HIV RAPID TEST TRAINING PACKAGE

Curriculum At A Glance

Training 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.

Target Audiences
Laboratory technicians, Nurses, Counselors at test sites (PMTCT, VCT, TB, STI)

Workshop Length
5 days

Characteristics of the Package
- Comprehensive
- Universally applicable (customization required)
- Flexible and adaptable
- Highly interactive and engaging
- Performance assessment

Recommended Certification Criteria
- Successful completion of workshop
- Daily attendance of training
- Passing score of 80% on written post-test
- Passing score of 100% on final practical examination
- 100% accuracy of first 50 specimens tested under direct supervision

Training Themes, Modules, and Key Messages

The Challenge
- HIV/AIDS Pandemic
- Limited trained staff in view of expanded services

The Context

The Solution

Available Technologies
Module 1. Overview of HIV Infection
Module 2. Integration of HIV Rapid Testing in HIV Prevention and Treatment Programs
Module 3. Overview of HIV Testing Technologies
Module 4. HIV Testing Strategies & Algorithms
Module 7. Preparation for Testing - Supplies & Kits
Module 8. Blood Collection: Fingerprick
Module 9. Performing HIV Rapid Tests (Demo & Practice)
Module 10. Inventory – Managing Stocks at the HIV Rapid Testing Site
Module 11. Use and Care of Equipment
Module 12. Quality Control
Module 13. EQA (On-site Evaluation & Re-testing)
Module 14. Blood Collection & Handling (DBS)
Module 15. Documents & Records
Module 16. Professional Ethics

Assuring Quality of HIV Testing
Module 5. Assuring Quality of HIV Rapid Testing
Module 6. Safety at the HIV Rapid Testing Site
Module 10. Inventory – Managing Stocks at the HIV Rapid Testing Site
Module 11. Use and Care of Equipment
Module 12. Quality Control
Module 13. EQA (On-site Evaluation & Re-testing)
Module 14. Blood Collection & Handling (DBS)
Module 15. Documents & Records
Module 16. Professional Ethics

Key Messages
- Paying attention to the entire testing process is essential in guaranteeing quality results.
- Usefulness of HIV testing in decision making (diagnosis and policy) depends on quality.
- HIV rapid tests, when performed by properly trained staff, are reliable.
- Training on the principles of testing, performance, and quality assurance is critical to the expansion of a successful testing program.
- Ongoing monitoring and evaluation of training is important to assure that the needs of trainers and trainees are met.

Training Package Components

Presentation Slides
PowerPoint presentations for 16 modules

Trainer’s Guide
Resources that help a trainer prepare for the workshop:
1 – Overview
2 – Preparation & Checklists
3 – Training Basics
4 – Presentation Slides & Trainer’s Notes
5 – Evaluation Tools

Participant Manual
Presentation slides and handouts for each module

Training Video/DVD
Hour-long video includes initial steps and procedures for fingerprick and six HIV rapid tests

Job Aides
Step-by-step photo illustration of fingerprick, venipuncture, and HIV rapid tests
HIV RAPID TEST TRAINING PACKAGE – Module Learning Objectives

The Context

Module 1
Overview 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

Module 2
Integration of HIV Rapid Testing in HIV Prevention & Treatment Programs
• 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

Module 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

Module 4
HIV Testing Strategies & 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

Module 5
Assuring 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

Module 6
Safety at 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

Module 7
Preparation for Testing - Supplies & 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

Module 8
Blood Collection: Fingerprick
• 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

Module 9
Performing HIV Rapid Tests
• Perform 3 HIV rapid tests according to SOP
• Perform multiple tests simultaneously
• Accurately interpret individual test results
• Accurately determine HIV status

Module 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

Module 11
Use and Care of Equipment
• Specify your responsibilities related to equipment
• Routinely monitor the temperatures of refrigerators or freezers
• Confirm auto pipettes deliver specified volumes
• Properly use and maintain centrifuges

Module 12
Quality Control
• Differentiate between internal and external controls
• Use external quality controls at designated frequencies
• Analyze common problems associated with invalid test results

Module 13
EQA (On-site Evaluation & 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

Module 14
Blood Collection & Handling (DBS)
• Collect dried blood spots
• Package and store DBS in a way to maintain specimen integrity
• Maintain DBS records
• Distinguish between valid and invalid dried blood spots

Module 15
Documents & 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 insert

Module 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

The Solution

HIV Rapid Tests

Quality Assurance

2005
HIV RAPID TEST TRAINING PACKAGE – Learning Methods

Module 1
Overview of HIV Infection

Module 2
Integration of HIV Rapid Testing in HIV Prevention & Treatment Programs

Module 3
Overview of HIV Testing Technologies
  - Exercise: Interpreting individual HIV rapid test results

Module 4
HIV Testing Strategies & Algorithms
  - Exercise: Interpreting HIV status using testing algorithm
  - Role-play: Rehearsing finger-pricking a client
  - Practice: Transfer pipette
  - Practice: Fingertip

Module 5
Assuring Quality of HIV Rapid Testing
  - Energizer: "Are you "Positive" or "Negative?"

Module 6
Safety at HIV Rapid Testing Site
  - Exercise: Calculating minimum stock level
  - Exercise: Determining full stock level
  - Activity: Examining lot number & expiry date

Module 7
Preparation for Testing – Supplies & Kits
  - Memory Game: Supplies & materials
  - Activity: Examining test kits
  - Activity: Organizing your work area

Module 8
Blood Collection: Fingerprick
  - Video & demo: Fingerprick procedures
  - Role-play: Rehearsing finger-pricking a client
  - Practice: Transfer pipette
  - Practice: Fingertip

Module 9
Performing HIV Rapid Tests
  - Video & demo: HIV Rapid Tests
  - Activity: Workspace setup
  - Practice: Individual tests using known specimens
  - Practice: Multi-test algorithm using blind specimens

Module 10
Inventory – Managing Stocks at the HIV Rapid Testing Site
  - Exercise: Calculating minimum stock level
  - Exercise: Determining full stock level
  - Activity: Examining lot number & expiry date

Module 11
Use and Care of Equipment
  - Activity: Passing around and examining pipettes
  - Activity: Creating a maintenance activity list

Module 12
Quality Control
  - Exercise: Interpreting rapid test results
  - Exercise: Resolving un-reportable test results

Module 13
EQA (On-site Evaluation & Re-testing)
  - Role-play: On-site evaluation visit

Module 14
Blood Collection & Handling (DBS)
  - Activity: Passing around and examining DBS supply items
  - Practice: Collecting DBS on filter paper
  - Practice: Valid vs invalid DBS

Module 15
Documents & Records
  - Exercise: Differentiating between documents and records

Module 16
Professional Ethics
  - Role-play: Ethical issues in HIV rapid testing

Legend

- Paper-based exercise
- Hands-on practice
- Energizer/Game
- Video
- Role-play
HIV RAPID TEST TRAINING: Framework for a Systematic Roll-out

**Direction-Setting**

- Establishing training needs, scope, strategy, and linkage to country’s scale-up plan
- Obtaining stakeholder consensus and commitment to ensure success
- Ensuring system readiness for training rollout
- Rolling out the training program systematically
- Monitoring program implementation & measuring success

**Alignement**

- • Training destination
- • Current training reality
- • Prioritized gaps to close
- • Prioritized training strategies
- • Needs assessment
- • Training infrastructure planning

**Readiness**

- • Appropriate policy in place
- • Funding/resource secured
- • Consensus achieved
- • Roles & responsibilities defined
- • Rollout priorities & timeframes
- • Best practices & quality assurance measures identified

**Implementation**

- • Learner readiness
- • Trainer readiness
- • Training tool readiness
- • Assessment of existing materials
- • Curriculum development
- • Curriculum customization
- • Translation
- • Workplace readiness
- • Follow-up plan

**Monitoring & Evaluation**

- • National training calendar
- • Logistical/admin support
- • Equipment/material requirements
- • Printing/production
- • Training facilities
- • Registration

Consider these issues:
- What are the key policies, strategies, and directions from countries, OGAC, and HHS that drive training needs?
- What training needs can you anticipate for the next one to three years in order to support country program needs?
- How is training done today? Where does it fall short?
- What are the gaps, if closed, that will yield the biggest impact?
- What strategies are you going to use to close those gaps?
- What training infrastructure must be in place in order to successfully implement the training strategies?
- How will other human performance issues (retention, supervision, motivation, etc.) be addressed in addition to training interventions?
- How do you define success? How do you measure it?

Consider these issues:
- Who are you going to train (target audiences)?
- What national policies, standards, and procedures must be created or changed to implement the training strategies?
- Who are the key stakeholders? How do you build consensus?
- Who will provide funding and resources?
- What are your rollout priorities and schedules?
- What quality assurance measures will you put in place to ensure training success?
- What challenges do you anticipate and how will you address them?

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Consider these issues:
- What indicators will you track to monitor program implementation and determine success? How will you collect the data?
- Number of people trained?
- Did they like the training?
- How much did they learn?
- Has their job performance improved?
- Does the training contribute to country, OGAC, and HHS goals?
- Is there evidence of a return on investment?
- What is the plan for collecting, analyzing, and reporting M&E data?
- What challenges do you anticipate and how will you address them?