

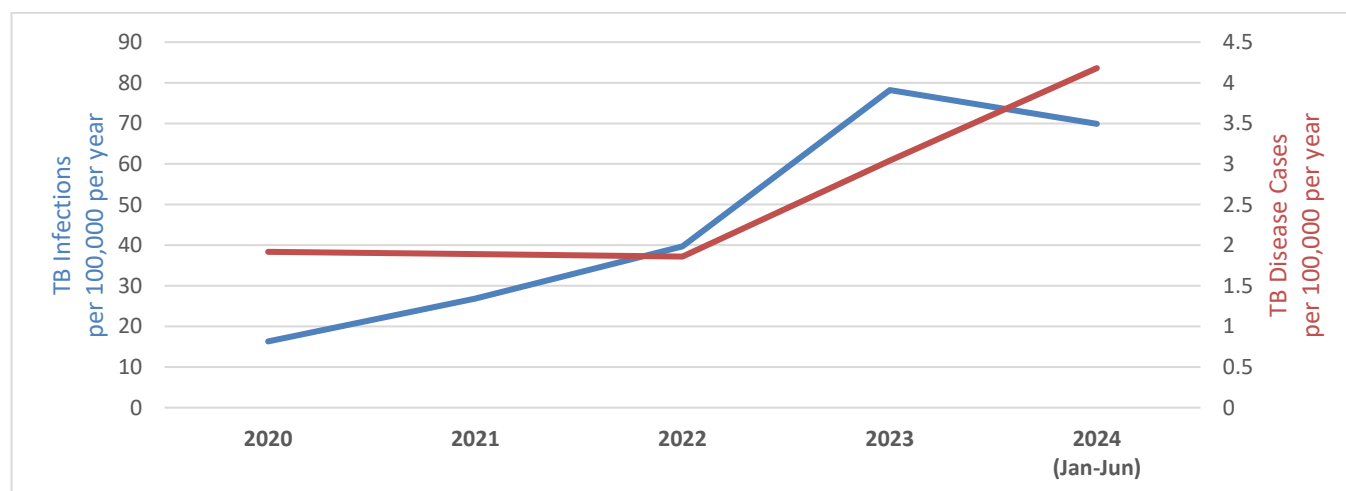
**SUBJECT:** New Tuberculosis Form and Guidance on Reporting  
**Date:** August 19, 2024  
**Pages:** 4  
**To:** Physicians, Hospitals  
**From:** Dr. Matthew Tenenbaum, Associate Medical Officer of Health

- **Consider tuberculosis (TB) in patients with compatible symptoms and order appropriate testing.**
- **Report all persons with any of the following to WDG Public Health:**
  - Latent TB infection
  - Suspected or confirmed active TB disease.
- **Use the new reporting form (attached) to report a positive TB skin test (TST) or Interferon Gamma Release Assay (IGRA) to WDG Public Health.**
- **Patients with active TB disease or latent TB infection can be referred to WDGPH's TB Clinic.**

Tuberculosis (TB) is a serious but curable infectious disease caused by *Mycobacterium tuberculosis* (MTB). TB most commonly affects the lungs and is spread through the air after prolonged contact with an infectious individual through coughing, sneezing, or talking. However, TB can also infect and cause disease in other organs such as the brain, bones, or kidneys.

The terminology for TB was updated in 2022. TB can manifest as TB disease (active TB) or as TB infection (latent TB) which is a non-contagious pre-disease state. Individuals with TB infection can develop TB disease later in life. TB disease can be further classified as respiratory (contagious) or non-respiratory (generally not contagious).

TB is a leading cause of death globally and killed 1.3 million people in 2022.<sup>1</sup> Though Canada is a low-incidence country, Indigenous and foreign-born populations are disproportionately affected by TB.<sup>2</sup> In WDG, rates of TB infection and TB disease have increased substantially in recent years.



Source: Integrated Public Health Information System (iPHIS)

## **Reporting Tuberculosis**

Under the *Health Protection and Promotion Act*, individuals with TB disease or infection must be reported to the Medical Officer of Health, including:

- All patients with clinical, suspected or lab confirmed cases of active TB disease (respiratory or non-respiratory);
- All patients with latent TB infection (LTBI) indicated by a positive TST or IGRA.

**Promptly report known or suspected cases of active TB disease to WDGP at 1-519-829-8370 (After hours or weekends: 1-877-884-8653). WDGP will ensure that they are appropriately isolated, managed, and referred as necessary.**

To report a latent TB infection, use the [updated Positive TST/IGRA Form](#) and fax to 1-855-WDG-LINE (1-855-934-5463). Please fill out each section of the form, including health education and follow-up.

## **About (Active) TB Disease**

When assessing clients with the signs or symptoms outlined below, please consider active TB disease as a part of the differential diagnosis, particularly for groups at elevated risk such as foreign-born individuals, Canadian-born Indigenous peoples, and those who have been previously exposed to TB.<sup>2</sup>

**Symptoms** of active respiratory TB disease can include:<sup>3</sup>

- chronic cough
- chest pain
- weakness or tiredness
- weight loss
- a lack of appetite
- chills
- fever
- night sweats

Active TB disease may present with different signs and symptoms, specifically pain, abscesses or masses, as it can affect parts of the body other than the pulmonary/respiratory system, such as the brain, spine, bones, kidneys, or lymphatic system.<sup>3</sup>

## **Testing for (Active) TB Disease**

Clients with suspect TB disease should receive:

- A chest X-Ray to assess for evidence of TB disease
- Sputum samples x3 for microbiological testing. WDGP can assist with arranging sputum testing for patients not admitted to hospital
- Tuberculin skin testing (TST) may be performed depending on a patient's clinical history; however, a negative result does not rule out active TB disease.

## **About (Latent) TB Infection**

Most people who become infected with TB do not immediately develop active TB disease.<sup>4</sup> These individuals develop a persistent immune response to *M. tuberculosis* without clinical symptoms; this is called TB infection (also known as latent TB or LTBI). These patients do not feel sick and do not spread TB to others.

Of this group, approximately 5% develop a '*reactivation*' of active TB disease after months or years of having a TB infection.<sup>4,5</sup> However, this risk can be reduced by treating TB infection before active TB disease develops.

The [Canadian Tuberculosis Standards](#) outline evidence-based regimens for TB preventive therapy. Medications are available free of charge through WDGPH. Additionally, patients can be referred to WDGPH's TB clinic for assessment and treatment (details below).

### Testing for (Latent) TB Infection

Tuberculin Skin Test (TST)	Interferon-Gamma Release Assay (IGRA)
Intradermal injection of MTB protein antigens that elicits a delayed hypersensitivity reaction in TB-infected individuals	In vitro blood test that detects interferon gamma produced by T cells in TB-infected individuals
Two visits	Single visit
Less accurate if immunocompromised (IC)	More accurate in certain IC groups
Inexpensive; publicly funded for some groups	Costly (~\$100.00)
Recommended for serial testing/routine screening	Not recommended for these use cases (serial IGRA results may vary)
Result may be impacted by BCG vaccination or by non-TB mycobacterial infection	Result more specific to tuberculosis infection

TSTs and IGRAs are both acceptable for diagnosing TB infection.<sup>6</sup> TST is generally preferred when testing will be repeated. IGRAs are preferred for some individuals who have previously received the Bacille Calmette-Guerin (BCG) vaccine or when a TST is contraindicated.

In BCG-vaccinated individuals, a positive TST *may* be due to BCG. However, this depends on a patient's age at vaccination and the time interval since vaccination. BCG vaccination can generally be ignored as a cause of a positive TST in any of these circumstances:

- BCG was given prior to 1 year of age and the patient is now 10 years of age or older.
- The patient belongs to a group with high TB prevalence (e.g. known contacts of an infectious TB case, immigrants from countries with high TB incidence).
- The patient has a high risk of developing TB disease if infected.<sup>7</sup>

In general, testing for TB infection should only be performed if there is an intention to offer TB preventive therapy.<sup>6</sup> This decision should consider patient preferences toward treatment and the expected benefit treatment would provide.

## **TB Clinics at WDGPH**

WDGPH operates a TB clinic at its Guelph office (160 Chancellors Way). The clinic accepts referrals from community physicians for:

- Assessment and management of active TB disease (respiratory or non-respiratory)
- Assessment of TB infection and prescribing of treatment
- Sputum induction (only for TB clients)

Health care providers can refer clients within the WDG region by faxed referral (1-855-934-5463) or calling the TB Line (1-519-829-8370).

## **References:**

1. Global Tuberculosis Report. (2023) World Health Organization, November 7, 2023. Available at: <https://www.who.int/teams/global-tuberculosis-programme/tb-reports/global-tuberculosis-report-2023/tb-disease-burden/1-2-tb-mortality>
2. Public Health Agency of Canada. Canadian Tuberculosis Standards: Chapter 1: Epidemiology of tuberculosis in Canada, March 2022. Available at: <https://doi.org/10.1080/24745332.2022.2033062>
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4. Public Health Agency of Canada. Canadian Tuberculosis Standards: Chapter 2: Transmission and pathogenesis of tuberculosis, March 2022. Available at: <https://www.tandfonline.com/doi/full/10.1080/24745332.2022.2035540>
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6. Public Health Agency of Canada. Canadian Tuberculosis Standards: Chapter 4: Diagnosis of tuberculosis infection, March 2022. Available at: <https://doi.org/10.1080/24745332.2022.2036503>
7. Government of Canada. Bacille Calmette-Guérin (BCG) vaccine: Canadian Immunization Guide, accessed August 16, 2024. Available at: <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-2-bacille-calmette-guerin-vaccine.html>

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