



# HIV

## SENTINEL

**SURVEILLANCE 2016-17**

---

**TECHNICAL BRIEF**

---



**National AIDS Control Organisation**

India's voice against AIDS  
Ministry of Health & Family Welfare, Government of India

# 25 Years of India's AIDS Control Programme





# HIV SENTINEL

## SURVEILLANCE 2016-17

---

### TECHNICAL BRIEF

---

December 2017



---

**National AIDS Control Organisation**

India's voice against AIDS

Ministry of Health & Family Welfare, Government of India

# 25 Years of India's AIDS Control Programme

GoI/NACO/MES/HSS 2016-17/011217

**Suggested citation:**

National AIDS Control Organization (2017). HIV Sentinel Surveillance: Technical Brief, India 2016-17. New Delhi: NACO, Ministry of Health and Family Welfare, Government of India.

**For additional information about HIV Sentinel Surveillance 2016-17, please contact:**

Monitoring, Evaluation and Surveillance Division  
National AIDS Control Organisation (NACO)  
Government of India  
Ministry of Health and Family Welfare  
6<sup>th</sup> and 9<sup>th</sup> Floor, Chanderlok  
36, Janpath, New Delhi, 110001



# Contents

<b>Foreword</b>	vii
<b>Preface</b>	ix
<b>Message from WHO Representative to India</b>	xi
<b>Acknowledgements</b>	xiii
<b>Acronyms</b>	xv
<b>Executive Summary</b>	1
<b>1. Introduction</b>	4
<b>2. Methodology</b>	11
<b>3. Overview of HIV Levels and Trends</b>	18
<b>4. HIV Level and Trends among Antenatal clinic attendees</b>	20
<b>5. HIV Levels and Trends among High Risk Group Population</b>	33
<b>6. HIV Levels and Trends among Bridge Population</b>	44
<b>7. State wise Syphilis Sero Positivity Level</b>	46
<b>8. Discussion</b>	48
<b>9. Annexure</b>	51
Annex 1: State-wise number of HSS sites, 2003-17	51
Annex 2: Bilingual Data form for Surveillance at ANC Sites, HSS 2017	53
Annex 3: Bilingual Data form for Surveillance at FSW Sites, HSS 2017	55
Annex 4: Bilingual Data form for Surveillance at MSM Sites, HSS 2017	57
Annex 5: Bilingual Data form for Surveillance at IDU Sites, HSS 2017	59
Annex 6: Bilingual Data form for Surveillance at H/TG Sites, HSS 2017	61
Annex 7: Bilingual Data form for Surveillance at SMM Sites, HSS 2017	63
Annex 8: Bilingual Data form for Surveillance at LDT Sites, HSS 2017	65
Annex 9: Consent Form, HRG & Bridge Population HSS 2017	67
Annex 10: Assent Form, HRG & Bridge Population HSS 2017	68
Annex 11: SACS's ANC checklist HSS 2017	69
Annex 12: State wise HIV prevalence among ANC clinic attendees, HSS 2003-2017	71
Annex 13: State wise HIV prevalence among FSW, HSS 2003-2017	72
Annex 14: State wise HIV prevalence among MSM, HSS 2003-2017	73
Annex 15: State wise HIV prevalence among IDU, HSS 2003-2017	74
Annex 16: State wise HIV prevalence among Single Male Migrants (SMM), Long Distance Truckers (LDT) and Hijra/Transgender people (H/TG), HSS 2005-2017	75





सत्यमेव जयते

संजीव कुमार, भा.प्र.से.

अपर सचिव एवं महानिदेशक, नाको

**SANJEEVA KUMAR, IAS**

Additional Secretary & Director General, NACO



भारत सरकार  
स्वास्थ्य एवं परिवार कल्याण मंत्रालय  
राष्ट्रीय एड्स नियंत्रण संगठन  
Government of India  
Ministry of Health & Family Welfare  
National AIDS Control Organisation



## FOREWORD

Evidence-based policy making and programme designing is the cornerstone of the India's AIDS response. HIV bio-behavioural surveillance and estimations activities are integral component of comprehensive systems of evidence generation, analysis and uses. I am proud to mention that HIV surveillance and estimation system provides one of the most authoritative, standard and up-to-date information on level and trends of HIV/AIDS epidemic at national and State level since the beginning of AIDS response in India.

"HIV Sentinel Surveillance 2017: A Technical Brief" is in continuation of this rich tradition of quick analysis and dissemination of surveillance report for informing the policy makers, programme managers, academicians, community, civil society, developmental partners and all other stakeholders on most recent level and trend of HIV epidemic.

Surveillance is information for action and this technical brief provides critical preliminary evidences to strengthen the national AIDS response. It highlights the continuation of concentrated HIV epidemic in India with some States having very high prevalence than the national level and explained the diversities of the epidemic with varied drivers in each of State. Many States have multiple drivers, migration is a key factor in many of the high out-migration State and then higher prevalence among truckers at many sites remains a cause of concern.

I commend Monitoring, Evaluation and Surveillance division of NACO for bringing out this report in record time. While field level activities for HSS were completed in August 2017 and sample testing in September 2017; this technical brief is being released on 1<sup>st</sup> December 2017. I specially appreciate the contribution of WHO India for its continuous support for surveillance activities. All other collaborating partners i.e. UNAIDS, CDC and USAID are acknowledged for extending valuable technical support for HIV surveillance.

I am confident that this brief will provide a valuable reference document for all stakeholders including policy makers, programme managers, research scholars, community and civil society and will be a critical enabler for further strengthening of AIDS response in country as we take concrete steps for "Ending AIDS as a public health threat by 2030".

  
(Sanjeeva Kumar)

---

6th Floor, Chandralok Building, 36 Janpath, New Delhi - 110001 Telefax : 011-23325331/23351700  
E-mail : dgnaco@gmail.com

---

अपनी एचआईवी अवस्था जानें, निकटतम सरकारी अस्पताल में मुफ्त सलाह व जाँच पाएँ  
Know your HIV status, go to the nearest Government Hospital for free Voluntary Counselling and Testing





सत्यमेव जयते

आलोक सक्सेना  
संयुक्त सचिव  
**Alok Saxena**  
Joint Secretary



राष्ट्रीय एड्स नियंत्रण संगठन  
स्वास्थ्य एवं परिवार कल्याण मंत्रालय  
भारत सरकार

National AIDS Control Organisation  
Ministry of Health & Family Welfare  
Government of India



## PREFACE

Monitoring and analysing levels and trends of HIV epidemic across locations and populations is a fundamental surveillance function to guide national AIDS responses. India has one of the oldest, largest and most robust HIV surveillance system and has been described as a fully functional surveillance system by independent experts in peer reviewed journal.

National AIDS Control Organization (NACO) established the HIV sentinel surveillance (HSS) system in 1992, and expanded it across the country in 1998, among ANC and STD clinic attendees and select high-risk groups (HRGs) to more systematically monitor the epidemic. Initially, sites were selected in areas or cities thought to be of high risk. Results were used to produce national estimates of the number of people living with HIV (PLHIV) in India that helped in informing policy makers and donors as the responses were designed and initiated. As the surveillance systems expanded, the concentrated nature of HIV epidemic in India was well established and target prevention interventions among most-at-risk communities became fundamental to national AIDS control programme.

The scale of prevention programmes with HRGs followed the scale-up of HSS. New pockets of IDU epidemics, such as in Punjab, were discovered only after the expansion of the HSS-IDU and, in response, NACO scaled-up the interventions to reach them.

As expanded epidemic data through surveillance became available at large number of districts, NACO first classified its districts into four categories (A-D) using HSS data, where A districts were the most affected and D the least. This has been used in allocating resources more efficiently in NACP-III.

HSS 2016-17 technical brief is in continuation of NACO's practice of promoting evidence based decision making by disseminating the epidemiological evidences. This brief has highlighted that while the programme has been hugely successful in the past, there is no place of complacency and the current challenge is to understand the diversity of this HIV epidemic, having complex and multiple drivers in each state, and therefore require a contextualized multi-prong approach. I am confident that this technical brief will be used extensively by policy makers, programme managers, community experts, civil societies, social scientist and jurists as we strengthen our responses towards "End of AIDS by 2030".

  
(Alok Saxena)

---

9th Floor, Chandralok Building, 36 Janpath, New Delhi - 110001 Tele.: 011-23325343 Fax : 011 - 23325335  
E-mail : js@naco.gov.in

---

अपनी एचआईवी अवस्था जानें, निकटतम सरकारी अस्पताल में मुफ्त सलाह व जाँच पाएँ  
Know your HIV status, go to the nearest Government Hospital for free Voluntary Counselling and Testing





World Health  
Organization

India



## Message from WHO Representative to India

The Indian HIV Sentinel Surveillance (HSS) is one of the largest in the world, and aligned with the latest WHO recommendations.

This surveillance system has guided the program response according to specific epidemiological situation by providing robust estimates of HIV prevalence and trends by population groups at the national and state level.

Since the beginning of the HIV epidemic in India, 15 successive rounds of sentinel surveillance have been conducted with an increased number of sites to strengthen representativeness. The populations vulnerable to HIV, bridge populations and pregnant women - considered as a proxy for the general population - have been covered during these rounds of surveillance.

The 2017 round of HSS, conducted with technical support from WHO, showed that the HIV epidemic continues to be heterogenic with varied HIV prevalence by location and population. It also continues to be concentrated among people who inject drugs, transgenders, men who have sex with men, and female sex workers and their clients, except in some specific pockets where the HIV epidemic is generalized.

This latest round has shown declining HIV prevalence trends in the traditional high prevalence southern states such as Andhra Pradesh, Karnataka, Maharashtra, Tamil Nadu and Telangana. However, the results have alerted the programme in Gujarat, Punjab, Rajasthan, Haryana, Uttar Pradesh, Delhi and Bihar where the epidemic is showing a rising trend.

Continuation and adaptation of HIV surveillance is instrumental to better understand the HIV epidemic, the geographical areas and communities most affected, and also guiding the National AIDS Control Programme to meeting the target of ending AIDS by 2030.

WHO is committed to continue supporting NACO in adapting its program response and to further strengthen its HIV surveillance system to inform the last mile towards the elimination of HIV as a public health problem by 2030.

A blue ink signature of Henk Bekedam, consisting of stylized initials and a surname.

Henk Bekedam







सत्यमेव जयते

## Dr S. Venkatesh

DNB, MD, DPH, MPH (Harvard), FAMS, FIPHA  
Deputy Director General

Tele: 91-11-23731963, Fax: 23731746  
Email: srinivasa.venkatesh@gov.in  
drsv.naco@gmail.com



भारत सरकार  
स्वास्थ्य एवं परिवार कल्याण मंत्रालय  
राष्ट्रीय एड्स नियंत्रण संगठन  
छठा तल, चन्द्रलोक, 36 जनपथ, नई दिल्ली-110001

Government of India  
Ministry of Health & Family Welfare  
National AIDS Control Organisation  
6th Floor, Chandralok, 36, Janpath, New Delhi - 110001



## Acknowledgements

Surveillance is information for action. The 2017 HSS Technical Brief provides the data from the most recent 15th round of HIV Sentinel Surveillance among seven population groups. Findings in the technical brief clearly show that India's success story of halting and reversing the epidemic continues. At the same time, it also indicates towards the challenges which state and district programme managers need to take into cognizance and make smart decisions locally to turn the epidemic trajectory.

This technical brief is an output of collective efforts of many stakeholders. First and foremost, efforts of medical officers, nurses, counsellors and laboratory technicians are acknowledged who implement surveillance maintaining highest possible quality standards. State AIDS Control Societies and District AIDS Prevention Control Units facilitate timely implementation of surveillance activities and we congratulate all project directors and their surveillance team for owning up the activity and ensuring timely completion. We appreciate the role of regional & nodal institutes as they bring the highest scientific rigor in surveillance process through intense training and supervision.

We thank WHO India, UNAIDS India and CDC India for the technical support extended during implementation of 15th round of implementation. Last but not the least, we commend Dr Pradeep Kumar and Dr Bhavna Sangal of Monitoring, Evaluation and Surveillance division for their hard work and ownership in timely implementation, analysis and publication of this technical brief.

  
(Dr S. Venkatesh)



## Acronyms

AIDS	Acquired Immuno-Deficiency Syndrome
AIIMS	All India Institute of Medical Sciences, New Delhi
ANC	Antenatal Clinic
CDC	Centers for Disease Control and Prevention
CI	Confidence Interval
DAPCU	District AIDS Prevention and Control Unit
EQAS	External Quality Assurance Scheme
FSW	Female Sex Worker
HIV	Human Immuno-Deficiency Virus
HRG	High Risk Group
HSS	HIV Sentinel Surveillance
ICMR	Indian Council of Medical Research
IDU	Injecting Drug User
LDT	Long Distance Trucker
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, Pune
NICED	National Institute of Cholera and Enteric Diseases, Kolkata
NIE	National Institute of Epidemiology, Chennai
NIHFW	National Institute of Health and Family Welfare, New Delhi
NIMS	National Institute of Medical Statistics, New Delhi
OBG	Obstetrics & Gynaecology
PGIMER	Postgraduate Institute of Medical Education and Research, Chandigarh

RI	Regional Institute
RIMS	Regional Institute of Medical Sciences, Imphal
SACS	State AIDS Control Society
SMM	Single Male Migrant
STD	Sexually Transmitted Disease
H/TG	Hijra/Transgender people
ToT	Training of Trainers
TRG	Technical Resource Group
UNAIDS	Joint United Nations Programme on HIV/AIDS
WHO	World Health Organisation
RPR	Rapid Plasma Reagin
SRL	State Reference Laboratory

## Executive Summary

1. HIV Sentinel Surveillance (HSS) plays a crucial role in monitoring the level and trend of the HIV epidemic across different population groups and locations in the country. With around 650 districts covered under HSS, India has one of the widest networks of sites, which track the epidemic biennially. Technical support for the training, monitoring and supervision of HSS is provided by two national and six regional institutes to ensure high quality implementation.
2. The 15th round of HSS was implemented during 2017 at 1323 sentinel sites- 829 sites among Antenatal Clinic (ANC) clinic attendees and 494 sites among high-risk groups & bridge populations: Female Sex Workers (FSW), Men having Sex with Men (MSM), Injecting Drug Users (IDU), Hijra/Transgender People (H/TG), Single Male Migrants (SMM) & Long-Distance Truckers (LDT).
3. Consecutive Sampling was adopted for recruitment of ANC, LDT and SMM populations, while random sampling was undertaken for recruiting HRG. Around 4.45 lakh blood specimens were tested across all population groups during the 15th round of HSS.
4. The HIV epidemic continues to be concentrated, with relatively higher prevalence among high risk groups comprising FSW, MSM, H/TG, IDU, and bridge population group of SMM and LDT, with lower prevalence among ANC attendees, which reflects proxy prevalence among the general population. The highest prevalence recorded in the 2017 rounds of HSS was among IDU (6.26%, 95% CI: 5.92-6.59), followed by H/TG (3.14%, 95%CI: 2.61-3.66), MSM (2.69, 95% CI: 2.47-2.91), FSW (1.56%, 95% CI: 1.46-1.66), LDT (0.86%, 95% CI: 0.64-1.07) and SMM (0.51%, 95% CI: 0.34-0.68). The observed HIV prevalence among ANC clinic attendees, considered a proxy for general population, was 0.28% (95%CI: 0.26-0.29).
5. Thirteen states have recorded an ANC HIV prevalence which is more than the national average. Of these states, the north-eastern states of Mizoram (1.19%), Nagaland (0.82%), Meghalaya (0.73%), Tripura (0.56%) and Manipur (0.47%) were among the highest. Gujarat and Andhra Pradesh were other states with HIV prevalence in the range of 0.41% to 0.44% among ANC clinic attendees.
6. Overall 56 sentinel sites recorded HIV prevalence of > 1% in this round of HSS, with almost one third of the sites being in the states of Bihar, Chhattisgarh, Delhi, Gujarat, Jharkhand, Odisha, Rajasthan and Uttar

Pradesh. Fourteen sites recorded an HIV prevalence of > 2% of which five were in the states of Bihar, Chhattisgarh, Odisha, Rajasthan and Uttar Pradesh. Additionally, 151 sites have recorded an HIV prevalence of 0.50-0.99% in this round of HSS.

7. Of the 829 sentinel sites for ANC, 561 are consistent sites, and analysis of these sites indicates a declining trend at the national level. Similar trends have been observed at consistent sites, in the erstwhile high prevalence states of southern India (i.e. Andhra Pradesh, Karnataka, Maharashtra, Tamil Nadu & Telangana). While a similar trend had been observed in the erstwhile high prevalence states of the north eastern region, now in the states of Manipur, Mizoram & Nagaland the HIV prevalence seems to be stabilizing and not declining at the same pace. Conversely, the long-term trends in states of Gujarat, Punjab, Rajasthan, Haryana, Uttar Pradesh, Delhi and Bihar appear to be rising.

8. The implementation of HSS in the FSW typology was completed at 245 sites across thirty-two states. Nine states recorded HIV prevalence of more than national average (1.56%, 95% CI: 1.46-1.66) while 17 sites recorded an HIV prevalence of >5% with a majority of them in Karnataka (6), Maharashtra (4) and Telangana (3). The national level trends of HIV prevalence among the FSW is observed to be declining. The trends appear to be stable to declining among FSW across all regions.

9. Among MSM, HSS was conducted at 89 sites across 26 states with thirteen sites recording prevalence of more than 5%. In total, 12 states recorded HIV prevalence of more than the national average (2.69, 95% CI: 2.47-2.91) with more than 5% HIV prevalence in the states of Manipur (8.40%), Nagaland (7.66%) and Karnataka (5.40%). The trends of HIV prevalence among MSM appear to be declining at national level. However, an increasing trend at consistent sites is being observed in Bihar and West Bengal.

10. The national HIV prevalence among the Injecting Drug Users was the highest among all population groups (6.26%, 95%CI: 5.92-6.59). The HIV Sentinel Surveillance among this group was conducted at 87 sites spread across 26 states. A total of nine states recorded an HIV prevalence of >5% among the IDU i.e. Mizoram (19.81%), Delhi (16.21%), Punjab (12.09%), Chhattisgarh (10.77%), West Bengal (10.76%), Uttarakhand (8.98%), Tripura (8.55%), Manipur (7.66%) and Madhya Pradesh (5.33%). Thirty sites recorded HIV prevalence of >5%, with a majority of them in the states of Manipur (8), Punjab (6) and Mizoram (4). Nationally, the HIV prevalence

trend among IDU has stabilized at a higher level. However, a stable to rising epidemic was noticed at consistent sites in the northern, eastern and north-eastern states.

11. A major expansion of H/TG sites was undertaken in this round of surveillance, with 18 sites participating in this round of HSS, compared to only 3 sites in 2010-11. The HIV prevalence among this population group was the second highest (3.14%, 95%CI: 2.61-3.66) across all population groups. The highest prevalence among H/TG was noted at 10.9% in the district of North East Delhi. Other than North East Delhi, three more sites recorded a prevalence of more than 5%: Kolkata (7.28%), Thane (6.80%) and Hyderabad (6.47%).

12. The HIV epidemic continues to be heterogenous in India, with varied levels of HIV prevalence by location and population. Each state has a different dynamics of epidemic. In the erstwhile high prevalence states of Andhra Pradesh, Maharashtra, Karnataka, Tamil Nadu and Telangana, higher HIV prevalence among FSW, MSM and H/TG indicates an epidemic primarily driven through unprotected sexual intercourse while in many of the north-eastern states, high prevalence among IDU, FSW and MSM, as well as in ANC populations, indicates an epidemic fuelled by multiple, possibly interrelated, risk behaviours. Prevalence among migrants and truckers is 2-3 times higher than that of ANC clinic attendees, adding credence to the hypothesis that migration is playing an important role in the high-outmigration states of Uttar Pradesh, Bihar, Rajasthan etc.

13. India is committed to the goal of “End of AIDS” as a public health threat by 2030. While the programme has been hugely successful in the past, there is no place of complacency and the current challenge is to understand the diversity of this HIV epidemic, having complex and multiple drivers in each state, and therefore require a contextualized multi-prong approach. Epidemiological findings need to be taken into consideration for tailoring the national programme’s responses and treatment must be complemented with strengthened prevention programmes among high risk populations and their clients like migrants and truck drivers with high-risk behaviour, as well as among spouses/partners of these populations. The findings from this HSS, must be used in conjunction with the findings of the national integrated biological and behavioral surveillance (IBBS), which provides crucial clues into the behavioral and service access patterns of populations with high-risk behaviours.

# 1. Introduction

The National AIDS Control Organization (NACO) implements HIV Sentinel Surveillance (HSS) biennially. The data generated are primary source of information on the level and trends of HIV epidemic in India. The 15th round of HIV Sentinel Surveillance (HSS) was implemented at 1323 sites among Antenatal Clinic (ANC) attendees, high risk groups (HRGs) and bridge populations. These surveillance sites were spread over 651 districts across 35 States and Union Territories (Uts). Sample collection for HSS 2017 was done during February-June 2017 at ANC sites while for the HRG and bridge population sites, samples were collected during April-August 2017.

This biennial surveillance technical brief, published by NACO, presents state-wise preliminary findings on the HIV prevalence levels and trends among different population groups. HIV surveillance data are used by policy makers and programme managers to monitor the levels and trends of the HIV epidemic, estimate HIV burden, plan services, allocate resources, conduct programme evaluation and use findings for advocacy and program improvement.

## 1.1 Initiation and Expansion

Over the past three decades, HIV Sentinel Surveillance in India has evolved significantly. While HIV surveillance was initiated in India by the Indian Council of Medical Research (ICMR) in 1985, sentinel surveillance was first conducted by the National AIDS Control Organisation (NACO) at 52 sites in selected cities during 1993-94. In 1998, NACO formalized sentinel surveillance for HIV infection monitoring in the country, with 176 sentinel sites (of which 92 were ANC sites). Since then, HSS has expanded across populations and locations. Table 1 presents the expansion of HSS sites over the years. HSS was done annually till 2008 and since then it is being carried out every two years.

Before the 2017 round, HSS among HRG & bridge populations was carried out last in 2010-11. While HSS among ANC was done during 2012-13 and 2014-15, the same was not implemented among HRG & bridge population as the National Integrated Biological & Behavioral Surveillance (IBBS) was being designed and implemented among high-risk groups during the same reference period<sup>1</sup>.

<sup>1</sup>National AIDS Control Organization (2015). National Integrated Biological and Behavioural Surveillance (IBBS), High Risk group, India 2014-15. New Delhi: NACO, Ministry of Health and Family Welfare, Government of India.



During the 15<sup>th</sup> round of HSS implementation, 640 districts, out of a total of 716 districts<sup>2</sup>, had at least one ANC surveillance site, while 299 districts had at least one HRG site and 48 districts had at least one bridge population site. Out of 829 ANC sites, almost half (399) were from the states in northern, eastern & central India. One third (34%) of the 494 HRG and bridge population sites were from states in northern, eastern & central India while half (51%) were in southern and western states. Table 1 and Figure 1 depict the changing pattern of the distribution of HSS surveillance sites in the country. Details on state-wise distribution of HSS sites for the years 2003, 2006, 2010-11, 2014-15 and 2016-17 are provided in Annex 1.

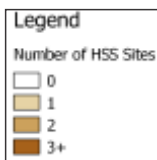
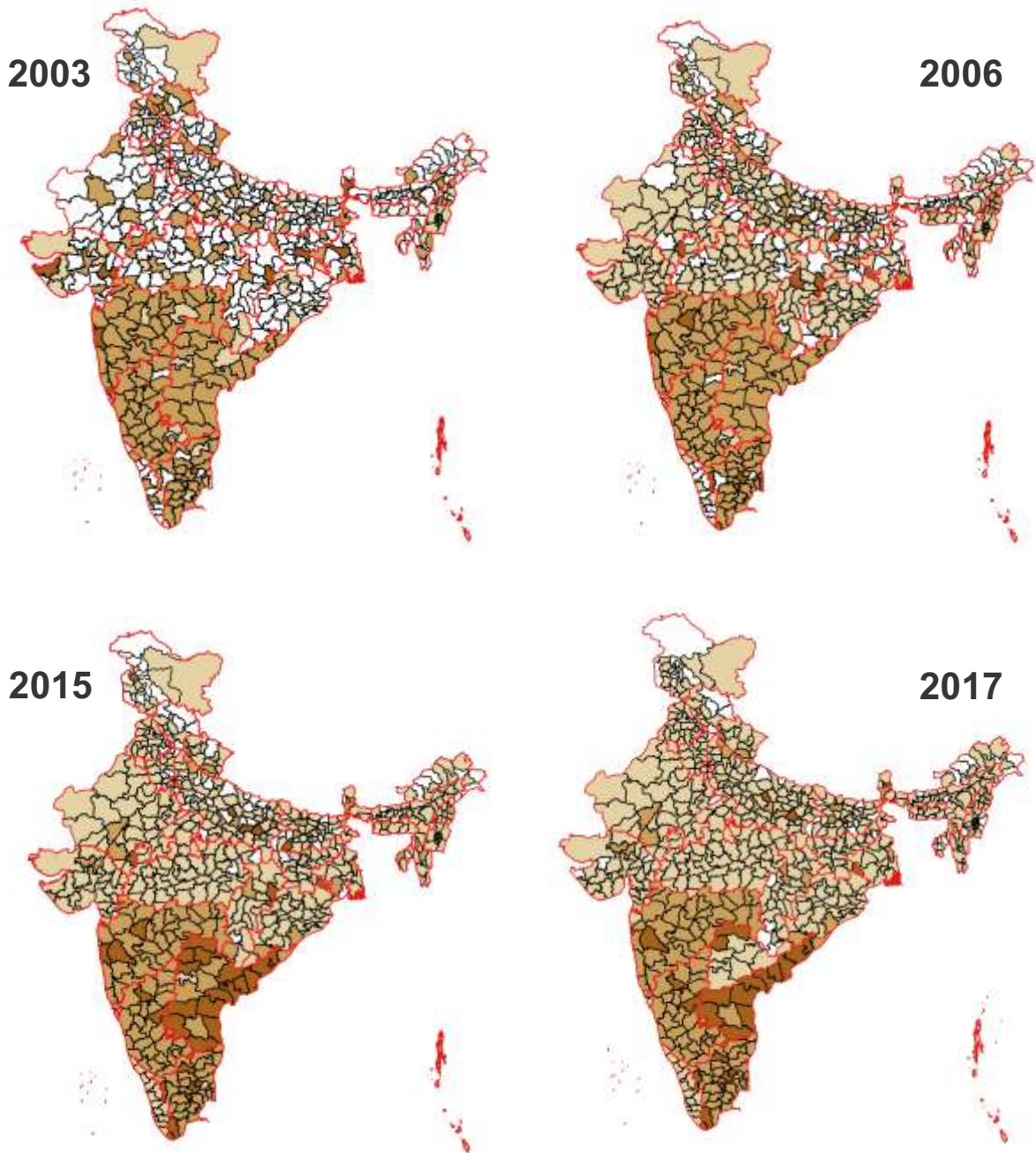
Till 2012-13, STD sites were also included in the HSS, to provide proxy data for high risk behavior, introduced at a time when surveillance among HRG was scant and geographically unrepresentative. With a systematic scale-up of HRG sites starting 2006, there was a proportional decrease in the number of STD sites, since the STD data had significant biases. These sites were entirely discontinued from the 2014-15 round of HSS .

<sup>2</sup>GOI Web Directory, <http://goidirectory.nic.in/district.php>, October 24, 2017

**Table 1: Expansion of Surveillance sites in India**

Site Type	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008-09	2010 -11	2012-13	2014-15	2016-17
<b>ANC</b>	92	93	111	172	200	476	390	391	628	646	660	696	750	776	829
<b>STD</b>	76	75	98	133	166	163	171	175	251	248	217	184	13	-	-
<b>FSW</b>	1	1	2	2	2	32	42	83	138	137	194	261	-	-	245
<b>MSM</b>	-	-	3	3	3	9	15	18	31	40	67	96	-	-	89
<b>H/TG</b>	-	-	-	-	-	-	-	1	1	1	1	3	-	-	18
<b>IDU</b>	5	6	10	10	13	18	24	30	51	52	61	79	-	-	87
<b>Migrant</b>	-	-	-	-	-	-	-	1	6	3	8	19	-	-	27
<b>Truckers</b>	-	-	-	-	-	-	-	-	15	7	7	20	-	-	28
<b>TB</b>	2	2	-	-	-	-	7	4	-	-	-	-	-	-	-
<b>Fisher-Folk/ Seamen</b>	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-
<b>Total</b>	176	177	224	320	384	699	649	703	1122	1134	1215	1359	763	776	1323
<b>Note:</b>	IBBS was implemented among HRG and Bridge populations during 2013-15.														

**Figure 1 : Distribution of ANC HSS Sites, 2003, 2006, 2015 & 2017**



## 1.2 Implementation Structure

Since inception, the HIV sentinel surveillance in India has been supported by a robust management structure for planning, implementation and monitoring at national, regional and state levels. This de-centralized implementation mechanism has been deliberately created by NACO, to build in sustainability and to ensure ease of conducting surveillance at such a large scale, without having to overburden the program with reconstitution and rationalization of effort for initiating HSS. The established institutional mechanisms described below, function as a well-oiled machine, ensuring that the entire process of HSS is carried out as efficiently and with the least amount of burden on the system, as possible.

The structure and key functions of each agency involved, continued during the 15<sup>th</sup> round of HSS, are shown in figure 2 below.

**National level:** The National AIDS Control Organisation (NACO) is the nodal agency for strategy formulation and commissioning of each round of HSS. The Technical Resource Group (TRG) on Surveillance and Estimation, comprising experts from the fields of epidemiology, demography, surveillance, biostatistics, and laboratory services, advises NACO on the broad strategy for HIV Surveillance and Estimations. 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, comprises independent experts who provide support in training and supervision. Organizations like the World Health Organisation (WHO), the Joint United Nations Programme on HIV and AIDS (UNAIDS) and the US Centers for Disease Control and Prevention (CDC) provide technical assistance.

**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 the quality of the data collected and their analysis. Data entry is another function performed by RIs. Core teams embedded within each RI comprise two epidemiologists/public health experts and one microbiologist, who 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 for that region.

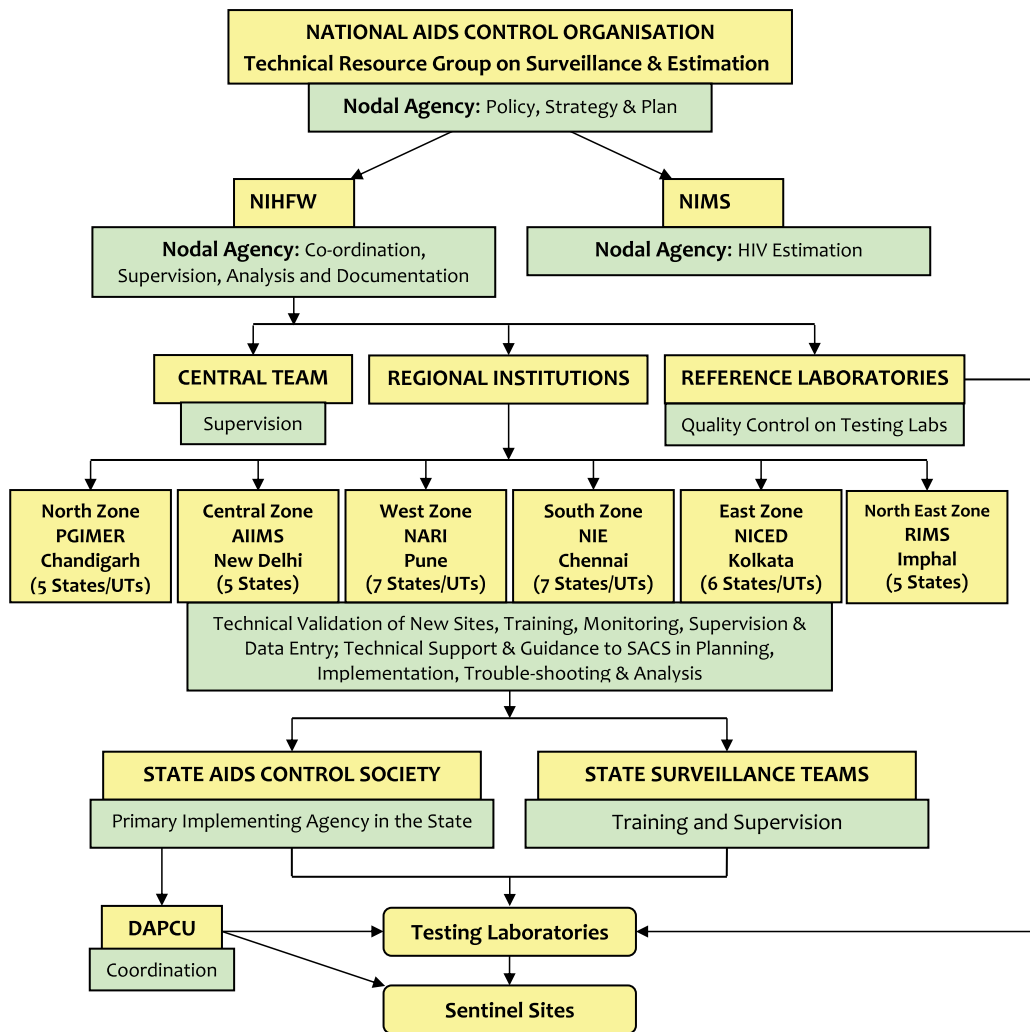
**State level:** The SACS is the primary agency responsible for implementation of HSS. Every state has a surveillance team comprised of public health experts and microbiologists who support SACS in the training, supervision, and monitoring of the personnel involved in sentinel surveillance. State surveillance teams (SSTs) are formed by RIs in consultation with SACS.

**District level:** In districts with functional district AIDS prevention and control units (DAPCUs), the 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. For ANC sites where HSS uses serum samples, a total of 137 serum testing laboratories (STL) conduct primary testing of blood specimens while thirteen national reference laboratories provide external quality assurance to the STLs through repeat testing of all HIV-positive blood specimens and 5% of HIV negative specimens.

Blood sample collection under HSS 2017 among HRG and bridge populations was done using Dried Blood Spot (DBS) method. The DBS samples are tested at 17 DBS testing laboratories where they were tested for the presence of HIV antibodies. The National AIDS Research Institute (NARI), Pune, is designated as the Apex Laboratory for DBS samples under HSS. It is responsible for quality assurance procedures including proficiency assessment of DBS testing labs through panel testing and re-testing. Re-testing of all positive samples and 2% of the negative samples is done at the Apex Laboratory.

Figure 2: Implementation Structure of HIV Sentinel Surveillance



## 2. Methodology

The methodology of the HSS among HRG and bridge population has been detailed in the operational manuals for HSS 2017. The salient features of the HSS methodology have been summarized in this section.

### 2.1 Study Population

HIV epidemic in India is concentrated, with high prevalence among High Risk Groups, moderate prevalence among bridge populations and low prevalence among general population. The drivers of the epidemic includes unprotected paid sex with Female Sex Workers (FSW), unprotected anal sex between Men who have Sex with Men (MSM) and Hijra/transgender (H/TG) people and Injecting Drug Use (IDU). Based on these transmission dynamics, India's HIV epidemic pattern is monitored among the high-risk groups, bridge populations as well as the general population (Figure 4).

**Figure 4: Population groups under HSS 2016-17**

High Risk Groups	Bridge Population	General Population
<ul style="list-style-type: none"> <li>• FSW</li> <li>• MSM</li> <li>• IDU</li> <li>• H/TG</li> </ul>	<ul style="list-style-type: none"> <li>• Single Male Migrants (SMM)</li> <li>• Long Distance Truckers (LDT)</li> </ul>	<ul style="list-style-type: none"> <li>• Pregnant women</li> </ul>

### 2.2 Sample Size

HSS aims to achieve a sample size of 400 for surveillance among ANC attendees and 250 among High Risk Groups and bridge population at each site since the inception of HIV Sentinel Surveillance in India. Same sample size protocols were followed in 15<sup>th</sup> round of HSS also.

### 2.3 Eligibility Criteria

#### 2.3.1 ANC

Inclusion criteria:

- i. Pregnant woman of age 15-49 years, and
- ii. Attending the antenatal clinic for the first time during the current round of surveillance

**Exclusion criteria:**

- i. Pregnant women not in age group of 15-49 year, or
- ii. Any pregnant woman attending the antenatal clinic for the second or more time during the current round of surveillance

**2.3.2 HRG and Bridge**

**Inclusion Criteria:**

- i. Fulfil the case definition (as detailed below), and
- ii. Age between 15-49 years

**Exclusion Criterion:**

Already approached and administered informed consent once in the current round of surveillance

**Case Definitions:**

- I. **FSW:** Women who are engaged in consensual sex for money or payment in kind, as a means of livelihood in the last six months
- ii. **MSM:** Men who had anal or oral sex with a male partner in the last one month
- iii. **IDU:** Men and women who use addictive substances or drugs for recreational or non- medical reasons, through injections, at least once in the last three months
- iv. **H/TG:** Person whose identity does not conform unambiguously to conventional notions of male or female gender roles, but combines or moves between these
- v. **SMM:** Single Male, living at a place other than “place of usual residence” without his spouse or family, for the purposes of work and visiting his home town at least once a year.
- vi. **LDT:** Truckers who travel more than 800 km one way between source and destination

**2.4 Sampling Method**

HSS adopted consecutive and random sampling methods depending upon the population group as detailed below.

**2.4.1 ANC**

Consecutive sampling method was adopted for ANC clinic attendees, similar to recruitment in previous rounds of ANC HSS. After the start of surveillance, all individuals attending the sentinel site facility (ANC clinic),



who were eligible for inclusion in surveillance as per the defined inclusion criteria, were recruited in the order they attended the clinic.

### **2.4.2 HRG**

Random sampling method was adopted for HSS 2017 among HRG groups comprising FSW, MSM, H/TG and IDU. Random sampling was first tested among HRG at select sites in 2009 and then extended to many states in 2010-11. In the random sampling method, respondents are selected randomly from the line list of targeted interventions and then approached for assessing their eligibility criteria. Those eligible are recruited in HSS once their voluntary consent for their participation was obtained and documented.

### **2.4.3 Bridge Population**

Consecutive sampling method was followed among bridge populations, similar to previous rounds. All individuals attending sentinel site facilities (like drop in centers/STI clinics in targeted interventions, etc), who were eligible for inclusion as per the defined criteria and gave consent, were recruited in the order they attended the facility.

## **2.5 Sampling period**

For a site, the recommended maximum sampling duration was 3 months. When a site achieved its allotted target sample size in a period less than the 3 months, collection of samples stopped at that site. However, the data collection period was extended at some sites, on case to case basis, after reviewing the reasons for delays and feasibility of achieving the desired sample size in a reasonable extension period.

## **2.6 Testing Approach**

Testing approach refers to the mechanism adopted for collecting and testing blood specimens and handling the test results in HSS. Linked Anonymous testing (LAT) approach was adopted during HSS 2017. Among HRG and bridge populations, informed consent was taken before recruiting the respondents under surveillance.

### **2.6.1 ANC**

Among ANC, linked anonymous testing (LAT) was adopted during HSS 2017 where a portion of linked blood specimen collected for routine ANC services, was used for surveillance purposes. No personal identifiers were

recorded either on the surveillance serum specimens or data forms; no informed consent was taken. However, the ANC clinic attendees were informed of the purposes of surveillance. While no personal identifier was obtained under HSS, provisions were made to allow linking of HSS test results to the ANC clinic records through codes to facilitate provision of confirmatory testing, and linkage to care, support and treatment services, for those who tested positive under the two-test strategy (see section 2.7) , and who did not already know their status. This process was adequately covered in the trainings for HSS, and site personnel were trained on maintaining confidentiality, and at the same time, ensuring that all positive ANC, who did not know her status, were duly informed and provided support.

### **2.6.2 HRG and bridge population**

Among HRG and bridge population, linked anonymous testing with informed consent was adopted during HSS 2017 (Annex-3). DBS blood specimens were collected primarily for surveillance purposes, after obtaining the informed consent of respondents. No personal identifiers were recorded either on the surveillance specimens or data forms. However, provisions were made for linking of HSS test results to the targeted interventions records through codes, to facilitate confirmatory testing, and linkage to care, support and treatment services, for those who tested positive under the two-test strategy (see section 2.7), and who did not already know their status. This process was adequately covered in the trainings for HSS, and site personnel were trained on maintaining confidentiality, and at the same time, ensuring that all positive HRG and bridge populations, who did not know their status, were duly informed and provided support.

## **2.7 Blood specimen collection methods and Testing Protocol**

Among ANC, serum samples were collected, while for the remaining population groups, DBS method using finger prick method was used for sample collection. HSS 2017 continued with a two-test protocol as adopted in earlier rounds for HIV. Under this protocol, the first test is of high sensitivity and the second test of high specificity. The second test is done only if the first test is found to be reactive. A sample was declared as positive only when both the test results were reactive. Among ANC clinic attendees, all the HIV positive samples and 5% of HIV negative samples were subjected to repeat testing at serum reference laboratories. For HRG and bridge populations, all the HIV positive samples and 2% of HIV negative samples were subjected to repeat testing at DBS reference laboratory.

All the samples collected under HSS among ANC clinic attendees were also tested for syphilis. Here also, a two-test protocol was followed – the first test was qualitative and the second test was quantitative; second test was done only when first test was reactive. A sample was declared positive for syphilis only when the titer during the second test result was  $\geq 1:8$ .

## 2.8 Information collected

A brief two-page bilingual data form was used for collection of information, as done in earlier rounds of HSS. Individual data forms were used by facility staff responsible for implementing the HSS to collect basic socio-demographic information about the respondents. For the HRG and bridge populations, the data forms also collected information on key behavioral parameters. For the first time in HSS 2017, data was collected to provide information on the status of the HIV cascade, to estimate the % of PLHIV who know their status and the % of PLHIV on ART (Annex 2-8).

## 2.9 HSS implementation Procedures

A standardized procedure for the implementation of HSS, one of the world’s largest and most robust surveillance surveys, was followed. All the activities of the HSS project cycle, with the lead stakeholders, has been summarized in table below:

**Table 2: Activities in HSS 2017 project cycle**

SN	Activities	Responsibility
	<b>Pre-Sample Collection phase</b>	
1	Decision on dates of HSS	NACO
2	Finalisation of Strategy and Key Technical/Administrative Decisions	NACO
3	National Pre-Surveillance Planning Meeting of NACO with Regional Institutes & SACS	NIHFW
4	Procurement of consumables and test kits – Central & State Level	NACO/ SACS
5	Recruitment into vacant positions	NACO/ RI's/ SACS
6	Finalisation, Printing & Supply of Technical Guidelines, Operational Manuals, Trainers' Manuals, Wall Charts, Data Forms, Informed Consent Forms (Multiple Languages)	NACO, RI's and partners (WHO, UNAIDS & CDC)
7	Submission of State Specific Action Plans	RIs and SACS
8	Constitution/ Revision of State Surveillance Teams	RIs and SACS
9	Sentinel Site Evaluation	RIs and SACS
10	Technical Validation and approval of new sites & dropping poor performing old sites	RIs
11	Finalizing site codes and site placement in districts	NACO/ RIs/ SACS
12	Finalising list of Testing Labs	NACO/ SACS
13	Training (National & Regional TOTs, State-level training of site and lab personnel)	NACO/NIHFW/ RIs/ SACS/ partners (WHO/UNAIDS/ CDC)
14	Preparatory Activities for Monitoring & Supervision (Identification of Problem Sites, Finalisation of Checklists, Development of Integrated Plan)	RIs and SACS

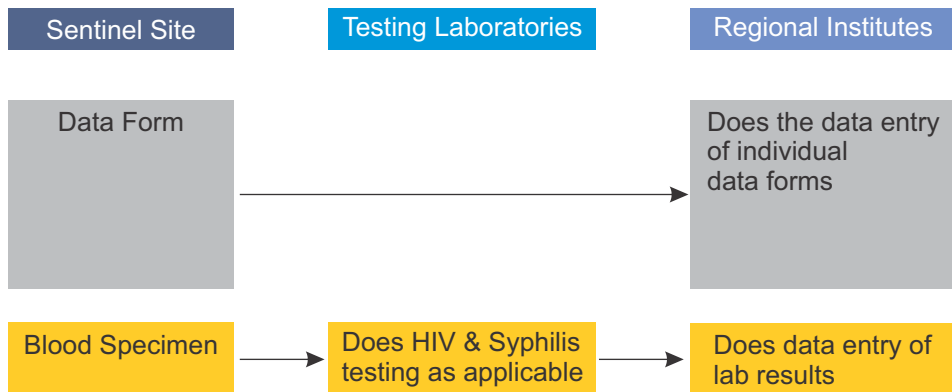
	<b>Sample Collection phase</b>	
1	Sample Collection	HSS Sites
2	Laboratory testing of specimens and Quality Control	SACS and laboratories
3	Supervision, Monitoring and Trouble-shooting	NACO/ NIHF/ RIs/ SACS/ partners (WHO/UNAIDS/ CDC)
4	Feedback and Corrective Action	SACS/ SST Members
5	Data Entry and Freezing Data	RIs
	<b>Post- Sample Collection phase</b>	
1	Investigation into unusual findings	NACO/RIs
2	Post- Surveillance Review Meetings – Regional & National	NACO/NIHF/ RIs
3	Data Analysis and Report Preparation (Technical brief & Final Report)	NACO/ RIs/ SACS/partners (WHO/UNAIDS/ CDC)
4	HIV Estimation and Projections using HSS data	NIMS (ICMR)
5	In-depth analysis of HSS data	NACO/ RIs/ SACS/partners (WHO/UNAIDS/ CDC)

## 2.10 Data Management

Data collection was paper-based, using bilingual standardized individual data forms. While data recording was done by counsellor/nurse/ANM, all data forms were checked for completeness and accuracy in the field by the site in-charge on a daily basis before signing the data forms (Figure 5). These forms were also checked by the field supervisors during their monitoring visits. The data forms were then transported to regional institutes periodically where they were first checked for completeness and accuracy and then entered into the HSS module of Strategic Information Management Software (SIMS), which is NACO’s integrated management system with service delivery program data captured at the facility level.

Laboratory results were shared separately by laboratories periodically in a standard format with RIs which entered them into SIMS. The SIMS did the linking of laboratory results with the data forms using the unique sample IDs assigned.

**Figure 5: Data flow under HSS 2017**



Double data entry of each data form was done by two data entry operators in SIMS. The entries were then compared by an in-built tool in the SIMS and all discrepancies identified between the two entries were corrected by consulting the original paper tools. The database was then 'frozen' and a cleaned master file was created. For the analysis, only the valid records i.e. those records with age as per the eligibility criteria and those with documented HIV test results, were considered.

### 3. Overview of HIV Levels and Trends

This section presents the HIV level and trend at the national level for all surveillance population groups. The findings are presented based on the sites which achieved a valid sample size. A site is categorized as a valid site if it achieved at least 75% of the target sample size i.e. at least 300 samples for an ANC site and at least 188 for HRG & Bridge population sites. Overall, out of 1323, 1299 sites (ANC-821, HRGs-423, Bridge Population-55) were valid sites during 15th round of surveillance.

Figure 6 depicts the national HIV prevalence among ANC clinic attendees, HRG and bridge populations from HSS 2017. The observed HIV prevalence was 0.28% (95%CI: 0.26-0.29) among ANC clinic attendees, 0.51% (95% CI: 0.34-0.68) among single male migrants (SMM), 0.86% (95% CI: 0.64-1.07) among long distance truckers (LDT), 1.56% (95% CI: 1.46-1.66) among FSW, 2.69% (95% CI: 2.47-2.91) among MSM, 3.14% (95% CI: 2.61-3.66) among H/TG and 6.26% (95% CI: 5.92-6.59) among IDUs.

**Figure 6: HIV Prevalence (%) by population group, HSS 2017, India**

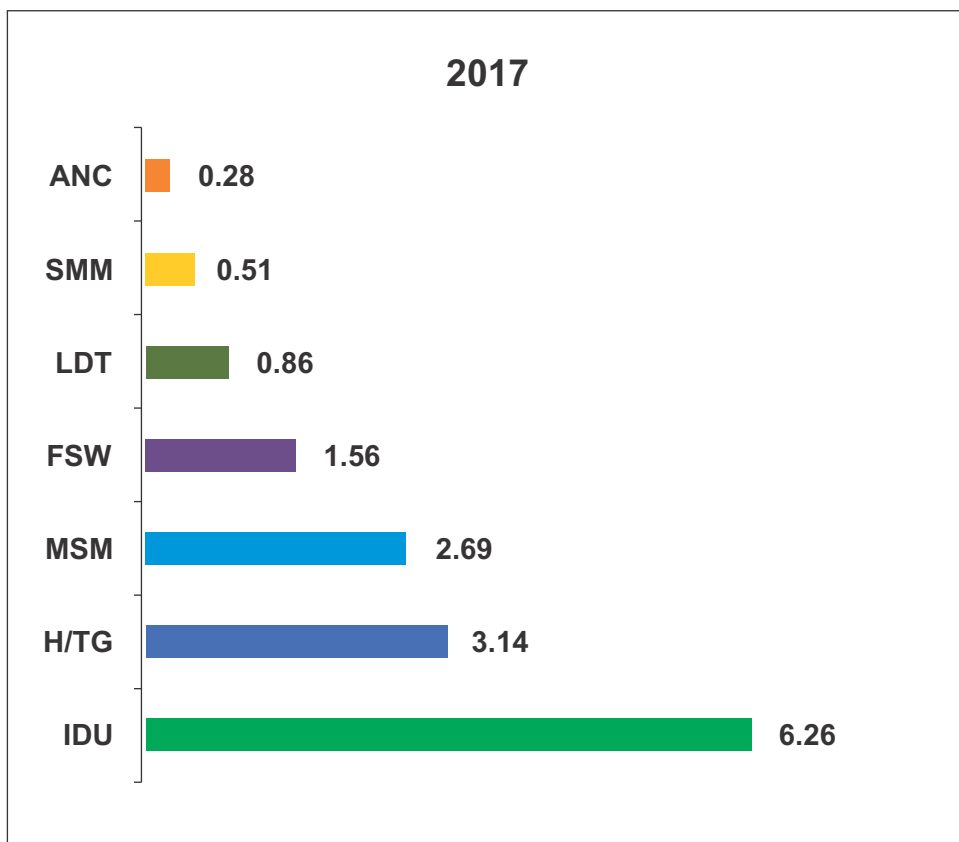
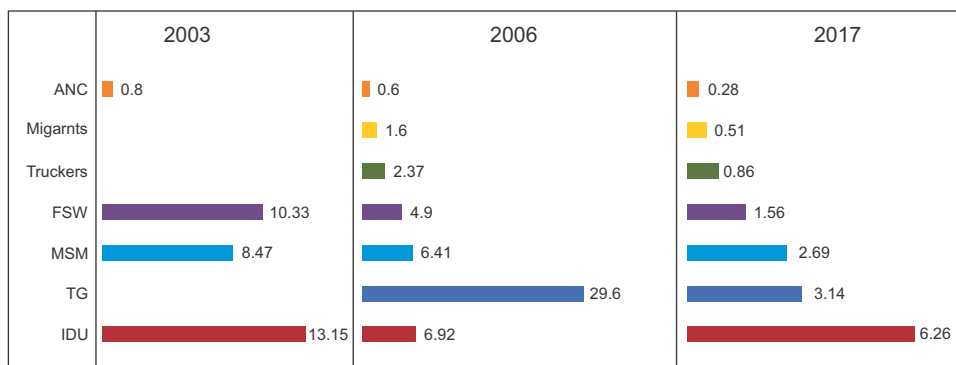


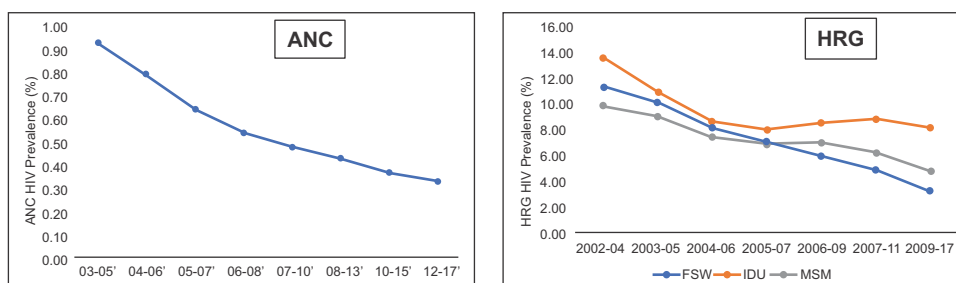
Figure 7 depicts the overall HIV prevalence across various population groups from HIV Sentinel Surveillance from 2003, 2006 and 2017 rounds of HSS. In 2003 the prevalence among FSW, MSM and IDU was 10-16 times higher than that among ANC clinic attendees. In 2017, the HIV prevalence among FSW was 5 times, among MSM 9 times, H/TG 10 times & IDU was 21 times higher than ANC Prevalence. The figures further confirm that India continues to have a concentrated HIV epidemic.

**Figure 7: HIV Prevalence (%) by population groups, HSS 2003, 2007 & 2017**



Trends among different population groups at national and state level are derived using moving average method at sites consistent since 2003-07 (Figure 8). At the national level, trends continue to be declining among ANC clinic attendees, FSW and MSM; while the trend appeared to be stable at a high level among IDU. Data was inadequate to present trends among H/TG, single male migrants & long-distance truckers.

**Figure 8: HIV Prevalence trend across population groups, India, 2003-17<sup>3</sup>**



<sup>3</sup>3-yr moving averages based on consistent sites (2002-2006 for ANC); ANC-561 sites;(2002-2007 for HRG); FSW-82 sites, MSM-25 sites, IDU-36 sites

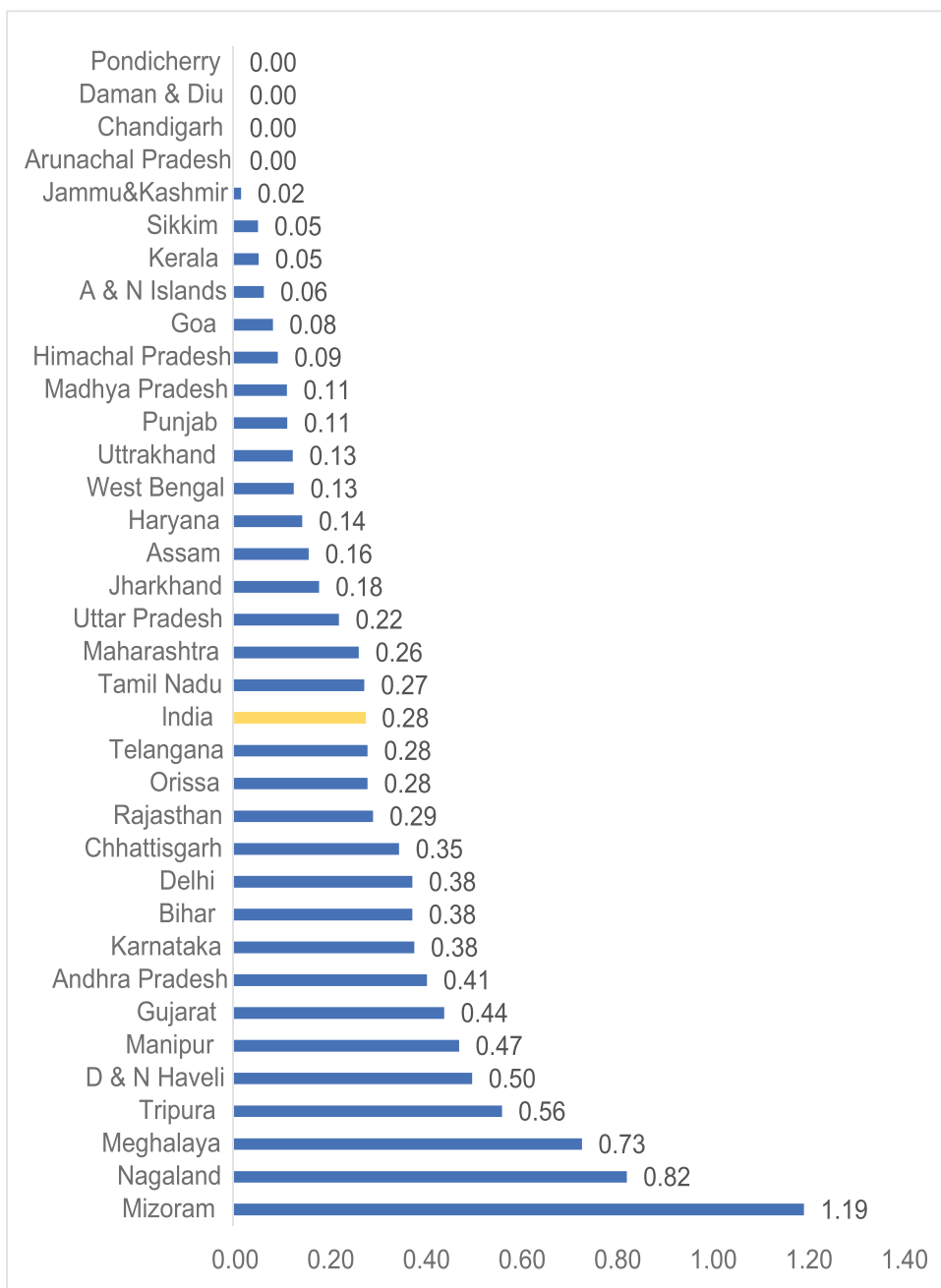
## 4. HIV Level and Trends among Antenatal clinic attendees: State

### 4.1 Level

Figure 9 shows state-wise HIV prevalence among ANC clinic attendees. Geographical differences continued to exist in the prevalence rates across different regions. Overall, 13 states have recorded prevalence higher than national average in 2017. In comparison, only 9 states recorded an HIV prevalence more than national average in ANC HSS 2014-15. Three high prevalence states among ANC clinic attendees were from the north-eastern region of the country, with Mizoram (1.19%) recording the highest prevalence followed by Nagaland (0.82%) and Meghalaya (0.73%). HIV prevalence higher than national average was also recorded in the states of Tripura (0.56%), Manipur (0.47), Gujarat (0.44%), Andhra Pradesh (0.41%), Karnataka (0.38%), Bihar (0.38%), Delhi (0.38%) and Chhattisgarh (0.35%). The states of Rajasthan (0.29%), Odisha (0.28%), Telangana (0.28%) and Tamil Nadu (0.27%) recorded HIV prevalence similar to the national average. Figure 10 shows the state wise color-coded map of India for 2003, 2006, 2015 and 2017 rounds of HSS. As evident, the states of Mizoram and Nagaland continue to have a prevalence of 0.75% or more. Erstwhile high prevalence states of Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu have recorded lower prevalence over the years and all have recorded prevalence of 0.25%-0.50% in 2017.



**Figure 9: HIV Prevalence at ANC sites, India and States, 2017**



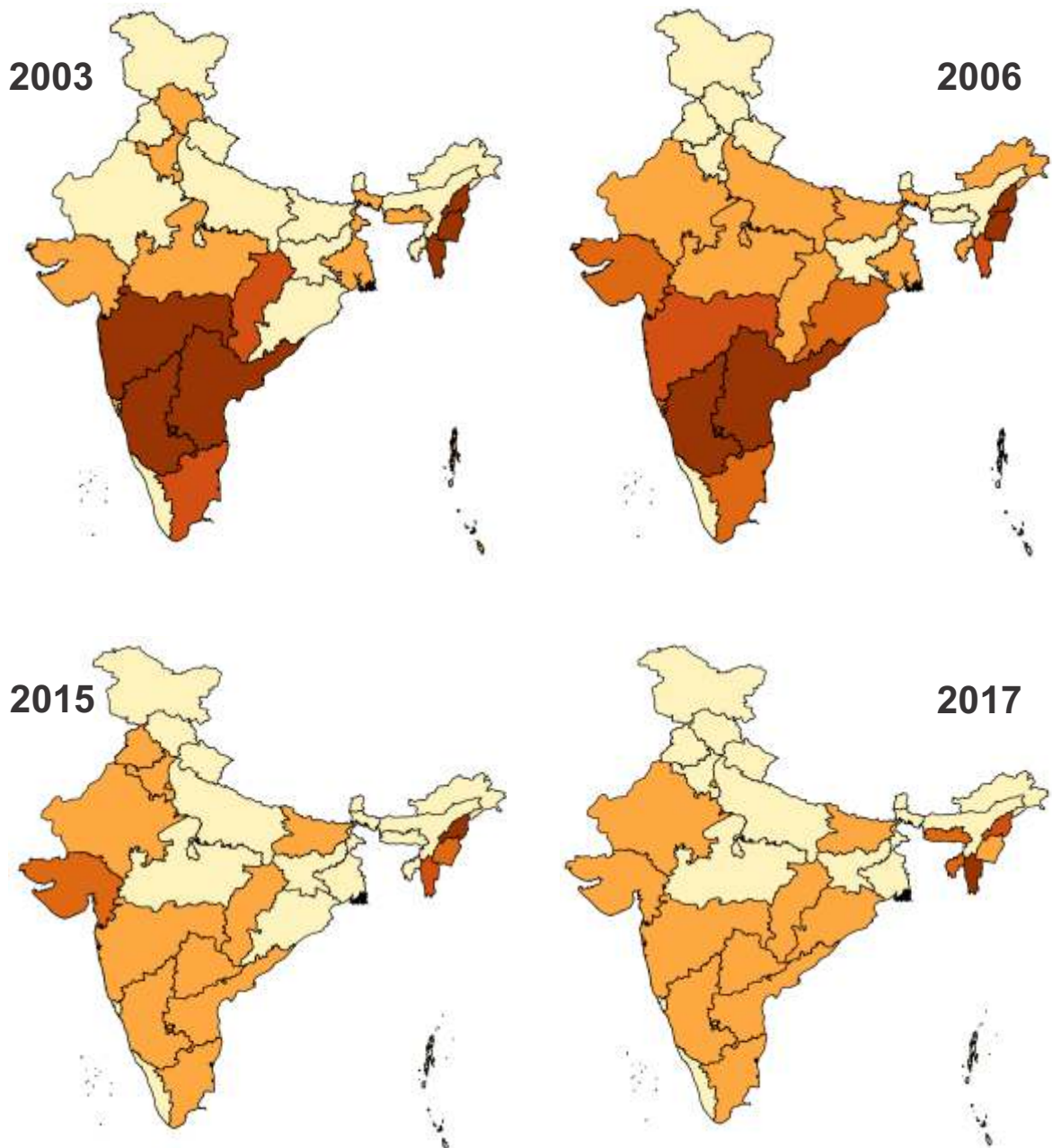
HIV prevalence among ANC clinic attendees at different sentinel sites corroborates the heterogeneous distribution of the HIV epidemic. Table 3 summarizes the distribution of pockets of high HIV prevalence among ANC clinic attendees in India.

There were 56 sentinel sites, across 18 states and 55 districts, which recorded a prevalence of 1% or more during the 15th round of HSS. Of them, 56% (32) were from the southern and north-eastern states of Andhra Pradesh (4), Karnataka (5), Maharashtra (5), Tamil Nadu (4), Telangana (2), Manipur (2), Nagaland (4), and Mizoram (6). At least three sites with prevalence of 1% or higher were also noted in states of Bihar, Gujarat and Uttar Pradesh. Sites with prevalence of 1% or higher had also been observed in Chhattisgarh (2), Delhi (2), Jharkhand (1), Meghalaya (2), Odisha (2) and Tripura (1). Of the 56 sites which recorded a prevalence of 1% or more, 14 sites showed prevalence of 2% or more. Out of these 14 sites, 2 each were from Meghalaya, Mizoram and Gujarat.

**Table 3: State wise number of high prevalence (> 1%) ANC Surveillance sites in HSS 2017**

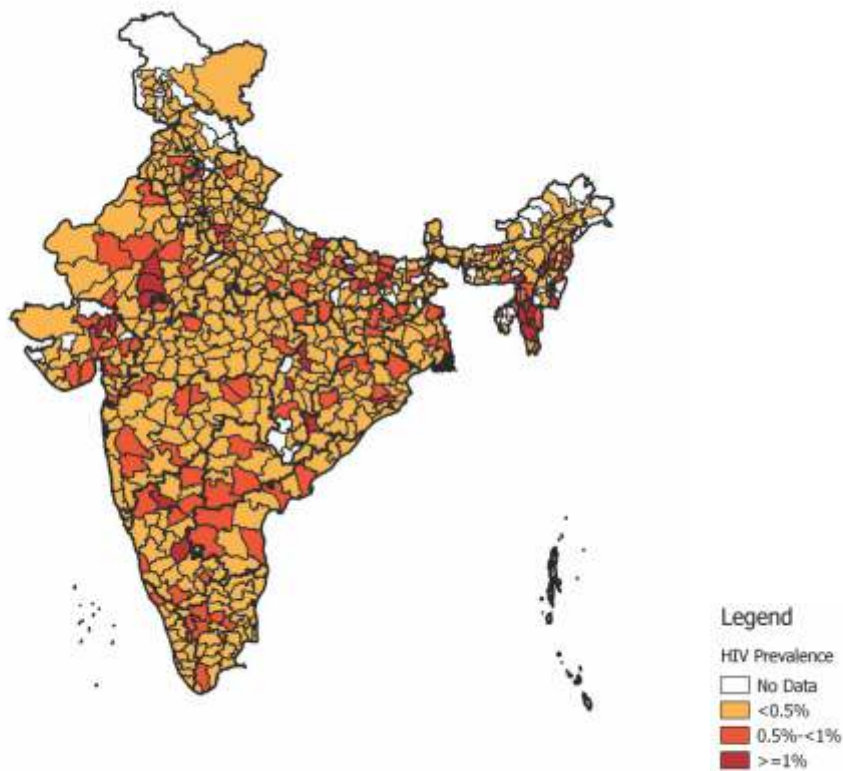
State	No of sites with ANC HIV Prevalence of 1% or more	No of sites with ANC HIV prevalence of 2% or more
Andhra Pradesh	4	-
Bihar	3	1
Chhattisgarh	2	1
Delhi	2	-
Gujarat	3	2
Jharkhand	1	-
Karnataka	5	1
Maharashtra	5	-
Manipur	2	1
Meghalaya	2	2
Mizoram	6	2
Nagaland	4	1
Odisha	2	1
Rajasthan	3	1
Tamil Nadu	4	-
Telangana	2	-
Tripura	1	-
Uttar Pradesh	5	1
<b>India</b>	<b>56</b>	<b>14</b>

**Figure 10 : State-wise HIV Prevalence (%) at ANC sites, HSS 2003, 2006, 2015 & 2017**



There were also 151 sites across 139 districts in 25 states that showed an HIV prevalence of 0.50-0.99% during HSS 2017. Figure 11 shows the map of India where districts are colour-coded into low (<0.5%), moderate (0.50-0.99%) and high (> 1%) based on HIV prevalence recorded among ANC clinic attendees in HSS 2017. Overall, 33 districts in the country recorded an HIV prevalence of 1% or more, most being from the north-eastern states of Mizoram (5), Nagaland (4), Meghalaya (2) and Manipur (2).

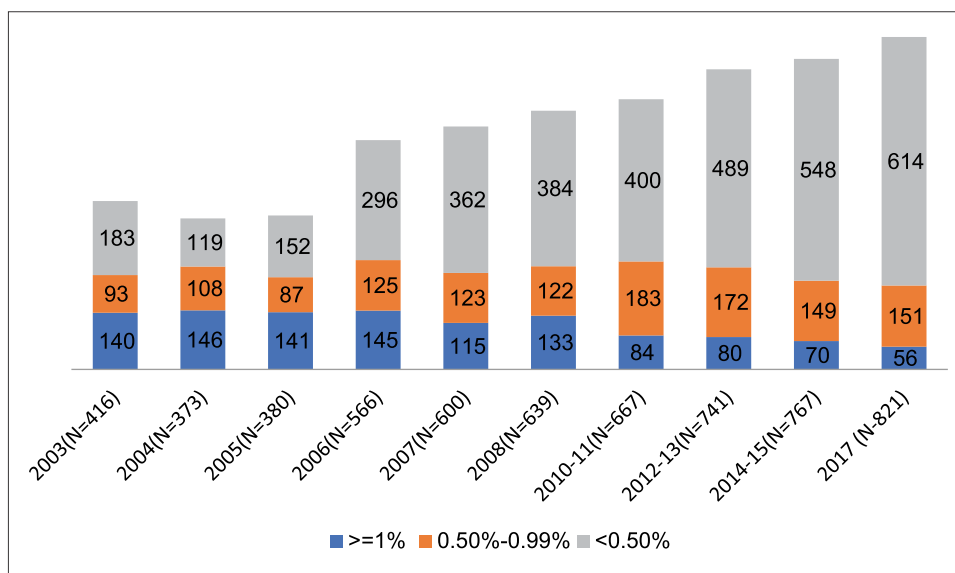
**Figure 11: District wise HIV Prevalence (%) among ANC clinic attendees, HSS 2017, India**



There had also been a decline in the number of sites showing a prevalence of 1% or more during year 2003-17 despite a continuous increase in number of surveillance sites across country (Figure 12). In 2003, more than one third (34%) of ANC surveillance sites, out of a total of 416 valid sites, showed a prevalence of 1% or more; 128 (91%) of them were in the six conventional high prevalence states of Andhra Pradesh, Karnataka, Maharashtra, Manipur, Nagaland and Tamil Nadu. In the 2006 HSS round, of the total 566

valid ANC sites, 26% recorded a prevalence of 1% or more, 121 (81%) of these high prevalence sites were in six high prevalence states. In contrast, during the 15th round of surveillance, only 56 of total 821 (7%) valid sites recorded a prevalence of 1% or more, 32 of them (57%) were in high prevalence states.

**Figure 12: Year-wise distribution of valid sites in different HIV prevalence (%) categories among ANC clinic attendees, HSS 2003-17**



The changes in prevalence category is also evident from Figure 13 which highlights not only the declining number of districts with more than 1% prevalence in country, but also the emerging pockets of high prevalence in states having low/moderate epidemic.

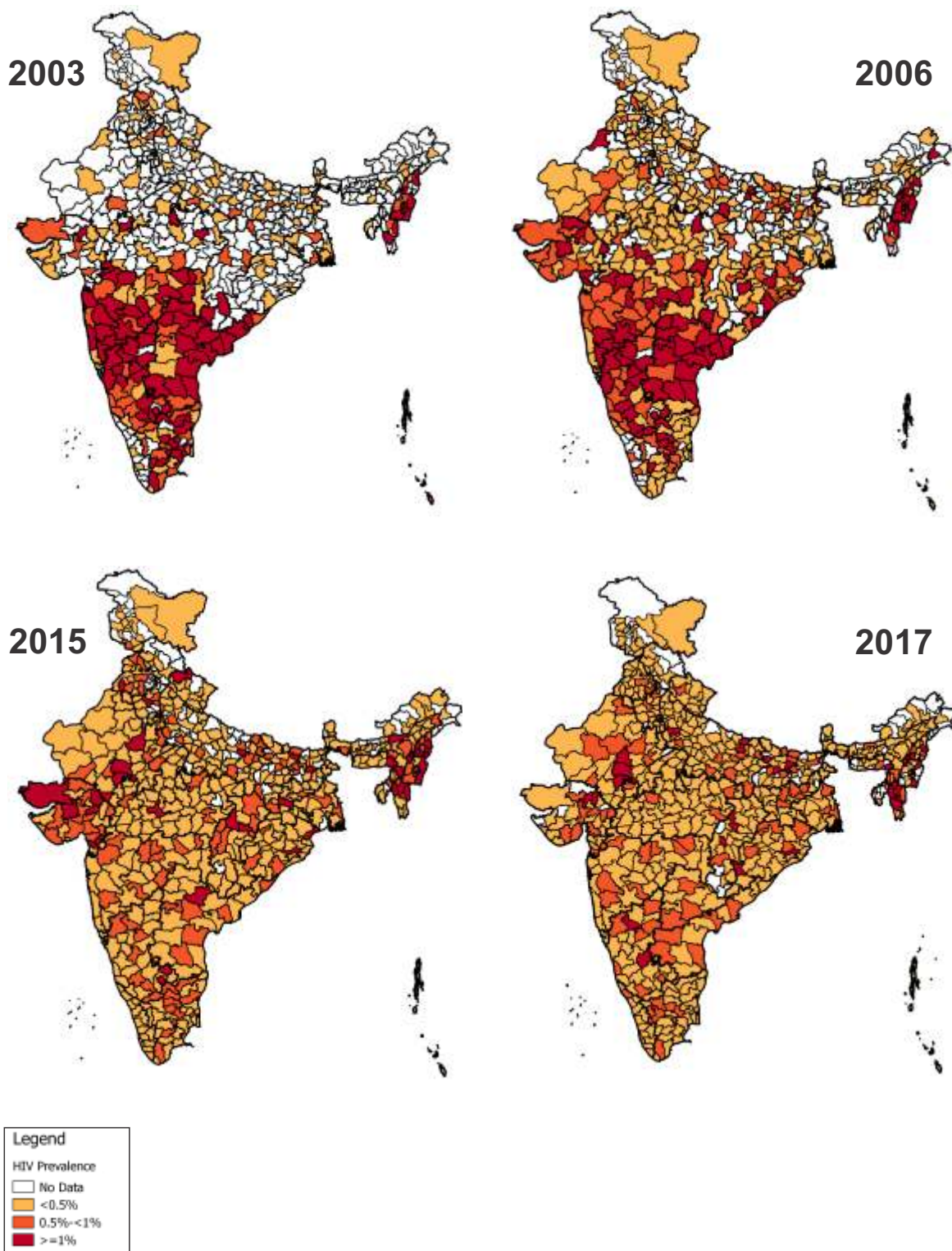
Table 4 shows districts with at least one ANC site recording HIV prevalence of 1% or more among ANC clinic attendees in 3 out of 6 rounds of HSS, i.e. from HSS 2007 to HSS 2017. While most of them were in high prevalence states from the southern and north-east region, Bihar (Patna), Chhattisgarh (Bilaspur, Raigarh), Gujarat (Mehsana, Sabar Kantha & Surat), Odisha (Ganjam & Cuttack), and Rajasthan (Chittaurgarh & Bhilwara) also had districts in this category. There were 287 sites across 223 districts which recorded HIV prevalence >1% at least once or more in the last six rounds.

**Table 4: State wise distribution of districts having ANC sites showing 1% or more HIV prevalence in at least 3 out of last 6 rounds of HSS (HSS 2007 to HSS 2017)**

State	Districts
Andhra Pradesh	12, Anantapur (1), Chittoor (1), Cuddapah (1), East Godavari(1), Guntur(1), Krishna(1), Kurnool(1), Prakasam (2), Visakhapatnam(1), West Godavari(2)
Bihar	1, Patna (1)
Chhattisgarh	2, Bilaspur (1), Raigarh (1)
Gujarat	3, Mehsana (1), Sabar Kantha (1), Surat(1)
Karnataka	13, Bagalkot (2), Bangalore(1), Belgaum(1), Bijapur (1), Chamrajnagar (1), Chitradurga (1), Davangere (2), Gulbarga(1), Kodagu(1), Mysore(1), Tumkur (1)
Maharashtra	10, Mumbai (1), Mumbai Suburban(2), Akola (1), Buldana (1), Dhule(1), Nanded(1), Pune (1), Sangli (1), Yavatmal (1)
Manipur	2-Chandel (1), Ukhrul (1)
Mizoram	3-Aizawl (2), Champai (1)
Nagaland	6-Dimapur (1), Kohima (1), Phere (1), Phek (1), Tuensang (2)
Odisha	2-Cuttack (1), Ganjam (1)
Rajasthan	2-Chittaurgarh (1), Bhilwara (1)
Tamil Nadu	5-Coimbatore (1), Dharmapuri (1), Namakkal (1), Salem(1), Tiruchirapalli (1)
Telangana	6- Bhadradi Kothagudem(1), Hyderabad(1), Jagitial (1), Karimnagar(1),Mahbubnagar(1),Warangal Urban(1).



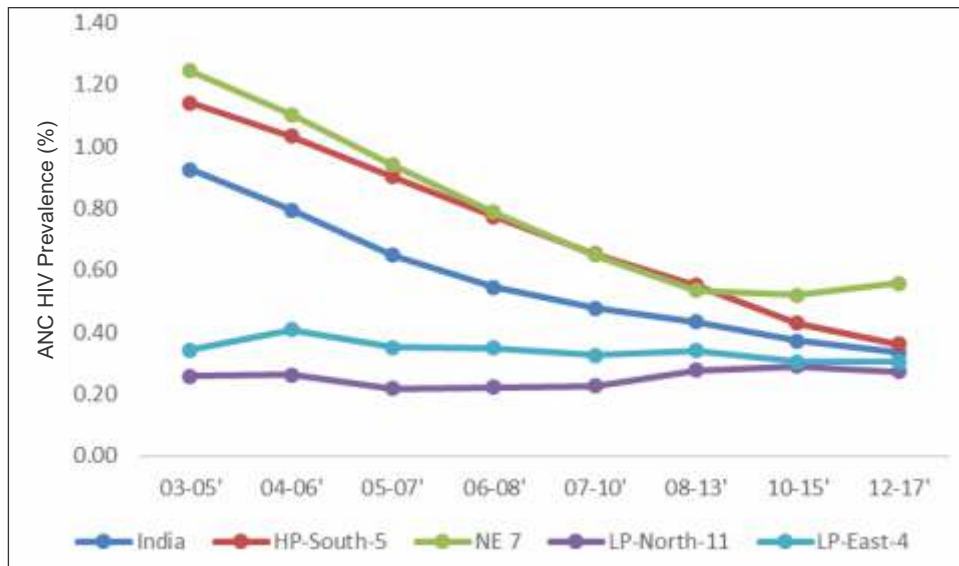
**Figure 13 : District-wise HIV Prevalence (%) at ANC sites,  
HSS 2003, 2006, 2015 & 2017**



## 4.2 Trend

The national level trends of HIV prevalence among the ANC clinic attendees continue to be declining. Trends like national level have been observed in the erstwhile high prevalence states of Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu (Figure 14). The HIV prevalence trend, in the recent past, appears to be stable to rising in the north-eastern region; largely because of epidemic in the states of Meghalaya, Mizoram, Nagaland and Tripura. On similar lines are the trends in the low prevalence states of northern as well as eastern region where stable to rising trends have been observed, though at a lower level. The trend in Gujarat, Punjab, Rajasthan, Haryana, Uttar Pradesh, Delhi and Bihar is indicative of continued rising epidemic among ANC clinic attendees.

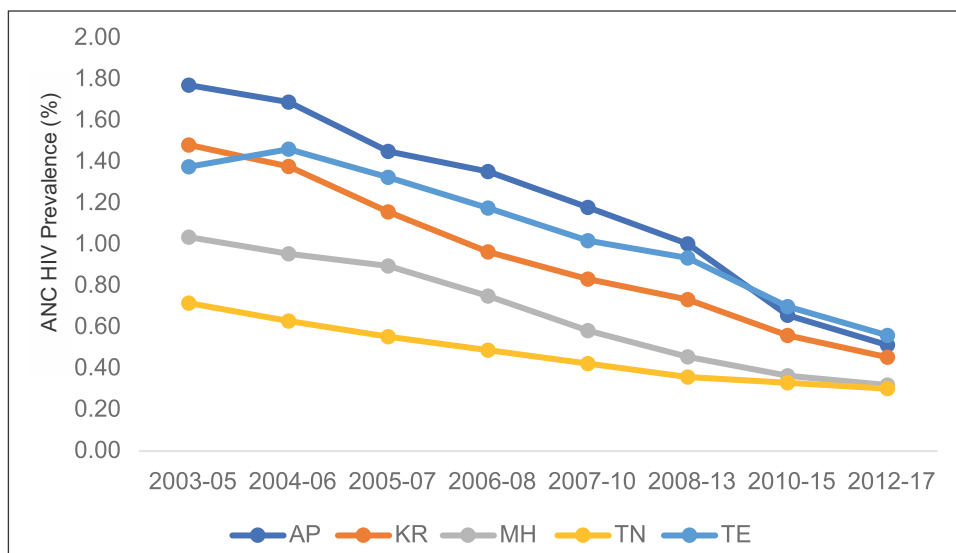
**Figure 14: Region wise trends in ANC HIV Prevalence<sup>4</sup>**



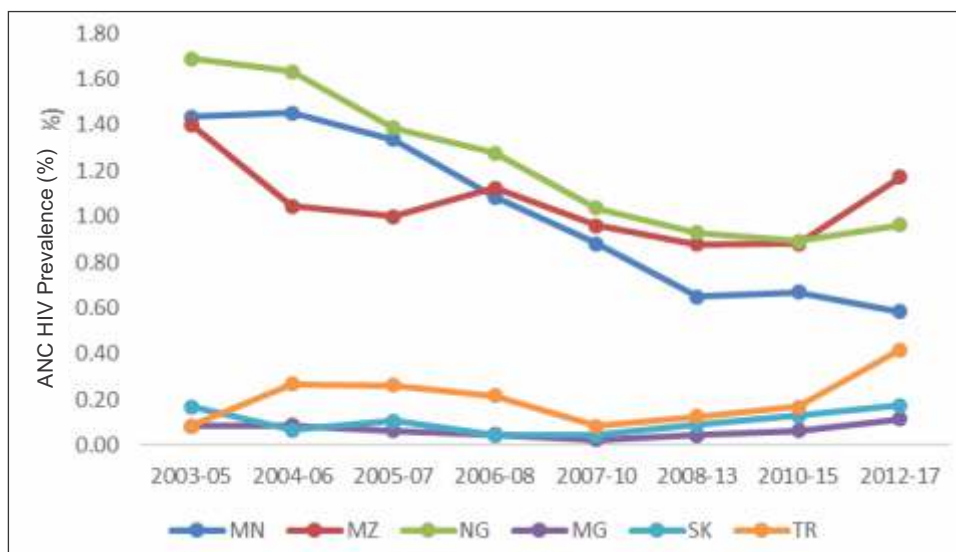
<sup>4</sup>3-yr moving averages based on consistent sites; India – 561; HP-South-5 (Andhra Pradesh, Tamilnadu, Karnataka, Maharashtra, Telangana) – 233, NE-7 (Manipur, Nagaland, Mizoram, Meghalaya, Sikkim, Tripura, Assam) – 51, LP-North-11 (Chandigarh, Chhatisgarh, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttarakhand, Uttar Pradesh) – 152, LP-East-4 (Bihar, Jharkhnd, West Bengal, Odisha-68).



**Figure 15: State wise trends in ANC HIV Prevalence based on consistent sites<sup>5</sup>**



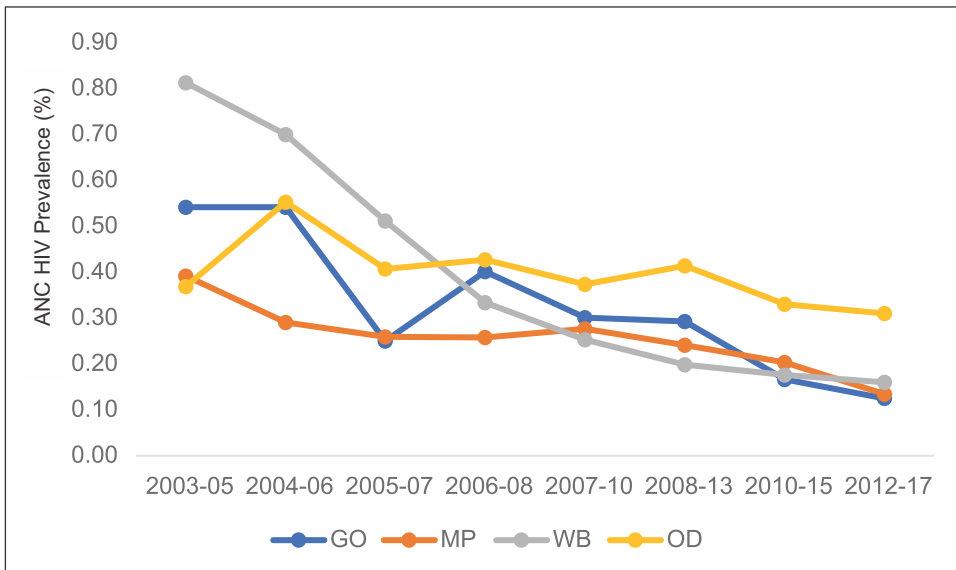
**Figure 16: State wise trends in ANC HIV Prevalence based on consistent sites<sup>6</sup>**



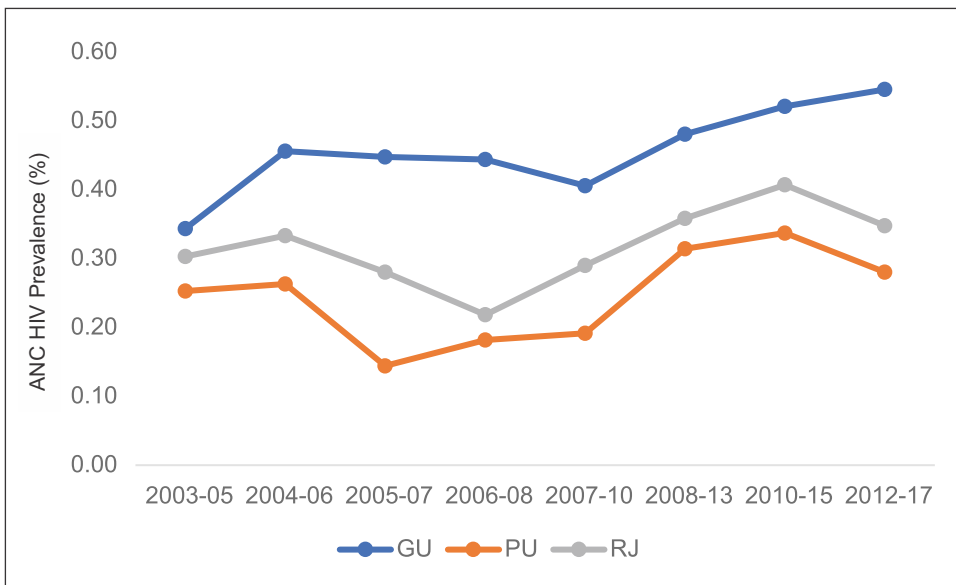
<sup>5</sup>3-yr moving averages based on consistent sites; AP (Andhra Pradesh) - 26; KR (Karnataka) - 54; MH (Maharashtra) - 72; TN (Tamil Nadu) - 63; TE (Telangana)-18.

<sup>6</sup>3-yr moving averages based on consistent sites; MN (Manipur)-14; MZ (Mizoram) - 4; NG (Nagaland)-15, MG (Meghalaya)-4, SK(Sikkim)-2, TR(Tripura)-2

**Figure 17: State wise trends in ANC HIV Prevalence based on consistent site<sup>7</sup>**



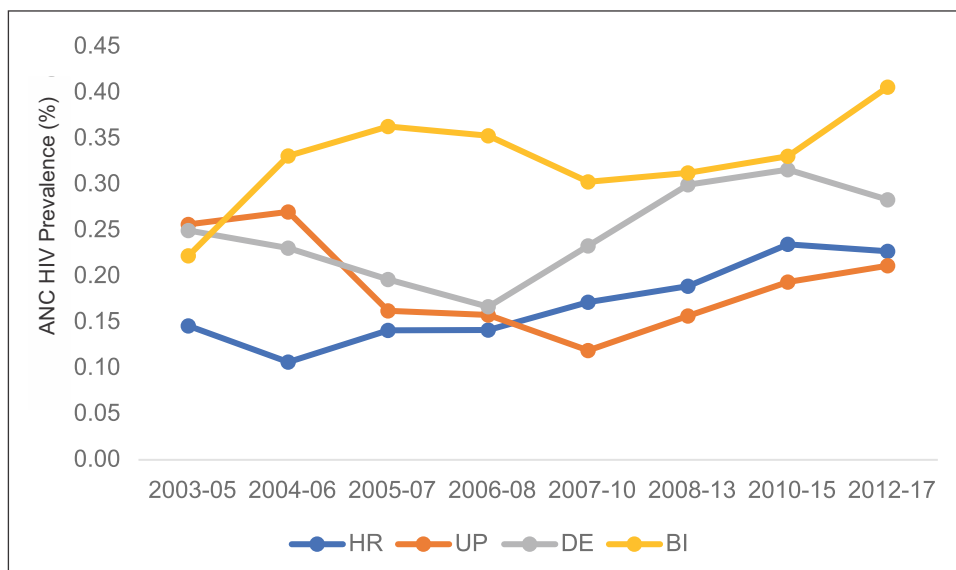
**Figure 18: State wise trends in ANC HIV Prevalence based on consistent sites<sup>8</sup>**



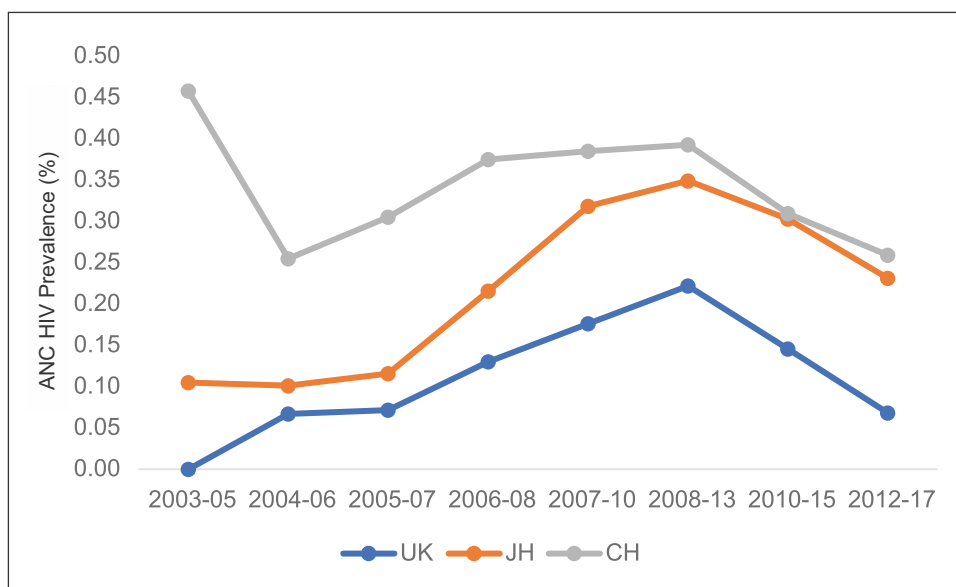
<sup>7</sup>3-yr moving averages based on consistent sites; GO (Goa)-2; MP (Madhya Pradesh)-36; WB (West Bengal)-11; OD (Odisha)-23

<sup>8</sup>3-yr moving averages based on consistent sites; GU (Gujarat)-23, PU (Punjab)-11, RJ (Rajasthan)-24

**Figure 19: State wise trends in ANC HIV Prevalence based on consistent sites<sup>9</sup>**



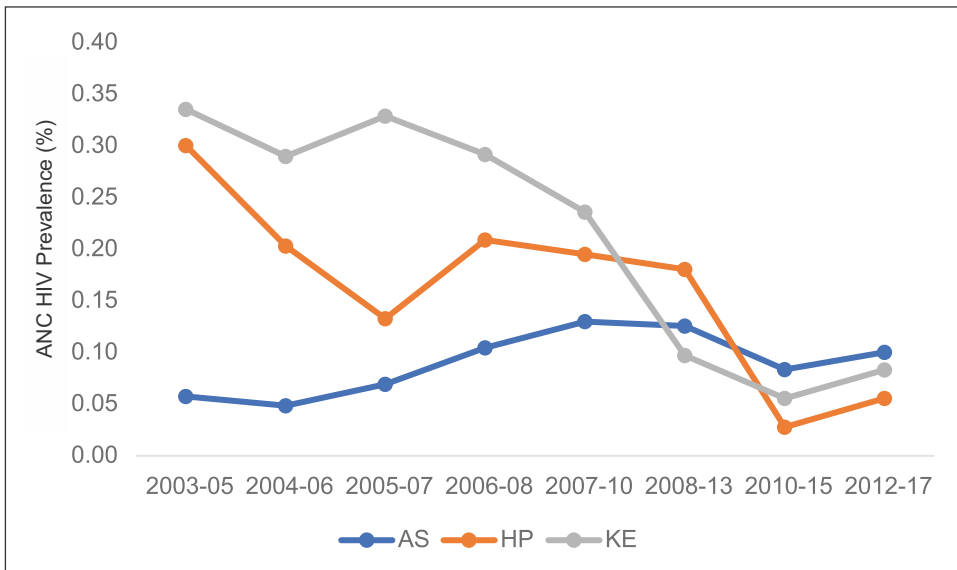
**Figure 20: State wise trends in ANC HIV Prevalence based on consistent sites<sup>10</sup>**



<sup>9</sup>3-yr moving averages based on consistent sites; HR(Haryana)-11, UP (Uttar Pradesh)- 39; DE (Delhi)-5;BI (Bihar)-21

<sup>10</sup>3-yr moving averages based on consistent sites; UK (Uttarakhand)-9; JH (Jharkhand)-13; CH (Chhattisgarh)-14.

**Figure 21: State wise trends in ANC HIV Prevalence based on consistent sites<sup>11</sup>**



<sup>11</sup>3-yr moving averages based on consistent sites; AS (Assam)-10; HP (Himachal Pradesh)-6; KE (Kerala)-6

## 5. HIV Levels and Trends among High Risk Group (HRG) Population: State

The HIV epidemic in India continues to be concentrated with high prevalence among HRG. The prevalence level varies, but pockets of high epidemic exists. Table 5 summarizes the distribution of pockets of high HIV prevalence (> 5%) by states, among high risk groups in India. Pockets with high HIV prevalence among FSW and MSM are largely in southern states of Karnataka, Maharashtra and Telangana. Among MSM, Gujarat also had two sites with prevalence of 5% or higher. However, pockets of high prevalence among IDU are in Delhi (3), Madhya Pradesh (2), Manipur (8), Mizoram (4), Punjab (6) and Uttar Pradesh (3).

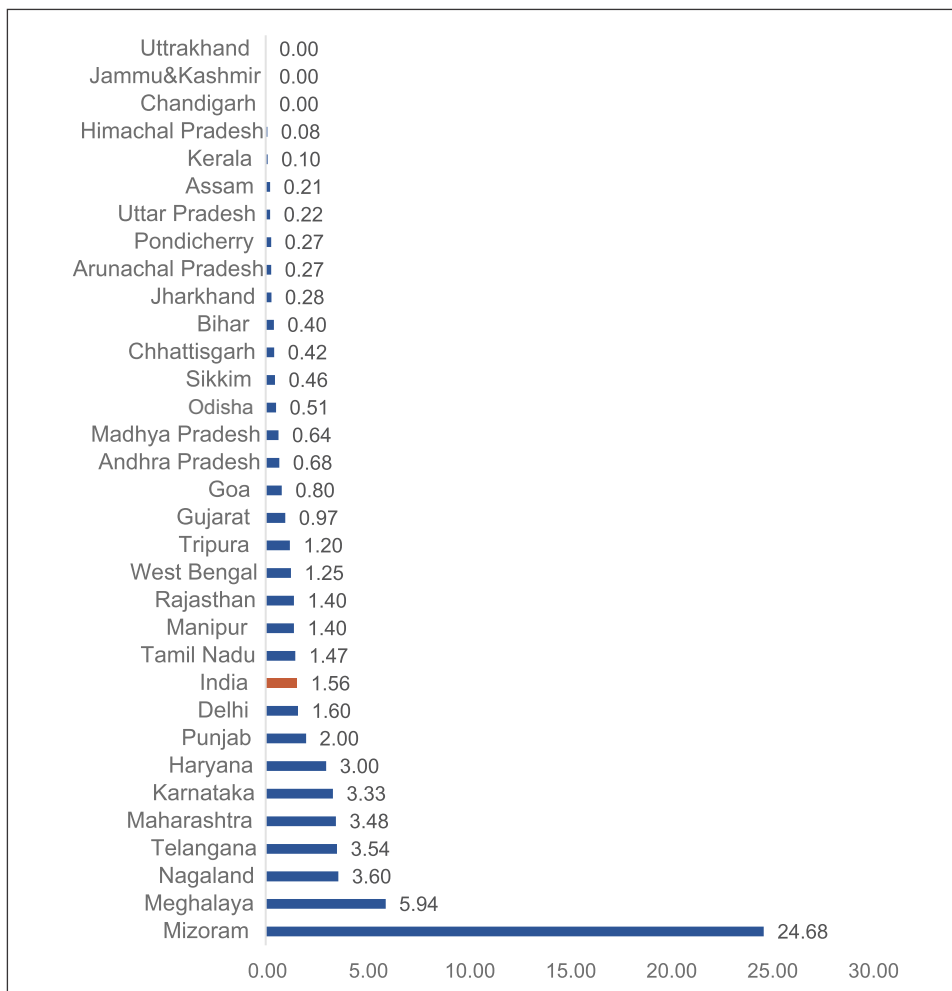
**Table 5: State wise number of high prevalence (> 5%) HRG Surveillance sites in HSS 2017**

State	No. of Sites with >=5% HIV Prevalence				No. of Sites with >=10% HIV Prevalence			
	FSW	IDU	MSM	H/TG	FSW	IDU	MSM	H/TG
Chhattisgarh	-	1	-	-	-	1	-	-
Delhi	-	3	-	1	-	2	-	1
Gujarat	-	-	2	-	-	-	1	-
Karnataka	6	-	5	-	2	-	2	-
Madhya Pradesh	-	2	-	-	-	-	-	-
Maharashtra	4	-	2	1	1	-	1	-
Manipur	-	8	1	-	-	1	-	-
Meghalaya	1	-	-	-	-	-	-	-
Mizoram	1	4	-	-	1	3	-	-
Nagaland	-	-	1	-	-	-	-	-
Punjab	1	6	1	-	-	5	-	-
Tamil Nadu	1	-	-	-	-	-	-	-
Telangana	3	-	1	1	-	-	-	-
Tripura	-	1	-	-	-	-	-	-
Uttar Pradesh	-	3	-	-	-	2	-	-
Uttarakhand	-	1	-	-	-	-	-	-
West Bengal	-	1	-	1	-	1	-	-
<b>India</b>	<b>17</b>	<b>30</b>	<b>13</b>	<b>4</b>	<b>4</b>	<b>15</b>	<b>4</b>	<b>1</b>

### 5.1 Female Sex Workers

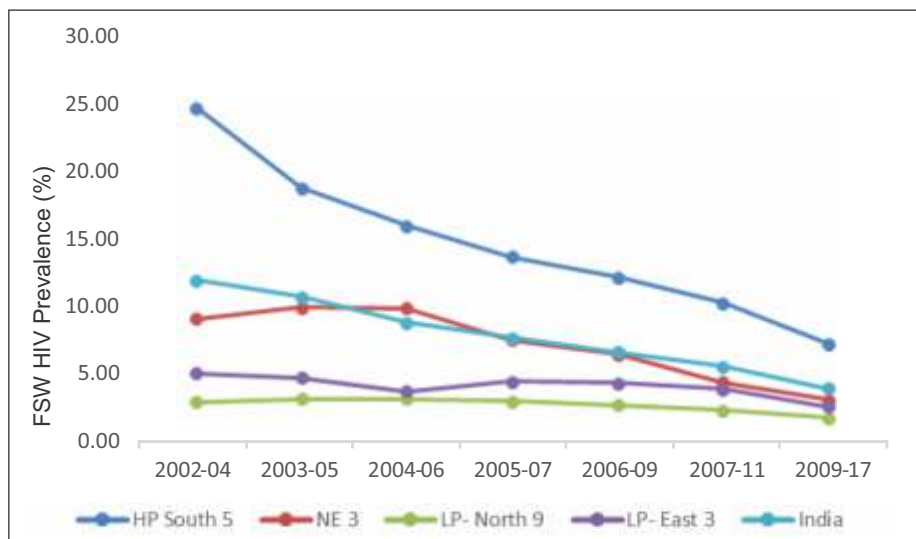
Figure 22 depicts state-wise prevalence among FSWs as recorded during the 15<sup>th</sup> round of HSS. The HSS among FSW was conducted across 32 states in 245 sites while the valid sample size was achieved by 236 sites. Most of the states have recorded less than 5% prevalence among FSWs except for Mizoram (24.7%) and Meghalaya (5.9%). Both Mizoram and Meghalaya have only one FSW site, located in Aizwal and East Khasi Hill respectively. The states of Delhi (1.6%), Punjab (2%), Haryana (3%), Karnataka (3.3%), Maharashtra (3.5%), Telangana (3.5%) and Nagaland (3.6%) recorded a prevalence higher than the national average. Overall, 17 sites have shown an HIV prevalence greater than 5% among FSW (Karnataka (6), Maharashtra (4), Telangana (3), Meghalaya (1), Mizoram (1), Punjab (1) and Tamil Nadu (1)).

**Figure 22: HIV Prevalence at FSW sites, India and states, HSS 2017**



The national levels trend of HIV prevalence among FSW is observed to be declining. The trends appear to be stable to declining among FSW across all regions, as per an analysis of 3-year moving average trends among consistent sites. (Figure 23).

**Figure 23: Region wise trends in FSW HIV Prevalence based on consistent sites<sup>12</sup>**



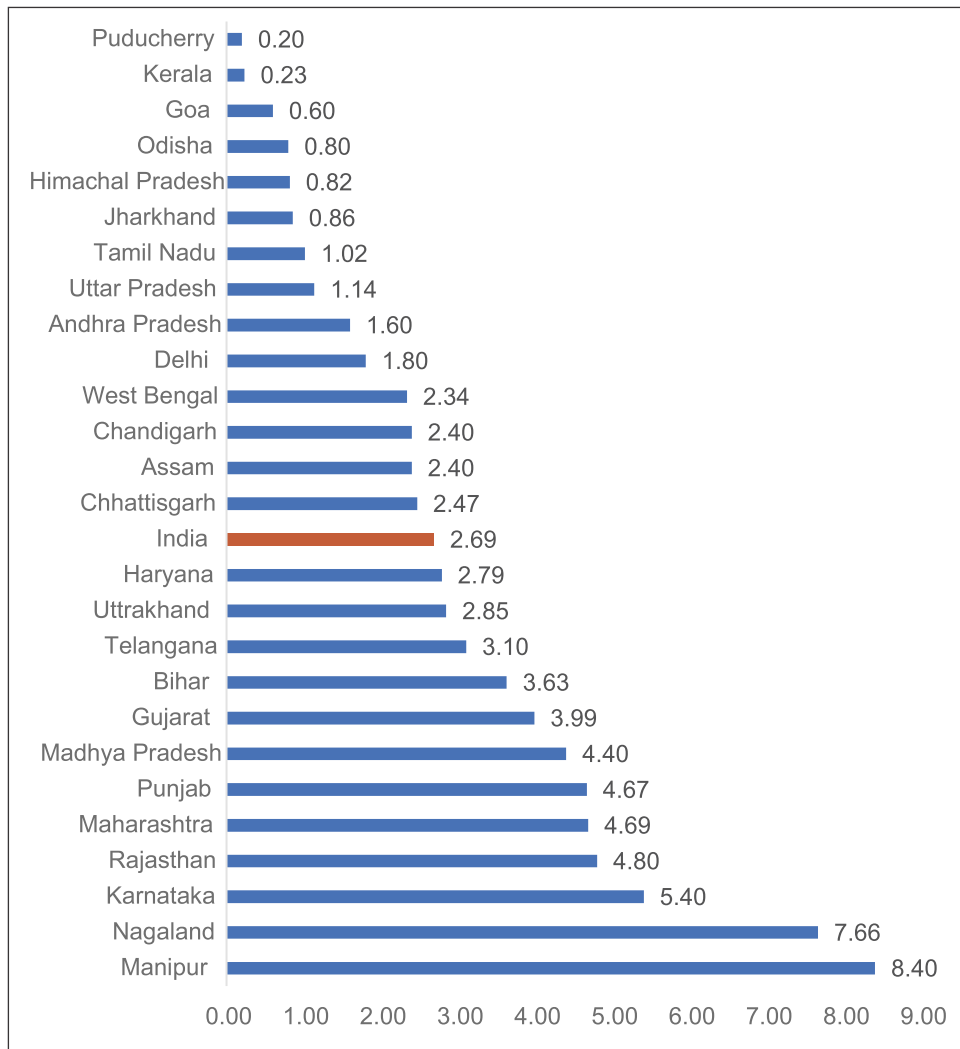
## 5.2 Men who have Sex with Men

The 15<sup>th</sup> round of HSS among MSM was conducted in 26 states involving 89 sites in 84 districts. In total, 12 states recorded an HIV prevalence among MSM above the national average with the highest prevalence recorded in the states of Manipur (8.4%), Nagaland (7.7%) and Karnataka (5.4%). Thirteen MSM HSS sites in 2017 showed high prevalence pockets which fell in the states of Karnataka (5), Gujarat (2), Maharashtra (2), Manipur (1), Nagaland (1), Punjab (1) and Telangana (1). Figure 24 shows state-wise HIV prevalence among MSMs.

The trend of HIV prevalence among the MSM appeared to be declining at the national level as well as in the low prevalence states of the northern region. The prevalence trends in the states of Andhra Pradesh, Maharashtra, Karnataka, Tamil Nadu, Assam and Manipur appeared to be stable to declining but at a higher level. In the low prevalent states of Bihar and West Bengal, the trends appeared to be rising but at lower level (Figure 25).

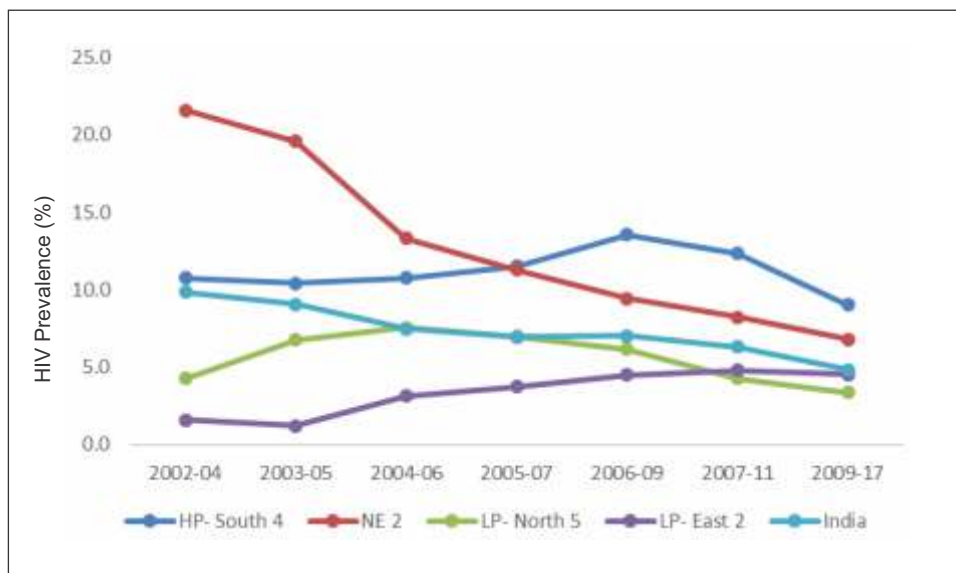
<sup>12</sup>3-yr moving averages based on consistent sites; India – 82; HP-South-5 (Andhra Pradesh, Tamil Nadu, Karnataka, Maharashtra, Telangana) – 28, NE 4- (Manipur, Nagaland, Sikkim, Assam) – 11, LP-North-8 (Chandigarh, Delhi, Gujarat, Himachal Pradesh, Odisha, Punjab, Rajasthan, Uttar Pradesh) – 22, LP-East-3 (Bihar, Jharkhand, West Bengal-11).

**Figure 24: HIV Prevalence at MSM sites, India and states, HSS 2017**





**Figure 25: Region wise trends in MSM HIV Prevalence based on consistent sites<sup>13</sup>**

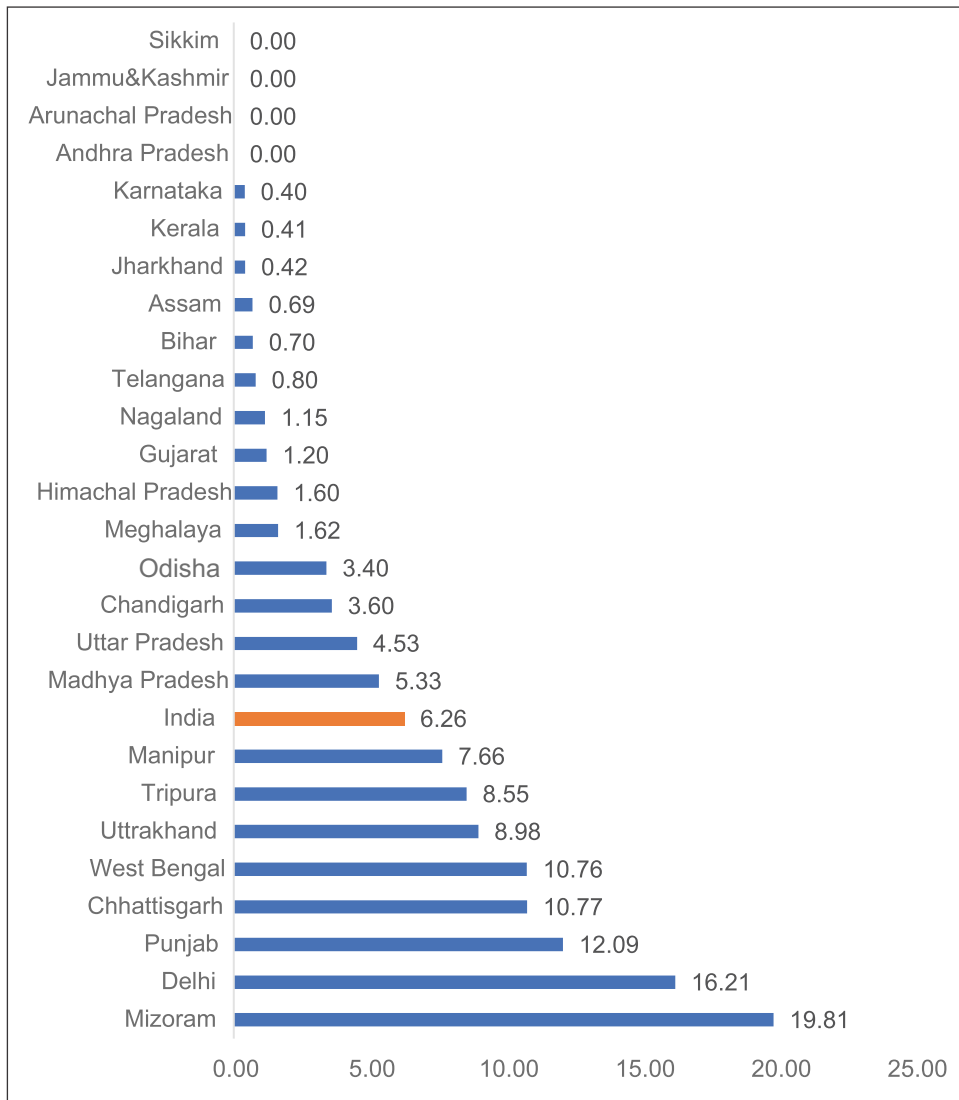


### 5.3 Injecting Drug Users

The 2017 HSS among IDU was conducted at 87 sites in 84 districts across 26 states and union territories. The highest HIV prevalence among IDUs was recorded in the states of Mizoram (19.8%) followed by Delhi (16.2%) and Punjab (12.1%). Overall, 9 states recorded >5% HIV prevalence among IDU. This included states of Chhattisgarh (10.8%), West Bengal (10.8%), Uttarakhand (9.0%), Tripura (8.6%), Manipur (7.7%) and Madhya Pradesh (5.3%) (Figure 26). More than one third of the sites (30 sites) recorded HIV prevalence of more than 5% in this round of surveillance including sites in the state of Manipur (8), Punjab (6), Mizoram (4), Delhi (3), Madhya Pradesh (2), Uttarakhand (1), Tripura (1), Chhattisgarh (1), West Bengal (1), and Uttar Pradesh (3).

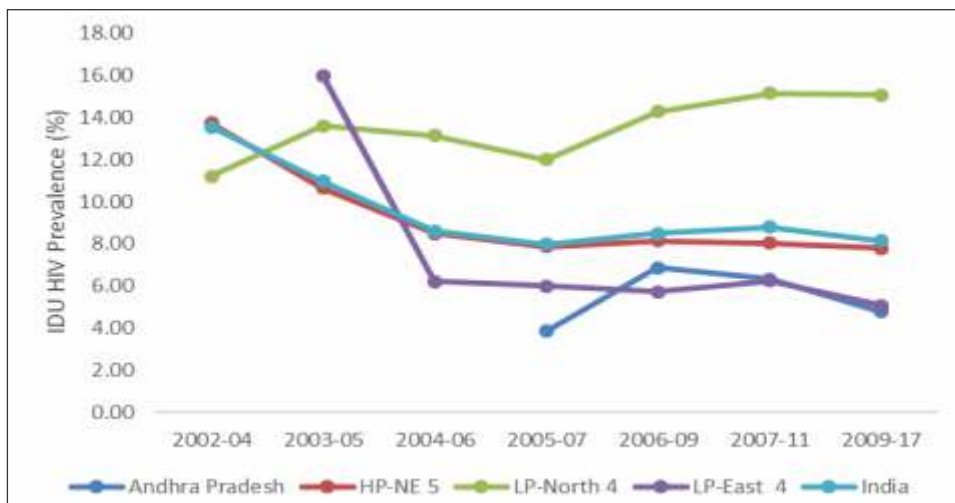
<sup>13</sup>3-yr moving averages based on consistent site India -25; HP-South-4 (Andhra Pradesh, Tamil nadu, Karnataka, Maharashtra) – 7, NE 2 – (Manipur, Assam) – 2, LP-North-5 (Chandigarh, Goa, Gujarat, Himachal Pradesh, Uttar Pradesh) – 7, LP-East-2 (Bihar, West Bengal)-3.

Figure 26: HIV Prevalence at IDU sites, India and states, HSS 2017

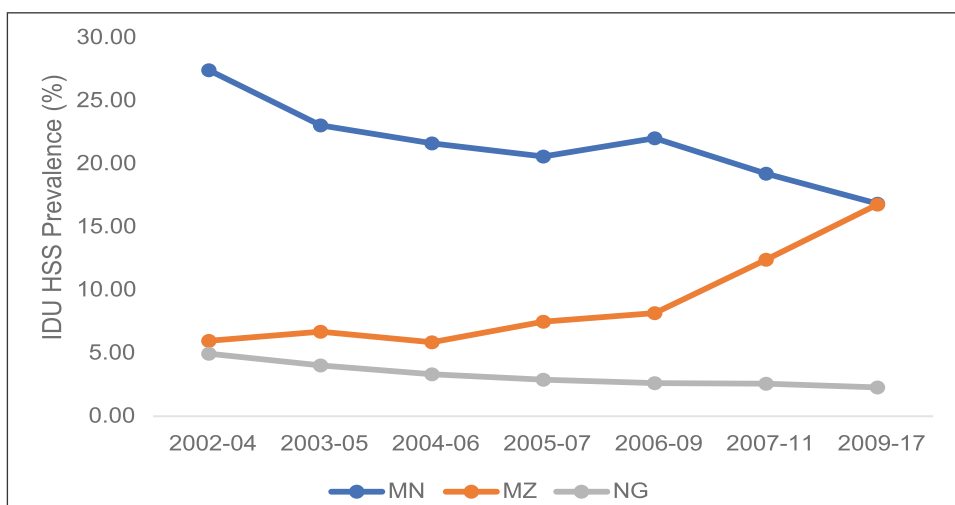


At the national level, the long-term trends of HIV prevalence among IDU population appear to be stable at a high level. Among the southern states, there was only one consistent site located in Chittoor (Andhra Pradesh) and the prevalence appears to be declining at this site. Stable to rising epidemic was noted at consistent sites in the northern, eastern and north-eastern states (Figure 27).

**Figure 27: Region wise HIV Prevalence trends in IDU based on consistent sites<sup>14</sup>**



**Figure 27-a: State-wise HIV Prevalence trends in IDU based on consistent sites<sup>15</sup>**

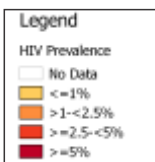
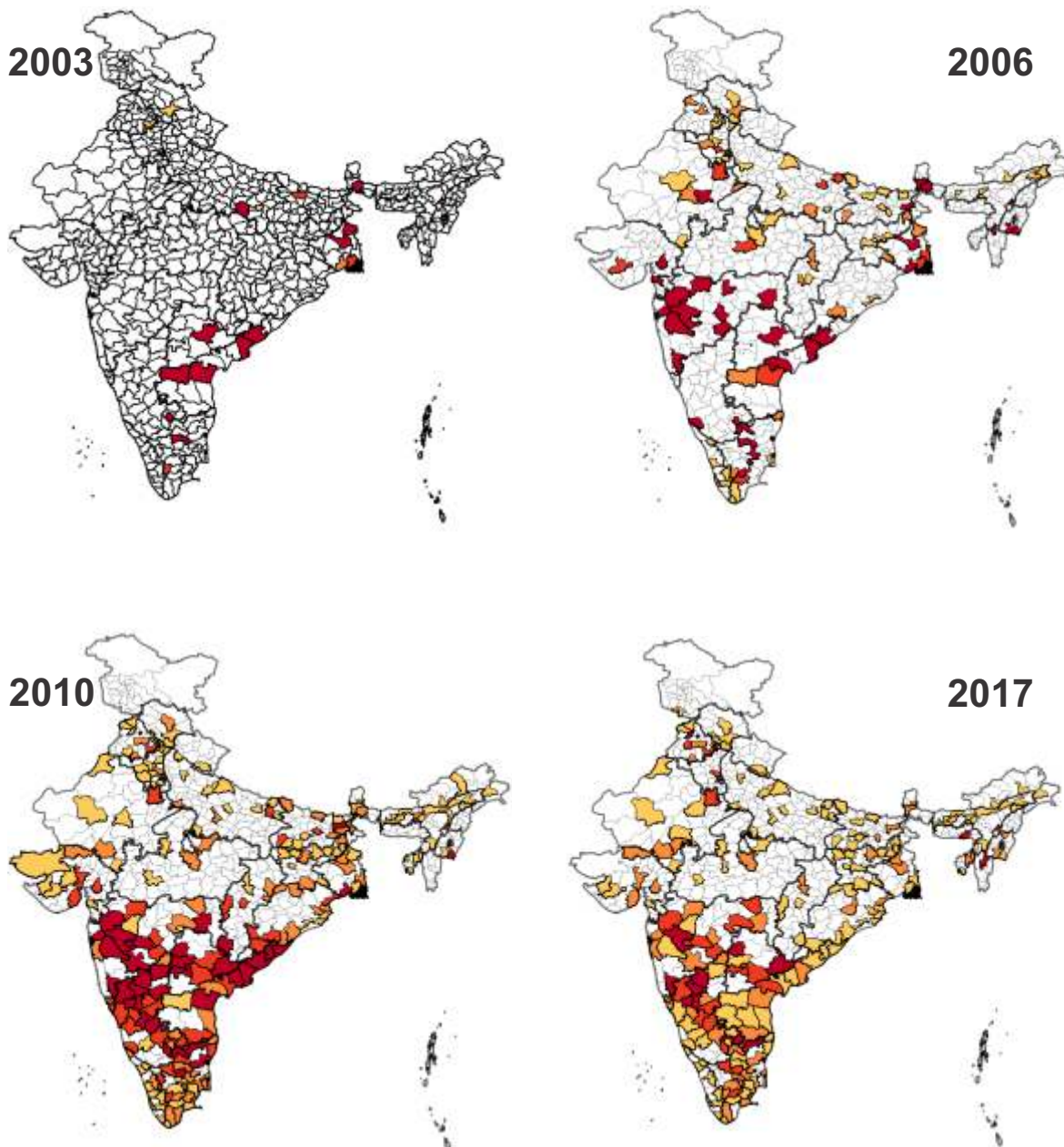


The IDU epidemic in the country is of dynamic nature. Figure 28 depicts that for this population group, the epidemic is still emerging. In the early days of the national AIDS response, surveillance sites among IDUs were largely located only in north-eastern states and it showed high prevalence in select north-eastern states. However as the surveillance sites were expanded across the country, pockets of high prevalence were also noted in many northern states including in Punjab, Delhi, Uttarakhand and Uttar Pradesh.

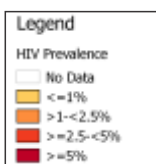
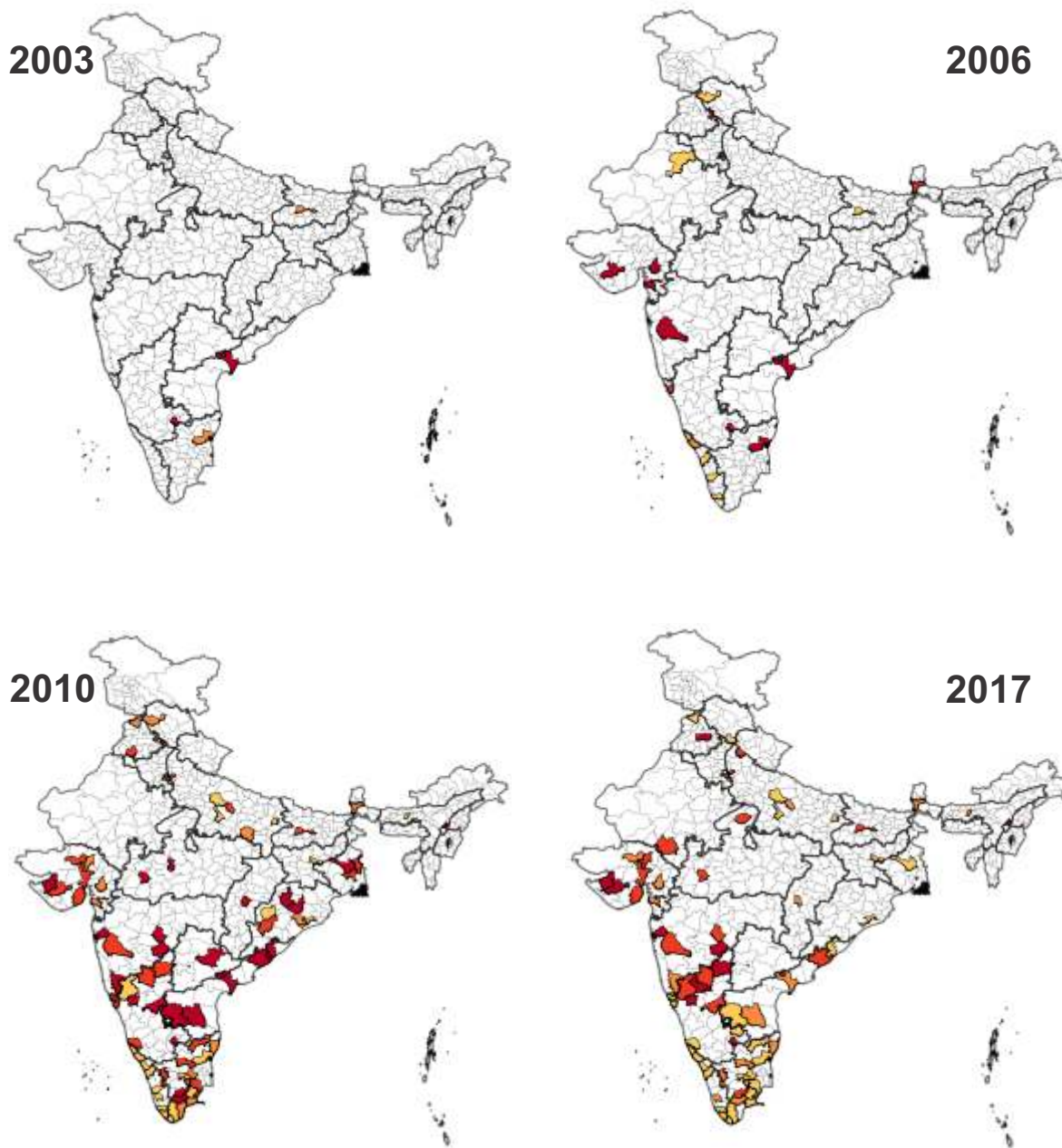
<sup>14</sup>3-yr moving averages based on consistent sites; India –36;(Andhra Pradesh) – 1, NE- 5 (Manipur, Mizoram, Nagaland, Sikkim, Assam) – 19, LP-North-4 (Chandigarh, Delhi, Punjab, Uttar Pradesh) – 6, LP-East-4 (Bihar, Jharkhand, West Bengal, Odisha-7).

<sup>15</sup>3-yr moving averages based on consistent sites; MN (Manipur)-4, MZ(Mizoram)-3, NG (Nagaland)-8.

**Figure 28a : District-wise HIV Prevalence (%) at FSW sites, HSS 2003, 2006, 2010 & 2017**

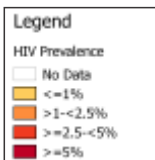
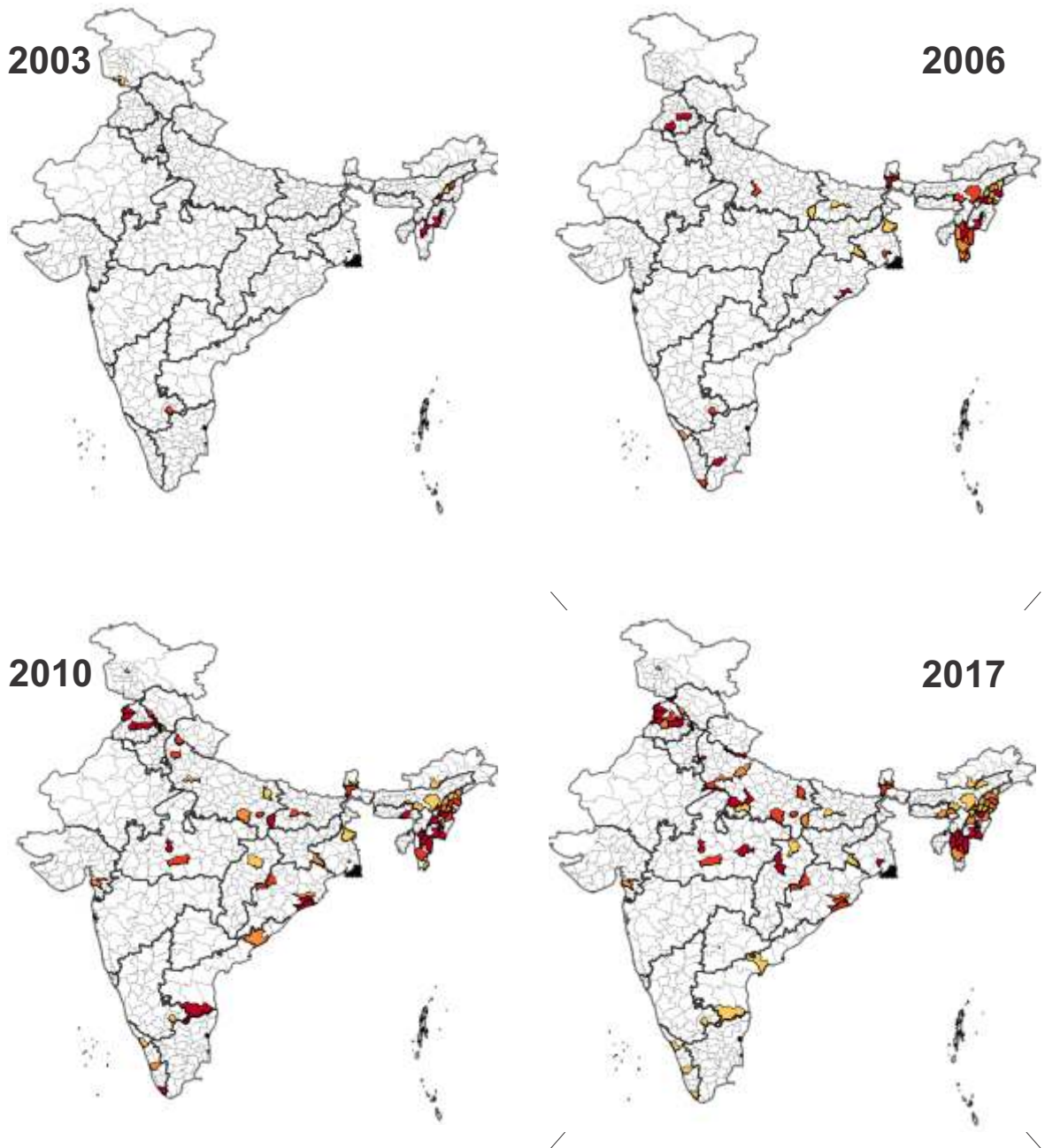


**Figure 28b : District-wise HIV Prevalence (%) at MSM sites, HSS 2003, 2006, 2010 & 2017**





**Figure 28c : District-wise HIV Prevalence (%) at IDU sites,  
HSS 2003, 2006, 2010 & 2017**

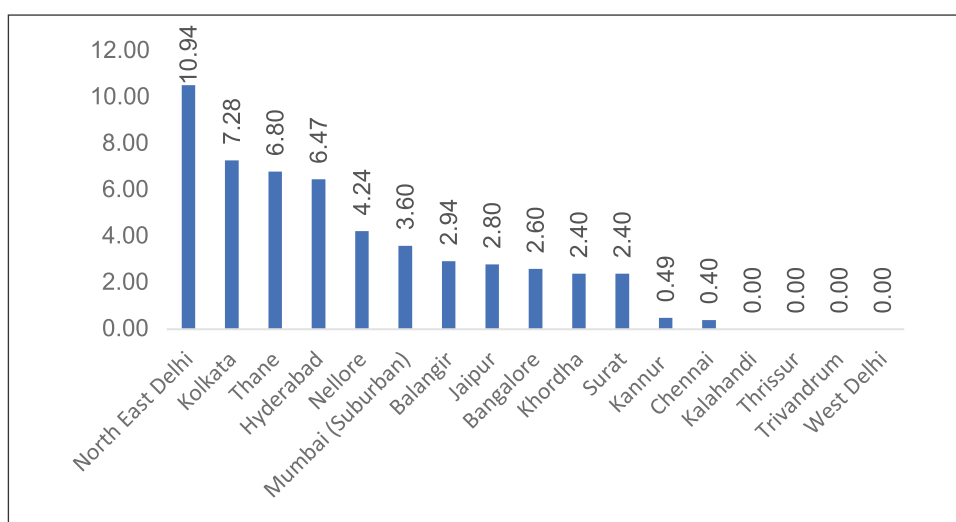


### 5.4 Hijra/Transgender (H/TG) People

The 15th round of HSS witnessed a major expansion of H/TG HSS sites. In the 2010-11 round, there were only 3 sites among H/TG: 2 in Tamil Nadu and 1 in Maharashtra. In 2017, 18 H/TG HSS sites were included (Figure 29).

The aggregated HIV prevalence at these sites among the H/TG was 3.13 % (95% CI: 2.61-3.66). Four sites recorded an HIV prevalence of more than 5% i.e. North East Delhi (10.9%), Kolkata (7.3%), Thane (6.80%) and Hyderabad (6.47%).

**Figure 29: HIV Prevalence at H/TG Sites, HSS 2017**



## 6. HIV Levels and Trends among Bridge Population

Conducting HSS among single male migrants (SMM) and long-distance truckers (LDT) helps to get an estimate of the epidemic among the bridge population. The HSS among the SMM and LDT in 2017 was planned and implemented across 27 and 28 sites respectively, with many new sites included. The observed prevalence among SMM was 0.51% (95%CI: 0.34-0.68) while among LDT it was 0.86% (95%CI: 0.64-1.07). Inter-site variations in HIV prevalence was observed among both the groups (Figure 30 and 31). Among Single Male Migrants, five sites recorded an HIV prevalence of more than 1 % i.e. Hyderabad (2.4%) in Telangana, Anugul (1.6%) in Odisha, Allahabad (1%) in Uttar Pradesh, Dakshin Kannada (1%) in Karnataka and Krishna (1.2%) in Andhra Pradesh. There were 9 sites with more than 1% HIV prevalence among LDT; these sites were in Kamrup Metropolitan (2.8%) in Assam, Purba Medinipur (2.8%) in West Bengal, Bangalore (2%) in Karnataka, Purbi Singhbhum (1.86%) in Jharkhand, Nagpur (1.6%) and Mumbai (1.2%) in Maharashtra, Rangareddy (1.6%) in Telangana, Dimapur (1.21%) in Nagaland, and Salem (1.2%) in Tamil Nadu.

**Figure 30: HIV Prevalence at SMM sites, 2017**

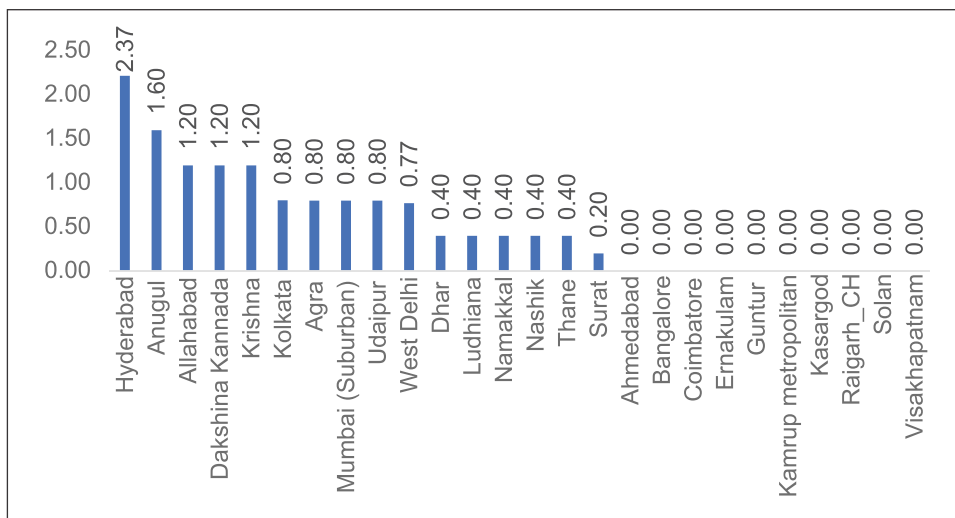
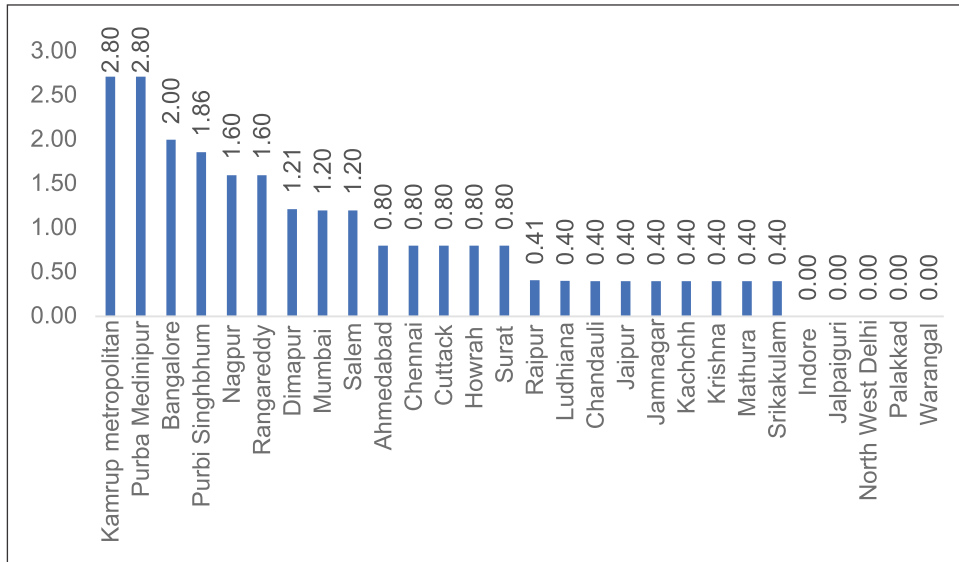




Figure 31: HIV Prevalence at LDT sites, 2017

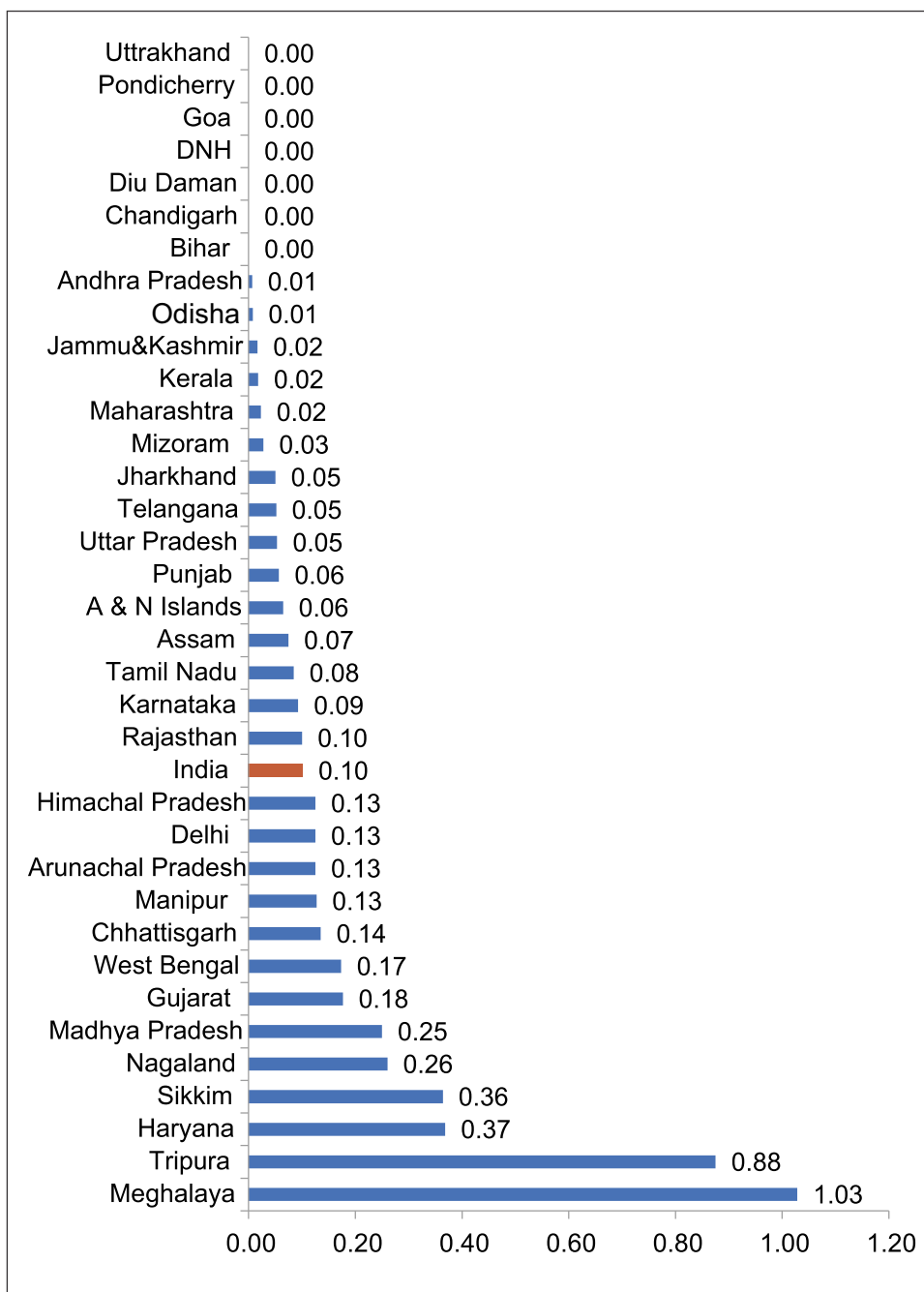


## 7. State wise Syphilis Sero Positivity Level

The blood specimens collected under ANC HSS are tested for Syphilis using non-treponemal Rapid Plasma Reagin (RPR) test. For Syphilis, a two-test protocol is used, i.e., first test is qualitative and the second test quantitative. Only those samples for which the first qualitative test is found reactive, are subjected to the second quantitative test. Under HSS, RPR quantitative tests are reported as “reactive” at dilution of  $\geq 1:8$ .

Figure 32 shows state wise Syphilis sero-positivity among ANC clinic attendees. Overall the Syphilis sero-positivity was low at 0.10% (95%CI: 0.09-0.11). Thirteen states recorded Syphilis sero-positivity above the national average with the highest sero-positivity among ANC attendees in Meghalaya (1.03%), Tripura (0.88%) and Haryana (0.37%). Other states which recorded sero-prevalence above the national average were Sikkim (0.36%), Nagaland (0.26%), Madhya Pradesh (0.25%), Gujarat (0.18%), West Bengal (0.17%), Chhatisgarh (0.14%), Manipur (0.13%), Arunachal Pradesh (0.13%), Delhi (0.13%) and Himachal Pradesh (0.13%).

Figure 32:- Syphilis Prevalence (%) at ANC Sites, India & States, 2017



## 8. Discussion

Over the last three decades, India's HIV Sentinel Surveillance has evolved and expanded to facilitate strategic planning & decision making by the programme countrywide. Sentinel sites have been scaled-up across the country, and among all population groups, thereby maintaining repetitiveness of trends, and aiding epidemiological investigations for Surveillance and Estimations, that have consistently driven the programme for developing evidence-based responses. This round witnessed for the first time, linked anonymous testing among all the typologies, thus an effort was made to link those who tested positive under surveillance with programme service delivery. While the scaling-up of sites across all population groups was done, its most noted scale-up was the implementation of H/TG HSS among 18 sites compared to 3 sites in 2010-11, thus giving the programme a more robust sample size for data interpretation.

The 15th round of HSS has depicted that HIV epidemic in India continues to be concentrated among HRG with higher prevalence among IDU (6.23%) & H/TG (3.14%) population groups at the national level. The prevalence among the FSW (1.56%) and MSM (2.7%) has continued to show a declining trend at national level, but a stable, high-level epidemic among IDU continues to be a major concern.

Analysis of HSS data for state and district level portrayed a diverse epidemic in India. HIV prevalence has a strong declining trend across all population groups under HSS in the erstwhile high prevalence states in southern India like Maharashtra and Tamil Nadu. But still, pockets of high epidemic exist in these states. Specifically, the prevalence among FSW, MSM and H/TG in these states remains relatively higher than the national average and indicates a largely sexual driven epidemic. The national IBBS (2014-15) has indicated that only half of interviewed HRGs were aware of antiretroviral treatment (ART) and thus relatively higher prevalence in these states may be driven by new infections as well as that of improved survival.

The epidemic level in the north-eastern states of Manipur, Mizoram and Nagaland is high and appears to be stable to rising in the last one decade. This has been noted in almost all past rounds of HSS and continued to be observed in 2017 round as well. In these three states, high prevalence sites were recorded in many districts and among multiple population groups. Clearly, the epidemic is widespread and well entrenched in these states.

Additionally, the states of Meghalaya and Tripura are also showing pockets of a growing epidemic. In Meghalaya, pockets of high prevalence have been noted in East and West Jaintia Hills and East Khasi Hills. Each of these states has its own characteristics and factors that are fuelling the epidemic. In Mizoram and Manipur, the high prevalence among high risk groups points to an epidemic largely fuelled by injecting drug behavior but also supported through commercial exchange of sex. In Meghalaya, high HIV prevalence among FSW as well as high level of sero-positivity for syphilis indicates a sexually-driven HIV epidemic. On other hand, Nagaland appears to have a more complex epidemic. The state neither has a large size of HRG nor a very high HIV prevalence among these core groups, but it continues to record a high prevalence among ANC. The epidemic in these states needs to be investigated systematically for ascertaining the locations, populations, their behaviors and contextual factors which are sustaining and fuelling the epidemic. Such investigations can help in the designing of appropriate interventions to strengthen the national AIDS response in these regions.

Besides the north-eastern states, injecting drug behavior is one of the key drivers of the epidemic in many states of north India, namely, Punjab, Delhi, Haryana, Uttarakhand, Uttar Pradesh etc. As the IBBS has reported, many drug users reported having female sexual partners, and condom use with them is relatively low. Experiences from the north-east have indicated that an IDU-driven HIV epidemic may lead to a high level of epidemic among general populations and thus underscore the need for consolidation of three-pronged prevention programmes for injecting drug users encompassing needles syringe exchanges, opioid substitution therapy and condom promotion.

Relatively high prevalence among single male migrants and long-distance truckers, 2-3 times higher than that of ANC clinic attendees, is a key factor in the overall burden of HIV/AIDS epidemic in India. The role of migration in fuelling the HIV epidemic in many northern and eastern Indian states, has been well documented. In-depth analysis of data from the 2015 round of surveillance has established that pregnant women with a migrant spouse have higher prevalence rates in select states. Many of these states are from northern and eastern regions like Bihar, Uttar Pradesh, Rajasthan and Odisha which are considered as high out-migration states. Interestingly, in the states of Manipur and Nagaland, pregnant women with a migrant spouse were 2-3 times more likely to be HIV positive than the pregnant women with a non-migrant spouse. As these evidences indicate, migration is fuelling the epidemic not only in select states of northern and eastern India, but also are probably playing a significant role in Manipur and Nagaland. Similarly,

among LDT, many sites recorded a prevalence of 1% or more. Higher risk among LDT has been well documented. Due to the distance, and the nature of the road network, truckers usually stay away from their families and immediate environments for days and sometimes weeks, thereby exposing them to the high-risk behaviors, usually in and around the truck halting points. In several rounds of HSS, pregnant women who had a spouse whose occupation was indicated as “truckers” have been found at higher risk for HIV than those who didn’t report having a spouse who was a trucker.

India is committed to “End of AIDS” as a public health threat by 2030. While the programme has been hugely successful in the past, there is no place of complacency and the current challenge resulting from the diversity of the HIV epidemic with complex and multiple drivers in each state, should not be under-estimated. The HIV sentinel surveillance has once again provided clues to hidden transmission and alert signs for our renewed focus on populations and geographies, that may have otherwise been missed. Epidemiological findings need to be taken into consideration for tailoring the national, state and district response, and treatment must be complemented with strengthened prevention programmes among high risk population and their clients like migrants and truck drivers with high-risk behaviour, as well as spouses/partners of these populations.

## 9. Annexures

### Annex 1- State-wise number of HSS sites, 2003-17

State	No of district with any HSS site							No. of districts with ANC HSS Sites							No of districts with HRGs & Bridge population HSS sites				No. of ANC HSS Sites							No of HRGs & Bridge Population HSS sites			
	2003	2006	2010-11	2013	2015	2017	2017	2003	2006	2010-11	2013	2015	2017	2017	2003	2006	2010-11	2017	2003	2006	2010-11	2013	2015	2017	2003	2006	2010-11	2017	
	A & N Islands	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	1	1	1	0	4	3	4	4	4	4	3	4	4
Andhra Pr.	23	23	24	23	13	14	14	23	23	23	23	13	14	11	11	12	22	14	43	44	63	64	38	38	15	19	31	26	
Arunachal Pr.	5	10	11	8	8	6	6	2	5	6	8	8	8	3	7	7	7	3	3	5	6	8	8	8	3	9	12	4	
Assam	9	23	25	24	25	27	27	4	15	19	24	25	26	5	16	19	17	7	7	15	20	25	27	27	7	23	30	21	
Bihar	11	36	34	27	27	31	31	7	23	23	27	27	30	8	28	25	10	7	23	23	29	29	31	31	10	38	38	12	
Chandigarh	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	4	7	7	5	
Chhattisgarh	8	16	17	16	19	24	24	5	15	16	16	18	24	3	6	6	9	8	19	18	18	21	26	3	10	9	11	11	
D & N Haveli	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	0	2	1	1	1	1	1	1	0	0	0	0	
Daman & Diu	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	2	2	2	2	2	0	0	0	0	
Delhi	8	9	9	5	5	9	9	4	5	5	5	5	9	6	8	8	7	4	5	5	5	5	10	7	16	15	13	13	
Goa	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2	4	2	3	3	3	3	3	3	3	4	4	
Gujarat	14	25	26	27	27	33	33	10	25	25	27	26	33	8	11	15	10	16	25	25	28	28	35	8	16	28	25	25	
Haryana	9	19	20	15	16	19	19	4	12	12	15	16	19	5	12	14	3	7	12	12	16	16	19	5	18	28	3	3	
Himachal Pr.	12	12	11	7	6	10	10	7	8	7	7	6	7	5	6	7	6	14	10	8	8	7	8	6	10	13	8	8	
J & K	3	14	13	14	14	14	14	3	14	14	14	14	14	2	6	5	2	5	16	15	15	15	15	3	9	9	2	2	
Jharkhand	8	17	19	19	22	24	24	7	12	12	19	22	23	3	11	14	13	12	16	15	21	24	25	3	19	26	15	15	
Karnataka	28	28	31	30	30	30	30	28	28	30	30	30	30	7	24	23	54	54	54	60	62	62	62	10	14	38	40	40	
Kerala	8	14	16	10	14	16	16	4	6	10	10	14	14	4	14	15	18	7	6	10	10	14	14	7	19	23	27	27	
Lakshadweep	1	1	0	0	0	0	0	1	1	0	0	0	0	0	1	1	0	1	2	0	0	0	0	1	1	1	0	0	
Madhya Pr.	23	45	44	47	49	51	51	15	36	37	47	49	51	10	15	15	9	26	36	37	47	49	51	10	16	20	12	12	
Maharashtra	37	37	38	36	37	36	36	35	35	37	36	37	36	11	15	20	18	70	73	75	75	78	76	15	29	38	36	36	
Manipur	9	9	9	9	9	9	9	9	9	9	9	9	10	4	5	9	10	14	14	14	14	14	15	7	10	18	18	18	
Meghalaya	2	6	6	7	7	8	8	2	6	6	7	7	9	1	2	2	2	2	7	7	8	8	9	3	4	4	4	3	

**Annex 1- State-wise number of HSS sites, 2003-17 (Contd....)**

State	No of district with any HSS site						No. of districts with ANC HSS Sites						No of districts with HRGs & Bridge population HSS sites						No. of ANC HSS Sites						No of HRGs & Bridge Population HSS sites					
	2003	2006	2010-11	2013	2015	2017	2003	2006	2010-11	2013	2015	2017	2003	2006	2010-11	2017	2003	2006	2010-11	2013	2015	2017	2003	2006	2010-11	2017	2003	2006	2017	
	Mizoram	4	8	8	8	8	8	3	3	8	8	8	6	2	8	5	6	5	4	9	9	9	9	4	12	9	7	4	12	9
Nagaland	8	11	11	11	11	11	8	11	11	11	11	11	6	8	8	10	12	19	19	13	13	13	7	10	12	13	7	10	12	13
Odisha	9	30	30	30	30	30	5	23	30	30	30	30	7	18	20	16	5	23	32	32	32	32	8	22	31	21	8	22	31	21
Puducherry	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	2	2	2	2	2	3	8	8	5	3	8	8	5
Punjab	8	18	19	13	18	22	6	11	13	13	18	22	3	9	12	13	10	11	13	13	18	22	4	14	23	21	4	14	23	21
Rajasthan	12	32	31	33	33	33	6	25	28	33	33	33	7	21	17	18	12	25	28	35	35	35	8	23	20	12	8	23	20	12
Sikkim	1	3	3	3	3	3	1	2	2	3	2	3	1	2	2	2	3	3	3	4	4	5	1	3	4	3	1	3	4	3
Tamil Nadu	30	30	31	33	33	32	29	30	31	33	32	32	13	18	27	25	53	64	68	72	72	71	15	26	53	44	15	26	53	44
Telangana	-	-	-	-	10	26	-	-	-	-	10	23	-	-	-	15	-	-	-	-	25	32	-	-	-	20	-	-	-	20
Tripura	2	4	4	3	6	5	1	1	1	3	3	3	2	4	4	4	1	2	2	4	7	4	2	8	12	4	2	8	12	4
Uttar Prad.	31	69	68	55	55	76	19	51	54	55	55	75	17	31	35	22	30	62	65	65	65	85	19	37	50	31	19	37	50	31
Uttarakhand	7	11	12	12	12	13	3	7	7	12	12	13	4	7	9	3	6	9	9	15	15	16	4	7	11	4	4	7	11	4
West Bengal	13	19	19	18	19	20	9	12	18	18	20	21	8	14	16	15	18	13	22	22	25	23	15	32	38	24	15	32	38	24
<b>India</b>	<b>354</b>	<b>590</b>	<b>600</b>	<b>554</b>	<b>577</b>	<b>651</b>	<b>271</b>	<b>464</b>	<b>505</b>	<b>554</b>	<b>572</b>	<b>640</b>	<b>173</b>	<b>328</b>	<b>388</b>	<b>328</b>	<b>476</b>	<b>628</b>	<b>696</b>	<b>750</b>	<b>776</b>	<b>829</b>	<b>223</b>	<b>494</b>	<b>663</b>	<b>494</b>	<b>223</b>	<b>494</b>	<b>663</b>	<b>494</b>



## Annex 2. HSS 2017 DATA FORM FOR ANTENATAL CLINIC ATTENDEES (ANC)

*(Please fill the site details in the box below OR Paste the sticker with site details/Stamp the site details in the empty box/*

State: ..... District:..... Site /Sub-site name: ..... <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span>(Site code)</span> <span>(Sub-site No)</span> <span>(sample No)</span> <span>(Date-DD/MM/YY)</span> </div>	
---	--

<b>1. Age in completed years</b>	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>		

<b>2. Literacy status</b>						
<table style="width: 100%;"> <tr> <td style="width: 33%;"><b>1. Illiterate</b></td> <td style="width: 33%;"><b>2. Literate and till 5<sup>th</sup> standard</b></td> <td style="width: 33%;"><b>3. 6<sup>th</sup> to 10<sup>th</sup> standard</b></td> </tr> <tr> <td><b>4. 11<sup>th</sup> to graduation</b></td> <td colspan="2"><b>5. Post graduation</b></td> </tr> </table>	<b>1. Illiterate</b>	<b>2. Literate and till 5<sup>th</sup> standard</b>	<b>3. 6<sup>th</sup> to 10<sup>th</sup> standard</b>	<b>4. 11<sup>th</sup> to graduation</b>	<b>5. Post graduation</b>	
<b>1. Illiterate</b>	<b>2. Literate and till 5<sup>th</sup> standard</b>	<b>3. 6<sup>th</sup> to 10<sup>th</sup> standard</b>				
<b>4. 11<sup>th</sup> to graduation</b>	<b>5. Post graduation</b>					

<b>3. Order of current pregnancy</b>				
<table style="width: 100%;"> <tr> <td style="width: 25%;"><b>1. First</b></td> <td style="width: 25%;"><b>2. Second</b></td> <td style="width: 25%;"><b>3. Third</b></td> <td style="width: 25%;"><b>4. Fourth/More</b></td> </tr> </table>	<b>1. First</b>	<b>2. Second</b>	<b>3. Third</b>	<b>4. Fourth/More</b>
<b>1. First</b>	<b>2. Second</b>	<b>3. Third</b>	<b>4. Fourth/More</b>	

<b>4. Duration of current pregnancy</b>			
<table style="width: 100%;"> <tr> <td style="width: 33%;"><b>1. First trimester</b></td> <td style="width: 33%;"><b>2. Second trimester</b></td> <td style="width: 33%;"><b>3. Third trimester</b></td> </tr> </table>	<b>1. First trimester</b>	<b>2. Second trimester</b>	<b>3. Third trimester</b>
<b>1. First trimester</b>	<b>2. Second trimester</b>	<b>3. Third trimester</b>	

<b>5. Has respondent received prior Antenatal care services from a healthcare facility during her current pregnancy?</b>		
<table style="width: 100%;"> <tr> <td style="width: 50%;"><b>1. Yes</b></td> <td style="width: 50%;"><b>2. No</b></td> </tr> </table>	<b>1. Yes</b>	<b>2. No</b>
<b>1. Yes</b>	<b>2. No</b>	

<b>6. Source of referral to the ANC clinic</b>						
<table style="width: 100%;"> <tr> <td style="width: 50%;"><b>1. Self-Referral</b></td> <td style="width: 50%;"><b>2. Family/Relatives/Neighbours/Friends</b></td> </tr> <tr> <td><b>3. NGO</b></td> <td><b>4. Private hospital (Doctor/Nurses)</b></td> </tr> <tr> <td><b>5. Govt. hospitals (including ASHA/ANM)</b></td> <td><b>6. ICTC/ART centre</b></td> </tr> </table>	<b>1. Self-Referral</b>	<b>2. Family/Relatives/Neighbours/Friends</b>	<b>3. NGO</b>	<b>4. Private hospital (Doctor/Nurses)</b>	<b>5. Govt. hospitals (including ASHA/ANM)</b>	<b>6. ICTC/ART centre</b>
<b>1. Self-Referral</b>	<b>2. Family/Relatives/Neighbours/Friends</b>					
<b>3. NGO</b>	<b>4. Private hospital (Doctor/Nurses)</b>					
<b>5. Govt. hospitals (including ASHA/ANM)</b>	<b>6. ICTC/ART centre</b>					

<b>7. Current place of residence</b>		
<table style="width: 100%;"> <tr> <td style="width: 50%;"><b>1. Urban (Municipal corporation/Council/Cantonment)</b></td> <td style="width: 50%;"><b>2. Rural</b></td> </tr> </table>	<b>1. Urban (Municipal corporation/Council/Cantonment)</b>	<b>2. Rural</b>
<b>1. Urban (Municipal corporation/Council/Cantonment)</b>	<b>2. Rural</b>	

<b>8. Current occupation of the respondent</b>									
<table style="width: 100%;"> <tr> <td style="width: 33%;"><b>1. Agricultural labourer</b></td> <td style="width: 33%;"><b>2. Non-agricultural labourer</b></td> <td style="width: 33%;"><b>3. Domestic servant</b></td> </tr> <tr> <td><b>4. Skilled/Semi-skilled worker</b></td> <td colspan="2"><b>5. Petty business/small shop</b></td> </tr> <tr> <td><b>6. Large business/Selfemployed</b></td> <td><b>7. Service (Govt./Pvt.)</b></td> <td><b>8. Student</b></td> </tr> </table>	<b>1. Agricultural labourer</b>	<b>2. Non-agricultural labourer</b>	<b>3. Domestic servant</b>	<b>4. Skilled/Semi-skilled worker</b>	<b>5. Petty business/small shop</b>		<b>6. Large business/Selfemployed</b>	<b>7. Service (Govt./Pvt.)</b>	<b>8. Student</b>
<b>1. Agricultural labourer</b>	<b>2. Non-agricultural labourer</b>	<b>3. Domestic servant</b>							
<b>4. Skilled/Semi-skilled worker</b>	<b>5. Petty business/small shop</b>								
<b>6. Large business/Selfemployed</b>	<b>7. Service (Govt./Pvt.)</b>	<b>8. Student</b>							

**9. Current occupation of the spouse**

- |  |                              |                     |
|--|------------------------------|---------------------|
| 1. Agricultural labourer   | 2. Non-Agricultural labourer | 3. Domestic servant |
| 4. Skilled/Semi-skilled worker   | 5. Petty business/small shop |                     |
| 6. Large business/Selfemployed   | 7. Service (Govt./Pvt)       | 8. Student          |
| 9. Hotel staff   | 10. Truck driver/Helper      |                     |
| 11. Local transport worker (auto/taxi driver, hand cart pullers, rickshaw pullers etc) |                              |                     |
| 12. Agricultural cultivator/landholder   | 13. Unemployed               |                     |
| 99. Not applicable (for never married/widowed/Divorced/Separated)                      |                              |                     |

**10. Does spouse reside alone in anotheplace/town away from wife for work for longer than 6 months?**

- |   |       |
|---|-------|
| 1. Yes  | 2. No |
| 99. Not applicable (For never married/Widowed/Divorced/Separated) |       |

**11. Has respondent everbeen tested for HIV?**

- |        |       |
|--------|-------|
| 1. Yes | 2. No |
|--------|-------|

**12.If ever tested for HIV, when was the last she wastested for HIV?**

- |                                    |                                    |                                       |
|------------------------------------|------------------------------------|---------------------------------------|
| 1. Tested during current pregnancy | 2. Tested before current pregnancy | 99. Not Applicable (For never tested) |
|------------------------------------|------------------------------------|---------------------------------------|

**13. What was the result of respondent's last HIV test?**

- |                                       |             |                                    |                |
|---------------------------------------|-------------|------------------------------------|----------------|
| 1. Positive                           | 2. Negative | 3. Did not collect the test result | 4. No Response |
| 99. Not Applicable (For never tested) |             |                                    |                |

**14. If positive, is respondent seeking care from any of the following for management of HIV?**

- |  |                             |
|--|-----------------------------|
| 1. Government Hospital/ART centres   | 2. NGO doctor               |
| 3. Private Facilities (Hospital/ Standalone clinic)  | 4. Pharmacist/chemist       |
| 5. Alternative/non-allopathic doctor (Ayurvedic/homoeopathic/siddha)                               | 6. Any other type of doctor |
| 7. Not seeing care for HIV management  |                             |
| 99. Not applicable (For all who were either never tested or not positive when last tested for HIV) |                             |

**15. Is respondent currently taking antiretroviral medications/HIV tablets?**

- |  |       |
|--|-------|
| 1. Yes   | 2. No |
| 99. Not Applicable (For all who were either never tested or not positive when last tested for HIV) |       |

Signature/ हस्ताक्षर:

Name/ नाम:

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

Signature/ हस्ताक्षर:

Name/ नाम:

(Sentinel site in-charge/  
सेंटिनल साइट प्रभारी)

## Annex 3: Bilingual Data form for Surveillance at FSW Sites, HSS 2017

### HSS 2017: DATA FORMS FOR FEMALE SEX WORKERS (FSW)

एच. एस. एस. 2017: महिला यौन कर्मियों के लिये 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/ सेंटिनल साइट की जानकारी यहाँ लिखें/छापें/चिपकाएं]

State/ राज्य: .....		District/जिला: .....	
Site /Sub-site Name/ साइट/ सब साइट का नाम: .....			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
(Site Code)	(Sub-Site No)	(Sample No)	(Date-DD/MM/YY)

1. Age in completed years/ आयु (सम्पूर्ण वर्षों में)

2. Literacy Status/ साक्षरता स्थिति

1. Illiterate/निरक्षर	2. Literate and till 5 <sup>th</sup> Standard /साक्षर और पांचवीं तक	3. 6 <sup>th</sup> to 10 <sup>th</sup> Standard छठी से दसवीं तक
4. 11 <sup>th</sup> to graduation/ग्यारहवीं से स्नातक	5. Post-Graduation/ स्नातकोत्तर	

3. Reason for coming to the service point/ सेवा केंद्र में आने की वजह

1. Collect Condoms/ कंडोम लेने	2. STD Treatment/ एसटीडी उपचार हेतु	3. Other medical care/अन्य चिकित्सा हेतु
4. Others, Specify/ अन्य (निर्दिष्ट करें.....)		5. Randomly Selected/ बेतरतीब ढंग से चुने गये

4. Current Place of Residence/ वर्तमान निवास स्थान

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

5. What is the type of sex work you are involved in (Multiple response possible)/ आप किस प्रकार के यौन संबंधित व्यवसाय करती हैं? (एक से अधिक विकल्प चुनने की अनुमति है)

1. Brothel Based/ वेश्यालय आधारित	2. Street Based/ सड़क आधारित	3. Home Based/ घर आधारित	4. Lodge Based/ लॉज आधारित
5. Dhaba Based/ ढाबा आधारित			
6. Others, Specify/ अन्य (निर्दिष्ट करें.....)			

6. What is the duration for which you have been involved in sex work?/ आप कितने समय से यौन व्यवसाय कर रही हैं?

1. <6 months / <6 महीने	2. 6 months to 1 year / 6 महीनों से 1 साल	3. 1-3 years / 1-3 साल
4. 3-5 years / 3-5 साल		
5. >5 year / >5 साल		

7. How long ago did you have last paid sex?/ आखिरी बार आपने कितने समय पहले पैसों के लिए सेक्स बेचा?

<input style="width: 20px; height: 20px;" type="text"/> Days/दिन	<input style="width: 20px; height: 20px;" type="text"/> Months/महीने
--	--

8. With how many clients did you have sex in the last week?/ आपने पिछले हफ्ते में कितने ग्राहकों को सेक्स बेचा? .....

9. Did you have any other source of income, apart from sex work?/ क्या आपका **यौन कार्य** के अलावा **कमाई का कोई और स्रोत है ?**

1. Yes/हाँ 2. No/ नहीं 3. If yes, specify/ यदि हाँ है तो, निर्दिष्ट करें.....

10. Did you inject yourself with any drug without prescription, for pleasure, in the last 12 months?/ क्या आपने पिछले 12 महीनों में, केवल मजे के लिए, कभी सुई द्वारा नशीली दवाओं (जो डॉक्टर ने नहीं दी ) का सेवन किया ?

1. Yes/हाँ 2. No/नहीं

11. Have you ever been tested for HIV?/ क्या आपने कभी भी एचआईवी जाँच करायी है?

1. Yes/हाँ 2. No/नहीं

12. What was the result of your last HIV test?/ आपके अंतिम एच आईवी जाँच का परिणाम क्या था?

1. Positive/ पॉजिटिव 2. Negative/ निगेटिव 3. Did not collect the test result / जाँच का परिणाम नहीं लिया  
4. No Response / कोई जवाब नहीं 99. Not Applicable (For never tested) / लागु नहीं होता (जिन्होंने एचआईवी जाँच कभी नहीं करायी है)

13. If positive, are you seeking care from any of the following for management of HIV? (Multiple response possible) यदि एचआईवी जाँच का परिणाम पॉजिटिव है, तो क्या आप एचआईवी के उपचार निम्न में से किसी भी जगह से ले रही है? (एक से अधिक प्रतिक्रिया संभव)

1. Government Hospital/ART centres/ सरकारी अस्पताल / ए.आर.टी. केंद्र  
2. Private Facilities (Hospital/ Stand-alone clinic )/ निजी सुविधाएं (अस्पताल / स्टैंड-अलोन क्लिनिक)  
3. NGO Doctor/ एन. जी. ओ. चिकित्सक 4. Pharmacist/chemist / फार्मसिस्ट / दवा की दुकान  
5. Alternative/non-allopathic doctor (Ayurvedic/homoeopathic/ siddha)/ वैकल्पिक/ गैर-एलोपैथिक डॉक्टर (आयुर्वेदिक / होम्योपैथिक / सिद्धा)  
6. Any other type of doctor/ अन्य प्रकार के चिकित्सक 7. Not seeing care for HIV Management/एचआईवी के उपचार नहीं ले रहे  
99. Not Applicable (For all who were either never tested or not positive when last tested for HIV)/ लागु नहीं होता (जिन्होंने एचआईवी जाँच नहीं करायी थी/ जिनका एचआईवी जाँच का परिणाम पॉजिटिव नहीं था )

14. Are you currently taking antiretroviral medications/HIV tablets?/ क्या आप वर्तमान में एंआरटी दवा /एचआईवी की गोलियां ले रही है?

1. Yes/हाँ 2. No/ नहीं 99. Not Applicable (For all who were either never tested or not positive when last tested for HIV)/ लागु नहीं होता (जिन्होंने एचआईवी जाँच नहीं करायी थी/ जिनका एचआईवी जाँच का परिणाम पॉजिटिव नहीं था)

Signature/ हस्ताक्षर:

Name/ नाम:

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

Signature/ हस्ताक्षर:

Name/ नाम:

(Sentinel Site in-charge/ सेंटिनेल साइट प्रभारी )

## Annex 4: Bilingual Data form for Surveillance at MSM Sites, HSS 2017

### HSS 2017: DATA FORMS FOR MEN WHO HAVE SEX WITH MEN (MSM)

एच.एस.एस.2017: पुरुषों के साथ यौन सम्बन्ध रखने वाले पुरुषों 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/ सेंटिनल साइट की जानकारी यहाँ लिखें/ छापें/ चिपकाएं]

State/ राज्य: ..... District/जिला: ..... Site /Sub-site Name/ साइट/ सब साइट का नाम: ..... <table style="width: 100%; border: none;"> <tr> <td style="border: 1px solid black; width: 25px; height: 25px;"></td> <td style="border: 1px solid black; width: 25px; height: 25px;"></td> <td style="border: 1px solid black; width: 25px; height: 25px;"></td> <td style="border: 1px solid black; width: 25px; height: 25px;"></td> <td style="border: 1px solid black; width: 25px; height: 25px;"></td> <td style="border: 1px solid black; width: 25px; height: 25px;"></td> <td style="border: 1px solid black; width: 25px; height: 25px;"></td> <td style="border: 1px solid black; width: 25px; height: 25px;"></td> <td style="border: 1px solid black; width: 25px; height: 25px;"></td> <td style="border: 1px solid black; width: 25px; height: 25px;"></td> <td style="border: 1px solid black; width: 25px; height: 25px;"></td> <td style="border: 1px solid black; width: 25px; height: 25px;"></td> </tr> <tr> <td style="text-align: center; font-size: small;">(Site Code)</td> <td colspan="2" style="text-align: center; font-size: small;">(Sub-Site No)</td> <td colspan="2" style="text-align: center; font-size: small;">(Sample No)</td> <td colspan="6" style="text-align: center; font-size: small;">(Date-DD/MM/YY)</td> </tr> </table>													(Site Code)	(Sub-Site No)		(Sample No)		(Date-DD/MM/YY)						
(Site Code)	(Sub-Site No)		(Sample No)		(Date-DD/MM/YY)																			

1. Age in completed years / आयु (सम्पूर्ण वर्षों में) □ □

2. Literacy Status/ साक्षरता स्थिति

1. Illiterate/ निरक्षर	2. Literate and till 5 <sup>th</sup> Standard / साक्षर और पांचवीं तक	3. 6 <sup>th</sup> to 10 <sup>th</sup> Standard छठी से दसवीं तक
4. 11 <sup>th</sup> to graduation/ ग्यारहवीं से स्नातक	5. Post-Graduation/ स्नातकोत्तर	

3. Reason for coming to the service point/ सेवा केंद्र में आने की वजह

1. Collect Condoms/ कंडोम लेने	2. STD Treatment/ एसटीडी उपचार हेतु	3. Other medical care/ अन्य चिकित्सा हेतु
4. Others, Specify/ अन्य निर्दिष्ट करें.....	5. Randomly Selected/ बेतरतीब ढंग से चुने गये	

4. Current Place of Residence/ वर्तमान निवास स्थान

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

5. 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/Semi-skilled worker/ कुशल/अर्ध कुशल 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, hand cart pullers, rickshaw pullers etc) स्थानीय परिवहन कर्मचारी (ऑटो/ टैक्सी चालक, ठेलेवाले, रीक्शावाले)
11. Hotel staff/ होटल कर्मचारी	12. Agricultural cultivator/landholder/ कृषक/ जमींदार
13. Unemployed/ बेरोजगार	

6. Type of MSM/ एम.एस.एम के प्रकार

1. Kothi/कोठी	2. Panthi/ पंथी	3. Double Decker/ डबल डेकर	4. No Response/ कोई जवाब नहीं
---------------	-----------------	----------------------------	-------------------------------

7. Did you have sexual intercourse with any female partner in last 6 months? / क्या आपने पिछले 6 महीनों में किसी महिला के साथ यौन संबंध बनाया है?

1. Yes/ हाँ      2. No/ नहीं

8. How long ago, did you have last sex with a man? / आखिरी बार कितने समय पहले आपने किसी पुरुष के साथ यौन संबंध बनाया?

□ □	Days/ दिन	□ □	Months/ महीने
-----	-----------	-----	---------------

9. In the last one month, had you received or paid money (or payment in kind) for having sex with a man?/ पिछले एक महीने में आप ने क्या किसी दूसरे मर्द के साथ यौन संबंध के लिए पैसे/ उपहार लिए/ दिए हैं?  
 1. Yes, Received Money/ हाँ पैसे/ उपहार लिए हैं 2. Yes, Paid Money /हाँ पैसे/ उपहार दिए हैं 3. Both/दोनों 4. No/नहीं

10. Did you inject yourself with any drug without prescription, for pleasure, in the last 12 months?/ क्या आपने पिछले 12 महीनों में, केवल मजे के लिए, कभी भी सुई द्वारा नशीली दवाओं (जो डॉक्टर ने नहीं दी) का सेवन किया?  
 1. Yes/ हाँ 2. No/ नहीं

11. Have you ever been tested for HIV?/ क्या आपने कभी भी एचआईवी जाँच करायी है?  
 1. Yes/ हाँ 2. No/ नहीं

12. What was the result of your last HIV test?/ आपके अंतिम एचआईवी जाँच का परीणाम क्या था?  
 1. Positive/पॉजिटिव 2. Negative/ निगेटिव 3. Did not collect the test result / जाँच का परीणाम नहीं लिया  
 4. No Response / कोई जवाब नहीं 99. Not Applicable (For never tested) लागू नहीं होता (जिन्होंने कभी एचआईवी जाँच कभी नहीं करायी है)

13. If positive, are you seeking care from any of the following for management of HIV? (Multiple response possible) यदी एचआईवी जाँच का परीणाम पॉजिटिव है, तो क्या आप एचआईवी के उपचार निम्न में से किसी भी जगह से ले रहे हैं? (एक से अधिक प्रतिक्रिया संभव)  
 1. Government Hospital/ART centres/ सरकारी अस्पताल / ए.आर.टी. केंद्र  
 2. Private Facilities (Hospital/ Stand-alone clinic)/ निजी सुविधाएं (अस्पताल / स्टैंड-अलोन क्लिनिक)  
 3. NGO Doctor/ एन. जी. ओ. चिकित्सक 4. Pharmacist/chemist/ फार्मिसिस्ट/ दवा की दुकान  
 5. Alternative/non-allopathic doctor (Ayurvedic/homoeopathic/ siddha)/ वैकल्पिक/ गैर-एलोपैथिक डॉक्टर (आयुर्वेदिक / होम्योपैथिक / सिद्धा)  
 6. Any other type of doctor/ अन्य प्रकार के चिकित्सक 7. Not seeing care for HIV Management/एचआईवी के उपचार नहीं ले रहे  
 99. Not Applicable (For all who were either never tested or not positive when last tested for HIV)/ लागू नहीं होता (जिन्होंने एचआईवी जाँच नहीं करायी थी/ जिनका एचआईवी जाँच का परीणाम पॉजिटिव नहीं था)

14. Are you currently taking antiretroviral medications/HIV tablets?/ क्या आप वर्तमान में एआरटी दवा /एचआईवी की गोतियां ले रहे हैं?  
 1. Yes/ हाँ 2. No/ नहीं 99. Not Applicable (For all who were either never tested or not positive when last tested for HIV)/ लागू नहीं होता (जिन्होंने एचआईवी जाँच नहीं करायी थी/ जिनका एचआईवी जाँच का परीणाम पॉजिटिव नहीं था)

Signature/ हस्ताक्षर:

Name/ नाम:

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

Signature/ हस्ताक्षर:

Name/ नाम:

(Sentinel Site in-charge/ सेंटिनेल साइट प्रभारी)

## Annex 5: Bilingual Data form for Surveillance at IDU Sites, HSS 2017

### HSS 2017: DATA FORMS FOR Injecting Drug Users (IDU)

एच.एस.एस.2017: सुई द्वारा नशीली दवा लेने वालों के लिए 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/ सैंटिनल साइट की जानकारी यहाँ लिखें/ छापीं/ चिपकाएं]

State/ राज्य: ..... District/जिला: ..... Site /Sub-site Name/ साइट/ सब साइट का नाम: ..... <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div> <div style="display: flex; justify-content: space-around; font-size: small;"> <span>(Site Code)</span> <span>(Sub-Site No)</span> <span>(Sample No)</span> <span>(Date-DD/MM/YY)</span> </div>	
--	--

<b>1. Age in completed years / आयु (सम्पूर्ण वर्षों में)</b>		
--	--	--

<b>2. Sex / लिंग</b>		
1. Male/ पुरुष	2. Female/ स्त्री	3. Hijra/Transgender/ हिजड़ा/किन्नर

<b>3. Marital Status/ वैवाहिक स्थिति</b>		
1. Never Married/ अविवाहित अलग/विधवा	2. Married / विवाहित	3. Divorced/separated/widowed/ तलाकशुदा/

<b>4. Literacy Status/साक्षरता स्थिति</b>		
1. Illiterate/निरक्षर	2. Literate and till 5 <sup>th</sup> Standard /साक्षर और पांचवीं तक	3. 6 <sup>th</sup> to 10 <sup>th</sup> Standard छठी से दसवीं तक
4. 11 <sup>th</sup> to graduation/ग्यारहवीं से स्नातक	5. Post-Graduation/ स्नातकोत्तर	

<b>5. Reason for coming to the service point/ सेवा केंद्र में आने की वजह</b>		
1. Collect Condoms/कंडोम लेने	2. STD Treatment/एसटीडी उपचार हेतु	3. Other medical care /अन्य चिकित्सा हेतु
4. Collect needles & syringes/सुई लेने	5. Opioid Substitution Therapy (OST)/ ओपियाड प्रतिस्थापन चिकित्सा के लिए	
6. Others, Specify अन्य (निर्दिष्ट करें.....)	7. Randomly Selected// बेतरतीब ढंग से चुने गये	

<b>6. Current Place of Residence/ वर्तमान निवास स्थान</b>	
1. Urban (Municipal Corporation/Council/Cantonment) शहरी (नगरपालिका/निगम/छावनी)	2. Rural/ ग्रामीण

<b>7. Current Occupation of the Respondent/ प्रतिवादी का वर्तमान व्यवसाय</b>	
1. Agricultural Labourer/कृषि श्रमिक	2. Non-Agricultural Labourer/ गैर कृषि श्रमिक
3. Domestic Servant/ घरेलू नौकर	4. Skilled/Semi-skilled worker/कुशल/अर्ध कुशल 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, hand cart pullers, rickshaw pullers etc)/ स्थानीय परिवहन कर्मचारी (ऑटो/टैक्सी चालक, ठेलेवाले, रीकशवाले)
11. Hotel staff/ होटल कर्मचारी	12. Agricultural cultivator/landholder/कृषक/ जमींदार
13. Unemployed/ बेरोज़गार	

<b>8. What is the duration for which you are injecting drugs?/ कितने समय से आप नशीली दवा सुई के द्वारा ले रहे हैं?</b>		
1. <6 months/ 6 महीने से कम	2. 6 months to 1 year/6 महीनों से 1 साल	3. 1-3 years/ 1 से 3 साल
4. 3-5 years/3 से 5 साल	5. >5 year/5 साल से ज्यादा	

**9. How frequently do you inject drugs?/ आमतौर पर, कितने बार आप नशीली दवाएं सुई के द्वारा लेते हैं?**  
**1. Once a week or less/साप्ताहिक या उससे भी कम** **2. Twice a week/हफ्ते में दो बार**  
**3. Thrice a week/हफ्ते में तीन बार** **4. More than thrice a week/हफ्ते में तीन बार से ज्यादा**

**10. Have you ever been tested for HIV?/ क्या आपने कभी भी एचआईवी जाँच करायी है?**  
**1. Yes/ हाँ** **2. No/ नहीं**

**11. What was the result of your last HIV test?/ आपका अंतिम एचआईवी जाँच का परीणाम क्या था?**  
**1. Positive/पॉजिटिव** **2. Negative/ निगेटिव** **3. Did not collect the test result / जाँच का परीणाम नहीं लिया**  
**4. No Response / कोई जवाब नहीं** **99. Not Applicable (For never tested) लागु नहीं होता (जिन्होंने कभी एचआईवी जाँच कभी नहीं करायी है)**

**12. If positive, are you seeking care from any of the following for management of HIV? (Multiple response possible) यदी एचआईवी जाँच का परीणाम पॉजिटिव हैं, तो क्या आप एचआईवी के उपचार निम्न में से किसी भी जगह से ले रहे/रही है? (एक से अधिक प्रतिक्रिया संभव)**  
**1. Government Hospital/ART centres/ सरकारी अस्पताल / ए.आर.टी. केंद्र**  
**2. Private Facilities (Hospital/ Stand-alone clinic)/ निजी सुविधाएं (अस्पताल / स्टैंड-अलोन क्लिनिक)**  
**3. NGO Doctor/ एन. जी. ओ. चिकित्सक** **4. Pharmacist/chemist/ फार्मिसिस्ट / दवा की दुकान**  
**5. Alternative/non-allopathic doctor (Ayurvedic/homoeopathic/ siddha)/ वैकल्पिक / गैर-एलोपैथिक डॉक्टर (आयुर्वेदिक / होम्योपैथिक / सिद्धा)**  
**6. Any other type of doctor/ अन्य प्रकार के चिकित्सक** **7. Not seeing care for HIV Management/एचआईवी के उपचार नहीं ले रहे**  
**99. Not Applicable (For all who were either never tested or not positive when last tested for HIV)/ लागु नहीं होता (जिन्होंने एचआईवी जाँच नहीं करायी थी/ जिनका एचआईवी जाँच का परीणाम पॉजिटिव नहीं था )**

**13. Are you currently taking antiretroviral medications/HIV tablets?/ क्या आप वर्तमान में एआरटी दवा /एचआईवी की गोतियां ले रहे है?**  
**1. Yes/ हाँ** **2. No/ नहीं** **99. Not Applicable (For all who were either never tested or not positive when last tested for HIV)/ लागु नहीं होता (जिन्होंने एचआईवी जाँच नहीं कराये थे/ जिनका एचआईवी जाँच का परीणाम पॉजिटिव नहीं था/ आज सहमति दी है )**

Signature/ हस्ताक्षर:  
 Name/ नाम:  
 (Person who filled the form/ व्यक्ति जिसके द्वारा फार्म भरा गया)

Signature/ हस्ताक्षर:  
 Name/ नाम:  
 (Sentinel Site in-charge/ सेंटिनेल साइट प्रभारी)



## Annex 6: Bilingual Data form for Surveillance at H/TG Sites, HSS 2017

### HSS 2017: DATA FORMS FOR HIJRA/TRANSGENDER (H/TG)

एच. एस. एस. 2017: हिजड़ा/ किन्नर 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/ सेंटिनल साइट की जानकारी यहाँ लिखें/ छापें/ चिपकाएं]

State/ राज्य: ..... District/जिला: ..... Site /Sub-site Name/ साइट/ सब साइट का नाम: ..... <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="border: 1px solid black; width: 30px; height: 20px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; margin-bottom: 2px;"></div> </div> <div style="display: flex; justify-content: space-between; margin-top: 2px;"> <span>(Site Code)</span> <span>(Sub-Site No)</span> <span>(Sample No)</span> <span>(Date-DD/MM/YY)</span> </div>	
--	--

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

**2. Literacy Status/साक्षरता स्थिति**

**1.** Illiterate/निरक्षर      **2.** Literate and till 5<sup>th</sup> Standard /साक्षर और पांचवीं तक      **3.** 6<sup>th</sup> to 10<sup>th</sup> Standard छठी से दसवीं तक

**4.** 11<sup>th</sup> to graduation/ग्यारहवीं से स्नातक      **5.** Post-Graduation/ स्नातकोत्तर

**3. Reason for coming to the service point/सेवा केंद्र में आने की वजह**

**1.** Collect Condoms/कंडोम लेने      **2.** STD Treatment/एसटीडी उपचार हेतु      **3.** Other medical care/अन्य चिकित्सा हेतु

**4.** Others, Specify/ अन्य (निर्दिष्ट करें.....)      **5.** Randomly Selected/ बेतरतीब ढंग से चुने गये

**4. Place of original Residence/ मूल निवास स्थान**

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

**5. 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/Semi-skilled worker/कुशल/अर्ध कुशल 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, hand cart pullers, rickshaw pullers etc)/ स्थानीय परिवहन कर्मचारी(ऑटो) टैक्सी चालक, ठेलेवाले, रीक्शेवाले

**11.** Hotel staff/ होटल कर्मचारी      **12.** Agricultural cultivator/landholder/कृषक/ जमींदार

**13.** Unemployed/ बेरोजगार

**6. Have you received money or payment in kind for sex in the last 12 months?/ पिछले बारह महीने में आप ने क्या यौन संबंध के लिए पैसे/ उपहार लिए हैं?**

**1.** Yes/ हाँ      **2.** No/नहीं      **3.** No Response/ कोई जवाब नहीं

**7. Did you inject yourself with any drug without prescription, for pleasure in the last 12 months? / क्या आपने पिछले 12 महीनों में, केवल मजे के लिए, कमी सुई द्वारा नशीली दवाओं (जो डॉक्टर ने नहीं दी) का सेवन किया?**

**1.** Yes/ हाँ      **2.** No/ नहीं

**8. Have you ever been tested for HIV?/ क्या आपने कभी भी एचआईवी जांच करायी है?**

**1.** Yes/ हाँ      **2.** No/ नहीं

9. What was the result of your last HIV test?/ आपके अंतिम एचआईवी जाँच का परीणाम क्या था?

1. Positive/ पॉजिटिव      2. Negative/ निगेटिव      3. Did not collect the test result / जाँच का परीणाम नहीं लिया  
4. No Response / कोई जवाब नहीं      99. Not Applicable (For never tested) लागु नहीं होता (जिन्होंने कभी एचआईवी जाँच कभी नहीं करायी है)

10. If positive, are you seeking care from any of the following for management of HIV? (Multiple response possible) यदि एचआईवी जाँच का परीणाम पॉजिटिव है, तो क्या आप एचआईवी के उपचार निम्न में से किसी भी जगह से ले रहे हैं? (एक से अधिक प्रतिक्रिया संभव)

1. Government Hospital/ART centres/ सरकारी अस्पताल / ए.आर.टी. केंद्र  
2. Private Facilities (Hospital/ Stand-alone clinic)/ निजी सुविधाएं (अस्पताल / स्टैंड-अलोन क्लिनिक)  
3. NGO Doctor/ एन. जी. ओ. चिकित्सक      4. Pharmacist/chemist/ फार्मसिस्ट / दवा की दुकान  
5. Alternative/non-allopathic doctor (Ayurvedic/homoeopathic/ siddha)/ वैकल्पिक / गैर-एलोपैथिक डॉक्टर (आयुर्वेदिक / होम्योपैथिक / सिद्धा)  
6. Any other type of doctor/ अन्य प्रकार के चिकित्सक      7. Not seeing care for HIV Management/एचआईवी के उपचार नहीं ले रहे  
99. Not Applicable (For all who were either never tested or not positive when last tested for HIV)/ लागु नहीं होता (जिन्होंने एचआईवी जाँच नहीं करायी थी/ जिनका एचआईवी जाँच का परीणाम पॉजिटिव नहीं था )

11. Are you currently taking antiretroviral medications/HIV tablets?/ क्या आप वर्तमान में ऐआरटी दवा /एचआईवी की गोलियां ले रहे हैं?

1. Yes/हाँ      2. No/ नहीं  
99. Not Applicable (For all who were either never tested or not positive when last tested for HIV)/ लागु नहीं होता (जिन्होंने एचआईवी जाँच नहीं करायी थी/ जिनका एचआईवी जाँच का परीणाम पॉजिटिव नहीं था )

Signature/ हस्ताक्षर:

Name/ नाम:

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

Signature/ हस्ताक्षर:

Name/ नाम:

(Sentinel Site in-charge/ सेंटिनेल साइट प्रभारी)

## Annex 7: Bilingual Data form for Surveillance at SMM Sites, HSS 2017

### HSS 2017: DATA FORMS FOR SINGLE MALE MIGRANTS (SMM)

एच.एस.एस.2017: एकल प्रवासी पुरुषों 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/ सेंटिनल साइट की जानकारी यहाँ लिखें/ छापें/ चिपकाएं]

State/ राज्य: ..... District/जिला: ..... Site /Sub-site Name/ साइट/ सब साइट का नाम: ..... <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div> <div style="display: flex; justify-content: space-around; font-size: small;"> <span>(Site Code)</span> <span>(Sub-Site No)</span> <span>(Sample No)</span> <span>(Date-DD/MM/YY)</span> </div>	
--	--

1. Age in completed years / आयु (सम्पूर्ण वर्षों में)

2. Marital Status/ वैवाहिक स्थिति

1. Never Married/ अविवाहित      2. Married / विवाहित      3. Divorced/separated/widower/ तलाकशुदा/अलग/विधुर

3. Literacy Status/ साक्षरता स्थिति

1. Illiterate/निरक्षर      2. Literate and till 5<sup>th</sup> Standard/ साक्षर और पांचवीं तक      3. 6<sup>th</sup> to 10<sup>th</sup> Standard छठी से दसवीं तक  
 4. 11<sup>th</sup> to graduation/ ग्यारहवीं से स्नातक      5. Post-Graduation/ स्नातकोत्तर

4. Reason for coming to the service point/ सेवा केंद्र में आने की वजह

1. Collect Condoms/कंडोम लेने      2. STD Treatment/एसटीडी उपचार हेतु      3. Other medical care/अन्य चिकित्सा हेतु  
 4. Others, Specify/ अन्य (निर्दिष्ट करें.....)      5. Randomly Selected/ बेतरतीब ढंग से चुने गये

5. Since how long you have migrated to the current place? वर्तमान निवास स्थान में आपका ठहरने की अवधि

Years/वर्ष        months/महीने

Q. Nos. 6,7 & 8- Enquire about the place of original residence of the respondent/ प्रश्न 6, 7, 8 - प्रतिवादी का मूलभूत प्रवास स्थान की जानकारी पूछें

6. What is the State of your original residence?/ आप मूलभूत रूप से किस राज्य से हैं? .....

7. What is the District of your original residence? आप मूलभूत रूप से किस जिले से हैं? .....

8. Place of original Residence/ मूलभूत रूप से किस क्षेत्र से हैं?

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

9. 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/Semi-skilled worker/कुशल/अर्ध कुशल 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, hand cart pullers, rickshaw pullers etc)/ स्थानीय परिवहन कर्मचारी (ऑटो/टैक्सी चालक, ठेलेवाले, रीक्शावाले)  
 11. Hotel staff/ होटल कर्मचारी      12. Agricultural cultivator/landholder/कृषक/ जमींदार  
 13. Unemployed/ बेरोजगार

**10. Did you have sex with a female (other than your wife) in last 6 months? पिछले 6 महीनों में क्या आपने (अपनी पत्नी के अलावा) किसी महिला के साथ यौन सम्बन्ध बनाये हैं?**

1. Yes & paid money/ gifts for sex /हाँ, पैसे/उपहार देकर      2. Yes & not paid money/ gifts for sex/हाँ, बिना पैसे/उपहार देकर  
3. Both/दोनों      4. No/ नहीं

**11. Did you have sex with another Man in the last 6 months? पिछले 6 महीनों में क्या आपने किसी दूसरे मर्द के साथ यौन सम्बन्ध बनाये हैं?**

1. Yes and he paid money/ gift for sex /हाँ, पैसे/उपहार देकर      2. Yes & he received money/payment in kind for sex/हाँ, पैसे/उपहार लेकर      3. Yes & without exchange of money/ gifts /हाँ बिना किसी लेन-देन के      4. No/ नहीं

**12. Did you inject yourself with any drug without prescription, for pleasure in the last 12 months? क्या आपने पिछले 12 महीनों में, केवल मजे के लिए, कभी भी सुई द्वारा नशीली दवाओं (जो डॉक्टर ने नहीं दी) का सेवन किया?**

1. Yes/ हाँ      2. No/ नहीं

**13. Have you ever been tested for HIV? क्या आपने कभी भी एचआईवी जाँच कराएँ हैं?**

1. Yes/ हाँ      2. No/ नहीं

**14. What was the result of your last HIV test? आपके अंतिम एचआईवी जाँच का परिणाम क्या था?**

1. Positive/पॉजिटिव      2. Negative/निगेटिव      3. Did not collect the test result /जाँच का परिणाम नहीं लिया  
4. No Response /कोई जवाब नहीं      99. Not Applicable (For never tested) लागू नहीं होता (जिन्होंने कभी एचआईवी जाँच कभी नहीं करायी है)

**15. If positive, are you seeking care from any of the following for management of HIV? (Multiple response possible) यदि एचआईवी जाँच का परिणाम पॉजिटिव है, तो आप एचआईवी के उपचार निम्न में से कौन सी जगह से ले रहे हैं? (एक से अधिक प्रतिक्रिया संभव)**

1. Government Hospital/ART centres/ सरकारी अस्पताल / ए.आर.टी. केंद्र  
2. Private Facilities (Hospital/ Stand-alone clinic)/ निजी सुविधाएँ (अस्पताल / स्टैंड-अलोन क्लिनिक)  
3. NGO Doctor/ एन. जी. ओ. चिकित्सक      4. Pharmacist/chemist/ फार्मसिस्ट / दवा की दुकान  
5. Alternative/non-allopathic doctor (Ayurvedic/homoeopathic/ siddha)/ वैकल्पिक / गैर-एलोपैथिक डॉक्टर (आयुर्वेदिक / होम्योपैथिक / सिद्धा)  
6. Any other type of doctor/ अन्य प्रकार के चिकित्सक      7. Not seeing care for HIV Management/एचआईवी के उपचार नहीं ले रहे  
99. Not Applicable (For all who were either never tested or not positive when last tested for HIV)/ लागू नहीं होता (जिन्होंने एचआईवी जाँच नहीं करायी थी/ जिनका एचआईवी जाँच का परिणाम पॉजिटिव नहीं था )

**16. Are you currently taking antiretroviral medications/HIV tablets? क्या आप वर्तमान में एआरटी दवा/एचआईवी की गोलियाँ ले रहे हैं?**

1. Yes/ हाँ      2. No/ नहीं      99. Not Applicable (For all who were either never tested or not positive when last tested for HIV)/ लागू नहीं होता (जिन्होंने एचआईवी जाँच नहीं करायी थी/ जिनका एचआईवी जाँच का परिणाम पॉजिटिव नहीं था)

Signature/ हस्ताक्षर:

Name/ नाम:

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

Signature/ हस्ताक्षर:

Name/ नाम:

(Sentinel Site in-charge/ सेंटिनेल साइट प्रभारी)

## Annex 8: Bilingual Data form for Surveillance at LDT Sites, HSS 2017

### HSS 2017: DATA FORMS FOR LONG DISTANCE TRUCKERS (LDT)

एच.एस.एस.2017: लंबी दूरी के ट्रक चालकों 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// सेंटिनल साइट की जानकारी यहाँ लिखें/ छापें/ चिपकाएं]

State/ राज्य: ..... District/जिला: ..... Site /Sub-site Name/ साइट/ सब साइट का नाम: .....																																										
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> </tr> <tr> <td style="text-align: center; font-size: small;">(Site Code)</td> <td></td> <td style="text-align: center; font-size: small;">(Sub-Site No)</td> <td></td> <td style="text-align: center; font-size: small;">(Sample No)</td> <td></td> <td style="text-align: center; font-size: small;">(Date-DD/MM/YY)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>																					(Site Code)		(Sub-Site No)		(Sample No)		(Date-DD/MM/YY)															
(Site Code)		(Sub-Site No)		(Sample No)		(Date-DD/MM/YY)																																				

1. Age in completed years/ आयु (सम्पूर्ण वर्षों में)

2. Marital Status/ वैवाहिक स्थिति

1. Never Married/ अविवाहित                      2. Married / विवाहित                      3. Divorced/separated/widower/  
तलाकशुदा/अलग/विधुर

3. Literacy Status/ साक्षरता स्थिति

1. Illiterate/निरक्षर                      2. Literate and till 5<sup>th</sup> Standard /साक्षर और पांचवीं तक                      3. 6<sup>th</sup> to 10<sup>th</sup> Standard छठी से दसवीं तक  
4. 11<sup>th</sup> to graduation/ग्यारहवीं से स्नातक                      5. Post-Graduation/ स्नातकोत्तर

4. Reason for coming to the service point/सेवा केंद्र में आने की वजह

1. Collect Condoms/कंडोम लेने                      2. STD Treatment/एसटीडी उपचार हेतु                      3. Other medical care/अन्य चिकित्सा हेतु  
4. Others, Specify/ अन्य (निर्दिष्ट करें..... )                      5. Randomly Selected/ बेतरतीब ढंग से चुने गये

5. Current Place of Residence/ वर्तमान निवास स्थान

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

6. On an average how many days in a month do you spend at home with family? महीने में लगभग कितने दिन आप परिवार के साथ समय बिताते हैं? .....Days/दिन

7. Did you have sex with a female (other than your wife) in last 6 months? पिछले 6 महीनों में क्या आपने (अपनी पत्नी के अलावा) किसी महिला के साथ यौन सम्बन्ध बनाये हैं?

1. Yes & paid money/ gifts for sex /हाँ, पैसे/उपहार देकर                      2. Yes & not paid money/ gifts for sex/हाँ, बिना पैसे/उपहार देकर  
3. Both/दोनों                      4. No/ नहीं

8. Did you have sex with another Man in the last 6 months? [Multiple response possible]/ पिछले 6 महीनों में क्या आपने किसी दूसरे मर्द के साथ यौन सम्बन्ध बनाये हैं? [एक से अधिक प्रतिक्रिया संभव]

1. Yes and he paid money/ gifts for sex /हाँ, पैसे/उपहार देकर                      2. Yes & he received money/payment in kind for sex/हाँ, पैसे/उपहार लेकर                      3. Yes & without exchange of money/ gifts /हाँ बिना किसी लेन-देन के                      4. No/ नहीं

9. Did you inject yourself with any drug without prescription, for pleasure in the last 12 months? क्या आपने पिछले 12 महीनों में, केवल मजे के लिए, कभी भी सुई द्वारा नशीली दवाओं (जो डॉक्टर ने नहीं दी) का सेवन किया?

1. Yes/ हाँ                      2. No/ नहीं

10. Have you ever been tested for HIV?/ क्या आपने कभी भी एचआईवी जाँच कराए हैं?

1. Yes/हाँ 2. No/ नहीं

11. What was the result of your last HIV test? / आपके अंतिम एचआईवी जाँच का परीणाम क्या था?

1. Positive/पॉजिटिव 2. Negative/निगेटिव 3. Did not collect the test result / जाँच का परीणाम नहीं लिया  
4. No Response / कोई जवाब नहीं 99. Not Applicable (For never tested) लागु नहीं होता (जिन्होंने कभी एचआईवी जाँच कभी नहीं करायी है)

12. If positive, are you seeking care from any of the following for management of HIV? (Multiple response possible) यदि एचआईवी जाँच का परीणाम पॉजिटिव है, तो आप एचआईवी के उपचार निम्न में से कौन सी जगह से ले रहे हैं? (एक से अधिक प्रतिक्रिया संभव)

1. Government Hospital/ART centres/ सरकारी अस्पताल / ए.आर.टी. केंद्र  
2. Private Facilities (Hospital/ Stand-alone clinic)/ निजी सुविधाएं (अस्पताल / स्टैंड-अलोन क्लिनिक)  
3. NGO Doctor/ एन. जी. ओ. चिकित्सक 4. Pharmacist/chemist/ फार्मसिस्ट / दवा की दुकान  
5. Alternative/non-allopathic doctor (Ayurvedic/homoeopathic/ siddha)/ वैकल्पिक / गैर-एलोपैथिक डॉक्टर (आयुर्वेदिक / होम्योपैथिक / सिद्धा)  
6. Any other type of doctor/ अन्य प्रकार के चिकित्सक 7. Not seeing care for HIV Management/एचआईवी के उपचार नहीं ले रहे  
99. Not Applicable (For all who were either never tested or not positive when last tested for HIV)/ लागु नहीं होता (जिन्होंने एचआईवी जाँच नहीं करायी थी/ जिनका एचआईवी जाँच का परीणाम पॉजिटिव नहीं था )

13. Are you currently taking antiretroviral medications/HIV tablets?/ क्या आप वर्तमान में ऐआरटी दवा / एचआईवी की गोलियां ले रहे हैं?

1. Yes/हाँ 2. No/ नहीं 99. Not Applicable (For all who were either never tested or not positive when last tested for HIV)/ लागु नहीं होता (जिन्होंने एचआईवी जाँच नहीं करायी थी/ जिनका एचआईवी जाँच का परीणाम पॉजिटिव नहीं था )

Signature/ हस्ताक्षर:

Name/ नाम:

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

Signature/ हस्ताक्षर:

Name/ नाम:

(Sentinel Site in- charge/ सेंटिनेल साइट प्रभारी)

## Annex 9: Consent Form, HRG & Bridge Population HSS 2017

### एच.एस.एस.2017 - प्रतिवादी से सहमति / अनुमति प्रपत्र

(एच.एस.एस.2017 में भाग लेने योग्य प्रतिवादी, जिनकी आयु 15 से 49 वर्ष के बीच हों, उनके लिए सहमति / अनुमति प्रपत्र)

इस प्रपत्र में आपको रक्त के नमूने एकत्रित करने और उसके संग्रह करने की विधि के बारे में बताया गया है। यदि आप निम्नलिखित जानकारी पढ़ने-समझने के बाद रक्त का नमूना देने के लिए इच्छुक हैं, तो आप प्रपत्र के अंत में हस्ताक्षर कर दें या अंगूठे का निशान लगाएं। यदि इस बारे में आपके कुछ प्रश्न-संदेह हैं, तो आप अपनी सहमति/अनुमति देने से पहले हमसे पूछ सकते हैं।

भारत में राष्ट्रीय एड्स नियंत्रण संगठन (नाको) एचआईवी नियंत्रण के लिए केंद्रीय नोडल एजेंसी है, जो कि विभिन्न जन समूहों के बीच एचआईवी रोग के प्रसार का पता लगाने के लिए द्वि-वार्षिक एचआईवी सर्वेक्षण संचालित करती है। नाको को इस सर्वेक्षण के परिणाम से भारत के विभिन्न समुदायों, क्षेत्रों एवं स्थानों में एचआईवी/एड्स रोकथाम के लिए पर्याप्त कार्यक्रम विकसित करने में सहायता मिलेगी। हमारे क्षेत्र से कुल 250 लोगों का चयन किया जाएगा, जो कि इस क्षेत्र का प्रतिनिधित्व करेंगे; उनमें से एक आपको भी इस सर्वेक्षण के लिए चुना गया है। यदि आप इस सर्वेक्षण में भाग लेने के लिए सहमत हैं, तो आपसे उंगली में चुभन के माध्यम से रक्त की कुछ बूँदें एक फिल्टर पेपर पर एकत्र की जाएगी तथा एचआईवी एवं अन्य संबंधित परीक्षण के लिए प्रयोगशाला में भेजा जाएगा। इसके लिये हम एकल प्रयोग (डिस्पोनेबल) उपकरणों का उपयोग करेंगे जो कि इस प्रक्रिया के लिए पूरी तरह से स्वच्छ व सुरक्षित हैं। आप चाहें तो, रक्त नमूना लेने के लिए उपयोग किए जाने वाले उपकरणों को देख सकते हैं।

रक्त नमूने के साथ आपका नाम या पता दर्ज नहीं किया जाएगा। यह परीक्षण यहाँ नहीं किया जाएगा। आपकी जाँच के परिणाम को गोपनीय रखा जायेगा। चूंकि हमारे सर्वेक्षण और परीक्षण प्रक्रिया का उद्देश्य व्यक्ति विशेष में एचआईवी का पता लगाना नहीं है, इसलिए हम आपके एचआईवी परीक्षण के परिणाम नहीं बता सकते हैं। हालांकि, यदि आप अपने रक्त में एचआईवी की जांच करना चाहते हैं, तो हम आपको नज़दीकी आईसीटीसी में मुफ्त एचआईवी परामर्श एवं परीक्षण लेने के लिए रेफरल पथी दे सकते हैं। यदि इस निगरानी सर्वेक्षण के तहत किसी प्रतिवादी के रक्त नमूने का परिणाम एचआईवी के लिए प्रतिक्रियात्मक होगा, तो हमारे कार्यक्रम के धिकित्सक और परामर्शदाता गोपनीय तरीके से पूर्णतः मुक्त एचआईवी परामर्श और परीक्षण देने के लिए उन तक पहुंच सकते हैं।

हम आपसे कुछ प्रश्न पूछेंगे, जो कुछ लोगों के लिए इसका जवाब देना मुश्किल होता है। लेकिन हमारा आपसे निवेदन है कि आप बिना किसी झिझक के जवाब दें, क्योंकि आपके द्वारा दी गई जानकारी को गोपनीय रखा जाएगा। यदि आप किसी प्रश्न का जवाब नहीं देना चाहते हैं, तो आप को जवाब देने की जरूरत नहीं है। हालांकि, हमें आपके द्वारा इमानदारीपूर्वक दिये गये जवाब से एचआईवी के जोखिम वाले कारकों को समझने में मदद मिलेगी।

मुझे आशा है कि आप इस सर्वेक्षण में भाग लेंगे। हालांकि इससे आपको कोई प्रत्यक्ष लाभ नहीं होगा; आपकी भागीदारी एवं इस सर्वेक्षण के परिणाम का उपयोग भारत के विभिन्न समुदायों, क्षेत्रों एवं स्थानों में एचआईवी/एड्स रोग की रोकथाम के लिए पर्याप्त कार्यक्रम के विकास में सहायता मिलेगी। आपका इस निगरानी में भाग लेने या न लेने से आपके द्वारा लेने वाले लक्षित हस्तक्षेप परियोजना के तहत सेवाओं के प्रावधान को प्रभावित नहीं करेगा।

क्या आपका कोई सवाल है?

मैं, \_\_\_\_\_, आयु-\_\_\_\_\_ वर्ष, एचआईवी परीक्षण के लिए स्वेच्छा से अपना रक्त देने के लिए तैयार हूँ। मुझे पता है कि इस सर्वेक्षण में मेरी एचआईवी जांच का परिणाम मुझे नहीं बताया जा सकता है। मुझे यह भी पता है कि इस डेटा का पूर्ण गोपनीयता के साथ राष्ट्रीय एड्स नियंत्रण कार्यक्रम के लिए इस्तेमाल किया जाएगा।

हस्ताक्षर / अंगूठे का निशान: \_\_\_\_\_ तारीख: \_\_\_\_\_

( \_\_\_\_\_ के बाईं अंगूठे का निशान है, काउंसिलर का हस्ताक्षर: \_\_\_\_\_ )

गवाह का नाम: \_\_\_\_\_ हस्ताक्षर: \_\_\_\_\_ तारीख: \_\_\_\_\_

काउंसिलर का नाम: \_\_\_\_\_ हस्ताक्षर: \_\_\_\_\_ तारीख: \_\_\_\_\_

(नोट: यदि प्रतिवादी की आयु 15-17 साल है, तो प्रतिवादी से अनुमति के सहित सूचित सहमति प्रतिवादी के माता-पिता / अभिभावक / देखभालकर्ता से लिया जाएगा।)

## Annex 10: Assent Form, HRG & Bridge Population HSS 2017

### एच.एस.एस.2017-अभिभावक से सहमति प्रपत्र

(एच.एस.एस.2017 में भाग लेने योग्य प्रतिवादी, जिनकी आयु 15 से 17 वर्ष के बीच है, उनके माता-पिता / अभिभावक / देखभालकर्ता के लिए सहमति प्रपत्र)

इस प्रपत्र में आपको स्वतः के नमूने एकत्रित करने और उसके संग्रह करने की विधि के बारे में बतचाया गया है। यदि आप निम्नलिखित जानकारी पढ़ने/समझने के बाद आप पर आश्रित नाबालिग प्रतिवादी (बच्चे) का स्वतः का नमूना देने के लिए अनुमति देने के इच्छुक हैं, तो आप प्रपत्र के अंत में हस्ताक्षर कर दें या अंगूठे का निशान लगाएं। यदि इस बारे में आपके कुछ प्रश्न/संदेह हैं, तो आप अपनी सहमति/अनुमति देने से पहले हमसे पूछ सकते हैं।

भारत में राष्ट्रीय एड्स नियंत्रण संगठन (नबसे) एचआईवी नियंत्रण के लिए केंद्रीय जोड़ल एजेंसी है, जो कि विभिन्न उम्र समूहों के बीच एचआईवी रोग के प्रसार का पता लगाने के लिए द्विवार्षिक एचआईवी सर्वेक्षण संचालित करती है। नबसे को इस सर्वेक्षण के परिणाम से भारत के विभिन्न समुदायों, क्षेत्रों एवं स्थानों में एचआईवी/एड्स रोकथाम के लिए पर्याप्त कार्यक्रम विकसित करने में सहायता मिलेगी। हमारे क्षेत्र से कुल 260 लोगों का चयन एचआईवी सर्वेक्षण में किया जाएगा, जो कि इस क्षेत्र का प्रतिनिधित्व करेंगे; उनमें से एक आपके बच्चे (आश्रित नाबालिग प्रतिवादी) को भी चुना गया है। यदि आप इस सर्वेक्षण में अपने बच्चे को भाग लेने के लिए अनुमति देते हैं, तो उनकी उम्र में चयन के माध्यम से स्वतः की कुछ बूँदें एक फिल्टर पेपर पर एकत्र की जाएंगीं तथा एचआईवी एवं अन्य संबंधित परीक्षण के लिए प्रयोगक्षमता में भेजा जाएगा। इसके लिये हम एकल प्रयोग (डिस्पोजेबल) उपकरणों का उपयोग करेंगे जो कि इस प्रक्रिया के लिए पूरी तरह से स्वच्छ व सुरक्षित हैं। आप बच्चे को, स्वतः नमूना लेने के लिए उपयोग किए जाने वाले उपकरणों को देख सकते हैं।

स्वतः नमूने के साथ आपके बच्चे का नाम या पता दर्ज नहीं किया जाएगा। यह परीक्षण चर्चे नहीं किया जाएगा और आपकी जाँच के परिणाम को गोपनीय रखा जायेगा। चूंकि हमारे सर्वेक्षण और परीक्षण प्रक्रिया का उद्देश्य व्यक्ति विशेष ने एचआईवी का पता लगाना नहीं है, इसलिए हम आपके बच्चे के एचआईवी परीक्षण के परिणाम नहीं बता सकते हैं। हालांकि, यदि आप अपने बच्चे के स्वतः में एचआईवी की जाँच करना चाहते हैं, तो हम आपको नजदीकी आईसीटीसी में मुफ्त एचआईवी परामर्श एवं परीक्षण लेने के लिए रेफरल पत्र दे सकते हैं। यदि इस निगरानी सर्वेक्षण के तहत किसी प्रतिवादी के स्वतः नमूने का परिणाम एचआईवी के लिए प्रतिनिध्यात्मक होगा, तो हमारे कार्यक्रम के चिकित्सक और परामर्शदाता गोपनीय तरीके से पूर्णतः मुक्त एचआईवी परामर्श और परीक्षण देने के लिए उन तक पहुंच सकते हैं।

हम आपके बच्चे से कुछ प्रश्न पूछेंगे, जो कुछ लोगों के लिए इसका जवाब देना मुश्किल हो सकता है। आपके बच्चे द्वारा दी गई जानकारी को गोपनीय रखा जाएगा। यदि वह किसी प्रश्न का जवाब नहीं देना चाहता/चाहती है, तो उन्हें वह जवाब देने की जरूरत नहीं है। हालांकि, हमें उनके द्वारा ईमानदारीपूर्वक दिये गये जवाब से एचआईवी के जोखिम वाले कारकों को समझने में मदद मिलेगी।

हमें आशा है कि आप अपने बच्चे को इस सर्वेक्षण में भाग लेने की अनुमति देंगे। हालांकि इससे आपके बच्चे को कोई फायदा लाभ नहीं होगा; उनकी भागीदारी एवं इस सर्वेक्षण के परिणाम का उपयोग भारत के विभिन्न समुदायों, क्षेत्रों एवं स्थानों में एचआईवी/एड्स रोग की रोकथाम के लिए पर्याप्त कार्यक्रम के विकास में सहायता मिलेगी। आपके बच्चे का इस निगरानी में भाग लेने या न लेने से उनके द्वारा लेने वाले लक्षित हस्तक्षेप परियोजना के तहत सेवाओं के प्रावधान को प्रभावित नहीं करेगा।

यदि आपका कोई सवाल है?

मैं, \_\_\_\_\_, आयु: \_\_\_\_\_ वर्ष, \_\_\_\_\_ का माता-पिता / अभिभावक / देखभालकर्ता हूँ, मैं एचआईवी परीक्षण के लिए स्वेच्छ से मैं अपने बच्चे का स्वतः देने के लिए तैयार हूँ। मुझे पता है कि इनकी एचआईवी जाँच का परिणाम हमारे सामने प्रकट नहीं किया जाएगा। मुझे यह भी पता है कि इस डेटा का पूर्ण गोपनीयता के साथ राष्ट्रीय एड्स नियंत्रण कार्यक्रम के लिए इस्तेमाल किया जाएगा।

हस्ताक्षर / अंगूठे का निशान: \_\_\_\_\_ तारीख: \_\_\_\_\_

( \_\_\_\_\_ के बच्चे अंगूठे का निशान है, कउंसेतर का हस्ताक्षर: \_\_\_\_\_ )

गवाह का नाम: \_\_\_\_\_, हस्ताक्षर: \_\_\_\_\_ तारीख: \_\_\_\_\_

कउंसेतर का नाम: \_\_\_\_\_, हस्ताक्षर: \_\_\_\_\_ तारीख: \_\_\_\_\_



## Annex 11: SACS's ANC checklist HSS 2017

S.N	Activity	To be completed by	Status	Remarks
<b>1. Background Activity</b>				
1.1	Filling of DD (MES) if position is vacant			
1.2	Intimation to NACO on DD (MES)-Focal person for HSS 2017			
<b>2. Finalization of ANC surveillance sites</b>				
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 Sites			
2.4	Release of budget to Sentinel Sites			
<b>3. Procurement</b>				
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			
<b>4. Testing lab preparation for HSS ANC sites</b>				
4.1	Submission of contact details of lab personnel to NACO			
4.2	Submission of details of ELISA/RAPID tests done at ANC 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			
<b>5. Training of SACS team, SSTs and ANC surveillance site personnel</b>				
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 & TOT			
5.4	Preparation of training plan including identification of training site @ 3 days per batch (10-12 sites per batch)			
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			
<b>6. Orientation/ Sensitization meetings at SACS involving NHM officials &amp; district authorities</b>				
6.1	Letter to key officials from NHM at state and district level on HSS and support required			
6.2	Sensitization of state level NHM 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 NHM/DMHOs/CMOs on HSS and support required during site level training or routine district level meeting			

<b>7. Development of monitoring plan</b>				
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			
<b>8. Printing and Supply of Documents</b>				
8.1	Translation of Bi-lingual Data Forms to Local Language			
8.2	Printing of Bi-lingual Data Forms			
8.3	Bi-lingual 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			
<b>9. Commencement of HSS 2017 Implementation</b>				
9.1	Date of Initiation of HSS 2017 at ANC sites			

## Annex 12: State wise HIV prevalence among ANC clinic attendees, HSS 2003-2017

State	2003	2004	2005	2006	2007	2008-09	2010-11	2012-13	2014-15	2017
A & N Islands	0.45	0	0	0.17	0.25	0.06	0.13	0	0.06	0.06
Andhra Pradesh	1.45	1.7	1.67	1.41	1.07	1.22	0.76	0.59	0.35	0.41
Arunachal Pradesh	0	0.2	0.46	0.27	0	0.46	0.21	0.26	0.06	0.00
Assam	0	0.14	0	0.04	0.11	0.13	0.09	0.16	0.18	0.16
Bihar	0.11	0.22	0.38	0.36	0.34	0.3	0.17	0.33	0.37	0.38
Chandigarh	0.22	0.5	0	0.25	0.25	0.25	0	0	0.25	0.00
Chhattisgarh	0.76	0	0.32	0.31	0.29	0.41	0.43	0.51	0.41	0.35
D & N Haveli	0.13	0	0.25	0	0.5	0	0	0	0	0.50
Daman & Diu	0.27	0.38	0.13	0	0.13	0.38	0.13	0.13	0.25	0.00
Delhi	0.13	0.31	0.31	0.1	0.2	0.2	0.3	0.4	0.25	0.38
Goa	0.48	1.13	0	0.5	0.18	0.68	0.33	0.25	0.08	0.08
Gujarat	0.38	0.19	0.38	0.55	0.34	0.44	0.46	0.5	0.56	0.44
Haryana	0.27	0	0.19	0.17	0.16	0.15	0.19	0.17	0.25	0.14
Himachal Pradesh	0.25	0.25	0.22	0.06	0.13	0.51	0.04	0.04	0	0.09
Jammu & Kashmir	0	0.08	0	0.04	0.05	0	0.06	0.07	0.05	0.02
Jharkhand	0.08	0.05	0.14	0.13	0.13	0.38	0.45	0.19	0.18	0.18
Karnataka	1.43	1.52	1.49	1.12	0.86	0.89	0.69	0.53	0.36	0.38
Kerala	0.09	0.42	0.32	0.21	0.46	0.21	0.13	0.03	0.05	0.05
Madhya Pradesh	0.42	0.38	0.27	0.26	0.25	0.26	0.32	0.14	0.13	0.11
Maharashtra	1.15	0.97	1.07	0.87	0.76	0.61	0.42	0.4	0.32	0.26
Manipur	1.34	1.66	1.3	1.39	1.31	0.54	0.78	0.64	0.6	0.47
Meghalaya	0.35	0	0	0.09	0	0.04	0.05	0.26	0.16	0.73
Mizoram	1.7	1.5	0.81	0.94	0.85	0.72	0.4	0.68	0.81	1.19
Nagaland	1.69	1.85	1.97	1.36	1.1	1.14	0.66	0.88	1.29	0.82
Odisha	0	0.5	0.6	0.55	0.23	0.73	0.43	0.31	0.24	0.28
Puducherry	0.13	0.25	0.25	0.25	0	0.25	0.13	0	0.13	0.00
Punjab	0.13	0.44	0.25	0.2	0.12	0.31	0.26	0.37	0.32	0.11
Rajasthan	0.15	0.23	0.5	0.29	0.19	0.19	0.38	0.32	0.32	0.29
Sikkim	0.21	0	0.25	0.1	0.09	0	0.09	0.19	0.13	0.05
Tamil Nadu	0.83	0.81	0.54	0.54	0.58	0.35	0.38	0.36	0.27	0.27
Telangana	-	-	-	-	-	-	-	-	0.39	0.28
Tripura	0	0.25	0	0.42	0.25	0	0	0.19	0.19	0.56
Uttar Pradesh	0.22	0.44	0.15	0.25	0.08	0.18	0.21	0.2	0.21	0.22
Uttarakhand	0.06	0	0	0.11	0.06	0.22	0.25	0.27	0.12	0.13
West Bengal	0.46	0.43	0.89	0.38	0.4	0.17	0.13	0.19	0.11	0.13
<b>India</b>	<b>0.8</b>	<b>0.95</b>	<b>0.9</b>	<b>0.6</b>	<b>0.49</b>	<b>0.49</b>	<b>0.4</b>	<b>0.35</b>	<b>0.29</b>	<b>0.28</b>

*Note:- (1) Based on valid sites (75% of target achieved) (2) No HSS site in Lakshadweep during HSS 2010-11, 2012-13 and 2014-15. (3) All figures in percentage (4) Figures from HSS 2017 are provisional.*

### Annex 13: State wise HIV prevalence among FSW, HSS 2003-2017

State	2003	2004	2005	2006	2007	2008-09	2010-11	2017
A & N Islands	-	0.5	0.4	-	-	-	-	-
Andhra Pradesh	20	16.97	12.97	7.32	9.74	11.14	6.86	0.68
Arunachal Pradesh	-	-	-	0	-	0	0.28	0.27
Assam	0	0	0.76	0.46	0.44	0.8	0.46	0.21
Bihar	4.8	0.2	2.24	1.68	3.4	2.98	2.3	0.40
Chandigarh	0.6	0.8	0.67	0.67	0.4	0.82	0	0.00
Chhattisgarh	-	-	-	1.57	1.43	-	2.73	0.42
D & N Haveli	-	-	-	-	-	-	-	-
Daman & Diu	-	-	-	-	-	-	-	-
Delhi	1.61	4.6	3.15	2.8	3.15	2.17	0.7	1.60
Goa	30.15	-	-	-	-	6.4	2.7	0.80
Gujarat	-	9.2	8.13	6.4	6.53	3.74	1.62	0.97
Haryana	-	-	2	1.19	0.91	1.55	0.48	3.00
Himachal Pradesh	0	0.8	0	0.66	0.87	0.55	0.53	0.08
Jammu & Kashmir	-	-	-	0	-	0	0	0
Jharkhand	-	0	0.8	0.88	1.09	0.94	0.82	0.28
Karnataka	14.4	21.6	18.39	8.64	5.3	14.4	5.1	3.33
Kerala	1.94	-	-	0.32	0.87	1.46	0.73	0.10
Madhya Pradesh	-	-	1.82	1.07	0.67	-	0.93	0.64
Maharashtra	54.29	41.69	23.62	19.57	17.91	10.77	6.89	3.48
Manipur	12.8	12.4	10	11.6	13.07	10.87	2.8	1.40
Meghalaya	-	-	-	-	-	-	-	5.94
Mizoram	-	13.69	14	10.4	7.2	9.2	-	24.68
Nagaland	4.4	4.44	10.8	16.4	8.91	14.06	3.21	3.60
Odisha	-	5.18	2.6	1	0.8	2.4	2.07	0.51
Puducherry	-	1.94	0.28	1.44	1.3	-	1.21	0.27
Punjab	0	-	-	1.36	0.65	0.97	0.85	2.00
Rajasthan	3.92	2.31	3.72	2.55	4.16	3.58	1.28	1.40
Sikkim	-	-	-	-	0	0.44	0	0.46
Tamil Nadu	8.8	4	5.49	4.62	4.68	6.22	2.69	1.47
Telangana	-	-	-	-	-	-	-	3.54
Tripura	-	-	-	-	-	-	0.21	1.20
Uttar Pradesh	6.6	8	3.5	1.52	0.78	1.03	0.62	0.22
Uttarakhand	-	-	-	-	-	-	0.44	0.00
West Bengal	6.47	4.11	6.8	6.12	5.92	4.12	2.04	1.25
<b>India</b>	<b>10.33</b>	<b>9.43</b>	<b>8.44</b>	<b>4.9</b>	<b>5.06</b>	<b>4.94</b>	<b>2.67</b>	<b>1.56</b>

*Note:- (1) Based on valid sites (75% of target achieved) (2) No HSS site in Lakshadweep (3) All figures in percentage(4) Figures from HSS 2017 are provisional.*

## Annex 14: State wise HIV prevalence among MSM, HSS 2003-2017

State	2003	2004	2005	2006	2007	2008-09	2010-11	2017
A & N Islands	1.25	-	-	-	-	-	-	-
Andhra Pradesh	13.2	16	6.45	10.25	17.04	23.6	10.14	1.60
Arunachal Pradesh	-	-	-	-	-	-	-	-
Assam	-	-	-	0.78	2.78	0.41	1.4	2.40
Bihar	1.6	1.6	0.4	0.3	0	1.64	4.2	3.63
Chandigarh	-	1.36	1.6	4.8	3.6	2.79	0.4	2.40
Chhattisgarh	-	-	-	-	-	-	14.98	2.47
D & N Haveli	-	-	-	-	-	-	-	-
Daman & Diu	-	-	-	-	-	-	-	-
Delhi	27.42	6.67	20.4	12.27	11.73	7.87	5.34	1.80
Goa	9.09	1.68	4.9	4.8	7.93	6.4	4.53	0.60
Gujarat	-	6.8	10.67	11.2	8.4	5.48	3	3.99
Haryana	-	-	-	0	5.39	3.2	3.05	2.79
Himachal Pradesh	-	-	-	0.44	0	0.4	1.23	0.82
Jammu & Kashmir	-	-	-	-	-	-	-	-
Jharkhand	-	-	-	-	-	2	0.4	0.86
Karnataka	10.8	10	11.61	19.2	17.6	12.52	5.36	5.40
Kerala	-	0.89	3.2	0.64	0.96	0.75	0.36	0.23
Madhya Pradesh	-	-	-	-	-	-	7.94	4.40
Maharashtra	18.8	11.2	10.4	15.6	11.8	11.9	9.91	4.69
Manipur	29.2	14	15.6	10.4	16.4	17.21	10.53	8.40
Meghalaya	-	-	-	-	-	-	-	-
Mizoram	-	-	-	-	-	-	-	-
Nagaland	-	-	-	-	-	-	13.58	7.66
Odisha	-	-	-	-	7.37	4.19	3.79	0.80
Puducherry	-	5.22	5.6	2.47	2	-	1.21	0.20
Punjab	-	-	-	4.8	1.22	3	2.18	4.67
Rajasthan	-	-	-	0	-	-	-	4.80
Sikkim	-	-	-	-	-	-	-	-
Tamil Nadu	4.2	6.8	6.2	5.6	6.6	5.24	2.41	1.02
Telangana	-	-	-	-	-	-	-	3.10
Tripura	-	-	-	-	-	-	-	-
Uttar Pradesh	-	-	-	-	0.4	4.07	1.56	1.14
Uttarakhand	-	-	-	-	-	-	-	2.85
West Bengal	-	1.33	0.54	6.6	5.61	4.9	5.09	2.34
<b>India</b>	<b>8.47</b>	<b>7.47</b>	<b>8.74</b>	<b>6.41</b>	<b>7.41</b>	<b>7.3</b>	<b>4.43</b>	<b>2.69</b>

*Note:- (1) Based on valid sites (75% of target achieved) (2) No HSS site in Lakshadweep (3) All figures in percentage(4) Figures from HSS 2017 are provisional.*

## Annex 15: State wise HIV prevalence among IDU, HSS 2003-2017

State	2003	2004	2005	2006	2007	2008-09	2010-11	2017
A & N Islands	-	-	-	-	-	-	-	-
Andhra Pradesh	-	-	-	-	3.71	6.9	3.05	0.00
Arunachal Pradesh	-	-	-	0	0	0.23	0.24	0.00
Assam	5.56	4.48	7.86	2.86	2.14	3.64	1.46	0.69
Bihar	-	-	-	0.2	0.6	5.47	4.54	0.70
Chandigarh	-	4.8	9.2	17.6	8.64	13.6	7.2	3.60
Chhattisgarh	-	-	-	-	-	-	0.42	10.77
D & N Haveli	-	-	-	-	-	-	-	-
Daman & Diu	-	-	-	-	-	-	-	-
Delhi	14.4	17.6	22.8	10	10.1	18.6	18.27	16.21
Goa	-	-	-	-	-	-	-	-
Gujarat	-	-	-	-	-	-	1.6	1.20
Haryana	-	-	-	0	0.8	2	0.8	-
Himachal Pradesh	-	-	-	-	-	0.65	4.89	1.60
Jammu & Kashmir	0	0	0	2.5	-	0	0	0.00
Jharkhand	-	-	-	0.4	-	1.65	2.02	0.42
Karnataka	2.8	0	-	3.6	2	2	0	0.40
Kerala	-	2.58	5.19	9.57	7.85	3.04	4.95	0.41
Madhya Pradesh	-	-	-	-	-	-	5.13	5.33
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	7.66
Meghalaya	0	0	0	3.33	4.17	-	6.44	1.62
Mizoram	6.4	6.8	4.8	3.05	7.53	5.28	12.01	19.81
Nagaland	8.43	3.22	4.51	2.39	1.91	3.17	2.21	1.15
Odisha	-	-	-	10.4	7.33	7.2	7.16	3.40
Puducherry	-	-	-	-	-	-	-	-
Punjab	-	-	-	13.8	13.79	26.36	21.1	12.09
Rajasthan	-	-	-	-	-	-	-	-
Sikkim	-	-	0.48	0.2	0.47	1.45	0	0.00
Tamil Nadu	63.81	39.92	18	24.2	16.8	9.48	-	-
Telangana								0.80
Tripura	-	-	10.92	0	0	0.42	0.45	8.55
Uttar Pradesh	-	-	-	4.63	1.29	2.46	2.03	4.53
Uttarakhand	-	-	-	-	-	-	4.33	8.98
West Bengal	2.61	3.83	7.41	4.64	7.76	6.9	2.72	10.76
<b>India</b>	<b>13.15</b>	<b>11.16</b>	<b>10.16</b>	<b>6.92</b>	<b>7.23</b>	<b>9.19</b>	<b>7.14</b>	<b>6.26</b>

**Note:- (1) Based on valid sites (75% of target achieved) (2) No HSS site in Lakshadweep (3) All figures in percentage(4) Figures from HSS 2017 are provisional.**

## Annex 16: State wise HIV prevalence among Single Male Migrants (SMM), Long Distance Truckers (LDT) and Hijra/Transgender (H/TG), HSS 2005-2017

State	SMM						LDT					H/TG				
	2005	2006	2007	2009	2011	2017	2006	2007	2009	2011	2017	2006	2007	2009	2011	2017
A & N Islands	-	-	-	-	-		-	-	-	-		-	-	-	-	
Andhra Pradesh	-	-	-	-	-	0.40	-	-	-	3.2	0.40	-	-	-	-	4.24
Arunachal Pradesh	-	-	-	-	-		-	-	-	-		-	-	-	-	
Assam	-	-	-	-	-	0.00	-	-	-	-	2.80	-	-	-	-	
Bihar	-	-	-	-	-		-	-	-	-		-	-	-	-	
Chandigarh	-	-	-	-	-		-	-	-	-		-	-	-	-	
Chhattisgarh	-	-	-	-	-	0.00	-	-	-	-	0.41	-	-	-	-	
D & N Haveli	0	-	-	-	-		-	-	-	-		-	-	-	-	
Daman & Diu	-	-	-	-	-		-	-	-	-		-	-	-	-	
Delhi	-	-	-	-	-	0.77	-	-	-	-	0.00	-	-	-	-	5.53
Goa	-	-	-	-	-		-	-	-	-		-	-	-	-	
Gujarat	-	-	-	1.8	0.67	0.13	-	-	-	3.09	0.60	-	-	-	-	2.40
Haryana	-	-	-	-	1.33		-	-	-	-		-	-	-	-	
Himachal Pradesh	-	-	0	0	0	0.00	-	0.4	-	-		-	-	-	-	
Jammu & Kashmir	-	-	-	-	-		-	-	-	-		-	-	-	-	
Jharkhand	-	-	-	-	-		-	-	-	1.2	1.86	-	-	-	-	
Karnataka	-	-	-	-	0	0.60	-	-	-	3.2	2.00	-	-	-	-	2.60
Kerala	-	-	-	-	0	0.00	2.4	3.6	0.8	0	0.00	-	-	-	-	0.16
Madhya Pradesh	-	-	-	-	-	0.40	-	-	-	2.47	0.00	-	-	-	-	
Maharashtra	-	2.4	1.6	3	1.07	0.53	-	-	-	1.61	1.40	29.6	42.21	16.4	18.8	5.20
Manipur	-	-	-	-	-		-	-	-	-		-	-	-	-	
Meghalaya	-	-	-	-	-		-	-	-	-		-	-	-	-	
Mizoram	-	-	-	0.8	1.22		-	-	-	-		-	-	-	-	
Nagaland	-	-	-	-	-		-	-	-	-	1.21	-	-	-	-	
Odisha	-	1.44	-	3.6	3.2	1.60	2.73	-	-	-	0.80	-	-	-	-	1.79
Puducherry	-	-	-	-	-		-	-	-	-		-	-	-	-	
Punjab	-	-	-	-	1.2	0.40	1.07	-	-	-	0.40	-	-	-	-	
Rajasthan	-	-	-	-	-	0.80	-	-	-	-	0.40	-	-	-	-	2.80
Sikkim	-	-	-	-	-		-	-	-	-		-	-	-	-	
Tamil Nadu	-	-	-	-	0.8	0.20	-	-	-	2.01	1.00	-	-	-	3.82	0.40
Telangana						2.37					0.80					6.47
Tripura	-	-	-	-	-		-	-	-	-		-	-	-	-	
Uttar Pradesh	-	-	-	-	-	1.00	-	-	-	-	0.40	-	-	-	-	
Uttarakhand	-	-	-	-	-		-	-	-	-		-	-	-	-	
West Bengal	-	-	9.27	2.42	1.61	0.80	2.72	2.72	1.75	3.71	1.20	-	-	-	-	7.28
<b>India</b>	<b>0</b>	<b>1.6</b>	<b>3.61</b>	<b>2.17</b>	<b>0.99</b>	<b>0.51</b>	<b>2.37</b>	<b>2.87</b>	<b>1.57</b>	<b>2.59</b>	<b>0.86</b>	<b>29.6</b>	<b>42.21</b>	<b>16.4</b>	<b>8.82</b>	<b>3.14</b>

Note:- (1) Based on valid sites (75% of target achieved) (2) No HSS site in Lakshadweep (3) All figures in percentage (4) Figures from HSS 2017 are provisional.







Tremendous efforts have been made to collect data on the HIV/AIDS epidemic through HIV Sentinel Surveillance. Over the past two decades, the HIV surveillance has expanded; the geographical unit of data generation, analysis and use for planning through HIV surveillance has shifted from the national to the State and district level. This technical brief analyses and describe the level and trend of HIV/AIDS epidemic across seven study population based on data from over 650 districts across 35 States and Union Territories.

HSS 2016-17 highlights that the HIV epidemic continues to be heterogenic in India with varied HIV prevalence by location and populatio. These epidemiological findings need to be taken into considerations for tailoring the responses by all stakeholders including policy makers, programme managers, research scholars, community and civil society.



**National AIDS Control Organisation**

India's voice against AIDS  
Ministry of Health & Family Welfare, Government of India