

# Module 1: Principles of Viral Load Monitoring



Time: 60 minutes

## Session Objectives

By the end of this session, participants will be able to:



- Understand the dynamics of viral load during the course of HIV infection
- Understand how viral load affects risk for transmission and progression of HIV
- Explain how viral load responds to antiretroviral therapy
- Identify treatment failure using viral load
- Describe schedule of viral load testing

## Session Overview

- Understanding Viral Load
- Viral Load and HIV Infection
  - Disease Progression
  - Disease Transmission
- Viral Load Measurement and Reporting
- Viral Load Response to ART
- Treatment Failure
  - Criteria
  - Routine and Targeted Viral Load Monitoring
- Schedule of Viral Load Monitoring

## Materials Needed




- Slides
- Adult Counseling Flipchart

45 minute  
Lecture

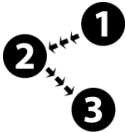


Trainer will:

- Explain the concept of viral load
- Describe how viral load relates to HIV infection, including:
  - How viral load changes according to disease progression
  - How viral load affects disease transmission
- Discuss how to measure viral load and interpret results
- Describe how viral load responds to ART
- Explain the definition of treatment failure, including:

	<ul style="list-style-type: none"> <li>○ Describe the criteria used for treatment failure</li> <li>○ Explain the difference between routine and targeted viral load monitoring</li> <li>● Introduce data that supports adherence counseling improving suppression of viral load and importance of enhanced adherence counseling.</li> <li>● Discuss the schedule of viral load monitoring for children and adolescents, pregnant or breastfeeding women, and adults.</li> <li>● Discuss the role of CD4 count testing.</li> </ul>
10 minute Activity 	<b>Activity: Knowledge Assessment</b>  Facilitator will conduct a 3-question knowledge assessment with the participants.
5 minute Wrap-up	Key points to emphasize in summary: <ul style="list-style-type: none"> <li>● Viral load predicts progression of disease in an individual, and onward transmission of HIV to sex partners or from mother to baby</li> <li>● In most individuals, viral load will drop to below levels detectable by viral load blood tests after 6 months of ART</li> <li>● Viral load testing is the preferred method for detecting treatment failure for ART patients and should be checked after 6 months on ART</li> <li>● Viral load &lt;1000 copies/ml indicates acceptable response to ART</li> <li>● Virologic treatment failure: <u>persistent (2 or more VL test results &gt;1,000 with the initial test being performed &gt;6 months on ART and the 2<sup>nd</sup> test performed after adherence counseling and a minimum of 3 months of good adherence)</u></li> </ul>

**Methodologies**

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- Lecture
  - Activity: Knowledge Assessment

**Advance Preparation for Trainers**



- Trainer must update slides 27, 28, 29, and 31 with the schedule for routine viral load monitoring and CD4 testing according to their country’s national guidelines.