

<p>IN THIS ISSUE:</p> <ul style="list-style-type: none"> ▪ World TB Day and TB Epidemiology ▪ Key Changes to Canadian TB Standards 	<p>FROM: Nicholas Brandon, MD, MA, MSc, CCFP, FRCPC Acting Medical Officer of Health</p>
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<p>Key Messages:</p> <ul style="list-style-type: none"> ▪ March 24th is World TB Day. TB remains a leading cause of morbidity and mortality in the world and in Peel Region. ▪ Canadian TB Standards, 8th edition, recommend preferential use of shorter treatments for latent TB (LTBI), preferential use of IGRA and TST in certain populations, and shorter duration of isolation of active TB cases.

World TB Day and TB Epidemiology

World TB Day is today, March 24th. It commemorates the day in 1882 when Dr. Robert Koch announced his discovery of the bacteria that cause TB.

TB remains one the leading causes of death from an infectious disease globally, second only to COVID-19. Globally, 1.6 million people died of TB in 2021 and the COVID-19 pandemic only worsened the situation. TB rates in Peel are over two times the provincial average and reflect previous exposure in countries with high TB incidence. Peel Region also saw an increase of active TB cases over the pandemic. TB incidence in 2022 was 15% higher than 2015-2019 average. Increased pediatric active TB cases in Peel over the pandemic were also noted.

Key Changes to Canadian TB Standards

TB Screening

The primary goal of testing for TB infection is to identify individuals who are at increased risk for the development of TB disease and therefore may benefit from treatment of TB infection to prevent TB disease. Routine screening for TB infection is not recommended, except for the individuals at high risk of developing active TB:

- contacts of pulmonary TB cases
- heavy drinkers
- smokers
- individuals with underlying medical conditions that increase the risk of TB reactivation (e.g., HIV, diabetes, currently on chemotherapy or immunosuppressive therapy due to an organ transplant, rheumatoid arthritis, etc.)

Either TST or IGRA can be used for most individuals for TB infection screening. The standards recommend IGRA instead of TST in the following populations:

- Children 2-10 years old who previously received BCG
- Persons 10 years or older who received BCG after the age of one or received BCG vaccine more than once
- Expertise to perform TST not available

NOTE: IGRA is not publicly funded in Ontario yet; TST should be offered if IGRA cost is a barrier.

TST preferred if serial testing is planned (e.g., health care workers, or if recommended by PH as a part of TB case and contact investigations).

All individuals with positive TST or IGRA should receive a medical assessment and a chest x-ray to rule out active disease:

<https://www.tandfonline.com/doi/full/10.1080/24745332.2022.2036503?src=recsys>

LTBI Treatment

Traditional, 9-month daily Isoniazid regimen is no longer recommended as a first line for LTBI treatment. The standards now recommend shorter treatment regimens as first line for LTBI treatment to increase adherence to treatment and reduce drug toxicity.

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Either once weekly Rifapentine and Isoniazid for 3 months (3HP), or daily Rifampin for 4 months (4R) are recommended.

3HP is currently funded by the Ministry of Health only if provided as a directly observed preventive therapy (DOPT). 3HP is not currently offered by Peel Public Health but it is being explored for future use in high-risk contacts at greatest risk of active disease. In the interim, Peel Public Health is recommending 4R, unless there are significant interactions with other medications that cannot be mitigated by altering treatment regimens. When Rifamycin based regimens cannot be used because they are not tolerated, not feasible or are contraindicated, the 9-month daily Isoniazid regimen (9H) is the preferred option.

NOTE: For children, older adults, pregnant and breastfeeding women, individuals with end stage renal disease, organ transplant, on HIV and Hepatitis C treatment or when drug resistance is suspected, a consultation with a specialist is warranted before initiating LTBI treatment.

De-isolation of Active TB Cases

Traditionally, active TB cases remained in prolonged isolation until sputum or culture conversion. To reduce the impact of long isolation on the mental health and overall well-being of clients, the standards now recommend shorter isolation periods, and release of individuals from isolation after 2-4 weeks of effective therapy. Peel Public Health is in the process of implementing these recommendations.

For the summary of all changes:

<https://www.tandfonline.com/doi/full/10.1080/24745332.2022.2133030> and

<https://www.tandfonline.com/toc/ucts20/6/sup1>

Please note that both suspect and confirmed active TB cases and LTBI are reportable to public health. To report LTBI and order LTBI treatment, please fax the Reporting Positive Skin Test and TB Drug Order

(<https://www.peelregion.ca/health/professionals/pdfs/V-07-601.pdf>) form to 905-565-8428. To report a case of active TB, please fax the Notification of New Active or Reactive Tuberculosis Case (<https://www.peelregion.ca/health/professionals/pdfs/v-07-211-notification-tb-case.pdf>) form to 905-565-8428.