Section 1: Overview

Introduction

This section provides an overview of an HIV Rapid Testing workshop. It contains information about:

- Workshop Goal
- Training Modules: Learning Objectives and Content Outline
- Learning Methods / Activities
- Recommended Certification Criteria
Workshop Goal

Participants will gain the knowledge and skills to perform HIV rapid tests accurately and reliably in a safe and professional manner in an era of expanding programs.

Training Modules: Learning Objectives and Content Outline

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| 1      | Overview of HIV Infection | ▪ What is HIV?  
▪ What is AIDS?  
▪ The HIV pandemic  
▪ HIV transmission  
▪ Window period  
▪ Stages of HIV infection |
|        | ▪ Describe the difference between HIV infection and AIDS  
▪ Discuss the HIV epidemics globally, regionally, and locally in terms of number of people affected  
▪ Define the terms antibody and antigen  
▪ Explain how “window period” may affect HIV testing results  
▪ Describe the progression of HIV infection |
|        | Duration: 30 min | |
| 2      | Integration of HIV Rapid Testing in HIV Prevention and Treatment Programs | ▪ Need for expanding access to HIV testing  
▪ Testing and counseling as an integral part of HIV prevention, care and support services  
▪ Client counseling and HIV rapid testing are a formidable combination in any HIV prevention strategy |
|        | ▪ Recognize the need for HIV testing and counseling (T&C) in HIV prevention programs  
▪ Describe the role of HIV rapid testing in supporting prevention and counseling programs  
▪ State the advantages of using HIV rapid tests in specific settings (e.g., VCT and PMTCT programs)  
▪ Describe the programs/settings where HIV rapid tests are used in your country |
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| 3 | Overview of HIV Testing Technologies | - Discuss settings where HIV testing will be part of service delivery during an era of expanded services  
- Discuss the spectrum of testing technologies for HIV  
- Explain the advantages and disadvantages of HIV rapid tests  
- Accurately recognize individual test result as reactive, non-reactive, or invalid | - Expansion of HIV rapid testing  
- Spectrum of HIV diagnostic tests  
- Challenges with HIV testing  
- Spectrum of HIV testing technologies  
- Advantages and disadvantages of HIV rapid testing  
- Three formats of rapid tests  
- Reading individual test results |
| 4 | HIV Testing Strategies and Algorithms | - Discuss the process for developing a national testing algorithm  
- Explain how sensitivity, specificity, positive/negative predictive value relate to development of an HIV rapid testing algorithm  
- Explain the HIV rapid testing algorithm approved in your country  
- Determine HIV status following a particular algorithm | - Testing strategies and algorithms  
- Developing national testing algorithm  
- Measuring performance of HIV rapid tests  
- Interpreting HIV status |
| 5 | Assuring the Quality of HIV Rapid Testing | - Explain the systems approach to lab quality and its benefits  
- Identify the essential elements of a lab quality system and how they apply to HIV rapid testing  
- Recognize key factors that may compromise the quality of HIV rapid testing  
- Describe your responsibilities in preventing and detecting errors before, during, and after testing | - The approach we take to achieve quality  
- Essential elements of a lab quality system  
- Quality assurance procedures at the HIV rapid testing site  
- How you can contribute to quality before, during, and after testing |
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| **6** | Safety at the HIV Rapid Testing Site | Adhere to personal health and safety practices  
Maintain a clean and organized workspace  
Disinfect and dispose of infectious materials  
Take appropriate actions following accidental exposure to potentially infectious specimen  
Follow written safety procedures and keep proper safety records | General safety practices  
Work habits (personal, work space, material)  
Proper disposal of sharps and waste  
Disinfection of work areas  
Safety documentation |
| Duration: 45 min | | |
| **7** | Preparation for Testing – Supplies and Kits | List and identify all the supplies required for HIV rapid testing  
List and identify all the components of test kits for HIV rapid testing | Supplies & materials  
Test kits |
| Duration: 50 min | | |
| **8** | Blood Collection: Finger prick | Explain the preparation tasks required for rapid tests  
Put a client at ease while collecting blood  
Collect blood from a finger prick accurately and confidently | Preparation for testing  
Educating your client  
Performing finger prick |
| Duration: 2-2.5 hrs | | |
| **9** | Performing HIV Rapid Tests: Demonstration and Practice | Perform 3 HIV rapid tests according to SOP  
Perform multiple tests simultaneously  
Accurately interpret individual test results  
Accurately determine HIV status | Overview of testing procedures  
Workstation setup  
Demonstration  
Practice session with known specimens  
Practice session with blinded specimens |
| Duration: 5.5 hrs | | |
| **10** | Inventory: Managing Stocks at the HIV Rapid Testing Site | Maintain proper records  
Maintain proper level of consumables  
Use first-expiry-first-out concept when managing stocks  
Inspect delivery of supplies before acceptance  
Identify lot numbers and expiry dates  
Keep kits and supplies in proper storage | What is stock management?  
Record keeping  
Re-order levels  
Receipt of consumables  
Storage of consumables |
<p>| Duration: 1 hour | | |</p>
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| 11     | Use and Care of Equipment at the HIV Rapid Testing Site | ▪ Specify your responsibilities related to equipment  
▪ Routinely monitor the temperatures of refrigerators and freezers  
▪ Confirm that auto pipettes deliver specified volumes  
▪ Properly use and maintain centrifuges | ▪ Rationale for using properly maintained equipment  
▪ Your responsibilities for equipment  
▪ Use and care of equipment at the HIV rapid testing site  
  o Refrigerator and freezer  
  o Pipette  
  o Centrifuge |
| 12     | Quality Control | ▪ Differentiate between internal and external controls  
▪ Use external quality controls at designated frequencies  
▪ Analyze common problems associated with invalid test results | ▪ What is Quality Control (QC)?  
▪ Benefits of QC in rapid testing  
▪ Internal versus external quality control  
▪ Troubleshooting invalid results  
▪ Quality control records |
| 13     | EQA: On-site Evaluation and Re-testing | ▪ Assess operations at test site to determine if quality requirements are met  
▪ Take corrective actions following External Quality Assessment (EQA)  
▪ Keep appropriate records related to EQA  
▪ Avoid common problems associated with EQA specimen management | ▪ What is EQA and why is it important?  
▪ EQA Responsibilities  
▪ EQA Methods  
  o Proficiency Testing  
  o On-Site Evaluation  
  o Re-testing  
▪ How to implement EQA |
| 14     | Blood Collection and Handling: DBS | ▪ Collect dried blood spots (DBS)  
▪ Package and store DBS in a way to maintain specimen integrity  
▪ Maintain DBS records  
▪ Distinguish between valid and invalid DBS | ▪ Required supplies  
▪ How to collect and dry DBS  
▪ How to package and store DBS  
▪ Valid and invalid DBS  
▪ Hands-on practice |
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| 15 Documents and Records | - Tell the difference between a document and a record  
- Explain the rationale for maintaining documents and records  
- Provide examples of documents and records kept at a test site  
- Follow the procedures as prescribed in SOPs  
- Describe how to properly keep and maintain test site documents and records  
- Describe the types of information typically not found in a manufacturer’s product insert | - What are documents and records?  
- Why are they important?  
- What documents should you keep?  
- Why is it important to follow SOPs?  
- What is the proper way to keep and maintain documents?  
- Records  
- Why are they important?  
- What records should you keep?  
- What is the proper way to keep and maintain records? |
| 16 Professional Ethics  | - Describe ethical issues related to HIV rapid testing  
- Explain the importance of professional ethics  
- Apply ethical conduct to HIV rapid testing  
- Take appropriate actions to maintain client confidentiality | - What is ethics?  
- Why is ethics important?  
- Who is responsible for ethics?  
- How is ethics applied to HIV rapid testing?  
- Maintaining confidentiality  
- Code of conduct |
Learning Methods / Activities:

The HIV Rapid Testing workshop includes the following types of activities to aid in accomplishing workshop goals and objectives:

- **Presentations** will allow participants gain knowledge through didactic exchange of information.
- **Group discussions** will allow participants to share experiences and ideas.
- **Role plays** will allow participants to learn through simulated situations.
- **Video presentations** will introduce participants to the procedural steps for collecting blood specimens, performing tests, and interpretation of results.
- **Demonstrations** will allow participants to observe a particular procedure or test prior to individual performance.
- **“Hands-on” practice exercises** will allow participants to experience collecting specimens, and performing, and interpreting a variety of HIV rapid tests.
- **Energizer / Games** will reinforce teaching points in fun and lively environment.

For further details on these activities, and detailed suggestions for facilitating each of the modules of instruction, refer to Section 4 of this guide: *Presentation Slides and Trainer Notes.*
Competency Certification Criteria:

The following criteria are recommended for certification of individuals who perform HIV rapid testing. The criteria are based upon recommendations outlined in “Guidelines for Assuring Accuracy and Reliability of HIV Rapid Testing: Applying a Quality System Approach.” Please note: Certification criteria must reflect national policy.

A certificate of competency is awarded to participants upon meeting the requirements outlined below:

1) Successfully completing the HIV Rapid Testing training workshop by:
   - Daily attendance
   - Passing score of 80% on written post-workshop examination
   - Passing score of 100% on final practical examination

2) 100% accuracy of first 50 specimens tested under direct supervision