Feb 2024



Tuberculosis (TB) Postgraduate Medical Education

Required prior to program start: TB Screening and TB Risk Assessment

TB Screening: Refer to page 2 of the PGME Health Screening Record for detailed requirements.

NOTE: Tuberculin skin testing (TST) must be given before OR given at least 28 days after a live vaccine (MMR, Varicella). IGRA serology must be tested before OR at least 28 days after a live vaccine.

Negative TST usually means there is no TB infection but can also occur after recent infection (it takes up to eight weeks after exposure for the skin test to become positive), or in individuals with a weak immune system (for example, due to HIV infection or active TB disease.

IGRA serology (Quantiferon, T-Spot) dated within the last 12 months is accepted as an alternative to TST for international learners ONLY who are unable to access TST in their <u>current</u> country of residence. If the IGRA test is negative, a two-step TST is recommended after registration (available at hospital Occupational Health Services).

Positive TST usually indicates TB infection but can also occur after BCG vaccination if the vaccine was given after age 12 months or more than once, or infection with other TB-like bacteria. Because IGRA is not affected by BCG vaccination, it is useful for assessing BCG-vaccinated individuals with positive TST. Positive IGRA is most likely due to TB infection. While most individuals infected with TB have latent (inactive) TB infection and are not contagious, progression to active TB disease can occur at any time. The risk of reactivation is highest in the first two years after infection and is also increased by HIV infection, fibronodular scarring on chest x-ray, chronic steroids (equivalent of prednisone ≥ 15 mg/day for ≥ 1 month), other immunosuppressive medications, and end stage renal failure.

Tuberculosis (TB) Risk Assessment: Learner to complete on page 1 of the PGME health screening record.

1) Learners with negative TST/IGRA should have a single TST eight or more weeks post exposure if lived or worked in a country other than Canada for one or more months (if meets criteria for TB testing), OR have had a significant exposure to an individual with active TB disease:

Criteria for TB testing:

- * 1 or more months in country with TB incidence ≥ 30/100,000 population with high-risk contact, particularly direct patient contact in a hospital or indoor setting, but possibly including work in prisons, homeless shelters, refugee camps or innercity slums.
- * 3 or more months in country with TB incidence > 400/100,000 population
- * 6 or more months in country with TB incidence 200-399/100,000 population
- * 12 or more months in country with TB incidence 100-199/100,000 population

Refer to: https://www.indexmundi.com/facts/indicators/SH.TBS.INCD/

2) Learners with positive TST/IGRA- While most individuals infected with TB have latent (inactive) TB infection and are not contagious, progression to active TB disease can occur at any time. Symptoms of active TB disease include persistent cough or fever lasting three or more weeks, hemoptysis, night sweats, unexplained weight loss. Learners need to be aware of the symptoms of active TB disease and seek prompt medical attention if symptoms develop.

For more information:

Tuberculosis: Health Canada

Canadian Tuberculosis Standards 8th edition

Hamilton Public Health-Tuberculosis Reporting, Guidelines and Resources

Questions? Contact the Health Screening Office: hrsadmin@mcmaster.ca, 905-525-9140 ext 22249