

## QUARTERLY INFECTIOUS DISEASES SURVEILLANCE REPORT

### Diseases of Public Health Significance Cases for January to September 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 September 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. – September 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				0	0.0	2	0.1
AIDS	5	5	6	2	1	3	3	9	5				39	2.6	45	3.1
Amebiasis	18	22	20	24	41	34	36	40	26				261	17.3	355	24.4
Blastomycosis	8	7	5	7	11	3	5	4	6				56	3.7	n/a	n/a
Botulism	0	0	0	0	0	0	1	1	0				2	0.1	1	0.1
Brucellosis	1	1	1	0	0	0	1	0	1				5	0.3	4	0.3
Campylobacter enteritis	96	96	151	105	128	229	308	292	241				1646	109.3	2258	155.3
Carbapenemase-Producing <i>Enterobacteriaceae</i> (CPE)	25	24	40	32	44	54	33	30	43				325	21.6	n/a	n/a

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Chlamydial Infections	2517	2707	3620	3075	3190	3395	3112	3521	3547				28684	1905.4	32146	2210.5
Cholera	0	1	1	0	0	1	0	0	0				3	0.2	1	0.1
Cryptosporidiosis	17	16	34	20	27	30	79	103	58				384	25.5	489	33.6
Cyclosporiasis	0	1	4	5	84	234	104	28	9				469	31.2	284	19.5
<i>Echinococcus multilocularis</i> Infection	0	0	0	0	0	1	0	0	0				1	0.1	n/a	n/a
Encephalitis	1	2	6	1	1	2	1	0	3				17	1.1	26	1.8
Encephalitis/Meningitis	7	8	8	13	12	14	11	18	27				118	7.8	110	7.6
Food Poisoning, All Causes	0	0	7	1	10	4	1	17	6				46	3.1	28	1.9
Giardiasis	49	42	54	53	53	62	79	103	113				608	40.4	901	62.0
Gonorrhoea (All Types)	817	738	1093	952	1026	1043	1009	1060	1050				8788	583.8	6987	480.5
Group A Streptococcal Disease, Invasive	85	68	72	56	68	60	73	54	61				597	39.7	751	51.6
Group B Streptococcal Disease, Neonatal	3	1	4	1	1	2	2	6	4				24	1.6	33	2.3
<i>Haemophilus Influenzae</i> Disease, All Types, Invasive	8	4	6	7	13	17	15	13	15				98	6.5	n/a	n/a
Hepatitis A	6	3	4	11	6	3	5	13	16				67	4.5	98	6.7
Hepatitis B (Acute)	5	6	12	9	9	14	12	9	2				78	5.2	71	4.9
Hepatitis B (Chronic)	75	78	103	60	78	76	60	73	84				687	45.6	1244	85.5
Hepatitis C	208	196	273	229	232	223	218	260	220				2059	136.8	3208	220.6

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HIV	49	49	68	54	64	58	69	82	78				571	37.9	611	42.0
Influenza	9	5	139	412	718	247	71	23	82				1706	113.3	9305	639.9
Legionellosis	12	8	12	17	13	41	32	41	80				256	17.0	228	15.7
Leprosy	0	0	0	0	0	0	0	0	0				0	0.0	2	0.1
Listeriosis	6	3	2	5	9	9	5	13	5				57	3.8	53	3.6
Lyme Disease	19	15	17	29	94	348	380	229	89				1220	81.0	954	65.6
Measles <sup>#</sup>	0	0	1	0	0	0	0	0	0				1	0.1	6	0.4
Meningitis	4	7	13	4	8	4	7	11	16				74	4.9	124	8.5
Meningococcal Disease, Invasive	1	0	3	0	0	2	6	2	1				15	1.0	21	1.4
Mumps	1	1	1	0	2	1	1	6	1				14	0.9	82	5.6
Ophthalmia neonatorum	0	0	0	0	1	1	0	0	1				3	0.2	1	0.1
Paralytic Shellfish Poisoning	0	0	0	0	0	0	0	0	0				0	0.0	0	0.0
Paratyphoid Fever	3	4	10	8	6	6	2	3	8				50	3.3	25	1.7
Pertussis (Whooping Cough)	0	0	4	1	4	3	12	12	15				51	3.4	231	15.9
Pneumococcal Disease, Invasive	109	47	62	89	111	84	65	53	85				705	46.8	698	48.0
Q Fever	1	0	2	0	0	1	0	0	0				4	0.3	7	0.5
Rabies	0	0	0	0	0	0	0	0	0				0	0.0	0	0.0
Rubella <sup>#</sup>	0	0	0	0	0	0	0	0	0				0	0.0	0	0.0
Rubella, Congenital Syndrome <sup>#</sup>	0	0	0	0	0	0	0	0	0				0	0.0	0	0.0
Salmonellosis	74	90	145	175	182	147	171	180	166				1330	88.3	1659	114.1

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Shigellosis	9	15	24	16	25	15	20	18	42				184	12.2	174	12.0
Syphilis, Early Congenital	0	3	1	2	2	2	2	2	2				16	1.1	3	0.2
Syphilis, Infectious	257	253	290	279	294	282	291	301	250				2497	165.9	1656	113.9
Syphilis, Other	122	113	149	137	149	156	157	169	173				1325	88.0	705	48.5
Tetanus	0	0	0	0	0	0	1	1	0				2	0.1	2	0.1
Trichinosis	0	0	1	0	1	0	0	1	0				3	0.2	6	0.4
Tuberculosis	349	398	417	290	425	407	342	410	421				3459	229.8	4650	319.8
Tularemia	0	0	0	0	0	0	0	0	0				0	0.0	0	0.0
Typhoid Fever	7	9	24	16	15	8	10	17	10				116	7.7	67	4.6
Verotoxin Producing <i>E. coli</i> Including HUS	4	8	15	16	16	15	26	31	19				150	10.0	134	9.2
West Nile Virus Illness	0	0	0	0	0	0	0	12	13				25	1.7	86	5.9
Yersiniosis	22	18	22	12	18	12	13	21	24				162	10.8	210	14.4

**Ontario Cases:** Ontario Ministry of Health, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2022/12/08].

**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](#).

## Citation

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