

TUBERCULOSIS SKIN TEST - ADMINISTERING THE TEST



Grey Bruce
Public Health

Step 1

Locate the Injection Site

- Place the forearm palm side up
- Select an area 5cm below the elbow that is free of tattoos, scars etc.
- Clean the site using an alcohol wipe and allow to dry



Step 2

Prepare the Tuberculin

- Check the tuberculin expiration date
- Use a 1ml tuberculin syringe with a ½ inch, 26 or 27 gauge needle
- Withdraw 0.1ml (5 tuberculin units)
- Administer tuberculin immediately



Step 3

Inject the Tuberculin

- Insert the needle with the bevel just below the skin surface at 5-15 degree angle
- Inject the tuberculin

Step 4

Check the Injection Site

- A 6-10 mm wheal should appear
- Repeat the test at least 5cm from the injection site if no wheal appears or a lot of fluid comes out
- Do not use a bandaid and do not squeeze the site



Step 5

Document the Test

- Location
- Tuberculin lot number
- Tuberculin expiration date
- Date and time administered
- Signature

TUBERCULOSIS SKIN TEST - READING THE TEST

Step 1

Timeline

- Read the test within 48 - 72 hours, otherwise the test will no longer be valid

Step 2

Inspect and Palpate

- Inspect the skin test site
- Note any induration (hard, dense, raised formation)
- Palpate with your fingers to determine if any induration is present



Step 3

Mark and Measure

- Mark the edges of the induration across the forearm with a pen held at a 45 degree angle
- Measure the distance between the pen marks with a caliper or TST ruler
- Measure the induration **NOT** redness



Step 4

Record Induration in millimetres (mm)

- Do not record result as positive or negative
- If there is no induration record 0mm

Interpretation of Results

- <5mm
 - Generally considered negative
- 5-9mm
 - Considered positive for persons living with HIV; known contact with someone with TB; abnormal chest x-ray with fibronodular disease; immunosuppressed; TNF alpha inhibitors; persons with chronic kidney disease
- >10mm
 - Considered positive for all other persons
- **Report positive results to Grey Bruce Public Health**

TWO STEP TUBERCULIN TESTING AND IGRA CONSIDERATIONS



Grey Bruce
Public Health

Two Step Tuberculosis Testing

Should be done for persons who:

- Require serial testing e.g., healthcare personnel, corrections staff, incarcerated persons, persons experiencing homelessness, person in contact with someone who has TB disease

Procedure:

- Administer the initial test
- If the initial test does not meet positive criteria, a second test is done 1-4 weeks later. For contacts of someone with TB this test is usually done 8 weeks from break in contact.
- If a two step is documented any subsequent testing requires only a one step

Positive TB Skin Test (TST)

- **Patients who have a positive TST should not have another TST**
- Assess for signs and symptoms of TB disease as well as risk factors
- Offer patients a fact sheet on TB disease and TB infection and explain the difference
- Recommended follow up may include a medical evaluation, chest x-ray, and discussion of TB preventative treatment (after TB disease is ruled out)

BCG Vaccine and IGRA Considerations

- BCG can be considered as the cause of a positive TST if it was given after 1 year of age and there are no known TB risk factors AND the person is Canadian-born non-Indigenous OR has immigrated / is visiting from a country with low TB incidence
- IGRA testing may be preferable if the client is 2-10 years of age and received BCG OR; is 10+ years of age and received BCG >1 years old OR; there is a history of multiple BCG immunizations OR; staff are not trained in TST administration and reading AND the patient can access and afford IGRA testing OR; the client is unlikely to return to have a TST read

Reference: Canadian Thoracic Society. Canadian tuberculosis standards. 8th ed. Can J

Respir Crit Care Sleep Med. 2022;6(2022 Suppl 1):1-255. Available from: <https://www.tandfonline.com/toc/ucts20/6/sup1>