

SURVEILLANCE REPORT

Diseases of Public Health Significance Cases

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Introduction

This monthly report publishes recent data on selected Diseases of Public Health Significance (DOPHS) in Ontario, as reported through the integrated Public Health Information System (iPHIS). The presented case counts and rates include confirmed cases for all diseases, and probable cases for select diseases (refer to the 'Data Caveats and Notes' section for details).

Please interpret surveillance results for DOPHS in 2020 through to 2023 with caution due to changes in the availability of health care, health seeking behaviours, public health follow up, and case entry during the COVID-19 pandemic and subsequent recovery period.

The following table provides case counts by month, followed by the total counts and rates per 1,000,000 population for 2024 to date (i.e., January to March 2024). The last two columns of the table provide the comparison historical data of 5-year counts and rates per 1,000,000 population for an average year-to-date (i.e., average of January to March counts based on data from 2019 to 2023).

Table 1: Selected Diseases of Public Health Significance case counts in Ontario, by month

DOPHS	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2024 to date COUNT	2024 to date RATE per 1,000,000 population	5-year average year-to-date COUNT	5-year average year-to-date RATE
Acute Flaccid Paralysis	0	0	0										0	0.0	0	0.0
Acquired Immunodeficiency Syndrome	3	9	4										16	1.0	15	1.0
Amebiasis	19	30	33										82	5.3	89	6.0
Anaplasmosis	0	0	0										0	0.0	n/a	n/a
Babesiosis	1	0	0										1	0.1	n/a	n/a
Blastomycosis	5	10	7										22	1.4	19	1.3
Botulism	0	0	0										0	0.0	0	0.0
Brucellosis	1	1	0										2	0.1	2	0.1
Campylobacter enteritis	146	141	124										411	26.3	417	28.0
Carbapenemase-Producing Enterobacteriaceae	50	57	48										155	9.9	104	7.0
Chlamydial Infections	3281	2842	2760										8883	569.4	10799	724.0

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Cholera	0	0	0										0	0.0	1	0.1
Cryptosporidiosis	35	59	41										135	8.7	95	6.4
Cyclosporiasis	5	0	4										9	0.6	8	0.5
Echinococcus multilocularis Infection	0	0	0										0	0.0	0	0.0
Encephalitis	4	2	0										6	0.4	9	0.6
Encephalitis/ Meningitis	10	5	17										32	2.1	24	1.6
Food Poisoning, All Causes	2	2	7										11	0.7	11	0.7
Giardiasis	104	76	63										243	15.6	223	15.0
Gonorrhoea (All Types)	1271	1073	1000										3344	214.4	2698	180.9
Group A Streptococcal Disease, Invasive	264	188	178										630	40.4	302	20.2
Group B Streptococcal Disease, Neonatal	3	3	2										8	0.5	10	0.7

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Haemophilus Influenzae Disease, All Types, Invasive	44	26	39										109	7.0	53	3.6
Hepatitis A	13	9	17										39	2.5	34	2.3
Hepatitis B (Acute)	5	9	10										24	1.5	26	1.7
Hepatitis B (Chronic)	130	124	126										380	24.4	381	25.5
Hepatitis C	288	294	261										843	54.0	969	65.0
Human Immunodeficiency Virus	125	110	125										360	23.1	233	15.6
Influenza	5651	4183	3362										13196	845.9	3918	262.7
Legionellosis	11	12	7										30	1.9	35	2.3
Leprosy	0	0	0										0	0.0	0	0.0
Listeriosis	7	5	7										19	1.2	15	1.0
Lyme Disease	18	21	21										60	3.8	43	2.9
Measles	1	4	5										10	0.6	2	0.1
Meningitis	7	6	8										21	1.3	27	1.8

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Meningococcal Disease, Invasive	3	3	5										11	0.7	6	0.4
Mpox	6	20	7										33	2.1	n/a	n/a
Mumps	4	4	11										19	1.2	15	1.0
Ophthalmia neonatorum	0	0	1										1	0.1	0	0.0
Paralytic Shellfish Poisoning	0	0	0										0	0.0	0	0.0
Paratyphoid Fever	2	8	8										18	1.2	20	1.3
Pertussis (Whooping Cough)	41	12	17										70	4.5	62	4.2
Pneumococcal Disease, Invasive	178	187	188										553	35.4	296	19.8
Powassan	0	0	0										0	0.0	n/a	n/a
Q Fever	0	0	2										2	0.1	3	0.2
Rabies	0	0	0										0	0.0	0	0.0
Salmonellosis	219	204	231										654	41.9	436	29.2
Shigellosis	21	28	23										72	4.6	65	4.4

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Syphilis, Early Congenital	3	2	4										9	0.6	2	0.1
Syphilis, Infectious	263	254	211										728	46.7	753	50.5
Syphilis, Other	213	219	244										676	43.3	361	24.2
Tetanus	0	0	0										0	0.0	1	0.1
Trichinosis	0	0	0										0	0.0	2	0.1
Tuberculosis	70	84	59										213	13.7	185	12.4
Tularemia	0	0	0										0	0.0	0	0.0
Typhoid Fever	12	13	9										34	2.2	33	2.2
Verotoxin Producing E. coli Including HUS	7	11	12										30	1.9	24	1.6
West Nile Virus Illness	1	2	0										3	0.2	1	0.1
Yersiniosis	20	27	16										63	4.0	67	4.5

Ontario Cases: Ontario Ministry of Health, iPHIS database, extracted by Public Health Ontario [2024 May 08].

Ontario Population: Ontario. Ministry of Health and Long-Term Care, IntelliHEALTH Ontario. Population Projections [2018-2023] [date extracted 2022 Jan 13].

= Although measles has been eliminated in Canada, it remains endemic in other countries and therefore, imported and import-related cases continue to occur in Ontario.

n/a = Five-year historical data are not yet available for these diseases (n/a):

- Mpox, first designated as a DOPHS, June 2022.
- Anaplasmosis, Babesiosis and Powassan, first designated as DOPHS, July 2023.

Data Notes and Caveats

- iPHIS is a dynamic reporting system which allows ongoing updates to data previously entered. As a result, data extracted from iPHIS represent a snap shot at the time of extraction and may differ from previous or subsequent reports. The data only represent selected cases reported to public health and recorded in iPHIS that meet the Ontario Ministry of Health's confirmed and/or probable [surveillance case definitions](#) in place at the time that the case was reported. Refer to the [Factors Affecting Reportable Diseases in Ontario](#) report for additional information on case definition changes and associated trends from 1991 to 2016. Note that the potential for underreporting and unresolved duplicates exists.
- Please note that the data presented in this report is subject to a time lag of 2 months to ensure completion of data entry requirements.
- Case counts for amebiasis, invasive *Haemophilus influenzae* disease (all types), invasive meningococcal disease, Lyme disease, mumps, pertussis, and West Nile Virus illness are based on the sum of confirmed and probable cases as reported in iPHIS. All other diseases reported in the table are based on confirmed cases only.
- Chronic and acute hepatitis B case counts are not mutually exclusive and should not be added to obtain a total for hepatitis B cases in Ontario.
- A case is reported as encephalitis and/or meningitis when an agent is not specifically identified through laboratory testing or is not reportable.
- Case counts of Carbapenemase-Producing *Enterobacteriaceae* (CPE) include CPE-Infection, CPE-Colonization, and CPE-Unspecified. Where multiple reports with the same carbapenemase are entered in iPHIS for a client, only the first report is included.
- Table 1 is not an exhaustive list of all DOPHS in Ontario. Historical annual counts and rates for most diseases designated as a DOPHS are available in the [Infectious Disease Trends in Ontario reports](#). The following designated diseases/outbreaks are omitted from the table:
 - Counts of Creutzfeldt-Jakob disease are not updated frequently enough for monthly publication as a result of an additional data reconciliation step that is required.
 - Diseases that are extremely rare or have zero incidence in recent years: anthrax, chancroid, diphtheria, hantavirus pulmonary syndrome, hemorrhagic fevers and Lassa fever, plague, acute poliomyelitis, psittacosis/ornithosis, rubella and rubella, congenital syndrome and smallpox.
 - Diseases that are only reportable in outbreak situations or as a combination of individual and aggregate counts: chickenpox (varicella), *Clostridioides difficile* infection (CDI) outbreaks in public hospitals, and gastroenteritis and respiratory infection outbreaks in institutions and public hospitals.
 - Counts of coronaviruses causing severe acute respiratory illness are not included, as COVID-19 cases are reported through other systems. Visit the [Ontario Respiratory Virus Tool](#) for respiratory virus activity in Ontario, including COVID-19, influenza and other respiratory viruses. Information on CDI outbreaks in public hospitals is available in the [Infectious Disease Trends in Ontario reports](#).

Citation

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