

Texas Department of State Health Services  
**Peripheral Neuropathy Assessment Process**

Neuropathy is the loss of sensation caused by damage to the peripheral nerves. It can cause pain (often “stabbing” or “burning”), numbness/tingling in the extremities, or unbalanced gait. It may occur in patients taking TB medications (high doses of isoniazid, linezolid) and if untreated, can be irreversible. Patients taking these medications should be assessed at baseline and monthly to identify any early signs of neuropathy. Symptoms listed above may present themselves before findings on filament or other sensory testing, so careful observation and early intervention is needed to prevent complications from neuropathy.

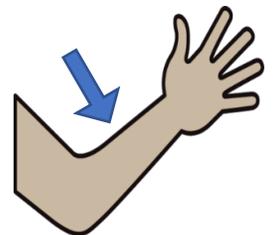
These instructions accompany the TB 702 “Toxicity Assessments for Clients on Second-Line TB Medications” and are specific to the *Peripheral Neuropathy Assessment* section: [dshs.texas.gov/IDCU/disease/tb/forms/PDFS/PeripheralNeuropathyAssessment.pdf](https://dshs.texas.gov/IDCU/disease/tb/forms/PDFS/PeripheralNeuropathyAssessment.pdf)

**Supplies needed:**

- 4.31/2gm monofilament for the hand test.
- 5.07/10gm monofilament for the foot test.

**Process:**

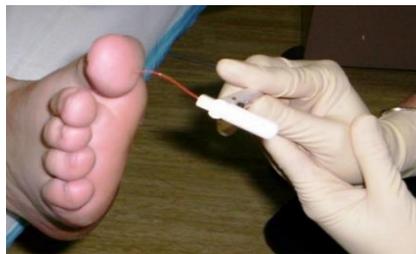
1. Begin by observing the patient’s gait and document any observation of unbalanced walking. Instruct patient to walk heel to toe, make note of their footwear and ask if they feel unbalanced. Document in progress notes and notify the treating physician of any abnormalities.
2. Next, ask questions 1-5 on the *Peripheral Neuropathy Assessment* portion of the TB-702 focusing on the hands and the feet.
3. Explain to the patient what you are about to do for the next portion of the assessment. You will be examining their skin and will be using monofilaments to test sensation of select areas on the hands and the feet. *See Figure 1.*
4. Find a comfortable place for the patient to sit or lie down and ask the patient to remove his/her shoes and socks.
5. Using standard precautions, demonstrate on another part of the body where there is not likely to be sensory loss what you are about to perform. Avoid touching on ulcers, callus, or scars; inside the forearm is a good place. Show the patient the monofilament and ensure the patient can describe the sensation they perceive when the monofilament touches their skin.
6. Begin by assessing the hands, making note of any evidence of skin abnormalities including calluses, wounds or burns. Ask the patient to close their eyes. Place the 4.31/2gm monofilament on the skin surface in the sensory points noted in *figure 1* and slowly push the monofilament until it has bent approximately 1cm. Hold



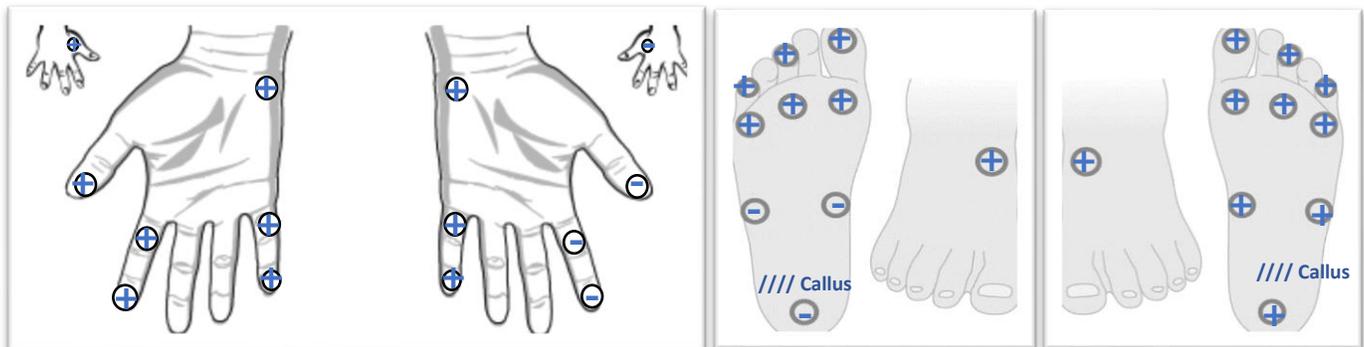
Texas Department of State Health Services  
**Peripheral Neuropathy Assessment Process**

against the skin for approximately 2 seconds, making sure the monofilament does not slide over the skin. Ask the patient to say "yes" every time they feel you touch the skin. See *figure 1* below for documentation of abnormalities, such as wounds.

7. If the patient says "yes" place a positive sign (+) on the diagram in the area tested. If the patient does not respond or reports a diminished or change in sensation from the last assessment, repeat the test at the same site twice more to verify their response. Record a negative sign (-) if the same response is reported.
8. Next, move to the feet and repeat steps #6 and #7. Use monofilament 5.07/10gm for assessing the feet. Note any calluses on the feet which in neuropathy may lead to ulcers if untreated.



*Sensory testing sites for where to place the monofilaments on both hands and feet (shown in circles). Examples of documentation results are in Blue:*



**Figure 1**

**Points to Remember**

- Performing the assessments, asking the screening questions and using monofilaments are all important in identifying neuropathy early and intervening when abnormalities are reported.
- Symptoms such as pain (stabbing or burning), numbness/tingling or unbalanced gait may present themselves prior to findings on sensory testing.
- If any abnormalities are found compared to the previous exam, notify the physician immediately.
- Ask pointed questions about their shoes and encourage proper footwear to prevent worsening neuropathy. Shoes that are too tight or too loose may impact the severity of tingling.

Texas Department of State Health Services  
**Peripheral Neuropathy Assessment Process**

**Caring for Monofilaments**

Monofilaments may be re-used if they are cared for and stored correctly. Cleaning with an alcohol swab and storing in a dry, clean environment is recommended; check with individual manufacturer for cleaning instructions. Never re-use monofilaments that touched wounds, ulcers, or body fluids that soil the filaments. For re-use, the monofilament must remain straight and unbent.

**Ordering Monofilaments**

A limited supply may be available in ITEAMS if programs are unable to order locally. Contact the TB and Hansen's Disease Branch for details.

Sample Monofilament:

