

Weekly Epidemiologic Summary

COVID-19 in Ontario: Focus on December 13, 2020 to December 19, 2020

This report includes the most current information available from CCM and other case management systems (CCM plus) as of **December 22, 2020.**

Please visit the interactive <u>Ontario COVID-19 Data Tool</u> to explore recent COVID-19 data by public health unit, age group, sex, and trends over time.

A <u>daily summary</u> is available and provides an epidemiologic summary of recent COVID-19 activity in Ontario. This weekly report provides an epidemiologic summary of COVID-19 activity in Ontario over time.

Highlights

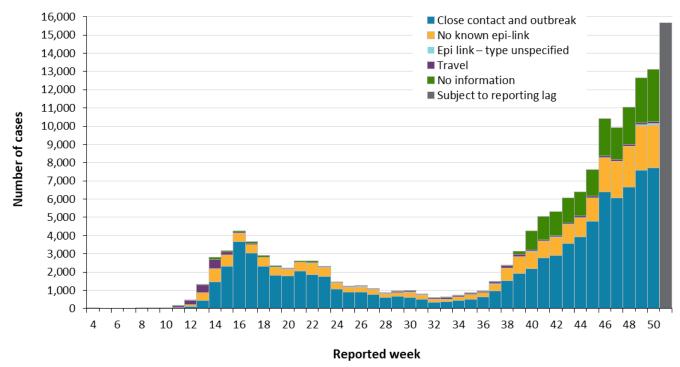
- There are a total of 157,804 confirmed cases of COVID-19 in Ontario with a public health unit reported date up to December 19, 2020.
- For the period with a public health unit reported date between December 13 and 19, 2020 (week 51):
 - A total of 15,677 cases were reported to public health compared to 13,096 cases the previous week (December 6 to 12).
 - There is a steadily increasing trend in the number of deaths occurring in recent weeks with over 100 deaths occurring in the past seven weeks and over 150 deaths occurring in the past two weeks.
 - Although both long-term care home and other workplace setting have a similar number of
 ongoing outbreaks (173 and 171, respectively), the number of cases associated with
 outbreaks in long-term care homes was more than 3 times that of cases associated with
 outbreaks in other workplace settings reported in the current week.

The term public health unit reported date in this document refers to the date local public health units were first notified of the case.

Data corrections or updates can result in case records being removed and or updated from past reports. Thus comparisons of case counts by public health unit reported date may not align with daily change in cases publicly reported by the province for the same time period, which reflects the difference in cumulative counts between one day and the next.

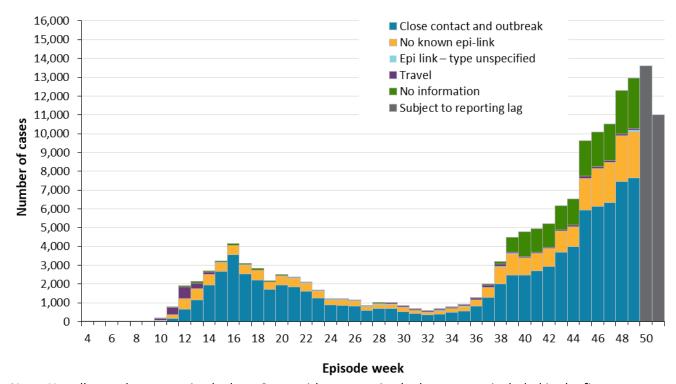
Cases Over Time

Figure 1. Confirmed cases of COVID-19 by likely source of acquisition and public health unit reported week: Ontario



Note: Include cases with reported dates ranging from week 4 (January 19 and 25, 2020) to week 51 (December 13 and 19, 2020). See <u>Table 1A</u> in Appendix A for a list of the weeks and corresponding start and end dates. The likely acquisition field was updated on December 16, 2020 to correct the classification of select cases into the category 'No information', which were previously reported as 'No known epi link'. This change mainly affects Toronto cases.

Figure 2. Confirmed cases of COVID-19 by likely source of acquisition and approximation of symptom onset week: Ontario



Note: Not all cases have an episode date. Cases without an episode date are not included in the figure. The definition for how episode date is defined is available in the technical notes. Include cases with episode dates ranging from week 4 (January 19 and 25, 2020) to week 51 (December 13 and 19, 2020). See <u>Table 1A</u> in Appendix A for a list of the weeks and corresponding start and end dates. The likely acquisition field was updated on December 16, 2020 to correct the classification of select cases into the category 'No information', which were previously reported as 'No known epi link'. This change mainly affects Toronto cases.

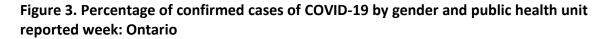
Case Characteristics

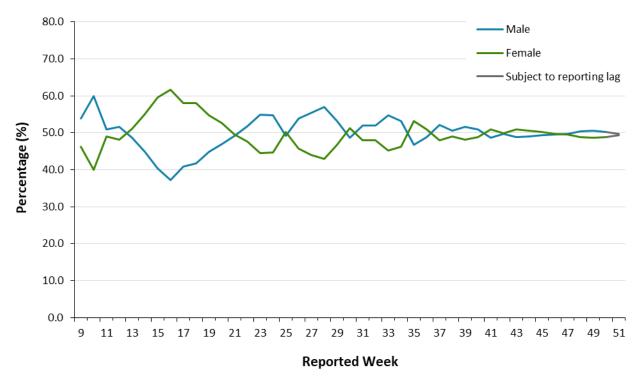
Table 1. Summary of confirmed cases of COVID-19 by public health unit reported date: Ontario

	Reported week 50 (December 6 to 12)	Reported week 51 (December 13 to 19)	Cumulative case count up to December 19	Cumulative rate per 100,000 population
Total number of cases	13,096	15,677	157,804	1,061.6
Gender: Male	6,584	7,799	77,467	1,058.4
Gender: Female	6,395	7,747	79,391	1,052.2
Ages: 19 and under	2,036	2,332	20,212	644.4
Ages: 20-39	4,788	5,717	57,736	1,389.1
Ages: 40-59	3,741	4,505	45,195	1,147.8
Ages: 60-79	1,804	2,177	22,626	765.7
Ages: 80 and over	722	934	12,006	1,767.5
Number resolved	N/A	N/A	138,804	N/A

Note: Not all cases have an age or gender reported.

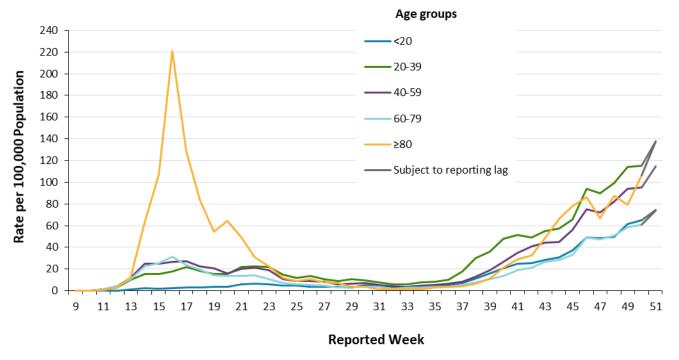
Interpret information for the most recent week with caution due to reporting lags.





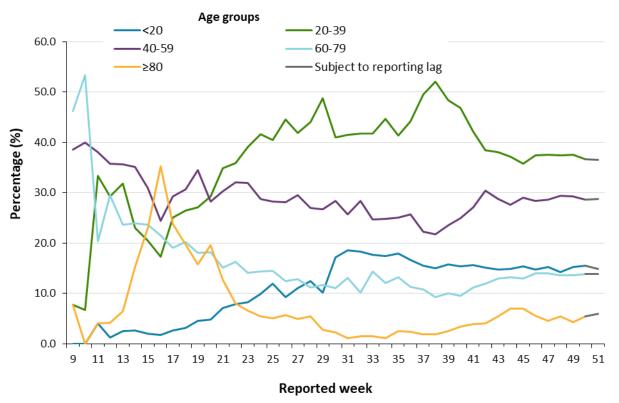
Note: Not all cases have a gender reported. The denominator for calculating weekly percentages includes all cases. Only weeks with more than 10 cases by public health unit reporting date are included (starting in week 9). Include cases with reported dates ranging from Week 9 (February 23 and 29, 2020) to week 51 (December 13 and 19, 2020). See <u>Table 1A</u> in Appendix A for a list of the weeks and corresponding start and end dates.

Figure 4a. Rate of confirmed cases of COVID-19 per 100,000 population by age group and public health unit reported week: Ontario



Note: Not all cases have an age reported. Only weeks with more than 10 cases by public health unit reporting date are included (starting in week 9). Include cases with reported dates ranging from week 9 (February 23 and 29, 2020) to week 51 (December 13 and 19, 2020). See <u>Table 1A</u> in Appendix A for a list of the weeks and corresponding start and end dates.

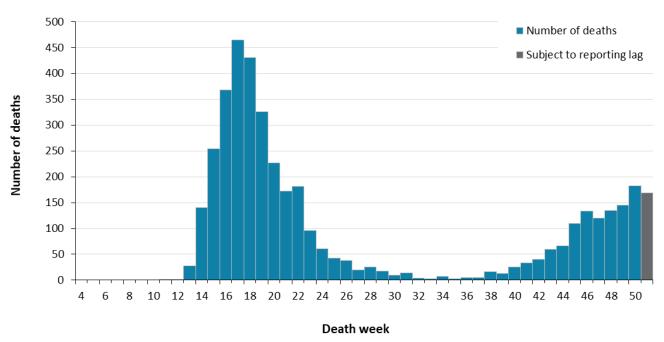
Figure 4b. Percentage of confirmed cases of COVID-19 by age group and public health unit reported week: Ontario



Note: Only weeks with more than 10 cases by public health unit reporting date are included (starting in week 9). Include cases with reported dates ranging from week 9 (February 23 and 29, 2020) to week 51 (December 13 and 19, 2020). See <u>Table 1A</u> in Appendix A for a list of the weeks and corresponding start and end dates.

Deaths

Figure 5. Deaths among confirmed cases of COVID-19 by week of death: Ontario



Note: Cases without a death date are not included in the figure. Include cases with date of death ranging from week 4 (January 19 and 25, 2020) to week 51 (December 13 and 19, 2020). See <u>Table 1A</u> in Appendix A for a list of the weeks and corresponding start and end dates.

Table 2. Summary of deaths among confirmed cases of COVID-19 by public health unit reported week: Ontario

Deaths	Reported week 50 (December 6 to 12)	Reported week 51 (December 13 to 19)	Cumulative case count up to December 19	Cumulative rate per 100,000 population
Number of deaths	127	50	4,224	28.4
Gender: Male	63	25	1,981	27.1
Gender: Female	63	25	2,210	29.3
Ages: 19 and under	0	0	1	0.0
Ages: 20-39	2	1	17	0.4
Ages: 40-59	6	5	170	4.3
Ages: 60-79	34	15	1,115	37.7
Ages: 80 and over	85	29	2,921	430.0

Note: Age and gender may not be reported for all cases. Reported week is the week the case was reported to the public health unit. This is different than the "week of death" presented in Figure 5 which reflects the week the case was reported to have a 'Fatal' outcome.

Interpret information for the most recent week with caution due to reporting lags.

Exposure

Table 3. Confirmed cases of COVID-19 by likely source of acquisition and public health unit reported week: Ontario

	Reported week 50 (December 6 to 12)	Percentage	Reported week 51 (December 13 to 19)	Percentage	Cumulative case count up to December 19	Cumulative percentage
Travel	96	0.7%	65	0.4%	3,842	2.4%
Outbreak-associated or close contact of a confirmed case	7,709	58.9%	7,884	50.3%	97,836	62.0%
Epidemiological link – type unspecified	74	0.6%	39	0.2%	351	0.2%
No known epidemiological link	2,355	18.0%	2,603	16.6%	30,436	19.3%
Information missing or unknown	2,862	21.9%	5,086	32.4%	25,339	16.1%
Total	13,096		15,677		157,804	

Note: Information for how cases are grouped within each category is available in the technical notes. Interpret information for the most recent week with caution due to reporting lags. The likely acquisition field was updated on December 16, 2020 to correct the classification of select cases into the category 'No information', which were previously reported as 'No known epi link'. This change mainly affects Toronto cases.

Sub-populations of interest

Table 4. Summary of cases of COVID-19 among health care workers: Ontario

Health care workers	Reported week 50 (December 6 to 12)	Reported week 51 (December 13 to 19)	Cumulative case count up to December 19
Number of cases	691	714	11,980
Ever hospitalized	8	6	296
Ever in ICU	1	1	66

Note: Interpret information for the most recent week with caution due to reporting lags.

Data Source: CCM plus

Table 5. Summary of cases of COVID-19 associated with long-term care home outbreaks: Ontario

Long-term care home associated cases	Reported week 50 (December 6 to 12)	Reported week 51 (December 13 to 19)	Cumulative case count up to December 19
Residents	424	666	10,052
Deaths among residents	55	23	2,608
Health care workers	164	180	3,957
Deaths among health care workers	0	0	8

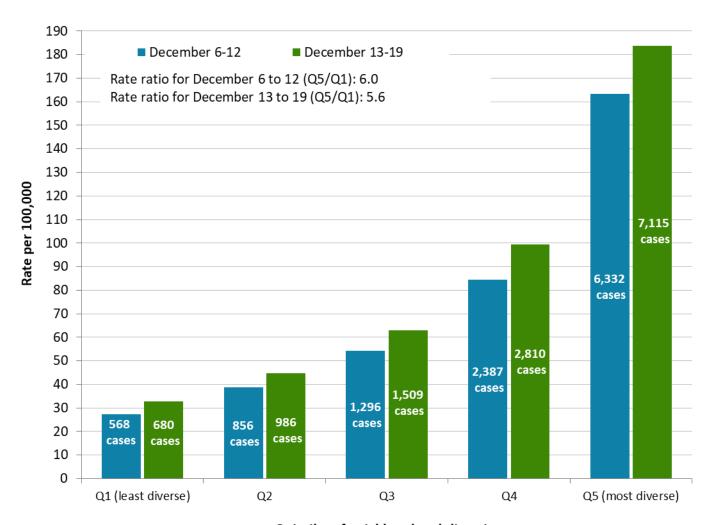
Note: Information on how long-term care home residents and health care workers are identified is available in the technical notes. Interpret information for the most recent week with caution due to reporting lags.

Table 6: Summary of cases of COVID-19 among school aged children by age group: Ontario

	Reported week 50 (December 6 to 12)	Reported week 51 (December 13 to 19)	Cumulative case count from August 30 up to December 19
Ages: 4-8	395	446	3,218
Ages: 9-13	576	590	4,457
Ages: 14-17	481	599	4,326

Note: Interpret information for the most recent week with caution due to reporting lags. Includes all confirmed cases of COVID-19 for specified ages, regardless of school attendance. Cumulative counts include cases of COVID-19 reported starting week 36 (August 30 to September 5, 2020).

Figure 6. Rate and number of confirmed cases of COVID-19 for each quintile of neighbourhood diversity: Ontario, week 50 (December 6 to 12, 2020) and week 51 (December 13 to 19, 2020).

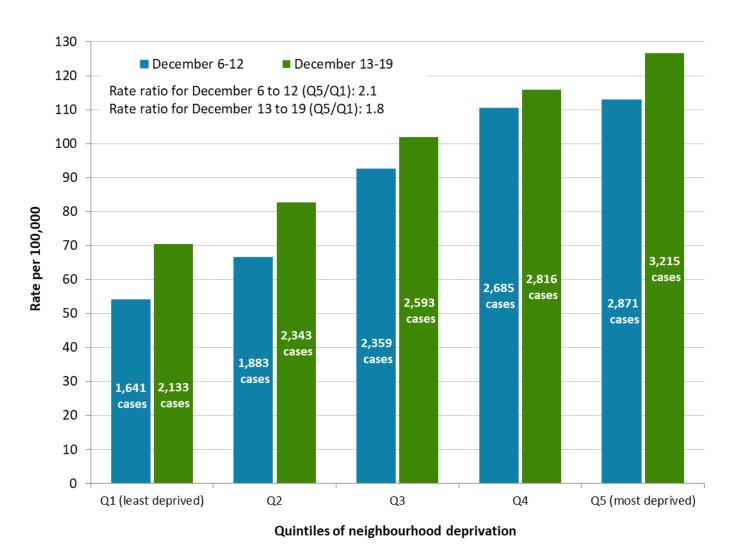


Quintiles of neighbourhood diversity

Note: Neighbourhood diversity is measured using the ethnic concentration dimension of the Ontario Marginalization Index. The ethnic concentration dimension is based on the proportion of non-white and non-Indigenous residents and/or the proportion of immigrants that arrived in Canada within the past five years.

Data Source: CCM plus, Ontario Marginalization Index

Figure 7. Rate and number of confirmed cases of COVID-19 for each quintile of neighbourhood deprivation: Ontario, week 50 (December 6 to 12, 2020) and week 51 (December 13 to 19, 2020).

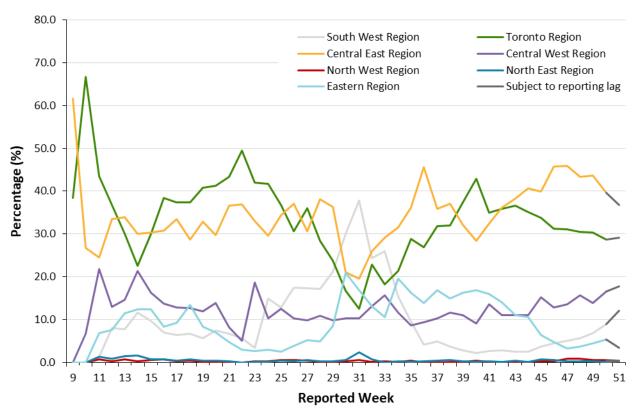


Note: Neighbourhood deprivation is measured using the material deprivation dimension of the Ontario Marginalization Index. The material deprivation dimension uses Canadian census data on income, quality of housing, educational attainment and family structure characteristics to assess the ability of individuals and communities to access and attain basic material needs.

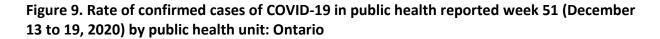
Data Source: CCM plus, Ontario Marginalization Index

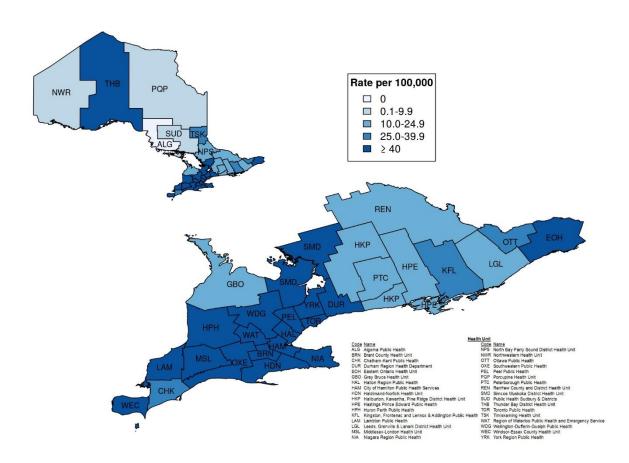
Geography

Figure 8. Percentage of COVID-19 cases by geographic region and public health unit reported week: Ontario



Note: Only weeks with more than 10 cases by public health unit reporting date are included (starting in week 9). Include cases with reported dates ranging from week 9 (February 23 and 29, 2020) to week 51 (December 13 and 19, 2020). Table 2A in <u>Appendix A</u> has a listing of public health units by region.





Note: The provincial rate of confirmed cases of COVID-19 reported in week 51 was 105.5 cases per 100,000 population.

Outbreaks

Table 7. Number of public health unit declared COVID-19 outbreaks by setting type: Ontario

Setting Type	Reported week 51 (December 13 to 19)	Number of ongoing outbreaks	Cumulative number of outbreaks reported to December 19
Congregate Care	101	326	1,499
Long-term care homes	52	173	844
Retirement homes	33	101	437
Hospitals	16	52	218
Congregate Living	21	79	418
Correctional facility	2	8	16
Shelter	2	8	78
Group Home/supportive Housing	14	48	269
Short-term accommodations	0	0	7
Congregate other	3	15	48
Education	50	193	667
Child care	7	49	223
School – Elementary*	29	97	313
School – Elementary/secondary*	1	3	21
School – Secondary*	12	40	98
School – Post-secondary*	1	4	12
Other settings	105	331	1,244
Bar/restaurant/nightclub	4	17	115
Medical/health services	4	10	52

Setting Type	Reported week 51 (December 13 to 19)	Number of ongoing outbreaks	Cumulative number of outbreaks reported to December 19
Personal service settings	0	2	11
Recreational fitness	2	11	47
Retail	11	38	126
Other recreation	4	21	67
Workplace - Farm	3	10	49
Workplace - Food processing	11	32	109
Other types of workplaces	61	171	657
Other	2	9	3
Unknown	3	10	8
Total number of outbreaks	277	929	3,828

Note: Reported week is based on the outbreak reported date, and if unavailable, the date the public health unit created the outbreak. Ongoing outbreaks includes all outbreaks that are 'Open' in CCM plus without a 'Declared Over Date' recorded or where the outbreak start date (determined by the onset date of first case, or if missing the reported date, or if missing the created date) is more than 5 months from the current date, even for outbreaks where the outbreak status value selected in CCM/iPHIS is 'OPEN'. Interpret information for the most recent week with caution due to reporting lags. Outbreak categories are mutually exclusive. Retail includes settings such as grocery stores, pharmacies, malls, etc. Other types of workplaces include settings such as offices as well as warehousing, shipping and distribution, construction, etc. Other recreation includes settings such as entertainment and event venues, gatherings (e.g., weddings), religious facilities, etc. Medical/health services refer to settings such as doctor's office or clinic, wellness clinics, etc., and excludes categories listed in the congregate care setting group.

^{*}Cumulative counts include COVID-19 school outbreaks reported starting week 36 (August 30 to September 5, 2020). Ongoing re-classification of settings for reported outbreaks can result in outbreak counts that may differ from previously reported counts. **Data Source:** CCM plus

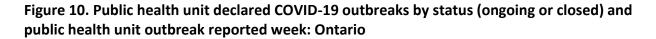
Table 8. Confirmed cases of COVID-19 associated with COVID-19 outbreaks by setting type and public health unit reported week: Ontario

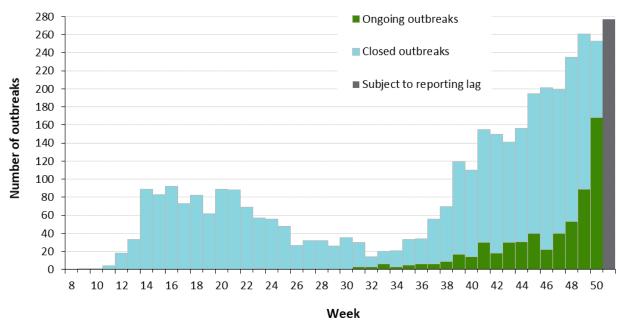
Cases associated with the outbreak setting type	Reported week 50 (December 6 to 12)	Reported week 51 (December 13 to 19)	Cumulative number of cases
Congregate Care	1,072	1,326	20,658
Long-term care homes	599	817	15,075
Retirement homes	263	335	3,433
Hospitals	210	174	2,150
Congregate Living	120	151	2,461
Correctional facility	16	70	214
Shelter	1	3	655
Group Home/supportive Housing	57	52	1,214
Short-term accommodations	0	0	14
Congregate other	46	26	364
Education	232	147	2,176
Child care	29	16	421
School – Elementary*	106	88	1,159
School – Elementary/secondary*	44	2	161
School – Secondary*	49	37	400
School – Post-secondary*	4	4	35
Other settings	675	583	8,158
Bar/restaurant/nightclub	18	12	435
Medical/health services	7	13	177
Personal service settings	1	0	36
Recreational fitness	22	10	395

Cases associated with the outbreak setting type	Reported week 50 (December 6 to 12)	Reported week 51 (December 13 to 19)	Cumulative number of cases
Retail	88	75	407
Other recreation	54	13	568
Workplace - Farm	34	59	1,607
Workplace - Food processing	99	118	1,063
Other types of workplaces	341	254	3,338
Other	2	19	42
Unknown	9	10	90
Total number of cases	2,099	2,207	33,453

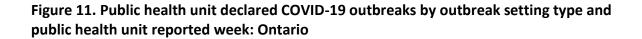
Note: Interpret case counts for the most recent week with caution due to reporting lags. Outbreak categories are mutually exclusive. Retail includes settings such as grocery stores, pharmacies, malls, etc. Other types of workplaces include settings such as offices as well as warehousing, shipping and distribution, construction, etc. Other recreation includes settings such as entertainment and event venues, gatherings (e.g., weddings), religious facilities, etc. Medical/health services refer to settings such as doctor's office or clinic, wellness clinics, etc., and excludes categories listed in the congregate care setting group.

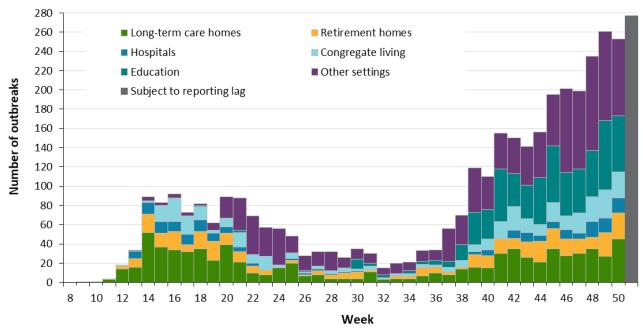
^{*}Cumulative counts include cases of COVID-19 associated with school outbreaks reported starting week 36 (August 30 to September 5, 2020). Ongoing re-classification of settings for reported outbreaks can result in case counts that may differ from previously reported counts.





Note: If public health unit outbreak reported date is unavailable, the date the public health unit created the outbreak is used. Ongoing outbreaks includes all outbreaks that are 'Open' in CCM plus without a 'Declared Over Date' recorded. Closed outbreaks are 'Closed' or have a 'Declared Over Date' recorded in CCM plus or where the outbreak start date (determined by the onset date of first case, or if missing the reported date, or if missing the created date) is more than 5 months from the current date, even for outbreaks where the outbreak status value selected in CCM/iPHIS is 'OPEN'. Week 8 refers to February 16 and 22, 2020 and week 51 refers to December 13 and 19, 2020.





Note: If public health unit outbreak reported date is unavailable, the date the public health unit created the outbreak is used. Week 8 refers to February 16 and 22, 2020 and week 51 refers to December 13 and 19, 2020. Congregate living include group homes, shelters, correctional facilities, etc. Other settings include outbreaks within workplaces, childcare, schools, restaurants, recreation etc.

Technical Notes

Data Sources

- The data for this report were based on:
 - Information extracted from the Ontario Ministry of Health (Ministry) integrated Public Health Information System (iPHIS) database for Toronto Public Health as of December 22, 2020 at 1 p.m.
 - Information successfully uploaded to the Ministry from local systems: Toronto Public Health (Coronavirus Rapid Entry System) CORES as of **December 22, 2020 at 2 p.m.**
 - Information successfully extracted from the Public Health Case and Contact Management Solution (CCM) for all other PHUS by PHO as of **December 22, 2020 at 1 p.m.**
- CCM plus (which includes CCM, iPHIS, and CORES) are dynamic disease reporting systems, which allow ongoing updates to data previously entered. As a result, data extracted from CCM and the local systems represent a snapshot at the time of extraction and may differ from previous or subsequent reports.
- Ontario population projection data for 2020 were sourced from Ministry, IntelliHEALTH Ontario.
 Data were extracted on November 26, 2019.
- Statistics Canada Postal Code Conversion File (PCCF), reference date of May 2020.
- The health equity (neighbourhood-level diversity and deprivation) analyses use data from the 2016 Ontario Marginalization Index and population counts from the 2016 Canada Census:
 - Matheson FI; van Ingen T. 2016 Ontario marginalization index. Toronto, ON: Providence St. Joseph's and St. Michael's Healthcare; 2018. Joint publication with Public Health Ontario.
 - Statistics Canada. Census of Population, 2016: Profile for Canada, Provinces, Territories, Census Divisions, Census Subdivisions and Dissemination Areas. Retrieved from:
 https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/download-telecharger/comp/GetFile.cfm?Lang=E&FILETYPE=CSV&GEONO=044 ONTARIO.

Data Caveats and Methods: Case Data

- The data only represent cases reported to public health units and recorded in CCM plus. As a result, all counts are subject to varying degrees of underreporting due to a variety of factors, such as disease awareness and medical care seeking behaviours, which may depend on severity of illness, clinical practice, changes in laboratory testing, and reporting behaviours.
- Observed trends over time should be interpreted with caution for the most recent period due to reporting and/or data entry lags.
- All cases meeting the confirmed case classification as listed in the MOH <u>COVID-19 case definition</u> are included except where noted (e.g., analyses that describe the relationship between COVID-19 and marginalization). This includes persons with a positive detection of serum/plasma

- immunoglobulin G (IgG) antibodies to SARS-CoV-2, which was added to the confirmed case definition on **August 6, 2020**.
- COVID-19 cases from CCM plus for which the Classification and/or Disposition was reported as ENTERED IN ERROR, DOES NOT MEET DEFINITION, IGNORE, DUPLICATE, or any variation on these values have been excluded. The provincial case count for COVID-19 includes cases that are counted once across all systems from which the case data are obtained. Duplicate records may exist if these records were not identified and resolved prior to data upload to the Ministry.
- Reported date is the date the case was reported to the public health unit. This is different than
 the daily change in cases released by the Province for the same time period, which reflects the
 difference in cumulative counts reported to the Province between one day and the next.
- Reported weeks were created to align with the Public Health Agency of Canada (PHAC) influenza surveillance weeks.
- Case episode date is based on an estimate of the best date of disease onset. This date is calculated based on either the date of symptom onset, specimen collection/test date, or the date reported to the public health unit.
- Cases with unknown or missing ages were excluded from age-specific analyses.
- Health care worker includes cases that reported 'Yes' to any of the following occupations: health care worker, doctor, nurse, dentist, dental hygienist, midwife, other medical technicians, personal support worker, respiratory therapist, first responder.
- Resolved cases are determined only for COVID-19 cases that have not died. Cases that have died are considered fatal and not resolved. The following cases are considered resolved:
 - Cases that are reported as 'recovered' in CCM based on local public health unit assessment
 - Cases that are not hospitalized and are 14 days past their symptom onset date or specimen collection date (where symptom onset date is not known)
 - Cases that are currently hospitalized (no hospitalization end date entered) and have a case status of 'closed' indicating that public health follow up is complete and are 14 days past their symptom onset date or specimen collection date
- Data on hospital admissions, ICU admissions and deaths are likely under-reported as these events may occur after the completion of public health follow up of cases. Cases that were admitted to hospital or died after follow-up was completed may not be captured in CCM.
- Deaths are determined by using the outcome field in CCM plus. Any case marked 'Fatal' is included in the deaths data. The CCM field Type of Death is not used to further categorize the data.
 - The date of death is determined using the outcome date field for cases marked as 'Fatal' in the outcome field.

- Hospitalization includes all cases for which a hospital admission date was reported at the time of
 data extraction. It includes cases that have been discharged from hospital as well as cases that
 are currently hospitalized. Emergency room visits are not included in the number of reported
 hospitalizations.
- ICU admission includes all cases for which an ICU admission date was reported at the time of
 data extraction. It is a subset of the count of hospitalized cases. It includes cases that have been
 treated or that are currently being treated in an ICU.
- Likely source of acquisition is determined by examining the epidemiologic link and epidemiologic link status fields in CCM and local systems. If no epidemiologic link is identified in those fields the risk factor fields are examined to determine whether a case travelled, was associated with a confirmed outbreak, was a contact of a case, had an Epidemiological link with type unspecified, had no known epidemiological link (sporadic community transmission) or was reported to have an unknown source/no information was reported. Some cases may have no information reported if the case is untraceable, was lost to follow-up or referred to FNIHB. Cases with multiple risk factors were assigned to a single likely acquisition source group which was determined hierarchically in the following order:
 - For cases with an episode date on or after April 1, 2020: Outbreak-associated > close contact of a confirmed case > travel > no known epidemiological link > information missing or unknown
 - For cases with an episode date before April 1, 2020: Travel > outbreak-associated > close contact of a confirmed case > no known epidemiological link > information missing or unknown
- 'Long-term care home residents' includes cases that reported 'Yes' to the risk factor 'Resident of a long-term care home'; or 'Yes' to the risk factor 'Resident of nursing home or other chronic care facility' and reported to be part of an outbreak assigned as a long-term care home (via the Outbreak number or case comments field); or were reported to be part of an outbreak assigned as a long-term care home (via the outbreak number or case comments field) with an age over 70 years and did not report 'No' to the risk factors 'Resident of long-term care home' or 'Resident of nursing home or other chronic care facility'. 'Long-term care home residents' excludes cases that reported 'Yes' to any of the health care worker occupational risk factors.
- 'Health care workers associated with long-term care outbreaks' includes 'health care workers'
 reported to be part of an outbreak assigned as a long-term care home (via the outbreak number
 or case comments field). Excludes cases that reported 'Yes' to risk factors 'Resident of long-term
 care home' or 'Resident of nursing home or other chronic care facility' and 'Yes' to the
 calculated 'health care workers' variable.
- 'Cases associated with school outbreaks' includes cases that are linked to an outbreak, by school classification type (Elementary, Elementary/Secondary, Secondary, Post-Secondary), that met the definition of a school outbreak.
- School classification types are defined by the Ministry of Education.

- Elementary/Secondary schools include public or private schools educating children in a combination of elementary and secondary grades (e.g., Kindergarten to Grade 8, Grades 9 to 12, and Kindergarten to Grade 12).
- Orientation of case counts by geography is based on the diagnosing health unit (DHU). DHU
 refers to the case's public health unit of residence at the time of illness onset and not
 necessarily the location of exposure. Cases for which the DHU was reported as MOH (to signify a
 case that is not a resident of Ontario) have been excluded from the analyses.
 - GTA health units include: Durham Region Health Department, Peel Public Health, Toronto Public Health and York Region Public Health
- Ongoing outbreaks are those that are reported in CCM plus as 'Open' and without a 'Declared
 Over Date' recorded. Closed outbreaks are 'Closed' or have a 'Declared Over Date' recorded in
 CCM plus or where the outbreak start date (determined by the onset date of first case, or if
 missing the reported date, or if missing the created date) is more than 5 months from the
 current date, even for outbreaks where the outbreak status value selected in CCM/iPHIS is
 'OPEN'.
- Outbreaks are declared by the local medical officer of health or their designate in accordance to the Health Protection and Promotion Act and criteria outlined in Ministry guidance documents.
- School outbreaks include outbreaks declared on or after week 36 (August 30 to September 5, 2020).

Data Caveats and Methods: ON-Marg

- ON-Marg is a data tool that combines a wide range of demographic indicators into multiple
 distinct dimensions of marginalization. It is an area-based index which assigns a measure of
 marginalization based on neighbourhood versus individual characteristics. As such, the broader
 demographic trends of an area may not reflect all residents of a neighbourhood owing to the
 inherent heterogeneity of demographic characteristics which can vary substantially especially
 across large rural geographies. For more information, please visit PHO's ON-Marg website.
- Neighbourhood diversity is defined using the ethnic concentration dimension of ON-Marg,
 which measures populations who may experience marginalization related to racism and
 discrimination. It is based on the proportion of non-white and non-Indigenous residents (visible
 minority) and/or the proportion of immigrants that arrived in Canada within the past five years.
 'Visible minority' is a term used by Statistics Canada that, although is considered to be outdated,
 is used here to be consistent with the Canadian census.
- Neighbourhood deprivation is defined using the material deprivation dimension of ON-Marg, which is closely connected to poverty. It refers to the inability of individuals and communities to access and attain basic material needs. The indicators included in this dimension measure income, quality of housing, educational attainment and family structure characteristics.
- "Neighbourhoods" are considered to be Statistic Canada dissemination areas (DA). The Single
 Link Indicator Postal Code Conversion File (PCCF) was used to match individuals to a DA based
 on their postal code, which were subsequently assigned to a quintile of marginalization that
 contained 20% of Ontario neighbourhoods. The quintiles for the ethnic concentration and the

material deprivation dimensions are ordered from quintiles 1 to 5, with quintile 1 having the lowest level of marginalization (i.e., least diverse or least deprived) and quintile 5 having the highest level of marginalization (i.e., most diverse or most deprived).

- The following were not included in analyses that summarize the impact of COVID-19 among Ontarians who may experience marginalization:
 - People who have tested positive for COVID-19 that reside in institutional and congregate settings are not included in the census data from which the marginalization indicators (ethnic concentration and material deprivation) are derived. Although these cases represent a large number of cases overall and deaths, their exclusion ensures appropriate comparisons since institutional and congregate setting residents are excluded from ON-Marg.
 - People who have tested positive for COVID-19 that reside in census dissemination areas where data has been suppressed, and cases that have missing or invalid postal codes could not be assigned to a quintile of marginalization.
 - Due to data suppression for some census indicators on Indian Reserves in Ontario, residents of Indian Reserves could not be included in ON-Marg and therefore people who have tested positive for COVID-19 and are living on Indian Reserves could not be assigned to a quintile of marginalization. While Indigenous individuals living off reserves are included in this analysis, Indigeneity data is not currently collected or captured in dimensions of ON-Marg.

Appendix A

Table 1A. Confirmed cases of COVID-19 by public health unit reported week: Ontario

Reported Week	Start date	End date	Number of cases	Cumulative count
2	January 5, 2020	January 11, 2020	0	0
3	January 12, 2020	January 18, 2020	0	0
4	January 19, 2020	January 25, 2020	3	3
5	January 26, 2020	February 1, 2020	0	3
6	February 2, 2020	February 8, 2020	0	3
7	February 9, 2020	February 15, 2020	0	3
8	February 16, 2020	February 22, 2020	1	4
9	February 23, 2020	February 29, 2020	13	17
10	March 1, 2020	March 7, 2020	15	32
11	March 8, 2020	March 14, 2020	147	179
12	March 15, 2020	March 21, 2020	448	627
13	March 22, 2020	March 28, 2020	1,326	1,953
14	March 29, 2020	April 4, 2020	2,800	4,753
15	April 5, 2020	April 11, 2020	3,169	7,922
16	April 12, 2020	April 18, 2020	4,273	12,195
17	April 19, 2020	April 25, 2020	3,653	15,848
18	April 26, 2020	May 2, 2020	2,906	18,754
19	May 3, 2020	May 9, 2020	2,345	21,099
20	May 10, 2020	May 16, 2020	2,234	23,333
21	May 17, 2020	May 23, 2020	2,613	25,946
22	May 24, 2020	May 30, 2020	2,615	28,561

Reported Week	Start date	End date	Number of cases	Cumulative count
23	May 31, 2020	June 6, 2020	2,306	30,867
24	June 7, 2020	June 13, 2020	1,469	32,336
25	June 14, 2020	June 20, 2020	1,231	33,567
26	June 21, 2020	June 27, 2020	1,253	34,820
27	June 28, 2020	July 4, 2020	1,085	35,905
28	July 5, 2020	July 11, 2020	865	36,770
29	July 12, 2020	July 18, 2020	932	37,702
30	July 19, 2020	July 25, 2020	995	38,697
31	July 26, 2020	August 1, 2020	804	39,501
32	August 2, 2020	August 8, 2020	597	40,098
33	August 9, 2020	August 15, 2020	611	40,709
34	August 16, 2020	August 22, 2020	729	41,438
35	August 23, 2020	August 29, 2020	854	42,292
36	August 30, 2020	September 5, 2020	976	43,268
37	September 6, 2020	September 12, 2020	1,506	44,774
38	September 13, 2020	September 19, 2020	2,393	47,167
39	September 20, 2020	September 26, 2020	3,134	50,301
40	September 27, 2020	October 3, 2020	4,243	54,544
41	October 4, 2020	October 10, 2020	5,055	59,599
42	October 11, 2020	October 17, 2020	5,304	64,903
43	October 18, 2020	October 24, 2020	6,059	70,962
44	October 25, 2020	October 31, 2020	6,403	77,365
45	November 1, 2020	November 7, 2020	7,625	84,990

Reported Week	Start date	End date	Number of cases	Cumulative count
46	November 8, 2020	November 14, 2020	10,427	95,417
47	November 15, 2020	November 21, 2020	9,926	105,343
48	November 22, 2020	November 28, 2020	11,026	116,369
49	November 29, 2020	December 5, 2020	12,662	129,031
50	December 6, 2020	December 12, 2020	13,096	142,127
51	December 13, 2020	December 19, 2020	15,677	157,804

Table 2A. Confirmed cases of COVID-19 by public health unit and region: Ontario

Public Health Unit Name	Cases reported week 50	Rate per 100,000 population Reported week 50	Cases reported week 51	Rate per 100,000 population Reported week 51
Northwestern Health Unit	6	6.8	5	5.7
Thunder Bay District Health Unit	62	41.3	65	43.3
TOTAL NORTH WEST	68	28.6	70	29.5
Algoma Public Health	1	0.9	0	0.0
North Bay Parry Sound District Health Unit	6	4.6	16	12.3
Porcupine Health Unit	1	1.2	4	4.8
Public Health Sudbury & Districts	10	5.0	8	4.0
Timiskaming Health Unit	7	21.4	11	33.7
TOTAL NORTH EAST	25	4.5	39	7.0
Ottawa Public Health	319	30.2	291	27.6
Eastern Ontario Health Unit	137	65.6	92	44.1
Hastings Prince Edward Public Health	48	28.5	25	14.8
Kingston, Frontenac and Lennox & Addington Public Health	87	40.9	76	35.7
Leeds, Grenville & Lanark District Health Unit	72	41.6	36	20.8
Renfrew County and District Health Unit	45	41.4	17	15.6
TOTAL EASTERN	708	36.8	537	27.9

Public Health Unit Name	Cases reported week 50	Rate per 100,000 population Reported week 50	Cases reported week 51	Rate per 100,000 population Reported week 51
Durham Region Health Department	554	77.8	633	88.9
Haliburton, Kawartha, Pine Ridge District Health Unit	59	31.2	46	24.3
Peel Public Health	2,976	185.3	3,226	200.9
Peterborough Public Health	18	12.2	24	16.2
Simcoe Muskoka District Health Unit	322	53.7	359	59.9
York Region Public Health	1,260	102.8	1,480	120.7
TOTAL CENTRAL EAST	5,189	115.8	5,768	128.7
Toronto Public Health	3,766	120.7	4,580	146.8
TOTAL TORONTO	3,766	120.7	4,580	146.8
Chatham-Kent Public Health	24	22.6	33	31.0
Grey Bruce Health Unit	33	19.4	30	17.7
Huron Perth Public Health	67	47.9	72	51.5
Lambton Public Health	21	16.0	73	55.7
Middlesex-London Health Unit	265	52.2	387	76.3
Southwestern Public Health	120	56.7	165	78.0
Windsor-Essex County Health Unit	639	150.4	1,129	265.8
TOTAL SOUTH WEST	1,169	69.1	1,889	111.7
Brant County Health Unit	85	54.8	108	69.6
City of Hamilton Public Health Services	599	101.2	730	123.3

Public Health Unit Name	Cases reported week 50	Rate per 100,000 population Reported week 50	Cases reported week 51	Rate per 100,000 population Reported week 51
Haldimand-Norfolk Health Unit	53	46.5	68	59.6
Halton Region Public Health	425	68.6	520	84.0
Niagara Region Public Health	284	60.1	507	107.3
Region of Waterloo Public Health and Emergency Services	452	77.3	569	97.4
Wellington-Dufferin-Guelph Public Health	273	87.5	292	93.6
TOTAL CENTRAL WEST	2,171	76.2	2,794	98.1
TOTAL ONTARIO	13,096	88.1	15,677	105.5

Note: Interpret information for the most recent week with caution due to reporting lags.

Disclaimer

This document was developed by Public Health Ontario (PHO). PHO provides scientific and technical advice to Ontario's government, public health organizations and health care providers. PHO's work is guided by the current best available evidence at the time of publication.

The application and use of this document is the responsibility of the user. PHO assumes no liability resulting from any such application or use.

This document may be reproduced without permission for non-commercial purposes only and provided that appropriate credit is given to PHO. No changes and/or modifications may be made to this document without express written permission from PHO.

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Weekly epidemiologic summary: COVID-19 in Ontario – focus on December 13, 2020 to December 19, 2020. Toronto, ON: Queen's Printer for Ontario; 2020.

For Further Information

For more information, email cd@oahpp.ca.

Public Health Ontario

Public Health Ontario is an agency of the Government of Ontario dedicated to protecting and promoting the health of all Ontarians and reducing inequities in health. Public Health Ontario links public health practitioners, front-line health workers and researchers to the best scientific intelligence and knowledge from around the world.

For more information about PHO, visit publichealthontario.ca.

