## Contents

Мар о	f Ohio by Region	1	
Cases,	Hospitalizations and Deaths for Ohio to Date	2	
Cases,	Hospitalizations and Deaths for Ohio and Region Over Time	5	
Fairfie <sup>2</sup>	ld County Specific Data	11	
Fairfie <sup>1</sup>	ld Co. Infection Rate per 100,000 Population	17	
Fairfie <sup>1</sup>	ld Co. Rate of Hospitalizations to Infections	18	
Fairfie <sup>2</sup>	Fairfield Co. Ratio of Deaths to Hospitalizations		
$\operatorname{List}$	of Tables		
${f List}$	of Figures		
1	Ohio Regions by County	1	
2	Ohio Infections by Age	2	
3	Ohio Hospitalizations by Age	3	
4	Ohio Deaths by Age	4	
5	Total Ohio Infections Over Time	5	
6	Total Ohio Hospitalizations Over Time	6	
7	Total Ohio Deaths Over Time	7	
8	Rate per 100,000 Infections by Region of State	8	
9	Rate per 100,000 Hospitalizations by Region of State	9	
10	Rate per 100,000 Deaths by Region of State	10	
11	Fairfield Co. Infections by Age	11	
12	Fairfield Co. Hospitalizations by Age	12	
13	Fairfield Co. Deaths by Age	13	
14	Fairfield Co. Infections Over Time	14	
15	Fairfield Co. Hospitalizations Over Time	15	

16	Fairfield Co. Deaths Over Time	16
17	Fairfield Co. Infection Rate per 100,000 Population	17
18	Fairfield Co. Ratio of Deaths to Hospitalizations	19

### Map of Ohio by Region

The following presentation summarizes Ohio COVID-19 data obtained from the Department of Health COVID-19 warehouse. Data for the state of Ohio and Fairfield County are presented. In addition to descriptive reports for the state and individual counties available on the state website, the Ohio Alliance for Innovation in Population Health has summarized trends by region of state and has calculated county level outcome indicators that measure disease transmission, population susceptability to adverse outcomes and the effectiveness of health systems at mitigating the effects of COVID-19. These measures will be explained at greater length later in this report.

Figure 1
Ohio Regions by County



## Cases, Hospitalizations and Deaths for Ohio to Date

The following series of graphs show the total number of Ohio cases, hospitalizations and deaths attributable to COVID-19 by reported age group of infected persons.

Figure 2 Ohio Infections by Age

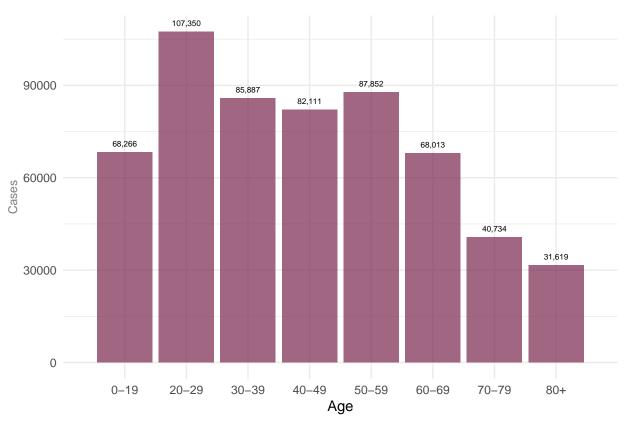


Figure 3
Ohio Hospitalizations by Age

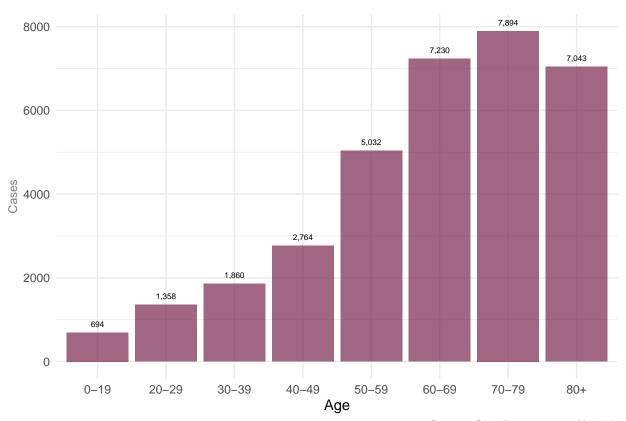
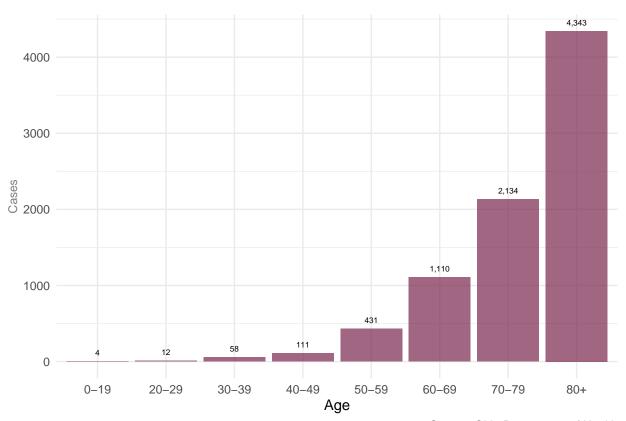


Figure 4
Ohio Deaths by Age



### Cases, Hospitalizations and Deaths for Ohio and Region Over Time

The following graphs show the number of infections, hospitalizations and deaths by day since the beginning of the pandemic. The number of infections in recent weeks has increased dramatically and is generally consistent with temporal pattern associated with influenza. Hospitalization data displays a multi-modal pattern with peaks in the spring, summer and fall. Deaths, however, have declined since the spring peak. A series of graphs summarizing these data by region of state is also presented.

Figure 5
Total Ohio Infections Over Time

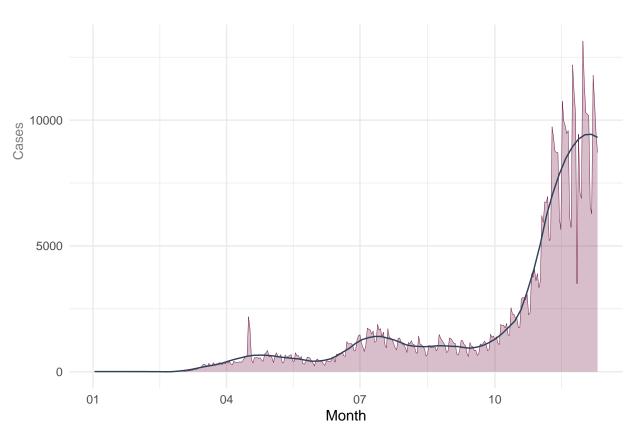


Figure 6
Total Ohio Hospitalizations Over Time

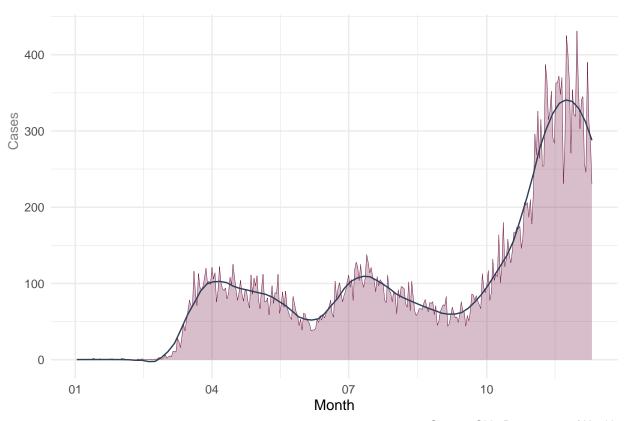
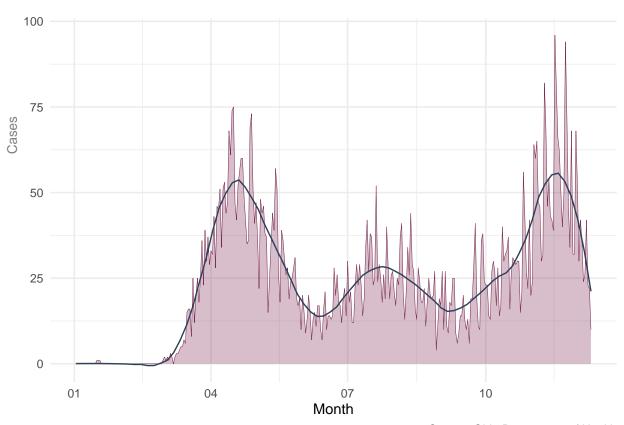


Figure 7
Total Ohio Deaths Over Time



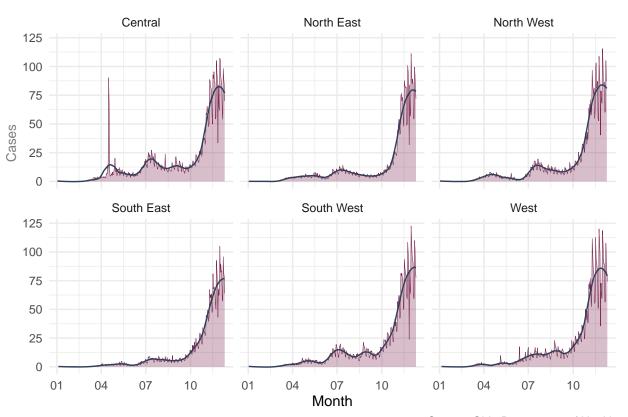


Figure 9
Rate per 100,000 Hospitalizations by Region of State

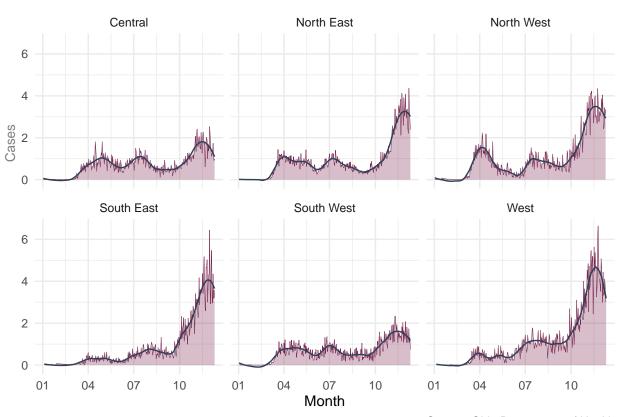
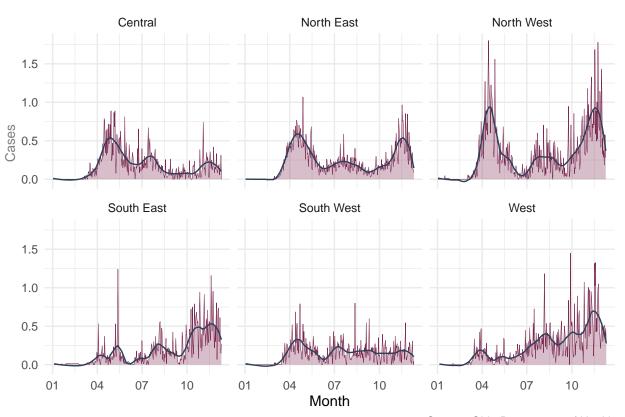


Figure 10 Rate per 100,000 Deaths by Region of State



# Fairfield County Specific Data

Figure 11
Fairfield Co. Infections by Age

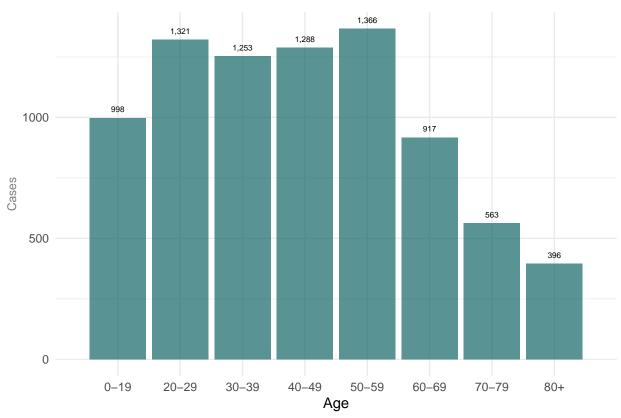


Figure 12
Fairfield Co. Hospitalizations by Age

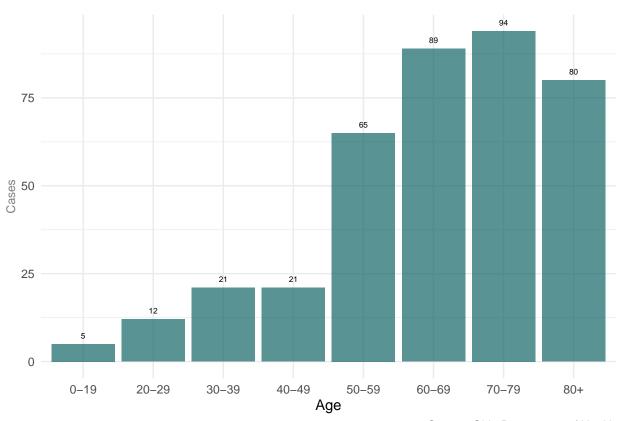


Figure 13
Fairfield Co. Deaths by Age

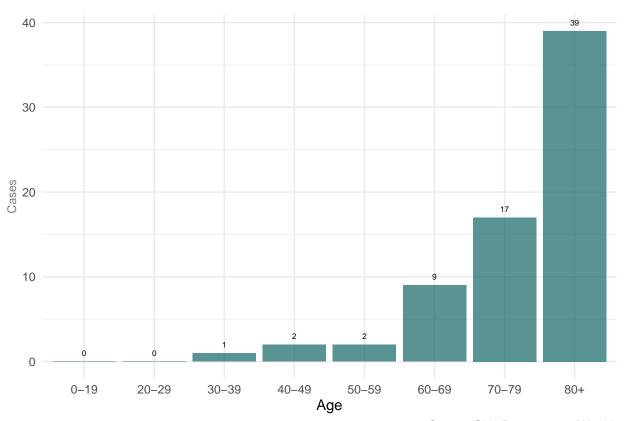
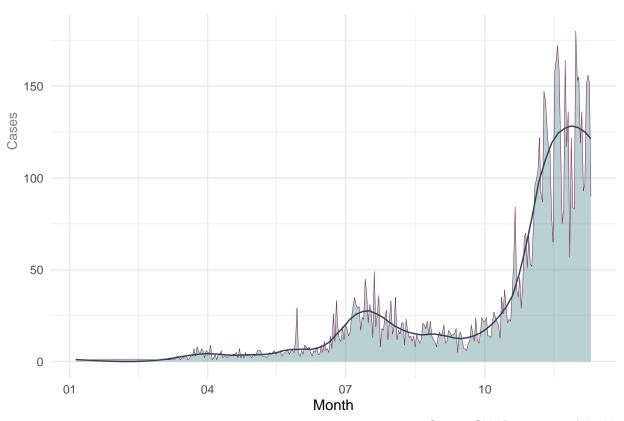


Figure 14
Fairfield Co. Infections Over Time



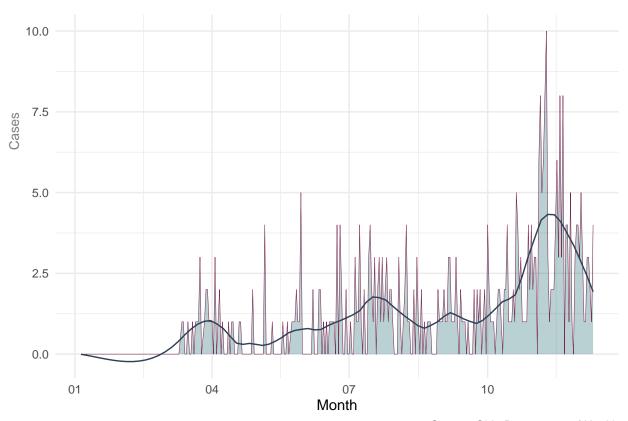
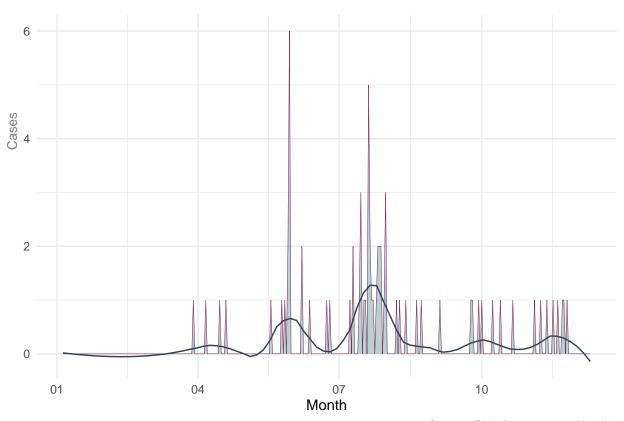
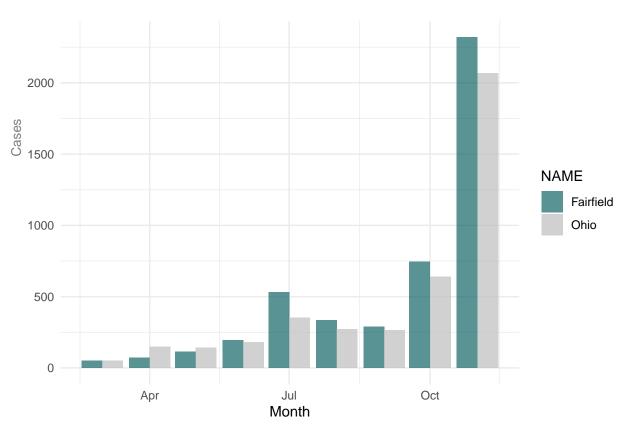


Figure 16
Fairfield Co. Deaths Over Time



### Fairfield Co. Infection Rate per 100,000 Population

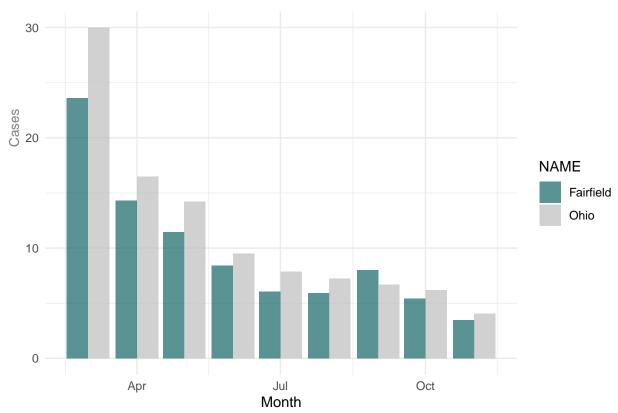
The Infection Rate per 100,000 population is a proposed measure of how efficiently the Coronavirus transmits within a geographic area. Transmission efficiency is a function of population density, and the concentration of residential institutions which are difficult to influence by short-term policy actions, as well as adherence to social distancing, mask compliance and other behavioral factors that can be influenced through state and local policy decisions. The following graph shows how the infection rate per 100,000 population has changed by month for Fairfield County and Ohio.



### Fairfield Co. Rate of Hospitalizations to Infections

The ratio of hospitalizations to infections (H2I) is a proposed measure for how susceptible the population of a geographic area is to adverse outcomes associated with COVID-19. This measure is calculated by dividing the number of hospitalizations by the total number of infections.

For the purposes of this exercise, it is assumed that high ratios of hospitalizations to infections is indicative of a geographic region that has a higher percentage of persons struggling with underlying conditions and therefore more susceptible to adverse outcomes.



## Fairfield Co. Ratio of Deaths to Hospitalizations

The ratio of hospitalizations to Deaths (D2H) is a proposed measure for the effectiveness of local health systems at mitigating the effects of COVID-19. This measure is calculated by dividing the number of hospitalizations by the total number of deaths. It is assumed that severity of illness for hospital admissions is similar acFairfield Ohio communities and therefore survival rates indicate greater or lesser success in mitigating the effects of the disease.

Fairfield Co. Ratio of Deaths to Hospitalizations

