Public Health Ontario | Santé publique Ontario

ENHANCED EPIDEMIOLOGICAL SUMMARY

Measles in Ontario

Updated: May 28, 2026

Introduction

Measles is a highly contagious respiratory virus. Symptoms of measles include fever, a red blotchy rash, red watery eyes and cough. Immunization is the best protection against measles. For children and most adults born in or after 1970, this means receiving two doses of measles containing-vaccine (e.g., MMR vaccine).

In Ontario, measles has historically been a rare disease, owing to the successful elimination of measles in Canada in 1998 and high immunization coverage. Cases in the province have typically been predominantly associated with travel (often referred to as "measles importations"). However, due to an increase in measles activity globally in 2024, Ontario began to see more cases. In October 2024, an exposure to an international travel-related case in New Brunswick led to Ontario's largest measles outbreak in decades, as well as cases in several other Canadian provinces as part of a multi-jurisdictional national outbreak.[1] Ontario's measles outbreak was declared over on October 6, 2025[2]; however, Canada's multi-jurisdictional outbreak is ongoing.[1] On November 10, 2025, the Public Health Agency of Canada announced that Canada lost its measles elimination status due to sustained transmission of the same measles strain for over 12 months.[3] As measles continues to circulate in Canada and globally, ongoing vigilance for measles case finding and public health follow-up will continue to occur.

This report describes the epidemiology of measles in Ontario between January 1 and May 26, 2026, as well as trends over time from 2013 to 2025. This report will be updated every four weeks until otherwise noted.

This report includes the most current information available from Ontario's integrated Public Health Information System (iPHIS) as of May 26, 2026 at 7:00 am.

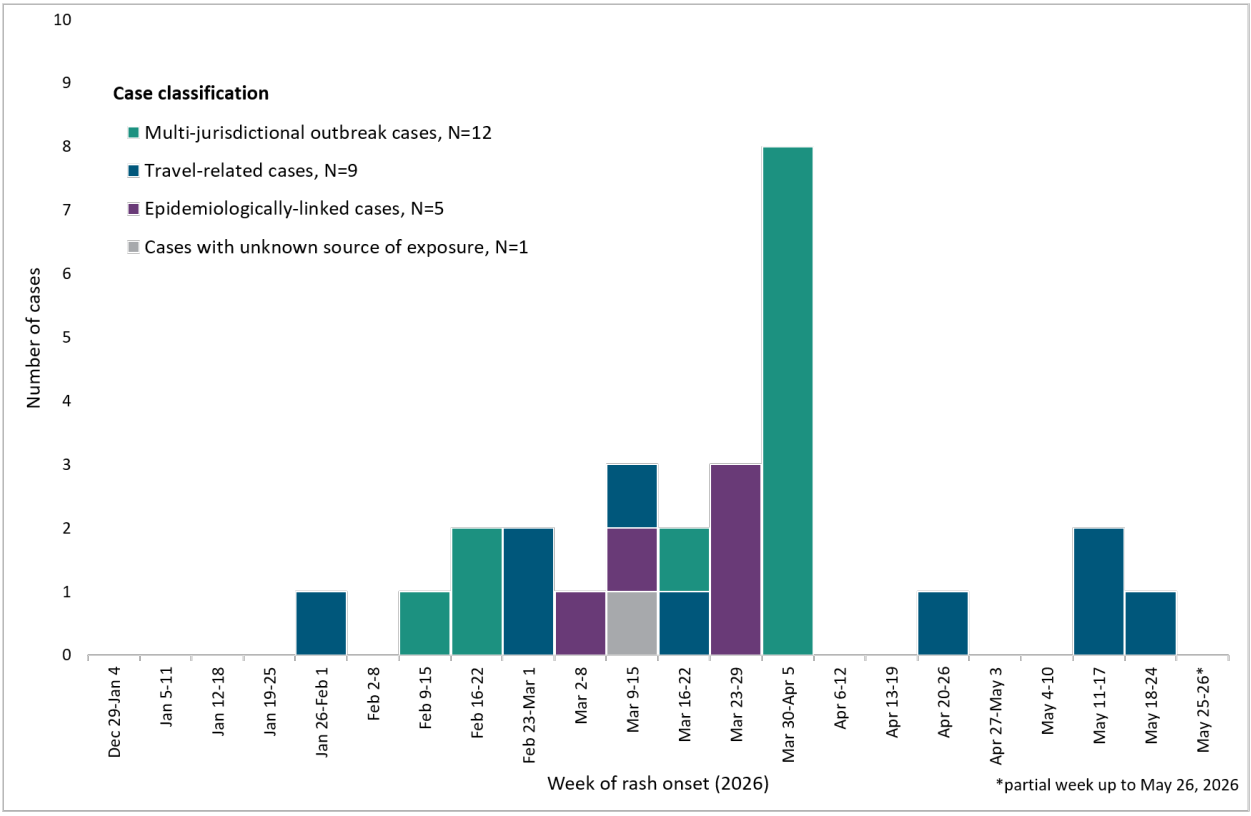
Highlights

January 1 to May 26, 2026

- As of May 26, there were 27 measles cases reported in 2026 (Figure 1).
  - This includes four cases that have been reported among three public health units since the previous data extraction on April 28 (Figure 1). All four cases had a history of travel (i.e., measles acquired outside of Canada).
- Cases were reported across eight public health units: Durham Region Health Department, Middlesex-London Health Unit, Niagara Region Public Health, Ottawa Public Health, Peel Public Health, South East Health Unit, Toronto Public Health, and York Region Public Health (Table 1).
- Infants, children and adolescents made up 51.9% (n=14) of cases, while adults accounted for 48.1% (n=13) (Table 2, Figure 2).
- Overall, 66.7% (n=18) of cases were unimmunized, 3.7% (n=1) had two doses of measles-containing vaccine, and 29.6% (n=8) had unknown immunization status (Table 2, Figure 2).
- Two cases were hospitalized but no cases have been admitted to the intensive care unit (ICU) (Table 2).
- As of May 25, laboratory data shows that 5.3% of individuals (n=22) out of 418 tested in 2026 for acute measles infection using molecular PCR at Public Health Ontario's Laboratory have received positive test results (Appendix Table A1).

For details on the 2024/2025 Ontario measles outbreak, refer to the Historical Trends Section of the report.

Figure 1: Measles Cases by Week of Rash Onset and Case Classification



Notes:

- Cases are reported for the period January 1–May 26, 2026.
- Cases are infectious from four days before rash onset to four days after rash onset.[4] The incubation period for measles (i.e., period from exposure to prodromal symptoms) averages 10 to 12 days and the time from exposure to rash onset ranges from 7 to 21 days (average 14 days).[4,5] Based on the incubation and the infectious period, epidemiologically-linked cases may appear up to 25 days after the rash onset date of the most recently reported case of measles.
- For cases missing rash onset date (either because the rash was not observed or the rash onset date was unknown), the earliest available date from the following was used: symptom onset (other than rash), laboratory specimen collection, laboratory test, or date reported to public health.

Table 1: Measles Cases by Public Health Unit

Public Health Unit	Case Count	Case Rate per 100,000 Population	Change in Case Count Since Previous Data Extraction on April 28	Last Rash Onset Date Among Cases
Durham Region Health Department	4 (14.8%)	0.5	0	March 15
Middlesex-London Health Unit	4 (14.8%)	0.6	0	March 29
Niagara Region Public Health	9 (33.3%)	1.6	0	April 4
Ottawa Public Health	2 (7.4%)	0.2	0	February 17
Peel Public Health	2 (7.4%)	0.1	1	April 26
South East Health Unit	1 (3.7%)	0.2	0	February 15
Toronto Public Health	4 (14.8%)	0.1	2	May 19
York Region Public Health	1 (3.7%)	0.1	1	May 15
Ontario	**27 (100.0%)**	**0.2**	**4**	**May 19**

Notes:

- Cases are reported for the period January 1–May 26, 2026.
- This table is based on the public health unit corresponding to where a case was residing most of the time at the time of illness onset or report to public health, and not necessarily the location of exposure or diagnosis.
- Changes in case counts at the PHU level (either increases or decreases) may result from ongoing data cleaning efforts and/or case updates, including re-classification of previously reported cases.
- For cases missing rash onset date (either because the rash was not observed or the rash onset date was unknown), the earliest available date from the following was used: symptom onset (other than rash), laboratory specimen collection, laboratory test, or date reported to public health.

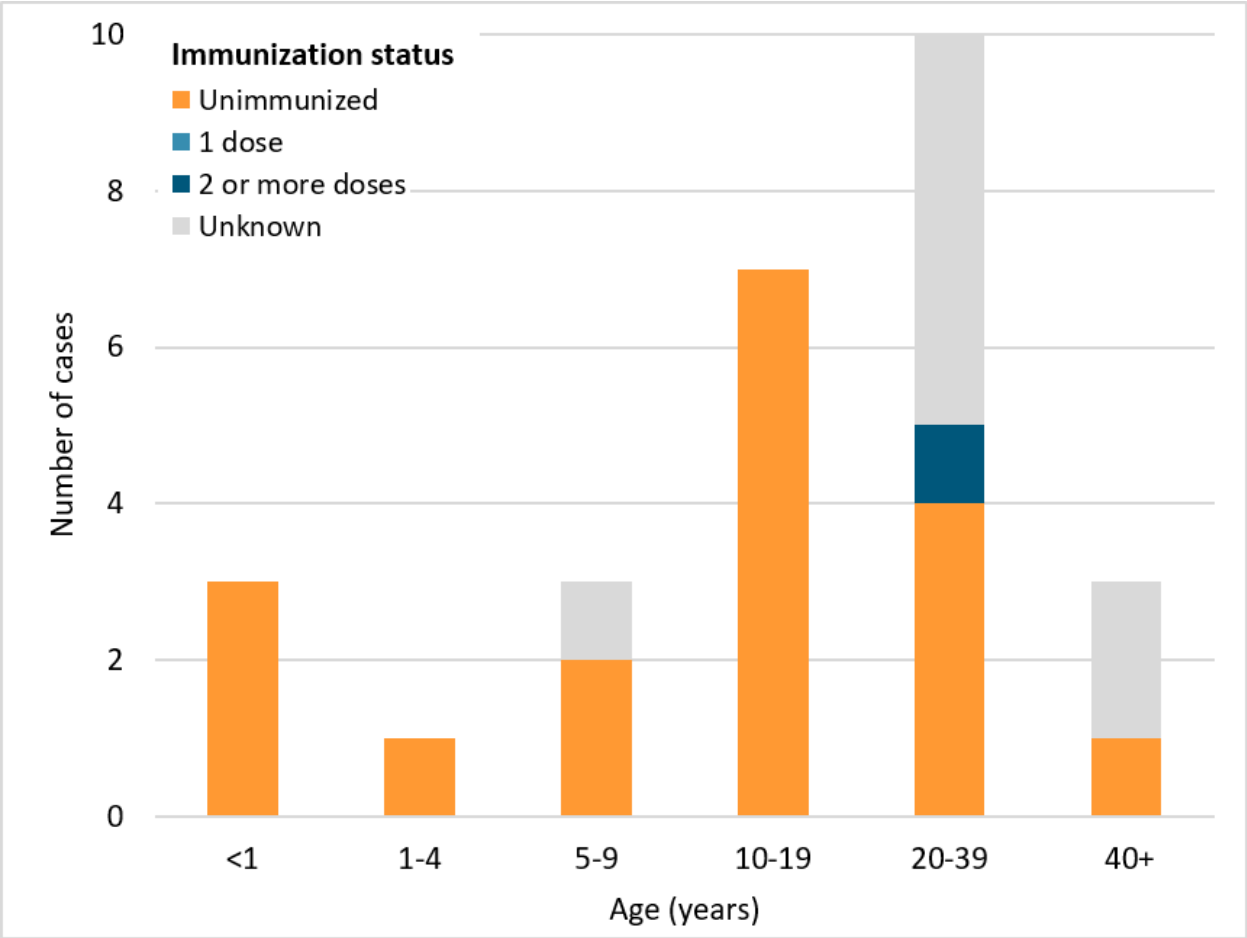
Table 2: Characteristics of Measles Cases

Case Characteristics	Case Count
Total cases	27
Gender	
Female	11 (40.7%)
Male	16 (59.3%)
Unknown	0 (0.0%)
Age (years)	
<1	3 (11.1%)
1–4	1 (3.7%)
5–9	3 (11.1%)
10–19	7 (25.9%)
20–39	10 (37.0%)
40+	3 (11.1%)
Unknown	0 (0.0%)
Cases born in or after 1970	26 (96.3%)
Pregnant cases	0 (0.0%)
Congenital cases	0 (0.0%)
Hospitalized cases	2 (7.4%)
ICU admissions	0 (0.0%)
Deaths	0 (0.0%)
Immunization status	
Unimmunized	18 (66.7%)
1 dose	0 (0.0%)
2 or more doses	1 (3.7%)
Unknown/no proof of immunization	8 (29.6%)

Notes:

- Cases are reported for the period January 1–May 26, 2026.

Figure 2: Measles Cases by Age Group and Immunization Status



Notes:

- Cases are reported for the period January 1–May 26, 2026.

Historical Trends

2024–2025

Outbreak Cases

- In October 2024, an exposure to an international travel-related case in New Brunswick led to a large measles outbreak in Ontario and other provinces.[1] The outbreak in Ontario was declared over on October 6, 2025.[2] Due to the ongoing multi-jurisdictional outbreak in other provinces, additional cases among Ontario residents may still be identified after this date based on epidemiological and laboratory evidence.
- A total of 2,377 outbreak cases (Figure 3) were reported among 26 public health units across Ontario during the outbreak period from October 2024 to October 2025.
    - The majority (73.2%) of cases were infants, children and adolescents (19 years old or younger), while 26.4% were adults, and 0.4% had unknown age (Table 3).
    - Most cases were unimmunized (89.2%), while 2.0% had one dose of measles-containing vaccine, 4.7% had two or more doses, and 4.1% had unknown immunizations status (Table 3).
    - A total of 2.1% of cases were pregnant at the time of their measles infection and there were nine congenital cases (i.e., measles diagnosed in the first 10 days of life).
    - Hospitalization occurred for 7.0% of cases, 0.5% were admitted to the ICU, and there was one death (Table 3).
    - Additional details on Ontario's outbreak can be found in the January 8 report.
- After the provincial outbreak was declared over, an additional case was identified in an Ontario resident with rash onset in December 2025 who acquired measles during travel to another province where the multi-jurisdictional outbreak is ongoing.

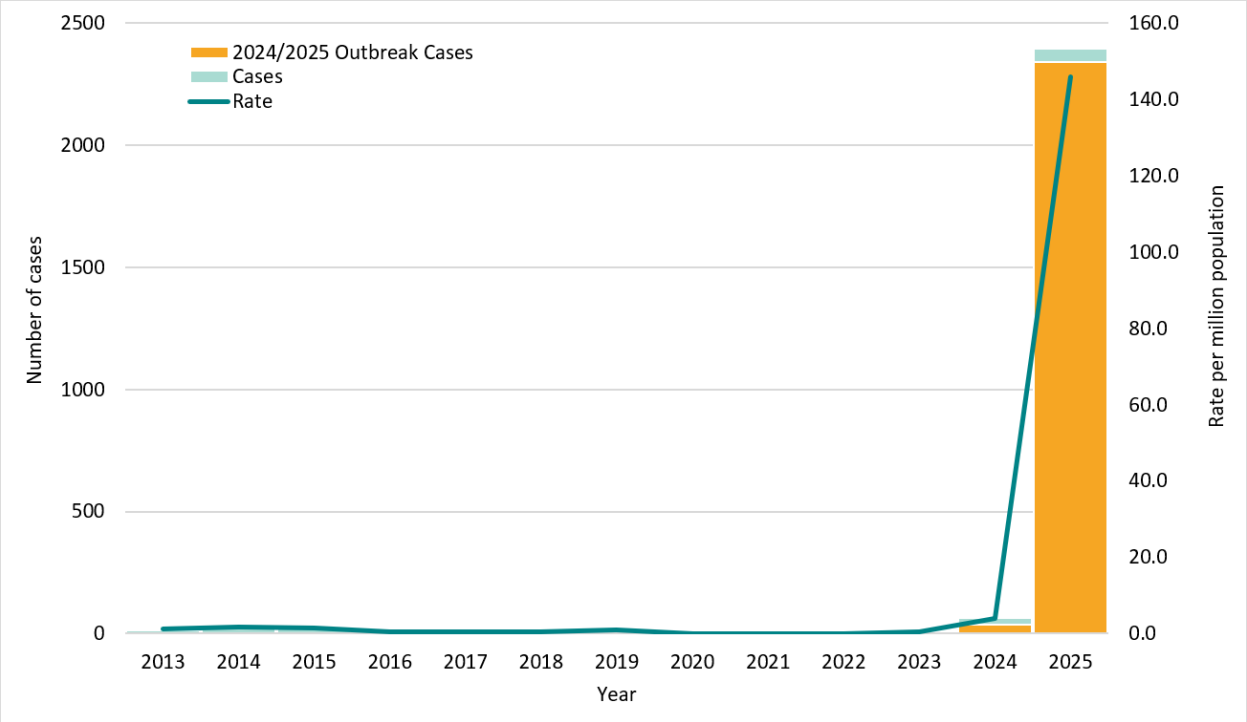
Non-Outbreak Cases

- In 2024 and 2025, consistent with the global increase in measles activity, Ontario reported a total of 83 non-outbreak cases (27 and 56 cases, respectively) (Figure 3).
    - Forty-four cases were travel-related, 23 were epidemiologically-linked cases, and 16 occurred in individuals with unknown sources of exposure (i.e., no history of travel and not epidemiologically linked to another case) (Table 3).
    - The majority (59.0%) of cases were infants, children and adolescents (19 years old or younger) and the remaining cases (41.0%) were adults (Table 3).
    - Most cases were unimmunized (61.4%), while 8.4% had one dose of measles-containing vaccine, 16.9% had two or more doses, and 13.3% had unknown immunizations status (Table 3).
    - Hospitalization occurred for 21.7% of cases, one case was admitted to the ICU, and there was one death (Table 3).

2013–2023

- Between 2013 and 2023, Ontario reported a total of 101 measles cases.
  - Almost all cases (93.1%) occurred in individuals born in or after 1970 (Table 3).
  - Most cases were unimmunized (62.4%) or had unknown immunization status (24.8%) (Table 3).
  - Hospitalization occurred for 27.7% of cases and there were no deaths (Table 3).
- Prior to the COVID-19 pandemic (2013–2019), the annual number of measles cases in Ontario ranged between seven and 22. In comparison, one case was reported during the pandemic (2020–2022) while seven cases were reported in 2023 (Figure 3).
  - Similar trends were seen in Canada overall, where the number of measles cases decreased dramatically during the COVID 19 pandemic.

Figure 3: Number of Measles Cases and Incidence Rate per Million Population by Year



Notes:

- A data table corresponding to this figure can be found in Appendix Table A2.

Table 3: Characteristics of Historical Measles Cases by Period

Case Characteristics	2013–2023	2024–2025 Non-Outbreak Cases	2024–2025 Outbreak Cases
Total cases	101	83	2,377
Gender			
Female	49 (48.5%)	35 (42.2%)	1,140 (48.0%)
Male	52 (51.5%)	48 (57.8%)	1,236 (52.0%)
Unknown	0 (0.0%)	0 (0.0%)	1 (0.04%)
Age (years)			
<1	13 (12.9%)	13 (15.7%)	145 (6.1%)
1–4	22 (21.8%)	18 (21.7%)	438 (18.4%)
5–9	6 (5.9%)	7 (8.4%)	545 (22.9%)
10–19	8 (7.9%)	11 (13.3%)	610 (25.7%)
20–39	36 (35.6%)	26 (31.3%)	486 (20.5%)
40+	16 (15.8%)	8 (9.6%)	142 (6.0%)
Unknown	0 (0.0%)	0 (0.0%)	10 (0.4%)
Cases born in or after 1970	94 (93.1%)	83 (100.0%)	2,336 (98.3%)
Hospitalizations	28 (27.7%)	18 (21.7%)	166 (7.0%)
Deaths	0 (0.0%)	1 (1.2%)	1 (0.04%)
Immunization Status			
Unimmunized	63 (62.4%)	51 (61.4%)	2,121 (89.2%)
1 dose	6 (5.9%)	7 (8.4%)	47 (2.0%)
2 or more doses	7 (6.9%)	14 (16.9%)	112 (4.7%)
Unknown/no proof of immunization	25 (24.8%)	11 (13.3%)	97 (4.1%)

Technical Notes

Data Sources

Case Data

- The case data for this report were based on information entered in the Ontario Ministry of Health (MOH) integrated Public Health Information System (iPHIS) database as of May 26, 2026 at 7:00 am.
    - Cases associated with the 2024/2025 measles outbreak were identified as cases linked to the provincial outbreak number (0000-2024-00016) in iPHIS.
- 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.

Laboratory Data

- The most recent monthly summary of laboratory data was extracted from the Public Health Ontario Laboratory Information Management System on May 25, 2026 and reflect finalized molecular PCR results indicating acute measles infection for samples received between January 1 and May 25, 2026. Specimen collection date was used where available, otherwise login date was used. Counts represent unique individuals and may change in future reports as results are finalized.
- Due to differences in the dates of extraction for case and laboratory data, and Public Health Ontario's Laboratory no longer performing all measles PCR testing in Ontario (as of June 15, 2025, Hamilton Health Science Laboratory began performing measles PCR testing), the number of cases and individuals testing positive by PCR will differ.

Ontario Population Data

Ontario population data were sourced from Statistics Canada and the Ministry of Finance:

- Statistics Canada. Table 17-10-0157-01: Population estimates (2021 census and administrative data), by age group and sex for July 1st, Canada, provinces, territories, health regions (2023 boundaries) and peer groups [Internet]. Ottawa, ON: Government of Canada; 2025 Feb 19 [extracted 2025 Feb 21]. Available from: https://doi.org/10.25318/1710015701-eng
- Population projections 2025-2026: Population reporting. Population Projections Public Health Unit, 2024–2051 [data file]. Toronto ON: Ministry of Finance [producer]; Toronto, ON: Ontario. Ministry of Health, IntelliHealth Ontario [distributor]; [data extracted 2025 Sep 12].

Data Caveats

- Data reported for 2020–2022 should be interpreted with caution. Both testing and iPHIS data entry practices were likely impacted by the COVID-19 pandemic response.
- Only measles cases meeting the confirmed and probable case classification as listed in the Ontario MOH surveillance[6] or 2024/2025 measles outbreak case definitions 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 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 "Factors Affecting Reporting Diseases in Ontario: Case Definition Changes and Associated Trends 1991-2016" and its associated appendix provide more detailed information on this topic.[7]
- Episode date was used as a proxy when rash onset date was unavailable. Episode date is an estimate of the onset date of disease for a case that is determined using the following hierarchy 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 and rates by geography are based on the diagnosing health unit (DHU). DHU refers to the public health unit corresponding to where a case was residing most of the time at the time of illness onset or report to public health, and does not necessarily indicate the location of exposure or diagnosis. Cases that were not residents of Ontario at the time of illness onset were excluded from the analysis.
- 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.
- To determine immunization status of cases, only documented doses of a measles-containing vaccine administered on or after the 1st birthday and at least 14 days prior to disease onset were included; a minimum interval of 28 days between doses was also applied to count valid doses.
- A case of measles is considered imported if the person travelled outside Canada 7 to 21 days prior to rash onset.
- To be considered as a fatal case outcome, a case must not have REPORTABLE DISEASE WAS UNRELATED TO CAUSE OF DEATH selected as the Death Type Description at the time of data extraction.

References

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Appendix A

Table A1: Number of Individuals Positive, Tested, and Percent Positivity for Measles PCR by Month

Month (2026)	Positive	Tested	Percent Positivity
January	0	83	0.0
February	5	81	6.2
March	12	116	10.3
April	2	89	2.2
May	3	49	6.1
Total	**22**	**418**	**5.3**

Notes:

- Public Health Ontario Laboratory data is reported for the period January 1–May 25, 2026.
- As of June 15, 2025, Hamilton Health Science Laboratory began performing measles PCR testing. As a result, these numbers do not capture all measles PCR testing in Ontario.

Table A2: Number of Measles Cases and Incidence Rate per Million Population by Year

Year	Cases	Case Rate per Million Population
2013	15	1.11
2014	22	1.62
2015	20	1.46
2016	7	0.50
2017	7	0.50
2018	8	0.56
2019	14	0.96
2020	0	0.00
2021	0	0.00
2022	1	0.07
2023	7	0.45
2024	64	3.97
Outbreak cases	37	2.29
Non-outbreak cases	27	1.67
2025	2,396	145.99
Outbreak cases	2,340	142.58
Non-outbreak cases	56	3.41

Notes:

- Data table corresponds to Figure 3.

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Measles in Ontario. Toronto, ON: King's Printer for Ontario; 2026.

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