### TARGETING GROUPS FOR SCREENING

- Recent infection/close contact of known or suspected cases of active TB
- Radiological evidence of old, healed, inactive TB, but no prior treatment
- Persons from countries with high prevalence of TB (within two years of arrival)
- Persons at increased risk of reactivation due to impaired immunity

For more detailed information about screening please refer to the Canadian Tuberculosis Standards.

# ADMINISTERING THE TUBERCULOSIS SKIN TEST (TST)

#### 1. Locate the injection site

- Place the forearm palm side up
- Select an area 5–10 cm below the elbow free of tattoos, scars or broken skin
- Clean site using alcohol swab and allow to dry

#### 2. Prepare the Tuberculin

- Check the tuberculin expiration date (use within one month after opening)
- Open and date the vial
- Use a 1 ml tuberculin syringe with a ½ inch, 26 or 27 gauge needle
- Do not inject air into vial
- Withdraw 0.1 ml (5 tuberculin units
- Administer tuberculin immediately once drawn

#### 3. Inject the Tuberculin

- Insert the needle just below the skin's surface at a 5° to 15° angle with the bevel up
- Inject the tuberculin, a wheal (small bubbled area) will form



#### 4. Check the Injection Site

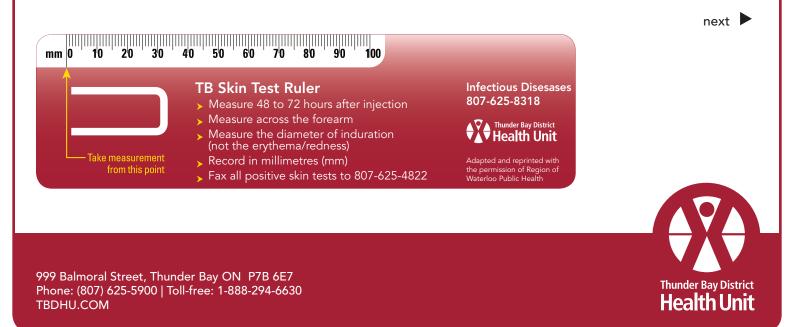
- Ensure a 6 to 10 mm wheal appears
- If the wheal is not 6 mm or more, repeat the injection on the opposite forearm or on the same forearm as before, but at least 10 cm from the previous injection
- Do not cover with a band-aid

#### 5. Document the following:

- Location (left arm or right arm)
- Tuberculin lot number and expiration date
- Date and time test administered
- Signature of health-care professional

#### Monitor client for 15 minutes post injection and instruct them to return in 48 to 72 hours to have the test read.

**Precautions:** Be aware and prepared for anaphylactic/acute allergic reaction.



## **READING THE TST**

The skin test must be read 48 - 72 hours after administration. If this "window" is missed, you may need to re-administer the TST.

- 1. Inspect
  - Inspect the skin test under good lighting
  - Note the induration (hard, raised formation)

#### 2. Palpate

• Use your fingertips to determine if any induration is present

#### 3. Mark

• Mark the edges of induration across the forearm with a pen held at a 45° angle

#### 4. Measure

- Using a ruler, measure the distance between pen marks
- Measure induration NOT erythema (redness)
- 5. Record Induration in millimetres (mm)
  - DO NOT record as simply positive or negative
  - If there is no induration, record as 0 mm

# INTERPRETATION OF THE TST

Tuberculin reaction size (mm of induration)	Setting in which reaction is considered positive
0 to 4 mm	In general, this is considered negative and no treatment is indicated. <b>NOTE:</b> Children under 5 years of age who were in close contact with an infectious case of TB should be considered positive and prescribed LTBI treatment pending the results of a repeat skin test 8 weeks after exposure.
5 to 9 mm	<ul> <li>HIV infection</li> <li>Contact with infectious TB within past 2 years</li> <li>Fibronodular diseases on CXR (untreated healed TB)</li> <li>Organ transplantation (related to immune suppressant therapy)</li> <li>Tumor Necrosis Factor alpha inhibitors and other immunosuppressive drugs e.g. corticosteroids</li> <li>End-stage renal disease</li> </ul>
≥ 10 mm	All others



Under the 1990 Health Protection and Promotion Act, sec. 26 (reporting of carrier of disease), all positive TST results are reportable to public health. The practitioner reading the test results must report the positive TST, even when referring the patient to another physician or specialist for treatment.

# Fax all positive skin test results with recent chest x-ray to 807-625-4822

### TWO-STEP TUBERCULOSIS SKIN TESTING

#### May be recommended for persons who:

- Require subsequent testing at regular intervals (e.g. health care workers, correctional workers and volunteers)
- Are residents of a long-term care facility who may be tested subsequently if there is a suspected exposure

#### Procedure:

- Administer and read the initial test to establish a baseline
- If first step is positive, do not repeat
- If the initial reaction does not meet positive skin test criteria, perform a second test one to four weeks later
- Document both skin test results
- Fax all positive skin test results along with recent chest x-ray to 807-625-4822

Note: If a two-step test is **documented**, any subsequent testing requires only a **single** test.

A two-step TST is NOT recommended for contact investigation.

## QUESTIONS ABOUT TB AND THE TST?

Call TBDHU Infectious Diseases Program at 807-625-8318 or toll-free 1-888-294-6630 ext. 8318.

Reference: Public Health Agency of Canada. Canadian Tuberculosis Standards, 7th edition (2014)

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For help interpreting positive TB skin tests visit www.tstin3D.com

