Public Health Ontario | Santé publique Ontario

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 July 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 July 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	1	0	0						1	0.1	1	0.1
Acquired Immunodeficiency Syndrome	2	9	5	10	5	5	1						37	2.4	37	2.5
Amebiasis	20	31	35	27	23	16	18						170	10.9	202	13.5
Anaplasmosis	0	0	0	0	8	13	7						28	1.8	n/a	n/a
Babesiosis	1	0	0	0	1	0	0						2	0.1	n/a	n/a
Blastomycosis	6	14	9	9	4	1	3						46	2.9	47	3.2
Botulism	0	0	0	0	0	0	0						0	0.0	0	0.0
Brucellosis	1	1	0	0	2	1	1						6	0.4	4	0.3
Campylobacter enteritis	147	142	128	137	190	285	361						1,390	89.1	1,313	88.0
Carbapenemase-Producing Enterobacteriaceae	69	81	68	95	105	73	80						571	36.6	251	16.8
Chlamydial Infections	4,212	3,727	3,501	2,852	2,699	2,599	2,734						22,324	1,431.0	23,572	1,580.4

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Cholera	0	0	0	0	0	0	0						0	0.0	1	0.1
Cryptosporidiosis	37	62	45	47	36	59	193						479	30.7	276	18.5
Cyclosporiasis	4	0	6	3	37	81	185						316	20.3	367	24.6
Echinococcus multilocularis Infection	0	0	0	0	0	0	0						0	0.0	0	0.0
Encephalitis	4	2	0	1	0	1	1						9	0.6	21	1.4
Encephalitis/ Meningitis	9	5	17	12	16	13	18						90	5.8	62	4.2
Food Poisoning, All Causes	2	2	7	5	7	0	1						24	1.5	20	1.3
Giardiasis	106	82	66	80	64	93	139						630	40.4	503	33.7
Gonorrhoea (All Types)	1,273	1,082	1,004	1,030	1,062	1,004	1,262						7,717	494.7	6,161	413.1
Group A Streptococcal Disease, Invasive	264	194	187	161	143	118	105						1,172	75.1	685	45.9
Group B Streptococcal Disease, Neonatal	3	3	2	4	2	4	2						20	1.3	21	1.4

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Haemophilus Influenzae Disease, All Types, Invasive	44	26	40	29	34	24	12						209	13.4	109	7.3
Hepatitis A	13	9	17	10	10	8	11						78	5.0	67	4.5
Hepatitis B (Acute)	6	10	9	9	8	10	5						57	3.7	54	3.6
Hepatitis B (Chronic)	151	146	142	135	116	131	102						923	59.2	866	58.1
Hepatitis C	299	305	283	273	297	242	205						1,904	122.0	2,205	147.8
Human Immunodeficiency Virus	124	109	123	105	102	82	96						741	47.5	522	35.0
Influenza	5,655	4,191	3,367	1,736	509	137	125						15,720	1,007.7	4,942	331.3
Legionellosis	11	14	9	10	25	40	82						191	12.2	148	9.9
Leprosy	0	0	0	0	0	0	0						0	0.0	0	0.0
Listeriosis	6	7	7	12	3	12	14						61	3.9	40	2.7
Lyme Disease	24	23	24	48	160	490	491						1,260	80.8	894	59.9
Measles	1	4	5	10	3	1	0						24	1.5	4	0.3
Meningitis	8	6	8	5	14	12	9						62	4.0	76	5.1

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Meningococcal Disease, Invasive	3	3	5	6	6	1	2						26	1.7	14	0.9
Mpox	6	20	8	9	13	27	52						135	8.7	n/a	n/a
Mumps	4	5	10	3	6	2	1						31	2.0	22	1.5
Ophthalmia neonatorum	0	0	1	0	2	0	0						3	0.2	1	0.1
Paralytic Shellfish Poisoning	0	0	0	0	0	0	0						0	0.0	0	0.0
Paratyphoid Fever	2	10	12	10	8	3	4						49	3.1	33	2.2
Pertussis (Whooping Cough)	41	12	19	33	113	269	350						837	53.7	118	7.9
Pneumococcal Disease, Invasive	179	186	188	182	166	102	86						1,089	69.8	602	40.4
Powassan	0	0	0	0	0	0	1						1	0.1	n/a	n/a
Q Fever	0	0	1	0	2	2	2						7	0.4	6	0.4
Rabies	0	0	0	0	0	0	0						0	0.0	0	0.0
Salmonellosis	223	207	244	206	197	201	240						1,518	97.3	1,064	71.3
Shigellosis	23	28	23	17	11	19	19						140	9.0	126	8.4

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Syphilis, Early Congenital	2	3	7	3	0	2	1						18	1.2	6	0.4
Syphilis, Infectious	269	276	247	242	272	259	206						1,771	113.5	1,692	113.4
Syphilis, Other	214	237	265	211	214	202	158						1,501	96.2	837	56.1
Tetanus	0	0	0	1	0	0	0						1	0.1	1	0.1
Trichinosis	0	0	0	0	0	0	0						0	0.0	4	0.3
Tuberculosis	68	83	63	73	103	99	99						588	37.7	442	29.6
Tularemia	0	0	0	0	0	0	0						0	0.0	0	0.0
Typhoid Fever	12	16	10	14	18	10	6						86	5.5	61	4.1
Verotoxin Producing E. coli Including HUS	5	12	14	14	12	20	36						113	7.2	94	6.3
West Nile Virus Illness	0	2	0	0	1	0	8						11	0.7	6	0.4
Yersiniosis	21	27	18	19	24	12	28						149	9.6	134	9.0

Ontario Cases: Ontario Ministry of Health, iPHIS database, extracted by Public Health Ontario [2024 Sep 11].
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.
  - Toronto Public Health (since mid-March 2020) and Ottawa Public Health (since mid-December 2023) report sporadic laboratory-confirmed influenza cases in aggregate to Public Health Ontario for inclusion in the Ontario Respiratory Virus Tool. These cases are not entered in iPHIS which means that the laboratory-confirmed influenza case counts since April 2020 that are presented in this monthly report are incomplete. For more complete seasonal laboratory-confirmed influenza case totals, refer to the Ontario Respiratory Virus Tool.

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Diseases of public health significance cases. Toronto, ON: King's Printer for Ontario; 2024.

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