

**Virginia Department of Health  
Tuberculosis Program  
Recommendations for Video Enhanced Therapy**

Directly Observed Therapy (DOT) is the standard of care in Virginia to ensure client adherence to treatment of tuberculosis disease. DOT is defined as a healthcare worker, or trained, non-family designee, watching a client face-to-face ingest and swallow every dose of prescribed medication, making note of any adverse reactions, taking appropriate action if necessary, and documenting the DOT encounter.

Video Enhanced Therapy (VET) is an alternative to DOT for selected clients in Virginia to ensure client adherence to treatment of tuberculosis disease. VET is also an alternative for clients receiving the 3-month isoniazid/rifapentine regimen for treatment of latent TB infection (LTBI). VET is defined as a healthcare worker, or appropriate trained designee, using a live video camera to watch the client ingest and swallow every dose of prescribed medication, making note of any adverse reactions, taking appropriate action if necessary, and appropriately documenting the VET encounter.

This document provides recommendations for using VET for carefully selected clients under care for tuberculosis disease *when traditional DOT is not possible*. Reporting the total number of DOT doses now includes those doses observed by traditional DOT plus those doses observed using a live video camera. The TB program has prepared the following recommendations to assist local health districts and case managers with using VET for carefully selected clients.

**Clients may be considered for VET if all the following apply:**

1. Client has completed the initial phase of treatment with 90% adherence
2. Sputum smears have converted to negative during the initial phase of treatment
3. Client has demonstrated clinical improvement
4. No severe significant adverse reactions were experienced during the initial phase of treatment
5. A health care worker that speaks the same language as the client or an interpreter is available
6. Clients **must** have their own internet access and a computer, smart phone, or tablet available for use. Data charges may occur, if the client is not in wireless mode
7. If the client has resistant disease, please reach out to a TB nurse consultant to discuss the possibility of VET, once the client has a well-established treatment regimen

**VET should not be considered for the following:**

1. Clients under 18 years of age
2. Clients with medical risk factors associated with a higher risk for adverse events from TB medications (e.g. immune compromised, liver disease, etc.)
3. Clients with evidence of drug or alcohol abuse
4. Clients with evidence of mental illness (e.g. psychotic, sociopathic, or depression)

**Further Recommendations:**

1. The treating clinician must be notified and approve VET when being considered.
2. Medications should be supplied in individual, one-time daily use packets, if possible.
3. Clients must be questioned regarding adverse reactions by the health care worker performing VET at every encounter.
4. Client must sign a VET agreement and remain 90% compliant during treatment.
5. All VET encounters with the client are to be documented on the standard DOT log, with a column that indicates VET use.
6. A private or remote location, headphones, or ear buds must be available to the health care worker, as well as the client, to conduct VET in order to ensure confidentiality.

**VET will be discontinued for any of the following reasons:**

1. Client falls below 90% compliance at any time during treatment.
2. Client's clinical status worsens.
3. Client reports a severe adverse event that requires an MD evaluation; but may resume if medications are not the cause of the event.
4. Clients' video equipment, smart phone, internet, or computer malfunction more than once.

**Confidentiality:**

Doxy.me is the HIPAA compliant application for conducting VET interactions. Uses of other applications such as SKYPE or Facetime are not HIPAA compliant and are prohibited.

The use of VET carries with it unique issues that must be addressed by the health care worker with the client. These issues include, but are not limited to:

- the sound of the client's voice being heard over a speaker connected to the video equipment;
- the client being heard in the vicinity where he/she takes the call;
- images of the client being visible on a screen being used by the health care worker; or
- the client being seen at the location where he/she takes the call.

- agreement between the healthcare worker and the client on a pre-established identifier (other than the client name) for use during the VET interactions.

It is recommended that districts have a working smartphone, tablet or other device for performing VET and **NOT** rely on the personal phones of staff due to confidentiality and safety concerns. If a personal device is used, it **must** be password protected.

The health care worker must ensure that every measure is taken to prevent any observation of the client by anyone other than the health care worker during the VET encounter. The encounter should be conducted in a private office or a remote location accessible only by the health care worker, and must have no other client's records in view. The health care worker must also educate the client about the issues related to using VET and instruct the client to conduct the encounter in a private or remote location accessible only by the client. If these conditions to protect the privacy of the client cannot be met, VET cannot be performed.

**VET may be considered in certain cases that do not meet the criteria above if there is no other recourse for providing observed therapy. Consult the TB program in these circumstances.**

## **VET Protocol**

**Preparation for use of VET for TB medication adherence – Staff should NOT try to register/set up a Doxy.me account until an invitation email is received from the TB Program.**

1. Assure that the healthcare worker assigned to monitoring clients using the approved VET application has access to a suitable electronic device and that has an internet browser and camera.
2. To use Doxy.me the healthcare worker must be registered as a VET provider and have received an invitation email. Permission is obtained by calling the TB program at (804) 864-7906.
3. Ensure that the healthcare workers understands how to use Doxy.me and is trained in the VET protocol.
4. Assist the client in preparing their phone or computer by assisting in:
  - Opening an internet browser
  - Navigating to the Virginia.doxy.me website
  - Enabling a camera
5. Ensure that the client understands how to use Doxy.me to sign in and “enter the room” of their DOT observer. Provide the health department observer’s alias, which is also the “room” the client enters by going to <https://virginia.doxy.me/> followed by the room/observer’s alias.
6. Assure that the client is aware of VET protocol and what their responsibilities and expectations during VET are. Part of the client training should include face-to-face training as

well as additional practice using Doxy.me with the healthcare worker while in the same building (health department or client home).

**Prior to each encounter by the healthcare provider performing the VET:**

1. The healthcare worker will review client's chart, notes, and medications noting any changes.
2. The healthcare provider must ensure that the call is being performed in a private or remote location that will protect client confidentiality and proceed with the call at the scheduled time.
3. When the client answers, the healthcare provider will self-identify and verify the client's identification using the pre-established identifiers such as a number or nickname that is not based on the client's name. Confirm with the client that medication is scheduled for the current date/time.
4. The health care worker will ask the client if he/she is in a private or remote location and the health care worker will document the client's response, instruct the client to relocate if necessary, and proceed with the VET encounter in a confidential manner after privacy is confirmed.

**During the encounter by the healthcare provider performing the VET:**

1. The healthcare worker will address concerns, signs, symptoms, and questions from the client. If the client verbalizes side effects or symptoms of toxicity, follow local DOT procedures for handling such situations.
2. The healthcare worker will ask the client to open the daily administration packet and:
  - a. Display all pills contained in the packet for the current dose on a solid well lit surface
  - b. Display the supplement (e.g., water, juice, etc.) that will be used to aide with pill ingestion
  - c. Verify the medications with a verbal and visual pill count in the visual field of the camera.
3. The healthcare worker will ask the client to display each tablet or capsule **one-at-a-time**. Ensure the client, as well as the medication, remains in the visual field of the camera. Maintain a pill/capsule count during the process to ensure that all medications are ingested.
4. The healthcare worker will confirm that all medications have been ingested by having the client open their mouth in close proximity to the camera for a visual inspection of their mouth.
5. The healthcare worker will ask the client to verbalize that they have taken all medications and will continue to talk with the client for several minutes after ingestion to monitor for side effects and assure that the client has swallowed the medication. Have the client talk as much as possible to help to discourage the client from "cheeking" or "tonguing" the medication.
6. The healthcare worker will confirm the next VET date and time.

7. The healthcare worker will inform the client to call their local health department or report to their local emergency room for evaluation if they experience any side effects after the call is complete.
8. The healthcare provider will finish the VET call and document the results of the encounter.
9. **The VET encounter will be documented as a failure if, from step 2 until the encounter is complete:**
  - The client moves out of the visual field for any reason
  - Any pills are dropped
  - The electronic equipment malfunctions
  - The client coughs into a tissue or hand
  - The healthcare worker is suspicious that there was an issue with adherence during the encounter .
10. **If adherence falls below 90%, VET should be discontinued and DOT resumed for the remainder of treatment.**