

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 2023 to date (i.e., January to November 2023). 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 – November counts based on data from 2018 to 2022).

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	2023 to date COUNT	2023 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	2	0	0	0	0	0	0	0		2	0.1	0	0.0
Acquired Immunodeficiency Syndrome	4	5	4	7	5	4	5	5	2	10	5		56	3.6	49	3.3
Amebiasis	37	24	35	27	36	20	22	25	30	19	16		291	18.9	252	17.1
Anaplasmosis	0	0	0	0	1	7	5	1	1	1	1		17	1.1	n/a	n/a
Babesiosis	0	0	0	0	0	1	5	2	0	0	0		8	0.5	n/a	n/a
Blastomycosis	13	5	8	4	13	3	15	9	8	12	8		98	6.4	59	4.0
Botulism	0	0	0	0	0	0	0	0	1	1	1		3	0.2	0	0.0
Brucellosis	0	1	0	1	1	0	0	1	1	0	0		5	0.3	0	0.0
Campylobacter enteritis	137	156	161	143	205	260	378	343	259	197	150		2,389	155.3	1,810	122.8
Carbapenemase-Producing Enterobacteriaceae	54	44	76	76	66	68	54	106	61	45	48		698	45.4	284	19.3
Chlamydial Infections	3,939	3,265	4,122	3,518	3,741	3,872	3,819	4,026	3,123	3,127	3,282		39,834	2,590.1	30,069	2,040.1

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Cholera	0	0	0	0	0	0	0	0	0	0	0		0	0.0	0	0.0
Cryptosporidiosis	24	23	18	13	21	33	91	119	71	28	54		495	32.2	434	29.4
Cyclosporiasis	5	9	5	14	161	245	168	39	1	3	4		654	42.5	267	18.1
Echinococcus multilocularis Infection	0	0	0	0	0	0	0	0	0	0	0		0	0.0	0	0.0
Encephalitis	3	1	2	1	2	3	4	2	4	1	2		25	1.6	22	1.5
Encephalitis/ Meningitis	12	9	9	9	6	11	19	18	17	20	16		146	9.5	93	6.3
Food Poisoning, All Causes	1	6	7	1	3	2	3	5	1	2	2		33	2.1	8	0.5
Giardiasis	75	79	102	68	65	69	114	141	104	61	73		951	61.8	707	48.0
Gonorrhoea (All Types)	1,107	935	1,112	1,035	1,197	1,231	1,287	1,282	1,279	1,308	1,296		13,069	849.8	7,695	522.1
Group A Streptococcal Disease, Invasive	124	129	158	191	204	179	178	129	115	165	152		1,724	112.1	692	47.0
Group B Streptococcal Disease, Neonatal	5	4	4	2	6	2	5	6	1	4	0		39	2.5	26	1.8

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Haemophilus Influenzae Disease, All Types, Invasive	30	27	32	24	23	19	22	23	23	28	41		292	19.0	120	8.1
Hepatitis A	15	10	20	6	21	9	6	14	19	12	11		143	9.3	71	4.8
Hepatitis B (Acute)	13	6	9	3	10	13	13	14	11	14	14		120	7.8	67	4.5
Hepatitis B (Chronic)	107	105	106	109	118	148	155	117	111	131	130		1,337	86.9	1,061	72.0
Hepatitis C	241	257	268	246	277	279	277	276	274	266	294		2,955	192.1	2,777	188.4
Human Immunodeficiency Virus	88	100	137	84	124	114	117	119	96	153	129		1,261	82.0	596	40.4
Influenza	652	246	485	588	550	302	102	80	107	161	1,011		4,284	278.6	6,165	418.3
Legionellosis	8	15	17	18	13	20	80	68	41	28	16		324	21.1	270	18.3
Leprosy	0	0	0	0	0	0	0	0	0	0	0		0	0.0	0	0.0
Listeriosis	6	6	7	4	6	4	7	9	4	5	4		62	4.0	56	3.8
Lyme Disease	22	17	19	31	97	305	682	293	146	88	43		1,743	113.3	1,044	70.8
Measles	0	2	0	2	0	1	0	0	1	0	0		6	0.4	0	0.0
Meningitis	8	5	9	10	16	10	19	30	12	14	2		135	8.8	97	6.6

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Meningococcal Disease, Invasive	1	2	0	3	3	2	3	2	3	2	5		26	1.7	12	0.8
Mpox	4	4	4	6	3	3	2	3	1	1	1		32	2.1	n/a	n/a
Mumps	2	4	3	1	1	5	1	0	1	3	3		24	1.6	14	0.9
Ophthalmia neonatorum	0	0	1	0	0	0	0	0	0	0	0		1	0.1	0	0.0
Paralytic Shellfish Poisoning	0	0	0	0	0	0	0	0	0	0	0		0	0.0	0	0.0
Paratyphoid Fever	5	7	24	11	3	5	2	6	6	4	6		79	5.1	7	0.5
Pertussis (Whooping Cough)	42	59	48	21	14	8	16	45	20	27	16		316	20.5	64	4.3
Pneumococcal Disease, Invasive	139	120	148	149	137	103	94	59	95	124	149		1,317	85.6	670	45.5
Powassan	0	0	0	0	0	0	0	0	0	0	0		0	0.0	n/a	n/a
Q Fever	2	0	2	1	1	0	1	0	2	1	0		10	0.7	1	0.1
Rabies	0	0	0	0	0	0	0	0	0	0	0		0	0.0	0	0.0
Salmonellosis	193	200	212	185	190	172	251	224	191	186	191		2,195	142.7	1,281	86.9
Shigellosis	24	25	26	10	20	20	20	28	20	22	29		244	15.9	153	10.4

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Syphilis, Early Congenital	3	1	1	2	1	2	0	1	1	1	1		14	0.9	0	0.0
Syphilis, Infectious	304	253	358	264	260	289	287	248	251	209	183		2,906	189.0	2,105	142.8
Syphilis, Other	204	189	228	172	229	201	199	198	181	182	188		2,171	141.2	912	61.9
Tetanus	0	1	0	0	0	0	0	0	0	0	0		1	0.1	0	0.0
Trichinosis	0	0	0	0	0	0	0	0	0	0	0		0	0.0	1	0.1
Tuberculosis	77	55	71	69	82	81	76	88	66	72	70		807	52.5	537	36.4
Tularemia	0	0	0	0	0	0	0	0	0	0	0		0	0.0	0	0.0
Typhoid Fever	16	11	22	17	12	10	4	6	9	6	5		118	7.7	55	3.7
Verotoxin Producing E. coli Including HUS	9	7	8	13	11	12	19	15	22	3	9		128	8.3	140	9.5
West Nile Virus Illness	0	0	0	0	0	0	3	26	26	2	1		58	3.8	29	2.0
Yersiniosis	18	23	24	17	17	18	19	26	18	7	18		205	13.3	170	11.5

Ontario Cases: Ontario Ministry of Health, iPHIS database, extracted by Public Health Ontario [2024 Jan 10].

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](#).

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