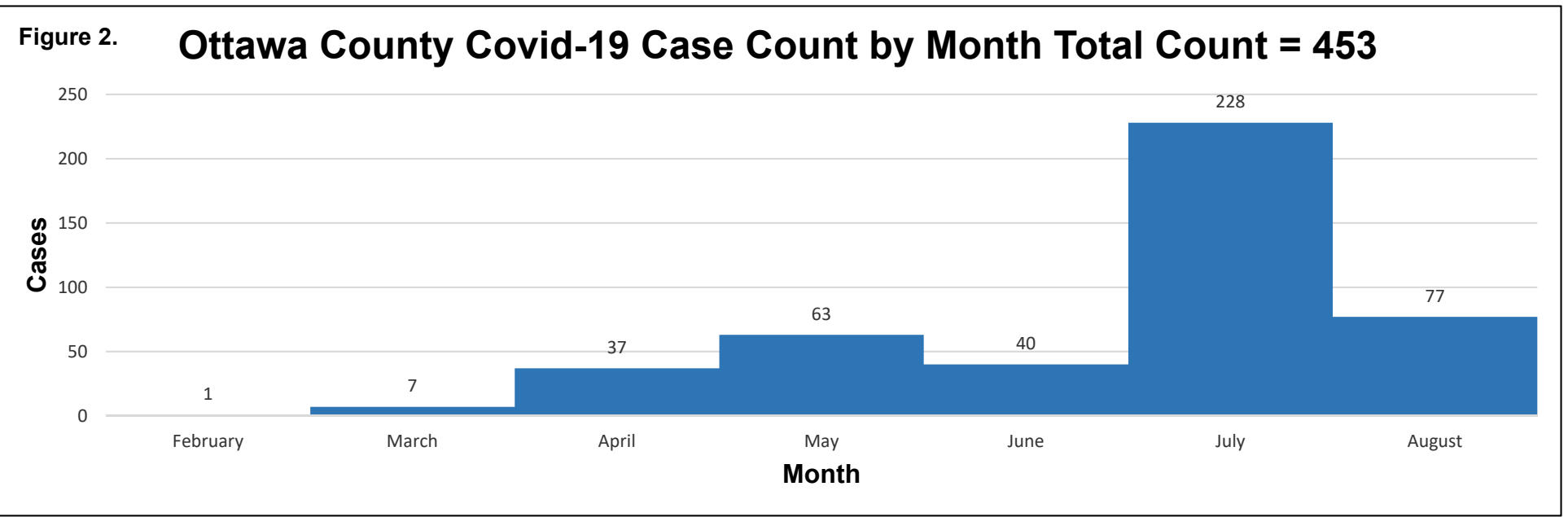
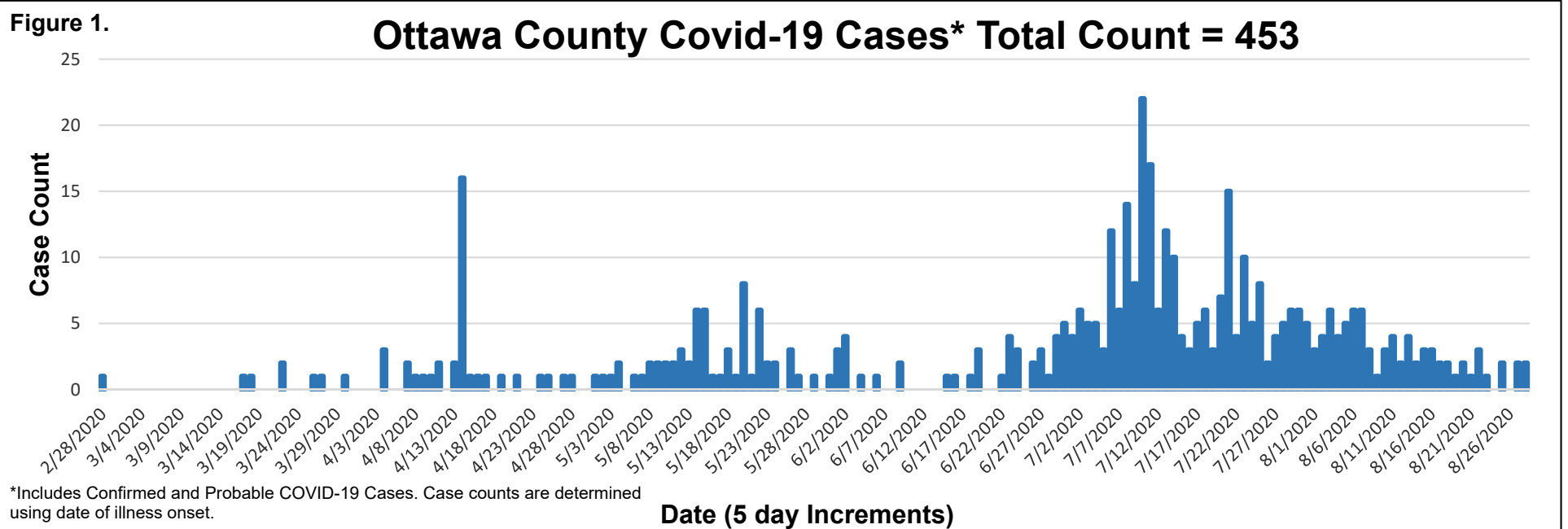


Ottawa County Health Department COVID-19 Summary Report February 28, 2020 – August 31, 2020

COVID-19 in Ottawa County

Section 1. COVID-19 Cases Overall Summary *(beginning 2/28/2020)*

453 Total Cases	438 Confirmed	15 Probable Cases	51 (11.3%) Hospitalizations	30 (6.6%) Deaths
252 (55.6%) Females	201 (44.4%) Males	6-99 Age Range	47 Median Age	26 (5.7%) ICU Admissions



Footnotes
*Data Includes Confirmed and Probable COVID-19 Cases. Case counts are reported using date of illness onset. For those with unknown illness onset, the date of first positive specimen collection is used. Be aware that this data is preliminary and may be underreported to OCHD because of the delay between initial contact with a healthcare provider, testing and diagnosis.

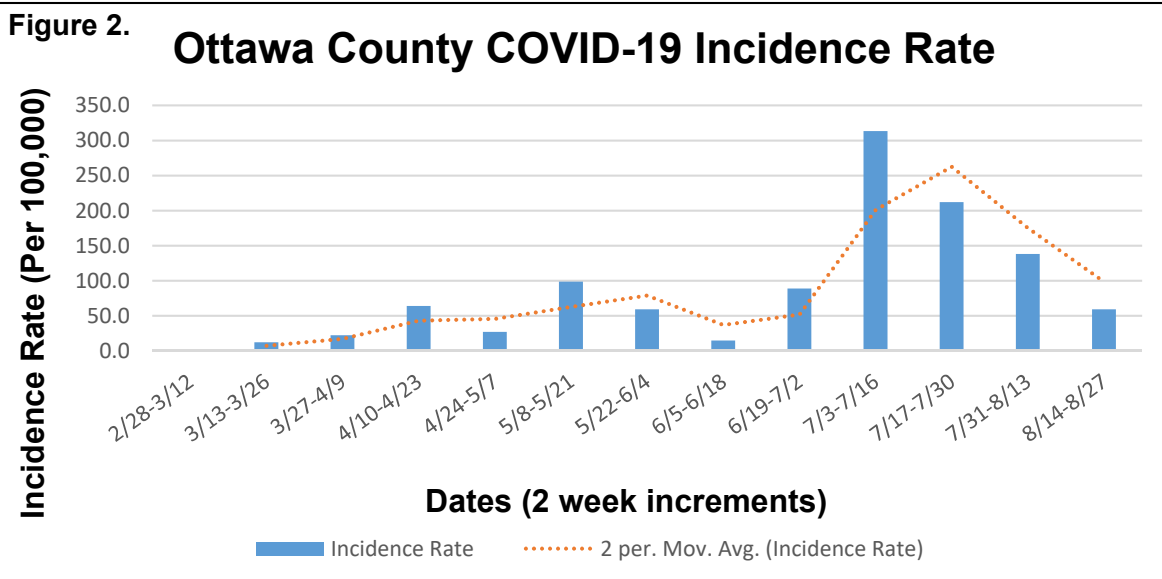


Table 1. Overall Prevalence Rates of COVID-19 Cases, Deaths and Hospitalizations in Ottawa County Compared to Ohio (as of 8/31/2020)

Category	Ottawa County		Ohio	
	Total Count	Prevalence (Per 100,000)	Total Count	Prevalence (Per 100,000)
Cases	453	1117.8	126,348	1080.3
Deaths	30	74.0	4,215	36.0
Hospitalizations	51	125.8	13,612	116.4

Demographic Information among COVID-19 Cases

Figure 4. Ottawa County COVID-19 Case Count by Age Group and Gender

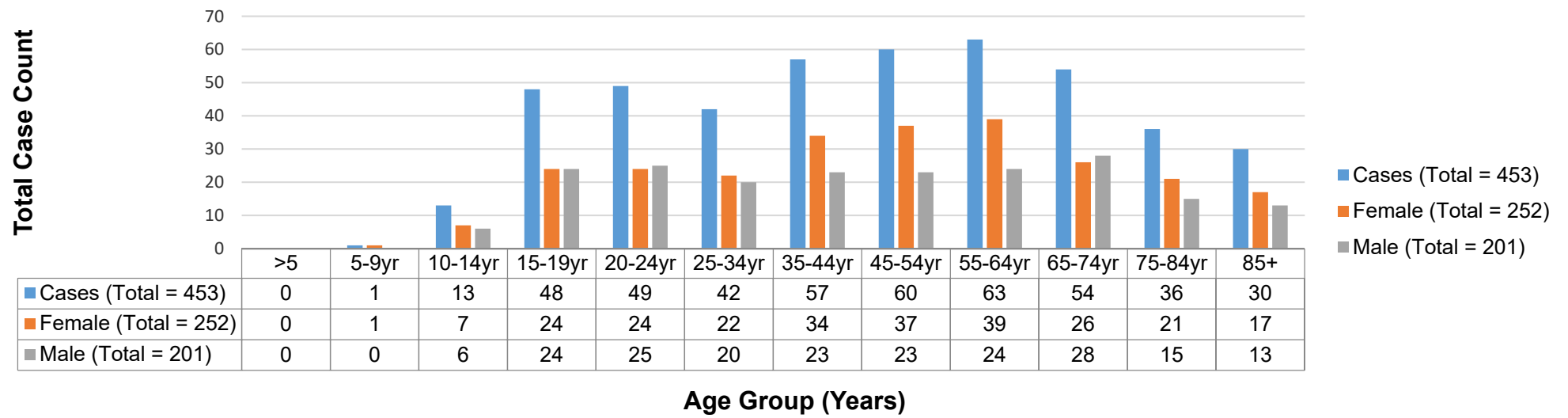


Figure 5. Ottawa County COVID-19 Case Count and Percentage by Race

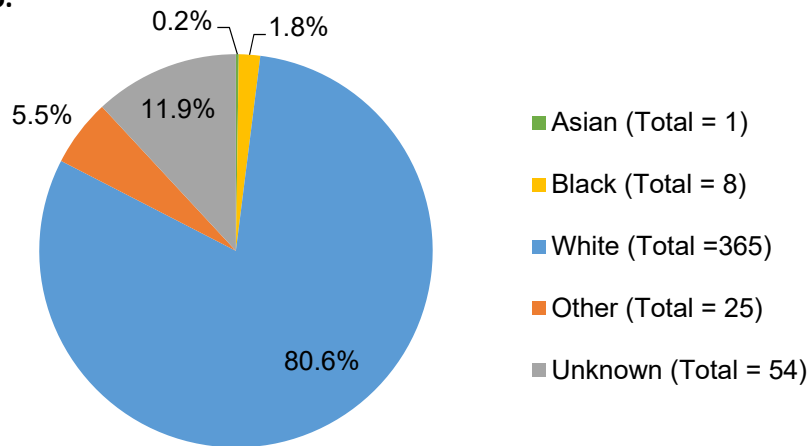
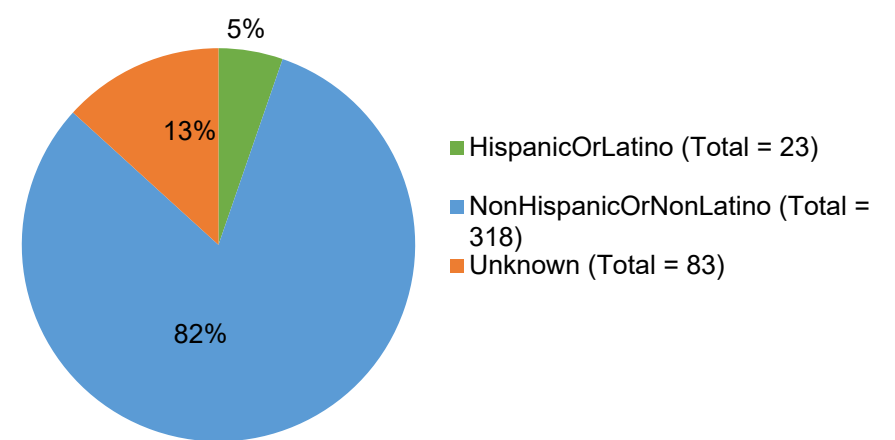


Figure 6. Ottawa County COVID-19 Case Count and Percentage by Ethnicity



Section 1. Data Interpretation

Figure 1 and 2 – These bar graphs display all of the confirmed and probable COVID-19 cases that have occurred in Ottawa County by date of illness onset. Date of illness onset is the first day that the patient noticed their symptoms and is most commonly obtained by conducting an interview with the patient, and or medical chart review. For those who did not experience symptoms and those who were unable to be contacted the date of the first positive specimen collection was used.

Figure 1 and 2. Key highlights

- There are various spikes in cases throughout these graph, which can be explained as follows:
 - April influx is due to a long-term care facility outbreak (LTC), which resulted in 40 positive residents and 3 positive Ottawa County resident staff members.
 - The influx in cases seen in July are a result of the mass testing done on Put-In-Bay which resulted in 66 total positive cases (37 of which were Ottawa County residents). The increase in numbers seen in July can also be attributed to the increase in social activities, and increased desire to seek testing coupled with wider testing availability.

Figure 3. – This bar graph shows the incidence rate in Ottawa County over a 6-month period in 2-week increments. Incidence rate is per 100,000 and is calculated by dividing the number of new COVID-19 positive cases over a 2-week period by the total population at risk for developing the disease multiplied by 100,000.

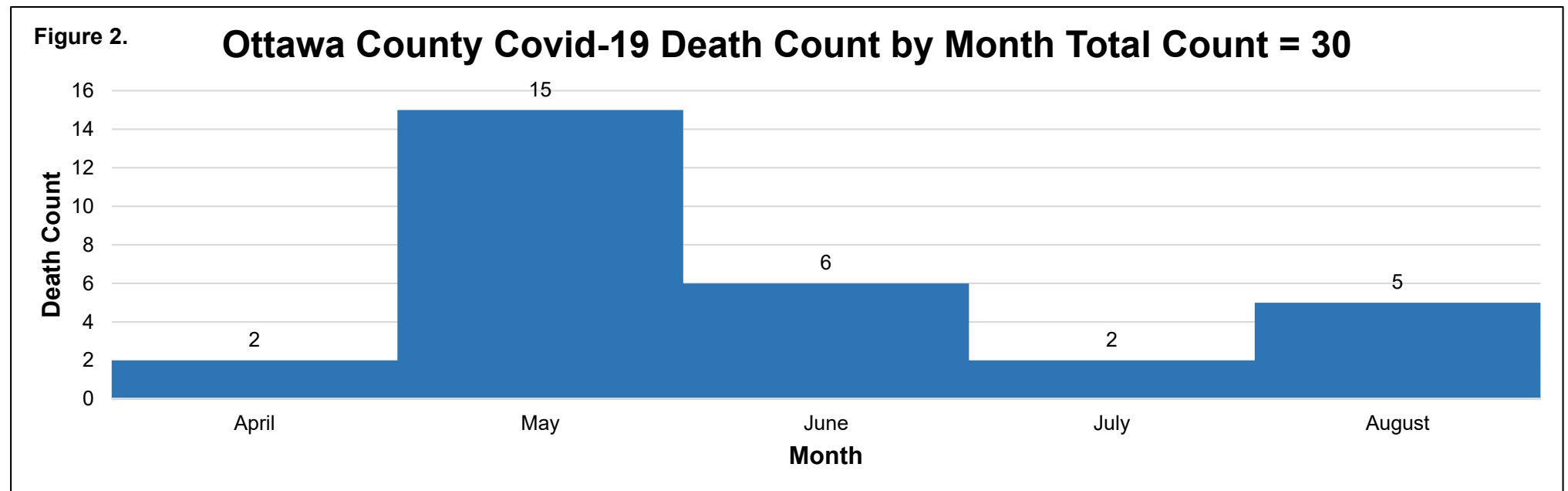
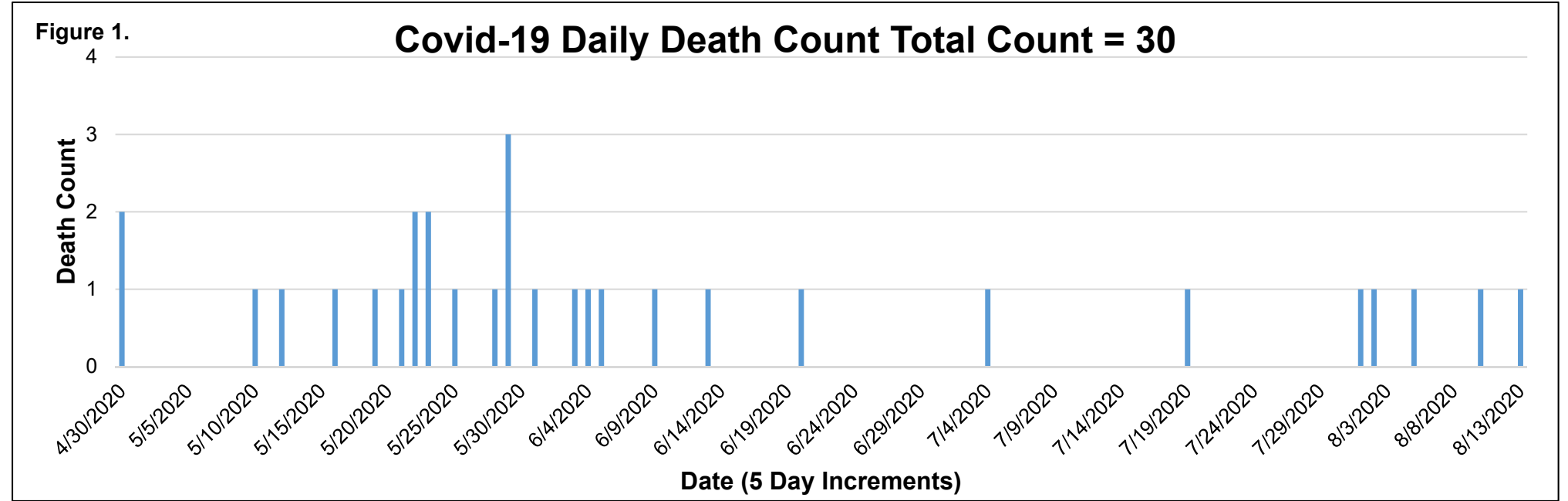
Table 1. – This table shows the overall prevalence rates for Ottawa County compared to the State of Ohio. Higher overall death rates seen in Ottawa County may be explained partially by the fact that the vast majority of deaths (22 out of 30, 73.3%) were Long-Term Care Facility residents and most of these individuals were over the age of 65 and all had at least one underlying medical condition. Individuals 65 and over living with underlying medical conditions experience higher morbidity and mortality compared to those who are younger than 65 and have no underlying medical conditions. Overall higher case rates may be explained by the fact that older people are more likely to seek medical attention and testing because they experience more severe illness. Ottawa County has a higher proportion of those 65 years and over when compared to the rest of Ohio, therefore, a higher proportion of the population in Ottawa County are getting testing compared to the rest of Ohio. Because the proportion of those 65 years and older are greater in Ottawa County when compared to the rest of Ohio, it would make sense that the hospitalization rate is higher as well.

Figure 5 and 6. – These pie charts show the distribution of cases by race and ethnicity. Unknown counts are those whose data could not be gathered due to loss to follow-up or an unwillingness to share this type of information by the patient. As you can see, the vast majority of cases are among the White, Non-Hispanic/Non-Latino Population. This is mainly because the vast majority of the population in Ottawa County belong to this demographic.

Section 2. COVID-19 Deaths Overall Summary

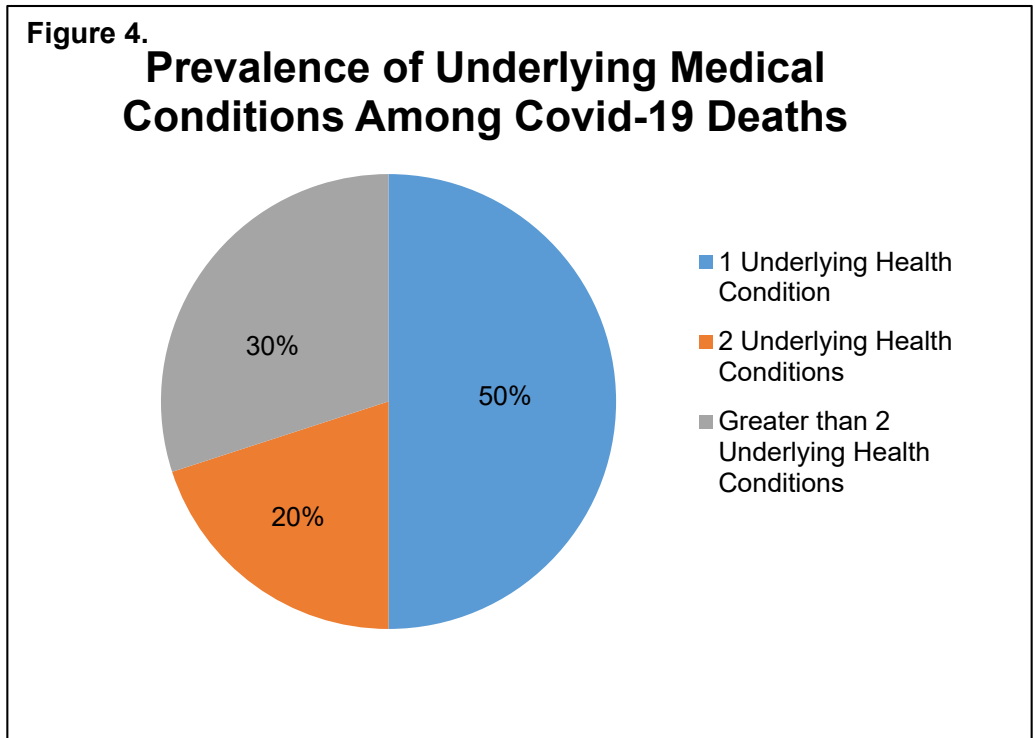
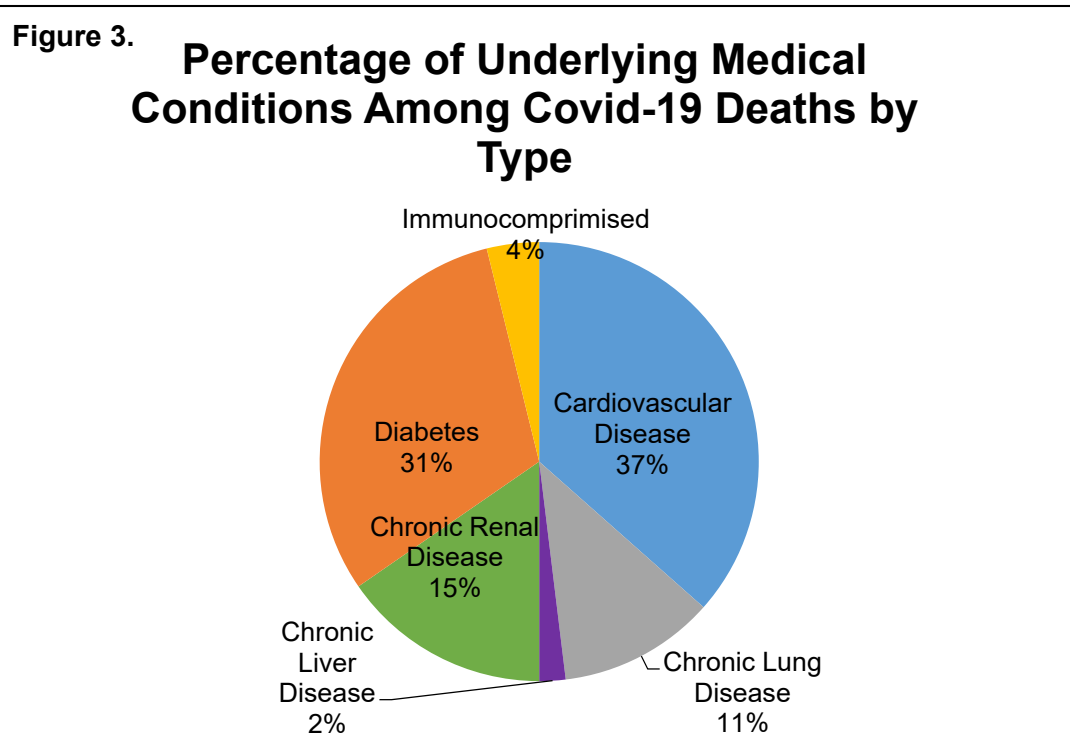
30 Total Deaths	11 (36.7%) Males	19 (63.3%) Females	22 (73.3%) LTC* Residents
19-98 Age Range	85 Median Age	10 (33.3%) Hospitalized	13 days Illness Onset to Death

*LTC = Long-Term Care Facility



Footnotes
*Definitive cause of death can take weeks to determine. Data displayed illustrates COVID-19 deaths as of 8/31/2020.

Comorbidities among COVID-19 Deaths



Demographic Information among COVID-19 Deaths

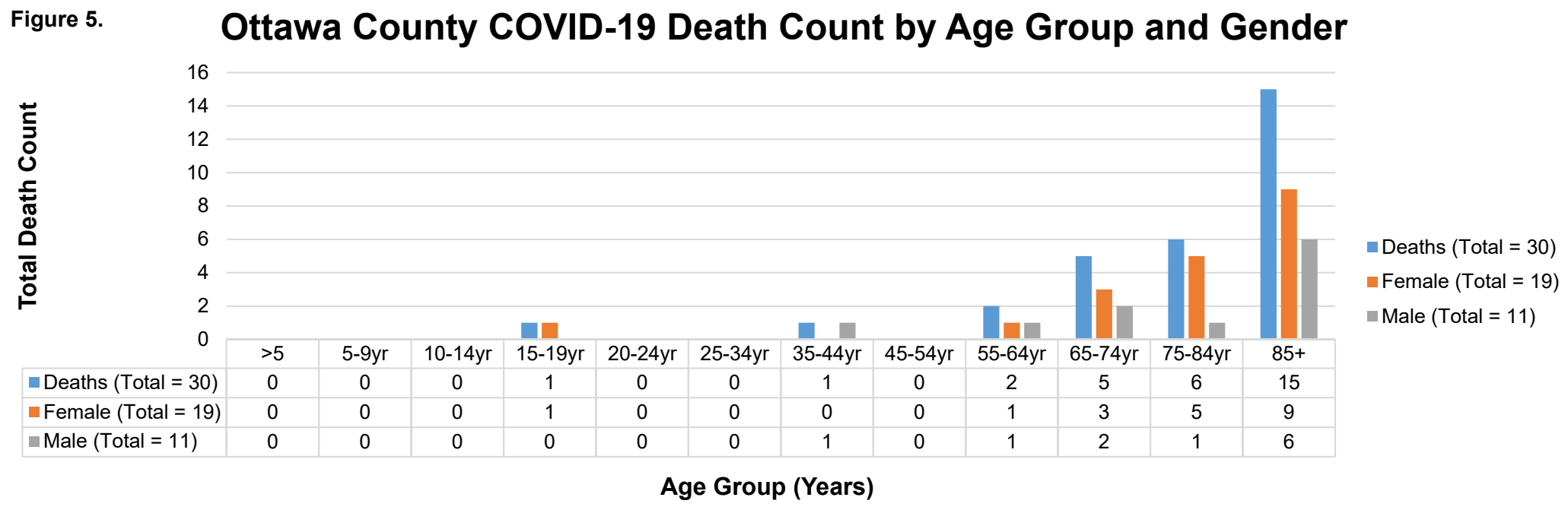
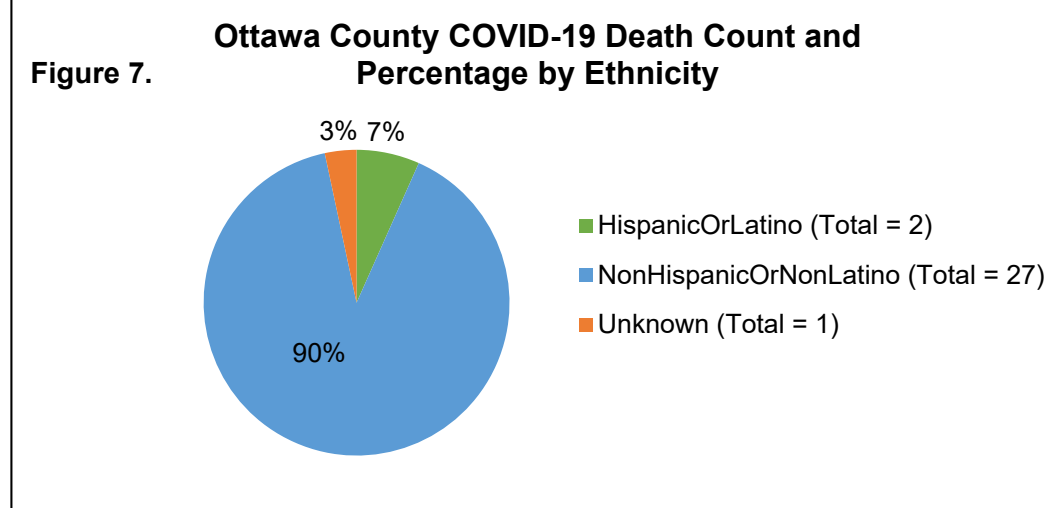
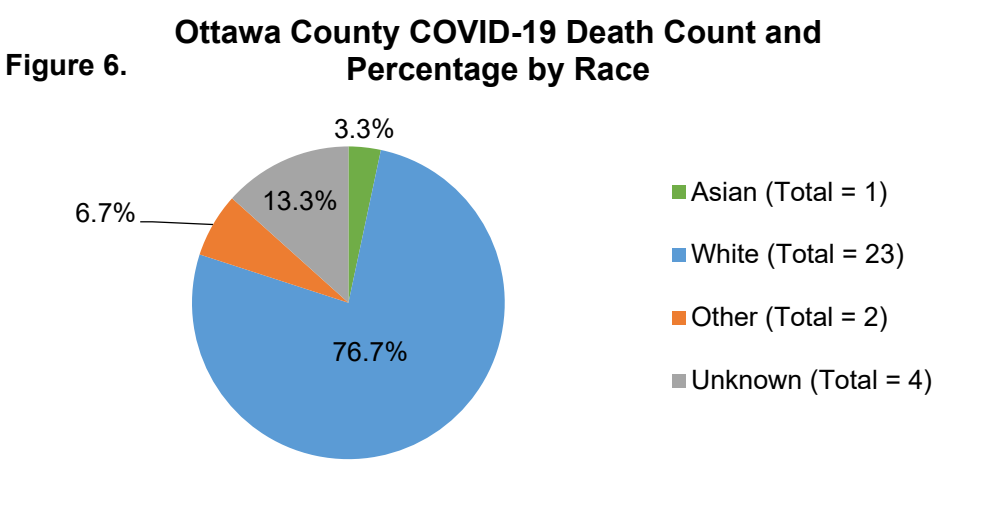


Table 1. Prevalence Rates of COVID-19 Deaths by Age Group (Per 100,000)

Age Group	Prevalence Rate Per 100,000 Population
Overall	74.0
>18	0
19-44	4.9
19-24	2.5
25-34	0
35-44	2.5
45-64	4.9
45-54	0
55-64	4.9
65+	64.2
65-74	12.3
75-84	14.8
85+	37.0



Section 2. Data Interpretation

Overall Summary - Death counts are determined using death certificate data. For each death certificate there is "Cause of Death Section". Each "Cause of Death Section" is separated into sub categories 1. "Immediate Cause of Death" and 2. "Due to (or as a consequence of)". All of the deaths counted in these numbers have COVID-19 listed in at least one of the aforementioned categories on their respective deaths certificates.

Figure 1 and 2. - These bar graphs display all of the Confirmed/Probable COVID-19 deaths that occurred over a 6-month period (2/28/20-8/31/20). There is a spike in deaths seen in the month of May. This is primarily the result of an outbreak at LTC where 20 residents died from their illness.

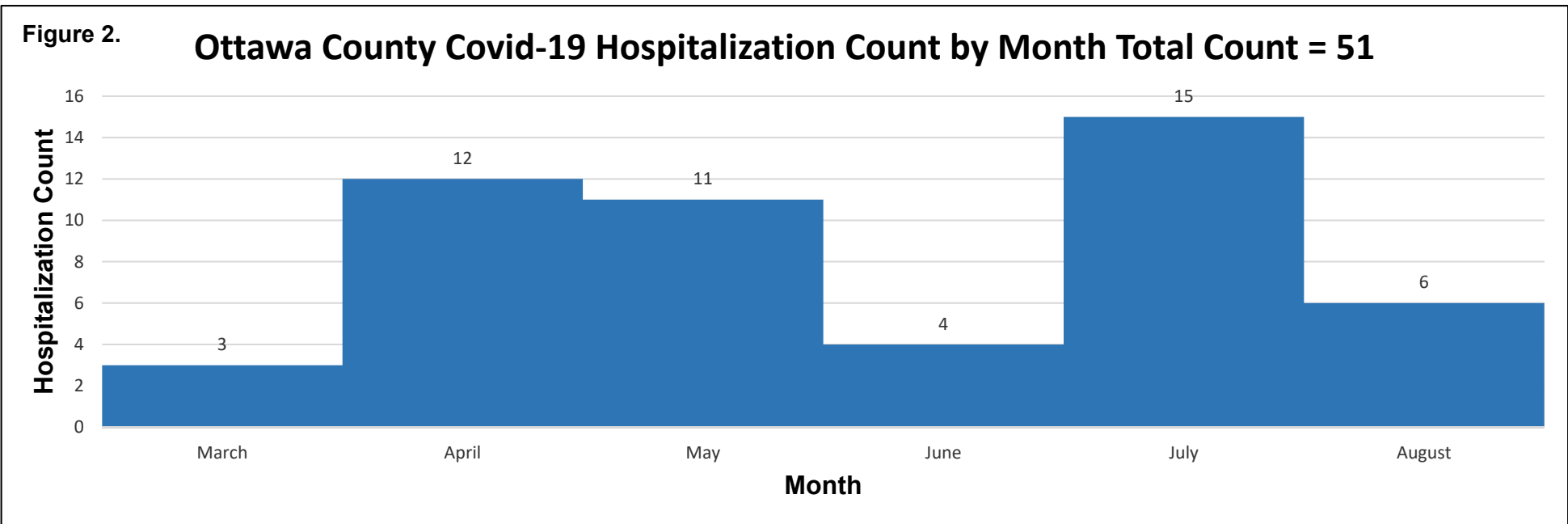
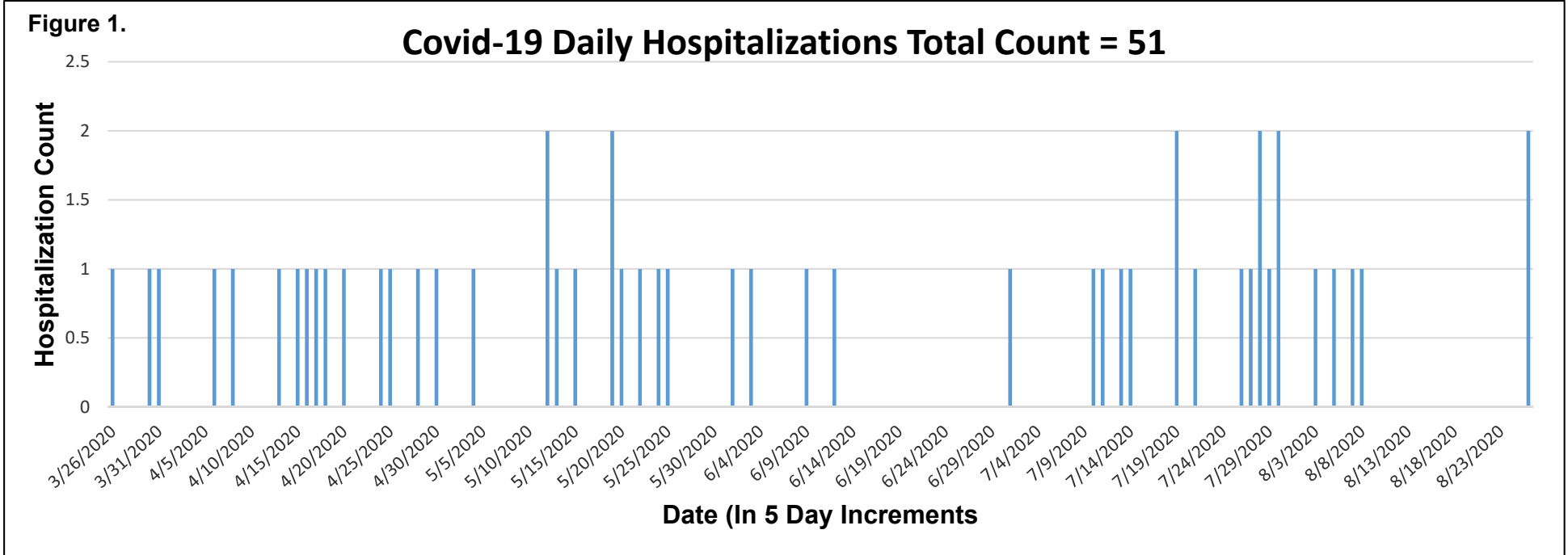
Figure 3 and 4. - These two pie charts display the prevalence of underlying medical conditions among COVID-19 deaths in Ottawa County. The data shows the majority of deaths had at least one underlying medical condition. The most common underlying medical condition reported among deaths were cardiovascular disease (hypertension coronary artery disease etc.) and diabetes.

Figure 5. - This bar graph displays the number of COVID-19 deaths by age and gender. The vast majority of deaths occurred among those 65 and over (26 deaths). The one 19-year-old female who died was residing in an intermediate care facility with multiple underlying medical conditions and the 37-year-old male was morbidly obese. Those in between the ages of 55-64 had two or more underlying medical conditions and one was in a nursing home coded as Do Not Resuscitate (DNR).

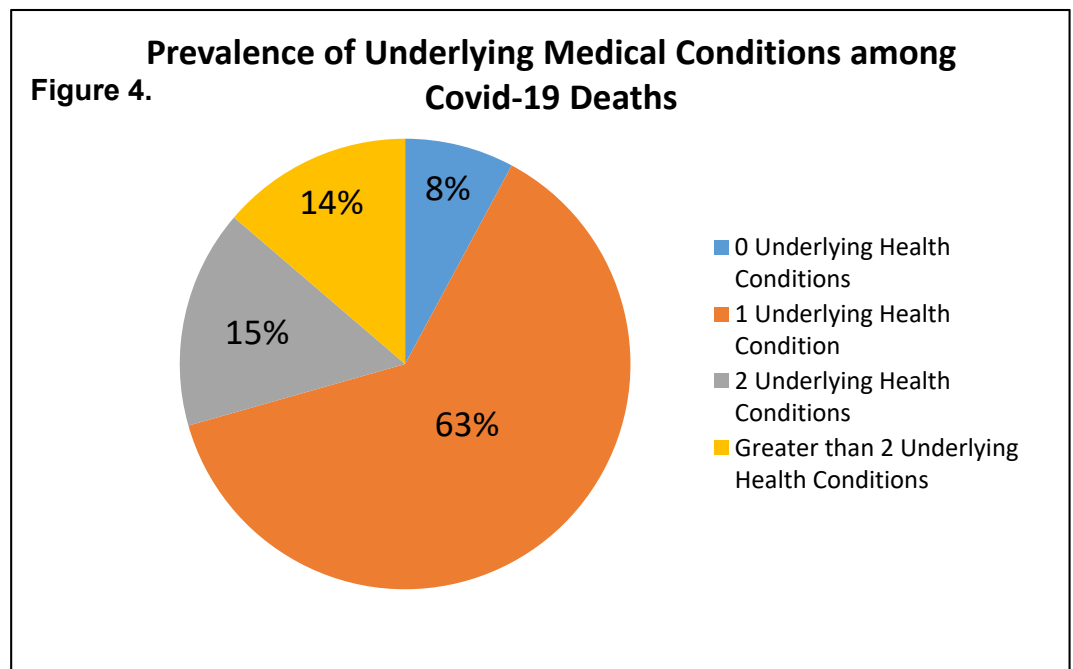
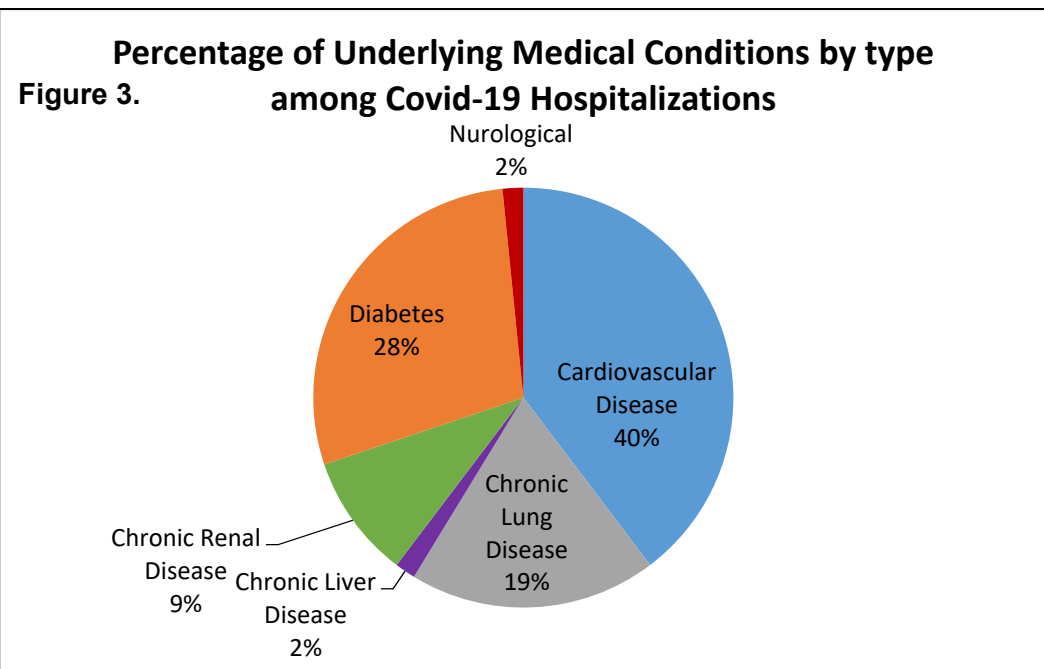
Figure 6 and 7. - These two pie charts show the COVID-19 Deaths by race and ethnicity. The majority of COVID-19 deaths were among White, Non-Hispanic/Non-Latino Population. This is mainly because the vast majority of the population in Ottawa County belong to this demographic.

Section 3. COVID-19 Hospitalizations Overall Summary

51 Hospitalizations	26 (51%) Males	25 (49%) Females	19-93 Age Range	64 Median Age
26 (50.9%) ICU Admissions	14 (27.5%) Deaths	37 (72.5%) Recovered	6 Days Illness Onset to Admittance* (Median)	6 Days Admittance to Discharge** (Median)
Footnotes * This is the median amount of time from the day the patient started experiencing symptoms to the day of hospital admittance **This is the median amount of time from the day the patient was admitted to the hospital to the date of discharge		15 (29.4%) LTC Residents		



Comorbidities among COVID-19 Hospitalizations



Demographic Information among COVID-19 Hospitalizations

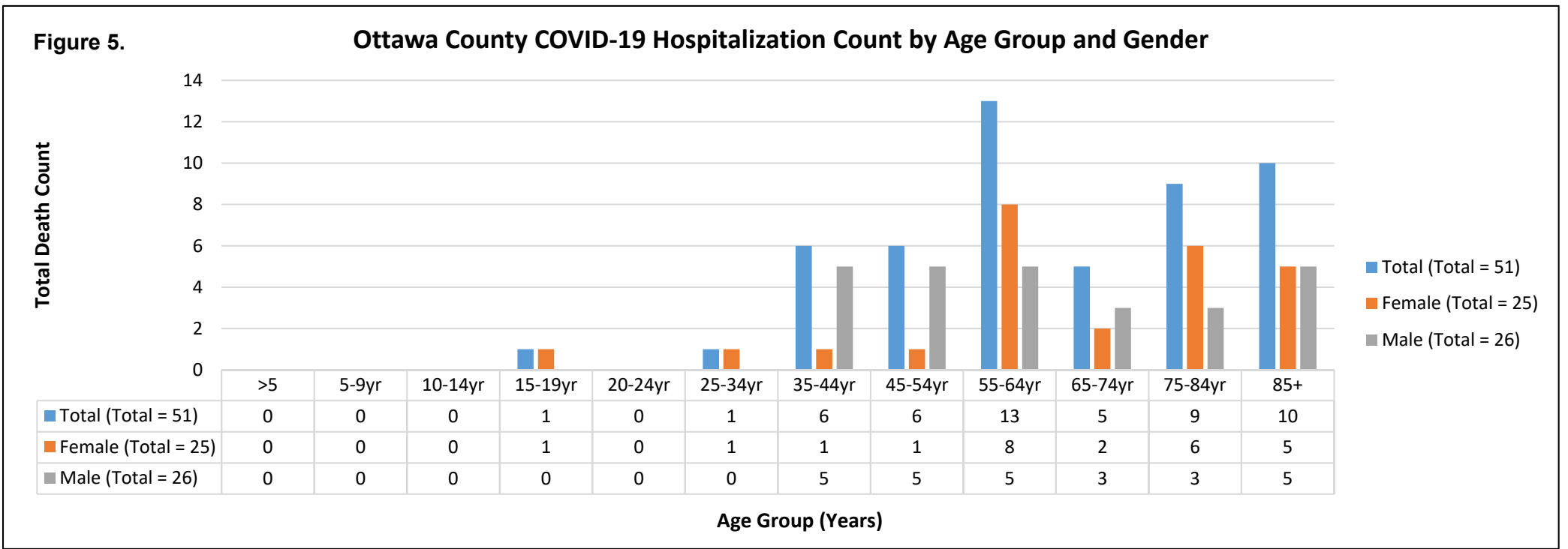
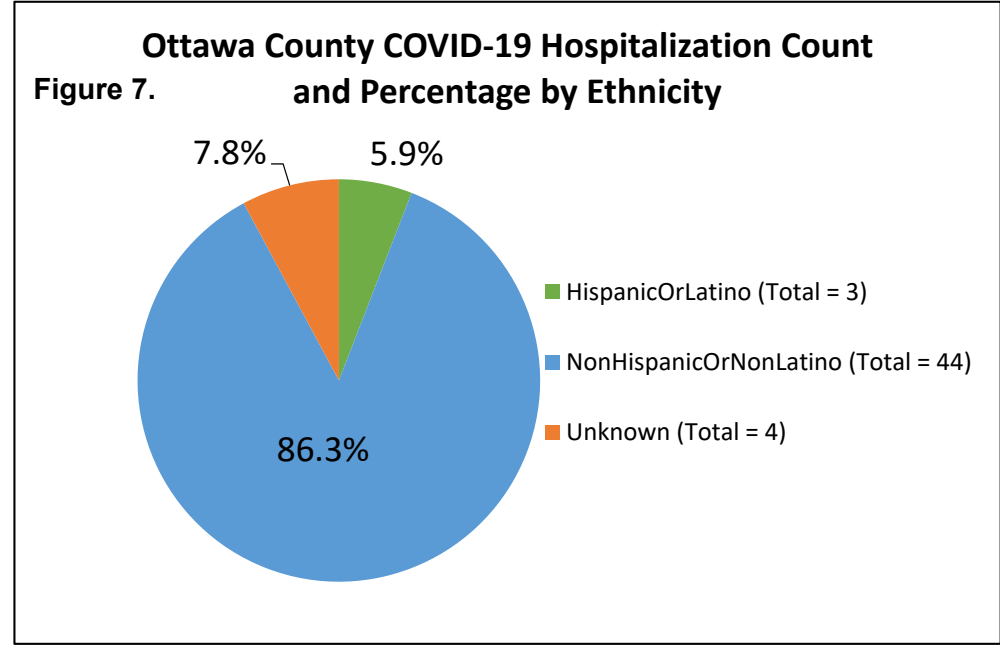
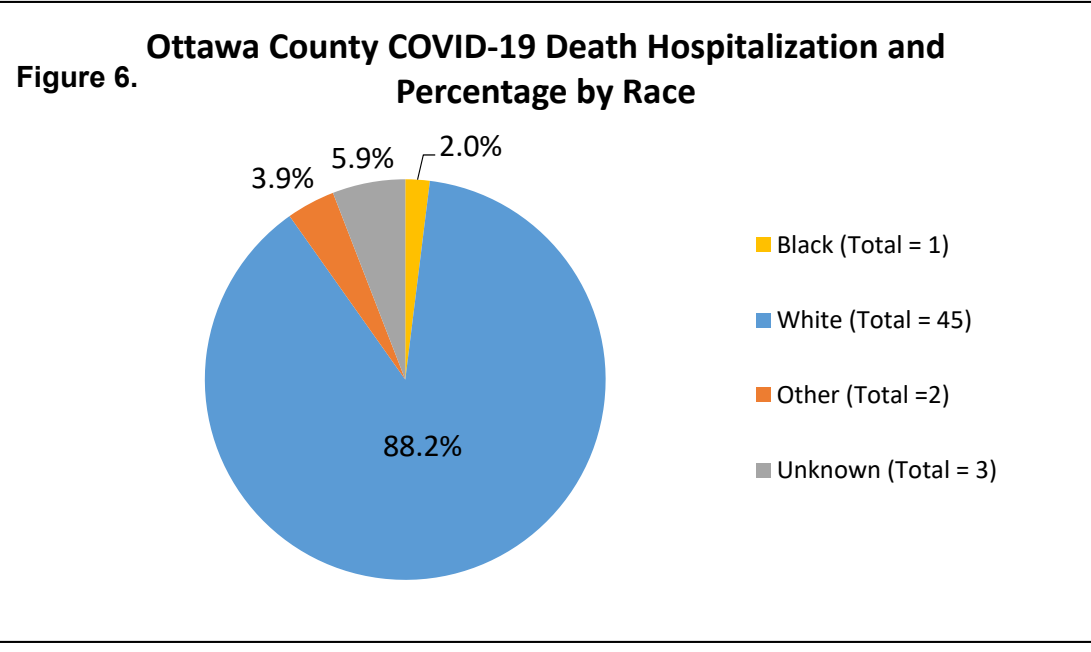


Table 1. Prevalence Rates of COVID-19 Hospitalizations by Age Group (Per 100,000)

Age Group	Cumulative Rate Per 100,000 Population
Overall	125.8
>18	0
19-44	19.7
19-24	2.5
25-34	2.5
35-44	14.8
45-64	46.9
45-54	14.8
55-64	32.1
65+	59.2
65-74	12.3
75-84	22.2
85+	24.7



Section 3. Data Interpretation

Figure 1 and 2. – These bar graphs display the cumulative number of COVID-19 Hospitalizations reported in Ottawa County over a 6-month period. 51 cases have been reported since 2/28/2020 with spikes in hospitalizations seen in the months of April, May and July. April and May can be primarily attributed to outbreaks in LTCs during these months, which accounted for 14 cases out of 23 total. There does not seem to be any evidence or clear epidemiological linkage to explain the spike seen in July. This may be due to the increase in social activity due to the reopening of restaurants and bars.

Figure 3 and 4. – These pie charts show that the vast majority of hospitalizations occurred among those with at least one underlying medical condition. The most common types of medical conditions reported were diabetes and cardiovascular disease.

Figure 5 and Table1. – Figure 5 depicts the number of COVID-19 Hospitalizations by age group. The data show that hospitalizations are positively correlated with the increase in age. Table 1. Shows that the highest prevalence rate for hospitalizations is seen in those between the ages of 55-64 (32.1 per 100,000). The second highest rate is seen in those 85 and over (24.7 per 100,000).

Figures 6 and 7. – Figure 6 and 7 depict COVID-19 hospitalization rates by race and ethnicity. The vast majority of hospitalizations occurred among White/Non-Hispanic-Non Latino population. This is explained primarily by the fact that the population in Ottawa County is mainly of this demographic.