in India, 1998-2013

Site Type	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008-09	2010 -11	2012-13
STD	76	75	98	133	166	163	171	175	251	248	217	184	13
ANC	92	93	111	172	200	266	268	267	470	484	498	514	564
ANC (rural)	-	-	-	-	-	210	122	124	158	162	162	182	186
IDU	5	6	10	10	13	18	24	30	51	52	61	79	-
MSM			3	3	3	9	15	18	31	40	67	96	-
FSW	1	1	2	2	2	32	42	83	138	137	194	261	-
Migrant	-	-	-	-	-	-	-	1	6	3	8	19	-
TG	-	-	-	-	-	-	-	1	1	1	1	3	-
Truckers	-	-	-	-	-	-	-		15	7	7	20	-
TB	2	2	-	-	-	-	7	4	-	-	-	-	-
Fisherfolk/ seamen	-	-	-	-	-	1	-	-	1	-	-	-	-
Total	**176**	**177**	**224**	**320**	**384**	**699**	**649**	**703**	**1122**	**1134**	**1215**	**1358**	**763**

Note: HRG in 2013 covered under national IBBS

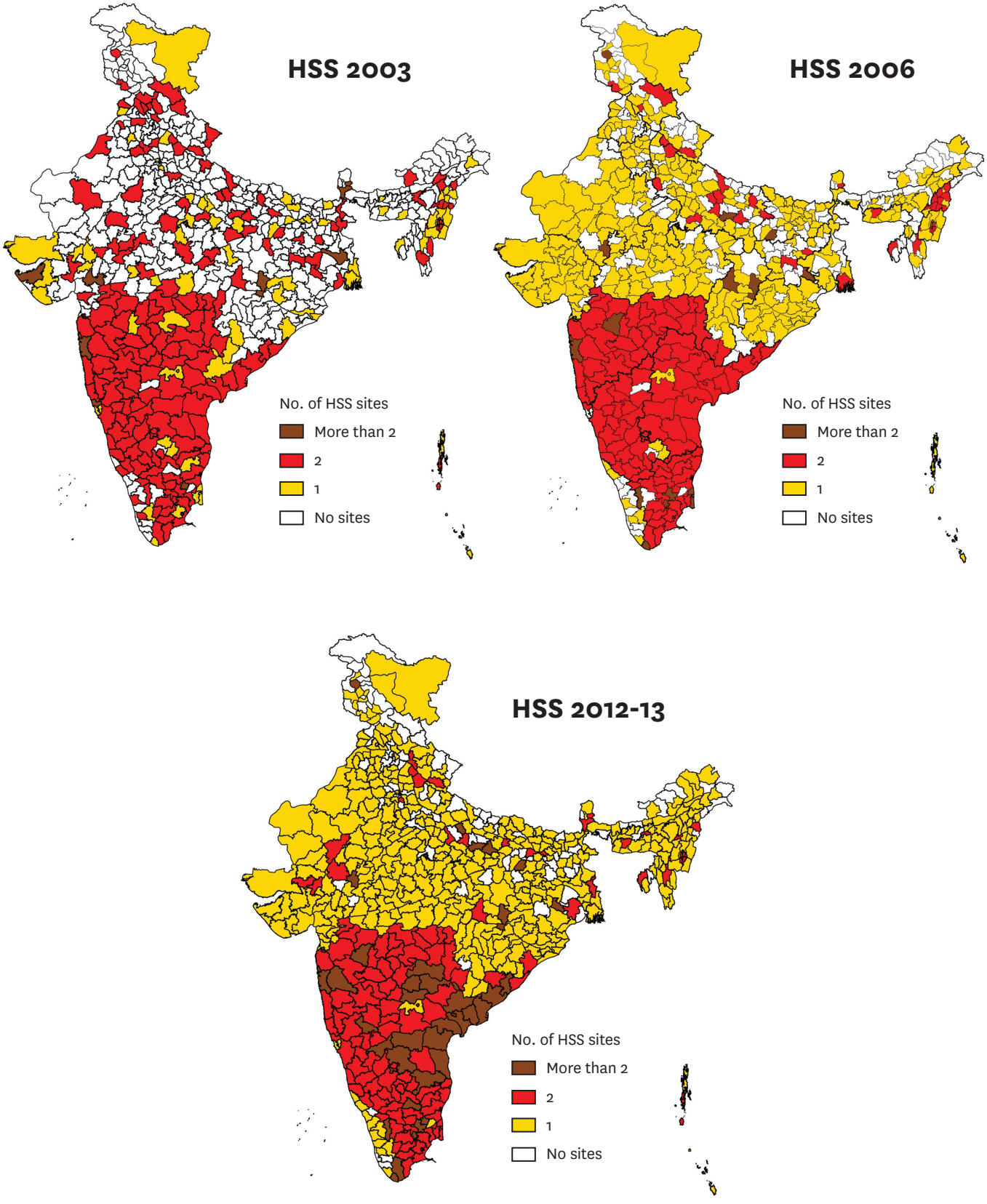

Figure 1. Distribution of ANC Sentinel Sites, HSS 2003, HSS 2006 and HSS 2012-13

As expansion continued, the geographical distribution of surveillance sites changed from concentration in high-prevalence states to uniform distribution across the country. In 2003, 271 districts of the country had at least one ANC surveillance site and half of them were in the southern and western regions of country. In 2006, 464 districts in country had at least one ANC surveillance site. During the 13th round of HSS implementation, 551 districts had at least one ANC surveillance site; 57 percent of which were in northern and eastern regions; 30 percent in the southern and western regions; and the remaining 13 percent in the northeastern region of country. Figure 1 depicts the changing pattern of distribution of ANC surveillance sites in the country. The details on state-wise distribution of HSS sites for the years 2003, 2006, 2010-11, and 2012-13 are provided in Annex 1.

The subsequent chapters present the key findings from the HIV Sentinel Surveillance 2012-13. The next chapter presents the methodology of HSS at ANC sentinel sites and description of the variables on which information is collected at these sites. Chapter 2 also presents the implementation structure and key initiatives during HSS 2012-13. Chapter 3 presents the background profile of the respondents. Levels of HIV prevalence among ANC clinic attendees at national, state, and district levels are discussed in Chapter 4. This is followed by the analysis of differentials in HIV prevalence among ANC clinic attendees by their background characteristics at national and state levels in Chapter 5. Chapter 6 presents the trends of HIV prevalence among ANC clinic attendees at national and state levels, while highlighting the districts and sites where trends are rising and warrant programmatic attention. The last chapter presents the concluding remarks based on the key findings from HSS 2012-13 and summarises key recommendations to the NACP.

It should be noted that in this report, the data presented for Andhra Pradesh refer to undivided Andhra Pradesh, i.e., Andhra Pradesh and Telangana together. Similarly, data presented for Maharashtra include the data for Mumbai. However, in view of the epidemiological importance of Mumbai and to facilitate evidence-based planning of activities under Mumbai Districts AIDS Control Society, data for Mumbai are also presented separately. Thus, in all the state-wise tables in the report, the total figure for India will not be equal to sum of all state figures in the table, as Mumbai is not counted in the total since it is already included under Maharashtra.

CHAPTER 2

METHODOLOGY AND IMPLEMENTATION

This chapter describes HSS methodology and the implementation mechanisms adopted during HSS 2012-13.

2.1. Methodology of HIV Sentinel Surveillance at ANC Sentinel Sites

HIV sentinel surveillance is defined as a system of monitoring the HIV epidemic among specified population groups by collecting information on HIV from designated sites (sentinel sites) over years, through a uniform and consistent methodology that allows comparison of findings across place and time, to guide programme response.

A sentinel site is a designated service point/facility where blood specimens and relevant information are collected from a fixed number of eligible individuals from a specified population group over a fixed period of time, periodically, for the purpose of monitoring the HIV epidemic.

Under HIV sentinel surveillance (HSS), recruitment of respondents is conducted for three months at selected ANC sentinel sites. Because of the low HIV prevalence in India, the classical survey method of sample size calculation that gives a large sample size cannot feasibly be collected through facility-based surveillance on an annual basis. Hence, a sample size of 400 for surveillance among ANC attendees was approved by a consensus of experts. Eligible respondents are enrolled until the sample size of 400 is reached or until the end of the surveillance period, whichever is earlier.

The eligibility criteria for recruiting respondents at an ANC sentinel site are:

1. Ages 15-49 years
2. Pregnant woman attending the antenatal clinic for the first time during the current round of surveillance

"Sampling method" refers to the approach adopted at the sentinel site for recruiting eligible individuals into HSS. Consecutive sampling method is

adopted in HSS in India for ANC clinic attendees. After the start of surveillance, all individuals attending the ANC sentinel site facility who are eligible for inclusion are recruited in the order they attend the clinic. This sampling method removes all chances of selection or exclusion based on individual preferences or other reasons, and hence reduces the selection bias. It is convenient, feasible, and easy to follow.

"Testing strategy" refers to the approach adopted for collecting and testing blood specimens and handling the test results in HSS. In India, the unlinked anonymous testing strategy is used. Testing is conducted on a portion of blood specimen collected for routine diagnostic purposes (such as syphilis) after removing all personal identifiers. Neither the information collected in the data form nor the HIV test result from the blood specimen is ever linked to the individual from whom the information/specimen is collected. Neither the personnel collecting the specimen nor the personnel testing the specimen are able to track the results back to the individual. Hence, personal identifiers such as name, address, outpatient registration number, etc. are not mentioned anywhere on the data form, blood specimen, or data form transportation or sample transportation sheets. Similarly, the HSS sample number or any mark indicating inclusion in HSS is not mentioned in the ANC register or patient/OPD card. The portion of the blood specimen with identifiers is used for reporting the results of the routine test for which it has been collected. The portion of the blood specimen without identifiers is sent for HIV testing under HSS.

"Testing protocol" refers to the number of HIV tests conducted on the blood specimen collected during HSS. A two-test protocol is adopted in HSS. The first test is of high sensitivity and second of high specificity and is confirmatory in nature. The second test is conducted only if the first is found to be positive. HIV testing under surveillance is for the purpose of ascertaining HIV levels and trends in a community and not for case diagnosis, which is why the two-test protocol is the global standard for surveillance. The methodology of HSS at ANC sentinel sites is summarized in Table 2 below.

2.2. Information Collected under HSS at ANC Sentinel Sites

HSS provides information on two bio-markers; HIV and syphilis. All blood specimens collected under HSS are tested for these two infections. Besides biomarkers, when recruiting an individual in HSS, information is collected on basic demographic parameters such as age, education, occupation, spouse's occupation, and order of pregnancy. Collected information is kept minimal and restricted to those who might be asked under routine clinic procedures. During the recent rounds, a few questions were added to identify potential biases in the sample (e.g., source of referral) or to further profile

Table 2. Methodology of HIV Sentinel Surveillance at ANC Sentinel Sites

Sentinel site	Antenatal clinic
Sample size	400
Duration	3 months
Frequency	Once in 2 years
Sampling method	Consecutive sampling
Eligibility	Pregnant women ages 15-49 years attending ANC clinic for the first time during the current round
Testing strategy	Unlinked anonymous testing
Blood specimen	Serum collected through venous blood specimen
Testing protocol	Two-test

the respondents with respect to their vulnerability (migration status of spouse) so that HIV prevalence estimates can be better explained and interpreted. The data form used in HSS 2012-13 is in Annex 2.

HSS 2012-13 collects information on the following nine key demographic variables from every respondent.

1. **Age:** The age of the respondent is recorded in number of completed years. Since age is a part of eligibility criteria, improper recording or non-recording of age makes a sample invalid. Information on age helps identify the age groups with high HIV prevalence. In the absence of data on HIV incidence, high prevalence among younger age groups is considered a proxy for recent infections.

2. **Literacy status:** The literacy status of an individual has a direct bearing on the awareness levels with respect to risks of acquiring HIV and means of protecting oneself. Knowing the literacy status of the pregnant woman helps in understanding differentials in HIV prevalence and informs demographics about the women who are accessing services at ANC clinics. This information may also be helpful to compare and standardize the demographic profiles of two independent samples under HSS, while investigating any unusual increase or decrease in trends. Under HSS 2012-13, the literacy status of respondents was classified into five categories as defined below.

    a. Illiterate: People with no formal or non-formal education.

    b. Literate and till 5th standard: People with non-formal education or those who joined school but did not study beyond 5th standard.

    c. 6th to 10th standard: Those who studied beyond 5th standard but not beyond 10th standard.

    d. 11th to graduation: Those who studied beyond 10th standard but not beyond graduation. Includes those with technical education/ diplomas.

    e. Post-graduation: Those who studied beyond graduation.

3. **Order of current pregnancy:** The order of pregnancy denotes the number of times a woman has been pregnant. It includes the number of live births, still births, and abortions. It is also referred to as gravidity. Women who are pregnant for the first time are referred to as primi-gravida. In the context of HIV, order of pregnancy indicates the duration of exposure to sexual risks. Since primi-gravida are likely to be exposed to sexual risks only recently, HIV prevalence among them is considered a proxy for new HIV infections and helps in understanding the HIV incidence in a region. The order of pregnancy is recorded as first, second, third, fourth, or more.

4. **Source of referral to the ANC clinic:** Under HSS, ANC clinic attendees are asked who referred them to the clinic for antenatal check-up. This variable was added to the data collection form to understand the various sources of referral, especially to assess if there is any specific bias in the sample because of specific referrals of HIV-positive cases from any source. Published literature indicates that there is disproportionate referral of HIV-positive cases from private sector to government hospitals. Similarly, if there are higher numbers of referrals from ICTC/ ART centres in the sample, it may bias the HIV prevalence, as those respondents are likely to be people who have been exposed to HIV risk, to have HIV risk perception or who are known to be HIV-positive. This variable helps assess any such phenomenon. The response categories listed in the HSS data form include:

    a. Self-referral

    b. Family/ relatives/ neighbours/ friends

    c. NGO

    d. Private hospital (doctors/ nurses)

    e. Government hospital (including ANM/ ASHA)

    f. ICTC/ ART centre

5. **Current place of residence:** HSS 2012-13 records the reported current residence of the respondent as urban or rural. If the current place of residence of the respondent i.e., the place she is living with her husband falls under Municipal Corporation, municipal council, or cantonment area, it is classified as urban. Otherwise, it is recorded as rural. Place of residence helps in studying

the epidemic patterns in urban and rural areas separately and provides programmatic insight for implementing interventions. In the context of formerly high-prevalence states, urban rural differentials of HIV prevalence is important because HIV is known to have spread to rural areas, sometimes with higher prevalence in these states. In low-prevalence states with rising HIV trends, migration from rural areas to high-prevalence destinations is likely to play a role. Therefore, studying rural epidemics is important to characterise the epidemic appropriately.

6. **Duration of stay at current place of residence:** All the respondents are asked about the duration of stay at the current place of residence (the place she is living with her husband) and the responses are recorded in years and months. If the duration is less than one year, '0' years and the number of months as reported by the respondent are recorded. If the duration is less than one month, the duration is recorded as '0' years, '1' month. Duration of stay at current place of residence is asked to ascertain whether the pregnant woman belongs to the place where the ANC clinic is situated. Because many pregnant women in India go to their maternal home for delivery, it is likely that they attend ANC clinic at the mother's place. If this is the case, her duration of stay will be only a few days or months. Although counsellors are instructed to ask where the respondent is living with her husband, this variable helps eliminate reporting errors. Also, it helps in understanding the duration of exposure to sexual risk. Similar to order of pregnancy, this variable also helps assess new HIV infections occurring in a region.

7. **Current occupation of respondent:** Certain occupations are associated with higher exposure and risk to HIV. It is important to understand the profile of respondents and differentials of HIV with respect to their occupation. For this purpose, HSS has categorized occupations into 13 categories ensuring that all the possible occupations are covered and the categories are relevant to the epidemiological analysis of HIV prevalence data. The occupation categories and their definitions where required, are:

   a. Agricultural labourer

   b. Non-agricultural labourer: includes workers at construction sites, quarries, stone crushers, road or canal works, brick-kilns.

   c. Domestic servant

   d. Skilled/semi-skilled worker: includes workers in small-scale or cottage industries; industrial/ factory workers; technicians such as electricians, masons, plumbers, carpenters, goldsmiths, iron-smiths, and those involved in automobile repair; artisans such as weavers, potters, painters, cobblers, shoe-makers, tailors.

   e. Petty business/small shop: includes vendors selling vegetables, fruits, milk, and newspapers; pan shop operators.

   f. Large business/self-employed: includes professionals and business people.

   g. Service (govt/pvt): those working on salary basis in government, private, or institutional sector; excludes drivers and hotel staff.

   h. Student

   i. Truck driver/helper

   j. Local transport worker (auto/ taxi driver, handcart pullers, rickshaw pullers, etc.)

   k. Hotel staff

   l. Agricultural cultivator/ landholder

   m. Housewife (in order to be consistent with the occupation codes for spouse of respondent, housewife is Code 14).

8. **Current occupation of spouse:** Occupation of spouse is an important epidemiological variable that may help identify population groups that are at higher risk of acquiring HIV. HSS used the same occupational categories as those used for the respondent. The two differences are that the category 'unemployed' (Code13) is used in the place of 'housewife' and there is an additional category: 'Not applicable (never married/widow/divorced/separated)' (Code 99).

9. **Migration status of spouse:** Analyses of drivers of the emerging epidemic in some low-prevalence states points to migration from these states to high-prevalence destinations (NACO Annual Report

2013-14, Chapter 2. Current Epidemiological Scenario of HIV/AIDS, pg.12). In order to assess the effect of migration status of spouse on HIV prevalence among ANC clinic attendees, respondents in HSS were asked whether spouse resides alone in another place/town away from wife for work for longer than 6 months. This question is not applicable to respondents who were never married/widowed/ divorced/separated.

2.3. Implementation Structure of HIV Sentinel Surveillance in India

HIV sentinel surveillance has a robust structure for planning, implementation, and review at national,

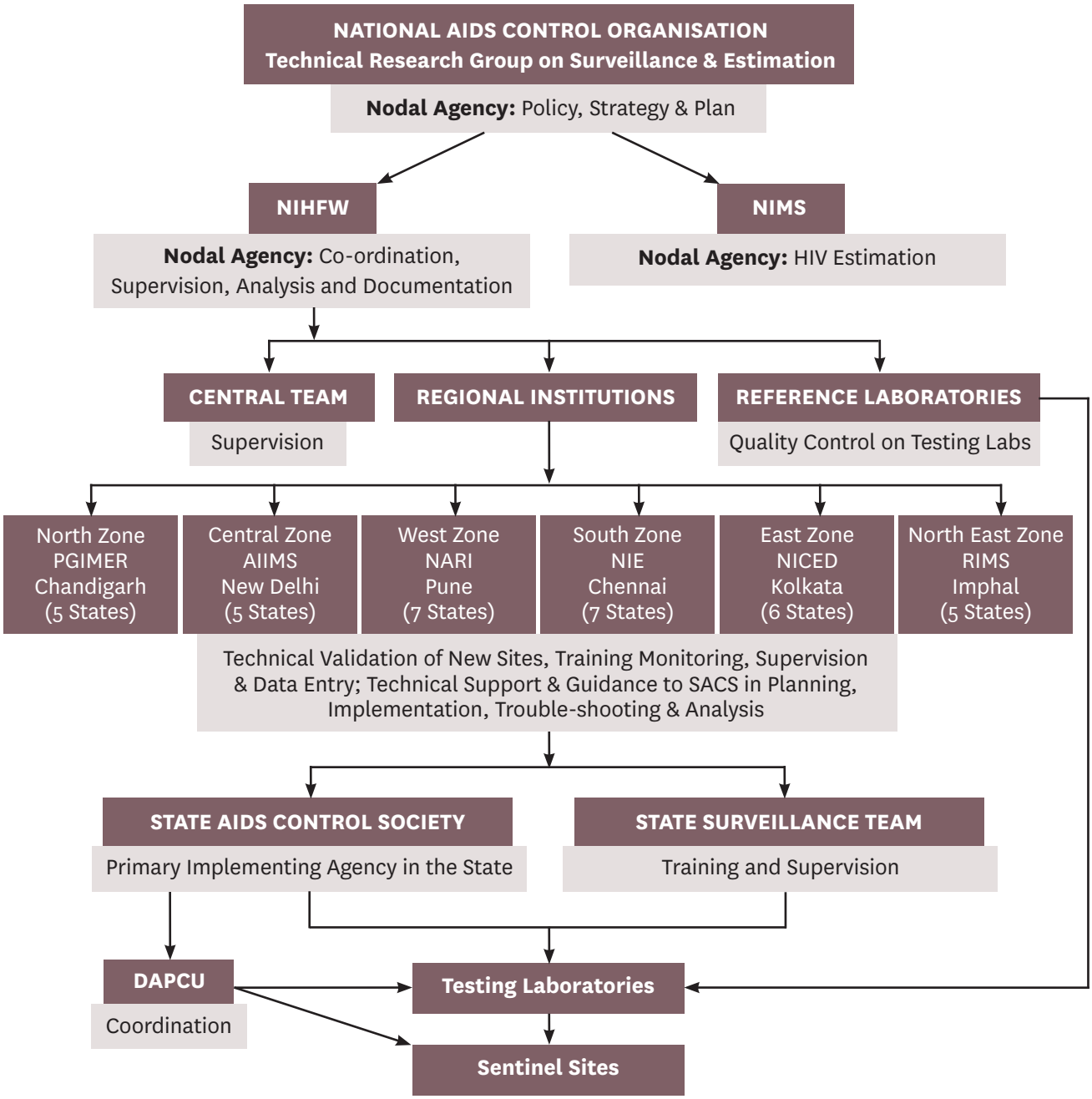

Figure 2. Implementation Structure of HIV Sentinel Surveillance in India

regional, and state levels. The structure and key functions of involved agencies are shown in Figure 2.

National level: The National AIDS Control Organisation (NACO) is the nodal agency for strategy formulation and commissioning for each round of HSS. The Technical Resource Group on Surveillance and Estimation, comprised of experts from the fields of epidemiology, demography, surveillance, biostatistics, and laboratory services, advises NACO on the broad strategy and implementation plans of HSS and reviews the outcomes of each round. Two national institutes—National Institute of Health and Family Welfare (NIHFW) and National Institute of Medical Statistics (NIMS)—support national level activity planning and coordination. In addition, the central team, which is coordinated by NIHFW, New Delhi and is comprised of experts from the Centers for Disease Control and Prevention (CDC), World Health Organisation (WHO),The Joint United Nations Programme on HIV and AIDS (UNAIDS), medical colleges, and other national and international agencies, provided support in training and supervision.

Regional level: Since 2006, six public health institutes in India have been identified as regional institutes (RIs) for HSS to provide technical support to the State AIDS Control Societies (SACS) for all HSS activities, starting with identification of new sites, training, monitoring and supervision, and improving quality of the data collected and their analysis. Data entry is another function performed by RIs. The team at each RI is comprised of two epidemiologists/public health experts and one micro-biologist, which are supported by one project coordinator, two research officers, one computer assistant/data manager, and between four and ten data entry operators, depending on the volume of data entry. The names of the six regional institutes and the distribution of states among them are in Table3, below.

State level: SACS is the primary agency responsible for implementation of HSS and NACO has appointed state epidemiologists at the SACS to support the activities and promote data analysis. In addition to these, every state has a surveillance team comprised of public health experts and microbiologists who support SACS in the training, supervision, and monitoring of the personnel involved in sentinel surveillance. State surveillance teams (SSTs) are formed by RIs in consultation with SACS. All activities are coordinated by RIs.

District level: In districts with functional district AIDS prevention and control units (DAPCUs), the

Table3. Regional Institutes for HIV Sentinel Surveillance andTheir State Allocation

Name of regional institution	Responsible states
Central Zone: All India Institute of Medical Science, New Delhi	Uttar Pradesh, Bihar, Jharkhand, Uttaranchal, and Delhi.
North Zone: Post-graduate Institute of Medical Education and Research, Chandigarh	Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab, and Chandigarh.
West Zone: National AIDS Research Institute, Pune	Maharashtra, Gujarat, Goa, Madhya Pradesh, Rajasthan, Daman & Diu, and Dadra Nagar Haveli.
South Zone: National Institute of Epidemiology, ICMR, Chennai	Andhra Pradesh, Tamil Nadu, Karnataka, Kerala, Odisha, Puducherry, and Lakshadweep.
East Zone: National Institute of Cholera and Enteric Diseases, Kolkata	West Bengal, Chhattisgarh, Sikkim, Andaman & Nicobar Islands, Meghalaya, and Nagaland.
Northeast Zone: Regional Institute of Medical Sciences, Imphal	Manipur, Mizoram, Tripura, Assam, and Arunachal Pradesh.

DAPCU staff is involved in the coordination of HSS activities at the sentinel sites and the associated testing labs.

Laboratory network: Laboratory support is provided by a network of testing and reference labs. There are 117 state reference laboratories (SRLs) that conduct primary testing of blood specimens collected under HSS. Thirteen national reference laboratories (NRLs) provide external quality assurance to the SRLs through repeat testing of all HIV-positive blood specimens and 5 percent of HIV-negative specimens.

2.4. Key Initiatives during HIV Sentinel Surveillance 2012-13

In response to key issues identified in the implementation of HSS during previous rounds and to improve the quality and timeliness of the surveillance process in the 13th round, several new initiatives were implemented as part of continuous quality improvement.

SACS checklist for preparatory activities: This was developed to monitor the planning process for HSS in each state (Annex 3). All the preparatory activities were broken into specific tasks with clear timelines and SACS were required to submit the completion status for each task. A team of officers from NACO coordinated with state nodal persons to ensure that preparatory activities in all states adhered to the timelines.

Pre-surveillance sentinel site evaluation (SSE): A pre-surveillance evaluation of ANC and STD sentinel sites was conducted to identify and correct human resource and infrastructure-related issues at the sentinel sites before initiation of surveillance. The evaluation also provided site information such as type of facility, average OPD attendance, availability of HIV and AIDS services, and distance of facilities from HSS labs (Annex 4), which may have implications on adherence to methodology.

Standard operational manuals, wall charts, and bilingual data forms: These were developed to simplify the HSS methodology for site-level personnel and ensure uniform implementation of the guidelines in all sentinel sites. These were printed centrally and distributed across the country.

Training during HSS 2012-13:

Steps to improve quality of training:

1. A well-structured training programme was adopted to ensure that all personnel involved in HSS at different levels were adequately and uniformly trained in the respective areas of responsibility.
2. The training agenda, curriculum, and planning and reporting formats were standardized and used in all states. Standard slide sets and training manuals for training of sentinel site personnel were developed centrally to ensure uniformity.
3. Trainings included group work and a "know your sentinel site" exercise, which helped participants identify the routine practices that could affect the implementation of surveillance at their sites and recommended actions to address the same.
4. Pre and post-test assessments were given to each participant of site-level trainings. Analysis of these scores helped state teams to identify priority sites for supervisory visits.
5. Training reports for each batch were submitted in standard formats at the end of each training.

Details of trainings:

1. Trainings started with two batches of national pre-surveillance meetings with about 90 personnel from regional institutes and SACS to discuss the critical aspects of planning for HSS 2012-13 and understand the system for supportive supervision through the online Strategic Information Management System (SIMS) application.
2. This was followed by 2-day regional TOTs organised by the RIs for SACS officers and state surveillance teams, comprised of public health experts and microbiologists, to create state-level master trainers and plan site-level trainings.
3. Site-level trainings (2 days per batch @ 8-10 sites per batch) were conducted in all the states. Representatives from regional institutes and NACO observed the trainings to ensure that trainings were provided as per the protocol and that all sessions were covered as per the session plan.

4. Separate trainings on surveillance testing protocols and lab reporting mechanisms through the SIMS application for HSS were organised for microbiologists and lab technicians from 117 ANC/STD testing labs and 13 NRL.

5. Overall, 40 central team members; 30 officers from six RIs; 95 SACS officers including in-charge surveillance, epidemiologists, and M&E officers; 280 state surveillance team members; 260 laboratory personnel including microbiologists and lab technicians from the designated testing labs; and more than 3,000 sentinel site personnel including medical officers, nurse/counsellors, and lab technicians were trained under HSS 2012-13.

Laboratory system: For HSS 2012-13, the laboratory system was strengthened by limiting the testing of specimens to designated SRLs. Real-time monitoring of the quality of blood specimens and laboratory processes was achieved through introduction of web based reporting through the SIMS application for HSS. Efforts were made to standardize quality assurance aspects of sample testing under HSS and to streamline responses in case of discordant test results between testing lab and reference lab through the SIMS application.

Supervisory mechanisms for HSS 2012-13: Supervision of all HSS activities was prioritized to ensure smooth implementation and high-quality data collection. Extensive mechanisms were developed to set up a comprehensive supervisory system for HSS and to ensure that 100 percent of HSS sites were visited in the first 15 days of the start of sample collection. The principles adopted included action-oriented supervision, real-time monitoring and feedback, accountability for providing feedback and taking action, and an integrated web-based system to enhance the reach and effectiveness of supervision.

SIMS modules for web-based supervision

Specific modules were developed and made operational in the web-based SIMS for HSS to facilitate real-time monitoring of HSS 2012-13.

1. Field supervision was conducted by trained supervisors who visited the sentinel sites to monitor the quality of recruitment of respondents and other site-level procedures. Real-time reporting of field supervision used the SIMS supervisor module via the field supervisory quick feedback and action taken report sub-modules. The module was used extensively by all the supervisors and helped in quick identification and resolution of challenges in the field.

2. Data were supervised by data managers at RIs to monitor the quality of data collection and transportation using the SIMS module.

3. Laboratory supervision was conducted by SRLs and NRLs to monitor the quality of blood specimens, progress in laboratory processing, and external quality assurance, using the SIMS lab module.

Overall, 80 percent of supervisors reported on the SIMS field supervisor quick feedback format, and 52 percent of action taken report formats were submitted by HSS focal persons from SACS and RIs. Laboratory reporting through the lab module was completed by 87 percent of SRLs.

Integrated monitoring and supervision plan

1. An integrated supervision plan for each state was developed by RIs, SACS, and NIHFW to avoid duplication in monitoring coverage, thereby facilitating maximum coverage of surveillance sites.

2. The first round of visits was conducted by RI, SACS, and SST members. Central team members (CTM) visited priority sites identified in feedback from the first round of visits. Subsequent visits were based on priority with a goal of making at least three visits to each identified problematic site.

SMS-based daily reporting from sentinel sites

The 13th round of HSS 2012-13 piloted an approach of daily reporting of the number of samples collected at each sentinel site through an SMS from a registered mobile number to a central server. The system automatically compiled and displayed site-wise data on an Excel format on a real-time basis. Access to this web-based application was given to SACS, RIs, and DAC and facilitated identification of sites with poor performance and enabled initiation of corrective action at sites that initiated HSS late; where sample collection was too slow or too fast; and where there were large gaps in sample collection.

CHAPTER 3

PROFILE OF RESPONDENTS

Before looking at the levels, trends, and differentials of HIV prevalence among ANC clinic attendees, it is important to understand the background profile of the respondents under HIV Sentinel Surveillance 2012-13 (HSS 2012-13). It helps in assessing how representative the sample is and enhances interpretation of data on positivity. HSS 2012-13 collected information on the following nine key demographic variables from every respondent.

1. Age
2. Literacy status
3. Order of current pregnancy
4. Source of referral to the ANC clinic
5. Current place of residence
6. Duration of stay at current place of residence
7. Current occupation of respondent
8. Current occupation of spouse
9. Migration status of spouse

An ANC sentinel site is considered a valid site if it achieves at least 75 percent of the target sample size i.e., if it achieves 300 sample size (75 percent of 400). An individual case is considered valid only if the sample ID and age are clearly noted on the data form and the blood specimen is not rejected by the testing lab. HSS 2012-13 was implemented at 750 ANC sentinel sites across the country. However, only 741 sentinel sites could achieve the minimum valid sample size of 300. Overall, 2,94,732 valid samples were collected at the valid sentinel sites. Invalid sites and cases at valid sites have been excluded from analysis in this report. The sections in this chapter describe the respondent profile in terms of the key demographic parameters listed above. Table 4 below presents the profile of respondents at the national level.

Review of the profile of the respondents showed that, at national level, three-fifths of respondents (60.8 percent) were in the age group of 15-24 years, with

the median age of respondents being 23 years. Only 18 percent of respondents had limited or no literacy skills. More than two-fifth (42.2 percent) of respondents were literate with 6th to 10th standard education, followed by those who studied up to graduation (19.7 percent). Those with only primary education accounted for 17 percent. Nearly half of the ANC clinic attendees (46.3 percent) were in their first pregnancy. Almost two-thirds of the respondents (62.8 percent) reported that they resided in rural areas. About 84 percent of ANC clinic attendees reported that they were housewives. Only 6 percent reported that they were agricultural labourers. Non-agricultural labourers (19.1 percent); service (16.3 percent); skilled/semi-skilled workers (15.4 percent); and agricultural labourers (15.2 percent) were the predominant occupations among the spouses of the respondents. Local transport workers (7.2 percent); truck drivers/helpers (2.2 percent); and hotel staff (1.3 percent) are other important occupation groups of spouses of respondents. Only six percent of ANC clinic attendees reported that their spouses reside in another place for work for longer than six months.

Table 4. Profile of Respondents at National Level, HSS 2012-13

Background characteristic	Number	%
Age (N=2,94,732)		
Median age (yrs)	23	--
15-24	1,79,227	60.8
25-34	1,08,837	36.9
35-44	6,579	2.2
45-49	89	0.03
Literacy status (N=2,94,278)		
Illiterate	52,806	17.9
Literate and till 5th standard	50,438	17.1
6th to 10th standard	1,24,292	42.2
11th to graduation	57,915	19.7
Post-graduation	8,827	3.0
Order of current pregnancy (N=2,94,270)		
First	1,36,324	46.3
Second	1,04,837	35.6
Third	37,983	12.9
Fourth or more	15,126	5.1
Current place of residence (N=2,92,918)		
Urban (municipal corporation/council/cantonment)	1,09,031	37.2
Rural	1,83,887	62.8
Current occupation of the respondent (N=2,94,522)		
Housewife	2,47,644	84.1

Table 4. Profile of Respondents at National Level, HSS 2012-13 (Cont...)		
Background characteristic	**Number**	**%**
Agricultural labourer	16,816	5.7
Non-agricultural labourer	7,821	2.7
Service (govt/pvt)	7,703	2.6
Skilled/semi-skilled worker	3,476	1.2
Student	2,904	1.0
Agricultural cultivator	2,827	1.0
Domestic servant	2,330	0.8
Petty business/small shop	2,083	0.7
Other*	918	0.3
Current occupation of spouse (N=2,94,296)		
Non-agricultural labourer	56,111	19.1
Service (govt./pvt.)	48,102	16.3
Skilled/semiskilled worker	45,428	15.4
Agricultural labourer	44,779	15.2
Petty business/small shop	31,578	10.7
Local transport worker (auto/ taxi driver, handcart puller, rickshaw puller, etc.)	21,074	7.2
Agricultural cultivator	18,083	6.1
Large business/self-employed	8,908	3
Truck driver/helper	6,459	2.2
Unemployed	4,987	1.7
Hotel staff	3,849	1.3
Student	3,233	1.1
Domestic servant	1,275	0.4
Not applicable (never-married/widow/divorced/separated)	430	0.1
Spouse resides alone in another place/town from wife for work for longer than 6 months (N=2,92,707)		
Yes	1,74,93	6.0
No	2,74,725	93.9
Not applicable (never married/widow/divorced/separated)	489	0.2

Note: N is different for different variables as the number of valid cases for which information is available for each indicator varies.

**Others- include large business, self-employed, truck driver helper, local transport workers, hotel staffs and agricultural cultivators/ landholders*

Age in completed years is recorded for every respondent at the time of recruitment into HSS. The data indicated that at the national level the median age of respondents was 23 years. The median age of respondents varied between 21 years in West Bengal and 27 years in Jammu & Kashmir. In Tripura, Karnataka, and Andhra Pradesh, median age of respondents was 22; in Mizoram and Nagaland it was 26 years (Table 5).

The majority (60.8 percent) belonged to the age group of 15-24 years and a little more than a third (36.9 percent) was in the age group of 25-34 years. Only two percent of respondents belonged to the age group of 35-44 years and less than one percent were in the 45-49 year group. Further breakdown of the younger age group of 15-24 years showed that people aged 15-19 accounted for around eight percent (8.4 percent), and those 20-24 years of age accounted for 52.4 percent of all respondents (Figure 3).

The proportion of respondents in the age group of 15-24 years varied from 31.6 percent in Jammu & Kashmir to 75.7 percent in Andhra Pradesh (AP). Besides AP, the states of West Bengal (75.4 percent), Tripura and Maharashtra (70.0 percent), Mumbai (68.7 percent), Karnataka (68.0 percent), and Dadra & Nagar Haveli (66.2 percent) had over two-thirds of respondents in the 15-24 years of age group. Besides Jammu & Kashmir, Himachal Pradesh (49.0 percent), most north-eastern states (Arunachal Pradesh, 46.7 percent; Manipur, 42.0 percent; Mizoram, 38.5 percent; and Nagaland, 37.2 percent), and the coastal states of Kerala (41.6 percent),and Goa (44.6 percent) showed less than 50 percent of respondents in the young age group. While the respondents in the age group of 35-44 years accounted only for two percent nationally, around 6-10 percent of the respondents in the states of Manipur, Mizoram, Nagaland, and Jammu & Kashmir belonged to this age group (Table 5).

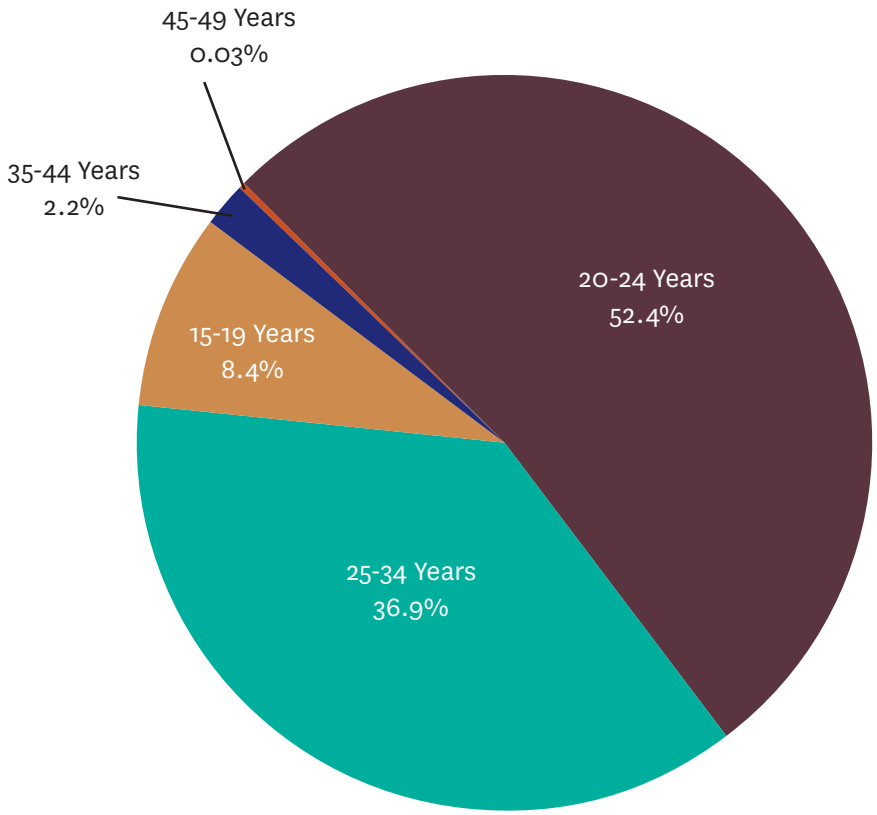

Figure 3. Percent Distribution of Respondents by Age Group, India

Table 5. Median Age and Percent Distribution of Respondents by Age Group and State, HSS 2012-13							
State	Median age (yrs)	15-19	20-24	25-34	35-44	45-49	Total (N)
		%	%	%	%	%	
Andaman & Nicobar Islands	24	11.1	44.2	40.9	3.8	0.1	1,600
Andhra Pradesh	22	11.3	64.4	23.8	0.5	0.0	25,447
Arunachal Pradesh	25	12.5	34.2	46.2	6.4	0.7	3,076
Assam	24	9.3	46.5	41.4	2.7	0.0	9,986
Bihar	24	7.4	50.2	40.2	2.2	0.0	10,706
Chandigarh	24	3.8	53.8	41.0	1.5	0.0	400
Chhattisgarh	23	10.1	54.8	33.1	2.0	0.0	7,165
Dadra & Nagar Haveli	23	11.3	54.9	31.3	2.3	0.3	399
Daman & Diu	24	5.6	54.4	38.1	1.9	0.0	800
Delhi	24	4.3	51.8	42.0	1.9	0.0	1,999
Goa	25	4.3	40.3	49.8	5.5	0.0	1,200
Gujarat	23	6.3	53.6	38.1	2.0	0.0	11,170
Haryana	23	5.8	58.1	34.7	1.5	0.0	6,334
Himachal Pradesh	25	4.7	44.3	49.0	2.0	0.0	2,400
Jammu & Kashmir	27	2.2	29.4	60.5	7.8	0.0	5,976
Jharkhand	23	14.4	48.8	34.7	2.1	0.1	8,369
Karnataka	22	10.1	57.9	30.9	1.1	0.0	24,767
Kerala	25	6.0	35.6	54.3	4.2	0.0	4,000
Madhya Pradesh	23	6.3	57.5	34.7	1.4	0.0	18,771
Maharashtra	23	8.7	61.1	29.0	1.1	0.0	29,959
Manipur	25	8.8	33.2	48.1	9.7	0.1	5,508
Meghalaya	23	15.9	40.4	37.7	5.9	0.1	3,076
Mizoram	26	7.9	30.6	52.6	8.7	0.1	3,556
Mumbai*	23	8.4	60.3	29.9	1.4	0.0	3,197
Nagaland	26	7.8	29.4	54.0	8.6	0.2	4,419
Odisha	24	5.8	51.7	40.4	2.0	0.0	12,783
Puducherry	24	4.9	49.5	44.5	1.1	0.0	800
Punjab	24	3.7	52.0	42.7	1.6	0.0	5,194
Rajasthan	24	4.3	54.2	39.8	1.7	0.0	13,570
Sikkim	24	12.6	40.1	43.4	3.9	0.1	1,600
Tamil Nadu	23	7.7	54.8	36.1	1.3	0.0	28,734
Tripura	22	25.9	44.1	28.7	1.3	0.0	1,600
Uttar Pradesh	24	4.0	47.5	45.7	2.8	0.0	25,813
Uttarakhand	24	3.7	54.1	40.4	1.7	0.0	5,559
West Bengal	21	28.3	47.1	23.6	1.0	0.0	7,996
India	**23**	**8.4**	**52.4**	**36.9**	**2.2**	**0.0**	**2,94,732**

** Mumbai is not counted in the total since it is already included under Maharashtra*

3.2. Literacy Status

Under HSS 2012-13, respondent literacy status was classified into five categories:

1. Illiterate: people with no formal or non-formal education.
2. Literate and till 5th standard: people with non-formal education or those who joined school but had not studied beyond 5th standard.
3. 6th to 10th standard: people who studied beyond 5th standard but not beyond 10th standard.
4. 11th to graduation: people who studied beyond 10th standard but not beyond graduation. Includes those with technical education/diplomas.
5. Post-graduation: people who studied beyond graduation.

Nearly 18 percent of respondents at the national level had no formal education. Around 17 percent of respondents studied up to fifth standard and the highest proportion of respondents (42.2 percent) studied between sixth and tenth standards. Around 20 percent of the respondents reported to have studied beyond 10th standard and up to graduation, while another 3 percent had studied beyond graduation (Figure 4).

The proportion of illiterates varied from less than one percent in Kerala to 40.7 percent in Bihar. Jammu & Kashmir (35.8 percent), Uttar Pradesh (29.4 percent), Rajasthan (27.2 percent), Arunachal Pradesh (23.4 percent), Gujarat (23.3 percent), Andhra Pradesh (22.9 percent), and Jharkhand (22.3 percent) had higher proportions of respondents who were illiterates. On the other hand, Puducherry (1.6 percent), Mizoram (3.0 percent), Himachal Pradesh (3.4 percent), and Tripura (4.6 percent) had very low proportions of respondents who were illiterates (Table 6).

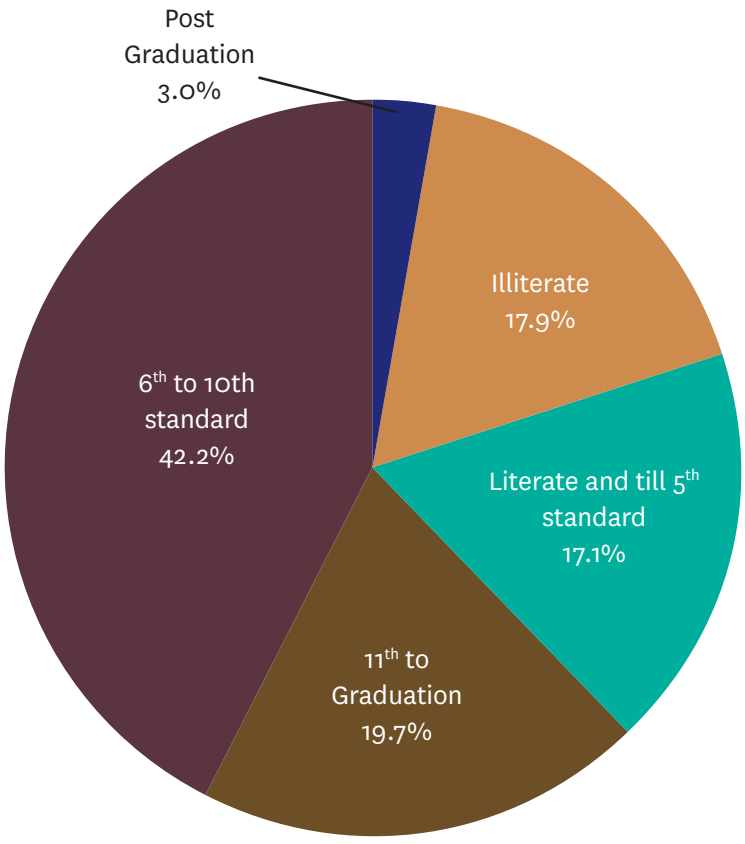

Figure 4. Percent Distribution of Respondents by Literacy Status, India

Table 6. Percent Distribution of Respondents by Education and State, HSS 2012-13						
State	**Illiterate**	**Literate till 5th standard**	**6th-10th standard**	**11th to graduation**	**Post graduation**	**N**
Andaman & Nicobar Islands	4.4	8.9	45.9	37.1	3.8	1,600
Andhra Pradesh	22.9	18.1	40.8	16.8	1.4	25,426
Arunachal Pradesh	23.4	17.2	34.6	22.1	2.7	3,071
Assam	13.9	17.2	44.0	23.9	1.0	9,964
Bihar	40.7	23.9	24.5	9.9	1.0	10,633
Chandigarh	10.8	18.3	34.0	29.3	7.8	400
Chhattisgarh	16.3	24.5	41.7	14.6	2.9	7,151
Dadra & Nagar Haveli	21.1	12.5	47.4	12.5	6.5	399
Daman & Diu	17.3	15.5	50.4	13.9	3.0	800
Delhi	19.5	12.3	43.8	21.6	2.8	1,995
Goa	14.0	11.3	57.8	16.5	0.3	1,200
Gujarat	23.3	20.1	44.2	9.6	2.7	11,148
Haryana	19.6	17.5	39.8	19.2	3.9	6,333
Himachal Pradesh	3.4	5.0	38.2	44.5	9.0	2,400
Jammu & Kashmir	35.8	9.9	31.2	20.4	2.7	5,974
Jharkhand	22.3	21.9	29.8	24.2	1.9	8,345
Karnataka	16.7	9.9	53.1	18.5	1.8	24,738
Kerala	0.8	3.3	41.2	47.8	6.9	3,999
Madhya Pradesh	19.9	22.9	38.3	14.7	4.2	18,743
Maharashtra	8.8	12.4	54.4	22.4	1.9	29,941
Manipur	15.2	11.8	48.7	21.8	2.6	5,491
Meghalaya	14.7	28.8	42.6	13.3	0.7	3,063
Mizoram	3.0	14.0	57.4	23.5	2.1	3,553
Mumbai*	14.0	16.4	51.6	16.5	1.5	3,197
Nagaland	13.8	19.3	48.0	18.2	0.7	4,408
Odisha	15.9	23.3	45.4	14.3	1.0	12,749
Puducherry	1.6	3.3	44.6	45.0	5.5	800
Punjab	19.0	24.0	36.5	17.2	3.3	5,193
Rajasthan	27.2	25.2	29.6	12.6	5.4	13,550
Sikkim	5.9	23.5	50.2	18.3	2.2	1,589
Tamil Nadu	5.8	10.0	51.4	28.7	4.1	28,711
Tripura	4.6	12.5	63.3	18.6	1.1	1,600
Uttar Pradesh	29.4	19.5	25.9	19.7	5.5	25,780
Uttarakhand	12.2	12.3	33.7	31.6	10.3	5,551
West Bengal	15.2	29.9	45.0	9.3	0.6	7,980
India	**17.9**	**17.1**	**42.2**	**19.7**	**3.0**	**2,94,278**

** Mumbai is not counted in the total since it is already included under Maharashtra*

3.3. Order of Pregnancy

The order of pregnancy denotes the number of times a woman has become pregnant. It includes the number of live births, still births, and abortions. It is also referred to as 'gravidity'. As noted earlier, in the context of HIV, order of pregnancy indicates the duration of exposure to sexual risks, so HIV prevalence among primi-gravida is considered a proxy for new HIV infections and is an indicator of regional HIV incidence.

At the national level, a little less than half (46.3 percent) of the respondents reported being pregnant for the first time, while close to 36 percent were pregnant for the second time, and 13 percent of respondents reported that it was their third pregnancy. Only 5 percent of respondents were pregnant for the fourth or more time (Figure 5).

At the state level, the percent of primi-gravida varied between 36.4 percent in Bihar to 64.3 percent in Tripura. West Bengal (57.6 percent), Assam (55.1 percent), and Sikkim (52.3 percent) also had higher percent of primi-gravida among respondents. On the other hand, Meghalaya (21.5 percent) had higher percent of respondents who were pregnant for the fourth or more times, followed by Mizoram (16.9 percent), Nagaland (13.6 percent), Bihar (10.9 percent), Manipur (10.3 percent), and Uttar Pradesh (10.1 percent) (Table 7).

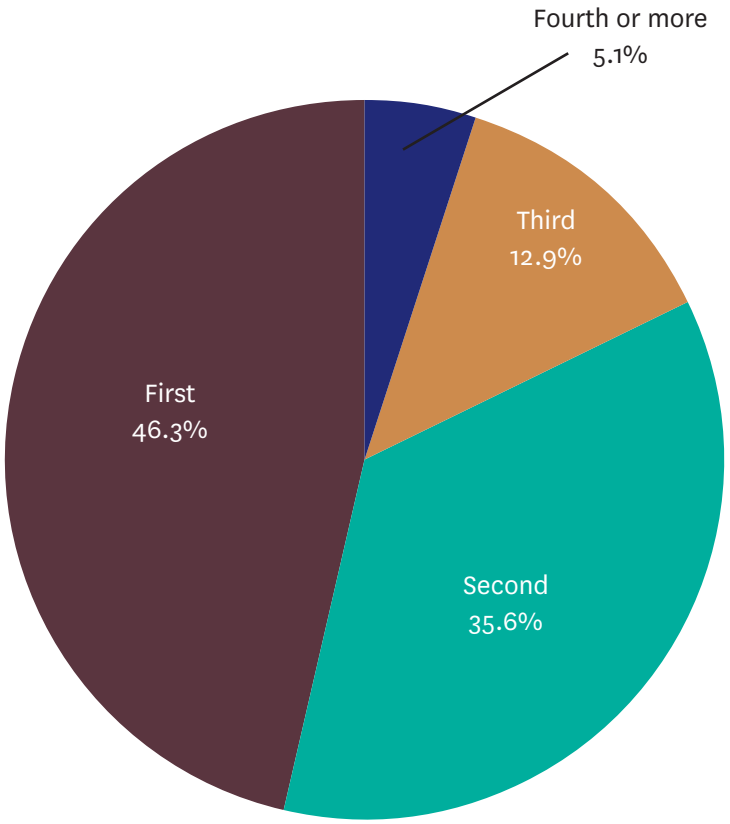

Figure 5. Percent Distribution of Respondents by Order of Pregnancy, India

Table 7. Percent Distribution of Respondents by Order of Pregnancy and State, HSS 2012-13					
State	First	Second	Third	Fourth or more	N
Andaman & Nicobar Islands	47.2	35.6	12.6	4.6	1,597
Andhra Pradesh	45.9	42.7	9.8	1.6	25,394
Arunachal Pradesh	40.3	33.2	18.0	8.5	3,062
Assam	55.1	32.4	9.8	2.8	9,980
Bihar	36.4	33.0	19.6	10.9	10,679
Chandigarh	43.5	34.3	18.0	4.3	400
Chhattisgarh	49.8	33.2	12.5	4.4	7,152
Dadra & Nagar Haveli	43.6	37.8	15.3	3.3	399
Daman & Diu	42.9	34.3	17.0	5.9	800
Delhi	40.7	40.2	15.1	4.0	1,997
Goa	41.9	39.0	15.3	3.8	1,200
Gujarat	44.2	33.8	15.0	7.0	11,149
Haryana	42.0	34.7	15.0	8.2	6,330
Himachal Pradesh	49.5	35.9	11.3	3.3	2,400
Jammu & Kashmir	42.3	33.4	16.6	7.7	5,962
Jharkhand	50.6	29.6	14.0	5.8	8,339
Karnataka	48.2	38.3	11.0	2.5	24,739
Kerala	46.0	40.1	10.6	3.3	3,992
Madhya Pradesh	48.4	34.7	12.4	4.4	18,743
Maharashtra	46.4	38.0	12.7	2.8	29,942
Manipur	43.5	31.5	14.6	10.3	5,497
Meghalaya	41.6	24.3	12.5	21.5	3,066
Mizoram	37.8	27.0	18.4	16.9	3,550
Mumbai*	43.6	43.4	11.0	2.1	3,196
Nagaland	40.4	28.9	17.1	13.6	4,397
Odisha	51.2	34.8	10.7	3.3	12,758
Puducherry	52.0	37.0	9.9	1.1	800
Punjab	47.6	36.1	11.9	4.4	5,194
Rajasthan	45.3	34.3	14.3	6.1	13,543
Sikkim	52.3	36.6	8.2	2.9	1,592
Tamil Nadu	46.8	40.8	10.3	2.2	28,723
Tripura	64.3	26.8	7.2	1.8	1,600
Uttar Pradesh	40.7	31.2	17.9	10.1	25,770
Uttarakhand	49.5	31.9	13.0	5.6	5,547
West Bengal	57.6	33.3	7.5	1.5	7,977
India	**46.3**	**35.6**	**12.9**	**5.1**	**2,94,270**

** Mumbai is not counted in the total since it is already included under Maharashtra.*

3.4. Source of Referral to the ANC Clinic

This variable illuminates the various sources of referral, and helps identify if a specific bias is being introduced in the sample due to specific referrals of HIV-positive cases from any source. The response categories listed in the HSS data form include self-referral; family/relative/neighbour/friend; NGO; private hospital (doctor/nurse); government hospital (including ANM/ASHA); and ICTC/ART centre. Government health care providers include ANM, ASHA, doctors/nurses at PHC, and CHC.

Government hospital/ANM/ASHA was identified as the major source of referral to ANC clinics, accounting for 54.4 percent of respondents, followed by self-referral (22.1 percent), and family/relative/neighbour/friend (18.7 percent). Only two percent had been referred by private service providers at the national level. NGOs and ICTC/ART centres accounted for 1.4 percent of referrals each.

Referral from government service providers was higher in the states of Andaman & Nicobar Islands (93.0 percent), Assam (86.2 percent), Odisha (78.6 percent), Jammu & Kashmir (77.9 percent), Madhya Pradesh (77.4 percent), and Chhattisgarh (72.2 percent). There were no referrals from the government facilities in Chandigarh and it was very low in Delhi (1.5 percent), Kerala (12.4 percent), and Dadra Nagar Haveli (17.5 percent). In Chandigarh, 100 percent of ANC clinic attendees came of their own accord, i.e., were not referred. This was followed by the states of Dadra & Nagar Haveli (74.7 percent), Puducherry (73.5 percent), Delhi (71.6 percent), Kerala (64.7 percent), Goa (60.6 percent), Meghalaya (57.4 percent), and Mizoram (49.8 percent). Self-referrals were lowest in the states of Tripura (2.8 percent), Assam (4 percent), Madhya Pradesh (5 percent), Odisha (5.6 percent), Andaman Nicobar Islands (6.0 percent), and Chhattisgarh (6.3 percent).

While overall private sector referrals accounted for only 2 percent of respondents, the north-eastern states of Tripura (14.8 percent), Arunachal Pradesh (8.8 percent), Mizoram (6.0 percent), Nagaland (5.1 percent), and Meghalaya (3.4 percent), northern states of Jharkhand (10.0 percent) and Bihar (4.7 percent), and the western state of Gujarat (7.7 percent) had higher proportions of private sector referrals. While NGOs accounted for only 1.4 percent of all respondents as a source of referral to ANC clinics, the north-eastern states of Manipur (9.5 percent) and Arunachal Pradesh (4.9 percent) showed relatively higher levels of NGO referrals. The proportion of refferal from ICTC/ART centres was also low (1.4 percent), however, it varied in certain states, for example in the states of Mizoram (13.0 percent), Nagaland (7.7 percent), Odisha (6.3 percent), Punjab (5.5 percent), and Rajasthan (4.1 percent), showed relatively higher proportions of referrals from ICTC/ART centres (Table 8).

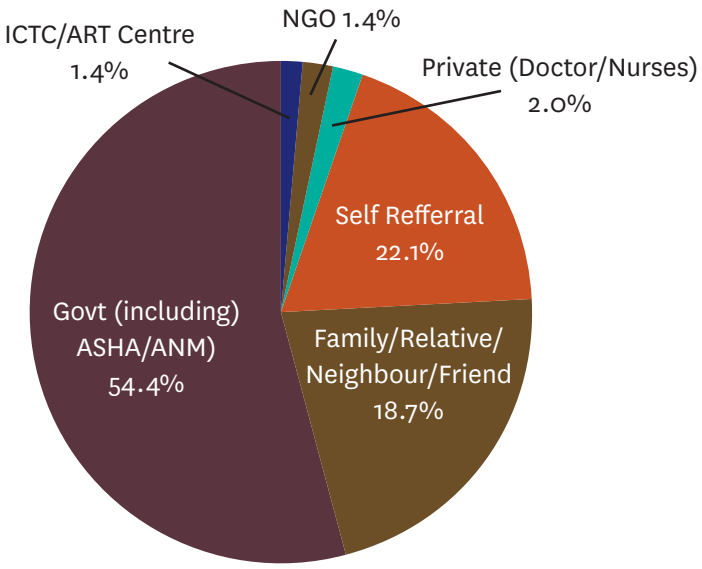

Figure 6. Percent Distribution of Respondents by Source of Referral, India

Table 8. Percent Distribution of Respondents by Source of Referral and State, HSS 2012-13							
State	Self-Referral	Family/relative/neighbour/friend	NGO	Private (doctor/nurse)	Govt (including ASHA/ANM)	ICTC/ART centre	N
A & N Islands	6.0	0.8	0.1	0.1	93.0	0.0	1,597
Andhra Pradesh	20.2	24.7	1.6	2.0	51.3	0.2	25,407
Arunachal Pradesh	36.5	16.3	4.9	8.8	33.5	0.1	3,072
Assam	4.0	8.4	0.4	1.0	86.2	0.0	9,958
Bihar	18.3	24.3	0.6	4.7	51.8	0.3	10,667
Chandigarh	100.0	0.0	0.0	0.0	0.0	0.0	400
Chhattisgarh	6.3	19.7	0.9	0.8	72.2	0.1	7,146
Dadar & Nagar Haveli	74.7	7.5	0.0	0.3	17.5	0.0	399
Daman & Diu	17.6	25.8	0.0	0.0	56.4	0.1	799
Delhi	71.6	26.5	0.0	0.4	1.5	0.0	1,998
Goa	60.6	5.4	0.0	0.0	34.0	0.0	1,198
Gujarat	24.7	23.6	3.7	7.7	40.0	0.3	11,135
Haryana	26.6	39.2	0.2	0.3	33.6	0.2	6,333
Himachal Pradesh	38.3	0.7	0.0	0.1	61.0	0.0	2,400
Jammu & Kashmir	19.5	1.9	0.1	0.4	77.9	0.2	5,966
Jharkhand	10.1	16.2	0.3	10.0	62.0	1.5	8,302
Karnataka	18.7	11.9	0.1	0.5	66.2	2.6	24,711
Kerala	64.7	19.8	0.4	2.8	12.4	0.0	3,998
Madhya Pradesh	5.0	15.5	0.4	0.7	77.4	1.0	18,740
Maharashtra	23.9	19.9	3.8	1.3	50.8	0.3	29,925
Manipur	18.5	22.6	9.5	1.7	46.7	0.9	5,488
Meghalaya	57.4	2.9	0.0	3.4	36.3	0.0	3,052
Mizoram	49.8	4.9	0.8	6.0	25.6	13.0	3,545
Mumbai*	36.4	33.4	0.3	0.9	29.1	0.0	3,194
Nagaland	32.8	9.8	3.0	5.1	41.7	7.7	4,408
Odisha	5.6	5.9	0.8	2.6	78.6	6.3	12,731
Puducherry	73.5	0.0	0.0	0.0	26.5	0.0	800
Punjab	32.8	28.6	0.1	0.8	32.2	5.5	5,194
Rajasthan	26.3	22.8	0.0	0.4	46.3	4.1	13,518
Sikkim	15.2	20.3	0.1	0.0	64.3	0.1	1,590
Tamil Nadu	30.8	14.5	1.5	1.4	50.2	1.7	28,717
Tripura	2.8	21.3	1.3	14.8	59.8	0.0	1,600
Uttar Pradesh	24.1	30.1	1.8	0.8	43.2	0.0	25,753
Uttarakhand	19.5	28.9	0.1	0.2	51.3	0.0	5,551
West Bengal	14.2	22.9	0.2	1.3	61.5	0.0	7,982
Total	**22.1**	**18.7**	**1.4**	**2.0**	**54.4**	**1.4**	**2,94,080**

** Mumbai is not counted in the total since it is already included under Maharashtra.*

Table 9. Percent Distribution of Respondents by Current Place of Residence and State, HSS 2012-13			
State	**Urban (%)**	**Rural (%)**	**N**
Andaman & Nicobar Islands	24.7	75.3	1,597
Andhra Pradesh	29.2	70.8	25,148
Arunachal Pradesh	70.8	29.2	3,057
Assam	20.7	79.3	9,926
Bihar	24.6	75.4	10,615
Chandigarh	76.0	24.0	400
Chhattisgarh	46.1	53.9	7,109
Dadra & Nagar Haveli	35.3	64.7	399
Daman & Diu	36.3	63.7	797
Delhi	97.6	2.4	1,988
Goa	11.9	88.1	1,197
Gujarat	52.4	47.6	11,103
Haryana	40.6	59.4	6,329
Himachal Pradesh	11.3	88.7	2,399
Jammu & Kashmir	19.3	80.7	5,966
Jharkhand	42.0	58.0	8,241
Karnataka	40.6	59.4	24,680
Kerala	20.4	79.6	3,988
Madhya Pradesh	44.7	55.3	18,606
Maharashtra	46.1	53.9	29,864
Manipur	24.8	75.2	5,440
Meghalaya	16.6	83.4	3,065
Mizoram	38.3	61.7	3,539
Mumbai*	97.4	2.6	3,192
Nagaland	48.7	51.3	4,393
Odisha	31.0	69.0	12,679
Puducherry	33.3	66.8	800
Punjab	40.0	60.0	5,193
Rajasthan	48.3	51.7	13,431
Sikkim	29.5	70.5	1,575
Tamil Nadu	38.6	61.4	28,653
Tripura	31.6	68.4	1,599
Uttar Pradesh	29.5	70.5	25,677
Uttarakhand	39.8	60.2	5,532
West Bengal	28.5	71.5	7,933
Total	**37.2**	**62.8**	**2,92,918**

** Mumbai is not counted in the total since it is already included under Maharashtra.*

3.5. Current Place of Residence

HSS 2012-13 records the reported current residence of the respondent as urban or rural. If the current place of residence of the respondent was Municipal Corporation, municipal council, or cantonment area, it was classified as urban. Otherwise, it was recorded as rural.

At the national level, 63 percent of respondents reported to be currently residing in rural areas and the rest (37.0 percent) reported to be currently residing in urban areas. However, there were inter-state variations. Besides Delhi, Mumbai, and Chandigarh, which are big cities, only Arunachal Pradesh reported more than two-thirds (70.8 percent) of respondents residing in urban areas. On the other hand, the northern states of Himachal Pradesh (11.3 percent) and Jammu & Kashmir (19.3 percent), the north-eastern states of Meghalaya (16.6 percent), Assam (20.7 percent), and Manipur (24.8 percent), the coastal states of Goa (11.9 percent) and Kerala (20.4 percent), and the eastern state of Bihar (24.6 percent) had lower proportions of respondents who reported urban area as their residence (Table 9).

3.6. Current Occupation of the Respondent

Certain occupations are associated with higher exposure and risk to HIV. It is important to understand the profile of respondents with respect to their occupation. For this purpose, HSS has categorized 13 occupations, as detailed in an earlier chapter.

At the national level, the majority of the respondents (84.1 percent) were housewives, and 16 percent of respondents reported to have engaged in some occupation. Agricultural labourers accounted for 5.7 percent of respondents, followed by non-agricultural labourers (2.7 percent), and those in government or private service (2.6 percent).

In all the states, majority of respondents were housewives. Except Arunachal Pradesh (62.4 percent), Andhra Pradesh (64.7 percent), and Chhattisgarh (73.9 percent), all states had over 75 percent of respondents who were housewives. Following housewife, a high proportion of respondents reported their occupation as agricultural labourers in the erstwhile high-prevalence states of Andhra Pradesh (18.8 percent), Maharashtra (9.5 percent), Karnataka (9.3 percent), and Tamil Nadu (5 percent); the central Indian states of Chhattisgarh (11.8 percent) and Madhya Pradesh (8.8 percent); and Arunachal Pradesh (9.6 percent) in the northeast. Similarly, a higher proportion of respondents reported being in government or private service in the north-eastern states of Arunachal Pradesh (11.5 percent), Mizoram (9.9 percent), Sikkim (9.6 percent), and Nagaland (7.5 percent); and in Kerala (8.6 percent). In Arunachal Pradesh and Jammu & Kashmir, around five percent of respondents reported to be students (Table 10).

Table 10. Percent Distribution of Respondents by Occupation and State, HSS 2012-13											
State	Housewife	Agricultural labourer	Agricultural cultivator	Non-agri. labourer	Domestic servant	Skilled/semi-skilled worker	Petty business/ small shop	Service (Govt/Pvt)	Student	Other*	N
Andaman & Nicobar Islands	90.4	0.1	0.1	0.0	0.0	0.2	0.2	8.4	0.3	0.3	1,600
Andhra Pradesh	64.7	18.8	1.7	7.0	1.1	2.7	0.8	2.2	0.7	0.3	25,421
Arunachal Pradesh	62.4	9.6	4.3	0.9	0.5	0.9	4.1	11.5	5.4	0.5	3,076
Assam	94.5	0.4	0.1	1.1	0.1	0.3	0.6	2.5	0.3	0.2	9,976
Bihar	89.6	1.6	0.0	2.7	0.3	0.6	0.9	0.9	3.0	0.5	10,688
Chandigarh	92.5	0.0	0.0	0.3	1.3	0.8	0.5	4.0	0.5	0.3	400
Chhattisgarh	73.9	11.8	0.0	5.9	0.8	2.0	0.6	3.5	1.1	0.2	7,159
Dadra & Nagar Haveli	90.2	1.0	0.3	0.0	0.5	5.8	0.3	1.3	0.8	0.0	399
Daman & Diu	92.0	0.0	0.0	0.5	0.4	3.1	0.1	3.6	0.1	0.1	800
Delhi	96.7	0.1	0.0	0.1	0.3	0.9	0.2	1.4	0.0	0.4	1,997
Goa	93.5	0.1	0.0	0.3	0.4	0.8	0.2	4.2	0.0	0.7	1,200
Gujarat	86.4	3.9	0.4	3.7	0.9	1.0	0.6	2.0	0.4	0.6	11,167
Haryana	92.8	0.3	0.1	1.5	1.7	0.4	0.4	1.5	1.2	0.1	6,334
Himachal Pradesh	91.5	0.3	1.4	0.2	0.0	0.3	0.3	4.7	1.1	0.0	2,400
Jammu & Kashmir	87.7	0.5	0.1	0.5	0.1	1.4	0.4	4.0	5.1	0.2	5,975
Jharkhand	89.8	1.2	2.3	1.8	0.1	0.4	0.3	2.2	1.7	0.1	8,347
Karnataka	76.7	9.3	0.9	4.3	3.6	2.3	0.5	1.7	0.2	0.4	24,743
Kerala	86.4	0.1	0.2	0.5	0.3	1.7	0.3	8.6	1.6	0.3	3,999
Madhya Pradesh	81.4	8.8	1.0	3.7	0.6	0.8	1.0	2.2	0.4	0.2	18,763
Maharashtra	81.3	9.5	2.0	2.8	0.5	0.8	0.5	2.2	0.3	0.2	29,954
Manipur	83.8	3.2	1.3	1.0	0.2	2.6	2.3	3.0	0.9	1.6	5,503
Meghalaya	78.9	4.2	1.6	3.3	1.9	0.7	1.5	4.8	3.1	0.1	3,073
Mizoram	79.5	2.4	0.2	1.3	0.2	1.3	2.9	9.9	1.6	0.7	3,554
Mumbai**	92.2	0.1	0.0	0.5	1.9	0.7	0.5	3.6	0.1	0.4	3,197
Nagaland	84.0	1.4	3.3	0.6	0.1	0.1	2.0	7.5	0.1	0.9	4,414
Odisha	91.6	2.2	0.1	2.5	0.3	0.4	0.4	2.3	0.1	0.3	12,779
Puducherry	93.8	0.6	0.0	0.4	0.3	0.1	0.0	4.1	0.8	0.0	800
Punjab	93.9	0.3	0.0	0.9	0.1	0.4	0.8	3.1	0.3	0.2	5,193
Rajasthan	85.4	4.1	1.1	2.2	0.4	1.5	0.8	2.1	2.3	0.2	13,562
Sikkim	83.7	2.1	0.7	0.6	0.3	0.3	1.8	9.6	0.3	0.8	1,598
Tamil Nadu	86.4	5.0	1.1	2.1	0.7	1.1	0.4	2.2	0.6	0.4	28,730
Tripura	96.9	0.0	0.0	0.3	0.0	0.8	0.2	1.6	0.2	0.0	1,600
Uttar Pradesh	92.4	0.8	0.6	0.8	0.2	1.0	0.6	1.8	1.7	0.2	25,778
Uttarakhand	89.8	4.3	0.1	0.6	0.3	0.3	0.5	3.3	0.6	0.1	5,547
West Bengal	94.1	0.7	0.0	1.8	0.6	0.6	0.5	0.7	0.5	0.5	7,993
Total	**84.1**	**5.7**	**1.0**	**2.7**	**0.8**	**1.2**	**0.7**	**2.6**	**1.0**	**0.3**	**2,94,522**

**Others- include large business, self-employed, truck driver helper, local transport workers and hotel staffs*

*** Mumbai is not counted in the total since it is already included under Maharashtra.*

3.7. Current Occupation of Spouse

The respondents were also asked about the current occupation of their spouses. Occupation of spouse is an important epidemiological variable that may help identify population groups at higher risk of acquiring HIV. HSS used the same occupational categories as those used for the respondent. The two differences were that the category 'unemployed' (Code 13) is used in the place of 'housewife' and there is an additional category 'not applicable' (for never married/widowed/divorced/ separated)' (Code 99).

At the national level, non-agricultural labourers (19.1 percent), service (govt/pvt) (16.3 percent), skilled/ semi-skilled workers (15.4 percent), agricultural labourers (15.2 percent), and petty business/small shops (10.7 percent) were the predominant occupations of the spouses of respondents, accounting for more than three-fourths (77.0 percent) of all respondents. Local transport workers (7.2 percent) and agricultural cultivators/landlords (6.1 percent) were other important spousal occupations. Only around two percent of respondents reported that their spouse was unemployed. Similar patterns were noted across the states with certain inter-state variations (Table 11).

Table 11. Percent Distribution of Respondents by the Occupation of Spouse and State, HSS 2012-13

State	Agricultural labourer	Local transport worker	Hotel staff	Agricultural cultivator	Unemployed	Non-agricultural labourer	Domestic servant	Skilled /semi-skilled worker	Petty business / small shop	Large business/ self employed	Service (govt/pvt)	Student	Truck driver/helper	Not applicable	N
A and N Islands	3.1	8.1	1.2	8.9	4.2	10.7	0.1	6.9	5.3	5.6	44.0	0.3	1.4	0.3	1,599
Andhra Pradesh	26.9	6.6	0.8	5.1	0.3	18.6	0.1	15.7	6.1	2.1	13.1	0.4	4.1	0.1	25,418
Arunachal Pradesh	9.7	6.5	0.6	8.9	7.8	3.0	2.2	8.3	10.4	5.5	28.6	3.8	2.8	1.8	3,076
Assam	11.8	7.9	0.9	8.7	0.7	14.4	0.8	11.1	22.6	5.7	13.8	0.2	1.4	0.0	9,976
Bihar	14.0	5.9	1.3	3.6	2.0	19.7	0.4	17.6	12.8	5.3	13.3	2.1	2.0	0.0	10,683
Chandigarh	1.8	6.3	0.8	4.5	0.8	16.5	1.8	12.3	7.5	2.3	44.3	1.3	0.3	0.0	400
Chhattisgarh	21.2	7.6	1.0	3.8	0.6	15.6	0.7	17.2	11.5	1.9	16.7	0.2	1.7	0.2	7,151
DN Haveli	2.8	6.0	0.8	1.5	1.3	1.5	0.3	77.9	3.0	0.3	3.3	0.8	0.8	0.0	398
Daman & Diu	0.5	5.1	2.4	0.0	0.4	24.0	0.4	30.1	6.3	2.5	27.9	0.0	0.4	0.1	800
Delhi	0.2	8.2	1.0	0.0	0.7	3.5	0.3	38.5	14.1	2.4	29.3	0.4	1.6	0.1	1,999
Goa	1.6	15.9	2.9	0.2	0.9	10.2	0.1	21.2	6.0	6.1	33.7	0.0	0.8	0.4	1,196
Gujarat	17.3	7.2	0.6	2.3	0.4	23.3	0.4	17.6	8.9	3.8	16.3	0.9	1.1	0.1	11,147
Haryana	6.6	4.1	0.6	5.3	2.0	28.8	0.7	13.3	12.0	1.7	19.6	3.1	2.2	0.0	6,334
Himachal Pradesh	8.0	4.5	1.2	10.2	0.4	9.1	0.5	10.8	10.9	1.4	39.3	0.5	3.3	0.0	2,400
Jammu & Kashmir	10.7	7.9	0.6	6.2	2.1	13.7	0.7	11.9	13.4	4.6	23.3	2.6	2.2	0.1	5,973
Jharkhand	10.4	7.6	1.4	6.0	2.5	17.6	0.4	12.6	13.2	1.6	23.3	1.6	1.6	0.1	8,336
Karnataka	23.4	7.9	1.8	7.8	0.2	27.3	0.2	9.9	7.8	2.4	8.4	0.1	2.6	0.1	24,704
Kerala	2.5	12.0	1.5	1.7	0.3	13.7	0.1	29.8	7.4	2.7	26.6	0.0	1.9	0.0	3,998

Table 11. Percent Distribution of Respondents by the Occupation of Spouse and State, HSS 2012-13 (Cont...)

State	Agricultural labourer	Local transport worker	Hotel staff	Agricultural cultivator	Unemployed	Non-agricultural labourer	Domestic servant	Skilled /semi-skilled worker	Petty business / small shop	Large business/ self employed	Service (govt/pvt)	Student	Truck driver/helper	Not applicable	N
Madhya Pradesh	20.0	4.5	1.1	8.0	1.3	19.7	0.6	13.9	12.0	2.0	13.8	1.6	1.5	0.0	18,742
Maharashtra	17.1	8.2	1.2	7.7	0.3	17.3	0.3	16.2	10.2	1.8	17.4	0.2	2.0	0.1	29,941
Manipur	16.5	4.9	0.1	7.8	10.0	7.3	0.6	13.4	12.5	4.9	17.0	1.4	3.6	0.0	5,498
Meghalaya	14	6.6	0.0	2.6	5.7	33	2.5	8.1	10.8	1.6	10.7	1.3	2.7	0.5	3,070
Mizoram	11.1	7.9	0.1	2.1	17.5	14.2	0.5	6.5	3.2	3.0	26.6	1.8	2.1	3.5	3,545
Mumbai*	0.6	14.2	1.8	0.1	0.4	7.8	0.4	32.2	10.3	1.7	29.2	0.2	1.3	0.0	3,196
Nagaland	9.1	3.6	0.1	13.6	13.4	5.9	0.2	6.9	11.4	3.7	31.2	0.4	0.6	0.1	4,405
Odisha	11.2	6.2	1.8	13.8	0.5	17.0	0.3	13.6	14.3	3.8	14.9	0.1	2.3	0.1	12,740
Puducherry	18.5	9.3	1.5	0.5	0.1	22.0	0.0	21.9	4.1	1.5	19.0	0.3	1.4	0.0	800
Punjab	10.1	3.9	0.5	6.0	0.9	34.5	0.3	15.7	9.5	1.2	15.3	0.3	1.5	0.0	5,194
Rajasthan	11.3	7.0	1.2	3.9	1.0	17.8	0.3	17.0	13.1	4.5	16.8	4.5	1.5	0.0	13,553
Sikkim	9.4	14.3	2.1	20.9	2.4	4.8	0.1	6.7	8.5	2.5	26.6	0.6	0.9	0.2	1,592
Tamil Nadu	14.9	9.4	2.2	3.1	0.2	21.9	0.4	25.0	4.9	3.0	11.7	0.1	3.1	0.1	28,714
Tripura	10.4	8.9	0.3	2.3	2.1	10.9	0.0	20.6	22.7	2.4	17.5	0.1	1.9	0.0	1,600
Uttar Pradesh	10.4	6.8	1.2	6.9	3.4	17.8	0.5	13.6	14.2	4.3	15.6	3.2	2.0	0.1	25,776
Uttarakhand	9.0	6.0	6.7	0.6	1.3	10.0	1.3	8.0	12.6	3.2	38.4	1.1	1.8	0.0	5,552
West Bengal	12.8	6.9	1.1	5.6	1.0	31.3	0.4	15.1	15.7	1.3	7.4	0.1	1.1	0.0	7,988
Total	**15.2**	**7.2**	**1.3**	**6.1**	**1.7**	**19.1**	**0.4**	**15.4**	**10.7**	**3.0**	**16.3**	**1.1**	**2.2**	**0.1**	**2,94,295**

** Mumbai is not counted in the total since it is already included under Maharashtra.*

3.8. Migration Status of Spouse

In order to assess the relationship between spousal migration status and HIV prevalence among ANC clinic attendees, respondents in HSS were asked whether spouse resides in another place/town away from wife for work for longer than 6 months. This question was not applicable to those respondents who were never married/widowed/divorced/separated.

At the national level, six percent of respondents reported that their spouses were migrants, though there were significant inter-state variations. The highest proportion of respondents with a migrant spouse was Bihar (30.3 percent), followed by other north Indian states of Uttarakhand (18.2 percent), Jharkhand (14.0 percent), and Uttar Pradesh (13.2 percent). The eastern states of West Bengal (11.3 percent) and Odisha (8.0 percent); the north-eastern states of Sikkim (10.1 percent), Mizoram (8.6 percent), and Manipur (7.3 percent); and the southern state of Kerala (12.2 percent) also showed higher proportions of respondents with a migrant spouse (Table 12).

Table 12.Percentage of Respondents with Migrant Spouse and State, HSS 2012-13		
State	**% respondents with migrant spouse**	**N**
Andaman & Nicobar Islands	2.1	1,583
Andhra Pradesh	1.4	25,344
Arunachal Pradesh	3.8	2,993
Assam	5.3	9,947
Bihar	30.3	10,514
Chandigarh	0.0	400
Chhattisgarh	3.6	7,062
Dadra & Nagar Haveli	1.5	399
Daman & Diu	5.0	793
Delhi	2.1	1,985
Goa	1.1	1,193
Gujarat	1.3	11,026
Haryana	1.4	6,328
Himachal Pradesh	2.0	2,399
Jammu & Kashmir	4.0	5,964
Jharkhand	14	8,262
Karnataka	1.1	24,578
Kerala	12.2	3,995
Madhya Pradesh	2.1	18,551
Maharashtra	1.7	29,795
Manipur	7.3	5,429
Meghalaya	1.0	3,024
Mizoram	8.6	3,427
Mumbai*	4.8	3,188
Nagaland	3.1	4,299
Odisha	8.0	12,686
Puducherry	0.9	800
Punjab	3.2	5,188
Rajasthan	5.7	13,416
Sikkim	10.1	1,561
Tamil Nadu	4.4	28,682
Tripura	2.7	1,595
Uttar Pradesh	13.2	25,583
Uttarakhand	18.2	5,521
West Bengal	11.3	7,896
Total	**6.0**	**2,92,218**

** Mumbai is not counted in the total since it is already included under Maharashtra.*

CHAPTER 4

LEVELS OF HIV PREVALENCE AMONG ANC CLINIC ATTENDEES

HIV sentinel surveillance is the primary source of information on the levels of HIV prevalence among various population groups across the country. HIV prevalence is the proportion of respondents who are found HIV positive at a given point of time in a specified geographic area. HIV prevalence indicates the burden of the epidemic in different population groups. HIV prevalence among ANC clinic attendees is considered a proxy for HIV burden in the general population. In the Indian context, HIV prevalence of 1 percent or more among ANC clinic attendees is considered high level; 0.5-0.99 percent is considered moderate; and less than 0.5 percent is considered low HIV prevalence. This chapter describes the levels of HIV prevalence among ANC clinic attendees at national, state, and district levels in 2013.

4.1. HIV Prevalence at National Level

Figure 7 depicts the overall HIV prevalence at national level among ANC clinic attendees from HSS 2012-13 and HRG and bridge populations from the HSS 2010-11, based on valid sites. The HIV prevalence observed among ANC clinic attendees, considered a proxy for HIV prevalence in the general population, during 2012-13 was 0.35 percent (90 percent CI: 0.33-0.37).

The data show that India has a low-level HIV epidemic. As noted in the graph, HIV prevalence among the general population is several times lower than that among high-risk groups (HRGs); hence, the epidemic in India is known as 'concentrated epidemic.'

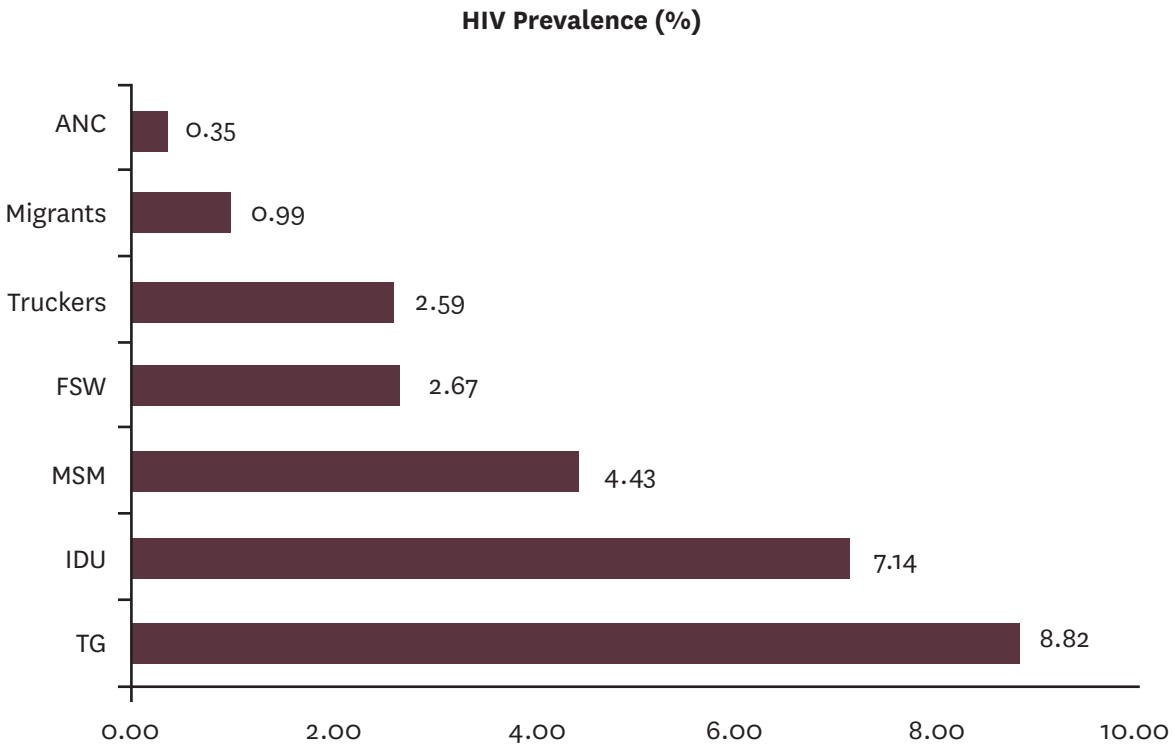

Figure 7. HIV Prevalence (%) among ANC Clinic Attendees (2012-13) and Other Risk Groups (2010-11), India

4.2. HIV Prevalence at State Level

The spread of HIV in India is heterogeneous, as it is evident from the considerable variation in the HIV prevalence among ANC clinic attendees across various states and union territories (UTs). As in HSS 2010-11, all states recorded less than 1 percent prevalence among ANC clinic attendees during 2012-13 rounds and portrayed low to moderate levels of HIV. However, 11 states recorded higher prevalence than the national average, including the six erstwhile high prevalence states, Mizoram in the northeast and four low/moderate prevalence states of Chhattisgarh, Gujarat, Delhi, and Punjab.

HIV prevalence among ANC clinic attendees was the highest in Nagaland (0.88 percent), followed by Mizoram (0.67 percent), Manipur (0.64 percent), Mumbai (0.63 percent), Andhra Pradesh (0.59 percent), Karnataka (0.54 percent), Chhattisgarh (0.52 percent), Gujarat (0.50 percent), Delhi (0.40 percent), Maharashtra (0.40 percent), Punjab (0.37 percent),and Tamil Nadu (0.36 percent) (Figure 8). Bihar (0.33 percent), Rajasthan (0.32 percent), and Odisha (0.31 percent) recorded HIV prevalence slightly lower than the national average. Four UTs (Puducherry, Dadra & Nagar Haveli, Chandigarh, and Andaman & Nicobar Islands) recorded zero prevalence during the 13th round of HSS (Table 13).

The data showed that while the erstwhile high-prevalence states of south India and the north-east had moderate to low levels of HIV prevalence in 2013, they continue to be higher than most other states in the country. Tamil Nadu, among the erstwhile high-prevalence states, had the lowest HIV prevalence (0.36 percent) among ANC clinic attendees. On the other hand, certain low-prevalence states showed HIV prevalence higher than Tamil Nadu and Maharashtra and demand focused attention under the National AIDS Control Programme. Figure 9 shows the map of India where states are colour-coded according to four HIV prevalence categories. Since no state has high HIV prevalence of 1 percent or more, low, and moderate levels have been further divided into four categories for better depiction of inter-state variations.

Table 13. HIV Prevalence among ANC Clinic Attendees with 90 percent CI by state, HSS 2012-13	
State	**HIV prevalence (%) (90 percent CI)**
Andaman & Nicobar Islands	0.00 (0.00-0.00)
Andhra Pradesh	0.59 (0.51-0.67)
Arunachal Pradesh	0.26 (0.11-0.41)
Assam	0.16 (0.09-0.23)
Bihar	0.34 (0.25-0.43)
Chandigarh	0.00 (0.00-0.00)
Chhattisgarh	0.52 (0.38-0.66)
Dadra & Nagar Haveli	0.00 (0.00-0.00)
Daman & Diu	0.13 (0.00-0.34)
Delhi	0.40 (0.17-0.63)
Goa	0.25 (0.01-0.49)
Gujarat	0.50 (0.39-0.61)
Haryana	0.17 (0.08-0.26)
Himachal Pradesh	0.04 (0.00-0.11)
Jammu & Kashmir	0.07 (0.01-0.13)
Jharkhand	0.19 (0.11-0.27)
Karnataka	0.54 (0.46-0.62)
Kerala	0.03 (0.00-0.08)
Madhya Pradesh	0.14 (0.10-0.18)
Maharashtra	0.40 (0.34-0.46)
Manipur	0.64 (0.46-0.82)
Meghalaya	0.26 (0.11-0.41)
Mizoram	0.67 (0.44-0.90)
Mumbai	0.63 (0.40-0.86)
Nagaland	0.88 (0.65-1.11)
Odisha	0.31 (0.23-0.39)
Puducherry	0.00 (0.00-0.00)
Punjab	0.37 (0.23-0.51)
Rajasthan	0.32 (0.24-0.40)
Sikkim	0.19 (0.01-0.37)
Tamil Nadu	0.36 (0.30-0.42)
Tripura	0.19 (0.01-0.37)
Uttar Pradesh	0.18 (0.14-0.22)
Uttarakhand	0.27 (0.16-0.38)
West Bengal	0.19 (0.11-0.27)
India	**0.35 (0.33-0.37)**

Data presented only from the valid sites

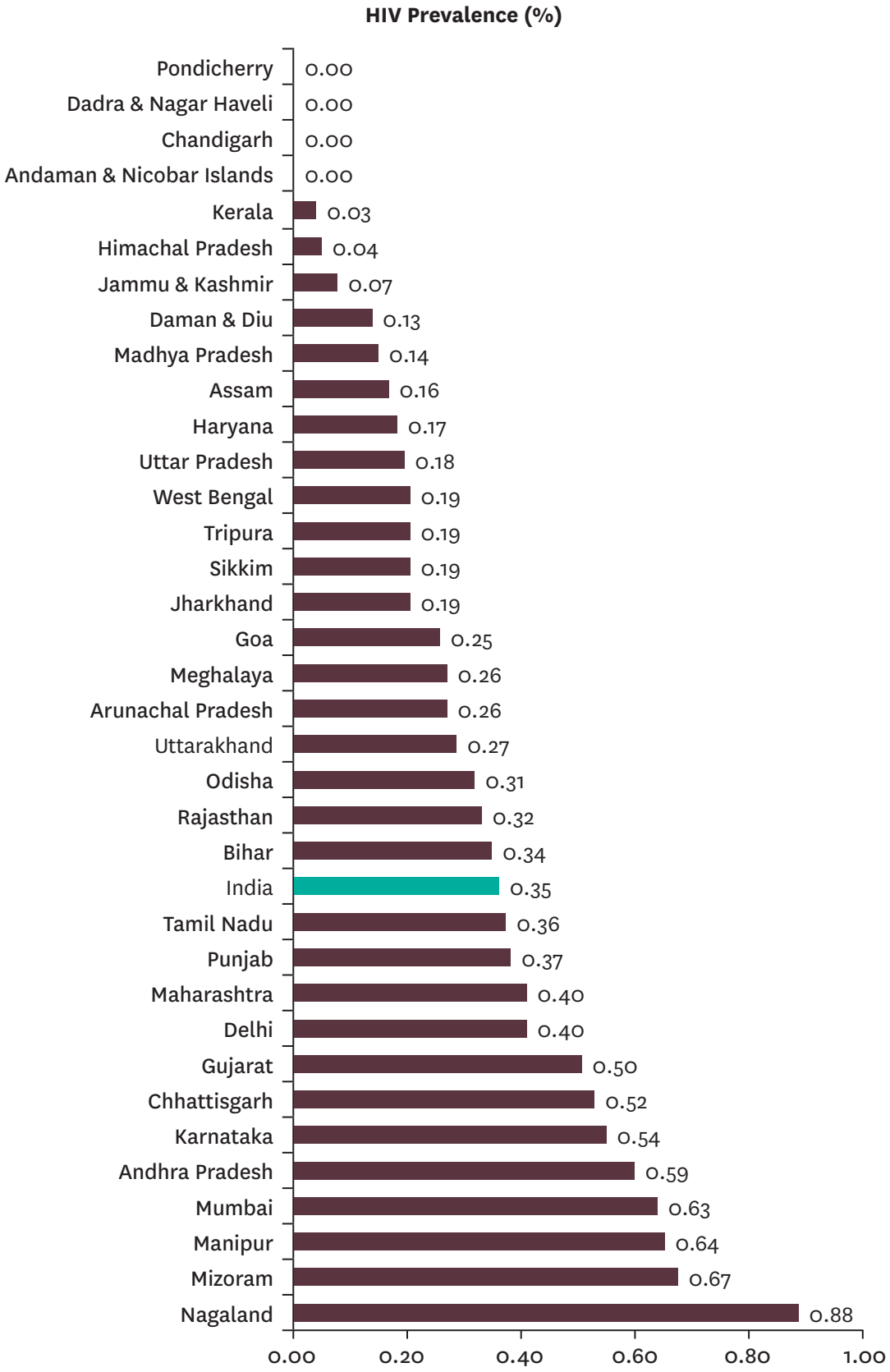

Figure 8. HIV Prevalence (%) among ANC Clinic Attendees by State, HSS 2012-13

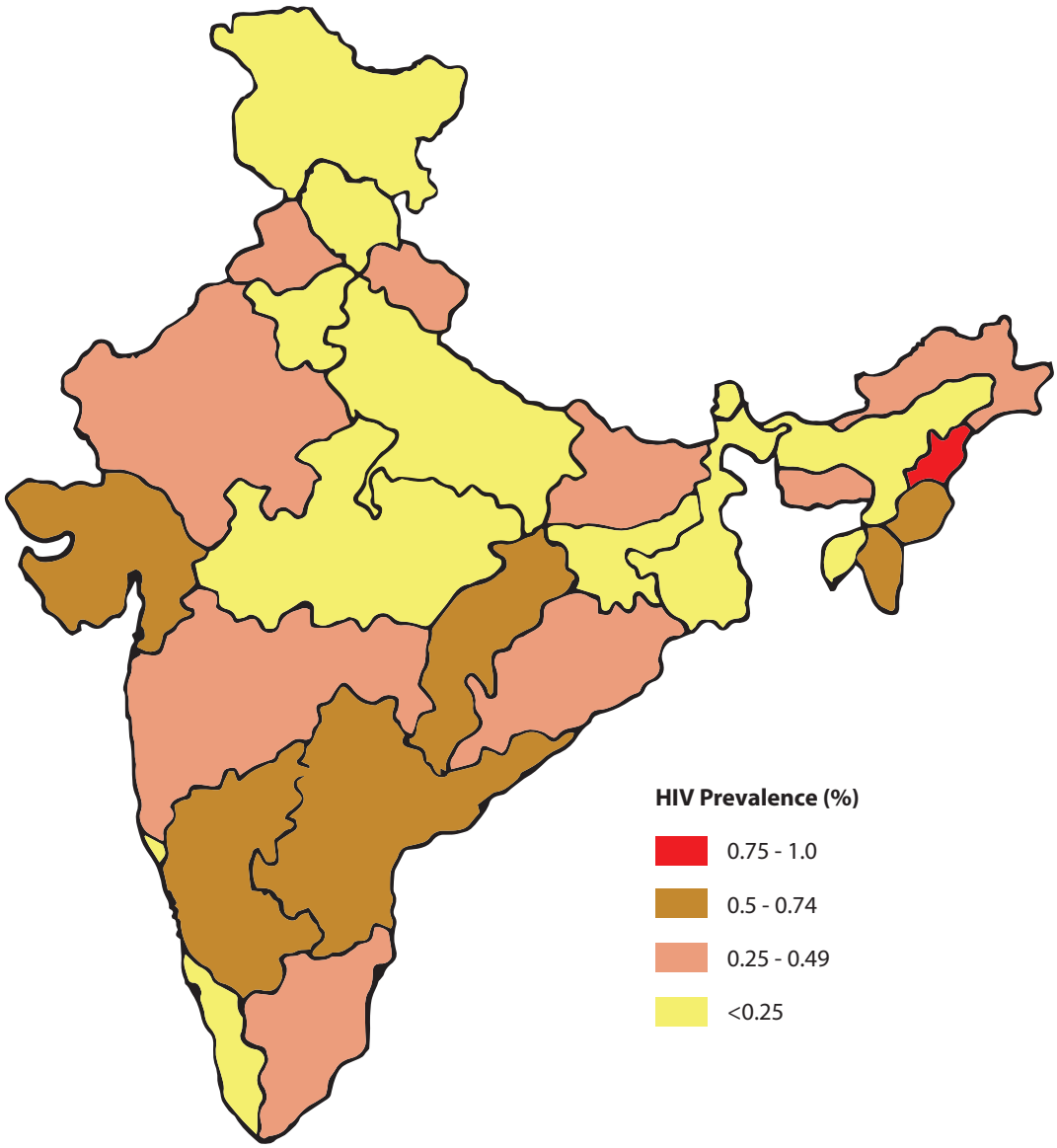

Figure 9. State Categories Based on Levels of HIV Prevalence (%) among ANC Clinic Attendees, HSS 2012-13

4.3. HIV Prevalence at District/Site Levels

HIV prevalence among ANC clinic attendees at different sentinel sites shows the heterogeneous distribution of the HIV epidemic and also the emerging pockets of HIV infection. Table 14 summarizes the distribution of high HIV-prevalence sites among ANC clinic attendees in India. There were 80 sentinel sites in 73 districts across 19 states that recorded a prevalence of 1 percent or more during the 13th round of HSS. Of them, 53 (64 percent) were from the known high-prevalence southern and north-eastern states of Andhra Pradesh (16 sites), Karnataka (9), Maharashtra (9), Tamil Nadu (9), Manipur (4), Nagaland (4), and Mizoram, with two.

Among the low/moderate prevalence states, Bihar, Chhattisgarh, Gujarat, Odisha, Rajasthan, and Uttar Pradesh had three or more sites each with HIV prevalence of 1 percent or more among ANC attendees in 2012-13. In Bihar and Uttar Pradesh, the high-prevalence sites were concentrated in the northern and eastern areas, respectively. Sites with prevalence of 1 percent or more have also been observed in Jharkhand (1), West Bengal

(1), Arunachal Pradesh (1), Meghalaya (1), Madhya Pradesh (1), and Uttarakhand (1). Of the 80 sentinel sites that recorded a prevalence of 1 percent or more, 12 showed prevalence of 2 percent or more. The list of these high-prevalence sites is provided in Annex 5.

It is important to note that of the 80 sentinel sites that showed 1 percent or more HIV prevalence among ANC clinic attendees, 24 showed this level for the first time; 9 were in erstwhile high-prevalence states, and 15 were in low/moderate prevalence states. Though it may be due to sampling variation and needs corroboration with data from upcoming rounds of HSS and other programme data, it is important that NACO and the Ministry be alerted to emerging pockets of HIV prevalence.

There were also 169 sites across 152 districts in 25 states that showed moderate HIV prevalence of 0.50-0.99 percent during HSS 2012-13. Of these, 34 sites showed moderate levels of HIV prevalence for the first time and may be explored under the NACP as emerging pockets of HIV. Except five sites in erstwhile high-prevalence states, all 29 sites are in low/moderate prevalence states. A list of emerging pockets of HIV is provided in Annex 6.

Since some of the districts have more than one ANC sentinel site, the district-level HIV prevalence was obtained by aggregating data from all sentinel sites in the district. Figure 10 shows the map of India, with districts colour-coded as low (<0.50 percent), moderate (0.50-0.99 percent), and high (>= 1.00 percent) based on HIV prevalence among ANC clinic attendees in HSS 2012-13. Overall, 37 districts in the country recorded a prevalence of 1.00 percent or more during HSS 2012-13. Fifteen of these were from the southern and north-eastern states of Andhra Pradesh (3), Karnataka (2), Manipur (2), Mizoram (2), Nagaland (3), and Tamil Nadu (3). The remaining 22 districts are in the low-to-moderate-prevalence states of north India. 130 districts showed moderate HIV prevalence of 0.50-0.99 percent among ANC clinic attendees, while 381 districts showed low HIV prevalence of less than 0.50 percent.

Table 14. State-wise Number of ANC Sentinel Sites with High HIV Prevalence by State, HSS 2012-13

State	No. of sites with ANC HIV prevalence of 1 percent or more	No. of sites with ANC HIV prevalence of 2 percent or more
Andhra Pradesh	16	1
Arunachal Pradesh	1	-
Bihar	3	-
Chhattisgarh	4	1
Gujarat	3	1
Jharkhand	1	-
Karnataka	9	2
Madhya Pradesh	1	-
Maharashtra	9	-
Manipur	4	1
Meghalaya	1	-
Mizoram	2	1
Nagaland	4	2
Odisha	4	-
Rajasthan	4	1
Tamil Nadu	9	2
Uttar Pradesh	3	-
Uttarakhand	1	-
West Bengal	1	-
Total	**80**	**12**

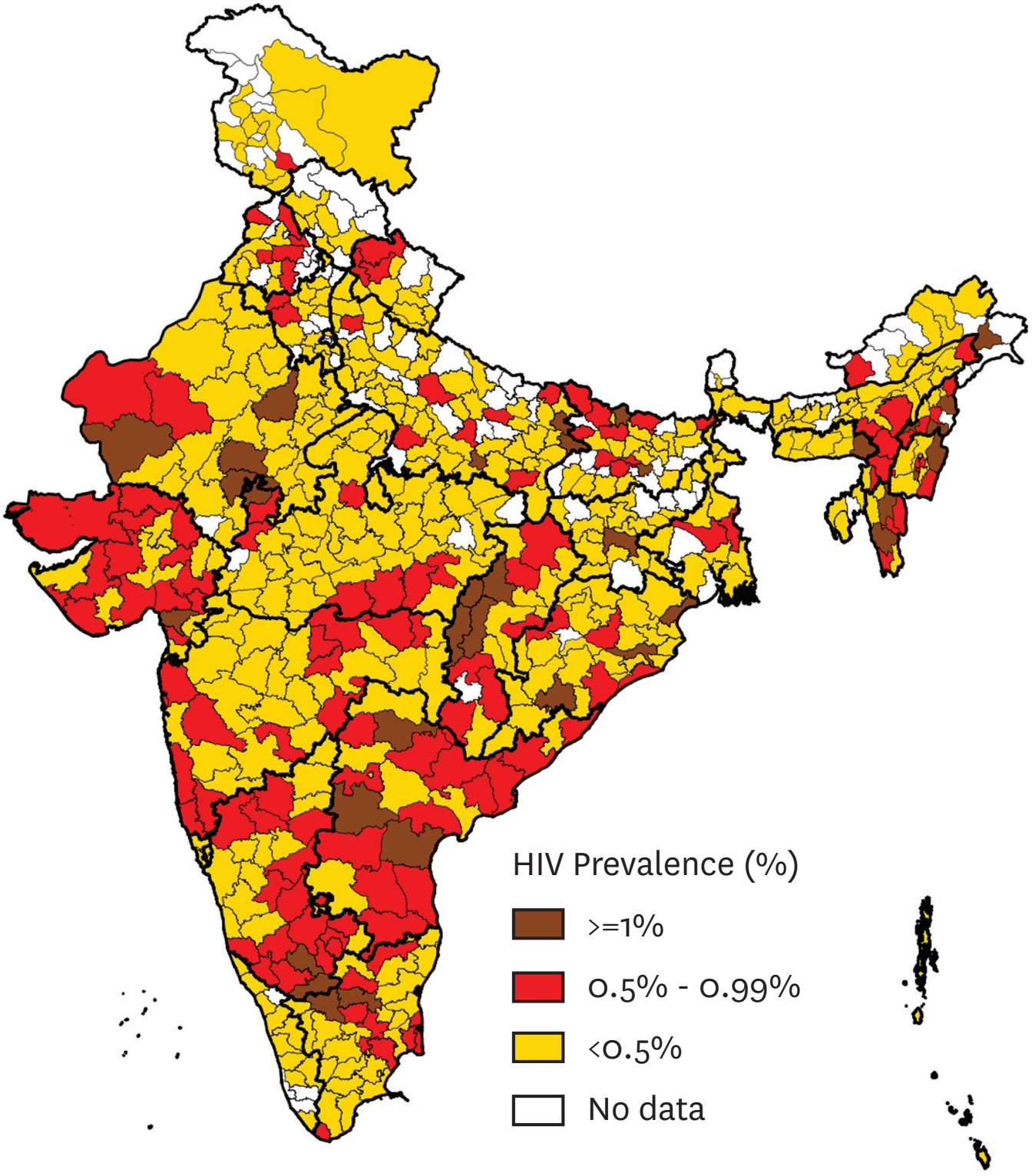

Figure 10. District-wise HIV Prevalence (%) among ANC Clinic Attendees, HSS 2012-13

4.4. Variations in the Number of High HIV-Prevalence Sites over Time

It may also be noted that the number of high HIV prevalence sites in the country has been decreasing. In 2003, more than one-third (140 sites, 34 percent) of ANC sentinel sites of a total of 416 valid sites, showed a prevalence of 1.00 percent or more among ANC clinic attendees. In 2006, of the total 566 valid ANC sites, 26 percent (145 sites) recorded an HIV prevalence of 1.00 percent or more. On the other hand, during 2013, only 11 percent (80 sites) of the total 741 valid sites recorded an HIV prevalence of 1.00 percent or more.

If we examine the variations in the number of high HIV-prevalence sites over time among the sentinel sites that are consistent from 2003 onward, we see a similar trend. Figure 11 depicts the change in number of ANC sentinel sites among the consistent sites and across different HIV prevalence levels. The figure shows that while the high-prevalence sites decreased in number, low- and moderate-prevalence sites increased. This pattern reflects the overall declining HIV epidemic in the country and is consistent with the national-level trends of HIV prevalence, as will be presented subsequently.

Examining these variations at state level (Table 15) showed that while the number of high HIV-prevalence sites decreased in number in the erstwhile high-prevalence states, the number of such sites increased in the low/moderate-prevalence states of north India. This is a result of successful prevention and control measures in the erstwhile high-prevalence states, and simultaneously highlights emerging sites in the low/moderate-prevalence states that need more programmatic focus. The same is also reflected in the three district maps of India depicting district-level HIV prevalence among ANC clinic attendees in 2003, 2006, and 2013, which clearly show the reduction in the number of high-prevalence sites in the southern and north-eastern parts of the country and the emergence of many newer pockets with high-and moderate-HIV prevalence in the other regions over the last decade (Figure 12).

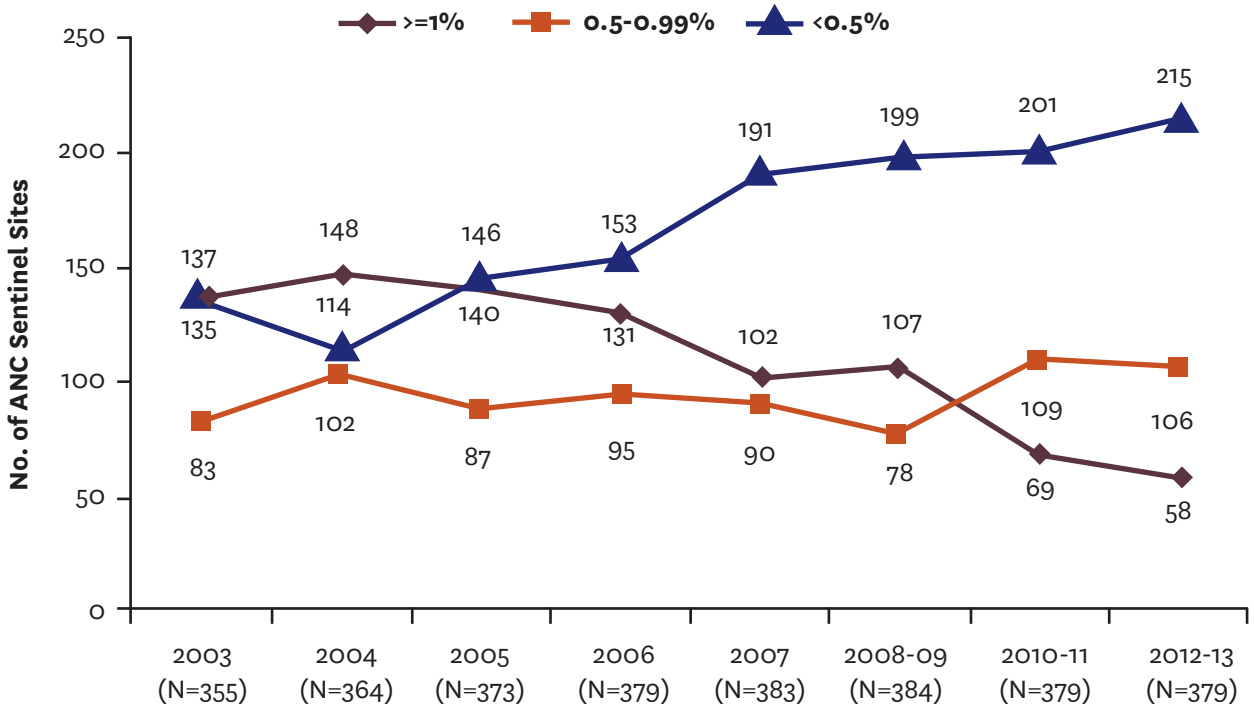

Figure 11. Number of ANC Sentinel Sites among the Consistent Sites by HIV-Prevalence Level from 2003 to 2013

Table 15. Number of ANC Sentinel Sites with High HIV-Prevalence (> = 1 percent) over time by State, HSS 2012-13							
State	**2004**	**2005**	**2006**	**2007**	**2008-09**	**2010-11**	**2012-13**
Mumbai	3	3	4	5	4	1	
Nagaland	5	8	6	4	9	4	4
Manipur	9	9	8	6	4	3	4
Tamil Nadu	19	14	13	14	10	9	9
Maharashtra	30	34	28	22	13	12	9
Andhra Pradesh	32	32	30	29	32	20	16
Karnataka	37	31	32	21	25	16	9
Total	**135**	**131**	**121**	**101**	**97**	**65**	**51**
Bihar	0	1	1	3	3	0	3
Chhattisgarh	0	0	0	1	4	3	4
Gujarat	0	2	6	2	4	5	3
Jharkhand	0	0	0	0	2	1	1
Rajasthan	0	1	1	0	1	4	4
Madhya Pradesh	1	0	4	1	4	3	1
Odisha	1	1	4	2	10	4	4
Mizoram	2	2	2	2	3	1	2
Uttar Pradesh	2	0	3	0	2	3	3
West Bengal	2	3	2	2	0	0	1
Total	**8**	**10**	**23**	**13**	**33**	**24**	**26**

** Mumbai is not counted in the total since it is already included under Maharashtra.*

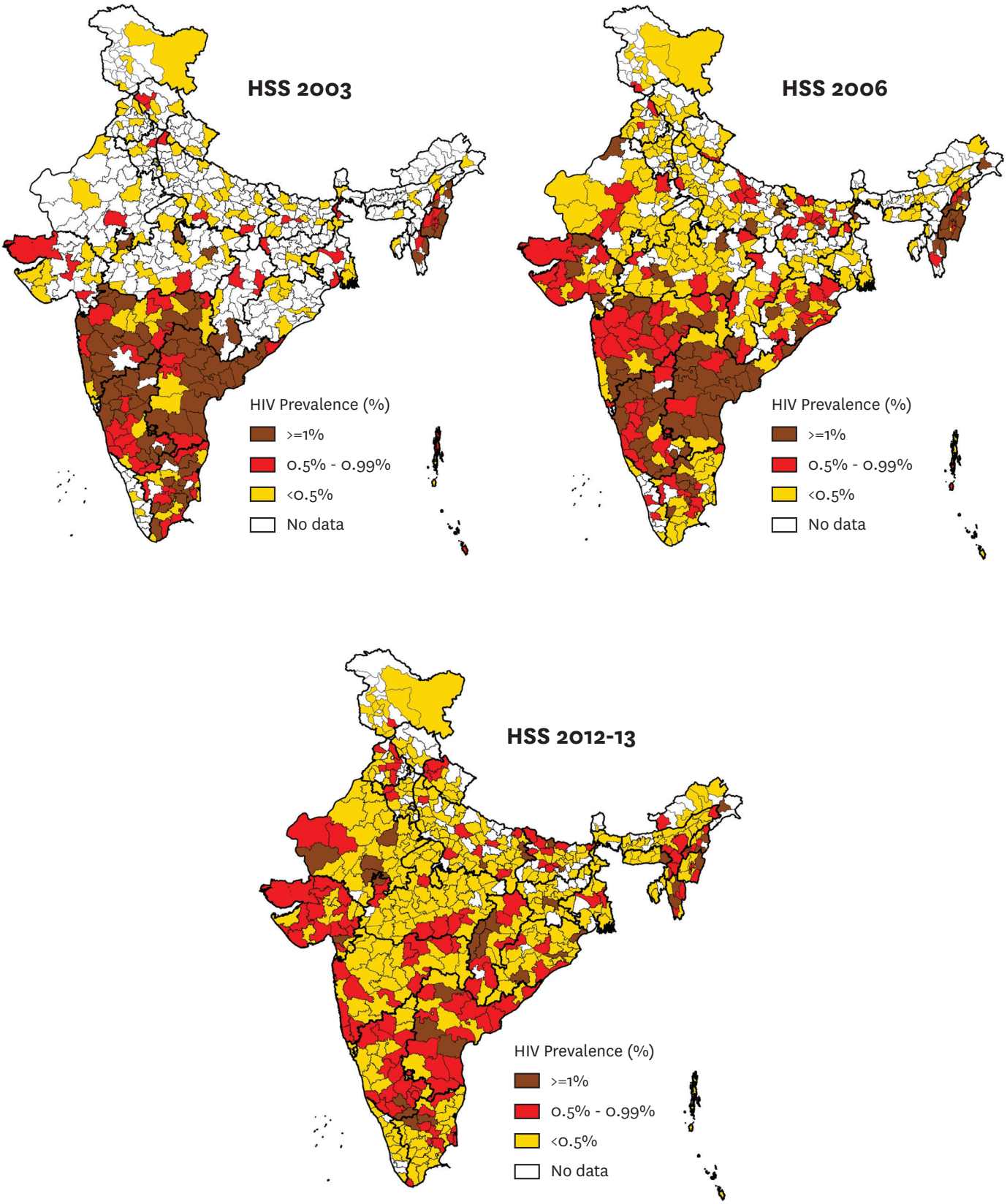

Figure 12. District-wise HIV Prevalence (%) among ANC Clinic Attendees, HSS 2003, 2006,and 2012-13

Amidst these variations in the HIV prevalence at district/site levels in several pockets, a few have tended to remain above 1 percent level for the last decade (Table 16), despite focused and scaled-up HIV prevention and control interventions in those districts. Overall, there are 41 sentinel sites in 38 districts where HIV prevalence remained at or more than 1 percent over the last 5-10 years (any three or more rounds of HSS including 2013).

Five sentinel sites—Guntur (AP), West Godavari (AP), Belgaum (Karnataka), Ukhrul (Manipur), and Tiruchirapalli (TN)—have consistently shown HIV prevalence of 1 percent or more in all the last eight rounds of HSS from 2003 to 2013. Another eight sentinel sites—five in AP (Cuddapah, East Godavari, Karimnagar (2 sites), Prakasam) and one each in Karnataka (Davanagere), Nagaland (Dimapur),and Tamil Nadu (Namakkal), have shown HIV prevalence of 1 percent or more in seven of the last eight rounds of HSS from 2003 to 2013, including 2013.

There is a need to identify the reasons for the sustained high HIV prevalence in these sites, while the epidemic has, in response to the program interventions, shown a decline. Special strategies to reduce the HIV epidemic in these sites may need to be developed.

Table 16. Districts where High HIV Prevalence (>=1 percent) Persisted over the Last 5-10 Years

State (no. of districts)	Districts with ANC sentinel sites where HIV prevalence was >=1 percent in 3 or more of 8 rounds of HSS from 2003 to 2013, including 2013 (no. of rounds with high prevalence)
Andhra Pradesh (10)	Chittoor (5), Cuddapah (7), East Godavari (7), Guntur (8), Karimnagar (7), Mahbubnagar (4), Nizamabad (6), Prakasam (7), Warangal (6), West Godavari (8)
Bihar (1)	Patna (3)
Gujarat (2)	Mehsana (6), Surat (6)
Karnataka (7)	Bangalore (3), Belgaum (8), Bellary (6), Chamrajnagar (6), Davangere (7), Mandya (5), Ramnagaram (5)
Maharashtra (5)	Amaravati (3), Bhandara (4), Nanded (5), Ratnagiri (3), Mumbai (suburban) (6)
Manipur (3)	Bishnupur (4), Imphal West (6), Ukhrul (8)
Mizoram (1)	Aizawl (5)
Nagaland (3)	Dimapur (7), Phek (4), Tuensang (6)
Odisha (2)	Cuttack (3), Ganjam (6)
Tamil Nadu (4)	Dharmapuri (3), Namakkal (7), Salem (4), Tiruchirapalli (8)

CHAPTER 5

HIV PREVALENCE AMONG ANC CLINIC ATTENDEES BY BACKGROUND CHARACTERISTICS

As noted in the previous chapter, the HIV epidemic in India is a low-level concentrated epidemic with heterogeneous distribution across the various states and districts. While HIV prevalence among ANC clinic attendees reflects the epidemic patterns in the general population, this chapter provides a detailed analysis of the differentials in prevalence by various background characteristics of ANC clinic attendees to increase understanding of sub-groups that are more likely to be at risk of HIV infection. This information allows programme planners to design and prioritize interventions that are most needed.

As discussed in Chapter 3, HSS 2012-13 collected information on the following nine key demographic variables from every respondent.

1. Age
2. Literacy status
3. Order of current pregnancy
4. Source of referral to the ANC clinic
5. Current place of residence
6. Duration of stay at current place of residence
7. Current occupation of respondent
8. Current occupation of spouse
9. Migration status of spouse

The following sections present the findings for each of these background characteristics.

5.1. HIV Prevalence among ANC Clinic Attendees by Age

Age-specific HIV prevalence data from HSS 2012-13 showed that HIV prevalence was higher among the older age group of the respondents (Figure 13). ANC clinic attendees in the younger age group (15-24 years) had an HIV prevalence of 0.32 percent (n=1, 79,227), while it was 0.37 percent (n=1, 08,837) among those aged 25-34 years, and 0.49 percent (n=6,668) among those aged 35-49 years. However, when the younger age group is further broken down into 15-19 years and 20-24 years, HIV prevalence among ANC clinic attendees ages 15-19 years was 0.35 percent (n=24,650), higher than among those aged 20-24 years (0.32 percent; n=1,54,577). As noted earlier, HIV prevalence among the young is considered a proxy for new HIV infections.

At the state level, the denominators became too small to interpret for people who were 35-49 years of age. Hence, for state-level analysis, all age groups above 25 years were combined into one (25-49 years of age). Also, a minimum sample size of 300 was taken as valid for interpretation of HIV prevalence data. Data points where sample size achieved was less than 300 were not interpreted. Most of the states portray the same pattern as the national level, where HIV prevalence in 25-49 years age group is higher than in the 15-24 years age of age group (Table 17).

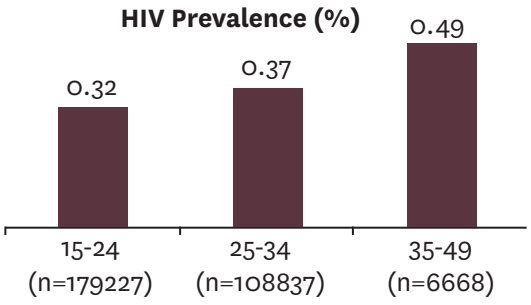

Figure 13. HIV Prevalence (%) among ANC Clinic Attendees by Age Group, India

However, there are some low-prevalence states where the situation was reversed, with higher HIV prevalence among the 15-24 years of age group, indicating a possible occurrence of more new infections in those states. This is consistent with the emerging pockets of HIV prevalence in certain low-prevalence states, noted earlier (Figure 14).

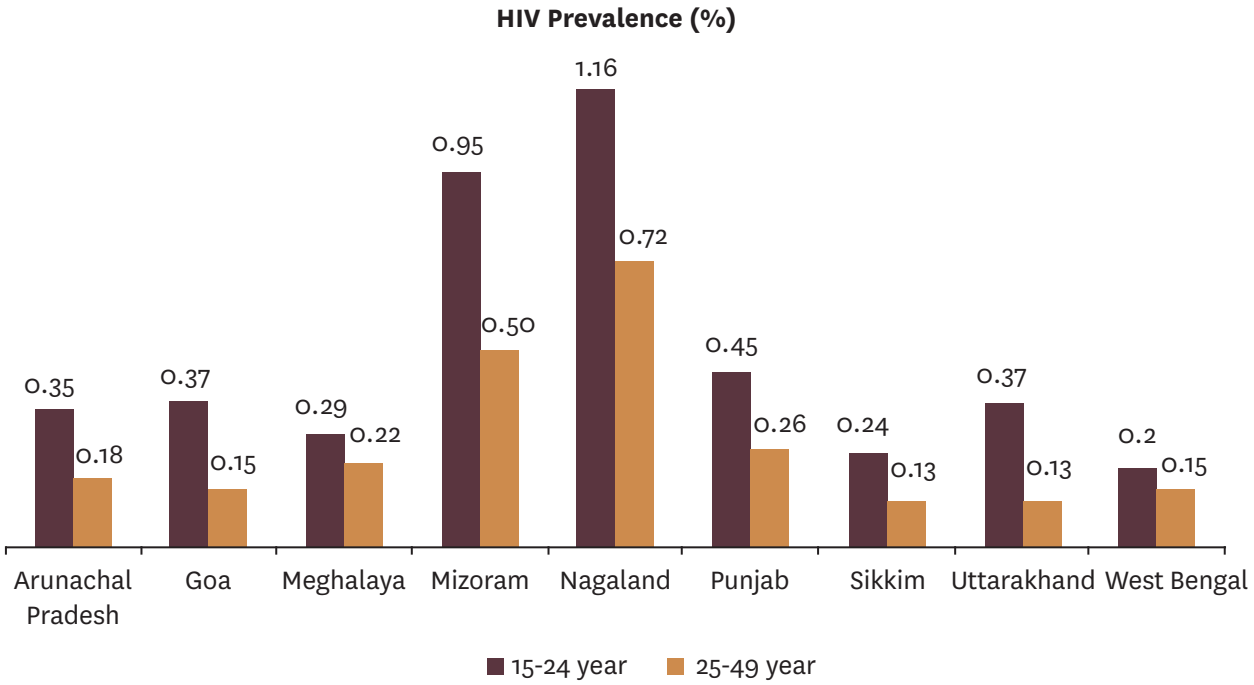

Figure 14. HIV Prevalence (%) among ANC Clinic Attendees by Age Group in Selected States

Table 17. HIV Prevalence (%) among ANC Clinic Attendees by Age Group and State, HSS 2012-13				
	15-24 years		25-49 years	
State	**Prev %**	**N**	**Prev %**	**N**
Andaman & Nicobar Islands	0.00	884	0.00	716
Andhra Pradesh	0.51	19,260	0.82	6,187
Arunachal Pradesh	0.35	1,437	0.18	1,639
Assam	0.16	5,580	0.16	4,406
Bihar	0.24	6,163	0.46	4,543
Chandigarh	0.00	230	0.00	170
Chhattisgarh	0.32	4,653	0.88	2,512
Dadra & Nagar Haveli	0.00	264	0.00	135
Daman & Diu	0.00	480	0.31	320
Delhi	0.27	1,122	0.57	877
Goa	0.37	536	0.15	664
Gujarat	0.49	6,687	0.52	4,483
Haryana	0.15	4,042	0.22	2,292
Himachal Pradesh	0.09	1,176	0.00	1,224
Jammu & Kashmir	0.05	1,892	0.07	4,084
Jharkhand	0.17	5,284	0.23	3,085
Karnataka	0.51	16,823	0.59	7,944
Kerala	0.06	1,661	0.00	2,339
Madhya Pradesh	0.15	11,984	0.12	6,787
Maharashtra	0.33	20,919	0.55	9,040
Manipur	0.52	2,315	0.72	3,193
Meghalaya	0.29	1,731	0.22	1,345
Mizoram	0.95	1,370	0.50	2,186
Mumbai*	0.59	2,194	0.70	1,003
Nagaland	1.16	1,643	0.72	2,776
Odisha	0.24	7,359	0.41	5,424
Puducherry	0.00	435	0.00	365
Punjab	0.45	2,893	0.26	2,301
Rajasthan	0.31	7,940	0.32	5,630
Sikkim	0.24	843	0.13	757
Tamil Nadu	0.31	17,966	0.45	10,768
Tripura	0.18	1,121	0.21	479
Uttar Pradesh	0.15	13,286	0.20	12,527
Uttarakhand	0.37	3,217	0.13	2,342
West Bengal	0.20	6,031	0.15	1,965
India	**0.32**	**1,79,227**	**0.38**	**1,15,505**

** Mumbai is not counted in the total since it is already included under Maharashtra.*

5.2. HIV Prevalence among ANC Clinic Attendees by Literacy Status

HIV prevalence among ANC clinic attendees was low among literate respondents, at national level as well as in most of the states. It is well understood from previous research that higher literacy is likely to create greater awareness to protect oneself from risks of acquiring HIV.

moderate levels of HIV prevalence (>=0.50 percent) among ANC clinic attendees in most of the groups, Meghalaya (0.57 percent) and Arunachal Pradesh (0.57 percent), showed higher prevalence among respondents who studied up to 5th standard. Only Chhattisgarh (0.76 percent) showed moderate levels of HIV prevalence among respondents who studied between 11th standard and graduation, followed by

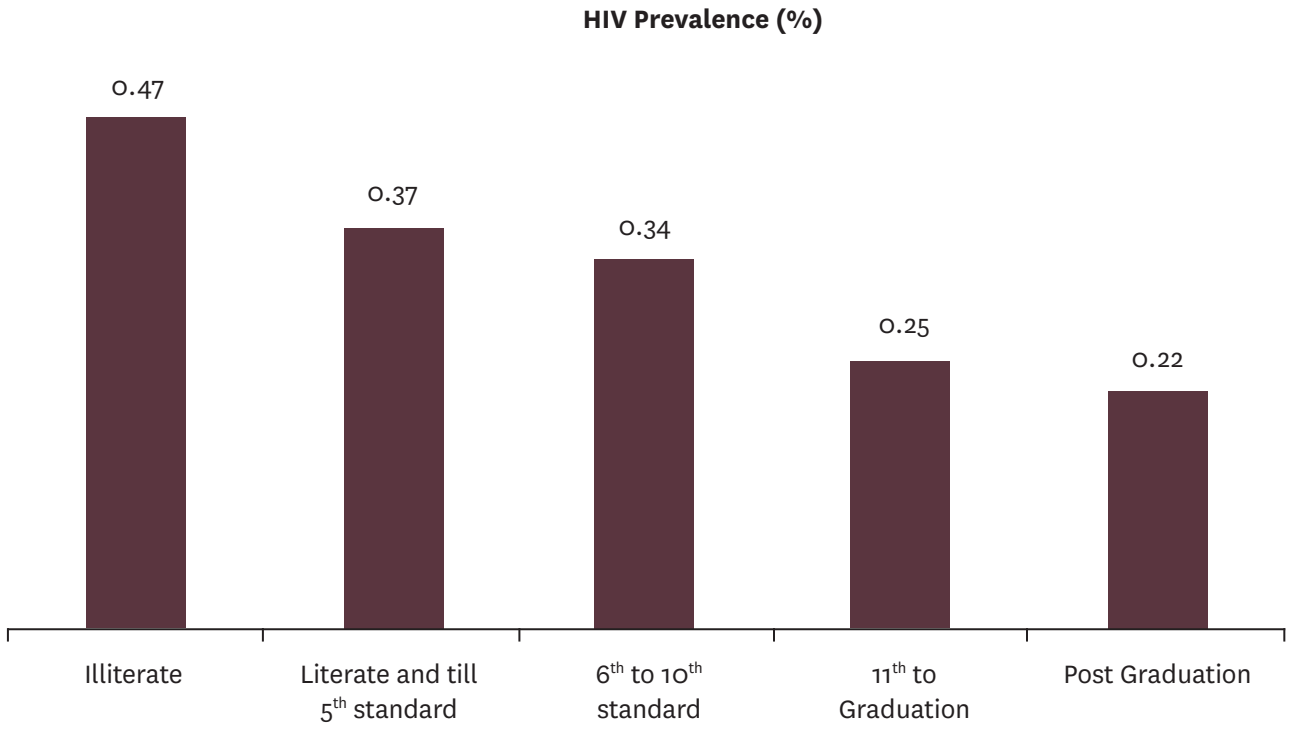

Figure 15. HIV Prevalence (%) among ANC Clinic Attendees by Literacy Status, India

ANC clinic attendees who had low or no literacy skills had the highest HIV prevalence (0.47 percent), while those who had a post-graduation education had the lowest HIV prevalence (0.22 percent) (Figure 15).

The pattern is the same in most states except Bihar and Chhattisgarh, where a reverse pattern is observed. The reasons for this must be explored. Likewise, of the erstwhile high-prevalence states that showed high to

Bihar (0.48 percent), Andhra Pradesh (0.47 percent), Karnataka (0.46 percent), and Punjab (0.45 percent). Moderate levels of HIV prevalence was noted among respondents who studied up to post-graduation in the states of Uttarakhand (0.70 percent) and Gujarat (0.66 percent). In all the above, a minimum sample size of 300 was taken as valid for interpretation of HIV prevalence data. Data points where sample size achievement was less than 300 were not interpreted (Table 18).

Table 18. HIV Prevalence (%) among ANC Clinic Attendees by Literacy Status and State, HSS 2012-13										
State	Illiterate		Literate and till 5th standard		6th-10th standard		11th to graduation		Post-graduation	
	Prev %	N	Prev %	N	Prev %	N	Prev %	N	Prev %	N
A&N Islands	0.00	70	0.00	142	0.00	734	0.00	594	0.00	60
Andhra Pr.	0.86	5,821	0.57	4,590	0.51	10,385	0.47	4,279	0.28	351
Arunachal Pr.	0.28	718	0.57	529	0.19	1,063	0.15	679	0.00	82
Assam	0.22	1,386	0.23	1,715	0.11	4,381	0.17	2,385	0.00	97
Bihar	0.28	4,332	0.39	2,539	0.35	2,605	0.48	1,051	0.00	106
Chandigarh	0.00	43	0.00	73	0.00	136	0.00	117	0.00	31
Chhattisgarh	0.34	1,168	0.46	1,753	0.50	2,980	0.76	1,046	0.98	204
DN Haveli	0.00	84	0.00	50	0.00	189	0.00	50	0.00	26
Daman & Diu	0.72	138	0.00	124	0.00	403	0.00	111	0.00	24
Delhi	0.77	390	0.82	245	0.23	874	0.23	431	0.00	55
Goa	0.60	168	0.00	136	0.14	694	0.51	198	0.00	4
Gujarat	0.77	2,596	0.31	2,244	0.49	4,932	0.28	1,071	0.66	305
Haryana	0.32	1,241	0.27	1,106	0.12	2,523	0.08	1,217	0.00	246
Himachal Pr.	0.00	81	0.00	119	0.00	916	0.09	1,067	0.00	217
Jammu & Kashmir	0.00	2,136	0.00	590	0.05	1,865	0.25	1,219	0.00	164
Jharkhand	0.05	1,865	0.33	1,824	0.20	2,483	0.20	2,018	0.00	155
Karnataka	0.90	4,134	0.45	2,452	0.48	13,129	0.46	4,569	0.22	454
Kerala	0.00	32	0.00	131	0.06	1,648	0.00	1,913	0.00	275
Madhya Pr.	0.13	3,736	0.12	4,286	0.15	7,178	0.18	2,749	0.00	794
Maharashtra	0.98	2,649	0.37	3,719	0.38	16,281	0.28	6,709	0.00	5,83
Manipur	0.72	835	0.46	646	0.82	2,672	0.33	1,196	0.00	142
Meghalaya	0.45	449	0.57	882	0.08	1,304	0.00	408	0.00	20
Mizoram	1.85	108	1.21	497	0.64	2,040	0.36	835	0.00	73
Mumbai*	1.57	446	0.95	525	0.42	1,651	0.19	527	0.00	48
Nagaland	0.66	609	0.94	849	1.13	2,116	0.37	802	0.00	32
Odisha	0.34	2,033	0.40	2,969	0.33	5,794	0.11	1,827	0.00	126
Puducherry	0.00	13	0.00	26	0.00	357	0.00	360	0.00	44
Punjab	0.41	985	0.32	1,246	0.32	1,897	0.45	894	0.58	171
Rajasthan	0.46	3,688	0.44	3,418	0.17	4,012	0.18	1,707	0.14	725
Sikkim	0.00	94	0.27	373	0.25	797	0.00	290	0.00	35
Tamil Nadu	0.96	1,673	0.49	2,865	0.35	14,753	0.22	8,251	0.43	1,169
Tripura	1.35	74	0.00	200	0.10	1,012	0.34	297	0.00	17
Uttar Pradesh	0.24	7,570	0.20	5,029	0.16	6,681	0.10	5,080	0.14	1,420
Uttarakhand	0.15	676	0.44	683	0.16	1,869	0.23	1,754	0.70	569
West Bengal	0.08	1,211	0.25	2,388	0.20	3,589	0.13	741	0.00	51
India	**0.47**	**52,806**	**0.37**	**50,438**	**0.34**	**1,24,292**	**0.25**	**57,915**	**0.22**	**8,827**

** Mumbai is not counted in the total since it is already included under Maharashtra.*

5.3. HIV Prevalence among ANC Clinic Attendees by Order of Pregnancy

As noted in an earlier chapter, order of pregnancy refers to the number of times the ANC clinic attendee had been pregnant including the current pregnancy. It includes the number of live births, still births, and abortions. The data showed that at the national level, HIV prevalence was higher among ANC clinic attendees who had higher order of pregnancy. Primi-gravida women showed an HIV prevalence of 0.34 percent (n=1,36,324). While there was no significant difference in HIV prevalence among the respondents with first, second (0.35 percent, n=104,837), and third (0.32 percent, n=37,983) order of pregnancy, HIV prevalence among those with fourth or more order of pregnancy was higher, at 0.46 percent (n=15,126) (Figure 16). State-level data showed similar patterns in almost all the states (Table 19).

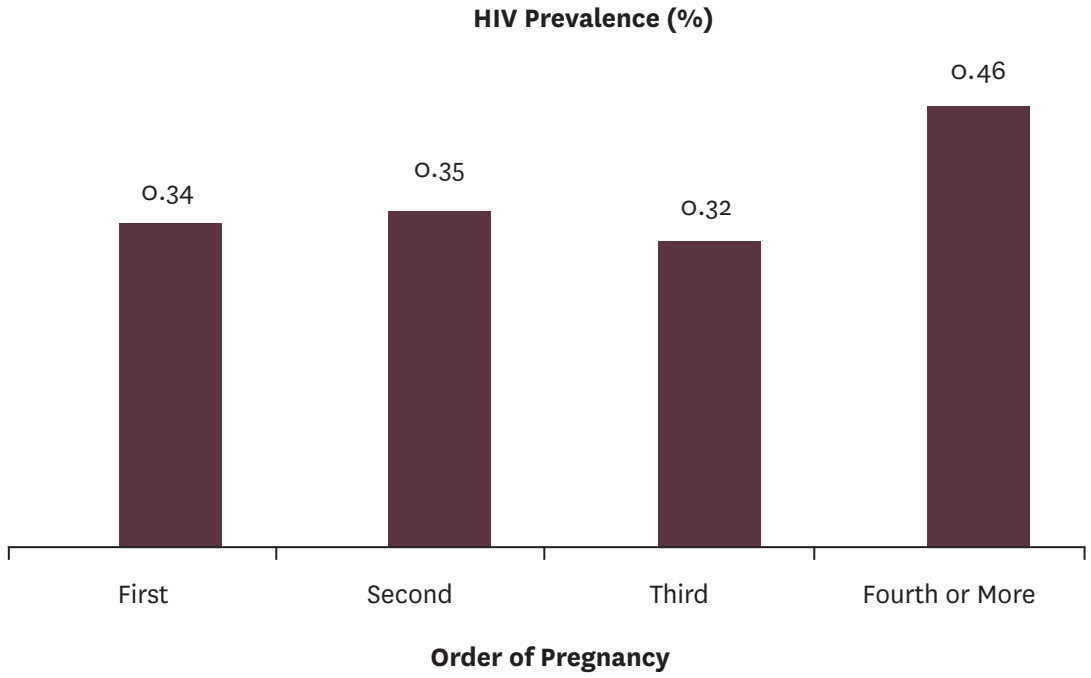

Figure 16. HIV Prevalence (%) among ANC Clinic Attendees by Order of Pregnancy, India

Table 19. HIV Prevalence (%) among ANC Clinic Attendees by Order of Pregnancy and State, HSS 2012-13								
	First		Second		Third		Fourth or more	
State	Prev percent	N	Prev percent	N	Prev percent	N	Prev percent	N
Andaman & Nicobar Islands	0.00	754	0.00	568	0.00	202	0.00	73
Andhra Pradesh	0.58	11,657	0.63	10,846	0.44	2,485	0.49	406
Arunachal Pradesh	0.24	1,233	0.29	1,018	0.36	550	0.00	261
Assam	0.16	5,497	0.09	3,229	0.31	974	0.36	280
Bihar	0.28	3,887	0.31	3,527	0.43	2,096	0.43	1,169
Chandigarh	0.00	174	0.00	137	0.00	72	0.00	17
Chhattisgarh	0.45	3,563	0.55	2,378	0.78	893	0.31	318
Dadra & Nagar Haveli	0.00	174	0.00	151	0.00	61	0.00	13
Daman & Diu	0.00	343	0.36	274	0.00	136	0.00	47
Delhi	0.12	813	0.75	802	0.33	302	0.00	80
Goa	0.00	503	0.43	468	0.00	183	2.17	46
Gujarat	0.47	4,929	0.53	3,770	0.48	1,667	0.64	783
Haryana	0.11	2,661	0.18	2,198	0.21	951	0.38	520
Himachal Pradesh	0.00	1,188	0.12	862	0.00	272	0.00	78
Jammu & Kashmir	0.12	2,520	0.05	1,992	0.00	989	0.00	461
Jharkhand	0.19	4,217	0.24	2,471	0.17	1,166	0.00	485
Karnataka	0.57	11,918	0.46	9,471	0.66	2,724	0.48	626
Kerala	0.05	1,836	0.00	1,602	0.00	422	0.00	132
Madhya Pradesh	0.14	9,077	0.14	6,509	0.13	2,325	0.12	832
Maharashtra	0.40	13,900	0.40	11,384	0.40	3,805	0.59	853
Manipur	0.71	2,393	0.40	1,733	0.25	804	1.59	567
Meghalaya	0.08	1,276	0.27	746	0.52	384	0.45	660
Mizoram	0.89	1,341	0.63	957	0.31	652	0.67	600
Mumbai*	0.65	1,393	0.51	1,386	0.57	350	2.99	67
Nagaland	1.18	1,777	1.02	1,270	0.00	750	0.83	600
Odisha	0.29	6,532	0.36	4,439	0.15	1,361	0.70	426
Puducherry	0.00	416	0.00	296	0.00	79	0.00	9
Punjab	0.40	2,471	0.43	1,875	0.16	619	0.00	229
Rajasthan	0.20	6,139	0.43	4,652	0.41	1,930	0.36	822
Sikkim	0.36	833	0.00	583	0.00	130	0.00	46
Tamil Nadu	0.34	13,440	0.34	11,716	0.37	2,946	0.97	621
Tripura	0.10	1,028	0.47	429	0.00	115	0.00	28
Uttar Pradesh	0.18	10,492	0.09	8,053	0.22	4,617	0.35	2,608
Uttarakhand	0.26	2,744	0.23	1,771	0.28	719	0.64	313
West Bengal	0.15	4,598	0.26	2,660	0.17	602	0.00	117
India	**0.34**	**1,36,324**	**0.35**	**1,04,837**	**0.32**	**37,983**	**0.46**	**15,126**

** Mumbai is not counted in the total since it is already included under Maharashtra.*

5.4. HIV Prevalence among ANC Clinic Attendees by Source of Referral

The source of referral helps in assessing if there was any specific bias being introduced in the sample due to specific referrals of HIV-positive cases from any source. Published literature indicates a disproportionate number of referrals of HIV-positive cases from private sector to government hospitals. Similarly, if there are higher numbers of referrals from ICTC/ART centres in the sample, it may bias the HIV prevalence, as those respondents are likely to be ones with exposure to HIV risk and risk perception or known HIV positives.

The data showed that respondents referred by private providers (1.00 percent, N=5,942) and ICTC/ART centres (1.20 percent, N=4,166) had higher HIV prevalence than others. These are followed by those referred by NGOs (0.46 percent, N=4,168). Those who visited ANC clinics of their own accord (self-referral, N=64,926) and those referred by family/relative/neighbour/friend (N=54,890) had similar HIV prevalence of 0.37 percent. Respondents referred by government service providers had the lowest HIV prevalence (0.30 percent, N=1,59,988) (Figure 17).

While the data suggest the possibility of disproportionately higher referral of HIV-positive cases from private providers and ICTC/ART centres to the ANC clinics, they may not have the ability to bias the results due to their small sample size. Referrals from the private providers comprised only two percent of the total referrals at the national level. NGOs and ICTC/ART centres accounted for 1.4 percent of referrals each. While in most states, these proportions may be even lower, careful assessment of bias needs to be done where proportion of referrals from these sources is higher. A closer examination of data in states with a higher proportion of referrals from private providers showed that HIV positivity among respondents referred by private providers was marginally higher than that of other groups in the states of Bihar, Gujarat, Jharkhand, and Nagaland. Similarly, in Punjab, where the proportion of referrals from ICTC/ART centres was higher, HIV-positivity among ICTC/ART referrals was also higher than that of other groups. This should be kept in mind while interpreting data from these states.

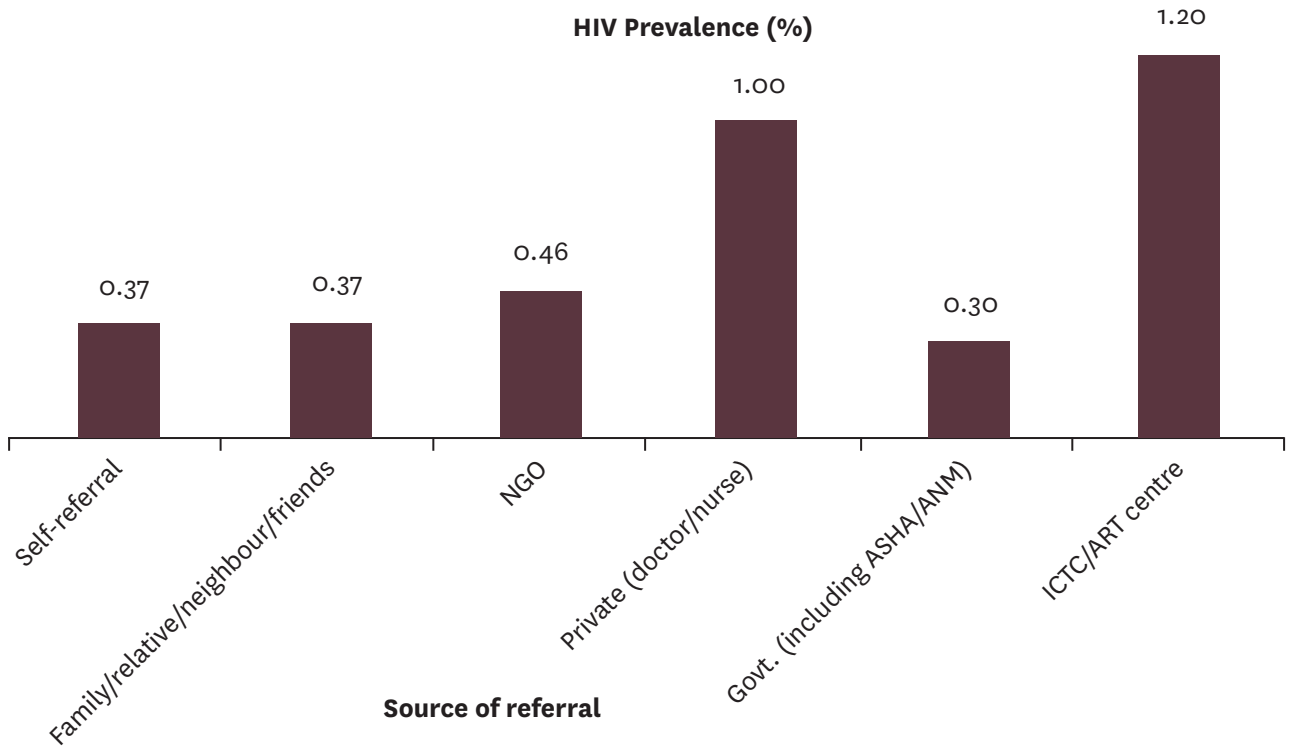

Figure 17. HIV Prevalence (%) among ANC Clinic Attendees by Source of Referral, India

5.5. HIV Prevalence among ANC Clinic Attendees by Place of Residence

Respondents of HSS were asked about their current place of residence (i.e., where they live with their husband), and were classified as urban if their place of residence is municipal corporation, municipal council, or cantonment area. Otherwise, they were classified as rural. Data showed that there was no significant difference in HIV prevalence among ANC clinic attendees by current place of residence. Respondents from rural areas, who accounted for 63 percent of sample size, had HIV prevalence of 0.35 percent (N=1,83,887), while respondents from urban areas, who accounted for 37 percent of sample size, had HIV prevalence of 0.34 percent (N=1,09,031).

State-level findings showed that several states, including Nagaland, Manipur, Andhra Pradesh, Gujarat, Karnataka, Punjab, Tamil Nadu, Maharashtra, Bihar, Rajasthan, Meghalaya, Goa, Uttar Pradesh, and Madhya Pradesh had higher HIV prevalence among ANC clinic attendees residing in rural areas than urban. (Figure 18 and Table 20). This important finding should be further explored and corroborated for programmatic purposes.

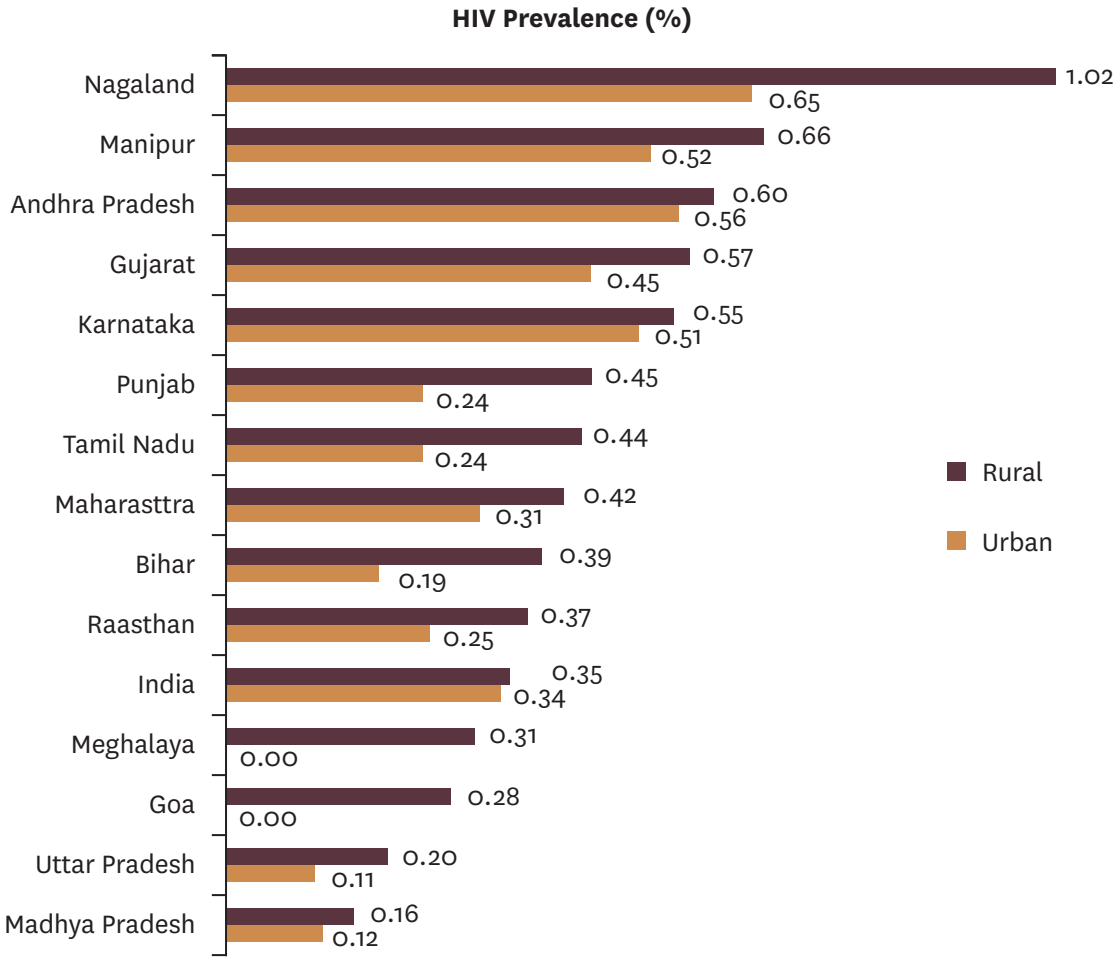

Figure 18. HIV Prevalence (%) among ANC Clinic Attendees by Place of Residence, India and Selected States

Table 20. HIV Prevalence (%) among ANC Clinic Attendees by Place of Residence and State, HSS 2012-13				
	Urban		Rural	
State	Prev percent	N	Prev percent	N
Andaman & Nicobar Islands	0.00	394	0.00	1,203
Andhra Pradesh	0.56	7,350	0.60	17,798
Arunachal Pradesh	0.32	2,163	0.11	894
Assam	0.24	2,056	0.14	7,870
Bihar	0.19	2,610	0.39	8,005
Chandigarh	0.00	304	0.00	96
Chhattisgarh	0.67	3,275	0.39	3,834
Dadra & Nagar Haveli	0.00	141	0.00	258
Daman & Diu	0.00	289	0.20	508
Delhi	0.41	1,941	0.00	47
Goa	0.00	143	0.28	1,054
Gujarat	0.45	5,822	0.57	5,281
Haryana	0.19	2,572	0.16	3,757
Himachal Pradesh	0.00	272	0.05	2,127
Jammu & Kashmir	0.09	1,154	0.06	4,812
Jharkhand	0.32	3,465	0.10	4,776
Karnataka	0.51	10,023	0.55	14,657
Kerala	0.00	815	0.03	3,173
Madhya Pradesh	0.12	8,308	0.16	10,298
Maharashtra	0.38	13,758	0.42	16,106
Manipur	0.52	1,350	0.66	4,090
Meghalaya	0.00	508	0.31	2,557
Mizoram	1.11	1,355	0.41	2,184
Mumbai*	0.64	3,108	0.00	84
Nagaland	0.65	2,140	1.02	2,253
Odisha	0.31	3,926	0.30	8,753
Puducherry	0.00	266	0.00	534
Punjab	0.24	2,076	0.45	3,117
Rajasthan	0.25	6,488	0.37	6,943
Sikkim	0.43	464	0.09	1,111
Tamil Nadu	0.24	11,067	0.44	17,586
Tripura	0.20	505	0.18	1,094
Uttar Pradesh	0.11	7,570	0.20	18,107
Uttarakhand	0.50	2,204	0.12	3,328
West Bengal	0.27	2,257	0.16	5,676
India	**0.34**	**1,09,031**	**0.35**	**1,83,887**

** Mumbai is not counted in the total since it is already included under Maharashtra.*

5.6. HIV Prevalence among ANC Clinic Attendees by Current Occupation of Respondent and Spouse

Occupation is an important risk factor for contracting HIV. As noted earlier, 84 percent of ANC clinic attendees were housewives and only 16 percent reported to be engaged in some occupation. HIV prevalence among respondents who were housewives was 0.33 percent (N=2,47,644). HIV prevalence was higher among respondents who were skilled/semi-skilled workers (0.72 percent, N=3,476), domestic servants (0.60 percent, N=2,330), or non-agricultural labourers (0.56 percent, N=7,821) (Table 21).

Data on HIV prevalence among ANC clinic attendees by the occupation of their spouse showed that HIV prevalence was the highest among those whose spouses were truck drivers/helpers (0.87 percent, N=6,459), followed by those whose spouses were hotel staff (0.49 percent, N=3,849) and local transport worker (auto/ taxi driver) (0.45 percent, N=21,074). This highlights the importance of focusing HIV prevention interventions on the transport and hotel industry. People in other occupation groups showed HIV prevalence ranging between 0.19 percent and 0.39 percent (Table 21).

5.7. HIV Prevalence among ANC Clinic Attendees by Migration Status of Spouse

Migration of spouse to faraway places for work has been increasingly identified as an important factor contributing to the spread of HIV, especially in the rural areas of high out-migration districts and states. At the national level, around six percent of respondents reported that their spouses were migrants, though there were significant inter-state variations. Data on migration status of spouse collected from ANC clinic attendees showed that respondents whose spouses were migrants had higher HIV-prevalence (0.45 percent, N=17,493) than respondents whose spouses were not migrants (0.34 percent, N=2,74,725). Some of the states including the known source/out-migration states of north and central India—Assam, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh, West Bengal and the erstwhile high-prevalence states of Andhra Pradesh, Maharashtra, and Manipur—showed similar patterns. However, at the state level, data need to be interpreted with caution due to small sample size of respondents with migrant spouses. (Figure 19 and Table 22).

Table 21. HIV Prevalence (%) among ANC Clinic Attendees by Occupation of Respondent and Spouse, India

	Respondent		Spouse	
Occupation	**Prev %**	**N**	**Prev %**	**N**
1. Agricultural Labourer	0.39	16,816	0.33	44,779
2. Non-Agricultural Labourer	0.56	7,821	0.38	56,111
3. Domestic Servant	0.60	2,330	0.39	1,275
4. Skilled / Semiskilled worker	0.72	3,476	0.34	45,428
5. Petty business / small shop	0.43	2,083	0.31	31,578
6. Large Business/Self employed	0.29	688	0.21	8,908
7. Service (Govt./Pvt.)	0.18	7,703	0.25	48,102
8. Student	0.24	2,904	0.19	3,233
9. Truck Driver/helper	0.00	15	0.87	6,459
10. Local transport worker (auto/ taxi driver,	0.00	57	0.45	21,074
11. Hotel Staff	1.90	158	0.49	3,849
12. Agricultural cultivator/	0.50	2,827	0.32	18,083
13. Unemployed	-	-	0.42	4,987
14. Housewife	0.33	247,644	-	-
99.Not Applicable (For never married/Widows/Divorced/Separated	-	-	1.86	430

Table 22. HIV Prevalence (%) among ANC Clinic Attendees by Migration Status of Spouse and State, HSS 2012-13				
	Migrant spouse		Non-migrant spouse	
State	Prev %	N	Prev percent	N
Andaman & Nicobar Island	0.00	33	0.00	1,550
Andhra Pradesh	0.82	367	0.58	24,977
Arunachal Pradesh	0.00	117	0.28	2,876
Assam	1.13	529	0.11	9,418
Bihar	0.31	3,187	0.34	7,327
Chandigarh	0.00	-	0.00	400
Chhattisgarh	0.00	258	0.53	6,804
Dadra & Nagar Haveli	0.00	6	0.00	393
Daman & Diu	0.00	40	0.13	753
Delhi	0.00	41	0.41	1,944
Goa	0.00	13	0.25	1,180
Gujarat	2.72	147	0.48	10,879
Haryana	0.00	87	0.18	6,241
Himachal Pradesh	0.00	47	0.04	2,352
Jammu & Kashmir	0.41	241	0.05	5,723
Jharkhand	0.43	1,157	0.15	7,105
Karnataka	0.75	266	0.54	24,312
Kerala	0.00	488	0.03	3,507
Madhya Pradesh	0.26	381	0.14	18,170
Maharashtra	0.58	516	0.40	29,279
Manipur	1.26	397	0.58	5,032
Meghalaya	0.00	29	0.27	2,995
Mizoram	0.33	304	0.64	3,123
Mumbai*	1.95	154	0.56	3,034
Nagaland	1.50	133	0.79	4,166
Odisha	0.59	1,014	0.29	11,672
Puducherry	0.00	7	0.00	793
Punjab	0.00	166	0.38	5,022
Rajasthan	0.78	771	0.28	12,645
Sikkim	0.00	158	0.21	1,403
Tamil Nadu	0.16	1,266	0.36	27,416
Tripura	0.00	43	0.19	1,552
Uttar Pradesh	0.41	3,389	0.14	22,194
Uttarakhand	0.20	1,003	0.29	4,518
West Bengal	0.56	892	0.14	7,004
India	**0.45**	**17,493**	**0.34**	**2,74,725**

** Mumbai is not counted in the total since it is already included under Maharashtra.*

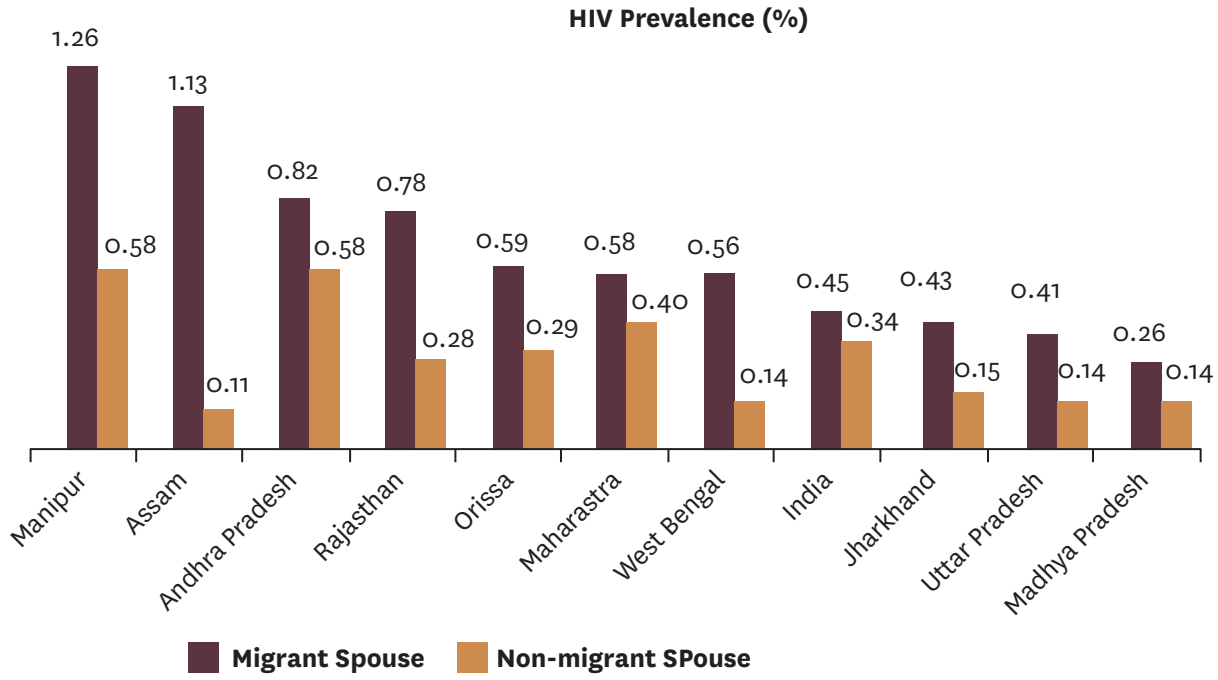

Figure 19. HIV Prevalence (%) among ANC Clinic Attendees by Migration Status of Spouse, India and Selected States

CHAPTER 6

TRENDS OF HIV PREVALENCE AMONG ANC CLINIC ATTENDEES

The primary objective of HIV sentinel surveillance is to generate data on trends of HIV prevalence among various population groups in the country. As discussed in chapter 2, the data collection methodology was designed to provide comparable estimates of HIV prevalence every year at the identified sites, thereby allowing NACO to identify areas with rising, stable, or declining trends of HIV. Over time, HIV sentinel surveillance offered vital information to areas where HIV was emerging and highlighted rising trends in certain states or regions. This has been a critical input to the strategic planning efforts of the National AIDS Control Programme and contributed to shaping the strategies for prevention and control of HIV and AIDS in India.

This chapter presents the trends of HIV prevalence among ANC clinic attendees at national, regional, and state levels as well as intra-state variations. Data from the year 2003 have been used for trend analysis, thereby including eight data points from 2003 to 2013. Only data from consistent sites were used for trend analysis to avoid the effect of adding HIV prevalence from new sites in subsequent years, thus providing a better picture of HIV trends in a state or region. Further, to smooth the sampling variations in HIV prevalence due to small sample size at sentinel site level, a three-year moving average was calculated at state/regional levels and trends were analysed using this data.

Every sentinel site was categorized based on the year since it was consistent. Table 23 shows the distribution of sentinel sites by their year of consistency. State-wise table of consistent sites by year is in Annex 7. Inconsistency or gaps for any one year over the period of eight rounds of HSS for a given sentinel site was ignored as the three-year moving average approach absorbs the missing data by averaging the prevalence at multiple sites over three years. All invalid sites—i.e., where sample size was less than 75 percent (300) of the target sample size of 400—were excluded from trend analysis for that year.

Table 23. No. of Consistent ANC Sentinel Sites Available for Analysis of HIV Prevalence Trends from Each Year Onward, India	
Year onward	**No. of consistent ANC sentinel sites (cumulative)**
2002	169
2003	350
2004	368
2005	376
2006	560
2007	606
2008	637
2010	682
2013	750

Years 2002, 2003, and 2006 were three major points in time when a large number of sentinel sites were added under the HSS system in India. Sentinel sites that were consistent from 2002, 2003, and 2004 were analysed together to generate three-year moving averages from 2003 onward. Similarly, sentinel sites that were consistent from 2005, 2006, and 2007 were analysed together to generate a three-year moving average from 2006 onward. Thus, a total of 368 sites were included in trend analysis from 2004 and another 238 sites were included in trend analysis from 2006. While trends from 2003 are available for all states, trends from 2006 are available only for 24 states, where scale up of sentinel sites was begun in later years. The trends in HIV prevalence based on moving averages from 2003 onward were analysed to interpret the epidemic at state level as they indicate the epidemic scenario over a longer period at sites where HIV was more visible and sentinel sites were established early. Sites or districts that showed rising trends were shown against the state trend to highlight the intra-state variations and sites in need of attention.

Year range notation is used to represent the three-year moving averages. Data point 2003-05 is the moving average of 2003, 2004, and 2005 rounds of HSS, and so on for the first three data points. For later three data points, since HSS was conducted once in two years, the year ranges are wider. Data point 2006-09 is the moving average of 2006, 2007, and 2008-09 rounds of HSS, and so on. The same notation is used in all the figures and other references in this chapter.

6.1. Trends of HIV Prevalence at National and Regional Levels

At the national level, India continued to portray a consistently declining trend of HIV prevalence among ANC clinic attendees during the period 2003 to 2013. A declining trend was also consistent in all the erstwhile high-prevalence states in the south and north-east of India. On the other hand, low- to moderate-prevalence states of north and west India showed rising trends of HIV prevalence among ANC clinic attendees (Figure 20).

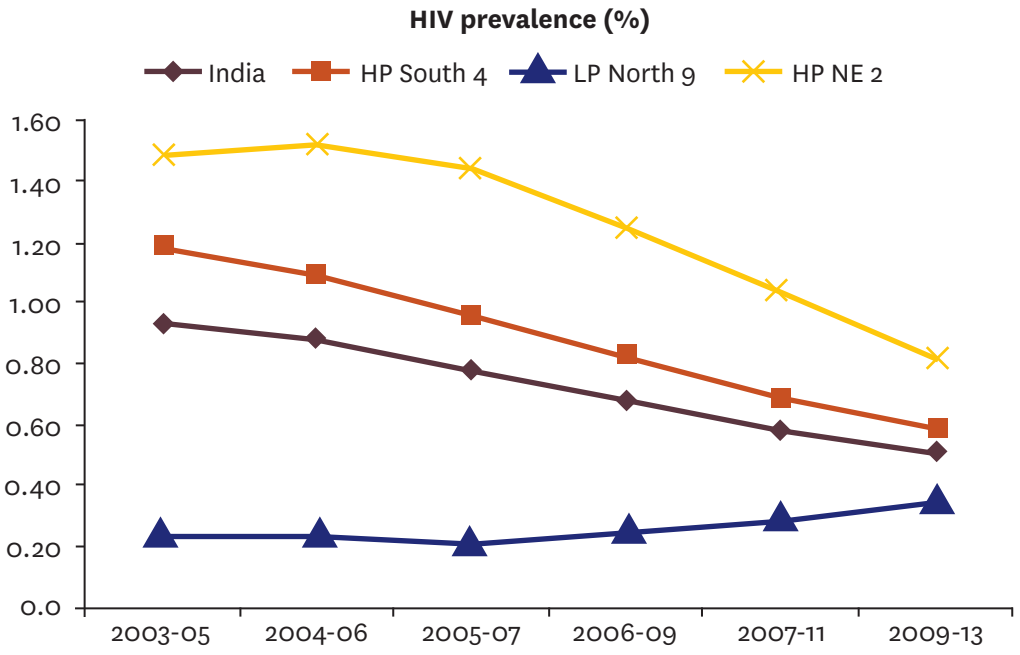

Figure 20. National and Regional Trends of HIV Prevalence (%) among ANC Clinic Attendees

Note: HP South4 (AP: Andhra Pradesh, KR: Karnataka, TN: Tamil Nadu, MH: Maharashtra) HPNE2 (MN: Manipur and NG: Nagaland) LP North9 (CT: Chhattisgarh, DE: Delhi, GU: Gujarat, HR: Haryana, JH: Jharkhand, PU: Punjab, UP: Uttar Pradesh, UK: Uttrakhand, AS: Assam)

6.2. Trends of HIV Prevalence at State Level

As noted above, all the erstwhile high-prevalence states showed consistently declining trends of HIV prevalence among ANC clinic attendees. All these states have reached below the high prevalence level of 1.00 percent. While most of them are in the moderate prevalence level i.e., between 0.50 percent and 0.99 percent, Maharashtra and Tamil Nadu showed successful

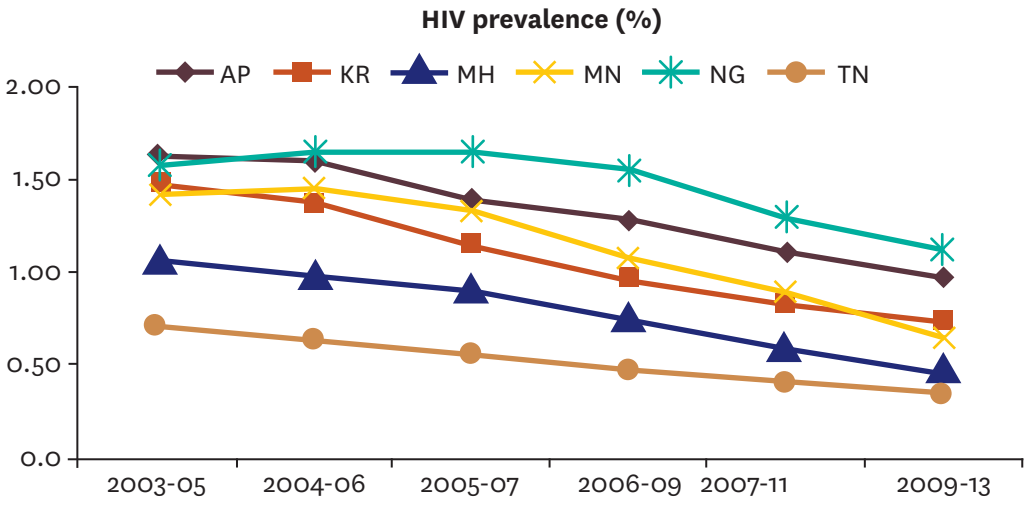

Figure 21. Declining Trends of HIV Prevalence (%) among ANC Clinic Attendees in Erstwhile High-Prevalence States (AP: Andhra Pradesh, KR: Karnataka, MH: Maharashtra, MN: Manipur, NG: Nagaland, TN: Tamil Nadu)

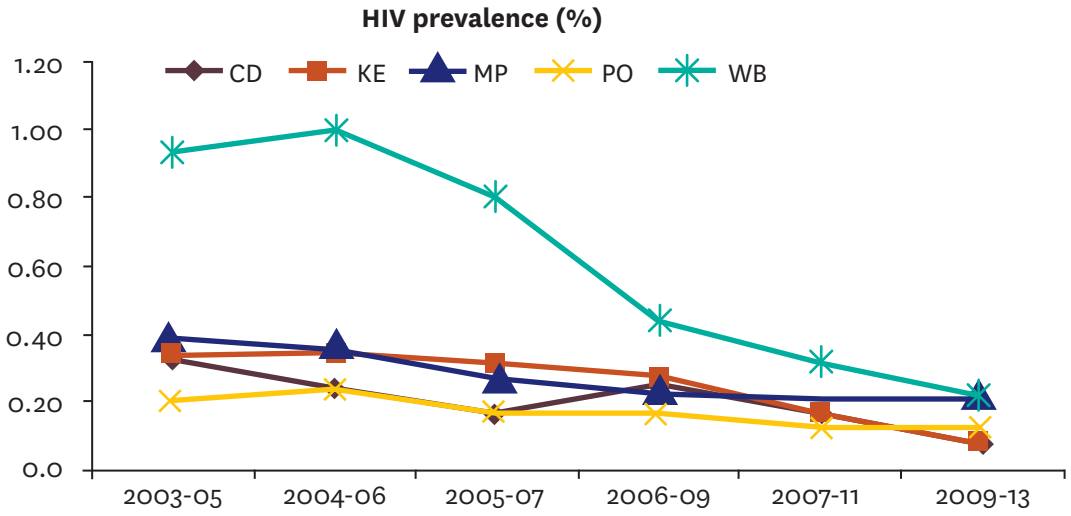

Figure 22. Declining Trends of HIV Prevalence (%) among ANC Clinic Attendees in Select States (CD: Chandigarh, KE: Kerala, MP: Madhya Pradesh, PO: Puducherry, WB: West Bengal)

reductions to low-prevalence level of less than 0.50 percent among ANC clinic attendees (Figure 21). Certain low-prevalence states of Kerala, Madhya Pradesh, and West Bengal and UTs of Chandigarh and Pondicherry also showed declining trends in HIV prevalence among ANC clinic attendees (Figure 22).

There are certain states that showed HIV prevalence among ANC clinic attendees that was either stable or fluctuating around the same level for the last few years. Bihar, Goa, Mizoram, Odisha, and Rajasthan were stable at low- to moderate-prevalence ranging from 0.25 percent to 0.75 percent, while the states of Himachal Pradesh, Jammu & Kashmir, Meghalaya, Sikkim, and Tripura were stable at very low-prevalence levels ranging from 0.00 percent to 0.25 percent (Figure 23 and Figure 24). Union territories of Andaman & Nicobar Islands, Dadra & Nagar Haveli, and Daman & Diu also showed stable trends of HIV prevalence at very low levels.

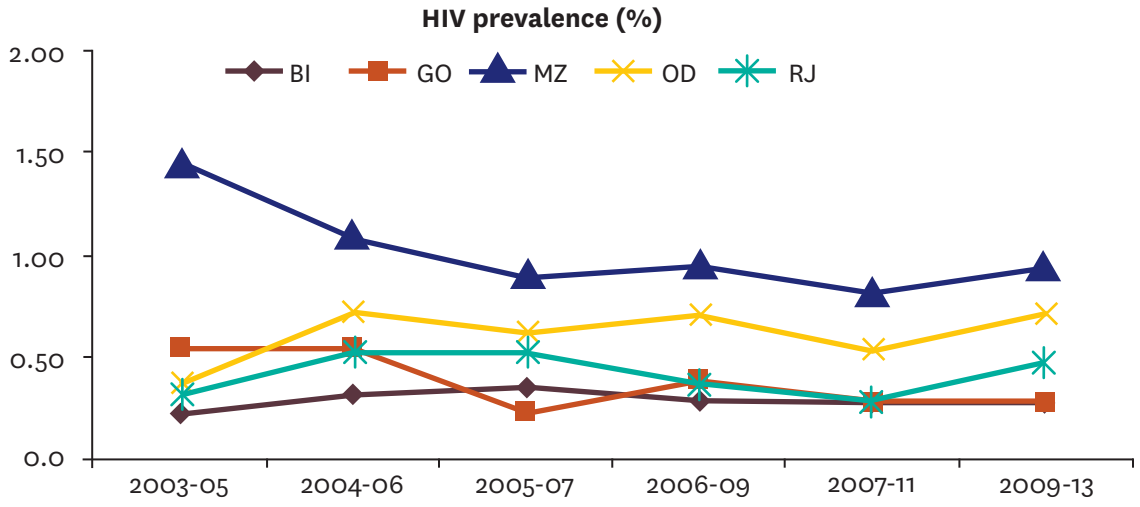

Figure 23. Stable Trends of HIV Prevalence among ANC Clinic Attendees in Select States (BI: Bihar, GO: Goa, MZ: Mizoram, OD: Odisha, RJ: Rajasthan)

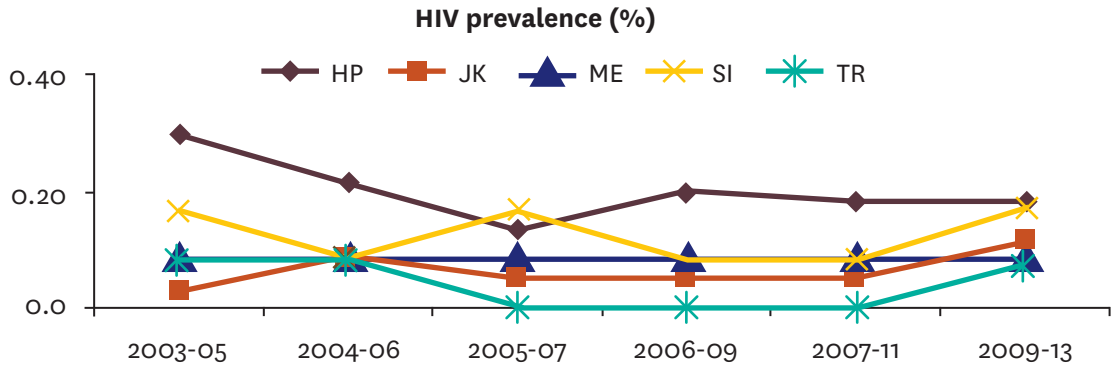

Figure 24. Stable Trends of HIV Prevalence among ANC Clinic Attendees in Select States (HP: Himachal Pradesh, JK: Jammu & Kashmir, ME: Meghalaya, SI: Sikkim, TR: Tripura)

While most of the states noted above showed stable or declining trends, certain low-prevalence states of Chhattisgarh, Delhi, Gujarat, Jharkhand, and Punjab showed rising trends of HIV prevalence among ANC clinic attendees. Besides, the states of Assam, Haryana, Uttar Pradesh, and Uttarakhand showed rising trends of HIV prevalence among ANC clinic attendees at levels of less than 0.25 percent (Figure 25 and Figure 26).

These findings reflect the possible role of long-standing, scaled-up prevention and treatment interventions in erstwhile high-prevalence states in declines of HIV among the general population. The coverage of prevention as well as treatment interventions in these states is very high. On the other hand, rising trends of HIV prevalence in low- to moderate-prevalence states in north India in which the HIV programme only started focusing in the last 7-8 years and has not yet been scaled to saturation levels. As noted in the earlier chapter on HIV prevalence at district/site levels, these rising trends are consistent with the fact that increasing numbers of high-prevalence sites have been identified in these states over the last decade.

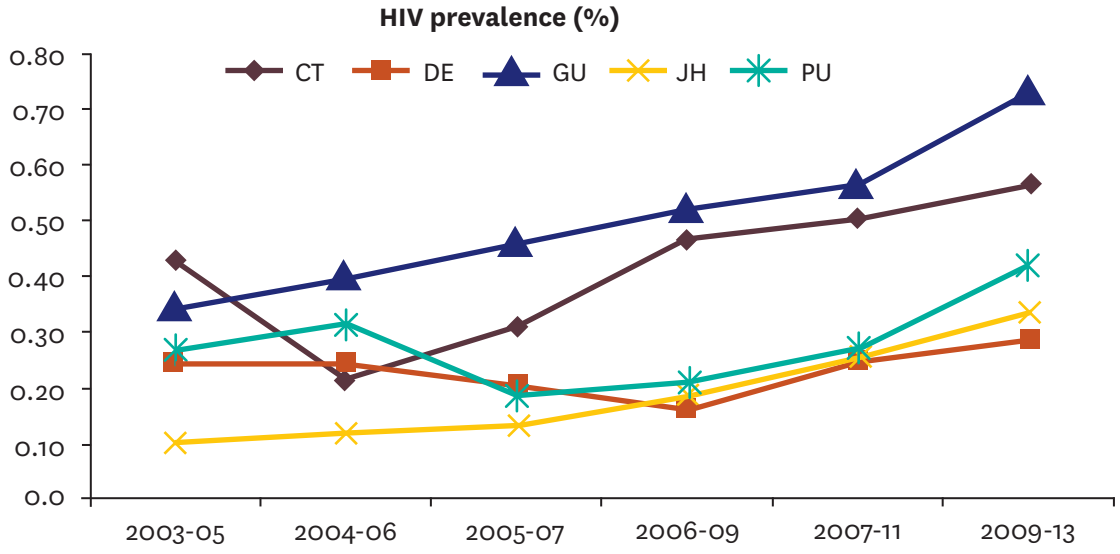

Figure 25. Rising Trends of HIV Prevalence (%) among ANC Clinic Attendees in Low-to Moderate-Prevalence States (CT: Chhattisgarh, DE: Delhi, GU: Gujarat, JH: Jharkhand, PU: Punjab)

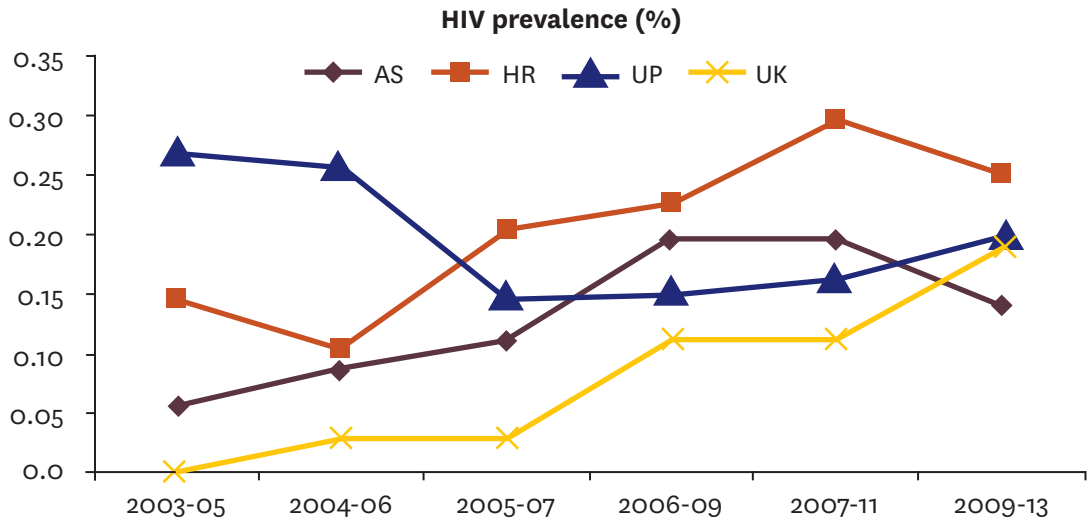

Figure 26. Rising Trends of HIV Prevalence (%) among ANC Clinic Attendees in Very Low-Prevalence States (AS: Assam, HR: Haryana, UP: Uttar Pradesh, UK: Uttarakhand)

6.3. Intra-state Variations in Trends of HIV Prevalence

This section examines HIV prevalence trends among ANC clinic attendees in groups of districts/sites in states of epidemiological importance. While the overall trend at state level indicates one direction, there may be a sub-set of districts/sites that have a contrary epidemic pattern. It is important to identify the districts/sites that are contributing to the overall rise at the state level, as the whole state or all districts may not be at the same level of vulnerability. This section highlights intra-state variations in selected states and focuses on districts/sites with rising trends. First, the situation in high-prevalence states is presented, followed by states with rising trends. At the end, three epidemiologically important states with stable trends and moderate levels are presented.

States with overall Declining Trends but rising trends in specific districts

ANDHRA PRADESH: As noted earlier, trends of HIV prevalence among ANC clinic attendees at the state level were consistently declining in the state of Andhra Pradesh. However, some sites in the districts of Cuddapah, Karimnagar, Nizamabad, Visakhapatnam, and Warangal showed rising trends over the last decade (Figure 27). The districts of Adilabad, Chittoor, Kurnool, and Mahabubnagar showed stable trends and did not decline as in the other districts and at state level.

KARNATAKA: The state showed declining trends of HIV prevalence among ANC clinic attendees at state level. While most of the districts showed declining trends, the districts of Chikballapur, Chitradurga, and Ramanagaram showed rising rates of HIV prevalence over the last few years (Figure 28). The districts of Bagalkot, Bellary, Bijapur, Chamrajnagar, Dakshina Kannada, Davanagere, Gadag, Kodagu, Mandya, Tumkur, and Udupi showed stable, not declining trends.

MAHARASHTRA: Maharashtra also showed declining trends of HIV prevalence among ANC clinic attendees at state level. Only the district of Washim showed rising HIV prevalence among ANC clinic attendees consistently. The districts of Akola, Buldana, Gadchiroli, Nanded, Nandurbar, Pune, Ratnagiri, Sindhudurg, Solapur, and

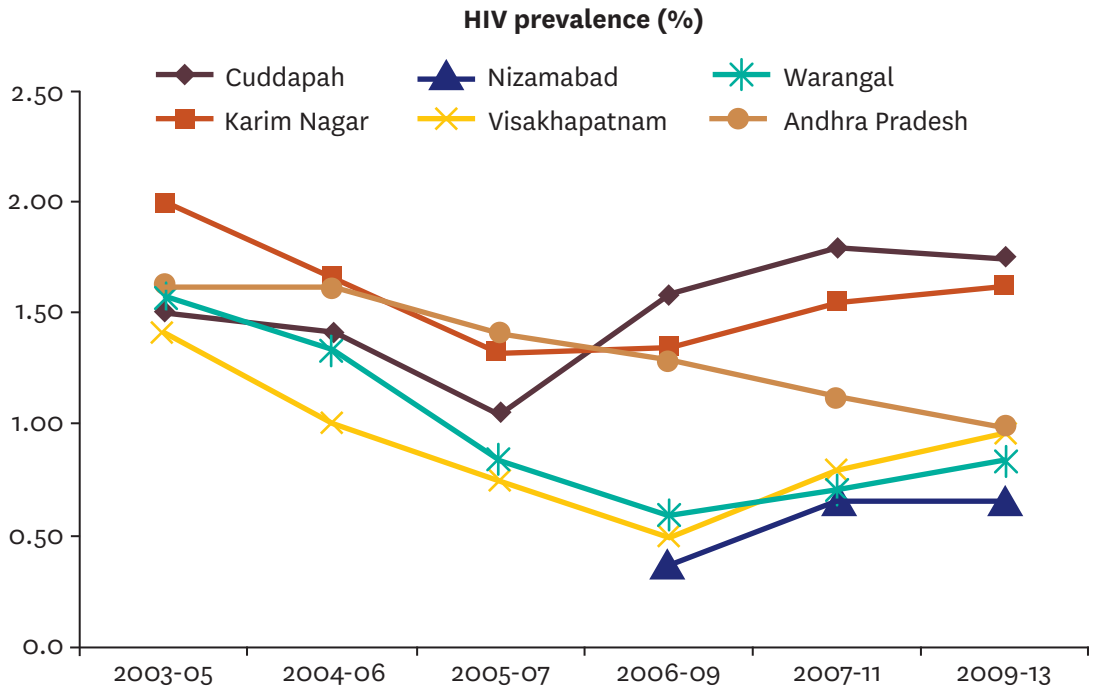

Figure 27. Districts with Rising Trends of HIV Prevalence (%) among ANC Clinic Attendees, Andhra Pradesh

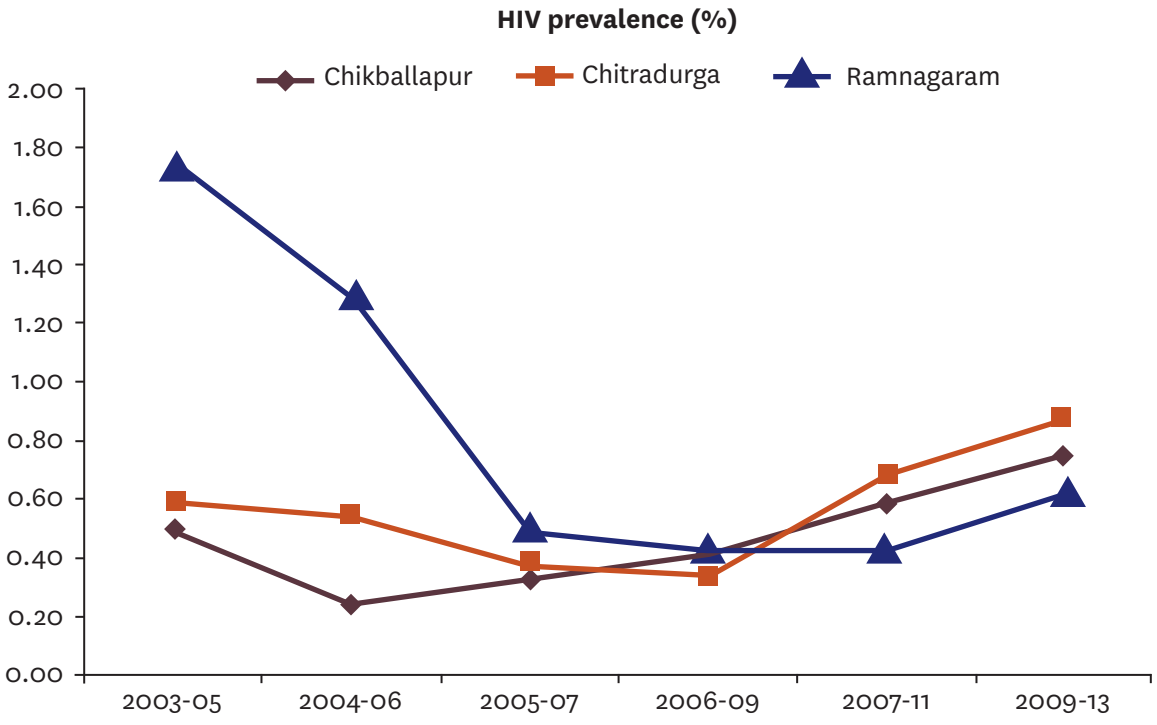

Figure 28. Districts with Rising Trends of HIV Prevalence among ANC clinic attendees, Karnataka

Wardha showed stable trends of HIV prevalence. All other districts showed declining trends.

MANIPUR: Similar to other high-prevalence states, Manipur showed declining trends of HIV prevalence among ANC clinic attendees at state level. All the districts showed declining trends except Bishnupur, which showed a rising trend, and Thoubal, which showed stable HIV prevalence among ANC clinic attendees over the last few years.

NAGALAND: While trends of HIV prevalence among ANC clinic attendees at state level in Nagaland is declining, both the sites in Dimapur showed rising trends. Longleng and Phek also showed rising trends from 2006 onward (Figure 29). Kohima and Mon showed stable trends, while Mokokchung, Peren, Tuensang, Wokha, and Zunheboto districts showed declining trends.

TAMIL NADU: Of all the high-prevalence states, Tamil Nadu showed the most significant declines in HIV prevalence percent among ANC clinic attendees at state level. While most of the district showed declining trends, the districts of Dharmapuri, Kancheepuram, Kanyakumari, and Madurai showed rising trends of HIV prevalence among ANC clinic attendees over the last few years (Figure 30). The districts of Coimbatore, Cuddalore, Nagapattinam, Vellore, and Villupuram showed stable trends.

Having looked at the intra-state variations in trends of HIV prevalence in formerly high-prevalence areas, the following section describes similar variations in the states with rising trends of HIV prevalence among ANC clinic attendees at state level.

States with Rising Trends at Moderate Prevalence Levels

CHHATTISGARH: HIV prevalence among ANC clinic attendees based on consistent sites was showing a rising trend in the state of Chhattisgarh. The districts of Baster, Bilaspur, Kawardha, and Rajnandgaon showed rising trends of HIV prevalence in the state (Figure 31).

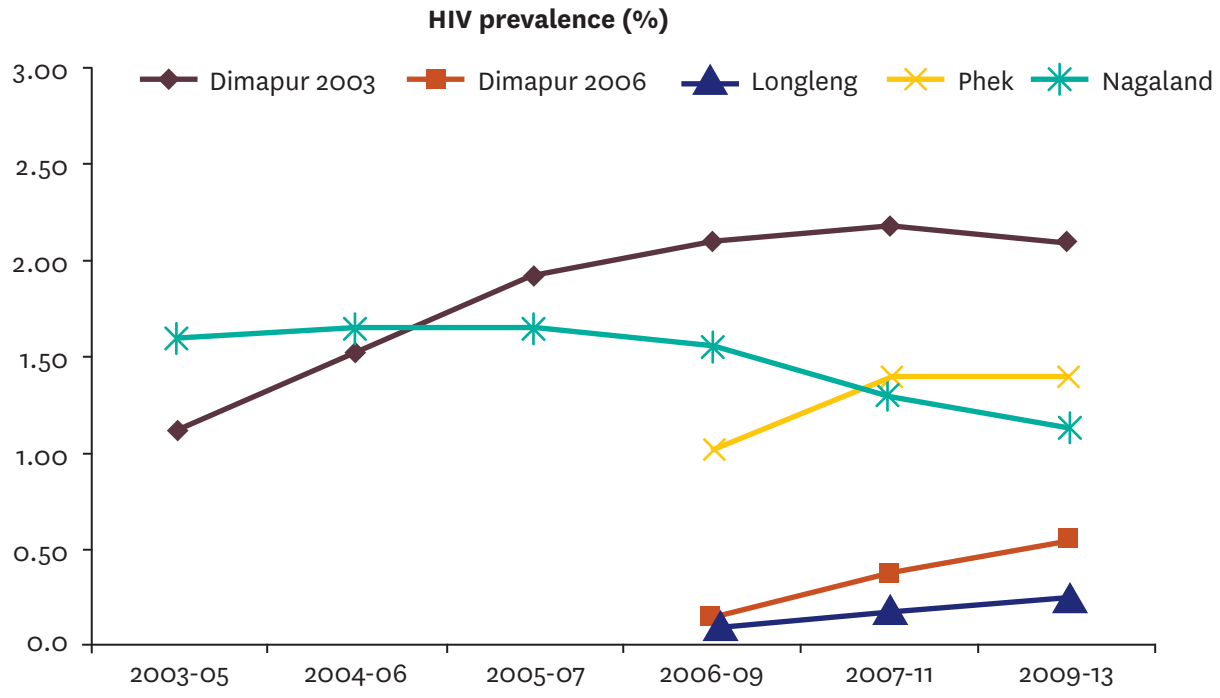

Figure 29. Districts with Rising Trends of HIV Prevalence (%) among ANC Clinic Attendees, Nagaland

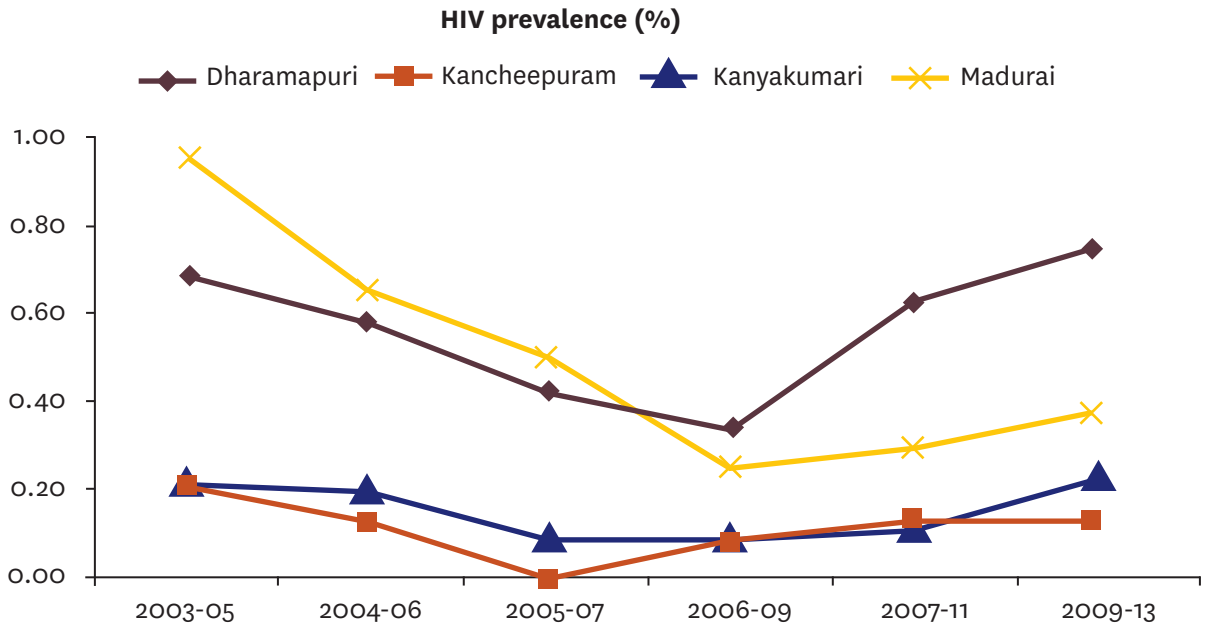

Figure 30. Districts with Rising Trends of HIV Prevalence among ANC Clinic Attendees, Tamil Nadu

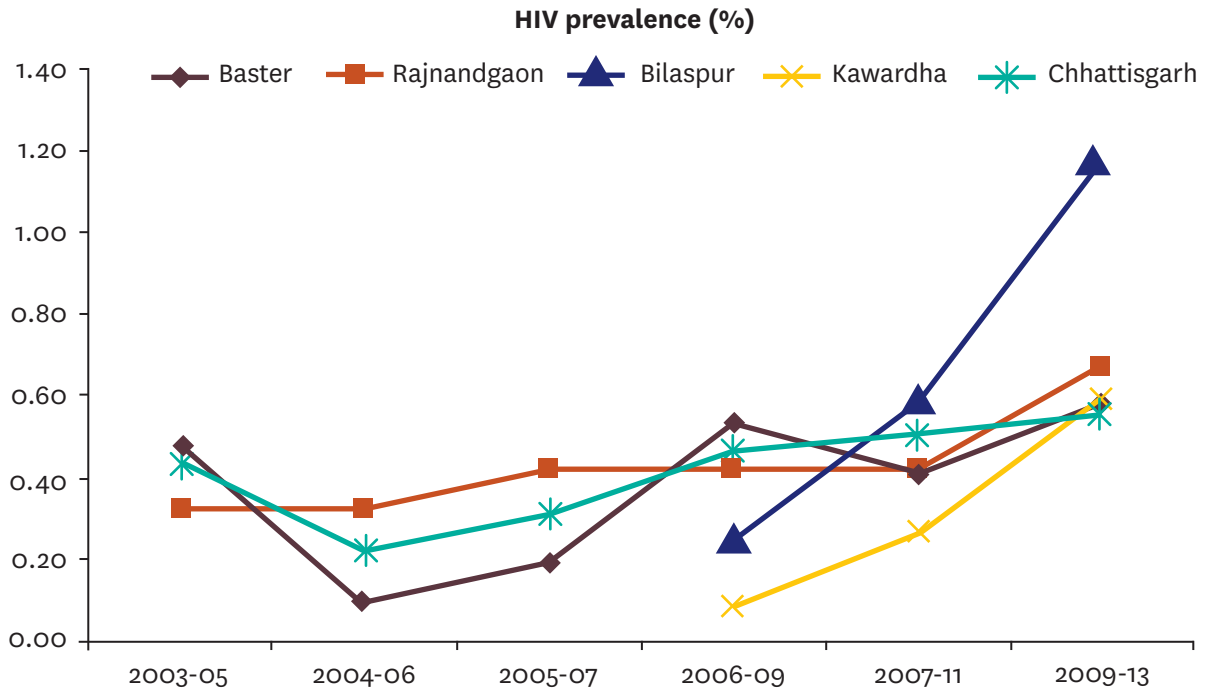

Figure 31. Districts with Rising Trends of HIV Prevalence (%) among ANC Clinic Attendees, Chhattisgarh

DELHI: Though the trend of HIV prevalence among ANC clinic attendees at Delhi state level showed declining trend in earlier years, it showed a consistent rise since 2006-09. Three districts—New Delhi, North, and North East—showed rising trends of HIV prevalence (Figure 32).

GUJARAT: Consistent sites from 2003 in Gujarat show a rising trend of HIV prevalence among ANC clinic attendees at state level. The districts of Ahmedabad, Dangs, Mahesana, Narmada, Rajkot, and Sabarkantha showed rising trends in the state (Figure 33).

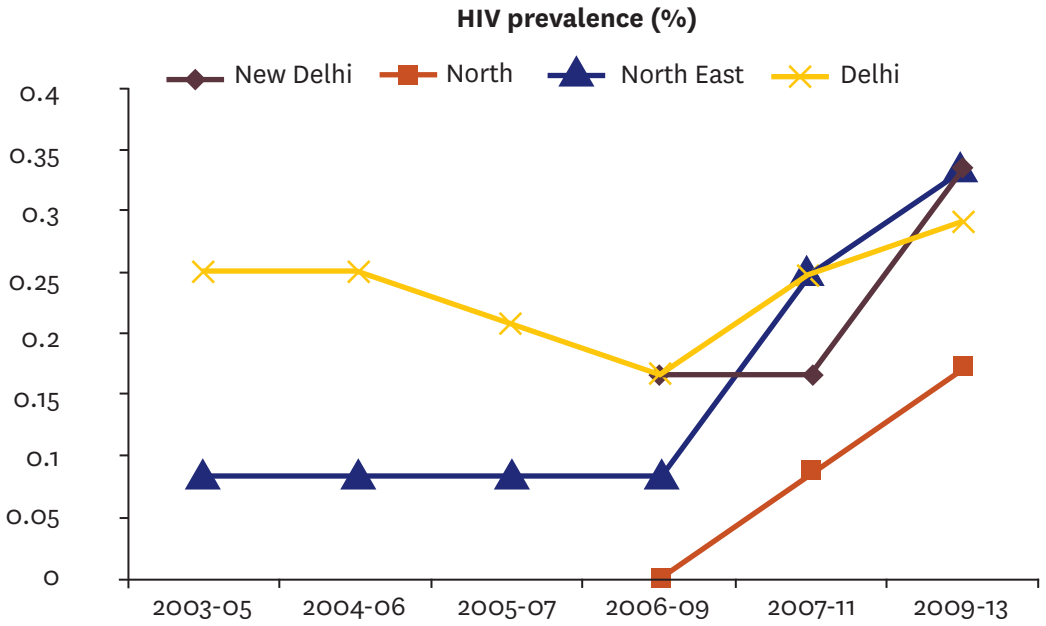

Figure 32. Districts with Rising Trends of HIV Prevalence (%) among ANC Clinic Attendees, Delhi

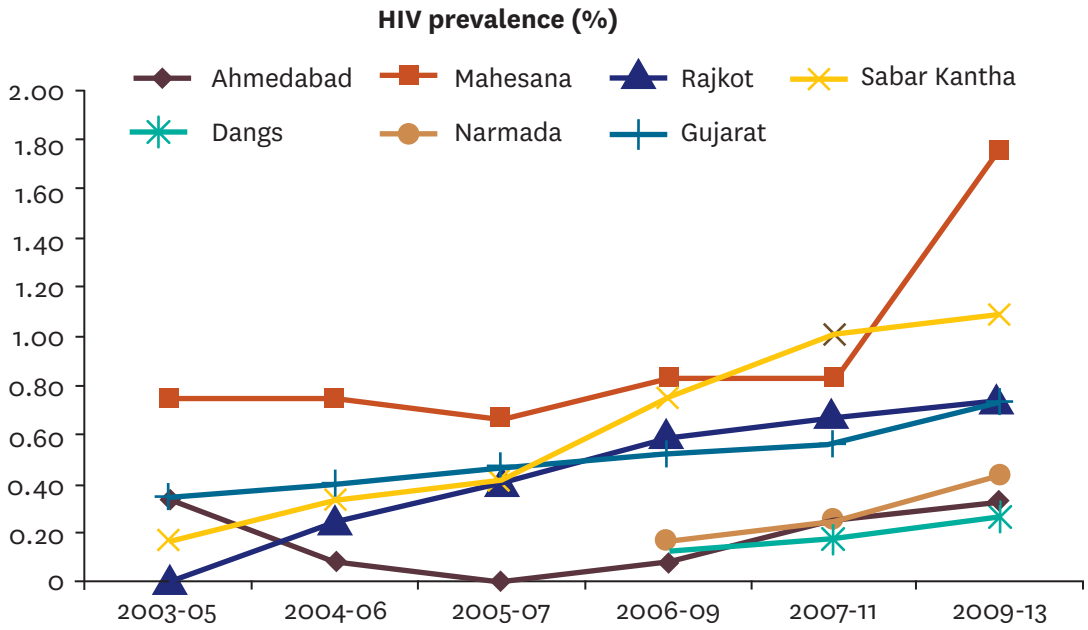

Figure 33. Districts with Rising Trends of HIV Prevalence (%) among ANC Clinic Attendees, Gujarat

JHARKHAND: In the state of Jharkhand, data from consistent sites showed a rising trend of HIV prevalence among ANC clinic attendees at state level. The districts of Ranchi, and Simdega showed rising trends of HIV prevalence over the last few years (Figure 34).

PUNJAB: In the state of Punjab, the data from consistent sites showed rising trends of HIV prevalence among ANC clinic attendees over the last few years at the state level. The districts of Amritsar, Faridkot, Ludhiana, Mansa, and Sangrur showed rising trends of HIV prevalence among ANC clinic attendees (Figure 35).

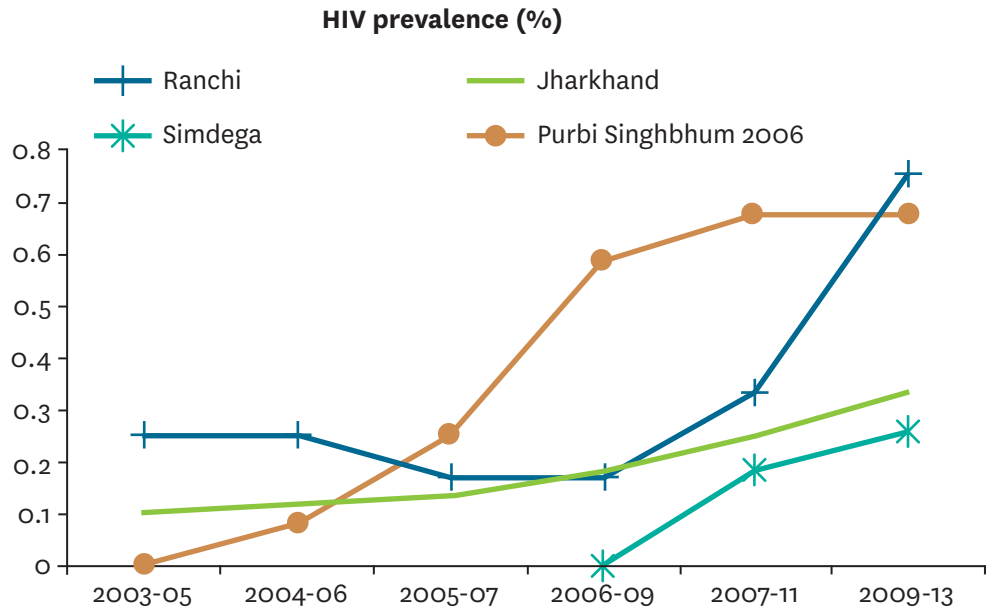

Figure 34. Districts with Rising Trends of HIV Prevalence (%) among ANC Clinic Attendees, Jharkhand

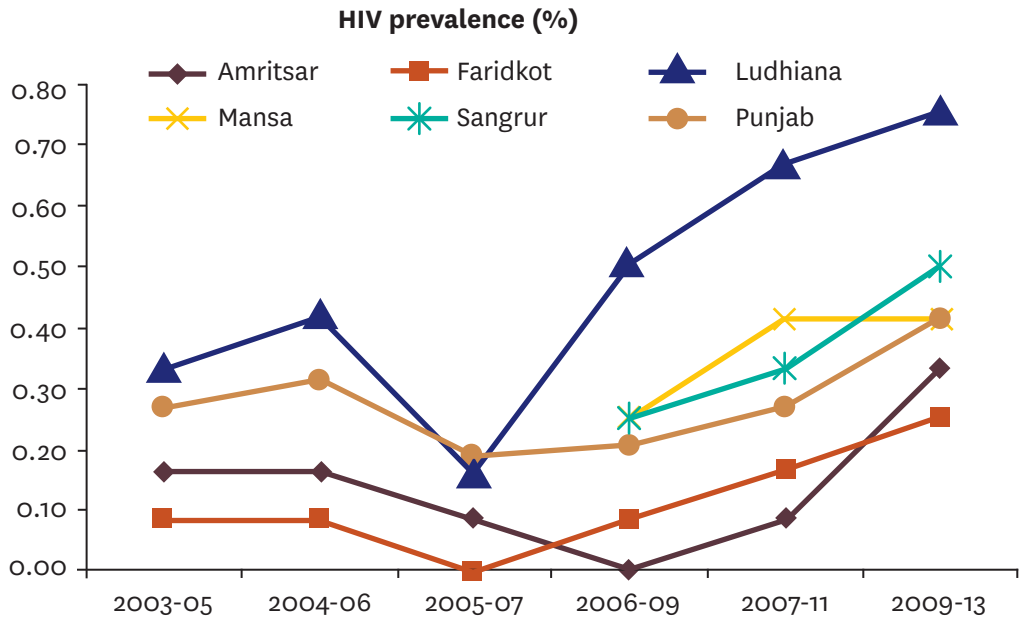

Figure 35. Districts with Rising Trends of HIV Prevalence (%) among ANC Clinic Attendees, Punjab

States with Rising Trends at very Low Prevalence Levels

The following are the very low-prevalence states with rising trends of HIV prevalence among ANC clinic attendees at state level.

ASSAM: The state of Assam showed a rising trend of HIV prevalence, though at a very low level. The districts of Jorhat, Kamrup, and Karimganj showed rising trends of HIV prevalence among ANC clinic attendees (Figure 36). Other districts had stable trends.

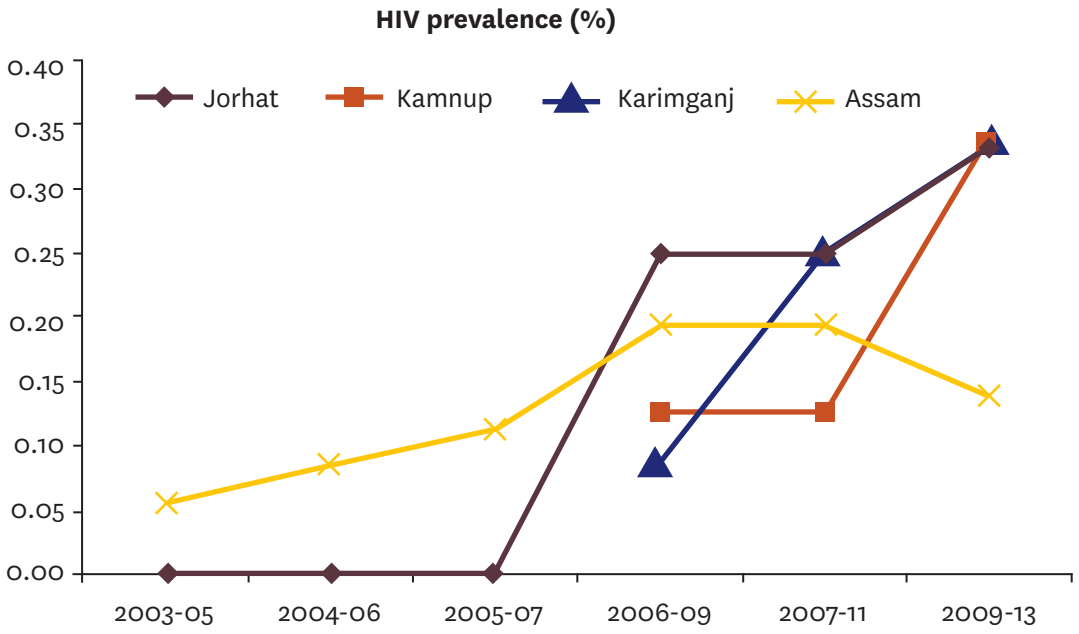

Figure 36. Districts with Rising Trends of HIV Prevalence (%) among ANC Clinic Attendees, Assam

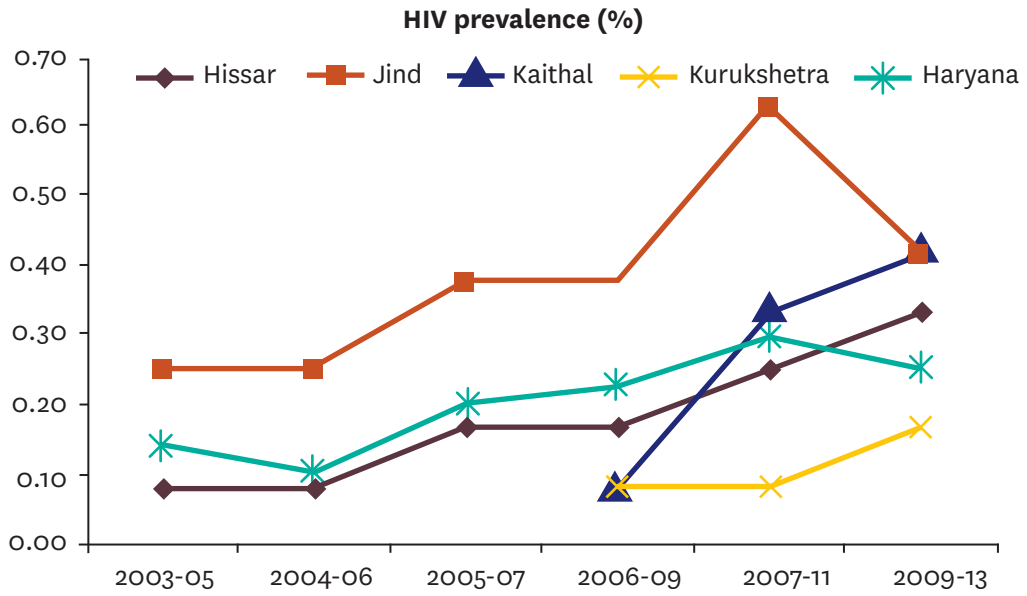

Figure 37. Districts with Rising Trends of HIV Prevalence (%) among ANC Clinic Attendees, Haryana

HARYANA: Similar to other states mentioned above, in Haryana, consistent sites showed a rising trend of HIV prevalence among ANC clinic attendees at state level. The districts of Hisar, Jind, Kaithal, and Kurukshetra showed rising trends of HIV prevalence (Figure 37).

UTTAR PRADESH: Based on consistent sites from 2003, the state of Uttar Pradesh showed rising HIV prevalence among ANC clinic attendees since 2005-07, though the trend was declining in the previous years. Among the districts consistent from 2003, Ballia, Banda, Gorakhpur, Mirzapur, and Pilibhit showed rising HIV prevalence. Among those consistent from 2006, Jalaun, Kanpur Dehat, and Lucknow showed rising trends of HIV prevalence among ANC clinic attendees (Figure 38).

UTTARAKHAND: Consistent sites showed a rising trend of HIV prevalence among ANC clinic attendees in the state of Uttarakhand, though at a very low prevalence level. The districts of Dehradun, Haridwar, Nainital, and Pitoragarh showed rising trends of HIV prevalence over the last few years (Figure 39).

The above information summarises the intra-state variations and districts with rising trends of HIV prevalence in erstwhile high-prevalence states and emerging epidemic states with rising trends at state level. However, although Rajasthan, Odisha, and Mizoram showed stable trend at state level they have considerable intra-state variation, with both moderate levels of prevalence and several pockets of high prevalence. The details of these three states follow.

RAJASTHAN: While Rajasthan showed a stable trend of HIV prevalence among ANC clinic attendees at state level, the consistent sites from 2006 showed rising trends albeit at lower levels of prevalence. The districts of Baran, Barmer, Chittaurgarh, Jaipur, Jodhpur, and Kota showed rising trends of HIV prevalence among ANC clinic attendees over the last few years (Figure 40).

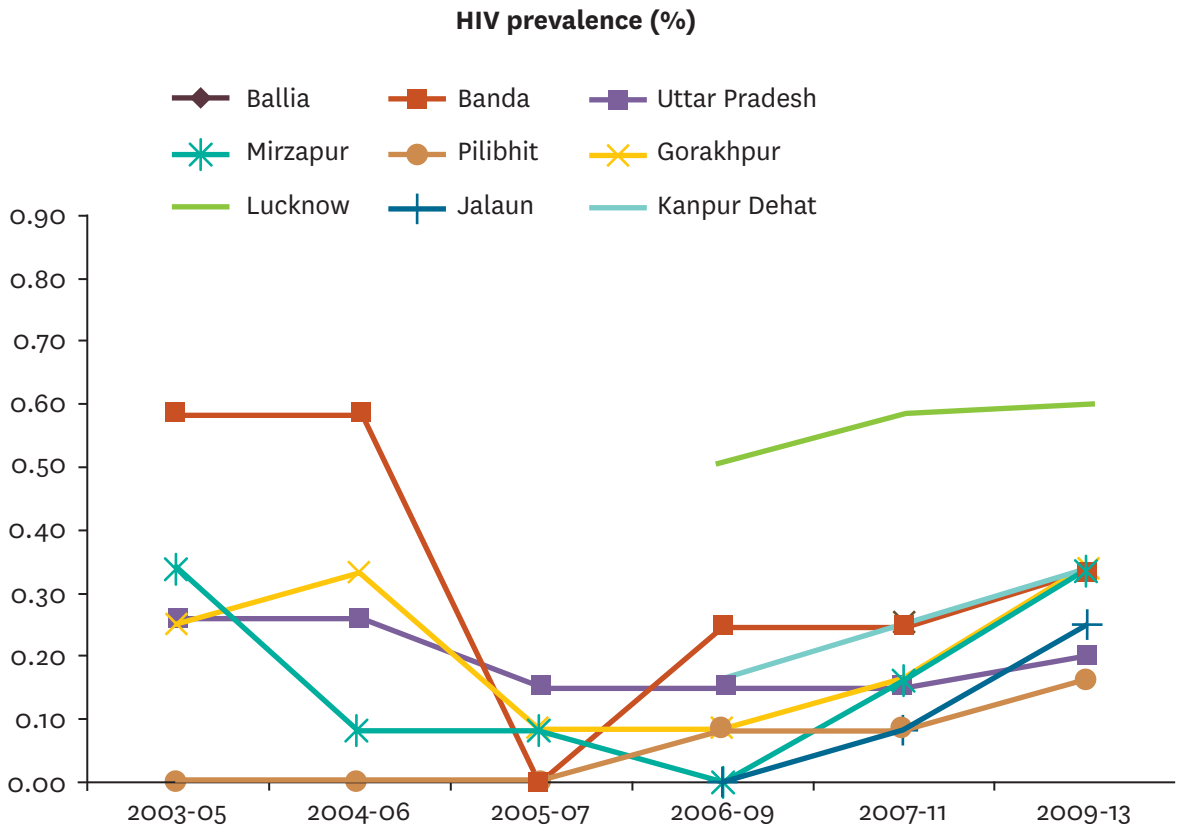

Figure 38. Districts with Rising Trends of HIV Prevalence (%) among ANC Clinic Attendees, Uttar Pradesh

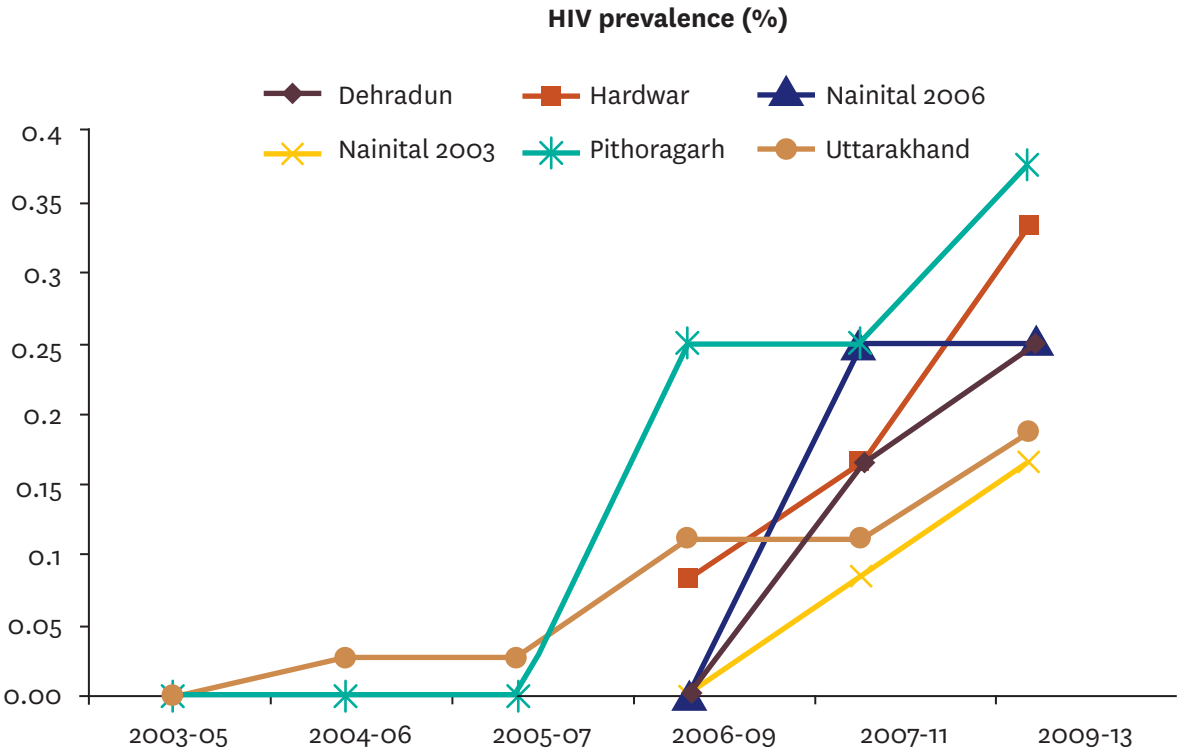

Figure 39. Districts with Rising Trends of HIV Prevalence (%) among ANC Clinic Attendees, Uttarakhand

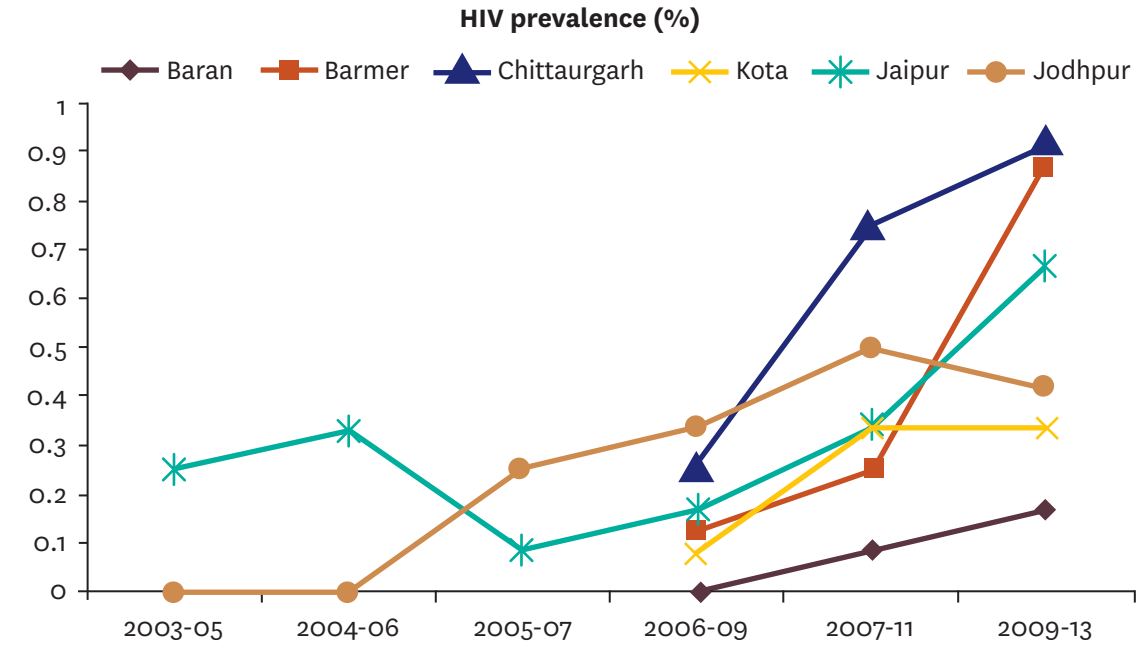

Figure 40. Districts with Rising Trends of HIV Prevalence among ANC Clinic Attendees, Rajasthan

ODISHA: Although the state-level trend of HIV prevalence among ANC clinic attendees was stable in Odisha, several sites showed rising trends at moderate levels. Sites with rising trends were found in the districts of Balasore, Cuttack, Jharsuguda and Kedrapara (Figure 41).

MIZORAM: In Mizoram, two districts, Aizawl and Serchip, showed rising trends of HIV prevalence among ANC attendees, though the overall trend at state level was stable to declining.

In summary, this chapter presented trends of HIV prevalence at national, regional, state, and intra-state levels, giving greater insight into sites and areas where the HIV epidemic is rising. These districts and areas, along with the high-prevalence sites identified in the previous chapter, need greater attention from the National AIDS Control Programme.

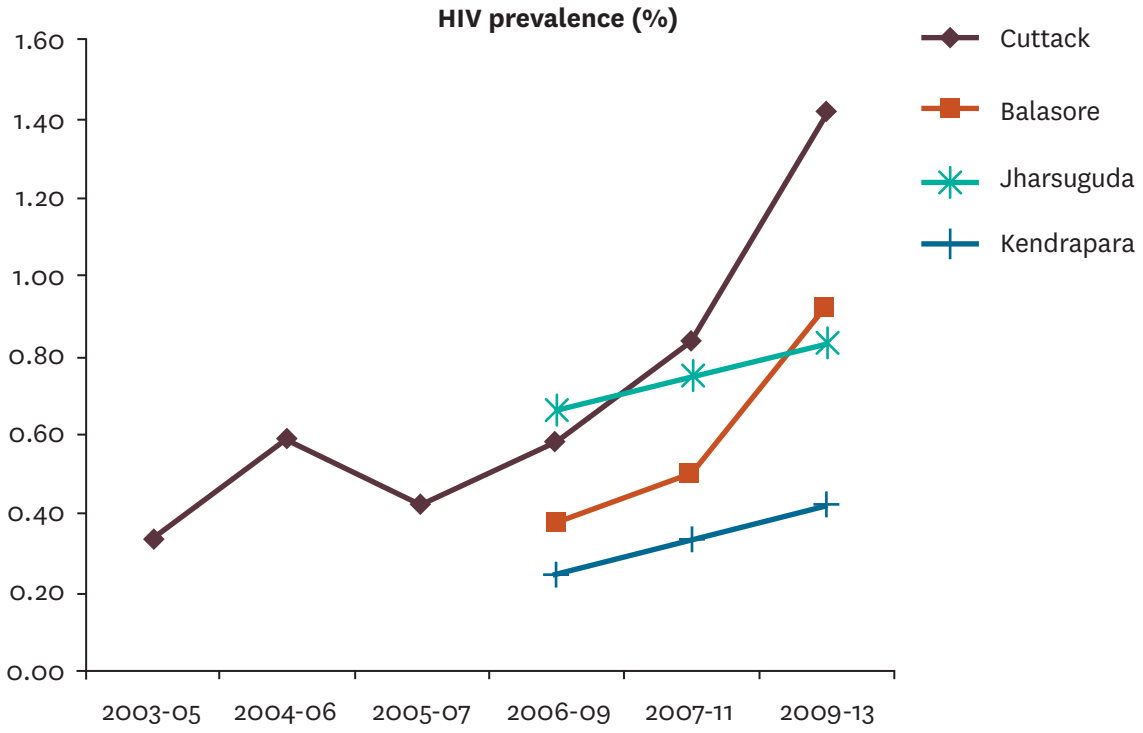

Figure 41. Districts with Rising Trends of HIV Prevalence among ANC Clinic Attendees, Odisha

CHAPTER 7

CONCLUSION

Based on the findings discussed throughout this report, the HIV epidemic in India continues to be characterised as a declining epidemic at national level, with diversity in trends at regional or state level. HIV prevalence continues to be at low levels in the general population, however, is heterogeneous in its geographic distribution with a changing landscape of HIV spread. The National AIDS Control Programme needs to be aware of these new characteristics associated with rising HIV prevalence, and to customize the programme accordingly to maintain effective prevention and control of HIV in India.

The Indian epidemic is a low level epidemic with a national average of 0.35 percent, though there are wide variations across the states and districts. It is worthwhile to note that none of the states in India are currently at high levels of HIV prevalence, i.e. 1.00 percent or more among the general population. All the erstwhile high prevalence states now have low to moderate levels of HIV prevalence. Tamil Nadu and Maharashtra have achieved significantly lower levels of HIV compared to other erstwhile high prevalence states. The heterogeneity in the spread of HIV is more evident at district level where 37 districts have HIV prevalence of 1.00 percent or more and another 130 districts have moderate HIV prevalence between 0.50 percent and 1.00 percent among the general population. There are also several sites with moderate or high HIV prevalence that are identified for the first time during each round of HIV Sentinel Surveillance.

The overall trend of HIV prevalence among ANC clinic attendees, considered a proxy for the general population, has been declining consistently over the last decade. The national decline is predominantly influenced by the significant reduction in HIV prevalence in the erstwhile high prevalence states of Andhra Pradesh, Karnataka, Maharashtra, Manipur, Nagaland and Tamil Nadu in the south and northeast. These significant declines are the likely impact of longstanding scaled up prevention and treatment programmes implemented in these states for more than two decades. High levels of coverage of both prevention and treatment services have been achieved in these states.

While the overall trend is declining, there are low to moderate prevalence states in north and west India with a different pattern. The states of Chhattisgarh, Jharkhand, Uttar Pradesh, Uttarakhand, and Delhi in the north, Gujarat in the west, and Punjab and Haryana in the northwest showed rising trends of HIV epidemic over the past decade. Out of these, Haryana, Uttar Pradesh and Uttarakhand have rising trends at very low levels of HIV prevalence, along with Assam in the North East. While epidemics in these states are in their early stages with rising trends, some other states are showing stable trends over the last several years. Of them, a high number of sites in the states of Rajasthan and Odisha are also showing high prevalence and rising trends, though at the state level, the epidemic is stable. All these epidemics are likely to remain at low to moderate level and may peak at levels much lower than 1.00 percent.

The overall landscape of the HIV epidemic in the country is also changing. The regions or pockets that hitherto had high HIV prevalence have now achieved lower levels of HIV while, several newer pockets have emerged with high prevalence. As the findings in this report show, newer pockets are more in the low to moderate prevalence states in the northern parts of the country. Also, in the high prevalence states, there are still certain pockets where HIV did not come down to a lower level in spite of sustained high focused interventions in these districts for more than two decades. Thus HIV epidemic is becoming more dispersed and localized to certain pockets rather than being a state level phenomenon, thereby requiring the National AIDS Control Programme to be more localized and customized in its response to be effective.

Key recommendations to the National AIDS Control Programme from the findings and discussions about the HIV epidemic in India are summarized below.

1. Continue to accord high priority to the states with rising trends of HIV prevalence with strategies to halt and reverse the epidemic in these states.
2. Ensure that higher coverage levels of programme interventions in high prevalence states are continued in order to sustain the declines in HIV prevalence achieved in these states.
3. Maintain prioritization of the districts and blocks with high HIV or rising trends of HIV or greater vulnerability and give enhanced focus on scaling up coverage and improving quality of interventions in these pockets.
4. Impart special focus on the high prevalence districts where HIV prevalence has not come down over the last decade in spite of sustained efforts. Undertake special studies to understand the reasons and evolve more comprehensive strategies to address them.
5. Customize the programme response to the specific key drivers of the HIV epidemic in different states and districts, to ensure effective implementation of interventions and achieve an impact on controlling HIV in the country.
6. Identify key population sub-groups that are at greater risk for acquiring HIV. Focus on younger age groups, illiterate groups, primi-gravida, women who work as skilled/semi-skilled labour in industries/ factories, domestic servants and non-agricultural labourers and men who work as truck drivers/ helpers, hotel staff and auto/taxi drivers.
7. Strengthen capacities for epidemiological analysis, interpretation, and modeling in the country at national and state levels to ensure effective use of surveillance data.
8. Promote greater analysis and use of surveillance data for programme management at state and district level. Encourage triangulation approaches for more productive use of other data generated by NACO by programme managers at all levels.

ANNEXURES

Annex 1: State-wise Distribution of Sentinel Sites under HSS 2003, 2006, 2010-11, and 2012-13

State	No. of ANC sentinel sites				No. of HRGs & bridge pop. sentinel sites		
	2003	2006	2010-11	2012-13	2003	2006	2010-11
Andaman & Nicobar Islands	4	3	4	4	3	2	1
Andhra Pradesh	43	44	63	64	15	19	31
Arunachal Pradesh	3	5	6	8	3	9	12
Assam	7	15	20	25	7	23	30
Bihar	7	23	23	29	10	38	38
Chandigarh	3	1	1	1	4	7	7
Chhattisgarh	8	19	18	18	3	10	9
Dadra & Nagar Haveli	2	1	1	1	0	0	0
Daman & Diu	4	2	2	2	0	0	0
Delhi	4	5	5	5	7	16	15
Goa	4	2	3	3	3	3	4
Gujarat	16	25	25	28	8	16	28
Haryana	7	12	12	16	5	18	28
Himachal Pradesh	14	10	8	8	6	10	13
Jammu & Kashmir	5	16	15	15	3	9	9
Jharkhand	12	16	15	21	3	19	26
Karnataka	54	54	60	62	10	14	38
Kerala	7	6	10	10	7	19	23
Madhya Pradesh	26	36	37	47	10	16	20
Maharashtra	70	73	75	75	15	29	38
Manipur	14	14	14	14	7	10	18
Meghalaya	2	7	7	8	3	4	4
Mizoram	5	4	9	9	4	12	9
Nagaland	12	19	19	13	7	10	12
Odisha	5	23	32	32	8	22	31
Puducherry	4	2	2	2	3	8	8
Punjab	10	11	13	13	4	14	23
Rajasthan	12	25	28	35	8	23	20
Sikkim	3	3	3	4	1	3	4
Tamil Nadu	53	64	68	72	15	26	53
Tripura	1	2	2	4	2	8	12
Uttar Pradesh	30	62	65	65	19	37	50
Uttarakhand	6	9	9	15	4	7	11
West Bengal	18	13	22	22	15	32	38
India	**476**	**628**	**696**	**750**	**223**	**494**	**663**

Annex 2: Data Form used at ANC Sentinel Sites, HSS 2012-13

HSS 2012-13: DATA FORM FOR ANTENATAL CLINIC ATTENDEES (ANC)

एच.एस.एस. 2012–13 प्रसवपूर्व जांच केंद्रों में जाने वाली महिलाओं के लिए डेटा प्रपत्र

(Please fill the site details in the box below OR Paste the sticker with site details/Stamp the site details in the empty box
सेन्टिनेल साइट की जानकारी यहां लिखें/छापें/चिपकायें)

State/ राज्य: ..... District/ जिला:.....

Site Name / साइट का नाम :.....

☐☐☐☐☐☐☐ (Site Code) ☐ (Sub-site No.) ☐☐☐ (Sample No.) ☐☐☐☐☐☐ (Date-DD/MM/YY)

1. Age (in completed years) / **आयु** (संपूर्ण वर्षों में) ☐☐

2. Literacy Status / साक्षरता स्थिति

1. Illiterate / निरक्षर **2.** Literate and till 5th standard / साक्षर और पाँचवी तक **3.** 6th to 10th standard / छठी से दसवीं तक
4. 11th to Graduation / ग्यारहवीं से स्नातक **5.** Post Graduation / स्नातकोत्तर

3. Order of Current Pregnancy / वर्तमान गर्भ का क्रम

1. First / पहली बार **2.** Second / दूसरी बार **3.** Third / तीसरी बार **4.** Fourth or more / चौथी या उससे ज्यादा

4. Source of Referral to the ANC clinic / प्रसवपूर्व जाँच केन्द्र में रेफरल का स्रोत

1. Self Referral / स्वतः रेफरल **2.** Family/ Relatives/ Neighbors/ Friends / परिवार/रिश्तेदार/पड़ोसी/दोस्त
3. NGO / एन.जी.ओ **4.** Private Hospital (Doctor/ Nurses) / निजी अस्पताल (डॉक्टर/नर्स)
5. Govt. Hospital (including, ASHA/ANM) / सरकारी अस्पताल (आशा/ए.एन.एम.) **6.** ICTC / ART Centre / आई.सी.टी.सी/ए.आर.टी केन्द्र

5. Current Place of Residence / वर्तमान निवास स्थान

1. Urban (Municipal Corporation / Council /Cantonment) / शहरी (नगरपालिका/निगम/छावनी) **2.** Rural / ग्रामीण

6. Duration of Stay at Current Place of Residence / वर्तमान निवास स्थान में ठहरने की अवधि ☐☐ years / वर्ष ☐☐ months / महीने

7. Current Occupation of the Respondent / प्रतिवादी का वर्तमान व्यवसाय

1. Agricultural Labourer / कृषि श्रमिक **2.** Non-Agricultural Labourer / गैर कृषि श्रमिक **3.** Domestic Servant / घरेलू नौकर
4. Skilled / Semiskilled worker / कुशल/अर्धकुशल श्रमिक **5.** Petty business / small shop / लघु उद्योग/छोटी दुकान **6.** Large Business/Self employed/विस्तृत उद्योग/स्वरोजगार
7. Service (Govt./Pvt.) / कर्मचारी (सरकारी/निजी) **8.** Student / विद्यार्थी **9.** Truck Driver/helper / ट्रक चालक/सहायक
10. Local transport worker (auto/ taxi driver, handcart pullers, rickshaw pullers etc./ स्थानीय परिवहन कर्मचारी (ऑटो/टैक्सी ड्राइवर, ठेलेवाले, रिक्शेवाले)
11. Hotel Staff / होटल कर्मचारी **12.** Agricultural cultivator /landholder / कृषक/जमींदार
14. Housewife / गृहणी

8. Current Occupation of the Spouse / प्रतिवादी के पति का वर्तमान व्यवसाय

1. Agricultural Labourer / कृषि श्रमिक **2.** Non-Agricultural Labourer / गैर कृषि श्रमिक **3.** Domestic Servant / घरेलू नौकर
4. Skilled / Semiskilled worker / कुशल/अर्धकुशल श्रमिक **5.** Petty business / small shop / लघु उद्योग/छोटी दुकान **6.** Large Business/Self employed/विस्तृत उद्योग/स्वरोजगार
7. Service (Govt./Pvt.) / कर्मचारी (सरकारी/निजी) **8.** Student / विद्यार्थी **9.** Truck Driver/helper / ट्रक चालक/सहायक
10. Local transport worker (auto/ taxi/ personal driver, handcart pullers, rickshaw pullers etc./स्थानीय परिवहन कर्मचारी (ऑटो/टैक्सी/व्यक्तिगत ड्राइवर, ठेलेवाले रिक्शेवाले)
11. Hotel Staff / होटल कर्मचारी **12.** Agricultural cultivator /landholder / कृषक/जमींदार **13.** Unemployed / बेरोजगार
99. Not Applicable (For Never married/Widows/Divorced/Separated) / लागू नहीं होता (अविवाहिता/विधवा/तलाकशुदा/अलग महिलाओं के लिय)

9. Does spouse reside alone in another place/ town away from wife for work for longer than 6 months? / क्या प्रतिवादी के पति उनसे दूर काम के लिए 6 महीनों से ज्यादा किसी दूसरे स्थान पर रहते है?

1. Yes / हां **2.** No / नहीं **99.** Not Applicable (For Never married/Widows/Divorced/Separated) / लागू नहीं होता (अविवाहिता/विधवा/तलाकशुदा/अलग महिलाओं के लिय)

Signature / हस्ताक्षर : _____ **Signature / हस्ताक्षर** : _____

Name / नाम : _____ **Name / नाम** : _____

(Person who filled the form/
व्यक्ति जिसके द्वारा फार्म भरा गया)

(Sentinel site in-charge/
सेन्टिनेल साइट के प्रभारी)

Annex 3: SACS Checklist for Preparatory Activities, HSS 2012-13

S.N	Activity	To be completed by	Status	Remarks
1. Background activity				
1.1	Filling of DD (MES) if position is vacant			
1.2	Intimation to NACO on DD (MES)-Focal person for HSS 2012-13			
2. Finalization of ANC and STD surveillance sites				
2.1	Validation of new sites in consultation with regional institutes			
2.2	Submission of composite sites details to NACO			
2.3	Sentinel site evaluation of ANC/STD sites			
2.4	Release of budget to sentinel sites			
3. Procurement				
3.1	Estimation for procurement of consumables			
3.2	Process initiated and tenders issued			
3.3	Purchase order issued			
3.4	Consumables received at SACS			
3.5	Site-wise packing of consumables			
3.6	Consumables reached sites			
4. Testing lab preparation for HSS ANC/STD sites				
4.1	Submission of contact details of lab personnel to NACO			
4.2	Submission of details of ELISA/RAPID tests done at ANC/STD testing labs to NACO			
4.3	Submission of details of sentinel site - testing lab linkages to NACO			
4.4	Release of budget to testing lab			
4.5	Consumables reached testing labs			
5. Training of SACS team, SSTs and ANC/STD surveillance site personnel				
5.1	Finalisation of SST members in consultation with RIs			
5.2	Participation of SACS in national pre-surveillance meeting			
5.3	Participation of SACS in regional pre-surveillance planning meeting and TOT			
5.4	Preparation of training plan including identification of training site @ 3 days per batch (10-12 sites per batch)			

Annex 3: SACS Checklist for Preparatory Activities, HSS 2012-13 (Cont...)

S.N	Activity	To be completed by	Status	Remarks
5.5	Communication to the sentinel sites about training dates and location			
5.6	Preparation of training kits (operational manual, technical guideline, session-wise presentation, data forms, sample transport sheet, date form transport sheet, site codes, sub-site codes, site-testing lab linkage sheet, etc.)			
5.7	Training of sentinel sites			
6. Orientation/sensitization meetings at SACS involving NRHM officials and district authorities				
6.1	Letter to key officials from NRHM at state and district levels on HSS and support required.			
6.2	Sensitization of state-level NRHM leadership and officials on HSS and support required during routine state-level meeting or as a separate meeting, as appropriate in each state.			
6.3	Sensitization of district-level NRHM/DMHOs/CMOs on HSS and support required during site-level training or routine district level meeting.			
7. Development of monitoring plan				
7.1	Constitution of state and district level monitoring team			
7.2	Development of integrated monitoring plan to ensure first visit to every sentinel site in first 15 days of start of HSS by SACS/SST team/ RI/central team.			
8. Printing and supply of documents				
8.1	Translation of bilingual data forms to local language			
8.2	Printing of bilingual data forms			
8.3	Bilingual data forms reached sentinel sites			
8.4	Printing of stickers with site details/preparation of stamps with site details			
8.5	Stickers/stamps with site details reached sentinel sites			
8.6	Operational manuals/wall charts supplied by NACO reached sentinel sites			
9. Commencement of HSS 2012-13 implementation				
9.1	Date of initiation of HSS 2012-13 at ANC/STI sites			

Annex 4: Pre-Surveillance Sentinel Site Evaluation Format

National AIDS Control Organisation
Department of AIDS Control, Ministry of Health and Family Welfare
Government of India

HIV Sentinel Surveillance Round 2012-13
Pre-Surveillance Sentinel Site Evaluation (ANC & STD Sites)

I. General Information

1. Type of site: ____ 2. Nature of site: ◯ Single Site ◯ Sub-site/ Part of Composite Site

3. Name of the Single Site/ Sub-site ____ 4. Name of Composite Site ____ 5. Name of Site/ Sub-site In-charge ____

6. Address ____ 7. Block ____ 8. District ____ 9. State ____

10. Contact Details: STD Code ____ Number 1 ____ Number 2 ____ Number 3 ____ Fax ____ Mobile 1 ____ Mobile 2 ____ Email ____

11. Type of Facility ◯ Medical College Hospital ◯ Non-teaching Tertiary/Speciality Hospital ◯ District Hospital
◯ Area Hospital ◯ CHCJ Rural Hospital/ Block Hospital ◯ PHC p Nursing Home p Clinic/Dispensary ◯ others

12. Ownership of Facility ____ 13. Average OPD Attendance per day ____ 14. Sentinel site since Year ____

15. Routine blood tests done at the facility: ☐ Syphilis (VDRL/RPR) ☐ Hemoglobin ☐ Malaria ☐ Other tests ☐ None

16. Services available at the facility: ☐ PPTCT/ICTC ☐ ART ☐ STI 17. No. of days in a week ANC/STD serices are provided ____

18. Mode of Transport of samples to Testing Lab ____ 19. Duration to reach Testing Lab (in hrs): ____

II. Status of Human Resource

	Medical officer/ Site In-charge	Nurse/ Counselor	Lab Technician
1. Is the staff in place?	◯ Yes ◯ No	◯ Yes ◯ No	◯ Yes ◯ No
2. Is there a chance of transfer/ leave/ leaving the job in next 6 months?	◯ Yes ◯ No	◯ Yes ◯ No	◯ Yes ◯ No
3. Did the staff participate in any previous rounds of surveillance?	◯ Yes ◯ No	◯ Yes ◯ No	◯ Yes ◯ No
4. Is the staff trained in Sentinel Surveillance earlier?	◯ Yes ◯ No	◯ Yes ◯ No	◯ Yes ◯ No

III. Status of Infrastructure

1. Refrigerator	◯ Available & Functional	◯ Available & Non-functional	◯ Not Available
2. Centrifuge Machine	◯ Available & Functional	◯ Available & Non-functional	◯ Not Available
3. Boiler/ Autoclave/ Other Equipment	◯ Available & Functional	◯ Available & Non-functional	◯ Not Available
4. Storage Racks/ Shelves	◯ Available & Functional	◯ Available & Non-functional	◯ Not Available
5. Sample Transportation Boxes	◯ Available & Functional	◯ Available & Non-functional	◯ Not Available
6. Cold-chain Equipment for Sample Transport	◯ Available & Functional	◯ Available & Non-functional	◯ Not Available
7. Needle Cutter/ Destroyer	◯ Available & Functional	◯ Available & Non-functional	◯ Not Available
8. Bio-medical Waste Disposal Unit (Incinerator/ Waste Pit)	◯ Available & Functional	◯ Available & Non-functional	◯ Not Available
9. Average duration of power cut in a day On hrs): ____	◯ Available & Functional	◯ Available & Non-functional	◯ Not Available
10. Generator	◯ Available & Functional	◯ Available & Non-functional	◯ Not Available

IV. Other Site-Specific Issues

(Any specific issues or problems at the sentinel site anticipated for the coming round of surveillance may be noted below.)

Annex 5: List of ANC Sentinel Sites with HIV Prevalence of 1 percent or More among Antenatal Clinic Attendees, HSS 2012-13

S.No.	District	Sentinel site	HIV prevalence (%)
Andhra Pradesh			
1	Chittoor	Chittor District HQ. Hospital	1.25
2	Cuddapah	Cuddapah Distt. Hospital	1.50
3	East Godavari	Kakinada Rangaraya Medical College	1.00
4	East Godavari	PHC - Addatheegala (New 12)	1.15
5	Guntur	Guntur Guntur Medical College	1.75
6	Karimnagar	Karimnagar Distt. Hospital	1.25
7	Karimnagar	Area Hospital, Jagitial	2.25
8	Kurnool	CHC Allgada (ANC-PHC/CHC)(New 10)	1.01
9	Mahbubnagar	Mehboobnagar Distt. Hospital	1.75
10	Mahbubnagar	Area Hospital, Gadwal	1.00
11	Nizamabad	Area Hospital, Kamareddy	1.00
12	Prakasam	Ongole Maternal and child Health Hospital	1.75
13	Prakasam	PHC, Santhanuthalapadu	1.50
14	Visakhapatnam	CHC, Aganampudi	1.01
15	Warangal	GMH, Hanumakonda	1.00
16	West Godavari	CHC, Bhimavaram	1.00
Arunachal Pradesh			
17	Lohit	Tezu District Hospital	1.43
Bihar			
18	Lakhisarai	Lakhisarai Sadar Hospital	1.25
19	Patna	Patna Patna Medical College Hospital	1.25
20	Sitamarhi	Sitamarhi Sadar Hospital	1.25
Chhattisgarh			
21	Bilaspur	CIMS (New 08)	2.25
22	Durg	D.H. Durg (New 12)	1.25
23	Kawardha	District Hospital, Kawardha	1.01
24	Rajnandgaon	Rajnandgaon District Hospital	1.00
Gujarat			
25	Mahesana	District Hospital, Mahesana	2.75
26	Patan	General Hospital	1.00
27	Surat	Municipal Inst. of Medical Edu. and Research (SMIMER)	1.00
Jharkhand			
28	Ranchi	Ranchi Rajendra Institute of Medical Sciences	1.26
Karnataka			
29	Bangalore	General Hospital K R Puram	1.50

Annex 5: List of ANC Sentinel Sites with HIV Prevalence of 1 percent or More among Antenatal Clinic Attendees, HSS 2012-13 (Cont...)

S.No.	District	Sentinel site	HIV prevalence (%)
30	Belgaum	Belgaum District Hospital	1.26
31	Bellary	General Hospital Hospet	1.25
32	Chamrajnagar	Chamarajnagar District Hospital	2.26
33	Chikballapur	DH / GH Chikkaballapura	1.00
34	Chitradurga	General Hospital Challekere	1.00
35	Davangere	C. G. Hospital Devangere / DH Devangere	1.25
36	Mandya	Mandya District Hospital	2.00
37	Ramnagaram	General Hospital, Channapatna	1.00
Madhya Pradesh			
38	Neemuch	District Hospital Neemuch (New 12)	1.01
Maharashtra			
39	Akola	CHC, Murtizapur	1.25
40	Amravati	Amravati Civil Hospital	1.00
41	Bhandara	Bhandara Civil Hospital	1.00
42	Mumbai	Cama Hospital ANC 15-24	1.26
43	Mumbai (Suburban)	Rajawadi Hospital	1.75
44	Nanded	Nanded Govt. Medical College	1.00
45	Pune	Pune ANC 15-24	1.00
46	Ratnagiri	Ratnagiri Government Hospital	1.00
47	Sindhudurg	Sindhudurg Civil Hospital	1.25
Manipur			
48	Bishnupur	Bishnupur District Hospital	1.00
49	Bishnupur	PHC, Moirang	1.00
50	Imphal West	Lamphelpat RIMS	1.00
51	Ukhrul	Ukhrul District Hospital	2.25
Meghalaya			
52	Jaintia Hills	Jowai Civil Hospital (New 12)	1.50
Mizoram			
53	Aizawl	Aizawl MCH Clinic, Civil Hospital	2.25
54	Lunglei	Lungei CHC Hospital	1.00
Nagaland			
55	Dimapur	Dimapur Civil Hospital	1.75
56	Phek	Phek Civil Hospital	1.23
57	Tuensang	Tuensang Civil Hospital	2.34
58	Tuensang	CHC, Noklak	2.31
Odisha			
59	Balasore	Dept of O&G, DHH Balasore (New 07)	1.50

Annex 5: List of ANC Sentinel Sites with HIV Prevalence of 1 percent or More among Antenatal Clinic Attendees, HSS 2012-13 (Cont...)

S.No.	District	Sentinel site	HIV prevalence (%)
60	Cuttack	Cuttack SCB Medical College	1.75
61	Ganjam	Berhampur City Hospital	1.75
62	Rayagada	Dept of O&G, District Head Quarter Hospital	1.50
Rajasthan			
63	Barmer	General Hospital	1.50
64	Bhilwara	Bhilwara District MG Hospital	2.25
65	Chittaurgarh	General Hospital	1.25
66	Jaipur	Jaipur Zanana Hospital	1.00
Tamil Nadu			
67	Dharmapuri	Govt. Distt. Hq Hospital	1.00
68	Erode	GH, Gobichettipalayam	3.00
69	Kanyakumari	Govt. Medical College Hospital, Nagercoil	1.00
70	Nagapattinam	Govt. Distt. Hq Hospital	1.00
71	Namakkal	Government Dist. HQ Hospital	1.00
72	Salem	GH, Attur	2.76
73	Thiruvarur	Govt. Distt. Hq Hospital	1.26
74	Tiruchirapalli	Govt. Medical College Hospital	1.50
75	Tiruchirappalli	Tiruchirapaally ANC 15-24	1.00
Uttar Pradesh			
76	Ballia	Balia Mahila Hospital	1.26
77	Deoria	District Mehila Hospital	1.00
78	Kaushambi	District Mehila Hospital	1.00
Uttrakhand			
79	Dehradun	Doon Women Hospital, Dehradun (New 12)	1.00
West Bengal			
80	Nadia	Aranghata BPHC (New 10)	1.25

Annex 6: List of Emerging Pockets of HIV Prevalence (ANC Sentinel Sites that Showed High or Moderate HIV Prevalence for the First Time), HSS 2012-13

S.No.	District	Site name	HIV prevalence (%)
Andhra Pradesh			
1	East Godavari	PHC - Addatheegala (New 12)	1.15
2	Kurnool	CHC Allgada (ANC-PHC/CHC)(New 10)	1.01
3	Mahbubnagar	Area Hospital, Gadwal	1.00
Chhattisgarh			
4	Durg	D.H. Durg (New 12)	1.25
5	Kawardha	District Hospital, Kawardha	1.01
6	Rajnandgaon	Rajnandgaon District Hospital	1.00
Gujarat			
7	Patan	General Hospital	1.00
Jharkhand			
8	Ranchi	Ranchi Rajendra Institute of Medical Sciences	1.26
Karnataka			
9	Chikballapur	DH / GH Chikkaballapura	1.00
Madhya Pradesh			
10	Neemuch	District Hospital Neemuch (New 12)	1.01
Maharashtra			
11	Sindhudurg	Sindhudurg Civil Hospital	1.25
Meghalaya			
12	Jaintia Hills	Jowai Civil Hospital (New 12)	1.50
Odisha			
13	Balasore	Dept of O&G, DHH Balasore (New 07)	1.50
14	Rayagada	Dept of O&G, District Head Quarter Hospital	1.50
Rajasthan			
15	Barmer	General Hospital	1.50
16	Bhilwara	Bhilwara District MG Hospital	2.25
17	Jaipur	Jaipur Zanana Hospital	1.00
Tamil Nadu			
18	Erode	GH, Gobichettipalayam	3.00

Annex 6: List of Emerging Pockets of HIV Prevalence (ANC Sentinel Sites that Showed High or Moderate HIV Prevalence for the First Time), HSS 2012-13 (Cont...)

S.No.	District	Site name	HIV prevalence (%)
19	Nagapattinam	Govt. Distt. Hq Hospital	1.00
20	Thiruvarur	Govt. Distt. Hq Hospital	1.26
21	Tiruchirappalli	Tiruchirapaally ANC 15-24	1.00
Uttar Pradesh			
22	Ballia	Balia Mahila Hospital	1.26
Uttarakhand			
23	Dehradun	Doon Women Hospital, Dehradun (New 12)	1.00
West Bengal			
24	Nadia	Aranghata BPHC (New 10)	1.25
Andhra Pradesh			
25	Visakhapatnam	Apurva Hospital, Seetaampeta (New 07)	0.50
Arunachal Pradesh			
26	West Kameng	Bomdila District Hospital	0.75
Assam			
27	Cachar	Silchar Medical College and Hospital (New 10)	0.50
28	Hailakandi	Hailakandi Civil Hospital	0.50
29	Kamrup	Mahendra Mohan Chaudhary Civil Hospital	0.75
30	Karbi Anglong	Diphu Civil Hospital	0.50
31	North Cachar Hills	Haflong Civil Hospital, Haflong (New 12)	0.50
32	Tinsukia	Tinsukia Civil Hospital	0.50
Bihar			
33	Muzaffarpur	Muzaffarpur Sri Krishna Medical College Hospital	0.75
34	Nalanda	Biharsharif Sadar Hospital	0.50
35	Pashchim Champaran	Betiah MJK Hospital	0.75
36	Siwan	Sadar Hospital, Siwan (New 12)	0.50
Chhattisgarh			
37	Sarguja	District Hospital, Surguja (New 08)	0.75
Delhi			
38	New Delhi	LHMC	0.75

Annex 6: List of Emerging Pockets of HIV Prevalence (ANC Sentinel Sites that Showed High or Moderate HIV Prevalence for the First Time), HSS 2012-13 (Cont...)

S.No.	District	Site name	HIV prevalence (%)
Gujarat			
39	Narmada	Ref. Hospital, Raipjpla	0.75
Haryana			
40	Fatehabad	GH Fatehabad	0.50
Jammu & Kashmir			
41	Doda	District Hospital, Doda	0.50
Karnataka			
42	Bagalkot	CHC Mahalingpur and PHC Belagali (New 12)	0.75
43	Bangalore Rural	Gen. Hosp., Devanahalli (New 08)	0.75
Madhya Pradesh			
44	Betul	Betual District Hospital	0.50
Punjab			
45	Amritsar	Amritsar Medical College	0.76
46	Nawanshahr	CH Sujjon	0.50
Rajasthan			
47	Jaisalmer	Sh. Jawahar Hospital	0.75
48	Udaipur	Pannadhai Govt. Hospital (New 12)	0.50
Sikkim			
49	East	Gangtok STNM Hospital	0.50
Tamil Nadu			
50	Tirunelveli	GH, Ambasamudram	0.50
51	Tiruppur	Govt HQ hosp.Tiruppur (New 12)	0.50
Uttar Pradesh			
52	Hardoi	CHC, Sandila	0.51
53	Jalaun	District Mehila Hospital	0.50
54	Maharajganj	Maharajganj Rural Composite (New 10)	0.50
55	Rae Bareli	CHC, Bachrawa	0.50
Uttarakhand			
56	Hardwar	Combine Hospital, Roorkee	0.50
57	Tehri Garhwal	District Hospital, Bauradi (New 12)	0.81
58	Uttarkashi	District Hospital, Uttarkashi (New 12)	0.51

Annex 7: Cumulative Number of Consistent ANC Sentinel Sites for Trend Analysis by State

State	2002	2003	2004	2005	2006	2007	2008-09	2010-11	2012-13
Andaman & Nicobar Islands	3	3	3	3	3	3	4	4	4
Andhra Pradesh	13	42	43	43	44	51	52	63	64
Arunachal Pradesh	0	0	0	2	5	5	5	5	8
Assam	3	3	3	3	10	12	16	20	25
Bihar	6	7	7	7	22	23	23	23	28
Chandigarh	1	1	1	1	1	1	1	1	1
Chhattisgarh	4	4	4	5	14	15	17	17	18
Dadra & Nagar Haveli	1	1	1	1	1	1	1	1	1
Daman & Diu	2	2	2	2	2	2	2	2	2
Delhi	4	4	4	4	5	5	5	5	5
Goa	2	2	2	2	2	2	3	3	3
Gujarat	8	8	8	8	23	25	25	25	28
Haryana	4	4	4	4	11	12	12	12	16
Himachal Pradesh	5	5	5	5	6	6	6	6	6
Jammu & Kashmir	3	3	3	3	9	13	14	14	15
Jharkhand	1	5	5	5	13	13	14	14	21
Karnataka	10	54	54	54	54	54	58	60	62
Kerala	3	3	4	4	6	6	6	10	10
Madhya Pradesh	13	13	13	13	36	36	36	37	47
Maharashtra	20	69	72	72	72	72	72	75	75
Manipur	10	14	14	14	14	14	14	14	14
Meghalaya	1	1	1	1	4	4	5	5	8
Mizoram	3	3	3	4	4	8	8	8	9
Nagaland	3	6	8	11	13	15	16	16	16
Odisha	4	5	5	5	23	31	31	32	32
Puducherry	2	2	2	2	2	2	2	2	2
Punjab	4	4	4	4	11	13	13	13	13
Rajasthan	5	5	5	5	24	25	25	27	34
Sikkim	1	1	1	1	2	3	3	3	4
Tamil Nadu	10	52	63	63	63	63	63	68	72
Tripura	1	1	1	1	2	2	2	2	4
Uttar Pradesh	14	16	16	17	39	47	53	64	66
Uttarakhand	3	3	3	3	9	9	9	9	15
West Bengal	2	4	4	4	11	13	21	22	22
India	**169**	**350**	**368**	**376**	**560**	**606**	**637**	**682**	**750**

Annex 8: HIV Prevalence (%) among ANC Clinic Attendees and Risk Groups Based on HSS 2003 to 2012-13 by State

Annex 8a: HIV prevalence (%) among ANC clinic attendees, HSS 2003-2013								
State	**2003**	**2004**	**2005**	**2006**	**2007**	**2008-09**	**2010-11**	**2012-13**
Andaman & Nicobar Islands	0.45	0.00	0.00	0.17	0.25	0.06	0.13	0.00
Andhra Pradesh	1.45	1.70	1.67	1.41	1.07	1.22	0.76	0.59
Arunachal Pradesh	0.00	0.20	0.46	0.27	0.00	0.46	0.21	0.26
Assam	0.00	0.14	0.00	0.04	0.11	0.13	0.09	0.16
Bihar	0.11	0.22	0.38	0.36	0.34	0.30	0.17	0.34
Chandigarh	0.22	0.50	0.00	0.25	0.25	0.25	0.00	0.00
Chhattisgarh	0.76	0.00	0.32	0.31	0.29	0.41	0.43	0.52
Dadra & Nagar Haveli	0.13	0.00	0.25	0.00	0.50	0.00	0.00	0.00
Daman & Diu	0.27	0.38	0.13	0.00	0.13	0.38	0.13	0.13
Delhi	0.13	0.31	0.31	0.10	0.20	0.20	0.30	0.40
Goa	0.48	1.13	0.00	0.50	0.18	0.68	0.33	0.25
Gujarat	0.38	0.19	0.38	0.55	0.34	0.44	0.46	0.50
Haryana	0.27	0.00	0.19	0.17	0.16	0.15	0.19	0.17
Himachal Pradesh	0.25	0.25	0.22	0.06	0.13	0.51	0.04	0.04
Jammu & Kashmir	0.00	0.08	0.00	0.04	0.05	0.00	0.06	0.07
Jharkhand	0.08	0.05	0.14	0.13	0.13	0.38	0.45	0.19
Karnataka	1.43	1.52	1.49	1.12	0.86	0.89	0.69	0.54
Kerala	0.09	0.42	0.32	0.21	0.46	0.21	0.13	0.03
Madhya Pradesh	0.42	0.38	0.27	0.26	0.25	0.26	0.32	0.14
Maharashtra	1.15	0.97	1.07	0.87	0.76	0.61	0.42	0.40
Manipur	1.34	1.66	1.30	1.39	1.31	0.54	0.78	0.64
Meghalaya	0.35	0.00	0.00	0.09	0.00	0.04	0.05	0.26
Mizoram	1.70	1.50	0.81	0.94	0.85	0.72	0.40	0.67
Nagaland	1.69	1.85	1.97	1.36	1.10	1.14	0.66	0.88
Odisha	0.00	0.50	0.60	0.55	0.23	0.73	0.43	0.31
Puducherry	0.13	0.25	0.25	0.25	0.00	0.25	0.13	0.00
Punjab	0.13	0.44	0.25	0.20	0.12	0.31	0.26	0.37
Rajasthan	0.15	0.23	0.50	0.29	0.19	0.19	0.38	0.32
Sikkim	0.21	0.00	0.25	0.10	0.09	0.00	0.09	0.19
Tamil Nadu	0.83	0.81	0.54	0.54	0.58	0.35	0.38	0.36
Tripura	0.00	0.25	0.00	0.42	0.25	0.00	0.00	0.19
Uttar Pradesh	0.22	0.44	0.15	0.25	0.08	0.18	0.21	0.18
Uttarakhand	0.06	0.00	0.00	0.11	0.06	0.22	0.25	0.27
West Bengal	0.46	0.43	0.89	0.38	0.40	0.17	0.13	0.19
India	**0.80**	**0.95**	**0.90**	**0.60**	**0.49**	**0.49**	**0.40**	**0.35**

Annex 8b: HIV prevalence (%) among FSW, 2003-2011							
State	**2003**	**2004**	**2005**	**2006**	**2007**	**2008-09**	**2010-11**
Andaman & Nicobar Islands	-	0.5	0.4	-	-	-	-
Andhra Pradesh	20	16.97	12.97	7.32	9.74	11.14	6.86
Arunachal Pradesh	-	-	-	0	-	0	0.28
Assam	0	0	0.76	0.46	0.44	0.8	0.46
Bihar	4.8	0.2	2.24	1.68	3.4	2.98	2.3
Chandigarh	0.6	0.8	0.67	0.67	0.4	0.82	0
Chhattisgarh	-	-	-	1.57	1.43	-	2.73
Dadra & Nagar Haveli	-	-	-	-	-	-	-
Daman & Diu	-	-	-	-	-	-	-
Delhi	1.61	4.6	3.15	2.8	3.15	2.17	0.7
Goa	30.15	-	-	-	-	6.4	2.7
Gujarat	-	9.2	8.13	6.4	6.53	3.74	1.62
Haryana	-	-	2	1.19	0.91	1.55	0.48
Himachal Pradesh	0	0.8	0	0.66	0.87	0.55	0.53
Jammu & Kashmir	-	-	-	0	-	0	0
Jharkhand	-	0	0.8	0.88	1.09	0.94	0.82
Karnataka	14.4	21.6	18.39	8.64	5.3	14.4	5.1
Kerala	1.94	-	-	0.32	0.87	1.46	0.73
Madhya Pradesh	-	-	1.82	1.07	0.67	-	0.93
Maharashtra	54.29	41.69	23.62	19.57	17.91	10.77	6.89
Manipur	12.8	12.4	10	11.6	13.07	10.87	2.8
Meghalaya	-	-	-	-	-	-	-
Mizoram	-	13.69	14	10.4	7.2	9.2	-
Nagaland	4.4	4.44	10.8	16.4	8.91	14.06	3.21
Odisha	-	5.18	2.6	1	0.8	2.4	2.07
Puducherry	-	1.94	0.28	1.44	1.3	-	1.21
Punjab	0	-	-	1.36	0.65	0.97	0.85
Rajasthan	3.92	2.31	3.72	2.55	4.16	3.58	1.28
Sikkim	-	-	-	-	0	0.44	0
Tamil Nadu	8.8	4	5.49	4.62	4.68	6.22	2.69
Tripura	-	-	-	-	-	-	0.21
Uttar Pradesh	6.6	8	3.5	1.52	0.78	1.03	0.62
Uttarakhand	-	-	-	-	-	-	0.44
West Bengal	6.47	4.11	6.8	6.12	5.92	4.12	2.04
India	**10.33**	**9.43**	**8.44**	**4.9**	**5.06**	**4.94**	**2.67**

Annex 8c: HIV prevalence (%) among MSM, 2003-2011							
State	**2003**	**2004**	**2005**	**2006**	**2007**	**2008-09**	**2010-11**
Andaman & Nicobar Islands	1.25	-	-	-	-	-	-
Andhra Pradesh	13.2	16	6.45	10.25	17.04	23.6	10.14
Arunachal Pradesh	-	-	-	-	-	-	-
Assam	-	-	-	0.78	2.78	0.41	1.4
Bihar	1.6	1.6	0.4	0.3	0	1.64	4.2
Chandigarh	-	1.36	1.6	4.8	3.6	2.79	0.4
Chhattisgarh	-	-	-	-	-	-	14.98
Dadra & Nagar Haveli	-	-	-	-	-	-	-
Daman & Diu	-	-	-	-	-	-	-
Delhi	27.42	6.67	20.4	12.27	11.73	7.87	5.34
Goa	9.09	1.68	4.9	4.8	7.93	6.4	4.53
Gujarat	-	6.8	10.67	11.2	8.4	5.48	3
Haryana	-	-	-	0	5.39	3.2	3.05
Himachal Pradesh	-	-	-	0.44	0	0.4	1.23
Jammu & Kashmir	-	-	-	-	-	-	-
Jharkhand	-	-	-	-	-	2	0.4
Karnataka	10.8	10	11.61	19.2	17.6	12.52	5.36
Kerala	-	0.89	3.2	0.64	0.96	0.75	0.36
Madhya Pradesh	-	-	-	-	-	-	7.94
Maharashtra	18.8	11.2	10.4	15.6	11.8	11.9	9.91
Manipur	29.2	14	15.6	10.4	16.4	17.21	10.53
Meghalaya	-	-	-	-	-	-	-
Mizoram	-	-	-	-	-	-	-
Nagaland	-	-	-	-	-	-	13.58
Odisha	-	-	-	-	7.37	4.19	3.79
Puducherry	-	5.22	5.6	2.47	2	-	1.21
Punjab	-	-	-	4.8	1.22	3	2.18
Rajasthan	-	-	-	0	-	-	-
Sikkim	-	-	-	-	-	-	-
Tamil Nadu	4.2	6.8	6.2	5.6	6.6	5.24	2.41
Tripura	-	-	-	-	-	-	-
Uttar Pradesh	-	-	-	-	0.4	4.07	1.56
Uttarakhand	-	-	-	-	-	-	-
West Bengal	-	1.33	0.54	6.6	5.61	4.9	5.09
India	**8.47**	**7.47**	**8.74**	**6.41**	**7.41**	**7.3**	**4.43**

Annex 8d: HIV prevalence (%) among IDUs, 2003-2011							
State	**2003**	**2004**	**2005**	**2006**	**2007**	**2008-09**	**2010-11**
Andaman & Nicobar Islands	-	-	-	-	-	-	-
Andhra Pradesh	-	-	-	-	3.71	6.9	3.05
Arunachal Pradesh	-	-	-	0	0	0.23	0.24
Assam	5.56	4.48	7.86	2.86	2.14	3.64	1.46
Bihar	-	-	-	0.2	0.6	5.47	4.54
Chandigarh	-	4.8	9.2	17.6	8.64	13.6	7.2
Chhattisgarh	-	-	-	-	-	-	0.42
Dadra & Nagar Haveli	-	-	-	-	-	-	-
Daman & Diu	-	-	-	-	-	-	-
Delhi	14.4	17.6	22.8	10	10.1	18.6	18.27
Goa	-	-	-	-	-	-	-
Gujarat	-	-	-	-	-	-	1.6
Haryana	-	-	-	0	0.8	2	0.8
Himachal Pradesh	-	-	-	-	-	0.65	4.89
Jammu & Kashmir	0	0	0	2.5	-	0	0
Jharkhand	-	-	-	0.4	-	1.65	2.02
Karnataka	2.8	0	-	3.6	2	2	0
Kerala	-	2.58	5.19	9.57	7.85	3.04	4.95
Madhya Pradesh	-	-	-	-	-	-	5.13
Maharashtra	22.89	29.2	12.8	20.4	24.4	20	14.17
Manipur	24.47	21	24.1	19.8	17.9	28.65	12.89
Meghalaya	0	0	0	3.33	4.17	-	6.44
Mizoram	6.4	6.8	4.8	3.05	7.53	5.28	12.01
Nagaland	8.43	3.22	4.51	2.39	1.91	3.17	2.21
Odisha	-	-	-	10.4	7.33	7.2	7.16
Puducherry	-	-	-	-	-	-	-
Punjab	-	-	-	13.8	13.79	26.36	21.1
Rajasthan	-	-	-	-	-	-	-
Sikkim	-	-	0.48	0.2	0.47	1.45	0
Tamil Nadu	63.81	39.92	18	24.2	16.8	9.48	-
Tripura	-	-	10.92	0	0	0.42	0.45
Uttar Pradesh	-	-	-	4.63	1.29	2.46	2.03
Uttarakhand	-	-	-	-	-	-	4.33
West Bengal	2.61	3.83	7.41	4.64	7.76	6.9	2.72
India	**13.15**	**11.16**	**10.16**	**6.92**	**7.23**	**9.19**	**7.14**

Annex 8e: HIV prevalence (%) among single male migrants, long-distance truckers,andpeople who are transgender												
State	SMMs				LDTs				TGs			
	2006	2007	2009	2011	2006	2007	2009	2011	2006	2007	2009	2011
A & N Islands	-	-	-	-	-	-	-	-	-	-	-	-
Andhra Pradesh	-	-	-	-	-	-	-	3.20	-	-	-	-
Arunachal Pradesh	-	-	-	-	-	-	-	-	-	-	-	-
Assam	-	-	-	-	-	-	-	-	-	-	-	-
Bihar	-	-	-	-	-	-	-	-	-	-	-	-
Chandigarh	-	-	-	-	-	-	-	-	-	-	-	-
Chhattisgarh	-	-	-	-	-	-	-	-	-	-	-	-
D & N Haveli	-	-	-	-	-	-	-	-	-	-	-	-
Daman & Diu	-	-	-	-	-	-	-	-	-	-	-	-
Delhi	-	-	-	-	-	-	-	-	-	-	-	-
Goa	-	-	-	-	-	-	-	-	-	-	-	-
Gujarat	-	-	1.80	0.67	-	-	-	3.09	-	-	-	-
Haryana	-	-	-	1.33	-	-	-	-	-	-	-	-
Himachal Pradesh	-	0.00	0.00	0.00	-	0.40	-	-	-	-	-	-
Jammu & Kashmir	-	-	-	-	-	-	-	-	-	-	-	-
Jharkhand	-	-	-	-	-	-	-	1.20	-	-	-	-
Karnataka	-	-	-	0.00	-	-	-	3.20	-	-	-	-
Kerala	-	-	-	0.00	2.40	3.60	0.80	0.00	-	-	-	-
Madhya Pradesh	-	-	-	-	-	-	-	2.47	-	-	-	-
Maharashtra	2.40	1.60	3.00	1.07	-	-	-	1.61	29.60	42.21	16.40	18.80
Manipur	-	-	-	-	-	-	-	-	-	-	-	-
Meghalaya	-	-	-	-	-	-	-	-	-	-	-	-
Mizoram	-	-	0.80	1.22	-	-	-	-	-	-	-	-
Nagaland	-	-	-	-	-	-	-	-	-	-	-	-
Odisha	1.44	-	3.60	3.20	2.73	-	-	-	-	-	-	-
Puducherry	-	-	-	-	-	-	-	-	-	-	-	-
Punjab	-	-	-	1.20	1.07	-	-	-	-	-	-	-
Rajasthan	-	-	-	-	-	-	-	-	-	-	-	-
Sikkim	-	-	-	-	-	-	-	-	-	-	-	-
Tamil Nadu	-	-	-	0.80	-	-	-	2.01	-	-	-	3.82
Tripura	-	-	-	-	-	-	-	-	-	-	-	-
Uttar Pradesh	-	-	-	-	-	-	-	-	-	-	-	-
Uttarakhand	-	-	-	-	-	-	-	-	-	-	-	-
West Bengal	-	9.27	2.42	1.61	2.72	2.72	1.75	3.71	-	-	-	-
India	**1.60**	**3.61**	**2.17**	**0.99**	**2.37**	**2.87**	**1.57**	**2.59**	**29.60**	**42.21**	**16.40**	**8.82**

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
A & N Islands										
1	Nicobars	Car Nicobar BJR Hospital	0.75	0.00	0.00	0.00	0.25	0.25	0.26	0.00
2	South Andaman	Port Blair GB Pant Hospital	0.50	0.00	0.00	0.50	0.50	0.00	0.25	0.00
3	South Andaman	PHC Garacharma,Port Blair (New 08)						0.00	0.00	0.00
4	North & Middle Andaman	Rangat CHC Hospital	0.50		0	0.00	0.00	0.00	0.00	0.00
5	South Andaman	Diglipur, Port Blair	0							
Andhra Pradesh										
6	Anantapur	Ananthapur Medical College	1.25	1.75	1.75	2.25	1.75	1.50	1.25	0.25
7	Anantapur	Rural Development Trust -(RDT PPP FI ICTC, Kalyandurg (ANC-Pvt) New 10							0.50	0.00
8	Chittoor	Chittor District HQ. Hospital	0.00	1.25	1.25	0.25	1.00	1.50	0.50	1.25
9	Chittoor	Desai Hospital, Madanapally (ANC-Pvt)-New 10							0.50	0.31
10	Cuddapah	Cuddapah DH	2.50	2.75	0.75	1.50	1.25	2.00	4.00	1.50
11	East Godavari	Kakinada Rangaraya Medical College	2.50	3.00	2.75	1.25	2.00	2.50	0.50	1.00
12	Guntur	Guntur Guntur Medical College	3.75	3.50	3.00	2.25	1.75	3.75	2.00	1.75
13	Krishna	Machilipatnam DH	1.75	2.25	2.00	1.75	2.25	1.25	1.25	0.25
14	Krishna	St.Anns Hospital/American Hospital (New 07)					0.00	0.25	0.25	0.00
15	Kurnool	Kurnool Kurnool Medical College	0.50	0.75	1.50	0.75	1.00	1.50	1.00	0.50
16	Nellore	Nellore GMH Hospital	2.50	2.75	1.50	2.00	2.25	0.50	0.25	0.75
17	Prakasam	Ongole Maternal & child Health Hospital	3.00	4.00	2.50	3.02	1.75	1.50	0.25	1.75
18	Srikakulam	Srikakulam DH	1.00	4.00	1.50	1.75	0.25	0.75	0.75	0.75
19	Visakhapatnam	Ankapalli DH	1.00	1.50	2.50	0.50	0.25	1.00	1.75	0.75
20	Visakhapatnam	Apurva Hospital, Seetaampeta (New 07)						0.25	0.00	0.50
21	Vizianagaram	Vizianagaram DH	1.25	1.75	1.25	1.25	1.00	1.25	0.50	0.25
22	West Godavari	Eluru DH	2.00	2.75	3.25	3.08	2.01	1.75	1.00	0.50
23	Anantapur	Area Hospital, Guntakal	0.75	1.25	1.00	0.50	0.25	0.25	0.75	0.25
24	Anantapur	CHC – Madakasira (ANC-PHC/ CHC)-New 10							0.00	0.25
25	Chittoor	Area Hospital, Srikalahasti	1.50	2.00	2.00	0.50	0.25	1.75	0.50	0.00
26	Cuddapah	Area Hospital, Rajampeta	1.25	1.25	0.50	1.75	0.50	2.50	0.50	0.00
27	East Godavari	Area Hospital, Ramachandrapuram	3.75	1.75	2.25	2.25	1.75	0.50	2.00	0.50

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
28	Guntur	Area Hospital, Narsorapet	2.76	1.50	2.50	1.25	2.25	2.50	0.75	0.75
29	Guntur	PHC, Pedanandipadu					1.52	1.25	0.50	0.00
30	Krishna	Area Hospital, Nuzividu	1.00	1.50	1.50	1.27	3.50	0.50	1.51	0.75
31	Kurnool	Women & Child Hospital, Adoni	0.25	0.25	0.00	1.00	0.00	1.00	0.00	0.25
32	Kurnool	CHC Allgada (ANC-PHC/CHC)-New 10							0.75	1.01
33	Nellore	Area Hospital, Kavali	0.50	2.25	0.75	1.50	0.75	1.50	0.25	0.25
34	Nellore	CHC Sullurpeta (ANC-PHC/CHC)-New 10							0.50	0.50
35	Prakasam	Area Hospital, Chirala	2.50	1.75	3.25	2.25	1.25	1.00	0.25	0.75
36	Prakasam	PHC, Santhanuthalapadu					1.00	0.75	0.25	1.50
37	Srikakulam	CHC, Tekkali	0.75	1.00	0.25	1.02	0.25	0.00	0.50	0.50
38	Visakhapatnam	CHC, Aganampudi	2.25	0.75	0.50	0.25	0.50	0.50	0.75	1.01
39	Visakhapatnam	CHC Paderu (ANC-PHC/CHC)-New 10							0.00	0.25
40	Vizianagaram	Area Hospital, Parvathipuram	1.00	0.50	2.00	0.50	0.25	0.50	0.00	0.25
41	Vizianagaram	CHC Bhogapuram (ANC-PHC/CHC)-New 10							0.50	0.50
42	West Godavari	CHC, Bhimavaram	2.53	2.00	3.00	1.76	1.25	3.75	1.00	1.00
43	West Godavari	PHC, Ganapavaram					2.25	0.75	0.27	0.00
44	East Godavari	PHC - Addatheegala (New 12)								1.15
Arunachal Pradesh										
45	Dibang Valley	DH Roing, Lower Dibang Valley (New)				0.00	0.00	0.56	0.00	0.00
46	Lohit	Tezu DH			0.87	1.27	0.00	0.00	0.50	1.43
47	Lower Subansiri	DH Ziro				0.00			0.00	0.00
48	Papum Pare	R K Mission Hospital, Itanagar				0.00	0.00	0.75	0.25	0.00
49	Upper Siang	District Hopital Yingkiong (New 07)								0.00
50	West Kameng	Bomdila DH			0.00	0.00	0.00	0.00	0.25	0.75
51	Lohit	Tezu DH	0.00							
52	East Siang	General Hospital, Pasighat (New 12)								0.00
53	West Siang	DH, Aalo (New 12)								0.00
Assam										
54	Bongaigaon	Bongaigaon Civil Hospital						0.25	0.50	0.00

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
55	Cachar	Silchar Medical College and Hospital-New 10							0.00	0.50
56	Darrang	Mangaldoi Civil Hospital				0.00	0.00	0.00	0.00	0.00
57	Dhemaji	Demaji Civil Hospital				0.00	0.00	0.00	0.00	0.00
58	Dibrugarh	Assam Medical Collegeand Hospital-New 10							0.00	0.25
59	Goalpara	Goalpara Civil Hospital					0.00	0.00	0.00	0.00
60	Golaghat	Golaghat Civil Hospital-New 10							0.00	0.00
61	Hailakandi	Hailakandi Civil Hospital						0.00	0.00	0.50
62	Jorhat	Jorhat Civil Hospital	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.25
63	Kamrup	Mahendra Mohan Chaudhary Civil Hospital				0.00		0.25	0.00	0.75
64	Kamrup	Rangia FRU-New 10							0.00	0.00
65	Karbi Anglong	Diphu Civil Hospital						0.00	0.00	0.50
66	Karimganj	Karimganj Civil Hospital				0.00	0.00	0.25	0.50	0.25
67	Lakhimpur	Lakhimpur Civil Hospital	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00
68	Marigaon	Morigan Civil Hospital				0.00	0.26	0.25	0.00	0.00
69	Nagaon	Nagaon Civil Hospital	0.00	0.62	0.00	0.25	0.00	0.00	0.25	0.00
70	Nalbari	Nalbari Civil Hospital				0.00	0.00	0.00	0.25	0.00
71	Sibsagar	Sibsagar Civil Hospital				0.00	0.25	0.00	0.00	0.00
72	Tinsukia	Tinsukia Civil Hospital						0.25	0.25	0.50
73	Udalguri	Udalguri CHC (New 07)					0.00	0.00	0.00	0.00
74	Lakhimpur	CHC, Naobcicha, North Lakhimpur	0.00							
75	Barpeta	Barpeta Medical College (New 12)								0.00
76	Dhubri	Dhubri Civil Hospital (New 12)								0.00
77	Kokrajhar	R.N.B Civil Hospital, Kokrajhar (New 12)								0.00
78	North Cachar Hills	Haflong Civil Hospital, Haflong (New 12)								0.50
79	Sonitpur	Kanaklata Civil Hospital, Tezpur (New 12)								0.00
Bihar										
80	Araria	Araria Sadar Hospital	0.00	0.00	1.75	0.00	0.00	0.00	0.00	0.00
81	Aurangabad	Aurangabad Sadar Hospital				0.50	0.00	0.00	0.00	0.00
82	Banka	Banka Sadar Hospital				0.75	1.23	0.25	0.00	0.00

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
83	Begusarai	Begusarai Sadar Hospital	0.25	0.50		0.50	0.50	0.00	0.00	0.00
84	Bhagalpur	Bhagalpur Jawhar Lal Nehru Med. College Hospital	0.00	0.25	0.50	0.25	0.00	0.00	0.50	
85	Darbhanga	Laheriasarai Darbhanga Medical College Hospital				0.25	0.25	1.00	0.50	0.25
86	Khagaria	Khagaria Sadar Hospital				0.00	0.25			0.25
87	Kishanganj	Mata Gujri Memorial Medical College Hospital				0.00	0.00	1.25	0.00	0.50
88	Lakhisarai	Lakhisarai Sadar Hospital				1.00	0.50	0.33		1.25
89	Madhepura	Madhepura Sadar Hospital				0.58	0.00	0.00	0.00	0.00
90	Madhubani	Madhubani Sadar Hospital				0.00	0.00	0.50	0.50	0.50
91	Muzaffarpur	Muzaffarpur Sri Krishna Medical College Hospital	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.75
92	Nalanda	Biharsharif Sadar Hospital				0.25	0.25	0.00	0.75	0.50
93	Nawada	Nawada Sadar Hospital				0.25	0.50	0.75	0.00	0.00
94	Pashchim Champaran	Betiah MJK Hospital				0.00	0.00	0.00	0.00	0.75
95	Patna	Patna Patna Medical College Hospital	0.50	0.75	0.00	0.75	1.00	1.00	0.50	1.25
96	Purba Champaran	Raxaul Duncan Hospital	0.00	0.00	0.00	0.50	0.25	0.50	0.53	0.50
97	Rohtas	Sasaran Sadar Hospital	0.00	0.00	0.00	0.50	0.50	0.00	0.50	0.00
98	Saharsa	Saharsa Sadar Hospital					0.00	0.25	0.00	0.00
99	Samastipur	Samastipur Sadar Hospital				0.75	0.50	0.00	0.00	0.00
100	Sheohar	Sheohar Sadar Hospital				0.00	0.00	0.25	0.00	0.25
101	Sitamarhi	Sitamarhi Sadar Hospital				0.50	1.25	0.75	0.00	1.25
102	Vaishali	Hajipur Sadar Hospital				0.50	0.75	0.00	0.25	0.25
103	Gaya	Sadar Hospital, Gaya (New 12)								0.00
104	Purnia	Sadar Hospital, Purnia (New 12)								0.25
105	Saran	Sadar Hospital, Saran (New 12)								0.00
106	Siwan	Sadar Hospital, Siwan (New 12)								0.50
107	Patna	Bakhtiyarpur PHC (New 12)								0.00
Chandigarh										
108	Chandigarh	Sector-16 General Hospital	0.50	0.50	0.00	0.25	0.25	0.25	0.00	0.00
109	Chandigarh	CHC-II, PGIMER, Chandigarh	0.00							

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
Chhattisgarh										
110	Baster	Jagdalpur DH	1.26	0.00	0.00	0.32	0.25	1.00	0.00	0.76
111	Bilaspur	Bilaspur DH	0.00	0.00	0.25		0.50	0.00	0.25	0.00
112	Bilaspur	SEC Railway Hospital Bilaspur				0.25				
113	Bilaspur	CIMS (New 08)					0.50	0.00	1.25	2.25
114	Dantewada	Dantewada DH			0.75	0.75	0.25	0.75	0.00	0.25
115	Dhamtari	DH, Dhamteri				0.00	0.00	0.25	0.00	0.00
116	Durg	Bhilai Steel Plant						0.00	0.25	
117	Jangir-Champa	DH, Jangir				0.00	1.00	0.25	0.75	0.25
118	Jashpur	DH, Jashpur				0.00		0.00	0.00	0.00
119	Kanker	DH, Kanker				0.25	0.75	0.25	0.00	0.50
120	Kawardha	DH, Kawardha				0.00	0.00	0.25	0.50	1.01
121	Korba	DH, Korba (New 08)						0.25	1.25	0.50
122	Koriya	Korea, DH				0.55	0.00	1.26	0.50	0.00
123	Mahasamund	DH, Mahasamund				0.75	0.00	0.25	0.25	0.50
124	Raigarh	Raigarh DH	2.25	0.00	0.28	0.50	0.00	1.26	1.51	0.00
125	Raigarh	kharsia				0.00	0.25	0.00	0.00	0.00
126	Raipur	DH, Raipur				0.00	0.50	1.25	0.25	0.25
127	Rajnandgaon	Rajnandgaon DH	0.75	0.00	0.25	0.75	0.25	0.26	0.75	1.00
128	Sarguja	DH, Surguja (New 08)						0.00	0.00	0.75
129	Bilaspur	CHC, Bilaspur, Mungeli	1.25							
130	Raigarh	CHC, Raigarh, Kharshia	0.00							
131	Rajnandgaon	CHC, Rajnangaon, Khairagarh	0.00							
132	Durg	DH Durg (New 12)								1.25
D & N Haveli										
133	Dadra & Nagar Haveli	V. B. Civil Hospital	0.25	0.00	0.25	0.00	0.50	0.00	0.00	0.00
134	Dadra & Nagar Haveli	Khanvel	0.00							
Daman & Diu										
135	Daman	Civil Hospital, Daman	0.25	0.50	0.25	0.00	0.25	0.00	0.25	0.25

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
136	Diu	Civil Hospital, Diu		0.25	0.00	0.00	0.00	0.75	0.00	0.00
Delhi										
137	New Delhi	LHMC				0.00	0.25	0.25	0.00	0.75
138	North	Delhi Kasturba Hospital	0.25	0.50	0.25	0.00	0.25	0.50	0.75	0.25
139	North East	GTB Hospital	0.00	0.00	0.25	0.00	0.00	0.25	0.50	0.25
140	North West	New Delhi Sanjay Gandhi Memorial Hospital, Mongolpuri	0.25	0.25	0.75	0.25	0.50	0.00	0.00	0.00
141	South	Safdarjung Hospital	0.00	0.50	0.00	0.25	0.00	0.00	0.25	0.75
Goa										
142	North Goa	Mapusa Asilo Hospital	0.25	1.00	0.00	0.75	0.25	0.25	0.25	0.25
143	North Goa	Ponda Community Health Centre	0.75	1.25	0.00	0.25		0.51	0.25	0.25
144	South Goa	Hospicio Hospital,Margao(New 08)						1.29	0.50	0.25
145	North Goa	Valpoi/P	0.00							
Gujarat										
146	Ahmedabad	VS Hospital, Ahmedabad	0.75	0.25	0.00	0.00	0.00	0.25	0.50	0.25
147	Amreli	Civil Hospital, Amreli				0.00	1.00	0.52	1.01	0.25
148	Anand	Civil Hospital, Petlad				0.25	0.25	0.25	0.00	0.00
149	Banas Kantha	Gandhi Lincon hospital Deesa				1.00	0.00	0.00	0.25	0.50
150	Bharuch	Civil Hospital				0.75	0.00	0.00	0.25	0.75
151	Bhavnagar	Sir T Hospital				0.75	0.00	0.00	0.50	0.50
152	Dangs	Civil Hospital, Ahwa					0.00	0.27	0.28	0.25
153	Dohad	Government Hospital				1.38	0.75	1.50	0.50	0.00
154	Gandhinagar	Civil Hospital				0.50	0.00	0.75	0.25	0.00
155	Jamnagar	Civil Hospital, Jam Khambhalia				0.50		0.00	0.50	0.00
156	Junagadh	DH, Junagadh	0.25	0.00	0.25	0.50	0.25	0.25	0.25	0.50
157	Kachchh	DH, Bhuj	0.50	0.25	0.00	0.50	0.00	0.00	0.50	0.75
158	Kheda	Civil Hospital, Nadiad					0.50	0.00	0.25	0.75
159	Mahesana	DH, Mahesana	1.00	0.25	1.00	1.00	0.00	1.50	1.00	2.75
160	Narmada	Ref. Hospital, Raipjpla				0.00	0.25	0.25	0.25	0.75
161	Navsari	General Hospital				1.00	0.75	0.50	0.75	0.50

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
162	Panch Mahals	Civil Hospital, Godhara				0.00	0.00		0.00	0.25
163	Patan	General Hospital				0.50	0.25	0.00	0.25	1.00
164	Porbandar	MGG Hospital				0.00		0.50	0.00	0.50
165	Rajkot	Civil Hospital, Rajkot	0.00	0.00	0.00	0.75	0.50	0.50	1.00	0.75
166	Sabar Kantha	DH, Himmatnagar	0.25	0.00	0.25	0.75	0.25	0.25	1.50	0.50
167	Surat	Municipal Inst. of Medical Edu. & Research(SMIMER)	1.00	0.75	1.25	1.25	1.50	0.76	1.26	1.00
168	Surendranagar	C. J. General Hospital, Surendranagar				1.75	0.25		0.25	0.50
169	Vadodara	Jamnabai Hospital, Vadodara	0.00	0.00	0.25	0.25	0.50	0.00	0.00	0.50
170	Valsad	CHC Bhilad, Vapi				0.00	0.50	0.76	0.00	0.25
171	Ahmedabad	CHC, Govt. Hosp., Visnagar, Ahmedabad	0.50							
172	Jamnagar	CHC, Anjar, Jamnagar	0.50							
173	Jamnagar	CHC, Keshod, Jamnagar	0.25							
174	Jamnagar	CHC, Morbi, Jamnagar	0.00							
175	Kheda	CHC, Govt. Hosp., Dakor, Kheda, Ahmedabad	0.00							
176	Surat	CHC, Sangodh, Surat	0.00							
177	Vadodara	CHC, Dabhoi, Vadodara	0.75							
178	Vadodara	CHC, Devgadhbaria, Vadodara	0.25							
179	Mehsana	Alka Hospital Kheralu (New 12)								0.25
180	Patan	Women Children & General Hospital Bhansali Trust (New 12)								0.00
181	Tapi	General Hospital Vyara (New 12)								0.00
Haryana										
182	Bhiwani	CHC Tosham					0.25	0.00	0.00	0.00
183	Palwal	General Hospital Palwal	0.50	0.00	0.00	0.00	0.50	0.50	0.00	0.00
184	Fatehabad	General Hospital Fatehabad				0.25	0.00	0.00	0.00	0.50
185	Hisar	Hissar General Hospital	0.00	0.00	0.00	0.25	0.25	0.00	0.50	0.50
186	Jhajjar	General Hospital Jhajjar				0.26	0.00	0.25	0.00	0.25
187	Jind	Jind General Hospital	0.25	0.00	0.50	0.25		0.50	0.75	0.00
188	Kaithal	General Hospital Kaithal				0.00	0.00	0.25	0.75	0.25
189	Karnal	Karnal General Hospital	0.25	0.00	0.25	0.00	0.25	0.00	0.00	0.25

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
190	Kurukshetra	L.N.J.P. Hospital				0.00	0.00	0.25	0.00	0.25
191	Mewat	CHC Nuh, Mewat (New)				0.31	0.00	0.00	0.25	0.00
192	Panchkula	CHC Raipurani				0.00	0.50	0.00	0.00	0.00
193	Panipat	General Hospital Panipat				0.00	0.00	0.00	0.00	0.25
194	Faridabad	General Hospital Faridabad (New 12)								0.00
195	Rewari	General Hospital Rewari (New 12)								0.25
196	Sirsa	General Hospital Sirsa (New 12)								0.00
197	Gurgaon	General Hospital Gurgaon (New 12)								0.25
Himachal Pradesh										
198	Hamirpur	Hamirpur Zonal Hospital	1.00	0.50	0.75	0.00	0.00	0.75	0.25	0.00
199	Kangra	Dharamshala Zonal Hospital	0.77	0.00	0.25	0.25	0.00	0.75	0.00	0.00
200	Kinnaur	Kinnaur Zonal Hospital	0.00	0.00	0.00	0.00				
201	Kinnaur	Rekongpeo Regional Hospital (New 07)						0.00		
202	Mandi	Mandi Zonal Hospital	0.00	0.25	0.00	0.00	0.00	0.25	0.00	0.25
203	Shimla	Rampur MGIMS				0.00	0.25	0.50	0.00	0.00
204	Solan	Solan Zonal Hospital	0.00	0.00	0.00	0.25	0.00	0.25	0.00	0.00
205	Una	Una Zonal Hospital	0.00	0.75	0.25	0.00	0.26	0.25	0.00	0.00
206	Hamirpur	CHC Nadaun & Barsar	0.00			0.00	0.50	1.25	0.00	
207	Kangra	Kangra, Palampur/Jawalamukhi	0.25							
208	Kinnaur	Kinnaur, Nichar/Sangala/Pooh	0.00							
209	Lahul & Spiti	Udaipur Kaza	0.00							
210	Mandi	Mandi, Karsog/Jnagar	0.26							
211	Solan	Solan, Arki/Nalagrah	0.50							
212	Una	Una, Haroli/Daulatpur Chowk	0.25							
Jammu & Kashmir										
213	Anantnag	DH, Anatnag				0.00	0.00	0.00	0.00	0.00
214	Badgam	DH, Budgam					0.00	0.00	0.00	0.00
215	Baramula	DH, Baramulla				0.00	0.00	0.00	0.00	0.00
216	Doda	DH, Doda				0.00	0.00	0.00	0.00	0.50

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
217	Jammu	SMGS Hospital Jammu	0.00	0.00	0.00	0.50	0.00	0.00	0.50	0.25
218	Kargil	DH Kargil				0.00				0.00
219	Kathua	Kathua DH					0.50	0.00	0.25	0.00
220	Kupwara	DH, Kupwara				0.00	0.00	0.00	0.00	0.00
221	Leh (Ladakh)	Leh DH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
222	Pulwama	DH, Pulwama					0.00	0.00	0.00	0.00
223	Punch	DH, Poonch						0.00	0.00	0.00
224	Rajauri	DH, Rajouri					0.25	0.00	0.00	0.00
225	Srinagar	Srinagar Lal Ded Hospital	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
226	Udhampur	DH, Udhampur				0.00	0.00	0.00	0.00	0.00
227	Jammu	CHC, RS Pma/Bishna, Jammu	0.00							
228	Srinagar	CHC, Ganderbal Harvan	0.00			0.00	0.00	0.00		0.00
Jharkhand										
229	Bokaro	Bokaro General Hospital				0.28	0.00	0.00	0.00	0.00
230	Deoghar	Deogarh Sadar Hospital	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00
231	Dhanbad	Patliputra Medical College Hospital, Dhanbad				0.00	0.25	0.25	0.50	0.25
232	Dhanbad	B.C. C. L. Dhanbad						0.00		
233	Garhwa	Garhwa Sadar Hospital	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00
234	Godda	Sadar Hospital, Godda				0.25	0.25	2.25	0.27	0.00
235	Gumla	Sadar Hospital, Gumla				0.00	0.00	0.00	0.00	0.25
236	Kodarma	Holy Family Hospital, Koderma				0.00	0.00	0.75	0.75	0.00
237	Lohardaga	Sadar Hospital, Lohardaga				0.00	0.00	0.25	0.51	0.00
238	Purbi Singhbhum	E. Singhbhum Sadar Hospital	0.00	0.00	0.00	0.25	0.51	1.00	0.50	0.50
239	Purbi Singhbhum	Mercy Hospital, Jamshedpur				0.00	0.50	0.50	1.00	0.25
240	Purbi Singhbhum	Tata Main Hospital						0.25	0.75	0.50
241	Ranchi	Ranchi Rajendra Institute of Medical Sciences	0.25	0.25	0.25	0.25	0.00	0.25	0.75	1.26
242	Sahibganj	Sahibganj Sadar Hospital	0.00	0.00	0.25	0.50	0.00	0.00	0.50	0.00
243	Simdega	Sadar Hospital, Simdega Tehsil (New)				0.00	0.00	0.00	0.51	0.25
244	Ranchi	RH, Bundu, Ranchi	0.00							

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
245	Chatra	Sadar Hospital, Chatra (New 12)								0.00
246	Jamtara	Sadar Hospital, Jamtara (New 12)								0.25
247	Kunti	Sadar Hospital, Khunti (New 12)								0.00
248	Latehar	Sadar Hospital, Latehar (New 12)								0.00
249	Hazaribagh	Sadar Hospital, Hazaribagh (New 12)								0.25
250	Ramgarh	Sadar Hospital, Ramgarh (New 12)								0.25
251	Saraikela	Sadar Hospital, Saraikela (New 12)								0.00
Karnataka										
252	Bagalkot	Bagalkot DH	2.00	2.75	3.25	2.00	0.25	1.75	1.75	0.50
253	Bangalore	Bangalore Vani Vilas Hospital	1.00	1.25	1.00	1.50	2.00	1.50	0.50	0.25
254	Bangalore Rural	General Hospital, Dodballapur (New 08)						0.75	0.00	0.75
255	Belgaum	Belgaum DH	3.75	3.75	3.50	3.00	1.75	1.75	1.50	1.26
256	Bellary	DH Bellary/VMIS Hospital Bellary	1.50	1.00	0.75	1.00	0.00	1.75	1.50	0.25
257	Bidar	Bidar DH	1.25	0.75	0.50	1.00	1.00	0.25	0.50	0.25
258	Bijapur	Bijapur DH	2.50	2.00	4.25	1.75	1.50	1.00	2.50	0.75
259	Chamrajnagar	Chamarajnagar DH	0.50	0.75	1.75	2.50	2.00	1.01	1.50	2.26
260	Chikballapur	DH / General Hospital Chikkaballapura	0.75	0.25	0.50	0.00	0.50	0.75	0.50	1.00
261	Chikmagalur	Chikmagalur DH	0.25	0.50	1.25	2.25	3.50	1.25	0.25	0.25
262	Chitradurga	Chitradurga DH	0.50	0.75	0.75	0.50	0.50	1.00	1.25	0.75
263	Dakshina Kannada	Mangalore Women & Children Hospital	1.25	2.50	0.25	0.25	0.25	1.25	0.50	0.75
264	Davangere	C. G. Hospital Devangere / DH Devangere	1.00	1.00	1.75	2.00	0.50	1.25	1.50	1.25
265	Dharwad	Hubli KIMS	3.00	1.75	6.25	1.00	0.50	0.75	1.00	0.25
266	Gadag	Gadag DH	1.50	1.50	1.50	0.75	0.25	0.75	1.75	0.25
267	Gulbarga	Gulburga DH	1.25	2.00	2.00	1.75	5.00	2.25	0.25	0.50
268	Hassan	Hassan DH	0.50	0.75	1.75	4.00	2.50	1.00	0.25	0.50
269	Haveri	Haveri DH	1.03	0.75	0.25	0.25	0.25	1.00	0.25	0.00
270	Kodagu	Madikeri DH	0.25	0.25	1.00	0.50	0.25	2.26	0.25	0.25
271	Kolar	Kolar DH	1.25	1.25	1.00	1.50	0.25	1.00	0.25	0.50
272	Koppal	Koppal DH	2.75	1.75	2.25	1.50	1.50	0.00	0.75	0.75

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
273	Mandya	Mandya DH	1.25	1.25	1.25	0.25	2.25	0.25	0.50	2.00
274	Mysore	Cheluvamba KR Hospital,Mysore	0.75	3.75	2.00	1.00	1.25	1.25	0.25	0.75
275	Raichur	Raichur DH	1.50	1.25	0.75	1.25	1.00	0.50	0.25	0.75
276	Ramnagaram	DH, Ramnagaram & General Hospital, Kanakapura	2.75	2.25	0.25	0.00	0.00	0.75	0.75	0.50
277	Shimoga	Shimoga DH	0.25	0.50	1.25	1.00	0.00	1.75	0.00	0.00
278	Tumkur	Tumkur DH	1.25	1.25	0.75	0.50	2.25	1.75	2.25	0.75
279	Udupi	Udupi DH	1.25	1.50	0.50	1.50	0.00	1.00	0.50	0.50
280	Uttara Kannada	Karwar DH	1.75	1.25	0.00	1.50	1.00	0.00	0.25	0.50
281	Yadgir	DH yadgiri (New 10)							0.50	0.25
282	Bagalkot	General Hospital Jamkhandi	3.50	2.50	2.50	2.25	1.00	2.50	5.25	0.50
283	Bangalore	General Hospital K R Puram	1.50	0.00	0.00	1.25	0.50	0.00	0.00	1.50
284	Bangalore Rural	General Hospital, Devanahalli (New 08)						0.00	0.25	0.75
285	Belgaum	General Hospital Gokak	5.13	4.75	3.75	3.25	2.25	1.25	0.25	0.25
286	Bellary	General Hospital Hospet	1.75	1.25	1.00	1.75	0.75	0.50	1.00	1.25
287	Bidar	General Hospital Hummabad	1.54	1.00	1.25	0.75	1.25	0.00	0.50	0.50
288	Bijapur	General Hospital Indi	0.75	0.75	0.00	0.73	0.50	3.00	1.00	0.25
289	Chamrajnagar	General Hospital Kollegal	0.51	1.25	1.50	0.25	0.00	0.00	0.25	0.25
290	Chikballapur	General Hospital, Gowri Bidnur (New 08)						1.75	0.25	0.00
291	Chikmagalur	General Hospital Mudigere	0.75	1.50	0.50	0.75	1.25	0.25	0.50	0.50
292	Chitradurga	General Hospital Challekere	0.25	0.75	0.50	0.00	0.00	0.00	1.25	1.00
293	Dakshina Kannada	General Hospital Bantwal	0.50	0.25	0.50	1.25	0.00	0.25	0.00	0.25
294	Davangere	General Hospital Channagiri	0.75	3.25	1.00	0.75	1.00	2.75	0.00	0.50
295	Dharwad	General Hospital Navalgund	3.00	4.00	7.25	0.75	0.25	0.50	0.00	0.00
296	Gadag	General Hospital Laxmeswara	0.25	0.75	0.75	1.00	0.75	0.25	0.50	0.50
297	Gulbarga	General Hospital Sedum	2.00	2.50	3.25	0.00	0.50	0.25	0.25	0.25
298	Hassan	General Hospital Sakaleshpur	1.00	1.25	1.00	0.75	0.00	0.75	1.25	0.76
299	Haveri	General Hospital Ranibennur	1.75	0.50	0.50	1.00	0.25	0.25	0.00	0.25
300	Kodagu	General Hospital Siddapur	0.25	1.25	0.50	0.50	1.25	3.00	1.00	0.75
301	Kolar	Kolar KGF Hospital (New 08)						0.00	0.25	0.00

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
302	Koppal	General Hospital Gangavathi	5.51	4.25	3.50	1.75	1.00	0.00	0.50	0.00
303	Mandya	General Hospital Malavalli	1.00	1.00	0.75	0.25	0.25	0.00	0.50	0.25
304	Mysore	General Hospital Hunsur	0.25	1.00	0.25	1.00	0.50	0.50	0.00	0.25
305	Raichur	General Hospital Sindhanur	1.75	1.00	2.50	1.50	0.00	0.50	0.25	0.25
306	Ramnagaram	General Hospital, Channapatna	1.00	2.75	1.50	1.00	0.25	0.50	0.25	1.00
307	Shimoga	General Hospital Sagar	1.25	0.50	0.50	0.00	0.75	0.25	0.00	0.50
308	Tumkur	General Hospital, Tiptur	2.50	1.75	1.25	1.00	0.00	0.50	0.75	0.25
309	Udupi	General Hospital Kundapur	0.50	0.50	0.75	0.00	0.25	0.25	0.50	0.25
310	Uttara Kannada	General Hospital Dandeli	0.25	1.50	1.50	1.20	0.00	0.25	0.50	0.00
311	Yadgir	General Hospital Shahapur (New 10)							0.75	0.50
312	Bagalkot	CHC Mahalingpur & PHC Belagali (New 12)								0.75
313	Bellary	CHC Tekkalkote & PHC Karur (New 12)								0.00
Kerala										
314	Ernakulam	Lekshmi Hospital-PVT (New 10)							0.00	0.00
315	Idukki	Thodupuzha Taluk Hospital		0.26	0.78	0.25	0.00	0.00	0.00	0.00
316	Kannur	MCH Kannur / Kannur DH		0.25	0.00	0.00	0.25	0.25	0.00	0.00
317	Kasargod	THQ Hospital,Kasargode				0.00	1.25	0.25	0.25	0.00
318	Kottayam	Kottayam Medical College Hospital	0.00		0.00	0.50	0.50	0.50	0.00	0.25
319	Kozhikode	Baby Memorial Hospital-PVT (New 10)							0.00	0.00
320	Malappuram	THQH Nilambur (New 10)							0.50	0.00
321	Palakkad	DH Palakkad (New 10)							0.50	0.00
322	Thiruvananthapuram	W&C Hospital, Thycaud, Thiruvananthapuram				0.00	0.25	0.25	0.00	0.00
323	Thrissur	Thrissur Medical College Hospital	0.50	0.75	0.50	0.50	0.50	0.00	0.00	0.00
324	Kottayam	Kajirapally, Kottayam	0.00							
325	Thrissur	Kodungalloor, Thrissur	0.00							
Madhya Pradesh										
326	Anuppur	DH Anuppur (New 10)							0.25	0
327	Ashok Nagar	DH Ashok Nagar				0.00	0.00	1.00	0.00	0.50
328	Balaghat	DH Balaghat				1.25	0.50	0.00	0.50	0.25

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
329	Barwani	Badwani DH	0.00	0.50	0.00	0.00	0.50	0.25	0.25	0
330	Betul	Betual DH	0.00	0.25	0.00	0.25	0.00	0.25	0.00	0.5
331	Bhind	Bhind Civil Hospital	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0
332	Bhopal	DH Bhopal				0.00	0.75	0.00	0.25	0
333	Burhanpur	DH Burhanpur (New)				0.00	0.75	0.75	0.50	0.25
334	Chhindwara	Chindwara DH	0.85	0.25	0.25	0.50	0.00	0.00	0.25	0.5
335	Damoh	DH Damoh				0.25	0.00	0.25	0.25	0
336	Datia	DH Datia				0.00	0.50	0.00	0.00	0
337	Dewas	Dewas DH	0.00	0.25	0.25	2.00	0.25	0.25	0.00	0
338	Dhar	DH Dhar				0.00	0.00	0.00	0.50	0
339	Guna	DH Guna				0.00	0.25	0.00	0.00	0
340	Harda	Harda DH	0.00	0.25	0.75	1.50	0.25	0.00	0.25	0
341	Indore	DH Indore				0.50	2.00	1.00	0.25	0
342	Jabalpur	MC Jabalpur				0.00	0.00	0.00	0.50	0.25
343	Katni	Katni DH	1.75	0.00	0.25	0.00	0.25	0.00	0.00	0
344	Khandwa	DH Khandwa (New)				0.25	0.50	0.25	0.25	0
345	Khargone	DH Khargone (New)				0.00	0.75	1.50	0.51	0
346	Mandla	DH Mandla				0.25	0.50	0.25	0.76	0.5
347	Mandsaur	Mandsaur DH	3.25	1.00	0.75	0.00	0.50	0.75	2.75	0.5
348	Narsimhapur	DH Narsinghpur				0.00	0.00	0.25	0.25	0
349	Panna	DH Panna				1.25	0.00	0.00	0.00	0
350	Raisen	CHC Barely				0.00	0.00	0.00	0.00	0
351	Rajgarh	CH Bioara				0.00	0.25	0.00	0.50	0
352	Ratlam	Ratlam DH	0.49	0.00	0.00	0.50	0.25	0.00	0.50	0.75
353	Rewa	Rewa S.S. Medical College Hospital	0.00	1.00	0.00	0.50	0.00	0.00	0.00	0
354	Sagar	Sagar DH	0.25	0.50	0.75	0.00	0.00	0.00	0.25	0
355	Sehore	DH Sehore				0.00	0.00	0.50		0.25
356	Seoni	DH Seoni				0.25	0.25	1.25	1.75	0.75
357	Shahdol	Shahdol DH	0.00	0.50	0.25	0.00	0.00	0.00	0.00	0

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
360	Sheopur	DH Sheopur				0.00	0.00	0.25	0.00	0
361	Shivpuri	Shivpuri DH	0.25	0.50	0.25	0.00	0.00	0.00	0.00	0
362	Sidhi	DH Sidhi				0.25	0.00	0.25	0.25	0.25
363	Tikamgarh	DH Tikamgarh				0.00	0.00	0.00	0.00	0
364	Vidisha	DH Vidisha				0.00	0.00	0.00	0.00	0
365	Barwani	Barwani, Rajpur	0.00							
366	Bhind	Bhind, Gohad	0.00							
367	Dewas	Dewas, Sonkatch	0.00							
368	Jabalpur	Shahdol, Jabalpur	0.00							
369	Mandsaur	Mandsaur, Mandsaur	1.75							
370	Ratlam	Ratlam, Indore	0.00							
371	Alirajpur	DH Alirajpur (New 12)								0.00
372	Chhatarpur	DH Chhatarpur (New 12)								0.00
373	Dindori	DH Dindori (New 12)								0.00
374	Gwalior	DH Gwalior (New 12)								0.00
375	Hoshangabad	DH Hoshangabad (New 12)								0.00
376	Neemuch	DH Neemuch (New 12)								1.01
377	Satna	DH Satna (New 12)								0.00
378	Shajapur	DH Shajapur (New 12)								0.00
379	Ujjain	DH Ujjain (New 12)								0.25
380	Morena	DH Morena (New 12)								0.00
Maharashtra										
381	Ahmadnagar	Ahmadnagar Civil Hospital	2.25	1.50	2.50	1.25	1.25	0.76	1.00	0.00
382	Akola	Akola Women Hospital	0.75	0.25	0.00	1.00	0.00	0.77	0.25	0.25
383	Amravati	Amravati Civil Hospital	0.75	0.75	1.00	0.50	1.00	0.00	0.50	1.00
384	Aurangabad	Aurangabad Government Medical College	0.25	0.25	0.00	1.25	0.50	0.29	0.75	0.75
385	Bhandara	Bhandara Civil Hospital	1.25	0.50	1.25	0.25	1.00	0.75	0.53	1.00
386	Bid	Beed Civil Hospital	2.25	0.25	1.25	0.50	0.75	0.75	0.25	0.00
387	Buldana	Buldhana Civil Hospital	0.25	0.25	0.50	1.00	0.25	1.32	0.00	0.00

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
388	Chandrapur	Chandrapur Civil Hospital	2.75	3.00	3.50	3.50	2.00	1.79	0.75	0.50
389	Dhule	Dhule Govt. Medical College	1.50	0.50	0.75	1.00	1.50	0.75	1.00	0.50
390	Gadchiroli	Gadchiroli Civil Hospital	0.50	1.00	0.50	0.50	0.00	0.00	0.75	0.00
391	Gondiya	Gondiya Civil Hospital	0.75	0.25	0.50	0.75	0.25	0.25	0.00	0.00
392	Hingoli	Hingoli Civil Hospital	0.25	1.50	1.00	1.25	0.50	0.25	0.50	0.25
393	Jalgaon	Jalgaon Civil Hospital	1.75	1.75	1.75	1.75	2.00	0.79	0.76	0.25
394	Jalna	Jalna Civil Hospital	0.25	1.00	1.25	0.75	0.50	0.77	0.50	0.25
395	Kolhapur	Kolhapur Govt. Medical College	2.50	2.00	2.75	2.25	1.50	0.75	1.25	0.75
396	Latur	Latur Women Hospital	2.01	2.25	1.50	1.50	1.25	1.01	0.00	0.00
397	Nagpur	Nagpur IGMC	2.75	1.25	1.50	0.50	1.25	0.77	0.00	0.75
398	Nanded	Nanded Govt. Medical College	1.25	1.25	1.00	0.75	0.50	1.38	0.50	1.00
399	Nandurbar	Nandurbar Civil Hospital	2.25	0.25	1.00	0.75	0.75	0.25	1.00	0.50
400	Nashik	Nasik Government Hospital	1.25	2.25	2.25	0.75	0.50	0.00	0.25	0.25
401	Osmanabad	Osmanabad Civil Hospital	0.75	1.75	1.50	1.50	0.50	1.10	0.50	0.75
402	Parbhani	Parbhani Civil Hospital	1.25	0.50	0.50	0.25	1.25	0.79	0.50	0.50
403	Pune	Pune BJ Medical College	2.50	3.25	3.25	0.50	0.50			
404	Raigarh	Raigarh Civil Hospital	0.50	1.00	0.75	0.50	0.25	0.26	0.75	0.25
405	Ratnagiri	Ratnagiri Government Hospital	1.50	0.75	1.00	0.50	0.50	0.52	0.51	1.00
406	Sangli	Sangli Government Hospital	4.00	2.50	3.25	3.00	3.25	1.81	1.25	0.75
407	Satara	Satara Government Hospital	3.00	2.00	2.25	2.00	2.25	0.27	0.00	0.25
408	Sindhudurg	Sindhudurg Civil Hospital	0.25	0.50	0.00	0.25	0.00	0.00	0.00	1.25
409	Solapur	Solapur Govt. Medical College	2.00	2.00	2.75	0.50	1.50	0.75	1.25	0.76
410	Thane	Thane Civil Hospital	4.25	1.50	2.00	0.75	1.75	1.02	0.75	0.75
411	Wardha	Wardha Civil Hospital	0.25	1.25	0.00	0.50	0.00	0.77	0.50	0.50
412	Washim	Washim Civil Hospital	0.00	0.25	0.75	0.25	0.50	0.50	0.50	0.75
413	Yavatmal	Yavatmal Govt. Medical College	2.25	1.50	1.25	1.50	1.00	1.55	1.00	0.50
414	Mumbai	Cama Hospital ANC 15-24			2.75				1.00	1.26
415	Mumbai (Suburban)	Kurla Baba ANC 15-24			0.75				1.25	0.50
416	Pune	Pune ANC 15-24			2				1.00	1.00

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
417	Ahmadnagar	CHC, Pathardi	1.00	0.25	0.75	0.25	0.75	0.26	0.25	0.25
418	Akola	CHC, Murtizapur		0.00	0.00	0.25	1.25	0.25	0.00	1.25
419	Amravati	CHC, Achalpur	0.25	0.25	0.25	0.00	0.25	0.26	0.00	0.00
420	Aurangabad	CHC, Sillod	0.00	0.00	0.00	0.25	0.00	0.27	0.00	0.00
421	Bhandara	CHC, Tumsar	0.75	0.75	1.00	0.50	0.50	0.00	0.00	0.25
422	Bid	CHC, Parali	0.75	0.75	0.50	1.00	0.50	0.50	0.00	0.25
423	Buldana	CHC, Khamgav	0.25	0.00	0.25	0.75	0.25	0.29	0.00	0.50
424	Chandrapur	CHC, Mul	0.25	0.75	1.75	0.00	0.25	1.03	0.00	0.00
425	Dhule	CHC, Shirpur	0.51	1.00	0.50	1.25	0.75	0.50	0.25	0.00
426	Gadchiroli	CHC, Armori	0.00	0.00	0.25	0.00	0.00	0.00	0.50	0.00
427	Gondiya	CHC, Deori	1.00	0.25	0.25	0.50	0.50	0.26	0.00	0.25
428	Hingoli	CHC, Vasmat	0.51	1.00	1.75	2.00	0.00	0.26	0.25	0.00
429	Jalgaon	CHC, Edlabad	1.25	1.25	1.75	1.25	1.50	0.00	0.25	0.00
430	Jalna	CHC, Ambad		0.50	0.50	1.50	0.75	0.00	0.00	0.25
431	Kolhapur	CHC, Gargoti	0.50	1.25	1.00	0.50	1.25	0.00	0.25	0.50
432	Latur	CHC, Murud	1.00	0.25	0.50	0.25	0.25	0.75	0.00	0.50
433	Nagpur	CHC, Umred	0.75	1.25	0.25	1.25	1.00	0.00	0.00	0.25
434	Nanded	CHC, Kandhar	0.00	0.50	0.25	0.25	0.25	0.00	0.25	0.00
435	Nandurbar	CHC, Navapur	0.25	0.00	0.25	0.00	0.00	0.00	0.00	0.00
436	Nashik	CHC, Kalwan	0.50	0.50	1.25	0.50	0.25	0.75	0.00	0.25
437	Osmanabad	CHC, Omerga	0.75	1.00	1.25	1.50	0.00	0.52	0.50	0.50
438	Parbhani	CHC, Selu	1.50	1.00	0.50	1.50	1.00	0.26	0.00	0.25
439	Pune	CHC, Narayangaon	0.25	1.50	0.50	0.50	0.00	0.00	0.75	0.50
440	Raigarh	CHC, Mangaon	0.25	0.25	1.00	1.25	0.25	0.26	0.00	0.25
441	Ratnagiri	CHC, Dapoli	0.50	0.75	1.00	0.00	0.00	0.27	0.00	0.00
442	Sangli	CHC, Islampur	4.00	3.75	2.25	1.00	1.25	1.09	0.00	0.00
443	Satara	CHC, Karad	2.50	1.25	1.50	1.00	1.00	0.00	0.25	0.25
445	Sindhudurg	CHC, Sawantwadi	0.00	0.00	0.50	0.00	0.25	0.25	0.25	0.00
446	Solapur	CHC, Akluj	0.50	0.25	0.75	1.50	0.50	2.55	1.01	0.50

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
447	Thane	CHC, Shahapur	1.50	0.75	0.75	1.00	0.00	0.26	0.00	0.25
448	Wardha	CHC, Pulgaon	0.50	0.50	0.75	0.00	0.50	1.00	0.25	0.00
449	Washim	CHC, Manglurpir	0.00	0.00	0.00	0.00	0.25	0.25	0.25	0.25
450	Yavatmal	CHC, Pusad		1.25	1.25	1.25	0.50	1.56	1.00	0.25
451	Mumbai	Cama Hospital	2.26	1.25	1.25	2.25	1.75	1.75	0.50	0.25
452	Mumbai (Suburban) *	Rajawadi Hospital	1.25	1.25	1.75	0.50	1.25	1.25	0.25	1.75
453	Mumbai (Suburban) *	Bhagwati Hospital	1.00	1.75	2.00	1.75	2.00	1.75	0.75	0.00
454	Mumbai (Suburban) *	Kurla KB Bhabha Hospital	0.75	0.75	0.75	1.25	1.00	0.25	1.50	0.25
456	Mumbai (Suburban) *	Govandi Shatabdi Hospital	1.25	1.00	0.25	1.00	1.75	1.25	0.25	0.75
457	Mumbai (Suburban) *	M.W. Desai Hospital	1.50	0.50	0.75	0.50	0.50	0.00	0.75	0.25
458	Mumbai (Suburban) *	Ashwini Maternity & Surgical Hospital				0.00				
459	Pune	Pune chest general Hospital, Aundh (Urban)						0.51	0.00	0.50
Manipur										
460	Bishnupur	Bishnupur DH	1.75	1.25	0.75	0.00	1.00	0.50	0.75	1.00
461	Chandel	Moreh CHC Hospital	1.75	1.50	3.50	1.75	3.00	1.00	1.25	0.52
462	Churachandpur	Churachandpur DH	5.00	2.75	1.50	2.25	3.00	0.75	0.75	0.00
463	Imphal East	Imphal J.N. Hospital	1.00	2.50	1.00	0.75	1.00	0.50	0.75	0.25
464	Imphal East	Jiribam CHC	0.00	0.25	0.25	1.25	1.00	1.00	0.50	0.75
465	Imphal West	Lamphelpat RIMS	1.50	1.50	1.50	2.25	0.75	1.00	0.50	1.00
466	Senapati	Senapati DH	0.75	0.50	1.00	1.75	0.00	0.25	0.25	0.25
467	Tamenglong	Tamenglong DH	0.75	1.50	1.75	2.50	0.00	0.50	0.50	0.25
468	Thoubal	Thoubal DH	1.00	4.00	0.75	1.25	0.75	0.00	1.75	0.75
469	Ukhrul	Ukhrul DH	3.00	4.50	3.00	4.00	6.00	2.17	2.50	2.25
470	Bishnupur	PHC, Moirang	1.50	1.25	1.75	0.75	0.00	0.00		1.00
471	Imphal West	CHC, Wangoi	0.50	0.75	0.00	0.25	0.50	0.00	0.00	0.30
472	Imphal West	CHC, Khumbong	0.00	0.50	0.50	0.25	0.75	0.00	0.25	0.51
473	Thoubal	CHC, Kakching	0.25	0.50	1.00	0.50	0.50	0.00	0.50	0.00
Meghalaya										
474	East Khasi Hills	Shillong Ganesh Das Hospital	0.25	0.00	0.00	0.24	0.00	0.00	0.25	0.00

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
475	East Garo Hills	CHC, Resubelpara								0.00
476	East Garo Hills	Wiilam Nagar CHC						0.26	0.00	0.25
477	Ri Bhoi	Nongpoh CHC				0.29	0.00	0.00	0.00	0.25
478	South Garo Hills	Bagmara CHC								0.00
479	West Garo Hills	Phulbari CHC				0.00	0.00	0.00	0.00	0.00
480	West Khasi Hills	Nongstoin CHC				0.00		0.00	0.00	0.00
481	Jaintia Hills	Jowai Civil Hospital (New 12)								1.50
Mizoram										
482	Aizawl	Aizawl MCH Clinic, Civil Hospital	0.75	1.25	0.25	1.25	1.25	1.00	0.50	2.25
483	Aizawl	Presbyterian Hospital, Durtlang, Aizawl			1.00	0.75	2.25	2.00	0.00	0.25
484	Champhai	Champhai Civil Hospital	3.50	2.75	1.25	1.25	0.75	1.25	1.01	0.50
485	Kolasib	Kolasib Civil Hospital (New 07)					0.50	0.25	0.25	0.25
486	Lawngtlai	Civil Hospital, Lawngtlai (New 10)								0.75
487	Lunglei	Lungei CHC Hospital	2.00	0.50	0.75	0.50	0.75	0.50	0.25	1.00
488	Mamit	Mamit Civil Hospital (New 07)					0.81	0.00	0.25	0.26
489	Saiha	Saiha Civil Hospital (New 07)					0.25	0.25		0.26
490	Serchhip	Serchhip Civil Hospital (New 07)					0.25	0.50	0.60	0.50
491	Lunglei	CHC, Hnahthial	0.97							
Nagaland										
492	Dimapur	Dimapur Civil Hospital	1.00	0.79	1.50	2.25	2.00	2.03	2.50	1.75
493	Kiphrie	CivilHospital,Kiphrie						1.68	0.31	
494	Kohima	Kohima Naga Hospital	1.75	1.75	1.75	1.25	0.75	2.26	1.00	0.50
495	Longleng	CivilHospital, Longleng				0.00	0.00	0.29	0.25	0.25
496	Mokokchung	Mokokchung Civil Hospital	0.00	2.51	0.75	1.11	0.25	1.25	0.52	0.00
497	Mon	Mon Civil Hospital	1.25	1.11	2.29	0.00	0.51	0.75	0.25	0.57
498	Peren	Civil Hospital, Peren				2.25	0.50	1.03	0.00	0.53
499	Phek	Phek Civil Hospital			1.86	0.26	1.25	1.51		1.23
500	Tuensang	Tuensang Civil Hospital	4.25		4.73	5.00	5.60	3.89	0.75	2.34
501	Wokha	Wokha Civil Hospital	0.82	0.74	1.00	0.61	0.60	0.61		0.25

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
502	Zunheboto	Zunheboto Civil Hospital		1.88	1.50	2.00	0.75	1.75	0.00	0.60
503	Dimapur	CHC, Medziphema			0.87		0.00	0.26	0.88	0.58
504	Kohima	CHC, Viswema / CHC, Tseminyu						0.00		
505	Mokokchung	CHC, Changtongya		0.61	1.21	0.83	0.52	0.26	0.57	
506	Mon	CHC, Aboi		0.00			0.25	0.00	0.00	
507	Phek	CHC, Pfutsero						0.79	1.32	
508	Tuensang	CHC, Noklak		7.07			4.30		1.35	2.31
509	Wokha	CHC, Bhandhari					0.61	0.26	0.87	
510	Zunheboto	CHC, Akuluto			0.00		0.50	1.23	0.00	
Orissa										
511	Anugul	Dept of O&G, District Head Quarter Hospital				1.75	1.74	0.50	1.26	0.50
512	Balangir	Dept of O&G, District Head Quarter Hospital				1.25	0.00	0.50	0.25	0.25
513	Balasore	Dept of O&G, DHH Balasore (New 07)					0.25	0.50	0.75	1.50
514	Bargarh	Dept of O&G, District Head Quarter Hospital				0.25	0.50	0.50	0.50	0.50
515	Baudh	Dept of O&G, District Head Quarter Hospital				0.00	0.00	0.00	0.00	0.00
516	Bhadrak	Dept of O&G, District Head Quarter Hospital				1.00	0.25	0.00	0.00	0.00
517	Cuttack	Cuttack SCB Medical College	0.00	0.50	0.50	0.75	0.00	1.00	1.50	1.75
518	Deogarh	Dept of O&G, DHH, Deogarh (New 07)					1.00	0.00	0.50	0.25
519	Dhenkanal	Dept of O&G, District Head Quarter Hospital				0.00	0.25	0.00	0.00	0.25
520	Gajapati	Dept of O&G, DHH Gajapati (New 07)					0.00	0.25	0.75	0.00
521	Ganjam	Berhampur City Hospital	0.00	1.50	2.25	3.25	0.25	1.25	1.00	1.75
522	Ganjam	Area Hospital Aska, Ganjam					0.50	0.75	0.50	0.00
523	Jagatsinghapur	Jagatsinghpur DHH	0.00	0.00	0.00	0.50	0.00	0.25	0.00	0.00
524	Jajapur	Dept of O&G, District Head Quarter Hospital				0.25	0.50	0.25	0.82	0.00
525	Jharsuguda	Dept of O&G, District Head Quarter Hospital				0.00	0.00	1.50	0.25	0.25
526	Kalahandi	Dept of O&G, District Head Quarter Hospital				0.00	0.00	0.00	0.00	0.00
527	Kandhamal	Dept of O&G, District Head Quarter Hospital				0.00	0.00	0.75	0.25	0.00
528	Kendrapara	Dept of O&G, District Head Quarter Hospital				0.00	0.00	0.75	0.25	0.25
529	Kendujhar	Dept of O&G, District Head Quarter Hospital				0.50	0.00	0.00	0.25	0.00

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
530	Khordha	Dept of O&G, Capital Hospital				0.25	0.00	0.00	1.00	0.00
531	Koraput	Dept of O & G, DHH Koraput (New 07)					0.00	0.00	0.50	0.00
532	Koraput	SDH Jeypore-composite (New 10)							0.25	0.25
533	Malkangiri	Dept of O&G, DHH Malkangiri (New 07)					0.00	0.00	0.50	0.00
534	Mayurbhanj	Dept of O&G, District Head Quarter Hospital				0.50	0.00	0.50	0.50	0.00
535	Nabarangapur	Dept of O&G, DHH Nawarangpur (New 07)					0.25	0.50	0.50	0.25
536	Nayagarh	Dept of O&G, District Head Quarter Hospital				0.75	0.25	0.00	0.50	0.00
537	Nuapada	Dept of O&G, DHH Nuapada (New 07)					0.00	0.00	0.50	0.00
538	Puri	Dept of O&G, District Head Quarter Hospital				0.50	0.25	0.50	0.00	0.50
539	Rayagada	Dept of O&G, District Head Quarter Hospital				0.50	0.25	0.25	0.50	1.50
540	Sambalpur	Burla VSS Medical College	0.00	0.50	0.00	0.50	0.75	0.00	0.00	0.25
541	Sonapur	Dept of O&G, District Head Quarter Hospital				0.00	0.00	1.75	0.00	0.00
542	Sundargarh	Rourkela RG Hospital	0.00	0.00	0.25	0.25	0.00	1.75	0.25	0.00
Pondicherry										
543	Karaikal	Karaikal General Hospital	0.25	0.25	0.50	0.50	0.00	0.25	0.00	0.00
544	Pondicherry	Pondicherry Maternity Hospital	0.00	0.25	0.00	0.00	0.00	0.25	0.25	0.00
545	Karaikal	Karaikal	0.26							
546	Pondicherry	Pondicherry	0.00							
Punjab										
547	Amritsar	Amritsar Medical College	0.00	0.25	0.25	0.00	0.00	0.00	0.25	0.76
548	Barnala	Civil Hospital Barnala (New 07)					0.25	0.00	0.50	0.00
549	Faridkot	Faridkot Medical College	0.00	0.25	0.00	0.00	0.00	0.25	0.25	0.25
550	Firozpur	Civil Hospital, Ferozepur				0.00	0.00	0.00	0.00	0.00
551	Hoshiarpur	Hoshiarpur Civil Hospital	0.50	0.25	0.75	0.75	0.00	0.00	0.47	0.50
552	Jalandhar	CH Jalandhar (New 07)					0.77	0.75	0.25	0.25
553	Ludhiana	Ludhiana Civil Hospital	0.00	1.00	0.00	0.25	0.25	1.02	0.75	0.50
554	Sangrur	CH Sangrur				0.00	0.00	0.75	0.25	0.50
555	Amritsar	CHC, Manawala, Amritsar	0.30							
556	Hoshiarpur	CHC, Tanda, Hoshiarpur	0.00							

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
557	Ludhiana	CHC, Sudhar, Ludhiana	0.25							
558	Mansa	Civil Hospital Mansa	0.00			0.00	0.25	0.50	0.50	0.25
559	Moga	Civil Hospital Moga				0.75	0.00	0.75	0.00	0.75
560	Muktsar	CH Muktsar				0.25	0.00	0.00	0.00	0.25
561	Nawanshahr	CH Balachaur				0.00	0.00	0.00	0.00	0.50
562	Tarn taran	CH Tarn Taran	0.30			0.25	0.00	0.00	0.00	0.25
Rajasthan										
563	Ajmer	Govt. Mahila Chikitshalay				0.00	0.00	0.25	0.00	0.00
564	Alwar	Rajiv Gandhi Govt. General Hospital				0.50	0.50	0.00	0.00	0.00
565	Banswara	Mahatma Gandhi Hospital				0.00	0.25	0.00	0.51	0.00
566	Baran	Govt. Hospital				0.00	0.00	0.00	0.25	0.25
567	Barmer	General Hospital				0.00		0.25	1.75	1.50
568	Bharatpur	Bharatpur DH (New 07)					0.25	0.25	0.00	0.00
569	Bhilwara	Bhilwara District MG Hospital	0.25	0.00	0.25	0.25	0.51	0.00	2.00	2.25
570	Bundi	P.B.S.S. General Hospital				0.00	0.00	0.00	0.00	0.00
571	Chittaurgarh	General Hospital				0.25		0.25	1.25	1.25
572	Churu	D.B. Govt. Hospital				0.00	0.00	0.00	0.00	0.00
573	Dausa	Govt. DH				0.00	0.00	0.00	0.00	0.25
574	Dholpur	DH Dholpur (New 10)							0.75	0.25
575	Dungarpur	Dungarpur DH	0.00	0.66	0.00	0.00	0.26			
576	Ganganagar	Sriganganagar DH	0.25	0.00	2.25	3.00	0.00	0.25	0.50	0.25
577	Jaipur	Jaipur Zanana Hospital	0.00	0.75	0.00	0.25	0.00	0.25	0.75	1.00
578	Jaisalmer	Sh. Jawahar Hospital				0.25	0.00	0.00	0.25	0.75
579	Jalor	Bhandari Sarvajanik Hospital				0.25	0.25	1.00	0.75	0.00
580	Jhalawar	Jhalawar DH	0.00		0.50	0.00	0.00	0.00	0.00	0.00
581	Jhunjhunun	B.D.K. Govt. Hospital				0.00	0.00	0.00	0.25	0.00
582	Jodhpur	Umaid Hospital, Jodhpur Medical College	0.00	0.00	0.00	0.00	0.75	0.25	0.50	0.52
583	Karauli	Govt. General Hospital				0.00	0.25	0.00	0.25	0.00
584	Kota	Jay Ka lone Hospital				0.00	0.25	0.00	0.75	0.25

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
585	Nagaur	Govt. Hospital				0.75	0.00	0.50	0.51	0.00
586	Pali	Govt. Vagad Hospital				0.50	0.00	0.25	0.25	0.50
587	Pratapgarh RJ	DH Pratapgarh (New 10)							0.25	0.00
588	Rajsamand	General Hospital				0.50	0.86	0.50	1.25	0.25
589	Sikar	Shree Kalyan Govt. Hospital				0.25	0.00	0.00	0.00	0.25
590	Sirohi	Govt. General Hospital				0.50	0.50	0.25	0.50	0.25
591	Bhilwara	CHC, Jahajpur	0.75							
592	Dungarpur	CHC, Sagwara	0.25							
593	Jaipur	CHC, Chomu	0.00							
594	Jhalawar	CHC, Khanpur	0.00							
595	Jodhpur	Pipar city	0.00							
596	Bikaner	PBM Hospital (New 12)								0.00
597	Hanumangarh	MGM Govt. Hospital (New 12)								0.00
598	Sawai Madhopur	Govt. Gen. Hospital (New 12)								0.00
599	Tonk	Saadat Hospital Tonk (New 12)								0.00
600	Udaipur	Pannadhai Govt. Hospital (New 12)								0.50
601	Pali	CHC Bali (New 12)								0.25
602	Udaipur	CHC Salumbar (New 12)								0.25
Sikkim										
603	East	Gangtok STNM Hospital	0.25	0.00	0.25	0.00	0.25	0.00	0.00	0.50
604	East	Pakyong Primary Health Center				0.00	0.00	0.00	0.00	0.00
605	North	Antenatal Clinic,Mangan					0.00	0.00	0.25	0.25
606	East	CHC, DH,Simgtam	0.25							
607	South Sikkim	Namchi DH (S) (New 12)								0.00
Tamil Nadu										
608	Chennai	Chennai Institute of Obsetrics & Gynecology	0.00	0.00	0.50	0.25	1.00	0.25	0.00	0.75
609	Chennai	St. Isabels Hospital		0.25	0.00	0.00	0.00	0.00	0.00	0.00
610	Coimbatore	Govt. Medical College hospital	0.75	0.50	0.75	1.00	0.75	1.00	1.75	0.50
611	Coimbatore	Sheila Hospital		0.75	0.25	0.00	0.00	0.00	0.00	0.00

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
612	Cuddalore	Government Distt. Hq Hospital	0.25	0.50	0.25	0.00	0.00	0.25	0.50	0.25
613	Dharmapuri	Govt. Distt. Hq Hospital		1.25	0.75	0.50	0.00	0.25	1.75	1.00
614	Dindigul	Government Distt. Hq Hospital	1.25	0.75	0.25	0.25	0.75	0.25	0.00	0.25
615	Erode	Govt. Distt. Hq Hospital	0.00	0.50	1.00	0.75	0.25	1.00	1.00	0.25
616	Kancheepuram	Govt. Distt. Hq Hospital	0.25	0.00	0.00	0.00	0.00	0.50	0.25	0.00
617	Kanyakumari	Govt. Medical College Hospital, Nagercoil	0.00	1.00	0.00	0.00	0.00	0.00	0.50	1.00
618	Kanyakumari	Jeyasekaran Hospital, Nagercoil		0.00	0.00	0.00	0.00	0.00	0.00	0.25
619	Karur	Govt. Distt. Hq Hospital	1.00	2.75	2.00	1.25	0.50	1.00	0.25	0.00
620	Krishnagiri	ANC Krishnagiri	1.50	1.00	1.00	1.00	0.50	0.00	0.75	0.50
621	Madurai	Govt. Madurai Medical College Rajaji Hospital	0.75	0.25	1.50	0.25	0.00	0.25	0.50	0.25
622	Nagapattinam	Govt. Distt. Hq Hospital	0.25	0.50	0.00	0.00	0.00	0.00	0.00	1.00
623	Nagapattinam	Arthur Hospital				0.25				
624	Namakkal	Government Dist. HQ Hospital	5.76	2.50	3.50	3.00	3.25	1.00	0.50	1.00
625	Perambalur	xxxxxxxxxxxx	1.25							
626	Perambalur	Govt. distt. Hq Hospital	0.50	1.25	1.50	1.00	1.00	1.00	0.00	0.00
627	Pudukkottai	Government Distt. Hq Hospital, Pudukottai	2.00	0.75	0.75	1.00	1.25	0.75	0.25	0.50
628	Ramanathapuram	Govt. Distt. Hq Hospital	0.50	0.75	0.00	0.25	1.00	3.25	0.00	0.00
629	Salem	Govt. Mohan Kumarmangalam Med. College Hospital	0.25	2.00	0.75	3.00	4.25	1.00	2.00	0.25
630	Sivaganga	Govt. Distt. Hq Hospital	0.25	0.75	0.50	0.50	0.25	0.50	0.75	0.25
631	Thanjavur	Govt. Distt. Hq Hospital, Kumbakonam	3.25	0.75	0.00	0.00	0.00	0.00	0.00	0.00
632	The Nilgiris	Govt. Distt. Hq Hospital, Ooty	0.25	0.50	1.00	0.50	0.25	0.75	0.00	0.00
633	Theni	Govt. Distt. Hq Hospital, Periyakulam	1.00	1.50	0.50	1.75	0.50	0.50	0.75	0.00
634	Thiruvallur	Govt. Distt. Hq Hospital	0.50	0.50	0.50	1.25	0.00	0.25	0.00	0.00
635	Thiruvarur	Govt. Distt. Hq Hospital	0.50	0.25	0.00	0.00	0.00	0.50	0.00	1.26
636	Thoothukkudi	Govt. Medical College Hospital	0.77	0.50	0.00	0.25	0.25	0.75	0.00	0.25
637	Tiruchirapalli	Govt. Medical College Hospital	1.50	1.25	1.50	2.50	2.25	1.00	1.25	1.50
638	Tiruchirapalli	CSI Hospital		0.50	0.25	0.25	0.00	0.00	0.75	0.00
639	Tirunelveli	Govt. Medical College Hospital	2.25	0.25	0.75	0.25	0.00	0.00	0.25	0.75
640	Tiruvannamalai	Govt. Dist. Hq. Hospital	1.25	1.50	1.25	0.50	2.00	0.25	0.00	0.50

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
641	Vellore	Vellore Government Hospital	1.25	0.75	0.25	0.00	1.00	0.75	1.25	0.75
642	Villupuram	Dist. Hq Hospital	1.00	0.50	0.50	0.25	0.25	0.00	0.50	0.00
643	Virudhunagar	Govt. Dist. Hq Hospital	0.00	0.25	1.00	0.00	1.00	0.25	0.00	0.25
644	Chennai	Chennai RSRM Hospital ANC 15-24			0.5				0.54	0.50
645	Coimbatore	Coimbatore ANC 15-24			1				1.75	0.00
646	Dharmapuri	Dharmapuri ANC 15-24			0.75				0.25	0.25
647	Tiruchirappalli	Tiruchirapaally ANC 15-24			1.25				0.50	1.00
648	Tirunelveli	Tirunelveli ANC 15-24			0.25				0.75	0.00
649	Coimbatore	General Hospital, Pollachi	0.50	0.75	0.00	0.75	0.00	0.00	0.25	0.25
650	Cuddalore	General Hospital, Panruti	1.00	1.00	1.00	0.00	0.50	0.00	0.00	0.00
651	Dharmapuri	FRU Harur		0.50	0.25	0.25	0.75	0.25	0.75	0.50
652	Dindigul	General Hospital, Palani	0.25	0.75	0.75	0.50	0.00	0.25	0.50	0.25
653	Erode	General Hospital, Gobichettipalayam	0.25	0.50	0.25	0.75	0.50	0.00	0.00	3.00
654	Kancheepuram	General Hospital, Maduranthagam	0.25	0.75	0.00	0.00	0.00	0.00	0.00	0.00
655	Kanyakumari	Govt. Hospital Padmanabapuram		0.50	0.00	0.25	0.50	0.00	0.00	0.27
656	Karur	General Hospital, Kulithali	0.50	3.25	0.25	0.50	0.25	1.00	0.25	0.00
657	Krishnagiri	ANC FRU Hosur (Krishnagiri)	1.25		0.50	1.25	1.75	0.00	0.75	0.25
658	Madurai	General Hospital, Melur	1.26		1.00	0.25	0.00	0.75	0.25	0.25
659	Nagapattinam	Arthur Hospital			0.00					
660	Nagapattinam	Govt. Hospital, Mayiladuthurai		0.50	0.00	0.50	0.25	0.00	0.00	0.00
661	Namakkal	General Hospital, Tiruchengode	0.50	0.75	0.00	0.50	0.75	0.25	1.00	0.50
662	Perambalur	General Hospital, Ariyalur	1.28	1.00	0.00	0.50	0.75	0.00	0.25	0.25
663	Pudukkottai	General Hospital, Aranthangi	0.00	0.50	0.50	0.50	0.00	0.00	0.00	0.50
664	Ramanathapuram	General Hospital, Paramakudi	0.50	0.50	1.00	0.00	1.00	0.00	0.00	0.00
665	Salem	General Hospital, Attur	0.50	1.25	0.50	1.50	0.25	0.00	1.00	2.76
666	Sivaganga	Govt. Hospital, Karaikudi		1.75	0.00	0.50	1.00	1.00	0.00	0.00
667	Thanjavur	General Hospital, Pattukkottai	0.50	0.50	0.00	0.75	0.25	0.00	0.00	0.00
668	The Nilgiris	General Hospital, Coonoor	0.25	0.75	0.50	0.25	0.25	0.00	0.00	0.00
669	Theni	General Hospital, Cumbum	1.50	1.25	0.75	0.50	2.00	0.00	0.25	0.00

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
670	Thiruvallur	General Hospital, Thiruthani	0.50	1.00	0.50	0.25	0.50	1.00	0.50	0.00
671	Thiruvarur	Govt. Hospital, Mannargudi		0.00	0.50	0.00	0.00	0.00	0.00	0.00
672	Thoothukkudi	General Hospital, Kovilpatti	0.75	1.00	0.25	0.25	0.50	0.00	0.25	0.00
673	Tiruchirapalli	General Hospital, Manapparai	0.75	0.50	0.50	1.25	0.25	0.25	0.25	0.00
674	Tirunelveli	General Hospital, Ambasamudram	0.25	0.25	0.25	0.25	0.00	0.00	0.00	0.50
675	Tiruvannamalai	Govt. Hospital Vandawasi		1.25	0.50	0.25	0.00	0.00	0.00	0.00
676	Vellore	General Hospital, Vaniambadi	0.51	0.50	1.50	0.25	0.75	0.00	0.25	0.25
677	Villupuram	DH, Kallakurichi	1.00	0.25	0.50	0.25	0.50	0.00	0.25	0.75
678	Virudhunagar	General Hospital, Rajapalayam	0.00	0.25	0.00	0.25	0.25	0.00	0.00	0.00
679	Ariyalur	PHC,Andimadam (New 12)								0.25
680	Perambalur	PHC,Labbaikudikadu (New 12)								0.00
681	Tiruppur	Govt HQ hosp.Tiruppur (New 12)								0.50
682	Tiruppur	General Hospital,Udumalaipattai (New 12)								0.00
683	Ariyalur		1.25							
684	Tiruvannamalai	Vasantha Nursing Home		0						
Telangana										
685	Adilabad	Adilabad Distt. HQ. Hospital	0.75	0.75	1.75	0.50	1.50	1.75	0.50	0.25
686	Adilabad	FI ICTC - PPP - BALAJI NURSING HOME, KAGAJNAGAR (ANC-PVT) New 10							1.25	0.00
687	Hyderabad	Hyderabad Gandhi Medical College	1.00	0.75	2.00	2.00	1.50	1.50	1.25	0.75
688	Hyderabad	St. Theresa Hospital (New 07)					1.00	0.75	0.25	0.00
689	Karimnagar	Karimnagar DH	2.00	3.50	2.25	0.50	1.00	1.50	1.50	1.25
690	Khammam	Area Hospital, Kothagudem	1.50	2.00	3.50	2.75	2.25	1.50	1.00	0.75
691	Mahbubnagar	Mehboobnagar DH	0.25	0.75	0.25	3.02	0.75	1.75	1.50	1.75
692	Medak	Sangareddy DH	0.50	1.00	2.00	2.00	0.25	2.25	0.75	0.25
693	Nalgonda	Nalgonda DH	1.50	2.25	2.75	2.00	0.75	1.50	1.00	0.50
694	Nizamabad	Nizamabad DH	1.00	2.25	0.75	0.50	0.75	0.25	1.00	0.25
695	Rangareddi	Rangareddy DH	0.50	0.50	1.75	1.25	0.50	0.50	0.50	0.50
696	Warangal	GMH, Hanumakonda	1.50	2.50	2.50	0.75	0.50	1.00	1.00	1.00

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
697	Hyderabad	Hyderabad ANC 15-24			1.75					
698	Adilabad	Area Hospital, Mancherial	1.50	0.25	1.00	0.25	1.75	1.00	0.75	0.25
699	Adilabad	CHC Utnoor (ANC-PHC/CHC)-New 10							0.00	0.00
700	Karimnagar	Area Hospital, Jagitial	2.01	1.50	0.57	1.50	2.00	1.50	1.75	2.25
701	Karimnagar	CHC – Peddapalli (ANC-PHC/CHC)-New 10							0.50	0.25
702	Khammam	Area Hospital, Bhadrachalam		2.00	2.25	1.01	0.25	1.00	0.75	0.75
703	Khammam	PHC, Julurupadu					0.00	0.75	0.28	0.00
704	Mahbubnagar	Area Hospital, Gadwal	0.50	0.75	0.25	0.75	0.00	0.50	0.50	1.00
705	Medak	CHC, Narsapur		0.50		1.50	1.50	1.00	0.75	0.25
706	Medak	CHC – Narayankhed (ANC-PHC/CHC)-New 10							0.75	0.50
707	Nalgonda	Area Hospital, Bhongir	0.75	0.75	1.00	1.00	1.00	1.25	0.25	0.00
708	Nizamabad	Area Hospital, Kamareddy	1.00	1.75	2.50	3.00	1.26	0.75	0.50	1.00
709	Nizamabad	PHC Nizamabad/CHC, Madnoor					0.25	0.50	1.25	0.25
710	Warangal	Area Hospital, Jangaon	1.00	1.25	0.75	0.25	0.25	0.75	0.75	0.50
Tripura										
711	West Tripura	Agartala IGM Hospital	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25
712	West Tripura	A.G.M.C. & GBP Hospital				0.97	0.50	0.00	0.00	0.50
713	North Tripura	Dharmanagar S.D. Hospital (New 12)								0.00
714	South Tripura	Belonia S.D. Hospital (New 12)								0.00
Uttar Pradesh										
715	Aligarh	Aligarh Mahila Hospital	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.29
716	Ambedkar Nagar	District Mehila Hospital						0.00	0.50	0.00
717	Auraiya	District Mehila Hospital					0.00	0.50	0.00	0.00
718	Baghpat	District Mehila Hospital				0.33	0.00	0.00	0.25	0.00
719	Bahraich	Bahraich Mahila Hospital	0.00	0.50		0.75	0.75	0.00		0.00
720	Ballia	Balia Mahila Hospital	0.00	0.53	0.00		0.25	0.27	0.75	1.26
721	Banda	Banda Mahila Hospital	0.00	1.75	0.00	0.00	0.00	0.75	0.00	0.25
722	Barabanki	Barabanki Mahila Hospital	0.00	0.75	0.00	0.50	0.00	0.00	0.00	0.00
723	Basti	DMH Basti (New 10)								0.00

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
724	Bijnor	Bijnore Mahila Hospital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
725	Bulandshahr	District Mehila Hospital				0.25	0.00	0.25	0.25	0.00
726	Chandauli	District Mehila Hospital							0.50	0.25
727	Chitrakoot	District Mehila Hospital					0.00	1.45	0.50	0.25
728	Deoria	District Mehila Hospital				1.25	0.00	0.00	0.00	1.00
729	Etah	District Mehila Hospital				0.25	0.00	0.25	0.00	0.00
730	Etawah	Etawah Mahila Hospital	0.00	1.25	0.25	0.00	0.00	0.25	0.25	0.00
731	Faizabad	District Mehila Hospital				0.50	0.25	0.00	0.25	0.50
732	Fatehpur	District Mehila Hospital				0.00	0.00	0.00	0.00	0.00
733	Firozabad	District Mehila Hospital				0.00	0.00	0.00	0.00	0.00
734	Gautam Buddha Nagar	District Mehila Hospital				0.00	0.00	0.00	0.00	0.00
735	Gorakhpur	Gorakhpur Mahila Hospital	0.00	0.75	0.00	0.25	0.00	0.00	0.75	0.25
736	Hathras	District Mehila Hospital				0.25	0.00	0.50	0.00	0.00
737	Jalaun	District Mehila Hospital				0.00	0.00	0.00	0.25	0.50
738	Jaunpur	Jaunpur Mahila Hospital	0.25	0.25	0.00	0.25	0.25	0.00	0.50	0.00
739	Jyotiba Phule Nagar	District Mehila Hospital					0.00	0.00	0.00	0.00
740	Kannauj	District Mehila Hospital					0.31	0.00	0.75	0.00
741	Kanpur Dehat	District Mehila Hospital				0.25	0.00	0.25	0.50	0.25
742	Kanpur Nagar	Kanpur Medical College	0.25	0.25	0.25	0.25	0.25	0.50	0.00	0.00
743	Kanpur Nagar	DMH Kanpur (New 10)							0.00	0.00
744	Kaushambi	District Mehila Hospital						0.00	0.00	1.00
745	Lalitpur	Lalitpur Mahila Hospital	1.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00
746	Lucknow	Lucknow Queens Mary Hospital	0.00	0.50	0.25	0.50	0.25	0.00	0.00	0.75
747	Lucknow	DMH Lucknow (VAB) (New 10)							0.00	0.00
748	Mahoba	District Mehila Hospital				0.00	0.00	0.00	0.00	0.25
749	Mainpuri	District Mehila Hospital				0.00	0.00	0.00		0.00
750	Mathura	District Mehila Hospital				0.75	0.00	0.00	0.25	0.00
751	Mathura	Ramkrishna Mission Hospital, Vrandavan				0.50	0.25	0.00	0.25	
752	Mau	District Mehila Hospital				1.46		0.50	0.00	0.50

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
753	Meerut	Meerut Mahila Hospital				0.00	0.00	0.50	0.25	0.00
754	Mirzapur	Mirzapur Mahila Hospital	0.75	0.00	0.25	0.00	0.00	0.00	0.50	0.50
755	Moradabad	Vivekanand Hospital & Research Centre					0.00			
756	Pilibhit	Pilibhit Mahila Hospital	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.25
757	Pratapgarh	Partapgarh Mahila Hospital	0.50	0.00	0.50	0.00	0.00	0.25	0.00	0.00
758	Rae Bareli	Raebareli			0.00	0.25	0.00	0.00	0.00	0.00
759	Rampur	District Mehila Hospital				0.00	0.00	0.00	0.00	0.25
760	Saharanpur	Saharanpur Mahila Hospital	0.50	0.25	0.50	0.00	0.25	0.25	0.25	0.25
761	Sant Kabir Nagar	District Mehila Hospital					0.00			
762	Sant Ravidas Nagar	DFH Bhadohi (Maharaj Chetsingh)							0.00	0.00
763	Shahjahanpur	District Mehila Hospital				0.00	0.00	0.00	0.00	0.00
764	Siddharthnagar	Sidharth								
765	Sitapur	District Mehila Hospital				0.00	0.00	0.00	0.00	0.00
766	Allahabad	CHC Handia				1.50	0.50	0.53	0.00	0.00
767	Azamgarh	Azamgarh Rural Composite (New 10)							0.25	0.25
768	Ballia	CHC Sikandarpur	0.00			0.00				
769	Bijnor	Nzibabad/Najibabad CHC Hospital			0.00	0.00	0.00	0.00	0.00	0.25
770	Budaun	CHC, Ujhani						0.00	0.00	0.00
771	Ghazipur	Ghazipur Rural Composite (New 10)							0.00	0.00
772	Gonda	CHC, Mankapur				0.95	0.30			
773	Gorakhpur	CHC, Pipriach						0.30		
774	Hardoi	CHC, Sandila						0.00	0.00	0.51
775	Jaunpur	CHC Madiyaon						0.00	0.51	0.00
776	Jaunpur	Jaunpur Rural Composite 1 (New 10)							1.78	0.32
777	Jaunpur	Jaunpur Rural Composite 2 (New 10)							0.25	0.25
778	Jhansi	CHC, MLBMC, Jhansi, Lalitpur	0.00							
779	Kanpur Dehat	CH, Bidhnoo, Kanpur	0.30							
780	Kushinagar	Kushinagar Rural Composite (New 10)							0.00	0.00
781	Lucknow	CHC, Mohanlalganj					0.00	1.02	0.75	0.00

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
782	Maharajganj	Maharajganj Rural Composite (New 10)								0.50
783	Mau	Mau Rural Composite (New 10)							0.57	0.25
784	Pratapgarh	CHC Patti	0.00				0.00	0.75	0.50	0.00
785	Rae Bareli	CHC,BACHRAWA					0.00	0.25	0.00	0.50
786	Sonbhadra	CHC, Robertganj						0.00	0.51	0.00
787	Varanasi	Varanasi Rural Composite (New 10)							0.25	0.00
789	Shamli	CHC, Shamli					0.00		0.00	0.25
Uttrakhand										
790	Champawat	CHC, Lohaghat Champawat				0.25	0.00	0.25	0.00	0.25
791	Dehradun	Combine Hospital, Rishikesh				0.00	0.00	0.00	0.50	0.25
792	Garhwal (Pauri)	Combine Hospital, Kotdwar				0.00	0.00	0.00	0.00	0.00
793	Hardwar	Haridwar Mahila Hospital	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25
794	Hardwar	Combine Hospital, Roorkee				0.00	0.00	0.25	0.25	0.50
795	Nainital	Haldwani Mahila Hospital	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.25
796	Nainital	Combine Hospital, Ramnagar				0.00	0.00	0.00	0.74	0.00
797	Pithoragarh	Pithoragarh Mahila Hospital	0.00	0.00	0.00	0.00	0.00	0.75	0.00	
798	Udham Singh Nagar	Distt. (Female) Hospital, Rudrapur, U.S. Nagar				0.50	0.50	0.75	0.50	0.00
799	Nainital	CHC, Ramnagar/BD Pandey, Haldwani	0.30							
800	Almora	District Female Hospital, Almora (New 12)								0.00
801	Bageshwar	DH, Bageshwar (New 12)								0.00
802	Dehradun	Doon Women Hospital, Dehradun (New 12)								1.00
803	Rudraprayag	DH, Rudraprayag (New 12)								0.00
804	Tehri Garhwal	DH, Bauradi (New 12)								0.81
805	Uttarkashi	DH, Uttarkashi (New 12)								0.51
West Bengal										
806	Bankura	Bishnupur Sub Divisional Hospital(New 08)						0.00	0.26	
807	Barddhaman	Durgapur SD Hospital	0.50	1.00	1.25	0.25	0.75	0.26	0.00	0.75
808	Dakshin Dinajpur	Gangarampur Sub Divisional Hosp. (New 08)						0.26	0.00	0.00
809	Darjiling	Darjeeling DH	0.25	0.50	0.84					

Annex 9: HIV Prevalence (%) at ANC Sentinel Sites, 2003-2013 by state (Cont...)

S.No.	District	Site Name	2003	2004	2005	2006	2007	2008-9	2010-11	2012-13
810	Darjiling	Kalimgpong SDH (New 07)					2.00	0.00	0.00	0.25
811	Haora	Uluberia Sub Divisional Hospital (New 08)						0.50	0.00	0.00
812	Koch Bihar	Coochbehar MJN Hospital		0.00	0.26					
813	Kolkata	RGKMCH Kolkata	0.50							
814	Kolkata	Abinash Dutta Maternity Home	0.75	1.25	2.25	1.76	1.50	0.00	0.75	0.25
815	Maldah	Malda DH	0.00	0.00	0.25					
816	Nadia	Nabadwip State General Hospital (New 08)						0.00	0.00	0.00
817	Nadia	Aranghata BPHC (New 10)							0.00	1.25
818	Paschim Medinipur	Kharagpur SDH (New 08)						0.50	0.00	0.00
819	Purba Medinipur	Midnapur Tamluk DH	0.75	0.00	0.00					
820	Puruliya	Puruliya DH	0.00	0.50	1.50					
821	South Twenty Four Parganas	Bijaygarh State Hospital		0.65						
822	Uttar Dinajpur	Uttar Dinajpur Raiganj Hospital	0.74	0.00	0.49					
823	Birbhum	Suri DH				0.00		0.00	0.25	0.00
824	Darjiling	CHC, Kurseong, Darjeeling	0.28							
825	Darjiling	CHC, SDH, Siliguri	0.25			0.00	0.50	0.75	0.00	0.50
826	Hugli	Khanakul Rural Hospital (New 08)						0.25	0.25	0.25
827	Koch Bihar	Mathabhanga SDH				0.00	0.25	0.55	0.00	
828	Kolkata	Bidya Sagar SDH (New 07)					0.00	0.00	0.00	0.00
829	Maldah	CHC, Manikchak Milki	0.66			0.00	0.00	0.50	0.00	0.00
830	Murshidabad	Jangipur Sub Divisional Hospital (New 08)						0.00	0.25	0.00
831	North Twenty Four Parganas	CHC, Madhyamgram	0.25			0.25	0.00	0.51	0.00	0.00
832	Paschim Medinipur	Contai Sub Division Hospital				0.00		0.00	0.25	0.25
833	Purba Medinipur	CHC, Mahishadal Basulia	0.56			0.00				
834	Purba Medinipur	Egra SDH (New 07)					0.00			
835	Puruliya	CHC, Raghunathpur				0.25	0.00	0.00	0.00	0.00
836	South Twenty Four Parganas	CHC, Baruipur	0.25			0.00	0.00	0.00	0.00	0.00
837	Uttar Dinajpur	CHC, Kaliaganj	0.50			2.25	0.00	0.00	0.00	0.00
838	Alipurduar	Alipur Duar Sub Divisional Hosp. (New 08)						0.25	0.00	0.25

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Published with the support of the Centers for Disease Control and Prevention under Cooperative Agreement No. U2GGH001132 implemented by JSI