

QUARTERLY INFECTIOUS DISEASES SURVEILLANCE REPORT

Diseases of Public Health Significance Cases for January to June 2022

This report publishes recent data on 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 Diseases of Public Health Significance in 2020, 2021 and 2022 with caution due to changes in the availability of health care, health seeking behaviour, public health follow up, and case entry during the COVID-19 pandemic.

The following table provides case counts by month, followed by the total counts and rates per 1,000,000 population for 2022 to date (i.e., Jan. to June 2022). 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 Jan. – June counts based on data from 2017 to 2021).

Disease of Public Health Significance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2022 to date COUNT	2022 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	1	0.1
AIDS	5	5	8	4	1	2							25	1.7	30	2.1
Amebiasis	19	22	20	25	41	34							161	10.7	238	16.4
Blastomycosis	7	7	5	7	9	3							38	2.5	n/a	n/a
Botulism	0	0	0	0	0	0							0	0.0	1	0.1
Brucellosis	1	1	1	0	0	0							3	0.2	3	0.2
Campylobacter enteritis	96	95	151	102	126	226							796	52.9	1,111	76.4

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Carbapenemase-Producing <i>Enterobacteriaceae</i> (CPE)	26	20	33	25	38	55							197	13.1	n/a	n/a
Chlamydial Infections	2,514	2,706	3,619	3,073	3,193	3,387							18,492	1,228.4	20,867	1,434.9
Cholera	0	1	1	0	0	1							3	0.2	1	0.1
Cryptosporidiosis	17	16	34	20	27	26							140	9.3	190	13.1
Cyclosporiasis	0	1	4	5	77	236							323	21.5	147	10.1
<i>Echinococcus multilocularis</i> Infection	0	0	0	0	0	0							0	0.0	n/a	n/a
Encephalitis	1	2	5	1	1	1							11	0.7	15	1.0
Encephalitis/Meningitis	8	7	9	13	12	13							62	4.1	56	3.9
Food Poisoning, All Causes	0	0	7	1	10	3							21	1.4	24	1.7
Giardiasis	47	41	49	53	52	55							297	19.7	515	35.4
Gonorrhoea (All Types)	816	738	1,093	952	1,027	1,041							5,667	376.4	4,304	296.0
Group A Streptococcal Disease, Invasive	85	68	71	57	67	59							407	27.0	544	37.4
Group B Streptococcal Disease, Neonatal	3	1	4	1	0	2							11	0.7	21	1.4
<i>Haemophilus Influenzae</i> Disease, All Types, Invasive	7	4	6	8	13	17							55	3.7	n/a	n/a
Hepatitis A	6	3	4	11	6	3							33	2.2	57	3.9
Hepatitis B (Acute)	6	7	14	10	11	13							61	4.1	49	3.4
Hepatitis B (Chronic)	68	64	85	48	74	78							417	27.7	833	57.3
Hepatitis C	206	196	274	224	226	214							1,340	89.0	2,136	146.9

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HIV	45	50	68	54	67	58							342	22.7	397	27.3
Influenza	9	5	139	412	710	242							1,517	100.8	9,262	636.9
Legionellosis	12	8	12	16	13	40							101	6.7	79	5.4
Leprosy	0	0	0	0	0	1							1	0.1	1	0.1
Listeriosis	6	3	2	5	9	9							34	2.3	28	1.9
Lyme Disease	19	14	16	26	75	239							389	25.8	309	21.2
Measles [#]	0	0	1	0	0	0							1	0.1	5	0.3
Meningitis	3	7	13	4	7	5							39	2.6	71	4.9
Meningococcal Disease, Invasive	1	0	3	0	0	2							6	0.4	15	1.0
Mumps	1	1	1	0	2	0							5	0.3	63	4.3
Ophthalmia neonatorum	0	0	0	0	1	1							2	0.1	0	0.0
Paralytic Shellfish Poisoning	0	0	0	0	0	0							0	0.0	0	0.0
Paratyphoid Fever	3	3	11	8	5	5							35	2.3	20	1.4
Pertussis (Whooping Cough)	0	0	4	1	4	3							12	0.8	138	9.5
Pneumococcal Disease, Invasive	109	47	62	89	109	82							498	33.1	559	38.4
Q Fever	1	0	2	0	0	0							3	0.2	5	0.3
Rabies	0	0	0	0	0	0							0	0.0	0	0.0
Rubella [#]	0	0	0	0	0	0							0	0.0	0	0.0
Rubella, Congenital Syndrome [#]	0	0	0	0	0	0							0	0.0	0	0.0

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Salmonellosis	74	90	145	167	180	139							795	52.8	995	68.4
Shigellosis	7	14	24	15	24	17							101	6.7	112	7.7
Syphilis, Early Congenital	0	2	1	1	2	2							8	0.5	2	0.1
Syphilis, Infectious	251	248	280	264	280	247							1,570	104.3	1,066	73.3
Syphilis, Other	122	113	152	136	144	157							824	54.7	471	32.4
Tetanus	0	0	0	0	0	0							0	0.0	1	0.1
Trichinosis	0	0	1	0	1	0							2	0.1	3	0.2
Tuberculosis	57	62	59	55	52	60							345	22.9	342	23.5
Tularemia	0	0	0	0	0	0							0	0.0	0	0.0
Typhoid Fever	7	9	24	17	15	6							78	5.2	46	3.2
Verotoxin Producing <i>E. coli</i> Including HUS	4	8	15	16	16	14							73	4.8	63	4.3
West Nile Virus Illness	0	0	0	0	0	0							0	0.0	4	0.3
Yersiniosis	22	18	22	12	19	11							104	6.9	136	9.4

Ontario Cases: Ontario Ministry of Health, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2022/09/02].

Ontario Population: Population Projections [2018-2022] and Estimates [2017], Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario, Dates Extracted [2019/11/26].

Although measles, rubella, and congenital rubella syndrome have been eliminated in Canada, these diseases remain 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):

- Blastomycosis, carbapenemase-producing *Enterobacteriaceae*, and *Echinococcus multilocularis* Infection, first designated under diseases of public health significance in May 2018.
- Invasive *Haemophilus influenzae* (all types), due to changes in reporting. As of May 1, 2018, all serotypes became reportable (prior to which only serotype b was reportable)

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 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.
- 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 Diseases of Public Health Significance (DOPHS) in Ontario. Historical annual counts and rates for most diseases designated under 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, and smallpox.
 - Diseases that are only reportable in outbreak situations or as a combination of individual and aggregate counts: chickenpox (varicella), *Clostridium 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 no longer included, because COVID-19 cases are now reported through several other systems in addition to iPHIS. Visit [COVID-19 data and surveillance](#) for detailed, up-to-date reporting on COVID-19 activity in Ontario.
- Detailed reporting on respiratory infection outbreaks in institutions and public hospitals is available in the [Ontario Respiratory Pathogen Bulletin](#).
- Information on CDI outbreaks in public hospitals is available in the [Infectious Disease Trends in Ontario reports](#).

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