

## COVID-19 Windsor and Essex County: March 20, 2020 to July 3, 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 [2020/07/02].
- Ontario Ministry of Health, integrated Public Health Information System (iPHIS) database, extracted by Windsor-Essex County Health Unit [2020/07/02].
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). Epidemiologic Summary: COVID-19 in Ontario – January 15, 2020 to July 1, 2020). Toronto, ON: Queen's Printer for Ontario; 2020.

### Highlights

- At the time of reporting, there are 1,614 confirmed cases of COVID-19 in WEC between March 20<sup>th</sup> and July 2<sup>nd</sup>.
- 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 increase in the past week due to a high number of agri-farm cases.
  - If agri-farm workers are excluded, the 7-day moving average stabilizes to approximately five cases
- As of July 2<sup>nd</sup>, there were 304 cases in long-term care and retirement homes (including staff and residents).
- Windsor and Essex County has the joint 2<sup>nd</sup> \ highest incidence rate in the province and is higher than the Ontario rate.
- In the last two weeks, 87% of the cases reported were among males and 13% were among females.
  - 70% of the cases during this time period were among adults 20 to 39 years of age.
- In the past 30 days, however, 62% of the cases have been from Leamington and 26% from Kingsville
  - In the past 7 days, however, 83% of the cases have been from Leamington and 8% from Kingsville.
- 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 (55%) was the most commonly reported symptom among cases with COVID-19 followed by fever (42%), malaise (40%) and fatigue (39%).

- COVID-19 cases that are hospitalized have declined sharply in the month while ICU cases have stabilized to zero COVID cases in the same timeframe.
- Approximately 37% of cases are still in self-isolation while 56% of cases have resolved.
- The overall case fatality rate in WEC is 4.2%, lower than the province (7.6%).
- The day-over-day doubling time has been trending positively in Canada and in Ontario. In Windsor-Essex, after weeks of observing shorter doubling rates, doubling time has increased.
- The mean  $R_0$  (effective) value is 1.17 and has increased from last week.
  - However, for the past month we have seen fluctuations with this number.



# COVID-19 *LIVE UPDATE*

July 3, 2020

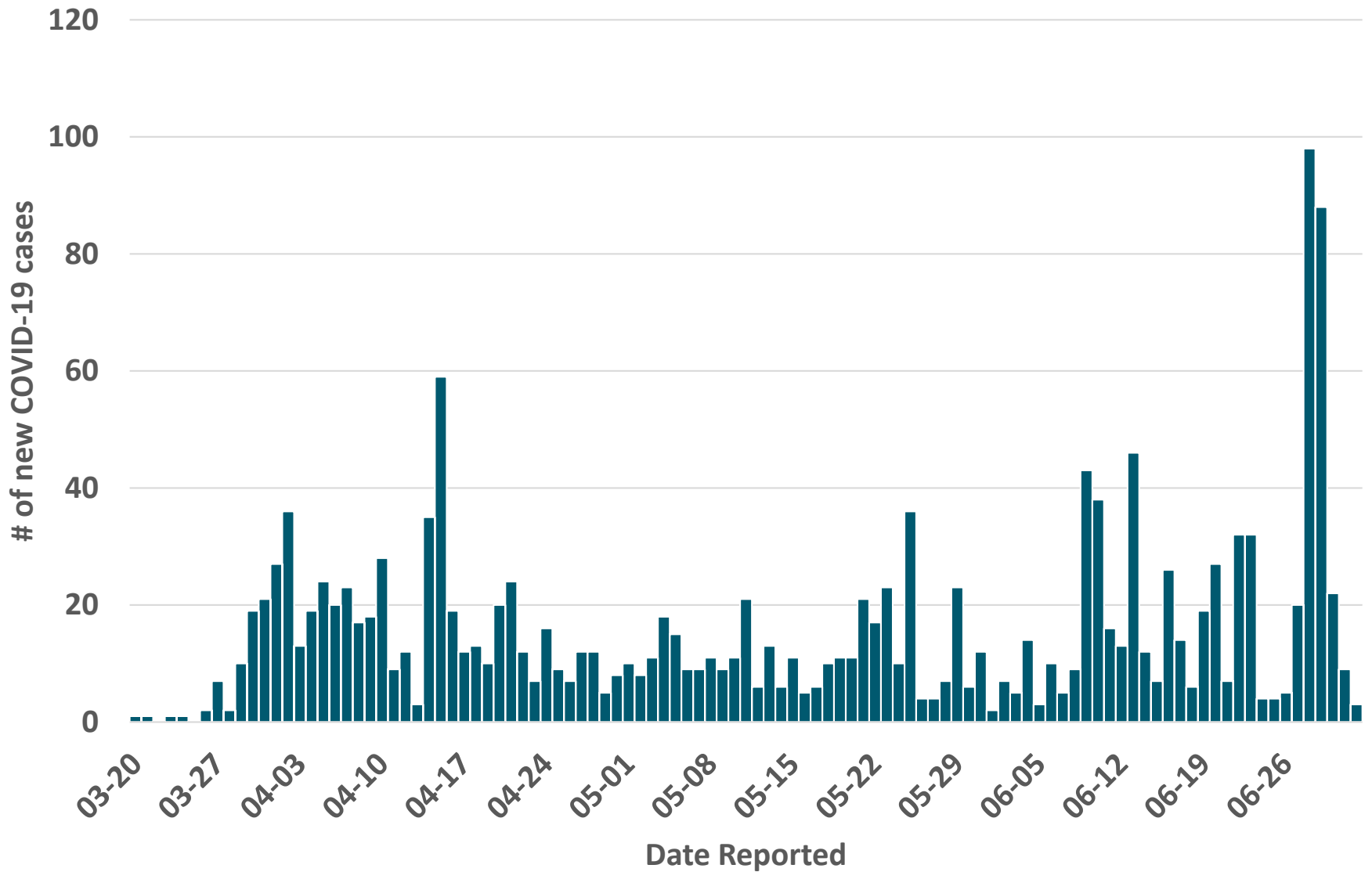
FOR UP-TO-DATE  
CASE NUMBERS  
VISIT  
**[wechu.org](https://wechu.org)**

# COVID-19 Epidemiological Summary

Content covered:

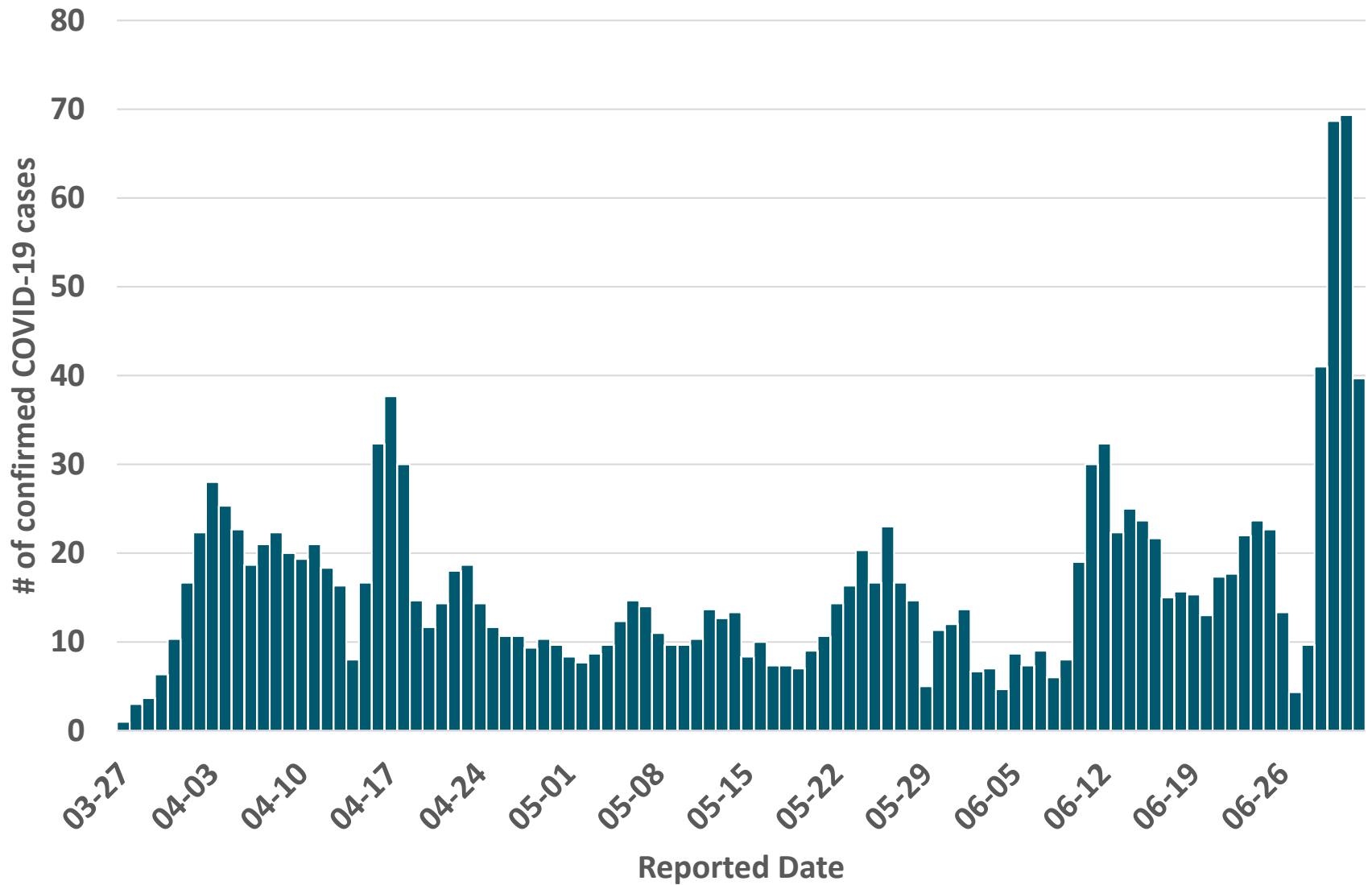
- Epidemic curves
- Regional & provincial rates
- Positive test turnaround time
- Case investigation time
- Age & sex distribution
- Distribution by municipality
- Exposure history
- Healthcare worker status
- Underlying conditions
- Top symptoms
- Hospitalizations & ICU
- Healthcare system capacity
- Current outcomes
- Breakdown by deaths
- Doubling time
- Mean  $R_0$  (effective)

# Epidemic Curve by Reported Date



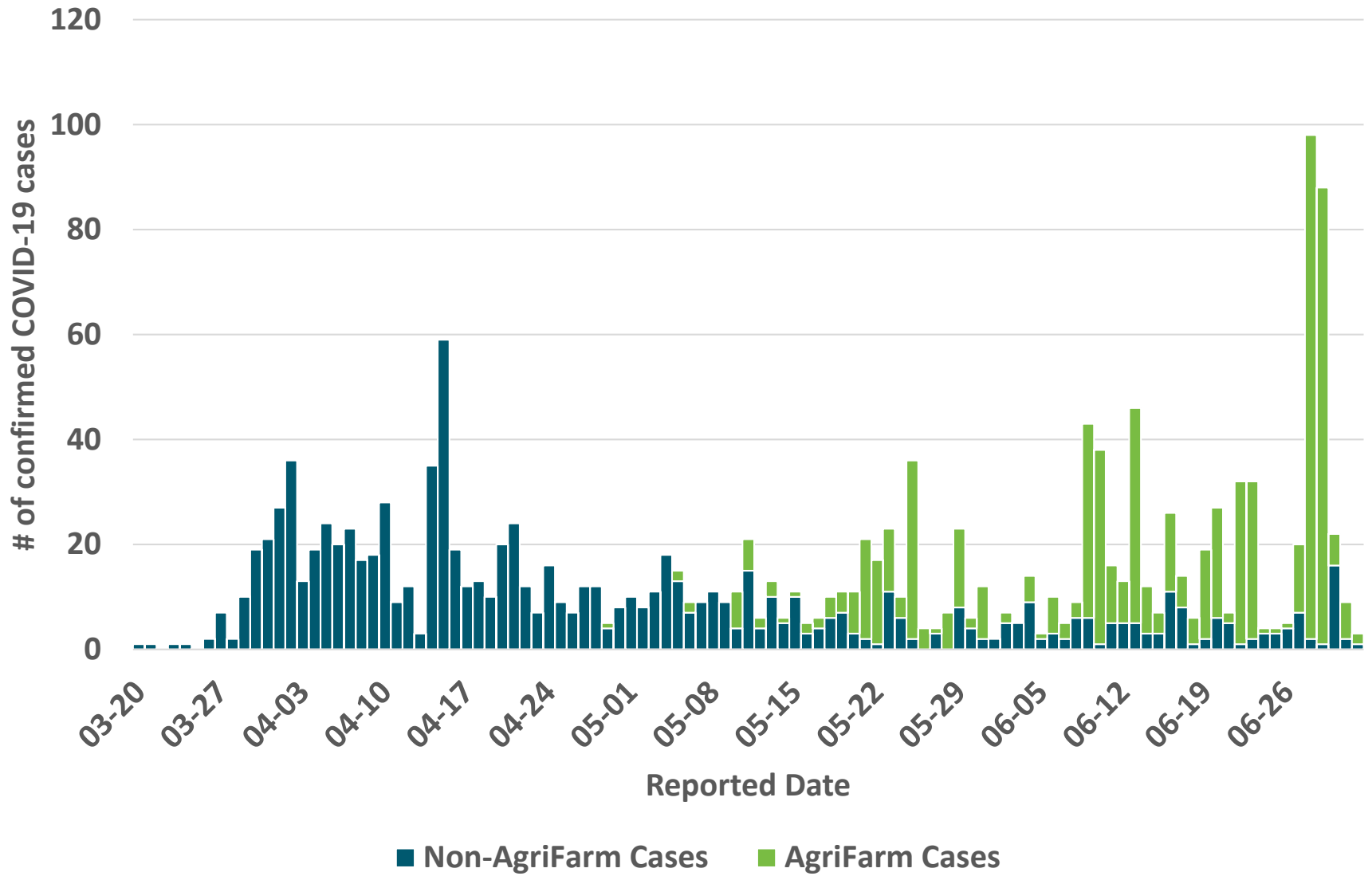
2020-07-06

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

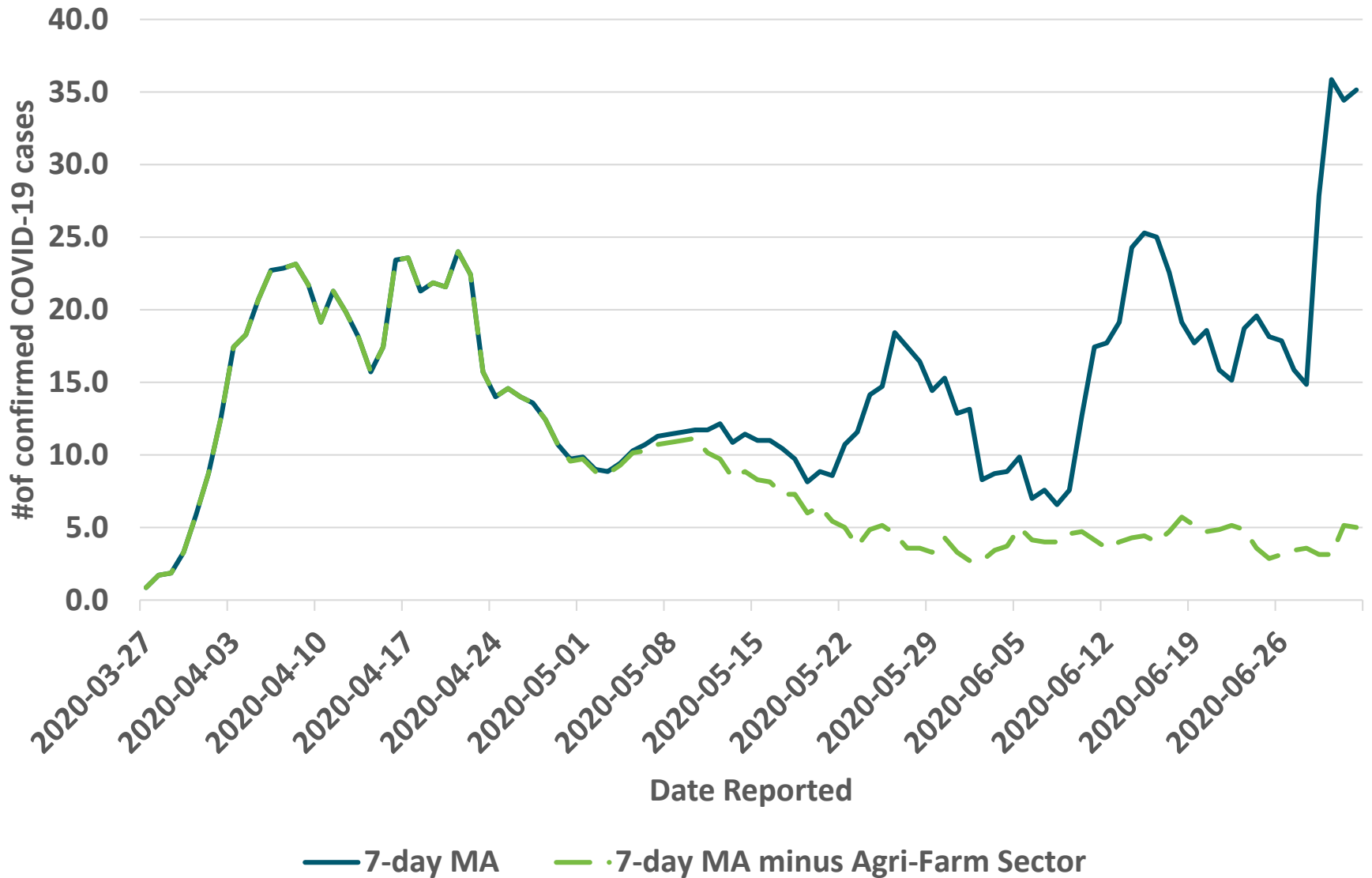


2020-07-06

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

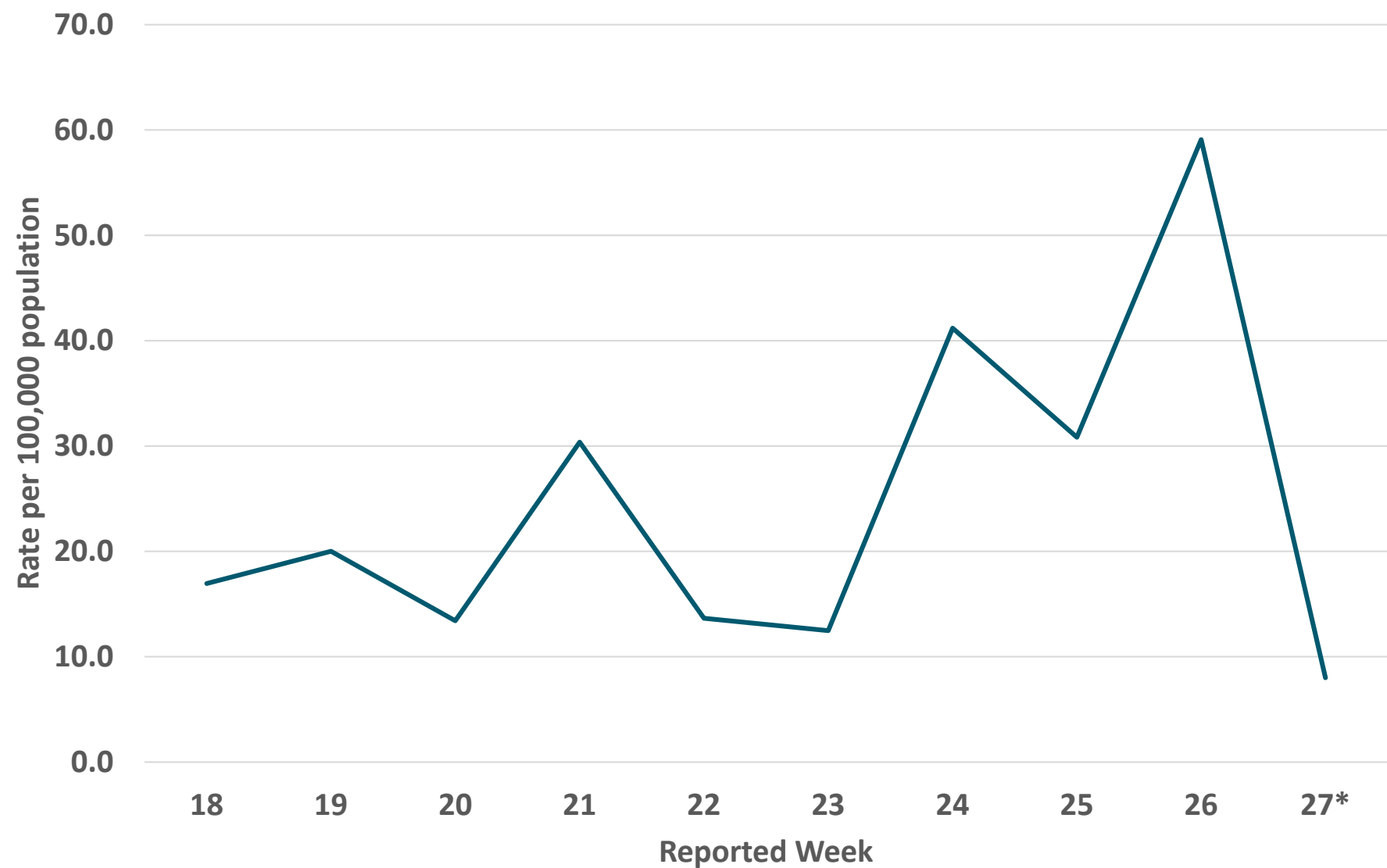


# 7-Day Moving Average by Reported Date

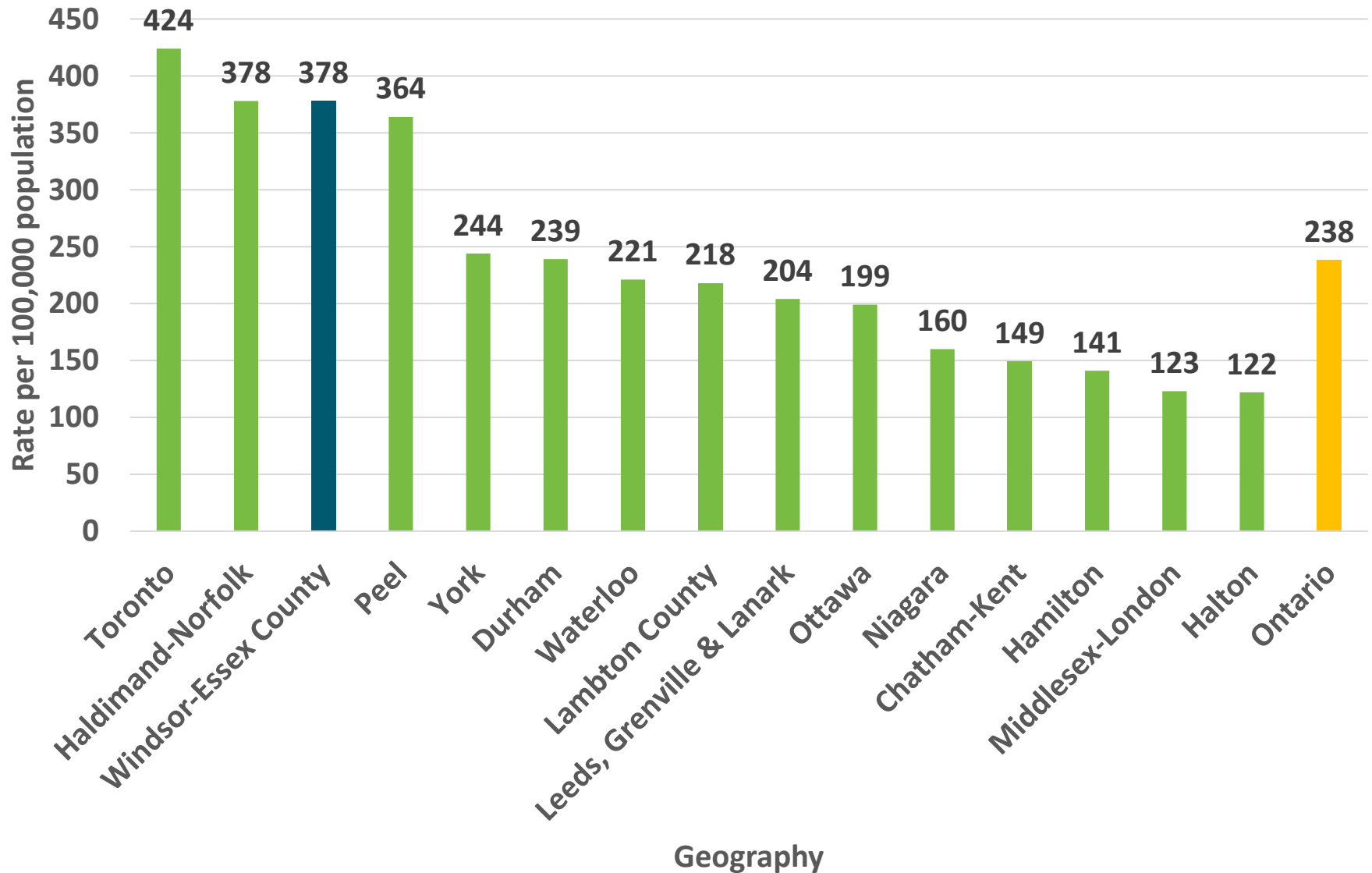




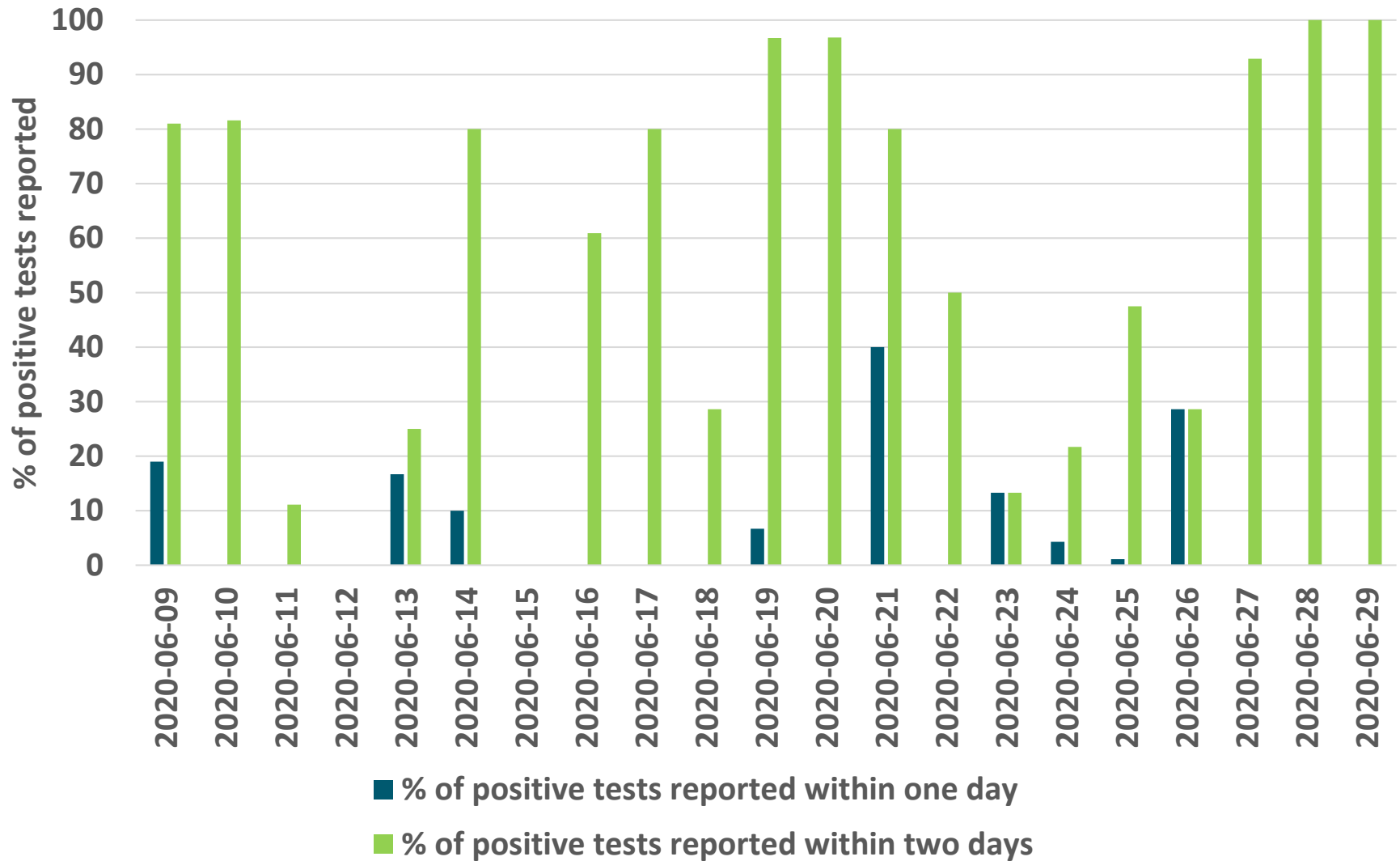
# Rate by Reported Week



# Regional & Provincial Rates

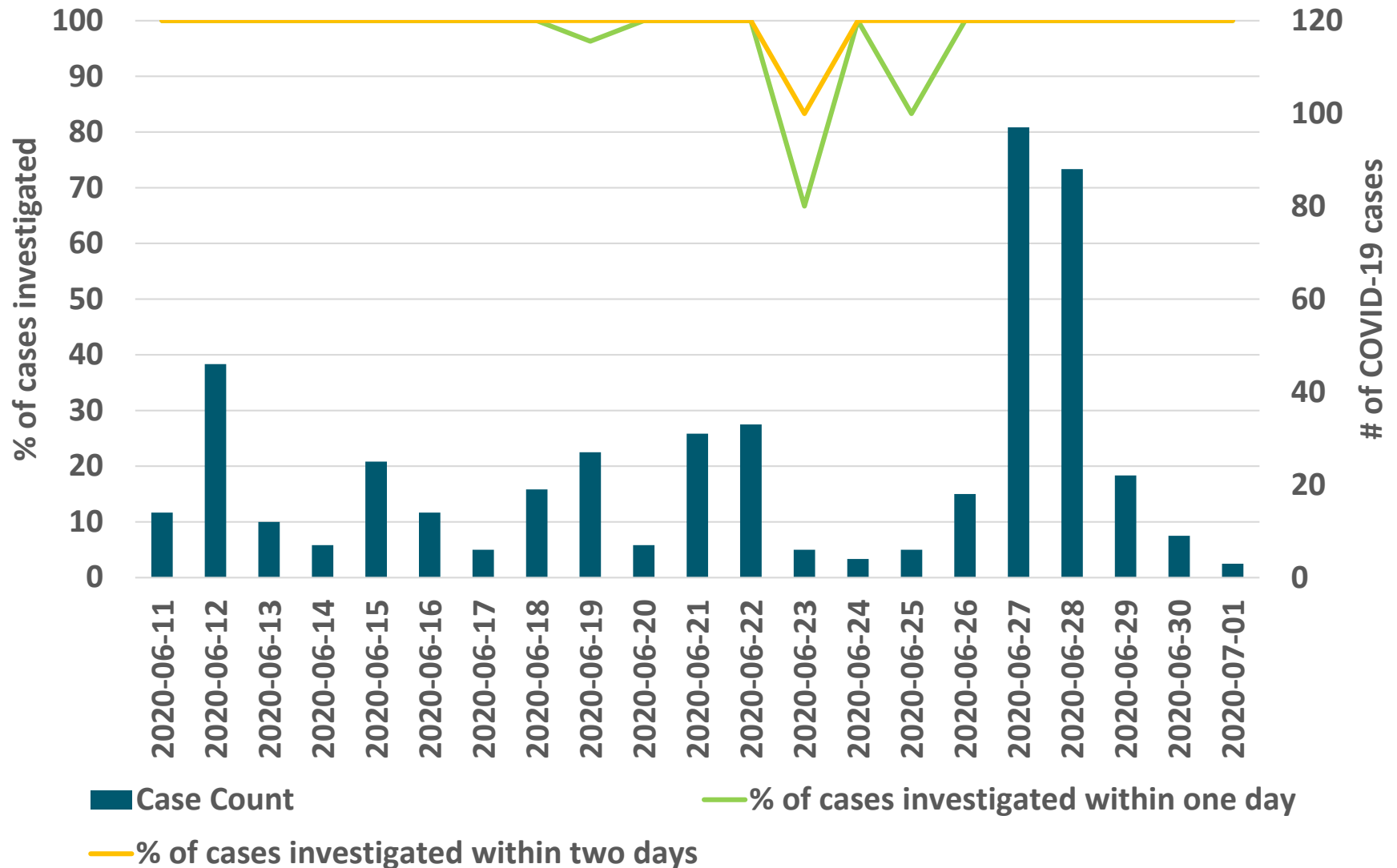


# Percentage of positive tests reported in one and two days of test date



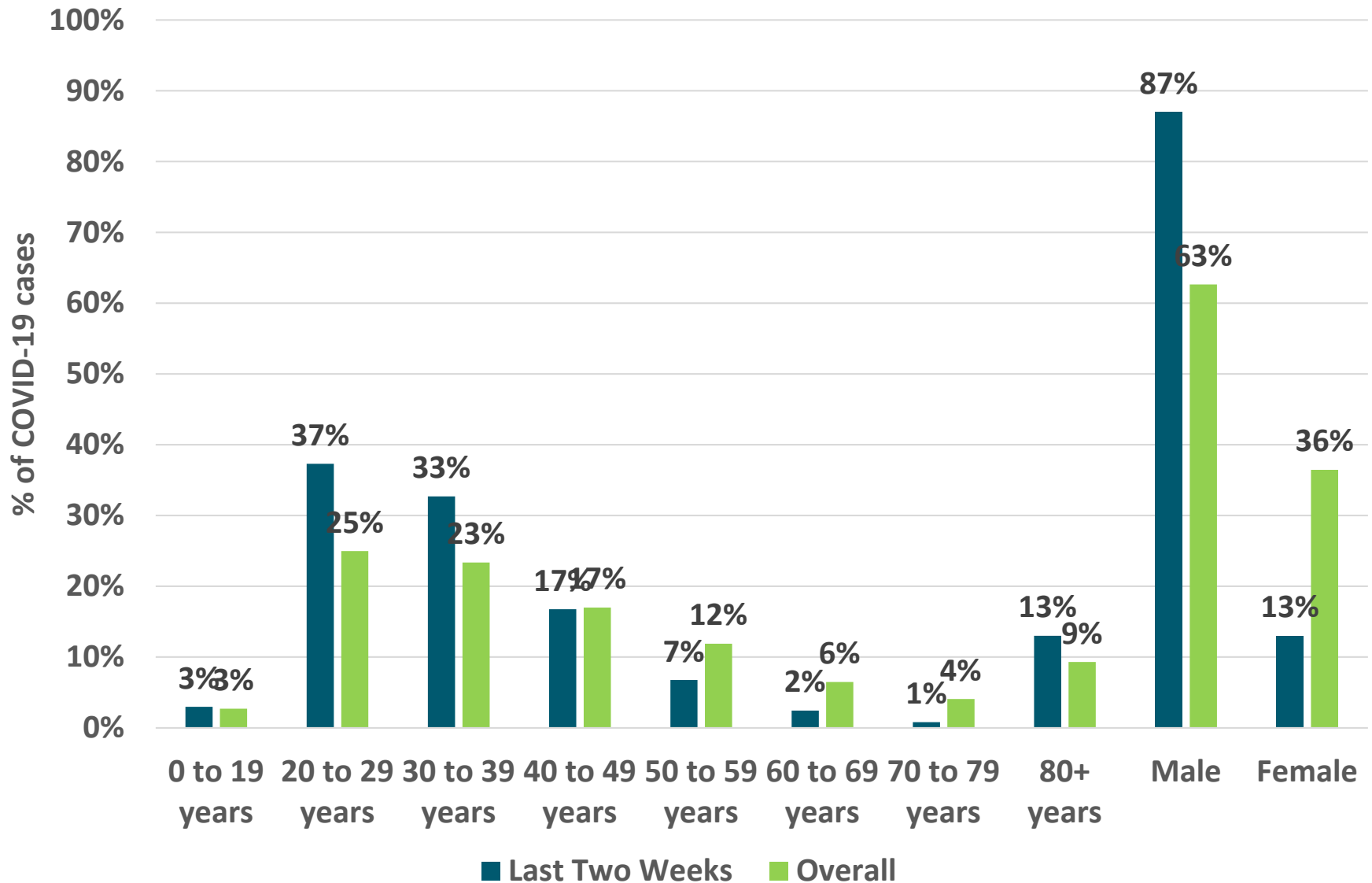
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# Percent of New Cases Investigated Within 24 & 48 Hours of Reported Date



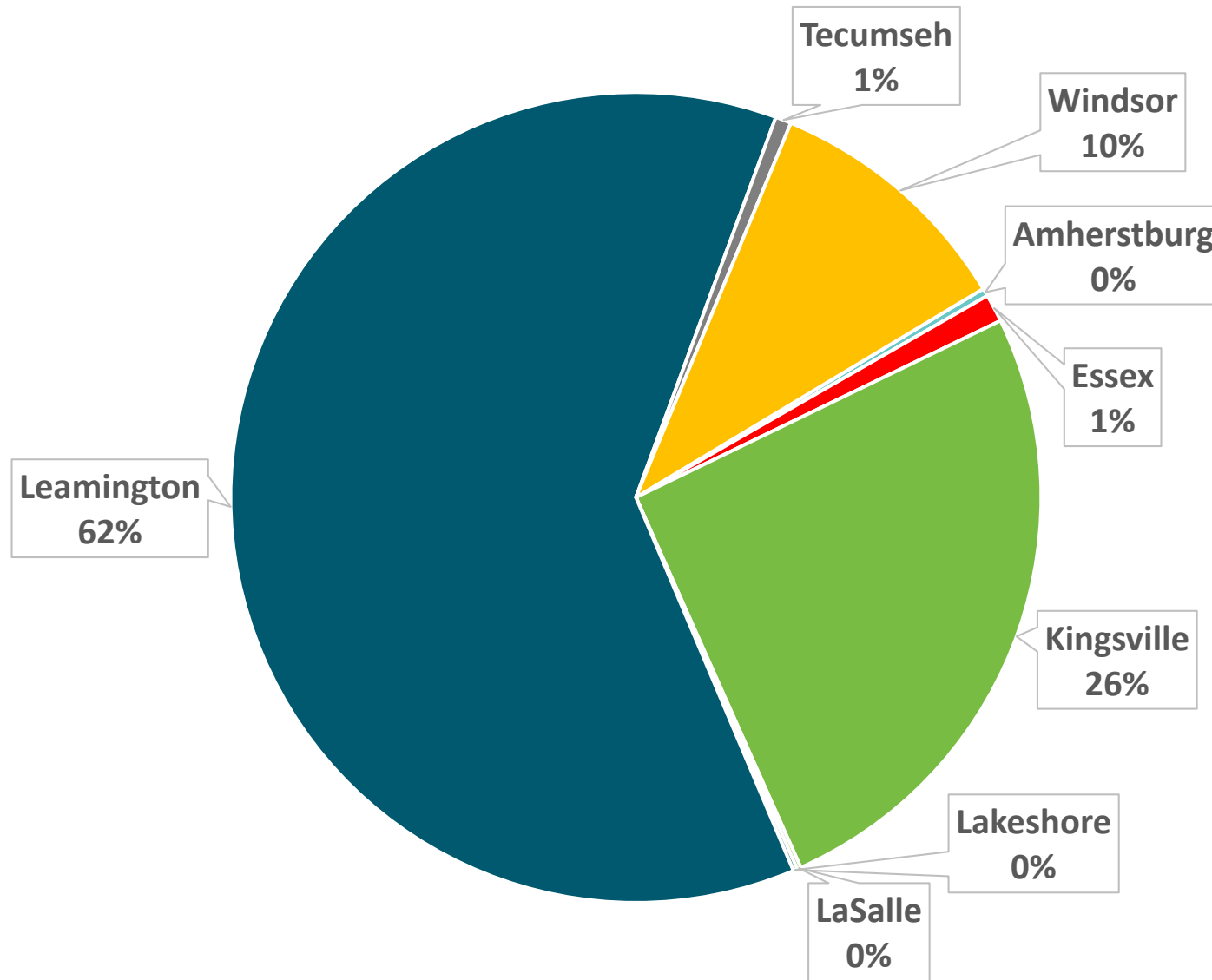
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# Age & Sex Distribution

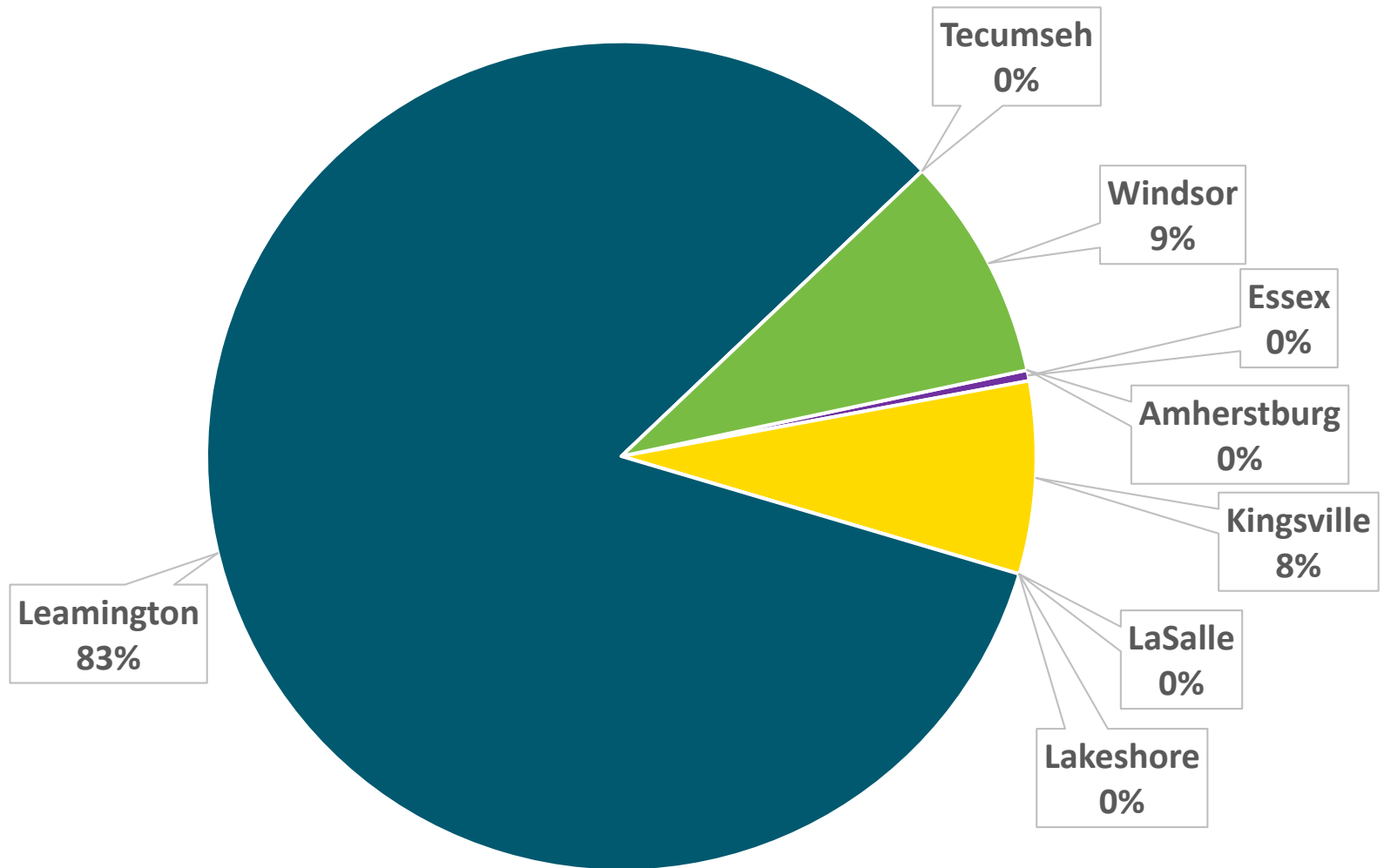


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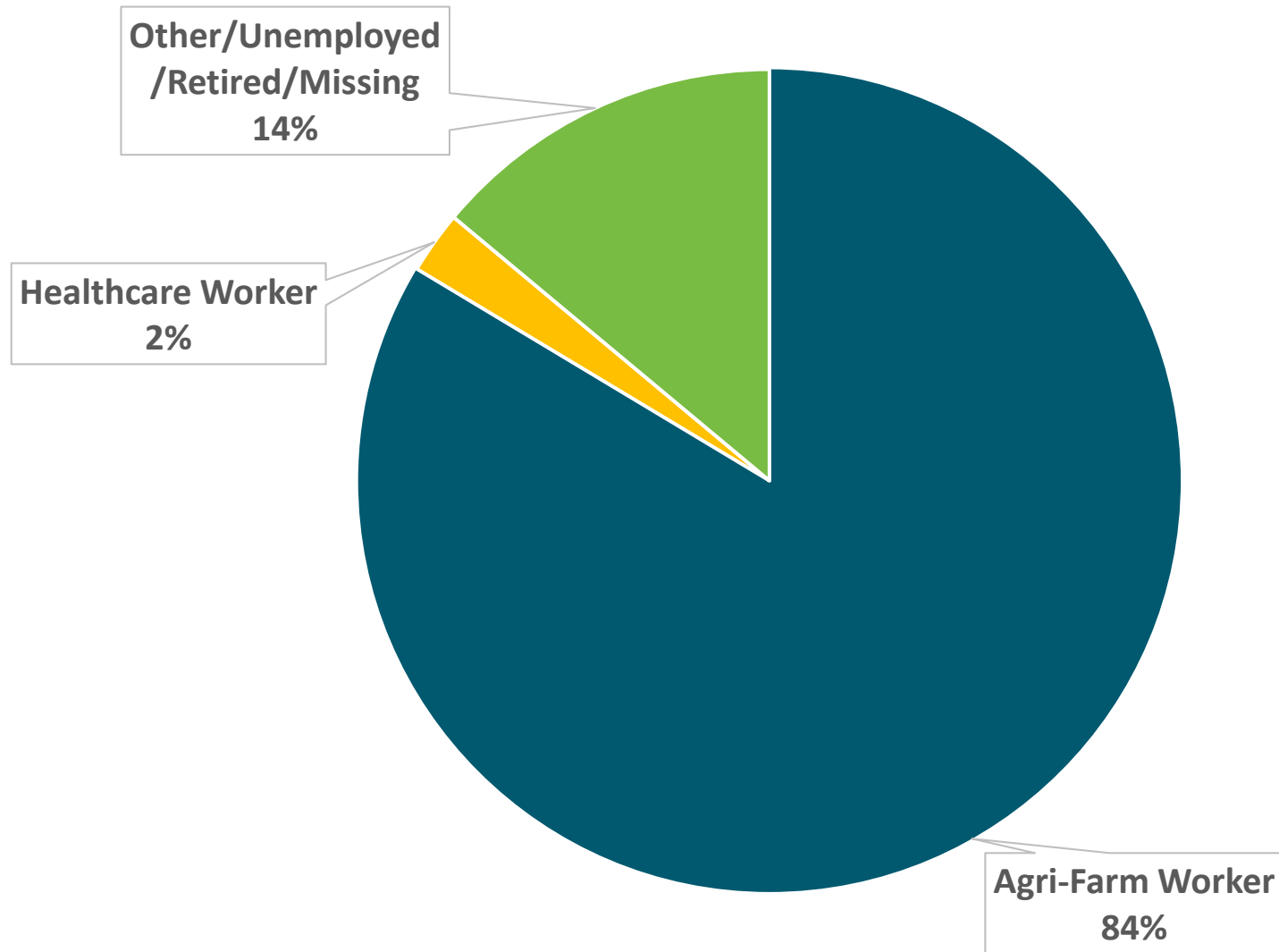
# Distribution of COVID-19 Cases by Municipality in last 30 days (June 2<sup>nd</sup> to July 1<sup>st</sup>)



# Distribution of COVID-19 Cases by Municipality in last 7 days (June 25<sup>th</sup> to July 1<sup>st</sup>)

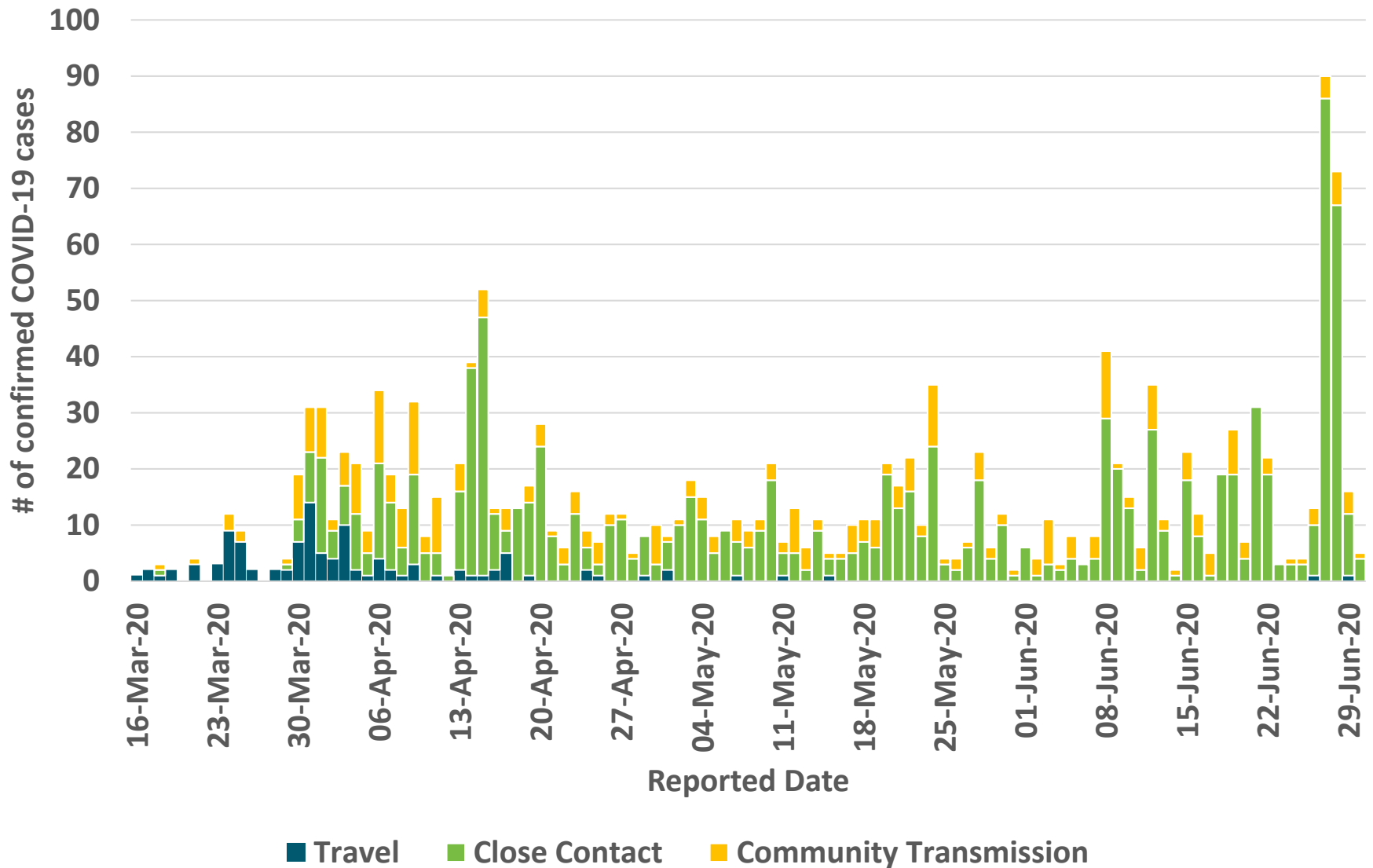


# Distribution of COVID-19 Cases by Occupation in the last 7 days (June 25 to July 1)

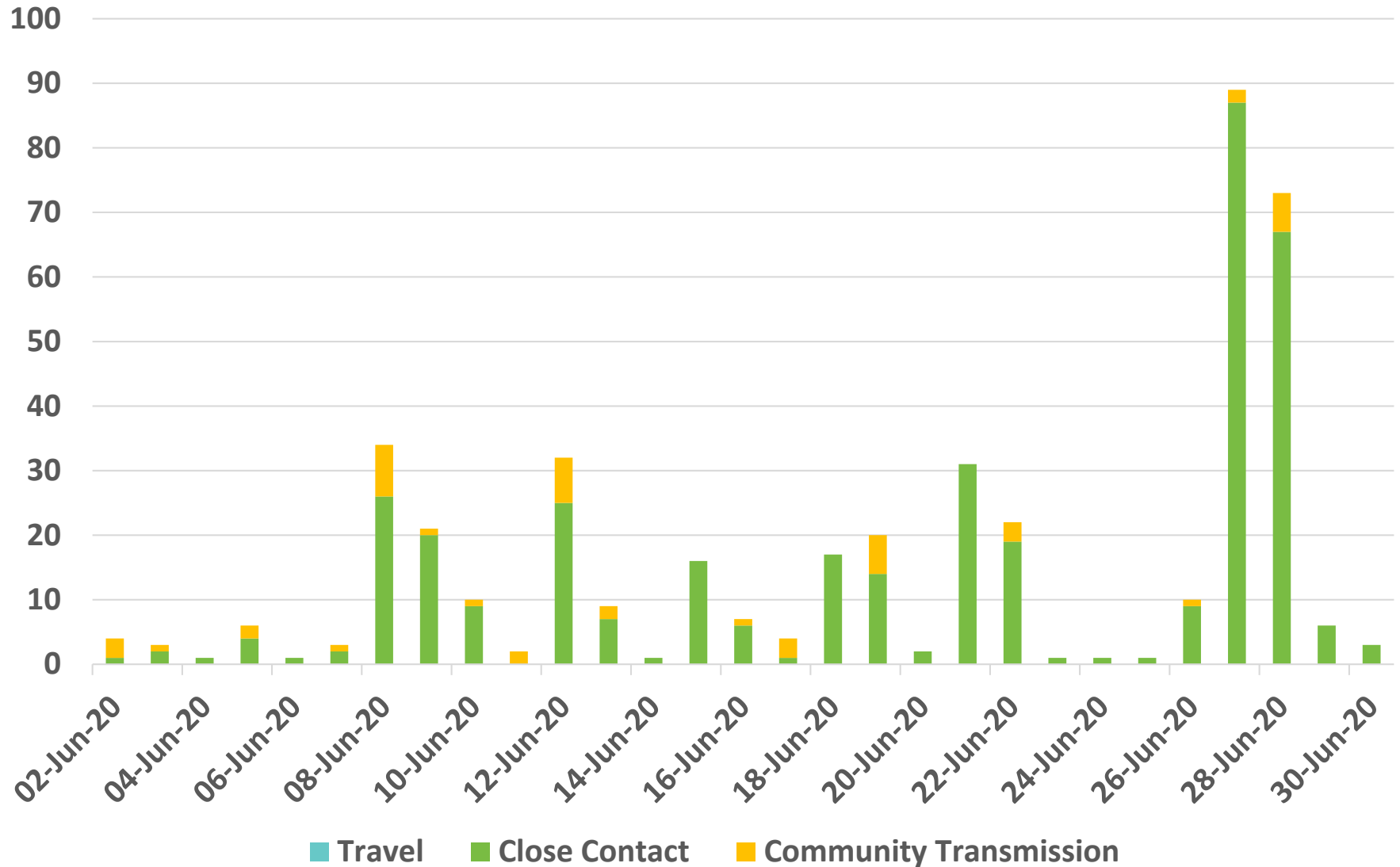




# Exposure History by Reported Date

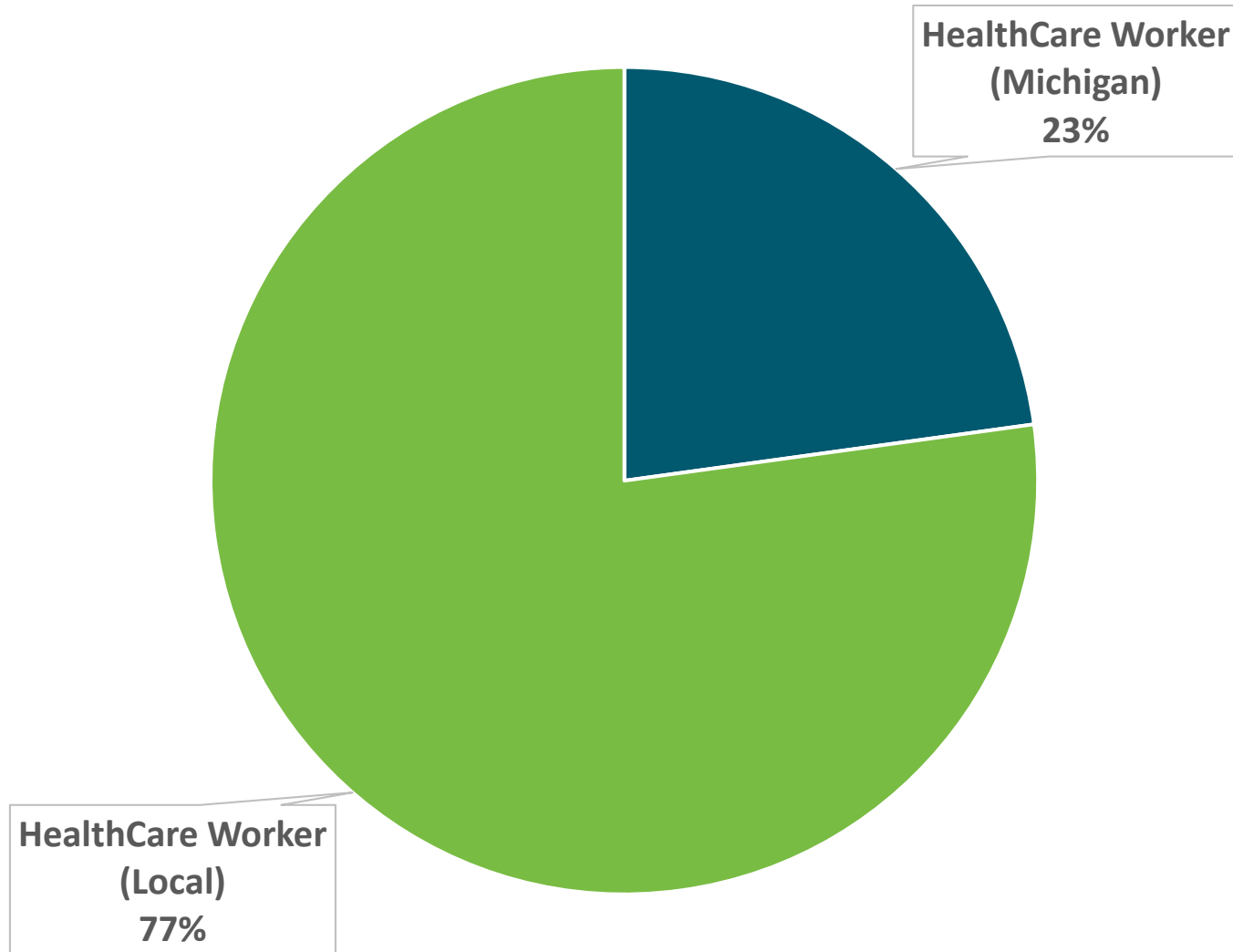


# Exposure History by Reported Date Among Agri-Farm Workers in the past 30 days

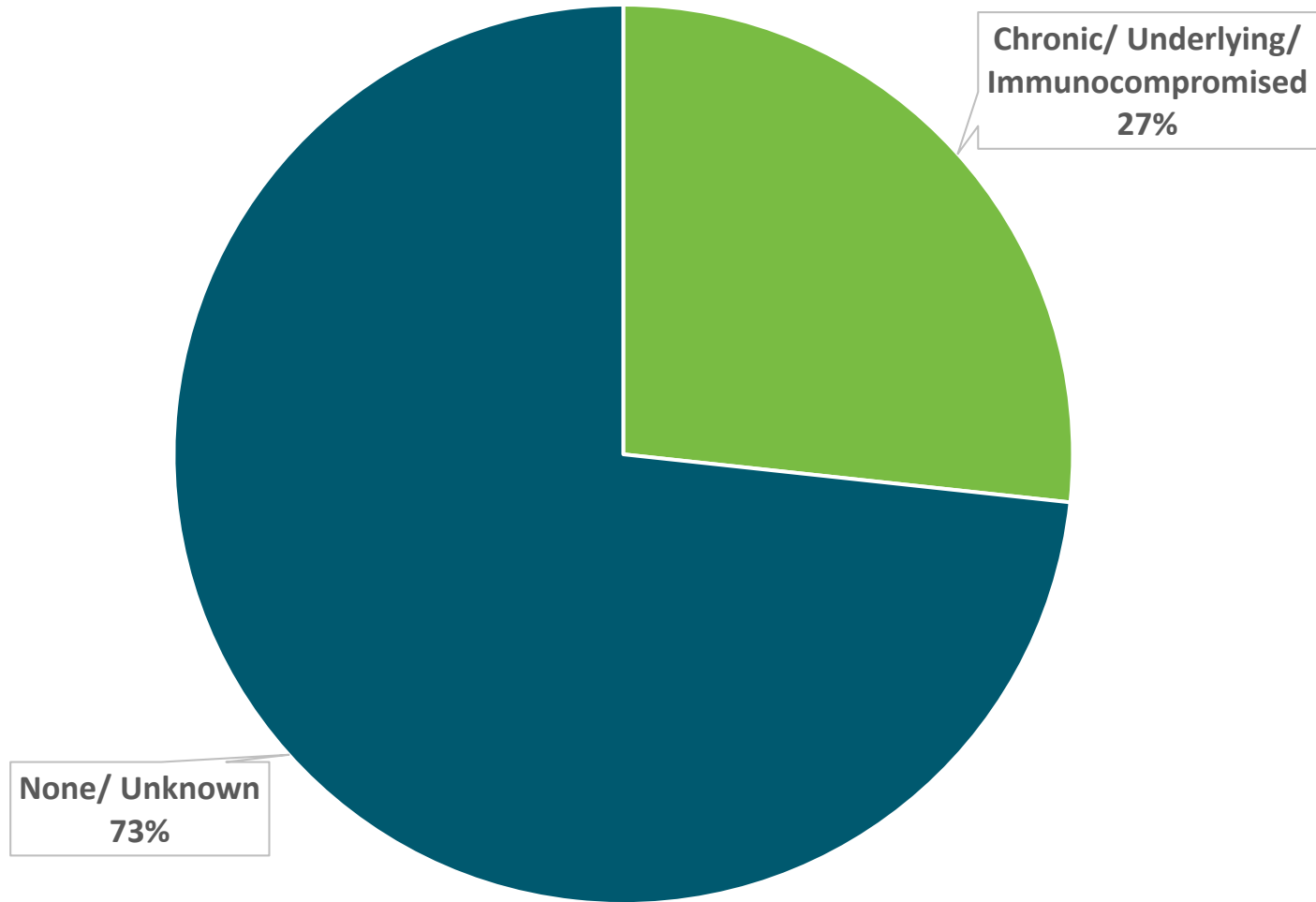


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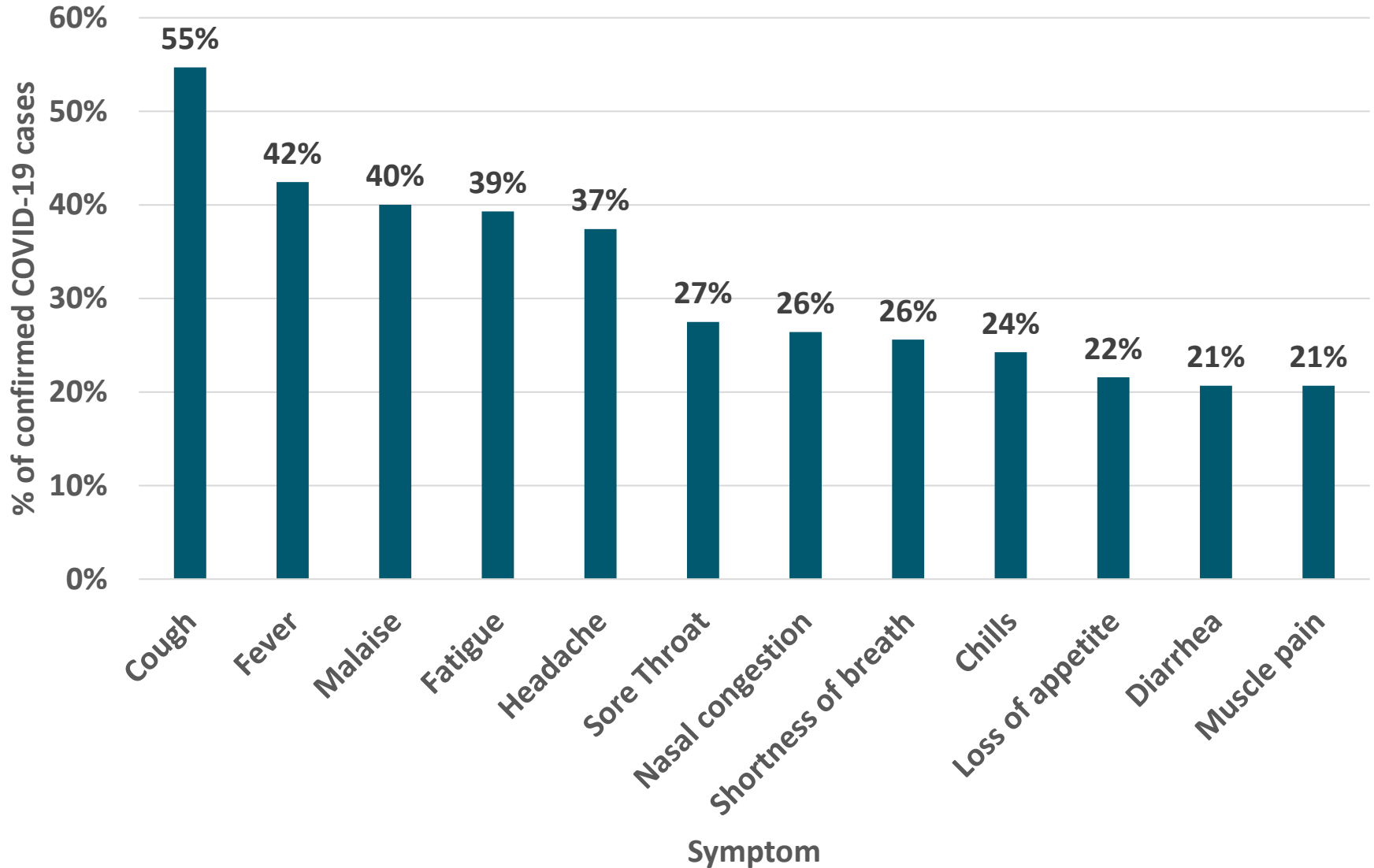
# COVID-19 Cases by Healthcare Worker



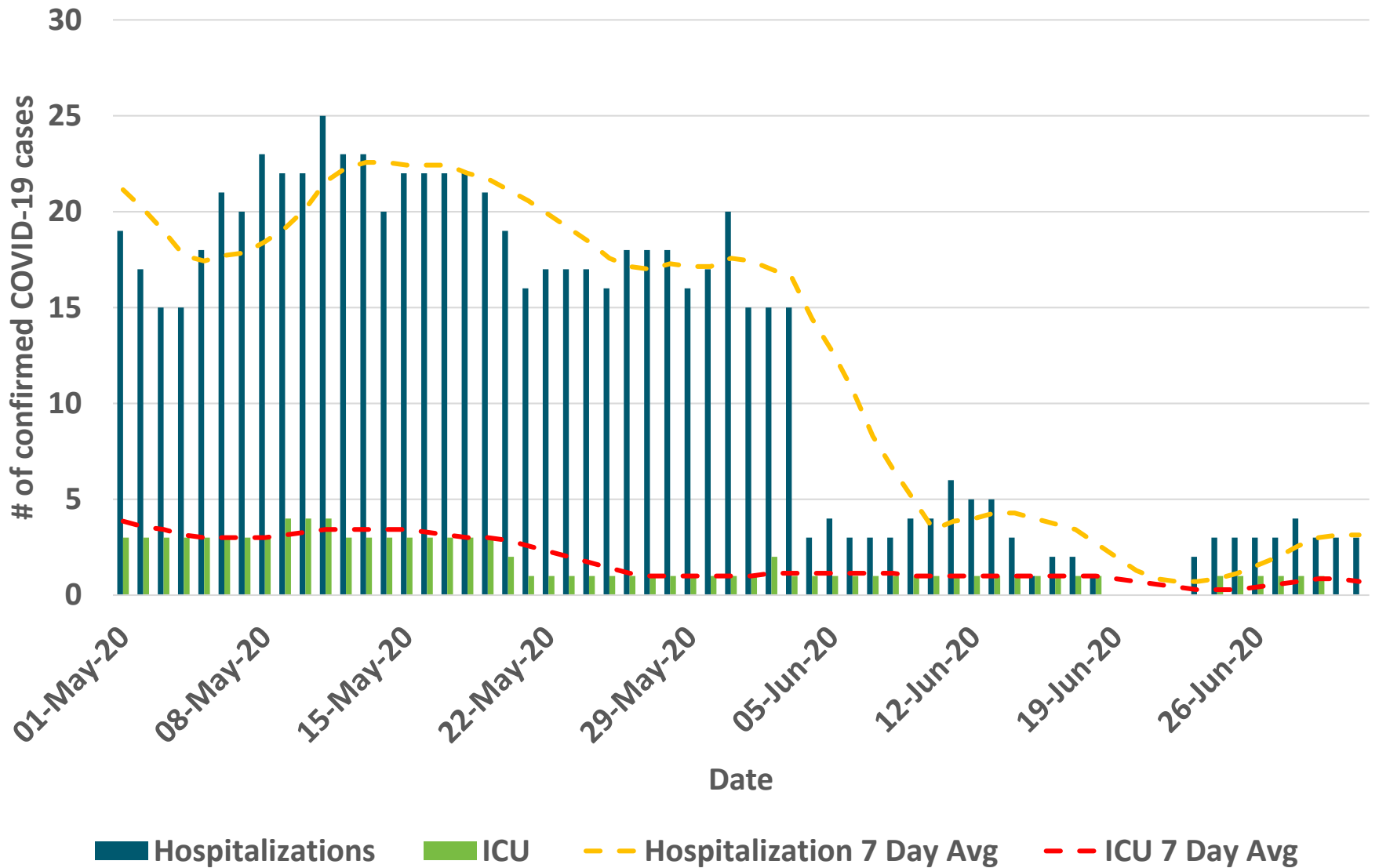
# Underlying Health Conditions



# Most Common Symptoms

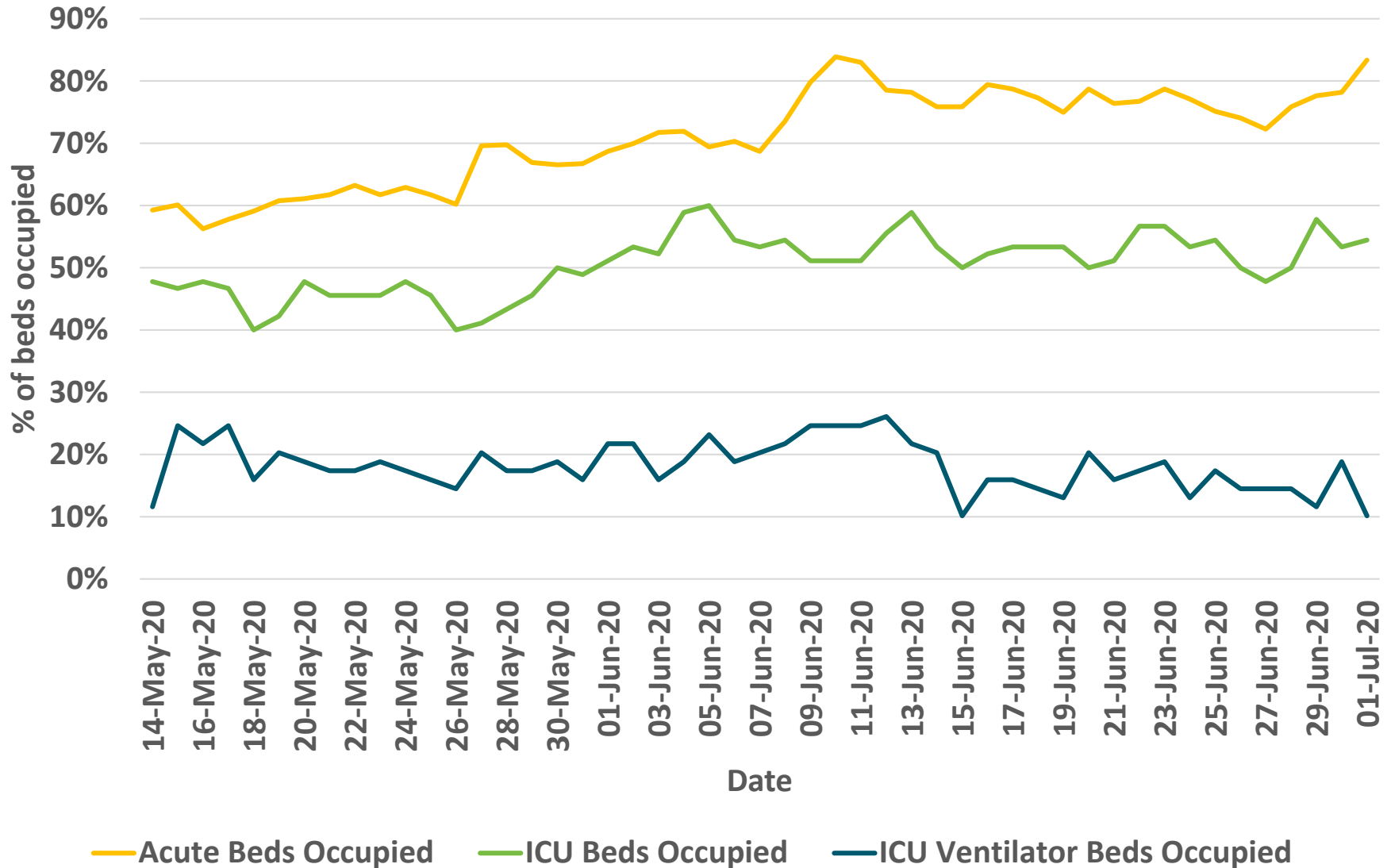


# Hospitalizations & ICU for COVID-19



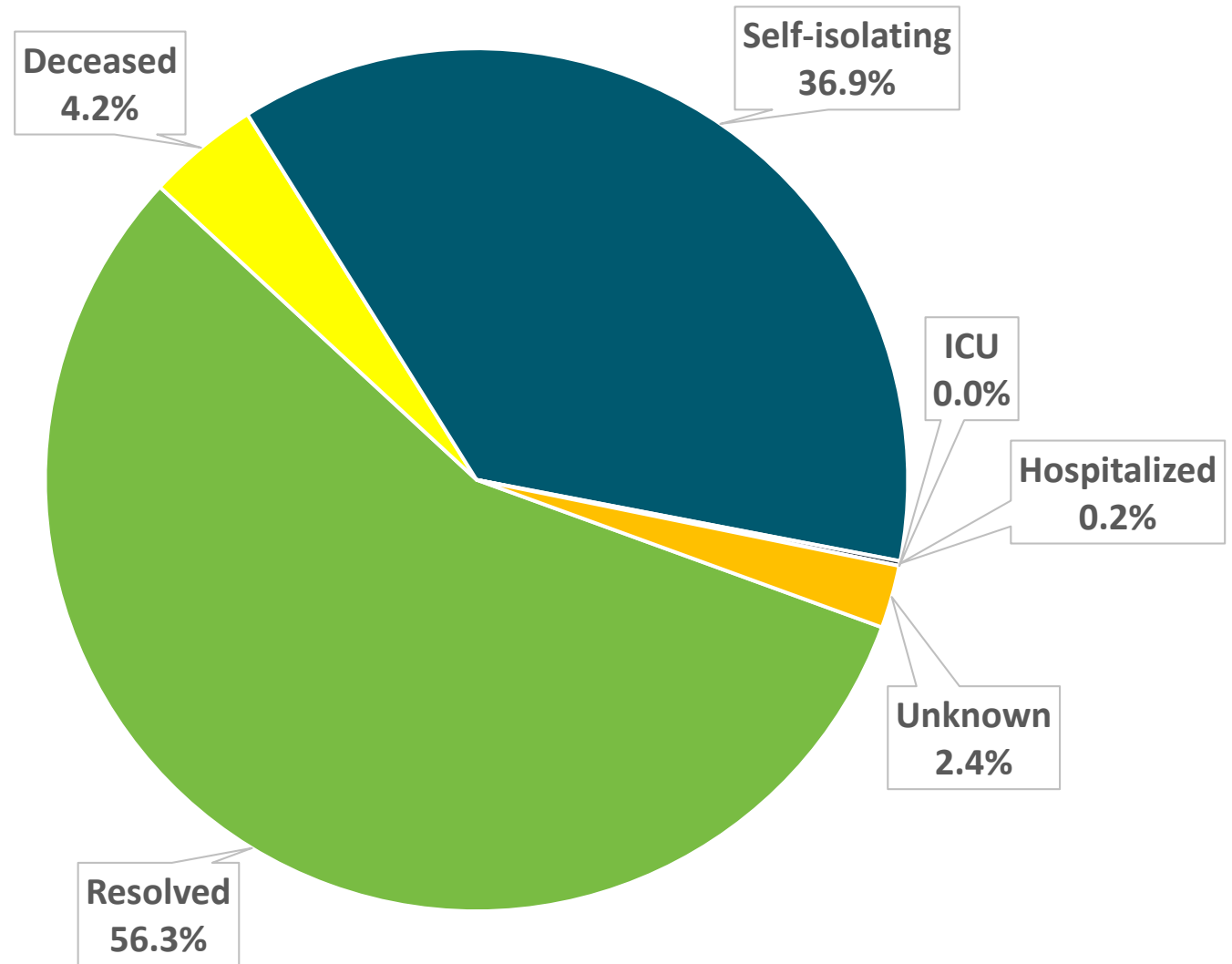
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# Health Care System Capacity



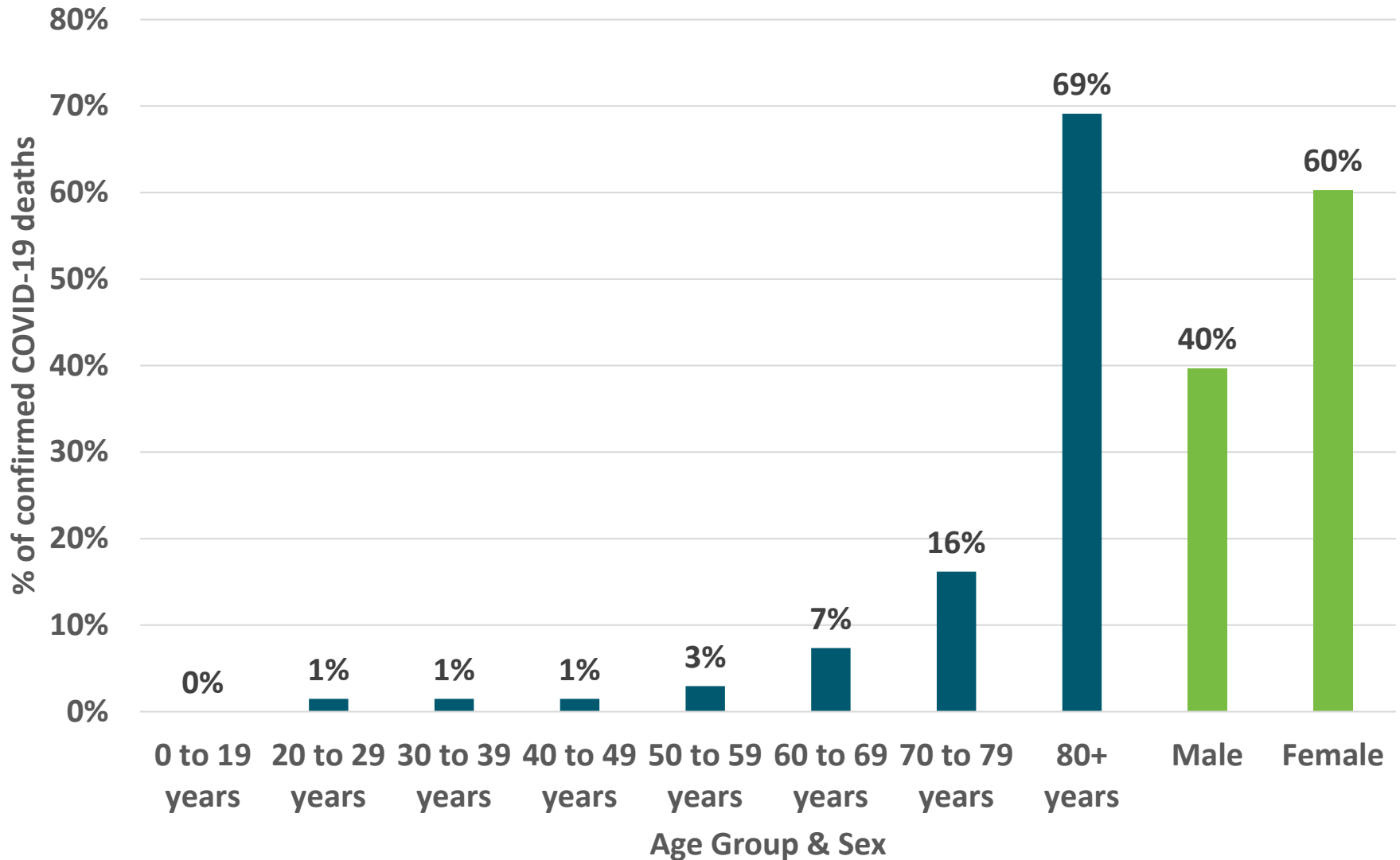
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# Current Outcomes

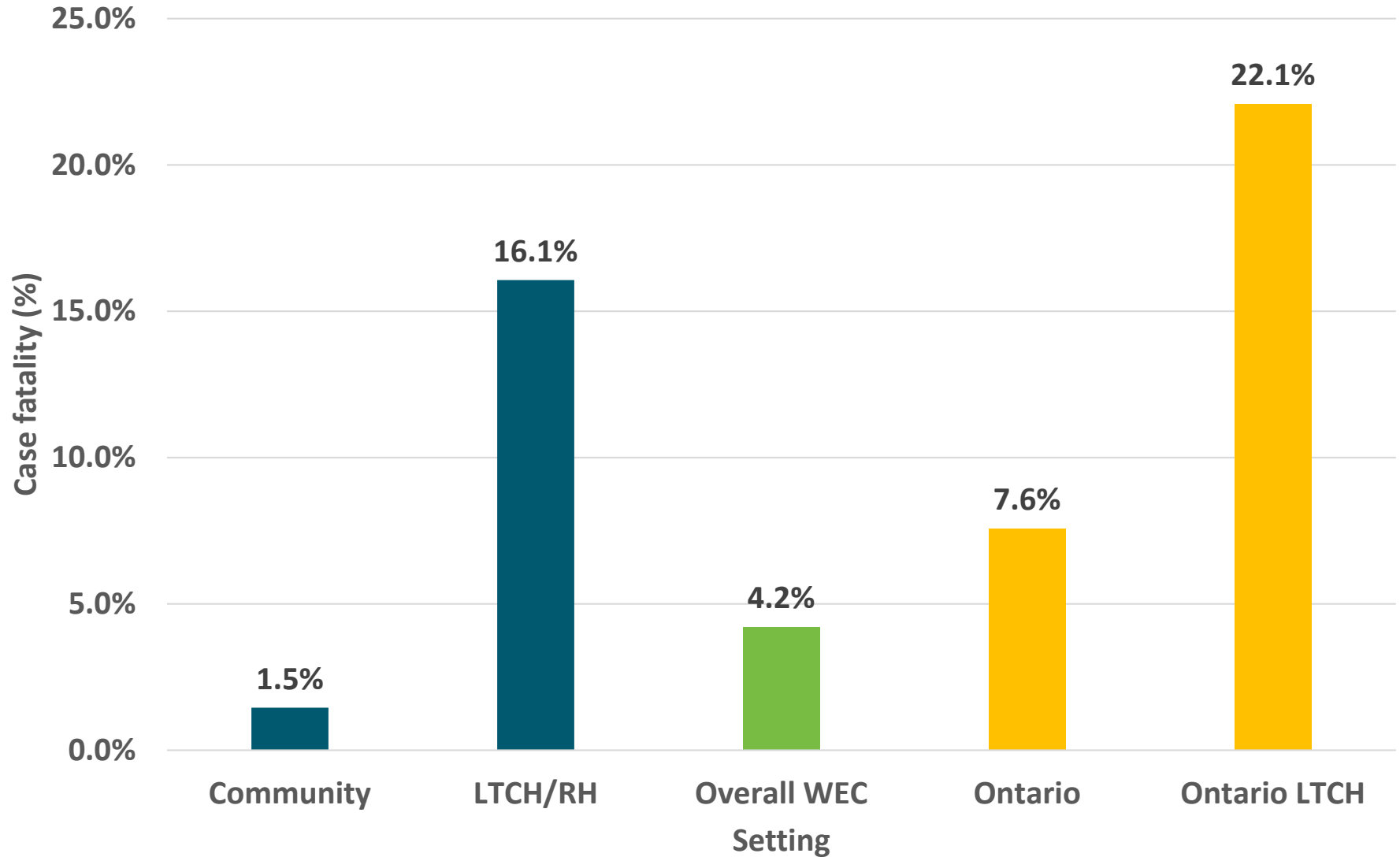




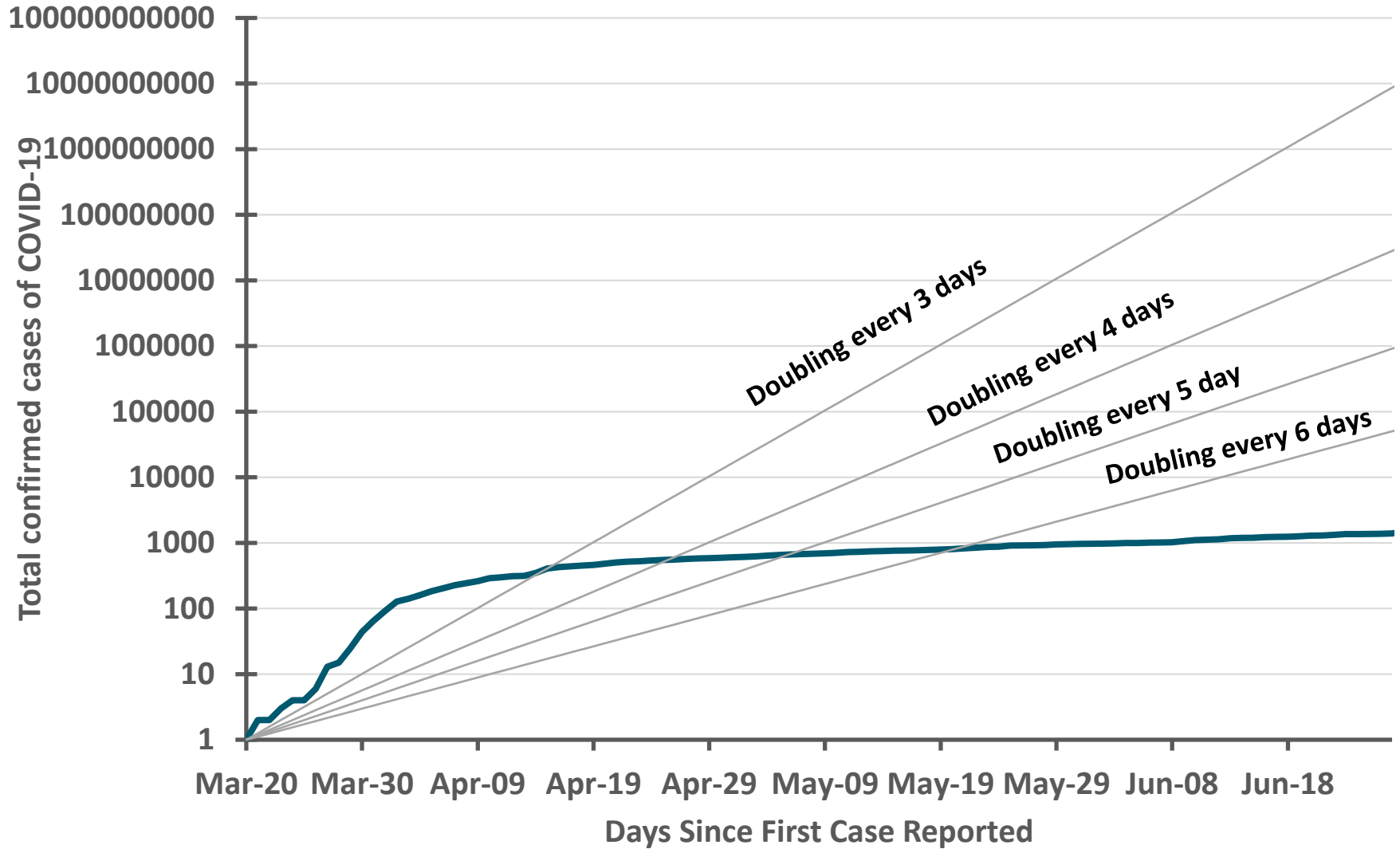
# Age & Sex Breakdown of COVID-19 Deaths



# Case Fatality Rate

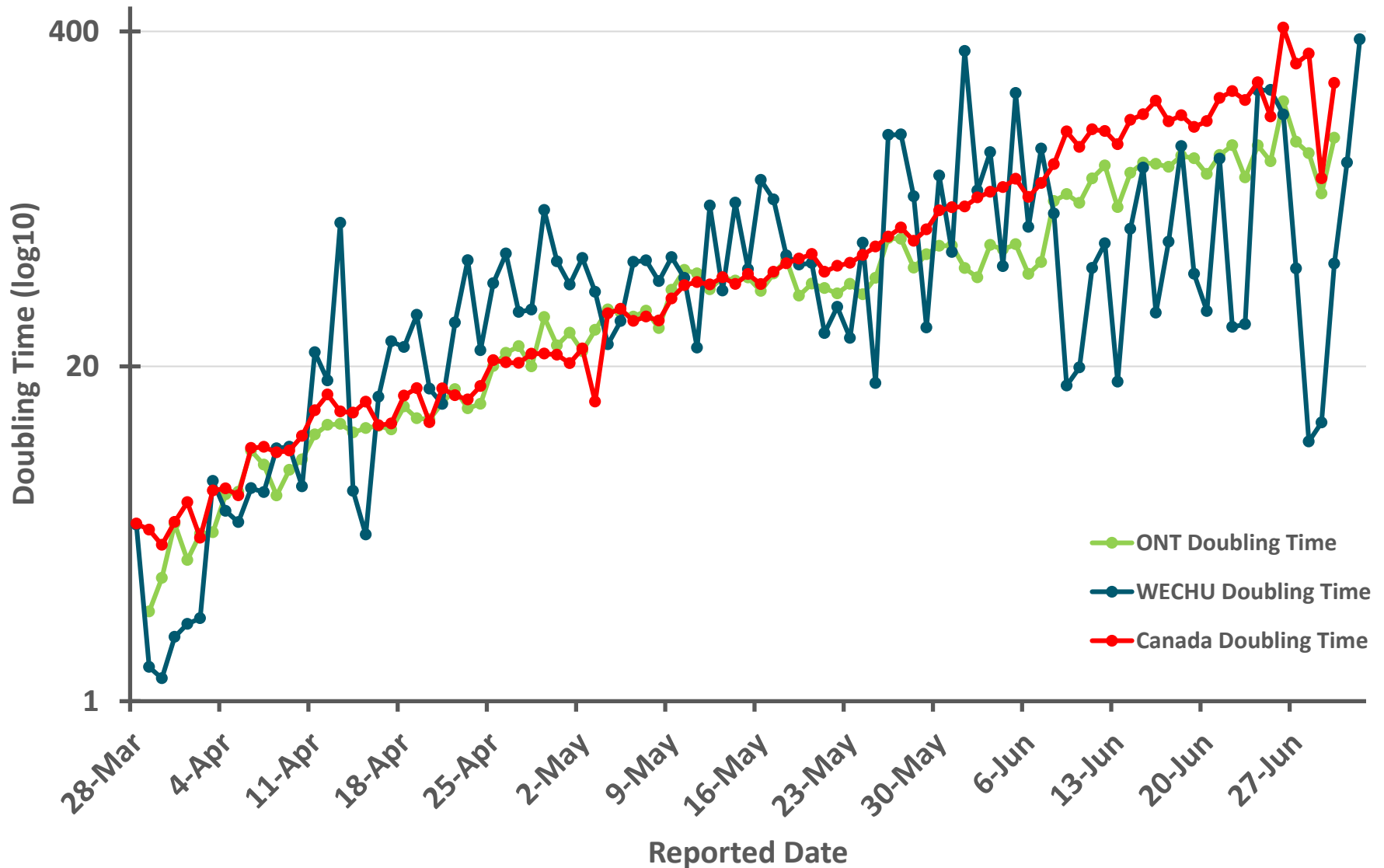


# Doubling Time (Cumulative Comparison)



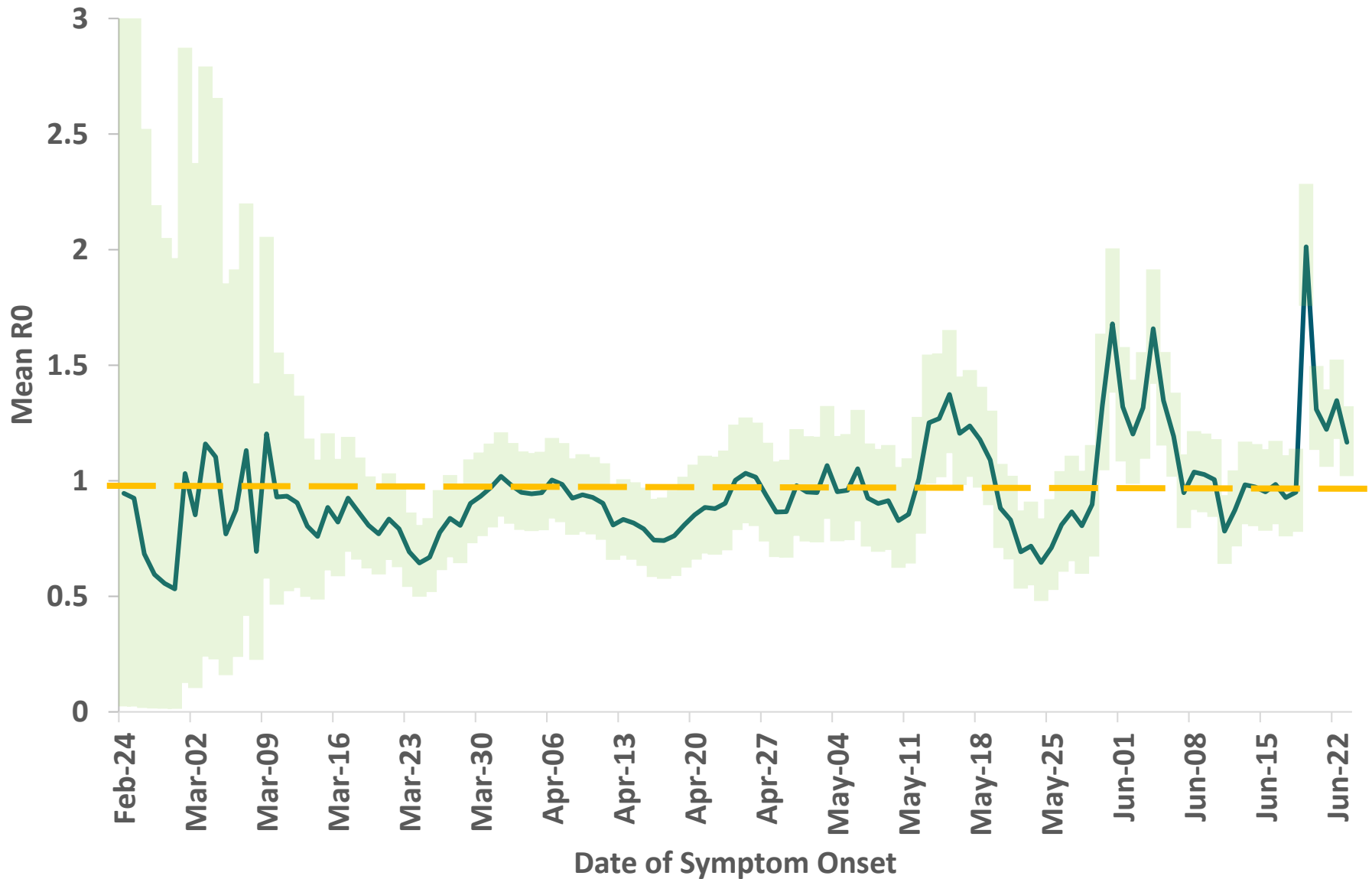
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# Doubling Time (Day over Day Comparison)



2020-07-06

# Mean R0 (Effective)



2020-07-06

# Summary

- Windsor-Essex has seen a spike in cases in late June
  - Most 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
- $R_0$  (effective) value is 1.17 indicating that every COVID-19 case leads to more than one new case
  - BUT we have seen variations in the past month