

EPIDEMIOLOGICAL SUMMARY

Tuberculosis in Ontario: July 1, 2020 to June 30, 2025

Published: October 2025

Introduction

This report, to be published on a quarterly basis, provides an epidemiologic summary of tuberculosis (TB) disease and TB infection (TBI), formerly referred to as latent TB infection, in Ontario and includes information available from Ontario's integrated Public Health Information System (iPHIS) as of **October 6, 2025**.

The current provincial case definitions for TB disease and TBI can be found in Appendix 1 of the Infectious Disease Protocol for Tuberculosis.¹

For further information regarding TB, including signs, symptoms, and how to reduce the risk of infection, visit Public Health Ontario's (PHO) Tuberculosis (TB) webpage.²

Key Messages

- The provincial quarterly incidence of TB disease declined in Q4 (October to December) of 2024 to 1.3 cases per 100,000 population and was similar in Q1 and Q2 (January to June) of 2025. Quarterly incidence reached its highest rates since July 1, 2020 in Q2 and Q3 (April to September) of 2024, with 1.7 cases per 100,000 population and 1.8 cases per 100,000 population, respectively. The annual incidence in 2024 remains the highest in the last 5-year period.
- The elevated provincial rate of confirmed TB disease cases underscores the ongoing need for
 effective TB prevention and care as well as ongoing local and provincial surveillance to further
 understand the factors that may be contributing to these recent increases.
 - This quarterly report contains an In Focus section that looks at TB indicators related to diagnosis and treatment of smear positive pulmonary TB.
- The COVID-19 pandemic coincided with a sharp decline in the number of provincial notifications of TBI. The number of TBIs reported in Ontario has since increased to pre-pandemic levels. Increases in the identification and diagnosis of TBI represents additional opportunities for preventive treatment of TBI to avert future TB disease cases, an important step to meeting reduction targets for TB disease cases. Addressing TBI is a key component of the WHO's Framework Towards TB Elimination in Low Incidence Countries.³

Highlights

TB Disease

- Between July 1, 2020 and June 30, 2025, the quarterly incidence of TB disease ranged from a low of 1.1 case per 100,000 population to a high of 1.8 cases per 100,000 population. (Figure 1)
- Rates of TB disease have been generally higher in males compared to females, with the quarterly incidence ranging between 1.1 to 2.0 cases per 100,000 population for males and between 0.9 to 1.5 cases per 100,000 population for females. (Figure 2)
- Overall, adults 80 years of age and older had the highest rates of TB (range: 1.5 to 4.2 cases per 100,000 population), followed by those 20-39 years of age (range: 1.3 to 2.4 cases per 100,000 population) and those 60-79 years of age (range: 1.1 to 2.0 cases per 100,000 population. (Figure 3)
- Between July 1, 2024 and June 30, 2025 (i.e., the last 12 months), Northeastern Public Health had
 the highest rate of TB at 17.9 cases per 100,000 population, followed by Thunder Bay District
 Health Unit, Toronto Public Health, and Peel Public Health at 10.0, 9.8, and 9.7 cases per 100,000
 population, respectively. (Figure 4)
- Over the last five years (July 1, 2020 to June 30, 2025), the Toronto region has usually had the highest quarterly rate of TB disease (range: 2.0 to 3.4 cases per 100,000 population). (Figure 5)

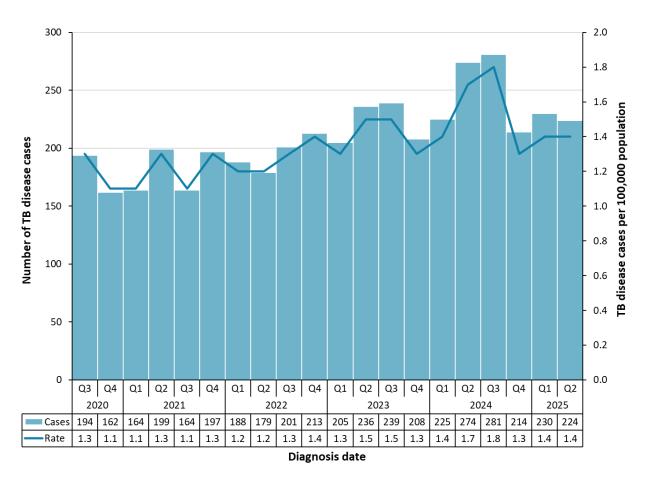
TB Infection

- Following declines in notifications during the COVID-19 pandemic, TBI rates have gradually increased, reaching an average quarterly rate of 14.7 infections per 100,000 population in the last 12 months. (Figure 6)
- Rates of TBI have been consistently higher in females compared to males. Since October 1, 2020 (i.e., following the sharp decrease observed at the start of the COVID-19 pandemic), the quarterly TBI incidence has ranged from 7.8 to 18.6 infections per 100,000 population for females and between 4.4 to 11.4 infections per 100,000 population for males. (Figure 7)
- Overall, those aged 20-39 years had the highest rates of TBI which, since October 1, 2020, have ranged between 11.7 to 31.0 infections per 100,000 population. (Figure 8)
- Between July 1, 2024 and June 30, 2025 (i.e., the last 12 months), Chatham-Kent Public Health and Public Health Sudbury and Districts had the highest rates of TBI at 141.3 and 121.6 infections per 100,000 population, respectively. (Figure 9)
- Since October 1, 2020, the quarterly incidence rates of TBI have fluctuated widely across the regions, with the Eastern and North East regions reporting the highest rates, averaging 15.0 and 14.4 infections per 100,000 population, respectively. (Figure 10)

TB Disease

Quarterly Trends

Figure 1: TB Disease Cases and Rates Per 100,000 Population by Diagnosis Date: July 1, 2020 to June 30, 2025

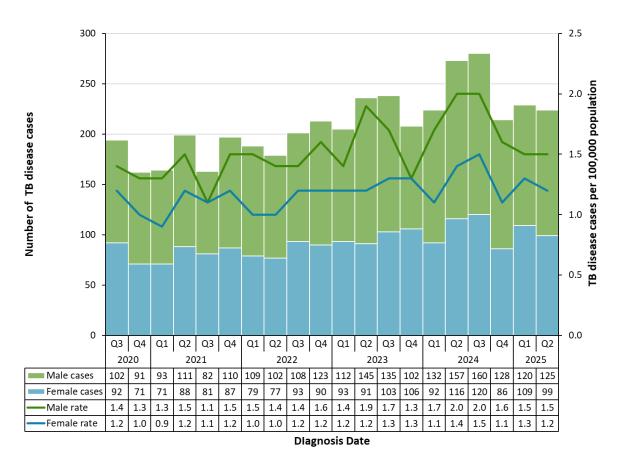


Data sources: Cases: Integrated Public Health Information System (iPHIS). Population denominators: Ontario. Ministry of Finance.⁴

Note: Q1=January 1-March 31; Q2=April 1-June 30; Q3=July 1-September 30; Q4=October 1-December 31

Sex and Age Group

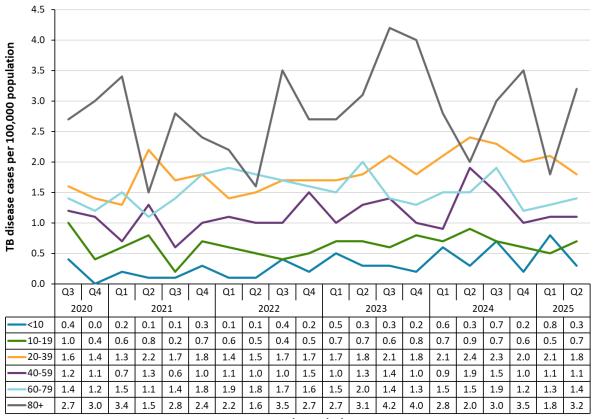
Figure 2: TB Disease Cases and Rates Per 100,000 Population by Sex and Diagnosis Date: July 1, 2020 to June 30, 2025



Data sources: Cases: Integrated Public Health Information System (iPHIS) Population denominators: Ontario. Ministry of Finance.⁴

Notes: Q1=January 1-March 31; Q2=April 1-June 30; Q3=July 1-September 30; Q4=October 1-December 31. Excludes TB disease cases that did not identify as male or female.

Figure 3: TB Disease Rates Per 100,000 Population by Age Group (years) and Diagnosis Date: July 1, 2020 to June 30, 2025



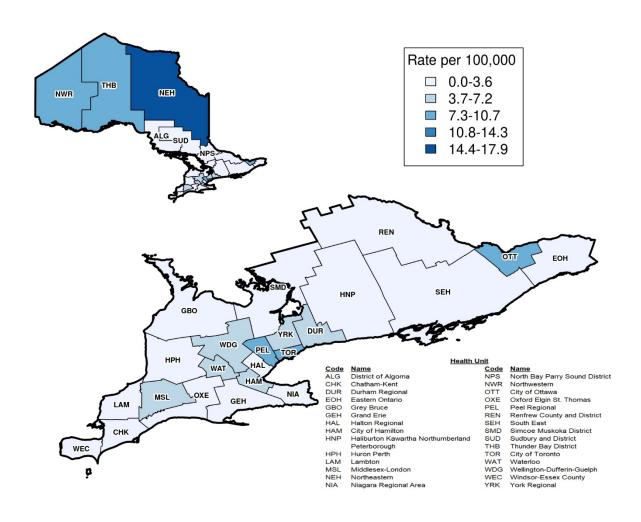
Diagnosis date

Data sources: Cases: Integrated Public Health Information System (iPHIS) Population denominators: Ontario. Ministry of Finance.⁴

Note: Q1=January 1-March 31; Q2=April 1-June 30; Q3=July 1-September 30; Q4=October 1-December 31. Unknown ages were excluded from analyses.

Geography

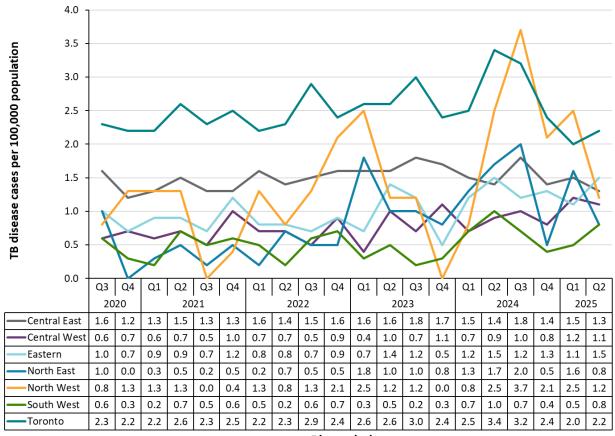
Figure 4: TB Disease Rates Per 100,000 Population by Public Health Unit: July 1, 2024 to June 30, 2025 (i.e., last 12 months)



Data sources: Cases: Integrated Public Health Information System (iPHIS). Population denominators: Ontario. Ministry of Finance.⁴

Note: See <u>Appendix A</u> for the full list of public health unit names and their 3-letter abbreviations, as well as annual rates by PHU for the years 2020-2025.

Figure 5: TB Disease Rates Per 100,000 Population by Provincial Region: July 1, 2020 to June 30, 2025



Diagnosis date

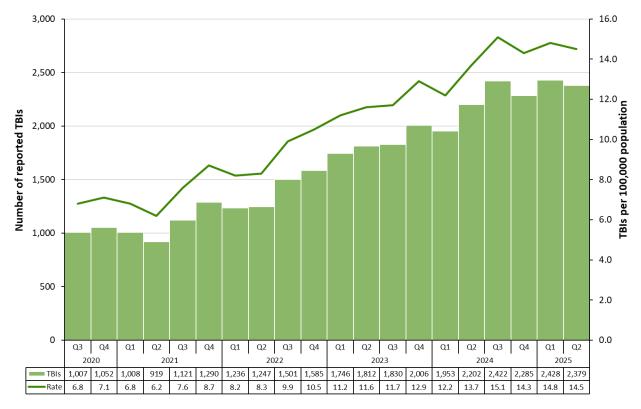
Data sources: Cases: Integrated Public Health Information System (iPHIS). Population denominators: Ontario. Ministry of Finance.⁴

Notes: Q1=January 1-March 31; Q2=April 1-June 30; Q3=July 1-September 30; Q4=October 1-December 31 The public health units that make up each provincial region can be found in Appendix A.

TB Infections

Quarterly Trends

Figure 6: Reported TBI Cases and Rates Per 100,000 Population by Episode Date: July 1, 2020 to June 30, 2025



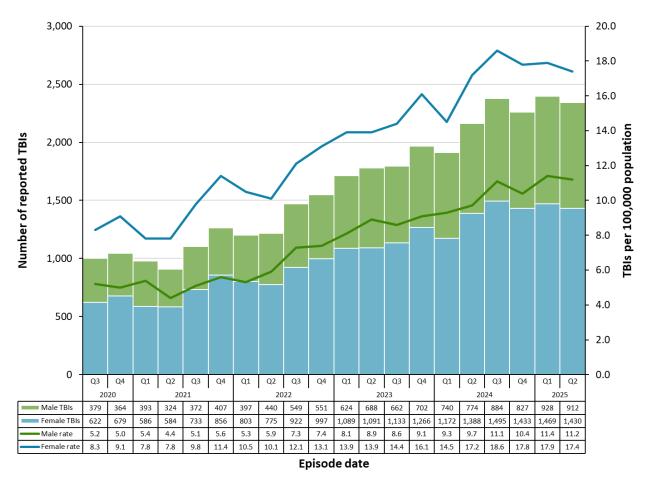
Episode date

Data sources: TBIs: Integrated Public Health Information System (iPHIS). Population denominators: Ontario. Ministry of Finance.⁴

Note: Q1=January 1-March 31; Q2=April 1-June 30; Q3=July 1-September 30; Q4=October 1-December 31

Sex and Age Group

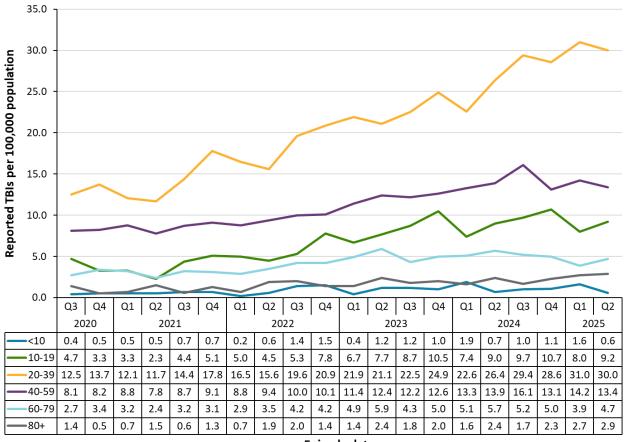
Figure 7: Reported TBI Cases and Rates Per 100,000 Population by Sex and Episode Date: July 1, 2020 to June 30, 2025



Data sources: TBIs: Integrated Public Health Information System (iPHIS)Population denominators: Ontario. Ministry of Finance.⁴

Note: Q1=January 1-March 31; Q2=April 1-June 30; Q3=July 1-September 30; Q4=October 1-December 31. Excludes reported cases of TBI that did not identify as male or female.

Figure 8: Reported TBI Rates Per 100,000 Population by Age Group (years): July 1, 2020 to June 30, 2025



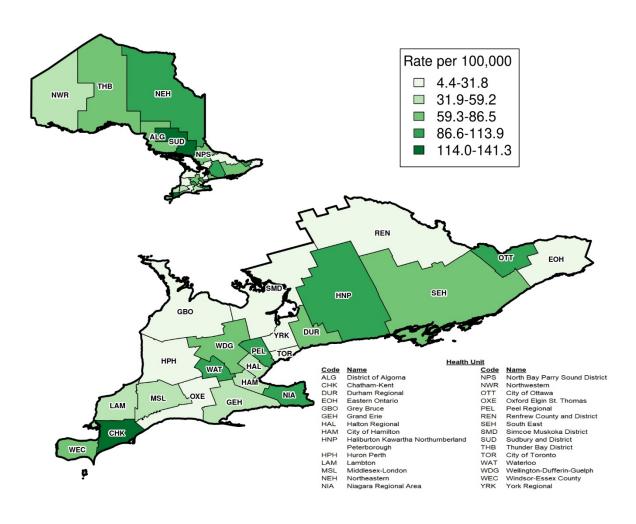
Episode date

Data sources: TBIs: Integrated Public Health Information System (iPHIS). Population denominators: Ontario. Ministry of Finance.⁴

Note: Q1=January 1-March 31; Q2=April 1-June 30; Q3=July 1-September 30; Q4=October 1-December 31. Unknown ages were excluded from analyses.

Geography

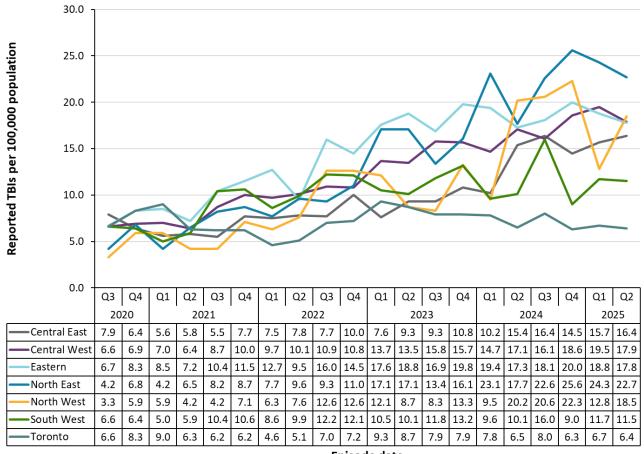
Figure 9: Reported TBI Rates Per 100,000 Population by Public Health Unit: July 1, 2024 to June 30, 2025 (i.e., last 12 months)



Data sources: TBIs: Integrated Public Health Information System (iPHIS). Population denominators: Ontario. Ministry of Finance.⁴

Note: See Appendix B for the full list of public health unit names and their 3-letter abbreviations, as well as annual rates by PHU for the years 2020-2025.

Figure 10: Reported TBI Rates Per 100,000 Population by Provincial Region: July 1, 2020 to June 30, 2025



Episode date

Data sources: TBIs: Integrated Public Health Information System (iPHIS). Population denominators: Ontario. Ministry of Finance.⁴

Notes: Q1=January 1-March 31; Q2=April 1-June 30; Q3=July 1-September 30; Q4=October 1-December 31 The public health units that make up each provincial region can be found in Appendix B.

In Focus: Exploring TB Indicators — Diagnosis and Treatment of Smear-Positive Pulmonary TB

Key Messages

- Strengthening data quality and completeness is essential to support the development and measurement of indicators that can inform tuberculosis (TB) program and health system performance.
 - TB disease case data in iPHIS contains gaps including incomplete reporting of acid-fast bacilli smear test and nucleic acid amplification test results, as well as limited treatment outcome information.
- Cases of pulmonary tuberculosis pose a greater risk of transmission than extra-pulmonary cases and require more public health resources to investigate and manage.
 - Cases of TB disease in Ontario have increased from 2014 to 2024, resulting in more cases of pulmonary TB overall.
- Treatment of TB disease cases is essential to achieve cure and reduce the risk of transmission.
 - Almost all cases (97.2%) of TB disease diagnosed between 2014 and 2024 initiated treatment, however, a lower percentage of these cases (80.7%) were reported to have completed treatment.

Background

Public Health Importance of Smear-Positive Pulmonary TB

TB disease, caused by the *Mycobacterium tuberculosis* bacteria, can affect multiple body sites. Pulmonary TB involves the lungs and/or the tracheobronchial tree (i.e., larynx, trachea, bronchi, and bronchioles). With rare exceptions, most *M. tuberculosis* transmission occurs from individuals with pulmonary TB disease. The likelihood of transmission depends on multiple factors including the infectiousness of the source case, and the proximity and duration of exposure in shared air space.

Smear microscopy is a diagnostic method used to detect the presence and quantity of acid-fast bacilli (i.e., *M. tuberculosis* complex and other non-tuberculous mycobacterium [NTM]) in specimens such as sputum.⁷ Individuals with smear-positive pulmonary TB are considered likely more infectious than those with smear-negative disease, and the degree of infectiousness increases with the rating corresponding to the absolute number of acid-fast bacilli (AFB) seen on microscopy (i.e., 1+, 2+, 3+, or 4+).⁷ Microbiological confirmation of TB disease through laboratory testing can only be made by isolating *M. tuberculosis* complex on culture.⁷

TB contact investigations by local public health units focus on contacts exposed to pulmonary TB cases⁸. Initiating prompt, appropriate treatment of individuals with smear-positive pulmonary TB is paramount to reducing the risk of transmission of *M. tuberculosis*, and supporting treatment completion is another key outcome.^{9,10}

In April 2025, PHO published the first 'In Focus' analysis that introduced the Canadian Tuberculosis Standards (CTBS), 8th Edition's framework for TB program performance monitoring and described Ontario's progress towards TB elimination in relation to indicator 1.0.^{10,11}

Objectives

Using public health surveillance data from 2014 to 2024, this In Focus explores provincial TB data relevant to the framework's suggested indicators and targets for monitoring TB case management and treatment. It also estimates the degree to which Ontario may be meeting these indicators. The indicators examined are 3.1, 3.2 and 3.4^{10} :

- **3.1:** The number of smear positive, pulmonary TB cases who initiate treatment within 72 hours of a positive nucleic acid amplification test (NAAT). Target: ≥95%
- **3.2:** The number of eligible smear-positive (S), rifampin-susceptible (by NAAT) pulmonary TB (PTB) cases notified between January and December 31 who start four anti-TB drugs. Target: ≥95%
- **3.4:** The number of annual incident TB cases notified in the preceding 12 months who were cured or completed treatment. Target: ≥90%

See Table 1 in Chapter 15 of the CTBS, Monitoring Tuberculosis Program Performance, for the full list of indicators and related targets.¹⁰

Methods

iPHIS data for confirmed TB disease cases from 2014-2024 were extracted on June 16, 2025. The detailed methods used for this analysis can be found in Appendix C.

Summary of Data

Smear Positive Pulmonary TB in Ontario: 2014-2024

Between 2014 and 2024, the number of confirmed cases of TB disease reported in Ontario increased by almost 70%, from 590 in 2014 to 992 in 2024 (Figure 11). Two-thirds (66.4%; 5,297/7,980) of all TB cases reported during this period involved a pulmonary site of infection, with the annual proportion of pulmonary cases ranging from 62.5% in 2014 to a maximum of 72.2% in 2023. Among PHUs with more than 10 TB cases reported between 2014-2024, the percentage of cases classified as pulmonary was highest among the three northernmost PHUs: Northwestern Public Health (86.3%), Thunder Bay District Health Unit (89.2%), and Northeastern Health Unit (92.6%) (Appendix D).

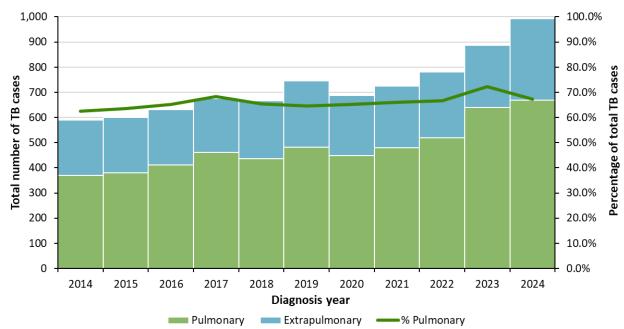


Figure 11: Cases of Pulmonary and Extrapulmonary TB: Ontario, 2014-2024

Data source: integrated Public Health Information System (iPHIS)

AFB smear microscopy results were available for 4,819/5,297 (91.0%) of pulmonary TB cases reported in Ontario between 2014 to 2024. The percentage of cases with known smear results varied annually and from 2014 to 2021 averaged 92.6%. However, this proportion began to decrease in 2022, and in 2024, only 85.0% of cases had known smear microscopy results.

Nearly two-thirds (3,141/4,819; 65.2%) of pulmonary TB cases with known smear microscopy results reported between 2014 to 2024 were smear positive (Figure 12). This proportion ranged from 60.9% of cases in 2024 to 68.7% in 2016. Among PHUs with more than 10 pulmonary TB cases reported between 2014-2024, the highest proportion of smear positive cases (of those with known smear status) was observed in Public Health Sudbury & Districts (78.6%), Wellington-Dufferin-Guelph Public Health (72.2%), and Windsor-Essex County Health Unit (69.4%) (Appendix D).

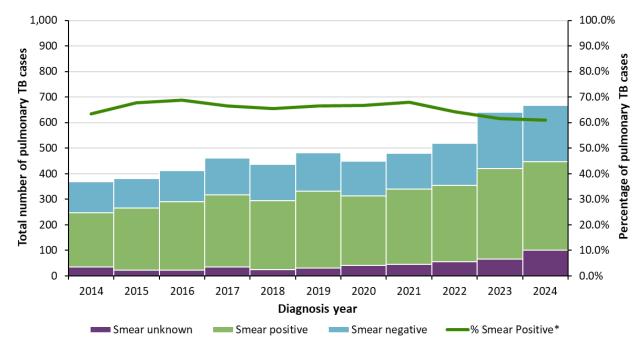


Figure 12: Cases of Pulmonary TB by AFB Smear Status: Ontario, 2014-2024

Data source: iPHIS.

*Of those with known smear results (i.e., total smear positive and smear negative)

Treatment Initiation

Of the 7,980 TB cases diagnosed in Ontario between 2014 and 2024, 7,760 (97.2%) initiated treatment; the annual proportion ranged from 96.2% in 2020 to 98.1% in 2016 (Appendix D). Overall, a slightly higher proportion of TB cases with extrapulmonary sites of infection initiated treatment (97.9%; 2,627/2,683) compared to those with pulmonary disease (96.9%; 5,133/5,297).

Of those with pulmonary TB from 2014 to 2024, 97.8% (range: 94.9-99.3%) of smear-positive and 96.7% (range: 95.1-98.3%) of smear-negative cases initiated treatment.

Treatment Completion

Overall, 80.7% (6,263/7,760) of TB cases that initiated treatment completed treatment (Figure 13). Between 2014 and 2020, this proportion averaged 86.0% (range: 84.7% to 87.9%); however, from 2021 to 2023, the percentage of cases completing TB treatment decreased annually from 82.2% to 78.4%. At the time of data extraction, of the 959 cases diagnosed in 2024 that initiated treatment, only 544 (56.7%) reported having successfully completed treatment; treatment remains ongoing for 262 (27.3%). Treatment completion for pulmonary and smear-positive pulmonary TB cases followed the same trends but was generally lower than the treatment completion percentage for all TB cases.

More than one-third (36.7%; 549/1,497) of TB cases that initiated treatment but did not complete treatment were reported to have died before the end of their treatment period. A total of 537/1,497 (35.9%) cases that initiated treatment had an outcome status of 'treatment ongoing' (this includes the 262 cases that were diagnosed in 2024 and an additional 275 cases diagnosed between 2014 and 2023). Other reasons for treatment not being completed include cases being lost to follow-up and treatment being transferred to other jurisdictions. Treatment outcome status was missing for 1.3% of cases that initiated treatment.

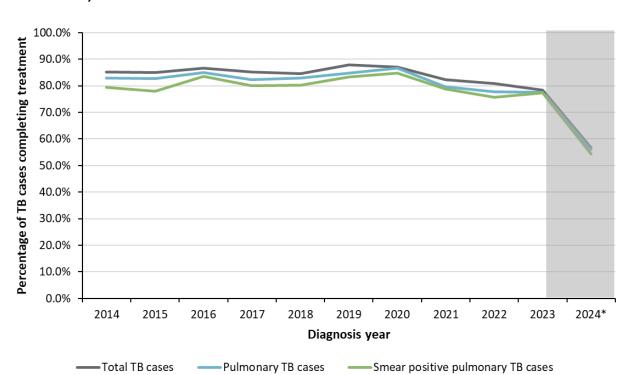


Figure 13: Percentage of TB Cases Completing Treatment (of those Initiating Treatment) by Year: Ontario, 2014-2024*

Data source: iPHIS

Discussion

The number of TB disease cases in Ontario increased between 2014 to 2024. Although the percentage of cases classified as pulmonary TB remained relatively stable during this period, the absolute number of pulmonary TB cases increased, reflecting a growing burden of TB disease in the population. This increase has resulted in additional demand on PHUs as pulmonary TB requires case management to ensure treatment initiation and completion, and support for case isolation as appropriate⁸, as well as to identify and assess potential contacts to reduce the risk of transmission.

Smear-positive pulmonary TB cases are of particular concern as they may be more likely to transmit TB compared to smear-negative cases, although multiple factors affect risk of transmission (e.g., time and proximity in shared airspace). Historically, 60%-70% of pulmonary TB cases have been smear-positive, but this percentage has declined in recent years. At the same time, there has been an increase in the number of cases with unknown smear status due to missing AFB smear data in iPHIS, a possible impact of delayed data entry; these missing data can impede the effective prioritization of limited public health resources.

From a surveillance and monitoring perspective, this and other data quality concerns make it challenging to assess Ontario's progress toward the relevant CTBS targets. For example, while a high percentage of TB disease cases initiated treatment, over 95% in each year observed, time to treatment initiation following a positive NAAT could not be assessed since many cases did not have NAAT results entered in iPHIS. NAAT results are a component of CTBS metrics 3.1 and 3.2. While fewer than 90% of cases that initiated treatment completed treatment, many were missing data and therefore the percentage that actually completed treatment may be higher.

^{*}Data on treatment outcome for TB cases from 2024 were incomplete at the time of data extraction.

Public Health Practice Considerations

Our analyses of iPHIS data for this In Focus identified opportunities for improving TB data in iPHIS and/or TB data linkages, specifically for key variables such as NAAT test results and treatment outcome, which are essential for accurately evaluating progress toward the CTBS performance metrics.

This exploratory analysis can help inform future consideration of TB program and health system indicators most relevant to Ontario public health and clinical partners, and efforts to continue improving the quality and completeness of TB data required to support indicator measurement.

Technical Notes

Data Sources

Case Data

- The data for the main portion of this report were based on information entered in the Ontario Ministry of Health (MOH) integrated Public Health Information System (iPHIS) database as of October 6, 2025 at 9:00 a.m.
- The data for the "In Focus" portion of this report were based on information entered in the Ontario Ministry of Health (MOH) integrated Public Health Information System (iPHIS) database as of June 16, 2025 at 5:00 p.m.
- iPHIS is a dynamic disease reporting system that allows ongoing updates to previously entered data. As a result, data extracted from iPHIS represent a snapshot at the time of extraction and may differ from previous or subsequent reports.

Ontario Population Data

 Population estimates used to calculate rates per 100,000 population were calculated using the Ontario population estimates for 2020-2022 and population projections for 2023-2025 sourced from the Ontario Ministry of Finance.

Data Caveats

- Data reported between 2020 and 2022 should be interpreted with caution. Both testing and iPHIS data entry practices were likely impacted by the COVID-19 pandemic response.
- These data only represent confirmed cases of tuberculosis (TB) disease and TB infection (TBI)
 reported to public health and recorded in iPHIS. As a result, all case counts are subject to varying
 degrees of underreporting due to a variety of factors, such as disease awareness and medical care
 seeking behaviours that may depend on severity of illness, clinical practices, and changes in
 laboratory testing and reporting behaviours.
- This report includes data up to the end of the quarter that finished three months prior to data extraction because TB disease and TBI counts and corresponding data can take several months to stabilize.
- Only TB disease and TBI cases meeting the confirmed case classification as listed in the <u>Ontario</u> <u>MOH surveillance case definitions</u>¹ are included in the reported case counts.
 - Changes to provincial surveillance case definitions and disease classifications have occurred over the years and thus may impact the analysis and interpretation of trends over time. Cases are classified in iPHIS based on the Ontario MOH surveillance case definitions in use at the time the case was identified.
 - PHO's technical report, "<u>Factors Affecting Reporting Diseases in Ontario: Case Definition Changes and Associated Trends 1991-2016</u>"¹² and its associated <u>appendix</u>¹³ provide more detailed information on this topic.

- TB disease cases are reported based on the Diagnosis Date. TBIs are reported based on the Episode
 Date, which is an estimate of the onset date of disease for a case. In order to determine this date,
 the following hierarchy exists in iPHIS: Onset Date > Specimen Collection Date > Lab Test Date >
 Reported Date.
 - For example: If an Onset Date exists, it will be used as the Episode Date. If Onset Date is not available, then the next available date in the hierarchy (i.e., Specimen Collection Date) will be used, and so on.
- Case counts by geography are based on the diagnosing health unit (DHU). DHU refers to the case's public health unit of residence at the time of illness onset or report to public health and not necessarily the location of exposure.
- The public health units that make up each geographic region can be found in Appendix A.
- Cases for which the Disposition Status was reported as ENTERED IN ERROR, DOES NOT MEET DEFINITION, DUPLICATE-DO NOT USE, or any variation on these values, were excluded from this analysis.
 - TBI episodes generally do not have a diagnosis status reported in iPHIS, however, those with a diagnosis status entered as 'Does Not Meet Definition' were also excluded from analyses.
- The potential for duplicates exists because duplicate sets were not identified and excluded unless they were already resolved at either the local or provincial level prior to data extraction from iPHIS.

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Appendix A: TB Disease Cases and Rates

Table A1: TB Disease Case Counts and Rates Per 100,000 Population by Public Health Unit, Region and Year: Ontario, 2020-2025

Public Health Unit	3-Letter Code	2020 n (rate)	2021 n (rate)	2022 n (rate)	2023 n (rate)	2024 n (rate)	2025* n (rate)
Durham Region Health Department	DUR	10 (1.4)	15 (2.1)	25 (3.4)	30 (3.9)	39 (5.0)	14 (1.8)
Haliburton Kawartha Northumberland Peterborough Health Unit	HNP	4 (1.2)	3 (0.9)	3 (0.9)	3 (0.9)	5 (1.4)	2 (0.6)
Peel Public Health	PEL	145 (9.3)	157 (10.0)	175 (10.9)	198 (11.7)	179 (10.1)	77 (4.2)
Simcoe Muskoka District Health Unit	SMD	10 (1.7)	5 (0.8)	4 (0.6)	9 (1.4)	13 (1.9)	4 (0.6)
York Region Public Health	YRK	64 (5.3)	59 (4.9)	69 (5.6)	74 (5.9)	64 (5.0)	43 (3.3)
CENTRAL EAST	n/a	233 (5.3)	239 (5.4)	276 (6.1)	314 (6.7)	300 (6.2)	140 (2.8)
City of Hamilton Public Health Services	НАМ	25 (4.3)	20 (3.4)	25 (4.2)	24 (3.9)	34 (5.4)	26 (4.1)
Grand Erie Public Health	GEH	0 (0.0)	3 (1.1)	3 (1.1)	4 (1.4)	4 (1.3)	3 (1.0)
Halton Region Public Health	HAL	17 (2.8)	24 (3.9)	17 (2.7)	25 (3.9)	18 (2.8)	11 (1.6)
Niagara Region Public Health	NIA	9 (1.9)	9 (1.8)	12 (2.4)	19 (3.7)	14 (2.7)	7 (1.3)
Region of Waterloo Public Health and Emergency Services	WAT	15 (2.5)	17 (2.8)	23 (3.6)	17 (2.5)	23 (3.2)	20 (2.7)
Wellington-Dufferin-Guelph Public Health	WDG	6 (1.9)	6 (1.9)	6 (1.9)	10 (3.0)	13 (3.9)	7 (2.0)
CENTRAL WEST	n/a	72 (2.5)	79 (2.7)	86 (2.9)	99 (3.2)	106 (3.4)	74 (2.3)
Ottawa Public Health	OTT	53 (5.1)	61 (5.8)	60 (5.6)	69 (6.3)	91 (8.1)	46 (4.0)
Eastern Ontario Health Unit	ЕОН	1 (0.5)	2 (0.9)	0 (0.0)	2 (0.9)	1 (0.4)	3 (1.3)
Renfrew County and District Health Unit	REN	0 (0.0)	0 (0.0)	1 (0.9)	0 (0.0)	1 (0.9)	1 (0.9)
South East Health Unit	SEH	9 (1.6)	8 (1.4)	3 (0.5)	6 (1.0)	14 (2.4)	4 (0.7)

Public Health Unit	3-Letter Code	2020 n (rate)	2021 n (rate)	2022 n (rate)	2023 n (rate)	2024 n (rate)	2025* n (rate)
EASTERN	n/a	63 (3.3)	71 (3.6)	64 (3.2)	77 (3.8)	107 (5.2)	54 (2.6)
Algoma Public Health	ALG	0 (0.0)	1 (0.9)	2 (1.7)	1 (0.8)	2 (1.6)	0 (0.0)
North Bay Parry Sound District Health Unit	NPS	2 (1.5)	0 (0.0)	1 (0.7)	0 (0.0)	1 (0.7)	0 (0.0)
Northeastern Public Health	NEH	5 (4.2)	6 (5.0)	8 (6.7)	24 (19.8)	17 (13.9)	13 (10.6)
Public Health Sudbury & Districts	SUD	0 (0.0)	2 (1.0)	0 (0.0)	3 (1.4)	13 (5.9)	2 (0.9)
NORTH EAST	n/a	7 (1.2)	9 (1.6)	11 (1.9)	28 (4.7)	33 (5.4)	15 (2.4)
Northwestern Health Unit	NWR	6 (7.4)	1 (1.2)	8 (9.8)	8 (9.7)	7 (8.5)	4 (4.9)
Thunder Bay District Health Unit	THB	6 (3.8)	6 (3.8)	5 (3.2)	4 (2.5)	15 (9.4)	5 (3.1)
NORTH WEST	n/a	12 (5.0)	7 (2.9)	13 (5.5)	12 (5.0)	22 (9.1)	9 (3.7)
Chatham-Kent Public Health	СНК	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.9)	0 (0.0)	0 (0.0)
Grey Bruce Health Unit	GBO	0 (0.0)	1 (0.6)	0 (0.0)	1 (0.5)	0 (0.0)	1 (0.5)
Huron Perth Public Health	НРН	0 (0.0)	1 (0.7)	0 (0.0)	0 (0.0)	3 (1.9)	1 (0.6)
Lambton Public Health	LAM	1 (0.8)	0 (0.0)	1 (0.7)	1 (0.7)	1 (0.7)	0 (0.0)
Middlesex-London Health Unit	MSL	15 (2.9)	20 (3.9)	23 (4.3)	9 (1.6)	33 (5.7)	15 (2.5)
Southwestern Public Health	OXE	1 (0.5)	3 (1.3)	2 (0.9)	4 (1.7)	0 (0.0)	0 (0.0)
Windsor-Essex County Health Unit	WEC	11 (2.6)	11 (2.6)	8 (1.8)	9 (2.0)	16 (3.4)	8 (1.7)
SOUTH WEST	n/a	28 (1.6)	36 (2.1)	34 (1.9)	25 (1.4)	53 (2.8)	25 (1.3)
Toronto Public Health	TOR	272 (9.1)	283 (9.6)	297 (9.8)	333 (10.6)	373 (11.5)	139 (4.2)
TORONTO	n/a	272 (9.1)	283 (9.6)	297 (9.8)	333 (10.6)	373 (11.5)	139 (4.2)
TOTAL	n/a	687 (4.7)	724 (4.9)	781 (5.2)	888 (5.7)	994 (6.2)	456 (2.8)

Data sources: Cases: iPHIS. [Database; extracted 6 Oct 2025]. Population denominators: Ministry of Finance.⁴

^{*2025} includes data from January 1 to June 30 only.

Appendix B: Reported TB Infections and Rates

Table A2: Reported TB Infections and Rate Per 100,000 Population by Public Health Unit, Region and Year: Ontario, 2020-2025

Public Health Unit	3-Letter Code	2020 n (rate)	2021 n (rate)	2022 n (rate)	2023 n (rate)	2024 n (rate)	2025* n (rate)
Durham Region Health Department	DUR	166 (23.3)	191 (26.2)	330 (44.3)	371 (48.6)	570 (72.9)	303 (38.0)
Haliburton Kawartha Northumberland Peterborough Health Unit	HNP	28 (8.3)	55 (16.1)	103 (29.7)	234 (66.3)	347 (96.8)	211 (58.1)
Peel Public Health	PEL	805 (51.6)	623 (39.8)	767 (48.0)	794 (47.0)	1,475 (83.6)	896 (49.3)
Simcoe Muskoka District Health Unit	SMD	56 (9.3)	40 (6.5)	45 (7.1)	57 (8.7)	65 (9.7)	52 (7.6)
York Region Public Health	YRK	229 (19.1)	191 (15.8)	258 (21.1)	283 (22.7)	286 (22.5)	131 (10.1)
CENTRAL EAST	n/a	1,284 (29.1)	1,100 (24.6)	1,503 (33.0)	1,739 (36.9)	2,743 (56.6)	1,593 (32.1)
City of Hamilton Public Health Services	HAM	199 (34.1)	247 (42.0)	320 (53.6)	410 (67.1)	390 (62.5)	180 (28.3)
Grand Erie Public Health	GEH	22 (8.0)	18 (6.4)	42 (14.7)	67 (22.9)	84 (28.0)	76 (24.9)
Halton Region Public Health	HAL	123 (20.2)	143 (23.2)	138 (22.0)	173 (27.0)	276 (42.2)	146 (21.8)
Niagara Region Public Health	NIA	123 (25.5)	171 (35.1)	217 (43.7)	322 (63.1)	477 (91.3)	266 (50.0)
Region of Waterloo Public Health and Emergency Services	WAT	238 (39.4)	264 (43.2)	383 (60.4)	565 (83.8)	639 (90.2)	393 (53.7)
Wellington-Dufferin-Guelph Public Health	WDG	51 (16.3)	85 (26.9)	128 (39.8)	257 (78.1)	226 (67.2)	143 (41.6)
CENTRAL WEST	n/a	756 (26.4)	928 (32.0)	1,228 (41.5)	1,794 (58.7)	2,092 (66.5)	1,204 (37.4)
Ottawa Public Health	ОТТ	413 (39.5)	604 (57.4)	697 (65.0)	994 (90.4)	1,155 (102.6)	554 (48.2)
Eastern Ontario Health Unit	ЕОН	8 (3.7)	5 (2.3)	10 (4.5)	16 (7.1)	16 (7.0)	4 (1.7)
Renfrew County and District Health Unit	REN	5 (4.6)	11 (10.0)	10 (9.0)	25 (22.5)	31 (27.8)	16 (14.3)
South East Health Unit	SEH	157 (27.9)	112 (19.8)	327 (56.8)	443 (75.6)	339 (56.9)	192 (31.9)

Public Health Unit	3-Letter Code	2020 n (rate)	2021 n (rate)	2022 n (rate)	2023 n (rate)	2024 n (rate)	2025* n (rate)
EASTERN	n/a	583 (30.2)	732 (37.6)	1,044 (52.7)	1,478 (73.1)	1,541 (74.8)	766 (36.6)
Algoma Public Health	ALG	28 (23.8)	16 (13.6)	36 (30.3)	63 (51.8)	103 (83.1)	37 (29.5)
North Bay Parry Sound District Health Unit	NPS	32 (24.7)	36 (27.5)	55 (40.9)	83 (60.3)	70 (49.9)	61 (43.0)
Northeastern Public Health	NEH	20 (16.8)	31 (26.1)	45 (37.6)	87 (71.7)	138 (112.6)	44 (35.7)
Public Health Sudbury & Districts	SUD	64 (31.2)	75 (36.4)	83 (39.8)	147 (68.6)	228 (104.1)	146 (65.8)
NORTH EAST	n/a	144 (25.2)	158 (27.6)	219 (37.7)	380 (63.9)	539 (89.0)	288 (47.0)
Northwestern Health Unit	NWR	24 (29.5)	18 (22.0)	31 (37.8)	38 (46.3)	41 (49.9)	24 (29.2)
Thunder Bay District Health Unit	ТНВ	20 (12.7)	33 (21.2)	62 (39.7)	64 (40.4)	135 (84.4)	52 (32.3)
NORTH WEST	n/a	44 (18.4)	51 (21.4)	93 (39.0)	102 (42.4)	176 (72.7)	76 (31.3)
Chatham-Kent Public Health	СНК	6 (5.6)	12 (11.1)	20 (18.3)	30 (27.1)	93 (83.0)	85 (75.2)
Grey Bruce Health Unit	GBO	2 (1.1)	4 (2.2)	21 (11.5)	13 (7.0)	19 (10.0)	11 (5.7)
Huron Perth Public Health	НРН	7 (4.8)	17 (11.5)	15 (10.0)	22 (14.3)	26 (16.6)	14 (8.8)
Lambton Public Health	LAM	24 (18.1)	25 (18.9)	35 (26.1)	41 (29.9)	48 (34.3)	20 (14.2)
Middlesex-London Health Unit	MSL	199 (39.0)	307 (59.5)	375 (70.5)	365 (65.3)	317 (54.5)	153 (25.6)
Southwestern Public Health	OXE	18 (8.2)	28 (12.5)	26 (11.4)	41 (17.5)	51 (21.3)	16 (6.6)
Windsor-Essex County Health Unit	WEC	172 (40.2)	159 (37.3)	267 (61.2)	325 (71.8)	290 (62.2)	148 (31.1)
SOUTH WEST	n/a	428 (24.9)	552 (31.8)	759 (42.8)	837 (45.6)	844 (44.8)	447 (23.2)
Toronto Public Health	TOR	1,074 (36.0)	817 (27.6)	723 (23.9)	1,064 (33.9)	927 (28.7)	433 (13.1)
TORONTO	n/a	1,074 (36.0)	817 (27.6)	723 (23.9)	1,064 (33.9)	927 (28.7)	433 (13.1)
TOTAL	n/a	4,313 (29.3)	4,338 (29.3)	5,569 (36.9)	7,394 (47.4)	8,862 (55.3)	4,807 (29.4

Data sources: TBIs: iPHIS. [Database; extracted 6 Oct 2025]. Population denominators: Ministry of Finance.⁴

^{*2025} includes data from January 1 to June 30 only.

Appendix C: Methods for In Focus

The general TB data caveats included in the Quarterly TB report apply to this In Focus.

Calculation of Categories Presented in the Report

- 1. All confirmed cases of TB disease diagnosed between January 1, 2014 and December 31, 2024 were extracted from the province's electronic surveillance system (the integrated Public Health Information System [iPHIS]) on June 16, 2025.
- TB cases were categorized as pulmonary or extrapulmonary based on diagnosis data from iPHIS.
 Multiple TB diagnoses can be reported for each case of TB within iPHIS. TB cases were classified as pulmonary or extrapulmonary based on the definitions from the <u>Canadian TB Standards 8th</u> edition, Chapter 7.¹³
 - a. If a case had any diagnosis of TB in a site constituting pulmonary TB they were classified as such, regardless of the other sites of TB diagnosis. For example, a case with diagnoses of miliary TB, unspecified and TB of the lung would be classified as pulmonary TB.
 - b. Pulmonary TB cases had at least one of the following TB diagnoses: primary respiratory tuberculosis; tuberculosis of lung; tuberculosis of larynx, trachea and bronchus; respiratory tuberculosis unspecified; or other respiratory tuberculosis.
 - c. Extrapulmonary TB cases had diagnosis sites other than those that constituted pulmonary TB
- 3. The AFB smear data were processed as follows:
 - a. Cases were categorized as smear-positive if they had an AFB result other than 0 or 'Not Detected'.
 - b. Cases were categorized as smear-negative if they had an AFB result of 0 or 'Not Detected'.
 - c. Cases with no AFB smear result data in iPHIS were categorized as having a smear status of Unknown.
- 4. Treatment initiation was assessed using the Treatment Start Date field. Entry of a date indicates that TB treatment was started on that date.
- 5. Treatment completion was assessed using the treatment outcome status as entered as "Treatment Completed" in iPHIS among those that started treatment.

Appendix D: Supplemental Tables

Table D1: Number and Percentage of TB Cases by Disease Site, Smear Status, PHU and Geographic Region: Ontario, 2014-2024

Public Health Unit	Pulmonary TB: Smear positive n (%)	Pulmonary TB: Smear negative n (%)	Pulmonary TB: Smear unknown n (%)	Pulmonary TB: total n (%)	Extra- pulmonary TB n (%)	Total TB cases n
Durham Region Health Department	91 (59.5)	52 (34.0)	10 (6.5)	153 (69.2)	68 (30.8)	221
Haliburton Kawartha Northumberland Peterborough Health Unit	13 (54.2)	7 (29.2)	4 (16.7)	24 (64.9)	13 (35.1)	37
Peel Public Health	627 (57.0)	312 (28.4)	161 (14.6)	1,100 (65.8)	573 (34.2)	1,673
Simcoe Muskoka District Health Unit	28 (62.2)	17 (37.8)	0 (0.0)	45 (69.2)	20 (30.8)	65
York Region Public Health	282 (64.2)	149 (33.9)	8 (1.8)	439 (68.4)	203 (31.6)	642
Central East	1,041 (59.1)	537 (30.5)	183 (10.4)	1,761 (66.8)	877 (33.2)	2,638
City of Hamilton Public Health Services	106 (67.9)	43 (27.6)	7 (4.5)	156 (67.8)	74 (32.2)	230
Grand Erie Public Health	10 (62.5)	4 (25.0)	2 (12.5)	16 (64.0)	9 (36.0)	25
Halton Region Public Health	55 (49.1)	48 (42.9)	9 (8.0)	112 (64.4)	62 (35.6)	174
Niagara Region Public Health	49 (67.1)	18 (24.7)	6 (8.2)	73 (70.2)	31 (29.8)	104
Region of Waterloo Public Health and Emergency Services	63 (60.6)	31 (29.8)	10 (9.6)	104 (54.7)	86 (45.3)	190
Wellington-Dufferin-Guelph Public Health	39 (72.2)	14 (25.9)	1 (1.9)	54 (65.1)	29 (34.9)	83
Central West	322 (62.5)	158 (30.7)	35 (6.8)	515 (63.9)	291 (36.1)	806
Eastern Ontario Health Unit	1 (16.7)	0 (0.0)	5 (83.3)	6 (75.0)	2 (25.0)	8
Ottawa Public Health	182 (46.3)	127 (32.3)	84 (21.4)	393 (63.2)	229 (36.8)	622
Renfrew County and District Health Unit	2 (50.0)	0 (0.0)	2 (50.0)	4 (100.0)	0 (0.0)	4
South East Health Unit	18 (45.0)	13 (32.5)	9 (22.5)	40 (62.5)	24 (37.5)	64

Public Health Unit	Pulmonary TB: Smear positive n (%)	Pulmonary TB: Smear negative n (%)	Pulmonary TB: Smear unknown n (%)	Pulmonary TB: total n (%)	Extra- pulmonary TB n (%)	Total TB cases
Eastern	203 (45.8)	140 (31.6)	100 (22.6)	443 (63.5)	255 (36.5)	698
Algoma Public Health	5 (71.4)	1 (14.3)	1 (14.3)	7 (70.0)	3 (30.0)	10
North Bay Parry Sound District Health Unit	7 (77.8)	1 (11.1)	1 (11.1)	9 (81.8)	2 (18.2)	11
Northeastern Public Health	31 (49.2)	19 (30.2)	13 (20.6)	63 (92.6)	5 (7.4)	68
Public Health Sudbury & Districts	11 (78.6)	1 (7.1)	2 (14.3)	14 (63.6)	8 (36.4)	22
North East	54 (58.1)	22 (23.7)	17 (18.3)	93 (83.8)	18 (16.2)	111
Northwestern Health Unit	21 (47.7)	8 (18.2)	15 (34.1)	44 (86.3)	7 (13.7)	51
Thunder Bay District Health Unit	33 (56.9)	16 (27.6)	9 (15.5)	58 (89.2)	7 (10.8)	65
North West	54 (52.9)	24 (23.5)	24 (23.5)	102 (87.9)	14 (12.1)	116
Chatham-Kent Public Health	4 (80.0)	1 (20.0)	0 (0.0)	5 (100.0)	0 (0.0)	5
Grey Bruce Health Unit	1 (100.0)	0 (0.0)	0 (0.0)	1 (25.0)	3 (75.0)	4
Huron Perth Public Health	3 (75.0)	1 (25.0)	0 (0.0)	4 (40.0)	6 (60.0)	10
Lambton Public Health	0 (0.0)	0 (0.0)	5 (100.0)	5 (100.0)	0 (0.0)	5
Middlesex-London Health Unit	38 (43.2)	38 (43.2)	12 (13.6)	88 (51.8)	82 (48.2)	170
Southwestern Public Health	8 (57.1)	4 (28.6)	2 (14.3)	14 (66.7)	7 (33.3)	21
Windsor-Essex County Health Unit	50 (69.4)	22 (30.6)	0 (0.0)	72 (65.5)	38 (34.5)	110
South West	104 (55.0)	66 (34.9)	19 (10.1)	189 (58.2)	136 (41.8)	325
Toronto Public Health	1,363 (62.1)	725 (33.0)	106 (4.8)	2,194 (66.8)	1,092 (33.2)	3,286
Toronto	1,363 (62.1)	725 (33.0)	106 (4.8)	2,194 (66.8)	1,092 (33.2)	3,286
Total	3,141 (59.3)	1,672 (31.6)	484 (9.1)	5,297 (66.4)	2,683 (33.6)	7,980

Data source: iPHIS

Table D2: Percentage of Pulmonary and Extrapulmonary TB Cases Initiating Treatment by Year: Ontario, 2014-2024

Year	Pulmonary TB: Smear positive	Pulmonary TB: Smear negative	Pulmonary TB: Smear unknown	Pulmonary TB: Total	Extra-pulmonary TB	Total TB Cases
2014	99.1% (210/212)	95.1% (116/122)	94.3% (33/35)	97.3% (359/369)	99.1% (219/221)	98.0% (578/590)
2015	98.8% (240/243)	98.3% (114/116)	81.8% (18/22)	97.6% (372/381)	98.2% (215/219)	97.8% (587/600)
2016	99.3% (266/268)	96.7% (118/122)	90.9% (20/22)	98.1% (404/412)	98.2% (216/220)	98.1% (620/632)
2017	98.9% (280/283)	95.1% (136/143)	94.3% (33/35)	97.4% (449/461)	96.7% (207/214)	97.2% (656/675)
2018	97.4% (263/270)	97.9% (139/142)	76.0% (19/25)	96.3% (421/437)	97.8% (225/230)	96.9% (646/667)
2019	97.7% (294/301)	97.4% (147/151)	93.3% (28/30)	97.3% (469/482)	97.7% (258/264)	97.5% (727/746)
2020	94.9% (258/272)	95.6% (129/135)	95.1% (39/41)	95.1% (426/448)	98.3% (235/239)	96.2% (661/687)
2021	98.0% (288/294)	95.7% (133/139)	84.8% (39/46)	96.0% (460/479)	98.8% (243/246)	97.0% (703/725)
2022	98.0% (292/298)	97.0% (161/166)	94.6% (53/56)	97.3% (506/520)	97.7% (254/260)	97.4% (760/780)
2023	98.3% (348/354)	96.4% (212/220)	93.9% (62/66)	97.2% (622/640)	98.0% (241/246)	97.4% (863/886)
2024	96.5% (334/346)	98.2% (218/222)	93.0% (93/100)	96.6% (645/668)	96.9% (314/324)	96.7% (959/992)
Total	97.8% (3,073/3,141)	96.7% (1,623/1,678)	91.4% (437/478)	96.9% (5,133/5,297)	97.9% (2,627/2,683)	97.2% (7,760/7,980)

Data source: iPHIS

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