TUBERCULOSIS (TB)

(Rev. Jun 2017)

Tuberculosis is acquired through inhalation of Mycobacterium bacilli in droplets released from the lungs or airways of an infected individual, usually through coughing or sneezing. In 90% of infected individuals the bacilli remain inactive and progression to active disease never occurs – this is called latent TB infection. 5-10% of infected individuals with latent TB infection develop active TB disease, most commonly affecting the lungs. Symptoms of pulmonary TB include persistent cough or fever lasting more than 3 weeks, bloody sputum, night sweats, and unexplained weight loss. Both latent TB infection and active TB disease can be cured with antibiotic medication.

Faculty of Health Sciences requirements for Health Professional programs:

Protection with N95 mask: This is administered by the Safety Office – N95 Respirator Education and Fit Testing

Screening for latent TB infection: This is administered by the Health Screening Office

TB skin test (TST):
- If no previous positive TST, all incoming students are required to submit a baseline two-step TB skin test, which is two separate tests, ideally 7-28 days apart, but may be up to 12 months apart, requiring four visits to their health care provider. This includes students who have had previous BCG vaccination. If the two-step test was completed more than six months prior to the program start date, an additional single TST will be required (except for Postgraduate Medicine students who are only required to have an additional single TST post-exposure).
  - A negative TST usually means there is no infection with TB. A negative test can also occur after recent infection (it takes three 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).
  - A positive TST usually indicates latent TB infection. A false-positive test without latent TB infection can occur after BCG vaccination or infection with other TB-like bacteria.
- If previous or new positive TST, students are required to submit a chest x-ray report subsequent to the positive test and they must also verify they have had a medical assessment and education of the result by a physician. Students with a normal chest x-ray and no symptoms of active TB disease are not contagious and are fully cleared for participation in clinical activities.

IGRA serology (T-Spot or Quantiferon): Only international visiting elective students and postgraduate fellows who cannot access TB skin testing in their home country may submit IGRA serology as an alternative to skin testing.

Annual screening:
- Postgraduate Medicine: Annual screening is not administered by the Health Screening Office.
- All other programs:
  - Previous negative TST: Annual screening with risk assessment questionnaire and post-exposure TST if required
  - Previous positive TST: Annual verification of no symptoms of active TB disease required

Risk assessment questionnaire: This is a useful tool for students to refer to at any time during their program.

| TB EXPOSURES: Have you had any of the following since your last negative TST? |
|-----------------|---------------------------------------------------------------|
| Yes  | No | Significant exposure to an individual with infectious TB disease (close, long-lasting or frequent contact) |
| Yes  | No | Clinical placement in a health care facility with high risk of exposure to infectious TB disease (i.e. notified by Occupational Health Department or Public Health Department about possible exposure) |
| Yes  | No | Lived or worked in a country with high incidence of active TB disease (30 or more cases per 100,000) See rate in first column at [http://www.who.int/tb/publications/global_report/gtbr2016_annex4.pdf?ua=1](http://www.who.int/tb/publications/global_report/gtbr2016_annex4.pdf?ua=1) |

For more information see:

TB FAQ Public Health Agency of Canada

World Health Organization Tuberculosis Fact Sheet

OHA/OMA Tuberculosis Surveillance Protocol

Hamilton Public Health Positive TST Report Form

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