



Ministry of Health & Family Welfare
Government of India



SENTINEL
SURVEILLANCE
2017

OPERATIONAL
MANUAL

for High Risk Groups and
Bridge Population Sites



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

Developed, published and disseminated with support from WHO Country Office for India



HIV SENTINEL SURVEILLANCE 2 0 1 7

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LIST OF ABBREVIATIONS

DBS	dried blood spot
DIC	drop-in-centre/ clinic
FSW	female sex worker
HRG	high risk group
HRI	high risk individual
HSS	HIV sentinel surveillance
IBBS	integrated biological and behavioural surveillance
ICTC	Integrated Counselling and Testing Centre
IDU	injecting drug user
LAT	linked anonymous testing strategy
LDT	long distance trucker
MSM	men who have sex with men
NACO	National AIDS Control Organisation
NRL	National Reference Laboratory
OST	opioid substitution therapy
ORW	outreach worker
SACS	State AIDS Control Society
SOP	standard operating procedure
STS	sample transportation sheet
TI	targeted intervention
UID	unique identification number

FOREWORD

HIV Sentinel Surveillance (HSS) has been the core in the tracking of HIV/AIDS epidemic under National AIDS Control Programme. With surveillance sites in almost every district, HSS aims to provide accurate and consistent information about the level and trend of HIV epidemic and helps in fine-tuning the responses to the epidemic by the programme.


The backbone for HIV Sentinel Surveillance is the wide network of 8 Regional institutes, 130 Laboratories and more than 1300 sentinel sites involved in managing, implementing, testing and quality management of HSS. HSS is implemented through a set process that includes training of more than 5000 personnel using standardized manual as the reference guideline for operational and technical aspects of HIV surveillance. This is consistent with NACO's commitment to systematic 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. In continuation to this endeavor, NACO organized 'Expert Group Consultation for HIV Estimations and Surveillance' in September 2016 which had participation of national and international experts including those from WHO Geneva, UNAIDS Geneva, CDC Atlanta etc. Representatives from countries of China, Vietnam and Philippines also participated in the consultation. There were three recommendations from consultations which were adopted as immediate action points: (i) scale-up of ANC surveillance sites in the northern and eastern states, (ii) sharing of test results from HSS to enable offering of HIV/AIDS counseling, testing and treatment to those in need, and (iii) adding up questions and laboratory test enabling treatment cascade surveillance. This manual has included the guidance on implementation of immediate action points as applicable.

This manual is in series of rounds of operational manual that is released before each round of surveillance with an objective to simplify the processes and to make them user-friendly. The manual, published separately for ANC and HRG & bridge population sites, describes the eligibility criteria and sampling process to be followed for surveillance among respective groups. The steps and precautions to be taken while collecting, drying, packing and transporting the specimens are also outlined in this manual and explained with the help of graphics wherever necessary.

The data coming out from surveillance have been robust. They have guided the programme in responding to the epidemic effectively. The robustness is the result of many good practices; however, standardized operational manual is the core of the system.

I hope that this operational guideline will help in strengthening the implementation of HIV sentinel surveillance.


(Dr Arun Kumar Panda)

GLOSSARY OF TERMS

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

High risk groups (HRG) are 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 individuals (HRI) are those who represent any of the abovementioned HRGs. Recruitment refers to an eligible individual in HSS who fills a data form and collects a blood specimen.

Sample pertains to an individual/ respondent found to be eligible for inclusion in HSS as per specified criteria.

Sample number is a unique number given to each eligible individual recruited in HSS 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 is the approach adopted at the sentinel site for recruiting eligible individuals in HSS. Consecutive sampling and Random sampling are the two sampling methods adopted in HSS at HRG and bridge population sentinel sites.

Data form is a brief questionnaire seeking information related to socio-demographic characteristics and vulnerabilities of the eligible individual.

Dried blood spot (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 is a designated laboratory where DBS specimens collected under HSS are tested for HIV.

HSS testing lab is where serum specimens collected under HSS are tested for HIV and syphilis. This term is used to differentiate it from other laboratories or testing centres where routine tests are done in a health facility or where HIV test is done in an Integrated Counselling and Testing Centre (ICTC).

Informed consent/ Informed assent is 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'.

Master list/ Master register is the computerised listing of HRI ever-contacted and registered at the Targeted Intervention (TI) Project (Form E). Master list contains serial number/ master list number, name and age of each of identified HRI, followed by other details relevant to the TI project.

Line list is a list of HRI who are contacted and provided TI programme service/s in the last six months. It is derived from the master list. In addition to those who are regularly contacted/provided services from the TI project, line list includes new contacts/ registrations made in the last six months, excluding those registered in the past, but could not be contacted in the last six months. It is an updated list of HRI who are currently under the coverage of TI project. This line list is updated every month and it contains master list number and the name and age of each HRI.

Random list is a list of HRI selected by random sampling out of the recently updated and validated line list. A new serial number/random list number is given to each randomly selected HRI, starting from 1. So, besides master list number, name and age of HRI, the random list contains the random list number too.

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

Sentinel site is a designated service point or facility where a fixed number of eligible individuals from a specified population group are recruited over a fixed period of time for the purpose of monitoring the epidemic.

Sentinel site code is a unique number given to each sentinel site. It is an eight digit number comprising codes for state (2 digits), district (3 digits) and site type (2 digits) followed by site number (1 digit).

Specimen refers to the blood collected from the eligible HRI.

Subsite number is a serial number given to each subsite in a composite site, starting with 1. For a single site, the subsite number will be '0'.

Testing strategy is the approach adopted for testing the blood specimens collected during HSS. Linked Anonymous Testing Strategy is adopted in HSS.

Testing protocol indicates the number of HIV tests conducted on the blood specimen collected during HSS. Two-test protocol is adopted in HSS (first test of high sensitivity and second test of high specificity, if first test is positive).

1. INTRODUCTION

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.

Under HSS, selected health facilities/targeted interventions sites are designated as sentinel sites where a predetermined number of samples are collected every year over a fixed duration. The sentinel sites have been scaled up in a phased manner from 176 in 1998 (including 92 ANC sites) to 1359 in 2010-11 (including 696 ANC sites). The HSS 2015 was implemented at 776 ANC sites. As a strategic focus to strengthen surveillance among HRGs and Bridge population, given the low level and concentrated nature of the HIV epidemics in country, Integrated Biological and Behavioural Surveillance (IBBS) was implemented among HRG and Bridge population in 2013-15. The 15th round of HSS is proposed to be implemented at around 800+ ANC and 500+ HRG sites during 2017. With this expansion, almost every district in the country will now have a sentinel site among one or more of the risk groups.

At each of HRG/Bridge population sentinel sites, three designated staff members are given the responsibility to implement surveillance activities. One Project Manager/ Officer, is designated as the site in-charge. The site in-charge, is further supported by a Counsellor who helps in taking consent/ assent and in data collection. A Laboratory technician helps in the collection of blood samples following the DBS method.

This Operational Manual has been prepared for easy reference of the staff at HRG/Bridge population sentinel sites. It describes the managerial, operational and technical aspects at the sentinel site for efficient implementation of HSS. The details include the roles and responsibilities of the staff, sampling process, instructions to fill data form and blood specimen management. The 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.

2. ROLES & RESPONSIBILITIES

The HSS implementation at the site is a team effort where specific roles are outlined for each of the members. This will ensure successful implementation of HSS. The team shall be aware that HSS is not an evaluation tool of TI. Also, analysis and inferences are not drawn at TI site level. Data collected during HSS is largely used in understanding the big picture of the HIV trend at the national and state level, while giving an indication of districts that need urgent attention. Hence, HSS team at site shall implement the HSS as per the prescribed guidelines, without any bias and as per the roles and responsibilities detailed below.

2.1 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 State AIDS Control Societies (SACS).
3. Conduct a pre-surveillance on-site training of the staff participating (or expected to participate) in surveillance activities, including PEs and Outreach workers.
4. Ensure that the HRIs are recruited as per the method of samples recruitment specified for the site. This is important to have quality data of high reliability to provide guidance to the programme.
5. Ensure that all the documentation at the sentinel site is properly maintained and complete.
6. Ensure that individual identifiers like name and mobile are not recorded anywhere, thus maintaining confidentiality and anonymity of respondents recruited under HSS.
7. Ensure that “HSS register” linking HSS sample number with TI Unique Identification Number (UID) is maintained in a secure and confidential manner.
8. The site-in charge will review the details of each of the HRIs recruited in HSS for their HIV testing status under the programme. If there are some cases which were not tested in the programme, s/he will take appropriate follow-up action to offer HIV testing to such HRIs.
9. Ensure that the standard operating procedures (SOP) for Dried Blood Spot (DBS) method are complied with by the staff at every step.
10. Check the forms filled on the particular day for completeness and sign them and discuss issues, if any with the concerned staff and guide them. Never sign blank data forms in advance.
11. Monitor the progress in sample collection on a daily basis.

12. 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.
13. 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.
14. Contact the nodal person at SACS for any clarification/ problem regarding staff, availability of the listed consumables, user manuals, flow charts, data forms and stamps/ pre-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 PEs on surveillance, sample recruitment and information to be communicated to the HRI at the time of contact.
4. Plan 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 15 days and obtain additional names from SACS to replace them.

2.2 NGO counsellor 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 HRIs selected by random sampling are correctly recruited into HSS.
2. Record details of HRI in HSS register and assess eligibility as per inclusion criteria.
3. Administer informed consent/assent form to all eligible HRI in their local language.
4. Fill the data form and “HSS register” for each eligible respondent as per the instructions given.
5. Ensure that the data form does not carry any personal identifiers.
6. Assist the site in-charge in ensuring that every HRI is offered HIV counselling and testing under the programme, as per the national HIV counselling and testing guidelines.
7. Assist site in-charge to offer HIV/STI counseling and testing services to HRIs who are recruited in HSS but not tested under the programme, as per existing guidelines for counselling and testing services.

8. Ensure that the filled data form and respondent reach the Laboratory Technician for blood collection.
9. 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.
10. Assist site in-charge in the overall implementation of surveillance at the site.

2.3 Laboratory technician should:

1. Verify the completeness of data form before taking the blood specimen and refer back to Counsellor 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 SOP.
4. Take all the care and precautions to avoid exposure of blood specimens to moisture.
5. Assist site in-charge in storing, packing and transporting of blood specimens every week and their documentation.
6. Strictly adhere to all the prescribed biosafety measures.

3. MATERIALS REQUIRED AT HRG SENTINEL SITES

Table 1: List of materials required at HRG sentinel sties

S. No.	Item	Quantity supplied
	Documents	
1	Operational manuals	3
2	Wall charts/Flow charts	1
3	HSS register	1
4	Informed consent/ Assent forms	300
5	Informed consent forms for parent/guardian	25
6	Data forms	300
7	Data form transportation sheet	30
8	Random list	1
9	Stamp/ Sticker with site details	2 stamps/ 300 stickers
10	Sample transportation sheets	30
	Consumables for blood collection	
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 ziplock bags	250
12	Big ziplock bag	40
13	Bubble envelopes (sample transportation)	30
	Material for waste disposal	
1	Puncture proof containers (jar for disposal of sharps)	2
2	2 Sodium hypochlorite solution	2 litres
3	Colour-coded waste disposal bags (yellow, blue and black)	10-15

4. ELIGIBILITY CRITERIA

The following criteria should be evaluated while assessing the eligibility of HRIs for inclusion in surveillance:

Box 1. Eligibility criteria for inclusion in HSS at HRG & bridge population sites

Inclusion criteria

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

Exclusion criteria

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

4.1 Case definitions for HSS

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 six 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 nonmedical reasons, through injections, at least once in the last three months.
4. Hijras/ Transgender: 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 subsite 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 the 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 mobilization 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, namely, 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. This should cover 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 drop-in-centre (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.
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 s/he came to the DIC/clinic.

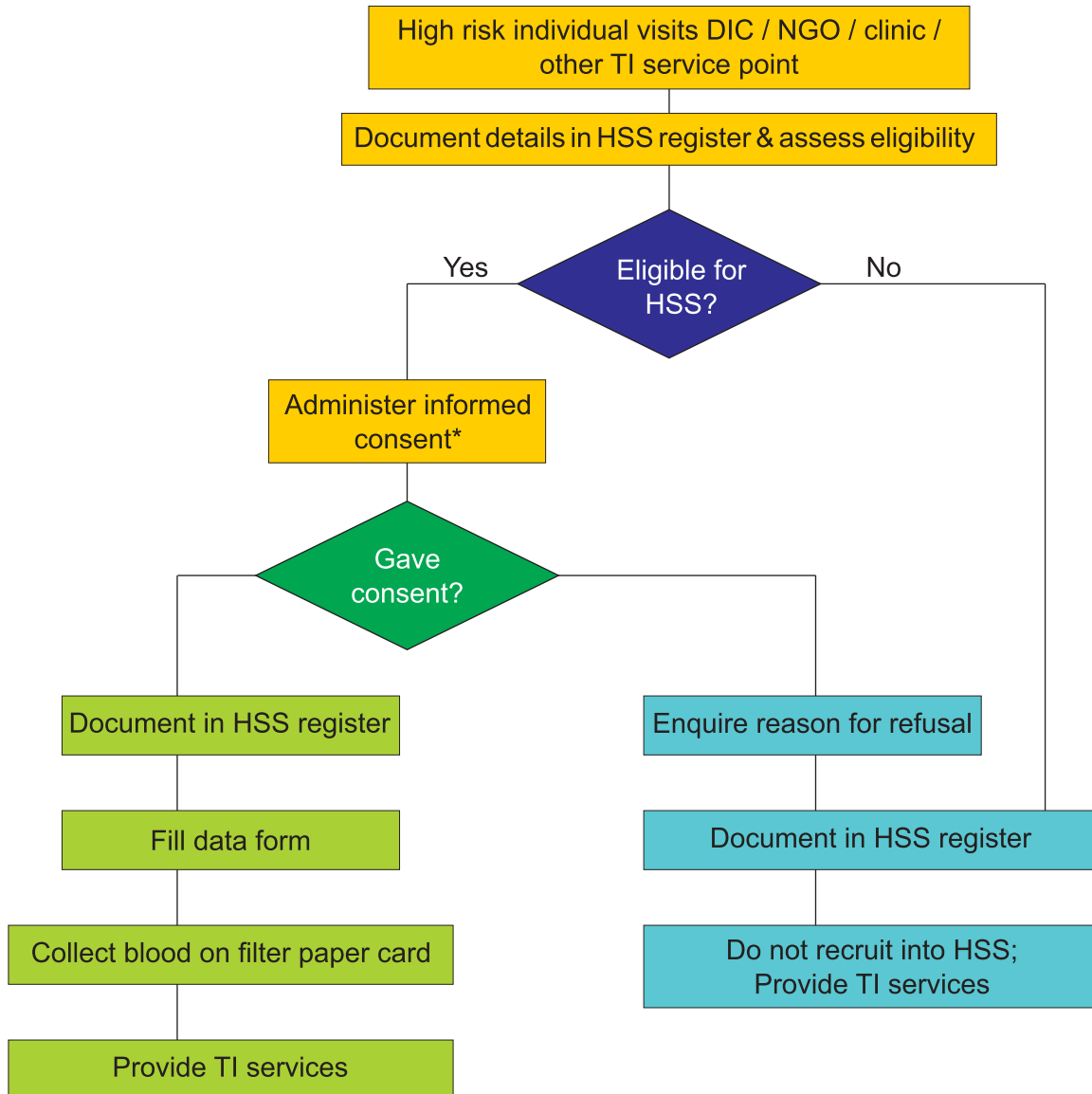
4. If the HRI is eligible for inclusion in HSS, administer the informed consent/ assent form. Refer to Section 6.3 for detailed instructions on administering informed consent/ assent form.
5. If the HRI of age 15-17 years gives his/her assent, informed consent should also be obtained from the guardian/caregiver.
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 s/he came to the DIC/clinic.
8. If the required consent/assent is 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 immediately, refer him/her to ICTC by giving the referral slip. Provide him/her the TI services for which s/he came to the DIC/clinic. Please also inform him/her for potential follow-up referral for HIV/syphilis counselling and testing services to keep healthy.

Box 2. Consecutive sampling method

- a. After the start of surveillance, all individuals attending the DIC/NGO clinic/service point, who are eligible for inclusion in surveillance as per defined criteria, should be recruited in the order they attend the clinic;
- b. Consecutiveness should be maintained at the point of enrollment in HSS register and assessment of eligibility and while administering informed consent to every successive eligible individual;
- c. This sampling method removes all chances of selection or exclusion based on individual preferences or other reasons, and hence reduces the selection bias; and
- d. It is convenient, feasible and easy to follow.

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

Flow chart 1. Process of consecutive sampling at HRG/Bridge population 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 s/he 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 number, master list number, name and age of HRI, from SACS.
2. From the random list, prepare a separate list of selected HRI for each PE (PE-wise list).
3. Conduct a meeting of PEs & Outreach Workers (ORW) and orient them on surveillance, sample recruitment and information to be communicated to the HRI at the time of contact. Instructions on organizing 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 s/he 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 overcrowding 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 five 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; and
 - 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 and reasons for refusal, amongst others against the name of the HRI on the PE-wise list that is given to him/her. This sheet can be provided to the Counsellor for recording the details in HSS register at the DIC.
11. PE should accompany the HRI when s/he comes to the DIC, preferably on the fixed date.

12. When a PE attempts to contact the sampled HRI, the scenarios that may arise, and actions that must 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; and
 - 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, Counsellor should:
 - a. Check whether the HRI is same as the one whose name is in the 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; and
 - c. Enquire from PE about the other HRI who did not come with him/her and document accordingly in the HSS register. Use the PE-wise lists on which PE has noted the details for recording 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 number, master list number, name and 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; and
 - e. Those who could not be contacted even after three 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.

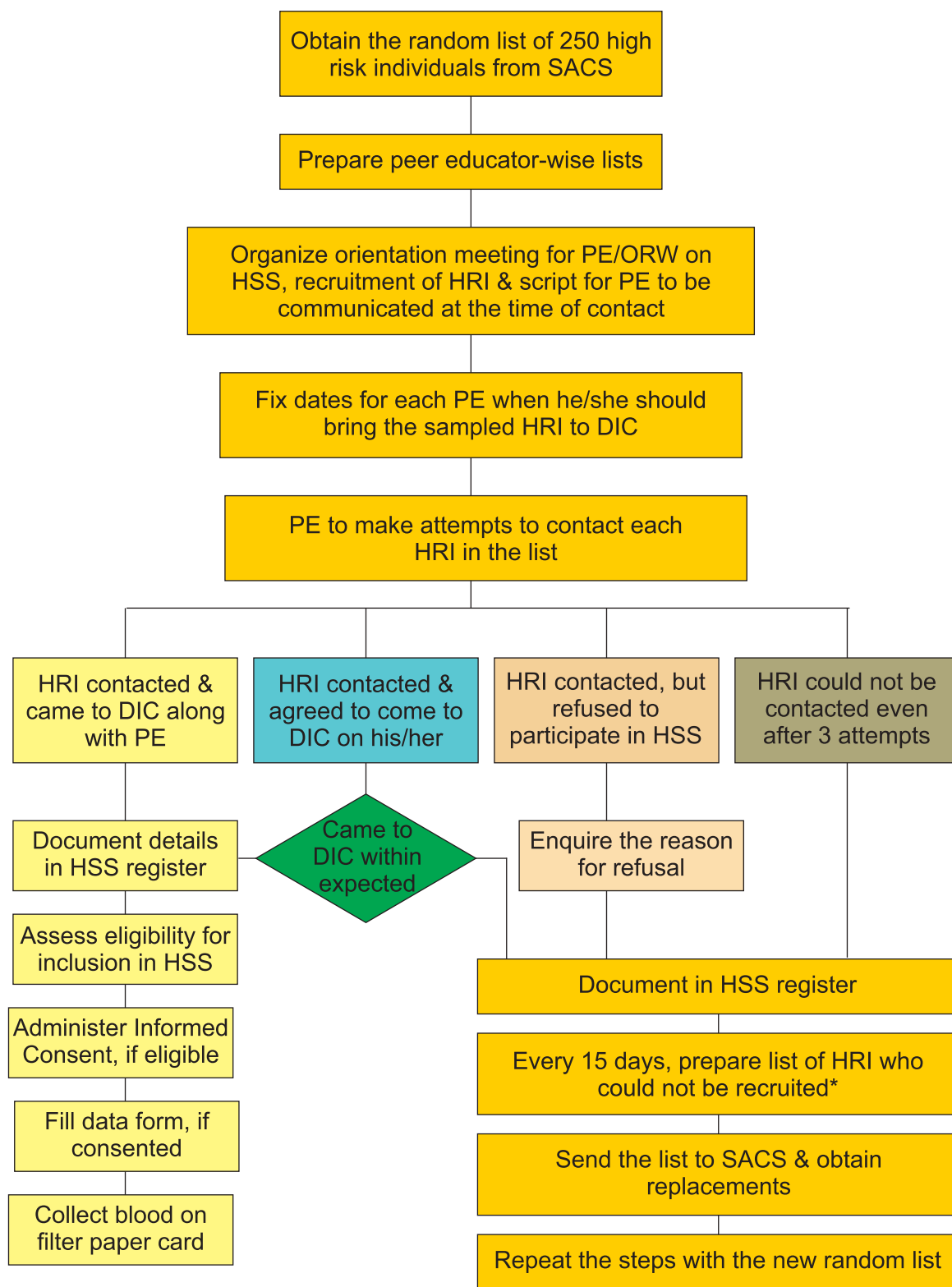
5.3 Instructions to organize PE/ORW meeting

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 HSS 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. Emphasize 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 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. As many as 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 as the recruitment and testing is not for diagnosis purpose, we will not be able to return the results 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 the DIC on (mention the fixed date)?

Flow chart 2: Process of random sampling at HRG/Bridge sentinel site



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

6. DOCUMENTATION

6.1 General instructions

1. Documentation to be maintained at the HRG sentinel site and norms of submission are summarized in Table 2 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 and 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.
6. Linked Anonymous Testing strategy (LAT) should be strictly adopted at the sentinel site. The concept of LAT 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.

Table 2. Documentation to be maintained at HRG sentinel site and norms of submission

S. No.	Document	Managed by	Verified by	Norms for submission
1.	HSS register	Nurse/Counsellor	Site in-charge	Send to Regional institute at the end of HSS and keep a copy
2.	Informed consent/ Assent forms	Nurse/Counsellor	Site-in charge	Send to SACS at the end of HSS
3.	Data forms	Nurse/Counsellor	Site-in charge	Send to Regional institute EVERY WEEK along with Data Form Transportation Sheet
4.	Data form transportation sheet	Nurse/Counsellor	Site-in charge	Send to Regional institute EVERY WEEK alongwith data forms
5.	Sample transportation sheet (STS)	Lab Technician	Site-in charge	Send to DBS testing lab EVERY WEEK along with DBS specimens
6.	Random list & PE-wise lists	Counsellor	Site-in charge	Send to Regional institute at the end of HSS
7.	List of non-recruits	Nurse/Counsellor	Site-in charge	Send to SACS EVERY 15 DAYS

Box 4. Linked anonymous testing strategy

1. Testing for HIV under surveillance is done on a blood specimen after removing all personal identifiers like name and mobile number. The specimens only have the surveillance code and not any other identifier.
2. This surveillance code is linked with TI Unique ID code in a separate confidential register (HSS register) at HSS site.
3. The surveillance specimen is sent to the HSS DBS testing lab (usually a National Reference Laboratory or NRL) for HSS purposes. The HSS testing lab tests the surveillance specimen for HIV and other related conditions. Results of surveillance sample, which are reactive for HIV as per the HSS laboratory guidelines, are returned to the respective SACS ICTC in-charge at the earliest. SACS ICTC in-charge will coordinate with respective HRG site in-charge to refer cases for HIV counselling and testing services which were reactive in surveillance but not tested under the programme. This will facilitate offering of counselling, testing or treatment services to all HRI to keep them healthy.

Most important instruction on documentation

1. HSS register, data form and filter paper card should not contain name but should contain sample number; and
2. Informed consent form should not contain sample number but 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. Reasons for refusal.
- 2) HSS register also helps in the following:
 - a. Assessing the eligibility of HRI for inclusion in surveillance;
 - b. Documenting profiles of the ineligible respondents at the TI; and
 - c. Better organizing 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. The 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 3: Format of HSS register at HRG sites with consecutive sampling

1	2	3	4	5	6	7	8	9	10	11	12	13
S. No.	TI UID number	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 consent given, write sample number	Whether tested for HIV under programme (Yes/No)	Reason for not tested for HIV under programme	Follow-up action

- 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: UID number is the number to each HRI who is enrolled with TI. This number is there for each beneficiary of TI and shall be updated in HSS register for every HRI who visits DIC/clinic;
- c. Column 3: 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;
- d. Column 4: Enquire the age of the HRI and record it in completed years;
- e. Column 5: Enquire the educational status and record the appropriate code as detailed under the Instructions to fill data form;
- f. Column 6: 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';
- g. Column 7: Enquire if HRI fits the case definition for surveillance or not. Mention 'Yes' or 'No' accordingly;

Note: The next 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 and fits the case definition). If ineligible, leave the last three columns blank.

- h. Column 8: 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;

- i. Column 9: This column needs to be filled only if an eligible HRI or his/ her parent/ guardian/ caregiver does not give assent/consent. In such a case, enquire the reason for refusal and write the same verbatim. If assent/consent is obtained, leave this column blank;

Note: Column 9 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 also a common 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;

- j. Column 10: This column needs to be filled only if assent and/or consent is obtained from an eligible HRI for participation in surveillance. In such a 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;

Note: The last three columns need to be filled only to assess if the HRI is tested for HIV under the programme and to plan the follow-up referral to facilitate the counselling and testing.

- k. Column 11: This refers to the status if the HRI have been tested for HIV under routine programme. Status of all the HRI who have been tested for HIV under programme shall be recorded as “Yes”;
- l. Column 12: This column shall be filled only for the HRI who were recruited under HSS but have been never tested under routine programme for HIV. The reason for not testing should be clearly mentioned under this column; and
- m. Column 13: This column shall be filled only for those HRI who were not tested for HIV. The follow-up action taken by site to offer counselling and testing of HIV to such HRI shall be recorded here.

6.2.2 *Format of HSS register at HRG sites with Random sampling*

Table 4: Format of HSS register at HRG sites with Random sampling

1	2	3a	3b	4	5	6
TI UID number	Random list number	Contacted or not	Reported or not	Age (in completed years)	Education status	Gender
7	8	9	10	11	12	13
Whether eligible for HSS as per case definitio? (Yes/No)	Whether informed consent/ Assent given? (Yes/No)	If No, what is the reason for refusal?	If eligible and consent given, write sample number	Whether tested for HIV under programme (Yes/No)	Reason for not being tested for HIV under programme	Follow-up action

- a. Column 1: Write the UID number of the HRI supposed to be brought by the PE on a fixed day;
- b. Column 2: Write the random list number of the HRI supposed to be brought by the PE on a fixed day;
- c. Columns 3a & 3b: Fill these columns with the following codes or expressions as per the instructions given in Table 4 below:

Codes for Column 3a (Contacted or Not): 'Y' for Yes, 'N' for No

Codes for Column 3b (Reported or Not):

1. Came to DIC
2. Expected
3. Refused
4. Not applicable

Table 5: Instructions for columns 3a & 3b of HSS register

Scenario	3a	3b	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 with the HRI. If s/he 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 verbatim under column 8
Not contacted after 3 attempts	N	4	

- d. Columns 4-13: 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, namely:

- a. One common form for taking informed consent or assent from the eligible individual (Respondent form - Annex 1); and
 - 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 s/he 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, check the following:
 - 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 the respondent on the 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; and
 - v. Ask the witness to write his name, sign and put the date in the specified space.
 15. After completing all the above steps, the counsellor 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, vulnerabilities and HIV treatment cascade of the eligible individual.
2. The Counsellor should assist the site in-charge in completing the data form.
3. Only designated and trained personnel should complete the data form.
4. Only one data form should be completed per individual.
5. The data form should be filled in only after confirmation of the eligibility by the counsellor/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. Subsite 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 Anonymous Testing, any personal identifiers such as name, address, mobile number etc., 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) How long ago did she (FSW) have last paid sex? (3) With how many clients did she (FSW) have sex in the last week? (4) How long ago did he (MSM) have sex with a man? and (5) 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 the 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 and (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 six months?; and
 - (3) If positive, is respondent seeking care from any of the following for management of HIV (FSW/MSM/IDU/H-TG/SMM/LDT)?
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 if 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 counsellor 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 subsites 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.

Box 5. Subsite number and Sample number

Subsite number: In case of composite sites, write the subsite number allotted by SACS. In case of a single site, write '0'.

Sample number: The sample number at each site and subsite should begin from '001'. If some of the samples are found to be invalid at the testing lab and the 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 subsite). The sample number of the invalid sample SHOULD NOT be given to these additional samples. The following example illustrates these points.

Eg 1. At a subsite with the allotted number '2', and with an allotted sample size of 050, the subsite number should be mentioned as '2' and sample numbers should be given from 001 to 050, successively. Suppose sample numbers 020, 034 & 042 are found to be invalid at HSS testing lab, the three additional samples that will be collected at the subsite no.2 should be given the sample numbers 051, 052 & 053; and

Eg 2. At a HRG single site (not composite), the subsite number should be mentioned as '0' and sample numbers should be from 001 to 250, successively. If four samples were found to be invalid, the additional four samples should be given sample numbers 251, 252, 253 & 254.

Table 6: 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, & name of the sentinel site and site code.</p> <p>Write the following 3 items manually:</p> <ol style="list-style-type: none"> 1. Subsite number; 2. Sample number; and 3. Date of sample collection
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"> 1. Illiterate: Without any formal or non-formal education. 2. Literate and till 5th standard: Those with non-formal education or those who joined school but not studied beyond 5th standard. 3. 6th to 10th standard: Those who studied beyond 5th standard but not beyond 10th standard. 4. 11th to Graduation: Those who studied beyond 10th standard but not beyond graduation. Includes those with technical education/ diplomas. 5. Post graduation: Those who studied beyond graduation.
Reason for coming to the service point	<p>Enquire the reason for which the respondent is visiting the service point and circle the appropriate option. If the reason for attending the service point is other than those mentioned above, circle option 'others' and write the exact reason in the space provided.</p> <p>If random sampling method is being adopted at the site, circle the option 'randomly selected'. This option will not be applicable for sites which are implementing "Consecutive sampling method" under HSS.</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 current place of residence of the respondent falls under Municipal Corporation or Municipal Council or Cantonment Area.</p> <p>If yes, circle the first option (urban);</p> <p>If no, circle the second option (rural); and</p> <p>Do not write the name of the place.</p>
Occupation of the respondent	<p>Circle the appropriate current occupation of the respondent using the explanations given below. Only the categories which need some elaboration are explained below:</p> <ol style="list-style-type: none"> 1. Non-agricultural labourer: Includes workers at construction sites, quarries, stone crushers, road or canal works and brick-kilns, amongst others. 2. Skilled/ Semi-skilled worker: Includes workers in small-scale or cottage industries; also includes industrial/ factory workers; technicians such as electricians, masons, plumbers, carpenters, goldsmiths, ironsmiths, those involved in automobile repair works; artisans such as weavers, potters, painters, cobblers, shoemakers and tailors.

	<p>3. Petty business/ small shop: Includes vendors selling vegetables, fruits, paan shop, milk and newspapers.</p> <p>4. Large business/ self-employed: Includes professionals and businessmen</p> <p>5. Service: Those working on salary basis in government, private or institutional sector excluding drivers, hotel staff.</p>
Whether injects drug/s	<p>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.</p>
HIV testing history	<p>This refers to the HIV testing history of HRI. If s/he has been tested at least once, irrespective of when; then please circle option "1" ("Yes"). If s/he has been never tested for HIV before, please record as option "2" ("No").</p>
Result of last HIV test	<p>This refers to the result of the most recent HIV test of the respondent. The options are self-explanatory and shall be circled accordingly.</p> <p>If respondent's last HIV test result was indeterminate, please record it as "Negative" i.e. encircle option "2".</p> <p>There may be some respondents who do not want to disclose their status and hence either do not provide any information regarding the result of their last HIV test result or refuse to do so. Please record such responses under "No response" i.e circle option "4".</p> <p>For those who have never been tested (i.e. circled as "2" under previous question), please encircle option "99" i.e "Not applicable (for never tested)"</p>
Management of HIV infections	<p>This refers to the enrolment of HIV positive respondents in HIV care, either for pre-ART or ART services, at the time of surveillance. The options are self-explanatory and shall be circled appropriately.</p> <p>This is a multiple option question and in instances where respondents are seeking care from more than one service delivery points; all appropriate options shall be encircled.</p> <p>If the respondent is not seeking any care for management of HIV, then please encircle option "7" i.e. "Not seeing care for HIV management".</p> <p>For all those respondents who were not positive when tested last (i.e any of option "2-4" or "99" is encircled under previous question), please encircle option "99" i.e "Not applicable (for all who were not positive when last tested for HIV)".</p>
ART uptake	<p>This refers to the current uptake of 'antiretroviral therapy' by HIV positive respondents. Carefully enquire about it by choosing a term for HIV treatment that is understandable in the local context, whether that is a complete phrase such as 'antiretroviral therapy', an acronym, such as ART, or another term.</p> <p>If she has been currently taking ART, please circle option "1" ("Yes"). If she was not currently taking ART, please record as option "2" ("No").</p> <p>For all those respondents who were not positive when tested last (i.e any of option "2-4" or "99" is encircled under question for testing result), please encircle option "99" i.e "Not applicable (for all who were either never tested for HIV or were not positive when last tested for HIV)".</p>

Table 7: Instructions for questions specific to FSW data form (Refer Annex-3)

Question/Field	Description/ Instructions
1. 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>Note: Multiple responses are allowed for this question. 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>
2. Duration of sex work	<p>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.</p> <p>The response categories are mutually exclusive. Option "2" (6 months to 1 year) refers to duration of 6 months to one year while option "3" refers to a duration which is more than 1 year to three years. Option "4" (3-5 years) refers to duration of more than 3 years to upto 5 years while option "5" refers to duration of more than 5 years.</p>
3. Last paid sex	<p>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 '0' months and number of days as reported by the FSW.</p> <p>In cases, where respondent mentioned that they have last paid sex on the day of interview, please record the response as '0' month and "1" day.</p> <p>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.</p>
4. Client volume in last week	<p>Enquire, with how many paying clients did the FSW have sex in the last week. Write the number in the space provided.</p>
5. Other source of income	<p>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.</p>

Table 8: Instructions for questions specific to MSM data form (Refer Annex-4)

Question/Field	Description/ Instructions
1. Type of MSM	<p>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.</p>
2. Sex with a female partner	<p>Enquire if the MSM had sex with any female partner (wife/ girlfriend/ lover/ sex worker/ other female) in the last six months and circle the appropriate option.</p>
3. Last sex with a male partner	<p>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 '0' months and number of days as reported by the MSM.</p> <p>In cases, where respondent mentioned that they had last paid sex on the day of interview, please record the response as '0' month and "1" day.</p>

4. 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.
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Table 9: Instructions for questions specific to IDU data form (Refer Annex-5)

Question/Field	Description/ Instructions
1. Duration of injecting drugs	<p>Enquire from the IDU since as to how long s/he has been injecting drugs and circle the appropriate option.</p> <p>The response categories are mutually exclusive. Option “2” (6 months to 1 year) refers to duration of 6 months to one year while option “3” refers to a duration which is more than 1 year to three years. Option “4” (3-5 years) refers to duration of more than three years to upto 5 years while option “5” refers to duration of more than 5 years.</p>
2. Frequency of injecting drugs	Enquire the IDU, how frequently s/he injects drugs and circle the appropriate option.

Table 10: Instructions for questions specific to SMM data form (Refer Annex-7)

Question/Field	Description/ Instructions
1. State of origin	Enquire from the respondent as to which state s/he belongs to and write legibly, the name of the state.
2. District of origin	Enquire from the respondent as to which district s/he belongs to and write legibly, the name of the state.
3. Place of origin	<p>Enquire if the original place of residence of the respondent falls under Municipal Corporation or Municipal Council or Cantonment Area.</p> <p>If yes, circle the first option (urban); and If no, circle the second option (rural).</p>
4. Sex with female partner other than wife in last six months	<p>Enquire if the respondent had sex with any female other than his wife, in the last six months. If yes, 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"> 1. Yes and he paid for sex: If he had sex with a female in the last six months and has paid for sex. 2. Yes and not paid for sex: If he had sex with a female other than his wife in the last six months, but has not paid anything in exchange for sex. 3. Both: If he had both paid and unpaid sex with female partners in the last six months. 4. No: If he did not have sex with any female other than his wife in the last six months.
5. Sex with another man	<p>Enquire if the respondent had sex with any male partner, in the last six months. If yes, also enquire if he paid or received any payment in cash or kind in exchange for sex.</p> <p>Circle the appropriate option as explained below. Multiple responses are allowed for this question:</p> <ol style="list-style-type: none"> 1. Yes and he paid for sex: If he had sex with a male in the last 6 months and has paid for sex.

	<p>2. Yes and he received money/ payment in kind for sex: If he had sex with a male in the last six months and has received money or payment in kind in exchange of sex.</p> <p>3. Yes and without exchange of money/gifts: If he had sex with male partners without any exchange of money or payment in kind in the last six months.</p> <p>4. No: If he did not have sex with a male in the last six months.</p>
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Table 11: Instructions for questions specific to LDT data form(Refer Annex-8)

Question/Field	Description/ Instructions
1. Average stay at home	Enquire as to how many days in a month does the respondent stay at home on an average and write the response in number of days.
2. Sex with female partner other than wife in last six months	<p>Enquire if the respondent had sex with any female other than his wife, in the last six 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> <p>1. Yes and he paid for sex: If he had sex with a female in the last six months and has paid for sex.</p> <p>2. Yes and not paid for sex: If he had sex with a female other than his wife in the last six months, but has not paid anything in exchange for sex.</p> <p>3. Both: If he had both paid and unpaid sex with female partners in the last six months.</p> <p>4. No: If he did not have sex with any female other than his wife in the last six months.</p>
3. 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. Multiple responses are allowed for this question:</p> <p>1. Yes and he paid for sex: If he had sex with a male in the last six months and has paid for sex.</p> <p>2. Yes and he received money/ payment in kind for sex: If he had sex with a male in the last six months and has received money or payment in kind in exchange of sex.</p> <p>3. Yes and without exchange of money/gifts: If he had sex with male partners without any exchange of money or payment in kind in the last six months.</p> <p>4. No: If he did not have sex with a male in the last six months.</p>

Table 12: Instructions for questions specific to H/TG data form (Refer Annex-6)

Question/Field	Description/ Instructions
1. 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 Counsellor.
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 should be written by the recipient and one of the two sheets 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 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.

The signed copy of STS received from the DBS testing lab should be securely stored for any future reference.

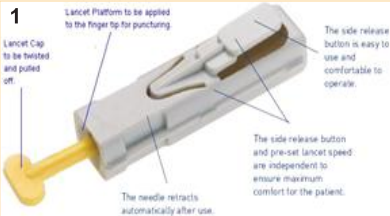

7. STANDARD OPERATING PROCEDURES FOR PROCESSING DRIED BLOOD SPOT (DBS) SPECIMENS

7.1 Dried blood spot method

The 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.

7.2 Description of consumables used in DBS method

1. **Sterile disposable rubber gloves:** Everyone involved in blood collection and who is handling the consumables for blood collection should wear gloves to maintain sterile conditions and avoid infections.
2. **Alcohol preps/ Swabs:** These are used to disinfect the skin before puncturing the fingertip.
3. **Non-reusable self-retractable adult safety lancet:** An automated incision device with a fixed penetration depth to collect capillary blood through finger prick. It has tri-bevelled, electro-polished 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, Figure -1.

4. **Sterile disposable gauze 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 a 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, Figure -2. 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 below for detailed instructions on handling the filter paper cards.


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. The preprinted 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.
3. Filter paper cards come in packets of 50 cards. Put these packets in one of the six airtight plastic boxes provided to your site.
4. 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.
5. Keep the rest of the cards in a big ziplock bag and place five desiccant packs inside the bag before sealing it. These desiccant packs should be replaced with an equal number of fresh desiccant packs once in every three days.
6. The packets of filter paper cards should be opened only when required and during rest of the time, the packets should be sealed and kept inside the plastic box with lid closed and side-locks applied. Five desiccant packs should be kept inside this storage box to take care of any moisture inside the box. These desiccant packs should be replaced with an equal number of fresh desiccant packs once in every three days.
7. It is very important to keep the unused filter paper cards with desiccants in a ziplock bag and airtight plastic box in order to prevent the moisture being absorbed on the filter paper card. This will in turn deter oversaturation or merging of circles when blood is being collected.
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.

6. **Small circular bandaids:** After blood collection, the bandaid 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 the drying box before using it for drying blood spot specimens, Figure-3.



8. **Drying box:** A plastic box, Figure-4 with airtight 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. Desiccant packs should be kept at all times at the bottom of the box to keep it dry. The box is also used to store unused filter paper cards and desiccants to protect them from moisture. Six airtight 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 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 latter box with DBS specimens, do not place any other material.



9. **Desiccants/ Desiccant packs (Drying agents):** Tiny capsules of silica gel that absorb moisture, Figure-4. 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 ziplock bag. Open only one packet of desiccants at a time. Opened packet of desiccants should be placed in the airtight plastic box. A new packet of desiccants should be opened only after the desiccants in the already opened packet are exhausted. If the desiccants are exposed to environment before their actual use, they absorb moisture and become useless for drying blood specimens.



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 squares of the size 3" x 5", Figure-6. After the blood spots are dried and before the filter paper card is placed inside small ziplock bag, butter paper is folded over the dried blood spots.



11. **Small zip-lock bag:** Specialised low-gas permeable plastic bag (4" x 6") with ziplock that prevents entry of air and exposure of its contents to moisture. They have a sliding "zipper" that is used to close and seal the bag. These are used for packing blood specimens after drying and also for storing unused filter paper cards. These bags are expensive and should never be used for other purposes, like carrying other consumables such as lancets, bandages, alcohol swabs etc., Figure-6. Each morning, DBS specimens collected on the previous day and dried overnight, are transferred to these bags. Small ziplock bags come in packets of 50 pieces.

12. **Large ziplock bag:** Large plastic ziplock bags (8" x 10") are used for storage and transportation of DBS specimens. Each large ziplock bag holds 10 small ziplock bags with filter paper cards.



13. **Bubble envelopes:** Used for packing of large ziplock bags and STS before transportation, Figure-7.

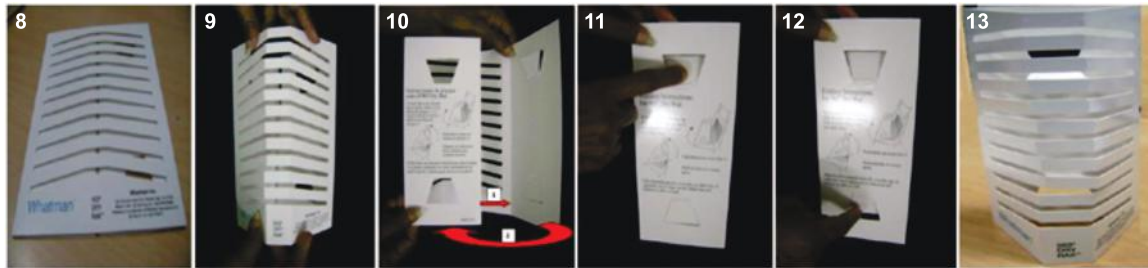
7.3 General instructions

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, the lab technician should verify the data form for any unanswered questions. If any, the respondent should be sent back to the Counsellor for completing the data form.

7. Universal safety precautions should be followed while collecting and processing blood specimens.
8. Every blood specimen collected, irrespective of whether it has been properly collected or not, or whether it is adequate or not, should be dried, packed and transported to the testing lab. 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 minimise wastage as much as possible.

7.4 Preparing drying rack & drying box before starting specimen collection

1. For the current round (HSS 2017), every old HRG site is provided two drying racks and two drying boxes while every new HRG site is provided five drying racks and five drying boxes. 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 Figure 8-13 and prepare the drying rack ready for use.
3. Keep the plastic drying box vertical, so that one of its shorter sides becomes the bottom of the box. The lid can be placed from the side and sidelocks can be applied. Sidelocks help to ensure airtight chamber and also to prevent accidental removal of box's lid, thereby exposing DBS cards to moisture, while drying.
4. Paste the folded drying rack inside a plastic drying box, Figure-14 using a 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 makes 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 or two drying kits in the beginning. Since the racks get damaged due to continuous use, the rest may be used subsequently.



7.5 Labelling the filter paper cards

1. Before collection of blood on the filter paper card from an eligible HRI, take out one card from the box/packet and close the box immediately.

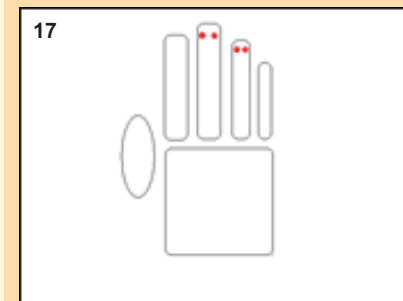
2. Hold the card only by the lower portion and never touch the upper portion of the card containing the printed circles.
3. Label the card with Sentin and write the rest manually. Do not mention personal site code, sub-site number, sample number and date of collection in the space provided. If stickers with site codes are available, paste the sticker an
4. identifiers such as name of HRI, address, contact information etc on the protein saver card.
5. 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.
6. 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 the appropriate puncture site as shown in Figure 15 -17

Box.7. Appropriate puncture site

1. The arm and hand should not have any wound, cut, scar, infection, swelling, deformity or rash.
2. Use the 3rd and 4th fingers for finger prick. This is because, in the 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 3rd and 4th fingers are localized.
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.
4. The respondent should not be wearing a ring on the finger, as the ring may disrupt free flow of blood to the fingertip.
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 / midline.
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 hand and the third and fourth fingers. As mentioned in the box, do not use a finger with a scar, wound or cut, infection, swelling, deformity, rash or on which the respondent is wearing a ring.
3. Once the right or left hand is selected, hyperextend his/her arm. Keep the position of the hand below the level of the respondent's heart 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.
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, Figure -18.
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. Otherwise, blood will not well 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 and opened. 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 as shown in Figure 19 -20. Dispose off the cap in the 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 fingertip.



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 towards the tip. That action will stimulate a flow of blood to the sample area Figure-20.
2. When your thumb reaches the fingertip, maintain a gentle pressure. Place the lancet perpendicular to the palmar surface of the end portion of the finger slightly off centre.



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.
4. The puncture should be made perpendicular to the ridges of the fingerprint so that the drop of blood does not run down the ridges as shown in Figure-21.
5. After puncturing the skin, turn the finger slightly to prevent blood from running into the grooves of the fingerprints.
6. Discard the used lancet immediately into a sharps disposal container with 1% sodium hypochlorite solution.



7.9 Collecting blood drops(Refer figures 22 -25 below)

1. When the 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 the 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 on the sides of the finger from which you are taking the blood sample 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 centre 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 immediately. If the first drop starts to dry due to any interruption in getting the subsequent drop, do not place the drop over it and fill another circle. Application of successive drops of blood to dried or partially dried blood spot causes 'caking'/'layering' and makes the specimen invalid for testing.

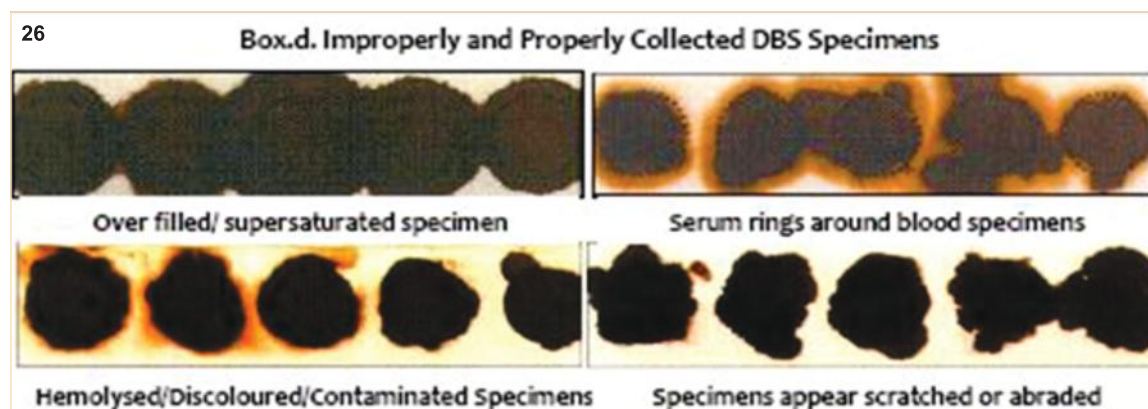


7. Try to have the first drop fall exactly in the centre of the printed circle. However, if by accident the drop falls outside of the circle and is not large enough, then let the next drop of blood fall again exactly in the centre of the original drop and not in the printed circle.
8. Attempt to fill 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 figure 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. All five circles should be filled and have uniform blood volume. The blood spots should not get smudged with each other.
12. Collect blood drops only on the printed side of the filter paper card.
13. Do not touch the blood spots and do not allow any object to come in contact with them, to avoid contamination.
14. Place the filter paper card with blood spots on the table. Be careful not to drop the card down.

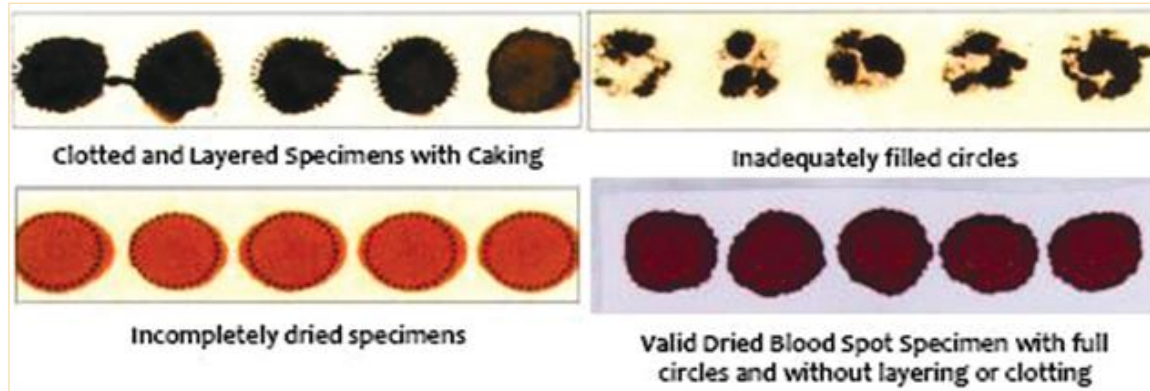


7.10 Stopping bleeding at puncture site

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 bandaid 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 bandaid into that with black bag.

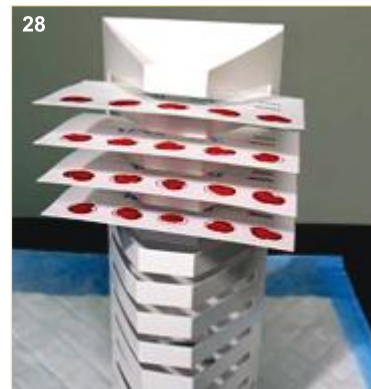


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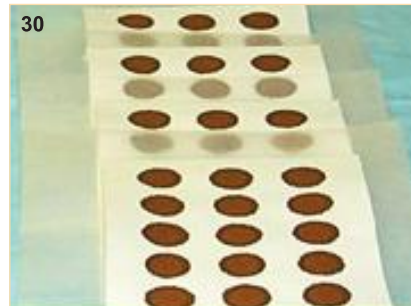
7.11 Drying the blood spot specimens

1. The blood specimens collected on the filter paper cards should be placed in the drying rack inside the drying box, one at a time shown in Figure -28 aside.
2. Every blood specimen collected, irrespective of whether it has been properly collected or not, or whether it is adequate or not, should be transferred to drying rack. No specimen should be judged as invalid/improper and discarded at sentinel site. Only the testing lab can decide whether a specimen is valid or not.
3. Carefully pick up the filter paper card with the blood spots and place it in a horizontal position. This should be in one of the slots in the drying rack in the box.
4. Avoid touching or smearing the blood spots on other cards in the box when you are 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 the lid and apply side locks so that the box becomes airtight.
7. 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 Figure-29.
8. Never keep any materials on top of the open box as they might contaminate the filter paper cards that are being dried in it.
9. 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.
10. Blood spots should be allowed to dry overnight at room temperature.
11. It is very important to dry blood spot specimens completely before storage or transport, because moisture may harm the specimen by inducing bacterial growth or altering the elution time of the specimen.



7.12 Packaging the dried blood spot specimens refer figures 30-33 below

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 figure 19 for the pictures of improperly and properly collected and dried blood specimens.

4. If one or more cards are not dried properly, they should be placed again in the drying rack and drying box for one more day. Desiccant packs should be replaced 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 the blood spots with butter paper folded over the edge of the filter paper card.

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

7. Place the filter paper card with DBS specimen inside a small ziplock bag. Only one card should be placed inside one ziplock bag.
8. Two desiccant packs should be kept in each small ziplock bag along with the filter paper card covered with butter paper. The desiccant packs should be placed behind the filter paper card, not on the side of the blood spots, to ensure that desiccant packs do not touch the blood spots.



Contents of the small ziplock bag should include:
1) Filter paper card with dried blood spots; 2) Butter paper; and 3) Two desiccants

9. Gently push out the air inside the small ziplock bag, taking adequate care not to touch the blood spots. Ensure that the small ziplock bag is thoroughly sealed without any gap.
10. Continue to pack each of the filter paper cards from the previous day which have dried overnight, putting each one into a small ziplock bag with desiccants.

11. When all the filter paper cards with dried spots are packed, put them into the large zip-lock bag. NOT MORE THAN TEN small ziplock bags containing filter paper cards with dried blood spots and desiccants should be packed into one big ziplock bag.
12. Place five desiccants in the big ziplock bag. The desiccants should be replaced with an equal number of fresh desiccants each time the big ziplock bag is opened for placing more specimens.



Contents of the big ziplock bag should include: 1) Up to 10 small ziplock bags with filter paper cards carrying DBS specimens; and 2) Five desiccants.

13. Place the big ziplock bag in one of the plastic airtight boxes for temporary storage up to a maximum of seven days. Place five fresh desiccants in the plastic box. Replace them each time the box is opened for placing more specimens.
14. DBS specimens may be stored at room temperature and should be transported to DBS testing lab every week. 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 temperature and moisture.

Box 8. Summary of packing of DBS specimens

1. Contents of small ziplock bag:
 - a. Filter paper card with dried blood spots;
 - b. Butter paper; and
 - c. Two desiccants.
2. Contents of the big ziplock bag:
 - a. Up to 10 small ziplock bags with filter paper cards carrying DBS specimen; and
 - b. Five desiccants.
3. Contents of sample transportation box:
 - a. One big ziplock bag containing five desiccants and up to ten small ziplock bags, each containing one DBS specimen; and
 - 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 DBS testing lab every week. All the specimens collected in that week and completely dried as on the day of transport should be sent to the designated testing lab.
3. The specimens that are collected on the day of transport and those that are collected on the previous day, but are not completely dried should be sent the coming week in the next lot.

4. Write the following details on the sample transportation box in the appropriate space provided on the box:
 - a. The range of sample numbers and date of despatch on the top ["HSS – DBS Samples (ID.:to)];
 - b. The name of the testing lab In-charge and complete address of testing lab including pincode;
 - c. Name of the site in-charge, mobile number, name of the sentinel site with type of site in bracket and complete address of the sentinel site; and
 - d. Date of dispatch on the back of the office.

5. Just before placing the DBS specimens in the transportation envelope, the desiccants in the small ziplock bags, containing samples which were collected more than three days earlier, should be replaced with an equal number of fresh desiccants. The ziplock bags should be sealed again, following all the stipulated guidelines Figures 34 -35.



6. Similarly, the desiccants in the big ziplock bag should be replaced with an equal number of fresh desiccants on the day of transporting. This will ensure a moisture-free environment around the DBS specimens during the transport.

7. Fill three copies of Sample Transportation Sheet (STS) as per the instructions provided under Section 6 earlier. One copy should be retained at the sentinel site and two copies should be kept inside the transportation envelope. Staple the envelope to secure it properly. One copy of STS will be sent back to the sentinel site with the seal of the testing lab as proof of receipt of specimens.



8. Only one big ziplock bag with up to ten specimens should be placed in one sample transportation box.

Contents of the transportation envelope should include: 1)One big ziplock bag containing up to ten DBS specimens in small zip-lock bags and five desiccants; and 2) Two copies of completely filled sample transportation sheet.

9. STS should not be packed inside the big ziplock bag containing DBS specimens, but should be kept beside the big ziplock bag in the transportation envelope.
10. 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 hand-delivered.
11. Use a reliable and tested courier/ mailing system/ hand delivery system for transportation of the specimen packages.

7.14 Summary of instructions on using desiccants

Table: Instructions on using desiccants

Place of use of desiccants	Number of desiccants to be used	Norm for replacement
Plastic box where opened packet of unused filter paper cards is stored	Five desiccant packs	Every time the box is opened
Plastic drying box	Five desiccant packs	Every time before placing filter paper cards with fresh blood spots for overnight drying
Small ziplock bag in which the DBS specimens are packed after overnight drying	Two desiccant packs	Not to be replaced once sealed
Big ziplock bag in which small ziplock bags with DBS specimens are packed	Five desiccant packs	Each time big ziplock bag is opened for placing new small ziplock bags with DBS specimens; and just before sending specimens to testing Lab
Plastic box for temporary storage of DBS specimens	Five desiccant packs	Every time the box is opened for placing new DBS specimens

8. BIOWASTE 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. Other precautions that must be taken are listed below:

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 gauze pieces should be discarded into a YELLOW coloured biohazard waste bag.
3. General waste such as wrapper of alcohol swabs, gloves and gauze, needle cap of lancet, etc. should be discarded into a BLACK coloured biohazard waste bag.
4. The biohazard waste bags should be taken to a nearby health facility/ ICTC which employs standard procedures for bio-hazardous waste disposal.

Above practices may be modified as per the biowaste management practices, as prevalent in respective States.

Annex-1

Consent/Assent form for respondent

Consent/Assent form for taking informed consent/assent from an eligible respondent aged 15 – 49 years for participating in HSS.

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 the form. If you have any questions/ queries, you can ask us before giving the consent/ assent.

National AIDS Control Organisation (NACO), the nodal national agency for control of HIV in India, conducts biennial 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 programmes to prevent HIV/AIDS in your community and region and in India as a whole. A total of 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 a finger prick on a filter paper and sent to a 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 here. The results will be confidential. Since, our survey recruitment and testing method is not for HIV diagnosing purposes, 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 immediately, we will give you a referral slip to get a free HIV counselling and testing at the nearby ICTC. For those respondents, whose HIV result is reactive under surveillance, our programme doctors and counsellor may reach out to them to offer free HIV counselling and testing services in a completely confidential manner.

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 programmes 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 from this survey will not be disclosed to me. I also know that this data will be used for the National AIDS Control Programme with full confidentiality.

Signature/ thumb impression: _____ Date: _____

(This is the left thumb impression of _____. Counsellor's signature: _____)

Name of witness: _____ Signature: _____ Date: _____

Counsellor'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.)

Annex-2

Consent form for guardian

Consent form for taking informed consent from parent/guardian/caregiver of an eligible respondent aged 15-17 years for participating in HSS.

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 the form. If you have any questions/ queries, you can ask us before giving the consent.

National AIDS Control Organisation (NACO), the nodal national agency for control of HIV in India, conducts biennial 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 programmes to prevent HIV/AIDS in your community and region and in India as a whole. A total of 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 a 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 the blood specimen.

Name or address of your ward will not be attached to the blood specimen. The testing will not be done here. The results will be confidential. Since, our survey recruitment and testing method is not for HIV diagnosing purposes, 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 immediately, we will give him/her a referral slip to get free counselling and testing for HIV at the nearby ICTC. For those respondents, whose HIV result is reactive under surveillance, our programme doctors and counsellor may reach out to them to offer free HIV counselling and testing services in a completely confidential manner.

We may ask your ward some questions that some people find difficult to answer. This information given by your ward will be kept confidential. S/he does not have to answer any question that s/he 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 programmes 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 Programme with full confidentiality.

Signature/ thumb impression: _____ Date: _____

(This is the left thumb impression of _____.)

Counsellor's signature: _____) Name of witness: _____

Signature: _____ Date: _____ Counsellor _____

Name: _____ Signature: _____ Date: _____

Annex- 3

HSS 2017: Data form for female sex worker (FSW)

[Please fill site details in the box below OR paste the sticker with site details/stamp site details in the empty box]

State: District:..... Site /Subsite name: <table style="width: 100%; text-align: center;"> <tr> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> </tr> <tr> <td colspan="5">(Site code)</td> <td colspan="2">(Subsite No)</td> <td colspan="3">(Sample No)</td> <td colspan="5">(Date-dd/mm/yy)</td> </tr> </table>																					(Site code)					(Subsite No)		(Sample No)			(Date-dd/mm/yy)					
(Site code)					(Subsite No)		(Sample No)			(Date-dd/mm/yy)																										

1. Age in completed years	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>
----------------------------------	---

2. Literacy status		
1. Illiterate	2. Literate and till 5 th standard	3. 6 th to 10 th standard
4. 11 th to graduation	5. Post graduation	

3. Reason for coming to the service point				
1. Collect condoms	2. STD treatment	3. Other medical care		
4. Others, Specify.....	5. Randomly selected			

4. Current place of residence	
1. Urban (Municipal Corporation/Council/Cantonment)	2. Rural

5. What is the type of sex work you are involved in(multiple response possible)					
1. Brothel-based	2. Street-based				
3. Home-based	4. Lodge-based				
5. Dhaba-based	6. Others, specify				

6. What is the duration for which you have been involved in sex work?		
1. <6 months	2. 6 months to 1 year	3. 1-3 years
4. 3-5 years	5. >5 years	

7. How long ago did you last have paid sex?	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	Days	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	months
--	---	------	---	--------

8. With how many clients did you have sex in the last week?
--

9. Did you have any other source of income, apart from sex work?		
1. Yes	2. No	3. If yes, specify

10. Did you inject yourself with any drug for pleasure, without prescription, in the last 12 months?	
1. Yes	2. No

11. Have you ever been tested for HIV?	
1. Yes	2. No

12. What was the result of your last HIV test?				
1. Positive	2. Negative	3. Did not collect the test result		
4. No response	5. Not applicable (for never tested)			

13. If positive, are you seeking care from any of the following for management of HIV?

(multiple response possible)

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

14. Are you currently taking antiretroviral medications/HIV tablets?

1. Yes 2. No 99. Not applicable (for all who were not positive when last tested for HIV)

Signature:
Name:
(Person who filled the form)

Signature:
Name:
(Sentinel site in-charge)

Annex- 4

HSS 2017: Data form for men who have sex with men (MSM)

[Please fill site details in the box below OR paste the sticker with site details/stamp site details in the empty box]

State: District:..... Site /Sub-site name: <table style="width: 100%; text-align: center;"> <tr> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> <td style="border: 1px solid black; width: 15px; height: 15px;"></td> </tr> <tr> <td colspan="5">(Site code)</td> <td colspan="2">(Subsite No)</td> <td colspan="3">(sample No)</td> <td colspan="6">(Date-DD/MM/YY)</td> </tr> </table>																					(Site code)					(Subsite No)		(sample No)			(Date-DD/MM/YY)						
(Site code)					(Subsite No)		(sample No)			(Date-DD/MM/YY)																											

1. Age in completed years	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>
----------------------------------	---

2. Literacy status		
1. Illiterate	2. Literate and till 5 th standard	3. 6 th to 10 th standard
4. 11 th to graduation	5. Post graduation	

3. Reason for coming to the service point		
1. Collect condoms	2. STD treatment	3. Other medical care
4. Others, Specify.....	5. Randomly selected	

4. Current place of residence	
1. Urban (Municipal Corporation/Council/Cantonment)	2. Rural

5. Current occupation of the respondent		
1. Agricultural labourer	2. Non-agricultural labourer	3. Domestic servant
4. Skilled/semi-skilled worker	5. Petty business/small shop	6. Large business/Self-employed
7. Service (Government/Private)	8. Student	9. Truck driver/Helper
10. Local transport worker (auto/taxi driver, handcart pullers, rickshaw pullers etc)		
11. Hotel staff	12. Agricultural cultivator/landholder	
13. Unemployed		

6. Type of MSM			
1. Kothi	2. Panthi	3. Double Decker	4. No response

7. Did you have sexual intercourse with any female partner in the last six months?	
1. Yes	2. No

8. How long ago, did you last have sex with a man?	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	Days	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	months
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9. In the last one month, did you receive or pay money (or get paid in kind) for having sex with a man?			
1. Yes, received money	2. Yes, paid money	3. Both	4. No

10. Did you inject yourself with any drug without prescription, for pleasure, in the last 12 months?	
1. Yes	2. No

11. Have you ever been tested for HIV?	
1. Yes	2. No

12. What was the result of your last HIV test?		
1. Positive	2. Negative	3. Did not collect the test result
4. No response	99. Not applicable (for never tested)	

13. If positive, are you seeking care from any of the following for management of HIV?

(Multiple response possible)

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

14. Are you currently taking antiretroviral medication/HIV tablets?

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

Signature:
Name:
(Person who filled the form)

Signature:
Name:
(Sentinel site in-charge)

Annex- 5

HSS 2017: Data form for injecting drug user (IDU)

[Please fill site details in the box below OR paste the sticker with site details/stamp site details in the empty box]

State: District:..... Site /Sub-site name: <table style="width: 100%; border: none;"> <tr> <td style="border: 1px solid black; width: 15%; text-align: center;">□□□□□□□□</td> <td style="border: none; width: 10%; text-align: center;">□</td> <td style="border: 1px solid black; width: 10%; text-align: center;">□□□□</td> <td style="border: 1px solid black; width: 15%; text-align: center;">□□□□□□□□</td> <td style="border: none;"></td> </tr> <tr> <td style="text-align: center;">(Site code)</td> <td style="text-align: center;">(Subsite No)</td> <td style="text-align: center;">(sample No)</td> <td style="text-align: center;">(Date-DD/MM/YY)</td> <td></td> </tr> </table>	□□□□□□□□	□	□□□□	□□□□□□□□		(Site code)	(Subsite No)	(sample No)	(Date-DD/MM/YY)		
□□□□□□□□	□	□□□□	□□□□□□□□								
(Site code)	(Subsite No)	(sample No)	(Date-DD/MM/YY)								

1. Age in completed years	□□
----------------------------------	----

2. Sex of the participant		
1. Male	2. Female	3. Hijra/Transgender

3. Marital status	
1. Never married	2. Married
3. Divorced/separated/widowed	

4. Literacy status		
1. Illiterate	2. Literate and till 5 th standard	3. 6 th to 10 th standard
4. 11 th to Graduation	5. Post graduation	

5. Reason for coming to the service point		
1. Collect condoms	2. STD treatment	3. Other medical care
4. Collect needles & syringes	5. Opioid substitution therapy (OST)	
6. Others,specify.....		7. Randomly selected

6. Current place of residence	
1. Urban (Municipal Corporation/Council/Cantonment)	2. Rural

7. Current occupation of the respondents		
1. Agricultural labourer	2. Non-agricultural labourer	3. Domestic servant
4. Skilled/semi-skilled worker	5. Petty business/small shop	6. Large business/Self-employed
7. Service (Government/Private)	8. Student	9. Truck driver/Helper
10. Local transport worker (auto/taxi driver, handcart pullers, rickshaw pullers etc)		
11. Hotel staff	12. Agricultural cultivator/landholder	13. Unemployed

8. What is the duration for which you are injecting drugs?		
1. <6 months	2. 6 months to 1 year	3. 1-3 years
4. 3-5 years	5. >5 years	

9. How frequently do you inject drugs?		
1. Once a week or less	2. Twice a week	3. Thrice a week
4. More than thrice a week		

10. Have you ever been tested for HIV?	
1. Yes	2. No

11. What was the result of your last HIV test?		
1. Positive	2. Negative	3. Did not collect the test result
4. No response	99. Not applicable (for never tested)	

**12. If positive, are you seeking care from any of the following for management of HIV?
(multiple response possible)**

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

13. Are you currently taking antiretroviral medication/HIV tablets?

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

Signature:
Name:
(Person who filled the form)

Signature:
Name:
(Sentinel site in-charge)

Annex- 6

Data form for HIJRA/ Transgender (H/TG)

[Please fill t site details in the box below OR paste the sticker with site details/stamp site details in the empty box]

State: District:..... Site /Sub-site name: <table style="width: 100%; border: none;"> <tr> <td style="border: 1px solid black; width: 25%; height: 20px;"></td> <td style="border: none; width: 5%;"></td> <td style="border: 1px solid black; width: 15%; height: 20px;"></td> <td style="border: none; width: 5%;"></td> <td style="border: 1px solid black; width: 25%; height: 20px;"></td> <td style="border: none; width: 25%;"></td> </tr> <tr> <td style="text-align: center; font-size: small;">(Site code)</td> <td></td> <td style="text-align: center; font-size: small;">(Subsite No)</td> <td style="text-align: center; font-size: small;">(sample No)</td> <td style="text-align: center; font-size: small;">(Date-DD/MM/YY)</td> <td></td> </tr> </table>							(Site code)		(Subsite No)	(sample No)	(Date-DD/MM/YY)		
(Site code)		(Subsite No)	(sample No)	(Date-DD/MM/YY)									

1. Age in completed years	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>
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2. Literacy status							
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">1. Illiterate</td> <td style="width: 33%;">2. Literate and till 5th standard</td> <td style="width: 33%;">3. 6th to 10th standard</td> </tr> <tr> <td>4. 11th to graduation</td> <td>5. Post graduation</td> <td></td> </tr> </table>	1. Illiterate	2. Literate and till 5 th standard	3. 6 th to 10 th standard	4. 11 th to graduation	5. Post graduation		
1. Illiterate	2. Literate and till 5 th standard	3. 6 th to 10 th standard					
4. 11 th to graduation	5. Post graduation						

3. Reason for coming to the service point							
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">1. Collect condoms</td> <td style="width: 33%;">2. STD treatment</td> <td style="width: 33%;">3. Other medical care</td> </tr> <tr> <td>4. Others, Specify.....</td> <td>5. Randomly selected</td> <td></td> </tr> </table>	1. Collect condoms	2. STD treatment	3. Other medical care	4. Others, Specify.....	5. Randomly selected		
1. Collect condoms	2. STD treatment	3. Other medical care					
4. Others, Specify.....	5. Randomly selected						

4. Place of original residence			
<table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">1. Urban (Municipal Corporation/Council/Cantonment)</td> <td>2. Rural</td> </tr> </table>	1. Urban (Municipal Corporation/Council/Cantonment)	2. Rural	
1. Urban (Municipal Corporation/Council/Cantonment)	2. Rural		

5. Current occupation of the respondents																
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">1. Agricultural labourer</td> <td style="width: 33%;">2. Non-agricultural labourer</td> <td style="width: 33%;">3. Domestic servant</td> </tr> <tr> <td>4. Skilled/Semi-skilled worker</td> <td>5. Petty business/small shop</td> <td>6. Large business/Self-employed</td> </tr> <tr> <td>7. Service (Government/Private)</td> <td>8. Student</td> <td>9. Truck driver/Helper</td> </tr> <tr> <td colspan="3">10. Local transport worker (auto/taxi driver, handcart pullers, rickshaw puller etc)</td> </tr> <tr> <td>11. Hotel staff</td> <td>12. Agricultural cultivator/landholder</td> <td>13. Unemployed</td> </tr> </table>	1. Agricultural labourer	2. Non-agricultural labourer	3. Domestic servant	4. Skilled/Semi-skilled worker	5. Petty business/small shop	6. Large business/Self-employed	7. Service (Government/Private)	8. Student	9. Truck driver/Helper	10. Local transport worker (auto/taxi driver, handcart pullers, rickshaw puller etc)			11. Hotel staff	12. Agricultural cultivator/landholder	13. Unemployed	
1. Agricultural labourer	2. Non-agricultural labourer	3. Domestic servant														
4. Skilled/Semi-skilled worker	5. Petty business/small shop	6. Large business/Self-employed														
7. Service (Government/Private)	8. Student	9. Truck driver/Helper														
10. Local transport worker (auto/taxi driver, handcart pullers, rickshaw puller etc)																
11. Hotel staff	12. Agricultural cultivator/landholder	13. Unemployed														

6. Have you received money or payment in kind for sex in the last 12 months?				
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">1. Yes</td> <td style="width: 33%;">2. No</td> <td style="width: 33%;">3. No response</td> </tr> </table>	1. Yes	2. No	3. No response	
1. Yes	2. No	3. No response		

7. Did you inject himself with any drug without prescription, for pleasure in the last 12 months?			
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1. Yes</td> <td style="width: 50%;">2. No</td> </tr> </table>	1. Yes	2. No	
1. Yes	2. No		

8. Have you ever been tested for HIV?			
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1. Yes</td> <td style="width: 50%;">2. No</td> </tr> </table>	1. Yes	2. No	
1. Yes	2. No		

9. What was the result of your last HIV test?							
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">1. Positive</td> <td style="width: 33%;">2. Negative</td> <td style="width: 33%;">3. Did not collect the test result</td> </tr> <tr> <td>4. No response</td> <td>99. Not applicable (for never tested)</td> <td></td> </tr> </table>	1. Positive	2. Negative	3. Did not collect the test result	4. No response	99. Not applicable (for never tested)		
1. Positive	2. Negative	3. Did not collect the test result					
4. No response	99. Not applicable (for never tested)						

10. If positive, are you seeking care from any of the following for management of HIV?

(Multiple response possible)

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

11. Are you currently taking antiretroviral medications/HIV tablets?

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

Signature:
Name:
(Person who filled the form)

Signature:
Name:
(Sentinel site in-charge)

12. Did you inject yourself with any drug without prescription, for pleasure in the last 12 months?

1. Yes

2. No

13. Have you ever been tested for HIV?

1. Yes 2. No

14. What was the result of your last HIV test?

1. Positive 2. Negative

3. Did not collect the test result

4. No response

99. Not applicable (for never tested)

15. If positive, are you seeking care from any of the following for management of HIV?

(multiple response possible)

1. Government hospital/ART centres

2. Private facilities (Hospital/ Standalone clinic)

3. NGO doctor

4. Pharmacist/chemist

5. Alternative/non-allopathic doctor (Ayurvedic/homoeopathic/siddha)

6. Any other type of doctor

7. Not seeing care for HIV management

99. Not applicable (for all who were either never tested or not positive when last tested for HIV)

16. Are you currently taking antiretroviral medication/HIV tablets?

1. Yes

2. No

99. Not applicable (for all who were either never tested or not positive when last tested for HIV)

Signature:

Name:

(Person who filled the form)

Signature:

Name:

(Sentinel site in-charge)

12. If positive, are you seeking care from any of the following for management of HIV?

(Multiple response possible)

- | | |
|--|---|
| 1. Government Hospital/ART centres | 2. Private facilities (Hospital/ Standalone clinic) |
| 3. NGO doctor | 4. Pharmacist/chemist |
| 5. Alternative/non-allopathic doctor (Ayurvedic/homoeopathic/siddha) | |
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13. Are you currently taking antiretroviral medication/HIV tablets?

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

Signature:
Name:
(Person who filled the form)

Signature:
Name:
(Sentinel site in-charge)

Annex 9

Data form transportation sheet

(To be sent in duplicate along with the data forms)

1. Name and complete address of the sentinel site/subsite:
..... District: State:
2. (A) Type of site: (B) Site code: (C) Subsite No:
3. Period of sample collection: (dd/mm/yy) to (dd/mm/yy)
4. Total no. of data forms:
5. Total number of envelopes:
6. Details of sample numbers whose data forms are being sent:

S. No.	Date of collection	Sample No.	S. No.	Date of collection	Sample No.
1			16		
2			17		
3			18		
4			19		
5			20		
6			21		
7			22		
8			23		
9			24		
10			25		
11			26		
12			27		
13			28		
14			29		
15			30		

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:

Annex 10

Sample transportation sheet

(To be sent in duplicate along with the samples)

1. Name and complete address of the sentinel site/subsite:
..... District: State:
2. (A) Type of site:(B) Site code: (C) Subsite No:
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.
1			16		
2			17		
3			18		
4			19		
5			20		
6			21		
7			22		
8			23		
9			24		
10			25		
11			26		
12			27		
13			28		
14			29		
15			30		

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

Sample sent by:

.....
(Name)

.....
(Signature)

.....
(Tel/Mobile no.)

Date of sending samples:

Samples received by:

.....
(Name)

.....
(Signature)

Date of receipt of samples:



