

NACO is committed to contain the spread of HIV in India by building an all-encompassing response reaching out to diverse populations. It endeavours to provide people with accurate, complete and consistent information about HIV and promote effective interventions and responsible behaviours. National AIDS Control Programme is built on a foundation of evidence, experience and community involvement, and is determined to formulate strategic responses to the changing HIV/AIDS situation in India.

A close watch on the HIV epidemic, its patterns of spread and vulnerabilities is critical for a successful strategic response. HIV Sentinel Surveillance system is the most important system established by NACO for monitoring the HIV epidemic among different population groups across the country. The robust system of conducting HIV surveillance annually, through a large network of personnel, health facilities, NGOs, laboratories, administrative units and institutes, symbolizes NACO's commitment to evidence-based planning and its readiness to adapt to emerging patterns of HIV epidemic.

Constant efforts are made to improve the mechanisms and methods of HIV surveillance to ensure better quality of data. This manual is an outcome of such efforts to simplify the processes and make them user-friendly. 'Operational Manual for HRG Sentinel Sites' describes the eligibility criteria and sampling process to be followed for surveillance among High Risk Groups. It gives instructions for managing HSS register, administering informed consent and data forms at the sentinel sites. The steps and precautions to be taken while collecting, drying, packing and transporting the Dried Blood Spot specimens are outlined in this manual and explained with the help of pictures wherever necessary. It also enlists the roles and responsibilities of the key personnel involved. The manual also highlights the important messages to be borne in mind while implementing surveillance at HRG sentinel sites.

This manual is a part of HIV Sentinel Surveillance 2010 series with three publications. While Technical Guidelines elucidate the science of HIV Sentinel Surveillance adopted in India, the two operational manuals provide guidance to the personnel implementing it.



**National AIDS Control Organisation**

**India's voice against AIDS**

**Department of AIDS Control**

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## **HIV Sentinel Surveillance 2010**

### **Operational Manual for HRG Sentinel Sites**

**National AIDS Control Organisation**

**Department of AIDS Control**

Ministry of Health and Family Welfare  
Government of India

**August 2010**



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HIV Sentinel Surveillance 2010 - Operational Manual for ANC & STD Sentinel Sites

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# **HIV Sentinel Surveillance 2010**

## **Operational Manual for HRG Sentinel Sites**



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**National AIDS Control Organisation**

**Department of AIDS Control**

Ministry of Health & Family Welfare, Government of India

**August 2010**

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### FOREWORD

India has the largest and one of the best HIV surveillance systems in the world. HIV Sentinel Surveillance is the most important tool to monitor HIV epidemic in the country. Surveillance data are also used for estimating key epidemiological parameters, such as HIV burden, new infections and deaths due to AIDS as well as important programme parameters such as need for ART & PPTCT. Surveillance is a vital component of Strategic Information that provides useful inputs for setting up priorities, planning interventions, resource allocation and evaluation of impact under the National AIDS Control Programme (NACP).

Understanding the critical role played by surveillance in decision making, the National AIDS Control Organisation (NACO) has established a credible and robust system for annual HIV Surveillance in the country. Started in 1992, this system has crossed several milestones. The impressive progress is reflected not only in its expansion and strengthened implementation mechanisms, but also in its enhanced focus on quality and use of data. Through a consistent, yet dynamic strategy, the surveillance system has evolved taking into consideration the emerging evidence on epidemic patterns and vulnerabilities as well as the growing programme needs. Use of surveillance outputs for programme planning and identification of priority areas has been promoted at national, state as well as district level.

NACO is now conducting its 12th round of annual HIV Sentinel Surveillance from 15th Sept 2010 for a period of three months. The scale of operation can be gauged from the fact that there are over 1,200 sentinel sites spanning the country, a network of about 150 laboratories for testing and quality control, over 5,000 personnel involved in collecting and testing about 4 lakh samples, and a massive supervisory structure of around 300 public health experts and microbiologists, 35 State AIDS Control Societies and eight public health institutions. Quality has always been the central focus in HIV Sentinel Surveillance. Strategic improvements have been effected on various fronts such as training, sample recruitment, specimen collection, supervision, and data management to ensure quality at every step and enhance reliability of outputs.

As site in-charge, Counselor or Lab Technician at the sentinel site, your role is crucial to the entire process. This manual describes each of your roles and responsibilities, steps to be followed and precautions to be taken at the sentinel site while implementing surveillance activities. Strict adherence to the guidelines prescribed in this manual will help you in ensuring high quality surveillance at your sentinel site.

The State AIDS Control Societies, Regional Institutes, NIHF, NIMS, and WHO have been making significant contribution to NACO's efforts for strengthening surveillance system in the country. I thank all the epidemiologists, microbiologists and other experts in central and state surveillance teams, testing and reference laboratories and partner agencies for supporting this important national endeavour.

(K. Chandramouli)

## ACRONYMS

AIDS	Acquired Immuno-Deficiency Syndrome
ANC	Antenatal Clinic
ART	Anti-Retroviral Treatment
DBS	Dried Blood Spot Method
DIC	Drop-in Centre
FSW	Female Sex Workers
HIV	Human Immuno-deficiency Virus
HRG	High Risk Groups
HRI	High Risk Individual
HSS	HIV Sentinel Surveillance
ICTC	Integrated Counseling and Testing Centre
IDU	Injecting Drug Users
LDT	Long Distance Truckers
LT	Lab Technician
MSM	Men who have Sex with Men
NACO	National AIDS Control Organisation
NACP	National AIDS Control Programme
NFHS	National Family Health Survey
NGO	Non-Governmental Organisation
ORW	Outreach Worker
OST	Opioid Substitution Therapy
PE	Peer Educator
PPTCT	Prevention of Parent to Child Transmission
SACS	State AIDS Control Society
SMM	Single Male Migrant
SOP	Standard Operating Procedure
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
STS	Sample Transportation Sheet
TI	Targeted Intervention
UAT	Unlinked Anonymous Testing
WHO	World Health Organisation

## GLOSSARY

In order to standardize the terminology used in HIV Sentinel Surveillance and to enable correct interpretation of different words, the key words used in this document are explained below.

**High Risk Group (HRG):** Populations with high risk behaviour for contracting HIV. Include Female Sex Workers (FSW), Men who have Sex with Men (MSM), Injecting Drug Users (IDU), Single Male Migrants (SMM) and Long Distance Truckers (LDT). The last two groups are also referred to as Bridge Population.

**High Risk Individual (HRI):** This term is used to refer to a particular individual from any of these High Risk Groups.

**Sample:** High Risk Individual who is found to be eligible for inclusion in HIV Sentinel Surveillance as per the specified criteria.

**Specimen:** Blood collected from the eligible High Risk Individual.

**Data Form:** Brief Questionnaire seeking information related to socio-demographic characteristics and vulnerabilities of the eligible HRI.

**Recruitment:** Including an eligible HRI in HIV Sentinel Surveillance by filling a data form and collecting blood specimen.

**Informed Consent/ Informed Assent:** Willingness expressed by an eligible HRI (and his/her parent/guardian/caregiver) to be recruited into HSS after completely understanding the purpose, advantages and disadvantages of his/her recruitment. In case of individuals aged 18 years or above, it is called 'Informed Consent'. In case of those less than 18 years, it is called 'Informed Assent'.

**Sentinel Site:** A designated service point or facility where a fixed number of eligible HRI from a specified population group are recruited over a fixed period of time for the purpose of monitoring the epidemic.

**Sentinel Site Code:** Unique number given to each sentinel site. It is a **nine** digit number comprising codes for state (2 digits), district (3 digits) and site type (2 digits) followed by site number (1 digit) and sub-site number (1 digit).

**Sample Number:** Unique number given to each eligible HRI recruited in HIV Sentinel Surveillance at a sentinel site. It is a three digit number starting with '001'. Sample number of an eligible individual is mentioned on the data form as well as on the blood specimen of the corresponding individual.

**Sampling Method:** The approach adopted at the sentinel site for recruiting eligible

HRI in HSS. Consecutive sampling and Random sampling are the two sampling methods adopted in HIV Sentinel Surveillance at HRC sentinel sites.

**Testing Strategy:** The approach adopted for testing the blood specimens collected during HSS. Unlinked Anonymous Testing Strategy is adopted in HIV Sentinel Surveillance.

**Testing Protocol:** Indicates the number of HIV tests conducted on the blood specimen collected during HSS. Two-test protocol is adopted in HIV Sentinel Surveillance (First test of high sensitivity & Second test of high specificity, if first test is positive).

**Dried Blood Spot (DBS) Method:** DBS method is the technique of blood specimen collection where drops of capillary blood are collected, through finger prick using a sterile lancet, on to a special protein saver card and dried subsequently to prepare the dried blood spot specimens. The DBS specimens are sent to testing laboratories where serum is eluted from the dried blood spots and used for testing.

**DBS Testing Lab:** Designated laboratory where Dried Blood Spot specimens collected under HIV Sentinel Surveillance are tested for HIV.

**Master List/ Master Register:** Computerised listing of HRI ever-contacted and registered at the Targeted Intervention (TI) Project (Form E). Master list contains serial no./ master list no., name & age of each HRI followed by other details relevant to TI project.

**Line-list:** List of HRI who are contacted and provided TI services in the last six months. Line list is derived from of master list. In addition to those who are regularly contacted/provided services from the TI project, line list includes the new contacts/ registrations made in the last six months and excludes those who were registered in the past, but could not be contacted in the last six months. So, line list is an updated list of HRI who are currently under the coverage of TI project. Line list is updated every month. Line list also contains master list no., name & age of each HRI.

**Random list:** List of HRI selected by random sampling out of the recently updated and validated line list. A new serial no./random list no. is given to each randomly selected HRI, starting from 1. So, besides master list no., name & age of HRI, random list contains random list no.

**PE-wise list:** List of randomly selected HRI under each Peer Educator (PE). From the random list, a separate list of HRI is prepared for each PE. PE-wise list is used by PE for contacting the HRI and documenting the outcomes of the contacts.

## 1. Introduction

The annual national HIV Sentinel Surveillance (HSS) is one of the components of the second generation HIV surveillance in India. It is one of the largest HSS systems in the world. It helps to understand the dynamics of the HIV epidemic and monitor the trends among different population groups and geographical areas and, thus, provides inputs to programme for strengthening prevention and control activities. The sentinel sites have been scaled up in a phased manner from 180 in 1998 to 1212 in 2008. Almost every district in the country now has a sentinel site among one or more of the risk groups.

For surveillance among high risk groups, selected targeted intervention project sites are designated as sentinel sites where a predetermined number of samples are collected every year over a fixed duration. At each sentinel site, three designated staff are given the responsibility to implement the surveillance activities. The project manager of the TI is designated as the sentinel site in-charge. Site in-charge is supported by counselor in documentation and data collection, and by laboratory technician in collection of blood specimen by DBS method.

This operational manual has been prepared for easy reference of the staff at HRG sentinel sites. This manual highlights the operational and managerial issues at the sentinel site for efficient implementation of HSS at these sites. This manual details the roles and responsibilities of the staff, sampling process, documentation and blood specimen management. Site in-charge should be aware of the entire set of functions and responsibilities of all the staff at the sentinel site. This ensures better coordination and uninterrupted continuation of surveillance activities at the sentinel site.

*Eyes see what the mind knows. The reader is strongly encouraged to refer to the technical guidelines for HIV sentinel surveillance, because a comprehensive reading of both these documents would strengthen not only operational efficiency of implementing surveillance, but also would ensure sound understanding of rationale of the entire process.*

## 2. Roles and Responsibilities

### *Sentinel Site In-Charge should*

1. be responsible for all the arrangements and activities for HIV surveillance at the site
2. attend trainings conducted for surveillance by the SACS
3. conduct a Pre-Surveillance on-site training of the staff participating (or expected to participate) in surveillance activities, including Peer Educators and Outreach workers (ORW)
4. Ensure that the High Risk Individuals (HRI) are recruited as per the method of sample recruitment specified for the site
5. ensure that all the documentation at the sentinel site is properly maintained and complete
6. ensure that sample number is not linked with individual's identity thus maintaining unlinked anonymous testing strategy
7. ensure that the standard operating procedures (SOP) for Dried Blood Spot (DBS) method are complied with by the staff at every step
8. check the forms filled on a particular day for completeness, discuss issues, if any, with concerned staff, guide them and sign them. **Never sign blank data forms in advance.**
9. monitor the progress in sample collection on daily basis
10. arrange for transport of DBS specimens, packed as per guidelines, along with sample transportation sheet (STS) to testing laboratory every week and file the returned copy of STS at site
11. ensure that filled up informed consent forms along with the register are kept securely at the site and are sent to respective SACS/RI at the end of HSS
12. contact the nodal person at SACS for any clarification/ problem regarding staff, availability of the listed consumables, Operational manuals, flow charts, data forms and stamps/ printed stickers or any methodological issues

At the sites where random sampling method is followed, sentinel site in-charge should fulfil the following additional responsibilities.

1. Obtain the list of randomly selected names of HRI (Random List) from SACS.
2. Prepare separate list for each Peer Educator (PE-wise List).
3. Conduct a session to orient the Peer Educators on surveillance, sample recruitment and information to be communicated to the HRI at the time of contact.
4. Plan the visits of HRI with each PE to avoid overcrowding on a particular day.
5. Prepare a list of HRI who could not be recruited every fifteen days and obtain additional names from SACS to replace them.

### **NGO Counselor should**

1. correctly identify the eligible respondents as per the inclusion criteria and recruit each successive eligible HRI in the case of consecutive sampling. At sites with random sampling method, maintain the random list and PE-wise list and ensure that the HRI selected by random sampling are correctly recruited into HSS.
2. record the details of HRI in HSS register and assess eligibility as per the inclusion criteria
3. administer informed consent/assent form to all eligible HRI in their local language
4. fill the data form for the eligible respondents as per the instructions given
5. ensure that data form does not carry any personal identifiers
6. ensure that the filled data form and the respondent reach laboratory technician for blood collection
7. ensure proper storage of data forms, informed consent forms and HSS register and weekly transport of data forms to Regional Institute, along with data form transportation sheet
8. assist site in-charge in the overall implementation of surveillance at the site

### ***Laboratory Technician should***

1. verify the completeness of data form before taking the blood specimen; refer back to counselor immediately if any fields are missing or illegible
2. securely store the consumables received from SACS, especially the filter paper cards, as per the instructions
3. collect blood specimen on the filter paper cards, dry, pack and store them as per Standard Operating Procedures (SOP)
4. take all the care and precautions to avoid exposure of to blood specimens to moisture
5. assist site in-charge in storage, packing and transportation of blood specimens every week and their documentation
6. strictly adhere to all the prescribed bio-safety measures

### 3. Materials Required at HRG Sentinel Site

S.No.	Materials / Consumables	Quantity Required
	<b>Documents</b>	
1	Technical guidelines	1
2	Operational Manuals	3
3	Wall charts/Flow Charts	1
4	HSS Register	1
5	Informed Consent / Assent Forms	300
6	Informed Consent Forms for Parent/Guardian	25
7	Data Forms	300
8	Data Form Transportation Sheet	30
9	Random List	1
10	Stamp/ Sticker with site details	2 stamps/ 300 stickers
11	Sample transportation sheets	30
	<b>Consumables for DBS Method</b>	
1	Alcohol preps/ swabs	300
2	Sterile disposable rubber gloves	300
3	Safety lancets	300
4	Sterile disposable gauze pieces	300
5	Filter paper card/ DBS card with five circles	250
6	Small Circular Band aids	300
7	Drying racks	3
8	Drying boxes	5
9	Desiccant packs	1200
10	Butter Paper	300
11	Low-gas permeable small zip-lock bags	250
12	Big zip lock bag	40
13	Sample Transportation Boxes	30
	<b>Material for Waste Disposal</b>	
1	Puncture proof containers (Jar for disposal of sharps)	2
2	Sodium Hypo-chlorite solution	2 litres
3	Color-coded waste disposal bags (Yellow, blue and black)	10 - 15

## 4. Eligibility Criteria

The following criteria should be evaluated while assessing the eligibility of high risk individuals for inclusion in surveillance.

### **Box 1. Eligibility Criteria for Inclusion in HSS at HRG Sites**

#### **Inclusion Criteria**

1. Fulfil the case definition (as detailed below)
2. Age between 15 & 49 years

#### **Exclusion Criterion**

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

### **4.1. Case Definitions for HIV Sentinel Surveillance**

1. **Female Sex Worker:** Women who are engaged in consensual sex for money or payment in kind, as a means of livelihood in the last 6 months
2. **Men who have Sex with Men:** Men who had anal or oral sex with a male partner in the last one month
3. **Injecting Drug User:** 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
4. **Transgender/Eunuch:** Person whose identity does not conform unambiguously to conventional notions of male or female gender roles, but combines or moves between these
5. **Single Male Migrant:** 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.
6. **Long Distance Trucker:** Truckers who travel more than 800 km one way between source and destination

## 5. Recruitment Process

1. The specified sample size for HRG sentinel sites is 250, to be collected over a period of three months. In case of composite sites, sample size will be specified for each sub-site and this should be obtained from SACS.
2. Sample collection should be stopped once the target of 250 has been achieved or at the end of three month period, even if the target of 250 is not achieved. In order to reach the target, sentinel sites should not recruit HRI through special mobilisation or camps or by including ineligible HRI. Data from sentinel sites is more useful and reliable if the recruitment process is strictly followed.
3. Recruitment process at HRG sites differs according to the sampling method adopted at the site.
4. Two sampling methods are adopted for surveillance at HRG sites - **consecutive sampling and random sampling.**
5. The steps under each method are detailed below. Method specified for a given sentinel site may be followed.
6. At sites where consecutive sampling method is adopted, only 5-10 HRI should be recruited per day so that adequate time can be given to each individual and quality can be ensured at every step of recruiting the respondent for HSS – documenting in HSS register, administering informed consent, filling data form and collecting blood specimen.
7. At sites where random sampling method is adopted, only HRI assigned to the PE on a fixed day (Five) should be recruited on that day.
8. Additional samples will have to be recruited if any of the blood specimens are declared invalid by the testing lab. The number of such additional samples will be intimated by testing lab/SACS. For sites with random sampling method, SACS will issue additional randomly selected names, as replacement.

### 5.1. Consecutive Sampling Method (Refer Flow Chart 1)

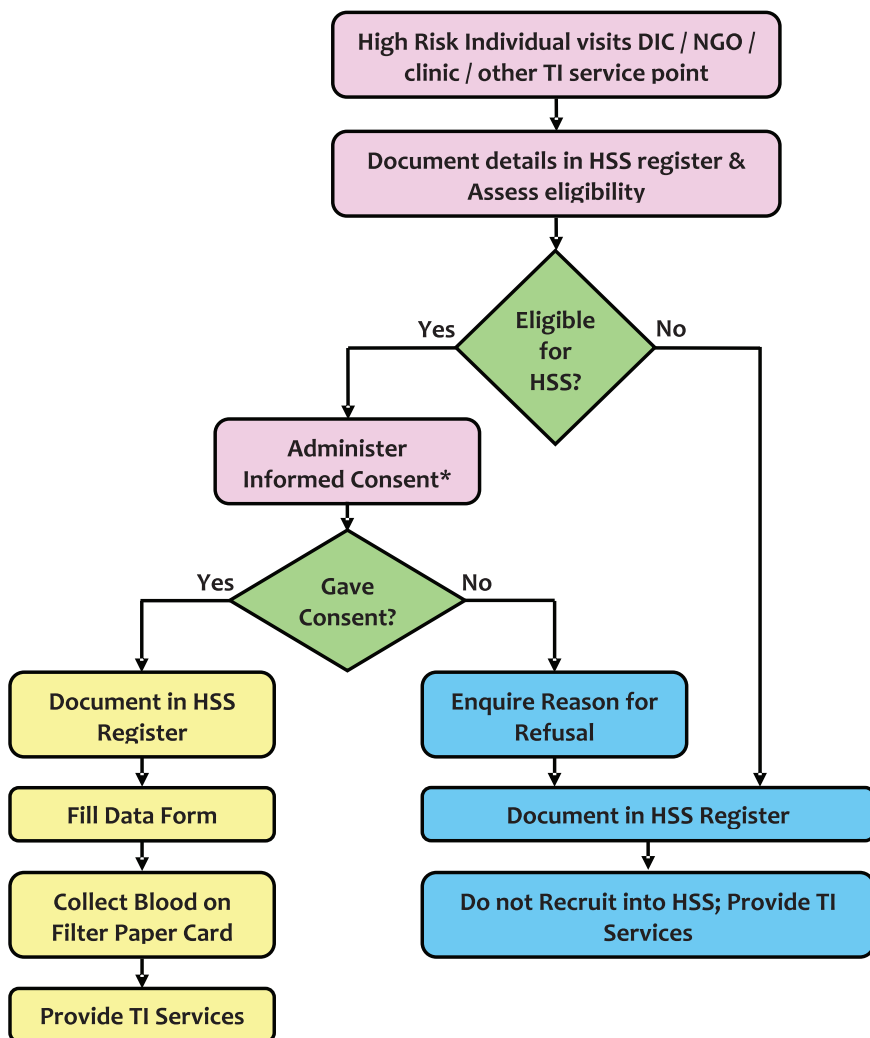
1. Every HRG site shall maintain the HSS Register in the prescribed format. Details of HSS Register Format and instructions on documentation are given at section 6.2.1.
2. From the start of surveillance period, enroll every HRI who visits the DIC/clinic/service point in HSS register by documenting the basic information and assess eligibility for inclusion in HSS. The concept of consecutive sampling is described in Box 2.

**Box 2. Consecutive Sampling Method**

- After the start of surveillance, all individuals attending the DIC/NGO Clinic/Service Point, who are eligible for inclusion in surveillance as per the defined criteria, should be recruited **in the order they attend the clinic**.
  - Consecutiveness should be maintained at the point of enrollment in HSS register & assessment of eligibility and while administering informed consent to every successive eligible individual.
  - This sampling method removes all chances of selection or exclusion based on individual preferences or other reasons, and hence reduces the selection bias.
  - It is convenient, feasible and easy to follow.
3. If the HRI is not eligible for inclusion in HSS, document the same in HSS register and provide him/her the TI services for which he/she came to the DIC/Clinic.
  4. If the HRI is eligible for inclusion in HSS, administer the informed consent/ assent form. Refer to Section 6.3 for detailed instructions on administering informed consent/ assent form.
  5. If the HRI of **age 15-17 years** gives his/her assent, informed consent should also be obtained from the guardian/caregiver.
  6. Document whether the HRI has given consent/assent in HSS register.
  7. If HRI refused to participate, enquire the reason for refusal, document the same in HSS register and provide him/her the TI services for which he/she came to the DIC/Clinic.
  8. If the required consent/assent are obtained, after taking the signatures/thumb impressions on consent/assent forms, fill the data form and send the HRI to lab technician for blood specimen collection.
  9. If the HRI wants to know his/ her HIV status, refer him/her to ICTC by giving the referral slip. Provide him/her the TI services for which he/she came to the DIC/Clinic.

**NOTE:** If a HRI had been administered informed consent once and had refused earlier, he/she should not be considered for inclusion in HSS during his/her subsequent visits. However, he/she should be enrolled in HSS register during subsequent visits by giving a serial no. & mentioning 'Yes' under the column, 'Is he/she approached/administered informed consent once during the the current surveillance period?'. No other documentation is required.

## Flow Chart 1. Process of Consecutive Sampling at HRG Sentinel Sites

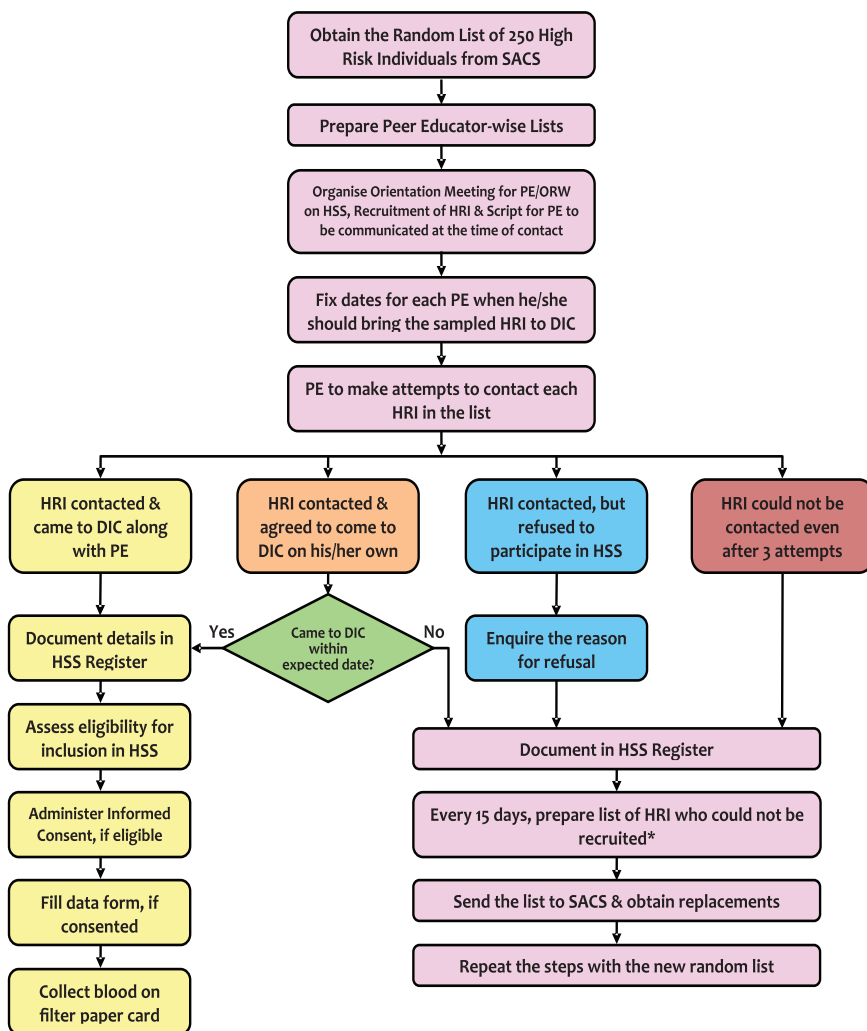


*\* For the HRI of age 15-17 years, since they are not allowed to give legal consent, 'INFORMED ASSENT' should be taken from the individual. If he/she gives assent, informed consent should also be obtained from the guardian/caregiver.*

## 5.2. Random Sampling Method (Refer Flow Chart 2)

1. Obtain the Random List of 250 names of HRI, containing random list no., master list no., name & age of HRI, form SACS.
2. From the random list, prepare a separate list of selected HRI for each Peer Educator (PE-wise list).
3. Conduct a meeting of PEs & ORWs and orient them on surveillance, sample recruitment and information to be communicated to the HRI at the time of contact. Instructions on organising this meeting are given subsequently.
4. The '**Script for PE**' is given in Box 3. Give two or three copies of the script to each PE.
5. Fix a date for each PE when he/she should bring the sampled HRI to DIC/Clinic. The following points may be noted in this regard.
  - a. Fix different dates for different PEs to avoid over-crowding of respondents at the DIC.
  - b. Dates may be fixed in discussion with the PE as per the suitability of the PE and the HRI.
  - c. PE should be instructed not to bring more than 5 HRI on a given day.
  - d. More than one date may be given to a PE with greater number of sampled HRI under him/her.
  - e. In case a specific HRI cannot come to DIC along with the PE on the fixed date, PE can bring him/her on any other day with prior intimation to DIC.
6. As per the list provided to each PE, they should contact the HRI, inform them about HSS and ask them to come to DIC on the fixed date.
7. PE should communicate to the HRI only in the way that has been specified in the 'Script for PE'.
8. PE should make **at least three attempts** to contact a sampled HRI.
9. PE should make **up to three contacts** with an HRI who agrees to come to DIC on his own, but does not come within the expected time.
10. PE should note down the details of the attempts and contacts, expected date of visiting DIC, reasons for refusal etc. against the name of the HRI on the PE-wise list that is given to him/her. This sheet can be provided to counselor for recording the details in HSS register at the DIC.
11. PE should accompany the HRI when he/she comes to the DIC, preferably on the fixed date.

## Flow Chart 2. Process of Random Sampling at HRG Sentinel Sites



\* Those who could not be recruited include: (1) Those who came to DIC, but are found to be ineligible (2) Those who came to DIC and are eligible, but refused to participate in HSS (3) Those who were contacted, but did not come to DIC within expected date even after 3<sup>rd</sup> contact (4) Those who were contacted, but refused to come to DIC for participating in HSS & (5) Those who could not be contacted even after 3 attempts.

12. When PE attempts to contact the sampled HRI, the scenarios that may arise, and actions to be taken are as follows.
  - a. **HRI contacted and came to DIC along with PE:** Follow the steps as mentioned under consecutive sampling starting with enrolment in HSS register and assessment of eligibility.
  - b. **HRI contacted and agreed to come to DIC on his own:** PE should note down the expected date on the PE-wise list.
    - i. If HRI comes to DIC within the expected date after 1/2/3 contacts, follow the steps as mentioned under consecutive sampling starting with enrolment in HSS register and assessment of eligibility.
    - ii. If HRI does not come to DIC within the expected date even after 3 contacts, consider him/her as a defaulter and document the same in HSS register as per the instructions given under section 6.2.2.
  - c. **HRI contacted but refused to come to DIC for participation in surveillance:** PE should enquire the reason for refusal and note it in PE-wise list for documentation in HSS register subsequently.
  - d. **HRI not contacted even after three attempts:** PE should report the same at the DIC for documentation in HSS register.
13. When PE comes to DIC along with the sampled HRI, counselor should
  - a. check whether the HRI is same as the one whose name is in random list
  - b. (For the HRI who came along with PE) follow the steps as mentioned under consecutive sampling starting with enrolment in HSS register.
  - c. enquire from PE about the other HRI who did not come with him/her and document them accordingly in the HSS register. Use the PE-wise lists on which PE has noted the details for recording them in HSS register.
14. At the end of every 15 days, prepare a list of HRI who could not be recruited, send it to SACS and obtain additional names from SACS to replace them. **The list of non-recruits should contain random list no., master list no., name & age of HRI, name of PE and reason for non-recruitment, as mentioned below.** The following HRI should be counted as those who could not be recruited.
  - a. Those who came to DIC, but are found to be ineligible
  - b. Those who came to DIC but refused to participate in HSS
  - c. Those who were contacted but did not come to DIC within expected date even after 3rd contact

- d. Those who were contacted, but refused to come to DIC for participating in HSS
- e. Those who could not be contacted even after 3 attempts
15. Besides the above reasons, new random list may be issued by SACS as replacements for the specimens that are declared invalid by the testing lab.
16. Repeat the same steps mentioned above with the new random list obtained from SACS.

### Instructions to organise PE/ORW meeting

1. Meeting and orientation of PEs is very essential as PE is critical in recruitment of HRI in random sampling approach.
2. Objective of this meeting is to make the PEs communicate appropriately to the HRI when they contact them in the field.
3. Prepare PE-wise lists of sampled HRI and distribute them to the PEs.
4. During the meeting, provide an overview to the PEs, of HIV Sentinel Surveillance and what is done under surveillance at the sentinel site.
5. Give copies of informed consent forms to PEs and explain its content in detail.
6. Encourage the PEs to read it and ask questions/doubts, if any. Clarify them adequately.
7. Give copies of what PE has to communicate to the HRI at the time of contact (script for PE). Ask each PE to read it out loudly.
8. Emphasise the point that PEs should communicate only as specified and explain that appropriate communication is important, in order to avoid refusals.

#### **Box 3. Script for Peer Educator**

A study/survey is being conducted across the country to determine the magnitude of HIV in different populations. This survey is conducted every year by Government of India. The results of this study will be useful in developing prevention programmes to control HIV in our area. 250 people have been randomly selected (by chance/lottery method) for this study to represent our area and you happen to be one among them. We would like to request you to come to the DIC where you will be provided more details about this study and asked if you want to participate. If you agree to participate in the study, some information and a few drops of blood by finger prick will be collected from you. Your name and address will not be recorded and therefore results cannot be linked to you. But, this will be a good contribution from you to improve services to control HIV in our country. Will you come with me to DIC on ..... (mention the fixed date)?

## 6. Documentation

### 6. 1. General Instructions

1. Documentation to be maintained at the HRG sentinel site and norms of submission are summarised in Table 1 below.
2. Only the designated and trained personnel should maintain the documentation at the sentinel site.
3. Site in-charge should ensure that all the documentation at the sentinel site is properly maintained and complete.
4. All the documents should be stored securely at the site.
5. Except one copy of sample & data form transportation sheet, **NONE OF THESE DOCUMENTS** should be retained or photocopied for retention at the site. All of them should be dispatched from the site as per the instructions given below

**Table 1. Documentation to be maintained at the HRG sentinel site and Norms of Submission**

S.No.	Document	Managed by	Verified by	Norms of Submission
1	HSS Register	Counselor	Site In-charge	Send to <b>Regional Institute</b> at the end of HSS
2	Informed Consent/ Assent Forms	Counselor	Site In-charge	Send to <b>SACS</b> at the end of HSS
3	Data Forms	Counselor	Site In-charge	Send to <b>Regional Institute EVERY WEEK</b> along with Data Form Transportation Sheet
4	Data Form Transportation Sheet	Counselor	Site In-charge	Send to <b>Regional Institute EVERY WEEK</b> along with data forms
5	Sample Transportation Sheet (STS)	Lab Technician	Site In-charge	Send to <b>DBS Testing Lab EVERY WEEK</b> along with DBS specimens
6	Random List & PE-wise lists	Counselor	Site In-charge	Send to <b>Regional Institute</b> at the end of HSS
7	List of non-recruits	Counselor	Site In-charge	Send to <b>SACS EVERY 15 DAYS</b>

6. **Unlinked Anonymous Testing strategy (UAT)** should be strictly adopted at the sentinel site. The concept of UAT is described in Box 4.
7. Informed consent forms **SHOULD NOT** be tagged or stapled with the corresponding data forms. They should be stored separately.

#### **Box 4. Unlinked Anonymous Testing Strategy**

- Testing for HIV is done on a blood specimen after removing all personal identifiers.
- Either the information collected in the data form or the HIV test result from the blood specimen can **NEVER** be linked to the individual from whom information/specimen is collected.
- Neither personnel collecting the blood specimen nor the personnel testing the blood specimen should be able to track the results back to the individual.
- Hence, personal identifiers such as name, address, registration number etc. **SHOULD NOT** be mentioned anywhere on the data form, blood specimen, data form transportation sheet or sample transportation sheet.

#### **Most Important Instruction on Documentation**

HSS Register, Data Form and Filter Paper Card

**SHOULD NOT CONTAIN NAME,  
SHOULD CONTAIN SAMPLE NUMBER.**

Informed Consent Form

**SHOULD NOT CONTAIN SAMPLE NUMBER,  
SHOULD CONTAIN NAME.**

## **6.2. HSS Register**

- 1) The objectives of maintaining HSS register are to understand
  - a. the profile of HRI who refused to participate in surveillance and
  - b. the reasons for refusal
- 2) HSS register also helps in the following:
  - a. assessing the eligibility of HRI for inclusion in surveillance
  - b. documenting the profiles of the ineligible respondents at the TI
  - c. better organising the process of random sampling and monitoring the number of replacements required
- 3) **At the sites where consecutive sampling is adopted, every HRI who visits the DIC/clinic during the three month period should be enrolled in HSS register on every visit. i.e. HRI should be enrolled in HSS register even during his second or subsequent visits.**

- 4) **At the sites where random sampling is adopted, every HRI included in the random list should be enrolled in HSS register.**
- 5) Since the recruitment process at HRG sites differs depending on whether consecutive or random sampling is adopted, the format of HSS register to be used at these sites is slightly different. The formats are explained below.

### 6.2.1. Format of HSS Register at HRG sites with Consecutive Sampling

**Table 2. Format of HSS Register at HRG sites with Consecutive Sampling**

1	2	3	4	5	6	7	8	9
Serial No.	Is he/she administered informed consent once during the current surveillance period? (Yes/No)	Age (in completed years)	Education status	Gender	whether eligible for HSS as per case definition?  (Yes/ No)	Whether informed consent/ Assent Given?  (Yes/ No)	If No, what is the reason for refusal?	If eligible and consents, write Sample number.

- a) **Column 1:** Serial number is the number allotted to each HRI who visits DIC/Clinic, starting with '1' and continuing subsequently, from the start of surveillance.
- b) **Column 2:** Enquire from the HRI/ verify from HSS register, if the HRI had already been administered informed consent once during the current surveillance period. Mention 'Yes' or 'No' accordingly. If yes, no further documentation is required as the HRI is not eligible for inclusion in surveillance. If no, continue with documenting the details in the subsequent columns in the HSS register.
- c) **Column 3:** Enquire the age of the HRI and record it in completed years.
- d) **Column 4:** Enquire the educational status and record the appropriate code as detailed under the Instructions to fill data form.
- e) **Column 5:** The column on 'Gender' is applicable only to IDU sites. Mention the gender of the IDU in the column by writing 'M' for 'Male' and 'F' for 'Female'.
- f) **Column 6:** Enquire if HRI fits the case definition for surveillance or not. Mention 'Yes' or 'No' accordingly.

The last three columns need to be filled only if an HRI is eligible i.e. fulfils all the three criteria (age 15-49, not administered informed consent earlier & fits case definition). If ineligible, leave the last three columns blank.

- g) **Column 7:** Mention if the eligible HRI has provided consent or not by writing 'Yes' or 'No'. In case of those age 15-17 years, since assent is taken from HRI and consent is taken from parent/guardian/caregiver, mention only the final status. i.e. Mention 'Yes' **ONLY IF BOTH**, assent of HRI and consent of parent/guardian/caregiver are obtained. Mention 'No' if any one of them is not obtained.
- h) **Column 8:** This column needs to be filled only if an eligible HRI or his/her parent/guardian/caregiver **DOES NOT** give assent/consent. In such case, enquire the reason for refusal and write the same verbatim. If assent/consent is obtained, leave this column blank.

**NOTE:**

- Column 8 is the most important column in HSS register since, the main objective of maintaining HSS register is to document the reason for refusal and profile of the refused. Hence, in all eligible cases who do not give assent/consent, probe for the reason for refusal and document the same clearly.
  - It is a usual practice to mention 'Not Willing' or 'Not Accepted' in this column. This is wrong because it is not the reason for refusal, it is just stating the refusal which is already documented in column 7. Hence, enquire why HRI is not willing or not accepted to participate and mention it correctly.
- i) **Column 9:** This column needs to be filled only if assent and/or consent is obtained from an eligible HRI for participation in surveillance. In such case, write the sample number in continuation with the number given to the previously recruited individual. It is essential to allot sample number to the eligible consented HRI in the HSS register before filling the data form. Write the same sample number on the data form and filter paper card.

## 6.2.2. Format of HSS Register at HRG Sites with Random Sampling

**Table 3. Format of HSS Register at HRG Sites with Random Sampling**

1	2a	2b	3	4	5	6	7	8	9
Random List No.	Contacted or Not	Reported or Not	Age (in years)	Education status	Gender	Whether eligible for HSS as per case definition?  (Yes/ No)	Whether informed consent/ Assent Given?  (Yes/ No)	If No, what is the reason for refusal?	If eligible and consents, write Sample number.

- a) **Column 1:** Write the random list number of the HRI supposed to be brought by the PE on a fixed day.
- b) **Columns 2a & 2b:** Fill these columns with the following codes or expressions as per the instructions given in Table 4 below.

*Codes for column 2a (Contacted or Not): 'Y' for Yes, 'N' for No*

*Codes for column 2b (Reported or Not): 1. Came to DIC      2. Expected  
3. Refused      4. Not applicable*

**Table 4. Instructions for Columns 2a & 2b of HSS Register**

Scenario	2a	2b	Further Instructions
If contacted and reported along with PE	Y	1	Fill the rest of the columns in the register by enquiring the HRI.
If contacted but will come on his own	Y	2	If HRI comes to DIC within expected date, strike off '2' and write '1' and fill the rest of the columns in the register by enquiring the HRI. If he/she does not come within the expected date, leave '2' as it is.
If contacted but refused to come to DIC	Y	3	Enquire from the PE, the reason for refusal and document the same under column 8 verbatim.
Not contacted after 3 attempts	N	4	

- c) **Columns 3-9:** Follow the instructions provided under format for HRG sites with consecutive sampling, mentioned earlier (Section 6.2.1).

### 6.3. Informed Consent/Assent Form

1. Written Informed Consent/Assent should be taken from the eligible HRI of age 15 – 49 years who are willing to participate in Surveillance.
2. For the HRI of age **18-49 years**, 'INFORMED CONSENT' should be taken from the individual.
3. For the HRI of age **15-17 years**, since they are not allowed to give legal consent, 'INFORMED ASSENT' should be taken from the individual.
4. If the HRI of age 15-17 years gives his/her assent, 'INFORMED CONSENT' should also be taken from the parent/guardian/caregiver of the respondent. In case the parent/guardian is not available, the in-charge of TI project may be considered as caregiver.
5. Two consent forms have been developed for HSS –
  - a. One common form for taking informed consent or assent from the eligible individual (**Respondent Form - Annex 1**)
  - b. Second form for taking informed consent from the parent/ guardian/ caregiver of the HRI of age 15-17 years (**Guardian Form - Annex 2**)
6. If the HRI or parent/guardian/caretaker of the HRI is literate, give the informed consent/assent form in local language to the respondent for him/her to read through it.
7. If the HRI or parent/guardian/caretaker of the HRI is **illiterate**, read out the informed consent/ assent form **in the presence of a witness, who is literate**.
8. Show the respondent all the consumables/items used for sample collection.
9. Assure the respondent that confidentiality would be ensured since the individual's name is not linked to the specimen or data form.
10. Provide adequate time and opportunity to the respondent to understand the content of informed consent form.
11. Do not put any form of pressure on the HRI/guardian and **give free choice to agree or refuse** to participate in surveillance.
12. Ask the respondent if he/she has any questions/doubts/clarifications. **Clarify them adequately**.

13. After addressing all the concerns raised by the respondent, if the respondent does not agree to participate in surveillance, enquire the reason for refusal and document the same in HSS register.
14. If the respondent agrees to participate in surveillance,
  - a. **If the respondent is literate**, ask the respondent to write his/her name and age in the space provided, sign and put the date on the consent/assent form
  - b. **If the respondent is illiterate**,
    - i. write the name and age of the respondent in the space provided
    - ii. take left thumb impression of respondent on consent/assent form at the specified place
    - iii. put the date in the specified place
    - iv. attest the thumb impression by writing the name of the respondent in the blank provided below and sign in the specified space
    - v. ask the witness to write his name, sign and put the date in the specified space
15. After completing all the above steps, counselor should write his name, sign the consent/assent form and put the date at the specified places at the end of the form.

## 6.4. Data Forms

### 6.4.1. General Instructions for Handling Data Forms

1. Data form is a brief questionnaire seeking information related to socio-demographic characteristics and vulnerabilities of the eligible individual.
2. Counselor should assist the site in-charge in completing data form.
3. Only designated & trained personnel should complete the data form.
4. **Only one data form** should be completed per individual.
5. Data form should be filled only after confirmation of the eligibility by the counselor/sentinel site in-charge.
6. Data Form should be completed before the blood specimen collection.

7. Site details including state, district, site name and site code should be stamped or pasted in the space provided on each data form before starting to fill the data form.
8. **Sub-site number, sample number & date of collection** should be manually written in the appropriate boxes. The same sample number should be mentioned by the lab technician on the blood specimen sent to HSS testing lab.
9. To ensure Unlinked Anonymous Testing, any **personal identifiers** such as name, address, registration number etc., which could link the data form to an individual, **should not be mentioned** anywhere on the data form.
10. Data forms should be filled neatly and legibly, without any overwriting and strike marks.
11. The person completing the form is advised to use a hard ball point pen to complete the data form. Ink pens may cause seepage and may make the entries illegible.
12. Responses for all the questions should be recorded by **CIRCLING the appropriate option**, except for the following.
  - a. **Number** reported by the respondent should be written for the following questions
    - 1) Age 2) Duration of Stay at current place of residence 3) How long ago did she (FSW) have last paid sex? 4) With how many clients did she (FSW) have sex in the last week? 5) How long ago did he (MSM) have sex with a man? 6) On an average how many days in a month does he (LDT) spend at home with family?
  - b. Response should be **recorded verbatim** for the following questions
    - 1) Specify other reasons for coming to service point 2) Specify other type of sex work that she (FSW) is engaged in 3) Specify other sources of income for FSW 4) State of original residence of SMM 5) District or original residence of SMM
13. Only one appropriate option should be circled. **Circling more than one option will be considered invalid.** Exceptions to this are the following questions where **multiple responses are allowed**.
  - 1) What is the type of sex work she (FSW) is engaged in? 2) Did the respondent (SMM & LDT) have sex with another Man in the last 6 months?

14. Each and every Question on the form should be completed.
15. Besides specified information, nothing else should be written on data forms.
16. Data form should not be handed over to the participants.
17. Person completing the data form should **check for completeness**, write his/her name, sign and put date.
18. **Lab Technician must check that all questions in data form are completed or not, before collecting blood specimen.** If response is not recorded for any question, it should be sent back to the counselor so that information may be collected when the individual is still in the facility.
19. Completed data forms should be stored securely at the sentinel site.
20. Site in-charge should verify the completed data forms every day and then sign and put date. **Blank data forms should NEVER be signed in advance.**
21. If there are any issues or mistakes in filling the data forms, site in-charge should discuss with concerned staff and guide them.
22. Completed data forms should be sent to the **respective Regional Institute EVERY WEEK.**
23. In case of composite sites, the data forms from all sub-sites should be compiled at the main site and sent together to the RI.

#### 6.4.2. Instructions to Fill Data Forms

The following sections present the instructions to fill data forms. Instructions for questions that are common between different HRG data forms are presented first. Instructions for questions that are specific to each HRG data form are presented subsequently.

#### Instructions for questions common to HRG data forms (Annexes 3 - 8)

Question/Field	Description / Instructions
Box with site and sample details	<p>Stamp or place the sticker with information of State, District, type &amp; name of the sentinel site &amp; site code.</p> <p><b>Write the following 3 items manually.</b></p> <ol style="list-style-type: none"> <li>1. Sub site number</li> <li>2. Sample number</li> <li>3. Date of sample collection</li> </ol>

### **Box 5. Sub-site Number & Sample Number**

#### **Sub-site Number:**

In case of composite sites, write the sub-site number allotted by SACS. In case of a single site, write '0'.

#### **Sample Number:**

**The sample number at each site and sub-site should begin from '001'.** If some of the samples are found to be invalid at the testing lab and site is asked to collect additional samples, these additional samples should be given fresh sample numbers after 250/x (where x is the sample size allotted to a sub-site). The sample number of the invalid sample **SHOULD NOT** be given to these additional samples. Following examples illustrate these points.

**Eg 1.** At a sub-site with allotted number '2' with an allotted sample size of 50, the sub-site number should be mentioned as '2' and sample numbers should be given from 1 to 50, successively. Sample numbers 20, 34 & 42 are found to be invalid at HSS testing lab. The three additional samples that will be collected at the sub-site no.2 should be given the sample numbers 051, 052 & 053.

**Eg 2.** At a HRG single site, the sub-site number should be mentioned as '0' and sample numbers should be given from 1 to 250, successively. If four samples were found to be invalid, the additional four samples should be given sample numbers 251, 252, 253 & 254.

Age	Write the completed age of the respondent in years.
Literacy status	<p>Circle the appropriate educational category using the explanation given below:</p> <ol style="list-style-type: none"> <li><b>Illiterate:</b> Without any formal or non-formal education</li> <li><b>Literate and till 5th standard:</b> Those with non-formal education or those who joined school but not studied beyond 5th standard</li> <li><b>6th to 10th standard:</b> Those who studied beyond 5th standard but not beyond 10th standard</li> <li><b>11th to Graduation:</b> Those who studied beyond 10th standard but not beyond graduation. Includes those with technical education/diplomas.</li> <li><b>Post Graduation:</b> Those who studied beyond graduation</li> </ol>

Reason for coming to service point	<p>Enquire the reason for which the respondent is visiting the service point &amp; circle the appropriate option. If the reason for attending the service point is other than those mentioned above, circle option 'others' and <b>write the exact reason</b> in the space provided. If random sampling method is being adopted at the site, circle the option 'randomly selected'.</p> <p>In the IDU data form, additional options of collecting needles and syringes and OST are given, which are applicable only for IDUs.</p>
Current Place of residence	<p>Enquire if the <b>current place of residence</b> of the respondent falls under Municipal Corporation or Municipal Council or Cantonment Area.</p> <ul style="list-style-type: none"> <li>- If yes, circle the first option (<b>Urban</b>).</li> <li>- If no, circle the second option (<b>Rural</b>).</li> </ul> <p>Don't write the name of the place.</p>
Duration of Stay	<p>Enquire the <b>duration of stay at the current place of residence</b> and write the response in <b>years</b> and <b>months</b>.</p> <ul style="list-style-type: none"> <li>- If the duration is less than one year, write 'o' years and the number of months as reported by the respondent.</li> <li>- If the duration is less than one month, write 'o' <b>years</b>, '1' <b>month</b>.</li> </ul>
Occupation of Respondent	<p>Circle the appropriate current <b>occupation of the respondent</b> using the explanations given below. Only the categories which need some elaboration are explained below.</p> <ol style="list-style-type: none"> <li>2. <b>Non-Agricultural Labourer:</b> includes workers at construction sites, quarries, stone crushers, road or canal works, brick-kilns, etc.</li> <li>4. <b>Skilled/ Semi-skilled worker:</b> includes workers in small-scale or cottage industries; industrial/ factory workers; technicians such as electricians, masons, plumbers, carpenters, goldsmiths, iron-smiths, those involved in automobile repair works etc.; artisans such as weavers,</li> </ol>

	<p>pottery, painters, cobblers, shoe-makers, tailors etc.</p> <p>5. <b>Petty business/small shop:</b> Includes vendors of vegetables, fruits, milk, newspapers, etc., pan shop, rag-pickers etc.</p> <p>6. <b>Large business/ self-employed:</b> Includes professionals and businessmen</p> <p>7. <b>Service:</b> Those working on salary basis in government, private or institutional sector <b>excluding drivers, hotel staff.</b></p>
11. Whether injects drugs	Enquire whether the respondent has injected himself / herself with any drug for the purpose of pleasure in the last 12 months and circle 'Yes' or 'No'. This injection should not be any prescription by a medical practitioner.

### Instructions for questions specific to FSW data form (Annex 3)

Question/Field	Description / Instructions
6. Type of sex work	<p>Enquire what is the type of sex work the FSW is engaged in, and circle the appropriate option. If the response does not match with any of the mentioned options, circle option '6' (Others) and write the reported type of sex work in the space provided.</p> <p><b>Note: Multiple responses are allowed for this question.</b> It is possible that the FSW is engaged in more than one form of sex work. In such cases, circle all the options that the FSW reports.</p>
7. Duration of sex work	Enquire since how long the FSW is engaged in sex work and circle the appropriate option. In this question, sex work connotes to paid sex where the respondent received money or payment in kind in exchange for sex.
8. Last paid sex	Enquire, when was the last time the FSW had sex with a paid client, and write the response in days and months; if it is less than one month, write 'o' months and no. of days as reported by the FSW. It is important to note in this case that, only the sex with a paying/ transactional client should be considered; Sex with her spouse, regular partner, boyfriend or other non-paying partners should not be considered.

9. Client volume in last week	Enquire, with how many paying clients did the FSW had sex in the last week. Write the number in the space provided.
10. Other source of income	Enquire, if the FSW has any other source of income apart from sex work such as fruit/vegetable vendor, domestic servant, etc. and circle 'Yes' or 'No'. If 'Yes', enquire what is the other source of income and write the response, verbatim and clearly, in the space provided.

### Instructions for questions specific to MSM data form (Annex 4)

Question/Field	Description / Instructions
7. Type of MSM	Enquire to what category the MSM classifies himself, and circle appropriate option. Read out the categories mentioned. 'Kothi' refers to receiving partner while 'Panthi' refers to the penetrating partner. Double-decker refers to those who act as both receiving and penetrating partner during anal sex.
8. Sex with a female partner	Enquire if the MSM had sex with any female partner (wife/ girl friend/ lover/ sex worker/ other female) in the last 6 months and circle the appropriate option.
9. Last sex with a male partner	Enquire, when was the last time the respondent had sex with another man and write the response in days and months; if it is less than one month, write 'o' months and no. of days as reported by the MSM.
10. Transactional sex with a male partner	Enquire if the respondent has paid or has been paid in cash or kind for having sex with another man in the last one month, and circle the appropriate option.

### Instructions for questions specific to IDU data form (Annex 5)

Question/Field	Description / Instructions
8. Duration of injecting drugs	Enquire the IDU since how long he/she is injecting drugs and circle the appropriate option.
9. Frequency of injecting drugs	Enquire the IDU, how frequently he/ she injects drugs and circle the appropriate option.

### Instructions for questions specific to SMM data form (Annex 6)

Question/Field	Description / Instructions
6. State of origin	Enquire the respondent to which state he belongs to and write legibly, the name of the state.
7. District of origin	Enquire the respondent to which district he belongs to and write legibly, the name of the state.
8. Place of origin	Enquire if the original place of residence of the respondent falls under Municipal Corporation or Municipal Council or Cantonment Area. If yes, circle the first option ( <b>Urban</b> ). If no, circle the second option ( <b>Rural</b> ).
10. Sex with female partner other than wife in last 6 months	<p>Enquire if the respondent had sex with any female other than his wife, in the last 6 months. If yes, also enquire if he paid the female in cash or kind in exchange for sex. Circle the appropriate option as explained below.</p> <ol style="list-style-type: none"> <li><b>1. Yes &amp; he paid for sex</b> - If he had sex with a female in the last 6 months and has paid for sex</li> <li><b>2. Yes &amp; not paid for sex</b> - If he had sex with a female other than his wife in the last 6 months, but has not paid anything in exchange for sex</li> <li><b>3. Both</b> - If he had both paid and unpaid sex with female partners in the last 6 months</li> <li><b>4. No</b> - If he didn't have sex with any female other than his wife in the last 6 months</li> </ol>
11. Sex with another man	<p>Enquire if the respondent had sex with any male partner, in the last 6 months. If yes, also enquire if he paid or received any payment in cash or kind in exchange for sex. Circle the appropriate option as explained below. <b>Multiple responses are allowed for this question.</b></p> <ol style="list-style-type: none"> <li><b>1. Yes &amp; he paid for sex</b> - If he had sex with a male in the last 6 months and has paid for sex</li> <li><b>2. Yes &amp; he received money / payment in kind for sex</b> - If he had sex with a male in the last 6 months and has received money or payment in kind in exchange of sex</li> <li><b>3. Yes &amp; without exchange of money/gifts</b> - If he had sex with male partners without any exchange of money or payment in kind in the last 6 months</li> <li><b>4. No</b> - If he didn't have sex with a male in the last 6 months</li> </ol>

### Instructions for questions specific to LDT data form (Annex 7)

Question/Field	Description / Instructions
6. Average stay at home	Enquire how many days in a month does the respondent stay at home, on an average and write the response in number of days.
7. Sex with female partner other than wife in last 6 months	<p>Enquire if the respondent had sex with any female other than his wife, in the last 6 months. If yes, also enquire if he paid the female in cash or kind in exchange for sex. Circle the appropriate option as explained below.</p> <ol style="list-style-type: none"> <li><b>1. Yes &amp; he paid for sex</b> - If he had sex with a female in the last 6 months and has paid for sex</li> <li><b>2. Yes &amp; not paid for sex</b> - If he had sex with a female other than his wife in the last 6 months, but has not paid anything in exchange for sex</li> <li><b>3. Both</b> - If he had both paid and unpaid sex with female partners in the last 6 months</li> <li><b>4. No</b> - If he didn't have sex with any female other than his wife in the last 6 months</li> </ol>
8. Sex with another man	<p>Enquire if the respondent had sex with any male partner, in the last 6 months. If yes, also enquire if he paid or received any payment in cash or kind in exchange for sex. Circle the appropriate option as explained below. <b>Multiple responses are allowed for this question.</b></p> <ol style="list-style-type: none"> <li><b>1. Yes &amp; he paid for sex</b> - If he had sex with a male in the last 6 months and has paid for sex</li> <li><b>2. Yes &amp; he received money / payment in kind for sex</b> - If he had sex with a male in the last 6 months and has received money or payment in kind in exchange of sex</li> <li><b>3. Yes &amp; without exchange of money/gifts</b> - If he had sex with male partners without any exchange of money or payment in kind in the last 6 months</li> <li><b>4. No</b> - If he didn't have sex with a male in the last 6 months</li> </ol>

### Instructions for questions specific to EUN data form (Annex 8)

Question/Field	Description / Instructions
7. Received money/in kind for sex in last 12 months	Enquire if the respondent has received any payment in cash or in kind in exchange for sex, in the last 12 months, and circle the appropriate option.

## 6.5. Data Form Transportation Sheet

1. As mentioned earlier, the responsibility of sending the data forms along with the data form transportation sheet is primarily that of the Counselor.
2. A properly filled data form transportation sheet (**Annex 9**), in duplicate, should accompany each set of data forms.
3. Clearly write the name and complete address of the sentinel site, including district and state.
4. Encircle appropriate option for the type of sentinel site and write the site code including sub-site number.
5. Period of sample collection i.e the period for which data forms are being sent, should be written in dd/mm/yy format.
6. Write the total number of data forms and the number of envelopes (containing the data forms) being sent.
7. In the table, write the date of collection and sample number of each sample, whose data forms are being sent.
8. If space provided in the table is not sufficient, please attach another sheet.
9. The sender should write legibly his / her name and telephone number and sign at the designated place before sending the data forms.
10. Also write the date of dispatch of the data forms.
11. The name, signature of the person receiving the data forms and date of receiving the data forms at the RI will be written by the recipient and one of the two sheets will be returned to sentinel site.
12. The signed copy of data form transportation sheet received from the RI should be securely stored for any future reference.

## 6.6. Sample Transportation Sheet

1. The responsibility of sending the blood specimens and the sample transportation sheet is primarily that of the lab technician.
2. A properly filled sample transportation sheet (**Annex 10**), in duplicate, should accompany each set of blood specimens sent to the DBS testing lab.

3. Clearly write the name and complete address of the sentinel site, including district and state.
4. Encircle appropriate option for the type of sentinel site and write the site code including sub-site number.
5. Period of sample collection i.e the period for which blood specimens are being sent, should be written in dd/mm/yy format.
6. Write the total number of blood specimens and the number of sample transportation boxes (containing the blood specimens) being sent.
7. In the table, write the date of collection and sample number of each blood specimen being sent.
8. If space provided in the table is not sufficient, please attach another sheet.
9. The sender should write legibly his / her name and telephone number and sign at the designated place before sending the blood specimens.
10. Also write the date of dispatch of the blood specimens.
11. The name, signature of the person receiving the blood specimens and date of receiving the blood specimens at DBS testing lab will be written by the recipient and one of the two sheets will be returned to sentinel site.
12. The signed copy of STS received from the DBS testing lab should be securely stored for any future reference.

## 7. Standard Operating Procedures for Processing Dried Blood Spot (DBS) Specimens

### 7.1. Dried Blood Spot Method

DBS method is the technique of blood specimen collection where drops of capillary blood are collected, through finger prick using a sterile lancet, on to a special protein saver card and dried subsequently to prepare the dried blood spot specimens. The DBS specimens are sent to testing laboratories where serum is eluted from the dried blood spots and used for testing. Specimen collection, processing, storage and transportation is made simpler and easy to be followed in all field conditions. This technique does not require the equipment (centrifuge machine, refrigerator, cold-chain transportation etc.) that is routinely required for processing venous blood samples and serum aliquots. The specimens are non-infectious when dry and have no chance of cross contamination. The method has received greater acceptability among the respondents as well as the personnel collecting and testing the DBS specimens. It has improved the quality and reliability of surveillance findings at HRG sentinel sites. Refer to Technical Guidelines for detailed advantages of Dried Blood Spot Method in HIV Sentinel Surveillance.

### 7.2. Description of Consumables Used in DBS Method

1. **Sterile disposable rubber gloves:** Everyone who is involved in blood collection & processing and handling the consumables should wear gloves to maintain sterile conditions and avoid infections.
2. **Alcohol Preps/ Swabs:** These are used to disinfect the skin before puncturing the finger tip.
3. **Non-reusable Self-retractable Adult Safety Lancet:** An automated incision device with a fixed penetration depth of 2.4 mm used to collect capillary blood through finger prick. It has tri-beveled, electro-polished 21G needle that ensures adequate blood flow. The needle is self-retractable after single use and cannot be reused. Hence, there is no chance of trauma or accidental injury. Lancets come in boxes of 100 pieces.

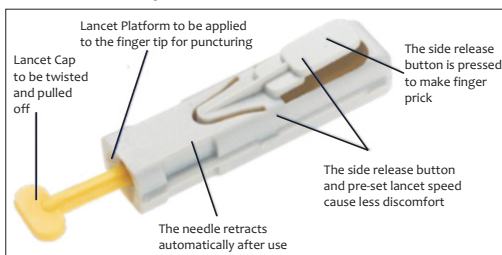


Fig 1 : Safety Lancet

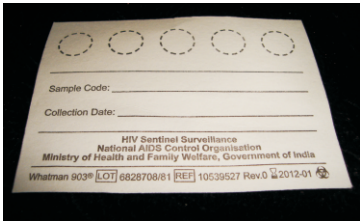
4. **Sterile disposable guaze pieces:** These are used to wipe away the first drop of blood after finger prick, to stimulate a spontaneous capillary flow.
5. **Whatman 903 Protein Saver Card/ Filter Paper Card/ DBS Card:** Specialised card with five printed circles where drops of blood are collected through finger prick. The card is made of a special filter paper that can retain fresh blood intact without any damage to the red blood cells. Each circle can hold approximately 100 µl blood when fully filled. The filter paper card has two portions. The upper portion contains the printed circles while the lower portion contains space for writing sample details and date of collection. Refer to Box 6 for detailed instructions on handling the filter paper cards.
 

Fig 2 : Protein saver card
6. **Small circular band-aids:** After blood collection, band-aid will be applied at the puncture site to avoid infection.
7. **Drying rack:** A cardboard rack designed to hold the DBS cards horizontally for drying. Drying rack is pasted inside drying box before using it for drying the specimens.
 

Fig 3 : Drying Rack
8. **Drying box:** A plastic box with air-tight lid and side locks in which the drying rack is pasted and where filter paper cards with freshly collected blood spots are placed for drying overnight. The box is also used to store unused filter paper cards, desiccants and DBS specimens to protect them from moisture. Six air-tight plastic boxes have been provided to each site – two or three to be used as drying boxes along with the drying racks, one or two to be used as storage boxes for storing the opened packets of unused filter paper cards and desiccants and one to be used for temporary storage of used filter paper cards with DBS specimens till the time of transportation. In the box with DBS specimens, do not place any other material.
 

Fig 4 : Drying Box

### **Box 6. Instructions for Handling Filter Paper Cards**

1. Filter paper cards should be stored securely. They **SHOULD NOT** be exposed to direct sunlight, extreme temperature and extreme moisture, **before as well as after** specimen collection.
  2. Filter paper cards come in packets of 50 cards. Keep these packets in one of the six air-tight plastic boxes provided to your site and **place five desiccant packs inside the box.**
  3. When a new packet of filter paper cards is needed, put on gloves first. Open the packet and take out only as many cards as required.
  4. Keep the opened packet with rest of the cards in a big zip-lock bag and place five desiccant packs inside the bag before sealing it. Keep it back inside the plastic box with lid closed and side-locks applied.
  5. Replace desiccant packs in the big zip-lock bag and the box with an equal number of fresh desiccant packs every time they are opened.
  6. **It is very important to protect unused filter paper cards from absorbing moisture. If they absorb moisture, it causes over-saturation and merging of blood drops, when blood is collected.**
  7. The printed circles of the filter paper cards must be kept clean and dry at all times as water, dust, sweat from hands, or other environmental contaminants can affect the HIV test results. Therefore, **ALWAYS use gloves** when handling the filter paper cards.
  8. Hold the card only by the lower portion and **NEVER TOUCH** the upper portion of the card where the circles are printed.
  9. Whenever the cards are taken out during specimen collection, take care that the upper portion of the card with printed circles does not come into contact with any object.
- 
9. **Desiccants/ Desiccant packs (Drying Agents):** Tiny capsules of silica gel that absorb moisture. These are used to keep the DBS specimens and the filter paper cards as dry as possible. Desiccants come in packets of 100 pieces in a zip-lock bag. Keep these packets in the air-tight plastic box. Open only one packet at a time. If the desiccants are exposed to environment before their actual use, they absorb moisture and become useless for drying blood specimens.



Fig 5 : Desiccant packs

10. **Butter Paper/ Glassine Paper:** Thin, glossy, semi-opaque paper used to cover the dried blood spots and protect them from physical damage during storage and transport. **It is cut into small rectangles of the size 3" x 5".** After the blood spots are dried and before the filter paper card is placed inside small zip-lock bag, butter paper is folded over the dried blood spots.



Fig 6 : Butter paper & small zip-lock bags

11. **Small Zip-lock bag:** Specialised low-gas permeable plastic bag (4" x 6") with zip-lock that prevents entry of air and exposure of its contents to moisture. These are used for packing blood specimens after drying. These bags are expensive and should never be used for other purposes, like carrying other consumables such as lancets, bandages, alcohol swabs etc. Small zip-lock bags come in packets of 50 pieces.
12. **Large Zip-lock bag:** Large plastic zip-lock bags (8" x 10") are used for storage and transportation of DBS specimens. Each large zip-lock bag holds ten small zip-lock bags with filter paper cards.

13. **Sample Transportation Boxes:** Cardboard boxes with thermacol casing and unbreakable adhesive seal used for transportation of DBS specimens from the sentinel site to DBS testing lab. The box protects DBS specimens both from physical injury as well as from moisture. Bio-hazard label and format to mention the required details are printed on the box.



Fig 7 : Sample transportation box with thermacol casing

### 7.3. General Instructions

1. It is the responsibility of the lab technician to handle all the consumables required for blood specimen collection and processing.
2. Only the trained lab technician should collect the blood specimens.
3. All the consumables received from SACS shall be stored safely.
4. Keep all the consumables on the table before starting specimen collection, so that they are easily accessible.
5. Surface of the table where the consumables (filter paper cards, desiccants,

lancets etc.) will be placed for blood specimen collection should be kept clean. Clean the surface of the table every day before start of the blood collection. It is advisable to spread a rubber sheet on the table before placing the consumables on it.

6. Before blood collection, lab technician should verify the data form for any unanswered questions. If any, the respondent should be sent back to the counselor for completing the data form.
7. Universal safety precautions should be followed while collecting and processing blood specimens.
8. **EVERY BLOOD SPECIMEN COLLECTED SHOULD BE DRIED, PACKED AND TRANSPORTED TO THE TESTING LAB, IRRESPECTIVE OF WHETHER IT HAS BEEN PROPERLY COLLECTED OR NOT, OR WHETHER IT IS ADEQUATE OR NOT. NO SPECIMEN SHOULD BE JUDGED AS INVALID/ IMPROPER AND DISCARDED AT THE SENTINEL SITE. ONLY THE TESTING LAB CAN DECIDE WHETHER A SPECIMEN IS VALID OR NOT.**
9. All the consumables used for DBS method are expensive and hence, should be used carefully and judiciously. Efforts should be made to minimize wastage as much as possible.

## 7.4. Preparing Drying Rack & Drying Box Before Starting Specimen Collection

1. For the current round (HSS 2010), every old HRG site is provided with three drying racks & two additional drying boxes each, while every new HRG site is provided three drying racks & five drying boxes each. Each drying rack has eleven slots and can take eleven filter paper cards at a time.
2. Drying racks are provided in unfolded or flat form. Fold the drying rack as per the instructions written on it/as shown in Fig 8 and prepare the drying rack ready for use.

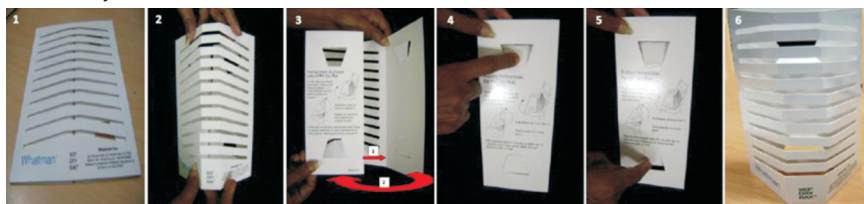


Fig 8 : Preparation of drying rack

3. Keep the plastic drying box vertical, so that one of its shorter faces becomes the bottom of the box. Lid can be placed from the side and side-locks can be applied. Side-locks are provided to ensure air-tight chamber and also to prevent accidental removal of lid of the box, thereby exposing DBS cards to moisture, while drying.
4. Paste the folded drying rack inside a plastic drying box using two-sided sticky tape, so that the rack and DBS cards do not fall out accidentally during handling.
5. One plastic drying box with a drying rack pasted inside it make the complete apparatus (drying kit) to be used for drying the DBS cards.
6. Since, a maximum of 10 samples are collected in a day, only one or two drying racks would be used every day. Hence, it is suggested to prepare only one drying kit in the beginning. As the rack gets damaged due to continuous use, subsequently, the rest may be used.



Fig 9 : Drying box with drying rack & desiccants

## 7.5. Labeling the Filter Paper Cards

1. Before collection of blood on the filter paper card from an eligible HRI, label the card with **SENTINEL SITE CODE, SUB-SITE NUMBER, SAMPLE NUMBER AND DATE OF COLLECTION** in the space provided. If stickers with site codes are available, paste the sticker and write the rest manually.
2. In order to ensure Unlinked Anonymous Testing, **DO NOT MENTION any personal identifiers** such as name of HRI, register no., contact information or address on the protein saver card.
3. Use only hard ball pen to write on the filter paper card. **DO NOT USE INK OR GEL PEN**, as it causes seepage and the details become illegible.
4. Do not write or make any marks above the line separating the circles from the space for sample details.

## 7.6. Selecting and Preparing the Puncture Site

1. Refer to Box 7 to understand what is the appropriate puncture site.

### **Box 7. Appropriate Puncture Site (Refer Fig a, b & c)**

1. The arm, hand & finger should not have any wound, cut, scar, infection, swelling, deformity or rash.

2. **Use the third or fourth fingers for finger prick.**

This is because, in index and little finger, the digital spaces are connected to those in the palm, and in case of an infection, it will spread to the hand also. Digital spaces in third and fourth fingers are localised.

3. Also, the skin of the index finger is usually thick and may not yield a better drop of blood on puncture. The tissue space in the little finger is small and hence, there is a greater risk of injuring the underlying bone if a prick is made here.

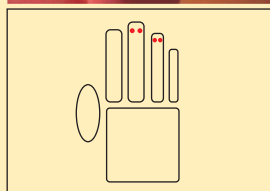
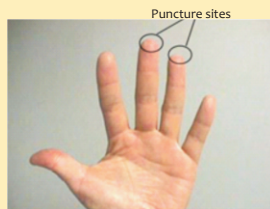


Fig 10 : Appropriate puncture site

4. The respondent should not be wearing a ring on the finger, as ring may disrupt free flow of blood to the finger tip.
5. On the selected finger, the site where the puncture would be made lies little away from the tip of the finger. **Prick should be made on the sides and NOT AT THE CENTRE/NOT ON THE MID-LINE.**
6. Avoid the very tip of the finger or the sides beyond the palmar area, because of the risk of piercing the underlying bone.

2. Make the eligible HRI sit in a chair or on a couch/bed. Examine both right and left hands and the third and fourth fingers.
3. Once right or left hand is selected, hyperextend his/her arm. Keep the position of the hand below the level of heart of the respondent so that there is adequate blood flow into the hand.
4. If the hand is cold, ask the respondent to warm the skin by rubbing the hands against each other. This will increase blood flow by reducing tissue fluid and will improve the ease with which a sample can be obtained.



Fig 11 : Cleaning finger tip with alcohol swab

5. With an alcohol swab, clean the skin of the finger thoroughly in outward motion. If the skin is very dirty, use a second swab.
6. Allow the alcohol to air dry. **Do not blow on the area** to dry the alcohol. Blowing may allow bacteria to contaminate the site.
7. Be sure that the finger is thoroughly dry. Blood will not swell up and form a drop at the puncture site of a moist finger.

## 7.7. Using the Lancet

1. Keep the box of lancets readily accessible. Take a lancet from the box.
2. Push the lancet cap into the body of the lancet until it clicks.
3. Twist off the lancet cap until you feel it separate from the device. **Don't pull, just twist.** Dispose off the cap in waste disposal container with black bag.
4. Do not pull out the lancet cap without twisting it first as this may cause the needle not to pierce the skin.
5. Now the lancet is ready to be used for puncturing the finger tip.

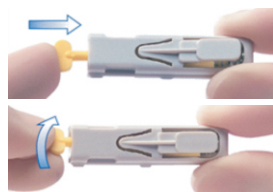


Fig 12 : Pushing & twisting lancet cap

## 7.8. Making the Finger Prick

1. Make sure that the finger is below the level of the respondent's heart to increase the flow of blood to the finger. Using a rolling movement of your thumb, lightly press the finger from the top knuckle toward the tip. That action will stimulate a flow of blood to the puncture site.
2. When your thumb reaches the fingertip, maintain a gentle pressure. Place the lancet perpendicular to the palmar surface of the tip of the finger **slightly off center**.
3. Press the lancet platform firmly against the chosen site and press the release button. The needle ejects through the lancet, producing a micro-incision in the skin, and immediately retracts into the device.



Fig 13 : Applying lancet to finger tip

4. The puncture should be made perpendicular to the ridges of the finger tip so that the drop of blood does not run down the ridges.
5. After puncturing the skin, turn the finger slightly to prevent blood from running into the ridges of the finger tip.
6. Discard the used lancet immediately into a sharps disposal container with 1% sodium hypochlorite solution.



Fig 14 : Making finger prick

## 7.9. Collecting Blood Drops

1. When blood appears, use a sterile gauze pad to **wipe away the first drop of blood**, as the first drop usually contains excess tissue fluid. Use subsequent drops of blood to fill circles on DBS card.
2. Continue to hold the respondent's finger below the level of the heart and **allow a large drop of blood to form** at the puncture site.
3. While maintaining a firm grip on the finger, press gently and intermittently on the finger from which you are taking blood to get a large second drop. **Be careful to avoid 'milking' or 'squeezing' the finger** as this could affect the test results. Wait until the drop is large enough to fill one of the printed circles on the card.
4. Move the card underneath the finger and let the blood drop **freely fall** at the center of the printed circle. In case the blood drop does not fall readily, you may touch the filter paper gently against the **LARGE blood drop (but not the skin)**. In one step, a sufficient quantity of blood should be allowed to soak through and completely fill the circle.
5. The card **SHOULD NOT be pressed** against the puncture site on the finger. Make sure that the respondent's **finger does not touch the card** at any point when you are collecting the blood spots.
6. There may be times when a drop of blood will not completely fill the circle. If a circle is not completely saturated, the next drop or just a portion of the next drop of blood may be used to saturate the circle, **only if the drop is obtained**

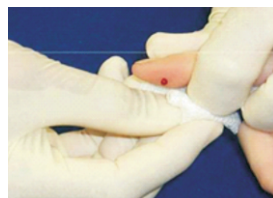


Fig 15 : Wiping away the first drop



Fig 16 : Allow a large drop of blood to form

**immediately.** If the first drop starts to dry due to any delay in getting the subsequent drop, do not place the drop over it and fill another circle. Application of successive drops of blood to a dried or partially dried blood spot causes '**caking**'/'**layering**' and makes the specimen invalid for testing.



Fig 17 : Collecting blood drop on filter paper card

7. Try to have the first drop fall exactly in the center of the printed circle. However, if by accident the drop falls outside of the circle and is not large enough, then let the next drop of blood fall in the center of the original drop and not in the printed circle.
8. Attempt to fill the circle completely before moving to the next empty circle. However, in an attempt to fill the circle completely, do not overfill or over saturate the circles. The blood spots should not get smudged with each other. Refer to Fig 19 for examples of improperly collected blood specimens.
9. Continue to collect drops of blood until all the five circles on the filter paper card are fully saturated.
10. If the blood flow stops or decreases before you fully saturate the five circles, it will need another finger prick. Whenever this is necessary, explain to the respondent that adequate sample could not be obtained and ask permission to obtain blood from another finger. Use fresh supplies and a different finger for the second finger prick.
11. Collect blood drops only on the printed side of the filter paper card.
12. Do not touch the blood spots and do not allow any object to come in contact with them, to avoid contamination.



Fig 18 : Completing five circles on filter paper card

## 7.10. Stopping Bleeding at Puncture Site

1. After the blood drop collection, wipe any remaining blood from the puncture site with a sterile gauze pad. Press the gauze pad against the puncture site until the blood flow has completely stopped.
2. Take a circular band-aid from its wrapper and apply it to the puncture site.
3. Discard the gauze piece, gloves and alcohol swab into the waste disposal container with yellow bag and wrapper of band-aid into that with black bag.

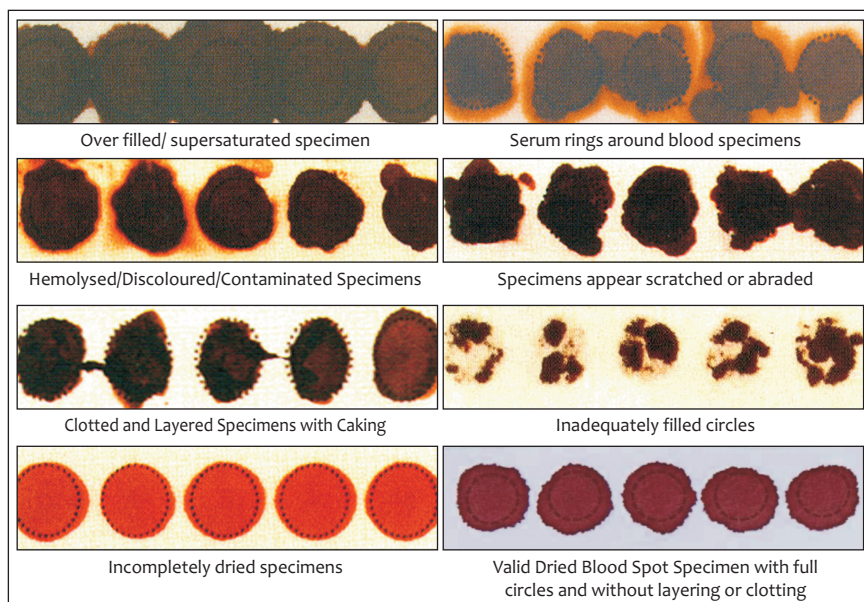


Fig 19 : Improperly and properly collected DBS specimens

## 7.11. Drying the Blood Spot Specimens

1. **Dry every specimen collected. Do not discard any specimen by judging it as invalid or improper.**
2. Place the filter paper card with blood specimen in the drying rack inside the drying box, one at a time.
3. Ensure that only the lower portion of the card up to the line below the circles is inserted into the slot and the blood spots remain outside the drying rack.
4. Avoid touching or smearing the blood spots on other cards in the box while placing a new card.
5. Never put more than one filter paper card in a single slot in the drying rack.
6. Place five desiccant packs at the bottom of the drying box. Close the box with lid and apply side locks so that the box becomes air-tight.
7. **Blood spots should be allowed to dry overnight at room temperature.**

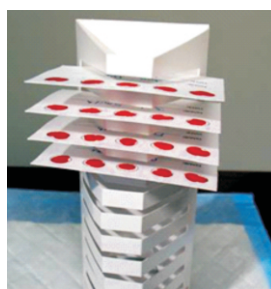


Fig 20 : Placing DBS cards in drying rack with blood spots facing outside

8. The box with drying rack **SHOULD ALWAYS BE KEPT VERTICAL** on the table so that the **filter paper cards with blood spots ALWAYS LIE HORIZONTALLY** during overnight drying.
9. Never keep any materials on top of the box as they might contaminate the filter paper cards that are being dried in it.
10. The desiccant packs in the drying box should be **replaced with fresh desiccant packs every time, before placing new filter paper cards with blood spots for drying.**
11. It is very important to dry blood spot specimens **completely** before storage or transport, because moisture may harm the specimen by inducing microbial growth or altering the elution time of the specimen.



Fig 21 : Drying DBS specimens in drying box

## 7.12. Packing the Dried Blood Spot Specimens

1. **Pack every dried specimen. Do not discard any specimen by judging it as invalid or improper.**
2. Every morning, examine the filter paper cards with blood spots kept in the drying box the previous day, to see if they are completely dried or not.
3. Put on a pair of latex gloves and carefully open the drying box. Check that the blood spots on each filter paper are completely dried. **Completely dried blood spots appear CHOCOLATE BROWN in colour.** Refer to Fig 19 for the pictures of improperly and properly collected and dried blood specimens.
4. If one or more cards are not dried properly, place them again in the drying rack and drying box for one more day. Replace desiccant packs with fresh ones before placing the specimens for the second day.
5. Separately remove each filter paper card on which the spots have dried from the drying box. Be careful not to touch the blood spots.
6. Cover blood spots with butter paper folded over the edge of filter paper card.

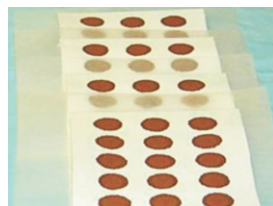


Fig 22 : Completely dried Chocolate Brown coloured DBS specimens

7. Place the filter paper card with DBS specimen inside a small zip-lock bag. **Only one card should be placed inside one zip-lock bag.**

**NOTE :** The blood spots should not be covered by anything except butter paper, so that the spots are visible through the zip-lock bag. This is very important because it enables the inspection of blood spots at the testing lab without opening the zip-lock bag. It not only saves a lot of time at the testing lab but also prevents exposure of the specimen to moisture due to opening of zip-lock bag at the time of specimen verification at the testing lab.

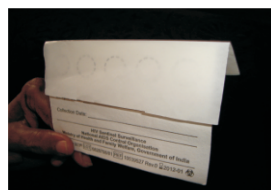


Fig 23 : Folding butter paper over blood spots

8. **Place two Desiccant packs** in each small zip-lock bag. Place them **BEHIND** the filter paper card, **NOT ON THE SIDE OF THE BLOOD SPOTS**, to ensure that desiccant packs do not touch the blood spots.



Fig 23 : Placing DBS card inside small zip-lock bag

9. Gently push out air inside the small zip-lock bag, taking adequate care not to touch the blood spots. Thoroughly seal the small zip-lock bag without leaving any gap, by firmly pressing the zip.
10. Continue to pack each of the filter paper cards from the previous day which have dried overnight, putting each one into a small zip-lock bag.
11. When all the filter paper cards with dried spots are packed, put them inside large zip-lock bag. **DO NOT PLACE MORE THAN TEN** small zip-lock bags inside one zip-lock bag.

12. Place five fresh desiccants in the big zip-lock bag, gently push out the air and seal it thoroughly. Replace the desiccants with an equal number of fresh desiccants **each time the big zip-lock bag is opened for placing more specimens.**



Fig 24 : Placing DBS specimens inside big zip-lock bag

13. Place the big zip-lock bag in one of the plastic air-tight boxes for temporary storage **up to a maximum of seven days**. Place five fresh desiccants in the box. Replace them each time the box is opened for placing more specimens
14. Keep the DBS specimens inside the box at room temperature. Do not take out the cards from the box till the day of transportation.
15. Avoid exposure of the DBS specimens to direct sunlight, extreme temperatures and moisture.

### **Box 8. Summary of Packing DBS Specimens**

1. Contents of small zip-lock bag:
  - a. Filter paper card with dried blood spots
  - b. Butter Paper &
  - c. Two Desiccants
2. Contents of the big zip-lock bag:
  - a. Up to ten small zip-lock bags with filter paper cards carrying DBS Specimens &
  - b. Five Desiccants.
3. Contents of the Sample Transportation Box:
  - a. One big zip-lock bag containing five desiccants and up to ten small zip-lock bags, each containing one DBS specimen &
  - b. Two copies of completely filled Sample Transportation Sheet

## **7.13. Transporting the Dried Blood Spot Specimens**

1. **Send every DBS specimen to the testing lab. Do not discard any specimen by judging it as invalid or improper.**
2. DBS specimens should be transported to the designated DBS testing lab, **whenever TEN specimens are collected and completely dried or at the end of the week, whichever is earlier.**
3. Write the following details on the Sample Transportation box in the appropriate space provided on the box.
  - a. The range of sample numbers that are being transported in the box [HSS-DBS SAMPLES (ID:.....to.....)]
  - b. Name of the testing lab in-charge and complete address of testing lab including PINCODE.
  - c. Name of the site in-charge, mobile no., name of the sentinel site with type of site in bracket and complete address of the sentinel site.
  - d. Date of Dispatch on the back of the box
4. After labeling the box, remove the thermacol casing from the cardboard box.



Fig 25 : Mention the details on sample transportation box

It will come out in two halves - bottom half & top half (acting as lid).

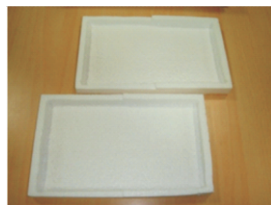


Fig 25 : Thermacol casing in two halves

5. Just before placing the DBS specimens in the thermacol casing, replace the desiccants in the big zip-lock bag with an equal number of fresh desiccants. This will ensure moisture-free environment around the DBS specimens during the transport. **Do not open the small zip-lock bags.**
6. Arrange the small zip-lock bags into two stacks of five each, inside the big zip-lock bag, so that they are uniformly placed inside the thermacol casing and the DBS specimens do not get compressed.
7. Fill three copies of Sample Transportation Sheet (STS) as per the instructions provided under section 6.6 earlier. One copy should be retained at the sentinel site and two copies should be kept **INSIDE** the Sample Transportation Box. One copy will be sent back to the sentinel site with the seal of the testing lab as proof of receipt of specimens.
8. Place the big zip-lock bag in bottom half of the thermacol casing. Place two copies of the completely filled STS above, **NOT INSIDE**, the big zip-lock bag and close the thermacol casing by putting the upper half in such a way that it completely closes the content.
9. Slowly insert the thermacol casing with all its contents into the cardboard box.
10. Close the flaps on both the sides, remove the thin foil on the adhesive seal and firmly seal both the ends of the box. It may be noted that it is an unbreakable seal and once sealed, the box cannot be reopened without tearing it. So, all the steps mentioned above should be ensured before sealing the box.
11. **Only one big zip-lock bag** with up to ten specimens should be placed in one sample transportation box.
12. DBS specimens may be transported by **Speed Post** or **Courier** to the designated testing lab. If the lab is situated in the same/ nearby city, specimens may also be transported manually.
13. If pick-up facility has been arranged with Speed Post or Courier, fix a day in the week when the sample pick-up person will come to collect specimens.

## 7.14. Summary of Instructions on Using Desiccants

Place of use of Desiccants	No. of Desiccants to be Used	Norm for Replacement
Big zip-lock bag & plastic Box where opened packet of unused filter paper cards is stored	Five Desiccant Packs	Every day when the bag/box is opened
Plastic Drying Box	Five Desiccant Packs	Every time before placing filter paper cards with fresh blood spots for overnight drying
Small Zip-lock bag in which the DBS specimens are packed after overnight drying	Two Desiccant Packs	Not to be replaced
Big Zip-lock bag in which small zip-lock bags with DBS specimens are packed	Five Desiccant Packs	- Every time big zip-lock bag is opened for placing new small zip-lock bags with DBS specimens - Just before sending the specimens to Testing Lab
Plastic box for temporary storage of BDS specimens	Five desiccant packs	Every time the box is opened for placing new DBS specimens

## 8. Bio-Waste Management

It is essential to follow universal safety precautions at all times during specimen collection, storage, testing, transportation and disposal of bio-hazardous wastes. The laboratory technician should take the responsibility of implementing safe bio-waste management procedures at the sentinel site under active supervision of sentinel site in-charge. Colour-coded waste-bags should be used as per standard specifications for disposal of waste materials and contaminated sharps.

1. Used safety lancets should be discarded into a puncture proof jar/ sharps disposal container containing freshly prepared 1% sodium hypochlorite solution. At the end of the each day's work, the contents of the container should be transferred into a BLUE coloured biohazard waste bag.
2. Alcohol Swabs, Gloves and Guaze Pieces should be discarded into YELLOW coloured biohazard waste bag.
3. General waste such as wrapper of alcohol swabs, gloves & gauze, needle cap of lancet, etc. should be discarded into BLACK coloured biohazard waste bag.
4. The biohazard waste bags should be taken to nearby health facility/ ICTC which employs standard procedures for bio-hazardous waste disposal.

## Annex-1

**CONSENT/ ASSENT FORM FOR TAKING INFORMED CONSENT/ ASSENT FROM AN ELIGIBLE RESPONDENT AGED 15 – 49 YEARS FOR PARTICIPATING IN HIV SENTINEL SURVEILLANCE**

This form explains the purpose for which blood specimen is being collected and the method of blood collection. On reading/ understanding the following information, if you are willing to provide blood specimen, you are requested to sign or make a thumb impression at the end of form. If you have any questions/ queries, you can ask us before giving the consent/ assent.

National AIDS Control Organization (NACO), the nodal national agency for control of HIV in India, conducts annual HIV surveys in different population groups to know how prevalent HIV is in India in different groups and overall. Results of this survey will help NACO to develop appropriate programs to prevent HIV/AIDS in your community and region and in India as a whole. 250 people will be included in the survey to represent our area and you are chosen to be one among them. If you agree to participate in the survey, a few drops of blood will be collected from you through finger prick on a filter paper and sent to laboratory for testing for HIV and other related conditions. We will use disposable sterile instruments that are clean and completely safe for this procedure. You can see the instruments that we will use for taking blood specimen.

Your name or address will not be recorded and attached to the blood specimen. The testing will not be done over here. This means no one, including us or this agency, will be able to trace or connect the blood specimen or the result of the HIV test back to you. The results will be anonymous. Since, in order to protect your confidentiality, we are not recording any information that will identify you in this survey, we cannot give you the result of the HIV test. However, if you wish to get your blood tested for HIV and know the result, we will give you a referral slip to get a HIV test at the nearby ICTC.

We may ask some questions that some people find difficult to answer, but you are requested to answer them without any hesitation as this information given by you will be kept confidential. You do not have to answer any question that you do not want to answer. However, your honest answer to these questions will help us better understand the risk factors associated with HIV.

I hope you would participate in the survey. Though there is no direct benefit to you, your participation and results of this survey will help NACO to develop appropriate programs to prevent HIV/AIDS in your community and region and in India as a whole. Your decision to agree or refuse to participate in Surveillance will not affect the provision of services under the Targeted Intervention Project.

Do you have any questions?

=====

I, \_\_\_\_\_, aged \_\_\_\_\_ yrs\*, am willing to give my blood for HIV test by my own wish. I know that my HIV test result will not be disclosed to me. I also know that this data will be used for the National AIDS Control Program with full confidentiality.

Signature/ thumb impression: \_\_\_\_\_ Date: \_\_\_\_\_  
(This is the left thumb impression of \_\_\_\_\_. Counselor's Signature: \_\_\_\_\_)

Name of witness: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Counselor's Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(\*Note: If age of the respondent is 15-17 years, informed consent shall have to be taken from the parent/ guardian/ caregiver also, in addition to the assent of the respondent taken in this form.)

**CONSENT FORM FOR TAKING INFORMED CONSENT FROM THE PARENT/ GUARDIAN/ CARE-GIVER  
OF AN ELIGIBLE RESPONDENT AGED 15-17 YEARS FOR PARTICIPATING IN HIV SENTINEL SURVEILLANCE**

This form explains the purpose for which blood sample is being collected and the method of blood collection. On reading/ understanding the following information, if you are willing to allow your ward to provide blood sample, you are requested to sign or make a thumb impression at the end of form. If you have any questions/ queries, you can ask us before giving the consent.

National AIDS Control Organization (NACO), the nodal national agency for control of HIV in India, conducts annual HIV surveys in different population groups to know how prevalent HIV is in India in different groups and overall . Results of this survey will help NACO to develop appropriate programs to prevent HIV/AIDS in your community and region and in India as a whole. 250 people will be included in the survey to represent our area and your ward is chosen to be one among them. If you agree to allow your ward to participate in the survey, a few drops of blood will be collected from his/ her finger through finger prick on a filter paper and sent to laboratory for testing for HIV and other related conditions. We will use disposable sterile instruments that are clean and completely safe for this procedure. You can see the instruments that we will use for taking blood specimen.

Name or address of your ward will not be attached to the blood specimen. The testing will not be done over here. This means no one, including us or this agency, will be able to trace or connect the blood sample or the result of the HIV test back to your ward. The results will be anonymous. Since, in order to protect confidentiality of the participant, we are not recording any information that will identify your ward in this survey, we cannot give you the result of the HIV test. However, if you wish to get your ward tested for HIV and know the result, we will give you a give you a referral slip to get a HIV test at the nearby ICTC.

We may ask your ward some questions that some people find difficult to answer. This information given by your ward will be kept confidential. He/ she does not have to answer any question that he/ she does not want to answer. However, his/ her honest answers to these questions will help us better understand the risk factors associated with HIV.

We hope you will allow your ward to participate in the survey. Though there is no direct benefit to you/ your ward, your participation and the results of this exercise will help NACO to develop appropriate programs to prevent HIV/AIDS in your community and region and in India as a whole. Your decision to allow or disallow your ward to participate in Surveillance will not affect the provision of services under the Targeted Intervention Project.

Do you have any questions?

=====

I, \_\_\_\_\_, the parent/ guardian/ caregiver of \_\_\_\_\_, aged \_\_\_\_\_ years, hereby give my consent to collect blood specimen from my ward for HIV test. I know that the HIV test result will not be disclosed to us. I also know that this data will be used for the National AIDS Control Program with full confidentiality.

Signature/thumb impression: \_\_\_\_\_ Date: \_\_\_\_\_  
(This is the left thumb impression of \_\_\_\_\_ . Counselor's Signature: \_\_\_\_\_)

Name of witness: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Counselor's Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# HSS 2010: DATA FORM FOR FEMALE SEX WORKERS (FSW)

## एच.एस.एस 2010: महिला यौन कर्मियों के लिए डेटा प्रपत्र

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

State/ राज्य: ..... District/ जिला: .....		
Site Name / साइट का नाम: .....		
<div> <div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div> <div></div> <div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div> </div>		
(Site Code)	(Sub-site No.) (Sample No.) (Date-DD/MM/YY)	

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

### 2. Literacy Status / साक्षरता स्थिति

1. Illiterate / निरक्षर 2. Literate and till 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 / ग्यारहवी से स्नातक 5. Post Graduation / स्नातकोत्तर

### 3. Reason for coming to the service point / सेवा केन्द्र 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. Duration of Stay at Current Place of Residence / वर्तमान निवास स्थान में ठहरने की अवधि   years / वर्ष   months / महीने

### 6. What is the type of sex work she is involved in? (Multiple options are allowed) / किस प्रकार के यौन संबन्धी व्यावसाय करती है? (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 / लौज आधारित  
5. Dhaba based / ढाबा आधारित 6. Others, Specify / अन्य, निर्दिष्ट करें .....

### 7. What is the duration for which she has been involved in sex work? / कितने समय से यौन संबन्धी व्यावसाय कर रही है?

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 years / 5 साल से ज्यादा

8. How long ago did she have last paid sex? / आखिरी बार कितने समय पहले पैसों के लिए सेक्स बेचा?   days / दिन   months / महीने

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

### 10. Did she have any other source of income, apart from sex work? / यौन कार्यों के अलावा कमाई का कोई और स्रोत है?

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

### 11. Did she inject herself with any drug without prescription, for pleasure, in the last 12 months? / पिछले 12 महीनों में, क्या मज्जे के लिए कभी सुई द्वारा नशीली दवाओं (जो डॉक्टर ने नहीं दी) का सेवन किया?

1. Yes / हाँ 2. No / नहीं

Signature / हस्ताक्षर : .....

Signature / हस्ताक्षर : .....

Name / नाम : .....

Name / नाम : .....

(व्यक्ति जिसके द्वारा फार्म भरा गया)

(सेन्टिनेल साइट के प्रभारी)

## HSS 2010: DATA FORM FOR MEN WHO HAVE SEX WITH MEN (MSM)

## एच.एस.एस 2010: 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)

सेन्टिनल साइट की जानकारी यहां लिखें/छापें/चिपकायें

State/ राज्य: ..... District/ जिला: .....  Site Name / साइट का नाम : ..... <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 40px; 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 (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 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 केन्द्र में आने की वजह

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

## 6. Current Occupation of the Respondent / प्रतिवादी का वर्तमान व्यवसाय

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

## 7. 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

8. Did the respondent have sexual intercourse with any female partner in the last 6 months?/ पिछले 6 महीनों में किसी महिला के साथ यौन संबंध बनाया है?

1. Yes / हाँ      2. No / नहीं

9. How long ago, did he have last sex with a man? / आखरी बार कितने समय पहले किसी पुरुष के साथ यौन संबंध बनाया?

  days / दिन   months / महीने

10. In the last one month, had the respondent received or paid money (or payment in kind) for having sex with a man? / पिछले एक महीने में प्रतिवादी 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

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

1. Yes / हाँ      2. No / नहीं

Signature / हस्ताक्षर : \_\_\_\_\_

Name / नाम : \_\_\_\_\_

(व्यक्ति जिसके द्वारा फार्म भरा गया)

Signature / हस्ताक्षर : \_\_\_\_\_

Name / नाम : \_\_\_\_\_

(सेन्टिनल साइट के प्रभारी)

# Annex-5

## HSS 2010: DATA FORM FOR INJECTING DRUG USERS (IDU)

### एच.एस.एस. 2010: सुई द्वारा नशीली दवा लेने वालों के लिए डेटा प्रपत्र

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

सेन्टिनेल साइट की जानकारी यहां लिखें/छापें/चिपकायें)

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

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

2. Sex of the participant / लिंग 1. Male/ पुरुष 2. Female/ स्त्री

3. Marital status / वैवाहिक स्थिति 1. Never married / अविवाहित 2. Married / विवाहित 3. Divorced/separated/widowed / तलाकशुदा / अलग / विधवा

4. 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

5. Reason for coming to the service point / सेवा केन्द्र में आने की वजह 1. Collect condoms / कन्डोम 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) / ओपियोड प्रतिस्थापन चिकित्सा के लिए 6. Others, Specify / अन्य (निर्दिष्ट करें) 7. Randomly Selected / बेतरतीब ढंग से चुने गये

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

7. Current Occupation of the Respondent / प्रतिवादी का वर्तमान व्यवसाय 1. Agricultural Labourer / कृषि श्रमिक 2. Non-Agricultural Labourer / गैर कृषि श्रमिक 3. Domestic Servant / घरेलू नौकर 4. Skilled / Semiskilled worker / कुशल / अर्धकुशल श्रमिक 5. Petty business / small shop / लघु उद्योग/छोटी दुकान 6. Large Business/Self employed/विस्तृत उद्योग/स्वरोजगार 7. Service (Govt./Pvt.) / कर्मचारी (सरकारी/निजी) 8. Student / विद्यार्थी 9. Truck Driver/helper / ट्रक चालक/सहायक 10. Local transport worker (auto/ taxi driver, handcart pullers, rickshaw pullers etc. / स्थानीय परिवहन कर्मचारी (ऑटो/ टैक्सी ड्राइवर, ठेलेवाले, रिक्शावाले) 11. Hotel Staff / होटल कर्मचारी 12. Agricultural cultivator /landholder / कृषक/जमींदार 13. Unemployed / बेरोजगार

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

9. How frequently does he/ she inject drugs? / प्रायः कितने, अक्सर नशीली दवा 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

Signature / हस्ताक्षर : .....

Name / नाम : .....

(व्यक्ति जिसके द्वारा फार्म भरा गया)

Signature / हस्ताक्षर : .....

Name / नाम : .....

(सेन्टिनेल साइट के प्रभारी)

## HSS 2010: DATA FORM FOR SINGLE MALE MIGRANTS (SMM)

## एच.एस.एस. 2010: 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)

सेन्टिनल साइट की जानकारी यहां लिखें/छापें/चिपकारी)

State/ राज्य: ..... District/ जिला: ..... Site Name / साइट का नाम: ..... <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> </div> </div> <div style="display: flex; justify-content: space-around; font-size: 0.8em;"> <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 (संपूर्ण वर्षों में)  

## 2. Marital status / वैवाहिक स्थिति

1. Never married / अविवाहित

2. Married / विवाहित

3. Divorced/separated/widowed / तलाकशुदा / अलग / विधवा

## 3. Literacy Status / साक्षरता स्थिति

1. Illiterate / निरक्षर

2. Literate and till 5<sup>th</sup> standard / साक्षर और पाँचवी तक3. 6<sup>th</sup> to 10<sup>th</sup> standard / छठी से दसवी तक4. 11<sup>th</sup> to Graduation / ग्यारहवीं से स्नातक

5. Post Graduation / स्नातकोत्तर

## 4. Reason for coming to the service point / सेवा केन्द्र 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 did the respondent has migrated to the current place? / वर्तमान निवास स्थान में ठहरने की अवधि  years / वर्ष  months / महीने

Q. Nos. 6, 7 &amp; 8 enquire about the place of original residence of the respondent / प्रश्न 6, 7 और 8 प्रतिवादी का मूलभूत प्रवास स्थान की जानकारी पूछें।

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

7. What is the District of his original residence? / 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 / Semiskilled worker / कुशल / अर्धकुशल श्रमिक

5. Petty business / small shop / लघु उद्योग / छोटी दुकान

6. Large Business/Self employed/विस्तृत उद्योग / स्वरोजगार

7. Service (Govt./Pvt.) / कर्मचारी (सरकारी / निजी)

8. Student / विद्यार्थी

9. Truck Driver/helper / ट्रक चालक / सहायक

10. Local transport worker (auto/ taxi driver, handcart pullers, rickshaw pullers etc. / स्थानीय परिवहन कर्मचारी (ऑटो / टैक्सी ड्राइवर, ठेकेदार, रिक्शेवाले)

11. Hotel Staff / होटल कर्मचारी

12. Agricultural cultivator / landholder / कृषक / जमींदार

13. Unemployed / बेरोजगार

10. Did the respondent have sex with a Female (other than his wife) in the last 6 months? / पिछले 6 महीनों में प्रतिवादी ने अपनी पत्नी के अलावा किसी दूसरी महिला के साथ यौन संबंध बनाए हैं?

1. Yes &amp; Paid for Sex / हाँ, पैसे / उपहार देकर

2. Yes &amp; not Paid for Sex / हाँ, बिना पैसे के

3. Both / दोनों

4. No / नहीं

11. Did the respondent have sex with another Man in the last 6 months? (Multiple options are allowed) / पिछले 6 महीनों में प्रतिवादी ने क्या किसी दूसरे मर्द के साथ यौन संबंध बनाए हैं? (एक से अधिक विकल्प चुनने की अनुमति है)

1. Yes &amp; he paid for Sex / हाँ, पैसे / उपहार देकर

2. Yes &amp; he received money / payment in kind for sex / हाँ, पैसे / उपहार लेकर

3. Yes &amp; without exchange of moeny gifts/ हाँ, बिना किसी लेन-देन के

4. No / नहीं

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

1. Yes / हाँ

2. No / नहीं

Signature / हस्ताक्षर : .....

Signature / हस्ताक्षर : .....

Name / नाम : .....

Name / नाम : .....

(व्यक्ति जिसके द्वारा फार्म भरा गया)

(सेन्टिनल साइट के प्रभारी)

# HSS 2010: DATA FORM FOR LONG DISTANCE TRUCKERS (LDT)

## एच.एस.एस. 2010: लम्बी 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)

सेन्टिनेल साइट की जानकारी यहां लिखें/छापें/चिपकायें)

State/ राज्य: .....		District/ जिला:.....	
Site Name / 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 (संपूर्ण वर्षों में)

2. Marital status / वैवाहिक स्थिति

1. Never married / अविवाहित      2. Married / विवाहित      3. Divorced/separated/widowed / तलाक़शुदा / अलग / विधवा

3. 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 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 केन्द्र में आने की वजह

1. Collect condoms / कन्डोम 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 does he spend at home with family? / महीने में लगभग कितने दिन परिवार के साथ समय बिताते हैं? .....Days/दिन

7. Did the respondent have sex with a Female (other than his wife) in the last 6 months? / पिछले 6 महीनों में प्रतिवादी ने अपनी पत्नी के अलावा किसी दूसरी महिला के साथ यौन संबंध बनाए हैं?

1. Yes & Paid for Sex / हाँ, पैसे/उपहार देकर      2. Yes & not Paid for Sex / हाँ, बिना पैसे के      3. Both / दोनों      4. No / नहीं

8. Did the respondent have sex with another Man in the last 6 months? (Multiple options are allowed) / पिछले 6 महीनों में प्रतिवादी ने क्या किसी दूसरे मर्द के साथ यौन संबंध बनाए हैं? (एक से अधिक विकल्प चुनने की अनुमति है)

1. Yes & he paid 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 moeny gifts./ हाँ, बिना किसी लेन-देन के      4. No / नहीं

9. Did he inject himself with any drug without prescription, for pleasure in the last 12 months? / पिछले 12 महीनों में, क्या मज़े के लिए कभी सुई द्वारा नशीली दवाओं (जो डॉक्टर ने नहीं दी) का सेवन किया?

1. Yes / हाँ      2. No / नहीं

Signature / हस्ताक्षर : .....

Name / नाम : .....

(व्यक्ति जिसके द्वारा फार्म भरा गया)

Signature / हस्ताक्षर : .....

Name / नाम : .....

(सेन्टिनेल साइट के प्रभारी)

**HSS 2010: DATA FORM FOR EUNUCH/ TRANSGENDERS (EUN)**

एच.एस.एस. 2010: हिजडा/किन्नार के लिए डेटा प्रपत्र

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

सेन्टिनेल साइट की जानकारी यहां लिखें/छापें/चिपकायें।

State/ राज्य: ..... District/ जिला: .....	
Site Name / साइट का नाम: .....	
<div style="display: flex; gap: 5px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="text-align: center; margin-top: 5px;">(Site Code)</div>	<div style="display: flex; gap: 5px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="text-align: center; margin-top: 5px;">(Date-DD/MM/YY)</div>

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

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

**3. Reason for coming to the service point / सेवा केन्द्र 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. Duration of Stay at Current Place of Residence / वर्तमान निवास स्थान में ठहरने की अवधि   years / वर्ष   months / महीने

**6. Current Occupation of the Respondent / प्रतिवादी का वर्तमान व्यवसाय**

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

7. Has the respondent received money or payment in kind for sex in the last 12 months? / पिछले 12 महीनों में प्रतिवादी ने कभी यौन संबंध के लिए पैसे लिए हैं?

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

8. Did he inject himself with any drug without prescription, for pleasure in the last 12 months? / पिछले 12 महिनोँ में, क्या मज्जे के लिए कभी सुई द्वारा नशीली दवाओं (जो डॉक्टर ने नहीं दी) का सेवन किया?

1. Yes / हाँ                      2. No / नहीं

Signature / हस्ताक्षर : \_\_\_\_\_

Name / नाम : \_\_\_\_\_

(व्यक्ति जिसके द्वारा फार्म भरा गया)

Signature / हस्ताक्षर : \_\_\_\_\_

Name / नाम : \_\_\_\_\_

(सेन्टिनेल साइट के प्रभारी)

## Annex-9

### DATA FORM TRANSPORTATION SHEET

(To be sent in duplicate along with Data Forms)

- Name and Complete Address of the Sentinel Site: \_\_\_\_\_  
 \_\_\_\_\_ District: \_\_\_\_\_ State: \_\_\_\_\_
- A) Type of Site: FSW/MSM/IDU/SMM/LDT/EUN B) Site Code: \_\_\_\_\_
- Period of Sample Collection: \_\_\_\_\_ (dd/mm/yy) to \_\_\_\_\_ (dd/mm/yy)
- Total No. of Data Forms: \_\_\_\_\_
- Total Number of Envelopes: \_\_\_\_\_
- Details of Sample Numbers whose data forms are being sent:

S. No	Date of Collection	Sample No.	S. No	Date of Collection	Sample No.	S. No	Date of Collection	Sample No.	S. No	Date of Collection	Sample No.
1			26			51			76		
2			27			52			77		
3			28			53			78		
4			29			54			79		
5			30			55			80		
6			31			56			81		
7			32			57			82		
8			33			58			83		
9			34			59			84		
10			35			60			85		
11			36			61			86		
12			37			62			87		
13			38			63			88		
14			39			64			89		
15			40			65			90		
16			41			66			91		
17			42			67			92		
18			43			68			93		
19			44			69			94		
20			45			70			95		
21			46			71			96		
22			47			72			97		
23			48			73			98		
24			49			74			99		
25			50			75			100		

If space provided above is not sufficient, please attach another sheet.

Data Forms Sent by: \_\_\_\_\_  
 \_\_\_\_\_ (Name) \_\_\_\_\_ (Signature) \_\_\_\_\_ (Tel/ Mobile No.)

Date of Sending Data Forms: \_\_\_\_\_

Data Forms Received by: \_\_\_\_\_  
 \_\_\_\_\_ (Name) \_\_\_\_\_ (Signature)

Date of Receipt of Data Forms: \_\_\_\_\_

**SAMPLE TRANSPORTATION SHEET***(To be sent in duplicate along with the DBS specimens)*

1. Name and Complete Address of the Sentinel Site: \_\_\_\_\_  
 \_\_\_\_\_ District: \_\_\_\_\_ State: \_\_\_\_\_
2. A) Type of Site: FSW/MSM/IDU/SMM/LDT/EUN      B) Site Code: \_\_\_\_\_
3. Period of Sample Collection: \_\_\_\_\_ (dd/mm/yy)      to      \_\_\_\_\_ (dd/mm/yy)
4. Total Number of Samples: \_\_\_\_\_
5. Total Number of Boxes: \_\_\_\_\_
6. Details of Sample Numbers:

S. No	Date of Collection	Sample No.	S. No	Date of Collection	Sample No.	S. No	Date of Collection	Sample No.	S. No	Date of Collection	Sample No.
1			26			51			76		
2			27			52			77		
3			28			53			78		
4			29			54			79		
5			30			55			80		
6			31			56			81		
7			32			57			82		
8			33			58			83		
9			34			59			84		
10			35			60			85		
11			36			61			86		
12			37			62			87		
13			38			63			88		
14			39			64			89		
15			40			65			90		
16			41			66			91		
17			42			67			92		
18			43			68			93		
19			44			69			94		
20			45			70			95		
21			46			71			96		
22			47			72			97		
23			48			73			98		
24			49			74			99		
25			50			75			100		

If space provided above is not sufficient, please attach another sheet.

Samples Sent by: \_\_\_\_\_ (Name) \_\_\_\_\_ (Signature) \_\_\_\_\_ (Tel/ Mobile No.)

Date of Sending Samples: \_\_\_\_\_

Samples Received by: \_\_\_\_\_ (Name) \_\_\_\_\_ (Signature)

Date of Receipt of Samples: \_\_\_\_\_