

### Administering the Tuberculin Skin Test (TST)

#### 1. Prepare the client

- Obtain informed consent
- Provide client specific education
- **Observe x 15 mins post-injection**
- **Return for TST reading x 48-72 hours**

#### 2. Supplies

- Tubersol®, 1 ml tuberculin syringe with a 26 or 27 gauge ¼ to ½ inch needle, alcohol swab, cotton ball, documentation record, and anaphylaxis kit and protocol
- Vials must be used within 30 days
- Discard open vial if there is no date noted

#### 3. Locate the injection site

- Use inner aspect of the left forearm, 2-4 inches below the elbow
- Avoid areas with extensive lesions, burns, eczema, rashes, tattoos or visible veins. If tattoos are extensive, TST can still proceed.
- Use alcohol swab to clean
- Do not use local anesthetic cream

#### 4. Prepare to administer the test

- Withdraw 0.1mL (5TU) of testing solution
- Do not preload syringes
- Do not inject air into the vial

#### 5. Inject the Tuberculin

- Hold the skin test site taut
- Position the needle, bevel up. Insert intradermally at a 5° to 15° angle to the skin. The needle tip should be visible just below the skin's surface.
- Slowly inject the tuberculin

#### 6. Check the injection site

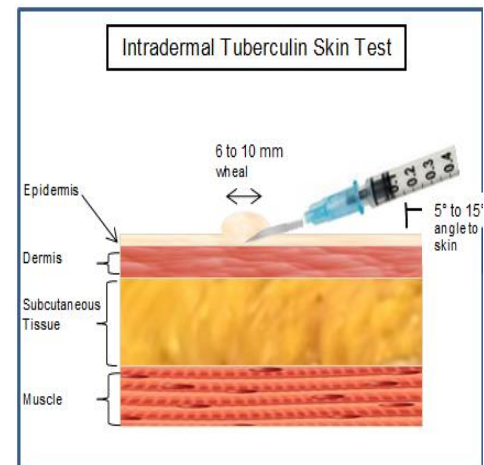
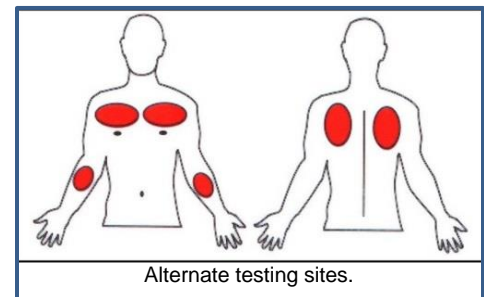
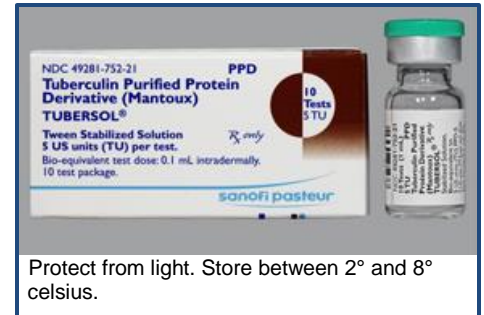
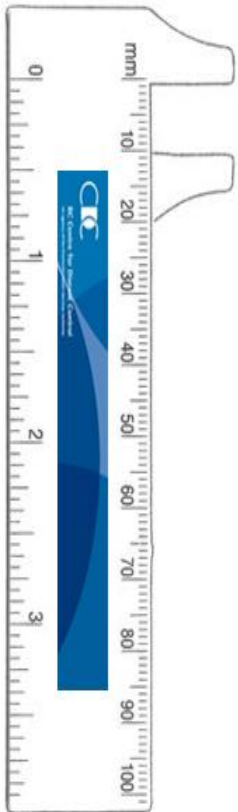
- A 6-10mm diameter wheal should form
- If wheal does not form, or if a lot of testing solution leaks out, repeat test using alternate site, or at least 2 to 4 inches below initial site
- A cotton ball can be used to gently blot any blood.
- Do not cover test site with band aid

#### 7. Advise the client

- Do not to press or scratch the injection site
- Do not apply creams or lotions
- Mild itching, swelling, irritation, or bruising may occur

#### 8. Document

- On the TB Screening form, or as per agency guidelines
- Can include date, lot number, injection site, and your signature



### Reading the Tuberculin Skin Test (TST)

Must be read by a trained health care professional. Ensure the patient has returned **within 48-72 hours of administration**.

#### 1. Gather supplies

- Caliper or flexible ruler, pen and documentation record

#### 2. Inspect TST site

- Visually inspect under good lighting on a firm surface
- Note induration (hard, dense, raised formation)

#### 3. Palpate for induration

- Use fingertips to lightly sweep over the surface of the forearm around the test site
- Gently palpate for induration
- Take note of the borders

#### 4. Mark induration borders

- Mark the widest lateral induration border with a pen
- Read across, not up and down
- Do not measure redness or soft swelling
- **Pen method:** move the tip of a pen at a 45° angle laterally towards the test site. The tip will stop at the edge of the induration

#### 5. Measure induration

- Place the "0" on the ruler inside the left-sided pen marking, and read the measurement to the inside of the right-sided pen marking
- If the dot is in between two demarcations on the ruler, use the lower millimeter (mm) value

#### 6. Document

- Record the date and measurement (in mm only)
- Do not record as positive or negative.
- If no induration is noted, record "0 mm"
- Document any adverse reactions
- Interpret the result as per the TST cut-off table in the BCCDC TB Manual

#### 7. Advise the client

- If TST positive or if there is an adverse reaction, advise the client that no further TST's are required in the future for TB screening
- Provide a copy of the results and educational resources
- Send results to TB Services as per the TB Manual and TB Screening Decision Support Tool. Further recommendations will follow.



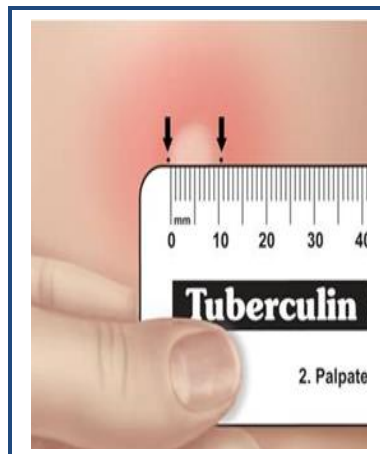
Palpating for induration  
Can use zig zag motion.



Marking the borders.



Pen method



### Notes

Reactivity may be suppressed by current or recent (within 4 weeks) major viral infection, or steroid dose equivalent to  $\geq 15\text{mg}$  daily for 2-4 weeks.

It can take 2-8 weeks after infection to reliably respond to tuberculin. TST can be given on same day or 4 weeks after a live vaccine.

See the TB Manual for other causes of false-negative and false-positive TST's.

#### TST's are safe:

- pregnancy
- breastfeeding
- history of BCG
- unclear or undocumented history of previous TST positive
- prior window period prophylaxis

#### Contraindications:

- Prior allergic response to components of Tubersol® or severe reaction (e.g. blistering)
- Prior documented TST positive result
- Previous active TB disease or latent TB infection
- Previous IGRA reactive

#### Questions?

Call the TB Services  
Nurse Consultants:

**604-707-5678**



See the BCCDC  
website for multilingual  
educational materials:

[www.bccdc.ca](http://www.bccdc.ca)