

Tuberculosis Skin Test - Mantoux

Administering the TB Test

Reading the TB Test

a) Locate the Injection Site

- Place the forearm palm side up
- Select an area 2 to 4 inches (5 cm) below the elbow that is free of tattoos, scars and non-intact skin
- Clean site using an alcohol swab; allow to dry



b) Prepare the Tuberculin

- Check the tuberculin expiration date
- Use a 1 ml tuberculin syringe with a 1/2 inch, 26 or 27 gauge needle
- Withdraw 0.1 ml (5 tuberculin units)
- Administer tuberculin immediately once it is drawn

c) Inject the Tuberculin

- Insert the needle with the bevel up just below the skin's surface at a 5 to 15 degree angle
- Inject the tuberculin - a wheal will form



d) Check the Injection Site

- Ensure a 6 - 10 mm wheal appears
- Repeat test 2 to 4 inches (5 - 10 cm) from the original site if the wheal is not 5 mm or more
- Do not cover with a bandaid



e) Document the Test, including:

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

See reverse for two-step testing method

The skin test must be read 48 to 72 hours after administration. If this "window" is missed, the TB skin test may have to be re-administered.

a) Inspect

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

b) Palpate

- Use your fingertips to determine if any induration is present

c) Mark

- Mark the edges of induration across the forearm with a pen held at a 45 degree angle



d) Measure

- Using a caliper ruler, measure the distance between the pen marks
- Measure induration - NOT erythema/redness



e) Record Induration in millimetres (mm)

- DO NOT record as simply positive or negative
- If there is no induration, record as 0 mm

| Tuberculin Reaction Size (mm of induration) | Setting in which reaction is considered positive |
|---|--|
| 0-4 mm | HIV infection AND expected risk of TB infection is high: patient is immigrant from TB endemic country, is a household contact, or has abnormal chest x-ray |
| 5-9 mm | <ul style="list-style-type: none"> • HIV infection/other immune suppression • Close contact of active case • Abnormal chest x-ray with fibronodular disease • Child suspected of having TB |
| > 10 mm | All others |

Two-Step Tuberculosis Testing

Should be done for persons who:

- may require subsequent testing: e.g. healthcare and correctional workers at time of hire
- are becoming residents of a long-term care facility/retirement home
- are travelling to a TB endemic country for a prolonged period of time

Procedure:

- administer and read the initial test
- if the initial reaction does not meet positive criteria, perform a second test 1-4 weeks later
- document both test results
- report a positive result to public health
- if a two-step test is documented, any subsequent testing requires only a single test

Promptly report all positive test results to Public Health by contacting a nurse in the Infectious Diseases Program at the Grey Bruce Health Unit.

References:

1. Canadian Lung Association, Canadian Thoracic Society: Public Health Agency of Canada. Canadian tuberculosis standards 7th ed. Ottawa, ON: Her Majesty the Queen in Right of Canada, as represented by the Minister of Health; 2014. Available from: http://www.respiratoryguidelines.ca/sites/all/files/Canadian_TB_Standards_7th_Edition_ENG.pdf



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