

Infant HIV Testing Training Curriculum for Healthcare Providers: TRAINER MANUAL



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Foreword

With the expansion of antiretroviral therapy (ART) and prevention of mother-to-child HIV transmission (PMTCT) programmes, the estimated number of new HIV infections among children has declined by 41%, from 280 000 in 2010 to 160 000 in 2018(1). Infants who are HIV-infected are at high risk for disease progression in the first year of life. In fact, without treatment, one third of infants with HIV die before they reach one year of age and over 50% die by two years(2). As such, it is critical to initiate HIV-infected infants on ART as early as possible. The key to early access to treatment is early diagnosis of HIV infection. This requires early identification of HIV-exposed infants, HIV testing, and retention of HIV-exposed infants in care to ensure ongoing follow-up with additional testing according to national guidelines, including determination of final HIV status at the end of breastfeeding.

Serological testing (also referred to as antibody testing) cannot confirm HIV infection in infants and children under 18 months of age; instead, infant virological testing through nucleic acid testing (NAT), is required for infant HIV diagnosis. Although virological testing is more costly than serological testing, widespread scale-up has resulted in cost reductions; however, bottlenecks and long turnaround times remain due to delays in sending samples for testing, delays in sample transportation to laboratories, delays in return of results to caregivers, and stock outs. Point of care (PoC) and near PoC NAT has recently been introduced for infant virological testing; this technology has the potential to reduce turnaround time to hours or days rather than weeks or months. This technology offers additional modalities for expanding infant HIV testing services to sites where barriers to conventional NAT have proven most challenging. Issues of quality assurance, site selection for PoC and near PoC platforms, and machine maintenance must be considered prior to implementation.

Since 2010, the World Health Organization (WHO) has recommended that routine NAT of HIV-exposed infants in resource-limited settings should begin at 4–6 weeks of age; this early first test is commonly referred to as early infant diagnosis or EID. WHO also recommends that infants with HIV-negative results be tested again at 9 months of age using a NAT, and again at 18 months of age or 3 months after breastfeeding has ended (whichever is later)(3). In addition, in their 2016 guidelines and 2018 technical report, WHO states that the addition of NAT at birth can be considered where feasible, but only in parallel with efforts to strengthen and expand existing infant HIV testing approaches. Birth testing is an addition to, and does not replace, testing at 4–6 weeks(3, 4).

With the scale up of virological testing of infants, much progress has been made in diagnosing HIV early and providing ART for children. However, in 2018 only 54.9% of newborns exposed to HIV received an HIV test within the first two months of life(5). In addition, over half (54%) of all children living with HIV were accessing treatment in 2018, up from 15% in 2009(6), but still far short of global targets(7).

Overview of the Infant HIV Testing Guides: In 2009, the Centers for Disease Control and Prevention (CDC) released a standardized guidance for early infant HIV diagnosis, referred to as the *Early Infant Diagnosis of HIV Implementation Guide*, to guide programs to plan for and implement these services as part of PMTCT and paediatric HIV-related interventions. This was one among many sets of tools developed to increase the proportion of HIV-exposed infants receiving comprehensive quality care, including timely infant HIV testing. This book, the 2019 *Guide*, is an update to the 2009 version; it has been revised based on guidelines released over the last decade and lessons learned from implementation experience. The *Guide* has now been renamed the *Infant HIV Testing Guide*, to reflect a focus on the complete cascade of testing for HIV-exposed infants from birth until 18 months of age or 3 months after the end of breastfeeding (whichever is later). The material contained in these guides aligns with WHO recommendations and should be adapted to national guidelines as appropriate.

Two books of the *Guide* have been revised and are released in this 2019 edition:

- **Book 1: *Implementation Guide for Programme Managers*** covers programme planning and helps with decisions related to infant HIV testing, including the interface between the clinic and laboratory, monitoring and evaluation, supportive supervision, and linkages between service delivery points. This book focuses on the components that are critical to the management of strong, high quality infant HIV testing services.
- **Book 2: *Training Curriculum for Healthcare Providers*** is a complete training curriculum updated with the 2016 and 2018 WHO guidelines. Book 2 also includes jobs aids to support quality infant HIV testing and counselling and early messages to educate women and communities about the comprehensive package of care that all HIV-exposed infants need throughout breastfeeding along with the importance of maternal health and family planning.

Based on the experiences and data shared from years of implementation of infant HIV testing services, the *Infant HIV Testing Guide* has been revised with the following in mind:

- Infant HIV testing has emerged as an essential service linking PMTCT with paediatric HIV care and treatment.
- Attention has been previously focussed on testing at 4–6 weeks of age but HIV testing at this time point is just one component of a cascade of testing that all HIV-exposed infants should receive as part of a comprehensive package of care that does not end until 18 months of age or 3 months after all breastfeeding has stopped (whichever is later) and the child is no longer at risk of HIV transmission.

It is our wish that these books will support countries to scale up and further improve comprehensive care and testing for HIV-exposed infants so that all mothers living with HIV can be supported to prevent HIV transmission to their infants and that infants who become infected are diagnosed early and linked to life-saving treatment.

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In 2009, the U.S. Centers for Disease Control and Prevention (CDC) made available the first version of the *Early Infant Diagnosis of HIV Implementation Guide* (now re-titled *Infant HIV Testing Guide*). This 2019 edition of the *Guide* is divided into two books:

- *Book 1: Implementation Guide for Programme Managers*
- *Book 2: Training Curriculum for Healthcare Providers*

The *Guides* have been developed and revised with contributions from multiple authors from CDC and other organizations. The original *Guide* was produced by CDC, authors and contributors included Tracy Creek, Lydia Lu, Michelle McConnell, Chin-Yi Ou, Emilia Rivadeneira, Martha Rodgers, Nathan Shaffer, Shambavi Subbarao, and Amilcar Tanuri. It was later revised with input from CDC and other organizations, including Michelle Adler, Joy Chih-Wei Chang, Helen Dale, Dennis Ellenberger, Sarah Kidd, Olusheyi Lawoyin, Lydia Lu, Mira Mehta, Emilia Rivadeneira, and Nandita Sughandhi. CDC student interns Meghan Duffy and Allison Doyle facilitated organization of the *Guide*. The 2019 update of the *Guide* was led by members of the Maternal and Child Health Branch and the International Laboratory Branch of CDC: Michele Montandon, Helen Dale, Paul Rashad Young, and R. Suzanne Beard. Other contributors to the revised *Guide* include Gloria Anyalechi, Zena Belay, Ashley Boylan, Sara Forhan, Susan Hrapcak, Mackenzie Hurlston, Kelsey Mirkovic, Surbhi Modi, Monita Patel, Emilia Rivadeneira, and Jason Williams.

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**A detailed table of contents for each module (Modules 1–6) can be found at the beginning of the module.*

Acronyms

AIDS	Acquired immune deficiency syndrome
ART	Antiretroviral therapy
ARV	Antiretroviral
AZT	Zidovudine
BCG	Bacillus Calmette–Guérin
CD4	T-lymphocyte CD4 cell count
CDC	U.S. Centers for Disease Control and Prevention
DBS	Dried blood spots
DNA	Deoxyribonucleic acid (genetic material)
EID	Early infant diagnosis
HIV	Human immunodeficiency virus
IMCI	Integrated Management of Childhood Illness
IPT	Isoniazid preventive therapy
MTCT	Mother-to-child transmission (of HIV)
NAT	Nucleic acid testing
NVP	Nevirapine
POC	Point of care
PCP	<i>Pneumocystis jirovecii</i> pneumonia
PCR	Polymerase chain reaction
PCV	Pneumococcal conjugate vaccine
PEP	Post-exposure prophylaxis
PMTCT	Prevention of mother-to-child transmission (of HIV)
QA	Quality assurance
RDT	Rapid diagnostic testing
RNA	Ribonucleic acid (genetic material)
SMS	Short message service
STI	Sexually transmitted infection
TAT	Turnaround time
VL	Viral load
WHO	World Health Organization

Trainer Manual Introduction

i. Overview of the Training and Trainer Manual

About this Training Curriculum

Infant HIV Testing: A Training for Health Care Providers serves as Book 2 of the *Infant HIV Testing Implementation Guide* and defines current key principles, concepts, procedures, and approaches to training that are critical for clinicians to understand when collecting samples for infant HIV testing, interpreting results, and providing HIV-exposed infant care. In addition, this updated package:

- Provides customizable training materials for healthcare providers, including:
- Training Manual
- Participant Manual
- Slide Sets
- Provides new job aids and tools to support DBS testing procedures and counselling messages for caregivers about infant testing and HIV-exposed infant care

Target Population

The target population for *Infant HIV Testing: A Training for Health Care Providers* includes members of multidisciplinary healthcare teams based in governmental and non-governmental clinics, hospitals, and other health facilities that serve parents living with HIV and their children, including:

- Physicians
- Medical officers
- Clinical officers
- Nurses and nurse midwives
- Social workers and counsellors
- Peer educators
- Pharmacists

Goal of Trainer Manual

The goal of the *Trainer Manual* is to guide the trainer through the preparation, lesson plans, and activities of the healthcare worker training.

The goal of this training is to equip healthcare providers with the knowledge and skills to plan, implement, monitor, and evaluate services for HIV-exposed infants. The training is primarily classroom-based, but also includes a supervised clinical practicum.

Course Schedule

Infant HIV Testing: A Training for Health Care Providers was developed as a 6-module course that should take about 4.5 days to complete, including a 1.5 day clinical practicum.

The supervised clinical practicum is described further in *Trainer Manual Introduction Section iv: Organizing the Practicum* and Module 6.

Components of this Training Package

You—the trainer or co-trainer—should familiarize yourself with all components of this training package well in advance of the training. Key components include: Trainer Manual, Participant Manual, and the accompanying PowerPoint slides.

Trainer Manual

The Trainer Manual was developed to support trainers and co-trainers to plan and implement the course. Each of the 6 modules provides technical content and guidance on how to teach that content. Each module is divided into various sessions. In each module, you will find:

- Table of contents for the module
- Overview for the trainer (module outline, materials needed, special instructions)
- Session guides for the trainer (session time, session objectives, trainer instructions, exercises)
- Additional module content (technical content for each session, appendices, references)

Trainer instructions in the overview for the trainer include reference to the slide numbers from the slide sets for each section.

Before facilitating the training, you should read through this introductory module carefully. Review *Trainer Manual Introduction Section ii. Trainer Role and Approaches to Adult Learning* for a summary of the principles of adult learning, suggestions for trainers, a description of the role of the trainer, a trainer checklist, tips on managing time, managing difficult participants, and communicating effectively. Then, study each of the modules, read the technical content and slides to ensure you understand all points, review the exercises closely, take note of exercises that require advance preparation, and try to anticipate participant questions.

The References section at the end of each module, as well as your country guidelines documents, should provide any additional background information you need about technical content.

Suggested questions are often provided to help you engage and draw responses from participants.

The exercises in each module include large group discussion, brainstorming, case studies, small group work, pair work, games, and role plays. Instructions, including recommended







Advance preparation and practice will increase trainer confidence and will help keep sessions to the recommended time.

time frames, for each exercise can be found in the exercise instructions. In preparing to facilitate these exercises, review *Trainer Manual Introduction Section iii*.

Tips on Training Methods.

- Be flexible—be ready to change exercises or the order of the agenda to adapt to the needs of participants and the amount of time available.
- Become familiar with the PowerPoint slides prior to the training by reviewing them several times and comparing them with the module content. You may even want to practise using the slides by presenting a session, or even a module, to colleagues or just on your own. The better you know the content, understand the learning methods, and master the computer equipment and projector, the more confident you will feel!

The Trainer Manual uses the following symbols (icons):

	Materials needed: Materials needed to teach the module, for example, flip chart and markers
	Special Instructions: Tips for the module, including advanced planning and preparation, how to adapt the module to the local context, and other special instructions
	Total session/module time: Estimated time needed for each module or session. All times listed are suggested and subject to change depending on participant learning needs
	Trainer instructions: Step-by-step guidance for the trainer
	Make these points: Key concepts to emphasize
	Key points: A summary of the material presented in a particular module. The key points for each module should be reviewed with participants at the end of that module.

The format and introductory sections of this Training Manual are adapted from Adolescent HIV Care and Treatment: A Training Curriculum for Health Workers, Trainer Manual.

[https://icap.columbia.edu/tools_resources/adolescent-hiv-care-and-treatment-a-training-curriculum-for-health-workers/2012_\(6\)](https://icap.columbia.edu/tools_resources/adolescent-hiv-care-and-treatment-a-training-curriculum-for-health-workers/2012_(6)).

Slide Sets

The slide sets were developed to facilitate presentations and discussions throughout the training. Some of the slide sets include animations. In other words, when you press or click on the “next” button, instead of progressing to the next slide, additional text appears on the same slide. If you are in “normal” view or “slide sorter” view, the slides with animations are noted with a star (★). If you are in “normal” view the star appears next to the slide in the thumbnails on the left.

When presenting, you may want to have a printout of the slides nearby for reference. If you are printing the slides, you may choose whether to print 3 slides per page (thus leaving room for notes) or 6 slides per page. When printing, make sure to select the “handout” setting, rather than the “print full slides” setting.

In addition to a printout of the slide set, you should always have your Trainer Manual available for reference. Never rely solely on the slide sets! The content in the slide sets is a summary of the material included in the Trainer Manual. When you are teaching the slides, you may refer to the Trainer Manual for additional information or to answer participant questions.

Participant Manual

The Participant Manual includes the module outline, objectives, technical content, and exercises (without the answers) from the Trainer Manual but does not include the Trainer Instructions.

Pre-test/post-test

Module 1 in the Trainer Manual contains the pre-test/post-test and answer key. The pre-test/post-test is designed to assess knowledge gained as a result of the training. Both tests are exactly the same, except that the pre-test is administered before the start of the training and the post-test at the end of the training.

The pre-/post-test can be completed confidentially, whereby participants put their names at the top of both the pre- and post-test, but the trainer does not post scores by name or identify individual participants. Or it may be completed anonymously where no names are written on the tests. If you plan to have participants complete the pre- and post-tests anonymously, you may still want to compare each participant’s post-test score with his or her pre-test score. You can do this by giving each participant a unique number identifier or code word that s/he needs to remember. Each participant can put his or her assigned number or word on the pre- and post-test so that you can link the results of the two tests together. The pre-/post-test is discussed further in Module 1.

ii. Trainer Role and Approaches to Adult Learning

Principles of Adult Learning (9)

Adults need to feel comfortable and may be reluctant to take risks.

- Create a comfortable and safe learning environment and utilize facilitation methods that will reassure participants that contributions will be received respectfully.
- Respect participants who are reluctant to speak in large groups or take an active role in learning activities. Support them in sharing their experiences in other ways during the training, such as within small group activities.
- Build the relationship between you and participants by sharing experiences and commitment. Trainers should be willing to take similar risks to those being asked of the participants.
- As the trainer, you should be accountable—meaning that you are willing to state how you know something. If you do not know something, you should say so and make a commitment to find the answer.

Adults need to actively participate in their learning.

- Give participants opportunities to identify learning objectives and to participate in planning their education. Ask them what they hope to learn and take away from the training.
- Involve participants in interactive activities early in each session.
- Build a sense of belonging to a team by encouraging participation.

Adults have a wealth of life and work experiences.

- Provide opportunities for participants to share their knowledge and experiences with the group and to solve problems with others.
- Encourage participants to share personal experiences. Sharing your own experiences and stories indirectly gives permission for others to do so as well.

Adults value practical information that they can use.

- Develop content that will provide knowledge and skills that participants can make use of right away and point out the immediate usefulness of information presented.
- Provide opportunities for participants to practise what they are learning and to address their feelings, ideas, and actions.

Roles of the Trainer

Given the principles of adult learning, your role as the trainer is to assist or facilitate the learning experience. The good trainer creates a winning situation in which both trainers and participants can successfully accomplish the training objectives. You may be the content expert, but you are actually there more to clarify and fill in the gaps in participants' knowledge rather than to lecture on a body of information. The goal is to facilitate learning and to create an environment where participants are comfortable asking questions (10).

It is essential to identify participants' needs and goals and to incorporate them into the training objectives. The pre-test will aid in this process, as will "Exercise 1: Getting to know each other," in Module 1.

Roles and expectations of the trainer also include:

Trainers are the standard-setters for the discussion. As the trainer, you must stay focused, alert, and interested in the discussion and learning that is taking place. You create the standards of communication by looking around the room at all participants, listening closely, and encouraging contributions from everyone. You should also:

- In the spirit of mutual learning, express your own feelings and contribute resources as a co-participant and member of the group.
- Show respect for differing opinions and values, and for repetitive questions.
- Share your enthusiasm about the subject and the teaching methods.

Trainers make the training environment a priority. You are in charge of deciding everything—how the tables and chairs are set up, where small group exercises will take place, and all other logistical issues. You are also responsible for judging how the physical environment of the training affects the atmosphere and for making changes as needed.

Trainers are mindful of timing issues. It is easy to over-schedule activities and not incorporate enough "down time" for participants. Avoid planning emotionally intensive activities directly before or after a meal. Always allow for activities to take longer than expected.

Trainers are responsible for explaining the purpose of the exercise or discussion and its significance to the group. It is important to clearly state the goal and function of each activity. Also, let the group know the expected time that will be spent on each activity.

Trainers make use of various techniques and tools to keep the discussion moving when tension arises or discussion comes to a halt. You must be prepared with tools to keep participants engaged and learning.

Trainers are responsible for ensuring confidentiality in the learning environment. During the training, participants will share patient case studies as well as stories of how they, their colleagues, or managers have handled different scenarios in the workplace setting. Typically, these stories are brought up to illustrate a lesson learned or as an example of current practice. Encourage participants to feel safe sharing by explaining to them that this body of knowledge needs to remain confidential. Also, ensure that you, as a trainer, respect confidentiality and serve as a role model for the group.

Trainer Preparation Checklist

Table 1: Trainer checklist

✓	Complete the following before starting each module
	Read manual objectives, technical content, and teaching exercises.
	Prepare for each of the exercises according to the <i>Trainer Instructions</i> .
	Obtain or develop and organize the materials needed.
	Read the content and the suggestions for facilitating group discussion. Add your own questions or tips that will help you engage participants and ensure that key messages are discussed.
	Review the PowerPoint slides and become familiar with their content. Practise using the computer and projector and also practise presenting technical content using the slides. Practise on your own or find friends or colleagues who are willing to be “participants.”
	Practise! It is not always easy to explain group exercises or to draw responses from an audience. Be prepared by thinking ahead and developing strategies. For complicated exercises or discussions, consider co-facilitation.
	Have a plan for monitoring time and keeping to the schedule.
	Have a plan for coping with difficult or disruptive participants.
	Choose a technique for creating small groups. If this is done multiple times during the day, choose a different method for each instance, unless it is specified that groups should remain the same.
	Learn what you can about participants before the training (for example, their worksite, roles, responsibilities, skills, and experience). This effort should continue throughout the training.

Adapted from: ICAP, (2012) (8)

Tips when Training as a Team

When planning a module presentation with another trainer, discuss the following questions to help clarify your roles:

- Which parts of the module would you like to be responsible for?
- Which parts would you like your colleague to handle?
- What is your teaching style? How does your teaching style differ from that of your colleague? What challenges might arise? How can you and your colleague ensure that you will work well together?
- What signal could be used by you and your colleague if there is a need for interrupting when the other person is presenting?
- How will you handle staying on task?
- How will you field participant questions?
- How will you make transitions between each of your presentations?
- How will you get participants back from breaks in a timely manner?

Team Training Checklist

Table 2: Team training checklist

✓	Preparation
	Decide who will lead and teach each session of each module, including who will lead each exercise within each session.
	Decide on a plan for staying on schedule, including how you and your colleague will signal each other when time is up.
	Decide together how to arrange the room.
	Decide who will serve as the time keeper for each session
✓	During training
	Support your colleague while he or she is presenting by paying attention. Never correct your colleague in front of the group.
	Ask for help from your training colleague when you need it, such as when you do not know the answer to a question or if you are not sure of something.
	Sit somewhere so that you and your colleague can make eye contact, but also in such a way that the person presenting has the spotlight.
✓	After training
	Discuss what you thought went well and what could have been done better. Take notes so that you will remember the next time.
	Discuss ways to help support one other during future trainings.

Source: ICAP, 2012 (8).

Know Your Audience

One of the most important resources that you, as trainer, can have is “knowing your audience.” This means knowing something about the individuals who will be participants in the training so you can tailor content and exercises to their learning needs.

For example, you may want to know the following about the participants of an upcoming training:

Participant demographics (for example, age, sex, place of employment)—This will help with planning logistics (venue and timing of the training) and with adapting role plays and case studies.

Education—Knowing the educational background of participants can help you gauge the level of language to use.

Job/position—Knowing participants’ jobs or positions will help you relate training content to their work.

Knowledge, experience, and skills providing care to mothers with HIV and their infants—Knowing the incoming knowledge, experience, and skill level of participants will help determine the level at which content should be taught, the time and methods needed to teach content, and the best types of exercises or learning methods for the group.

Attitudes—Knowing participant attitudes toward the training can give you a sense of issues that will need to be addressed. Are participants looking forward to it? Or do they see it as a waste of time? What is their attitude toward the topics to be presented?

Ways to get to know your audience

There are many ways to learn about your audience, including:

- Asking participants to complete a training registration form that includes questions on current job title, number of years in this position, educational background, number of months/years working in HIV and in paediatrics/adult HIV services, and anything else they would like the trainer to know.
- Having participants complete the pre-test.
- During the training, facilitating “Exercise 1: Getting to know each other” (in Module 1).
- Talking with participants before the start of the training, during breaks and meals, and at the end of the day.

Ways to Manage Time

- **Know the content to be taught.** Study the training content in advance to ensure you understand it. If you need help, seek support from an expert. Find out how the content can be shortened or lengthened, depending on participant learning needs. Consider how the timetable can be adjusted to create time if it is needed. For example:
 - Shorten breaks or lunch
 - Lengthen the day (for example, start 30 minutes earlier or end 15 minutes later)
 - Shorten or skip presentations or activities in areas that participants know well
- **Practise before the training.** Practise presenting exercise introductions and slide sets, using the material that will be used for the actual presentation. Practise co-facilitating technical content and training exercises using the Trainer Manual and slides.
- **Use and follow the agenda.** The agenda will let participants know how long activities are expected to last. Reiterate time expectations every few minutes during exercises/activities.
- **Keep time.** Place a clock or watch in a place where you can see it and where it will not distract participants. Use signs (“5 minutes,” “1 minute,” and “stop”) that tell presenters how much time they have left.
- **Keep the training focused on the objectives.**
- **Use the “parking lot” or “car park”** for discussions that take too much time or are related, but not critical, to the topic under discussion (see below).

Parking lot

The “parking lot” or “car park” is a sheet of flip chart paper posted on the training room wall where the trainer will write all topics brought up that are not directly related to the current session objectives. The parking lot is a way of saying that a particular issue or question is important, but not directly relevant to the current discussion. It is a way of acknowledging the participant’s idea or question and committing to discuss it at a later time.

Topics or questions in the “parking lot” can be discussed at an agreed upon time, such as at the end of the training, during a break, or during an upcoming, relevant module.

iii. Managing Training Sessions: Tips for the Trainer

Day 1: Participant Registration

Set up a registration table at least 30 minutes before the course is scheduled to start. The registration table is where participants will stop before they enter the training room for the first time. This is where they will:

- Register for the training or sign in, if already registered. The sign in sheet may include spaces for the following information: name, job title, place of employment, address of employer, work phone number, cell phone number, and e-mail address.
- Collect their Participant Manuals, pens, and notebooks.
- Fill in their name tags. Trainers and participants should wear their name tags throughout the training to facilitate the learning of names and long-term networking.

Depending on the size of the group, it is probably sufficient if 1 trainer and 1 support person staff the registration table. However, trainers should be available at this time to not only meet and greet participants but also to troubleshoot any problems. Their presence will help ensure a positive first impression and learning environment (6).

Starting Each Day, “Morning Rounds”

It is recommended that each training day begin with “*Morning Rounds*,” a time to greet one another, summarize key points from the previous day, answer any questions, and review the agenda for that day. The “*Morning Rounds*” should take 5–15 minutes.

Strategies for reviewing the previous day’s key points include:

- Write key points on flip chart before participants arrive in the morning.
- Present key points using a large group discussion format, asking the group, for example: “What were the most important points from yesterday’s presentation?” You, as the trainer, should then add any additional key points that the group has missed.
- Alternatively, divide participants into small groups or pairs and give them about 5 minutes to write down the 3 most important points from the previous day’s presentations. Then bring the large group back together and ask each small group/pair to summarize their 3 points.

Once the key points have been summarized, ask participants if they have any questions about the material covered the previous day (6).

“Anonymous Question Bowl”

Some questions are difficult to ask in a group. One method to encourage participants to ask questions is to set up a question bowl, basket, or envelope somewhere away from the centre of the room, along with paper and a pen or pencil. This way, when participants have a question that they do not want to ask in a group setting, they can write it down and place it in the bowl or envelope at any time throughout the day.

At the end of each training day, review all questions in the “*Anonymous Question Bowl*” so that you can provide responses the next morning. These questions may include:

- **Logistical questions** (for example, *At what time are we breaking for lunch? Can we finish early on Thursday?*): Respond to all logistical questions as soon as is convenient.
- **Technical questions**: Questions on course content can be read aloud to the group. Give the group some time to think about the question and then encourage those who know the answer to respond. It is important to address all such questions and to ensure that participants leave the session knowing the correct answers. If a participant offers an incorrect or misinformed response, provide the correct answer in a tactful way. If there is no clear answer, tell the group that you will find out the answer and get back to them. Take care to ensure the questioner remains anonymous.
- **Personal questions**: Respond to more personal questions as appropriate, for example, by embedding the response into that day’s presentation or one of the case studies, by facilitating discussion on the topic, or by asking someone who has expertise in that area to respond, based on his or her experience. Again, take care to ensure the questioner remains anonymous.

The “*Anonymous Question Bowl*” will be introduced in Module 1, “Exercise 2: Setting ground rules and introducing daily activities” (6).

Daily Evaluation—“How did it Go?”

At the end of each training day, you should give each participant a sheet of paper:

- On 1 side of the paper, participants should draw a smiley face (☺) and write 1 thing that was good about the day.
- On the other side of the paper, participants should draw a sad face (☹) and write 1 thing they did not like about the day or an area for improvement.

Tell participants that you will be collecting their responses, but that they should not record their names on their papers. Explain that this is so they can feel comfortable responding honestly.

Ask participants to put their completed “*How did it Go?*” evaluations into a large envelope before they leave the training each day. Then, review participants’ comments and suggestions and make improvements during following days. The daily evaluation is further discussed in Module 1, Session 1.2 (6).

Training Evaluation Form

On the last day of training, as part of Module 6, participants will have an opportunity to complete a training evaluation form. This form appears as *Appendix 6D: Training Evaluation*

Form, at the end of the module. This evaluation form is an important source of feedback and provides much information on how the course should be improved in the future so as to better meet participant training needs. Remember to only distribute course completion certificates to participants after they have handed in their evaluation forms!

Note that the 2nd part of the evaluation form is a table that lists each of the modules in this training package. The instructions read, *“How helpful were each of the training modules to you and your work? If you have specific comments, please write them on the next page.”* Participants may find it helpful to complete this section on a daily basis, rather than at the end of the training. Therefore, take about 3–4 minutes at the end of each day and ask them to turn to *Appendix 6D: Training Evaluation Form* so that they can record their feedback on the modules completed that day. Emphasize that they should write down any comments they have while they are still fresh, rather than waiting until the last day of the training [1].

Reviewing the evaluation forms

Upon completion of the training, take at least a half hour to read through the training evaluation forms. Use a database or a paper tally sheet to summarize the evaluation scores. Focus in on the questions where the ratings were relatively low and think through how these areas can be strengthened in the future.

Closely review the last 3 questions—the open-ended questions. Think of ways to address suggestions offered in response to *“How can we improve this training?”* particularly if mentioned by multiple participants (6).

Facilitating Group Discussion

Group discussions allow participants to share their experiences and ideas, to come up with solutions to a problem, or to apply content information to different situations.

Step 1: Prepare for the group discussion.

As a trainer, it is very important to prepare ahead of time. Being prepared can prevent many problems from occurring, will relieve stress, and is likely to make the exercise more successful. Preparation includes:

- Determining what participants will discuss and what they should get out of the discussion (in other words, the objectives)
- Preparing any necessary materials or visuals

Step 2: Introduce the group discussion.

If specific instructions are required, provide them verbally and in a clear manner.

Step 3: Conduct the discussion.

Facilitate the discussion:

- You, as the trainer, should talk only about 20% of the time, whereas participants should talk about 80% of the time.
- Use questions (open-ended, probing, and close-ended) to help guide the discussion.
- Provide positive feedback when participants contribute to the discussion.
- Keep the discussion focused on the objectives. If the discussion starts to get off track, remind the group of the objectives and bring them back to topic.

Manage group dynamics:

- Ensure that only 1 person talks at a time and that there is only 1 conversation happening at a time.
- Encourage all participants to contribute.
- Encourage mutual respect, especially when participants disagree.
- If participants start to argue, continue to act as trainer—maintain control and do not take sides in subjective discussions. State that, in this case, we should all agree to disagree and that it is important to show respect for different points of view.

Step 4: Summarize the discussion and debrief.

- State the purpose of the discussion.
- Review key points.
- Come to a conclusion about disagreements.
- Clarify questions and concerns.
- Ask participants what they learned from the group discussion.
- Ask participants how they can use what they have learned.

Facilitating a Small Group Exercise

A small group exercise is an activity that allows participants to share their experiences and ideas, to come up with solutions to a problem, or to apply content information to different situations. Participants are first divided into small groups or pairs. Then they conduct the exercise task—and it is the participants who do most of the talking. Finally, each small group or pair reports back to the large group. Small groups are an excellent way to get all participants involved, as people are often more comfortable and willing to talk in smaller group settings.

Step 1: Prepare for the small group exercise.

See “Table 3: Small group exercise preparation checklist” on the next page.

Step 2: Introduce the small group exercise.

Provide instructions verbally and in a clear manner. This is one of the most important steps in any group exercise. Refer participants to the description of the exercise in their Participant Manuals and describe the following:

- The purpose
- Who will do what
- The role of the co-trainers
- What the tasks are
- When the tasks should be completed (state both the number of minutes and the clock time)
- Where the exercise will take place
- How the exercise will be conducted
- How the groups will be divided

Finally, ask participants what questions they have and provide any needed clarifications.

Step 3: Conduct the small group exercise.

- Move around from group to group. Check to see that the groups understand the activity and the timeframe, and that they are following the instructions.
- Keep participants on task and follow the timeframe allotted for each portion of the exercise. Stay on time!
- Bring participants back to the large group to report on their small group work and to discuss their findings. Wait to start the small group presentations until everyone has stopped working and has rejoined the large group. Remind each group how much time they have to present.

Step 4: Summarize the small group exercise and debrief.

- State the purpose of the exercise.
- Review key points.
- Come to a conclusion about disagreements.
- Clarify questions and concerns.
- Identify common themes that emerged from the small presentations.
- Ask participants what they learned from the exercise.
- Ask participants how they can use what they have learned.

Table 3: Small group exercise preparation checklist

✓ Step
Review the small group exercise to make sure you understand it.
Determine how you will divide the large group into small groups. There are many different ways to divide participants into groups—the method you choose should depend on the specific exercise. For ideas on how to divide the group, see the box entitled, “Tips on dividing participants into small groups” on the next page.
Map out the time for each part of the exercise. Divide the allotted time amongst each activity within the exercise. Follow suggested timeframes where available or estimate based on the total exercise time. A small group exercise can generally be divided into the following: Introducing the exercise. Conducting the exercise. Summarizing the key points of the exercise and debrief.
Prepare materials. Collect all needed materials, equipment, and supplies and have them readily available before the small group exercise begins.
Set up the room, equipment, flip charts, markers, and other materials ahead of time.
Practise giving the instructions and leading the exercise.

Source: ICAP, 2012 (8).

Table 4: Tips on dividing participants into small groups

Tips on dividing participants into small groups

There are many different ways to divide participants into groups. Throughout the training, it is helpful to vary the way participants are assigned to small groups, so they are not divided into the same groups each time. This helps manage group dynamics and encourages participants to interact with as many other participants as possible. The method chosen for dividing participants into small groups should depend on the particular exercise. Examples include:

Counting: This is good for randomly assigning participants to groups. Have participants count out loud, according to the number of groups needed. For example, to divide participants into 4 groups, start at the front of the room and have each participant count off one number. The first person says 1, the second person says 2, the third 3, the fourth 4, the fifth 1, the sixth 2, etc., until all participants have been assigned to a group.

Table: Have participants work with those sitting at their table or nearby. Two or more tables that are next to each other can work together.

Job/position: Sometimes participants represent many different disciplines (nurses, doctors, laboratory personnel, etc.). For certain exercises, it can be advantageous to have groups divided by job title and, for other exercises, it may be preferable to ensure that each group has a representative from each discipline.

Agency or district teams: Some exercises, such as action planning, are designed for health facility-, agency-, or district-specific teams. Such exercises provide the members of these “real-life” teams with an opportunity to interact, discuss specific scenarios, and share ideas.

Topic preference: For exercises where each small group is discussing a different topic, encourage participants to self-select which group they want to work in.

In pairs: Have participants work with the person seated next to them or with another participant of their choice.

Cards: Distribute cards with a different word, colour, or symbol (representing the different groups), either before the exercise or as participants enter the room.

Source: ICAP, 2012 (8).

Facilitating Case Studies

Case studies are a form of problem-based learning, where the trainer presents a clinical situation that needs a resolution. A typical health or medical case study is a story describing a particular patient focusing on his/her relevant medical history, including laboratory results (where available/applicable), history of illness, social and demographic information. The case study is usually followed by questions to guide discussion. The participant or group of participants should respond to the questions drawing from what they have learned during

the course and make recommendations regarding the care, treatment, counselling and referrals that would meet patient need. This curriculum includes a number of case studies.

Trainers are invited to modify the case studies and scenarios presented in this curriculum to better reflect the local context and issues. If you use a real life experience as a case study, always **ensure you preserve the subjects' confidentiality. Never reveal actual patient names.**

Whether you are teaching a case-based game, role play or case study keep in mind:

- It is important that you give participants an opportunity to discuss similar cases from their own experience, so that participants can learn from each other's successes and errors and apply what they are learning to actual clinical practice.
- Often times it is the participant stories and lessons learned that are the most memorable lessons from any training, particularly if participants are able to empathize with the characters, whether the healthcare provider or the patient.
- As the trainer, you will have to balance the importance of participants sharing their experiences and time management. Keep close track of time during case discussions.

Facilitating Role Plays

A role play or drama is a simulation or demonstration during which a real-life situation is presented to the group, as a skit, by 2 or more volunteer participants (or by the trainers). The role play dramatizes different scenarios, characters, and perspectives—not only for those playing the roles (the actors), but for those watching (the observers).

Why use role plays?

- They demonstrate real-life situations and allow participants to react to those situations.
- They also demonstrate:
 - Personal interactions
 - Attitudes
 - Processes or procedures
 - Emotions
 - Behaviours (good, bad, controversial, etc.)

Step 1: Prepare for the role play.

Refer to "Table 5: Role play checklist" on page 24.

Step 2: Introduce the role play.

Provide instructions verbally and in a clear manner. Refer participants to the description of the role play in their Participant Manuals.

Your instructions should explain the following:

- The purpose of the role play
- The situation/scenario
- Who will do what—what the actors will do, who each character is, who will play each character, what the observers (the other participants) will do
- That the actors are acting out roles and the attitudes they express are not necessarily their own
- What tasks are to be completed

- How long the role play will last (state both the number of minutes and the clock time)
- That role plays rarely last more than 5 minutes, particularly when being presented to a large group. This is because longer role plays tend to lose the interest of those watching.
- Ask actors to speak loud enough so everyone to hear.
- Check for clarification, asking participants what questions they have.

Step 3: Conduct the role play.

Begin the role play.

- Make sure that all participants understand the exercise.
- Explain that the actors are representing roles or perspectives that are not necessarily their own.
- Encourage the actors to let themselves feel and act like the characters.

Facilitate the role play.

- Watch to see if the actors are raising issues appropriate to the main problem. If they are not, wait until the debrief to discuss issues that should have been raised.
- Watch to see if participants are engaged. If they are losing interest, consider ending the role play.
- Keep the role play on time. Give signals to the actors to indicate when they have 1 minute left and when to stop.

End the role play. Stop the role play when:

- The time is up
- The actors have demonstrated the main feelings and ideas important for the given scenario
- Others become restless
- The role play is not working

Debrief and de-role the actors. Thank the actors for their help and good work. Ask the actors:

- *How do you think it went?*
- *How did it feel taking on the role?*
- *“What if, instead, the actor had done...?”*

De-role (relieve) the actors of their roles—especially for role plays with strong emotional content. This is critical in role plays dealing with HIV and sick babies. It can be quite emotional to role play a new mother with HIV or someone counselling a client with HIV, so it helps to bring people back to reality after the role play has finished. One technique that can be used to de-role is to ask the actors several questions about themselves, such as:

- *What is your name?*
- *Where do you work?*

Manage problems. If the role play did not go as planned:

- Discuss what went wrong without blaming or singling out participants.
- Make positive situations out of negative ones.

- Turn the problem into a learning situation.

Step 4: Summarize and debrief the role play.

Ask observers:

- *What did you observe?*
- *What went well?*
- *What did you learn from the role play?*
- *How might you apply what you learned to your job?*

If observers were given a specific task, review it with them.

Address any questions or concerns.

Table 5: Role play checklist

✓ Steps:
Review the role play to understand it.
Determine what the actors and other participants will do throughout the role play.
<p>Prepare any materials.</p> <ul style="list-style-type: none"> • Collect all materials, equipment, and supplies and have them readily available before the role play begins.
<p>Map out the time for each part of the role play.</p> <ul style="list-style-type: none"> • Determine how much time is needed for each part of the role play. A role play can generally be divided into the following: • Selecting and preparing actors • Introducing the role play • Conducting the role play • Summarizing the role play <p>The role play should not last more than 5–10 minutes.</p>
<p>Choose and prepare the actors.</p> <p>Choose the actors or ask for volunteers (sometimes, the trainers can be the actors). It is helpful to choose the actors ahead of time, so they can prepare for their roles. Describe to them:</p> <ul style="list-style-type: none"> • The purpose of the role play • The situation/scenario/problem • Each role and how it should be acted out (what the characteristics of each role are, etc.) • How much time the role play should take and what signals you will give them during the role play to let them know how much time is left • What the observers will do <p>Provide actors with scripts and props. Encourage the actors to let themselves feel and act like the characters. Emphasize that they will need to speak loudly enough for everyone to hear. If possible, give them an opportunity to practise ahead of time.</p>
<p>Set up the room ahead of time. The actors should be positioned where everyone can see and hear them—probably in the centre of the room, rather than in the front of the room.</p>
Practise giving the instructions and leading the follow-up discussion.

Source: ICAP, 2012 (8).

Tips for Amending or Replacing Exercises

There are many reasons you may wish to adapt an exercise. For example:

- If you have simplified a session to suit the target group, the exercise(s) may also have to be changed.
- You may want to substitute a certain exercise with one that is more relevant to the particular context. However, make sure that all the points that the original exercise was supposed to illustrate are included in the replacement exercise.

iv. Organizing the Practicum

Purpose of the Practicum

The purpose of the practicum is to provide participants with an opportunity to practise the skills learned in the classroom setting. It is during the practicum that the concepts discussed and practised in the classroom come to life. During the practicum, students work with HIV-exposed infants and their caregivers and have the opportunity to try out the skills and techniques they previously rehearsed in the classroom. It is also during the practicum that participants come to a better understanding of their strengths and learning needs as well as the influence of their attitudes and life experiences on their practice.

The practicum outlined in this curriculum is competency-based (see Appendix 6A: Practicum Checklist), guided by experienced preceptors and concludes with end-of-day debriefings. The debriefings give participants opportunity to discuss what they've learned, better connect theory to practise, reflect on how to improve their skills and learn from their fellow participants.

Timing

The practicum should take place after participants complete Modules 1, 2, 3, 4, 5 and Sessions 6.1 and 6.2 of Module 6. After the practicum, participants should re-convene for a meeting to complete Module 6.

Select Practicum Site and Preceptors (1 Month Before Training)1

Select a clinic for the practicum sessions—ideally, this should be a clinical setting that sees many HIV-exposed infants.

Discuss with site leadership the best way for participants to observe and practise applying the skills from this training to services for their HIV-infected mothers and HIV-exposed babies. Participants should spend enough time in the clinic to see a minimum of 2 HIV-exposed babies, ideally at least 1 of whom is attending for the 4–6 week visit.

Ideally, preparation for the practicum should be initiated at least 1 month in advance. When you meet with practicum site leadership to discuss the practicum, also:

- Orient them around the training, training schedule, training goals and the participants who will be in attendance.
- Discuss the possibility of some of the facility staff taking on roles as preceptors during the practicum sessions (this is in addition to the trainers, who will also be preceptors). If agreed, work with site leadership to identify facility staff who are experienced and able to support participant learning.

Preceptor Orientation (1–4 Weeks Before Training)

Return to the clinic to meet with these preceptors. Provide them with an overview of the training. Discuss what you expect participants will get out of the practicum and how the preceptors' role can facilitate the learning of new skills during the practicum. Share Table 6, "Tips for Preceptors" with all preceptors prior to the practicum.

Review with preceptors the practicum checklist in Appendix 6A, in Module 6. Discuss how each of the competencies in the checklist can be observed and demonstrated by participants during the practicum. Discuss how to fill in the Practicum Checklist with examples of "Good," "Fair," and "Poor" performance for several of the competencies. If preceptors are new to this type of training, orient them on methods of coaching, mentoring, and giving feedback (see text boxes below).

Explain that on the day(s) of the practicum, each participant will have a copy of the checklist that they will give to the preceptor. Preceptors should observe and mentor participants to help them conduct each skill correctly. During the practicum, the preceptors will fill in one Checklist for each participant. Preceptors should note on the Practicum Checklist which competencies each participant was able to practise during the day, and their assessment of participant performance for each competency ("Good," "Fair," and "Poor"). They should also note any comments or areas where improvement is needed.

If time allows, role play with preceptors various scenarios that could occur during the practicum so that they learn how to deal with potential difficult situations with participants.

End of Day Debrief

Advise preceptors that, where possible, at the end of each practicum day, participants should reconvene as a group to discuss what they observed. Assuming participants are at more than one clinical location, they can reconvene as a large group in the training classroom, if that classroom is relatively nearby. Or, where this is not possible, participants should gather as a small group at their practicum sites, with their preceptor, if he/she is available. During the daily practicum debrief, participants should discuss:

- What core competencies did you practise during the day?
- Which competencies were the most comfortable for you to conduct? Which were the most challenging?
- Are there areas in which you feel you need more practise? Which ones?
- Were there any unexpected or new things that you observed during the practicum session today?
- Do you have suggestions to improve tomorrow's practicum session?

Table 6: Tips for Preceptors

What are the qualities of a good preceptor?

- Has strong knowledge, skills, and experience related to PMTCT and paediatric HIV care
- Professional
- Understands the importance of skill sharing and capacity building and is willing to teach and mentor others
- Respects others
- Conscientious and trustworthy
- Accountable for his or her work and responsive to feedback
- Upholds confidentiality at all times
- Makes decisions that are ethically sound
- Has leadership skills

Preceptor do's and don'ts

Do:

- Make participants feel welcome and valued.
- Set shared achievable goals.
- Put yourself in the participant's shoes.
- Ask questions that show an interest in developing participants' skills.
- Monitor progress and give feedback frequently.
- Provide guidance, encouragement, and support.

Don't:

- Arrive unprepared.
- Be vague about your expectations.
- Confine participants to passive roles.
- Wait to give feedback until the final assessment.
- Embarrass or humiliate participants.
- Accept behaviour that is unethical or unsafe.
- Judge if a participant does not know something.

Five-step method for teaching clinical skills

- Provide an overview of the skill and how it is used in patient care.
- Demonstrate exactly how the skill is carried out, without giving commentary.
- Repeat the demonstration, this time describing each step.
- Have the participant "talk through the skill" by describing each step.
- Observe and provide feedback to the participant as he or she performs the skill.

Arrange Logistics

- Assign each participant to a preceptor. There should be no more than 4–5 participants assigned to each preceptor.
- Arrange for transport to and from the practicum site(s) and for lunch for participants and preceptors.
- Organize a room for the daily debriefing. Inform participants where and when the group will come together each day for the daily practicum debriefing.
- Gather a summary of lessons and accomplishments from preceptors to share when you teach Module 6. Remember that this information must be generally applicable to the group instead of just to a single individual.

Adapted from: ICAP, 2012 (11)

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