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.

Notes

Reactivity may be suppressed by current or recent (within 4 weeks) major viral infection, or steroid dose equivalent to ≥ 15mg 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

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