

## MONTHLY INFECTIOUS DISEASES SURVEILLANCE REPORT

# Diseases of Public Health Significance cases for January to December 2020

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).

The following table provides case counts by month, followed by the total counts and rates per 1,000,000 population for 2020 to date (i.e., Jan. – Dec. 2020). 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. – Dec. counts based on data from 2015 to 2019).

Disease of Public Health Significance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2020 to date COUNT	2020 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	0	0.0	6	0.4
AIDS	4	3	7	5	7	6	3	10	6	2	4	5	62	4.2	67	4.7
Amebiasis	48	28	24	20	16	22	25	20	22	26	15	12	278	18.7	670	47.1
Blastomycosis	6	0	5	4	2	2	5	5	3	1	3	2	38	2.6	n/a	n/a
Botulism	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	2	0.1
Brucellosis	0	0	2	0	1	0	0	0	2	0	0	0	5	0.3	5	0.4
Campylobacter enteritis	182	156	112	66	99	219	313	294	226	141	129	105	2042	137.4	3388	238.4
Carbapenemase-Producing Enterobacteriaceae (CPE)	43	36	34	20	9	10	24	19	24	12	21	16	268	18.0	n/a	n/a
Chlamydial Infections	4872	4222	3166	1637	1806	2384	2888	3210	3452	3247	3271	2872	37027	2491.0	45004	3166.5

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Cholera	0	0	0	0	0	0	1	0	0	0	0	0	1	0.1	2	0.1
Cryptosporidiosis	45	43	20	10	23	36	103	100	44	24	13	4	465	31.3	556	39.1
Cyclosporiasis	2	0	2	3	25	138	132	42	3	3	0	0	350	23.5	308	21.7
Echinococcus multilocularis Infection	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	n/a	n/a
Encephalitis	3	3	2	0	2	2	5	0	4	2	2	1	26	1.7	37	2.6
Encephalitis/Meningitis	11	7	10	1	14	11	7	7	10	15	5	13	111	7.5	185	13.0
Food Poisoning, All Causes	1	0	3	1	11	0	1	0	0	0	0	0	17	1.1	43	3.0
Giardiasis	90	99	67	34	21	66	82	106	96	84	45	22	812	54.6	1369	96.3
Gonorrhoea (All Types)	1104	865	734	394	461	654	727	742	844	855	906	810	9096	611.9	8429	593.1
Group A Streptococcal Disease, Invasive	126	114	111	81	93	60	74	78	57	74	86	87	1041	70.0	896	63.0
Group B Streptococcal Disease, Neonatal	1	2	3	3	0	1	4	1	4	2	1	1	23	1.5	47	3.3
Haemophilus Influenzae Disease, All Types, Invasive	26	24	14	11	6	5	2	5	4	6	8	10	121	8.1	n/a	n/a
Hepatitis A	17	19	11	7	5	3	4	2	3	3	1	2	77	5.2	144	10.1
Hepatitis B (Acute)	9	15	8	3	2	5	12	5	4	2	6	4	75	5.0	98	6.9
Hepatitis B (Chronic)	141	112	68	26	51	62	53	117	75	76	70	66	917	61.7	1929	135.7
Hepatitis C	401	298	255	112	139	207	255	223	216	219	250	179	2754	185.3	4785	336.7
HIV	82	78	77	29	37	42	47	47	58	41	37	42	617	41.5	853	60.0

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Influenza	5579	2853	1263	51	30	4	7	5	5	3	3	2	9805	659.6	13831	973.2
Legionellosis	14	8	13	7	12	27	43	50	28	48	25	18	293	19.7	237	16.7
Leprosy	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	4	0.3
Listeriosis	4	1	6	6	2	1	5	12	8	7	8	3	63	4.2	73	5.1
Lyme Disease	16	9	11	26	56	165	186	126	81	61	48	24	809	54.4	742	52.2
Measles#	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	11	0.8
Meningitis	15	8	6	10	10	11	10	7	5	7	6	5	100	6.7	209	14.7
Meningococcal Disease, Invasive	2	6	4	2	1	0	1	2	0	1	2	0	21	1.4	32	2.3
Mumps	16	17	10	4	1	0	0	2	0	1	0	1	52	3.5	100	7.0
Ophthalmia neonatorum	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	2	0.1
Paralytic Shellfish Poisoning	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
Paratyphoid Fever	7	10	6	0	1	1	0	1	1	0	0	0	27	1.8	37	2.6
Pertussis (Whooping Cough)	47	25	18	5	2	7	1	1	1	0	0	2	109	7.3	519	36.5
Pneumococcal Disease, Invasive	156	106	79	40	47	32	17	22	24	55	33	45	656	44.1	1161	81.7
Q Fever	1	1	1	2	1	0	0	0	0	0	0	0	6	0.4	10	0.7
Rabies	0	0	0	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	0	0.0
Rubella, Congenital Syndrome <sup>#</sup>	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
Salmonellosis	177	155	129	50	59	119	220	181	136	127	82	66	1501	101.0	2762	194.3

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Shigellosis	35	41	11	6	6	11	14	9	8	7	14	8	170	11.4	308	21.7
Syphilis, Early Congenital	0	0	0	0	1	0	0	1	0	0	0	1	3	0.2	2	0.1
Syphilis, Infectious	242	203	193	110	116	159	172	197	215	201	217	154	2179	146.6	1703	119.8
Syphilis, Other	92	100	72	26	46	41	86	74	81	80	88	80	866	58.3	814	57.3
Tetanus	1	0	0	0	0	0	0	0	1	0	0	0	2	0.1	1	0.1
Trichinosis	0	0	0	1	0	0	0	0	0	0	0	0	1	0.1	7	0.5
Tuberculosis	59	55	61	46	48	56	56	68	67	64	43	48	671	45.1	664	46.7
Tularemia	0	1	0	0	0	0	0	0	0	0	0	0	1	0.1	0	0.0
Typhoid Fever	10	12	9	3	2	0	1	6	2	3	1	0	49	3.3	93	6.5
Verotoxin Producing <i>E. coli</i> Including HUS	8	10	9	3	5	20	23	22	14	10	5	3	132	8.9	176	12.4
West Nile Virus Illness	2	0	1	0	0	5	5	52	20	5	5	3	98	6.6	83	5.8
Yersiniosis	27	17	27	6	9	17	13	17	23	12	17	8	193	13.0	272	19.1

Ontario Cases: Ontario Ministry of Health, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2021/02/10].

Ontario Population: Population Projections [2018-2020] and Estimates [2015-2017], 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 <a href="Ontario Respiratory Pathogen Bulletin">Ontario Respiratory Pathogen Bulletin</a>.
- Information on CDI outbreaks in public hospitals is available in the <u>Infectious Disease Trends in</u> Ontario reports.

#### Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Monthly infectious diseases surveillance report: Diseases of Public Health Significance Cases for January to December 2020. Toronto, ON: Queen's Printer for Ontario; 2021.

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