

Tuberculosis Prevention and Control Protocol, 2018

Population and Public Health Division,
Ministry of Health and Long-Term Care

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Preamble

The Ontario Public Health Standards: Requirements for Programs, Services, and Accountability (Standards) are published by the Minister of Health and Long-Term Care under the authority of section 7 of the *Health Protection and Promotion Act* (HPPA) to specify the mandatory health programs and services provided by boards of health.^{1,2} The Standards identify the minimum expectations for public health programs and services. Boards of health are accountable for implementing the Standards including the protocols and guidelines that are referenced in the Standards. Protocols are program and topic-specific documents incorporated into the Standards which provide direction on how boards of health shall operationalize specific requirement(s) identified within the Standards.

Purpose

The purpose of this protocol is to provide direction to boards of health to reduce the burden of tuberculosis (TB) through prevention and control.

To further support the clinical and public health management of TB cases and contacts, it is recommended that other published materials be utilized for further information, relevant definitions, and guidance, such as the most current version of the tuberculosis disease-specific chapter of the *Infectious Diseases Protocol, 2018* (or as current), the *Canadian Tuberculosis Standards, 2014* (or as current), and the *Tuberculosis Program Guideline, 2018* (or as current).³⁻⁵

Reference to the Standards

This section identifies the standard and requirements to which this protocol relates.

Infectious and Communicable Diseases Prevention and Control

Requirement 1. The board of health shall conduct population health assessment and surveillance regarding infectious and communicable diseases and their determinants. These efforts shall include:

- a) Reporting data elements in accordance with the *Health Protection and Promotion Act*; the *Infectious Diseases Protocol, 2018* (or as current); the *Rabies Prevention and Control Protocol, 2018* (or as current); the *Sexual Health and Sexually Transmitted/Blood-Borne Infections Prevention and Control Protocol, 2018* (or as current); and the *Tuberculosis Prevention and Control Protocol, 2018* (or as current);
- b) Conducting surveillance and epidemiological analysis, including the monitoring of trends over time, emerging trends, and priority populations in accordance with the *Infectious Diseases Protocol, 2018* (or as current); the *Population Health Assessment and Surveillance Protocol, 2018* (or as current); the *Rabies Prevention and Control Protocol, 2018* (or as current); the *Sexual Health and*

Sexually Transmitted/Blood-Borne Infections Prevention and Control Protocol, 2018 (or as current); and the *Tuberculosis Prevention and Control Protocol, 2018* (or as current);

- c) Responding to international, Federal/Provincial/Territorial and local changes in diseases epidemiology by adapting programs and services; and
- d) Using the information obtained through assessment and surveillance to inform program development regarding communicable diseases and other infectious diseases of public health importance.

Requirement 11. The board of health shall provide public health management of cases, contacts, and outbreaks to minimize the public health risk in accordance with the *Infectious Diseases Protocol, 2018* (or as current); the *Institutional/Facility Outbreak Management Protocol, 2018* (or as current); the *Management of Potential Rabies Exposures Guideline, 2018* (or as current); the *Rabies Prevention and Control Protocol, 2018* (or as current); the *Sexual Health and Sexually Transmitted/ Blood-Borne Infections Prevention and Control Protocol, 2018* (or as current); and the *Tuberculosis Prevention and Control Protocol, 2018* (or as current).

Requirement 12. The board of health shall facilitate timely identification of active cases of TB and referrals of persons through immigration medical surveillance in accordance with the *Tuberculosis Prevention and Control Protocol, 2018* (or as current) and *Tuberculosis Program Guideline, 2018* (or as current), and shall provide or ensure access to TB medication at no cost to clients or providers.

Operational Roles and Responsibilities

Data collection and reporting of data elements

- 1) The board of health shall:

General

- a) On an annual basis, advise health care providers who have a duty to report diseases under the HPPA (including physicians, nurses, pharmacists and optometrists), hospital administrators, superintendents of institutions, school principals, and operators of a laboratory about the requirement to report cases of tuberculosis (TB), according to the HPPA.²
- b) Ensure that the information entered into the integrated Public Health Information System (iPHIS) or any other method specified by the Ministry of Health and Long-Term Care and/or Public Health Ontario (“ministry/PHO”) is complete and accurate and includes the final case disposition (see current iPHIS Guide Tuberculosis Module – Section I to VII or any other guide specified by the ministry and/or PHO).

Confirmed and suspect cases

- c) Create a record for the person as a suspect or confirmed case in iPHIS or any other method specified by the ministry/PHO within one business day of receiving the initial report.

Additional information on cases

- d) Enter into iPHIS or any other method specified by the ministry/PHO all initial laboratory (including drug sensitivities) and radiological reports within one business day of receipt.
- e) Enter into iPHIS or any other method specified by the ministry/PHO any additional data elements as specified in Regulation 569 (Reports), and the current iPHIS Tuberculosis (TB) User Guide, as soon as possible, but in any event no later than 30 calendar days from the date of receipt.^{6,7}

Information for TB contacts

- f) Create a record for any suspected or confirmed contact and enter into iPHIS or any other method specified by the ministry/PHO, all demographics, episode status, and the link to the source case as soon as possible, but no later than 30 calendar days of identification of the contact.
- g) Enter into iPHIS or any other method specified by the ministry/PHO any additional data elements as soon as possible, but in any event no later than 30 calendar days of receipt.

Immigration medical surveillance

- h) Enter into iPHIS or any other method specified by the ministry, the demographics (if client self-reported), episode status, and additional data elements, as outlined in iPHIS TB User Guide – Section II: Medical Surveillance for persons on immigration medical surveillance as soon as possible, but no later than 30 calendar days of the person reporting.⁷

Latent TB infection (LTBI)

- i) Enter all required data elements in accordance with the current iPHIS Tuberculosis (TB) User Guide into iPHIS or any other method specified by the ministry/PHO as soon as possible, but in any event no later than 30 calendar days of receipt.⁷

Surveillance

- 2) The board of health shall on an annual basis:
 - a) Conduct epidemiological analysis of TB data on, but not limited to, the following:
 - i) For cases:
 - Age
 - Gender
 - Risk factors
 - Risk settings
 - Clinical, laboratory and radiological findings
 - Drug resistance
 - Country of origin
 - Proportion completing treatment
 - Mortality
 - ii) For LTBI in locally-identified high-risk groups:
 - Age
 - Gender
 - Risk factors
 - Risk settings
 - Country of origin
 - Proportion initiating treatment
 - Proportion completing treatment
 - b) Prepare a detailed summary of any outbreaks of TB occurring in its jurisdiction.
 - c) Disseminate relevant epidemiological analyses of TB data to relevant health care and community stakeholders.
 - d) Utilize the results of epidemiological analyses of TB data, including outbreak summaries, for program planning.

Early identification of TB cases, including referrals of persons with inactive TB through immigration medical surveillance

- 3) The board of health shall:

Early identification of TB cases

- a) Implement strategies to promote the early identification and treatment of persons with TB.
- b) Provide annual education to health care providers and/or community stakeholders, as needed, based on local epidemiology, as outlined in the *Tuberculosis Program Guideline, 2018* (or as current), about the following:
 - i) Considering TB in persons with compatible symptoms;
 - ii) Reporting suspect and confirmed cases of TB according to the HPPA;² and

- iii) Screening of high-risk groups, as per the *Canadian Tuberculosis Standards, 2014* (or as current).^{4,5}

Referrals for medical surveillance

- c) Have a process in place to prioritize timely initiation of medical surveillance for urgent referrals (i.e., clients required by Immigration, Refugees, and Citizenship Canada (IRCC) to report for medical surveillance upon arrival in Canada), as outlined in d), in accordance with minimum guidelines set in the *Tuberculosis Program Guideline, 2018* (or as current) to:
 - i) Locate these persons; and
 - ii) Refer and facilitate the process for medical assessment of these persons upon receipt of the urgent notification or immediately if they have signs or symptoms of active TB.
 - iii) Once active TB is ruled out continue to follow these persons as per Regular Immigration Medical Surveillance (see d) iii and d) iv).⁵
- d) Have a process in place for managing referrals for immigration medical surveillance (i.e., clients required by IRCC to report for medical surveillance), in accordance with minimum guidelines set in the *Tuberculosis Program Guideline, 2018* (or as current), to:
 - i) Contact these persons;
 - ii) Conduct preliminary assessment for symptoms of active TB;
 - iii) Provide TB education at first contact with these persons, which would include:
 - Symptom recognition and the need to notify the board of health should symptoms occur;
 - IRCC requirements of medical surveillance;
 - Instructions for obtaining Ontario Health Insurance Program (OHIP) coverage; and
 - Availability of TB for Uninsured Persons Program (TB-UP) as required.
 - iv) Facilitate medical assessment for active TB disease and/or LTBI, including laboratory and radiological testing as determined by the attending health care provider, according to the *Tuberculosis Program Guideline, 2018* (or as current).⁵
 - v) Utilize strategies to facilitate the early identification of active TB in individuals referred for medical surveillance (e.g., base follow-up on risk level, outlined in the *Tuberculosis Program Guideline, 2018* (or as current)).⁵

Management of TB cases

- 4) The board of health shall, in accordance with relevant/applicable documents:
 - a) Initiate contact with persons who have suspected/confirmed respiratory TB and their health care providers, within 24 hours of receipt of the notification.
 - b) Direct the person to be in respiratory isolation if respiratory TB is suspected/confirmed.
 - c) Conduct public health investigation of all suspected/confirmed cases and report

via iPHIS by obtaining details including, but not limited to:

- i) Demographics;
 - ii) Symptoms;
 - iii) Date of onset of symptoms;
 - iv) Level of infectiousness;
 - v) Radiological and laboratory results (including drug sensitivity);
 - vi) Assessment of risk factors for acquisition and transmission; and
 - vii) Identification of contacts.
- d) Recommend that all persons with newly diagnosed TB who are not already known to be seropositive should undergo informed HIV serologic testing in accordance with the *Canadian Tuberculosis Standards, 2014* (or as current).⁴
 - e) Strongly recommend a drug treatment regimen in accordance with the *Canadian Tuberculosis Standards, 2014* (or as current).⁴
 - f) Contact persons with respiratory TB, who are no longer on Directly Observed Therapy (DOT), at a minimum of once every month to monitor the treatment response, adherence and drug toxicity until the completion and outcome of therapy. The frequency of monitoring all nonrespiratory cases shall be based on clinical judgment.
 - g) Utilize a DOT assessment tool and clinical judgement to prioritize cases and duration for DOT, as per DOT Assessment form in the *Tuberculosis Program Guideline, 2018* (or as current).⁵ Have a mechanism in place to provide DOT for, at minimum, and not limited to:
 - i) All respiratory cases for as long as the case is infectious;
 - ii) All cases (respiratory or nonrespiratory TB) resistant to two or more first line drugs for the duration of treatment;
 - iii) All cases (respiratory or nonrespiratory TB) with treatment failure or recurrence of TB for the duration of treatment; and
 - iv) All cases (respiratory or nonrespiratory TB) while they are being treated on an intermittent therapy regimen.
 - h) As appropriate, the board of health should strongly recommend that a physician and/or team experienced in the management of drug-resistant TB provides treatment for, or is consulted on all cases resistant to two or more drugs, as well as all cases determined to be treatment failures, in accordance with the *Canadian Tuberculosis Standards, 2014* (or as current).⁴
 - i) Ensure that respiratory isolation is discontinued only when a case is considered to be no longer infectious. While a TB specialist/physician should be consulted as necessary, the decision and responsibility for discontinuing isolation for outpatients with pulmonary TB rests with the board of health.
 - j) Have a mechanism in place to ensure the provision of TB medications at no cost to the person with TB or the provider.
 - k) Review drug regimens and sensitivity results to ensure appropriateness and adequacy of therapy.
 - l) Monitor sputum culture conversion for pulmonary TB (or chest X-ray improvement if no respiratory specimens can be obtained for microbiological culture).

- m) Report to PHO all cases who leave the province of Ontario, as per the *Tuberculosis Program Guideline, 2018* (or as current).⁵
- n) Issue orders to persons with suspect/confirmed TB according to criteria specified in Section 22 of the HPPA.²
- o) Report to the ministry all cases who are being considered for a section 35 order from the Ontario Court of Justice under the HPPA.²

Identification, assessment, and management of contacts of respiratory TB

- 5) The board of health shall:
 - a) Use an organized and systematic approach to prioritize contact follow-up as recommended by the *Canadian Tuberculosis Standards, 2014* (or as current), including:
 - i) Considering the infectiousness of the source case, extent of exposure, and immunologic vulnerability of those exposed;
 - ii) Identifying high priority contacts within 48 hours of notification of the source case or as soon as possible thereafter. The highest priority contacts are those with the most exposure and the highest risk of progression to active TB if infected;
 - iii) Facilitating assessment of high priority contacts to detect or rule out active TB as soon as possible, to identify secondary cases and those with LTBI, and to facilitate treatment;
 - iv) For high priority contacts with no history of TB or documented positive Tuberculin Skin Test TST, facilitating initial TST and, if negative, repeat TST eight weeks after the last exposure; and
 - v) Considering infectiousness of the case, results of initial high priority contact investigation, and nature of exposure of additional contacts to inform decision-making about whether to expand contact investigation.⁴
 - b) Recommend follow-up for other identified contacts;
 - c) Review the results of contact follow-up for each index case and expand contact follow-up as required;
 - d) Recommend window period prophylaxis (i.e., treat for eight weeks post break in contact) for high priority contacts <5 years of age with a negative baseline TST, in accordance with the *Canadian Tuberculosis Standards, 2014* (or as current).⁴

Identification and management of individuals with LTBI

- 6) The board of health shall:
 - a) Implement strategies to promote the identification and treatment of persons with LTBI, as per the *Canadian Tuberculosis Standards, 2014* (or as current).⁴ This shall include providing annual education to health care providers and/or community stakeholders, as needed based on local epidemiology, about:
 - i) Considering LTBI in those with increased risk of TB exposure and/or risk factors for progression to active TB disease, in accordance with the *Canadian Tuberculosis Standards, 2014* (or as current);⁴
 - ii) At board of health's discretion, reporting persons with LTBI;
 - iii) Screening of high-risk groups, in accordance with the *Canadian Tuberculosis Standards, 2014* (or as current);⁴
 - iv) The need to offer treatment for those with LTBI as appropriate and ensure treatment completion; and
 - v) Recommending all persons with LTBI undergo HIV serologic testing according to established guidelines.
 - b) Have a mechanism in place to ensure the provision of TB medications for persons on LTBI therapy at no cost to the person with LTBI or the provider.

References

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2. *Health Protection and Promotion Act*, RSO 1990, c H.7. Available from: <https://www.ontario.ca/laws/statute/90h07>
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4. Public Health Agency of Canada. Canadian tuberculosis standards. 7th ed. Ottawa, ON: Her Majesty the Queen in Right of Canada; 2014. Available from: <https://www.canada.ca/en/public-health/services/infectious-diseases/canadian-tuberculosis-standards-7th-edition.html>
5. Ontario. Ministry of Health and Long-Term Care. Tuberculosis program guideline. Toronto, ON: Queen's Printer for Ontario; 2018. Available from: http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/protocol_sguidelines.aspx
6. *REPORTS*, RRO 1990, Reg 569. Available from: <https://www.ontario.ca/laws/regulation/900569>
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