COVID-19 Windsor and Essex County: March 20, 2020 to July 10, 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 [2020/07/09].
- Ontario Ministry of Health, integrated Public Health Information System (iPHIS) database, extracted by Windsor-Essex County Health Unit [2020/07/09].
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). Epidemiologic Summary: COVID-19 in Ontario – January 15, 2020 to July 8, 2020). Toronto, ON: Queen's Printer for Ontario; 2020.

Highlights

- At the time of reporting, there are 1,771 confirmed cases of COVID-19 in WEC between March 20th and July 9nd.
- In late June, WEC saw a sharp increase in the number of COVID-19 cases due to an outbreak at one farm
- Based on the 7-day moving average, WEC saw a sharp decrease in the past week.
 - If agri-farm workers are excluded, the 7-day moving average stabilizes to approximately five cases
- As of July 9nd, there were 306 cases in long-term care and retirement homes (including staff and residents.
- Windsor and Essex County has the 2nd highest incidence rate in the province and is higher than the Ontario rate.
- In the last two weeks, 85% of the cases reported were among males and 15% were among females.
 - o 73% of the cases during this time period were among adults 20 to 39 years of age.
- Overall, the majority of the cases are from Leamington (37%), followed by Windsor (33%) and Kingsville (20%)
 - In the past 30 days, however, 54% of the cases have been from Leamington and 33% from Kingsville
 - In the past 7 days, however, 60% of the cases have been from Kingsville, 17% from Leamington and 17% from Windsor
- The majority of cases identified are due to close contacts with individuals that were positive for COVID-19.
- Approximately 27% of current cases have a known chronic condition, an underlying condition or are immunocompromised.

- Coughing (65%) was the most commonly reported symptom among cases with COVID-19 followed by fever (50%), headache (46%) and malaise (44%).
- COVID-19 cases that are hospitalized have declined sharply in the June have been low in July
- ICU cases have stabilized to zero COVID cases in the same timeframe.
- Approximately 30% of cases are still in self-isolation while 64% of cases have resolved.
- The overall case fatality rate in WEC is 3.8%, lower than the province (7.4%).
- The day-over-day doubling time has been trending positively in Canada and in Ontario. In Windsor-Essex, the day-over-day doubling time has varied due to the number of agri-farm cases.
- The mean R₀ (effective) value is 1.06 and has decreased from last week.
 - o However, for the past month we have seen fluctuations with this number.



COVID-19 LIVE UPDATE

July 10, 2020

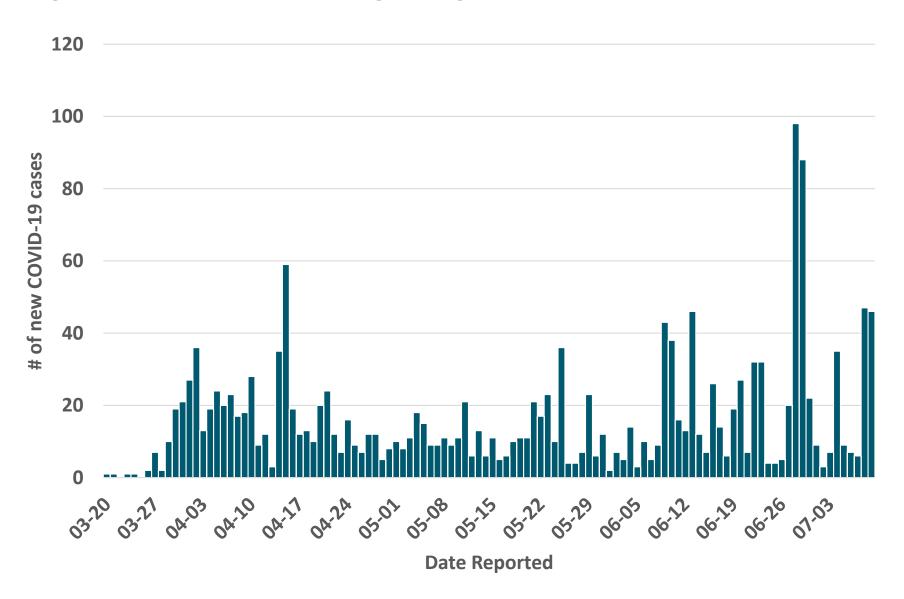
FOR UP-TO-DATE
CASE NUMBERS
VISIT
wechu.org

COVID-19 Epidemiological Summary

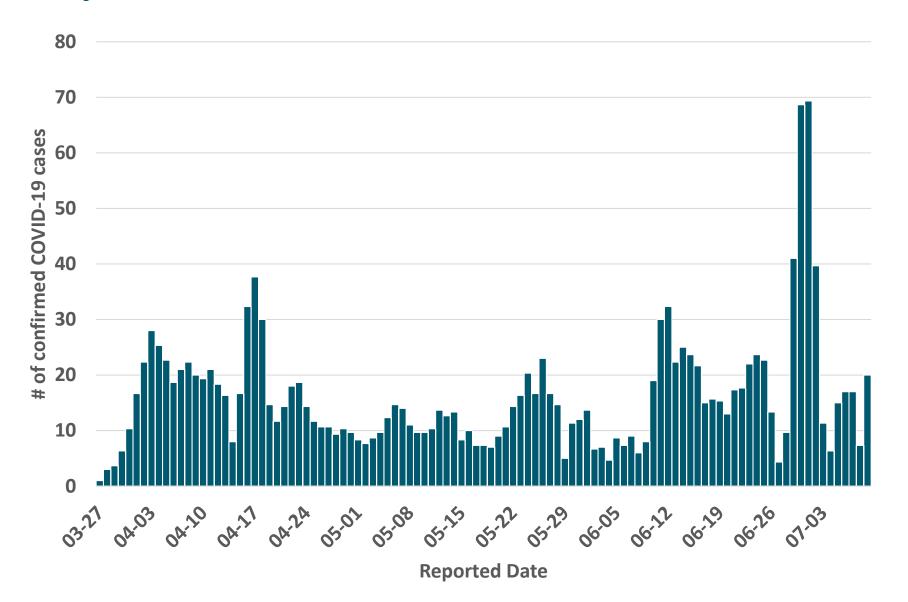
Content covered:

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

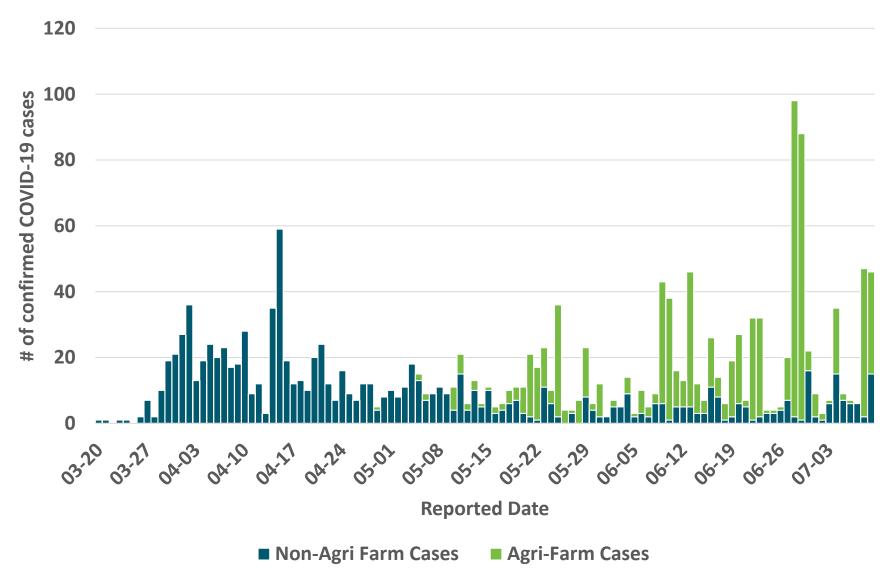
Epidemic Curve by Reported Date



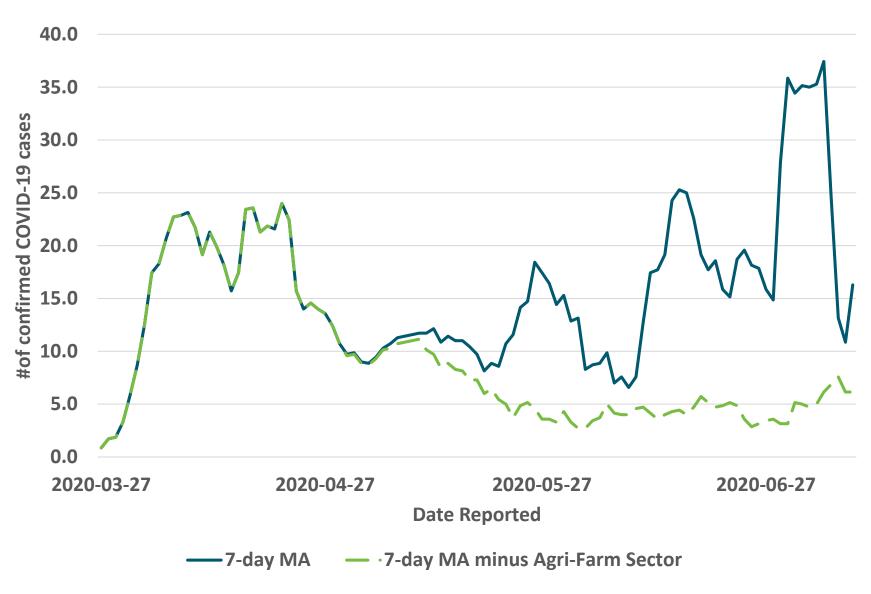
Epidemic Curve by 3-Day Moving Average by Reported Date



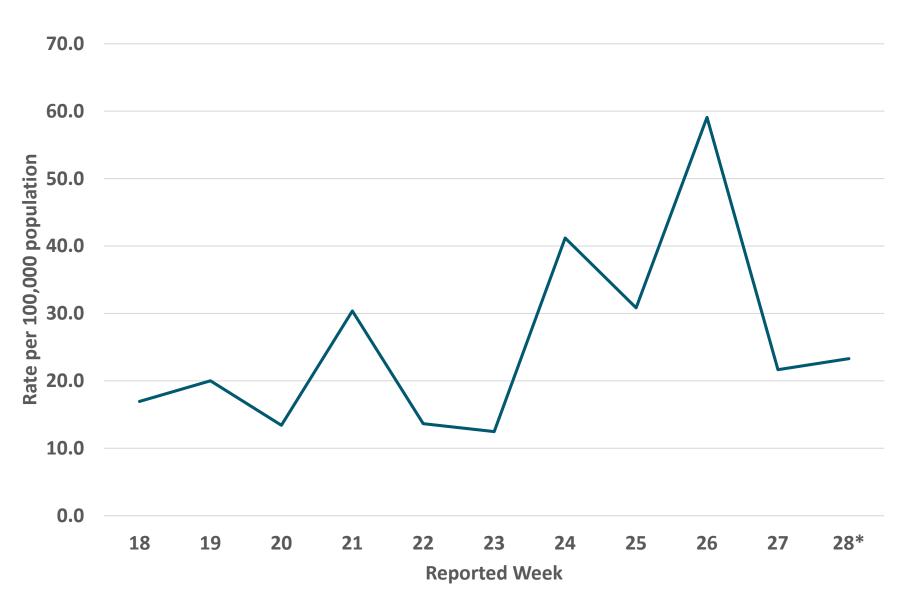
Epidemic Curve by Agri-Farms Versus Non-Agri- Farm Cases by Reported Date



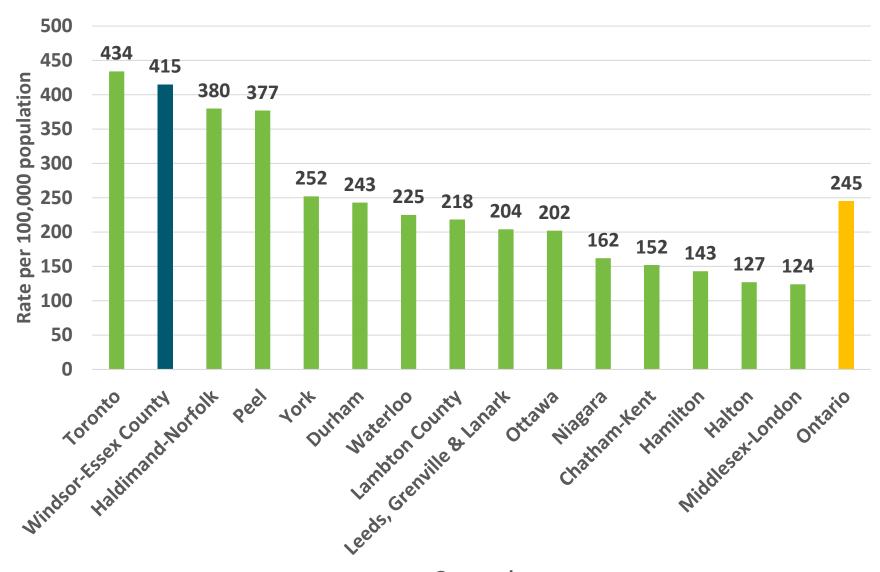
7-Day Moving Average by Reported Date



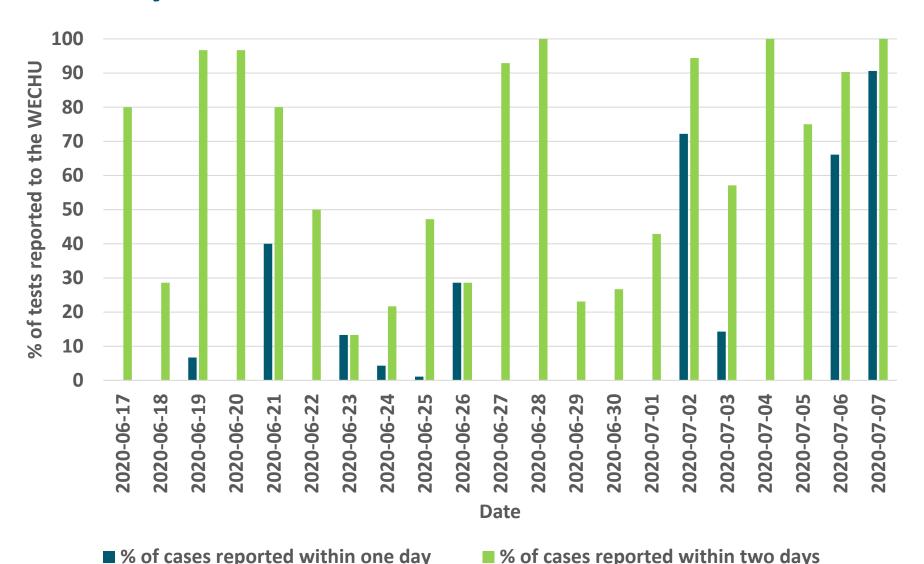
Rate by Reported Week



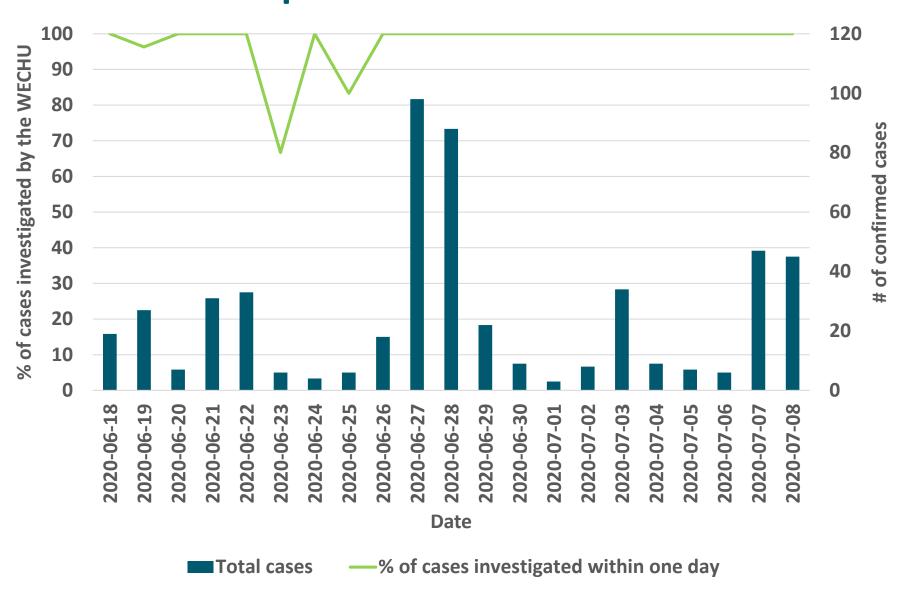
Regional & Provincial Rates



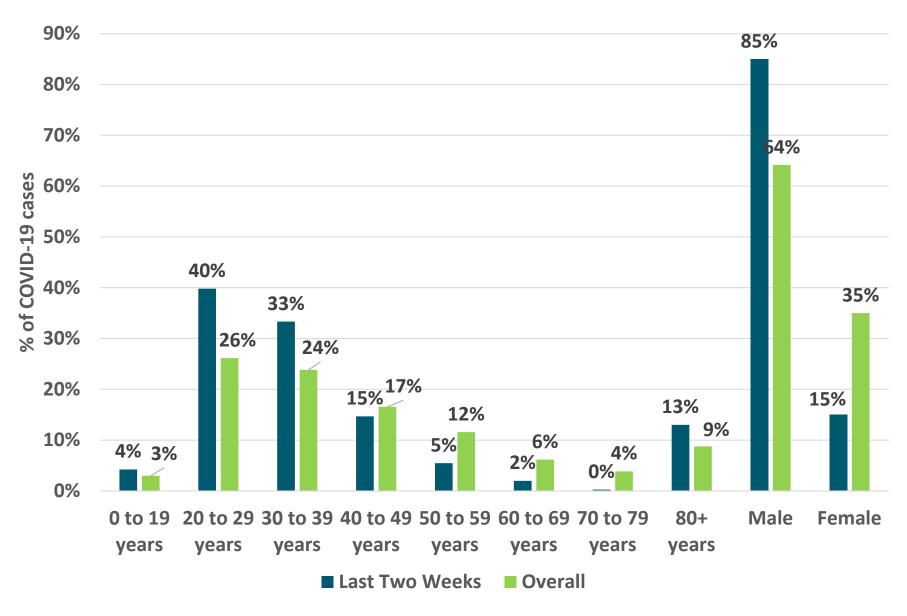
Percentage of positive tests reported in one and two days of test date



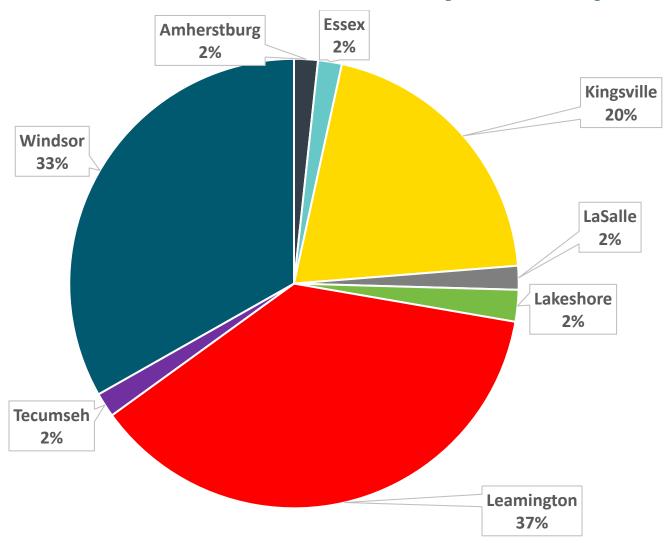
Percent of New Cases Investigated Within 24 & 48 Hours of Reported Date



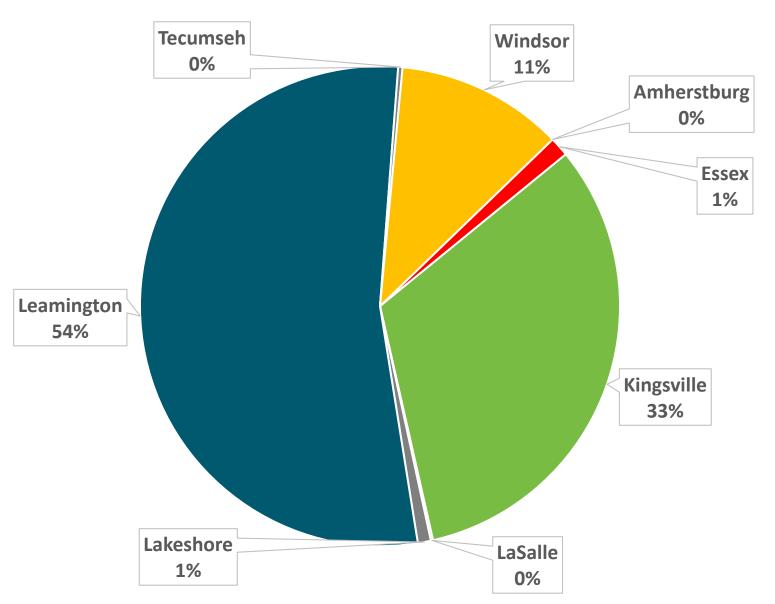
Age & Sex Distribution



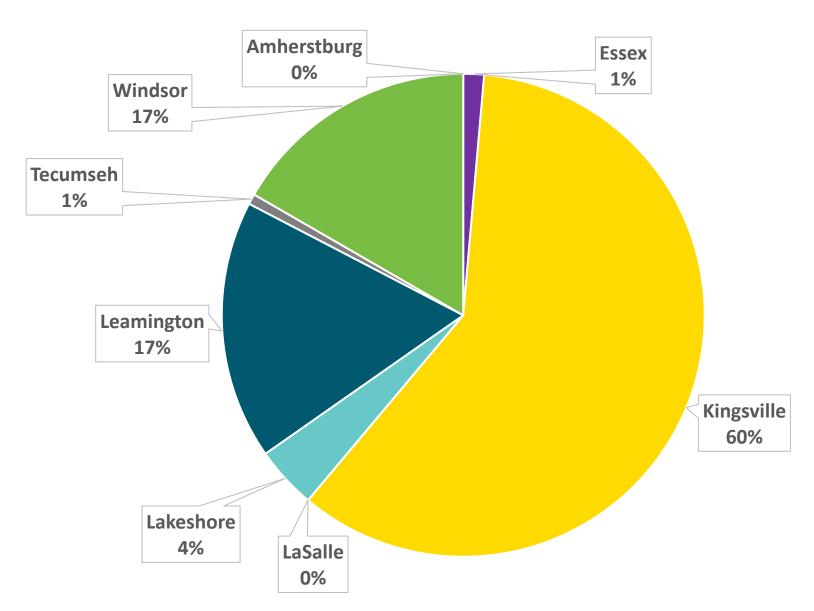
Distribution of COVID-19 Cases by Municipality



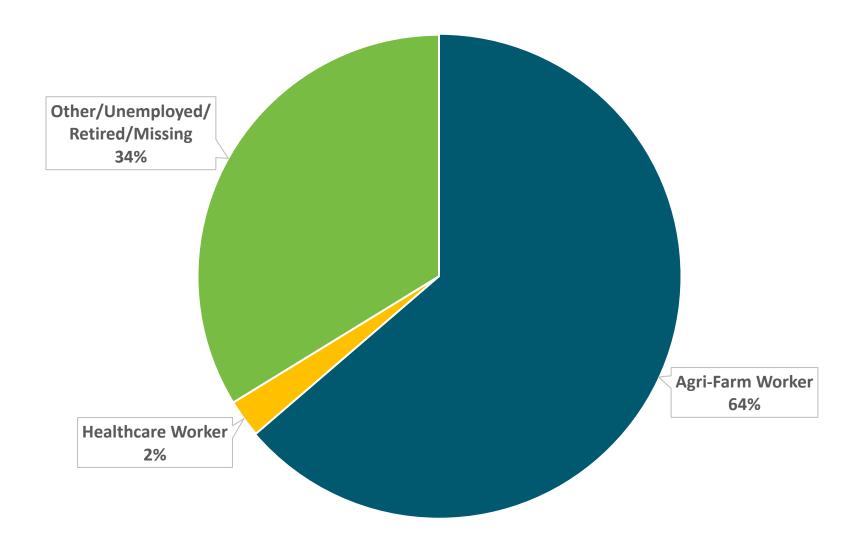
Distribution of COVID-19 Cases by Municipality in last 30 days (June 9th to July 8th)



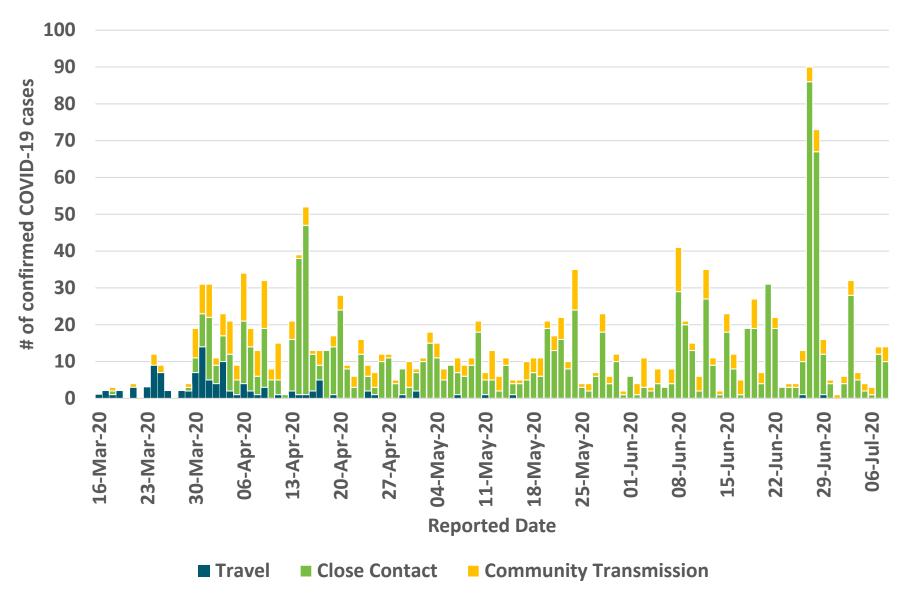
Distribution of COVID-19 Cases by Municipality in last 7 days (July 2nd to July 8th)



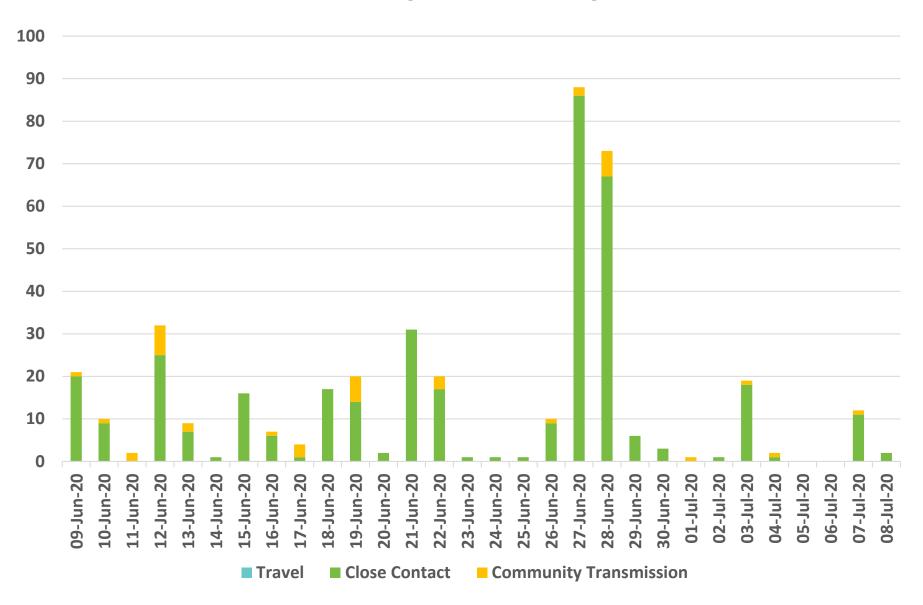
Distribution of COVID-19 Cases by Occupation in the last 7 days (July 2nd to July 8th)



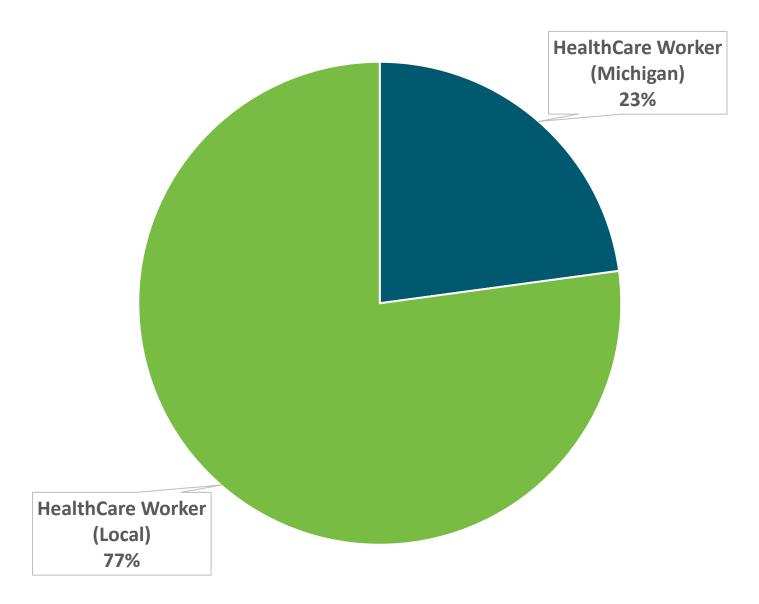
Exposure History by Reported Date



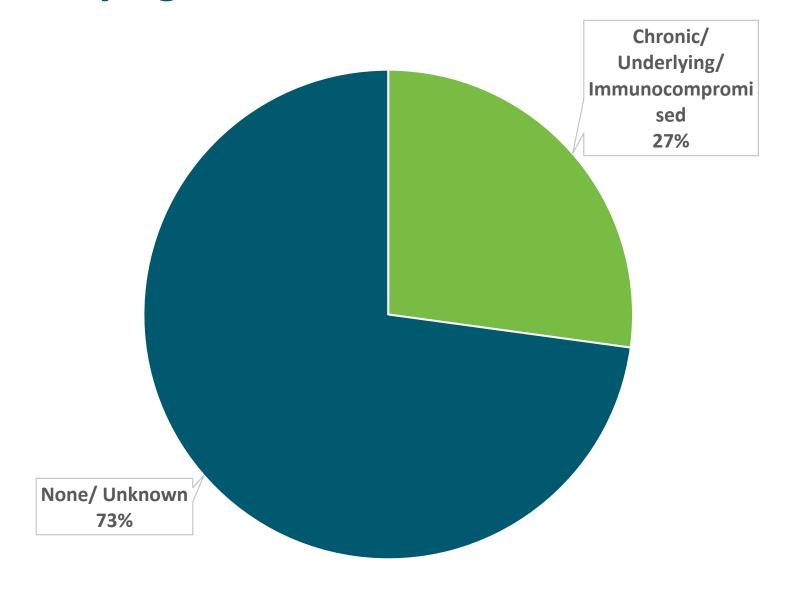
Exposure History by Reported Date Among Agri- Farm Workers in the past 30 days



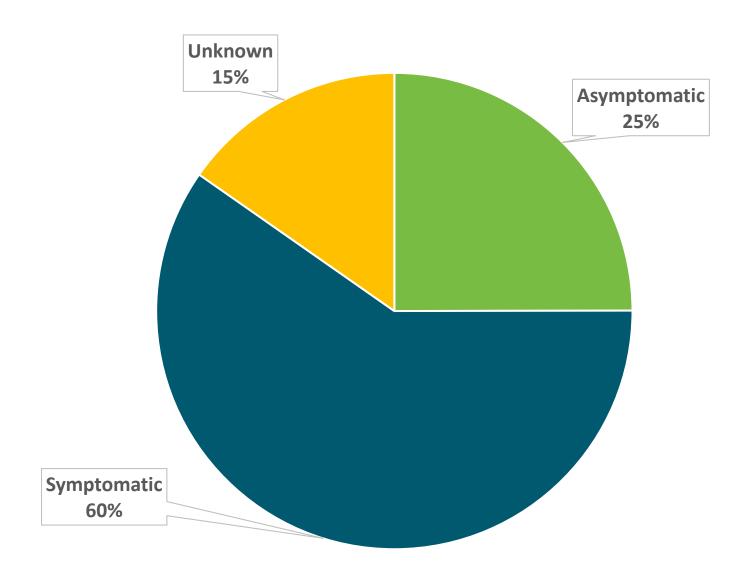
COVID-19 Cases by Healthcare Worker



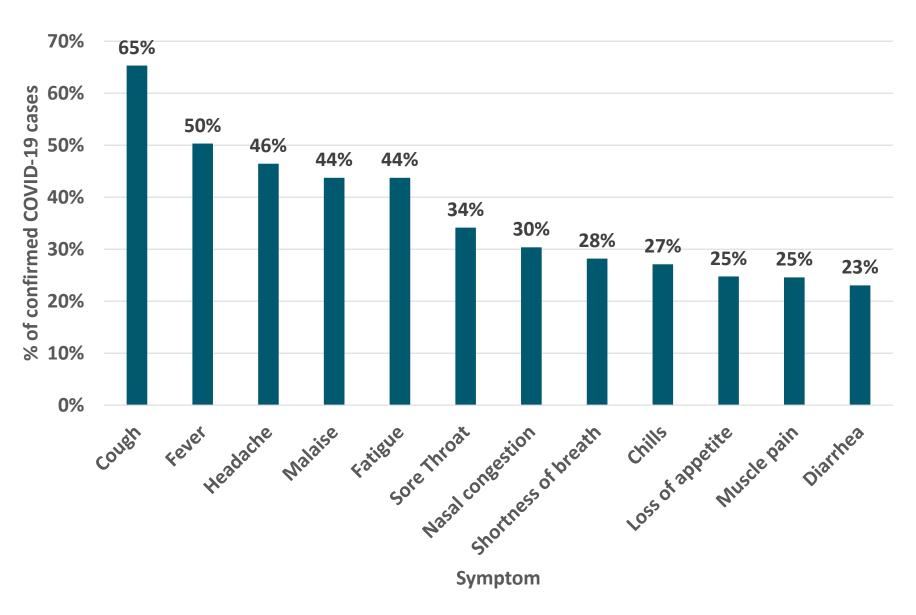
Underlying Health Conditions



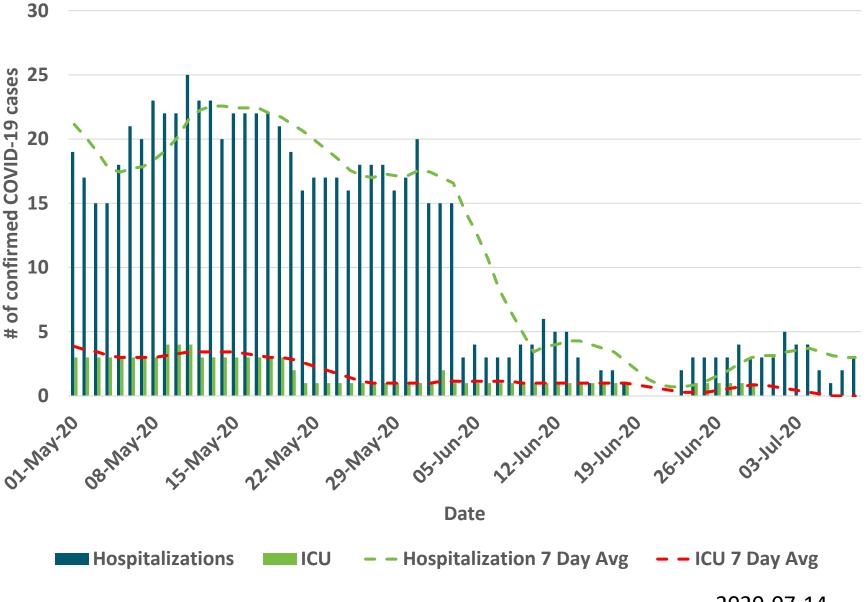
Symptomatic Versus Asymptomatic Cases



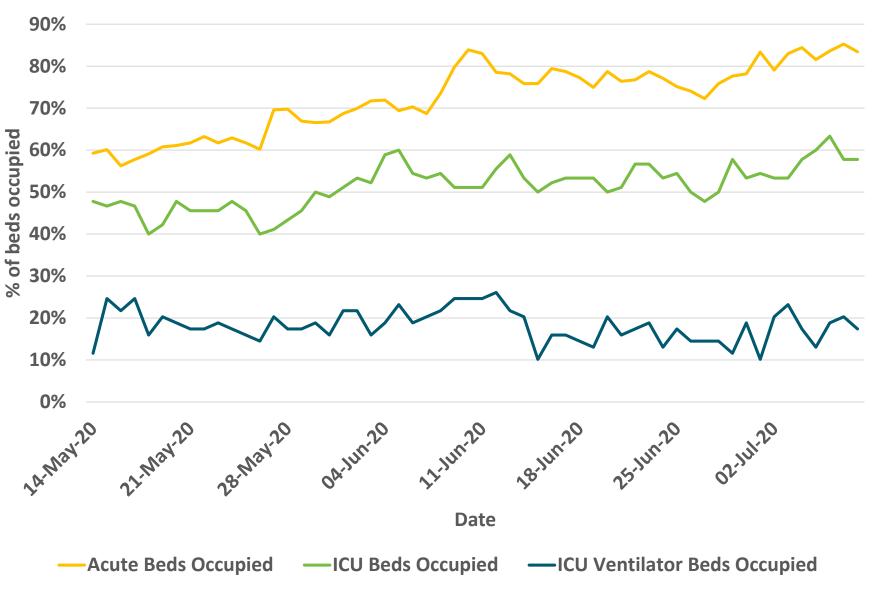
Most Common Symptoms



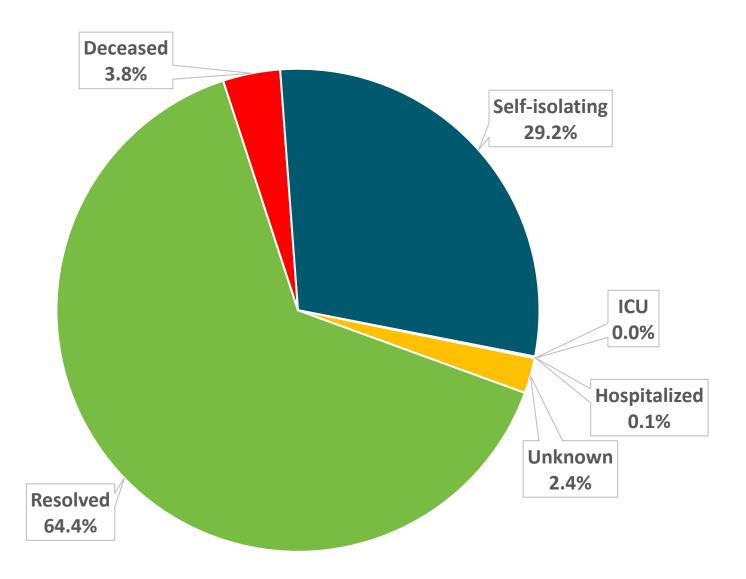
Hospitalizations & ICU for COVID-19



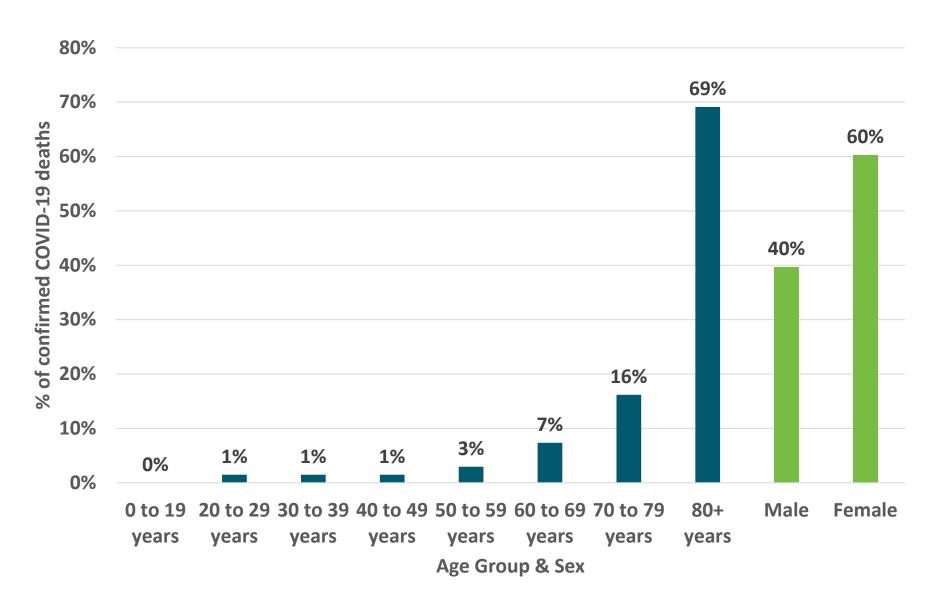
Health Care System Capacity



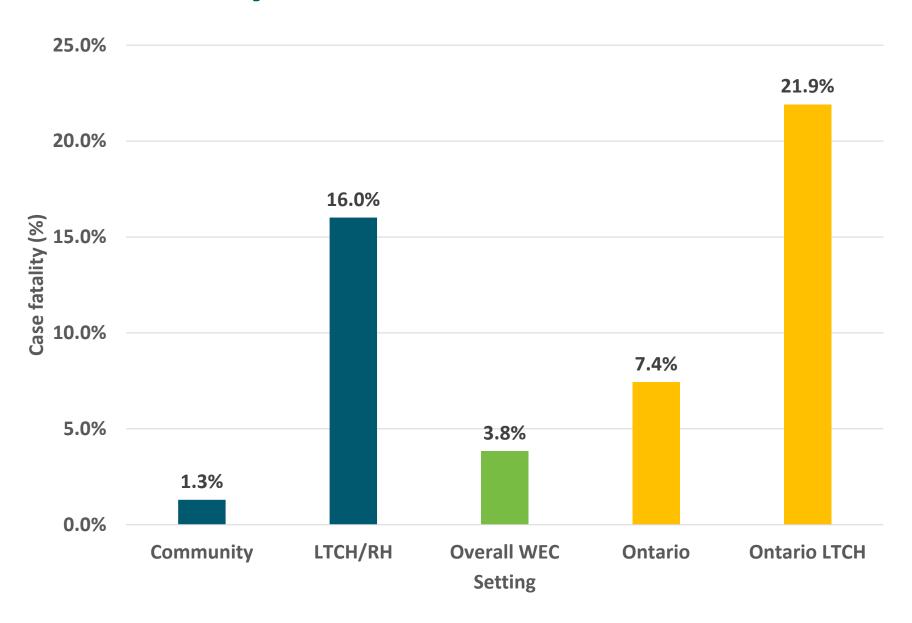
Current Outcomes



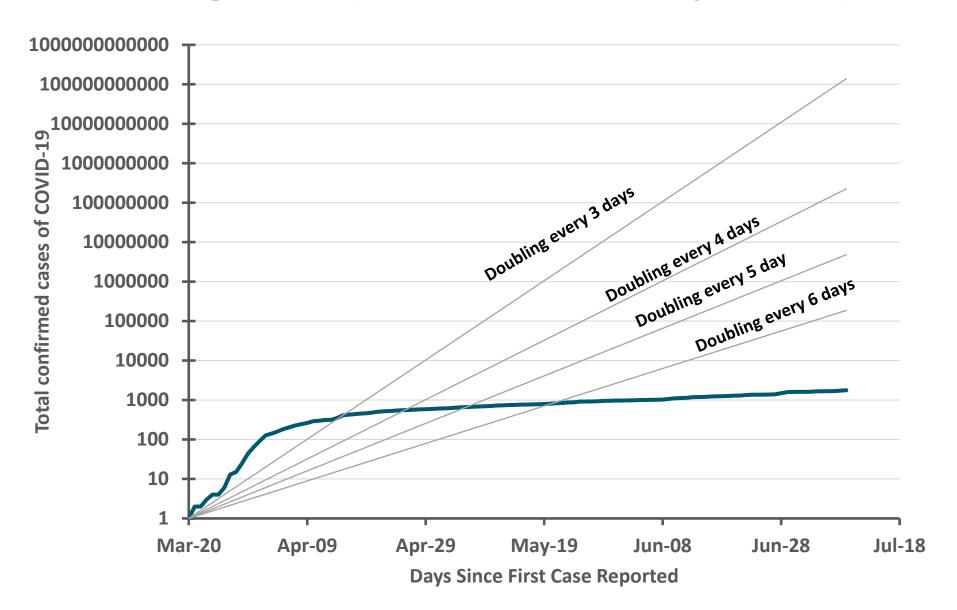
Age & Sex Breakdown of COVID-19 Deaths



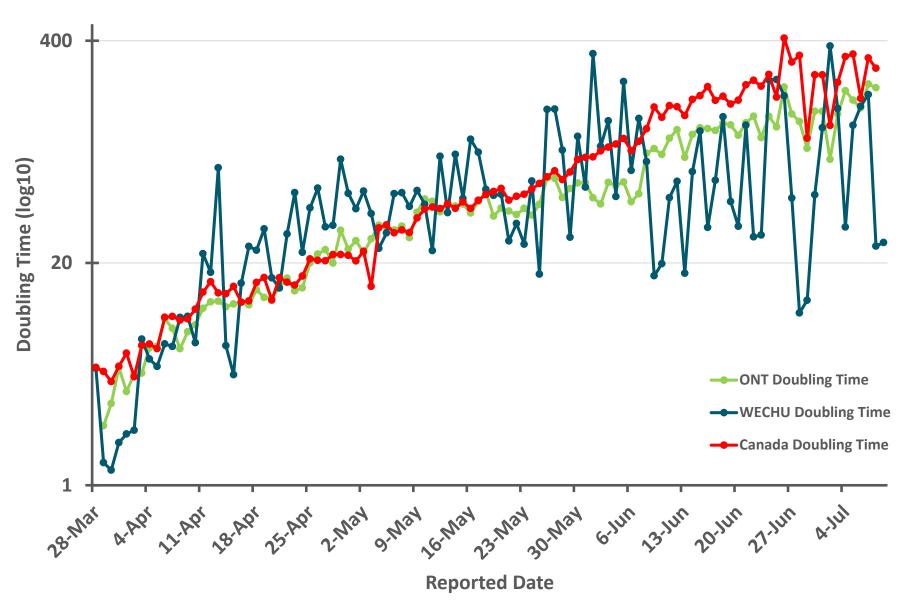
Case Fatality Rate



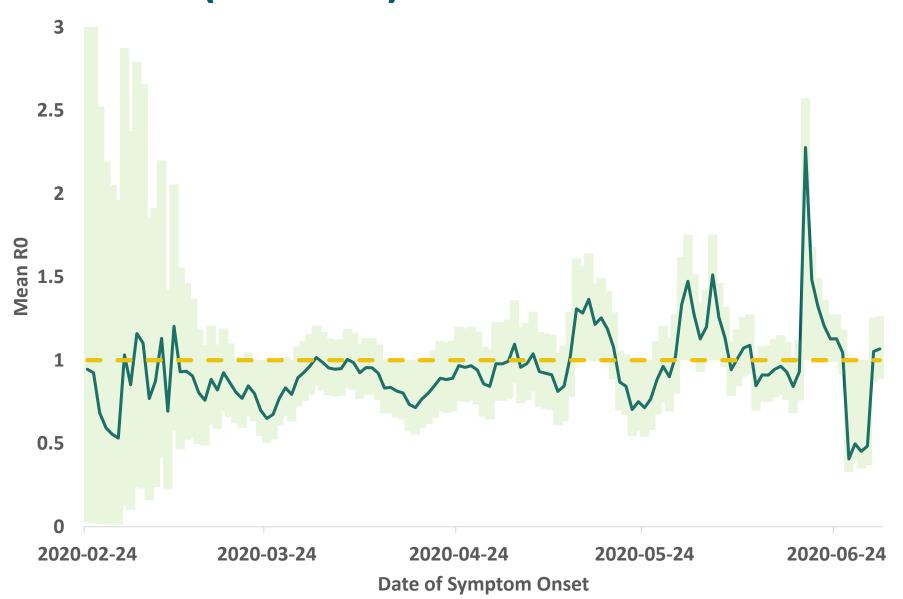
Doubling Time (Cumulative Comparison)



Doubling Time (Day over Day Comparison)



Mean R0 (Effective)



Summary

- Windsor-Essex continues to see huge variation in cases day over day
 - The spikes are attributed to the agri-farm sector
- The primary source of exposure is through close contact with a confirmed case
- COVID-19 related hospitalizations and ICU capacity have decreased dramatically in June
- R0 (effective) value is 1.06 indicating that every
 COVID-19 case leads to more than one new case
 - BUT we have seen variations in the past 1.5 months