

Guidelines for Reading the Mantoux Tuberculin Skin Test

NOTE: The results of the skin test must be read by a trained health care worker 48 to 72 hours from the time the test was administered. (Results reported as “positive” or “negative” are **not** acceptable.)

Supplies

- Small, plastic, flexible ruler marked in millimeters
- Ball point pen to mark edges of the induration
- Alcohol pad to clean off pen marks
- Mantoux Tuberculin Skin Test Record Form
- Patient education materials

Preparation

- Verify that the correct patient has returned for TST reading
- Explain the procedure to the patient to put him/her at ease
- Wash your hands
- Make the patient feel at ease with his/her arm in a relaxed position

Inspect for site

- Inspect the arm in good light and on a firm surface
- Locate the site of injection on the palm-side-up surface of the forearm with the patient’s arm supported and slightly flexed at the elbow

Palpate

- Keep your fingernails short enough so they do not extend beyond the fingertip
- Since the induration is not always visible, you must rely on palpation with your fingertips to determine induration at the injection site
- Touch the area lightly with the pads of your fingertips
- Lightly sweep your fingertips in 2-inch diameters from the injection site in all four directions to locate the edges of the induration
- Use a zig-zag, feather-like touch to palpate the area for margins of induration. Be careful not to confuse a margin of induration with a margin of muscle on the forearm. To check this, repeat the palpation with the patient’s arm raised to a 45-degree angle.

Mark

- Hold your palm over the injection site with your fingertips at the outer edge of the patient’s forearm
- Without lifting, move your fingertips from the outer edge towards the induration
- Rest one fingertip firmly against the induration margin on one side before marking the margin. The fingertip should remain in contact with the skin at all times
- Use a ball point pen to mark lightly with a fine dot at the widest edge of the induration
- Repeat the procedure from the other side of the patient’s forearm and place the second mark on the margin of induration
- Palpate again, repeating finger movements toward the injection site, to ensure that the induration was marked correctly and adjust the dots if necessary

- If the margins are not equally clear all the way around the induration, it is still necessary to mark the margins on each side of the induration. For irregular margins of induration, mark and measure the longest diameter across the forearm

Measure

- Measure only the area of induration, a hard, dense, raised formation
- Do not measure erythema, reddening of the skin that can also have swelling
- Use the millimeter ruler to measure the diameter of the induration perpendicular to the long axis of the forearm
- Place the zero ruler line inside the left dot edge and read the ruler line inside the right dot edge
- If the measurement falls between the two divisions on the millimeter scale, record the lower mark. If unsure, ask a co-worker

Note: Reactions to the tuberculin skin test at the injection site will vary. If there is blistering, palpate the induration gently as it may be painful. Measure only the induration. Only the margins of the induration are significant, redness and swelling should not be measured

Record

- Record the exact measurement in millimeters of induration on the Mantoux Tuberculin Skin Test Record Form. Do not record the interpretation of the results as “positive” or “negative.”
- Record the date and time the test was read, the name and signature of the person who read the skin test, and the presence or absence of adverse effects (i.e., blistering, redness, and swelling)
- If there is no induration, this measurement should be recorded as 0 mm of induration
- Become familiar with the interpretation guidelines for your facility

Educate

- Explain the significance of a positive skin test. For example, a positive skin test result means latent infection with the TB germ. A negative skin test result means there is no TB infection
- Direct the patient for follow-up (chest x-ray if skin test result is positive), if necessary
- Answer the patient’s questions
- Provide culturally and linguistically appropriate educational materials and documentation to the patient

Note: If doing two-step testing, explain to patient the reason for doing so prior to administering the skin test. Additionally, if the first skin test result is negative, explain the significance of this result and the need for administering a second test.