#### COVID-19 Windsor and Essex County: March 20, 2020 to August 7, 2020

#### Purpose

 Providing an epidemiologic summary of COVID-19 activity in Windsor and Essex County (WEC) to date

#### Source

- Windsor-Essex County Health Unit (WECHU), Infectious Disease Prevention (IDP) databases, extracted by Windsor-Essex County Health Unit [2020/08/06].
- Ontario Ministry of Health, integrated Public Health Information System (iPHIS) database, extracted by Windsor-Essex County Health Unit [2020/08/06].
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). Epidemiologic Summary: COVID-19 in Ontario – January 15, 2020 to August 5, 2020). Toronto, ON: Queen's Printer for Ontario; 2020.
- Chung H, Fung K, Ishiguro L, Paterson M, et al. Characteristics of COVID-19 diagnostic test recipients, Applied Health Research Questions (AHRQ) # 2021 0950 080 000. Toronto: Institute for Clinical Evaluative Sciences; 2020.

#### Highlights

- At the time of reporting, there are 2,356 confirmed cases of COVID-19 in WEC between March 20<sup>th</sup> and August 6<sup>th</sup>.
- The case counts in the first week of August were very low compared to the previous month of July.
- The current percent positivity, as of August 1<sup>st</sup>, is 1.7% and is lower compared to last week (4.7%). This is displayed by the number of individuals and not tests, as one individual could have multiple tests.
  - O However, there is a reporting lag for the most recent week.
  - The percent positivity in WEC was higher compared to Ontario (0.4%) for the same time period.
- The 7-day moving average in the past week has decreased dramatically and is comparable to even if agri-farm cases were removed.
- Windsor and Essex County has the highest incidence rate in the province and is higher than the Ontario rate.
- Locally, Learnington has the highest COVID-19 incidence rate in Windsor-Essex followed by Kingsville and the City of Windsor.
- The distribution of cases per 1,000 residents show a higher rates of cases in parts of Kingsville and Leamington in the county.
  - o In Windsor, rates per 1,000 were higher in certain pockets across the city.
- Active cases per 1,000 residents is predominantly clustered in Kingsville and Leamington though Windsor has certain pockets as well.

- A higher proportion of individuals 20 to 39 years of age have COVID-19 in Learnington and Kingsville due to the agri-farm workers who are of the working age.
  - Tecumseh has a higher proportion of individuals 80 years or older with COVID-19
  - Amherstburg reported a higher proportion of children 0 to 19 years of age with COVID-19.
- In the last two weeks, 67% of the cases reported were among males and 33% were among females.
  - 54% of the cases during this time period were among adults 20 to 39 years of age.
  - During this same time period, 10% of the cases were among those 0 to 19 years of age.
- Overall, the majority of the cases are from Learnington (36%), followed by Windsor (32%) and Kingsville (24%)
  - In the past 30 days, however, 37% of the cases have been from Kingsville, 31% from Leamington, and 27% from Windsor
  - In the past 7 days, 43% of the cases have been from Leamington, 31% from Windsor, and 22% from Kingsville.
- The majority of cases identified are due to close contacts with individuals that were positive for COVID-19.
  - This is similarly found among the agri-farm worker population
  - Outside of the agri-farm workers, most cases are exposed to the virus through close contact with another confirmed case.
- Coughing (61%) was the most commonly reported symptom among cases with COVID-19 followed by headache (49%), fever (48%) and fatigue (41%).
- COVID-19 cases that are hospitalized and in the ICU have stabilized with a decrease observed in the last two days of the reporting period.
- Approximately 11% of cases are still in self-isolation while 85% of cases have resolved.
- The overall case fatality rate in WEC is 3.0%, lower than the province (7.0%).
- The day-over-day doubling time has been trending positively in Canada and in Ontario.
  - o In Windsor-Essex, the day-over-day doubling time has varied due to the number of agrifarm cases. But has recovered to the levels seen in Ontario and across Canada.
- The mean R<sub>0</sub> (effective) value is 0.35 and has decreased from last week.
  - However, for the past two months we have seen fluctuations with this number.



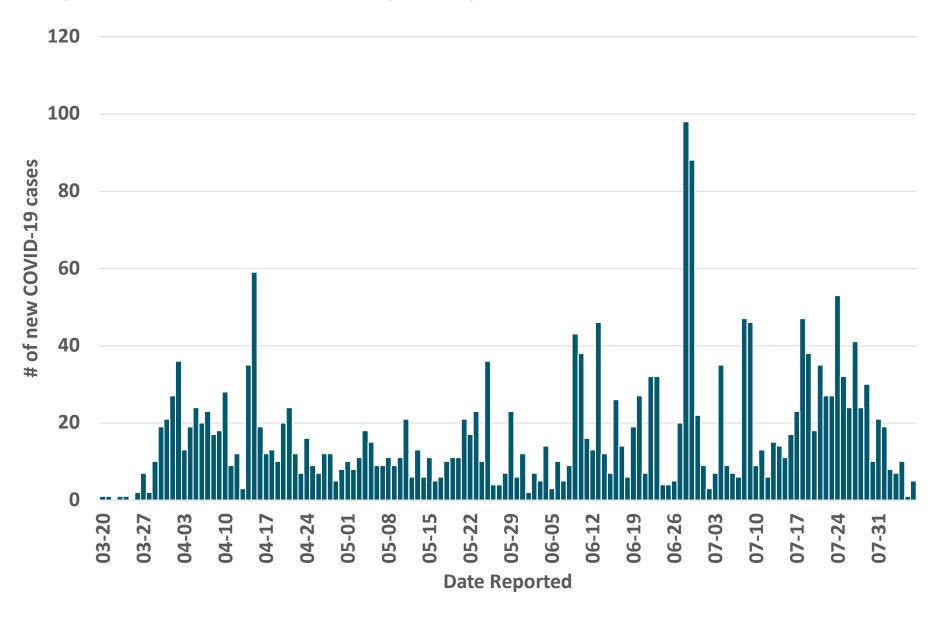
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### **COVID-19 Epidemiological Summary**

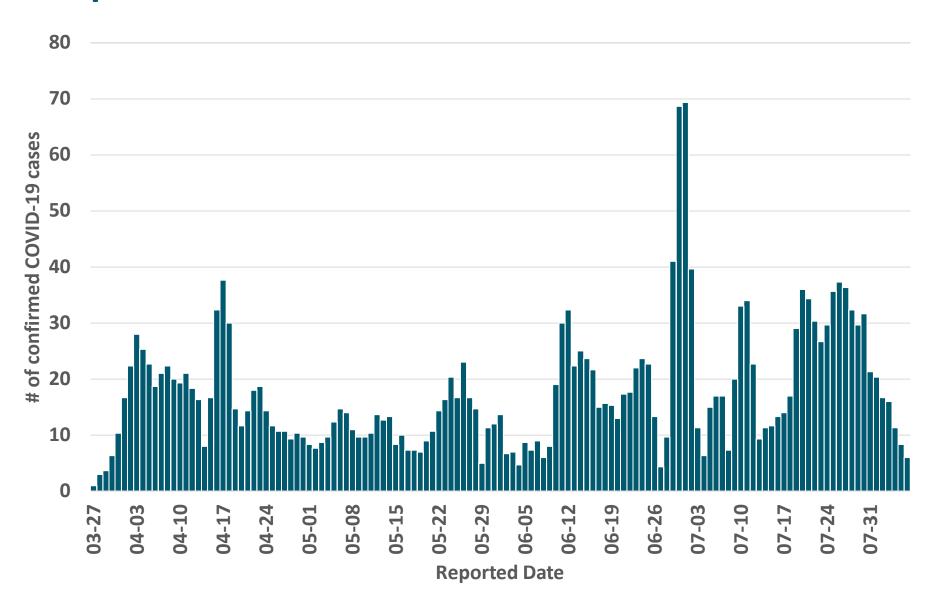
#### Content covered:

- Epidemic curves
- Syndromic surveillance
- Regional & provincial rates
- Percent positivity
- Positive test turnaround time
- Case investigation time
- Age & sex distribution
- Geographical rates & distribution of cases
- Exposure history
- Healthcare worker status
- Underlying conditions
- Top symptoms
- Hospitalizations & ICU
- Healthcare system capacity
- Current outcomes
- Breakdown by deaths
- Doubling time
- Mean R0 (effective)

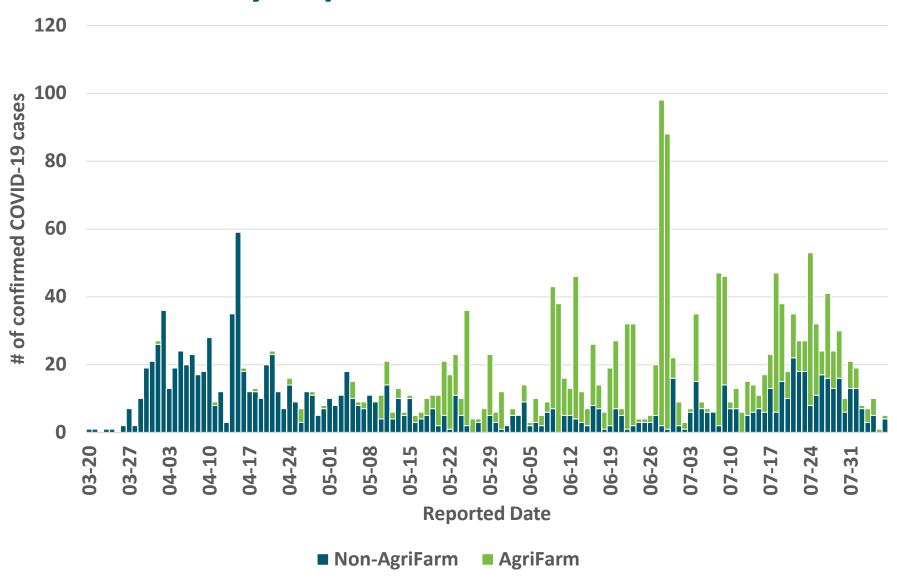
### **Epidemic Curve by Reported Date**



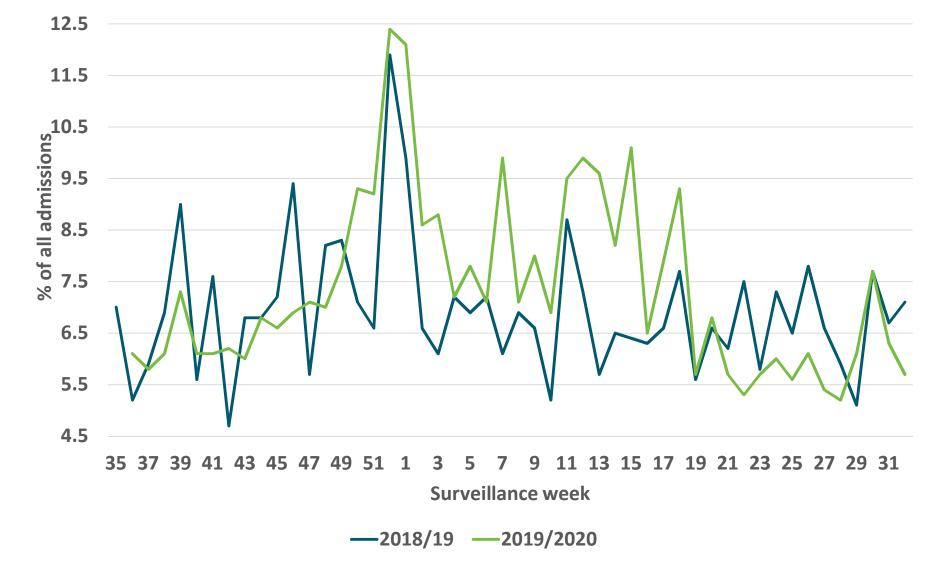
# **Epidemic Curve by 3-Day Moving Average by Reported Date**



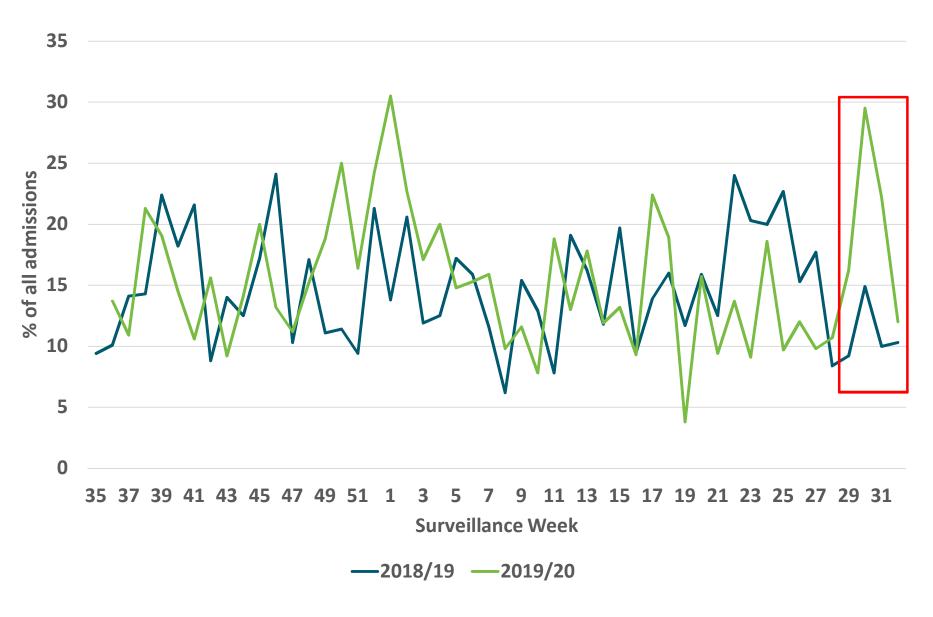
# **Epidemic Curve by Agri-Farms Versus Non-Agri- Farm Cases by Reported Date**



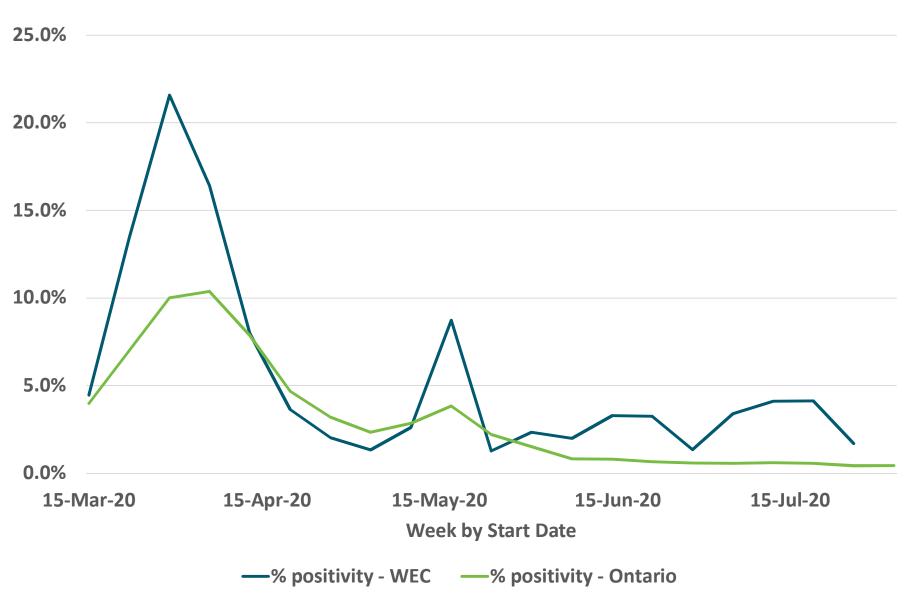
#### **Emergency Department Visits By Syndromes**



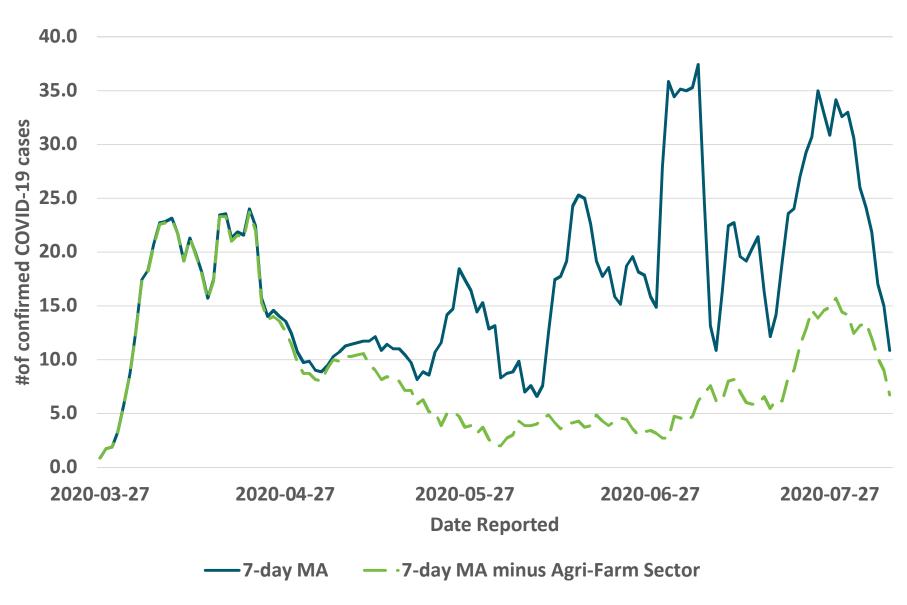
### **Emergency Department Visits by Syndromes For Erie Shores HealthCare**



### Percent Positivity by Week Among Unique Individuals



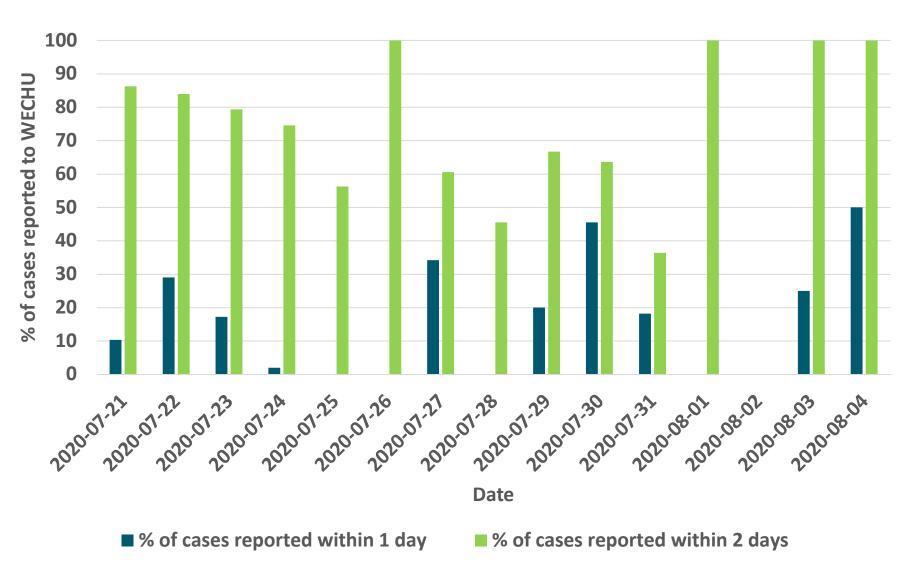
### 7-Day Moving Average by Reported Date



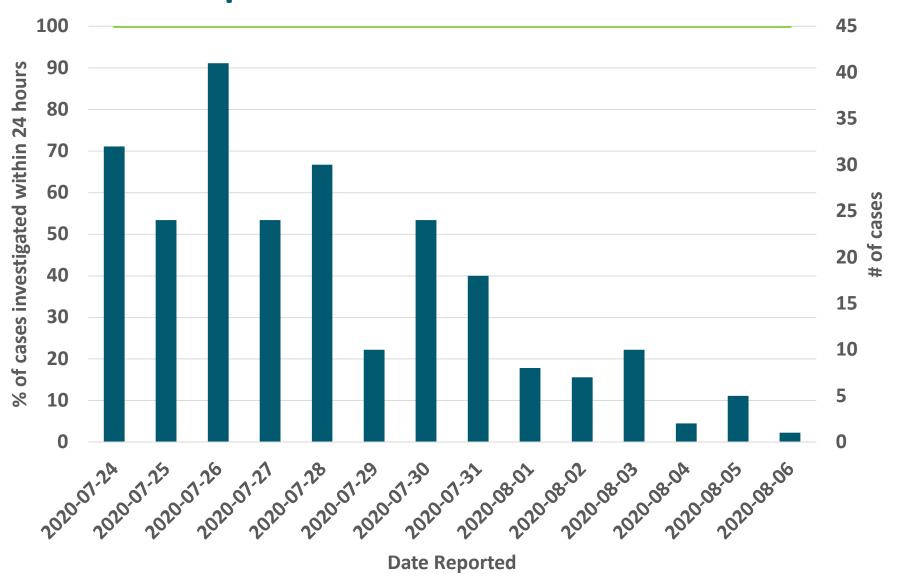
### Windsor-Essex Rate by Reported Week



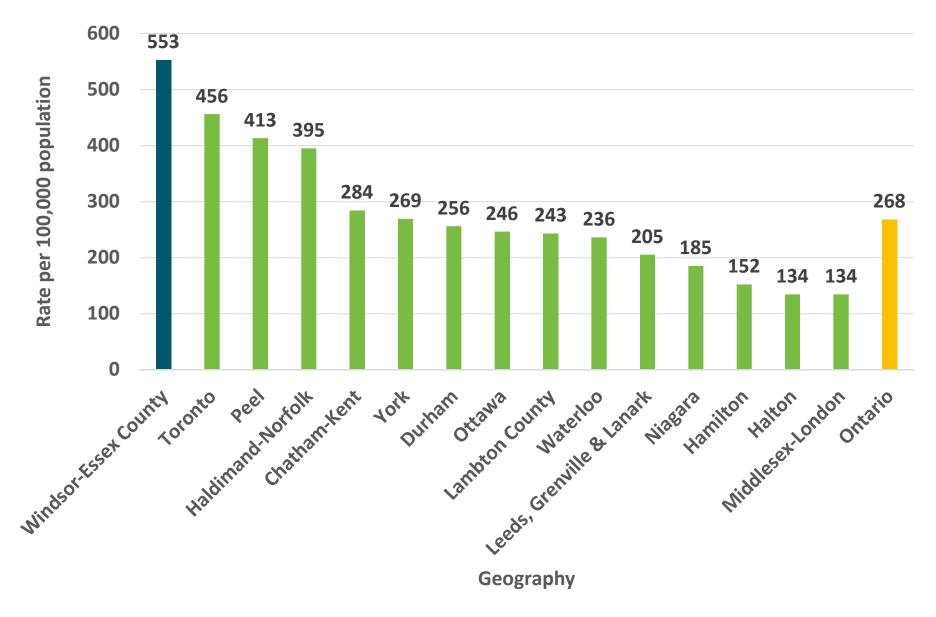
## Percentage of positive tests reported in one and two days of test date



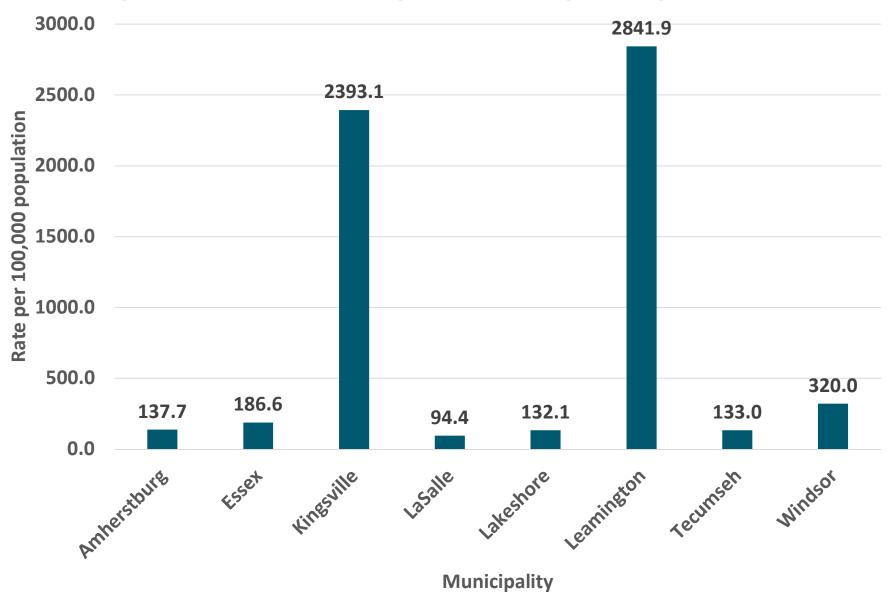
## Percent of New Cases Investigated Within 24 Hours of Reported Date

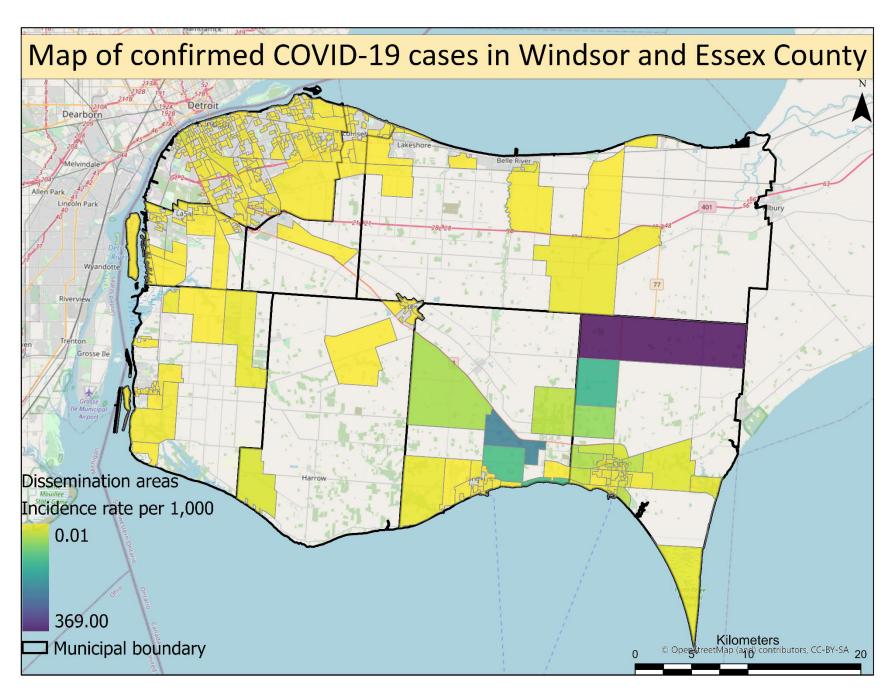


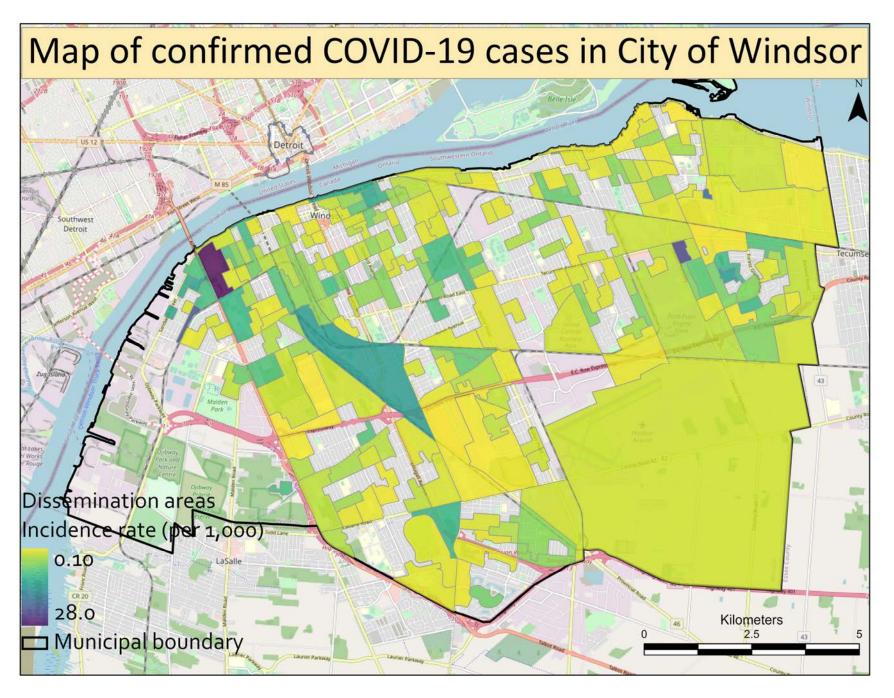
### **Regional & Provincial Rates**

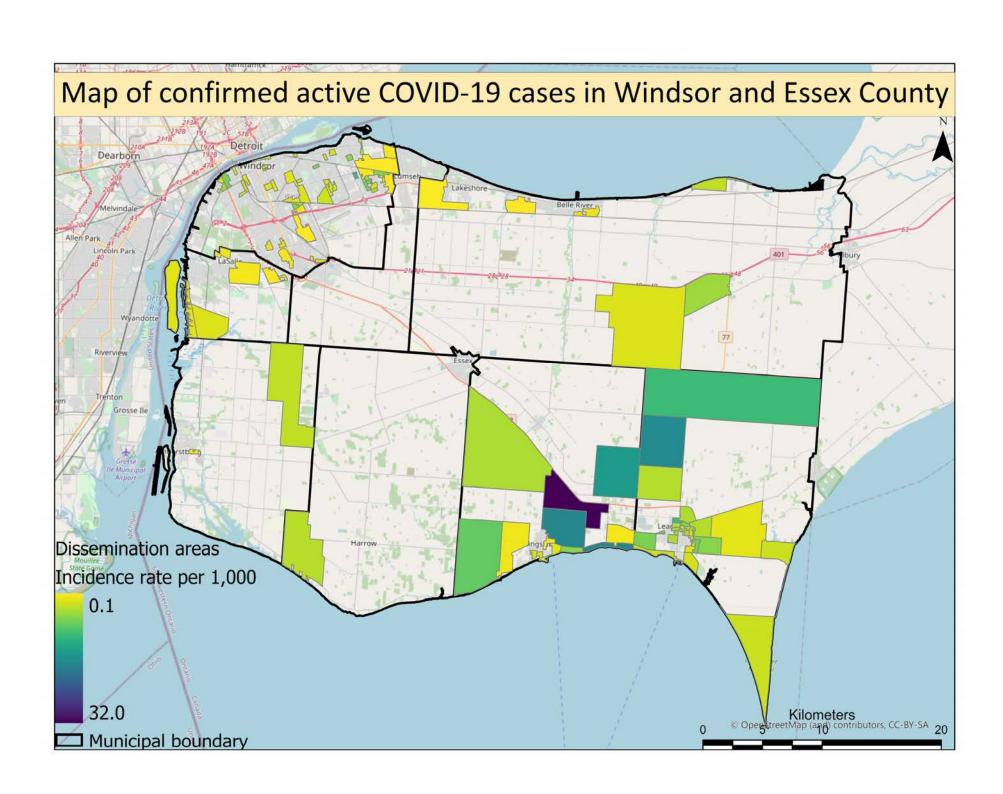


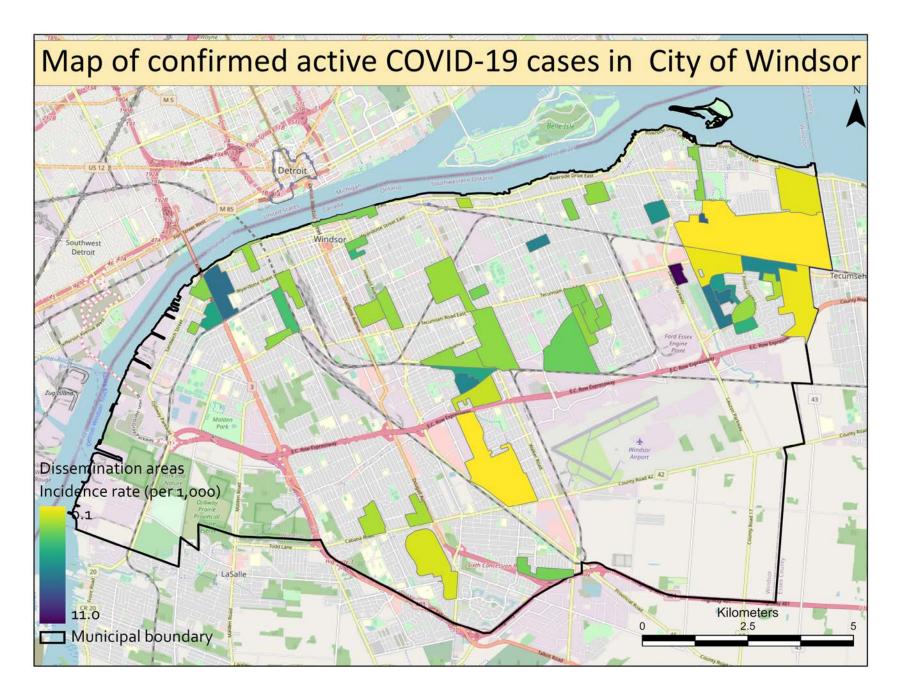
### Rate per 100,000 by Municipality



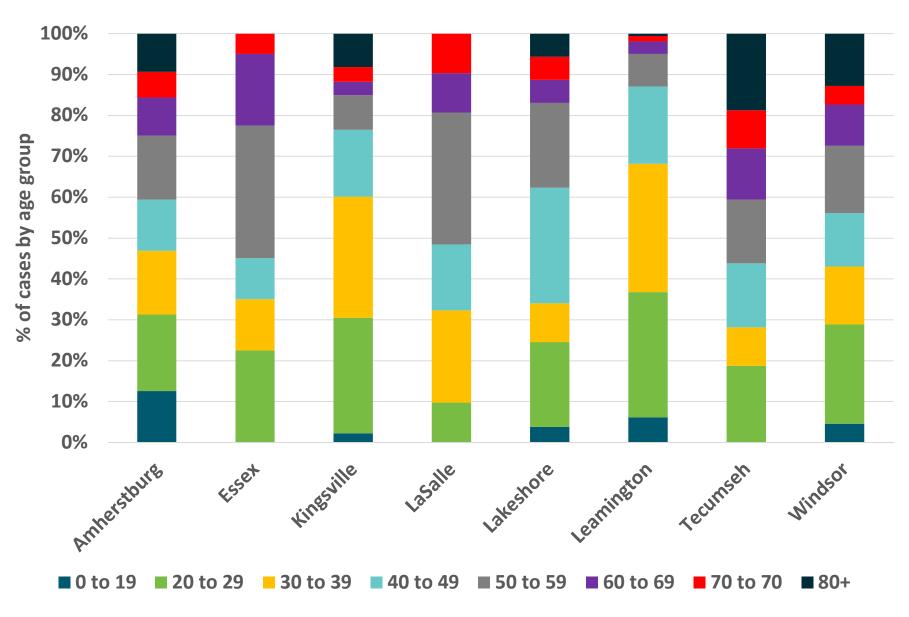




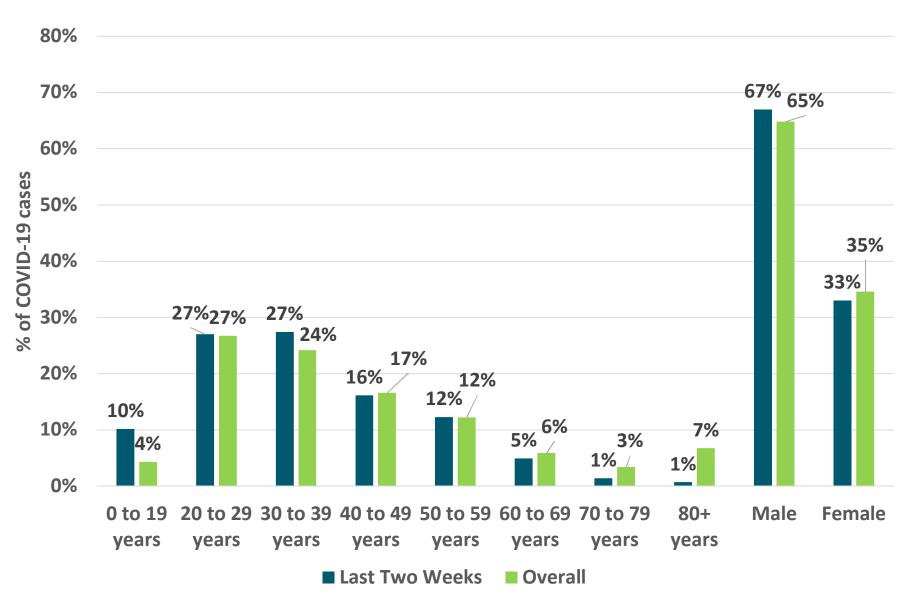




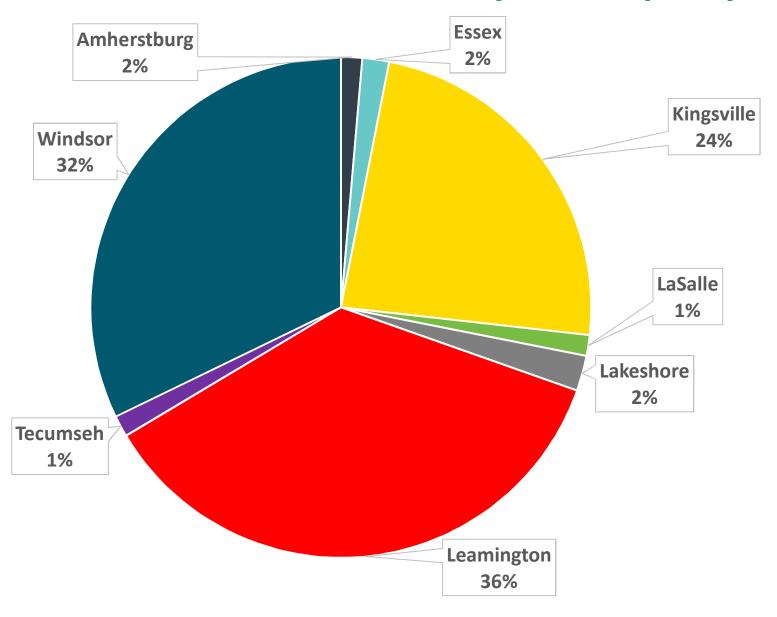
### Age Breakdown by Municipality



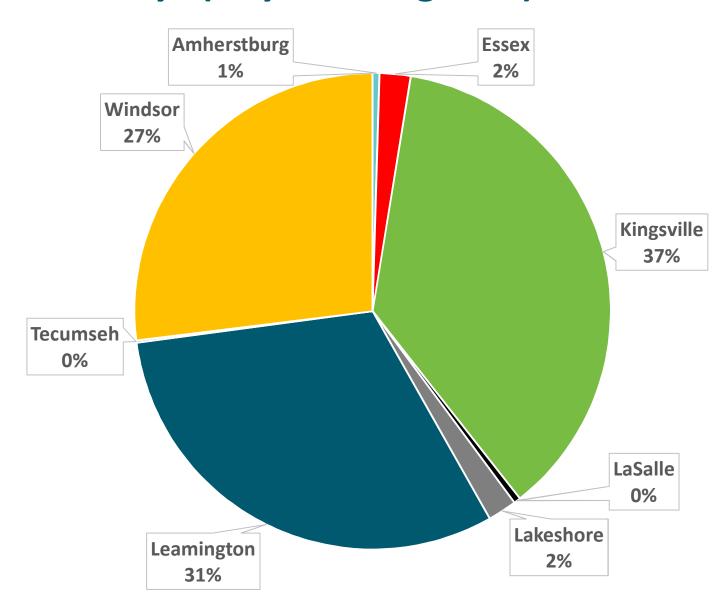
### **Age & Sex Distribution**



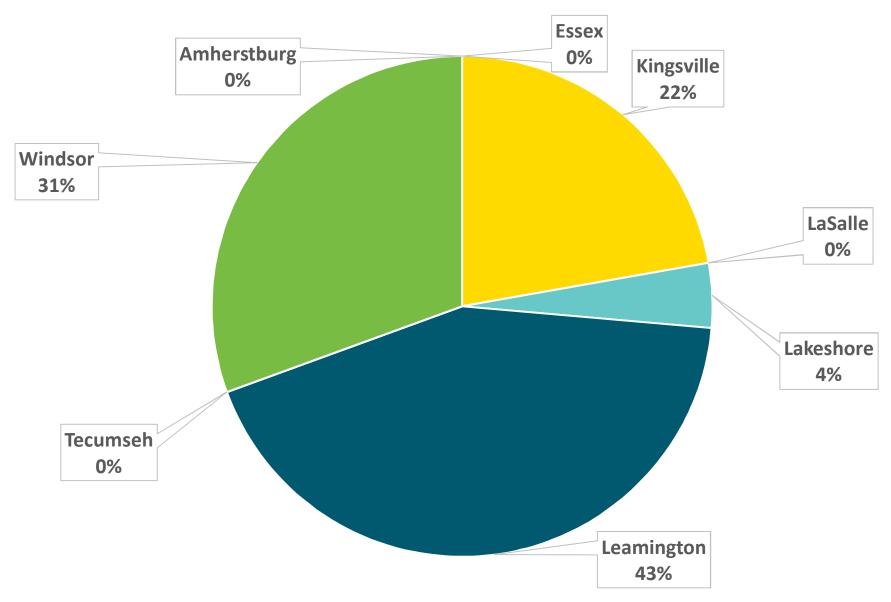
### **Distribution of COVID-19 Cases by Municipality**



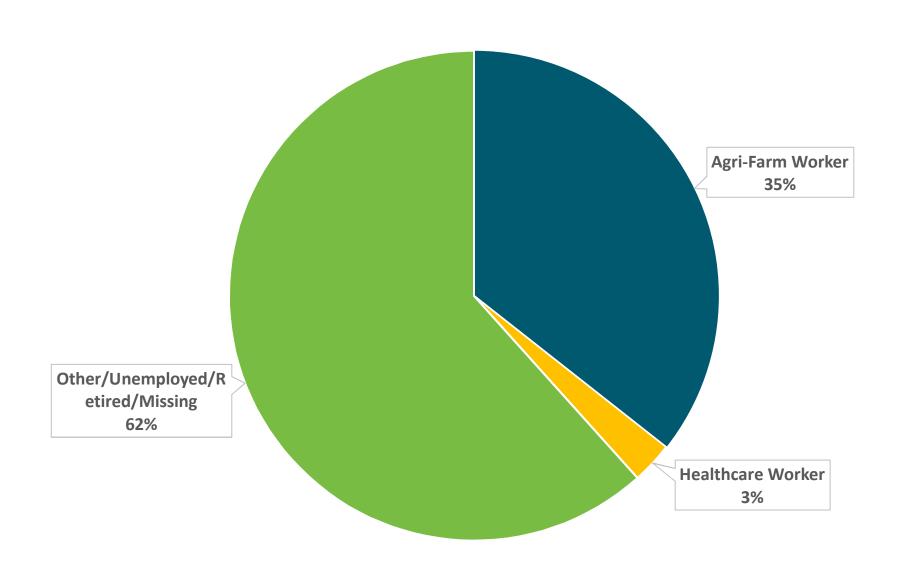
# Distribution of COVID-19 Cases by Municipality in last 30 days (July 7 to August 5)



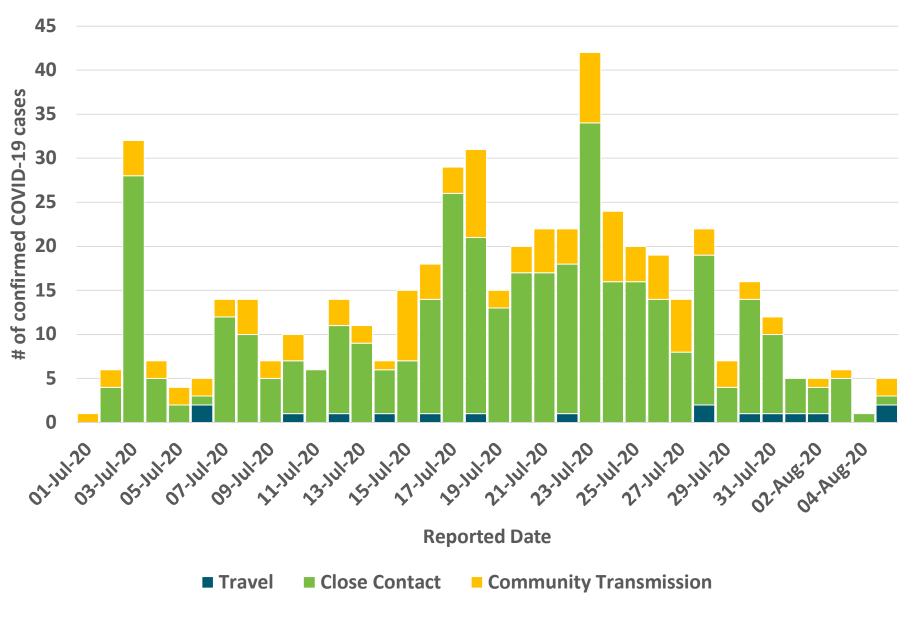
# Distribution of COVID-19 Cases by Municipality in last 7 days (July 30 to August 5)



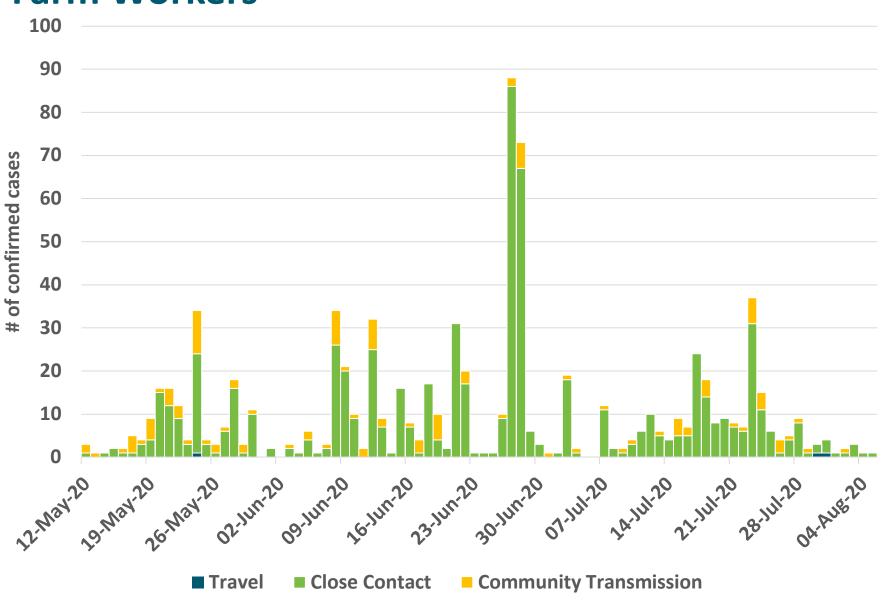
# Distribution of COVID-19 Cases by Occupation in the last 7 days (July 30 to August 5)



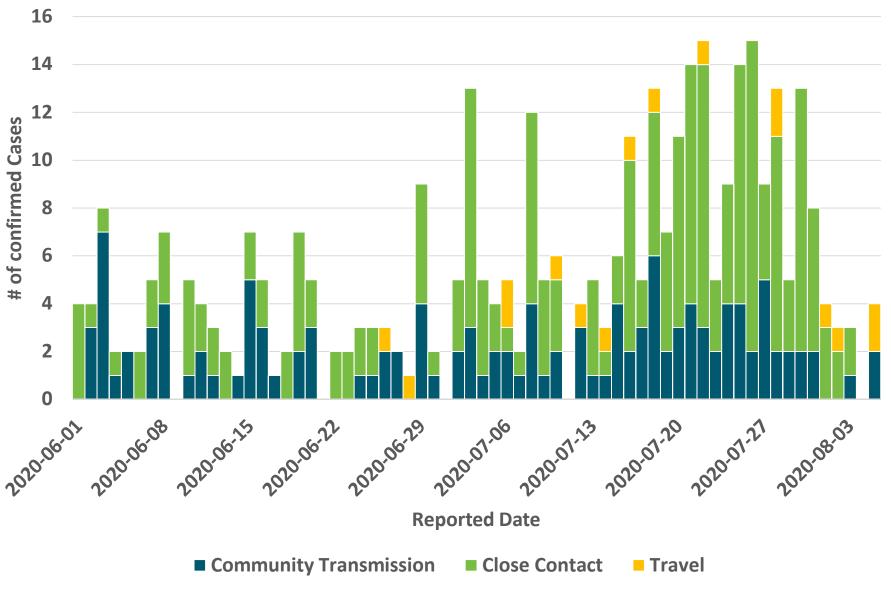
### **Exposure History by Reported Date**



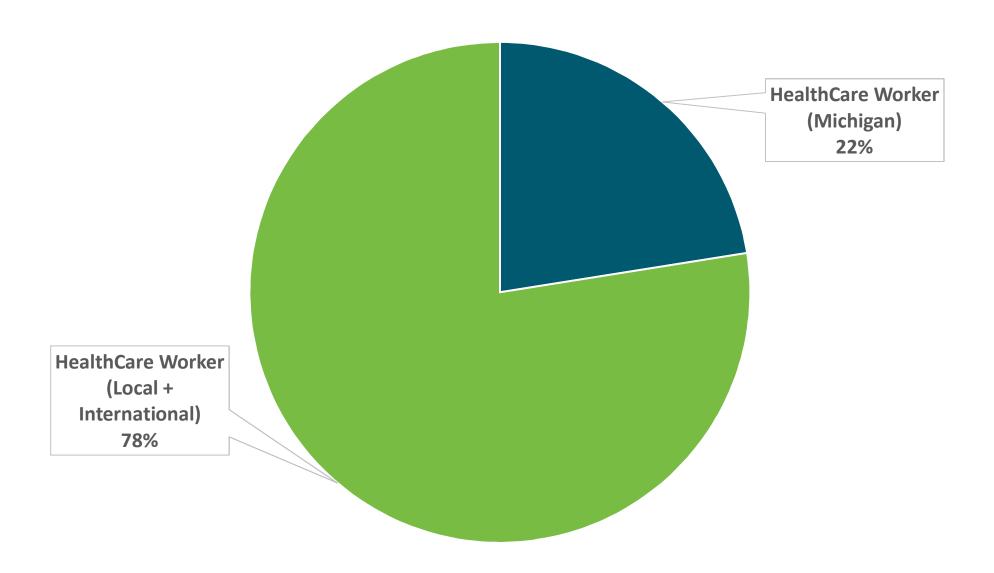
### **Exposure History by Reported Date Among Agri- Farm Workers**



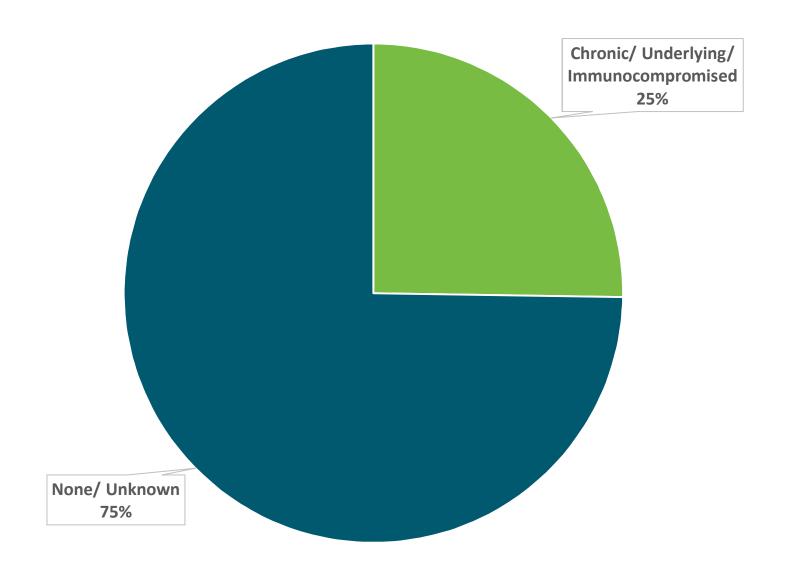
## **Exposure History by Reported Date Among Non- AgriFarm Cases**



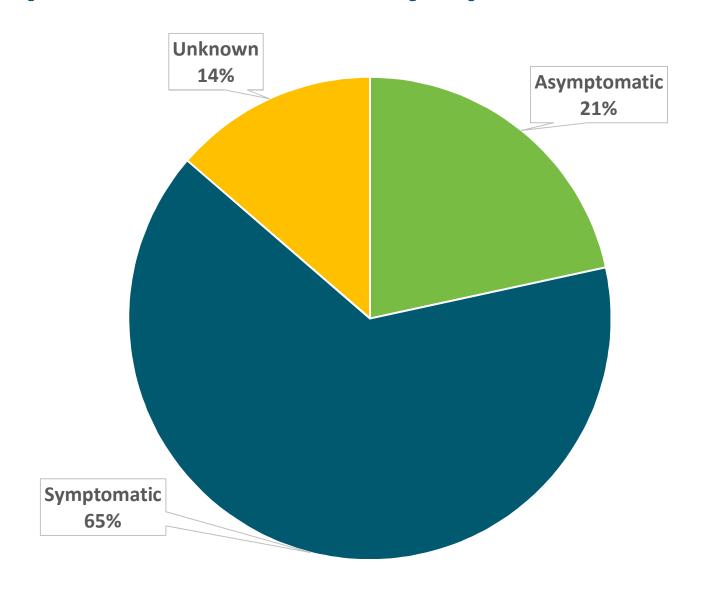
### **COVID-19 Cases by Healthcare Worker**



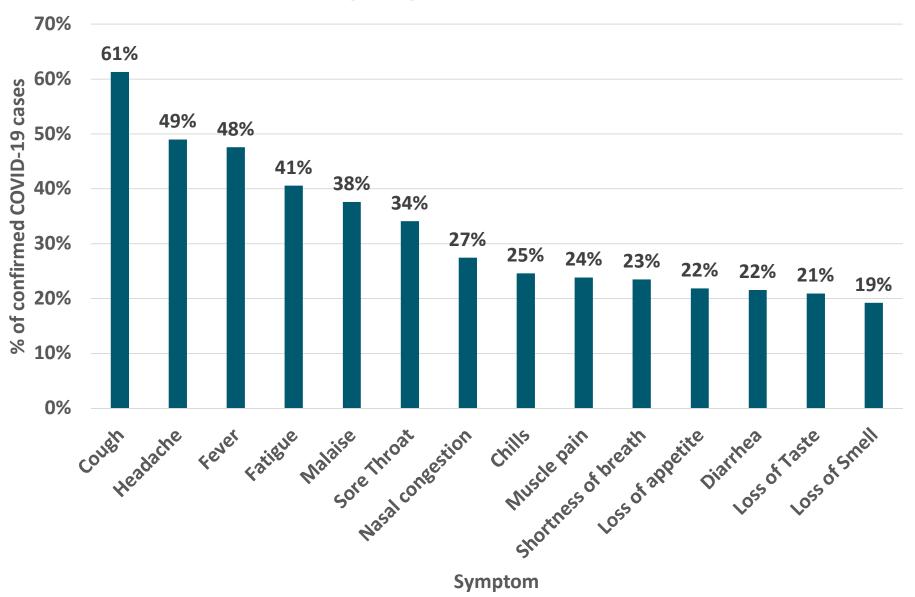
### **Underlying Health Conditions**



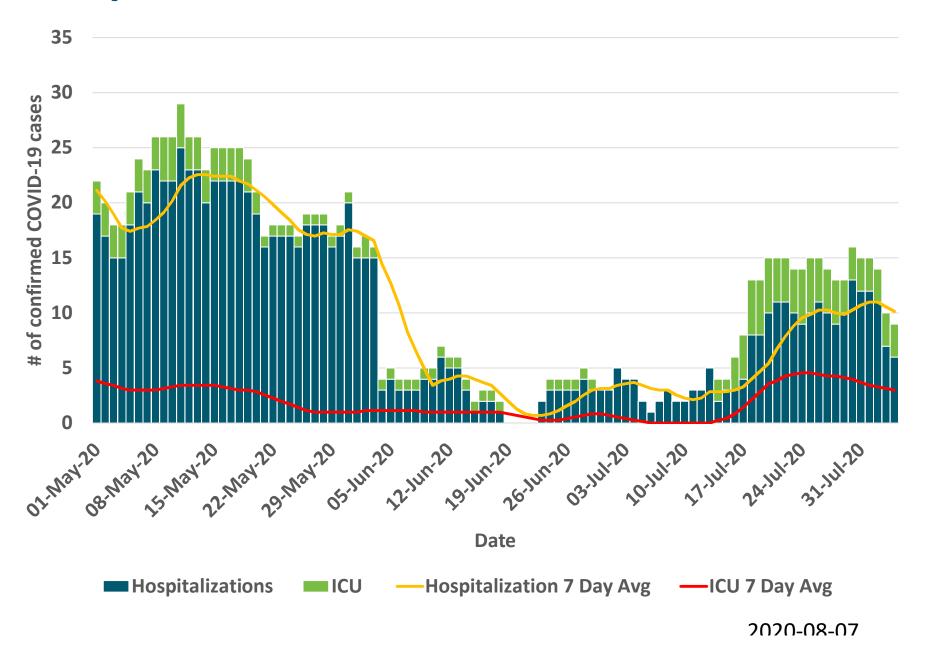
### **Symptomatic Versus Asymptomatic Cases**



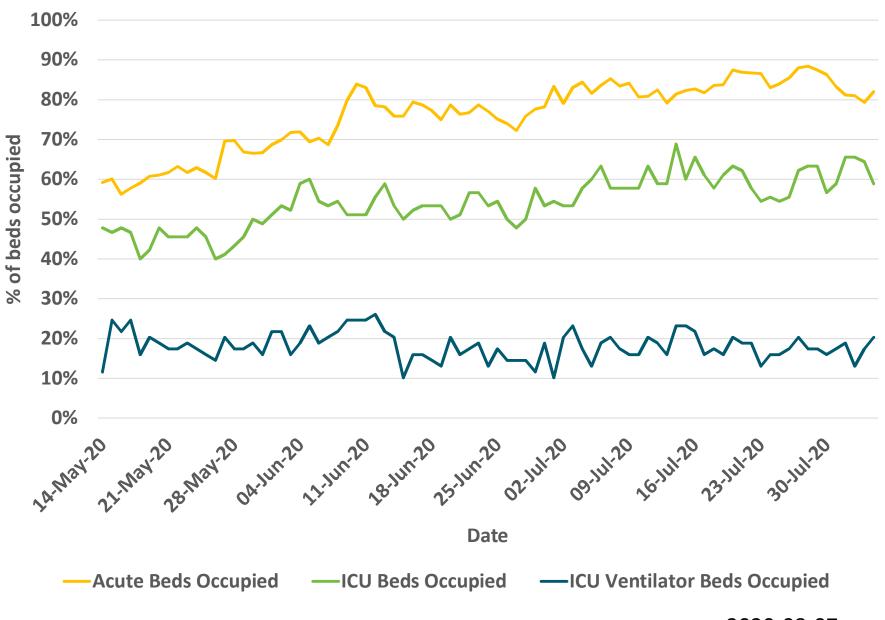
### **Most Common Symptoms**



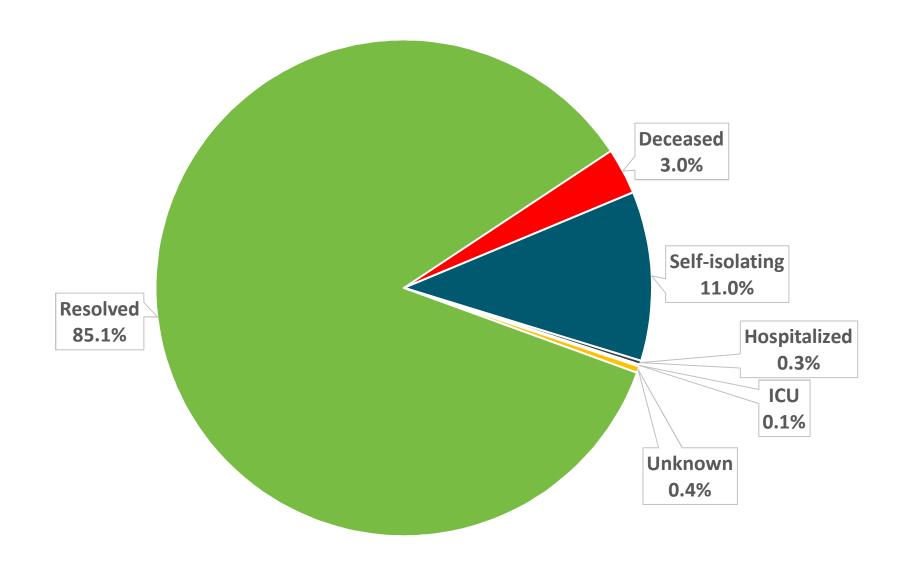
### **Hospitalizations & ICU for COVID-19**



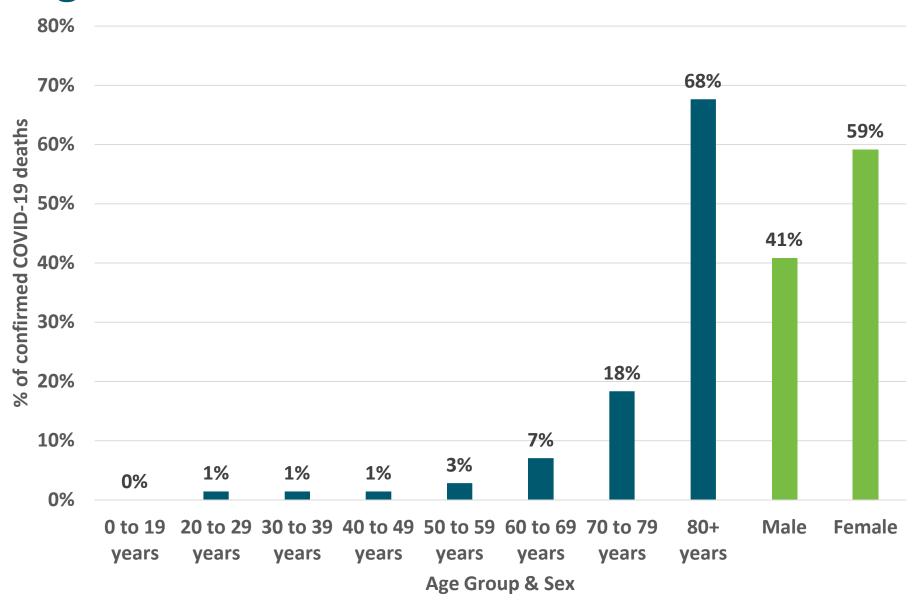
### **Health Care System Capacity**



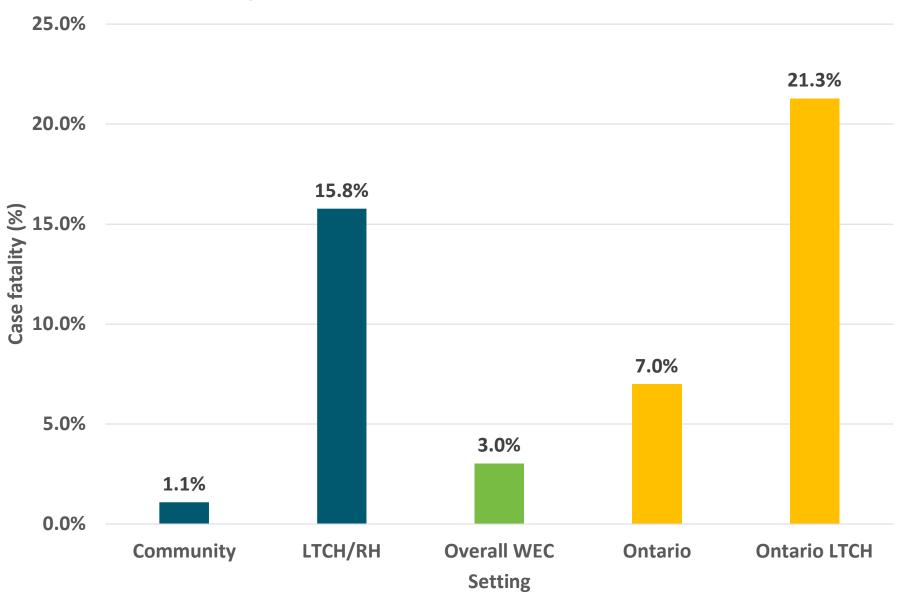
#### **Current Outcomes**



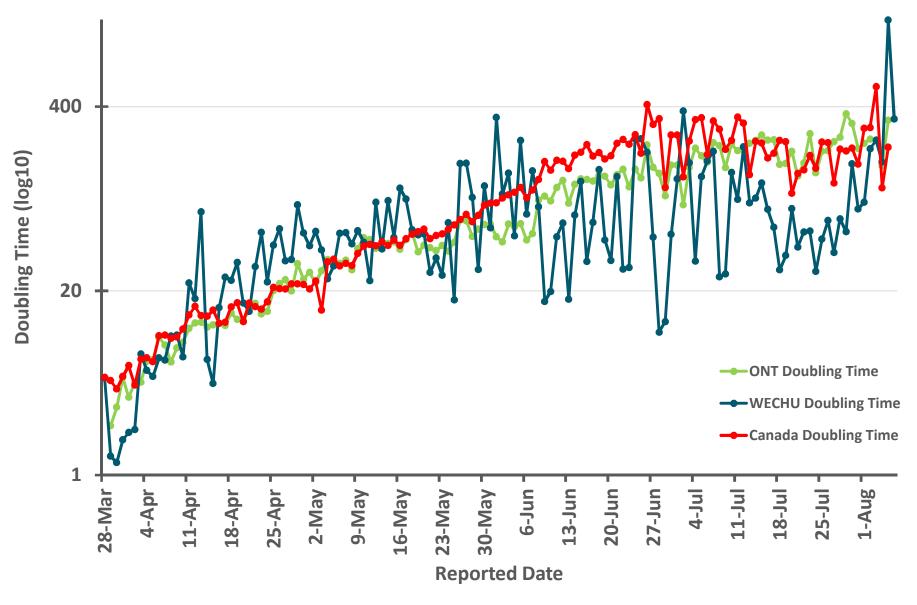
### Age & Sex Breakdown of COVID-19 Deaths



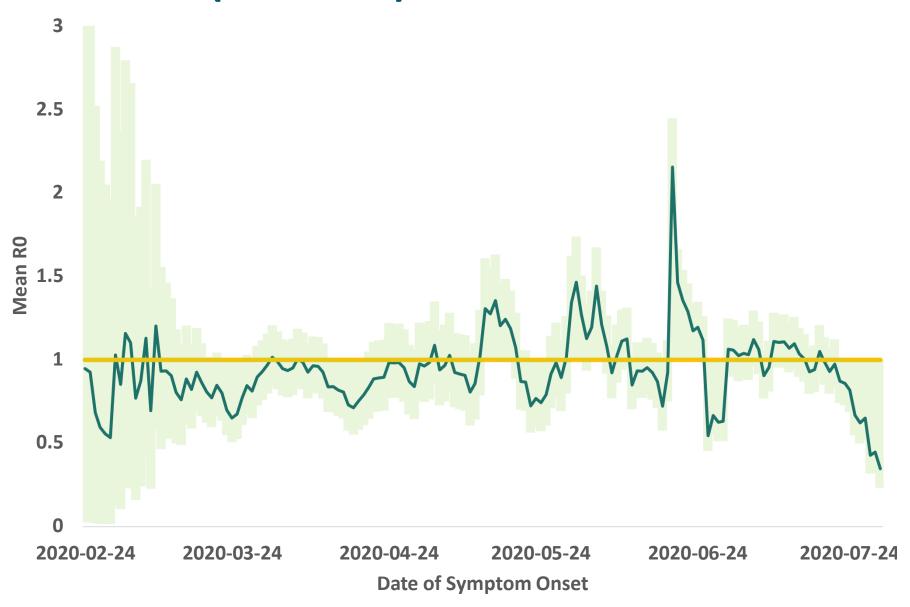
### **Case Fatality Rate**



### **Doubling Time (Day over Day Comparison)**



### Mean R0 (Effective)



### **Summary**

- Windsor-Essex has seen a decline in cases in the past week.
- The primary source of exposure continues to be close contact with a confirmed case
- COVID-19 related hospitalizations and ICU are starting to decrease once again.
- Day-over-day doubling time in Windsor-Essex is on par with the province and nationally
- R0 (effective) value is 0.35 indicating a decrease in transmission in Windsor-Essex