

# QUARTERLY INFECTIOUS DISEASES SURVEILLANCE REPORT

# Diseases of Public Health Significance Cases for January to June 2021

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 and 2021 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 2021 to date (i.e., Jan. to June 2021). 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 2016 to 2021).

Disease of Public Health Significance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2021 to date COUNT	2021 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	4	1	7	5	4	4							25	1.7	32	2.2
Amebiasis	18	14	17	16	9	14							88	5.8	305	21.1
Blastomycosis	9	1	3	4	2	3							22	1.5	n/a	n/a
Botulism	0	0	0	0	0	0							0	0.0	1	0.1
Brucellosis	0	0	0	0	0	1							1	0.1	3	0.2
Campylobacter enteritis	95	89	85	80	98	208							655	43.5	1247	86.4

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Carbapenemase-Producing Enterobacteriaceae (CPE)	16	19	18	18	11	12							94	6.2	n/a	n/a
Chlamydial Infections	2994	2599	3003	2652	2141	2087							15476	1028.0	21675	1502.4
Cholera	0	0	0	0	0	0							0	0.0	1	0.1
Cryptosporidiosis	10	12	15	12	9	21							79	5.2	198	13.7
Cyclosporiasis	0	0	1	1	3	39							44	2.9	157	10.9
Echinococcus multilocularis Infection	0	0	0	0	0	0							0	0.0	n/a	n/a
Encephalitis	0	0	2	3	0	0							5	0.3	17	1.2
Encephalitis/Meningitis	8	12	13	5	9	10							57	3.8	62	4.3
Food Poisoning, All Causes	0	0	0	2	0	0							2	0.1	26	1.8
Giardiasis	42	40	26	32	34	24							198	13.2	577	40.0
Gonorrhoea (All Types)	806	668	748	628	577	530							3957	262.9	4097	284.0
Group A Streptococcal Disease, Invasive	80	70	66	59	66	45							386	25.6	538	37.3
Group B Streptococcal Disease, Neonatal	3	2	4	2	2	3							16	1.1	23	1.6
Haemophilus Influenzae Disease, All Types, Invasive	3	2	5	6	11	4							31	2.1	n/a	n/a
Hepatitis A	2	2	3	1	3	2							13	0.9	63	4.4
Hepatitis B (Acute)	6	9	5	5	2	2							29	1.9	54	3.7
Hepatitis B (Chronic)	78	58	76	53	64	62							391	26.0	888	61.5

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Hepatitis C	233	217	278	257	241	227							1453	96.5	2280	158.0
HIV	40	41	47	38	30	47							243	16.1	410	28.4
Influenza	2	3	2	0	1	0							8	0.5	11617	805.2
Legionellosis	10	7	12	14	11	27							81	5.4	70	4.9
Leprosy	0	0	1	0	0	0							1	0.1	1	0.1
Listeriosis	5	1	4	4	5	9							28	1.9	33	2.3
Lyme Disease	7	6	11	32	69	162							287	19.1	237	16.4
Measles#	0	0	0	0	0	0							0	0.0	6	0.4
Meningitis	4	4	2	7	7	4							28	1.9	78	5.4
Meningococcal Disease, Invasive	1	1	1	0	1	0							4	0.3	16	1.1
Mumps	1	1	0	0	0	0							2	0.1	66	4.6
Ophthalmia neonatorum	0	1	0	0	0	0							1	0.1	1	0.1
Paralytic Shellfish Poisoning	0	0	0	0	0	0							0	0.0	0	0.0
Paratyphoid Fever	0	0	2	2	1	0							5	0.3	22	1.5
Pertussis (Whooping Cough)	0	1	1	0	0	1							3	0.2	193	13.4
Pneumococcal Disease, Invasive	54	35	44	53	40	37							263	17.5	624	43.3
Q Fever	0	0	1	1	2	0							4	0.3	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

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Rubella, Congenital Syndrome#	0	0	0	0	0	0							0	0.0	0	0.0
Salmonellosis	53	47	48	47	80	86							361	24.0	1236	85.7
Shigellosis	14	10	10	5	4	7							50	3.3	143	9.9
Syphilis, Early Congenital	0	0	1	1	0	1							3	0.2	1	0.1
Syphilis, Infectious	234	200	222	191	164	156							1167	77.5	923	64.0
Syphilis, Other	81	84	119	120	114	99							617	41.0	423	29.3
Tetanus	1	0	1	0	0	0							2	0.1	0	0.0
Trichinosis	0	0	1	0	1	0							2	0.1	4	0.3
Tuberculosis	42	61	51	50	63	61							328	21.8	333	23.1
Tularemia	0	0	0	0	0	0							0	0.0	0	0.0
Typhoid Fever	0	2	1	2	0	2							7	0.5	52	3.6
Verotoxin Producing E. coli Including HUS	1	4	6	12	10	28							61	4.1	59	4.1
West Nile Virus Illness	0	0	0	1	0	0							1	0.1	3	0.2
Yersiniosis	19	14	25	15	16	14							103	6.8	149	10.3

Ontario Cases: Ontario Ministry of Health, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2021/08/11].

Ontario Population: Population Projections [2018-2021] and Estimates [2016-2017], 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 <a href="Infectious Disease Trends in Ontario reports">Infectious Disease Trends in Ontario reports</a>. 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 <u>COVID-19 data and surveillance</u> 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 <u>Infectious Disease Trends in Ontario reports</u>.

## Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Diseases of public health significance cases for January to June 2021. Toronto, ON: Queen's Printer for Ontario; 2021.

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