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# Chandigarh State AIDS Control Society

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## HIV Sentinel Surveillance

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A Technical Brief  
(ANC)  
2014-15

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Compiled by: Ms Poonam Bakshi  
M&E & Surveillance Program

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### Special Thanks to:

Regional Institute Team (RI) - PGIMER.	State Surveillance Team (SST)	SACS Team (Chandigarh SACS)
<ul style="list-style-type: none"> <li>▪ Dr. Rajesh Kumar Prof. &amp; Head, Deptt of Community Medicine School of Public Health - PGIMER</li> <li>▪ Dr. P.V.M Lakshmi Additional Prof - SPH</li> </ul>	<ul style="list-style-type: none"> <li>▪ Dr. Sunil Arora Prof. In-charge- HIV Diagnostic and Disease Monitoring Laboratory &amp; NACO State Reference Laboratory. PGIMER, Chd.</li> <li>▪ Dr. P.V.M Lakshmi Additional Prof - SPH</li> </ul>	<ul style="list-style-type: none"> <li>▪ Dr. Vanita Gupta Direct Health Surveillance cum Project Director, CSACS</li> <li>▪ Ms Poonam Bakshi M&amp;E Program and HSS Focal Person</li> </ul>



## Message

India has the largest HIV surveillance systems in the world. Indian Council of Medical Research (ICMR) first started HIV surveillance among blood donors and patients with sexually transmitted diseases in 1985. National AIDS Control Organization (NACO) formalized Annual HIV Sentinel Surveillance (HSS) in the country in 1998, and subsequently expanded it rapidly to Antenatal Clinic (ANC) sites in peri-urban and rural settings and High Risk Groups (HRGs). This activity helped Government to understand the trends of the HIV epidemic among different population groups and geographical areas to provide necessary interventions for strengthening of programme.

Initially, surveillance was carried out annually but from 2008 onwards it is being conducted once in two years. Currently, 14<sup>th</sup> round of HSS was implemented during 2014-15 at 776 Antenatal Clinics (ANC) surveillance sites across the country. These sites covered 572 districts across 36 States and Union Territories in the country. The first round of nationwide Integrated Biological and Behavioral Surveillance (IBBS) has been carried out as a strategic shift to strengthen the surveillance system among HRGs and bridge populations.

The Chandigarh State AIDS Control Society (SACS) was registered in 1998. Chandigarh SACS has played a vital role in implementation of National AIDS Control Programme (NACP), and HSS activities by expansion of the sentinel sites and timely co-ordination of the national response to the HIV and AIDS epidemic in Chandigarh. The Chandigarh SACS prepares a brief annual report regarding the HIV status in Chandigarh based on annual HSS round to disseminate the findings of HSS to all key stakeholders.

I would like to congratulate the Chandigarh SACS for actively carrying out surveillance activity and providing feedback to all stakeholders for proper planning and implementation of control activities.

Dr. Rajesh Kumar  
Professor of Community Medicine  
School of Public Health  
Post Graduate Institute of Medical Education and Research  
Chandigarh-160012

## Chapter 1

### BACKGROUND

#### SURVEILLANCE

Surveillance is defined as "ongoing, systematic collection, analysis, interpretation and dissemination of data regarding a health related event for use in public health action to reduce morbidity and mortality and to improve health.

#### CLASSIFICATION OF SURVEILLANCE:

- **Behavioral Surveillance**  
Behavioural surveillance is cross-sectional survey for collecting data on HIV risk behaviours and other relevant issues that can be compared over time. It provides information for developing prevention programmes by identifying the populations and behaviours that are driving the epidemic
- **AIDS Surveillance**  
AIDS Surveillance is to monitor AIDS mobility in the general population through regular ongoing reporting system.
- **STI Surveillance**  
STI Surveillance is for determining the percentage of how many people have STIs when compare to the total population.
- **HIV Sentinel Surveillance (HSS)**  
HIV Sentinel Surveillance (HSS) is defined as "A System of monitoring HIV epidemic among specified population groups by collecting information on HIV from designated sites (Sentinel sites)\* over years, through a uniform and consistent methodology that allows comparison of finding across place and time, to guide programme response."

#### Important Applications of HSS

- Data from HSS is used for estimation of HIV burden in the country.
- Methodology: "Consecutive Sampling with Unlinked Anonymous Testing".  
"Random Sampling" at High Risk Group (HRG) sites in few states.
- It is implemented with the support of Two National Institutes and Six Regional Public Health Institutes of India.

#### HSS started - at National Level

India has one of the world's largest and most robust HIV Sentinel Surveillance (HSS) Systems. It has helped the national government to monitor the levels and burden of HIV among different population groups in the country and craft effective responses to control HIV/AIDS. In 1998, NACO formulized annual sentinel surveillance for HIV infection in the country with 176 sentinel sites (of which 92 were ANC sites).

#### HSS started - at Chandigarh Level

Annual Sentinel Surveillance for HIV is being held in Chandigarh using standardized methodology as per NACO guidelines since 1993. With overall objectives to track the HIV epidemic, evidence based planned for future.

## Expansion & Brief Summary

HIV Sentinel Surveillance - a process which includes Trainings, Supervisory monitory Visits, Monitoring, Data Collection, analysis and writing of reports - along with the key finding of the epidemic and the recommendation of the next round.

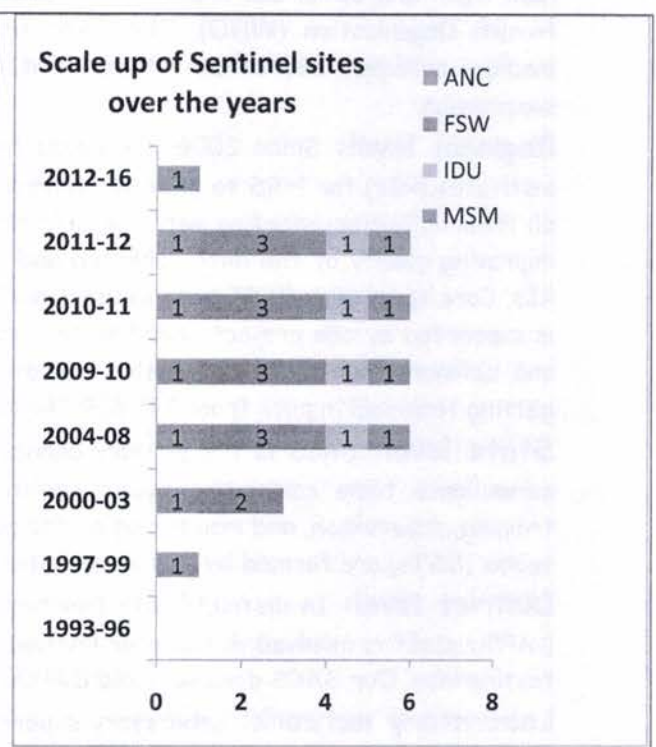
Annual Sentinel Surveillance for HIV is being held in Chandigarh using standardized methodology as per NACO guidelines since 1993. The overall objective of HSS is to track the HIV epidemic, evidence based planned for future. Now, since 2010, it is biannual.

### ❖ History

- HIV screening started in Chandigarh in year 1987. The first case of HIV in UT., Chandigarh was identified in 1987. However, first case from local population of Chandigarh was detected in the year 1992. CSACS has screened more than two lakhs individuals for HIV in various in various counseling and testing centers of Chandigarh within span of 14 years.
- **First Sentinel Site** for HIV was established for STD patients in Skin OPD at General Hospital, Sector-16 in year 1993.
- From year 1998, two more sites were added in sentinel study one for STD patients in Department of Dermatology, Venerology and Leprology, PGIMER
- Another site for Antenatal women attending ANC clinic of General Hospital, Sector-16, Chandigarh was added in 1997.
- From 2003-04 onwards, study was extended for core group population i.e Female Sex Workers, Intravenous Drug Users and Men Having Sex with Men, based on mapping study conducted by Department of Community Medicine, PGIMER, Chandigarh in 2003.

### ❖ EXPANSION OF SENTINEL SITES IN CHANDIGARH

Year	STD	ANC	FSW	IDU	MSM
1993	1	-	-	-	-
1994	1	-	-	-	-
1995	1	-	-	-	-
1996	1	-	-	-	-
1997	1	1(***)	-	-	-
1998	1	1	-	-	-
1999	1	1	-	-	-
2000	2	1	-	-	-
2001	2	1	-	-	-
2002	2	1	-	-	-
2003	2	1	2(****)	-	-
2004*	2	1	3	1(****)	1(****)
2005	2	1	3	1	1
2006	2	1	3	1	1
2007	2	1	3	1	1
2008	2	1	3	1	1
2009-10	2	1	3	1	1
2010-11	◆	1	3	1	1
2011-12		1	3	1	1
2012-13		1	New Project - IBBS (Integrated Biological Behavioral Surveillance)		
2013-14		1			
2014-15		1			
2015-16		1			



# STD Composite site (PGIMER + Sector-22) later closed. (◆)

# IBBS Project was started from F.Y 2013-15.

The 14<sup>th</sup> round of HIV Sentinel Surveillance was implemented among Antenatal Clients (ANC) under the Financial Year of 2014-15

This technical report represents the findings of the Chandigarh HIV ANC Clinic attendees and shows the prevalence levels and trends of the HIV epidemic.

## Objectives of HSS

- To understand the level and trends of the HIV epidemic among the general population in age between 15-49
- To understand the geographical spread of HIV infection and to identify emerging pockets.
- To estimate HIV Prevalence and HIV Burden in the country.

## Implementation Structure

HSS has a robust structure for planning, implementation and monitoring at national, regional and state levels. The structure and key functions of each agency involved are shown in Annexure 1.

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

**Regional level:** Since 2006, six public health institutes in India have been identified as regional institutes (RIs) for HSS to provide technical support to the State AIDS Control Societies (SACS) or all HSS activities, starting with identification of new sites, training, monitoring and supervision, and improving quality of the data collected and their analysis. Data entry is another function performed by RIs. Core team at each RI has two epidemiologists/public health experts and one microbiologist, which is supported by one project coordinator, two research officers, one computer assistant/data manager, and between four to 10 data entry operators, depending on the volume of data entry. Our SACS is getting technical inputs from PGIMER Chandigarh (one of the six RIs).

**State level:** SACS is the primary agency responsible for implementation of HSS. Every state has surveillance team comprising 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 (DAPCU), the DAPCU staff is involved in the coordination of HSS activities at the sentinel sites and the associated testing labs. Our SACS does not hold DAPCU.

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

## ACTIVITIES TAKEN TO ASSURE THE QUALITY IN THE SURVEILLANCE PROCESS

A stringent process was adopted for ensuring the quality of HSS and during the stages of planning & implementation. Detail is listed below.

❖ **Participation of SACS in "National Pre Surveillance Meeting" (NPSM)**

- Date:- 16-17 Nov., 2014 venue:- NIHFW (National Institute of Health and Family Welfare)
  - Chandigarh SACS representatives were present in National Pre- Surveillance meeting in NIHFW, New Delhi.

❖ **Participation of SACS in Regional Level "Pre Surveillance Meeting" and TOT (Training of Trainers)**

- Date:- 2-3 Dec., 2014 Venue:- School of Public Health, PGIMER, Chd.
  - SACS representatives were also present in PSM and TOT in School of Public Health, PGI.

❖ **Release of Budget to Testing Lab:**

- Rs. 90,000/- No. CSACS/HSS/2014/7887 dated 13/10/2014

❖ **Procurement of the HSS Consumables:**

- Rs. 7,406/- PO/2015/541 dated 27/01/2015
- Rs. 1,125/- PO/2015/1598 dated 11/03/2015

❖ **Communication to Site In-charges regarding the Training Dates and Venue**

- Communication sent through letters, duly signed by Project Director, CSACS on vide memo no. CSACS/HSS/2014/9625 dated 24.12.2014 to The Medical Superintendent, GMSH-16, Dr. Nirlep Kaur, Deptt. of Obst. & Gynae, GMSH-16, Dr. Abha Sarwal Saini, ICTC Incharge, GMSH-16, Chd.

❖ **Development of Integrated "Monitoring Schedule"**

-Integrated Monitoring Plan/Schedule was prepared. This plan was also shared with SST & RIs Members. Proper co-ordination was built up with SST & RIs members.

ANC Site Visits details	RI = 3	SST = 3	SACS = 5
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❖ **NACO designed "Operational Manual and Wall Charts"**

- Operational Manuals and Wall Charts were also distributed during the time of training.

❖ **Date of initiation of "HSS Sample Collection" 2014-15**

- 3<sup>rd</sup> Jan, 2015 (F.Y 2014-15)

❖ **Released of "Honorarium Budget" to HSS Sentinel Site**

- Memo no. CSACS/HSS/2015/6660 dated 3/11/2015

## Chapter-2

### Sample Framework & Methodology

- Sample size for ANC Attendees was 400.
  - The sampling unit for ANC attendees, between 15-49 years of age.
  - Testing Strategy - Unlinked anonymous
  - At ANC site (Single site) Venous Blood was collected from Sampling Frame. Serum was separated from the whole Blood, coded and forwarded to SRL- [designated laboratory from NACO] for HIV and VDRL Testing.
  - Consecutive Sampling Methodology
  - Duration - 3 months (3<sup>rd</sup> Jan 2015 to 31<sup>st</sup> March 2015)
  - Blood Specimen - Serum
  - Testing Strategy - Unlinked Anonymous
  - Testing Protocol - Two Test Protocol
- Eligibility Criteria**

**Inclusion criteria:**

- ❖ Age 15-49 years
- ❖ Pregnant women attending the antenatal clinic for the first time during HSS period

**Exclusion Criteria:**

- ❖ Already included once in the current round of surveillance

**Case Definition of ANC Attendees :-**

A pregnant women aged 15 to 49 who are attending the antenatal clinic only once during the round of surveillance period.

#### **External Quality Assurance Scheme (EQAS) Program in HIV Testing**

# External Quality Assurance Scheme ensures the participating centers are correctly testing, getting consistent results and checks the validity of the results

#### **# Cross Check of the Positive/Negative Sample**

- Testing Labs submitted all the positives and 5% of the negative HIV tested sera samples to the reference lab on a regular basis - specifically at an interval of 15 days during the surveillance period for cross checking.
- 5% of the negative samples were chosen by systematic random sampling. The starting random number was informed by the reference laboratory to the testing site in-charges, and then from there onwards every 20th sample was selected.

[This procedure is also known as Quality Check (QC).]

**Brief Definition:**

**For Concordant:** The tests are called concordant when the SRL's results matches with the result of NRL.

**For Discordant:** The tests are called discordant when no concurrence is build up between the testing results of SRL and NRL.

## **2. NACO Designed Data Capturing Forms**

- Pre- Surveillance Sentinel Site Evaluation form HSS 2014-15
- Data form for Surveillance at ANC sites HSS 2014-15.  
(Annexure on page No- 17, 18 )



## HSS ANC - Findings

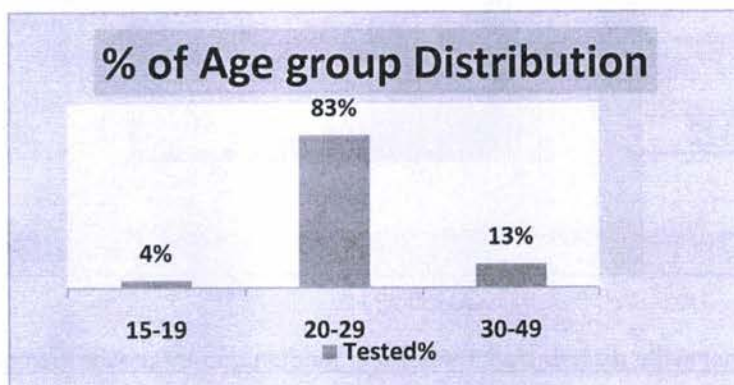
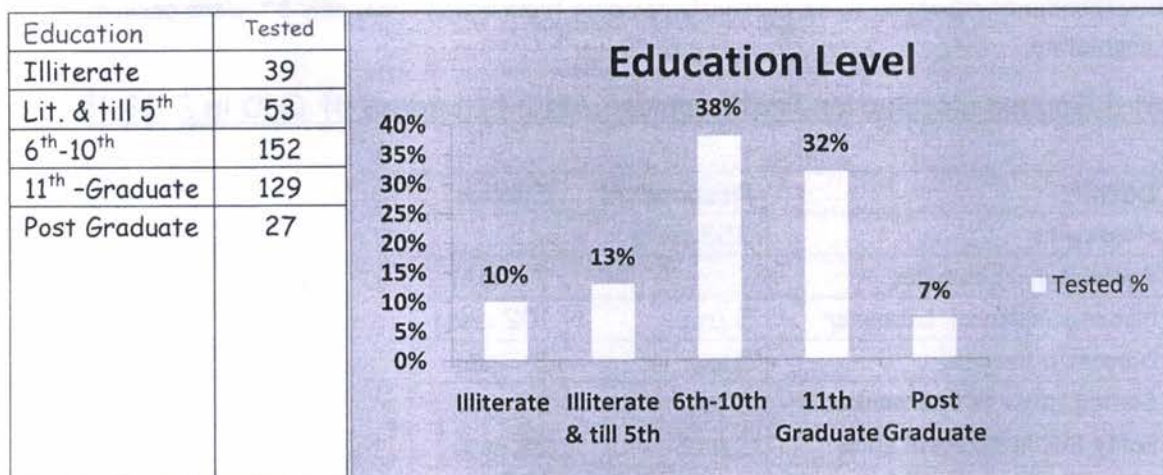
Detail of ANC site:

Govt Multi Speciality Hospital, Sector-16, Chandigarh

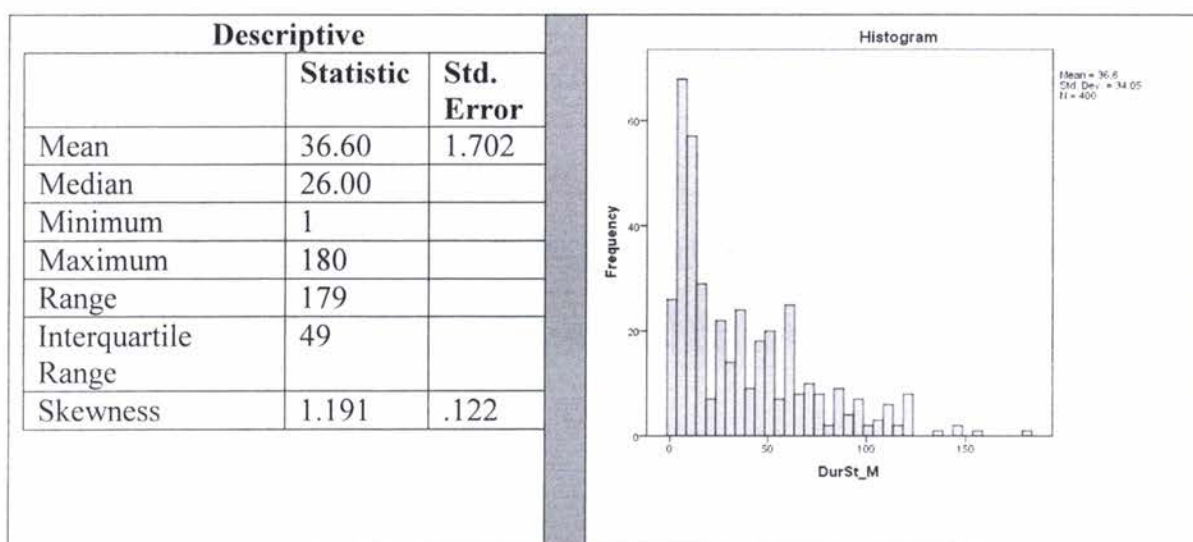
Low Risk Site - ANC - 1

## Result at a Glance

Number of samples to be tested	400
Sample tested	400
Number of samples found HIV+ve	1
Percentage HIV+ve	0.25

Socio-Demographic Profile of ANC Attendees of Chandigarh in 2014-15Literacy status of the Respondents of Chandigarh in 2014-15

Around 10% of the respondent had no formal education. 13% of the respondent studied up to fifth standard and highest proportion of the respondents (38%) studied between 6<sup>th</sup>-10<sup>th</sup> standard, (32%) up to graduate, while 7% studied beyond graduate.



### Duration of Stay

Duration of Stay - The stay is not normally distributed therefore median and interquartile range is used.

### Local Distribution

95% of the respondents reported to be currently residing from urban area, only 5% were accounted from rural population.

### Respondent & Spouse Occupation Profile among ANC Attendees of CHD in 2014-15

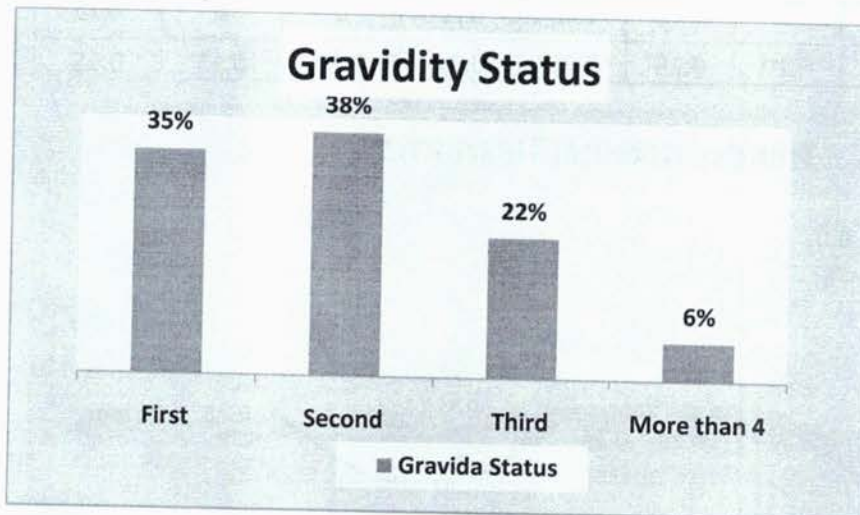
Details	Respondent	Spouse
Housewife	353 (88%)	-
Agricultural Labourer	-	7 (2%)
Non-Agricultural Labourer	5 (1%)	102 (26%)
Domestic Servant	5 (1%)	2 (1%)
Skilled/semi skilled worker	6 (2%)	37 (9%)
Petty Business/small shop	3 (1%)	23 (6%)
Large Business/Self Employed	1 (0%)	8 (2%)
Service (Govt/ Pvt)	26 (7%)	165 (41%)
Student	1 (0%)	1 (0%)
Trucker Driver	-	2 (1%)
Local Transport Worker	-	27 (7%)
Hotel staff	-	5 (1%)
Agriculture Cultivator	-	17 (4%)
Unemployed	-	4 (1%)

Occupation is an important determinant of HIV infection and from Chandigarh about 88% of the ANC Clinic attendees were housewives, 2nd highest proportion of the respondent (7%) being in govt or pvt service. Other 5% reported to be engaged in some other occupations (like non-agri/domestic servant/petty/large business).

The respondents were also asked the current occupation of their spouses as it is very important variable that may help to identify population groups at higher risk of acquiring HIV.

Non-Agricultural labourer (26%), service [Govt/pvt] (41%), Skilled/semi skilled (9%), Local Transport worker (7%), petty/small shop (6%) and the rest of 11% were employed in some other occupation.

### Gravidity Status among ANC attendees of Chandigarh in 2014-15



Order of pregnancy refers to the number of times ANC Clinic attendees has been pregnant including the current pregnancy.

In context of HIV, "Order of Pregnancy" indicates the duration of exposure to sexual risks, so HIV prevalence among "Primi-Gravida" is considered a proxy for new HIV infections and is an indicator of regional HIV incidence

35% of the respondent reported being pregnant for the first time, while close to 38% was pregnant for the second time. 22% respondent from third and only 6% of the respondents were pregnant more than 4 time.

The single case of HIV deducted in Chandigarh was pregnant for the third time.

#### ❖ Migrant Status

Entire population of ANC attendees participating in the HSS were non migrant.

#### **HIV Prevalence among ANC Clinic Attendees of Chandigarh in 2014-15.**

Only one positive case was found during the HSS ANC surveillance. ANC Clinic attendee who had higher HIV prevalence 0.34% in the age group of 20-29 yr with low literacy skills 1%, from 6<sup>th</sup> - 10<sup>th</sup> standard, belonged to urban area, was from non-migrant population and with third order of pregnancy and was housewife.

#### **Syphilis Prevalence (VDRL positivity) among ANC Clinic Attendees of Chandigarh in 2014-15.**

No positive case was found during the HSS ANC surveillance.

## Chapter-4

### Trend of HIV Prevalence among ANC Attendees in Chandigarh over the Years

Overall, HIV Prevalence in Chandigarh showed Low Prevalence Level ranging from 0.00%- 0.25% after slight increase in this surveillance period.

### Sentinel Surveillance And Other Data Sources

	2003	2004	2005	2006	2007	2008-09	2010-11	2012-13	2014-15
India	0.8	0.95	0.9	0.6	0.49	0.49	0.4	0.35	0.29
HSS	0.22	0.50	0	0.25	0.25	0.25	0	0	0.25
PPTCT		0.22	0.10	0.26	0.29	0.27	0.19	0.15	0.18

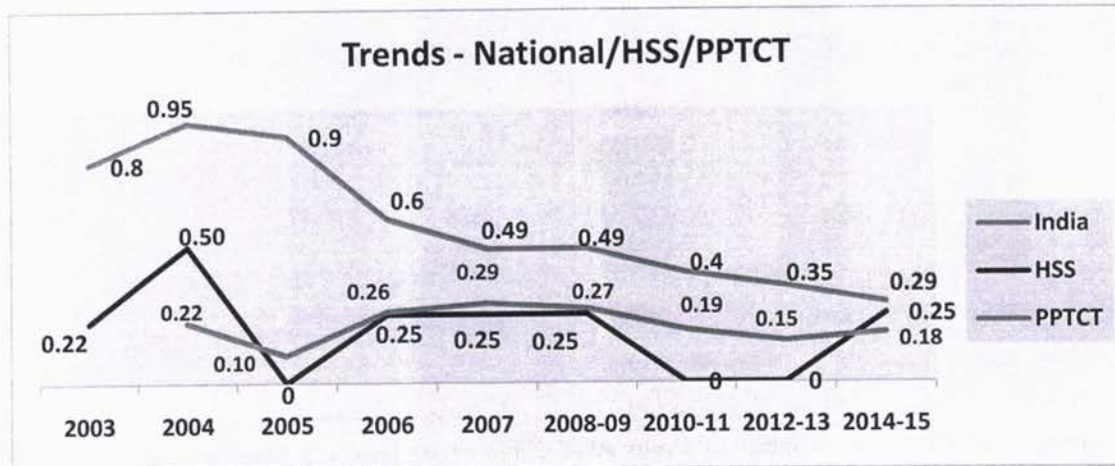


Fig: Trends in ANC HIV prevalence among National & State Surveillance and program data. PPTCT centre, which is the routine collection and testing of HIV throughout the year antenatal cases registered and the positivity rate in PPTCT program is 0.2%.

ICTC (P) (2014-15)	*Tested =6688	P.W Prev. 0.18%	*Tested = 18059
	+ve =290		+ve =34

#### HIV Trend with other data sources

	2003	2004	2005	2006	2007	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Blood Bank	-	0.19	0.19	0.10	0.13	0.18	0.11	0.08	0.09	0.08	0.06	0.06
STI	-	-	-	-	0.96	2.09	0.88	0.42	0.40	0.30	0.38	0.50
ICTC Excluding PW	4.9	5.78	9.89	11.59	8.74	6.49	4.74	3.67	2.79	1.97	1.69	1.45

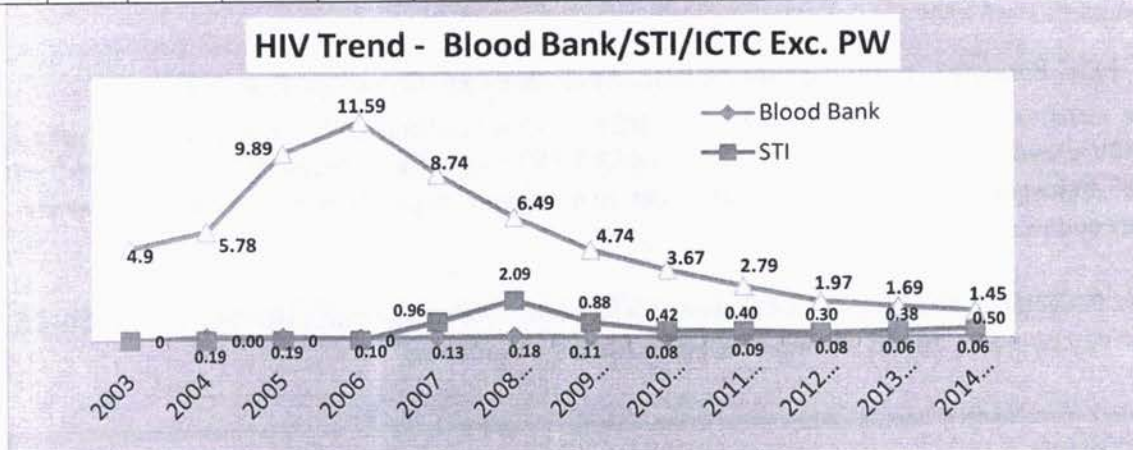


Fig: Trends in HIV prevalence among various program data (HIV Trend - Blood Bank/STI/ICTC Exc. PW).

Syphilis Trend with other data sources

	2003	2004	2005	2006	2007	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Blood Bank	-	0.38	0.58	0.08	0.06	0.12	0.05	0.04	0.05	0.06	0.12	0.14
STI	12.32	7.37	11.9	9.79	12.77	5.40	3.85	1.36	2.0	0.18	2.54	2.40

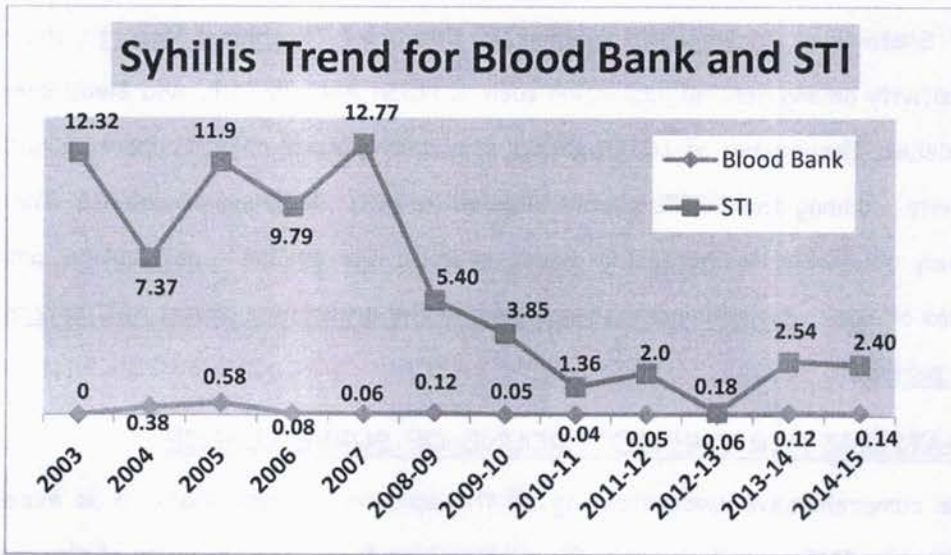


Fig: Trends in HIV prevalence among various program data (HIV Trend - Blood Bank/STI)

Syphilis Trend with other data sources

	2003	2004	2005	2006	2007	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
HSS	10.4	3.8	1.6	3.2	0.9	-	-	0	-	-	-	0
PPTCT	1.4	0.2	0.65	0.7	0.4%	0.37%	0.08%	0.2%	0.05%	0.05%	0.03%	0.05%

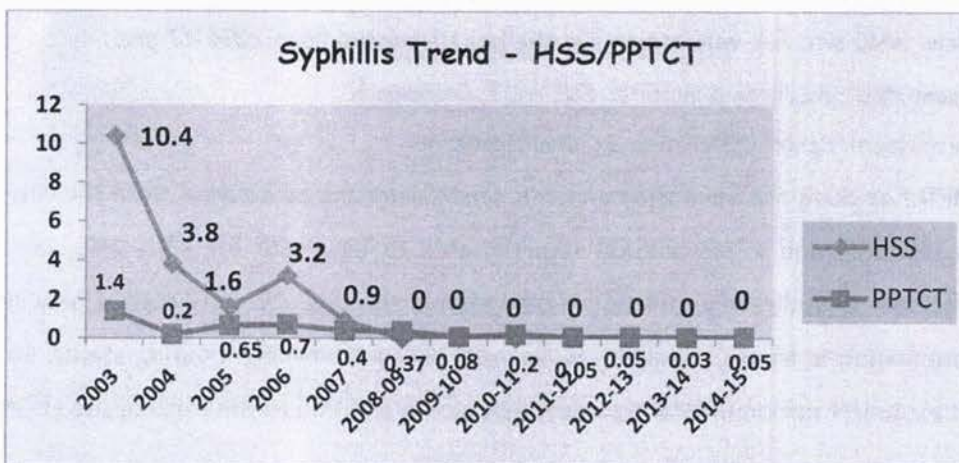


Fig: Trends in prevalence of syphilis among National and State surveillance data.

## Chapter-5

### CONCLUSION

On the basis of State level Analysis/the findings of this brief "Technical Report", the data which indicates the positivity among general population such as HSS- ANC, PPTCT, and Blood Bank indicated a declining prevalence. The number of ICTCs clients especially general clients report an increase every year. The positivity among the ICTCs clients also indicated a declining prevalence. The HSS-ANC data showed likely to stable to increasing among specific age groups - particularly among people between 20-29yrs of age. A slight increase was seen in the prevalence among ANC attendees during this surveillance period.

### RECOMMENDATIONS FOR THE NEXT ROUND OF SURVEILLANCE

- ❖ To gain the comprehensive understanding of the epidemic across state, it is necessary to identify one more ANC site where ANC Clinic attendees from other pockets of the peripherals may cover for the next rounds of the HSS surveillance. The creation of additional site will give a better picture of the HIV epidemic among ANC attendees in Chandigarh

#### Action Taken by CSACS

In this regard, Chandigarh SACS has coordinated with SPH, PGIMER and the process of site validation for another new ANC site has been completed.

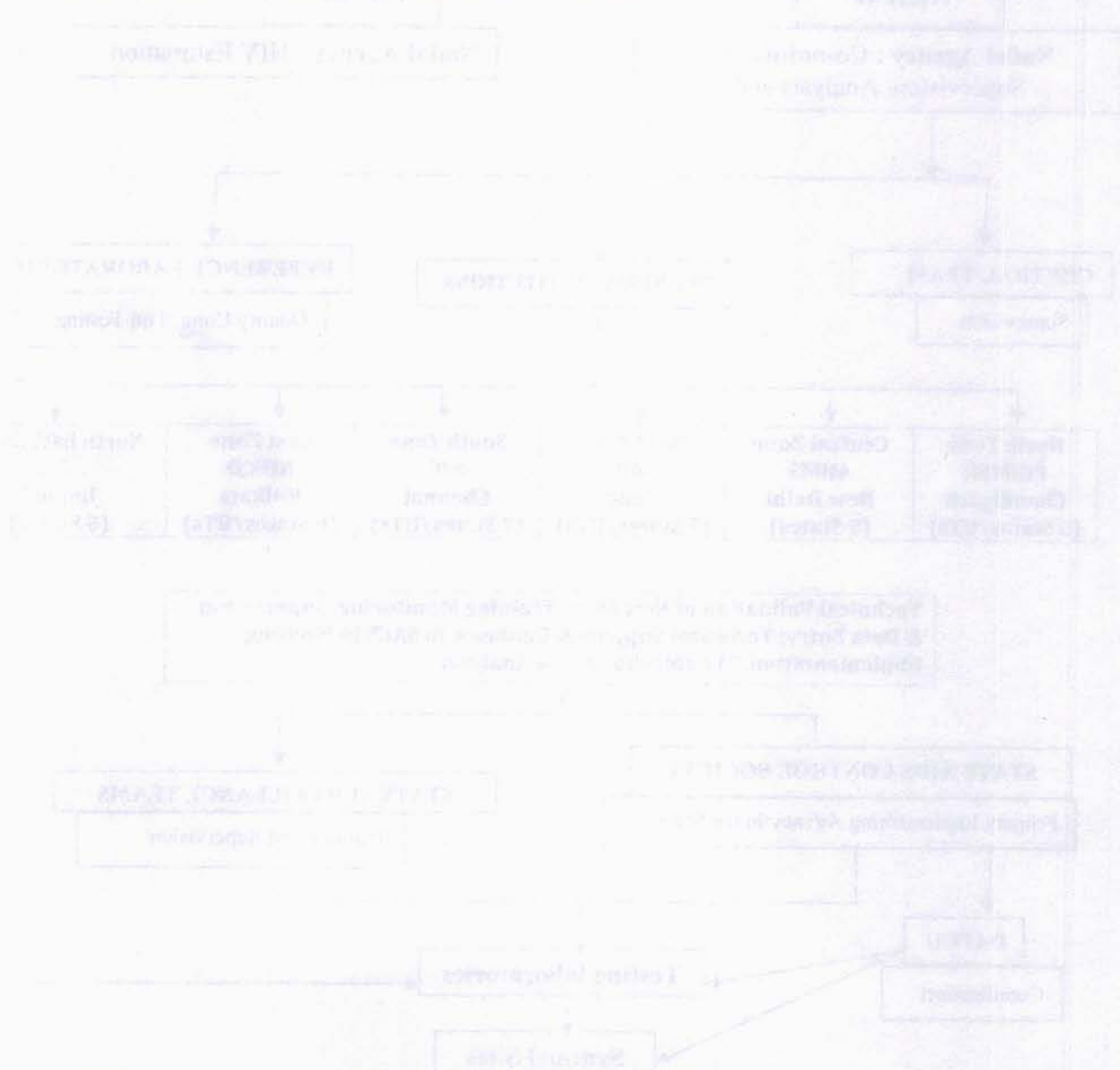
Proposed new ANC site for validation for the next financial year 2016-17 are :-

1. Government Medical College & Hospital, GMCH-32, Chandigarh.
2. Community Health Centre (CHC), Sec-22, Chandigarh.

SPH, PGIMER has done the validation and the conclusions are as follows: Both the sites fulfill all the human resource and infrastructural requirements to be a site for ANC- HSS, but the true representation of Chandigarh population is only seen in site CHC -22. In GMCH-32 only 30% of the antenatal population is from Chandigarh while rest 70% is from neighbouring states. So CHC -22 appears to be a better option for starting a new ANC site in addition to the existing site at GMSH-16.

- ❖ It is essential to increase "Awareness and Knowledge" among general population through IEC (Information Education and Communication), BCC (Behaviour Change Communication), "Life Skills Education" in schools and colleges. This will empower them to protect not only themselves against HIV, but also their children and partners.
- ❖ More Efforts are required for "Adolescent Education Program", who are especially more vulnerable to HIV.

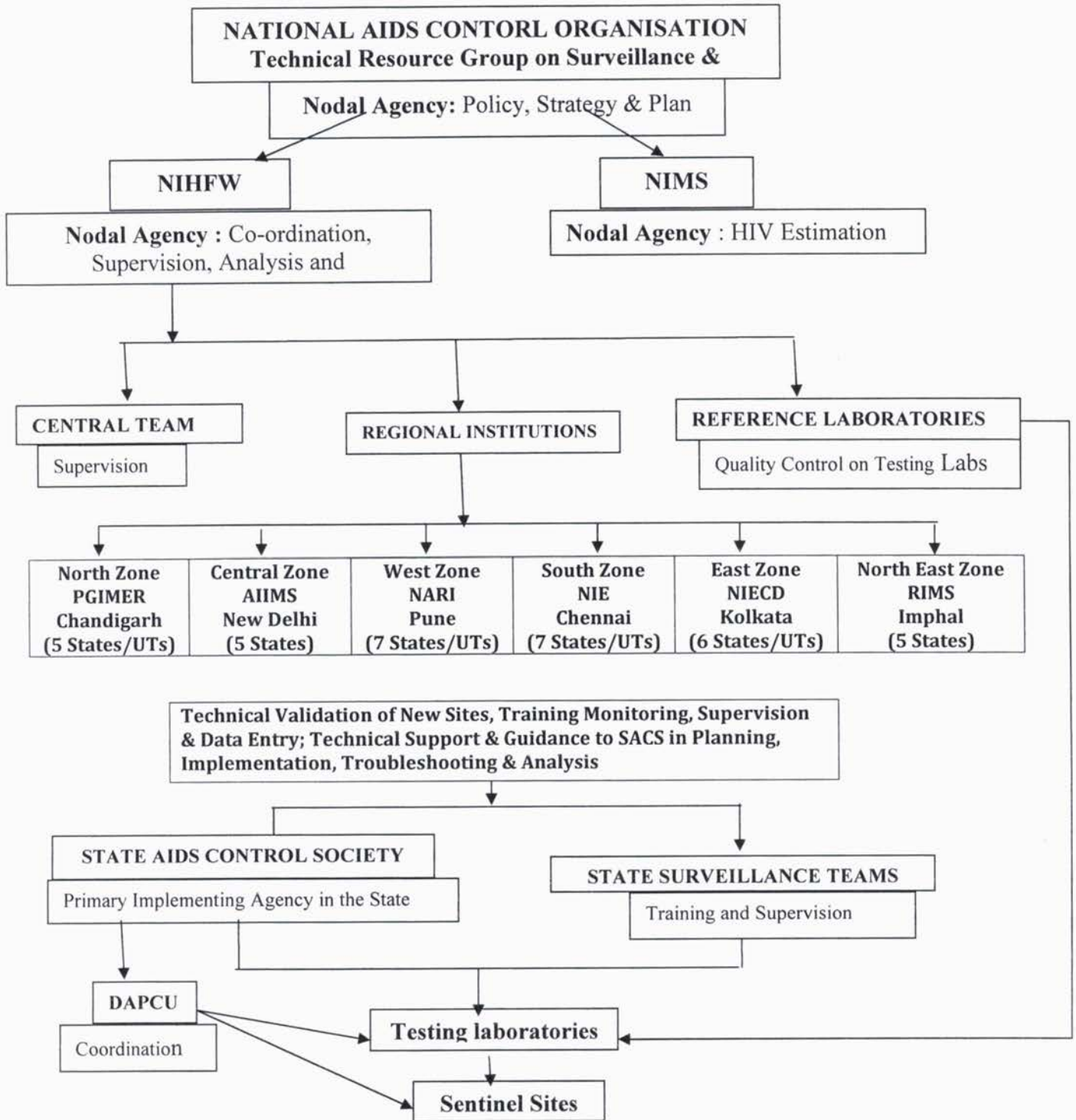
## ANNEXURES



## Annexure 1

### Implementation Structure - (Flow Chart)

The implementation structure and key functions of each agency is shown in below mentioned flow chart.





## Annexure - 2

- Pre- Surveillance Sentinel Site Evaluation form HSS 2014-15

### Pre Surveillance Sentinel Site Evaluation Form, HSS 2014-15

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

**HIV Sentinel Surveillance Round 2015**  
**Pre-Surveillance Sentinel Site Evaluation (ANC Sites)**

**I. General Information**

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

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

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

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

11. Type of Facility:  Medical College Hospital  Non-teaching Tertiary/ Speciality Hospital  District Hospital  
 Area Hospital  CHC/ Rural Hospital/ Block Hospital  PHC  Nursing Home  Clinic/Dispensary  Others

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

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

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

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

**II. Status of Human Resource**

Medical officer/ Site In-charge	Nurse/ Counselor	Lab Technician
1. Is the staff in place? <input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
2. Is there a chance of transfer/ leave/ leaving the job in next 6 months? <input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
3. Did the staff participate in any previous rounds of surveillance? <input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
4. Is the staff trained in Sentinel Surveillance earlier? <input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO

**III. Status of Infrastructure**

1. Refrigerator  Available & Functional  Available & Non-functional  Not Available

2. Centrifuge Machine  Available & Functional  Available & Non-functional  Not Available

3. Boiler/ Autoclave/ Other Equipment  Available & Functional  Available & Non-functional  Not Available

4. Storage Racks/ Shelves  Available & Functional  Available & Non-functional  Not Available

5. Sample Transportation Boxes  Available & Functional  Available & Non-functional  Not Available

6. Cold-chain Equipment for Sample Transport  Available & Functional  Available & Non-functional  Not Available

7. Needle Cutter/ Destroyer  Available & Functional  Available & Non-functional  Not Available

8. Bio-medical Waste Disposal Unit (Incinerator/ Waste Pit)  Available & Functional  Available & Non-functional  Not Available

9. Average duration of power cut in a day (in hrs):

10. Generator  Available & Functional  Available & Non-functional  Not Available

**IV. Other Site-Specific Issues**  
(Any specific issues or problems at the sentinel site anticipated for the coming round of surveillance may be noted below.)

### Annexure - 3

- Data form for Surveillance at ANC sites HSS 2014-15.

#### Bilingual Data form for Surveillance at ANC sites, HSS 2014-15

**HSS 2014-15 : DATA FORM FOR ANTENATAL CLINIC ATTENDEES (ANC)**  
**एच.एस.एस. 2014-15 प्रसवपूर्व जांच केंद्रों में जाने वाली महिलाओं के लिए डेटा प्रपत्र**  
*(Please fill the site details in the box below OR Paste the sticker with site details/Stamp the site details in the empty box  
 सेटिनेल साइट की जानकारी यहाँ लिखें / चपरे / स्टिकर)*

State/राज्य: _____	District/ज़िला: _____	
Site Name / साइट का नाम: _____		
Site Code (Site Code)	Sub-site No. (Sub-site No.)	Sandy No. (Sandy No.)
Date DDMMYY (Date DDMMYY)		

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

2. Literacy Status / साक्षरता स्थिति  
 1. Illiterate / निरक्षर  
 2. Literate and till 5<sup>th</sup> standard / साक्षर और पाँचवी तक  
 3. 6<sup>th</sup> to 10<sup>th</sup> standard / छठी से दसवी तक  
 4. 11<sup>th</sup> to Graduation / ग्यारहवीं से स्नातक  
 5. Post Graduation / स्नातकोत्तर

3. Order of Current Pregnancy / वर्तमान गर्भ का क्रम  
 1. First / पहली बार  
 2. Second / दूसरी बार  
 3. Third / तीसरी बार  
 4. Fourth or more / चौथी या उससे ज़्यादा

4. Source of Referral to the ANC clinic / प्रसवपूर्व जांच केंद्र में रेफरल का स्रोत  
 1. Self Referral / स्वतः रेफरल  
 2. Family/Relatives/Neighbors/Friends / परिवार/ रिश्तेदार/ पड़ोसी/ दोस्त  
 3. NGO / एन.जी.ओ.  
 4. Private Hospital (Doctor/Nurses) / निजी अस्पताल (डॉक्टर/नर्स)  
 5. Govt. Hospital (including ASHA/ANM) / सरकारी अस्पताल (इलाहा/ए.एन.एम.)  
 6. ICTC / ART Centre / आई.टी.सी./ ए.आर.टी. केंद्र

5. Current Place of Residence / वर्तमान निवास स्थान  
 1. Urban (Municipal Corporation / Council / Cantonment) / कस्बा (नगरपालिका/ पंचायत / कान्टनमेंट)  
 2. Rural / ग्रामीण

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

7. Current Occupation of the Respondent / प्रतिवादी का वर्तमान व्यवसाय  
 1. Agricultural Labourer / कृषि श्रमिक  
 2. Non-Agricultural Labourer / गैर कृषि श्रमिक  
 3. Domestic Servant / घरेलू सहायक  
 4. Skilled/Semi-skilled worker / कुशल/अर्धकुशल श्रमिक  
 5. Petty business / small shop / लघु व्यवसाय/ छोटी दुकान  
 6. Large Business/Self employed/लगातार व्यवसाय/स्वयं-सहायक  
 7. Service (Govt./Pvt.) / कार्यकारी (सरकारी/निजी)  
 8. Student / छात्रा  
 9. Truck Driver/helper / ट्रक चालक/सहायक  
 10. Local transport worker (auto/taxi driver, handcart puller, rickshaw puller etc.)/स्थानीय परिवहन कार्यकारी (ऑटो/टैक्सी चालक, बैलगाड़ी चालक, रिक्शाचालक)  
 11. Hotel Staff / होटल कर्मचारी  
 12. Agricultural cultivator/landholder / कृषक/जमींदार  
 13. Unemployed / बेरोजगार  
 14. Housewife / गृहणी

8. Current Occupation of the Spouse / प्रतिवादी के पति का वर्तमान व्यवसाय  
 1. Agricultural Labourer / कृषि श्रमिक  
 2. Non-Agricultural Labourer / गैर कृषि श्रमिक  
 3. Domestic Servant / घरेलू सहायक  
 4. Skilled/Semi-skilled worker / कुशल/अर्धकुशल श्रमिक  
 5. Petty Business / small shop / लघु व्यवसाय/ छोटी दुकान  
 6. Large Business/Self employed/लगातार व्यवसाय/स्वयं-सहायक  
 7. Service (Govt./Pvt.) / कार्यकारी (सरकारी/निजी)  
 8. Student / छात्रा  
 9. Truck Driver/helper / ट्रक चालक/सहायक  
 10. Local transport worker (auto/taxi driver, handcart puller, rickshaw puller etc.)/स्थानीय परिवहन कार्यकारी (ऑटो/टैक्सी चालक, बैलगाड़ी चालक, रिक्शाचालक)  
 11. Hotel Staff / होटल कर्मचारी  
 12. Agricultural cultivator/landholder / कृषक/जमींदार  
 13. Unemployed / बेरोजगार  
 99. Not Applicable (For Never married/Widows/Divorced/Separated) / लागू नहीं होगा (अविवाहित/विधवा/वियोग/अलग रहनेवाला क विवाह)

9. Does spouse reside alone in another place/town away from wife for longer than 6 months? / क्या प्रतिवादी के पति उनसे दूर काम के लिए 6 महीनों से ज़्यादा किसी दूसरे स्थान पर रहते हैं?  
 1. Yes / हाँ  
 2. No / नहीं  
 99. Not Applicable (For Never married/Widows/Divorced/Separated) / लागू नहीं होगा (अविवाहित/विधवा/वियोग/अलग रहनेवाला क विवाह)

Signature / हस्ताक्षर : \_\_\_\_\_

Name / नाम : \_\_\_\_\_  
(Person who filled the form)  
 व्यक्ति जिसने फॉर्म भरा है

Signature / हस्ताक्षर : \_\_\_\_\_

Name / नाम : \_\_\_\_\_  
(Person in-charge)  
 सेटिनेल साइट की ज़िम्मेदारी

## Annexure-4

### Surveillance Team Members

#### CSACS Team

- Project Director
- HSS In-charge
- DD- STI & I/c ICTC
- DD-TI
- M&E Program I/c

Dr. Vanita Gupta  
Dr. Anu Dosanjh  
Dr. Kavita Chavan  
Mr. Sandeep Mittal  
Ms Poonam Bakshi

#### School of Public Health/RI/SST (PGIMER-Chandigarh)

- Prof & Head, Deptt of Community Medicine, PGIMER
- Additional Prof
- HSS Coordinator

Dr. Rajesh Kumar  
Dr. Lakshmi  
Dr. Deepak Sharma

#### State Reference Lab (SRL-PGIMER- Chandigarh )

- Prof and Head Immunopathology Lab

Dr. Sunil Arora

#### Microbiology Lab, Govt, Multi Speciality Hospital, Sector-16, Chandigarh

- MO In-charge Pathology Lab, GMSH-16.

Dr. Abha

### Acronyms

ANC	Antenatal Clinic
CI	Confidence Interval
CTM	Center Team Member
DBS	Dried Blood Sample
ELISA	Enzyme Linked Immuno Sorbent Assay
EQAS	External Quality Assurance System
FSW	Female Sex Worker
HRGs	High Risk Groups
HSS	HIV Sentinel Surveillance
ICTCs	Integrated Counseling and Testing Centers
IDU	Injecting Drug Users
LDT	Long Distant Tracker
MSM	Men who have Sex with Men
NACP	National AIDS Control Programme
NGOs	Non-Govt. Organizations'
SACS	State AIDS Control Society
SMM	Single Male Migrant
SPH	School of Public Health
SRL	State Reference Laboratory
SST	State Surveillance Team
RI	Regional Institute
TG	Transgender
VDRL	Venereal Disease Research Laboratory

