HIV SENTINEL SURVEILLANCE - 2014-15

Training of ANC Site Personnel

Facilitator's Manual

National AIDS Control Organisation

India's voice against AIDS

Ministry of Health & Family Welfare, Government of India

6th Floor, Chanderlok Building, 36, Janpath, New Delhi-110001

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National AIDS Control Organisation

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PREFACE 21 November 2014

India is set to implement 14th round of HIV Sentinel Surveillance among ANC clients from 1st January 2015. It is being done with active participation from more than 3500 personnel at various levels. Two national and six regional institutions of repute will provide technical assistance in its implementation through training and supervision. State AIDS Control Societies (SACS) are nodal authority to facilitate HSS implementation in their respective states. Around 130 laboratories, with state of art facilities, are involved in testing of blood specimen collected using the latest technologies. HSS site personnel, comprising of doctors, counselors/nurses & laboratories technicians who implement the HSS at their surveillance sites as per prescribed protocol are building blocks of this system.

Training of all the stakeholders to ensure quality implementation of HSS 2014-15 will be done in a cascade manner. A national resource pool will be sensitized to the protocols through National Pre-Surveillance Meeting. The national resource group, in turn, will train personnel from state to create a pool of resource persons on HSS in every state in regional ToT. Finally, state level resource personnel will do the training of HIV sentinel surveillance site personnel.

This facilitator manual has been developed to standardize the training at all levels and of all stakeholders to ensure that uniform messages are being passes to the audience during training. This will be essential not only for quality management of HSS 2014-15 but would be also essential for ensuring comparability across various sites and years. The various sections under the facilitator guideline give slide by slide description for 2 days training programme. It has been prepared in a way that's it's a self explanatory. At many places, case studies and scenarios has been used to clarify the key methodological concepts to ensure that HSS 2014-15 is implemented as per the prescribed protocol.

This facilitator manual has been an outcome of the effort of many national and state level experts. We would like to acknowledge the technical support of the World Health Organization, CDC DGHA, UNAIDS and FHI 360 in developing this guideline. We appreciate the Project Directors and surveillance teams in the State AIDS Control Societies, staff of the Regional Institutes and state surveillance teams who have continuously provided their feedback towards quality implementation of cascade of training under HSS. Last, but not least, we would also thank the field staffs at all sentinel sites and testing labs, who have contributed to development of this training manual through sharing of their experiences, challenges as well as best practices. Without them, it would not have been possible for standardizing this training manual. NACO/GoI is confident that all stakeholders will use this facilitator guideline extensively to ensure high quality surveillance implementation in country.

21/11/14

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Acronyms:

AIDS	Acquired Immuno Deficiency Syndrome
AIIMS	All India Institute of Medical Sciences
ANC	Antenatal Clinic
ANM	Auxiliary Nurse Midwife
ART	Anti Retroviral treatment
BSS	Behavioral Surveillance Survey
CMO	Chief Medical Officer
CHC	Community Health Center
DFTS	Data Form Transportation Sheet
ELISA	Enzyme Linked Immunosorbent Assay
HIV	Human Immunodeficiency Virus
HSS	HIV Sentinel Surveillance
HRG	High Risk Group
IBBS	Integrated Biological and Behavioral Surveillance
ICTC	Integrated Counselling and Testing Center
MCH	Maternal and Child Health
NACO	National AIDS Control Organization
NARI	National AIDS Research Institute
NICED	National Institute of Cholera and Enteric Diseases
NIE	National Institute of Epidemiology
NIHFW	National Institute of Health and Family Welfare
NIMS	National Institute of Medical Statistics
NGO	Non-Governmental Organization
OPD	Out Patient Department
PEP	Post Exposure Prophylaxis
PGIMER	Post-Graduate Institute of Medical Education and Research
PHC	Primary Health Care
PPTCT	Prevention of Parent to Child Transmission
RI	Regional Institutes
RIMS	Regional Institute of Medical Sciences
RPR	Rapid Plasma Reagin
SACS	State AIDS Control Society
SIMS	Strategic Information Management system
SOP	Standard Operating Procedures
SST	State Surveillance Team
STD	Sexually Transmitted Diseases
STS	Sample Transportation Sheet
UAT	Unlinked Anonymous Testing

Content

Introduction

NACO has been conducting HIV Surveillance among antenatal women since 1998. The surveillance base has been significantly expanded over the years and from just 92 Ante Natal Care (ANC) sentinel sites when surveillance first began, the number of sites has been scaled up to 750, for the most recent round of ANC surveillance in 2012-13. It was conducted annually till 2008-09, however, the surveillance rounds are now conducted every 2 years.

This surveillance effort requires training of stakeholders at all levels and there has been a sustained effort by NACO to institutionalize this training process. As a part of this effort, the 7 Regional Institutes (RIs), that are the management and coordination partners of NACO, conduct a training of trainers (TOT) for State AIDS Control Society (SACS) and State Surveillance Team (SST) members, who in turn act as trainers for sentinel site personnel. This HSS Facilitators' Manual is meant to serve as a ready-to-use guide and reference for trainers and facilitators who will be conducting field training for the site level personnel. This manual is supposed to be used with the "ANC HIV Sentinel Surveillance Trainee's Manual".

Intended Target Audience

The HSS Facilitators' Manual provides direction and supervision to Regional Institute and SST members, on how to plan for, prepare and deliver training to sentinel site personnel, namely the site-in-charges, counsellors and laboratory technicians, collaborators and stakeholders in the National Rural Health Mission (NRHM) , and State AIDS Control Society / District AIDS Prevention and Control Unit (DAPCU) personnel involved in the HSS process.

All trainers / facilitators should be well versed with the concept, content and emphasis areas of the training material for quality improvement. These trainings are conducted before the start of every round of surveillance, in order to familiarise all personnel with the operational guidelines. This ensures that any turn-over / attrition in staff – both at the state and site levels – does not affect the quality of training.

Scope

The purpose of the HSS Facilitators' Manual (hereafter referred to as the Manual) is to:

- Ensure uniform application of training kit material
- Identify and clarify doubts that participants may have, about the HSS procedure for further improvement
- Emphasise the importance of generating good quality data
- Explain the importance of, and ensure the execution of a smooth and successful HIV sentinel surveillance

How to use the Manual

The Manual is designed to provide trainers / facilitators with direction and tips for training sentinel site personnel, using the available training material. This Manual — along with the "ANC HIV Sentinel Surveillance Trainee's Manual" must be used in conjunction and with the Operational Manual for ANC Sentinel Sites 2014–15. Each slide has supporting text which helps the facilitator understand the key issues to be highlighted on the slide, while teaching.

The text is broadly provided under 4 sections:

Describe the Slide:

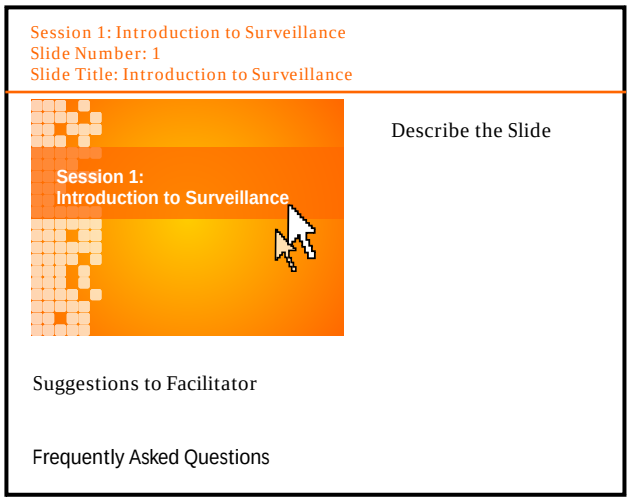
You will find that the text written in this section is in inverted commas. This is because all information has been provided in the first person, as would be spoken by the trainer / facilitator. This does not mean that the trainer / facilitator is required to read the text during the training. Instead, it is recommended that the trainer / facilitator reads and re-reads this text and internalizes the message that is supposed to be delivered to the trainees, through that slide. The way in which the text is provided, you will know exactly how to introduce the slide, talk about its contents, point out the key messages and interact with the trainees as required.

Suggestions to Facilitator:

This section, as the name suggests, has suggestions for the trainer/facilitator, on how to interact with the trainees, in order to bring out the key discussions around the contents of the slide. This section also points out clearly if there is a cross reference required with the Operational Manual or other slides in the Trainee's Manual. Additional points to be discussed that may enhance the trainees' understanding of the concepts being discussed, are also mentioned in this section.

Frequency Asked Questions/ Additional Reading (only where required):

This section provides suggestions to the trainers/facilitators about relevant questions that can be asked of trainees. Asking/answering these questions will encourage greater discussion where trainees can share personal experiences, suggestions, real life situations, which will hopefully lead to more clarity in grasping concepts that are being explained in the slides. Also, where necessary, additional reading references have been provided, in case the trainer/facilitator wants to delve further into a particular area for his/her own knowledge enhancement. Below is an example of the way in which training slides have been included in the Manual and explained.



Facilitators' Training Kit

- The ANC HIV Sentinel Surveillance Trainiee's manual 2014-15
- HIV Sentinel Surveillance Facilitators' Manual 2014–15
- Operational Manual for ANC Sentinel Sites 2014–15
- ANC Data Form for HSS 2014-15
- Data Form Transportation Sheet
- Sample Transportation Sheet
- ANC Wall chart for HSS 2014-15
- Pre- and Post-Test Questionnaires
- Contact details of officials/personnel involved in surveillance
- Participants' sentinel site name, site code, sub-site number and sample size allocated for HSS

Structure of the Manual

The Manual is divided into the following sections:

- Introduction: pp 1-4
- Facilitation Tips for Session 1: Introduction to Surveillance pp 5-26
- Facilitation Tips for Session 2: Know your Sentinel Site (Practical Exercise) pp 27-34
- Facilitation Tips for Session 3: Methodology of Sentinel Surveillance at ANC Sites pp 35-76
- Facilitation Tips for Session4: Data Forms for Sentinel Surveillance at ANC Sites pp 77-134
- Facilitation Tips for Session 5: Laboratory Procedures pp 135-178
- Facilitation Tips for Session 6: Introduction to Monitoring & Supervision; Coordination pp 179-198

Pre-Training Preparations:

- Find and set up a suitable training room
- Prepare, print and distribute training kits in adequate numbers
- Ensure laptop and projector are installed and working an hour before training begins
- Ensure flipcharts and markers are available
- Ensure registration/attendance sheet is available
- Display the ANC wall chart in the training room
- Ensure that the seating in the training room is not theatre style. Rather the seating arrangement should be such that it encourages discussion and dialogue
- Ensure that resource persons allotted to different sessions are available and informed well in advance for sessions to be taken
- Ensure that laboratory material for demonstration (vacuutainer, centrifuge tube, serum vials, etc.) is available
- Inform participants about course content, date, time and location details well in advance, along with pre requisite information related to the surveillance process.

Please Remember: This course is not about how much content you as the trainer/facilitator can put into it, but about how much the participants can take away in new learning and understanding of skills.

Know Your Audience

One of the most important aspects of training is to understand your trainees. Knowing your target audience will help you contextualise your presentation to what participants can relate to. Giving actual examples from the field will immediately appeal to them, and help retain concepts being explained.

The session must begin with introductions, starting with you, as facilitators, and your co-trainers. Next, give all trainees an opportunity to introduce themselves, including their designations and the organisations they represent. Following the introductory round, you could warm up the class by asking participants how long they have been working at their sentinel sites, their experiences and levels of involvement in HSS during previous rounds, etc. Acknowledge that there are not necessarily any 'correct' answers to queries/problems; and that solutions vary according to time and place. Encourage these discussions so that you may as certain the level of understanding participants already have. As a facilitator, you should immediately be able to gauge the varying levels of experience in the room.

Discuss Ground Rules:

After the preliminary introductions, it is recommended that you begin by reading out the 'Ground Rules' for HSS:

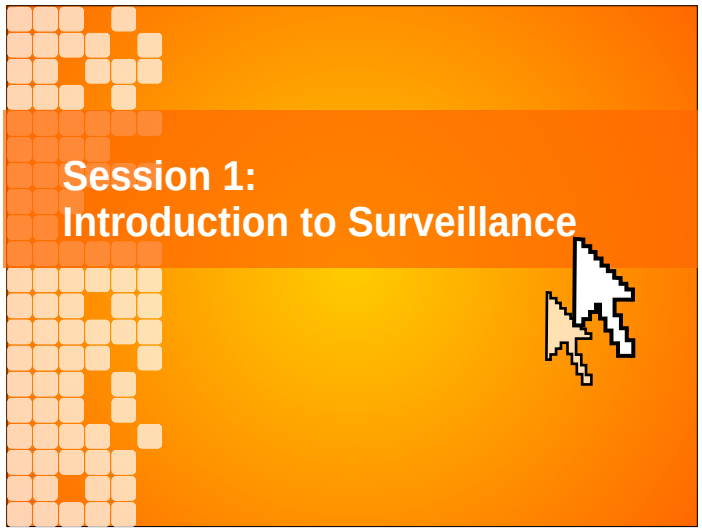
- Arrive on time for the beginning of each session, and after each break
- Keep mobile phones on silent mode
- Treat each other as equals
- Share experiences and expertise. Many participants may have previous experience of surveillance
- All questions are good questions. Feel free to ask at any time
- Please await your turn and allow others to complete their questions/comments
- Everyone should participate in and contribute to discussions
- Give feedback to trainers wherever you it feel necessary
- If a point — not directly related to the training objective — needs extensive discussion, bring it up during breaks

Tips for Effective Training and Motivation of HSS Staff

- Communicate in the language which your audience understands
- Make eye contact with your audience. If expressions on some people's faces indicate that they are not following, and/or that they look disinterested, pause and re-engage them
- Maintain friendly and approachable facial expressions during trainings so that participants feel comfortable asking questions
- Use a 'trainer's voice', i.e., project your voice so that even participants at the back of the room can hear you. Vary your pitch to avoid monotony; and, if necessary, use a microphone
- Use open-ended questions to encourage discussions e.g. “How can you…?”, “What are your views on…?”, “Why don't you…?”. Don't ask questions that generate monosyllabic responses like “Yes” or “No”
- Ensure participants are not criticised or demoralised when offering comments and questions
- Encourage teams to work together and communicate well
- Assure all team members that each have strengths and weaknesses that complement each other's skills, which is why they have been selected as a team
- Have a meeting for 5–10 minutes at the end of each day, along with all your resource personnel, to review the day's session; and decide if any changes are required for the following day

Facilitation Tips for Session 1

Introduction to Surveillance



Describe the Slide

"I welcome all of you to this training session on the HIV Sentinel Surveillance system in India. Before we begin to concentrate on 'HIV Sentinel Surveillance' or HSS as we call it, let us first try and understand the basic concept of 'surveillance' in the sphere of public health.

"You should be aware that various methods and types of surveillance are prevalent across different public health programmes for core communicable and non-communicable diseases in our country. For example, active surveillance is used for monitoring diseases such as malaria and polio; passive surveillance is used for diseases like tuberculosis; while sentinel surveillance is used for infections like HIV, drug resistance etc. Public health surveillance is a tool to estimate the health status and behaviour of a nation's population. Since this tool can directly measure a population's health, it is useful for measuring the need for as well the effects of interventions. The basic purpose of surveillance is to empower decision makers with timely and useful data/evidence, so that they can manage and direct public health programmes more effectively.

"Before we move further on this training for the HSS 2015, it will be good if we can understand level of your familiarity with surveillance systems. We will like to hear from each of you about your involvement in any type of disease surveillance? Also, we will like to know your association with HIV sentinel surveillance?

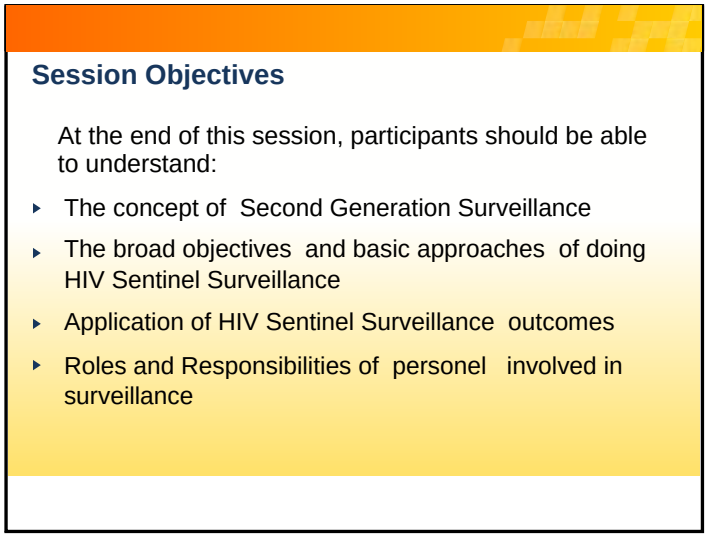
Suggestions to Facilitator

- After describing the slide, interact with participants before proceeding further. Begin with questions on general surveillance such as: "Madam/Sir, tell me, were you ever involved in any surveillance exercise before?"
- Through this interactive exercise, ascertain whether participants are familiar with the principle of surveillance, along with the operational aspects of HSS. This will help you to customise your training approach, as you will know how many participants are novices and how many have previous knowledge of the system.
- Remember to inform participants that although different surveillance approaches are used in the country across various sectors, the basic principle remains the same.

Frequently Asked Questions

- What is the difference between Survey and Surveillance?

Suggestion: The main difference is in periodicity. In contrast to one-time/cross sectional surveys, surveillance is a process that continues over time. As surveys are usually limited in time, they have been often compared with photography while surveillance has been described as a film as they are supposed to be uninterrupted. Sometimes, repeated surveys are used to detect trends in the data and then these surveys become useful for surveillance purpose. Importantly, a surveillance system is not complete without feedback components and a direct link to public health action.



Describe the Slide

"Let us begin our present session on 'Introduction to Surveillance'. This sessions aims to help you understand the key concepts of surveillance — especially HIV sentinel surveillance.

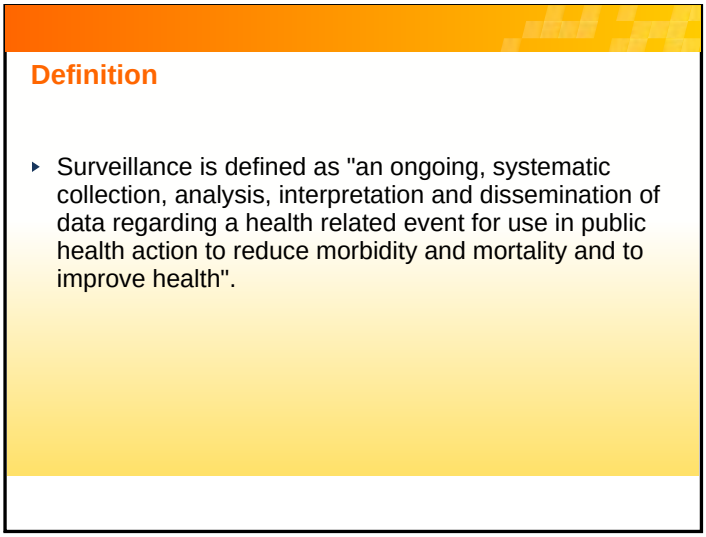
"During our discussions and interactions in the session, you should be able to grasp the concept of Second Generation Surveillance; understand the basic approaches and objectives of HSS — including the key applications of HSS, and the roles and responsibilities of the HSS team at the sentinel sites.

"I would like you to specifically understand the importance of quality data generated at each of your sentinel sites — because the resultant analyses of such data will eventually be used at global, national, regional and state levels. This can only be possible with your hard work, commitment and support to the HSS process.

"Please feel free to ask me questions at any stage. In fact I would greatly encourage you to clear your doubts, if any, on the subject of HIV sentinel surveillance."

Suggestions to Facilitator

- While starting the slide description, you may build upon the variation in the familiarity with HSS as observed during interaction in previous slide.
- Please try to link this slide with the experience on HIV surveillance



Describe the Slide

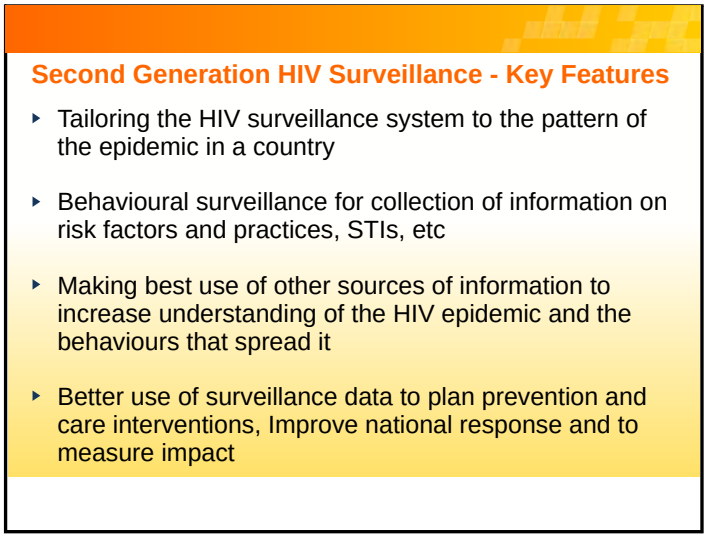
"So what is Surveillance? Here in this slide we come to the definition of surveillance in the public health system. Every word in this description is significant — 'ongoing' would refer to the periodic nature of the surveillance process, while 'systematic collection' would indicate a uniform process-driven procedure to ensure data quality at all levels. Also, a proper 'analysis' and 'interpretation' of the data generated by surveillance is vital for taking informed decisions and corrective actions on any public health programme.

"Note that '...dissemination of data...for use in public health action' refers to the fact that surveillance generates data that needs to be used for taking actions. If timely action is NOT taken on the analysis and interpretation of surveillance data, then the whole purpose of surveillance gets defeated. Please do remember, Surveillance is information for action. The whole point of carrying out a public health surveillance programme is to be able to 'reduce morbidity and mortality and to improve health' among the target population through Evidence Based Decision making.

"In next slides, we shall discuss further details of data use and its application in reducing mortality, morbidity and health improvement, specific to HIV."

Suggestions to Facilitator

- You may invite a participant to read out the definition slowly, while you explain the significance of each term.
- You may also ask the class about their own interpretations of the meaning of this definition, before you explain it to them.
- You may initiate an interactive session by asking participants, "Why do you think we need a standard methodology for sentinel surveillance?" Through a guided discussion on the answer to this question, tell participants that following a standard and consistent methodology across all sentinel sites and all surveillance rounds is essential for interpreting and projecting year-on-year disease burden trends. If a non-standardised method is used, it will be sub optimal and difficult to interpret the yearly/annual trends that emerge from the surveillance exercise.



Describe the Slide

"HIV Sentinel Surveillance is one of the components of Second Generation Surveillance (SGS) in India. So what is second generation surveillance? The beginning of HIV surveillance focussed only on tracking biological prevalence either through case reporting of newly diagnosed cases of HIV/AIDS or through prevalence surveys. Though this system was effective for doing advocacy and resource planning in initial days, there was growing need for data on specific behaviours that put population group at risks. In second generation surveillance, biological surveillance was combined with behavioural surveillance to generate information for policy development, program planning and evaluation at local regional and national levels. Fundamental principle of SGS talks of tailor-made surveillance system based on level of HIV epidemic. Besides HIV Sentinel Surveillance, other components of the SGS system include the National Behavioural Surveillance Survey (BSS) and Integrated Biological & Behavioural Surveillance (IBBS), AIDS case and death reporting, STD surveillance etc. This particular surveillance system moves beyond a standardized approach for all epidemic types, and instead uses the core knowledge of an epidemic to tailor the HIV surveillance system."

Suggestions to Facilitator

- You may invite senior officials attending this session to talk about second generation surveillance in India.
- You may offer participants reading material (provided at the end of this session, after Slide No. 16)
- Explain the (global) term 'second generation surveillance' — which is a comprehensive approach to look further into the social, behavioural and cultural context of HIV transmission, in contrast to earlier traditional (so called 'first generation') analysis or sero-surveys.
- Take questions, if any, at this stage.

Frequently Asked Questions

- What is First Generation HIV surveillance?
  Suggestion: First generation HIV surveillance was based only on biological indicator either through monitoring of case reports of newly diagnosed cases of HIV and AIDS or through HIV surveillance. It provided some data on HIV exposure categories (main groups that are most vulnerable to HIV infection) but was not able to provide data on the specific behaviours that put these groups at risk.

- What is Third Generation HIV surveillance?
  Suggestion: Third generation surveillance upgrades second generation surveillance by monitoring coverage and quality of care for People Living With HIV/AIDS (PLWHA) and STI patients. "

What is HIV "Sentinel" Surveillance

- **HIV Sentnel Surveillance** is defined as "a system of monitoring HIV epidemic among specified population groups by collecting information on HIV from designated sites (sentinel sites) over years, through a uniform and consistent methodology that allows comparison of findings across place and time, to guide programme response."
- **Sentinel Site** is defined as "a designated service point/facility where blood specimens & relevant information are collected from a fixed number of eligible individuals from a specified population group over a fixed period of time, periodically, for the purpose of monitoring the HIV epidemic"

Describe the Slide

"Now that we have a better understanding of 'surveillance' and 'second generation surveillance' systems, let us move on to the concepts of 'HIV Sentinel Surveillance' or HSS, and 'Sentinel Sites'.

In a sentinel surveillance system, a prearranged sample of reporting sources agrees to report all cases of defined conditions, which might indicate trends in the entire target population (Birkhead and Maylahn, 2000).Such a surveillance system is best suited for monitoring large public health problems like HIV. Since its inception in 1998, HSS has evolved into a robust system for monitoring the HIV epidemic in India. The sentinel sites too have expanded from 176 in 1998 to 1359 in 2010–11. During the 13th round of HSS in 2012–13, surveillance was conducted at 763 ANC & STD sentinel sites across 35 states and union territories of India.

"Coming down to the question of 'what is HSS?',I should inform you that it is a system of monitoring prevalent trends in the HIV epidemic over time. This is NOT a one-time study, but an ongoing monitoring of disease burden trends among 'specified population groups' at 'designated sites'. Please remember that the HSS methodology — that of Consecutive Sampling with Unlinked Anonymous Testing (UAT) —is 'uniform and consistent' across all different sites and differing time periods. This practice ensures that the distribution and spread of HIV prevalence among different population sub-groups across the country may be compared/analysed and interpreted accurately. This surveillance data is then used to 'guide programme responses' or interventions and for overall strategic planning."

In India, HIV surveillance is conducted at 'sentinel sites' identified by the national HSS programme. These are fixed locations — usually within government or private hospitals — where a fixed number (400 for ANC sites) of eligible candidates from a specific population group are recruited each year— for a period of three months — to monitor the HIV epidemic. This ensures uniformity in annual trend analysis and data comparison among the target catchment of each sentinel site. The different population groups monitored under HSS include Pregnant women attending antenatal clinics (ANC), Patients attending STD Clinics, Female Sex Workers (FSWs), Men who have Sex with Men (MSM), Injecting Drug Users (IDUs), Transgender (TGs), High-risk migrants/ Single male migrants (SMM) and Long Distance Truckers (LDTs).

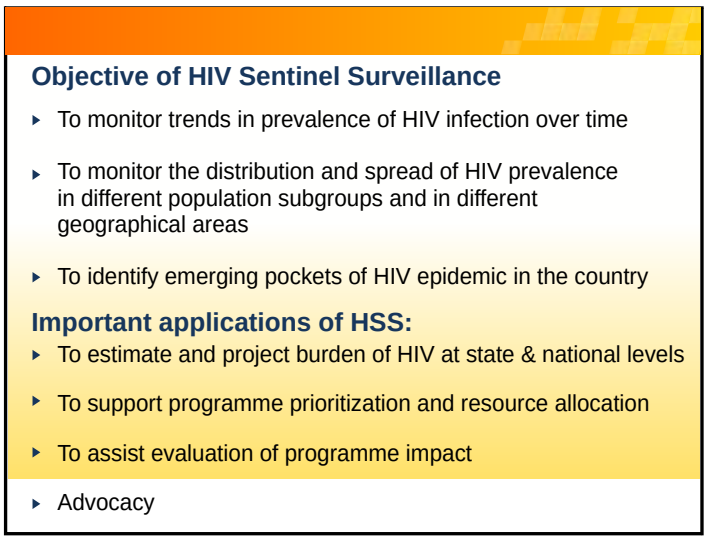
Suggestions to Facilitator

- You may invite participants to read out the two definitions on the slide slowly, while you explain the significance of each term: “Can anyone of you volunteer to read out the definition of HSS shown on this slide for us please?” OR “May we please have another volunteer for reading out the definition of a 'Sentinel Site'?”
- Mention that in the case of Antenatal Clinic (ANC) surveillance, the sentinel site is the clinic; and the sentinel population is that of pregnant women attending the clinic.

Frequently Asked Questions

- How are sentinel sites identified by the programme?

  Suggestion: The identification of sentinel suites takes into consideration the feasibility of implementing uninterrupted surveillance at a particular site in a particular risk group. Besides feasibility, the sites are also considered for their potential to do value addition in decoding HIV epidemic and/or bringing hot-spots in focus at district/state/national level which entails obtaining information from different geographical locations (e.g., high outmigration districts, transport corridors), including those with a high risk of HIV infection (FSWs, MSMs, IDUs, TGs etc); rural-urban spread, representation of different socioeconomic status. Etc. For example, women from poor socioeconomic backgrounds are often over represented in HSS at ANC sites, and so some clinics in the private sector have been considered. Addition of new sentinel sites also takes into account existence of other sites in same population group in the district.



Describe the Slide

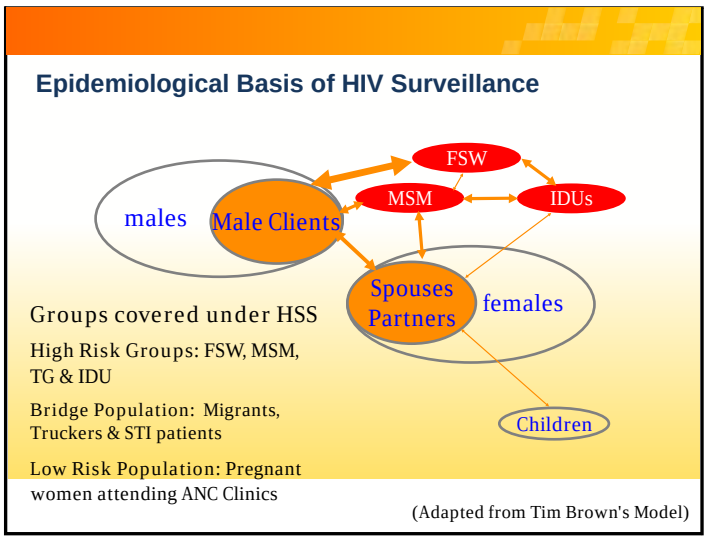
"I hope that by now you have a better understanding of the HIV Sentinel Surveillance system, with special emphasis on the importance of 'sentinel sites'? Let us now turn to the objectives of HSS and the applications of HSS data in India."

"As discussed, surveillance helps in monitoring 'trends', 'distribution and spread' of the HIV epidemic. It also helps to identify emerging pockets of HIV infection. All this monitoring and tracking is for the purpose of estimating and projecting the burden of the disease on the country's population, so that national and state-level public health programmes and resources may be strategically planned to address this burden. The key objective of HSS is to provide decision makers with information to guide interventions.

"This is where the importance of HSS data comes in. HIV prevalence data of all typologies are used in estimating and projecting burden of HIV infection in India. It is also used for making robust epidemiological estimates for state and district-level issues. However, it is not enough to simply collect data and present them. As discussed earlier, surveillance is information for action and this has been the beauty of HSS surveillance system in India. For example, HSS data has been used for doing district categorization (categories A, B, C and D) which was the basis of doing effective evidenced based planning in our resource constraint settings. The data is also important for advocating HIV-related public health programmes in the country. It is a readily available factual database for taking appropriate public health action to stop the spread of the epidemic."

Suggestions to Facilitator

- For each point, give a couple of relevant local/regional examples
- To ascertain if participants have understood the concepts presented in slides 5 and 6, ask questions about the importance of sentinel sites for HSS; and/or ask individual participants to identify some of the objectives and/or applications of HSS data.
- Additional reading references would include the National Technical Brief, the National Annual Report, state-specific surveillance fact sheets, and regional surveillance reports, if any. (available on www.naco.gov.in)
- Take questions regarding these important concepts, if any, at this stage.



Describe the Slide

"The type of HIV epidemic that a country usually experiences is either 'generalised' or 'concentrated'. In generalized epidemics, HIV is firmly established in the general population. Although sub-populations at high risk may contribute disproportionately to the spread of HIV, sexual networking in the general population is sufficient to sustain an epidemic independent of sub-populations at higher risk of infection."

In concentrated epidemics — such as that experienced in India — HIV prevalence is high enough in one or more sub-populations, from HRGs — such as FSW, MSM and IDUs to maintain the epidemic in that sub-population but the virus is not circulating in the general population. Therefore HIV surveillance in India focuses on measuring HIV prevalence and risk behaviour among those mostly infected with HIV. And as a proxy measure of HIV infection among the general, sexually active population, pregnant women in ANC are monitored. HSS at ANC sites also helps in identifying potential candidates for the PPTCT programme.

"The population groups monitored under HSS in India include patients attending STD Clinics, pregnant women attending antenatal clinics ANC, FSWs, MSM, IDUs, TGs, SMM, LDTs and their helpers. Among these population groups, IDUs, MSM and FSW form the HRGs; while migrants and truckers have been identified under the NACP as the bridge population.

"If you look at this accompanying slide, you will see a graphic representation of the epidemiological transmission patterns of HIV epidemic. The red ovals represent the HRGs who are at the core of HIV transmission; while the orange ovals represent the high-risk bridge population who transmit the epidemic among the general population. The thick orange arrow between FSW and their male clients represent the maximum transmission risk of the epidemic. These male clients of FSW then pass on the disease to their spouses/partners, and thereby cause the epidemic to spread to children from their HIV-infected mothers. Please notice that spouses of MSM and IDUs also become conduits of HIV transmission. At this stage, parent-to-child transmission also occurs from the infected pregnant spouses of these HRGs as well as the bridge population.

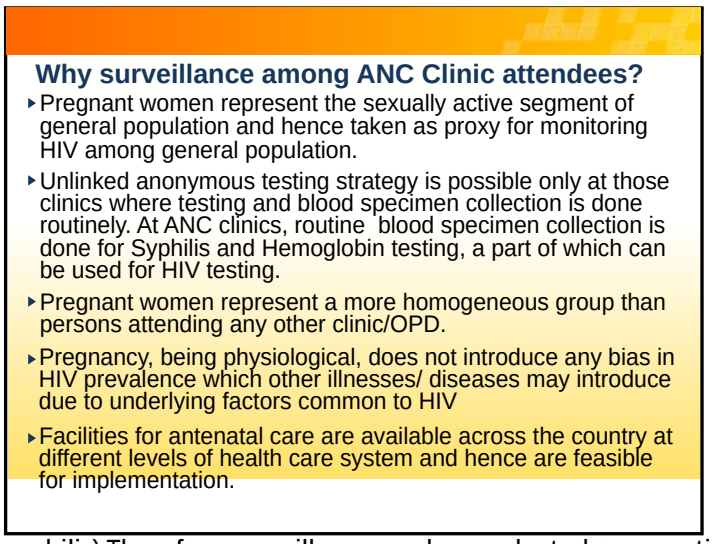
"There can be additional sub-transmission amongst the HRGs themselves too, represented by the thinner orange arrows. For example, the infection may spread from FSWs to IDUs who may be their clients; or from female IDUs, who may also work as sex workers, to their clients, etc."

Suggestions to Facilitator

- You may begin by asking the class about the number of sentinel sites in their state, including district-level distribution. You may then ask them why this number is not equal among all districts. This discussion will form a background for you to introduce this slide on the epidemiological basis of HIV surveillance in India.
- Please explain to participants that sentinel sites are decided on the basis of the stage of the HIV epidemic in the state and its districts; as well as by the drivers of the epidemic in a district.
- Take questions, if any, at this stage.

Additional References

- HIV/AIDS surveillance publications of WHO (http://www.who.int/hiv/pub/surveillance/en/index.html)
- HIV/AIDS Epidemiology publications of UNAIDS (http://www.unaids.org/en/dataanalysis/knowyourepidemic/)



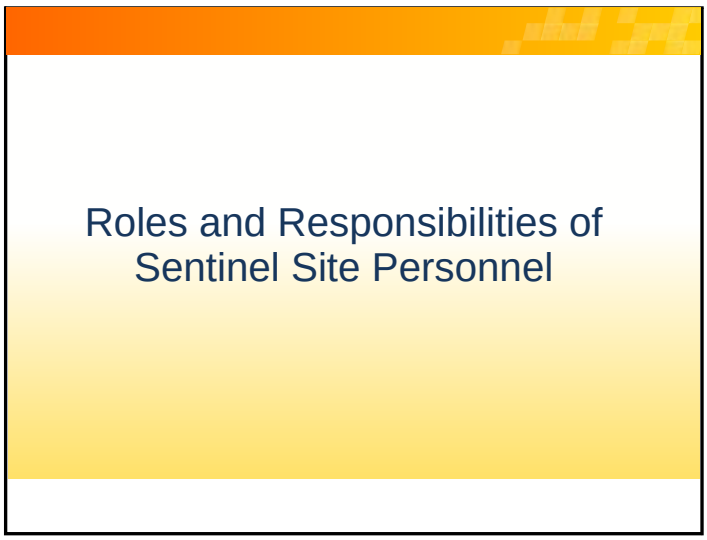
Describe the Slide

"As discussed earlier, HIV surveillance in India is usually concentrated on pregnant women attending antenatal clinics, as a proxy measure of HIV infection among the general, sexually active population. This accompanying slide provides the rationale for surveillance among the ANC population. Not only is this population group representative of the sexually active general population, they can also be feasibly accessed at ANC clinics, where they seek medical services during pregnancy.

"In a resource constrained setting like that of India, pregnant women are likely to visit an ANC at least once during their pregnancy where their blood is collected for routine antenatal diagnostic tests (eg; syphilis).Therefore surveillance can be conducted on a portion of that same routine blood sample, thereby not necessitating an additional blood draw — something that would be ethically questionable. The practice also aids in the Unlinked Anonymous Testing (UAT) strategy, since the blood sample being tested is a just a part of that being used for routine Syphilis and Haemoglobin blood tests at the ANCs. Moreover, ANCs being present across the country at different levels of our healthcare system, it becomes that much easier to implement HSS programmes at these facilities; and examining/inspecting a wider spread of the general population."

Suggestions to Facilitator

- Read the bullets slowly, explaining each point. You may also invite a participant to read the points, while you explain them.
- Explain the UAT strategy at this stage. Refer participants to page 13 of the *Operational Manual for ANC Sentinel Sites 2014-15*
- Take questions, if any, at this stage.



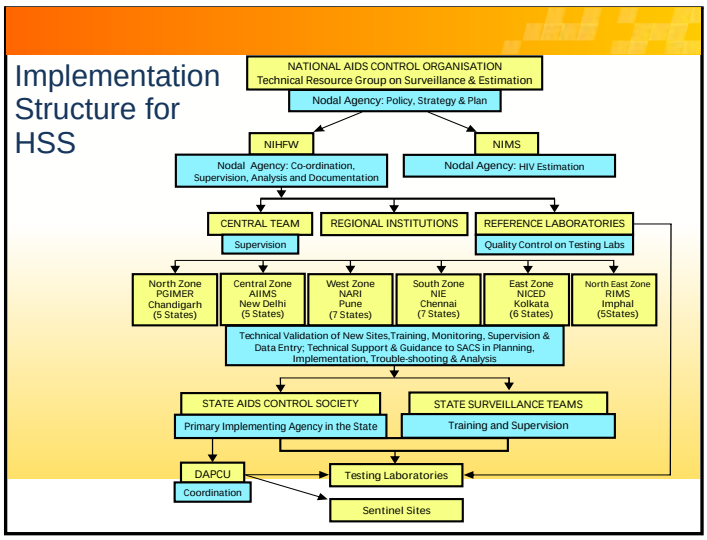
Describe the Slide

"Now that we have understood the basis of HSS, and why we mainly target ANC clinic attendees for our surveillance purposes, we will now try to understand the roles and responsibilities of all sentinel site personnel.

"Over the next couple of slides, we will study the entire structure of the HSS team, as well as the detailed role of each member in the system — such as the SACS personnel, the site-in-charge, the lab technician and the nurse/counsellor."

Suggestions to Facilitator

- By a show of hands, ascertain how many lab technicians, nurse/counsellors, sites-in-charge, etc., are there in the group. You may begin with: "Do we have any SACS personnel in our group today? Please raise your hands. Any sites-in-charge? Nurses or counsellors? Lab technicians? Alright, now that we know who we are in the HSS team, let us also become aware of our specific roles and responsibilities in the HSS process"
- Take questions, if any, at this stage.



Describe the Slide

This is the implementation structure for HSS. This diagram explains the entire surveillance hierarchy from the field up to the national level. As you can see the sentinel site staffs is the base on which the foundation of surveillance system stands. Without you this system would never work.

"The sentinel sites are the primary units for conducting periodic recruitments from target population groups, collecting basic respondent information (Keeping the UAT strategy in mind), and testing blood samples for surveillance purposes. This vital surveillance data forms the pillar of the entire HSS programme.

"Then blood samples are sent to HSS laboratories while respondent data forms are sent to the Regional Institutes (RIs). State Reference Laboratories (SRLs) and/or designated laboratories conduct testing of HSS samples, the reference laboratories carry out quality control on samples sent by the testing laboratories.

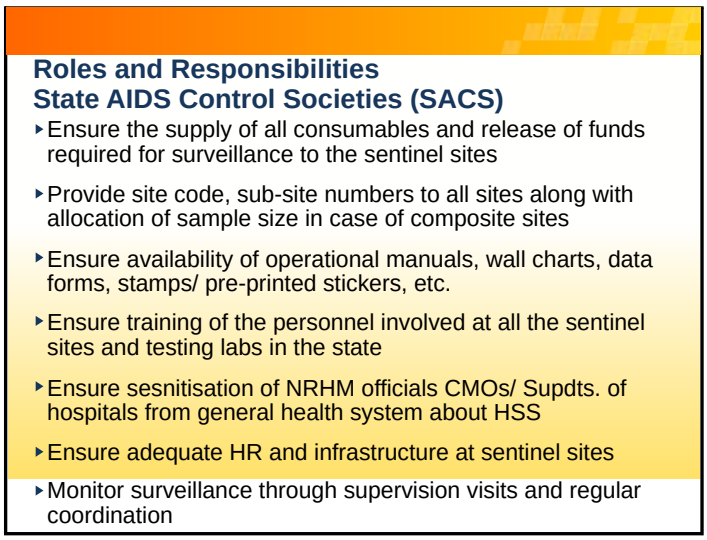
"SACS is the nodal agency to facilitate HSS implementation in the state. Besides, SACS also plays a vital role in coordinating with RIs on technical, supervision and quality assurance at HSS sentinel sites. Many SACS have also effectively used District AIDS Prevention Control Units (DAPCUs) in facilitating HSS implementation in the state.

"The Regional Institutes or RIs play a key role in training site personnel, conducting site supervision during surveillance, and supporting the SACS during planning, monitoring, data entry and analysis. The RIs also engage the State Surveillance Teams (SSTs) that are responsible for training, handholding sites and ensuring that surveillance takes place as per guidelines.

"The National AIDS Control Organisation (NACO) is primarily responsible for overall strategizing, policy planning and utilising of the HSS programme. It functions through two nodal institutes — one which is responsible for overall coordination, supervision and analysis, the National Institute of Health and Family Welfare (NIHFW) — and the other which is responsible for HIV estimations and projections by use of surveillance data, the National Institute of Medical Statistics (NIMS). The entire process of surveillance is managed by NACO at the national level supported by technical partner agencies like WHO, CDC and their partners."

Suggestions to Facilitator

- Before moving to the next slide, you could ask participants to turn to the kit that has been provided to them and check the names and contact details of the key personnel in SACS/DAPCU/RI that have been provided to them. It is essential that there is a regular and healthy communication loop that is maintained at all times, to allow for immediate troubleshooting if required. Ask participants if there is any confusion about identifying their testing labs, SACS and DAPCU on the hierarchy.



Describe the Slide

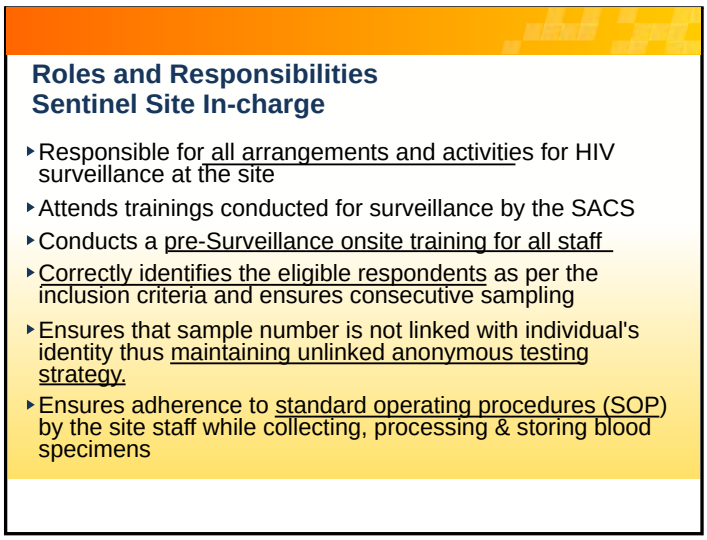
"We begin with the specific roles and responsibilities of the State AIDS Control Societies. As discussed earlier, SACS is responsible for planning, coordinating and rolling out of the HSS implementation in their states. All sentinel sites depend on the SACS for supply of consumables and release of funds for the HSS programme; for providing site codes and sub-site numbers, for communicating the sample size for each composite site, for making arrangements for operational manuals, wall charts, data forms, etc.

"SACS is responsible for the overall monitoring and supervision of the HSS process across all sentinel sites at the state and district levels. The training of HSS staff; sensitizing the officials and heads of the general health system within the state; conducting periodic supervisory visits at sentinel sites; and ensuring adequate resources and infrastructure – all of these form the responsibilities of the SACS. They should, in fact, be involved in the HSS programme for nine months in a year — three months prior to the surveillance period, during the three-month surveillance period, and for three-months after the surveillance-period.

"The SACS should also work on sesnitising NRHM officials, CMOs and hospital superintendents to the HSS process for their support, and the smooth functioning of the surveillance exercise."

Suggestions to Facilitator

- The bullets are self-explanatory. Some responsibilities are obvious, while others might need some coaxing on your part to ensure that SACS personnel have understood and are ready to perform. Some RIs reported during the previous rounds of surveillance, that SACS did not undertake any monitoring or supervisory visits. Emphasise to attending SACS officers, that they too, play a vital role in ensuring the quality of surveillance in their states.
- For list of consumables required at ANC sites, refer participants to page 4 of the *Operational Manual for ANC Sentinel Sites 2015*.
- You may use this slide to ensure that other site-level personnel also understand that these responsibilities are to be performed by SACS officials.
- Take questions, if any, on the roles and responsibilities of SACS.



Describe the Slide

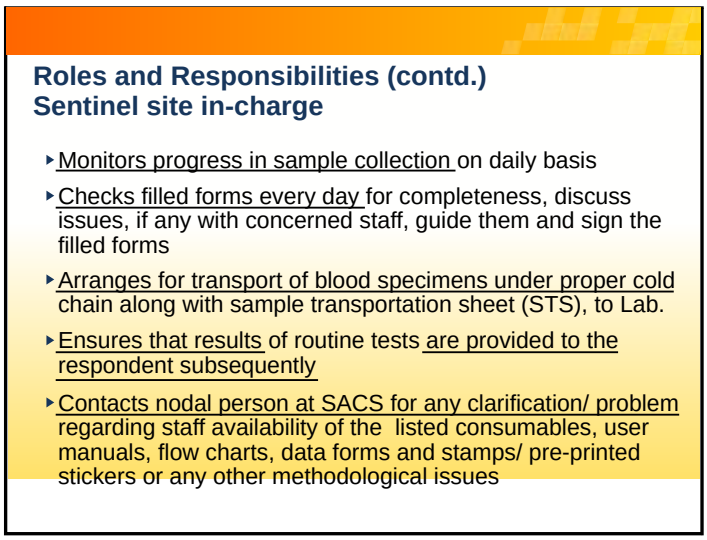
"We now come to the roles and responsibilities of the site-in-charge of all HSS sentinel sites. He/she is responsible for all surveillance activities at their sentinel sites.

"The site-in-charge should see to it that the eligibility criteria for HSS sample respondents are being followed properly, while ensuring consecutive sampling using the UAT strategy. He/she should make person should also conduct training of the sentinel site staff prior to the surveillance exercise. sure that the standard operating procedures (SOP) are being followed by the site staff while collecting, processing and storing blood specimens for surveillance purposes.

"It is important to emphasize that the site-in-charge should enlist the help of other site-level personnel in order to ensure that tasks are performed as per guidelines. In case there are multiple attending medical officers, the site-in-charge should try to enlist the support and commitment of other site personnel during a pre-surveillance training round, without whose help it would be difficult to carry out surveillance."

Suggestions to Facilitator

- Refer participants to page 2 of the *Operational Manual for ANC Sentinel Sites 2014-15*.
- You may use this slide to ensure that other site-level personnel also understand the responsibilities of the site-in-charge, so that they can reach out to him/her for help, as and when required.
- Take questions, if any, at this stage.



Describe the Slide

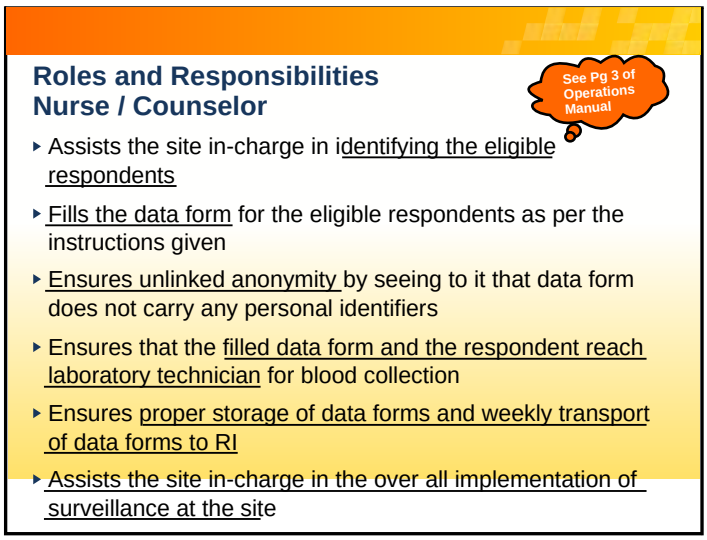
"Apart from the points we have already discussed, there are some more responsibilities of a site-in-charge in ensuring proper progress of the HSS procedure at his/her sentinel site.

"The site-in-charge is responsible for verifying completed HSS data forms every day, before signing them off with a date. If any mistakes are found, they should be discussed with the concerned team member and guidance offered. It is also the site-in-charge who should arrange for a proper cold chain for transporting blood specimens, along with sample transportation sheets to the designated HSS testing Laboratories. At the end of day, it's the site-in-charge who is responsible for the quality of blood samples and the completeness and correctness of the HSS data forms of every eligible ANC attendee. He/she should also make sure that all site surveillance respondents receive their routine test results.

"The site-in-charge acts as a bridge between the SACS and the sentinel site staff. He/she ensures the receipt of all funds, consumables and infrastructure required for surveillance. The person also ensures that guidelines are available for ready reference at the sentinel site, along with other reference material such as flow charts, booklets, manuals, data forms, stickers, stamps, etc., from SACS personnel."

Suggestions to Facilitator

- Take questions, if any, at this stage.



Describe the Slide

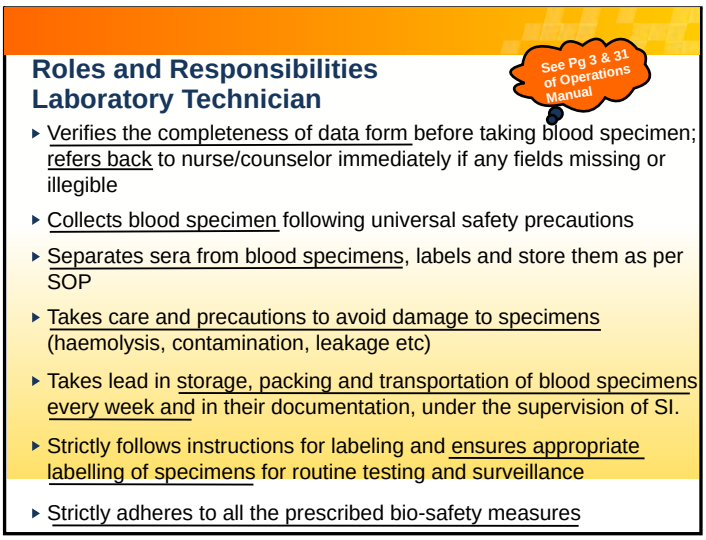
"After discussing the role of the site-in-charge, the next key personnel that we shall focus on are the nurse/counsellor. I would like to emphasise that some very vital steps — such as determining the eligibility of HSS respondents and filling out their data forms — are dependent on the nurse/counsellor.

"The nurse/counsellor assists the site-in-charge in identifying eligible HSS respondents; and ensures that each respondent along with their properly filled out data forms reach the lab technician for sample blood collection. He/she is the primary team member in collecting each respondent's basic information for HSS data forms using consecutive sampling methods, while maintaining UAT strategies.

"He/she also ensures proper storage of data forms and their weekly transportation to the RI along with data form transportation sheets. The nurse/counsellor assists the site-in-charge in the overall implementation of surveillance at the HSS sentinel sites."

Suggestions to Facilitator

- Refer participants to page 3 of the *Operational Manual for ANC Sentinel Sites 2014-15*.
- Take questions, if any, at this stage.



Describe the Slide

"We shall now turn to the roles and responsibilities of lab technicians in the HSS system.

"Once an ANC attendee is found eligible for HSS, and her data form is filled out, the next crucial step is that of blood sample collection. Here the lab technician's responsibility is to check each and every data item to ensure that all information is correctly and completely filled up. He/She needs to ensure that each question is attempted and appropriately encircled or written wherever required. In fact, this is probably the last opportunity available in the HSS process to correct any error on data forms, as the respondent would most likely leave the ANC facility once her blood specimen collection process is over.

"The lab technician is responsible for collecting blood specimens from all respondents, by following universal safety precautions. He/she is responsible for separating sera from blood samples, labelling and storing them as per standard operating procedures. Lab technicians should remember to divide the sera obtained from each eligible respondent into two specimen vials — one for on-site routine testing, and the other for unlinked anonymous HIV testing at RIs.

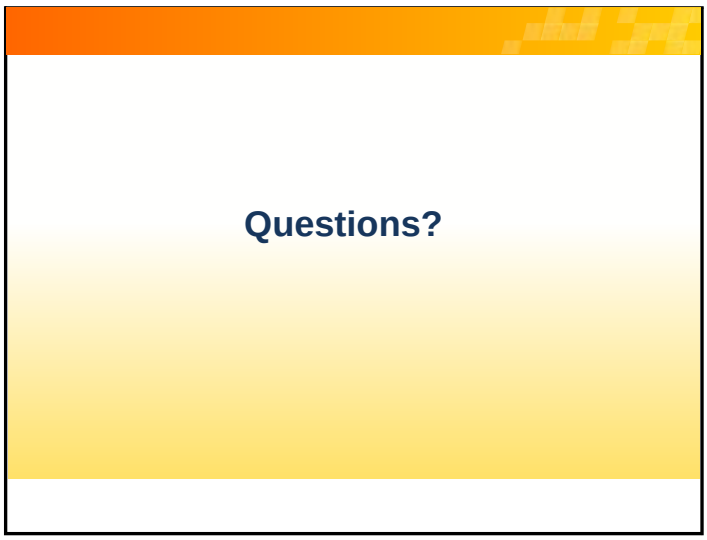
"They are also responsible for storing these HSS specimens — in a special container marked with the sentinel site code and dates of collection for a maximum of 7 days — before they are transported to the RI on a weekly basis. All lab technicians should follow bio-safety measures and precautions very strictly."

Suggestions to Facilitator

- Refer participants to page 3 & 31 of the *Operational Manual for ANC Sentinel Sites 2014-15*.
- Take questions, if any, at this stage.

Frequently Asked Questions

- What are Universal Precautions for preventing transmission of blood borne infections?
  Suggestion: Universal Precautions are a simple set of effective practices designed to protect health workers and patients from infection with a range of pathogens including blood borne viruses. These practices are used when caring for all patients regardless of diagnosis. The implementation of universal precautions includes simple interventions like hand washing after any direct contact with patients, no needle recapping, safe collection and disposal of sharps, wearing gloves for contact with body fluids, covering cuts and abrasions, cleaning up spills of blood and other body fluids etc.



Describe the Slide

““We now come to the end of our session on 'Introduction to Surveillance'. I hope all of you grasped the basic concepts of HIV Sentinel Surveillance and its implementation structure during this session.

“We will end our day by clearing any doubts that you may continue to have at this point. I shall try to address all your queries now.”

Suggestions to Facilitator

- Take questions at this stage.
- Open up discussions; and invite all participants for their comments and questions regarding the entire session.

Additional References/ Reading List:

If participants wish to further explore the topic of surveillance, second generation surveillance, public health surveillance, etc., they may refer to the following sites and books:

WEBSITES

http://www.who.int/hiv/pub/surveillance/en/index.html

http://globalhealthsciences.ucsf.edu/prevention-public-health-group/training-resources/hivaids-epidemiologic-surveillance-trainings

(Initiating second generation HIV surveillance systems: practical guidelines, UNAIDS, WHO, August 2002.)

http://www.unaids.org/en/media/unaids/contentassets/dataimport/publications/irc-pub02/jc742-initiatingsgs_en.pdf

Chapter on "Public Health Surveillance: A Tool for Targeting and Monitoring Interventions" from *Disease Control Priorities in Developing Countries*. 2nd edition.Jamison DT, Breman JG, Measham AR, et al., editors. Washington (DC): World Bank; 2006.

http://www.ncbi.nlm.nih.gov/books/NBK11770/

HIV Surveillance in India: Evolution and Challenges by IndrajitHazarika and Michelle Kermode, September 2010

http://ni.unimelb.edu.au/__data/assets/pdf_file/0012/439968/KN_HIV_Surveillance_Document_Final_October_2010.pdf

https://www.unaids.org/en/media/unaids/contentassets/dataimport/pub/report/2008/20080326_report_commission_aids_en.pdf

BOOKS

Birkhead, G. S., and C. M. Maylahn. 2000. "State and Local Public Health Surveillance." In Principles and Practices of Public Health Surveillance, ed. S. M. Teutsch and R. E. Churchill, 270. New York: Oxford University Press.

Foege W. H., Hogan R. C., Newton L. H. Surveillance Projects for Selected Diseases. International Journal of Epidemiology. 1976;5(1):29–37.

Facilitation Tips for Session 2

Group Work: Know Your Sentinel Site

Objectives of the Group Work

1. To understand the routine functioning of OPD and ANC clinic at the sentinel site facility
2. To document and review the patient flow of the pregnant woman on a normal OPD day when HSS is not being implemented, including the distance between the steps and documentation involved at each step
3. To identify site-specific issues that may affect implementation of consecutive sampling and UAT under HSS
4. To provide site-specific recommendations and guidance to the sentinel site personnel during the training to ensure proper implementation of HSS at every site
5. To identify sentinel sites that need to be prioritized for supervisory visit during the first 15 days

Instructions to trainers for conducting the Group Work

1. This group work is scheduled for the second session in the training of sentinel site personnel, before elaborating the methodology and principles of HSS.
2. The idea is to understand the functioning of OPD & ANC clinic and patient flow at the sentinel site facility on a normal working day, when HSS is not being implemented.
3. Understanding the routine practices at the sentinel site facility is important to identify if any of them may affect or hinder the implementation of key principles of HSS such as consecutive sampling and unlinked anonymous testing.
4. In this exercise, there should not be any mention or discussion of HSS or the principles thereof. Only, information will be captured from the site personnel that will be used for exercise and discussion during the subsequent session on methodology.
5. Before starting the group work, explain to the participants, the objectives and purpose of this group work as outlined above.
6. Classify the participants into groups based on the type of facility – Medical Colleges/ District Hospitals/ CHC/ PHC/ Private hospital etc.
7. Arrange the seating of participants in such a way that personnel from each site sit together so that they can discuss with one another while doing the group work.
8. Provide the format for group work to the personnel of each sentinel site.
9. Orient them to the format that they are supposed to fill and give the instructions outlined below. Read out all instructions with explanation wherever necessary. Keep referring to the format while giving the instructions for greater clarity.
10. Resource persons should sit with the groups, clear their doubts and guide them in correctly filling the formats.
11. After all the sentinel sites finished filling their respective formats, randomly pick one site from each typology and ask them to come and present/ read out the format that they have filled. This will make the session interactive, act as an ice-breaker, will give chance to the participants to interact with one another and will make the resource persons as well as participants aware of different practices at different hospitals. Encourage other participants to ask questions or seek clarifications from the person presenting the site details.
12. At the end of the session, collect the filled formats from all the sentinel sites.

13. During the break between this session and the next session, the resource persons should quickly go through the formats to identify sites where the routine practices may affect the implementation of HSS. This will be useful to initiate site-specific discussion during the next session on methodology. Case discussions and exercise are included in the next session (Session III on methodology) that present the common issues noticed at the sentinel sites and the recommendations to be given to the sentinel site personnel. During this session, format filled by every sentinel site in the group work will be discussed and specific recommendations will be given to each sentinel site, that include
    a. Any specific action to be taken to ensure consecutiveness in sampling for HSS
    b. Any arrangements to be made to ensure that filling HSS data form and collecting blood specimen are done close to the ANC clinic
    c. Sensitisation of any other doctors and staff at the hospital
    d. Optimal number of pregnant women to be recruited per day
    e. Any other site-specific recommendations
14. Keep the filled formats securely during the training. After the training, SACS should ensure that a copy of the filled formats is sent to the respective Regional Institute. Information collected in this format will also be used for prioritizing sentinel sites for supervisory visits.
15. Regional Institutes should ensure that formats for all the ANC sentinel sites are received by them at the end of state level trainings.

Instructions to ANC Sentinel Site Personnel for filling format of Group Work – Know Your Sentinel Site

1. Please refer to the format for group work given to you.
2. This format has to be filled with information related to your hospital/ facility.
3. The format has four sections.
4. Section-I documents the site identification information.
5. Section-II has some questions related to the functioning of the OPD & ANC clinic in your hospital. Please answer them in the space provided for each question or tick the appropriate one from suggested responses.
6. Section-III is to record the patient flow of a pregnant woman in your hospital.
   a. Left table is for a new case and right table is for an old case.
   b. It gives a list of usual steps that a pregnant woman goes through in a hospital when she visits for ANC check-up, such as ANC registration, doctor's consultation, laboratory etc; !gainst each suggested contact point, there is an empty box.
   c. Think of the normal steps that a pregnant woman goes through when she visits your hospital for ANC check up. The order of steps in your hospital may be different from the order mentioned here.
   d. Review the list and identify which is the first step for a pregnant woman after entering your hospital. Mention number '1' in the box against that point;
   e. Then, identify where the pregnant woman goes next; Mention number '2' in the box against the second step.
   f. Go on numbering each step in serial order till you reach the stage 'Exit from hospital';
   g. If any specific contact point in your hospital is not mentioned in the suggested list, please add the same in the blanks given at the bottom and number them accordingly.
   h. If any step is not applicable to your hospital, leave it blank.
   i. Repeat the process of numbering the steps for an old case who is already registered with the hospital in the past.
7. Section-IV is to record the distance between successive steps in the patient flow and documentation maintained at each step.
   a. Under the first column 'Steps', mention the steps as per the order recorded in Section -III.
   b. For each step, mention the distance from the previous point, documents maintained at that point & who fills the document in the remaining columns.
   c. Examples of documents are ANC register, OPD/ANC card given to the pregnant woman, Requisition for routine tests, PPTCT register, Lab register, Routine test results/report, HIV test report, etc.
8. The resource persons will come to you to help you in filling the format correctly. If you need any assistance, call any one of the resource persons.
9. After all sentinel sites fill their respective formats, we will randomly select a few sites to come and present what they have filled in the format, so that all of us are aware of different practices at different hospitals.

HIV SENTINEL SURVEILLANCE 2014-15

TRAINING OF ANC SENTINEL SITE PERSONNEL

FORMAT FOR SESSION II: GROUP WORK: KNOW YOUR SENTINEL SITE

I. SITE IDENTIFICATION INFORMATION

1. State: ....., 2. District: ....., 3. Type of Hospital: .....,
(Medical College/Tertiary Hospital/District Hospital/Sub-district Hospital/ CHC/PHC/Private nursing home/Other Specify: .....),4. Nature of Site: ....., *(Single site/ Sub-site (Part of composite site))*

5. Site Code (8-digits): ☐☐☐☐☐☐☐☐ 6. Sub-site Number (1-digit): ☐

7. Name of Sentinel Site/Sub-site: .....,

8. Name of Composite Site: ....., (Not applicable for single site)

II. DETAILS OF ANC OPD FUNCTIONING

1. Number of days in a week that ANC clinic is functional in your hospital: .....,
2. ANC OPD timings *(Mention the timings on each day; If they are different for new and old cases, mention the same. If there is no difference, mention it under all cases)*

	New Cases		Old Cases		All Cases	
	From	To	From	To	From	To
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						
Saturday						

3. Average daily ANC clinic attendance: .....,
4. Who conducts the !NC clinic? ....., *(Gynaecologist/Other Doctor/Nurse/ANM/Other: .....)*
5. How many different doctors conduct ANC clinic in a week?: .....,
6. What are the routine blood tests done for ANC attendees in your hospital? (a) Syphilis: .....*(Yes/ No)* (b) Haemoglobin/HB: ..... *(Yes/ No)* (c) Malaria: .....*(Yes/ No)* (d) Any Other tests done (Specify: .....)
7. Are these tests done routinely for every pregnant woman or only for those prescribed by the doctor? ....., *(All/ Only for those prescribed by Doctor)*
8. When are routine test results returned to the pregnant woman? ....., *(Same day/ After ..... day(s)/ During next visit)*
9. How are routine test results issued? ....., *(Written on ANC card/ Separate Report/ Both)*
10. Is there a PPTCT centre functioning in your hospital? .....*(Yes/ No)* ***[If yes, answer the following questions. If no, go to section III.]***
11. How is it ensured that every pregnant woman attending the ANC clinic for check-up reaches PPTCT centre and gets tested for HIV? *(Tick one or more options below. If any other, describe it in the blank)*
    a. Every pregnant woman is referred to PPTCT centre by doctor in ANC clinic, and the doctor verifies and ensures if HIV test results are available during next visit
    b. PPTCT Counselor sits in/close to ANC clinic and ensures that every pregnant woman comes for HIV counseling after ANC check-up
    c. Every pregnant woman is brought to PPTCT centre from ANC clinic by nurse/ out-reach worker/ hospital attendant (accompanied referral)

d. Every pregnant woman first comes to the PPTCT centre and goes to ANC clinic for check-up only after registration at PPTCT centre

e. ANC clinic & PPTCT centre work independently. Pregnant women come to PPTCT centre on their own. No specific procedures are employed.

f. Any other mechanism: .....
.....
.....

12. How is blood collection for routine tests & HIV done? *(Collected twice separately for HIV & routine tests/ Collected only once and shared between PPTCT centre for HIV & general lab for routine tests/ Collected only once for HIV, no other tests are done/ Any other: .....
.....)*

13. When are HIV test results returned to the pregnant woman? ..... *(Same day/ After ..... day(s)/ During next visit)*

14. How are HIV test results issued? ..... *(Written on ANC card/ Separate Report/ Both)*

III. PATIENT FLOW OF A PREGNANT WOMAN ON A NORMAL ANC OPD DAY

(Think of the normal steps that a pregnant woman goes through when she visits your hospital for ANC check up. The common steps are listed below. But, the order of steps in your hospital may be different from the order mentioned here. Mention numbers starting with '1' in the empty boxes in the serial order of steps for new and old ANC case as followed in your hospital. If any step is not applicable to your hospital, leave it blank.)

Steps of Patient Flow for a NEW ANC case	Step No.
Entry into the hospital	0
OPD/ANC registration counter/ Point where OPD/ANC card is issued	
ANC Clinic/ Point where doctor conducts antenatal check-up	
PPTCT centre/ Point where HIV counseling is done	
PPTCT centre/ Point where blood is collected for HIV testing	
General testing lab/ Point where blood is collected for routine tests	
PPTCT centre/ Point where HIV test results are issued	
General testing lab/ Point where routine test results are issued	
Any Other:	
Any Other:	
Any Other:	
Exit from the Hospital	

Steps of Patient Flow for an OLD ANC case	Step No.
Entry into the hospital	0
OPD/ANC registration counter/ Point where OPD/ANC card is issued	
ANC Clinic/ Point where doctor conducts antenatal check-up	
PPTCT centre/ Point where HIV counseling is done	
PPTCT centre/ Point where blood is collected for HIV testing	
General testing lab/ Point where blood is collected for routine tests	
PPTCT centre/ Point where HIV test results are issued	
General testing lab/ Point where routine test results are issued	
Any Other:	
Any Other:	
Any Other:	
Exit from the Hospital	

IV. DISTANCE & DOCUMENTATION

(Mention the steps in the order of number you have given in table above. For each step, mention the distance from the previous point, documents maintained at that point & who fills the document. Examples of documents are ANC register, OPD/ANC card given to the pregnant woman, Requisition for routine tests, PPTCT register, Lab register, Routine test results/report, HIV test report, etc.)

Steps	Distance from previous point	Documentation at this step	Who fills the document?
Step 1:	Not Applicable	a. ..... b.	a. ..... b. .....
Step 2:	a. Same room b. Adjacent room c. 3-4 rooms away in same corridor d. Other part of same building e. Other building f.	a. ..... b.	a. ..... b. .....
Step 3:	a. Same room b. Adjacent room c. 3-4 rooms away in same corridor d. Other part of same building e. Other building f.	a. ..... b.	a. ..... b. .....
Step 4:	a. Same room b. Adjacent room c. 3-4 rooms away in same corridor d. Other part of same building e. Other building f.	a. ..... b.	a. ..... b. .....
Step 5:	a. Same room b. Adjacent room c. 3-4 rooms away in same corridor d. Other part of same building e. Other building f.	a. ..... b.	a. ..... b. .....
Step 6:	a. Same room b. Adjacent room c. 3-4 rooms away in same corridor d. Other part of same building e. Other building f.	a. ..... b.	a. ..... b. .....
Step 7:	a. Same room b. Adjacent room c. 3-4 rooms away in same corridor d. Other part of same building e. Other building f.	a. ..... b.	a. ..... b. .....
Step 8:	a. Same room b. Adjacent room c. 3-4 rooms away in same corridor d. Other part of same building e. Other building f.	a. ..... b.	a. ..... b. .....

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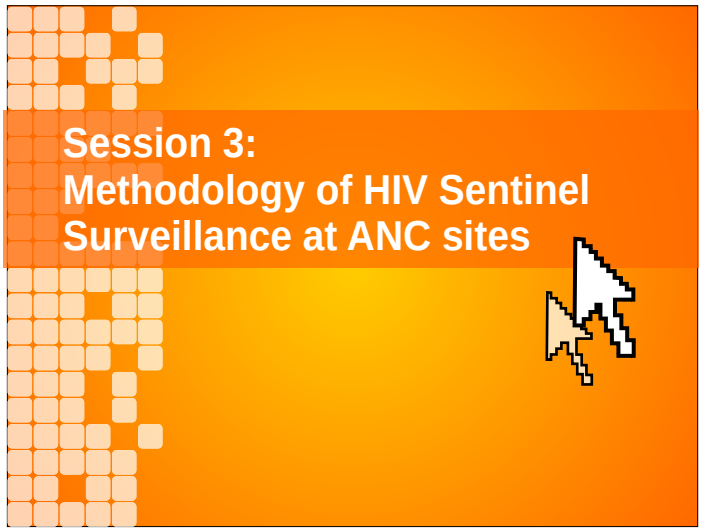
Methodology of Sentinel Surveillance at ANC Sites



Describe the Slide

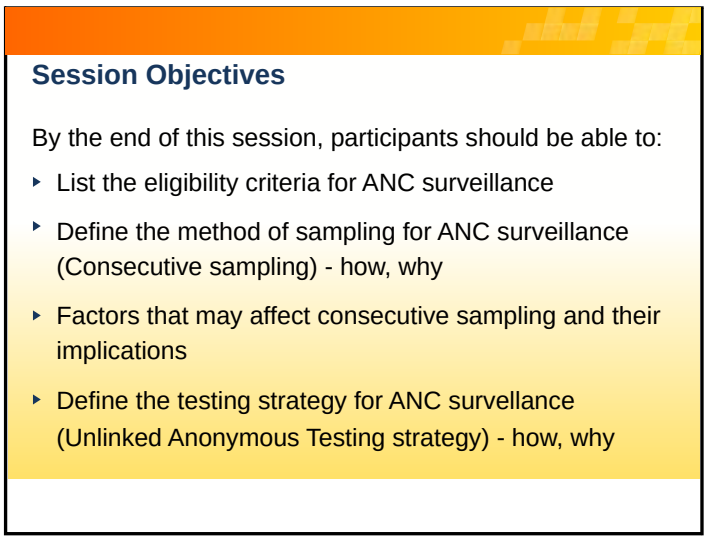
"After having understood all about HIV sentinel surveillance in India; and the group work that we conducted on getting to know your sentinel sites better, we will now deal with the methods of carrying out HSS at ANC sites.

"This methodology session will basically be all about defining the eligibility criteria of HSS candidates, and the standard sampling and testing strategies used in conducting HSS.

"In case you have participated in previous rounds of HSS, you may be aware that we use the Consecutive Sampling method and the Unlinked Anonymous Testing (UAT) strategy for conducting HIV sentinel surveillance at ANC sites. We shall discuss these concepts in much more detail during our present session."

Suggestions to Facilitator

- You may encourage the audience to initiate discussion on Consecutive Sampling and Unlinked Anonymous Testing. This will help you to understand level of familiarity of your audience with HIV Sentinel Surveillance System.
- You may refer participants to page 5 to 11 of the *Operational Manual for ANC Sentinel Sites 2014-15* at this stage.



Describe the Slide

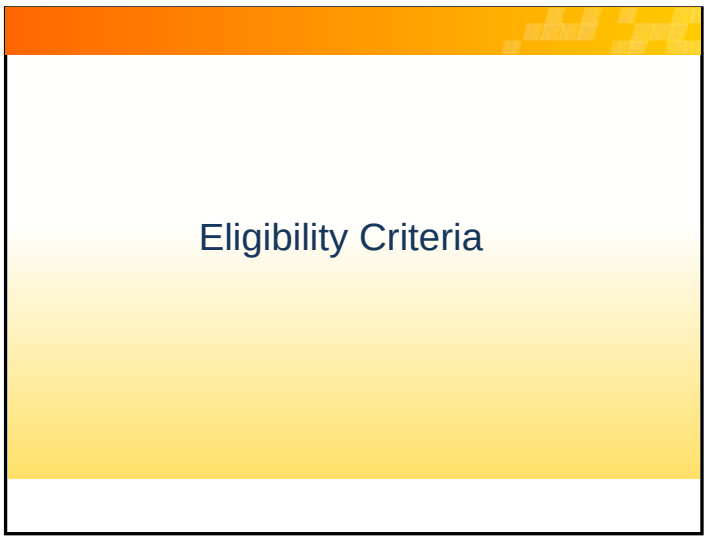
"Let us begin with the broad objectives of today's training session on the Methodology of Sentinel Surveillance at ANC Sites. By the end of the day, you should be able to thoroughly understand:

- The eligibility criteria for ANC sentinel surveillance;
- The Consecutive Sampling method used for ANC surveillance;
- The factors that may affect this consecutive sampling method, and their implications on the surveillance exercise; and
- The Unlinked Anonymous Testing (UAT) strategy used for ANC surveillance.

"Please feel free to ask questions at any stage; and clear your doubts, if any, on the subject of the methodology of sentinel surveillance at ANC sites."

Suggestions to Facilitator

- You may refer participants to page 5 and pages 7–11 of the *Operational Manual for ANC Sentinel Sites 2014-15*.
- You may remind participants that consistently adhering to these guidelines during the HSS process will ensure the generation of quality surveillance data, leading to meaningful interpretation and analysis of year-on-year HIV trends in India.
- Ask participants if they have any other points that they would like covered/addressed during this session on methodology of sentinel surveillance. If any relevant suggestion is made, make a note of the same on the separate flip chart/white board, and include the point(s) wherever necessary during the current training session.



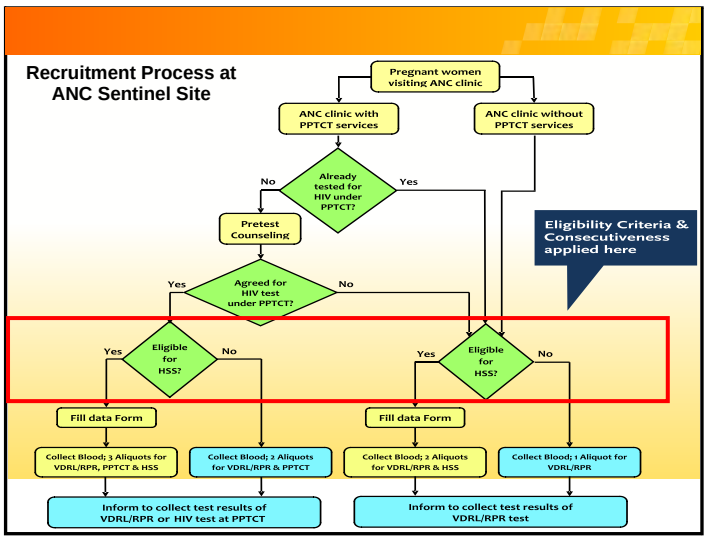
Describe the Slide

"We will now turn to the eligibility criteria for selecting candidates for ANC sentinel surveillance. As we've discussed earlier, it is important to follow a uniform eligibility criteria across all ANC sentinel sites, and during each and every HIV surveillance round. Such a standard practice allows trends to be uniformly compared over the years, while ensuring quality data for analyzing the status of the HIV epidemic at state and national levels.

"Before we move ahead, can someone tell us what are the eligibility criteria of an ANC respondent for recruitment in HIV surveillance?"

Suggestions to Facilitator

- You may refer participants to page 5 of the *Operational Manual for ANC Sentinel Sites 2015*.
- Please check with audience about eligibility criteria of an ANC respondent. Probe and interact with participants to understand their conceptual clarity on eligibility criteria and then proceed to next slide for proper answer.
- Take questions, if any, at this stage.



Describe the Slide

"Please open to page number 10 of the ANC Operational Manual. This is a flow chart of the recruitment process at the ANC sentinel site. The chart shows how ANC attendees walking into a sentinel site can get recruited for HSS, if found eligible.

"The points coded in green show a decision making stage. The yellow boxes are standard HSS procedures that have to be followed; while the blue boxes denote routine tests and PPTCT testing for eligible clients.

(Click for the red line and dark blue label to appear in this chart. This box outline "Eligibility Criteria & Consecutiveness" label that will focus on the stage under discussion.)

"When a pregnant woman walks into an ANC clinic, she can only be faced with two possible scenarios — either the ANC sentinel site offers PPTCT services, or it does not. In case the site does offer PPTCT services, the site-in-charge will need to find out whether the pregnant mother has been tested for HIV before. Now if she has been tested before, or in case she refuses to be tested under PPTCT, her eligibility to be recruited for HSS should be determined at this stage. If she's found to be eligible, she should be recruited; and if she's ineligible for HSS recruitment, she should be sent ahead for routine medical tests.

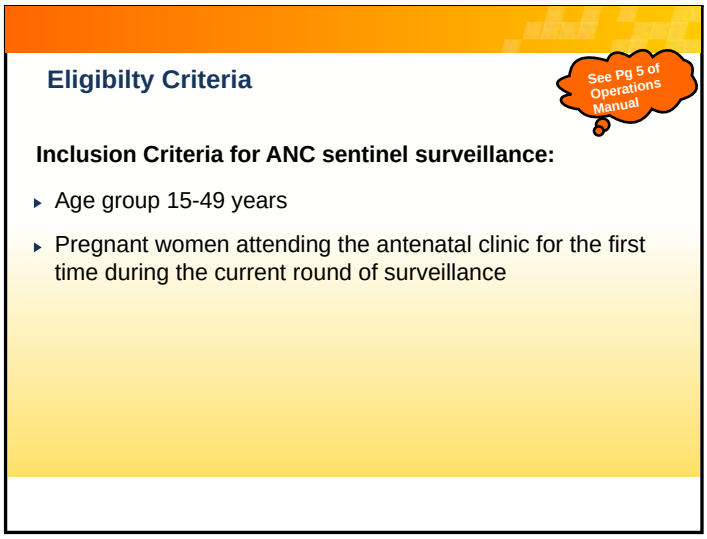
"In a scenario where she has not been tested for HIV before, she needs to be offered pre-test counseling. After counseling, if she agrees to be tested for HIV, the site-in-charge and/or nurse/counsellor will need to determine her eligibility for HSS recruitment. If found eligible, she will be recruited for HSS and sent for collection of blood samples — for routine tests, and PPTCT. (A portion of the blood sample will also be used for HSS) But in case she's found to be ineligible for HSS recruitment, she will be sent for her routine tests and PPTCT tests, and no portion of her blood will be used for HSS.

"If she disagrees to be tested for HIV after counseling, she will be appraised for HSS eligibility. As before, if she's found ineligible she'll be sent ahead for routine tests only. But if she's found to an eligible candidate for HSS recruitment, she'll be sent ahead for her routine tests. (A portion of the blood sample will also be used for HSS)

"Now if the ANC sentinel site where the pregnant lady walks in does not offer PPTCT services, her eligibility to participate in HSS should be determined. As before, if she's found to be eligible, she should be recruited and blood sample should be collected for routine test. (A portion of the blood sample will also be used for HSS) If she is ineligible for HSS recruitment, she should be sent ahead for routine tests, and no portion of her blood will be used for HSS."

Suggestions to Facilitator

- Refer participants to pages 6 - 9 of the *Operational Manual 2014-15*; you may ask a volunteer to read out the section on "ANC sites with PPTCT services" (page 7), while another volunteer may read out the one on "ANC sites without PPTCT services" (Page 8).
- Spend some time on this slide, explaining this simple flow of events. Emphasise to participants that they must visualise this happening at their own sites and try to understand the complexities or the unique situations that might result from issues that may be specific to their sites.
- You may ask one or two volunteers to talk about how they would apply this decision tree at their site. Are there any exceptions? Is there someone who is unable to fit their site's functioning within any one of these options provided? Initiate a discussion and spend about 10–12 minutes in understanding and being assured that all participants can relate to this scenario.
- This slide has some animations. You need to click mouse for red line and dark blue label to appear in this chart.



Describe the Slide

"As you can see from this slide, the basic eligibility criteria for ANC attendees are fairly simple. The first criterion is age; the age group of the pregnant ANC attendee must be between 15–49 years. Please remember to consider the completed age of the attendee. For instance, if a pregnant girl visiting the ANC sentinel site is 14 years and 10 months old, she should not be considered eligible for HSS. In another instance, if a pregnant woman visiting the ANC site is 49 years and 11 months old, she can be considered for HSS recruitment since she is yet to complete her 50 years.

"The second criterion for inclusion in the HSS programme is the time of attendance at the ANC site. Please remember that the pregnant woman MUST be visiting the clinic for the first time since surveillance began at the ANC sentinel site. The pregnant attendee may have already visited the site before and registered with your ANC clinic even before the current surveillance round started, but do not exclude her for that reason. If she happens to come for the first time since surveillance began at your ANC site, she should be included in HSS if she meets the age criteria.

"Please remember that if any pregnant ANC attendee meets these two criteria, she should be recruited for HSS, regardless of any other information that you may or may not have about her."

Suggestions to Facilitator

- Refer participants to page 5 of the *Operational Manual for ANC Sentinel Sites- 2014-15*.
- Read out the inclusion criteria for HSS from the slide; or invite a participant to read it out to the team.
- You may discuss one or two more age and attendance scenarios with the group.
- Ask participants if they have any questions.

Remember:

- If the pregnant women becomes eligible by the above criteria, she should be included in surveillance, irrespective of:
  - Date of antenatal registration
  - HIV positivity status, (if known to counselor or treating doctor)
  - Participation in previous rounds of surveillance
  - Whether she is being tested for HIV under PPTCT (or not)
- A pregnant woman should be recruited only once during a round of surveillance. To ensure this, verify the date of her previous visit to ANC clinic. If the date of her previous visit to ANC clinic falls during the current round of surveillance, she should be excluded from the sample.

Describe the Slide

"Taking our discussion further on the inclusion criteria for ANC sentinel surveillance, let us look into some possible situations that have often been noted at surveillance sites. These situations may influence the decision for exclusion/inclusion of a pregnant woman for HSS.

"The first issue that often causes confusion is that of the date of antenatal registration. An eligible ANC attendee may have registered at the ANC clinic at any time during her pregnancy (her first/second/third trimester or during her current visit). This should not influence the doctor's and/or site-in-charge's decision to exclude/include her in HSS. The decision should only be based on the two inclusion criteria — namely that her age be between 15–49 years and this be her first visit during the current round of HSS.

"A second point of confusion is regarding the possible HIV positive status of a HSS candidate. Even if the attending doctor and/or the nurse/counsellor is aware of the candidate's HIV positivity status — i.e. whether she is positive or negative — this should not influence the decision to exclude/include the candidate in HSS. The decision should only be based on the two inclusion criteria of age and time of attendance during an on-going surveillance round at the site.

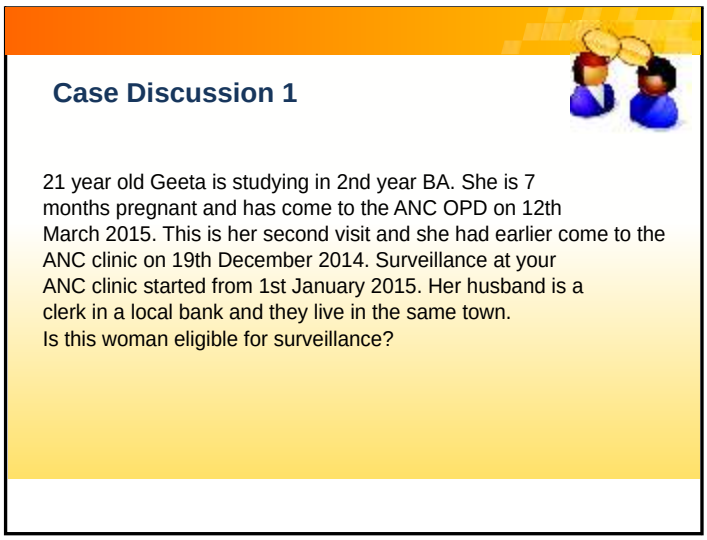
"Another possible scenario is that of the candidate's participation in previous rounds of surveillance. If the treating doctor and/or nurse/counsellor recall recruiting a particular pregnant ANC attendee in the previous rounds, of HSS, this knowledge should not influence their decision to exclude/include an eligible candidate for HSS at all. The decision should only be based on the two inclusion criteria we have discussed before.

"Yet another cause of confusion is whether a candidate has been tested under PPTCT. If the eligible ANC attendee has not been tested under PPTCT before, and she consents to be tested at this visit; or even if she has not been tested under PPTCT before, and refuses to be tested on this visit — either way this should not influence your decision to exclude/include for recruitment under HSS. The decision should only be based on the two inclusion criteria of her age and time of attendance during the on-going surveillance round.

"Please remember that all you need to keep in mind while recruiting a pregnant women for HSS at your ANC site is whether she meets the basic two inclusion criteria. You do not need to over-burden yourselves or over-analyse a situation while recruiting a HSS candidate. Just follow the basic rules, and nothing else needs to be considered at all."

Suggestions to Facilitator

- Refer participants to page 5 of the *Operational Manual for ANC Sentinel Sites- 2014-15*..
- Ask participants if they have any questions.



Describe the Slide

"We will now go over some case studies; and discuss the eligibility of the ANC attendee in each case.

"Let us look at the example of 21-year-old Geeta, who's a second year BA student:

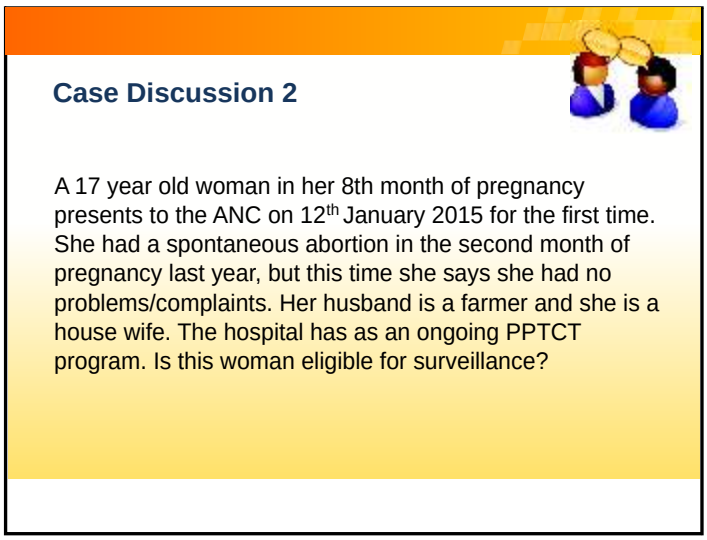
(Read the slide slowly, or ask a volunteer to read it).

"Does Geeta fulfill our requirements for HSS recruitment? Does she meet the age criteria we have been discussing so far? (Answer: Yes she does. She falls within the 15–49 age bracket.)

"And does Geeta meet our second HSS inclusion criteria too? (Answer: Yes she does. She had first come to the ANC site on 19th December 2014, and then again on 12th March 2015. Since surveillance began at the site from 1st January 2015, she can be included in the surveillance.)"

Suggestions to Facilitator

- Ask a volunteer to read out the case. Throw the question open to the whole class.
- Let participants answer these questions themselves, before you help them. The correct answers are provided in bold font, alongside the questions above. After some discussion, in case participants are unable to answer, explain the situation again and help them with the solution.
- Ask participants if they have any questions.



Describe the Slide

"This is another example of a 17-year-old young lady, who visited the ANC site for the first time in the 8th month of her pregnancy:

(Read the slide slowly, or ask a volunteer to read it).

"Let's see if this candidate fulfils our two eligibility conditions for HSS. Does she meet our age criteria? (Answer: Yes, she does. Her age is within the 15–49 bracket).

"Now let's see if she fulfils our second criteria too. Do you think she is eligible for surveillance? (Answer: Although the start date of the ANC surveillance is not provided, the case study clearly states that she visited the ANC clinic for the first time; and based on this information alone she is eligible for HSS recruitment).

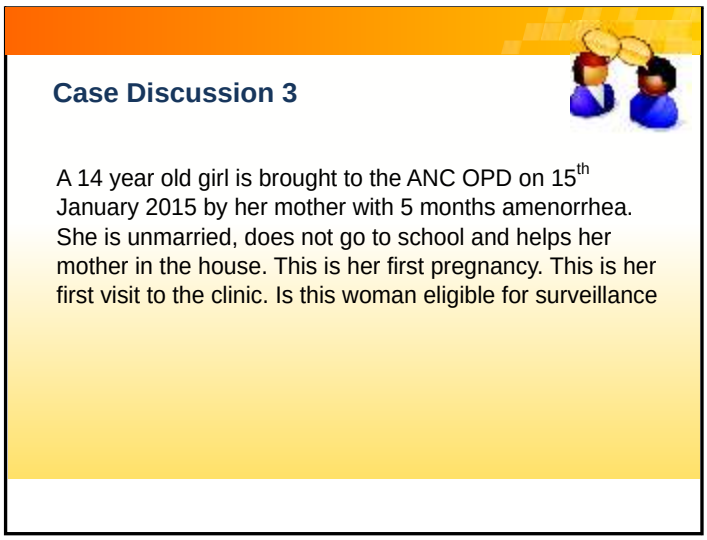
"Based on these points presented to you, let me ask you a question. Mind you, *this is not related to the eligibility criteria in any way*. From the information given, what do you think is the candidate's order of pregnancy? (Answer: The temptation will be to think that this is the second order, however there is insufficient information provided for us to reach any conclusion. We don't know that the abortion was the woman's first pregnancy. Although one can argue that she is young and it is unlikely that she has had too many pregnancies).

"Let me ask you another question. Do you think the knowledge of the presence of a PPTCT should make any difference in the decision of this candidate's eligibility for HSS? (Answer: This information will have no bearing on the eligibility criteria).

"Let me conclude this set of case discussions by reminding you again that a pregnant woman's inclusion in the HSS programme is only dependent on her age and the order of her visit to the ANC clinic since the start of the present surveillance exercise. You will not need any other data or information to decide the candidate's eligibility for HSS."

Suggestions to Facilitator

- Ask a volunteer to read out the case; and invite all participants to answer the questions. Please ensure that you throw each question to the audience one by one. You should build on the responses from the audience to complete the correct answers for the questions.
- Let participants answer the questions themselves, before you help them. The correct answers are provided in bold font, alongside the questions above. After initial discussions, in case participants are unable to answer, explain the situation to them and help them with the right solution.
- Take relevant questions from participants, if any.



Describe the Slide

"This is the last case discussion on the eligibility criteria of ANC attendees for HSS recruitment. This case is about a 14-year-old girl brought to the clinic by her mother with 5 months amenorrhea: (Read the slide slowly, or ask a volunteer to read it).

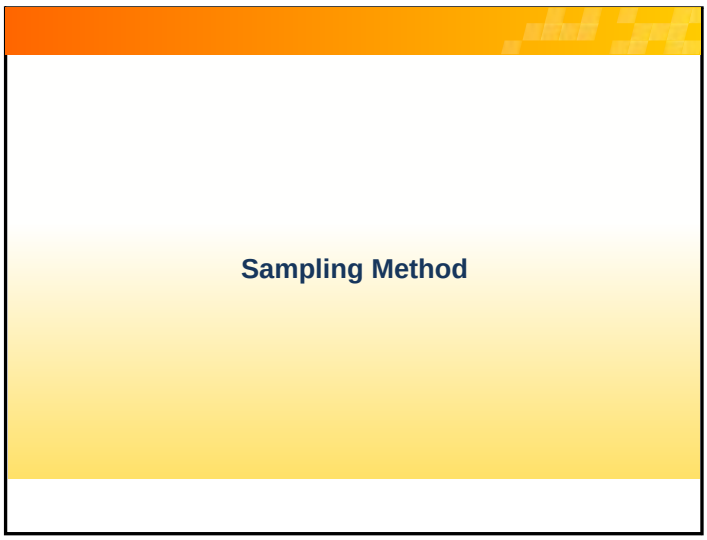
"Let's look at our first criteria; does she meet our age bracket? (Answer: No, she does not. The girl does not fall within the 15–49 age brackets).

"Let's turn to the other aspects of the case. Depending upon the information presented to you, what would your decision be on her eligibility for HSS recruitment?

(*Refer to Suggestions to Facilitator at this stage*) Remember my earlier suggestion on not over-analysing a situation? Once a candidate has been deemed ineligible on the age criteria, there should be no further analysis on other aspects of her eligibility."

Suggestions to Facilitator

- Ask a volunteer to read out the case; and invite all participants to answer the questions.
- Let participants answer the questions themselves, before you help them. The correct answers are provided in bold font, alongside the questions above. After initial discussions, in case participants are unable to answer, explain the situation to them and help them with the right solution.
- After the answer to the age criteria has been discussed correctly, you might let participants discuss various other aspects of the case study before interrupting them with the reminder: "Remember my earlier suggestion on not over-analysing a situation? Once a candidate has been deemed ineligible on the age criteria, there should be no further analysis on other aspects of her eligibility."
- Take relevant questions from participants, if any.



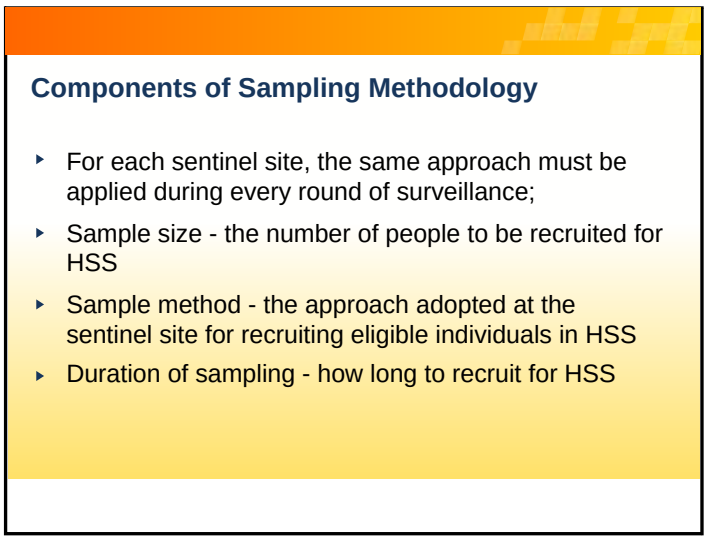
Describe the Slide

"Now that we have understood the eligibility criteria for recruiting HSS respondents, we shall discuss the HSS sampling method. As discussed earlier, following a standard and consistent methodology across all ANC sentinel sites and all surveillance rounds is essential for interpreting and projecting year-on-year disease burden trends. If a non-standardised method is used, it becomes difficult, sometimes even impossible, to compare yearly/annual trends that emerge from the HIV surveillance data.

"Our standard methodology for HIV sentinel surveillance at all ANC sites involves the Consecutive Sampling method, using the Unlinked Anonymous Testing (UAT) strategy on pregnant ANC attendees in the age group of 15–49 years. This surveillance exercise is carried out at each ANC sentinel site over a period of three months, at a frequency of once in two years."

Suggestions to Facilitator

- You may read out the slide title to the participants.
- You may like to ask few participants to see if they understood importance of standard methodology in sentinel surveillance
- Take questions from participants, if any.



Describe the Slide

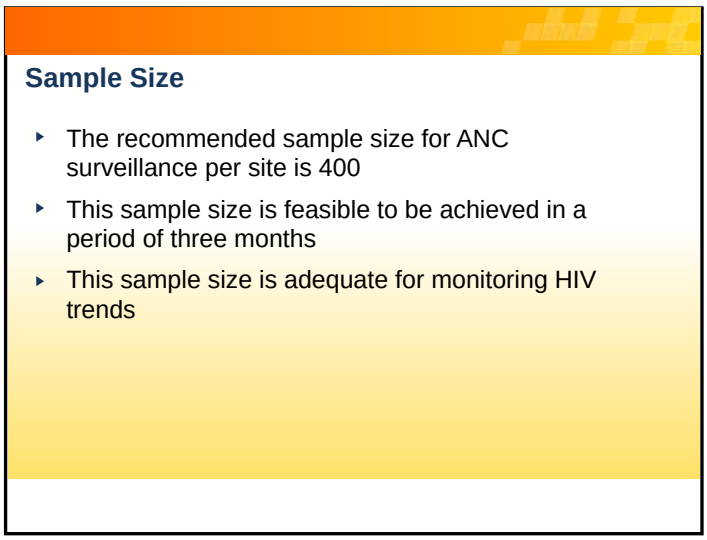
"When we say that the same sampling process has to be followed across all sentinel sites and surveillance rounds, we specifically mean the three main considerations to that process:

Size: The sample size has to be the same
Method: The sampling method has to be the same; and
Duration: The time frame or period for conducting sentinel surveillance has to be the same.

"Differences in any of these three approaches across the years and/or across sentinel sites will lead to inconsistencies which will make monitoring / analysis of trends impossible, since trends can only be monitored/analysed across comparable data sets and variables."

Suggestions to Facilitator

- You may read out the slide; or invite a participant to read it out.
- Take questions from participants, if any.



Describe the Slide

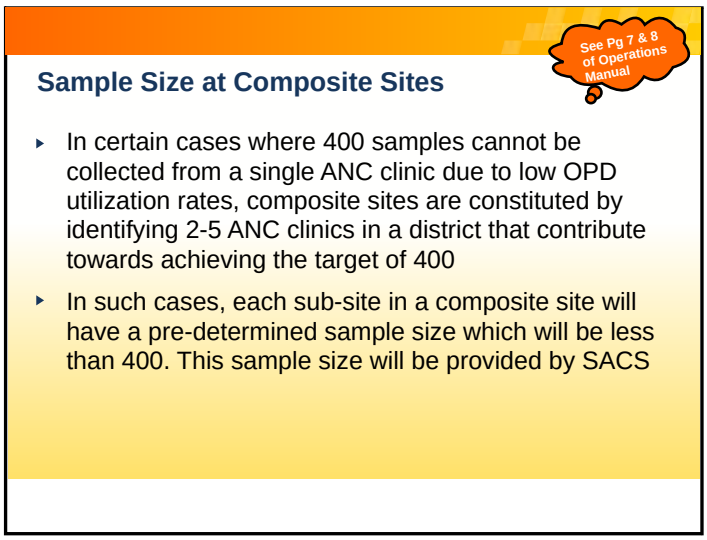
"The first component of our consistent sampling approach is the Sample Size. The sample size that is considered adequate for monitoring HIV trends per ANC site is 400. This sample size is feasible and easy to achieve within the surveillance period of three months.

"Differences in this sample size across the years and across sentinel sites will lead to inconsistencies in the interpretation of surveillance data. For instance, its not desirable to collect 500 samples from ANC site X in a particular surveillance year and then collect 350 samples in the next round of surveillance. In the same way, the intended purpose of HSS will be defeated if we keep on changing the location of surveillance site every year.

"As we've discussed earlier, such erroneous practices would make monitoring/analysing of trends very difficult, since trends can only be monitored/analysed across comparable data sets and variables with desired sample size."

Suggestions to Facilitator

- You may read out the slide; or invite a participant to read it out.
- Take questions from participants, if any.



Describe the Slide

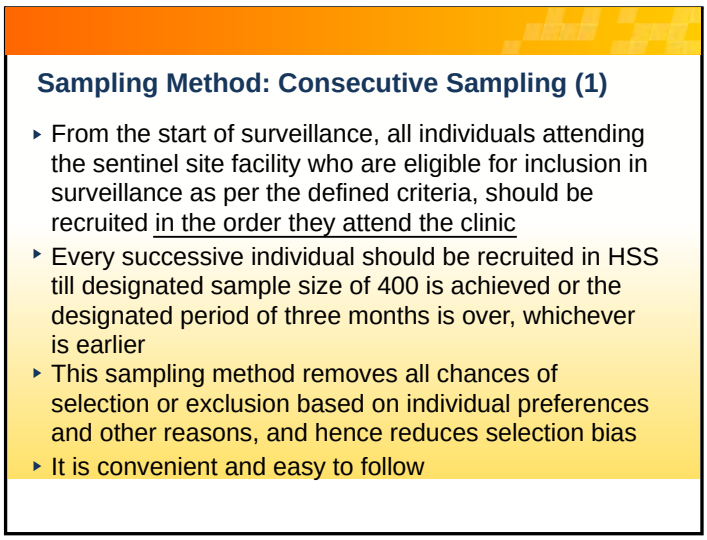
"We have said that it is feasible and easy to collect a sample size of 400 from each ANC site during a surveillance round. But it has often been noted that this is not always possible for sentinel sites, for instance, with low OPD utilization rates. ANC clinics with low footfalls/low volume of attending patients are often not able to collect 400 samples within the three-month surveillance period. In such cases the target of achieving that number is divided among a minimum of two sub-sites and a maximum of five sub-sites in a district.

"Such sub-sites are known as Composite Sites. In these cases, anywhere between two and five ANC clinics in a district are together constituted/treated as a single sentinel site. Each of these sub-sites' target sample size is pre-determined and communicated to them by the SACS. Also during the state level/ regional trainings for site staff, RI & SACS will reaffirm to ensure all sub site staff are aware of sample size to be achieved. This sample size number is obviously less than 400 for each composite site.

"Please remember that the principle of consecutive sampling MUST be followed at each sentinel sub-site as well."

Suggestions to Facilitator

- You may read out the slide; or invite a participant to read it out.
- Remind each participating site-in-charge of composite sites that they must obtain the pre-determined sample size and sub-site number from SACS before returning from this training.
- Take questions from participants, if any.



Describe the Slide

"We will now understand the Consecutive Sampling method used for ANC surveillance sites. The accompanying slide provides important details on HOW to sample the population who attend ANC clinics.

"By now all of you should be aware that the sample size (400 for single and all sub sites if composite ANC site) as well as the sampling duration (3 months) are fixed components of our surveillance methodology. The only aspect of the sampling process which is dependent on individuals who recruit participants during surveillance is the sampling method.

"The Consecutive Sampling method tries to eliminate any selection bias by recruiting eligible candidates in the order they attend the ANC clinic. No one has any control over who walks in through a door, which essentially means that any pregnant woman from the ANC site's catchment population has a fair and equal chance of being selected for HIV surveillance. This makes it a kind of random sampling method. However, the only difference is that the sampling interval is zero in this case, because all eligible ANC attendees are CONSECUTIVELY recruited on a first-come-first- served basis at the clinic during the surveillance period.

"When we follow this consecutive sampling method over fixed surveillance duration for a fixed sample size number, we have the perfect HSS methodology. As discussed before, these are the three boundaries within which we need to operate — size, method and duration. Consecutive sampling should be adopted for all ANC attendees who visit the clinic during the three months of HIV surveillance, till the sample size of 400 is achieved or the three months are up, whichever comes first. Even if the sample size of 400 is not reached, the recruitment process should be halted at the completion of three months. This is done to maintain consistency in the sampling process, as we have already discussed earlier.

"Since there is no scope or room to do intentional and unintentional recruitment of HSS candidates by the attending doctor and/or nurse/counsellor, beyond the prescribed method we eliminate the possibility of any selection bias — which could be inadvertent. Another reason for following this consecutive sampling method is because it is uncomplicated and easy to practice, without undergoing detailed planning or preparations."

Suggestions to Facilitator

- Refer participants to page 6 of the *Operational Manual for ANC Sentinel Sites - 2014-15*.
- You may read out the slide one point at a time. Explain a point or ask participants what they understand, before moving on to the next.
- Take questions from participants, if any.

Sampling Method: Consecutive Sampling (2)

- In clinics with large daily attendance, it is recommended that not more than 20 consecutive eligible attendees be recruited per day (to ensure quality of surveillance data collection)
- In such cases, the first 20 eligible attendees on a given day should be recruited
- However, there may be site-specific exceptions to this recommendation. In such cases, decision about number of consecutive samples to be collected per day should be taken in consultation with RI/SACS.
- However, the exception should not compromise the principles of consecutive sampling, desired sampling size, high quality patient care and surveillance

Describe the Slide

"Continuing with our discussion on the consecutive sampling method, let us focus on some more details to keep in mind during surveillance at ANC sites.

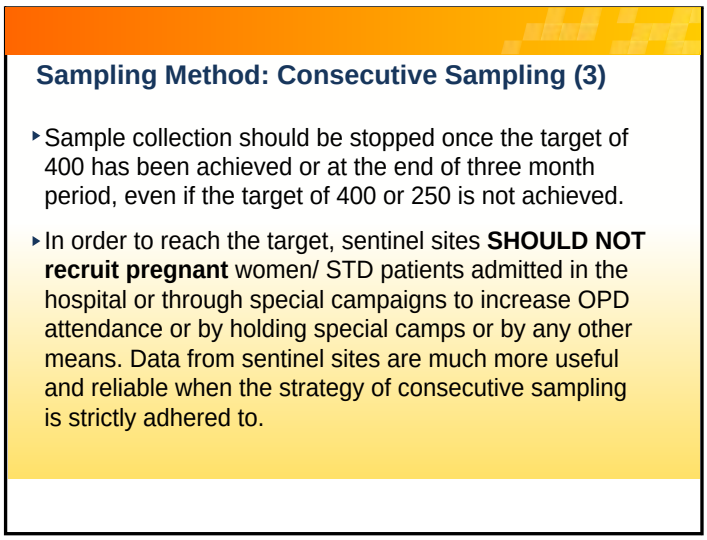
"To ensure the quality of sampling and that of the surveillance data thus generated, it is recommended that no more than 20 samples be collected in a day, as a rule of thumb. It has been observed in previous surveillance rounds, that high volume ANC clinics have gone ahead and recruited their target sample numbers within a week of commencement of surveillance. Collecting so many specimens in such a short time can impose a severe burden on the sentinel site infrastructure and can easily impact the quality of the specimen collection as well as of patient care. For this reason, in clinics with large daily attendance, it is recommended that NOT MORE THAN 20 consecutive eligible attendees be recruited per day to ensure quality of surveillance data collection.

"The best practice, therefore, is to recruit the first 20 eligible attendees on any given day for HSS. However, there may be exceptions to the above recommendation. In such cases, the decision about the exact number of consecutive samples to be collected per day should be taken in consultation with the Regional Institute (RI) and/or the SACS — without compromising the overarching principles of consecutive sampling for the target sample size of 400, non-compromised patient care and high-quality surveillance.

"Please remember that maintaining data quality in surveillance is of prime importance."

Suggestions to Facilitator

- Refer participants to pages 6–7 of the *Operational Manual for ANC Sentinel Sites-2014-15*.
- Before ending this slide presentation with that final sentence, pause for a while and ask participants to recall an earlier exercise where the sentinel site's details were presented. During that day's exercise, ANC utilisation rates were also recorded. Ask those participants with a high ANC case load to discuss their HSS experience in previous years; and ensure that the concept of "not more than 20 samples a day" is cemented in their minds.
- Take questions from participants, if any.



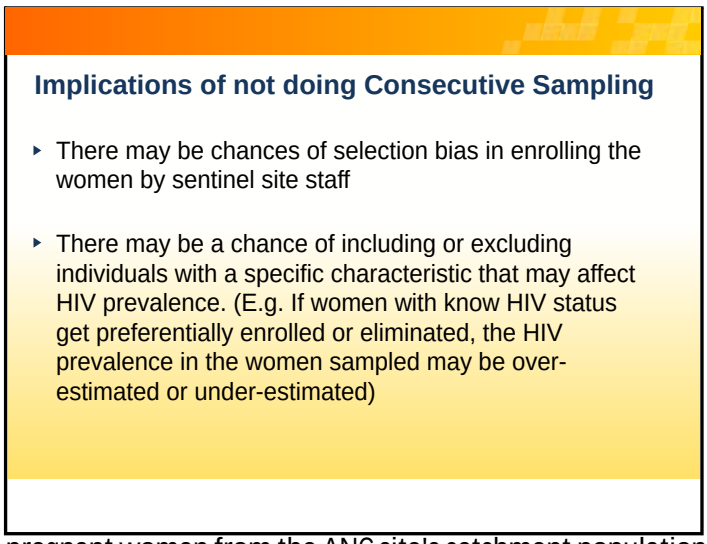
Describe the Slide

"To maintain consistency in the sampling process, HSS sample collection should be discontinued once the target of 400 (or the lesser sample size number for sub-sites) samples is achieved, or the three-month surveillance period comes to an end – whichever happens earlier. Even if the sample size of 400 (or the lesser sample size number for sub-sites) is not reached, the recruitment process should be halted at the completion of three months.

"Please remember that data from pregnant attendees of ANC sentinel sites, using the consecutive sampling method, is what is required for HSS. HSS teams of sentinel sites should NOT recruit pregnant mothers from maternity/labour wards and/or through special campaigns/camps to attract/increase OPD attendance. This will cause difficulties in interpretation of yearly state and district-level trend"

Suggestions to Facilitator

- Refer participants to pages 6–7 of the *Operational Manual for ANC Sentinel Sites- 2014-15*
- Take questions from participants, if any.



Describe the Slide

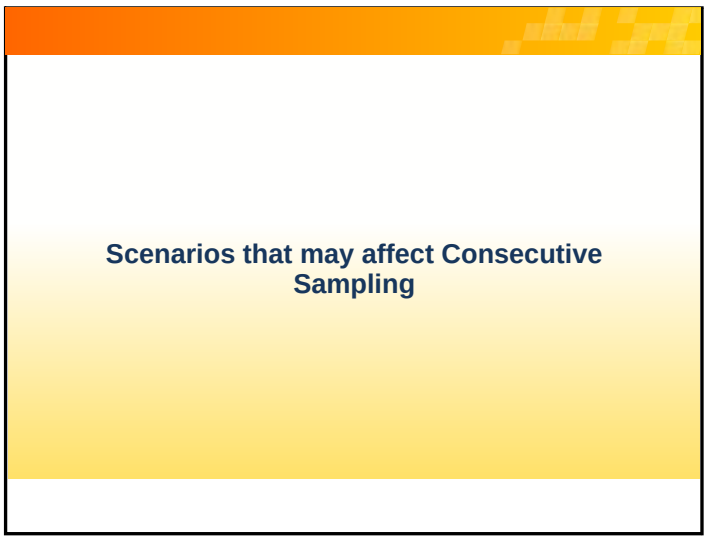
"As discussed before, our methodology of sentinel surveillance at ANC sites operates within three boundaries — size, method and duration. And apart from the sample size and surveillance period, which are fixed components, our sampling method is the only component that runs the risk of either deliberate or inadvertent partiality/prejudice when HSS recruitment is left entirely to the decision of the attending doctor and/or nurse/counsellor.

"That is why we follow a Consecutive Sampling method, which tries to eliminate any selection bias in the HSS recruitment process by choosing eligible candidates in the order they attend the ANC. clinic This method, therefore, essentially gives any and every pregnant woman from the ANC site's catchment population a fair and equal chance at being selected for HIV surveillance. Please remember that when the consecutive sampling method is not followed, and possible selection bias occurs in the recruitment of HSS candidates, the resultant data could project errors in state and district-level surveillance analyses.

"Consider a situation, for example, where an ineligible pregnant women with a known HIV positive status have been selectively enrolled (due to a wrong notion on the part of the site-in-charge and/or nurse/counsellor) — this would wrongly inflate the numbers of HIV prevalence at that sentinel site, reflecting an erroneous epidemic condition for the district too. Alternatively, an eligible pregnant women with a known HIV positive status were to be selectively excluded from the sample —this would artificially deflate HIV prevalence at the sentinel site, presenting another wrong picture for the district and state. For these reasons, Consecutive Sampling is a mandatory practice to avoid deliberate or inadvertent errors in the selection of HSS participants."

Suggestions to Facilitator

- Take questions from participants, if any.



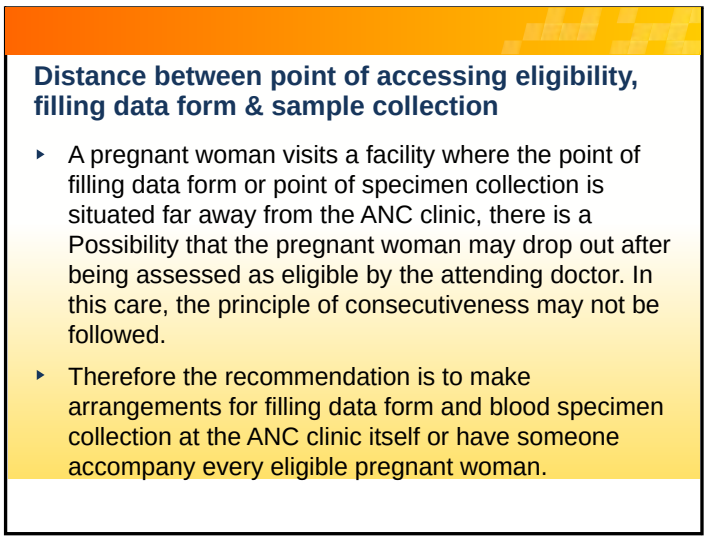
Describe the Slide

"Over the next few slides we will discuss possible scenarios that may affect consecutive sampling on the field. These situations are examples of how and where a possible error might occur in HSS recruitment, compromising the principle of consecutive sampling in our surveillance exercise.

"After that you will be presented with a few case studies where you would need to apply your knowledge of the sampling method to determine whether or not a given situation violates the principle of consecutive sampling or not."

Suggestions to Facilitator

- Take questions from participants, if any.



Describe the Slide

"This particular situation deals with the issue of physical distance between the point of HSS recruitment, data form filling and sample collection at an ANC sentinel site."

Suggestions to Facilitator

- Read the slide slowly; or invite a participant to read it out.
- Ask participants who have been involved in previous surveillance rounds to share how they have realistically dealt with this recommendation at their sentinel sites. Have they arranged for a special space near the attending doctor for data form filling and specimen collection? Has the attending doctor's chamber been shifted nearer the testing lab? How have they ensured that the HSS recruitment process happens seamlessly at the OPD of a busy ANC site? Ensure where arrangement not possible to have extra / additional staff (student nurse etc.) arranged for accompanied referral to blood collection point from ANC recruitment OPD to avoid missing of eligible attendees.
- Take questions from participants, if any.

Self Exclusion at ANC Sentinel Site with PPTCT Services

- A pregnant woman who knows her HIV status visits a maternity hospital which also offers PPTCT services. If the attending doctor finds her eligible for surveillance and refers her to PPTCT centre for filling of data form, the pregnant woman may decide not to go to the PPTCT as she already knows her status. This will violate consecutiveness.
- Therefore the recommendation is to make arrangements for filling data form and blood specimen collection at the ANC clinic itself or have someone accompany every eligible pregnant woman to the PPTCT centre.

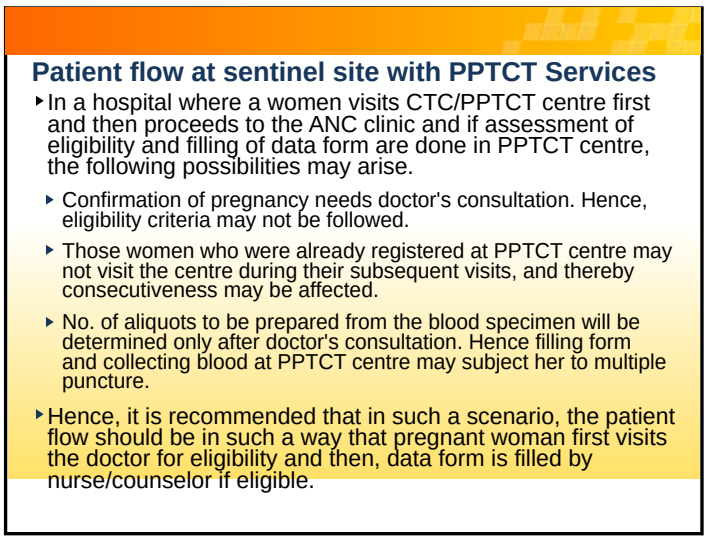
Describe the Slide

In this situation there is possibility that ANC attendee; whose HIV status is known to her due to previous visits to PPTCT centers, may try to avoid to visit it again during HSS period thus self-excluding from sentinel surveillance. Though eligible, she is not been able to recruit in surveillance implies violation of consecutiveness.

"This is an example of a possible situation where the principle of consecutiveness may be violated. A corresponding recommendation is provided thereafter."

Suggestions to Facilitator

- Read the slide slowly; or invite a participant to read it out.
- Ask participants who have been involved in previous surveillance rounds to share how they have dealt with this recommendation at their sentinel sites.
- Take questions from participants, if any.



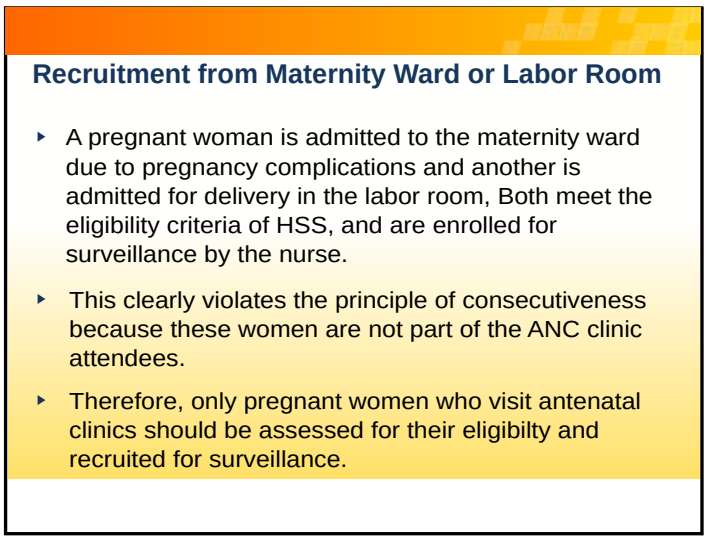
Describe the Slide

"As you know that counselor sits in PPTCT centers in OPD while doctor looks after ANC attendees in ANC OPD, so in situations where pregnant women are visiting PPTCT center first and then referred to attending doctor, there are some possibilities raised mentioned in the slide which may affect consecutive sampling thereby affecting site level prevalence.

"This is another example of a possible situation where the consecutive sampling method may get affected. A corresponding recommendation is provided thereafter."

Suggestions to Facilitator

- Read the slide slowly; or invite a participant to read it out.
- Ask participants who have been involved in previous surveillance rounds to share how they have dealt with this recommendation at their sentinel sites.
- Try to assess each sentinel site wise arrangements at their clinics/ hospitals by asking/ probing participants on 'patient flow' related questions (remind them session-2) and helping to follow which is recommended as per guidelines.
- Take questions from participants, if any.



Describe the Slide

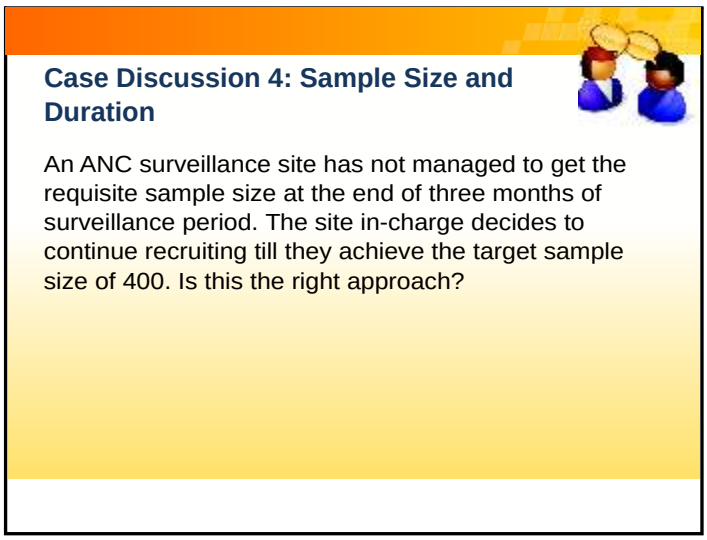
"This one is a scenario where pregnant women admitted in the maternity ward and labour rooms are recruited by the nurse for HSS as they meet the eligibility criteria. Let's see how this compromises the principle of consecutive sampling.

"This is an example from a real life situation, where in-patient ANC women were being recruited from maternity wards and women coming in directly for delivery were being enrolled into HSS from the labour rooms. This is absolutely not permitted; and such scenarios must be categorically avoided at your sentinel sites.

"Please remember that the HSS sampling frame is for ANC attendees who are coming to seek medical care at ANC clinics in the OPD. Our surveillance samples MUST be chosen from this group; and NOT from intra or post-natal care attendees admitted in the hospital or wards or labor rooms etc."

Suggestions to Facilitator

- Read the slide slowly; or invite a participant to read it out.
- Ask participants who have been involved in previous surveillance rounds to share how they deal with such possibilities at their sentinel sites.
- Take questions from participants, if any.



Describe the Slide

"We will now go over some case studies; and discuss various aspects of the HSS methodology. This particular case involves the HSS sample size and surveillance duration:

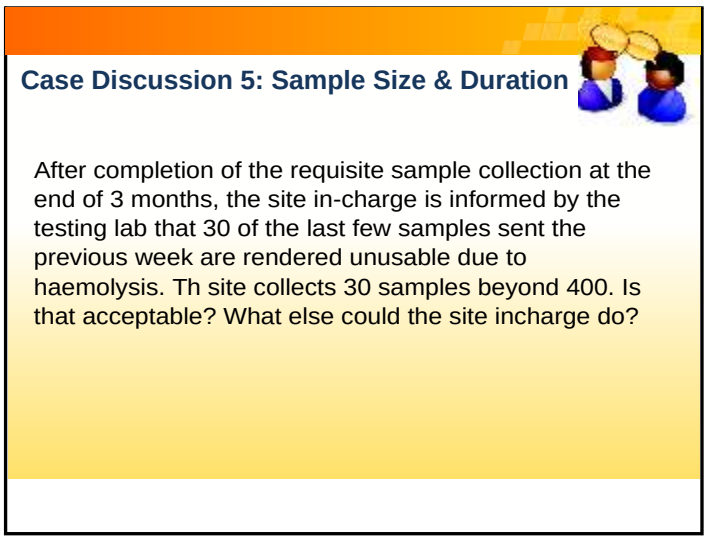
"What do you think? In your opinion, is this the right approach? (Answer: No. The site-in-charge cannot "decide" to continue recruiting samples beyond the end date of surveillance. According to the HSS guidelines, the site MUST consult with the SACS, keeping the RI in the loop.)

(*For further discussion/ explanation:* "Do you think there are any exceptions to the rule?

Answer: "If there have been no hindrances to sample collection, and no exogenous factors have prevented surveillance from proceeding as planned, it is possible an extension will not be provided. If, however, there was a genuine cause for delay in starting and/or continuing surveillance, there is a possibility of an extension being provided. For example, if surveillance began across the country on 1st January, and your particular site could not start at that time due to non-receipt of lab consumables, and surveillance started instead on 20th January, then the three-month period for your site should be counted from 20th January and not 1st January. There are several other situations provided in the guideline, to help SACS/RI make a decision on whether or not to allow extension on a case to case basis)."

Suggestions to Facilitator

- Read the slide slowly, or invite a participant to read it out; and then throw the question open to the class.
- Let participants answer these questions themselves, before you help them. The solution is provided in bold font, alongside the questions above. After some discussion, in case participants are unable to answer, explain the situation again and help them with the solution.
- Ask participants with previous surveillance experience, if they've faced such a scenario and how it was tackled.
- Ask participants if they have any questions.



Describe the Slide

"This next case also involves sample size and surveillance duration:

"Do you think this was the right thing to do? Is it acceptable to recruit/collect samples beyond the end of the surveillance period?

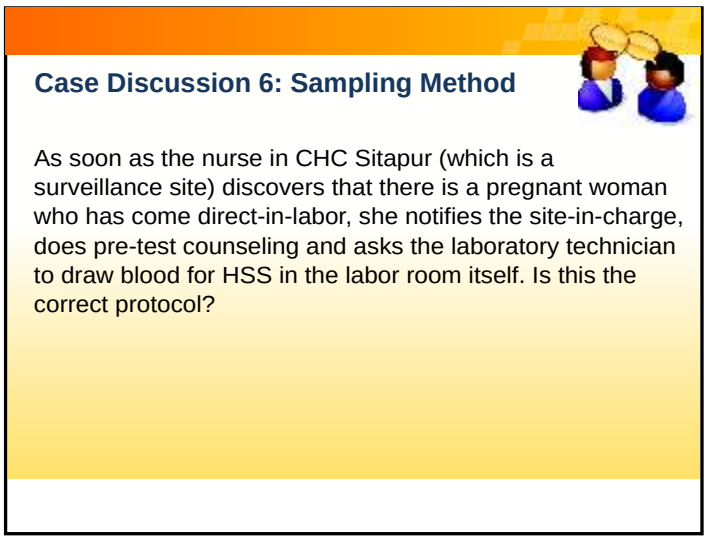
(Answer: "No, again, if the testing laboratory comes back to the site-in-charge and reports that some samples have been spoilt and cannot be used for testing, then the site will need to inform the SACS**,** keeping the RI in loop. Based on the decision table, the SACS will give a go-ahead to the site on whether to recruit or not to recruit further).

(*For further discussion*: "What else do you think the site-in-charge can do in this case?

Answer: "The site-in-charge should be worried about so many samples being haemolysed; and should have a discussion with the laboratory technician about possible errors in sample collection. The site-in-charge should observe sample processing randomly**,** and also provide hands-on training again to ensure that the standard procedures for specimen management are well understood and followed)."

Suggestions to Facilitator

- Read the slide slowly, or invite a participant to read it out; and then throw the question open to the class.
- Let participants answer these questions themselves, before you help them. The solution is provided in bold font, alongside the questions above. After some discussion, in case participants are unable to answer, explain the situation again and help them with the solution.
- Ask participants with previous surveillance experience, if they've faced such a scenario and how it was tackled.
- Ask participants if they have any questions.



Describe the Slide

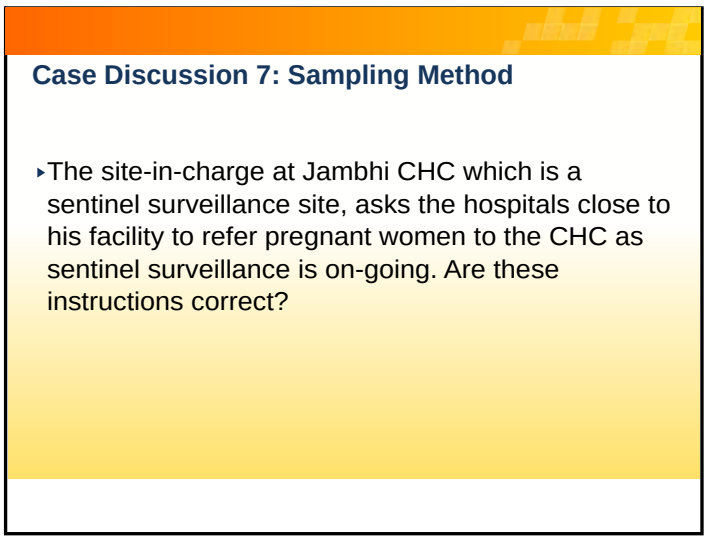
"This particular case discussion involves the HSS sampling method:

"Is this the correct protocol? What do you think? Should the nurse have recruited the pregnant woman directly in the labour room? Do you think this pregnant woman is even eligible for surveillance recruitment? Tell me your thoughts.

(Answer: No, as discussed earlier in today's session, the recruitment of participants for HSS should only be done from the pool of ANC attendees who visit the OPD. In this case, the pregnant woman was admitted directly in-labor and is therefore an intra-natal care patient not in pool of OPD cases, who should be excluded from the surveillance process)."

Suggestions to Facilitator

- Read the slide slowly, or ask a volunteer to read it out; and then throw the question open to the class.
- Let participants answer these questions themselves, before you help them. The solution is provided in bold font, alongside the questions above. After some discussion, in case participants are unable to answer, explain the situation again and help them with the solution.
- Ask participants with previous surveillance experience, if they've faced such a scenario and how it was tackled.
- Ask participants if they have any questions.



Describe the Slide

"This slide also discusses a case involving the HSS sampling method:

"Are these instructions correct? What do you think?

(Answer: No, these instructions are not correct. The CHC should be receiving only those women who routinely access the facility. By forcing a referral from adjoining facilities, we are altering the profile of the group of ANC attendees who would have otherwise walked in by themselves to avail medical services at the CHC.)"

Suggestions to Facilitator

- Read the slide slowly, or ask a volunteer to read it out; and then throw the question open to the class.
- Let participants answer these questions themselves, before you help them. The solution is provided in bold font, alongside the questions above. After some discussion, in case participants are unable to answer, explain the situation again and help them with the solution.
- Ask participants with previous surveillance experience, if they've faced such a scenario and how it was tackled.
- Ask participants if they have any questions.

Case Discussion 8: Sampling Method

In a district hospital with an average daily OPD of 40 pregnant women at the ANC clinic, surveillance was not initiated from the designated date as doctor was on leave. Towards the end of surveillance, when the doctor joins duty, he asks the nurse to start collecting samples from all pregnant women who come to the clinic and completes the target in 10 days, within the three month period. Is this the right approach?

Describe the Slide

"This next slide discusses a case involving the HSS sampling method again:

"Well, was this the right approach? What do you think?

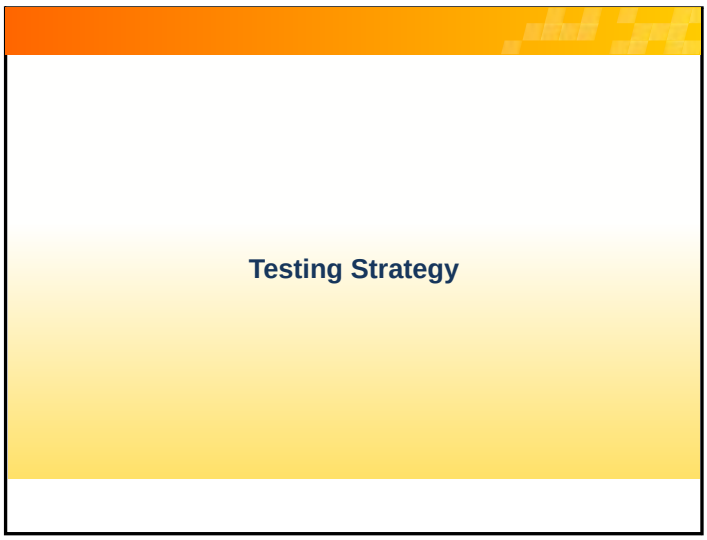
(Answer: No, this was not the right approach. The attending doctor was on leave for most part of the surveillance duration. He should have consulted with the SACS, keeping the RI in loop, about what could be done about the target samples. It would then be the SACS's decision to grant an extension and decide on an alternative end-date for the surveillance site; or to deploy a temporary in-charge till the doctor returned from leave.

(*For further discussion*: "Do you note another discrepancy in this case? What do you think is this guideline violation?

Answer: To ensure quality of surveillance data collection, the HSS guidelines clearly recommend that for ANC site's with large daily attendance, no more than 20 samples can be collected in a day. Therefore, even if the OPD attendance at this ANC site was an average of 40 per day, this "quick" way of completing/achieving the target surveillance samples is a wrong practice. It compromises the quality of surveillance data collection)."

Suggestions to Facilitator

- Read the slide slowly, or ask a volunteer to read it out; and then throw the question open to the class.
- Let participants answer these questions themselves, before you help them. The solution is provided in bold font, alongside the questions above. After some discussion, in case participants are unable to answer, explain the situation again and help them with the solution.
- Ask participants with previous surveillance experience, if they've faced such a scenario and how it was tackled.
- Ask participants if they have any questions.

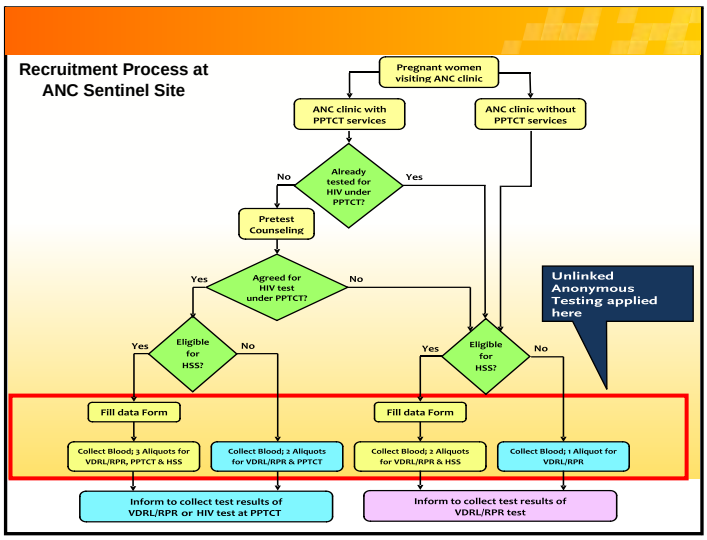


Describe the Slide

"I trust all of you have a better understanding of the sentinel surveillance methodology at ANC sites by now? We will now discuss the testing strategy used in HSS — the Unlinked Anonymous Testing (UAT) strategy."

Suggestions to Facilitator

- You may read out the slide title to participants.
- Take questions from participants, if any.



Describe the Slide

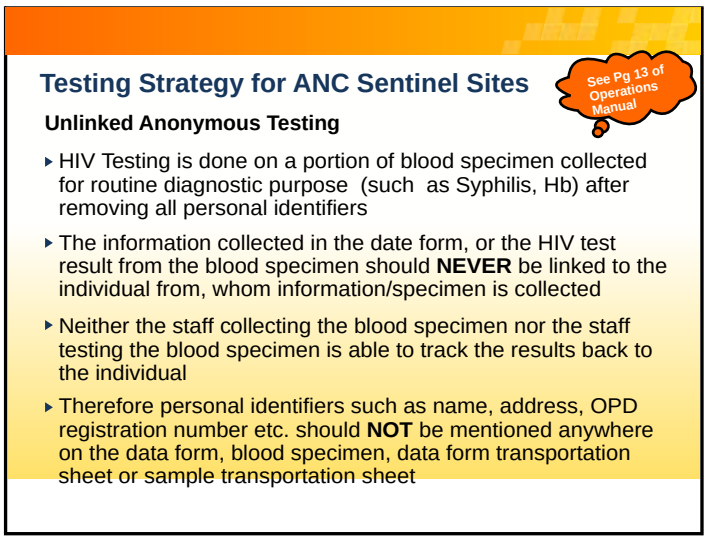
"Before we begin to discuss the UAT strategy, let us revisit the recruitment process at ANC sentinel sites once more. We had viewed and discussed this operational flow chart at the beginning of today's session. Let us evaluate how much we have already covered according to this diagram.

(Click for the red line and dark blue label to appear in this chart. This box outline and "UAT" label will focus on the operational stage under discussion).

"After assessing eligibility and ensuring that those who are recruited for HSS are sampled according to the principle of consecutive sampling, the next thing to do is to fill out the HSS data form and collect a blood specimen. This is the point where the principle of unlinked anonymity is applied. Over the next couple of slides, we will discuss this concept in greater detail."

Suggestions to Facilitator

- You may refer participants to this chart on page 10 of the *Operational Manual for ANC Sentinel Sites 2014-15*.
- You may go over the flow chart slowly.
- Take questions from participants, if any.



Describe the Slide

"Unlinked Anonymous Testing or UAT without informed consent is the strategy used for ANC sentinel surveillance in India. This was chosen as the strategy because of the possibility of participation bias likely to be faced by HSS teams during surveillance recruitment.

"Participation bias is the degree to which respondents/candidates choose to be tested. For surveillance data to be as unbiased as possible, participation bias must be minimal; and the four main considerations that may affect participation bias in HIV testing are:

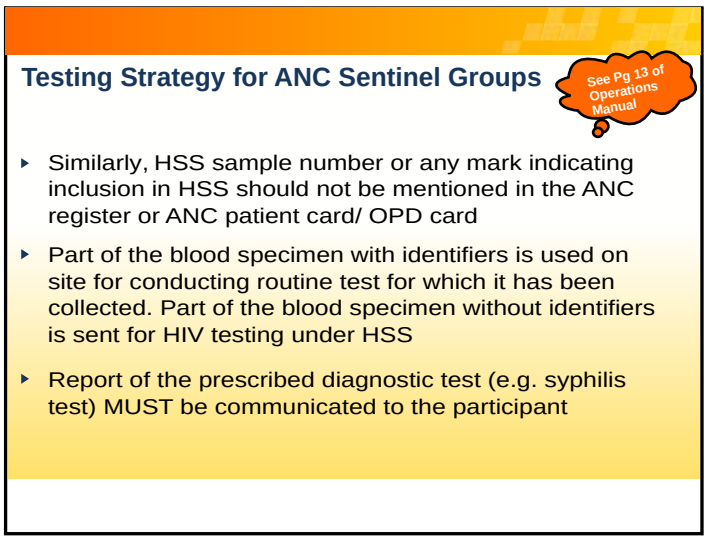
- Is testing anonymous or confidential?
- Are specimens linked or not linked to identifying information about a patient?
- Does the patient consent to be tested?
- Are the test results given to the patient?

Unlinked Anonymous Testing (without informed consent) means testing of unlinked specimens collected for other purposes. Blood specimen from eligible candidates is collected for other routine diagnostic purposes; the HSS procedure just makes use of an existing process and tests part of the sample for HIV prevalence to study trends among ANC attendees. Since no personal identifiers, names and/or addresses are obtained from the candidate for HSS sampling, no informed consent or counselling is required either. The HSS blood specimen is coded without mention of any traceable details to the patient from whom the specimen is collected for surveillance purposes.

Please remember that from the time of recruitment (i.e., filling out of HSS data forms) and blood specimen collection to testing and result reporting — no personal information related to the candidate should be traceable or linked to the data forms or specimen collected from her."

Suggestions to Facilitator

- Refer participants to page 13 of the *Operational Manual for ANC Sentinel Sites, 2014-15*.
- You may read out the slide; or invite a participant to read it out.
- Invite participants to relate their experiences of maintaining UAT. Has this been easy to implement? Ask teams familiar with previous surveillance rounds if they've ever had specimens being tracked back to HSS candidates.
- Take questions from participants, if any.



Describe the Slide

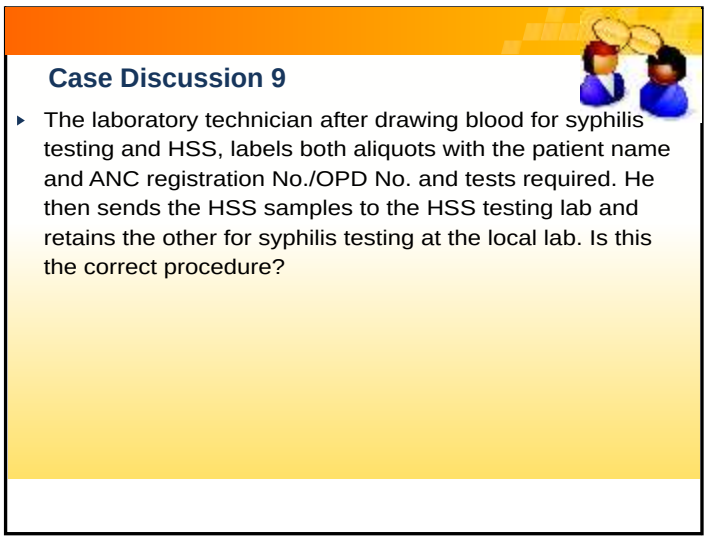
"With this slide too, we continue to deal with further details of maintaining unlinked anonymity during HSS sample collection.

"To maintain UAT, OPD/ANC registration numbers of respondents should NOT be noted anywhere in the HSS data form. And similarly, HSS sample numbers/codes or markings should NOT be noted in their OPD card or in the ANC Register.

"As for the collected blood specimen, the part which is used for on-site routine testing of the patient is marked with identifiers; and the patient is asked to duly collect these test results from the ANC lab. And the part which is used for HIV testing under HSS is safely stored without any personal identifying markers and sent off to the HIV testing lab on a weekly basis."

Suggestions to Facilitator

- Refer participants to page 13 of the *Operational Manual for ANC Sentinel Sites 2014-15.*
- You may read out the slide; or invite a participant to read it out.
- Take questions from participants, if any.



Describe the Slide

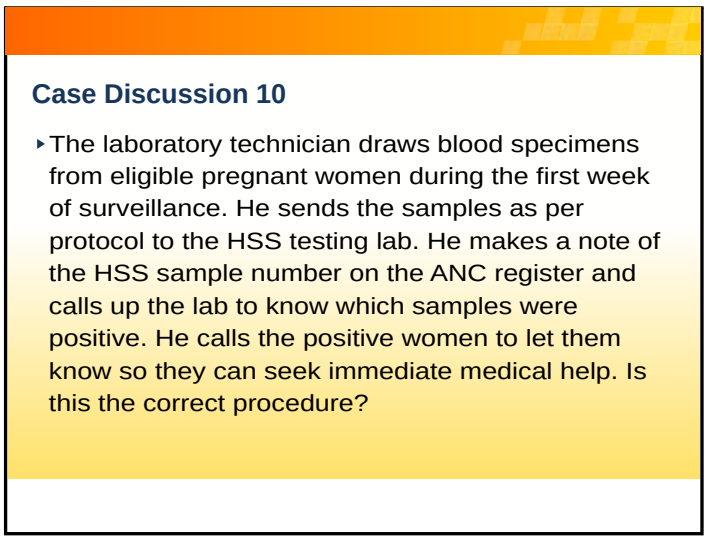
"We will again discuss some scenarios you are likely to face on the field. This particular case involves the principles of UAT:

"Is this the correct procedure for conducting specimen tests? Do you think the laboratory technician followed the right protocol?

(Answer: No, the laboratory technician has labeled both aliquots for routine tests and HSS sample tests with the patient's name and ANC registration number/OPD number and tests required. This violates the principles of UAT, because by putting the name/ number of the patient on the HSS vial, he has compromised the confidentiality of the patient and has directly flouted the principles of "unlinked" and "anonymous" in UAT)."

Suggestions to Facilitator

- Read the slide slowly, or ask a volunteer to read it out; and then throw the question open to the class.
- Let participants answer these questions themselves, before you help them. The solution is provided in bold font, alongside the questions above. After some discussion, in case participants are unable to answer, explain the situation again and help them with the solution.
- Ask participants with previous surveillance experience, if they've faced such a scenario and how it was tackled.
- Ask participants if they have any questions.



Describe the Slide

"This next case is also involved with the principles of UAT:

"Do you think this was right? Is this the correct procedure?

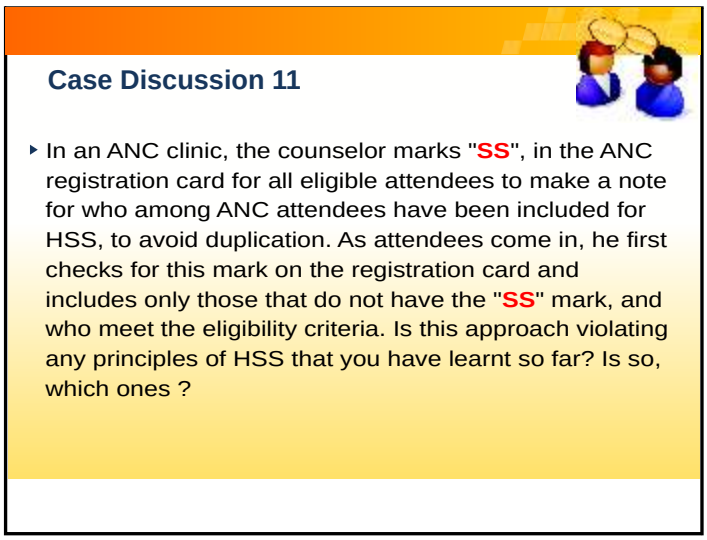
(Answer: No, this was not the correct procedure. By noting down the HSS sample numbers next to the ANC registration numbers, the lab technician has linked the samples back to the patients. This linking is completely prohibited under UAT).

(*For further discussion*: "Does this case present any more problems to you? What do you think they are?

Answer: "Since the pregnant women had no idea that HIV testing was being done on them, calling them to tell them about their HIV status is absurd. We do not have this information in the case study, but if this was an ANC clinic with PPTCT services, then as per protocol**,** the women would have been offered HIV testing; and they would have been tested ONLY on their consent. By contacting and informing the positive women about their HIV status, the lab technician has not only violated all norms of UAT and compromised the confidentiality of the ANC's patients, but also abused the foundation of the principles of sentinel surveillance)."

Suggestions to Facilitator

- Read the slide slowly, or ask a volunteer to read it out; and then throw the question open to the class.
- Let participants answer these questions themselves, before you help them. The solution is provided in bold font, alongside the questions above. After some discussion, in case participants are unable to answer, explain the situation again and help them with the solution.
- Ask participants with previous surveillance experience, if they've faced such a scenario and how it was tackled.
- Ask participants if they have any questions.



Describe the Slide

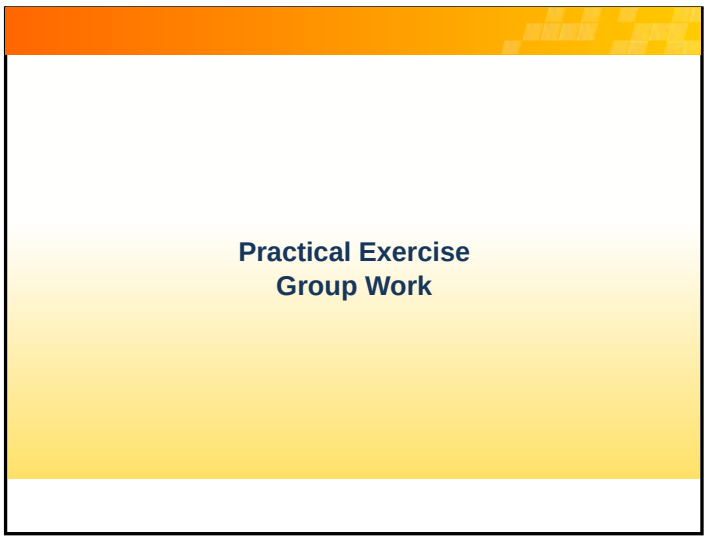
"Consider this next case very carefully. It involves all aspects of HSS sample selection and testing that we have discussed in our session today:

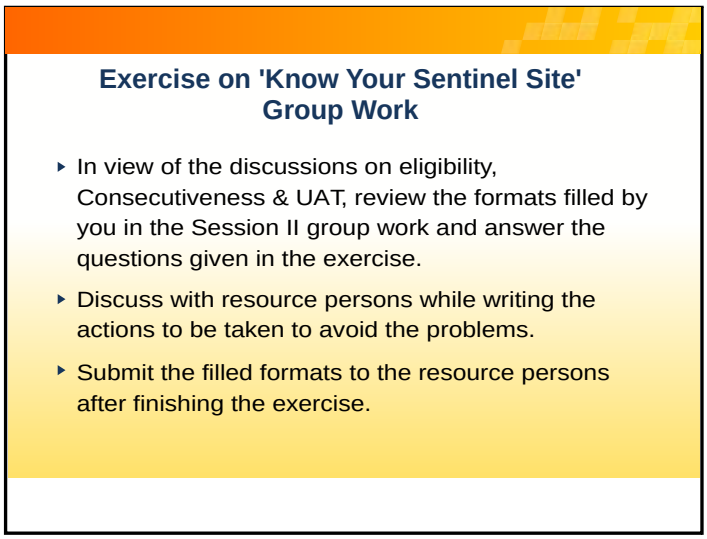
"This is a very interesting case study, since it touches upon all the principles of HSS. What do you think are the problems here?

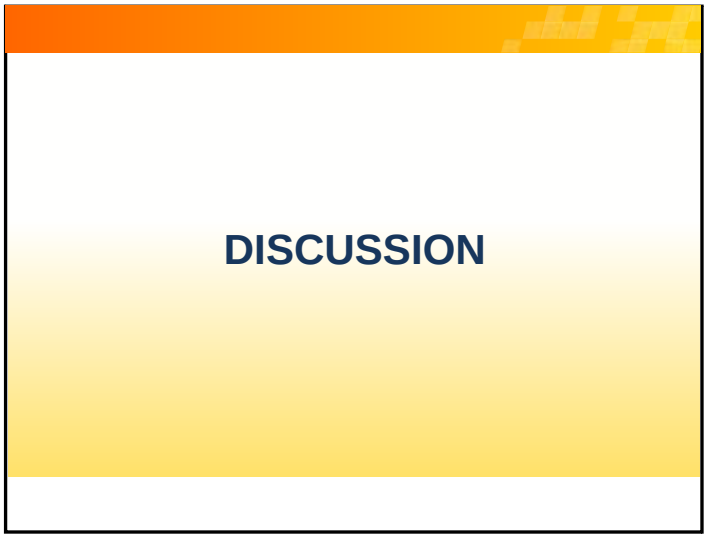
(Answer: By making a mark on the ANC card, the counselor is firstly violating the principle of UAT. By making any notation on the card, the knowledge of the pregnant woman being included in HSS is made evident. Secondly, by only including pregnant women who do not have the SS mark on the card, he is violating the principle of consecutive sampling. He is breaking the continuous order of recruitment (which maintains the randomness of the sample) by introducing a selection bias. Moreover, he is not following the inclusion criteria of first visit. If he was following the 'first visit since start of surveillance' principle, he would not even have considered second visits, and would have automatically rejected the attendee from HSS eligibility if she had already visited the ANC once during the surveillance period.)"

Suggestions to Facilitator

- Read the slide slowly, or ask a volunteer to read it out.
- Give some time to the participants to think over this particular case study, before you help them. The solution is provided in bold font, alongside the question above. After some discussion, in case participants are unable to answer, explain the situation again and help them with the solution.
- Ask participants with previous surveillance experience, if they've faced such a scenario and how it was tackled.
- Ask participants if they have any questions.







Describe the Slide

"We will be concluding today's session with another group work, which draws upon the "Know Your Sentinel Site" group work done on our previous session.

(Arrange groups according to sentinel site personnel and hand out their worksheets for completion.)

"The instructions are up on this slide. You have 15 minutes to finish this exercise. And your time starts now."

Suggestions to Facilitator

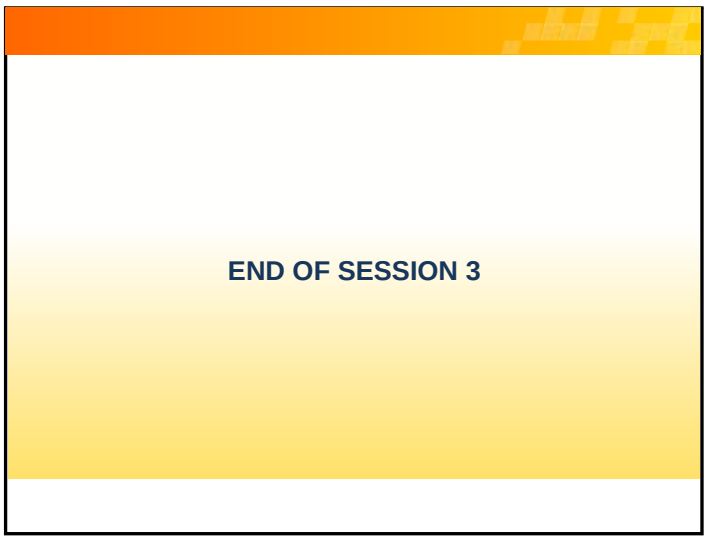
- Arrange groups according to sentinel site personnel and hand out their worksheets for completion.
- At the end of 15 minutes, start a discussion around their responses. Let volunteers read and discuss their responses. Ensure all participants raised their issues on consecutiveness, UAT, sample size etc. to discuss and resolve there it.

HIV SENTINEL SURVEILLANCE 2014-15
TRAINING OF ANC SENTINEL SITE PERSONNEL
FORMAT FOR SESSION III: EXERCISE ON METHODOLOGY OF HSS

(In view of the discussions on eligibility, consecutiveness & UAT in session -3, review the formats filled by you in session-2 group work and answer the following questions. Discuss with the resource persons while writing the actions to be taken to avoid the problems.)

1. If there are separate OPD timings for new and old ANC cases, when will you recruit pregnant women into surveillance? ..... *(Only from new ANC cases/ Only from old ANC cases/ Both)*
2. At what step of patient flow will you assess eligibility for HSS? .....
3. Based on the steps of patient flow and point of assessing eligibility for HSS, is there a possibility of missing any new case or old case from including in HSS, thereby affecting consecutiveness? .....*(Yes/ No)*
   a. If yes, elaborate. .....
   .....
   b. What should be done to avoid this problem? .....
   .....
4. At what step of patient flow will the HSS data form be filled? .....
5. Who will fill the HSS data form? .....
6. Based on the steps of patient flow and point of filling HSS data form, is there a possibility of missing any new case or old case from including in HSS, thereby affecting consecutiveness? ..... *(Yes/ No)*
   a. If yes, elaborate; .....
   .....
   b. What should be done to avoid this problem? .....
   .....
7. It what step of patient flow will the blood specimen will be collected? .....
8. Based on the steps of patient flow and point of collecting blood specimen, is there a possibility of missing any new case or old case from including in HSS, thereby affecting consecutiveness? ..... *(Yes/ No)*
   a. If yes, elaborate; .....
   .....
   b. What should be done to avoid this problem? .....
   .....
9. Based on distance between the steps of patient flow, is there a possibility of missing any new case or old case from including in HSS, thereby affecting consecutiveness? .....*(Yes/ No)*
   a. If yes, between which steps? .....
   .....
   b. What should be done to avoid this problem? .....
   .....
10. Based on the documentation maintained at different steps of patient flow, is there a possibility of linking the pregnant woman with HSS blood specimen, thereby violating UAT? .....*(Yes/ No)*
    a. If yes, elaborate; .....
    .....
    b. What should be done to avoid this problem? .....
    .....

11. Based on the way routine tests are prescribed for pregnant women, is there a possibility of missing any new case or old case from including in HSS, thereby affecting consecutiveness? ..... *(Yes/ No)*
    a. If yes, elaborate? .....
    .....
    b. What should be done to avoid this problem? .....
    .....
12. Based on the way pregnant women visit ANC clinic and PPTCT centre and the point of assessing elibility/filling HSS data form, is there a possibility of missing any new case or old case from including in HSS, thereby affecting consecutiveness? .....*(Yes/ No)*
    a. If yes, elaborate? .....
    .....
    b. What should be done to avoid this problem? .....
    .....
13. Based on the way HIV test results are issued, is there a possibility of selectively including or excluding known HIV positive cases in HSS, thereby creating selection bias? .....*(Yes/ No)*
    a. If yes, elaborate? .....
    .....
    b. What should be done to avoid this problem? .....
    .....
14. Based on the average daily ANC clinic attendance, what should be the optimal number of pregnant women to be recruited into HSS every day (not exceeding 20 per day) so that the procedures of ass essing eligibility, consecutiveness, filling data form and U!T are strictly followed? ..... *(Decide in consultation with resource persons)*
15. Does the HSS sentinel site in-charge who is attending this training conduct ANC clinic on all ANC OPD days? .....*(Yes/ No).*
    a. If no, what action will you take after going back to your hospital? .....
    .....



Describe the Slide

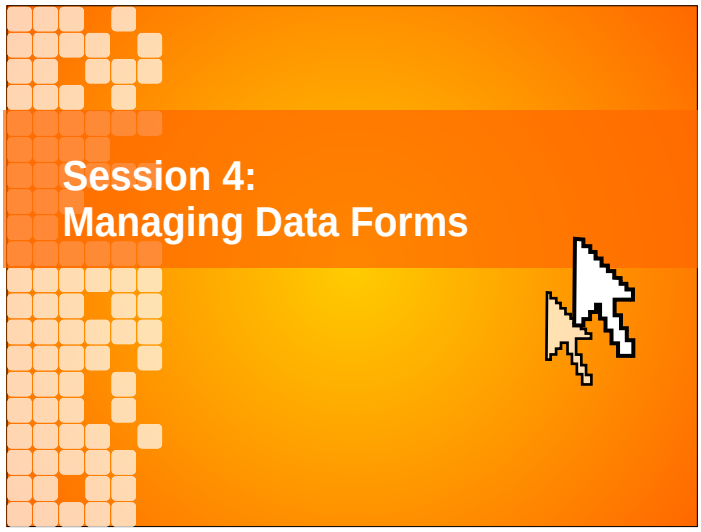
"We have now come to the end of today's training session on the methodology of sentinel surveillance at ANC sites. All of you should now know everything about the eligibility criteria of HSS candidates, the recruitment process, the consecutive sampling methodology and the UAT strategy."

Suggestions to Facilitator

- Take questions from participants, if any.
- Ensure all points/ doubts/clarifications noted on white board before the start of session were covered during the session.

Facilitation Tips for Session 4

Data Forms for Sentinel Surveillance at ANC Sites



Describe the Slide

"Once an eligible ANC client has been recruited, the next step in the HSS process is the filling out of data forms for each respondent. In this session, therefore, we shall discuss the management of data forms in great detail.

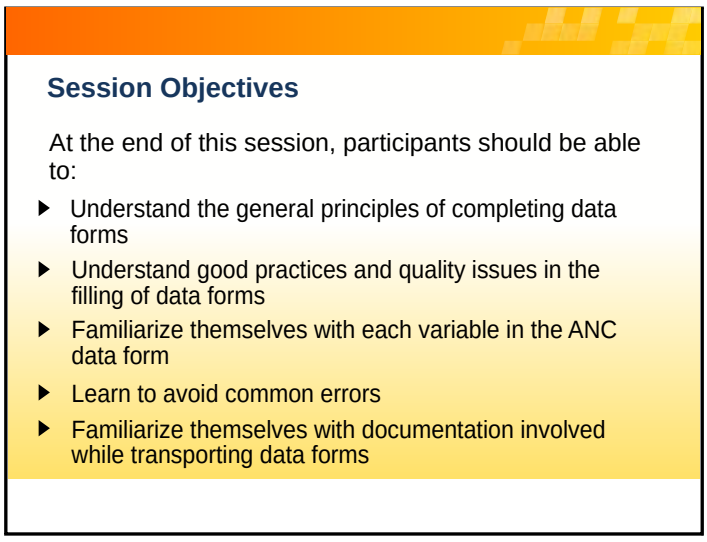
"It is important to keep in mind that data forms have to be correctly filled out while maintaining the respondents' privacy, re-checked by the lab technician, and securely stored at the sentinel site before being transferred to the RIs.

"Many of you – who have participated in earlier rounds of the HSS process – must be aware of how simple our data form is. But despite this simple structure, we still continue to see many errors when it is filled out by the HSS team. In some cases, certain errors invalidate or negate a whole sample, since vital information is left missing. These errors may include illegible, incorrect and/or inconsistent recordings. We shall be looking into some of the errors from our last round of HSS in the coming slides. These errors weaken and undermine all our efforts – because when data quality is compromised, the data generated does not produce accurate results. And most importantly, when such data forms are rejected and not analysed, the state and district level data gets affected.

"But please allow me to tell you that all these errors can be very easily avoided if all responsibilities in managing data forms are followed by the HSS team at the sentinel sites."

Suggestions to Facilitator

- Pause while moving from the second to the third message of this slide explanation. It would be helpful to stress on the message in the second paragraph.
- Before going to the next slide, you may recount your experience of a similar site visit.
- You may also randomly select one or two sites-in-charge, nurses/counsellors and lab technicians with experience in earlier rounds of the surveillance; and ask them to describe their roles in the data form management process from previous rounds. You might note down these responses on a separate flip chart/white board (which is in full view of the participants) and relate/refer to them later, while discussing the team's roles and responsibilities in managing data forms.



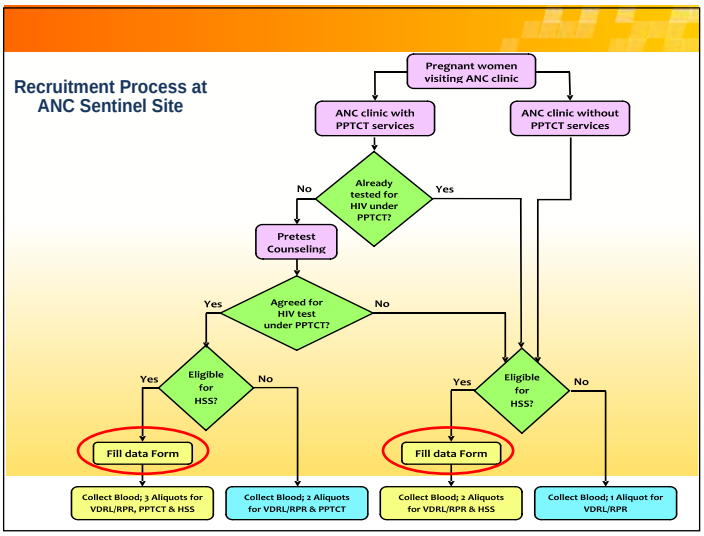
Describe the Slide

"In this session, we will help you gain a comprehensive understanding of various aspects of data form management. We shall focus on and explain every detail and also address your doubts and queries about the process.

"The objectives of our current session are to help you (I) understand the general principles of completing data forms; (ii) understand good practices and quality issues in filling out data forms; (iii) familiarize yourself with each variable in the data forms; (iv) learn how to avoid common errors; (v) and learn the documentation process for transporting data forms."

Suggestions to Facilitator

- After completing the first paragraph, you may read out the session objectives OR randomly invite participants to read them out one by one.
- Ask participants if they have any other points that they would like covered/addressed during this session on data form management. If any relevant suggestion is made, make a note of the same on the separate flip chart/white board, and include the point(s) wherever necessary during the current training session.



Describe the Slide

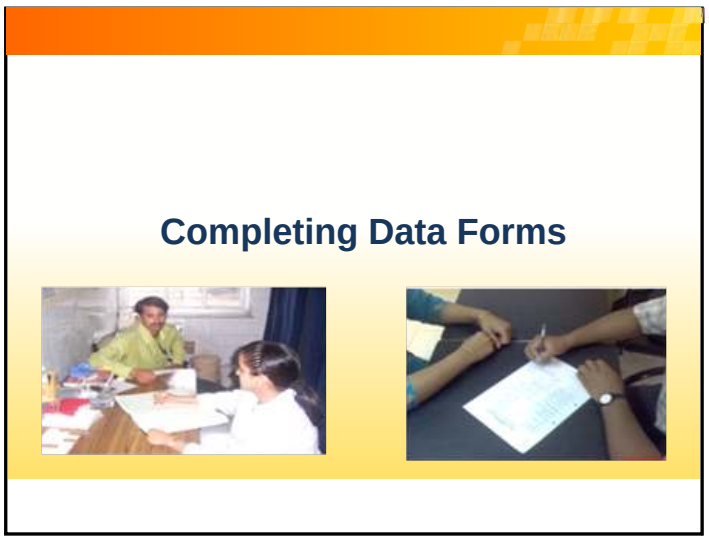
"This is an overview of the stage of data forms in our entire surveillance process. We have already discussed earlier that the process takes two different routes, depending on whether the ANC site is also a PPTCT facility or not. We shall not go into that discussion again. But what we will emphasize at this point is that the stage for filling out data forms comes only when an ANC client has been found eligible for HSS.

"If the ANC client is found to be ineligible for HSS by the attending doctor, no data form needs to be filled out at all for HSS purpose. Another important point is that blood samples for routine tests (syphilis/Hemoglobin test) and/or PPTCT (as applicable) shall be done only after completing the data forms for the eligible respondents. A portion of the sample is taken for HSS while making aliquots."

Please remember that the blood sampling process should NOT begin without a respondent's completed data form."

Suggestions to Facilitator

- Before going on to the two paragraphs above, first ensure that all participants are on page 10 of the *Operational Manual for ANC Sentinel Sites 2014-15*, and are referring to the flow chart when this slide is being described.
- You may then randomly invite participants to describe the flow chart and identify the stage of filling up data forms within it, maybe like this, "Can anyone tell me what this flow chart is showing? Can you tell me exactly where 'Data Forms' are being filled in this chart?" and so on.
- Lastly, make a click with your mouse so that the red circle encircles the 'Fill Data Form' box for emphasis. Now you can begin with the above paragraphs.
- While speaking out the first paragraph, you may remove the 'red circle'; and then repeat the clicking action at the end of the paragraph, to emphasise the placement of the 'Fill Data Form' box within the flow chart.



Describe the Slide

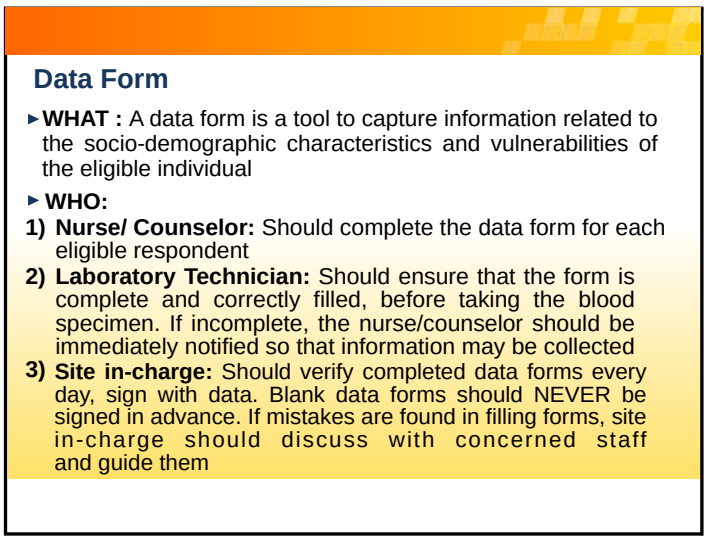
"In the next few slides, we shall be discussing in great detail the various aspects of completing data forms.

"An important aspect in this process is maintaining client confidentiality. Nurses/counsellors should remember to exercise caution while collecting information from recruited respondents. They may also need to probe sometimes to correctly assess a respondent's response.

"Ideally, the nurse/counsellor should be seated close to the doctor to avoid common cases of eligible ANC attendees going missing. It has often been observed that when the counsellor is placed at a distance from the examining doctor, eligible ANC clients do not reach the counsellor's desk. It is also ideal for the lab technician to be nearby when data forms are being filled out, so that respondent drop-outs may be avoided and data form errors may be re-checked and corrected immediately."

Suggestions to Facilitator

- In this slide, remember to cover points regarding the importance of probing the correct answers from respondents. For example, make sure that the question on 'Duration of stay at current place of residence' refers to the respondents' marital homes and not to their mother's homes. This is a common misinterpretation that Counsellors need to be aware of.



Describe the Slide

"At all ANC HSS sites, a simple one-pager tool is used to capture the basic information of eligible pregnant women. This is what we call a 'Data Form'.

"As you can see from your sample data forms, there are nine questions for recording the respondent's age, literacy level, order of current pregnancy, source of referral, current place of residence, duration of stay at current place of residence, occupations of the respondent and her spouse, and finally the spouse's migration status.

"We shall now discuss the roles and responsibilities of the HSS team, before discussing when and how data forms should be filled.

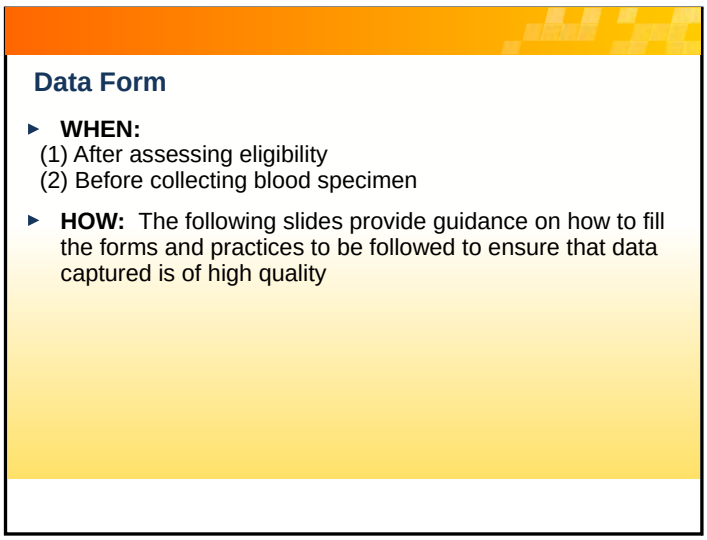
Now please pay attention to the bottom of your data forms, at the area which needs names and signatures. As you can see, there are two people whose names and signatures need to be recorded here. On the left-hand side, the name and signature of the person who has filled out the data form is required. This will be the nurse/counsellor who is responsible for completing the data forms for each eligible respondent.

"And then moving on to the bottom right hand corner of the data form, the name and signature of the sentinel site-in-charge is required here. This is the person responsible for verifying completed data forms every day, before signing them off with a date. A site-in-charge should never sign a blank data form in advance. If you find mistakes in the data forms, you should discuss it with your concerned team member and guide them accordingly. At the end of day, please do remember that it's the site-in-charge who is accountable for the completeness and correctness of the data forms of every eligible ANC client.

"While we have discussed the roles of the nurse/counsellor and the site-in-charge in managing data forms, the role of the lab technician is also vital. Once an ANC client is found eligible for HSS, and her data form is filled out, the next crucial step is that of blood sample collection. Here the lab technician's responsibility is to check each and every data item to ensure that all information is correctly and completely filled up. In fact, this is probably the last opportunity available in the HSS process to correct any error on data forms, as the respondent would most likely leave the ANC facility once her blood specimen collection process is over."

Suggestions to facilitator

- Please ask participants to refer to pages 33-34 of the *Operational Manual for ANC Sentinel Site 2014-15*. Also hold up the data form for all participants to see, when you describe it in the first and second paragraphs.
- Ensure that all participants have extra copies of the data forms handy with them to refer to in subsequent slides; and also for hands-on practice in filling them up correctly.
- After introducing the data forms and mentioning about 9 questions in them, you may ask the audience to describe the role of each of team member of the surveillance site, towards data forms management.
- You may ask lab technicians, sites-in-charge, and nurses/counsellors to raise their hands, before asking them questions about their specific roles and responsibilities.
- You may recall earlier participant responses to roles and responsibilities from Slide 1 (duly noted in a separate flip chart); and refer to them here.



Describe the Slide

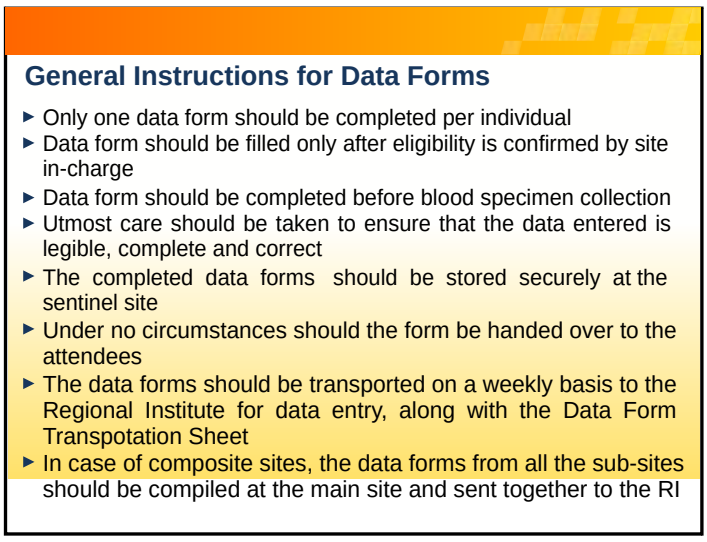
"Now we come to 'when' and 'how' data forms should be filled out. As discussed earlier, we would like to emphasise here again that data forms have to be filled out after ensuring an ANC client's eligibility; and before collecting her blood sample.

"We will now discuss how the data forms should be filled up – so that they are legible, comprehensible, of high quality, and complete with all relevant information. Remember that we have nine questions in all; out of which point number 1 and point number 6 have to be clearly written out, and the rest need to have their correct option numbers circled properly

"It is important for a trained nurse/counsellor to fill up the data form, instead of untrained staff. Even lab technicians should not be filling them out – remember that they are the first and only line of checking, wherein they check for completeness and accuracy of the respondent's responses while the recruited respondent is still at the facility and corrections are still possible. Counsellors should also remember to illicit correct responses by probing questions, instead of casually recording a respondent's answers. Otherwise the quality of recorded data may be compromised.

Suggestions to facilitator

- You may recall the flow chart from Slide 3 for discussing the 'When' of the data form.
- You may reach out to the audience and throw a question to them about personnel responsible for assessing the ANC client eligibility for HSS. This will keep the session interactive as well as reinforce the learnings on roles and responsibilities of various personnel.
- At the end of the second paragraph, you may ask one of the trainees to read out the questions in the HSS forms where we need to write something to capture the recruited respondent response. (Q1, Q6)
- You may offer various examples from experience to illustrate points regarding a counsellor's distance from ANC's examining doctor, untrained counsellors/nurses, and/or of counsellors not probing/examining a respondent suitably for the correct answer, etc.



Describe the Slide

"We shall now discuss the general instructions for filling out data forms.

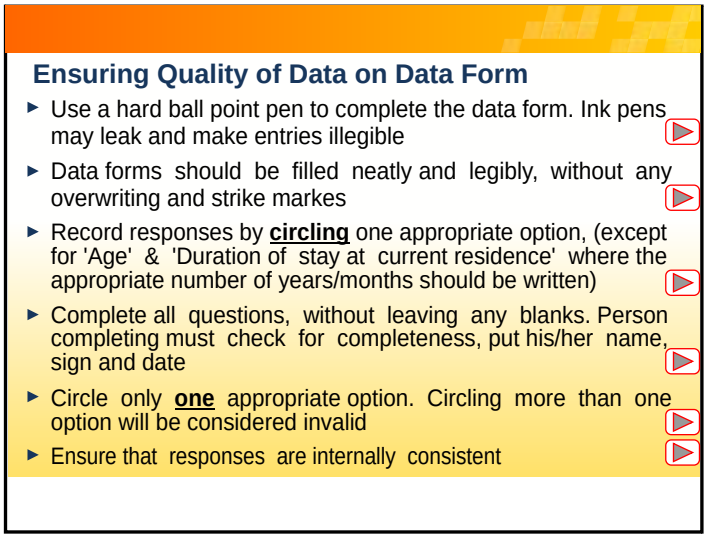
"Remember that data forms should only be filled for eligible respondents, as confirmed by the site-in-charge. And not more than one data form should be used for each individual. As discussed earlier, these forms should be neatly and correctly filled up before any blood sample collection.

"The site-in-charge should ensure that no photocopies of data forms are made, and neither any HSS register maintained. Maintaining client confidentiality is of utmost importance, as we shall discuss later in detail.

"These data forms should be securely stored at the sentinel sites, before being safely transferred to the RIs on a weekly basis. Data forms from composite sites should be transported with great care. It is recommended for the main site to compile data forms from every sub-site, and then send it all together to the RI. However, there may be sub-sites that may find this recommendation difficult to implement for logistical reasons. If any such sub-site needs to deviate from the general principle, their case may be examined and site-specific alterations may be suggested by the SACS focal personnel for surveillance to the sentinel site-in-charge."

Suggestions to Facilitator

- Try to explain the importance of each point through examples and/or field experiences.
- You may reach out to the audience to ask if there are any composite sites who will like to directly send their data forms to RI. Ask them why they want such arrangements. During discussions, if any justifiable need arises for specific sub-sites to follow alternative data sheet transportation arrangements/co-ordination, ensure that the SACS focal personnel for surveillance are made aware of such requirements, and that a note has been made on-site for any such changes in practice.
- After covering the slide's bullets points, you may take up questions from participants, if any.



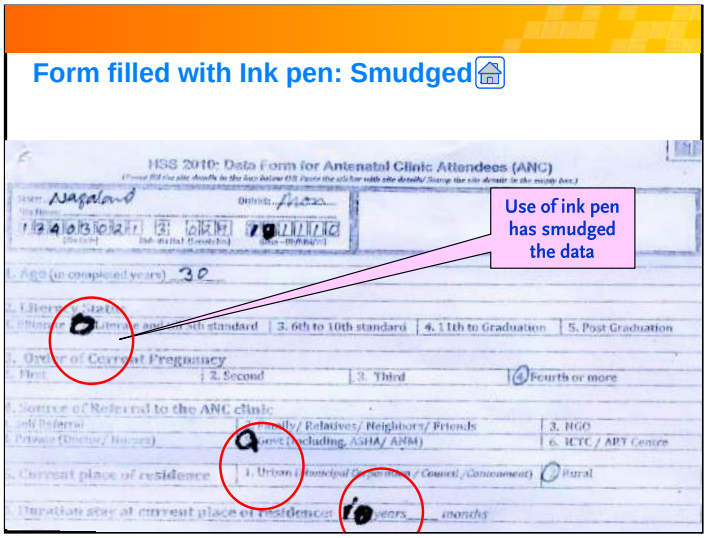
Describe the Slide

"Now that we have covered the general instructions for filling out data forms, let us turn to the recommended practices for completing the options for various data items. We shall go through them one by one. We will also discuss how some common mistakes are made in filling out forms, and how they may be avoided.

"You should all be aware that compromising data quality – though human errors and/or a casual approach towards the surveillance exercise – will lead to the poor performance of the overall sentinel site."

Suggestions to Facilitator

- You will see a play radio button alongside every bullet point. These play buttons are hyperlinked to elucidate a point through the practical example of a form that is wrongly filled.
- After you read a point, click on the play button to bring up a slide which demonstrates that point. The home button next to each heading on the hyperlinked slide will return you to the Slide again.
- This slide is very rich in content. Go over each point with your participants, as shown in the next pages.



Describe the Slide

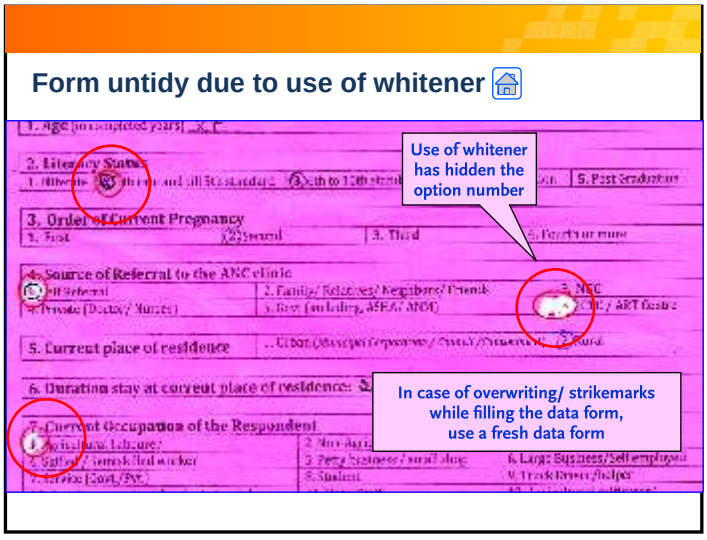
"As you can see, the use of an ink pen has smudged the recorded data in this particular form, making the information illegible. (You cannot read it).

"Ink pens are generally discouraged because they may cause the ink to spread to the next question, they may even blot a page, and/or smudge a neighboring option. In all these cases, the data form will be untidy and cause misinterpretation at the data entry level.

"In addition to ink pens, the use of lead pencils to complete data forms should also be discouraged, as they may lead to information getting deleted over time and/or information getting compromised easily."

Suggestions to Facilitator

- Clicking on the 'home' button next to the heading on top of this slide. This will return you to Slide No. 8 again.



Describe the Slide

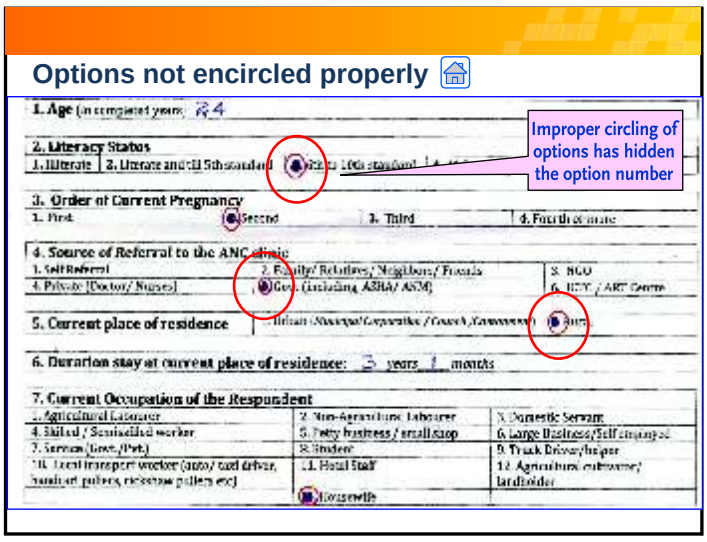
"And in this case, notice how overwriting has made the information in this form illegible.

"Overwriting creates confusion for the data manager, leading to human errors in data entry and data interpretation.

"Please remember that if you make a mistake – by ticking the wrong option, ticking multiple options, filling in the wrong data – you should discard the form and start over with a fresh one. DO NOT use strike marks or whiteners to correct mistakes in a form."

Suggestions to Facilitator

- Clicking on the 'home' button next to the heading on top of this slide will return you to Slide No. 8 again.



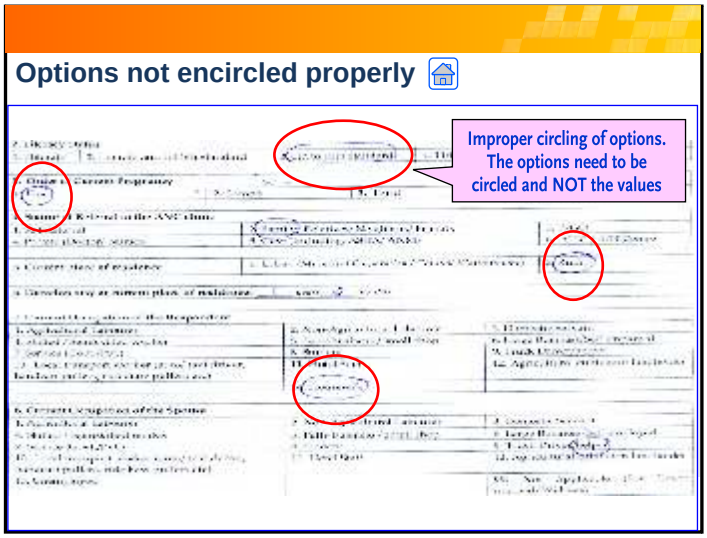
Describe the Slide

"Notice how the correct options in this form are not marked properly. Please ensure that the appropriate option is CIRCLED in such a way that the right option number is clearly visible. Coloring the option number or totally covering it with pen marks should be absolutely discouraged by the site-in-charge.

"Moreover, such wrong practices will indicate that untrained personnel have been involved in data form management – leading to the poor performance of the site."

Suggestions to Facilitator

- Clicking on the 'home' button next to the heading on top of this slide will take you to Slide No. 12, as these two slides are linked.



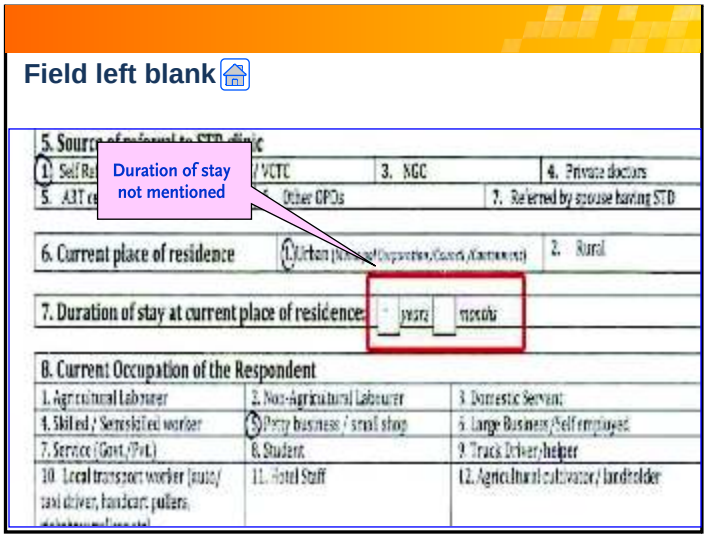
Describe the Slide

"Now in this case, a team member has wrongly circled the option values, instead of the option numbers. Please make sure that you circle the option numbers — such as "1" or "2" — instead of option values — such as "Urban" or "Rural".

"The implications in this case are also similar to the last instance. These are all unacceptable practices as per the HSS guidelines, and should be avoided under all circumstances. These wrong practices will further lead to the disruption of flow during data entry and subsequent data entry errors."

Suggestions to Facilitator

- Clicking on the 'home' button next to the heading on top of this slide will return you to Slide No. 8 again.



Describe the Slide

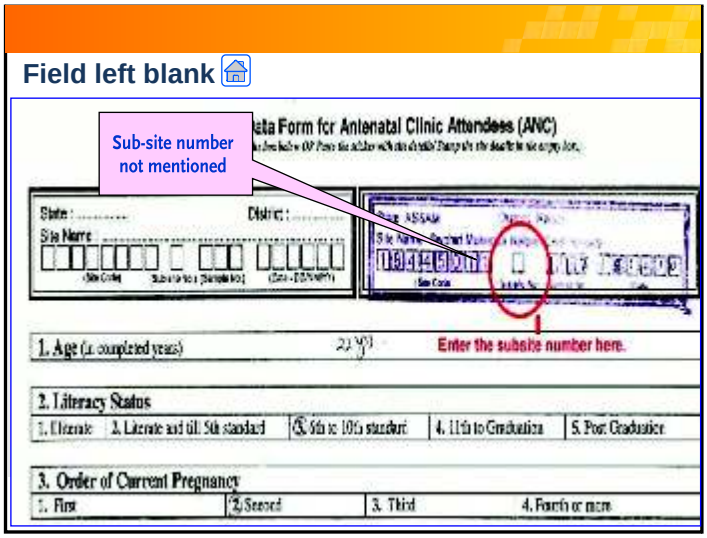
"Another erroneous practice demonstrated here is leaving questions blank. Please remember that there MUST be an answer for all questions asked on the data form. In case a question is not applicable, the 'Not Applicable' option number (99) must be selected and circled.

"All questions – except that on Age and Duration of Stay – are multiple option questions that need to be circled. For Age and Duration of Stay, the actual values must be clearly written out.

"Please remember that especially for vital data points like age, occupation of respondents and of their husbands, etc., such errors may lead to the rejection of data forms thus affecting the quality of data. Please also remember that only one appropriate answer needs to be encircled for each question except for question no 1 and 6. Encircling more than one option will make the response invalid."

Suggestions to Facilitator

- Clicking on the 'home' button next to the heading on top of this slide will take you to Slide No. 14, as these slides are linked.



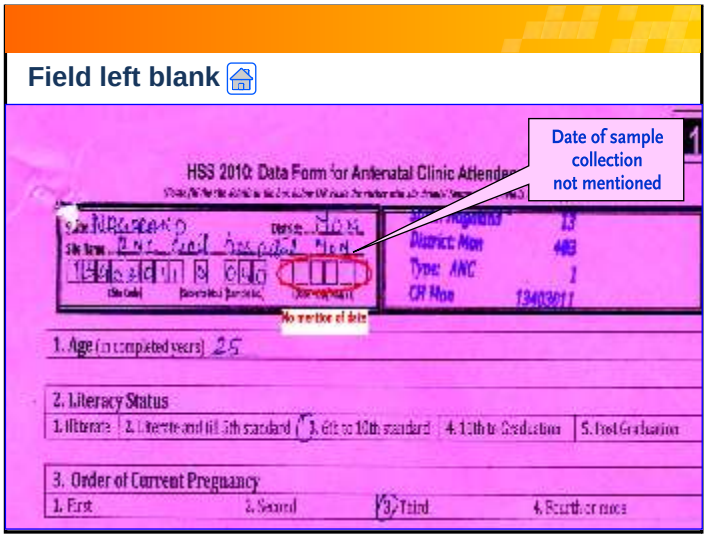
Describe the Slide

"As discussed, no data points may be left blank. Providing the HSS staff with site codes and sub-site numbers, especially, is the joint responsibility of the SACS focal surveillance personnel as well as the sentinel site-in-charge.

"Site codes and sub-site numbers are an important link for the RIs to identify data forms. Missing site codes make it very difficult to locate data at the state/district level, as each RI receives data forms from multiple sentinel sites. Retrieving such data is unnecessarily time consuming and delays the data entry process."

Suggestions to Facilitator

- Facilitator should ensure that site codes and sub-site numbers are communicated to the HSS team by the SACS nodal surveillance personnel.
- Clicking on the 'home' button next to the heading on top of this slide will take you to Slide No. 15, as these slides are linked.



Describe the Slide

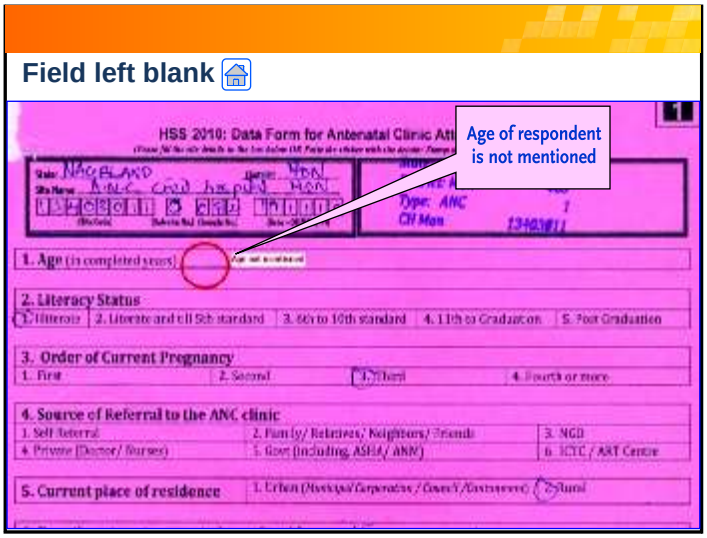
"This is yet another example of blank information points in the data form. In this case, it is the Date of sample collection that has been left out.

"This is another vital parameter/ variable showed here in the surveillance data analysis process to understand data collection patterns; as well as for epidemiological investigations after the surveillance if necessary.

"Dates are also important for filling up data transportation sheets; and missing dates in data forms may lead to errors in the overall documentation process. Lastly, missing dates cast doubts on whether or not the given timeline for HSS had been followed by the sentinel site ."

Suggestions to Facilitator

- Clicking on the 'home' button next to the heading on top of this slide will take you to Slide No. 16, as these slides are linked.



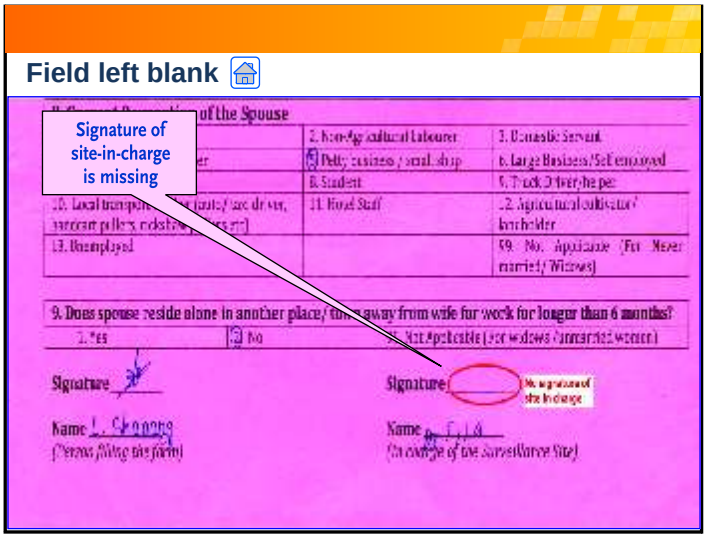
Describe the Slide

"Notice that in this example, the Age has been left out. As mentioned earlier, here the respondent's age in completed years must be clearly written out.

"Missing a vital variable like age will lead to a rejection of data form, and hence loss of important data set for the state and district level analysis."

Suggestions to Facilitator

- Clicking on the 'home' button next to the heading on top of this slide will take you to Slide No. 17, as these slides are linked.



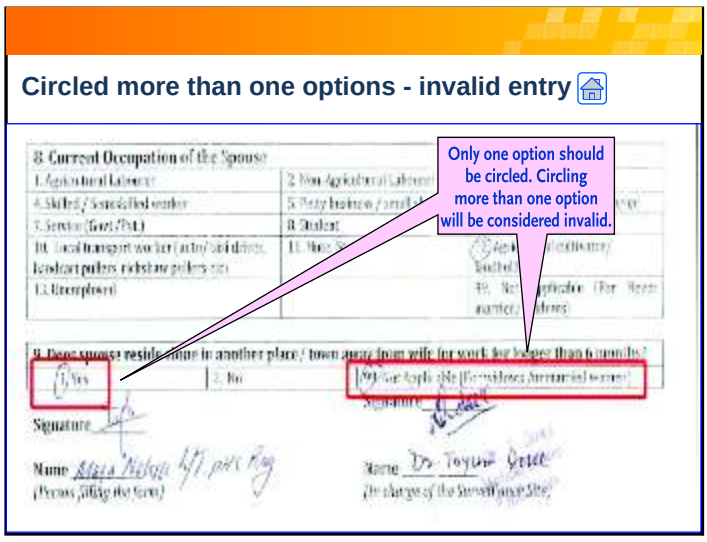
Describe the Slide

"And in this instance, an important signature is missing. Remember that the site-in-charge's signature must be present on every form as proof that it has been checked for quality.

"When a signature such as that of the site-in-charge goes missing, it throws doubts on the guidelines being followed at the sentinel site. It is recommended that the site-in-charge checks and signs data forms at the end of each day. This helps in the early identification and correction of errors in data forms." This is one of the most common errors reported during the surveillance monitoring. Please note that as site-in-charges are reviewing data forms at the end of day, in most cases error identified can not be corrected for data forms which are being reviewed. However, this process of review by the site-in-charges combined with a feedback mechanism to nurse/counselor will help in reducing future errors."

Suggestions to Facilitator

- You can talk about different on-site practices, where some sites-in-charge check every form at the end of the day; some check them every two days; and some check them real-time, as and when the forms are filled up. There is a level of periodicity in each form checking process and the most suitable practice should be adopted by the relevant site.
- Clicking on the 'home' button next to the heading on top of this slide will return you to Slide No. 8 again.



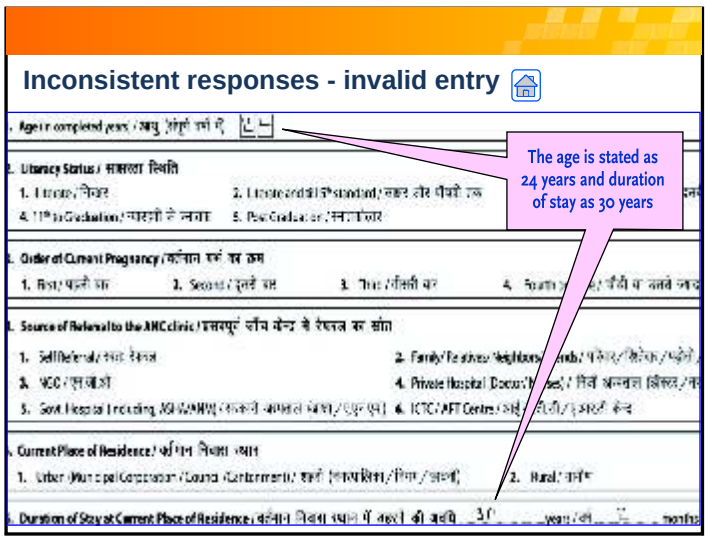
Describe the Slide

"As demonstrated here, please remember NOT to circle more than one option for each data point. If the lab technician notices a mistake like this, he/she should immediately contact the nurse/counsellor for the correct option, before collecting any blood specimen."

"This data will not be entered and the data form will be rejected. Such wrong practice indicates lack of training among HSS staff, as well as an issue of data validation at the site."

Suggestions to Facilitator

- Clicking on the 'home' button next to the heading on top of this slide will return you to Slide No. 8 again.



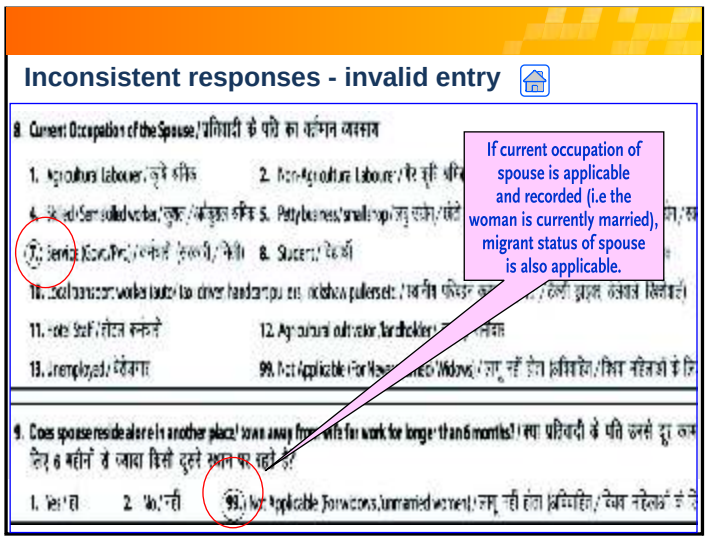
Describe the Slide

"Here is an example of internal inconsistency of data. All data points must be checked once a form is filled out to ensure that no response contradicts another. For example, in this case the age of a respondent is being shown as less than her duration of stay at her current residence.

"This indicates lack of data validation at the site; and the need for further training of the HSS staff." This also indicates a casual approach in filling data forms which is to be discouraged.

Suggestions to Facilitator

- Clicking on the 'home' button next to the heading on top of this slide will take you to Slide No. 20, as these two slides are linked.



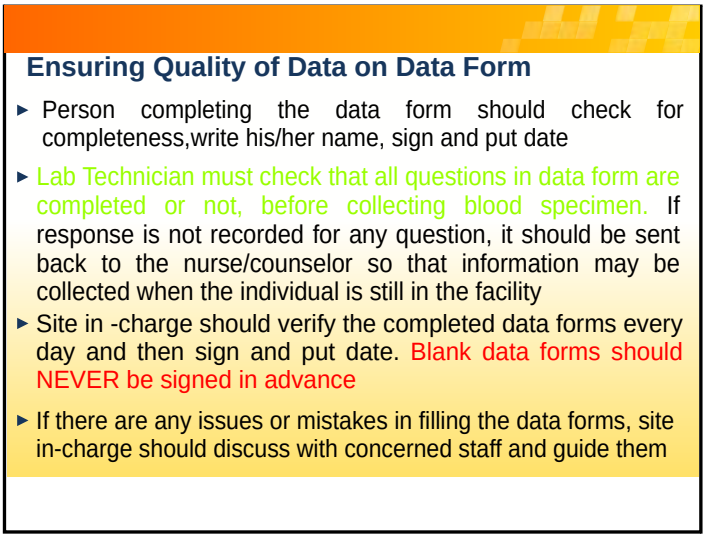
Describe the Slide

"Here is another example of internal inconsistency of data. Notice that the occupation of the spouse has been provided, and yet the option for migration status of the spouse has been chosen as Not Applicable – which should only be chosen in case of unmarried or widowed women."

"This too, if the above is not applicable, would signify lack of understanding about significance of sentinel surveillance and lack of data validation system at the sentinel site. It also indicates that the HSS team requires more training."

Suggestions to Facilitator

- Clicking on the 'home' button next to the heading on top of this slide will return you to Slide No. 8 again.

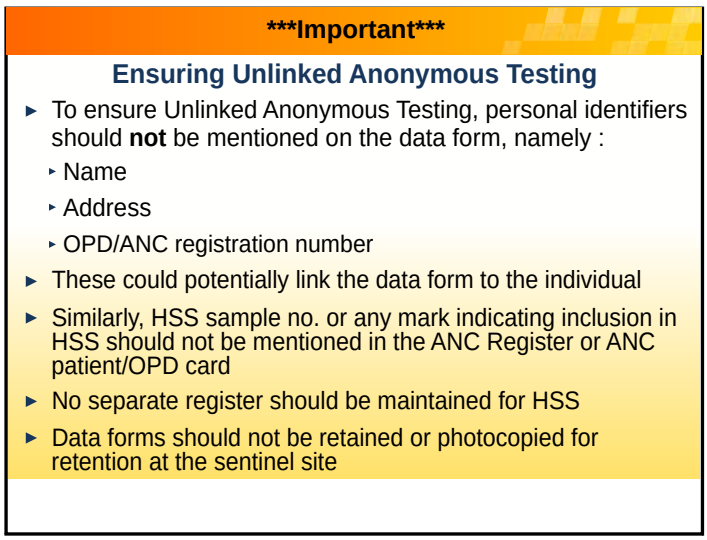


Describe the Slide

"We have certain tips for all of you to ensure that data collected during HSS are of high quality. These tips are for all site personnel as all of you have some very important role in data forms management. We shall now review certain important issues/pointers for ensuring data quality in the forms."

Suggestions to Facilitator

- Make this review session an interactive one. Try to especially involve those participants who have not interacted / responded so far.
- Time permitting, you may introduce role playing techniques too. For instance, "A respondent comes in for a blood sample along with an incomplete data form, who is to intervene and how?" Or, "At which stage should the site-in-charge sign a data form?" and so on.



Describe the Slide

"Remember our earlier discussion about not collecting any personal identifying information of the respondents? In keeping with the principles of UAT, we DO NOT collect any personal identifying information through these data forms.

"The form only collects information about the age, marital status, literacy status, source of referral to the facility, order of pregnancy, duration of stay at current residence, occupation of participant and spouse (if applicable) and migration status of the spouse (if applicable). No one can trace a respondent back to her town or village, based on this information alone, because no personal identifiable information – such as name or residential address – is collected.

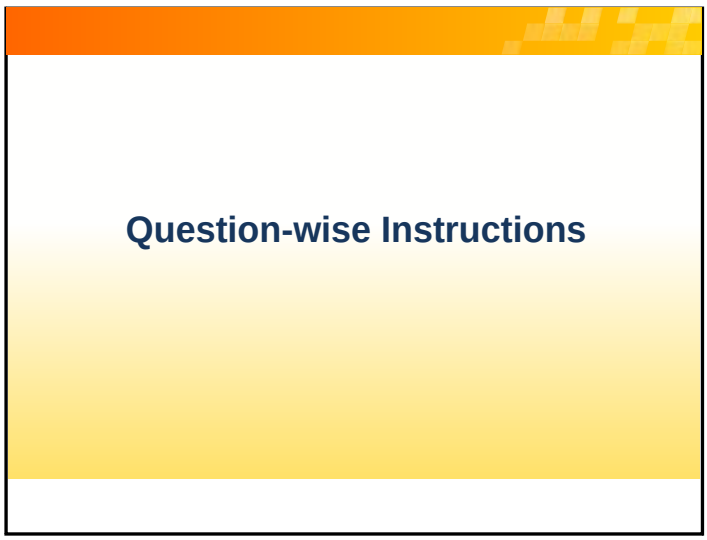
"For the same reasons, OPD/ANC registration numbers of respondents should NOT be noted anywhere in the data form. And similarly, HSS sample numbers/codes or markings should NOT be noted in their OPD card or the ANC Register.

"Let me emphasize once more that we DO NOT collect an ANC attendee's personal information for the purpose of HSS. Since the blood specimen is drawn for other purposes, the HSS just makes use of an existing process and tests part of the sample for HIV prevalence to study trends among ANC attendees. And even though data forms do not have identifiers, they should still be stored securely at the ANC sentinel site before sending them to the regional institutes for data entry.

"Collecting personal identifiers would violate UAT's principle of confidentiality. In case a respondent wishes to know her sero-status, she may be referred to PPTCT. Under HSS, all data and sample collection is for surveillance and public health monitoring purposes alone."

Suggestions to Facilitator

- You may ask participants to refer to page 13 of the *Operational Manual for ANC Sentinel Sites* -2014-15. After delivering the message in the slide, please go back to the audience and check if message on UAT is clear to them.



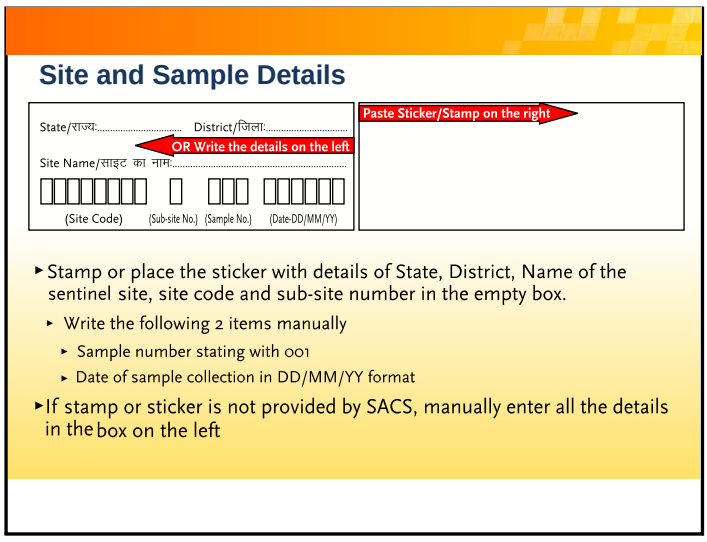
Describe the Slide

"Now let's turn again to the *Operational Manual*. Please refer to pages 33 and 34 of Annex-1 for the latest data form in use for ANC attendees. Instructions for filling out the data forms are provided in pages 15-17 of the *Operational Manual for ANC Sentinel Site 2014-15.*

"We shall now go over each data point, beginning from the top of the form. Please note that you can also find the explanation of each question on the back of bilingual data forms. "

Suggestions to Facilitator

- Please ensure that participants have their copies of the *Operational Manual for ANC Sentinel Sites 2014-15* handy at this stage.
- Also ensure that all participants have extra copies of the language-appropriate data form.
- Mention that data forms are available in English and other local/regional languages, such as Tamil, Kannada, Telugu, Bengali and Hindi.



Describe the Slide

"As this slide suggests, we shall now focus on site and sample details.

"For the empty box on the top right-hand corner, you should be provided with either stickers or a stamp by the SACS office, with your sentinel site details. These should be pasted/stamped inside the empty box; and just the Sample Number and Date of sample collection should be manually filled up/entered.

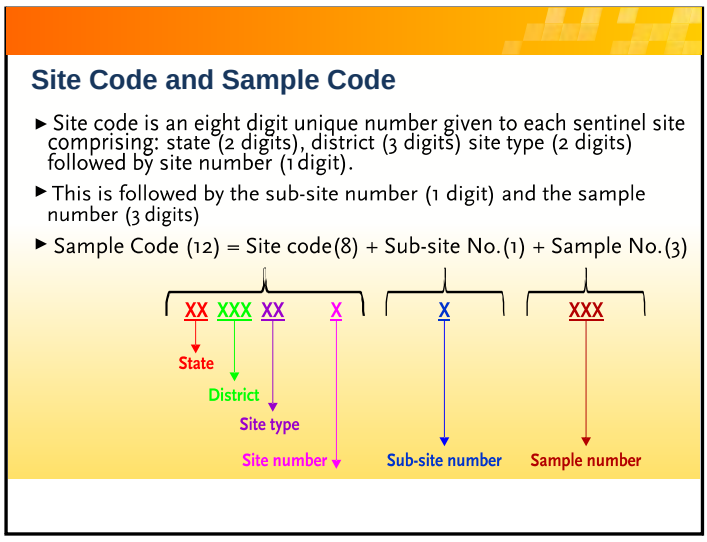
"In case stamps/stickers are unavailable, you should fill up your sentinel site details manually in the box on the top left-hand corner. "It is, however, always recommended that stickers/stamps be used as they minimize the chances of errors and/or blank areas.

"The site code, the sub-site number, the sample number and the sample date should all be clearly written out on the data form.

"We will now focus on the right procedure for filling out the site and sample codes for both single and composite sites."

Suggestions to Facilitator

- Remind the participating sites-in-charge that their stamps/stickers with site details should be collected from the SACS focal/nodal person for surveillance before they leave the current training session.
- Ask participants if there are sub-sites present in the room by a show of hands. Then randomly find out whether any HSS team from a composite site knows its site code and sub-site number. The response may be addressed and further discussed during the next few slides which deal entirely with sub-site coding.



Describe the Slide

"Please notice that this slide demonstrates how the sample code is formed. This slide breaks down the code for you, one component at a time. This illustration should make it fairly simple to understand.

"The Sample Code is actually a 12 digit number which comprises the Site Code, the Sub-Site Number and the Sample Number. When broken down further we see that:

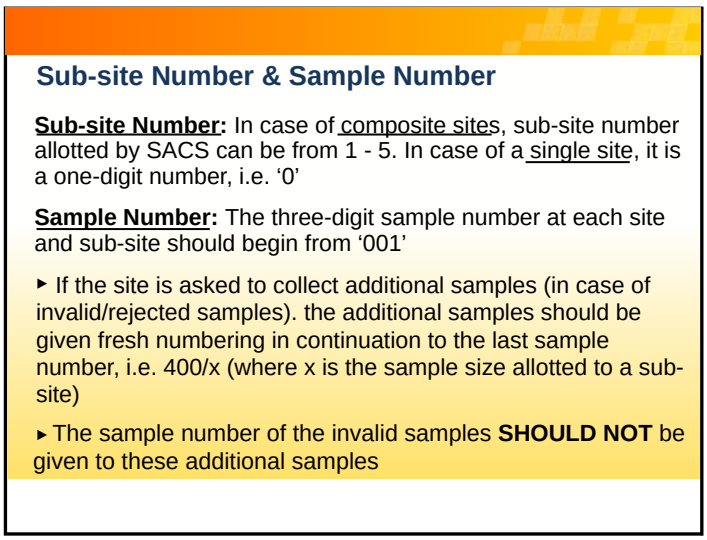
1. The 8-digit Site Code is made up of the state code (2 digits), the district code (3 digits), the site type (2 digits) and the site number (1 digit). Codes for state, district & site type are self explanatory, but what about site number? There may be more than one ANC site in a district. In such cases the serial number of that particular sentinel site is denoted under the site number. For instance, if a site is the third ANC site in district Y of state X, then the site number will be '3'.

2. The Sub-Site Number is a 1-digit number which can have a value between 0 and 5. The sub-site number denotes that the site which is filling this form is a sub-site as a part of a parent site. In case the site is a 'single site' and not a composite site, the sub-site number will be zero ('**0**'). All HSS team members should know their sub-site numbers.

3. And finally the Sample Number is simply the consecutive numbers of the ANC samples that are collected on-site. It should start from '001' and may go on to '400' for stand-alone, 'single sites' OR may be a number lesser than '400' for composite sites, according to the sample size allotted to that particular sub-site.

Suggestions to Facilitator

- You may ask every participant their site code and sub-site numbers. In case of any discrepancies, the site-in-charge should be reminded of his/her responsibility to get this from the SACS and provide it to the team.
- Share at least two filled out sample data forms to illustrate site and sample code details for single and composite sites. These should be further discussed in the next slide.
- For instance, the sample code for a composite site of District X, from State Y, may look like this: (The 2-digit State Code) 18 + (the 3-digit District Code) 009 + (Site Type) 01 + (Site Number) 1 + (the Sub-Site Code) 3 + (Sample Number) 171
- And the sample code for a single site at Gangarampur from Dinajpur District, West Bengal, may look like this: (The 2-digit State Code) 19 + (the 3-digit District Code) 323 + (Site Type) 01 + (Site Number) 1 + (the Sub-Site Code) 0 + (Sample Number) 099



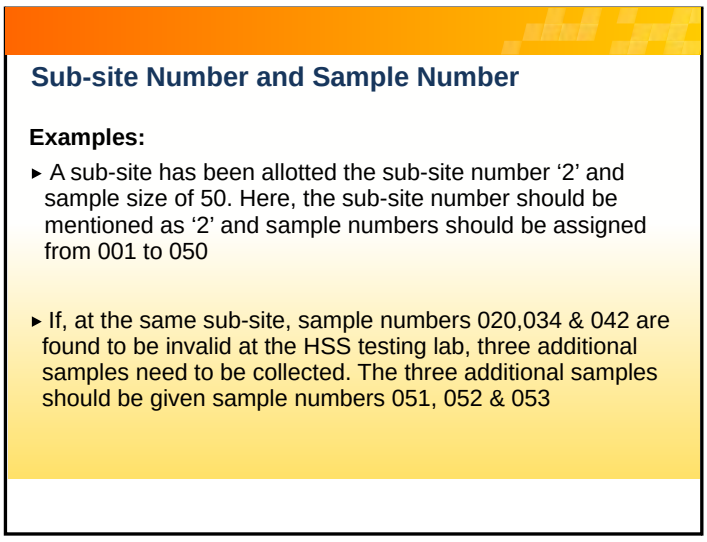
Describe the Slide

"Let us try to further explain the break-up of the site and sample codes here.

"As mentioned earlier, the Sub-Site Number is a 1-digit number which can have a value between 0 and 5. The sub-site number denotes whether the sentinel site is a sub-site as part of a composite site; OR whether it is a 'single site'. The sub-site number for a 'single site' will always be zero ('0').

"As for Sample Numbers, they always start from '001' and usually go up to '400' for a single site. For composite sub-sites, this number varies from '001' to 'x', where 'x' is the sample size allotted to a particular sub-site. Please do note that the sample number of a single site may go more than 400 in case of invalid/rejected samples for the site as unique sample number shall be given to each of the additional sample to be collected against invalid/rejected samples. Same is the case in case of composite sites if there is additional sample collection for invalid/rejected samples."

"Please remember that each sample number is unique; and the sample numbers from rejected data forms should NOT be re-used while filling out fresh forms."

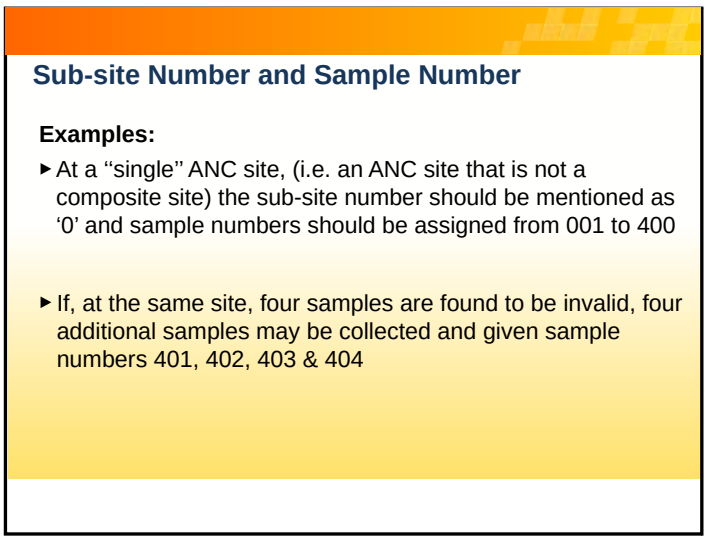


Describe the Slide

"Here we have more examples of sub-site numbers and the use of fresh sample numbers, in case of rejected data forms at a composite site."

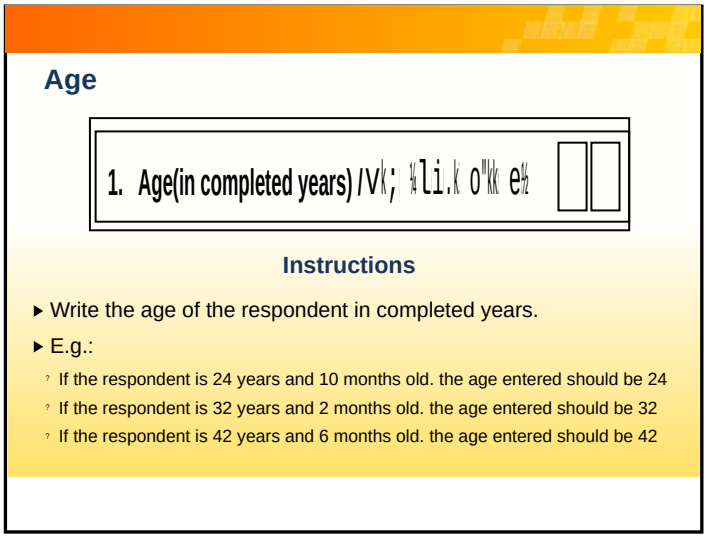
Suggestions to Facilitator

- Teams may also be asked to work out sample codes for other such composite sites; and how to number additional samples at such sites. Use scenarios relevant to sentine sites and participants.



Describe the Slide

"Here we have examples of single sentinel sites and the use of fresh sample numbers, in case of rejected data forms."



Describe the Slide

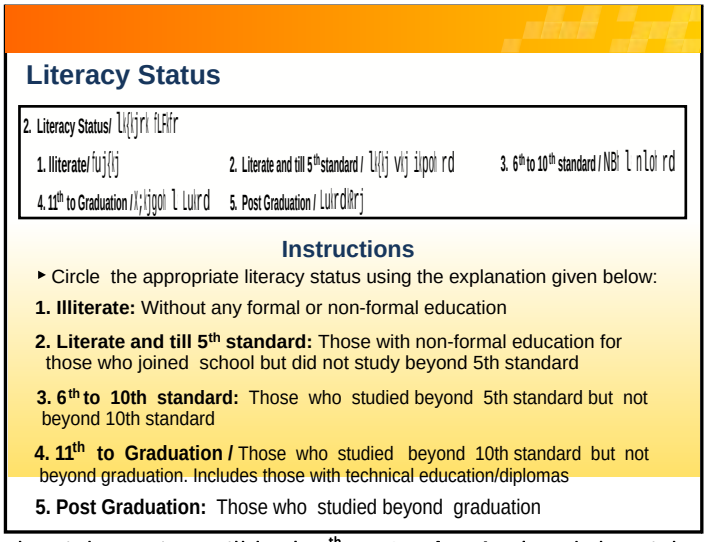
"Here we will see how a respondent's age should be correctly entered. It should be clearly written out in terms of completed years.

"For example, if a respondent's age is 24 years and 10 months, you should write 24; if her age is 18 years and 2 months, you should write 18; if it is 45 years and 6 months, you should still write 45.

"As discussed already, age is a vital parameter/variable in our analysis. It is therefore important to ascertain the respondent's age correctly. Please remember that ANC mothers come from heterogeneous backgrounds and may not always understand and/orrespond correctly to your questions, unless probed carefully. You may have to help your respondent link her age to important local vents, major festivals and/or seasonality. Alternatively, in case the respondent has any proof of age with her, this may be used for recording her correct age."

Suggestions to Facilitator

- In the beginning of this slide, you may reach to the trainee and ask them about the eligibility criteria for recruitment in HSS, especially in context of Age.



Describe the Slide

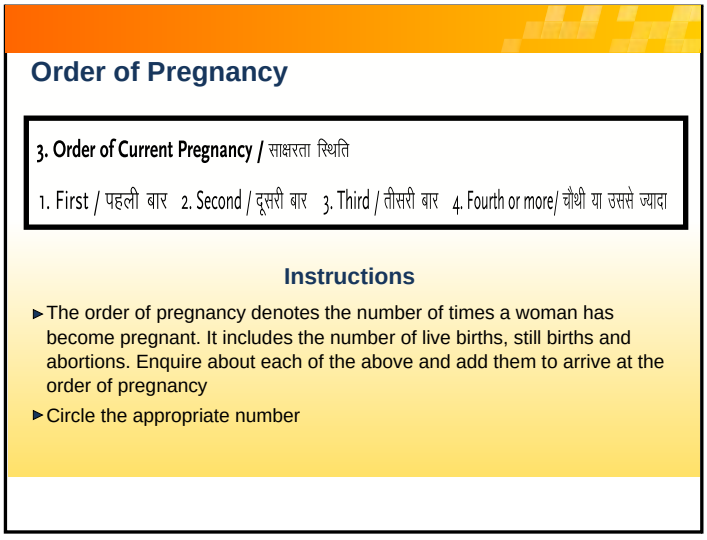
"Now we shall turn to a respondent's literacy status and learn how this data point should be correctly entered.

"If a straightforward answer is not provided, please go over each of the five options here with the respondent, explaining what they imply before choosing the correct option.

"For example, if the ANC mother has never formally attended school, but has been taught the basic alphabet and numbers at home or can read and write their names etc., she will be considered 'Literate and till 5th standard'. And the right option number will be '2' in her case. Then again, for respondents who have obtained technical diplomas, the right option will be '**11th to Graduation**' and the right option number will be '**4**'.

Suggestions to Facilitator

- Link the slide with page 16 of the *Operational Manual for ANC Sentinel Sites 2014-15* and read out the instructions for filling out literacy status to participants.
- Time permitting, you may introduce role playing methods, and invite participants to correctly assess a respondent's literacy level, using examples like the ones above. For example, explore when the '**Illiterate**' and/or '**6th to 10th standard**' options may be chosen correctly.



Describe the Slide

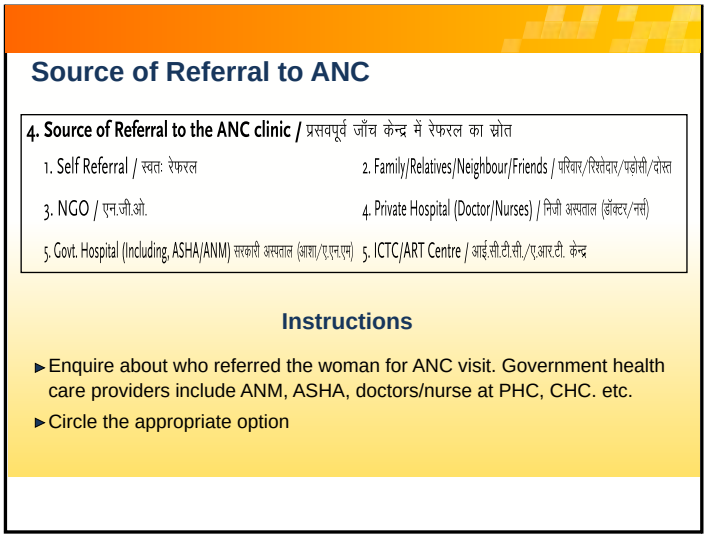
"This particular data point deals with a respondent's order of pregnancy.

"Please ensure that you are counting the order of pregnancy, including still births and abortions. For example, if a pregnant woman comes to the ANC with a 3-year-old, and says that she has had a miscarriage after her eldest child, then her order of pregnancy in this case will be 3, not 2.

"In this case too, the respondent should be probed for her correct response to this question. The correct data option may guide towards an indirect method for assessing new infection and understanding of risk behaviour."

Suggestions to Facilitator

- Link the slide with page 16 of the *Operational Manual* for ANC Sentinel Sites 2014-15 and read out the instructions for filling out the order of pregnancy data point to participants.
- You may give examples of various scenarios involving still births and abortions from your field experiences; and ask participants for the correct order of pregnancy.
- You may also ask participants to share similar experiences; and try to assess such orders of pregnancy.



Describe the Slide

"This slide focuses on the respondent's source of referral to the ANC, as in who suggested she should visit the ANC clinic to this hospital.

"This question should also be probed for the right response from the ANC mother. Read out the possible sources of referral if the respondent is not able to provide a direct answer. The implications of certain responses here are of analytic importance. For instance, if the respondent is referred to the ANC by an ART or ICTC, then she may signify different perspective on HIV positivity of district."

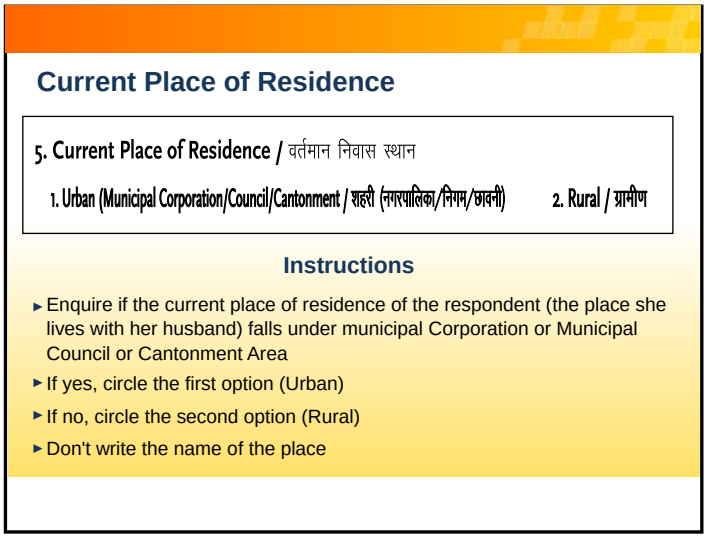
Suggestions to Facilitator

- Link the slide with page 16 of the *Operational Manual*; and read out the instructions for filling out source of referral.
- You may share examples from your field experiences; and ask participants for the correct options.

Additional Information

Here are a few acronyms for the accompanying slide:

- NGO Non-government organization
- ASHA Accredited Social Health Activist
- ANM Ancillary Midwife
- ICTC Integrated Counseling and Testing Center
- ART Antiretroviral Center
- PHC Primary Health Center
- CHC Community Health Center



Describe the Slide

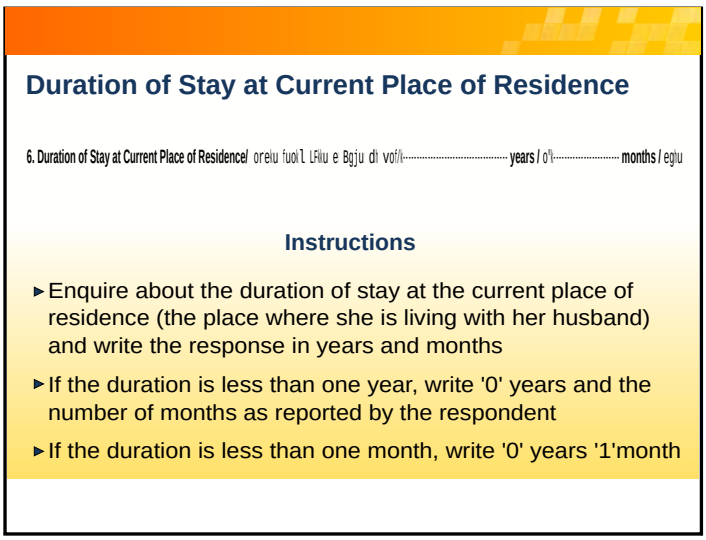
"Now we come to the respondent's current place of residence. How should these two options be chosen correctly? This question too should be investigated properly for the correct response.

"Most importantly, it needs to be clarified that we are asking about the respondent's marital residence and not that of her mother's home.

"There are only two options here: urban and rural. Be careful about your encircling correct response, as it has analytic importance. A rural area will fall under a village/gram panchayat, while an urban area will come under a municipal corporation, municipal council or cantonment area. For example, if the respondent lives with her husband at a slum area in a small town, the right option will be 'Urban', not 'Rural', and the correct option number will be '1'."

Suggestions to Facilitator

- Link the slide with page 16 of the *Operational Manual for ANC Sentinel Sites 2014-15* and read out the instructions for filling out a respondent's current place of residence.
- You may propose options and examples, initiating interactive methods to help participants assess the right option.



Describe the Slide

"Now we come to the respondent's duration of stay at her current place of residence. Notice that this is not an optional question; and that similar to the respondent's age, it has to be clearly written out.

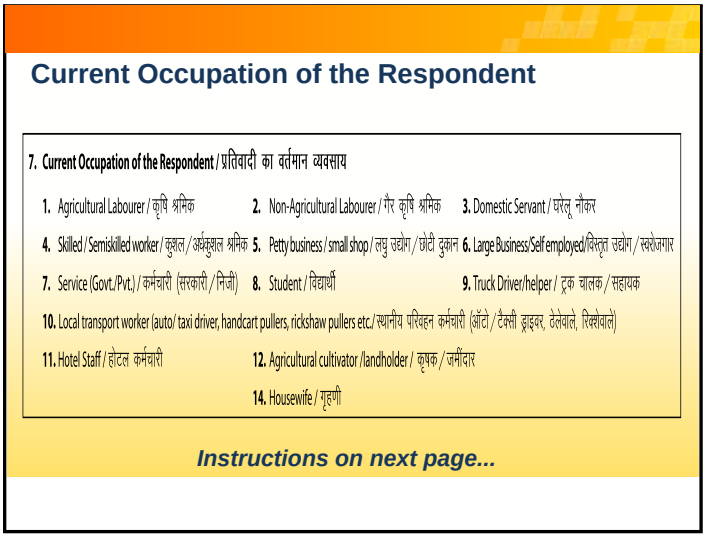
"Once again it is important to remember that we are asking about the respondent's marital residence. The duration of her stay here should be clearly written in years and months.

"For example, if she has been staying at her current marital home for the last 6 years and 3 months, then write '6'years '3' months. If she's been staying there for the past nine months, write '0' years '9' months; and if she has stayed here for less than a month, write '0' years '1' month.

"Please remember to patiently ask your respondents to recall the exact number of years and months for which they have been staying at their current residence."

Suggestions to Facilitator

- Link the slide with page 16 of the *Operational Manual for ANC Sentinel Sites 2014-15* and read out the instructions for filling out a respondent's duration of stay at current residence.
- You may propose options and examples, initiating interactive methods to help participants assess the right answers.
- For instance, you may use this real-life example of a woman who was married in her own village: "A woman who was born in Rajaram village has been married to her neighbour's son at the age of 23. She has been married for a year and three months now. What will be her duration of stay at her current residence?"
  There may be participants who will say, "24 years and 3 months", but that is an incorrect response. The correct answer is "1 year and 3 months", since her duration of stay at her marital home has been a year and three months.



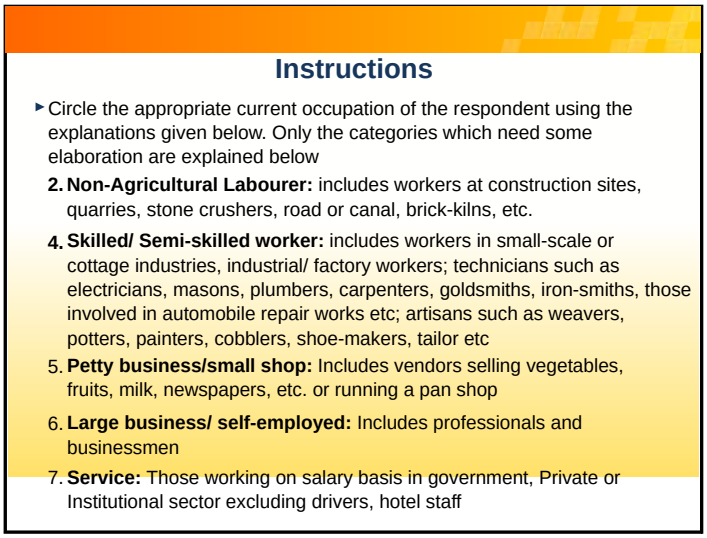
Describe the Slide

"Turning to the seventh question on the respondent's current occupation, this one has thirteen options to choose from. We will discuss the instructions for each of them in the next slide. You will also find the same instructions on the back of your sample data forms.

"This is another important parameter for surveillance data monitoring and analysis. It helps in understanding the profile of the HIV positive population group. And as such, it is very important that all HSS team members understand the spectrum of occupations and/or services that each of these data points cover."

Suggestions to Facilitator

- You may keep switching between this slide and the next one, as both relate to the same point.
- You may also link the slide with page 17 of the *Operational Manual for ANC Sentinel Sites 2014-15* for instructions on a respondent's occupation.



Describe the Slide

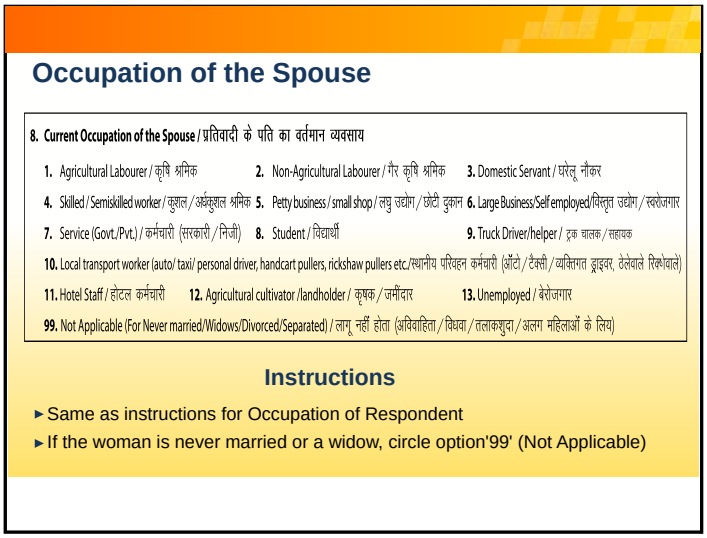
"In this slide we have tried to explain the different options in the question for respondent's current occupation.

"While 'Agricultural Labourer' is a self-explanatory category, 'Non-Agricultural Labourer' would denote those using their physical labour for work at construction sites, road or other infrastructure building sites, stone quarries, brick-kilns, etc. 'Domestic Servant' is again self-explanatory, while 'Skilled/Semi-skilled worker' would include those who have mastered a skill or technique of work, such as artisans, technicians, industrial/factory workers, and workers in small-scale or cottage industries.

"Those involved in 'Petty business/small shop' would include fruit and vegetable vendors, milk vendors, newspaper vendors, those running *paan* stalls, small tea-stall owners, and even those selling food and other goods at railway platforms. Under 'Large business/self-employed' would come professionals offering services as well as businesswomen, such as a woman offering children tuitions at home. Those in 'Service' would be women receiving their salary from either the government, private or institutional sectors – excluding drivers and hotel staff. And all the rest of these 13 categories, such as 'Housewife', 'Student' or 'Truck Driver/helper' are quite straight forward."

Suggestions to Facilitator

- You may keep switching between this slide and the earlier one, as both are related to each other.
- Turn this into an interactive session by asking participants to guess the right options under various occupation scenarios – such as a woman who works on agricultural fields; one who looks after her household; one who weaves baskets; a woman who embroiders saris/clothes; a woman who sells vegetables or fish at the local market, etc.



Describe the Slide

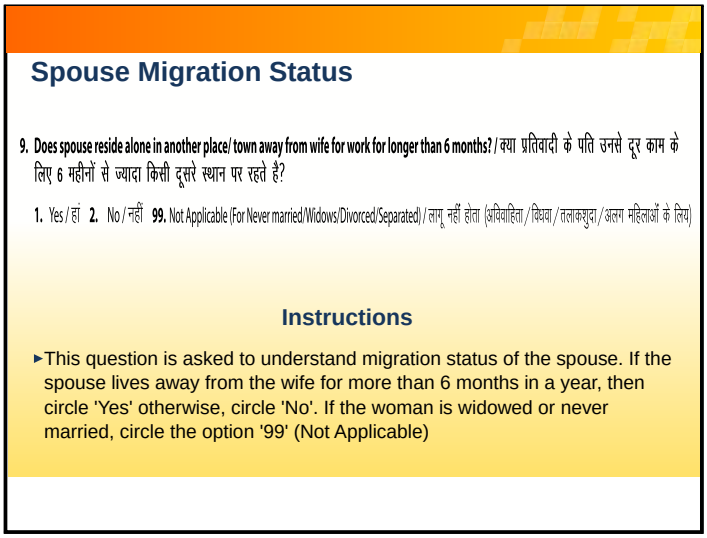
"Now we come to the occupation of the respondent's spouse. All the categories are exactly the same as the earlier question, except for the last two options. Here there is no category for a 'Housewife', instead we have an 'Unemployed' category; and lastly, a 'Not Applicable' option for unmarried and widowed respondents.

"Instructions for filling out these occupation options are otherwise exactly the same as those for the last question."

"Implications of errors in this category can lead to incorrect data analysis, as this is a vital variable in profiling risk population/groups. Therefore, please be careful in choosing option numbers here."

Suggestions to Facilitator

- You may keep switching between this slide and the earlier one for the instructions.
- You may involve participants for guessing the right options, under various occupation scenarios, (Such as cycle-rickshaw puller; a stone crusher; a truck driver's helper; hotel staff; an agricultural field worker; an idol maker; a kite maker; a newspaper/magazine stall owner; a neighbourhood grocery store owner, etc.) including cases when the 'Not Applicable' option should be chosen. Examples for the Not Applicable option may include a woman whose husband used to work at a brick kiln, but has passed away a few years ago. Or a single woman who is yet to be married.



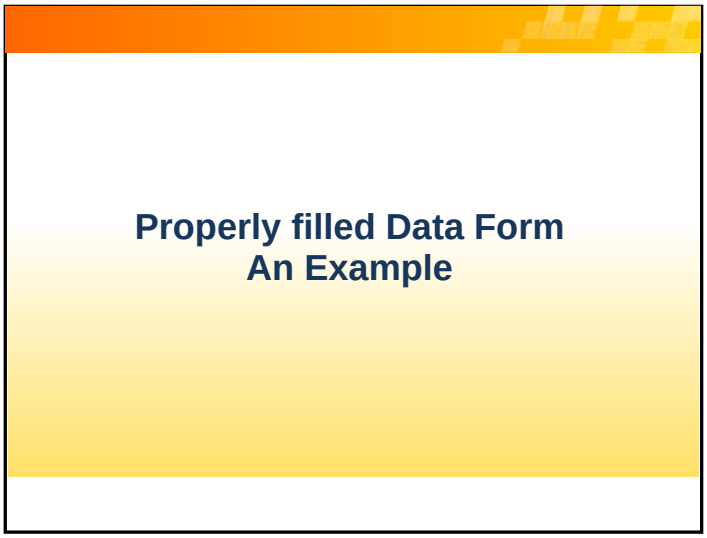
Describe the Slide

"The last question of the data form refers to the migration status of the respondent's spouse. Notice that like the earlier question here too we have a 'Not Applicable' option for unmarried and widowed respondents.

"This is yet another vital data parameter for assessing risk behavior; and should be given very careful consideration. Encircle the 'Yes' option number ('1')only when the husband works/lives away from the wife for more than six months in a year. If this is not the case, please circle the 'No' option number ('2')."

Suggestions to Facilitator

- You may involve participants in guessing the right options from various examples, including cases where the 'Not Applicable' option should be chosen.
- You may share relevant field experiences, and/or invite participants to do the same.

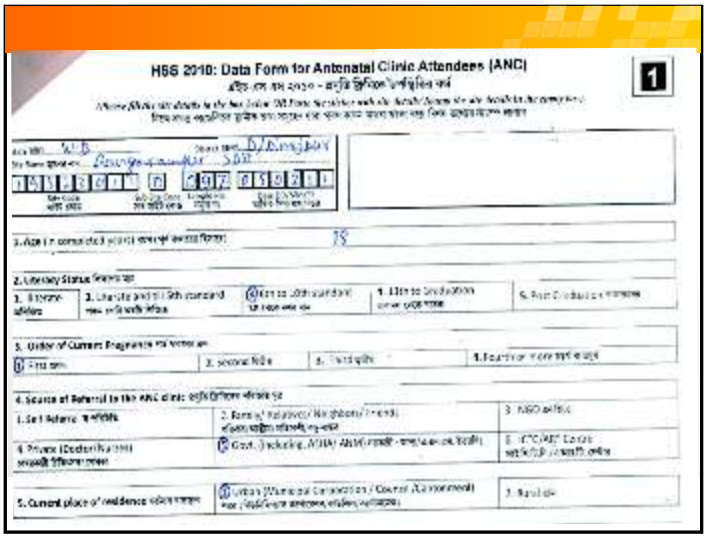


Describe the Slide

"We shall now see what a correctly filled out data form should look like. This is how we want you to fill out every data form that you work on at your sites.

"Neatly and correctly filled out data forms help in proper data interpretation, leading to accurate data analysis at the district and state levels.

"The following two slides will provide you with an example of a properly filled out data form. Please look at them carefully."



Describe the Slide

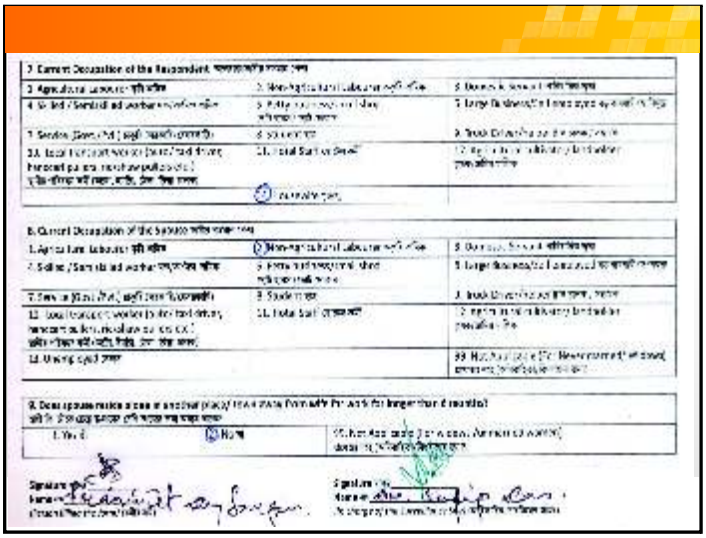
"Here we see the top half of a data form very clearly and tidily filled out. You will notice that it is easy to read all option values and option numbers here, even in the absence of a sticker/stamp."

"We can make out that this data comes from a 'single' ANC site, marked as the first sentinel site of the district. This was the 97th sample, and it was collected on 5th February, 2011.

"One can also understand that this is the first pregnancy of the 18-year-old respondent, who has studied between the 6th and 10th standard. She was referred to the ANC by a government health center. Her current marital home is in an urban locality; and she's been staying there for less than a year.

Suggestions to Facilitator

- Patiently go over the form with participants.
- You may also ask participants the implications of the circled options and written answers.



Describe the Slide

"Here we see the bottom half of the same data form. The options chosen here indicate that the respondent is a housewife; and that her husband is a non-agricultural labourer, who is not a migrant.

Please also notice the name and signature areas at the very bottom. This implies that this data was validated for quality by the site-in-charge after the nurse/counselor had filled in all points.

"We will now review our session on data form management with some practical exercises."

Suggestions to Facilitator

- Patiently go over the form with participants
- You may also ask participants the implications of the circled options.

Practical Exercise - Case 1

26 year old Bhavani is a graduate who gives tutions in her house to children from classes 2-3. She is 4 months pregnant and has come to the ANC OPD on January 16, 2015. This is her second pregnancy and first pregnancy ended in an abortion. Surveillance at this site began on January 15, 2015. This is her second visit and she had earlier registered at the ANC on 21st October 2014. Her husband works as a plumber in the local primary school. They have been married for 1 year and she has been living with her husband since then at Rampur village.

- **Is this woman eligible for surveillance?**
- **How will you proceed for this woman in year survey?**
- **Please complete a data form for this woman**

Describe the Slide

"Please pass these fresh data forms among yourselves. I shall then display a case/scenario, which you will have five minutes to study. You will then have 10 minutes to fill in your forms from the information given to you. You may discuss your responses among your group. Your time starts now."

Suggestions to Facilitator

Gather participants into the earlier groups of three. Distribute a data form to each participant. Give five minutes to read over then display this case study slide. Read out the case study and give participants 10 minutes to fill their data forms using the information provided. Ask sentinel site participants to fill in their own site codes in the forms. Let each group discuss their responses.

After everyone is done, start from the first question onwards; and as you go along ask volunteers to read out the correct option, based on their understanding of the case study.

ANSWERS TO CASE 1

Site Code: As applicable

Age: 26
Literacy Status: 4 (11th to Graduation)

Order of Pregnancy: 2

Source of Referral to ANC: Not Available

Current place of Residence: 2 (rural)

Duration of Stay: 1 year 0 months

Current Occupation: 6 (large business/self-employed)

Current occupation of Spouse: 4 (skilled/semi-skilled)

Does spouse reside alone in another place/town away from wife for longer than 6 months?: 2 (No)

Is this woman eligible for surveillance? Yes she is, because she meets the age criteria as well as the criteria for her first visit to the ANC since surveillance began.

How will you proceed for this woman in your survey? The attending doctor will assess eligibility. After assessing the eligibility, further course of action will depend on if the site offers PPTCT services or not but will result into filling of data forms for HSS. After filling the data forms, the recruited respondent will be taken to the lab technician who will re-check the data forms and then take sample from the respondent for routine diagnostic tests and/or PPTCT.

Practical Exercise - Case 2

A 17 year old woman in her 8th month of pregnancy presents to the ANC OPD in MG Hospital in Bareilly on 2nd February 2015 for the first time. Surveillance at this site began on 1st January, 2015. She had a spontaneous abortion in the second month of her 1st pregnancy last year, but this time she says she had no problems/complaints. Her husband is a farmer but she is a house wife. Bareilly hospital has as an ongoing PPTCT program.

- **Is this woman eligible for surveillance?**
- **How will you proceed for this woman in year survey?**
- **Please complete a data form for this woman**

Describe the Slide

"Please pay attention to the second case now. You have 15 minutes to study it and fill up the data form, with responses discussed with your group."

Suggestions to Facilitator

Follow the same procedure during this practical session. Remember to ask sentinel site participants to fill in their own site codes in the forms. Let each group discuss their responses.

Please note that some information may be missing in this brief exercise, but in the field ALL questions need to be answered.

ANSWERS TO CASE 2

Site Code: As applicable

Age: 17

Literacy Status: Unavailable in this case study

Order of Pregnancy: 2

Source of Referral to ANC: Unavailable in this case study

Current place of Residence: 1. (Urban)

Duration of Stay: Unavailable in this case study

Current Occupation: 14 (Housewife)

Current occupation of Spouse: 12 (Agricultural cultivator)

Does spouse reside alone in another place/town away from wife for longer than 6 months? Unavailable

Is this woman eligible for surveillance? Yes she is, because she meets the age criteria as well as the criteria for her first visit to the ANC since surveillance began.

How will you proceed for this woman in your survey? The attending doctor will assess eligibility. In this case, when the woman is found eligible the doctor will refer her to the counsellor for PPTCT and/or HSS. When she reaches the counsellor – as PPTCT services are available at the site – pre-test counselling shall be given, and she shall be asked whether she wants to be tested for HIV under PPTCT. If she agrees to the testing, the counsellor shall fill in the HSS Data Form, and send the woman to the laboratory technician for collecting her blood specimen. The laboratory technician will re-check the Data Form and collect her blood sample for routine tests, HIV test under PPTCT and a portion of collected blood sample will be kept separately for HSS. Even if she does not agree for testing under PPTCT, the counselor shall fill in the HSS Data Form, and send the woman to the laboratory technician for collecting her blood specimen. The laboratory technician will re-check the Data Form and collect her blood sample for routine tests and a portion of collected blood sample will be kept separately for HSS.

Practical Exercise - Case 3

A 15 year old girl is brought to the ANC OPD on 15th march 2015 by her mother with 5 months amenorrhea. She is unmarried, does not go to school and helps her mother in the house. She also sells berries on the highway. This is her first pregnancy and has lived in the same area all her life. This is her first visit to the clinic.

- **Is this woman eligible for surveillance?**
- **How will you proceed to include this woman in year survey?**
- **Please complete a form for this woman. if eligible**
- **What information is missing in this case?**

Describe the Slide

"On display now is the third case. You have 15 minutes again to study it and fill up the data form, with responses discussed with your group."

Suggestions to Facilitator

Follow the same procedure during this practical session. Remember to ask sentinel site participants to fill in their own site codes in the forms.

Please note that some information may be missing in this brief exercise, as before, but in the field ALL questions need to be answered.

ANSWERS TO CASE 3

Site Code: As applicable

Age: 15

Literacy Status: 1

Order of Pregnancy: 1

Source of Referral to ANC: Unavailable in this case study

Current place of Residence: 2 (rural)

Duration of Stay: 15 years 0 months
Note: Duration of stay with mother will need to be mentioned in this case.
Current Occupation: 5 (petty business/small shop)

Current occupation of Spouse: 99 (NA)

Does spouse reside alone in another place/town away from wife for longer than 6 months? 99 (NA).

Is this woman eligible for surveillance? Yes she is, because she meets the age criteria as well as the criteria for the first visit to the ANC since surveillance began.

How will you proceed for this woman in your survey? The attending doctor will assess eligibility. After assessing the eligibility, further course of action will depend on if the site offers PPTCT services or not but will result into filling of data forms for HSS. After filling the data forms, the recruited respondent will be taken to the lab technician who will re-check the data forms and then take sample from the respondent for routine diagnostic tests and/or PPTCT.

What information is missing in this case?
Source of referral to ANC

Practical Exercise - Case 4

21 year old Geeta is studying in 2nd year BA. She is 7 months pregnant and has come to the ANC OPD on 12th March 2015. This is her second visit and she had earlier registered at the ANC on 11th January 2015. Surveillance at this site began on 1st January, 2015. Her husband is a clerk in SBI and they live in the same town.

- **Is this woman eligible for surveillance?**
- **How will you proceed to include this woman in year survey?**
- **Please complete a data form for this woman. if eligible**
- **What information is missing in this case?**

Describe the Slide

"This is the last case in this practice session. You have the same 15 minutes to study it and fill up your data forms, with responses discussed with your group."

Suggestions to Facilitator

Follow the same procedure during this practical session too. Remember to ask sentinel site participants to fill in their own site codes in the forms.

Please note that some information may be missing in this brief exercise for training purpose. Please do emphasize to the trainees that all the questions are mandatory and all need to be completed during HSS implementation in field.

ANSWERS TO CASE 4

Site Code: As applicable

Age: 21

Literacy Status: 4 (11th to graduation)

Order of Pregnancy: Unavailable in this case study

Source of Referral to ANC: Unavailable in this case study

Current place of Residence: 1 (urban)

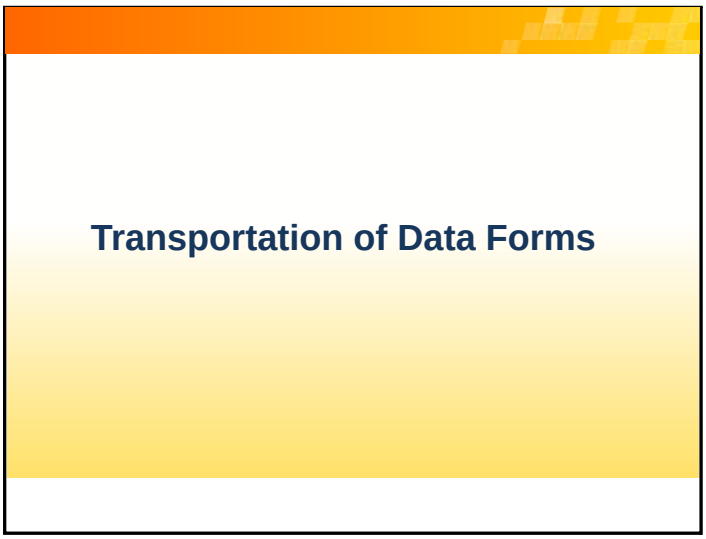
Duration of Stay: Unavailable in this case study

Current Occupation: 8 (student)

Current occupation of Spouse: 7 (service (Govt/Pvt)

Does spouse reside alone in another place/town away from wife for longer than 6 months? 2 (No)

Is this woman eligible for surveillance? No.



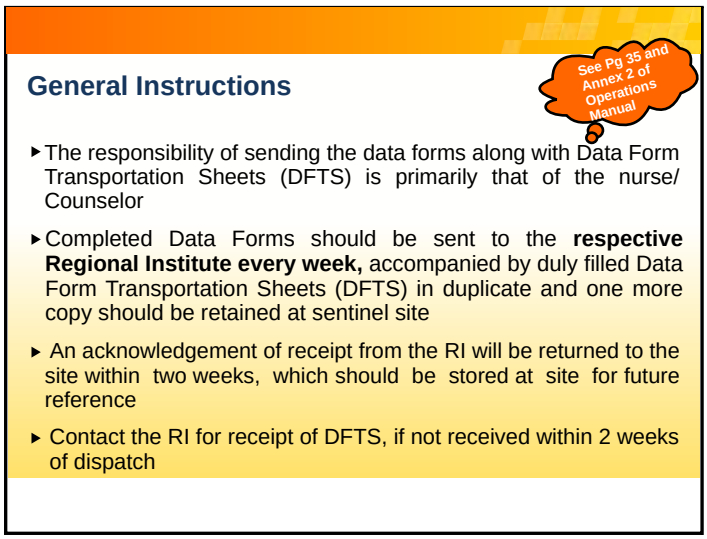
Describe the Slide

"In this concluding part of our session, we shall finally look at the procedure for regularly transferring data forms to the regional institutes (RIs). This is a crucial link in the HSS chain, mainly for the purposes of documenting the data form management process. The transfer of data forms and data form transportation sheets to the RIs, therefore, needs to be handled with the utmost care.

"You may please turn to Annexe-2, page 35 of the *Operational Manual for ANC Sentinel Sites 2014-15* for a sample data form transportation sheet."

Suggestions to Facilitator

- Ensure that all participants are referring to the sample data form transportation sheet (DFTS) in the *Operational Manual*.



Describe the Slide

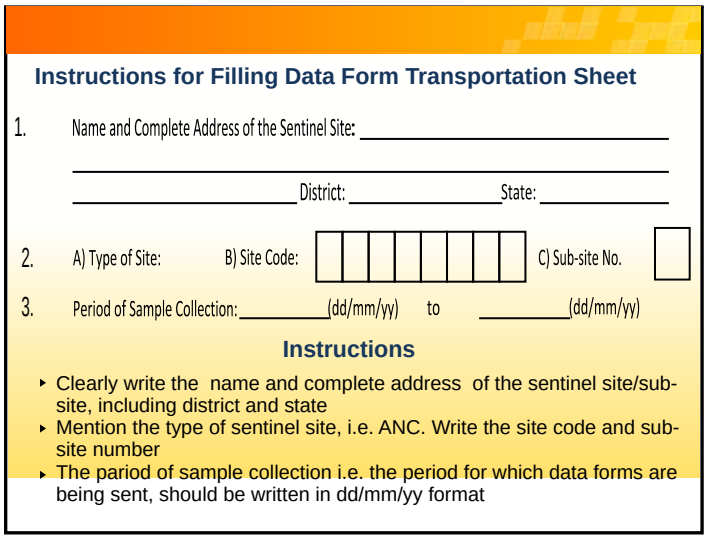
"We shall now discuss the general instructions for handling, managing and transporting data forms.

"Remember that it is the responsibility of the nurse/counselor to fill out the data form transportation sheets or DFTS. Every week, completed data forms along with the DFTS – in duplicate – have to be sent to the RI. A third copy of the DFTS has to be stored at the site. It is recommended that the courier receipt and this third copy of the DFTS be filed together for future references.

At the RI, the duplicate copy of the DFTS should be signed and returned to the sentinel site as an acknowledgement of receipt of all data forms. If this receipt fails to reach the sentinel site within two weeks of each weekly dispatch/submission, the RI needs to be contacted and asked about the same. This receipt from the RI may also be filed with the earlier courier receipt and third DFTS copy. This entire documentation process needs to be overseen by the site-in-charge for his/her sentinel site."

Suggestions to Facilitator

- Please ensure that apart from the *Operational Manual for ANC Sentinel Sites 2014-15* all participants have their copies of a sample data form transportation sheet (DFTS) handy with them at this stage.
- You may take questions, if any, on this documentation process from participants.



Instructions for Filling Data Form Transportation Sheet

1. Name and Complete Address of the Sentinel Site: _____

_____

_____ District: _____ State: _____

2. A) Type of Site: B) Site Code: | | | | | | | | | C) Sub-site No. |

3. Period of Sample Collection: _____(dd/mm/yy) to _____(dd/mm/yy)

Instructions

- Clearly write the name and complete address of the sentinel site/sub-site, including district and state
- Mention the type of sentinel site, i.e. ANC. Write the site code and sub-site number
- The parod of sample collection i.e. the period for which data forms are being sent, should be written in dd/mm/yy format

Describe the Slide

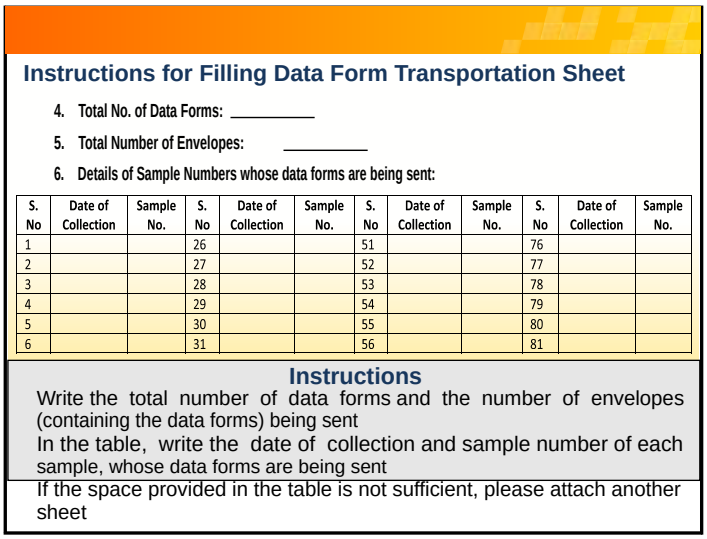
"Now let's turn again to the *Operational Manual*. Please refer to page 35 of Annex-2 for the latest DFTS in use for HSS. Instructions for filling out the DFTS are provided in pages 21-22 of the *Manual*.

"We shall now go over each information area, beginning from the top of the form. Remember to clearly write down the name and complete address of your sentinel site/sub-site, including your district and state. As always, please use a hard ball-point pen, and avoid ink pens and lead pencils at all costs.

"For 'Type of Site', mention 'ANC'. Then fill in your complete site code and sub-site number. Lastly, fill up the period of your current sample collection in dd/mm/yy format."

Suggestions to Facilitator

- Please ensure that participants have their copies of the *Operational Manual for ANC Sentinel Sites 2014-15* handy.
- Also ensure that all participants have extra copies of the DFTS, with instructions printed on the back.
- Please provide for DFTS in the required language too – whether in English or the local/regional language – such as Tamil, Telugu, Kannada, Bengali and/or Hindi.
- You may take questions, if any, on the above three data points from participants.



Instructions for Filling Data Form Transportation Sheet

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.	S. No	Date of Collection	Sample No.	S. No	Date of Collection	Sample No.
1			26			51			76		
2			27			52			77		
3			28			53			78		
4			29			54			79		
5			30			55			80		
6			31			56			81		

Instructions

Write the total number of data forms and the number of envelopes (containing the data forms) being sent

In the table, write the date of collection and sample number of each sample, whose data forms are being sent

If the space provided in the table is not sufficient, please attach another sheet

Describe the Slide

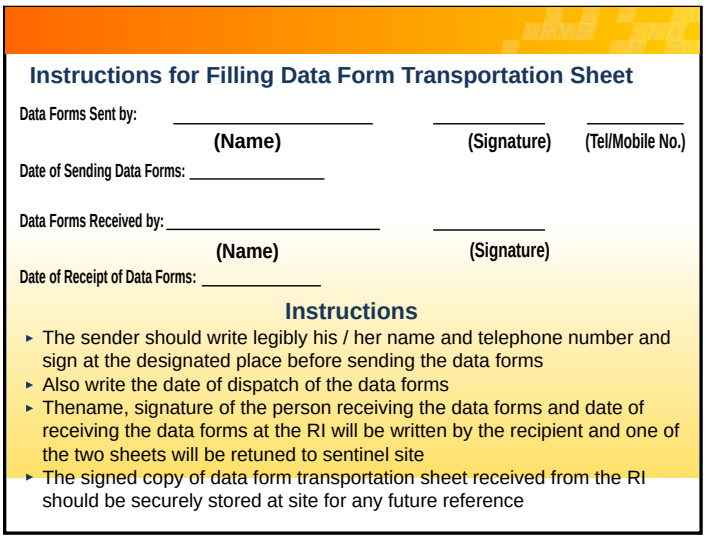
"Now focus on the next three information areas of the DFTS.

"Begin by clearly and legibly writing down the total number of data forms being dispatched that week. Next, mention the total number of envelopes in which these data forms are being sent to the RI.

"Lastly, document all the data forms being transferred by clearly mentioning their sample numbers and their date of collection. Please ensure that these details are provided for all data forms you send. Like in your data forms, NONE of these information areas must be left blank."

Suggestions to Facilitator

- You may take questions, if any, on the above points from participants.



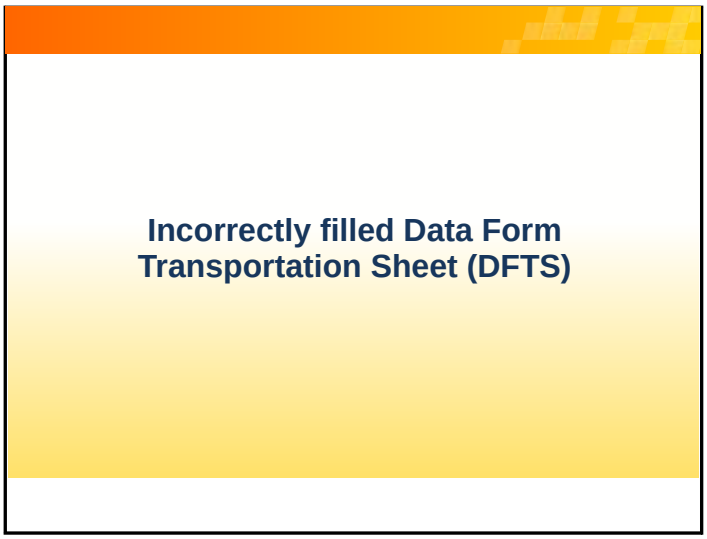
Describe the Slide

"Here we have come to the bottom of the DFTS, which requires names, signatures and the dates of dispatch and receipt. This area is very important as it helps record the names and signatures of the site personnel sending out the data forms, and the RI personnel receiving the same. The sender's contact number is also required here, in case he/she needs to be contacted.

"This also serves as proof of submission and receipt of data sheets, which is why a duly signed copy of the DFTS is returned to the sentinel by the RI as an acknowledgment of receipt. These signed receipts should be stored securely at the sentinel site for future references."

Suggestions to Facilitator

- You may take questions, if any, on the above points from participants.
- Time permitting, you may initiate role play to illustrate the roles of the sender and the RI personnel at this stage.



Describe the Slide

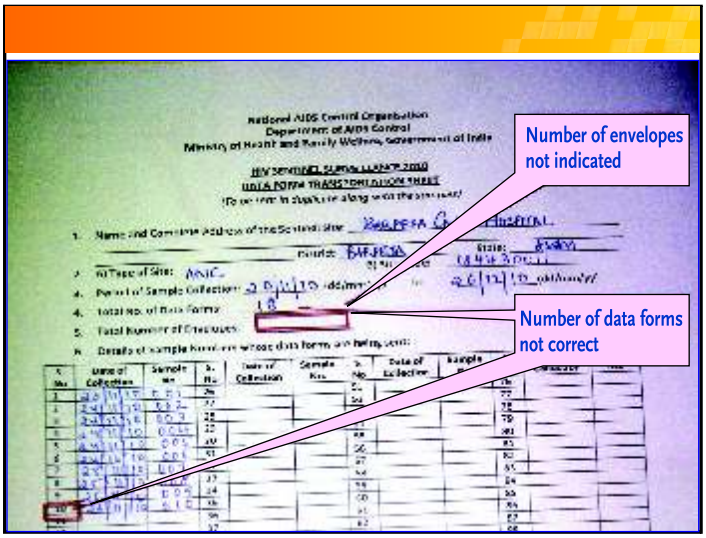
"We shall now discuss examples of incorrectly filled out DFTS; and their implications.

"Errors in the DFTS basically affect the HSS data form management documentation process. Errors in the DFTS call into question the accountability of the HSS staff. It also affects smooth operations and stock taking at each sentinel site.

"During routine inspections of sentinel sites, properly filled out DFTS indicate that the HSS team is functioning as per guidelines; that there is co-ordination between the staff; and that the team's approach towards the HSS process is serious. And lastly, a properly filled out DFTS indicates that data entry for the particular sentinel site can proceed properly and without delay."

Suggestions to Facilitator

- You may take questions, if any, from participants at this stage.
- You may invite participants to share their experiences too, if relevant to this slide.



Describe the Slide

"Over the next couple of slides we shall focus on some common errors noticed in previous rounds of HSS."

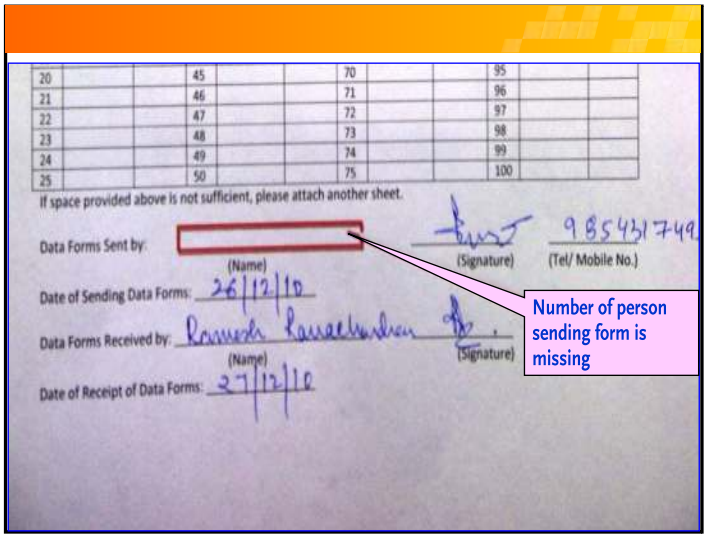
"This particular slide demonstrates two kinds of common mistakes. Firstly, the total number of envelopes containing the 18 data forms has been left blank.

"And secondly, the total number of data forms – which is mentioned as 18 – is not matching up with the details of data forms shared in the DFTS – which is just 10. Either the details of eight data forms are missing from this DFTS, or the '18' is a typological error when the number should actually be '10'.

"These lapses indicate human error, as well as the absence of overall monitoring by the site-in-charge."

Suggestions to Facilitator

- You may take questions, if any, from participants at this point.



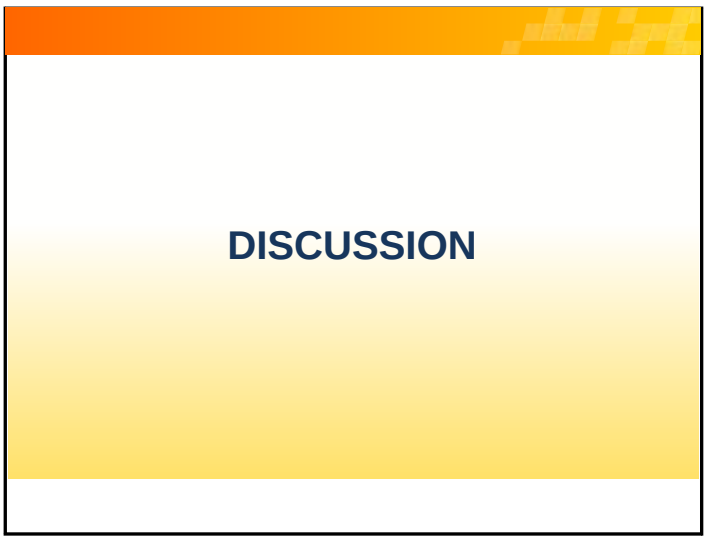
Describe the Slide

"This particular slide shows a DFTS where the name of the sender is missing. As discussed earlier, this is a crucial point in the documentation process. With the sender's name missing, even the duly signed duplicate copy will now become a flawed proof of submission of data forms for the sentinel site."

"Once again, this indicates a human error, as well as the site-in-charge's lack of overall monitoring of the documentation process."

Suggestions to Facilitator

- You may take questions, if any, from participants.



Describe the Slide

"We now come to the end of our session on data form management. I hope all of you have gained a thorough insight into the process.

"We will end this session by discussing how to address some of the actual field realities you are likely to face, and by clearing any doubts that you may continue to have at this point."

"As we have understood the data forms management, we shall soon move to the next sessions which will focus on blood specimen management as a logical progression of HSS activities at sites.

Suggestions to Facilitator

- You should now open up discussions; and invite all participants for their comments and questions regarding the entire session.

Describe the Slide

"We now come to the end of our session on data form management. I hope all of you have gained a thorough insight into the process in these one-and-half hours.

"We will end this session by discussing how to address some of the actual field realities you are likely to face, and by clearing any doubts that you may continue to have at this point."

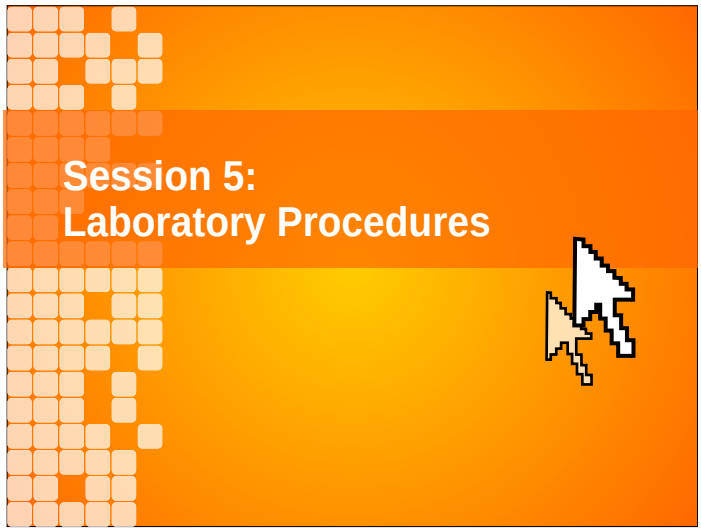
"As we have understood the data forms management, we shall soon move to the next session which will focus on blood specimen management as a logical progression of HSS activities at sites.

Suggestions to Facilitator

- You should now open up discussions; and invite all participants for their comments and questions regarding the entire session.

Facilitation Tips for Session 5

Laboratory Procedures



Describe the Slide

"Once an eligible ANC candidate has been identified for HSS, and her data form has been properly filled out, the next step is blood specimen collection. In this session, therefore, we shall discuss all required laboratory requirements and procedures in connection with HIV sentinel surveillance in great detail.

"It is important to keep in mind that blood samples for HSS have to be collected while observing all standard precautions, and maintaining the respondent confidentiality. These samples also have to be properly labeled, processed and temporarily stored at the sentinel site before being transported to the linked HSS testing lab on a regular basis.

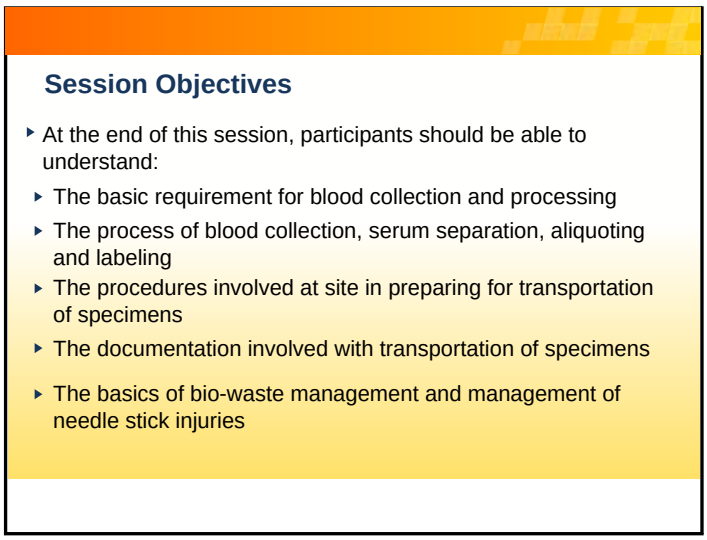
"Many of you – who have participated in earlier rounds of the HSS process – may be aware of the laboratory procedures involved in blood sample collection. Despite earlier surveillance rounds at sentinel sites, we continue to see errors in laboratory procedures. In some instances, certain errors invalidate or negate a whole sample as vital laboratory methods are either ignored or not followed correctly. That is why in the coming slides we shall discuss all the important steps involved in sample collection, processing, storage, packaging and transportation. Errors in following these procedures seriously weaken and undermine all our efforts – because when sample quality is compromised, the lab testing does not produce reliable results. And most importantly, when samples are rejected and not analysed, the state and district level data gets affected.

"Bio-waste management is another basic requirement involving the proper disposal of bio-waste including contaminated sharpes (needle and syringe), along with the management of needle stick injuries. The importance of following standard precautions during HSS lab procedures cannot be stressed enough.

"But please allow me to tell you that these situations can be very easily avoided if all necessary lab procedures are followed by the laboratory technician and site-in-chargeof ANC sentinel sites."

Suggestions to Facilitator

- Before going to the next slide, you may recount your experience of a site visit.
- You may also randomly select one or two lab technicians with experience in earlier rounds of the surveillance and ask them to describe their experiences of laboratory procedures, and the problems they may have faced in previous rounds. You might note down these responses on a separate flip chart/white board (which is in full view of the participants) and relate/refer to them later.



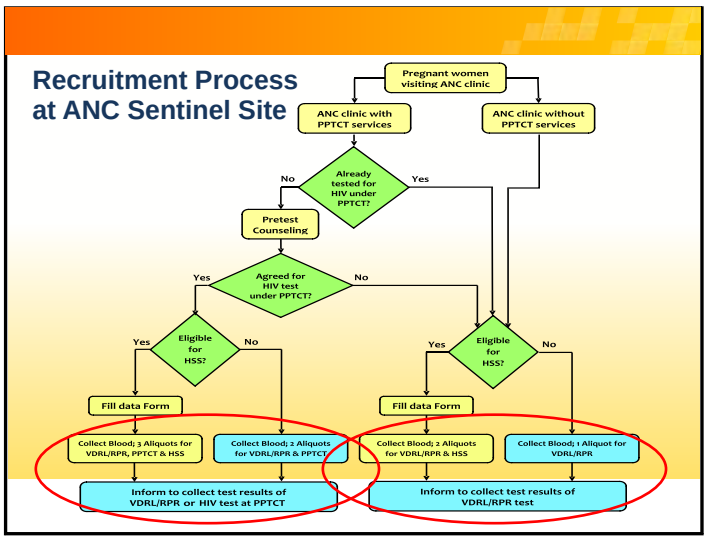
Describe the Slide

"In this session, we will help you form a comprehensive understanding of laboratory procedures. We shall focus on every detail and address your queries, so that you gain a complete understanding of the entire procedure.

"The objectives of our current session are to help you (i) understand the basic requirements for sample collection and processing; (ii) understand the procedure of sample collection, serum separation, aliquoting and sample labelling; (iii) familiarize yourself with procedures involving blood sample transportation, including documentation for transporting blood specimens; and (iv) learn how to handle bio-waste management and needle stick injuries." We will also discuss temporary storage of serum specimens at the sentinel site before specimens are transported to HSS testing Lab."

Suggestions to Facilitator

- After completing the first paragraph, you may read out the session objectives OR randomly invite participants to read them out one by one.
- Ask participants if they have any other points that they would like covered/addressed during this session on lab procedures. If any relevant suggestion is made, make a note of the same on the separate flip chart/white board, and include the point(s) wherever necessary during the current training session.



Describe the Slide

"This is an overview of the recruitment process at an ANC site and helps in understanding the position/placement of lab procedures and specimen processing in entire sentinel surveillance process. We have already discussed in earlier sessions that the process takes two different routes, depending on whether the ANC site is also a PPTCT facility or not. We shall not go into that discussion again. But we will emphasise at this point that it is only when the HSS data form has been correctly filled out for an eligible ANC candidate that we can use a portion of her blood sample collected, for routine testing and/or PPTCT (as applicable), for HSS while making aliquots.

"As you are aware, under HSS, we take a portion of blood collected for routine purposes like hemoglobin, syphilis etc under MCH programme and then test this portion at labs designated under HSS. In this flow chart, the yellow boxes within the red circle are instances where aliquotes for HSS have to be prepared from blood specimen collected for routine testing and/or PPTCT testing; while the blue boxes denote blood sample collection for routine tests and/or PPTCT testing without preparing aliquots for HSS. We will go through this flow chart carefully to understand when we will need to prepare aliquote for HSS purpose from blood specimen collected for routine testing.

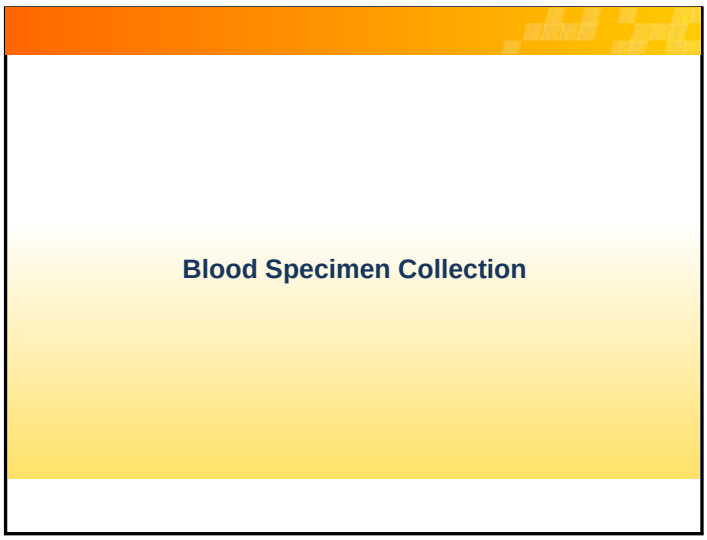
"In case the sentinel site offers PPTCT services, and the candidate agrees to be tested under PPTCT after counseling, then two aliquots of her blood sample have to be prepared: one for routine tests and the second for PPTCT. In addition, if she's found eligible for HSS recruitment as well during process, then a third aliquot is made for HSS — out of the same blood specimen.

"In cases when the ANC client has already been tested for PPTCT, she refuses to be tested under PPTCT, or the ANC site does not offer PPTCT services, her blood sample should be collected in only one aliquot for routine tests. In these cases, if the candidate is found eligible for HSS recruitment too, then an extra aliquot of her blood specimen should be collected for HSS testing.

"Please remember that the HSS blood sampling process should never begin without an eligible respondent's completed data form."

Suggestions to Facilitator

- Refer participants to flow chart on page 10 of the Operational Manual for ANC Sentinel Sites 2014-15.
- Before you begin, you may randomly invite participants to describe the flow chart and identify the position/placement of collecting blood samples within it, maybe like this, "Can anyone tell me what this flow chart is showing? Can you tell me exactly where blood sample collection is placed in this chart?" and so on.
- Lastly, make a click so that the red circle encircles the 'Collect Blood' boxes for emphasis. Now you can begin with the above paragraphs.
- While speaking out the first paragraph, you may remove the 'red circle'; and then repeat the clicking action at the end of the paragraph, to emphasize the placement of the 'Collect Blood' boxes within the flow chart.
- Please ensure that your audience is having a clear vision of this flow chart. You may also paste the wall chart of ANC recruitment at various places in training venues. This will be quite helpful for your audience while explaining the slides.
- Each arm of the flow chart refers to a specific scenario with a specific outcome in terms of aliquote preparation. Keep on referring to these arms while explain the messages in paragraph 3 & 4.



Describe the Slide

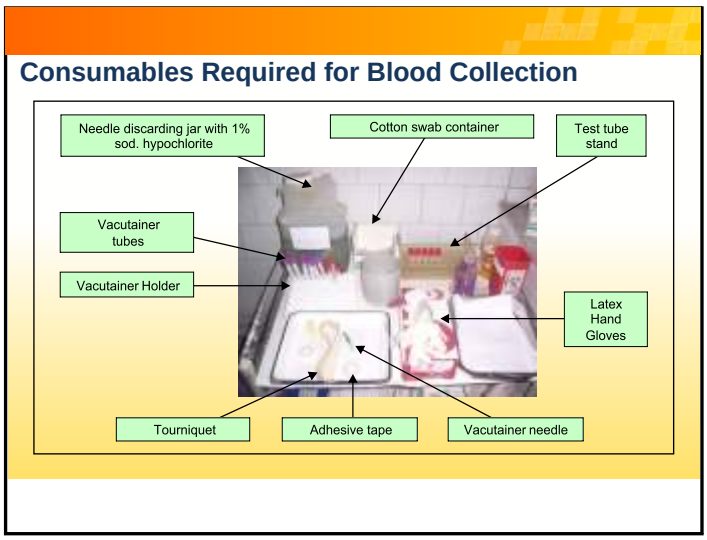
"After verification of data, Lab procedures begin with specimen collection. In the next few slides, we will discuss procedure of blood specimen collection.

"An important aspect in this process is observing universal/ standard precautions at all times for the safety of the client as well as the lab technicians. Lab technicians should also be mindful of maintaining client confidentiality while preparing for HSS sample tests, as per the UAT strategy.

"In an ideal scenario, it is best for the lab technician to be situated nearby when data forms are being filled out, so that respondent drop-outs may be avoided between the stages for data form filling and blood specimen collection."

Suggestions to Facilitator

- Take questions from participants, if any.



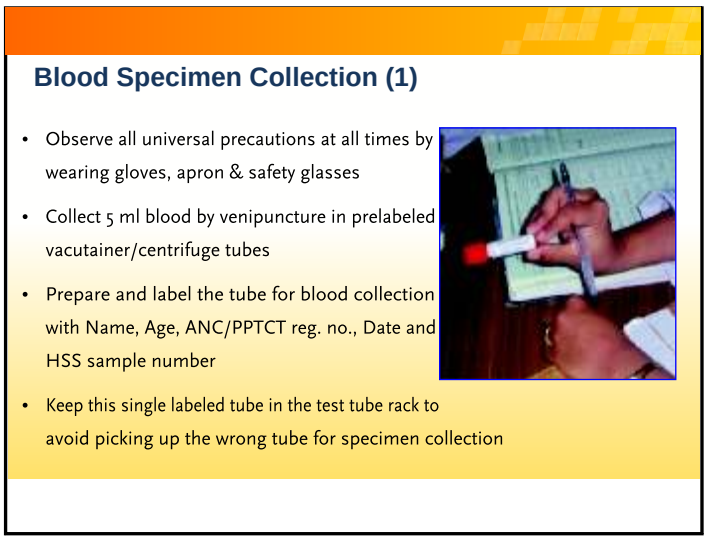
Describe the Slide

"A number of consumables are required to conduct HSS laboratory procedures at the sentinel sites. The accompanying slide presents some of these basic requirements. Apart from these items shown on the slide (read the items on the slide) other requirements include, spirit swabs, plastic serum vials, sterile disposable pipette tips or sterile disposable plastic droppers, labels, water-proof marking pens for labelling,a needle destroyer for used needles and syringes, a centrifuge, a refrigerator for storing specimens, a sample transportation box with lid, etc.

"The site-in-charge should ensure that all required consumables and equipments for lab procedures are provided by the SACS before surveillance begins. Remember to contact SACS office well in advance, in case the required equipment is not available and/ or the quantity is inadequate. Ensure that a clean and adequate storage space is available for keeping these consumables."

Suggestions to Facilitator

- Refer participants to page 4 of the Operational Manual for a list of consumables/equipment needed at ANC sentinel sites.
- Remind all participating sites-in-charge to contact the SACS office for the required consumables/equipments, before returning to their sentinel sites from the present training programme. If SACS has a different plan for consumable distribution, request SACS personnel to share the plan for consumables distribution if not done already.
- You may invite participants with experience in previous surveillance rounds to share incidents related to consumables at their sentinel sites.
- It will be good if samples of all consumables to be supplies for HSS are available for demonstration during training. Though the method described for blood specimen collection is quite routine and daily work for lab technicians, it will be of great help to repeat the process to avoid any confusion, especially in cases where we are using equipment like vacutainer.
- Take questions from participants, if any.



Describe the Slide

"It is very important to follow standard precautions for HSS lab procedures at ANC sentinel sites. Apron and gloves should be worn all times while dealing with infectious material.

"We are all aware of the grave risk of acquiring blood borne infections from infected needles, wrong handling of blood samples, etc.

"The material required for Specimen collection should be prepared and laid out on the table for use by the Lab Technician (LT) before the eligible ANC attendees approaches the laboratory with her data form. The lab technician should prepare the required sample labels from the data form after checking the data form for completion of data. Sample collection tube should be labelled before sample collection is initiated. Label the tube with Name, age, reg. no of the participant and date of sample collection.

"Please note that at least 5 ml of blood collection is required for obtaining 2 to 3 ml of serum, which is essential for performing all tests done under HSS. Therefore, amount of blood collected is important. Less amount of blood collected may not yield adequate serum for testing and more amount of blood collection leads to wastage.

"Please do not take any of these practices lightly, as each of them have far-reaching consequences— either related to the health of ANC attendees and lab technicians themselves, or to the final data generated from the district and state-level surveillance analysis."

Suggestions to Facilitator

- Refer participants to page 23 of the Operational Manual for ANC Sentinel Sites 2014-15.
- After communicating the first paragraph, read out the slide; or invite a volunteer to read it out. Then take up each point and explain them, as given above.
- You may consider keeping some of the essential laboratory consumables at the training venue. It might help participants in understanding some of the standard procedures of blood collection (without actually puncturing any vein and/or drawing any blood).
- Take questions from participants, if any.

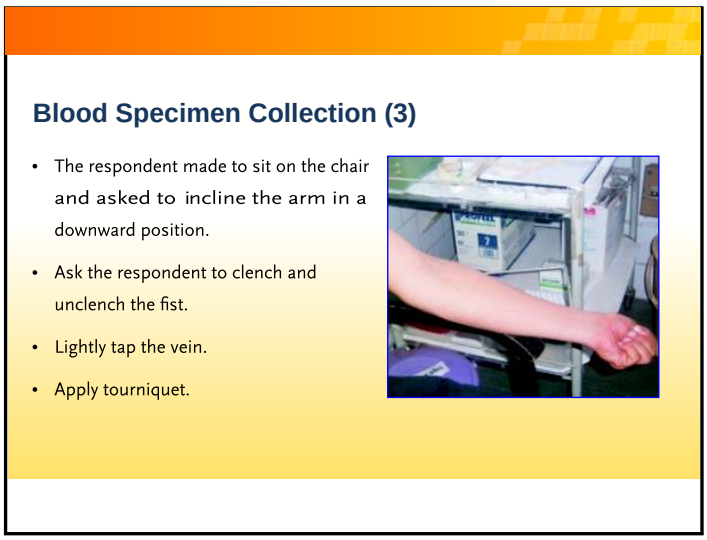
Describe the Slide

"Over the next couple of slides we will take a practical approach to give a hands-on training on blood sample collection. We will go through the process step-by-step, as described in this slide, without actually puncturing any vein and drawing any blood.

"Please note that the blood will be collected either by using a vacutainer device or using a sterile disposable needle and syringe. During this procedure standard precautions shall be followed at all times."

Suggestions to Facilitator

- Refer participants to page 24 of the Operational Manual for ANC Sentinel Sites 2014-15.
- Read out the slide; or invite a volunteer to read it out.
- Enact these points through role play, to best communicate the message to participants. Identify lab technicians among your group; and ask one of them to perform these tasks (without actually puncturing any vein and/or drawing any blood) step-by-step, while the others watch closely.
- The slide here describes the system of blood collection using vacutainer. However, in many instances, sterile disposable needle and syringe will be used for specimen collection. Please adapt your message delivery accordingly.
- Take questions from participants, if any.



Describe the Slide

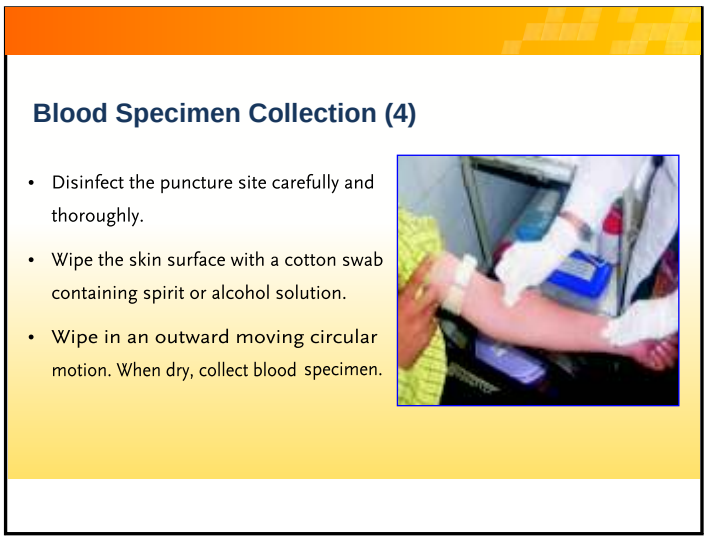
"For this slide too, we shall follow the steps for blood sample collection one by one, as described here.

"Please note that as a Lab Technician you should explain the blood collection procedure to the respondent in brief to alleviate anxiety. You should mention to ANC attendees that sterile devices are used for blood collection to reduce the risk of infection and that pain experienced will be minimal. Also explain to them that inclining the arm in downward position helps in pooling of blood towards the puncture site and helps in easy identification of vein and blood draw.

"While collecting the blood , please make sure that the tourniquet is not tied very tightly and removed immediately after the blood draw."

Suggestions to Facilitator

- Refer participants to page 24 of the Operational Manual for ANC Sentinel Sites 2014-15.
- Read out the slide; or invite a volunteer to read it out. Ensure that every message on the slide has been covered.
- Enact these points through role play, to best communicate the message to participants. Identify a different lab technician among your group; and ask him/her to perform these tasks (without actually puncturing any vein and/or drawing any blood) step-by-step, while the others watch closely.
- Take questions from participants, if any.



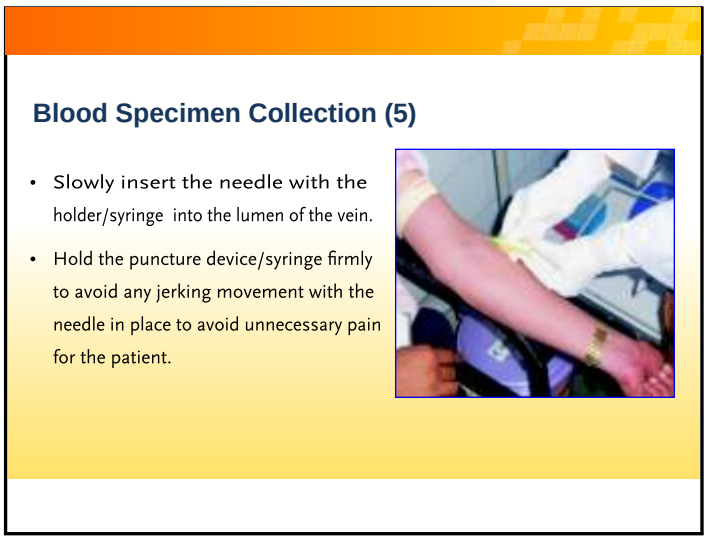
Describe the Slide

"Here too, we shall follow the steps for blood sample collection one by one, as described in this slide."

"Please note that the vein identified for blood draw should be palpated before cleaning and disinfecting the puncture site.If it necessary to reevaluate the site by palpation, the area needs to be re-cleansed before the venipuncture is performed."

Suggestions to Facilitator

- Refer participants to page 24 of the Operational Manual for ANC Sentinel Sites 2014-15
- Read out the slide; or invite a volunteer to read it out. Ensure that every message on the slide has been covered.
- Enact these points through role play, to best communicate the message to participants. Identify a different lab technician among your group; and ask him/her to perform these tasks (without actually puncturing any vein and/or drawing any blood) step-by-step, while the others watch closely.
- Take questions from participants, if any.



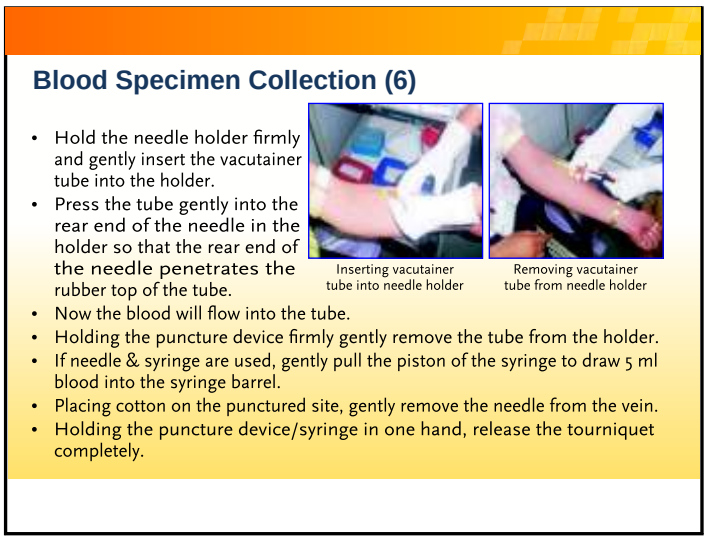
Describe the Slide

"We shall continue to follow the step-by-step directions for blood sample collection, as described here in this slide too."

"I will like to emphasize that the needle should form a 15-30 degree angle with the arm surface. Avoid excess probing. The Bevel end of needle should be away from the skin."

Suggestions to Facilitator

- Refer participants to page 24 of the Operational Manual for ANC Sentinel Sites 2014-15.
- Read out the slide; or invite a volunteer to read it out. Ensure that every message on the slide has been covered.
- Enact these points through role play, to best communicate the message to participants. Identify a different lab technician among your group; and ask him/her to perform these tasks (without actually puncturing any vein and/or drawing any blood) step-by-step, while the others watch closely.
- Take questions from participants, if any.



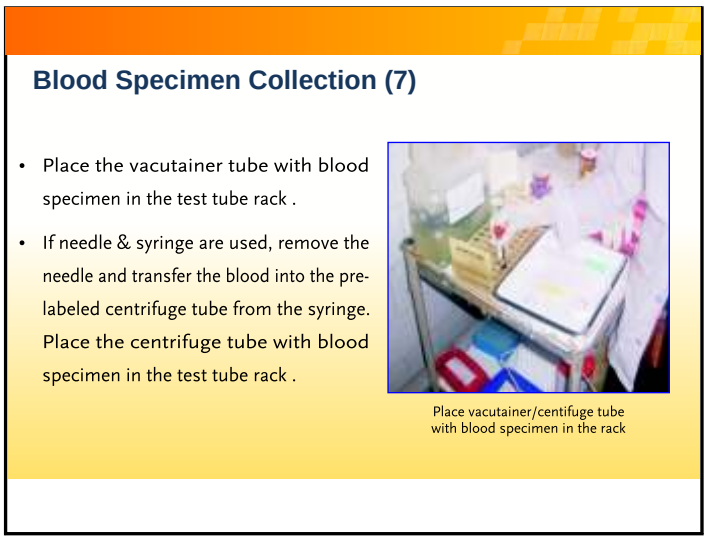
Describe the Slide

"We shall continue to follow the step-by-step directions for blood sample collection, as described here in this slide. Let us read the messages one by one.

"At the end, while placing cotton on the puncture site, please remember not to put too much pressure at site to avoid formation of a hematoma."

Suggestions to Facilitator

- Refer participants to page 24 of the Operational Manual for ANC Sentinel Sites 2014-15.
- Invite a volunteer to read out the all messages on slides one by one. Ensure that every message on slides is covered.
- Enact these points through role play, to best communicate the message to participants. Identify a different lab technician among your group; and ask him/her to perform these tasks (without actually puncturing any vein and/or drawing any blood) step-by-step, while the others watch closely.
- Take questions from participants, if any.

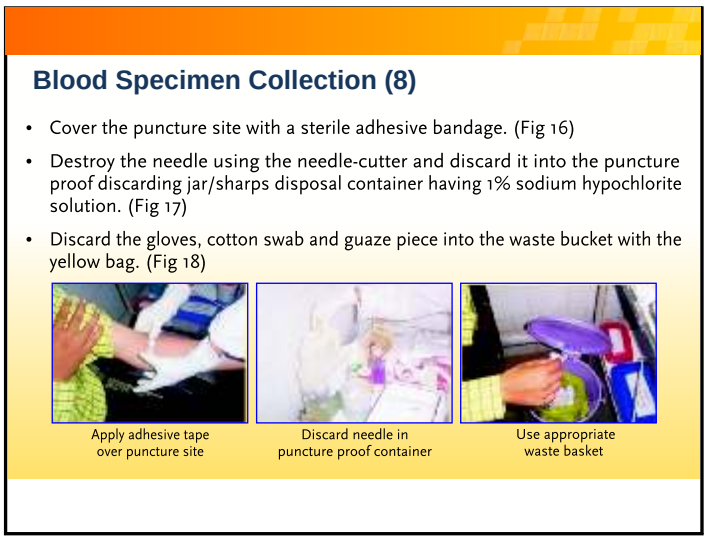


Describe the Slide

"Here too, we shall follow the step-by-step directions for blood sample collection, as described in this slide. Here we are talking of what to do once the blood sample has been collected from the attendees."

Suggestions to Facilitator

- Refer participants to page 25 of the Operational Manual for ANC Sentinel Sites 2014-15.
- Invite a volunteer to read it out. Once he/she read the messages, please ask him/her to explain the message. Ask others to add.
- Enact these points through role play, to best communicate the message to participants. Identify a different lab technician among your group; and ask him/her to perform these tasks (without actually puncturing any vein and/or drawing any blood) step-by-step, while the others watch closely.
- Take questions from participants, if any.



Describe the Slide

""And we continue with our blood sample collection exercise, as described in this slide.

"Remember to follow all standard precautions and bio-waste disposal methods, as shown here. Let us read the messages one by one.

"After holding pressure for 1-2 minutes, tape a fresh piece of gauze or Band-Aid to the puncture site. Please note that adhesive bandage not only assures the participants that she is being taken care of but also helps in avoiding infection at the puncture site.

"As far as bio-waste management at surveillance sites is concerned, please note that these shall be discarded as per local guidelines. I will like to mention again that hypochlorite solution used should be freshly prepared every day."

Suggestions to Facilitator

- Refer participants to page 25 of the Operational Manual for ANC Sentinel Sites 2014-15.
- Read out the slide; or invite a volunteer to read it out.
- Enact these points through role play, to best communicate the message to participants. Identify a different lab technician among your group; and ask him/her to perform these tasks (without actually puncturing any vein and/or drawing any blood) step-by-step, while the others watch closely.
- Take questions from participants, if any.

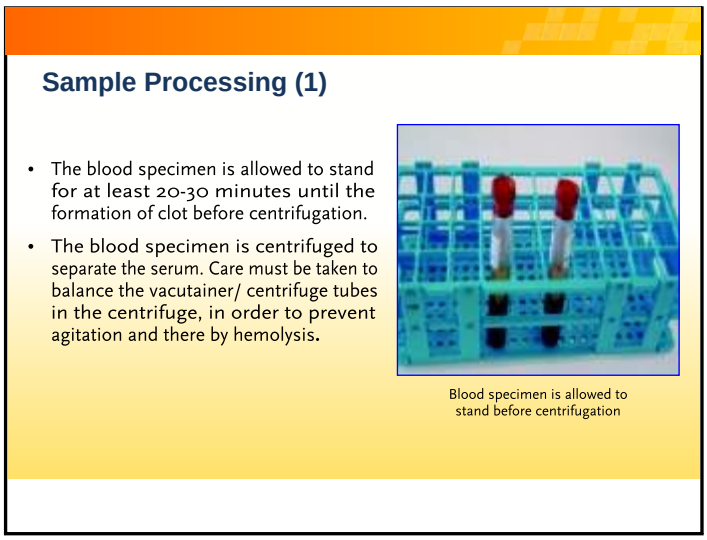
Describe the Slide

"I hope all of you — especially all laboratory technicians in our group today — have understood the steps for blood specimen collection. Now as we have mastered how to collect blood samples, we shall learn the appropriate techniques for processing them, labeling them, aliquoting them, and storing them properly till they are transferred to the HSS lab.

"Over the next couple of slides we will discuss how to separate serum from the collected blood samples. We will also discuss the right number of aliquots that need to be made from any given specimen and to label these aliquots. Lastly, we shall discuss the standard storage techniques for HSS samples/ aliquots."

Suggestions to Facilitator

- Refer participants to page 11 (for flow chart on blood specimen management) and page 27 (for instructions on sample processing) of the Operational Manual for ANC Sentinel Sites 2014-15.
- Take questions from participants, if any.



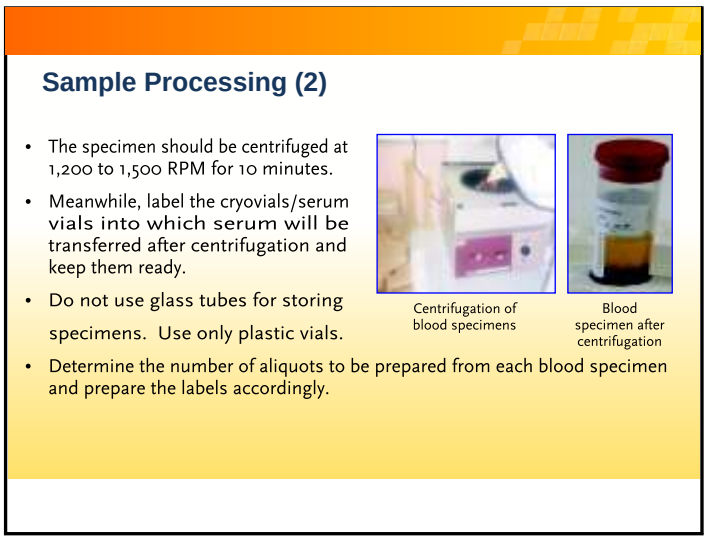
Describe the Slide

"Continuing with our discussion on blood sample processing, first we will discuss serum separation in these few slides. Let us go through these two messages one by one.

"I will like to mention that it is important to allow the sample to stand for 20-30 minutes to form a clot. Immediate centrifugation increases chances of hemolysis. Please note that vacutainer can be directly centrifuged and it is not advisable to transfer blood in any other tube for centrifugation from vacutainer to avoid occupational hazards because of potential spills."

Suggestions to Facilitator

- Invite a volunteer to read out the messages on the slide. Once he/she read the messages, please ask him/her to explain the message. Ask others to add.
- Take questions from participants, if any.



Describe the Slide

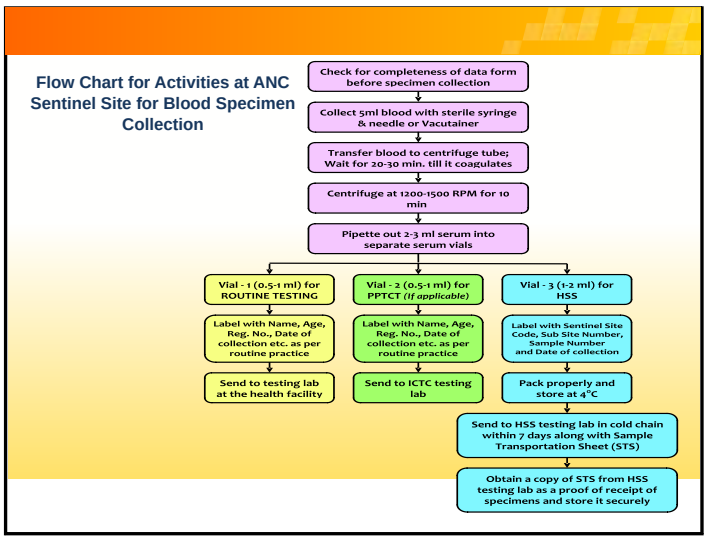
"In this slide, discussion on serum separation continues. So let us go through the messages on this slide slowly one by one.

"I will like to emphasize on properly closing the lid of the centrifuge before spinning the specimens and to open the lid only once the centrifuge stops rotations completely. Also important point to note is that cryovials must be labelled before making the aliquots."

"In the successive slides, we shall discuss more about how to determine the number of aliquots to be prepared.

Suggestions to Facilitator

- Invite a volunteer to read out the messages on the slide. Once he/she read the messages, please ask him/her to explain the message. Ask others to add.
- Once all the statements have been discussed, stress on closing the lid properly as mentioned in paragraph 2.
- Take questions from participants, if any.



Describe the Slide

"This flow chart will help you to better understand the sequence of procedures that a lab technician has to perform — right from checking for completeness of data form to transporting the HSS specimens to the RI, along with the necessary documentation.

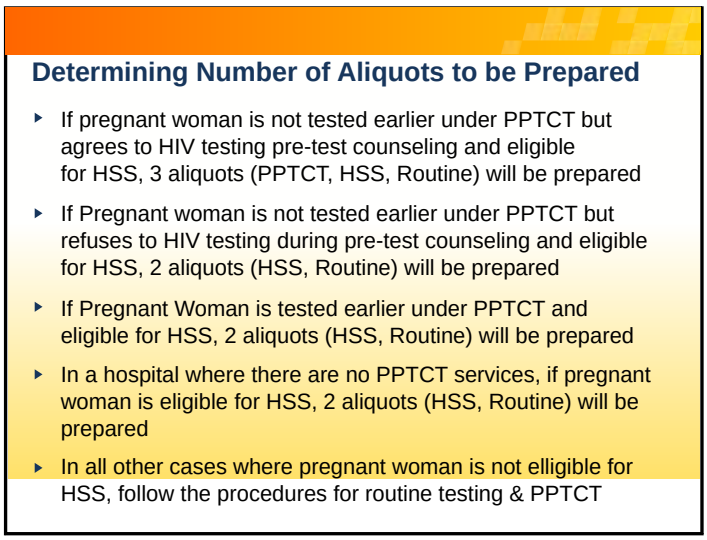
"The pink boxes denote the standard practices to be followed for all ANC patients who approach the lab for blood collection, along with their data forms. The yellow boxes present the steps to be followed for routine testing of ANC mothers; while the green boxes show the procedures for PPTCT testing. The method to be followed for HSS sample preparation is presented by the blue boxes in this flow chart.

"As you can see, the procedures for the initial blood sample collection and serum separation are the same for all specimen testing categories. It is only at the separate aliquoting stage that different procedures have to be followed, as per requirements. Notice that the labelling process for routine and PPTCT aliquots are different from that of HSS. While the ANC patient's name, age, ANC registration number, etc., are mentioned in the first two cases, for HSS the UAT strategy is followed. Vials having blood sample for HSS are labelled with the date, site and sample details from the ANC attendee's data form. Please note that for name of ANC attendees eligible for recruitment in HSS are never put on the label.

"Also notice that the testing centres are different for the different test categories. While routine tests are carried out at the ANC site's testing laboratory, PPTCT tests are done at ICTC testing laboratories, and HSS samples are tested at HSS testing labs. Once the HSS sample has been aliquoted, it needs to be properly packed and stored at 4°C temperature till it is shipped off in a cold chain within a week to the HSS testing lab. The sample transfer has to be accompanied with the required documentation, viz., two copies of the Sample Transportation Sheet (STS)."

Suggestions to Facilitator

- Refer participants to page 11 (for flow chart on blood specimen management) of the Operational Manual for ANC Sentinel Sites 2014-15.
- Go over the chart very carefully, stage-by-stage.
- Take questions from participants, if any.



Describe the Slide

"So how many aliquots need to be prepared from each specimen? As we have seen in earlier round, the answer depends on the situation. So what are the various scenarios? Let us go through those one by one"

Suggestions to Facilitator

- After reading the opening paragraph, select LTs randomly to go through each scenario one by one. Please stop the trainees once a statement is read. Explain the scenario and number of aliquots need to be prepared in the message. Then move to the next message and follow the same steps.
- Take questions from participants, if any.

Determining Number of Aliquots to be Prepared

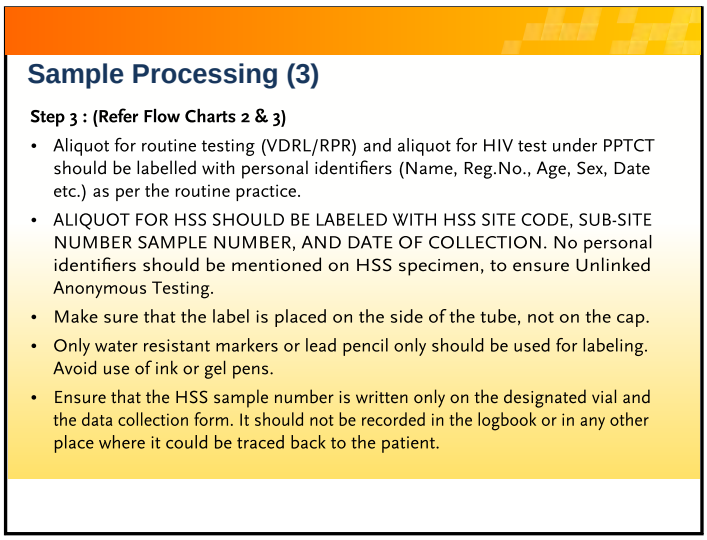
Scenario	PPTCT Services Available	Already tested for HIV under PPTCT	Agreed for HIV test under PPTCT Now	Eligible for HSS	Carries Prescription/ Requisition form for lab tests	No. of Aliquots to be prepared
1	No	NA	NA	No	Routine tests	1
2	No	NA	NA	Yes	Routine tests & HSS data form	2
3	Yes	Yes	NA	No	Routine tests	1
4	Yes	Yes	NA	Yes	Routine tests & HSS data form	2
5	Yes	No	No	No	Routine tests	1
6	Yes	No	No	Yes	Routine tests & HSS data form	2
7	Yes	No	Yes	No	Routine tests & PPTCT	2
8	Yes	No	Yes	Yes	Routine tests, PPTCT & HSS	3

Describe the Slide

"This slide represents a tabular form of the previous slide for easy retention. Let us go through them once again one by one"

Suggestions to Facilitator

- After reading the opening paragraph, select medical officers randomly to go through each scenario one by one. It's important to involve them to understand their comprehension on this aspect. Please do remember that medical officers are the nearest resource available for quick identifications of issue, if any, and their quick resolution.
- Take questions from participants, if any.

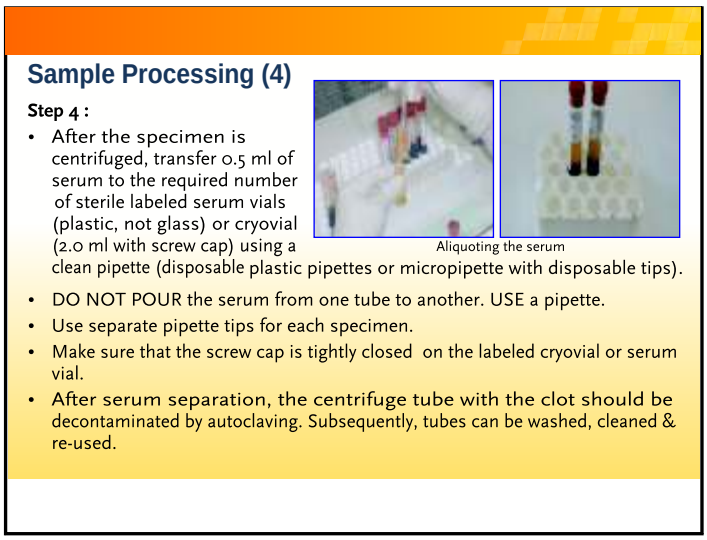


Describe the Slide

"In this slide, we will talk about labeling of aliquots. I will like to reiterate that testing under HSS is UAT, therefore, the name or any other identifier of the respondent shall not be reflected on the aliquot that will be used for testing under HSS. So let us go through these messages one by one."

Suggestions to Facilitator

- Refer participants to Box 5 on page 26 of the Operational Manual for ANC Sentinel Sites 2014-15.
- Read out each statement one by one after making the opening statement.
- You may reach to the trainees and ask them about their experience in labeling of serum vials during the last round of HSS.
- Take questions from participants, if any.

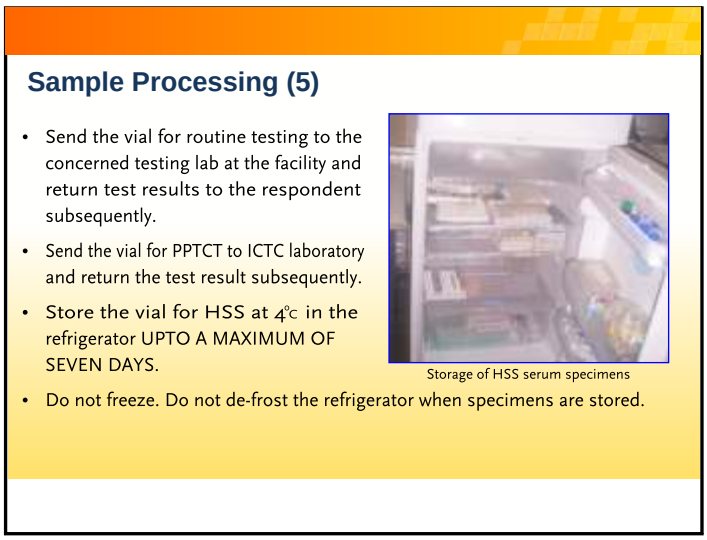


Describe the Slide

"Here we are going further ahead with sample management. While explaining this slide, I will like to mention that the serum transferred in vial for HSS should be minimum 2 ml. And separate pipettes/ tips must be used to avoid cross contamination of specimen which can lead to incorrect testing results."

Suggestions to Facilitator

- Refer participants to page 27 of the Operational Manual for ANC Sentinel Sites 2014-15.
- Instead of reading the slide the facilitator may ask questions to make the session participatory;
  - Ask the participants about bullet two – Why should serum not be poured between tubes and only a pipette be used? Answer: Pouring can result in remixing of blood with serum and also causes increase chances of serum spill.
  - Ask the participants about bullet three – What is the benefit of tightly closing the serum vials? Answer: To avoid any leakage during transit,this can be bio-hazardous and can also result in wastage of specimen.
- Take questions from participants, if any.



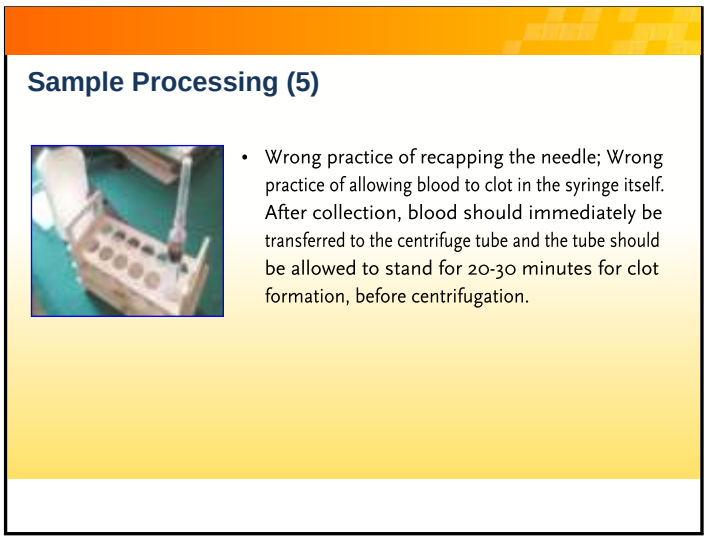
Describe the Slide

"In this slide, we will further talk about the handling of different aliquots. Please remember here that the blood specimen has been collected for routine resting and or PPTCT, hence I will like to reiterate that the vial collected for routine testing will be tested in the routine manner and reports provided to respondents.

"The vials collected for HSS testing will be stored for not more than 7 days at the site and subsequently transported. The specimens are stored temporarily at 4°c and make sure that the refrigerator is not de-frosted during storage. De-frosting leads to temperature variations and can cause specimen deterioration."

Suggestions to Facilitator

- Refer participants to page 27 of the Operational Manual for ANC Sentinel Sites 2014-15.
- Invite a volunteer to read out the messages on the slides. Once he/she reads the messages, please ask him/her to explain the message. Ask others to add.
- Ask participants about the routine procedure followed at their site for storage.
- Take questions from participants, if any.



Describe the Slide

"Till now we have seen recommended good practices in laboratory. Now we will see one of the practices which are never recommended in the laboratories.

"So let us see what is happening here. Can anyone tell problems with the practice shown in the slide?
(Answer: Incomplete serum separation, difficulty in transferring serum to vials, increased risk of spill and needle stick injury.)

"In the next slide, we will see a pictures depicting very small volume of serum in the vial which usually happens if recommended methods are not followed. As the quantity is low, mostly the specimen will be rejected which is wastage of efforts of all of you this can be avoided if recommended guidelines are followed.

Suggestions to Facilitator

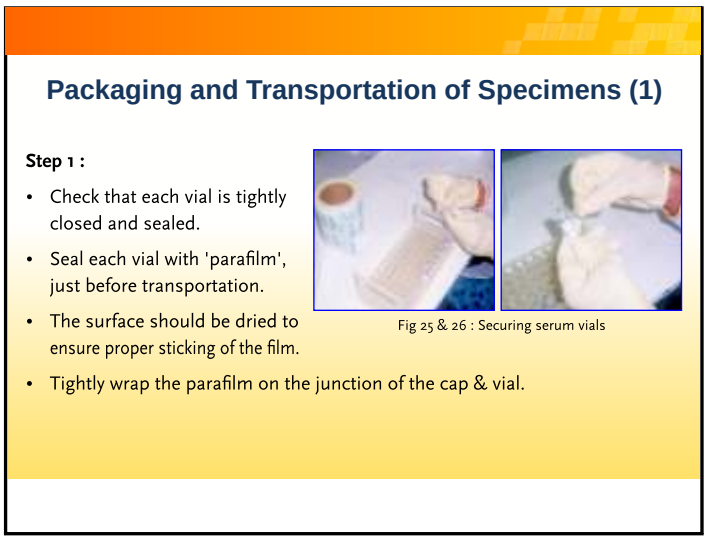
- Ask the participants – what problems do they think are expected if this wrong practice shown in the picture is followed?
- You may ask the team some other practices which should be avoided in the laboratory for collecting and storing a good quality sample and universal precautions to be observed.
- Take questions from participants, if any.

Describe the Slide

"Once the blood specimen collected is centrifuged, separated and aliquoted in vials, the vials are transported to the linked HSS lab. In next few slides, we will deal with correct procedure of serum vial packaging and transportation. However, before we go ahead, we shall have some discussion with our experiences from the past"

Suggestions to Facilitator

- Refer participants to page 28 of the Operational Manual for ANC Sentinel Sites 2014-15.
- You may see if HSS laboratory representatives are also available for the training. If they are available and they have experiences of past round of HSS, you may check with them what the quality of packing of HSS specimen was and if there were some practices that must be avoided during this round. You may note down good practices as well as avoidable practices on a flip chart to keep the session interactive.
- Take questions from participants, if any.



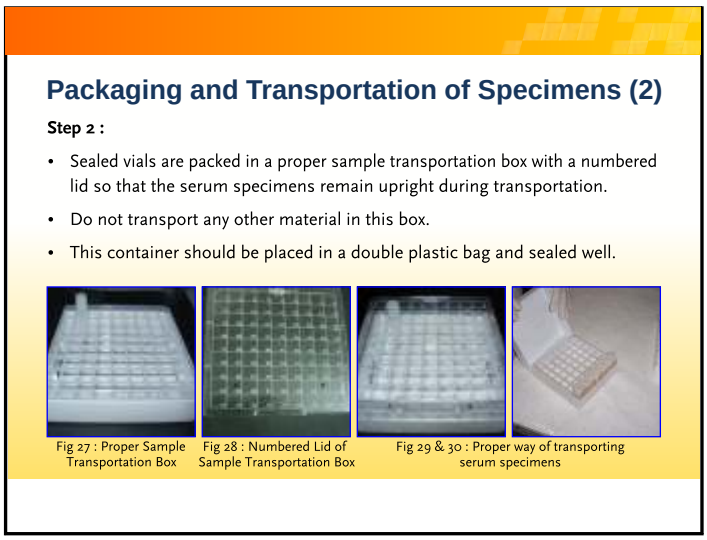
Describe the Slide

"So first thing in sample packaging is proper closure and sealing of serum vials. Please note that the chances of leakages are maximum during transportation and transit. Therefore, you should tightly close the serum vials and also seal it with paraflim (which is a paraffin tape).

"Please note that parafilm sticks to the surface only when the surface is dry. The correct place of sticking the parafilm is the junction of cap and vial. Inform the trainees that while applying the parafilm, it should not be stretched too much, else it can break and if it not stretched at all it may not stick properly"

Suggestions to Facilitator

- You may invite some volunteer to read through the messages on the slides.
- Take questions from participants, if any.



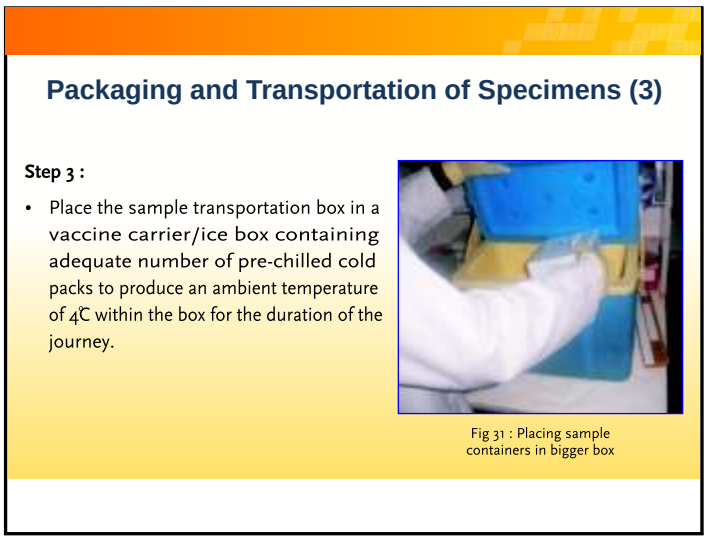
Describe the Slide

"Here we are continuing with our discussion on packing of specimens. So let us go through the messages on the slides one by one.

"I would like to emphasize that placing the transportation box in the plastic bag ensures that the lid of the box does not get displaced or opens during transportation. It also helps in containing specimen leakage if it may happen during transit."

Suggestions to Facilitator

- Invite volunteers to read out the messages one by one. The messages are self explanatory, however, please explain them if required.
- It will be good to have sample of transport boxes being supplied by SACS. Please use it to demonstrate to the site team and tell them how these can be used to ensure proper transportation.
- Take questions from participants, if any.

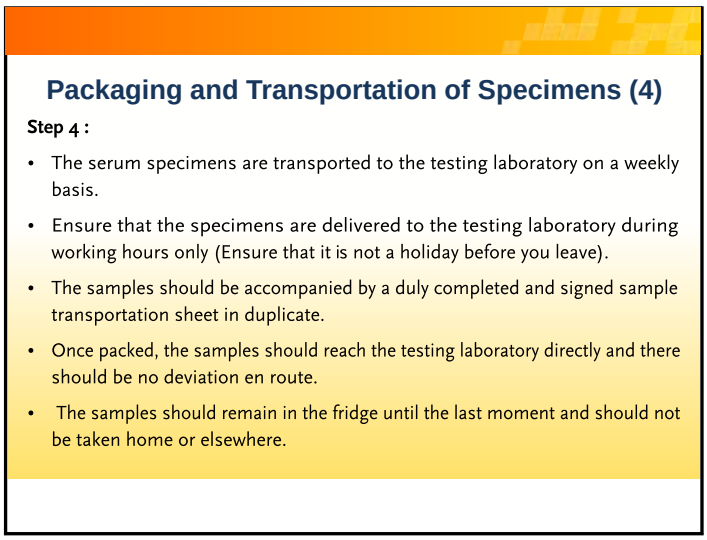


Describe the Slide

"Here in this slide, we explain that maintaining cold chain during transportation is important to maintain the integrity of the serum. To maintain cold change, adequate number of cold packs must be placed in the ice box/ carrier."

Suggestions to Facilitator

- Invite volunteers to read out the messages one by one. The messages are self explanatory, however, please explain them if required.
- You may further interact with the Lab Technicians to understand the routine cold chain practice at various sites. You may tell them to continue to do the same if you find them appropriate or suggest modifications to be done if required.
- Take questions from participants, if any.

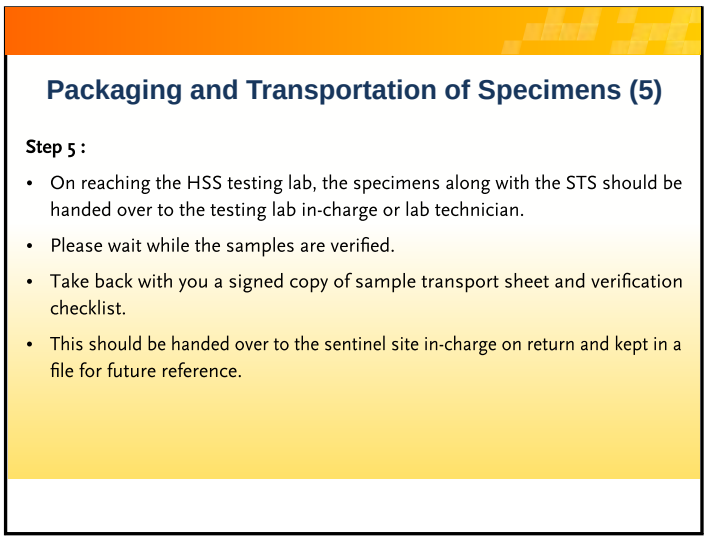


Describe the Slide

"Here in this slide we have some instruction for you to follow for transporting the samples. It's important that you follow these instructions to avoid hemolysis of the samples as well as occupational hazard to yourselves and others. We will go through each of these instructions one by one."

Suggestions to Facilitator

- After reading the opening paragraph, select LTs randomly to go through each instruction one by one. Please stop the trainees once an instruction is read. Explain the instruction to the audience and then select other LTs to read the next instructions.
- Take questions from participants, if any.



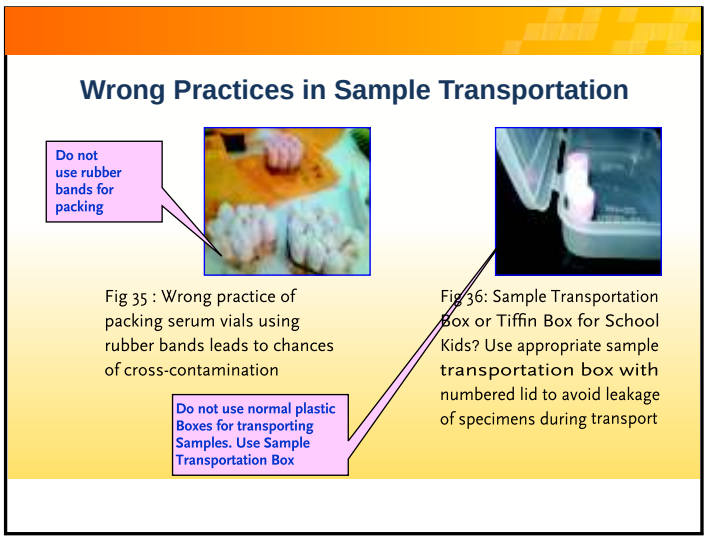
Describe the Slide

"Here in this slide, we continue with our discussion on sample transportation. The focus is on the activities to be done while handing over the specimen to HSS testing labs. We will go through each of these instructions one by one:

"It's important to remember that lab technician should bring back the STS and verification checklist for record keeping at the site. It's important for site-in-charge to know if any of its samples has been rejected or not. If any samples have been rejected by HSS testing lab, there is a need for initiation of discussion with SACS to collect more samples to manage this shortfall if some time is still left in the completion of 3 month period of surveillance.

Suggestions to Facilitator

- After reading the opening paragraph, select LTs randomly to go through each instruction one by one. Please stop the trainees once an instruction is read. Explain the instruction to the audience and then select other LTs to read the next instructions.
- Take questions from participants, if any.



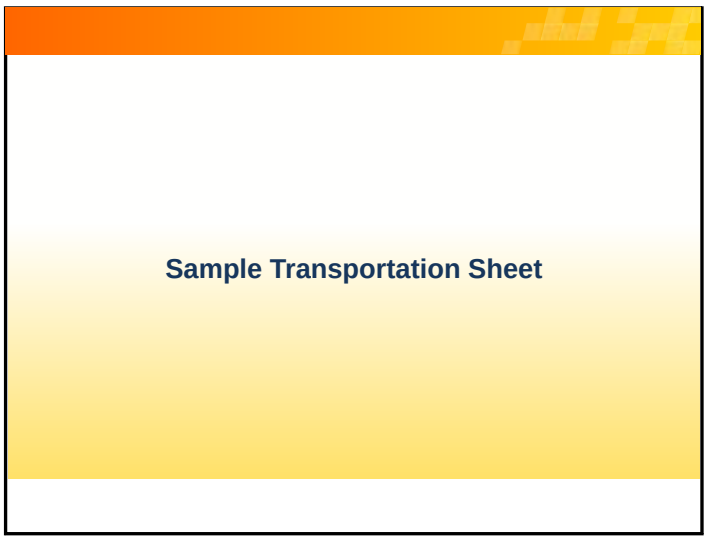
Describe the Slide

"Here in this slide we have presented some of the wrong practices observed during previous rounds of surveillance.

"Please note that use of rubber bands and tiffin boxes for transportation do not adequately secure serum vials during transportation and leads to increase chances of specimen leakage."

Suggestions to Facilitator

- Take questions from participants, if any.

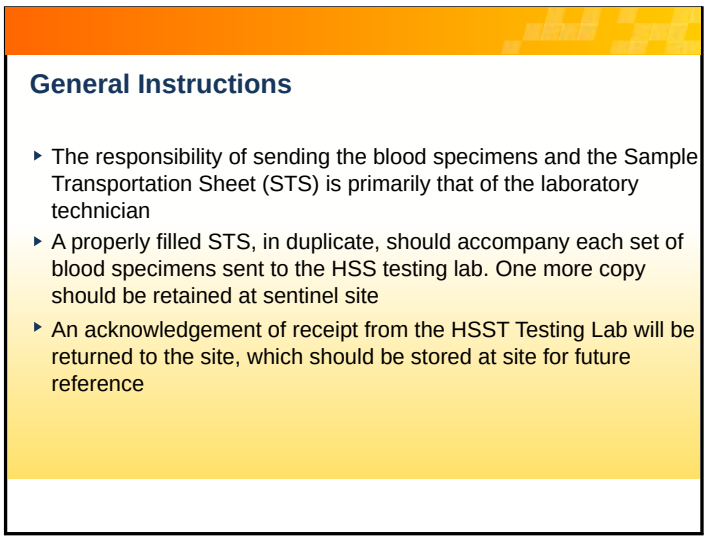


Describe the Slide

"We have discussed till now technical aspects associated with blood specimen management in HSS ranging from blood collection to handing over the sample to the HSS testing lab. In next few slides, we will discuss about documentation associated with blood specimen management in HSS. We will also see some of the bad documentation from earlier rounds of HSS to emphasize what we are not expecting from you while doing this documentation."

Suggestions to Facilitator

- Take questions from participants, if any.

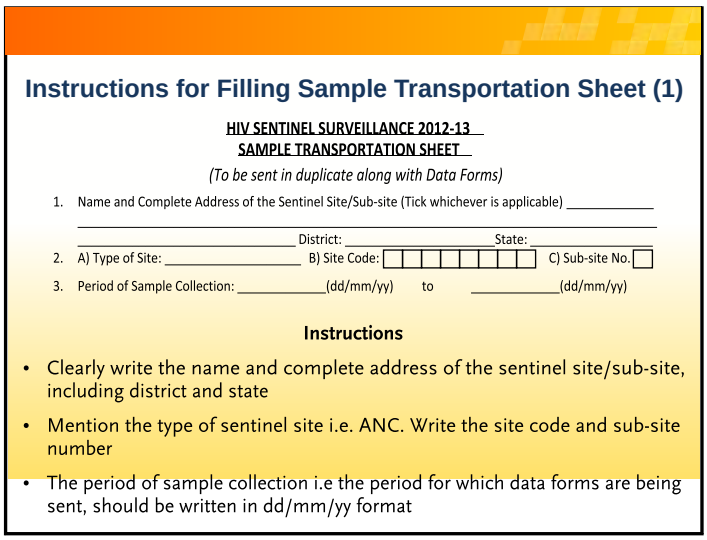


Describe the Slide

"The documentation associated with the lab component of HSS is called Sample Transportation Sheet, commonly known as STS in our day to day conversation. So how should we manage STS? We will go through instructions on this slide to become familiar with the same."

Suggestions to Facilitator

- After reading the opening paragraph, select LTs randomly to go through each instruction one by one. Please stop the trainees once an instruction is read. Explain the instruction to the audience and then select other LTs to read the next instructions.
- Take questions from participants, if any.



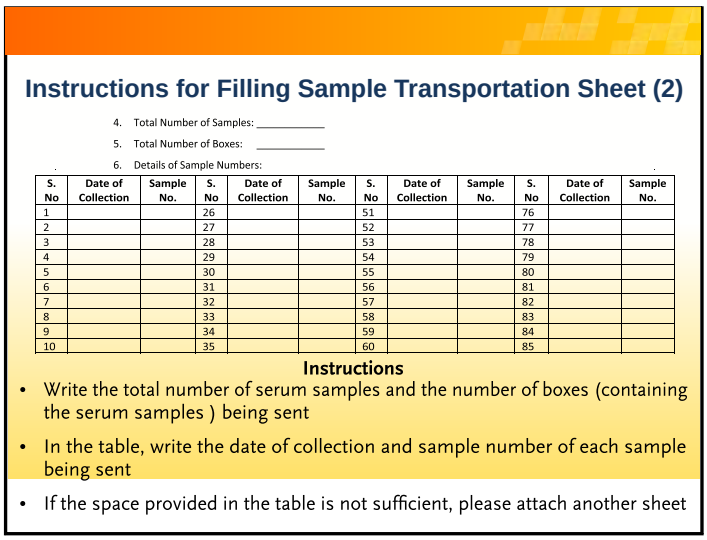
Describe the Slide

"So let us go though this STS. I request all of you to open your copy of STS. As you can see, it's a simple one page format and it needs to be prepared in three copies for each lot of specimen being transported to HSS testing labs. Two copies shall be sent in duplicate along with samples while one copy needs to be retained at the site level.

"In this slide, we have shown the introductory portion of the STS. Let us go through each item and instruction one by one."

Suggestions to Facilitator

- After making the opening statement, please ensure that each participant has his/her copy of STS for reference.
- Please invite a volunteer first to read each item (from 1-3) one by one and request him/her to explain what shall be filled in each place. After the items are discussed and explained correctly, please invite another volunteer to read instructions on slide one by one. Please have a discussion on the mechanism to be put in place at the surveillance site to ensure that the lab technician is aware of the surveillance site and sub-site codes.
- Take questions from participants, if any.

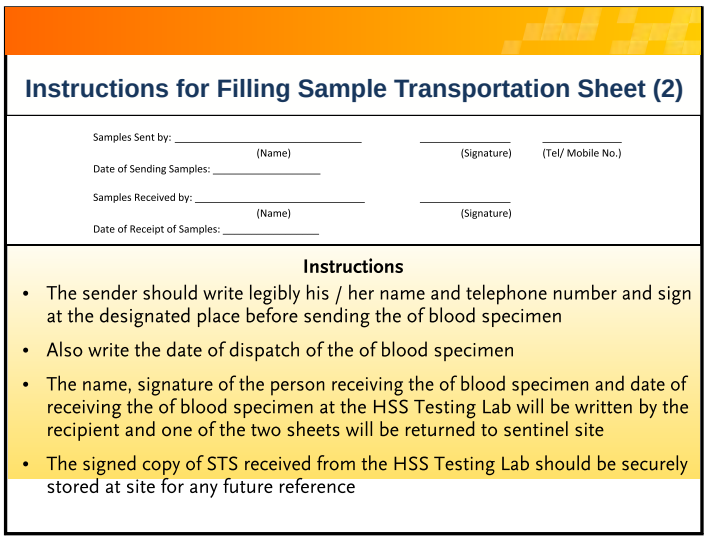


Describe the Slide

"So let us go through the other parts of the STS. Here we are summarizing the number of specimens being sent in the sample transport boxes as well as basic details i.e. sample number and date of collection of each specimen being transported. So let us go through all item on this slide and instructions to complete them one by one."

Suggestions to Facilitator

- Please invite a volunteer first to read each item (from 4-6) one by one and request him/her to explain what should be filled in each place. After the items are discussed and explained correctly, please invite another volunteer to read instructions on slide one by one. Please explain that if you are sending more than 100 samples, you can attach one more sheet of STS.
- Take questions from participants, if any.

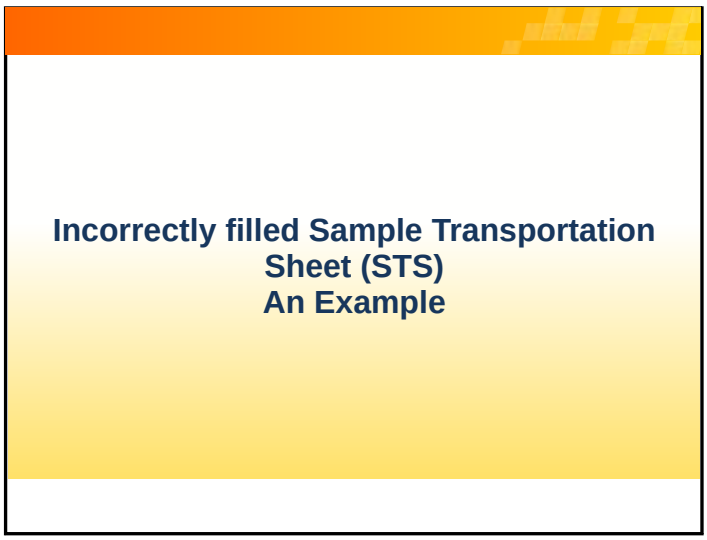


Describe the Slide

"Now we will go through last section of the STS which provides evidence of the Lab technician sending the sample and person at HSS testing labs receiving the sample. So let us go through all item on this slide and instructions to complete them one by one."

Suggestions to Facilitator

- Please invite a volunteer first to read each item one by one and request him/her to explain what should be filled in each place. After the items are discussed and explained correctly, please invite another volunteer to read instructions on slide one by one. The instructions are self explanatory; still, please clarify the instruction if required.
- Take questions from participants, if any.

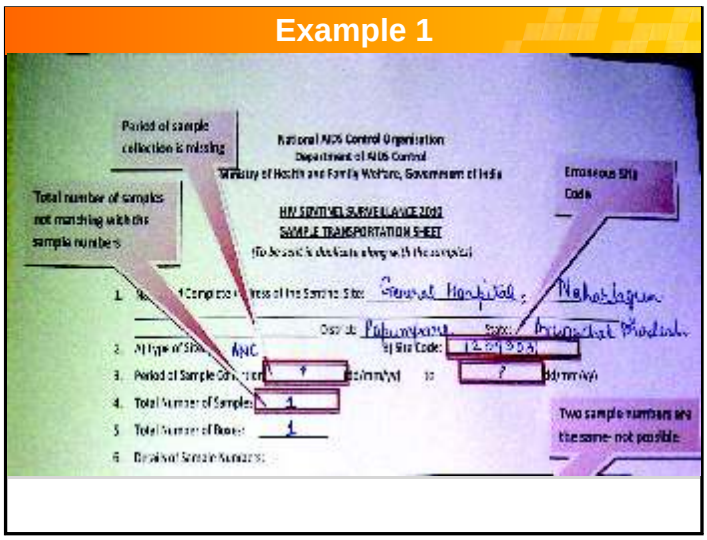


Describe the Slide

"So we have gone through the STS in detail. As you must have observed, STS is a very simple format and we do not expect any errors while handling it. However, there have been cases where STS was not maintained as recommended. We will go through some of the examples from earlier rounds of surveillance in next few slides."

Suggestions to Facilitator

- Take questions from participants, if any.

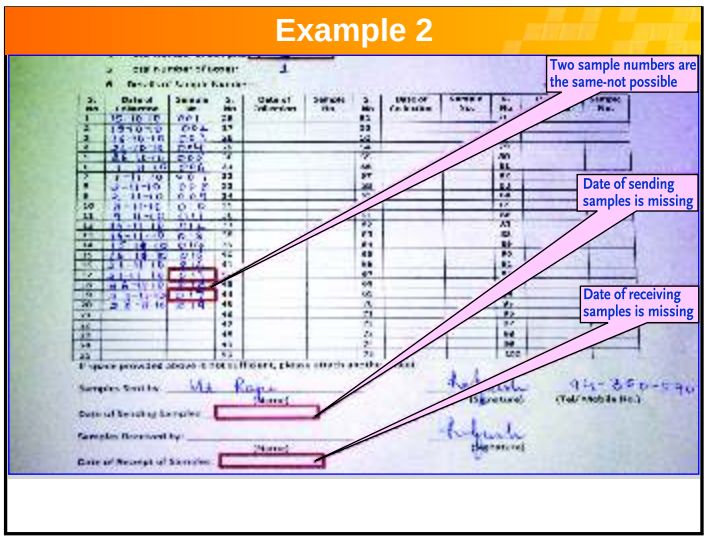


Describe the Slide

"Here is one example with lots of errors. Let us go through them one by one".

Suggestions to Facilitator

- After making the opening statement, please invite a site-in-charge to go through the errors shown in this slide. As mentioned earlier, it's important to involve them to ensure their understanding on this aspect. Please do remember that medical officers are the nearest resource available for quick identification of issues if any and their quick resolution.
- Summarize the errors on the slide after the site-in-charge has finished discussing his/her understanding of the errors on the slide.
- Take questions from participants, if any.

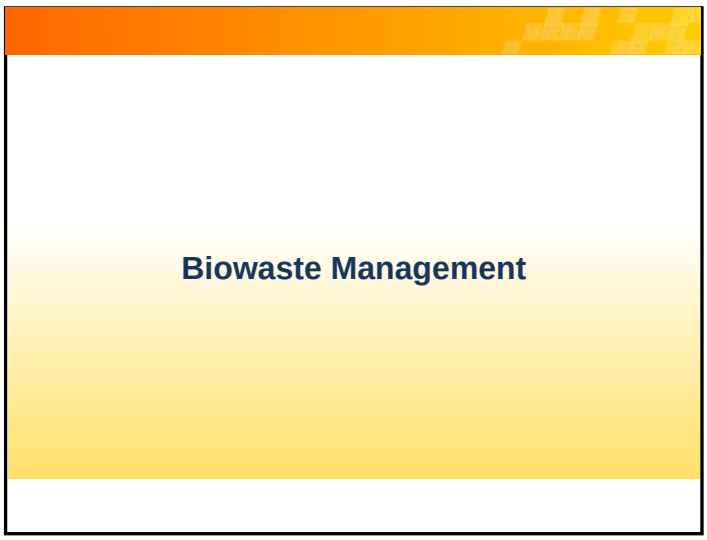


Describe the Slide

"Here again, we will continue with common errors observed on the STS. Let us go through them one by one".

Suggestions to Facilitator

- After making the opening statement, please invite another site-in-charge to go through the errors shown in this slide.
- Summarize the errors on the slide after the site-in-charge has finished discussing his/her understanding of the errors on the slide.
- Take questions from participants, if any.

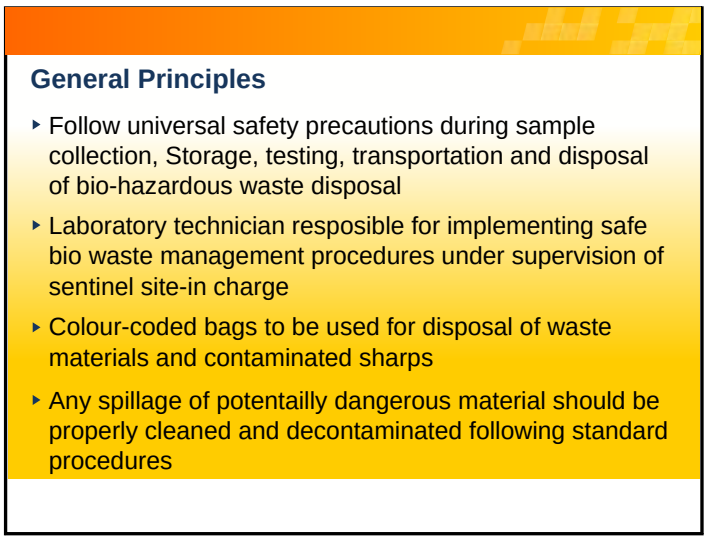


Describe the Slide

"So till now we have discussed how to collect, store and transport the samples and associated documentation with it. In the next few slide, we will talk about another crucial lab function i.e bio-waste management. Again, as a lab technician, you must follow safe practices at your sites; hence we will not go into the details. But we will talk of some basic principles of bio-waste management to ensure that every one is on same page."

Suggestions to Facilitator

- After making the opening statement, please invite a few lab technicians to explain the bio-management practices at their sites. This discussion will help everyone understand not only the bio-management practices applied at sites but also will help to develop some discussion for the instructions given on next slides.
- Take questions from participants, if any.

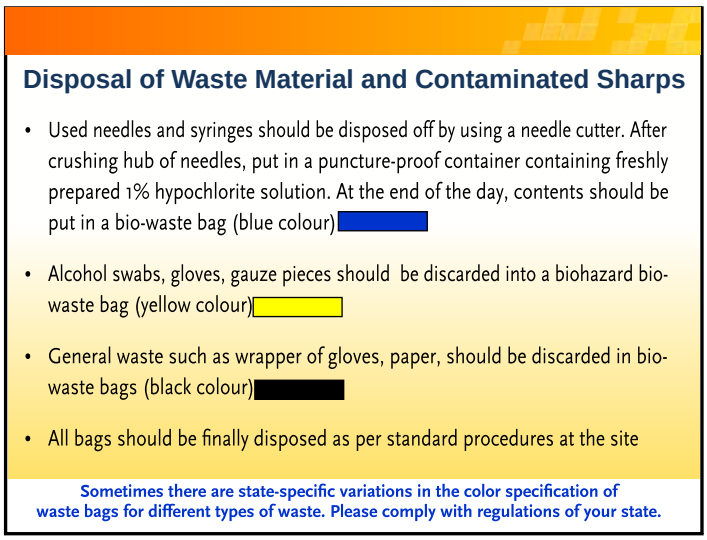


Describe the Slide

"So here we will have some general principle for the section. So lets us go through each principle on this slide one by one."

Suggestions to Facilitator

- Please invite a volunteer first to read each item one by one and request him to explain each principle. All of these are self explanatory; still please further clarify the principles if required.
- Take questions from participants, if any.



Describe the Slide

"In this slide, we will have some more discussion on waste management practices. We have some generic instructions on the slide, however I would like to instruct once again that we have to follow the practices recommended in our states as far as disposal of waste materials and sharps in color-coded bags are concerned. So, let us go through these one by one."

Suggestions to Facilitator

- Please invite a volunteer first to read each item one by one. Please ask him/her to explain what color bag is used for what purposes in the state. If there are variations in the statements given on slide vis a vis practices recommended at state level, please tell the site team to follow state recommendations.
- Take questions from participants, if any.

Management of Needle Stick Injury

- Needle stick, puncture wounds, cuts, open skin contaminated by spills or splashes should be washed throughly with soap and water
- Report injury to the laboratory in-charge or site in-charge as the case
- Assess individual for Post Exposure Prophylaxis (PEP) PEP, perferably should be started within 2 hours and no later than 72 hours of the accidental expose
- Appropriate medical e valuation, treatment and counseling should be provided
- For details on PEP, please refer to NACO Guidlines for Post Exposure Prophylaxis on www.naco.gov.in

DISCUSSION

END OF SESSION 5

Describe the Slide

"Here again we have some instructions for needle stick injury under the section. Let us go through these one by one."

Suggestions to Facilitator

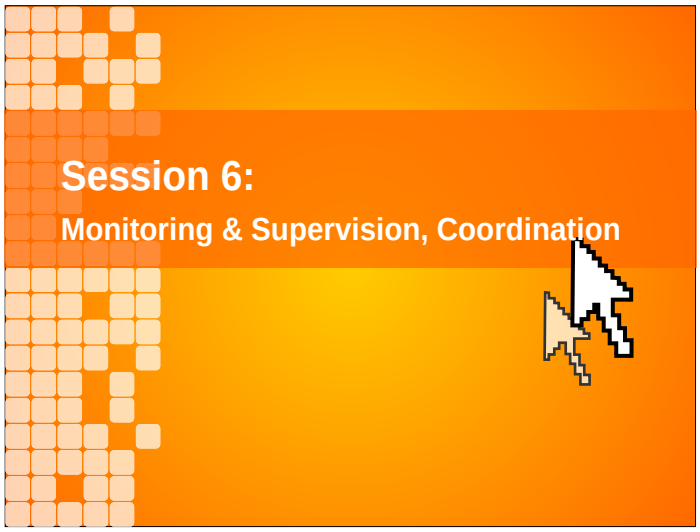
- Please invite a volunteer first to read each item and request him/her to explain each principle. All of these are self explanatory; still please further clarify the principles if required.
- Take questions from participants, if any.

Describe the Slide

"Now we have reached the end of our session. Please feel free to ask if you have any other questions."

Facilitation Tips for Session 6

Monitoring & Supervision; Coordination



Describe the Slide

"I welcome all of you to this very important training session of HIV Sentinel Surveillance system in India. Since we have completed five sessions including understanding the surveillance, its importance, relevance to India's HIV epidemic; then we did exercise on ' Know Your Sentinel Site' to understand and discuss facility level problems to overcome and ensure proper implementation at site ; methodology where sampling approach and sample size and case recruitment criteria was emphasized; followed by hands on practice for data forms to ensure correct & legible encircling; & finally laboratory part to ensure proper collection and transportation of samples. Ensuring the quality at each step by means of physical observation, supportive supervision is the next important step to discuss. This will enable us to collect good data and samples. Large efforts have been taken to standardise the monitoring and supervision of HSS including real time monitoring, proper documentation, but still lot needs to be done on integrated plan for supervision, effective coordination between NACO, RI and SACS and successful monitoring.

Effective and supportive supervision with real time monitoring helps us understand methodological, operational issues and address them for ensuring quality of the surveillance data. This will ensure the better monitoring HIV trends and estimations.

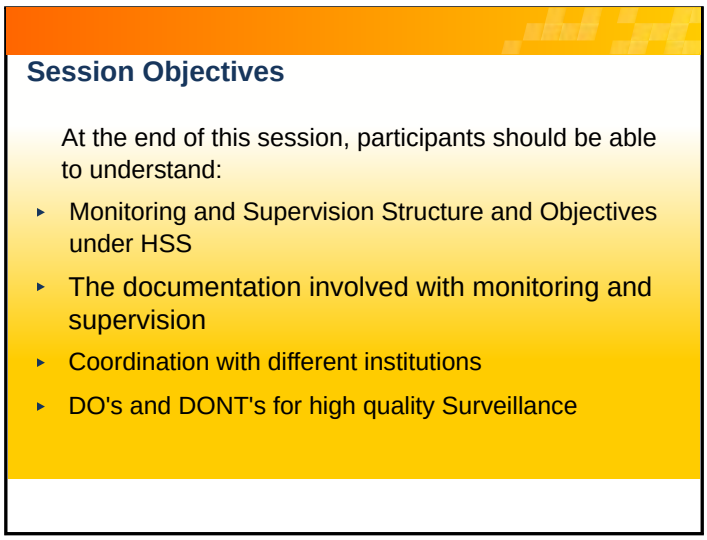
Suggestions to Facilitator

- Interact with participants and warm up the session before proceeding further. Begin with questions on general supervision: Such as: "Madam/Sir, tell me, what is your opinion regarding supervision?
- Through this interactive exercise, ascertain whether participants are clear about the principle and ingredients of supervision and monitoring. This will help you to customise your participatory approach, as you will know how many participants are novices and how many have previous knowledge of real time monitoring system.
- Before going to the next slide, you may recount your experience of a site visit / monitoring/ coordination and how errors/ bias were identified, discussed and sorted out with appropriate solutions in line with operational manual guideline.

Frequently Asked Questions

"How many of you have been involved in surveillance exercises before as Supervisor? How many of you been part of site which is being visited for supervision? What is supportive supervision and what is not supportive supervision?

Definition : Supportive supervision is a process that promotes quality at all levels of the health system by strengthening relationships within the system, focusing on the identification and resolution of problems, and helping to optimize the allocation of resources- promoting high standards, teamwork, and better two-way communication.. (Marquez and Kean 2002)



Describe the Slide

"Let us begin our present session on 'Introduction to Monitoring & Supervision; Coordination' with the broad objectives of this session. It will be my attempt to help you understand the key concept of monitoring & supervision, its structure and the purpose of it including minimum documentation and coordination.

"I would like you to specifically understand the importance of monitoring, supervision, its relevance, how it helps understand major issues in the field and how quickly corrective actions can be taken. The huge network of Sentinel surveillance spread across each district in the country needs coordinated efforts to ensure the adherence of SOP (mentioned in operational manual) in each step (Along with the syncronized coordination) the supervision and monitoring in real time, with a trouble shooting attitude is vital.

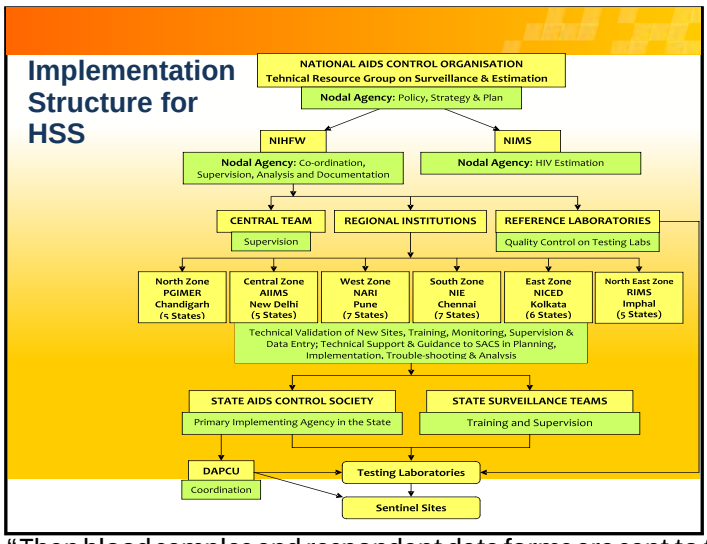
"Please feel free to ask me questions at any stage. In fact I would greatly encourage you to clear your doubts, if any, on the subject of this slide.

Suggestions to Facilitator

- You may refer participants to page 5 and pages 7–11 of the Operational Manual for ANC & STD Sentinel Sites.
- You may remind participants that consistently adhering to these guidelines during the HSS process will minimize the errors year on year and maximise the generation of quality surveillance data, leading to meaningful interpretation and analysis of year-on-year HIV trends in India.
- Ask participants if they have any other points that they would like covered/addressed during this session on supervision part. If any relevant suggestion is made, make a note of the same on the separate flip chart/white board, and include the point(s) wherever necessary during the current training session.

Frequently Asked Questions

- Who can be the Supervisor or monitor for the HIV Sentinel Surveillance?



Describe the Slide

"This is the implementation structure for HSS. This diagram explains the entire surveillance hierarchy from the field up to the national level. As you can see the sentinel site staffs at the base on which the foundation of surveillance system stands ;without you; this system would never work.

"The sentinel sites are the primary units for conducting periodic recruitments from target population groups, collecting basic respondent information (Keeping the UAT strategy in mind), and testing blood samples for surveillance purposes. This vital surveillance data forms the pillar of the entire HSS programme.

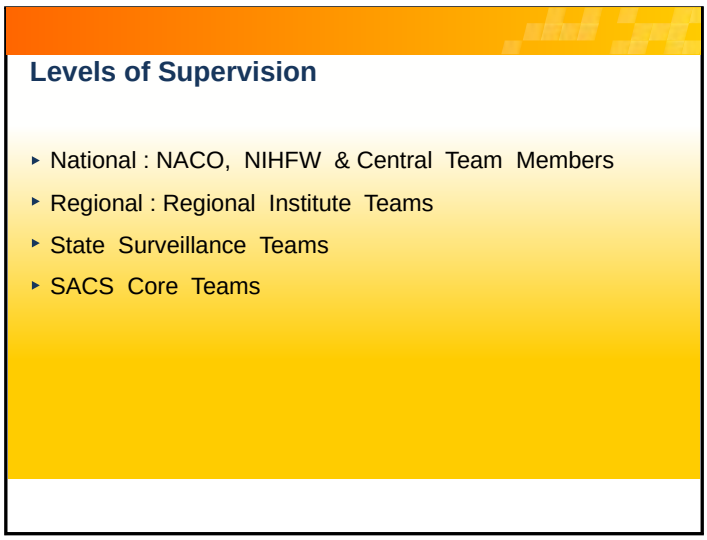
"Then blood samples and respondent data forms are sent to the Regional Institutes (RIs). While the laboratories of the states called State Reference Laboratories (SRLs) and designated laboratories conduct testing of HSS samples, the reference laboratories carry out quality control on samples sent by the testing laboratories. State and district level bodies like the State AIDS Control Society (SACS) and District AIDS Prevention and Control Unit (DAPCU) play a vital role in coordinating with RIs on technical, supervision and quality assurance at HSS sentinel sites.

"The Regional Institutes or RIs play a key role in training site personnel, conducting site supervision during surveillance, and supporting the SACS during planning, monitoring, data entry and analysis. The RIs also supervise the State Surveillance Teams (SSTs) that are responsible for training, hand holding sites and ensuring that surveillance takes place as per guidelines.

"The National AIDS Control Organisation (NACO) is primarily responsible for overall strategizing, policy planning and utilising of the HSS programme with the assistance from different partner organisations.. It functions through two nodal institutes — one which is responsible for overall coordination, supervision and analysis, the National Institute of Health and Family Welfare (NIHFW) — and the other which is responsible for HIV estimations and projections by use of surveillance data, the National Institute of Medical Statistics (NIMS). The entire process of surveillance is managed by NACO at the national level supported by technical partner agencies like WHO & CDC. The structure also shows the involvement and role of various institutes at three layers which will be used for supervision and monitoring purpose as well apart from central team members.

Frequently Asked Questions

- What is external and internal supervision? Why supervision and monitoring of HSS sites happens in odd hours sometimes? Why registers, data forms, lab reports, important to maintain at sentinel site? How to maintain UAT with documentation involved at site?



Describe the Slide

"Many of you are now aware that our national HIV Sentinel Surveillance system is the largest surveillance system in the world.

The implementation structure as discussed in previous slide, works at all levels for smooth conduct of surveillance includes national, regional, state and district level monitors. This slide highlights the different levels of supervision which is important in identifying problems as well to suggest corrective solutions during the surveillance period.

National level: The Technical Advisory Group comprising senior technical experts from NACO, the Regional Institutes, WHO, CDC, FHI 360, UNAIDS , NIHFW and ICMR are guiding and advising the entire process of planning and executing the HSS. The National Working Group comprising individuals from NACO, WHO, CDC and FHI360 staff who have contributed in developing guidelines, manuals, tools and formats for all aspects of the surveillance.

TAG members and Working Group members for surveillance will be visiting sentinel sites as supervisors to randomly assess and improve the quality of surveillance across the country. The Central Surveillance Team is a committed group of technical experts, who are identified by NACO/ NIHFW to travel to different parts of the country to monitor field activities and improve the quality of the surveillance. The role of national members will be to support, supplement & strengthen regional and state supervision being an additional layer of supervision & providing timely feedback through online system.

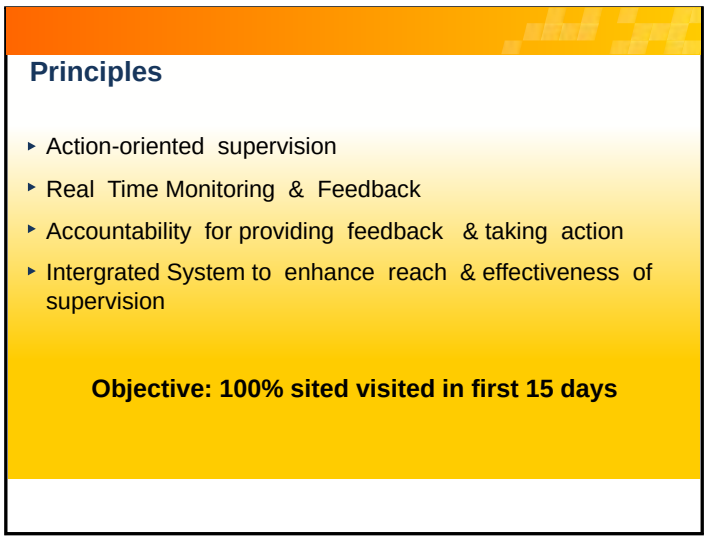
Regional Level: The Regional Institutes are the hubs that are responsible for the field level supervision of several states designated under them. The institutes are: ; AIIMS, New Delhi; NIE, Chennai; NARI, Pune; PGI, Chandigarh; NICED, Kolkata; RIMS, Imphal. The institutes, in addition to providing implementation support, will provide supervision and monitoring for the HSS in coordination with State AIDS Control Societies and State Surveillance Team members. They will also make sure that the entire region is adequately supervised by meticulous planning to avoid duplication of efforts with effective utilization of regional & state level supervisors.

State level: The State AIDS Control Society is playing a crucial coordination role. The entire surveillance being implemented in the state by the core surveillance team of SACS including Deputy Director (M&E, Surveillance), State Epidemiologist, M&E Officer and their team. Apart from ensuring smooth implementation of surveillance, they will also manage to make visits to all sentinel sites in the state at least once and more than once at the 'problem sites'. SST: These are technical experts from medical colleges and institutions that have been carefully selected based on their experience and technical expertise, to provide intensive handholding and support to the surveillance. They are based at the state level and will be more frequently in touch with you in the field, to review the work that you are doing, and to provide you real time feedback on areas that need improvement.

District level: DAPCUs are placed at the district level and have very detailed and in-depth knowledge about the process and operations at site level thus will be approached to facilitate local coordination, site sensitization meetings and discussions including supervision of sites to ensure crisis prevention and management as and when required.
The entire structure of monitoring & supervision from national to state level is meant to support your technical and operational needs. They will provide you suggestions for improvement, where they find gaps, and they will also enhance your understanding of the operational manuals, guidelines etc., if you are having trouble interpreting

Suggestions to Facilitator

- You may invite experienced staff during the training of session to talk about their experiences about identification of any major problems and solutions given that had avoided errors/ biases at their sentinel site.
- You may ask participants at the end of session on different layers of supervision and within those different stakeholders who will supervise the sentinel sites to prepare their questions and concerns to be raised during the visit.
- Take questions, if any, at this stage.



Describe the Slide

"Now that we have a better understanding of 'monitoring & supervision structure, let us move on to understand the principles and importance of having strong and robust supervision, monitoring and coordination system for

The monitoring of surveillance will include whether the trainings are happening, to know that all personnel designated at sites and laboratories were trained or not, to know if there are dropouts during the surveillance period, to know if you have received all the consumables that you need to conduct the surveillance, whether equipments are functioning well, whether any untoward / unwanted attempts (drive/ campaign to complete sample size) by you, etc. In addition we will also need to keep track of what is happening in the field in real time.

It is observed that the recommendations mentioned and reported by the supervisor have helped a lot to find out different problems at site in right time. It's observed that over the period of time, effective supervision and prompt action at local level has resulted in improved performance and reduction of errors/ biases, problems at site. All supervisors will provide feedback to you on the spot will address your concerns if any, will answer your questions if any. Each supervisory visit is an opportunity to clarify your doubts so keep it ready.

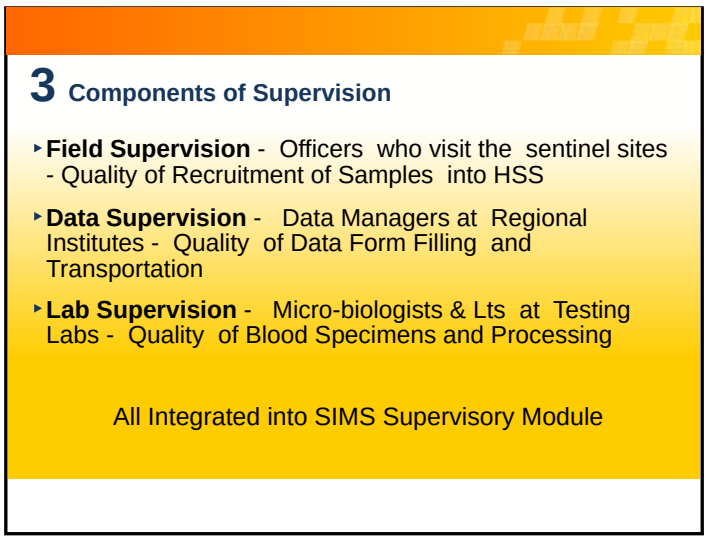
Quote few examples: Like site investigations in unusual findings reduced over the period of time. The proportion of sentinel sites completing the sample size increased over the period of time etc. The supervisory visits also include fixing the responsibility according to the type of problems observed so that quick and appropriate action is taken by respective institutes.
All supervisory visits should be conducted within the first 2 weeks of the HSS including the actions taken for the issues identified. Each supervisor must write the important issues, problems, best practices observed at sentinel site along with responsibility to initiate action taken in supervisory register maintained at the site. This is to be maintained by site-in-chrage with his team to help next supervision team to ensure action is taken and review it. The supervision register will help to refine the quality of supervision by further probing and improving any other challenges/ problems/ gaps.

The integrated software system(SIMS monitoring module) has been successfully used since 2 years in enhanced planning, reporting, and documenting and immediate feedback for supervision & monitoring. However still there are delays, gaps and improvement in effective use of this integrated system.

You must cooperate to the fullest extent being available during the visits and answering questions about the site work.

Suggestions to Facilitator

- You may invite participants to read out the slide elaborate each principle slowly, while you explain the significance of each to them.
- "Can anyone of you volunteer to explain supervision visit and its details on how it was supportive and corrective etc.?



Describe the Slide

"I hope that by now you has a better understanding of the HIV Sentinel Surveillance system, with special emphasis on levels and principles of supervision & monitoring. Let us now turn to the different components of supervision and its significance for HSS in India.

We will observe, whether guidelines are being adhered to, and whether all protocols are being followed. It is this FIELD LEVEL SUPERVISION that we are concerned the most as this is THE crucial & first step to identify and rectify problems in the field itself. The critical areas to be prioritized but not limited to are recruitment pattern, practical approach and understanding logical flow of patients and ensuring consecutive sampling etc. to mention few.

The DATA FORM SUPERVISION on quality of data collection in-terms of filing up the forms, transportation system is largely done at the regional institute level. However, the data forms filled by the counselor / ANM at sentinel sites is also reviewed by team-in-charge as well supervisors who had visited the site,. The scrutiny of forms is actually being done at regional institute by data managers. Data managers not only point out the mistakes any erroneous recording but also visits 'problem' sites & state where recurrent errors are observed. The supervision of data collection is vital at all level.

As you have seen the state supervision team and central monitoring team for HSS constitutes members from both public health as well microbiology expertise to monitor lab as well field issues. The LABORATORY SUPERVISION constitutes two parts; one at sentinel site and other at SRL. This is the third and less supervised but very much required supervision done by State Reference Laboratories with immediate feedback. The samples collected and separated at sentinel site by laboratory technician are sent every week to SRL through proper transportation system under cold chain system. This entire process of sample collection, separation, transportation and cold chain system is assessed & monitored by LT and Microbiologists at respective laboratories. Even the supervisors visiting site, ensures samples are collected, stored, transported as per the guidelines given. There were many instances of poor quality samples as informed in laboratory session (session-V) observed at site level as well at SRL level. Few such instances are mentioned here like inadequate serum, haemolysed or contaminated sample, maggots in samples, poor packing, use of non-frozen ice packs etc.

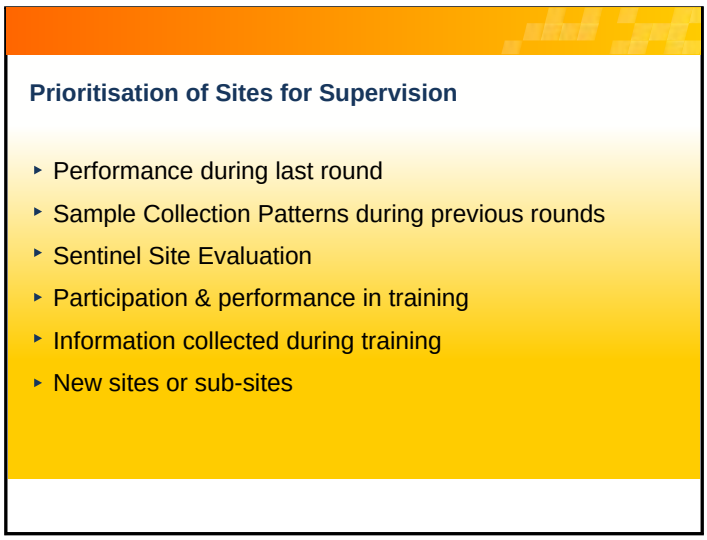
All three supervision components were integrated and part of SIMS supervisory module to ensure real time feedback and action taken reporting at all levels.

Suggestions to Facilitator

- For each point, give a couple of relevant local/regional examples
- To ascertain if participants have understood the concepts presented in slides 5 and 6, ask questions about the importance of supervision and monitoring or ask individual participants to identify some of the mistakes identified by supervision at lab, field and data sections.
- Take questions regarding these important concepts, if any, at this stage.

Frequently Asked Questions

- HSS in India, being managed by experts across the country and regions, how the supervisors are updated with latest changes and modifications for every round?



Describe the Slide

The supervision levels, components and purpose were described and discussed in depth so now let's move to another area called "Prioritisation of sentinel sites for supervision". Inspite of meticulous planning for sites visit, it was observed that the good number of supervision visits are being made to the places which are easy to travel or places with other attraction for example, urban areas, tourist places or at same city of airport . Even few sites are visited frequently or same site is visited frequently due to lack of coordination and proper planning. Anyhow it should be important to visit at least twice sites, which are consistently performing as 'poor sites'. There should be coordinated efforts between SACS, Regional Institute and NACO/NIHFW to ensure that poor performing sites are identified to plan proper supervision and monitoring visits well in advance. The list of sites identified should be available at stateand regional level based on the criteria mentioned in the slide. Here I must urge you all to recall, the timely identification of these poor performing sites only possible if we adhere to the suggestions made in earlier slides.

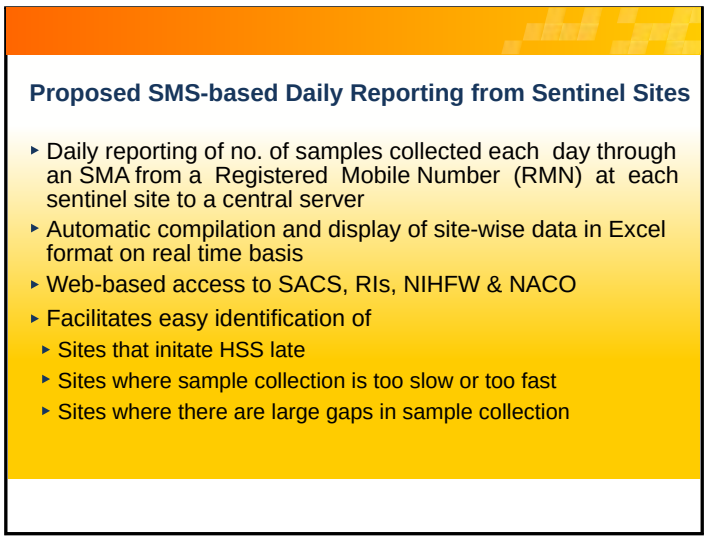
You can ask the participants to read out loudly one by one the criteria mentioned here. The performance of sentinel site includes sample size collection at site, quality of surveillance based on supervision feedback, if possible relevance with epidemic profile monitoring by site prevalence etc. The sample collection pattern denotes the sincerity and technicality of staff on understanding recruitment pattern and sampling approach. Usually its observed that samples were collected during last month of HSS period and not uniformly distributed which is wrong practice and violation of guidelines. Prioritisation criteria should also include sentinel site evaluation, which takes care of infrastructure, staff, training, equipments, consumables and its working status in advance to plan visits.

Very important to notice and take into consideration are response and responsiveness of participants from site on understanding technical & operation aspects of surveillance including flow of patients and distance between site and sample collection, eligibility & recruitment of ANC attendee, UAT, sampling approach , sample separation, labelling etc. and their participatory approach. The information collected on day-2 'Know Your Sentinel Site' & staff's effective participation are very informative to capture & update list of "poor performing site" for prioritisation.

The matrix for supervision and monitoring should include all these aspects along with sentinel sites newly started in the state or region.

Suggestions to Facilitator

- You may like to ask participants individually to read each point mentioned in the slide and get the responses from each sentinel site.
- Ensure that all sentinel sites were covered and followed for each criteria mentioned above
- Ask participants which sites fall into all criteria or maximum conditions and so discuss how important is to ensure smooth implementation and effective supervision
- Please explain to participants each bullet point one by one as it will also help them to revise and re-fresh previous sessions, experiences etc.
- Take questions, if any, at this stage and clarify



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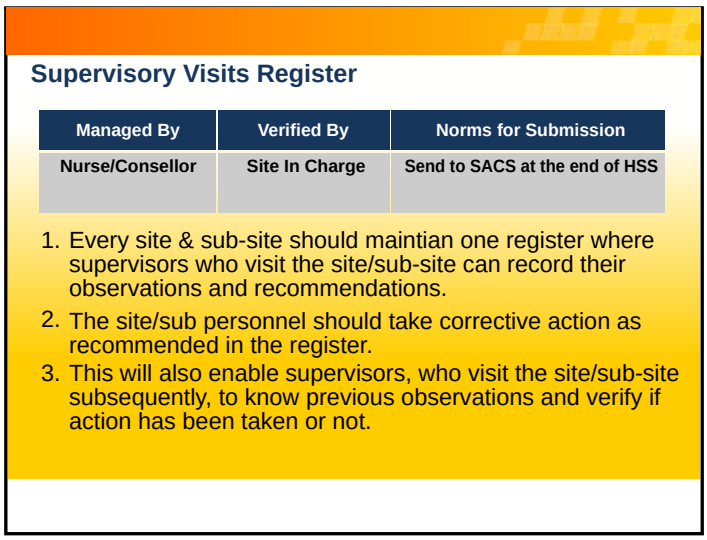


Describe the Slide

This is the last slide on supervision and monitoring part of session. As we have discussed levels, principles, components and criteria for prioritisation of supervision; the documentation for quick review of issues, challenges and gaps at sentinel site is equally vital to discuss in the slide.

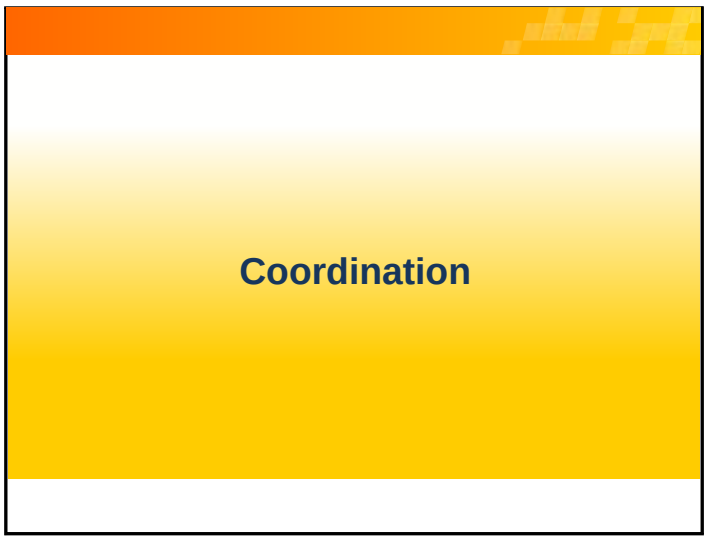
The equal attention is required to maintain and ensure that it's been filled up at each supervision visit.

There are successful examples of crucial decision being taken at sites based on proper records and registers which were maintained at sites with has helped in understanding the methodology adopted and systems in place for conduct of sentinel surveillance at site. The register to be properly structured and maintained is counsellor/nurse 's responsibility while it need to be regularly checked by site in charge to review point wise action is taken or not ?

“Over the next couple of slides, we will study the importance of coordination as well as the detailed contacts for specific coordination and troubleshooting areas in the system — such as the SACS personnel, the site-in-charge, the regional institute coordinator, NACO programme Officer etc.

Suggestions to Facilitator

- By a show of hands, ascertain how many nurse/counsellors, sites-in-charge, etc., had maintained the supervisory visits register at their sentinel site?
- You may begin the slide with: “Do we have any SACS/RI/Central team member visited and given their feedback on performance of your site? Ensure after Yes if it's in writing? If yes is it in visitor register or supervisory register?
- Take questions, if any, at this stage.



Describe the Slide

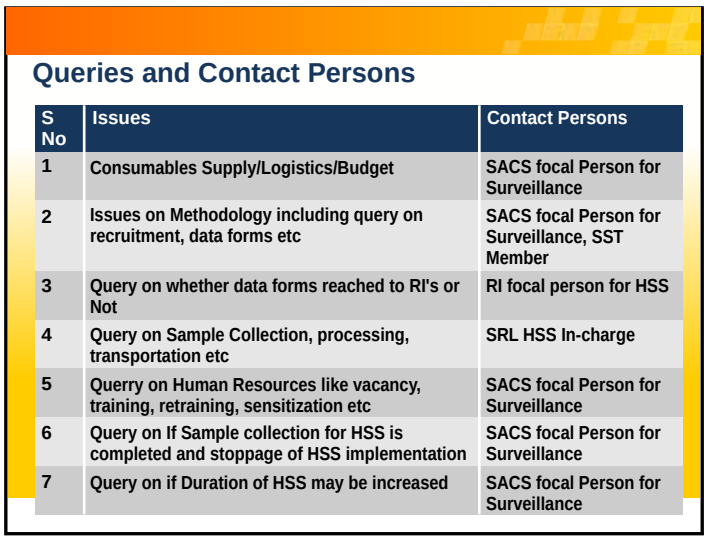
The entire process of coordinating the monitoring & supervision is vital for an effective supervision The Coordination, Communication and real time troubleshooting are the three pillars of smooth implementation of HIV Sentinel Surveillance. As seen in slide no- 3, the implementation structure of HSS involves different institutes at national, regional, state and district level. Since more than 2000 staff working for the HSS, the smooth conduct of survey demands systematic and meticulous planning including supervision and its coordination with and within the system.

Being the largest but also the oldest surveillance system in the country with clear roles and responsibilities, the coordination has improved since years. However this section focuses on re-emphasis of coordination and implementation structure and discusses issues which had directly or indirectly affected the HSS. The few of the coordination issues mentioned here may be discussed with the participants like delayed start or stop of site work due to sudden transfer of staff at sentinel site, data forms or consumables not reached on time, training dates were informed delayed or missed resulting in non-participation, no- coordination within team, or site-in-chrage or between lab and site resulting in biases in methodology etc.

The communication & coordination from field to SACS or SACS to regional institute or national level also need to be strengthened and understood before the start of HSS.

Suggestions to Facilitator

- At this point, you could ask participants to turn to the kit that has been provided to them and check the names and contact details of the key personnel in SACS/DAPCU/RI/ NACO that have been provided to them. It is essential that there is a regular and healthy communication loop that is maintained at all times, to allow for immediate troubleshooting if required. Ask participants if there is any confusion about identifying their testing labs, supervision plan, SACS focal persons and DAPCU.
- You can ask site in charges to provide their feedback of last round of HSS with examples on how coordination was maintained, scope of improvement and how it was resolved???



Queries and Contact Persons

S No	Issues	Contact Persons
1	Consumables Supply/Logistics/Budget	SACS focal Person for Surveillance
2	Issues on Methodology including query on recruitment, data forms etc	SACS focal Person for Surveillance, SST Member
3	Query on whether data forms reached to RI's or Not	RI focal person for HSS
4	Query on Sample Collection, processing, transportation etc	SRL HSS In-charge
5	Querry on Human Resources like vacancy, training, retraining, sensitization etc	SACS focal Person for Surveillance
6	Query on If Sample collection for HSS is completed and stoppage of HSS implementation	SACS focal Person for Surveillance
7	Query on if Duration of HSS may be increased	SACS focal Person for Surveillance

Describe the Slide

"We had discussed the specific roles and responsibilities of the State AIDS Control Societies, Regional Institutes, and SST members. As discussed earlier, their main role lies in coordinating with RIs on personnel and consumables needed at HSS sentinel sites. All sentinel sites depend on the SACS for release of funds for the HSS programme; for providing site codes and sub-site numbers, for communicating the sample size for each composite site, for making arrangements for operational manuals, wall charts, data forms, etc.

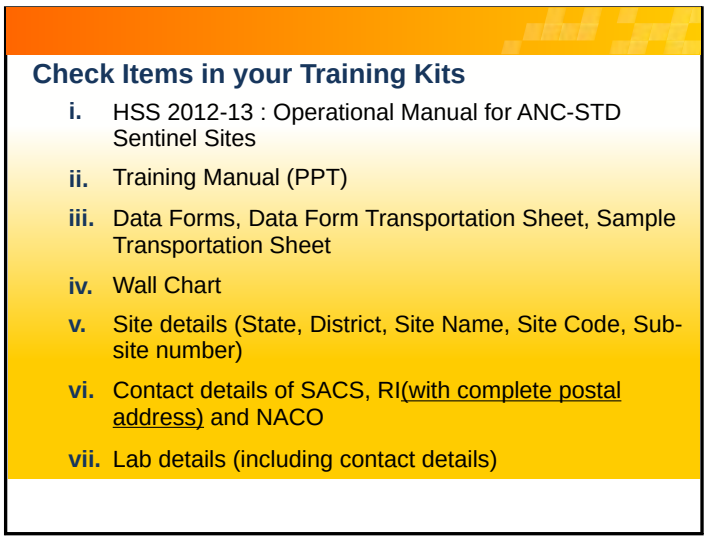
The training of HSS staff; sensitizing the officials and heads of the general health system within the state; conducting periodic supervisory visits at sentinel sites; and ensuring adequate resources and infrastructure – all of these form the responsibilities of the SACS.

"The SACS should also work on sensitising NRHM officials, CMOs and hospital superintendents to the HSS process for their support, and the smooth functioning of the surveillance exercise."

Some of the key and important contact points and related issues are mentioned in this slide. The slide is self-explanatory.

Suggestions to Facilitator

- The points are self-explanatory. Contact persons and responsibilities are obvious to ensure that SACS personnel, RI staff and SST have understood, and update if any changes in the number to share.
- Some RIs reported during the previous rounds of surveillance, that SACS did not undertake any monitoring or supervisory visits. Emphasise to attending SACS officers, that they too, play a vital role in ensuring the quality of surveillance in their states.
- For list of consumables required at ANC sites, refer participants to page 4 of the Operational Manual for ANC Sentinel Sites 2014-15
- You may use this slide to ensure that site-level personnel understand to contact right persons and institutes for related issues.
- Take questions, if any, on any other issues identified during the training to clarify.



Describe the Slide

"We now have come to the last part of session where all participants' especially site staff should ensure the items mentioned here are available with them before they leave the training venue. These are the items even the site-in-charge of all HSS sentinel sites should ensure to make it available for the site during the training.

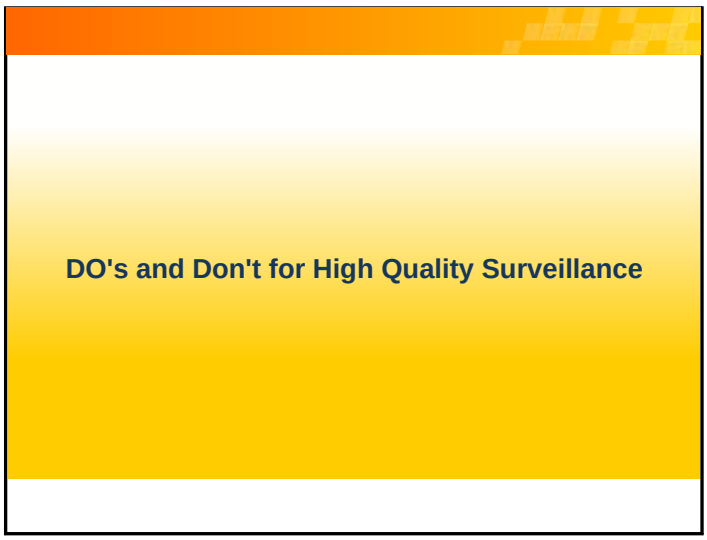
Most of the times, it's observed that the material required to start the surveillance is not available at the site resulting in delay of start which is not a good practice for 'Good Performing Site'.

This slide may be read out loudly to enlist items one by one and ask each sentinel site team staff to check that item simultaneously in their kit. It's observed from last rounds of surveillance that, the data forms, transportation sheets, site code details including sub sites and contact details of staff were missing or not available affecting the work at sentinel site.

"It is important to emphasize again that the site-in-charge should enlist the items mentioned above and ask if any queries or doubts during the training itself on logistics, technical and documentation part.

Suggestions to Facilitator

- You may ask participants to inform any other items if required aprat from those mentioned in the slide.
- Facilitator may note down and suggest accordingly.
- List of consumables and other items were mentioned and discussed separately. You may ask them to refer page 4 of the Operational Manual for ANC Sentinel Sites 2014-15.



Describe the Slide

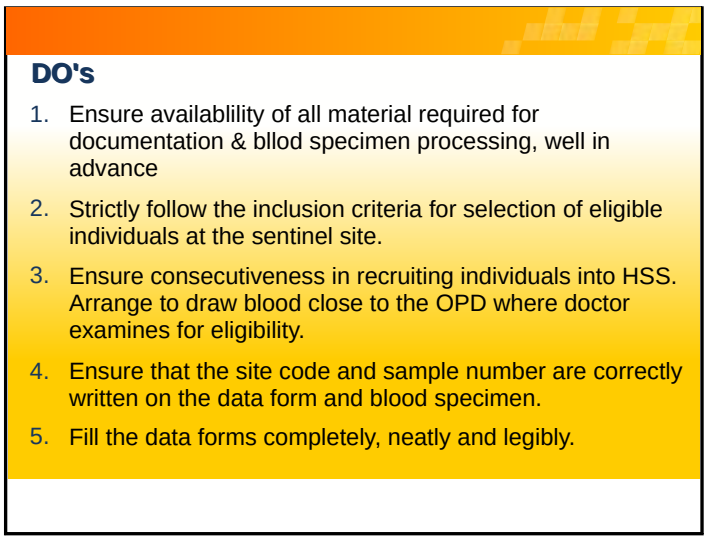
"Apart from the points already discussed, you may like to again remember the points which are the crucial and vital to ensure good quality data collection and smooth conduct of surveillance.

The slide is very very important to brainstorm with participants what may be the different issues they can recollect under 'Dos & Don'ts' slide.

These are the points which were covered in depth in each session.

Suggestions to Facilitator

- Ask each participant to mention one point under Do and one under Don't and note down
- Interact with participants and discuss criteria of ensuring good and high quality surveillance
- Once the points were discussed, take questions, if any, at this stage.



Describe the Slide

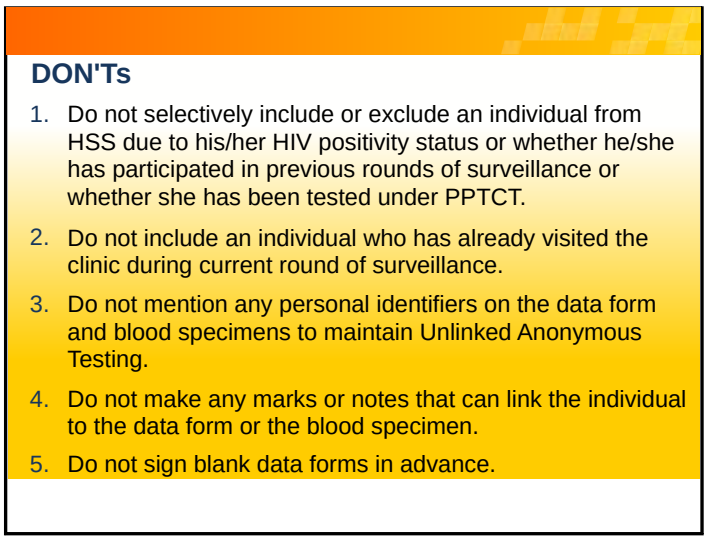
"The slide is meant to revise the important and crucial aspects of HSS where maximum frequency of mistakes and errors are likely to happen during the surveillance.

These are the points which may have been repeated again and again during the training but still deserves to be emphasised again here in terms of Dos.

Ask the participants especially counsellor and lab technician to read out first point and ask various material required to have it before the start of surveillance. The same way, ask site-in-charge the eligibility and blood sample collection arrangement points to read out and discuss the relevance and importance in HSS.

Suggestions to Facilitator

- Refer participants to last page of the Operational Manual for ANC Sentinel Sites 2014-15 to ensure and read again the points described here in do and don'ts.
- Take questions, if any, at this stage.

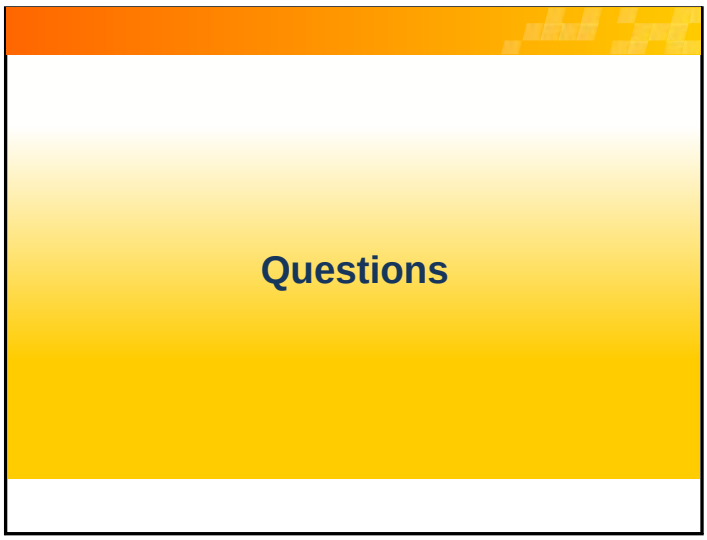


Describe the Slide

Stir the discussion in the same fashion as it is instructed in the previous slide.

Suggestions to Facilitator

- Refer participants to last page of the Operational Manual for ANC Sentinel Sites 2014-15
- Take questions, if any, at this stage.



Describe the Slide

"We now come to the end of our session on 'Monitoring & Supervision; Coordination'. I hope all of you grasped the basic concepts of HIV Sentinel Surveillance supervision for ANC sites during this session.

"We will end our day by clearing any doubts that you may continue to have at this point. I shall try to address all your queries now."

Suggestions to Facilitator

- Take questions at this stage.
- Open up discussions; and invite all participants for their comments and questions regarding the entire session.

Additional References/ Reading List:

If participants wish to further explore the topic of surveillance, second generation surveillance, public health surveillance, etc., they may refer to the following sites and books:

WEBSITES

http://www.who.int/hiv/pub/surveillance/en/index.html
http://globalhealthsciences.ucsf.edu/prevention-public-health-group/training-resources/hivaids-epidemiologic-surveillance-trainings

(Initiating second generation HIV surveillance systems: practical guidelines, UNAIDS, WHO, August 2002.) http://www.unaids.org/en/media/unaids/contentassets/dataimport/publications/irc-pub02/jc742-initiatingsgs_en.pdf

Chapter on "Public Health Surveillance: A Tool for Targeting and Monitoring Interventions" from *Disease Control Priorities in Developing Countries*. 2nd edition. Jamison DT, Breman JG, Measham AR, et al., editors. Washington (DC): World Bank; 2006. http://www.ncbi.nlm.nih.gov/books/NBK11770/

HIV Surveillance in India: Evolution and Challenges by Indrajit Hazarika and Michelle Kermode, September 2010 http://ni.unimelb.edu.au/__data/assets/pdf_file/0012/439968/KN_HIV_Surveillance_Document_Final_October_2010.pdf
https://www.unaids.org/en/media/unaids/contentassets/dataimport/pub/report/2008/20080326_report_commission_aids_en.pdf

BOOKS

Birkhead, G. S., and C. M. Maylahn. 2000. "State and Local Public Health Surveillance." In Principles and Practices of Public Health Surveillance, ed. S. M. Teutsch and R. E. Churchill, 270. New York: Oxford University Press.

Foege W. H., Hogan R. C., Newton L. H. Surveillance Projects for Selected Diseases. International Journal of Epidemiology. 1976;5(1):29–37.