TUBERCULOSIS (TB) INFORMATION
Health Care Professional Programs

Postgraduate Medicine students – See Postgraduate Medicine TB Screening

Tuberculosis is a bacterial infection acquired by breathing in 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 (infectious) disease never occurs – this is called latent TB infection. About 10% of infected individuals develop active TB disease, most commonly affecting the lungs. Symptoms of pulmonary TB include persistent cough or fever lasting more than three weeks, bloody sputum, night sweats, and unexplained weight loss. Both latent TB infection and active TB disease can be cured with antibiotic medication.

Latent TB infection is diagnosed with a tuberculin skin test (TST) or IGRA test (Quantiferon or T-Sport). A negative test usually means there is no infection; 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 test 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.

Faculty of Health Sciences TB requirements for Health Professional programs:

Protection with N95 mask: Administered by the Safety Office – N95 Respirator Education and Fit Testing

Screening prior to program start:

- Learners with negative or unknown or undocumented TB history are required to submit a baseline two-step TST from any time in the past (two separate tests, ideally 7-28 days apart, but may be up to 12 months apart, requiring four visits to a health care professional). This includes students who have had previous BCG vaccination. An additional single TST may be required prior to the program start depending on when the two-step test was completed. IGRA serology may be submitted as an alternative to skin testing ONLY by international visiting elective students and postgraduate fellows who cannot access skin testing in their home country.

- Learners with a documented positive TST or other positive TB history (positive IGRA test or blistering TST reaction, or previous diagnosis and/or treatment for active TB disease or latent TB infection) are required to submit a chest x-ray report dated subsequent to the positive TB history. Students with a normal chest x-ray and no symptoms of active TB disease are not contagious and will be fully cleared for participation in clinical activities.

Continuing surveillance:

Post-exposure: Post-exposure TB update form. Students with baseline negative TB screening who are exposed to active (infectious) TB during their program are required to have a TST eight or more weeks post-exposure. Students who convert to a positive TST during their program must be cleared by the Health Screening Office before they may return to clinical activities.

Annual screening:

- Previous negative TB screening: Previous negative TB update form. Students complete a risk assessment questionnaire (see next page) and a single TST will be required only for students with significant unprotected exposure to an individual with TB disease or with clinical placements in high-risk settings (note some placement sites may require a more recent TST; students are responsible to be aware of their placement site’s requirements).

- Previous positive TB screening: Previous positive TB update form. Students complete an update form to verify they have no symptoms of active TB disease.

For more information click on:

OHA/OMA Tuberculosis Surveillance Protocol for Ontario Hospitals
Hamilton Public Health tuberculosis reporting guidelines and resources
Tuberculosis FAQ Public Health Agency of Canada
Canadian Tuberculosis Standards 7th Edition

Questions? Contact the Health Screening Office, MDCL 3514, (905) 525-9140 ext 22249, fax 905-528-4348
TB risk assessment questionnaire: This is a useful tool for students to refer to at any time during their program.

### TB Exposures
Do any of the following apply since your last negative TST?

- [ ] Yes  [ ] No  1. Significant exposure to an individual with active (infectious) TB disease
- [ ] Yes  [ ] No  2. Clinical placement in health care facility with high risk of exposure to infectious TB disease
- [ ] Yes  [ ] No  3. Lived or worked in a country with a high incidence of TB

If “Yes” applies to one or more questions, a single TST is required eight or more weeks post-exposure.

Notes on questionnaire:

1. Significant exposure: Lived with or had an intimate relationship with someone with active TB, or notified by Occupational Health or Public Health Services about possible exposure to active TB disease.

2. Annual TST recommended for learners involved in intermediate-risk activities in health care facilities not considered low risk, and those involved with high-risk activities in all health care settings.
   - Health care facilities not considered low risk: ≥ 200 beds and ≥ 6 active TB cases annually, or < 200 beds and ≥ 3 active TB cases annually.
   - Intermediate-risk activities include regular direct patient contact on units (such as emergency departments) where patients with respiratory TB disease may be present. High-risk activities include cough-inducing procedures such as sputum induction, bronchoscopy, administration of aerosolized therapies, respiratory therapy, chest physiotherapy, autopsy, morbid anatomy and pathology examinations, bronchoscopy and designated mycobacterium laboratory procedures.


Exposure criteria for post-travel TB testing:

- ≥ 1 month of travel to TB incidence country ≥ 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 inner-city slums.
- ≥ 3 months of travel to TB incidence country > 400/100,000 population
- ≥ 6 months of travel to TB incidence country 200-399/100,000 population
- ≥ 12 months of travel to TB incidence country 100-199/100,000 population