

# Leading Causes of Death Profile

## St. Louis County, Missouri

Saint Louis County Department of Public Health

October 04, 2021

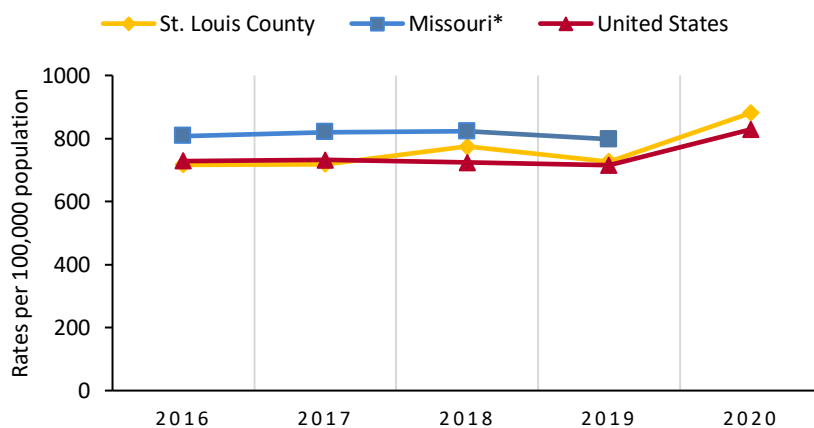
### Background

Mortality, life expectancy, and infant mortality are key indicators of the overall health of a population. Cause-of-death ranking is a standard method that is used for illustrating the relative burden of particular diseases or injuries that cause mortality.<sup>1</sup> This report presents data from 2016 to 2020 for Saint Louis County leading causes of death, age-adjusted mortality rates for all causes and the leading causes of death by sex, age, race, Hispanic origin, poverty level<sup>2</sup> and geographic subregions, life expectancy and years of potential life lost (YPLL) estimates, and emerging issues in unintentional injuries. In recognition of the devastating impact of the pandemic, we highlight mortality due to Coronavirus Disease 2019 (COVID-19).

### Key findings:

- There were 11,958 deaths in St. Louis County in 2020. All-cause mortality increased by 21.3% from 726.2 per 100,000 deaths in 2019 to 880.9 per 100,000 in 2020.
- Although heart disease and cancer remained the top two leading causes of death, COVID-19 was the third leading cause of death in 2020.
- COVID-19 killed 1,310 residents accounting for 11% of all deaths in St. Louis County in 2020.
- There were great disparities in COVID-19 mortality with Black/African American residents dying at 2.4 times the rate of white residents. Those in Outer North and Inner North subregions of the county and those living in high neighborhood poverty levels had the highest COVID-19 mortality rates as well.
- Black/African Americans accounted for 54% of total years of potential life lost due to COVID-19 in St. Louis County.
- As a result of increase of deaths due to COVID-19, overall life expectancy declined by 2.3 years in St. Louis County in 2020.
- A decline in life expectancy was observed across all groups; however, there were stark disparities in the magnitude of the decline by race, with the greatest decline observed among Black/African American women (-3.9 years) followed by Black/African American men (-3.4 years).
- In 2020, infant mortality ratio in St. Louis County declined 48% from 8.2 deaths per 1,000 live births the previous year to 4.3 deaths per 1,000 live births. However, Black/African American babies still died at a rate 2 times that of white babies.

**Figure 1. Age-Adjusted All-Cause Mortality Rates for St. Louis County, Missouri, and United States from 2016 – 2020.**



\*The 2020 data for the state of Missouri not yet available on the state dashboard (MOPHMS).<sup>3</sup>

## Leading Causes of Death

Figure 2 shows the ten leading causes of death in St. Louis County from 2016-2020. In each of those years, seven of the ten leading causes of death were chronic diseases – except 2018, in which eight were chronic diseases. Heart disease and cancer were consistently the first and second leading causes of death across all five years. Notably, in 2020, in just 9 months, COVID-19 killed more St. Louis County residents than most of the previous leading causes of death and was the third leading cause of death. Even when all five years are combined, COVID-19, was the seventh leading cause of death for 2016-2020.

**Figure 2. Ten Leading Causes of Death and Age-Adjusted Rates by Year Highlighting Chronic Disease-Related Deaths, St. Louis County – 2016 to 2020.**

Rank	2016	2017	2018	2019	2020	2016-2020
1	Heart Disease 169.1	Heart Disease 167.8	Heart Disease 177.8	Heart Disease 169.9	Heart Disease 186.2	Heart Disease 176.7
2	Cancer 149.9	Cancer 153.5	Cancer 155.0	Cancer 142.9	Cancer 141.9	Cancer 147.1
3	Unintentional Injury 53.6	Unintentional Injury 56.1	Unintentional Injury 60.5	Unintentional Injury 59.2	<b>COVID-19</b> <b>92.2</b>	Unintentional Injury 59.8
4	Stroke 38.5	Stroke 41.8	Alzheimer's Disease 41.1	Alzheimer's Disease 41.5	Unintentional Injury 67.2	Stroke 42.2
5	Alzheimer's Disease 32.7	Alzheimer's Disease 34.6	Stroke 42.8	Stroke 41.3	Stroke 44.2	Alzheimer's Disease 39.5
6	CLRD 32.6	CLRD 28.1	CLRD 31.3	CLRD 27.0	Alzheimer's Disease 41.0	CLRD 28.6
7	Kidney Disease 17.2	Kidney Disease 17.8	Kidney Disease 16.7	Kidney Disease 15.9	CLRD 25.3	<b>COVID-19</b> <b>18.4</b>
8	Diabetes 16.4	Diabetes 14.8	Diabetes 16.3	Diabetes 15.9	Kidney Disease 19.8	Kidney Disease 17.4
9	Influenza/ Pneumonia 14.9	Influenza/ Pneumonia 13.3	Influenza/ Pneumonia 15.6	Septicemia 10.8	Diabetes 18.1	Diabetes 16.3
10	Septicemia 10.4	Homicide 16.0	Parkinson's Disease 11.1	Homicide 16.4	Influenza/ Pneumonia 13.9	Influenza/ Pneumonia 13.9

Source: Missouri DHSS, Bureau of Vital Statistics.

Rates are per 100,000 2000 US Standard population. Rank based on number of deaths.

**Case Definition:** *International Classification of Diseases, Tenth Revision (ICD-10) codes:* I00-I09, I11, I13, I20-I51 (Heart Disease); C00-C97 (Cancer); I60-I69 (Stroke); V01–X59, Y85–Y86 (Unintentional Injury); J40-J47 (Chronic Lower Respiratory Disease); CLRD); G30 (Alzheimer's Disease); J09–J18 (Influenza and Pneumonia); N00–N07, N17–N19, N25–N27 (nephritis, nephrotic syndrome and nephrosis; i.e., Kidney Disease); E10–E14 (Diabetes); A40–A41 (Septicemia), \*U03, X60-X84, Y87.0 (Intentional self-harm; suicide).

## Mortality from All Causes

Table 1. Deaths from All Causes per 100,000 Population, St. Louis County, 2020.

	Rate	95% Confidence Interval	Count per Year
St. Louis County	880.9	859.4 to 902.5	11958
<b>Age Group</b>			
< 18 years	42.7	34.0 to 51.4	93
18 - 24 years	164.9	137.3 to 192.5	137
25 - 44 years	232.4	213.5 to 251.3	580
45 - 64 years	639.3	608.5 to 670.0	1659
65 years and over	5146.6	5043.0 to 5250.1	9489
<b>Gender</b>			
Male	1052.5	1021.0 to 1084.1	5782
Female	744.0	714.5 to 773.5	6175
<b>Race/Ethnicity</b>			
Asian	539.9	484.8 to 595.1	153
Black/African American	1328.9	1283.7 to 1374.1	3111
Hispanic or Latino	649.1	580.8 to 717.4	101
Multiple Races	480.8	417.0 to 544.6	32
White	776.2	748.2 to 804.1	8533
<b>Neighborhood Poverty</b>			
Very High	1361.2	1225.3 to 1497.1	582
High	1260.4	1156.1 to 1364.8	795
Medium	1145.1	1083.8 to 1206.3	2987
Low	863.8	823.0 to 904.6	7594
<b>Geographic Area</b>			
Central	723.2	664.4 to 782.0	1304
Inner North	1172.1	1118.1 to 1226.1	2372
Outer North	1078.5	1019.3 to 1137.6	2331
South	770.8	721.0 to 820.6	2636
West	709.1	664.3 to 753.0	3292

**Comparisons:**

- Higher than St. Louis County rate
- Lower than St. Louis County rate

**Notes:**

Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Vital Statistics.  
 Case Definition: All deaths to St. Louis County residents between 2011 and 2015 from all causes.  
 Rates are age-adjusted to the 2000 US population (not including Age Group rates).

**Figure 3. Age-Adjusted Death Rates for the 10 Leading Causes of Death, Comparing Rates for Males and Females, St. Louis County only.**

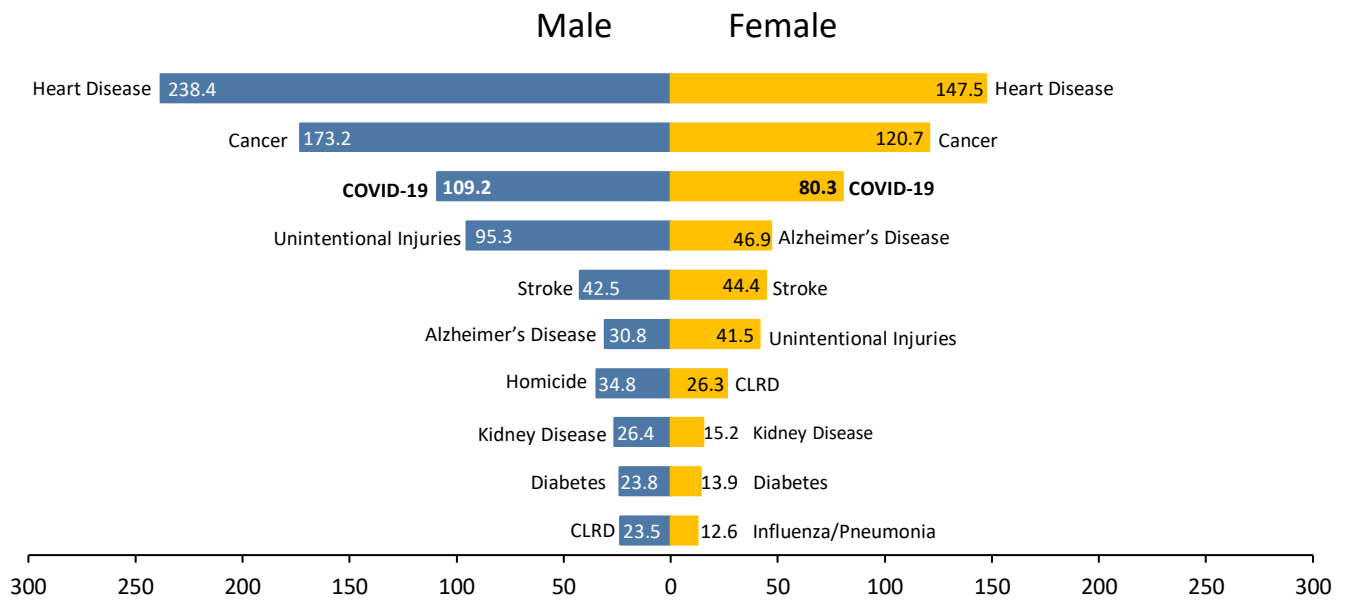
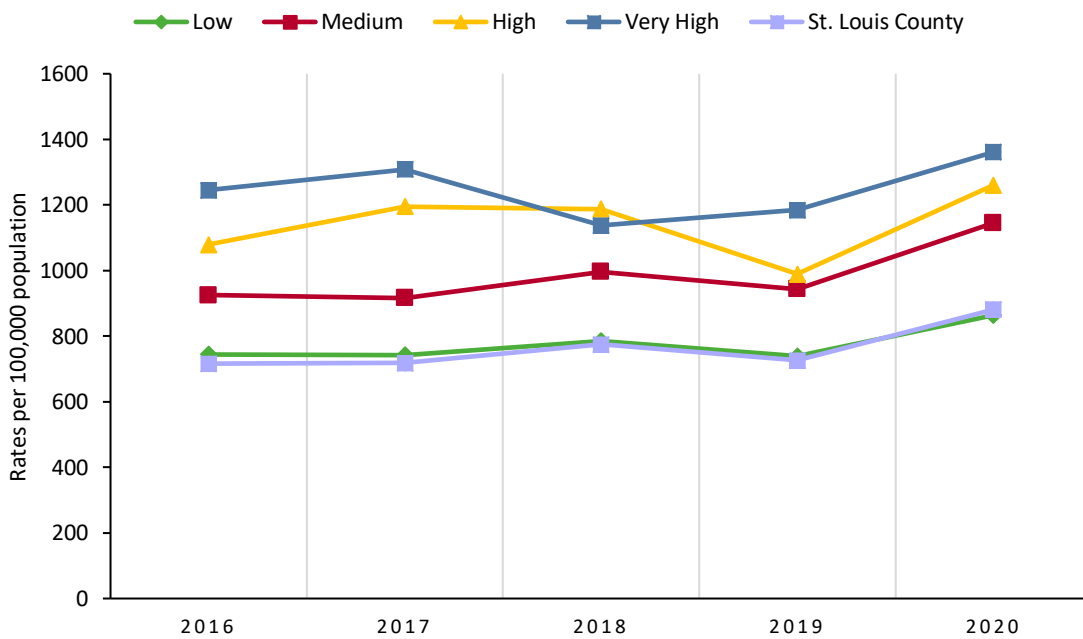


Figure 3 shows the leading causes of death for males and females during 2020 only. In 2020, COVID-19 was the third highest cause of death for both men and women, but the death rate was significantly higher among men (109.2 deaths per 100,000 men) compared to women (80.3 deaths per 100,000 women).

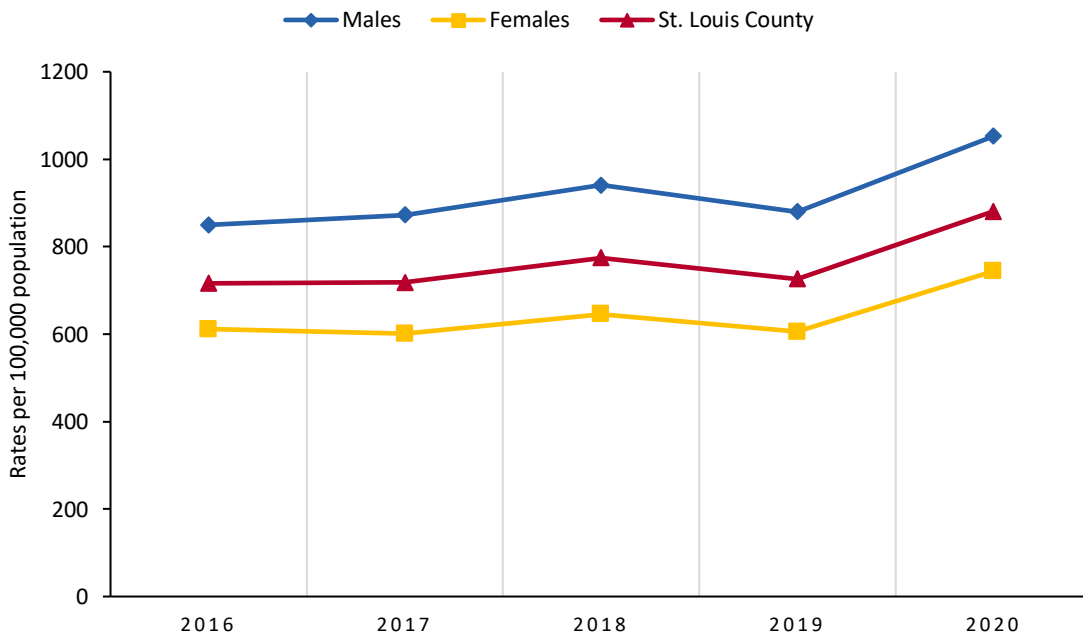
**Figure 4. Age-Adjusted Death Rates by Neighborhood Poverty, St. Louis County, 2016 – 2020.**



**Figure 4** above shows the age-adjusted death rates by neighborhood poverty level from 2016 to 2020. Neighborhood poverty was divided into four categories based on neighborhood poverty rates: Low (<10%), medium (10-20%), high (20-30%), and very high (≥30%).

Age-adjusted death rates were highest for high and very high poverty neighborhoods. Compared to low poverty neighborhoods, the age-adjusted death rates were 1.6 and 1.7 times higher in high and very high poverty neighborhoods, respectively. Age-adjusted death rates were highest across all neighborhood poverty levels in 2020. From 2016 to 2020, age-adjusted death rates increased 16.1% in low poverty neighborhoods, 23.8% in medium poverty neighborhoods, 16.8% in high poverty neighborhoods, and 9.4% in very high poverty neighborhoods.

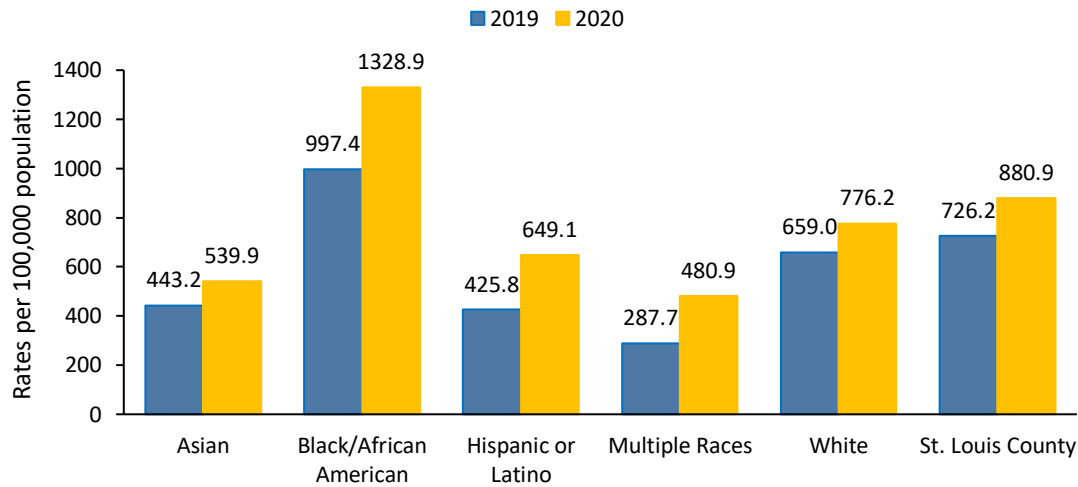
**Figure 5. Age-Adjusted Death Rates by Gender, St. Louis County Residents, 2016 – 2020.**



**Figure 5** shows the age-adjusted death rates by gender from 2016 to 2020. From 2016 to 2020, age-adjusted death rates increased 23.9% among males and 21.8% among females in St. Louis County. Prior to 2020, however, age-adjusted death rates decreased 0.9% among females and only increased 3.5% among males. Males consistently had a higher age-adjusted death rate compared to females. Over the five-year period, males died at 1.4 times the rate as females.

**Figure 6** below shows the age-adjusted death rates by race and ethnicity from 2016 to 2020. Age-adjusted death rates were consistently highest among Black/African Americans, whereas Asian, Hispanic or Latino, and multiracial residents had the lowest age-adjusted death rates. From 2016 to 2020, age-adjusted death rates increased 30.9% among Asians, 34.3% among Black/African Americans, 130.6% among Hispanics or Latinos, 37.9% among multiple races, and 17.7% among whites.

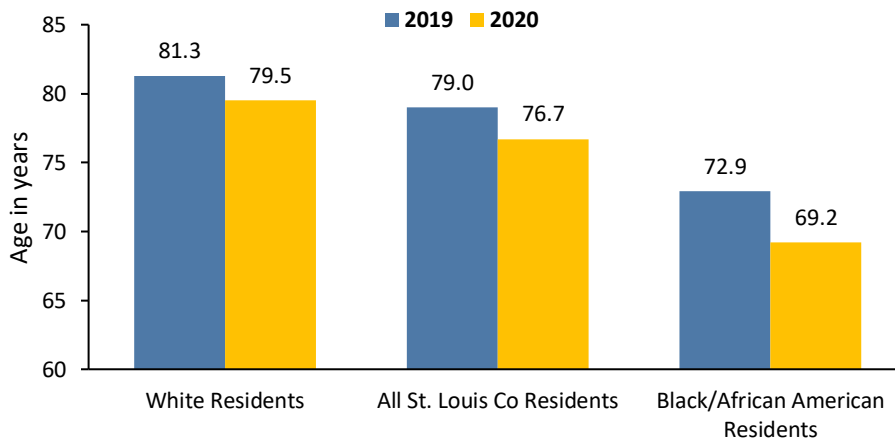
**Figure 6. Age-Adjusted Deaths Rates by Race and Ethnicity, St. Louis County, 2016 – 2020**



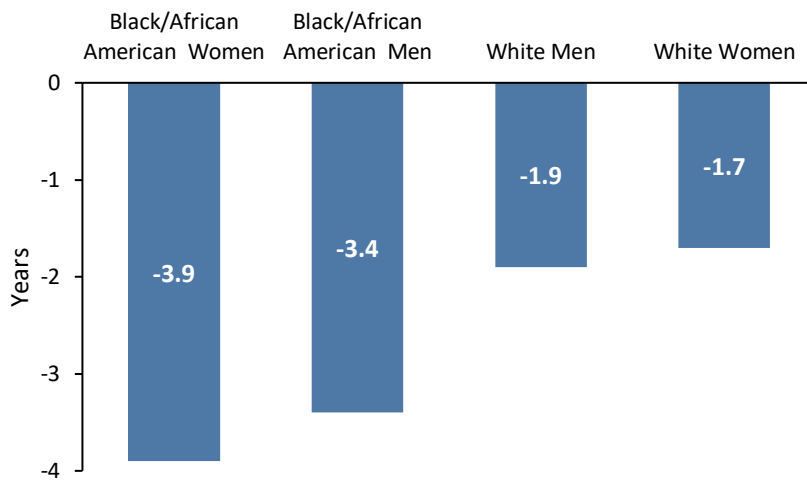
## Life Expectancy

**Figure 7** shows life expectancy by race before and after the COVID-19 pandemic. Although a decline in life expectancy was observed overall in the county and across racial groups, disparities persist. Based on provisional data from the National Center for Health Statistics (NCHS), life expectancy in the United States dropped by 1.5 years in 2020,<sup>4</sup> the biggest decline in nearly two decades. In St. Louis County, overall, based on data from the Missouri Department of Health and Senior Services (DHSS), life expectancy decline by 2.3 years. Black/African American women experienced the largest decline in life expectancy of nearly 4 years, followed by Black/African American men (-3.4 years) (**Figure 8**).<sup>5</sup> As shown in Map 1 below, life expectancy varies greatly depending on the zip code of birth. For example, based on our 2020 data, on the low end, a child born in zip code 63134 can expect to live just 66 years at birth. On the other hand, a child born in zip code 63105 can expect to live almost 86 years at birth. That is a difference of nearly 20 years between two zip codes just 10 miles apart. As described below, we also observed similar differences by race. Unfortunately, these disparities are not new. As documented in the *For the Sake of All* report in 2015, these disparities have been persistent for a long time; indeed, the gap has grown slightly.<sup>6</sup>

**Figure 7. Life Expectancy at birth, for St. Louis County and by race: St. Louis County, 2019 and 2020**

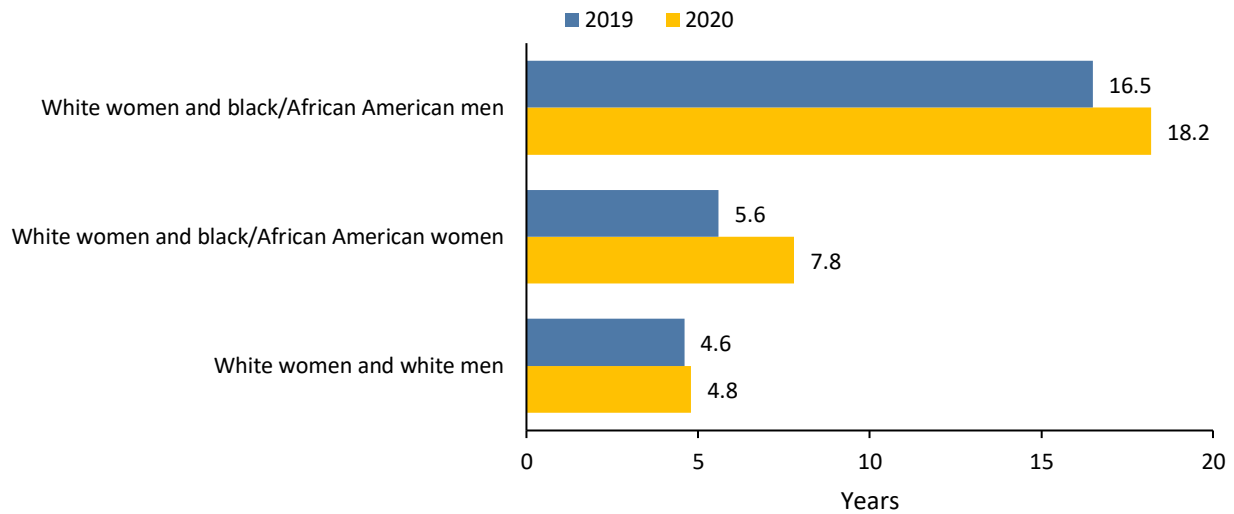


**Figure 8. Change in life expectancy at birth by race and gender: St. Louis County, 2019 and 2020**



A startling finding of our analysis is the wide disparities that exist between the group with the best life expectancy in the county (white women) and the group with the lowest life expectancy (Black/African American men) that has now been exacerbated by the COVID-19 pandemic. Specifically, in 2019, white women born in St. Louis County could expect to live 16.5 years longer than Black/African American men. In 2020, that gap has increased about 10% to 18.2 years (Figure 9).

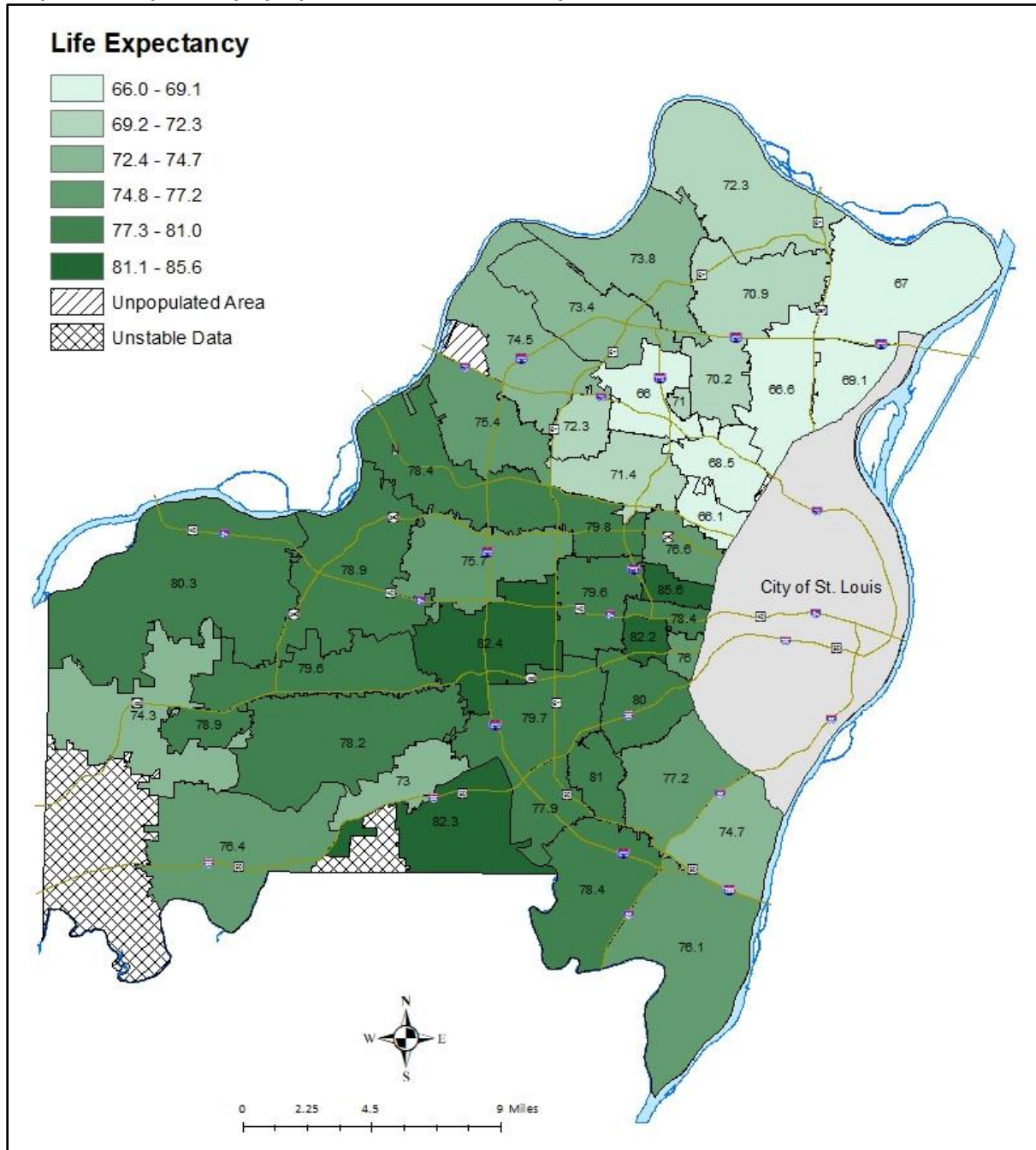
**Figure 9. Differences between groups in life expectancy at birth: St. Louis County 2019 and 2020**



### Years of Potential Life Lost (YPLL)

Another way of measuring the impact of disease is by calculating the years of potential life lost (YPLL) or potential years of life lost (PYLL), which estimates the number of life years lost to premature deaths.<sup>7</sup> This highlights the loss to society as a result of premature death and does not include deaths occurring after the age of 75 because that is not considered premature death. In St. Louis County, overall, years of potential life lost (YPLL) in 2020 were 79,973, an increase of 13.5% from 2019. When data were disaggregated by race, the increase in years of potential lost among Black/African Americans was 16% compared to about 11% among white residents. Of note, while Black/African Americans lost fewer years of potential life pre-pandemic, they lost more years of potential life compared to white residents in 2020. Importantly, looking at disease-specific causes of years of potential life lost in 2020, Black/African Americans accounted for 54% of total years of potential life lost due to COVID-19 in St. Louis County.

Map 1. Life Expectancy by Zip Code in St. Louis County, 2020





## Leading Causes of Infant Death

The infant mortality rate (IMR)—the ratio of infant deaths to live births in a given year—is considered a good indicator of the overall health of a population. For 2016–2020, the overall IMR in St. Louis County was 5.9 infant deaths per 1,000 live births. In 2020, IMR in St. Louis County declined 48% from 8.2 deaths per 1,000 live births to 4.3 deaths per 1,000 live births. Blacks/African Americans have the largest burden of infant mortality in St. Louis County (**Figure 10**). Although, the overall IMR for the county is just below the *Healthy People 2020* goal of 6.0 per 1,000 live births, Black/African American IMR in St. Louis County is still nearly double the *Healthy People 2020* goal and that goal is unlikely to be attained any time soon. Among the 10 leading causes of infant death for 2016–2020, low birth weight, congenital malformations, and unintentional injuries accounted for 53.4% of infant deaths in St. Louis County (**Table 2**).

**Table 2. Number of Infant Deaths, Percentage of Total Infant Deaths, and Infant Mortality Rates for the 10 Leading Causes of Infant Death for 2016 – 2020: St. Louis County**

Rank <sup>a</sup>	Cause of Death (based on ICD–10)	Number	Percent of total deaths	Rate <sup>b</sup>
...	All Causes	334	100	594.9
1	Disorders related to short gestation and low birth weight, not elsewhere classified (low birth weight) (P07)	88	20.9	124.7
2	Congenital malformations, deformations and chromosomal abnormalities (congenital malformations) (Q00-Q99)	63	18.9	112.2
3	Accidents (unintentional injuries) (V01-X59)	38	11.4	67.7
4	Newborn affected by maternal complications of pregnancy (maternal complications) (P01)	17	5.1	30.3
5	Bacterial sepsis of newborn (P36)	12	3.6	21.4
6	Assault (homicide) (X85-Y09)	11	3.3	19.6
6	Newborn affected by complications of placenta, cord, and membranes (cord and placental complications) (P02)	11	3.3	19.6
8	Diseases of the circulatory system (I00-I99)	7	2.1	12.5
8	Neonatal hemorrhage (P50-P52, P54)	7	2.1	12.5
10	Atelectasis (P280, P281)	5	1.5	8.9
10	Respiratory distress of newborn (P22)	5	1.5	8.9
...	All other Causes	88	26.3	156.8

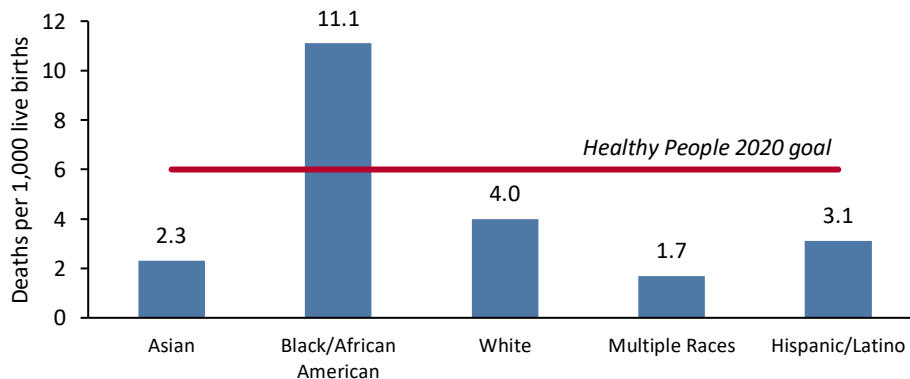
... Category not applicable.

<sup>a</sup>Rank based on number of deaths. Cause-of-death statistics are based on the underlying cause of death.

<sup>b</sup>Infant deaths per 100,000 live births.

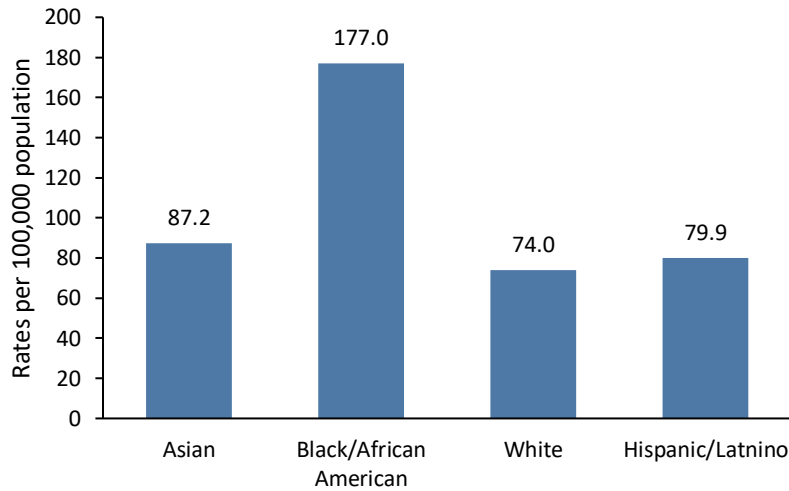
‡Suppressed to protect confidentiality and/or too few cases to report reliable rates.

**Figure 10. Infant Mortality Rates by Race and Ethnicity for 2016 – 2020: St. Louis County**



## COVID-19 SPECIFIC STATISTICS

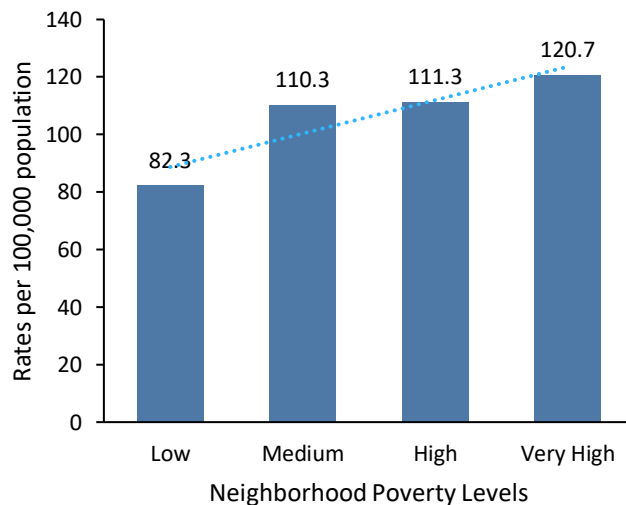
**Figure 11. Age-Adjusted Deaths Rates due to COVID-19 by Race and Ethnicity: St. Louis County, 2020**



Similar to national trends, we observed great disparities in COVID-19 mortality rates in St. Louis County by race/ethnicity (**Figure 11**). Specifically, Black/African American residents of St. Louis County died at a rate 2.4 times the rate of white residents. The second highest mortality rate was observed among Asian residents at 87.2 per 100,000 population.

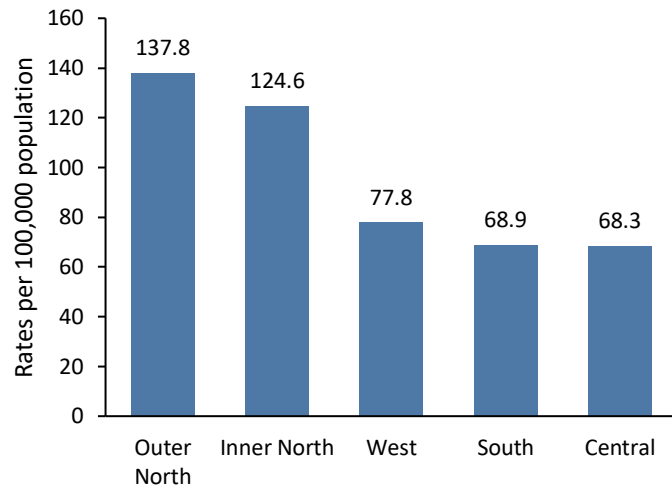
The association between adverse health outcomes and socioeconomic status have been well documented.<sup>8</sup> As the pandemic progressed, a clear association between poverty and COVID-19 infections and mortality has been observed in the United States.<sup>9</sup> In St. Louis County, we observed similar patterns with those living in low neighborhood poverty levels (0 to <10% living below federal poverty level) having the lowest mortality rates (82.3 per 100,000 population) and those in very high neighborhood poverty level, i.e., >30% living below federal poverty level, having the highest mortality rates at 120.7 per 100,000 population. Very little differences were observed in mortality rates between those living in medium and high neighborhood poverty levels.

**Figure 12. Age-Adjusted Death Rates due to COVID-19 by Neighborhood Poverty Level: St. Louis County, 2016-2020**

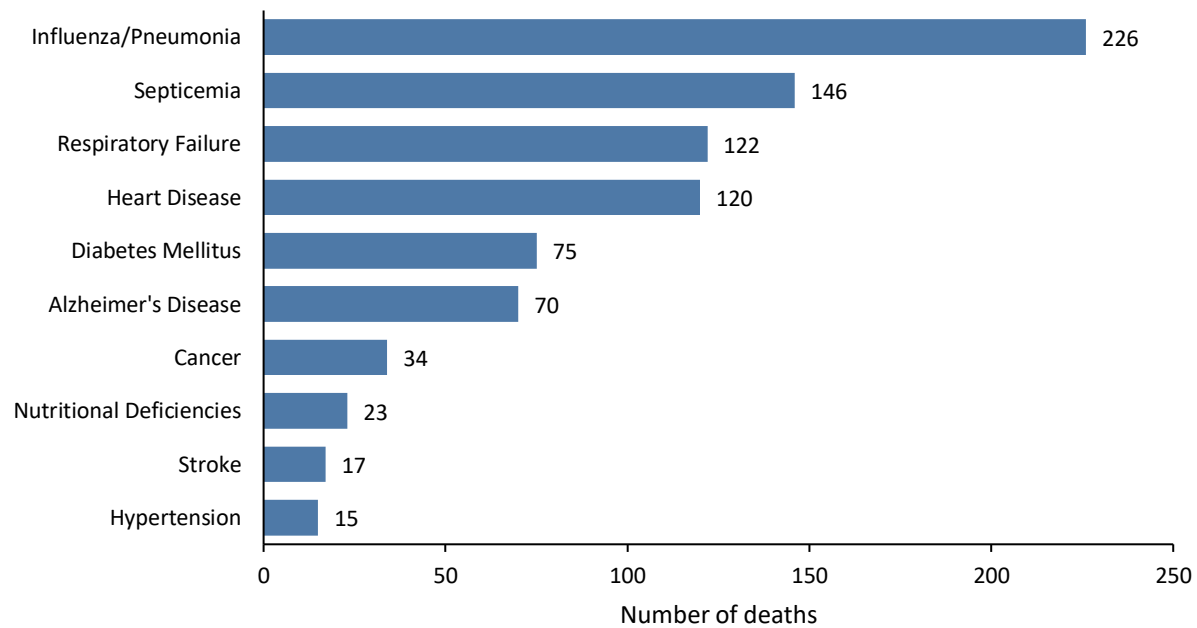


In St. Louis County, there are well established disparities in a myriad of health outcomes by geographic sub regions. When we looked at mortality rates due to COVID-19 by geographic subregions, similar disparities emerged. As shown in **Figure 13** on the right, residents of Outer North subregion of the county had the highest mortality rate, closely followed by those in the Inner North subregion. In essence, the North County subregion as a whole had the highest mortality rate overall. The lowest mortality rates were observed in Central and South subregions of the county.

**Figure 13. Age-Adjusted Death Rates due to COVID-19 by Geographic Subregions: St. Louis County, 2020**

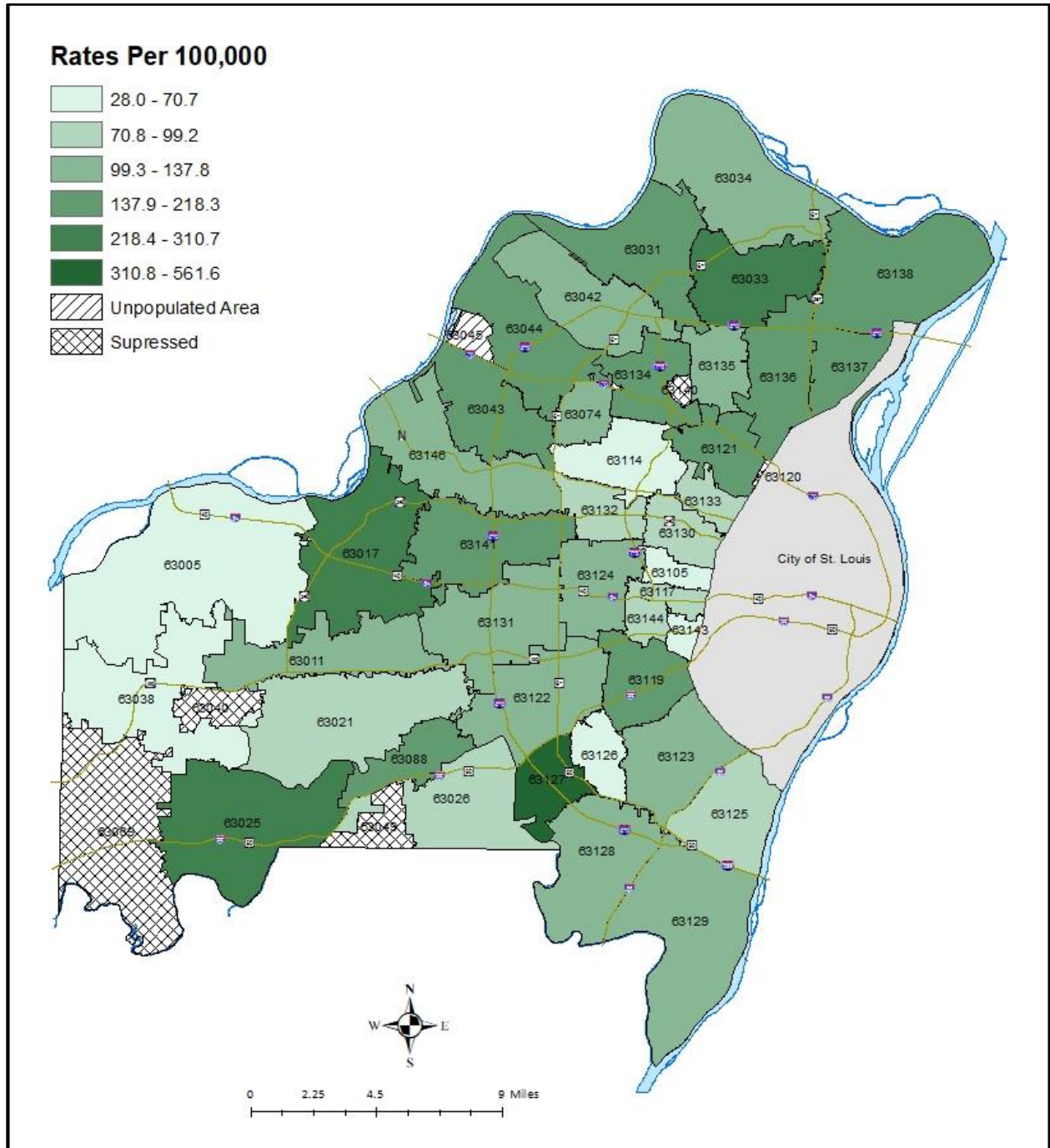


**Figure 14. Ten Leading First Significant Conditions Among COVID-19 Deaths**



**Figure 14** shows the ten leading first significant conditions among COVID-19 deaths. The most common first significant condition was influenza and pneumonia, followed by septicemia. Seven of the ten leading first significant conditions are chronic conditions. In particular, heart disease and diabetes are the highest and second-highest chronic significant conditions, which indicates that individuals with these conditions are at greater risk of death from COVID-19 than individuals who do not have heart disease or diabetes. Based on existing data, we know that the prevalence of these conditions are highest among Black/African American residents, those who live in high neighborhood poverty levels, and residents living in Inner North and Outer North subregions of the county.<sup>10,11</sup>

Map 2. COVID-19 Death Rates by Zip Codes in St. Louis County, 2020



**Table 3. Distribution of Death certificates with COVID-19 diagnosis in St. Louis County, 2020**

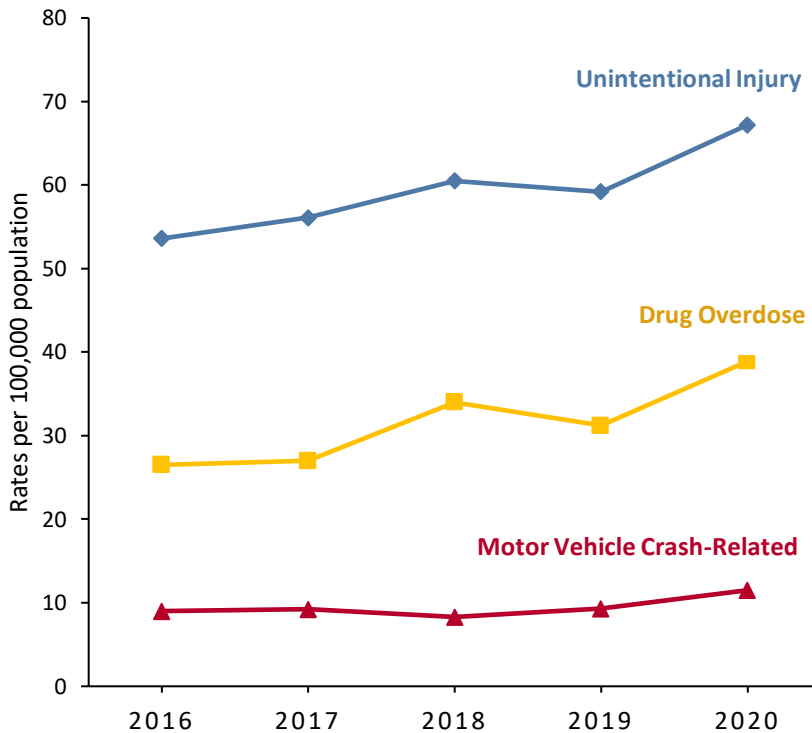
Characteristic	No. (row %)					
	No. of death certificates	COVID-19 only	COVID-19 and 1 significant condition	COVID-19 and 2 significant conditions	COVID-19 and 3 significant conditions	COVID-19 and ≥ 4 significant conditions
Total	1,310	168 (12.8)	322 (24.6)	325 (24.8)	222 (16.9)	273 (20.8)
Age group						
<40	†	†	†	†	†	†
40-49	18	6 (33.3)	†	†	†	†
50-64	138	16 (11.6)	26 (18.8)	34 (24.6)	32 (23.2)	30 (21.7)
65-74	253	26 (10.3)	57 (22.5)	59 (23.3)	46 (18.2)	65 (25.7)
75-84	343	36 (10.5)	91 (26.5)	90 (26.5)	55 (16)	71 (20.7)
≥85	553	83 (15)	144 (26)	139 (25.1)	87 (15.7)	100 (18.1)
Sex						
Male	619	70 (11.3)	164 (26.5)	153 (24.7)	102 (16.5)	136 (22.0)
Female	691	98 (14.2)	158 (22.3)	173 (25.0)	120 (17.4)	137 (19.8)
Race/Ethnicity						
Hispanic or Latino	13	†	†	†	†	†
Asian, non-Hispanic	22	†	†	6 (27.3)	†	†
Black, non-Hispanic	395	50 (12.7)	86 (21.8)	92 (23.3)	72 (18.2)	95 (24.1)
White, non-Hispanic	877	112 (12.8)	227 (25.9)	223 (25.4)	146 (16.6)	169 (19.3)
Setting of death						
Inpatient	822	70 (8.5)	194 (23.6)	216 (26.3)	145 (17.6)	197 (24.0)
Outpatient/Emergency department	32	7 (21.9)	8 (25.0)	6 (18.8)	7 (21.9)	†
Decedent's home	48	12 (25.0)	8 (16.7)	11 (22.9)	6 (12.5)	11 (22.9)
Hospice facility	†	†	†	†	†	†
Nursing home	395	73 (18.5)	109 (27.6)	90 (22.8)	63 (15.9)	60 (15.2)
Other	8	†	†	†	†	†

†Suppressed due to few numbers.

**Table 4** shows the distribution of death certificates with a COVID-19 diagnosis in St. Louis County in 2020. The majority (87.2%) of death certificates had at least one significant condition that contributed to death in addition to COVID-19. In about 13% of the death certificates only COVID-19 was listed as the main cause of death. The number of death certificates with one, two, three, and four or more significant conditions are spread fairly evenly across those groups.

### Emerging Issues in Unintentional Injuries: Drug Overdose and Motor Vehicle Crash Deaths

**Figure 15. Age-Adjusted Death Rates for Unintentional Injury, Drug Overdose and Motor Vehicle Crashes, St. Louis County, 2016 – 2020**



Source: Missouri DHSS, Bureau of Vital Statistics.

Drug poisoning or overdose and motor vehicle crash-related deaths are issues of major concern in unintentional injury prevention (Figure 15). Last year (2020) resulted in the highest mortality rates of the five year period 38.9 per 100,000 and 11.5 per 100,000 for overdose and motor-vehicle crash related deaths, respectively. This marks a 47% increase in the age-adjusted mortality rate for Drug Overdose and a 14% increase in age-adjusted mortality for motor vehicle crash-related incidents.

### Drug Poisoning or Overdose

The increasing trends of Drug poisoning mortality nationally and locally over the last 5 years are an important issue for St. Louis County. In the year 2020 alone, drug poisoning or overdose was the cause of death for 352 St. Louis County residents. This is the highest number of overdoses that St. Louis County has experienced and represents a 13% increase over the previous high of 311 (in 2018). Opioid-involved overdoses accounted for 322 of the drug overdose deaths in 2020. Following along with the trend seen in drug poisoning overall, this is an 11% increase over the previous high of 291 in 2018. Opioid-involved overdoses are quantified using the multiple cause of death codes and include T40.0 – T40.4 and T40.6. Additional data on trends in overdoses will be available in St. Louis County’s 2020 Overdose Mortality Report to be released shortly.

## Methods

Data were obtained from the Missouri Department of Health and Senior Services, Bureau of Vital Statistics for the years 2016 to 2020. Causes of death were classified using the *International Classification of Diseases, Tenth Revision (ICD-10)* underlying cause codes and ranked according to the number of deaths assigned to rankable causes.<sup>12</sup> The “List of 113 Selected Causes of Death and Enterocolitis due to *Clostridium difficile*” was used to select rankable causes for the leading causes presented in this report.<sup>12</sup> The “List of 130 selected causes of infant death” was used for ranking the leading causes of infant deaths. Infant mortality rates were calculated by dividing the number of infant deaths (age <1 year) in a calendar year by the number of live births registered for that same time period. Data for rates of the leading cause of death in the United States were obtained from National Vital Statistics System (NVSS), National Center for Health Statistics (NCHS) data briefs and reports.<sup>1, 12, 13</sup>

The data received captures all deaths of St. Louis County residents (within or outside of St. Louis County). The American Community Survey (ACS) was used to generate 1-year and 5-year estimates for the St. Louis County population by age, gender, race and Hispanic origin for 2014-2019. The percent of residents living below the federal poverty level for each census tract was also obtained from ACS using the 5-year estimate for 2004 to 2019.

In the analysis, neighborhood poverty level was assigned to each death based on residence within each St. Louis County 2010 census tract. Each census tract was assigned one of four categories of percent below federal poverty level:<sup>2</sup> Low (0 to < 10 percent); Medium (10 to <20 percent); High (20 to <30 percent); and Very high (30 to 100 percent). Age-adjusted and age-specific rates and 95% confidence intervals were calculated in SAS Macro using population estimates from ACS. The rates were age-adjusted to the 2000 U.S. population.<sup>14</sup> Geographic regions were determined from St. Louis County Planning division region maps by assigning each census tract a matching region. Maps were generated using ArcGIS for the vital statistics data for rates by zip code, and geographic regions.

Life expectancy at birth is defined as the estimated number of years a newborn can expect to live if current age-specific death rates in that population remained the same over time.<sup>5</sup> Zip Code specific life expectancy was calculated using St. Louis County deaths (2020 provisional deaths data) and 2010 Census data for single years of age and sex (US Census Summary File 1, Table PCT12). County wide The data were aggregated into 19 age groups (<1, 1–4, 5–9, 10–14, 15–19, 20–24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65–69, 70–74, 75–79, 80–84, 85+) and entered into the SEPHO Life Expectancy Calculator tool.<sup>15</sup> These methods are consistent with the [Sub-County Assessment of Life Expectancy \(SCALE\) Project](#), led by the Council of State and Territorial Epidemiologists (CSTE) and the Centers for Disease Control and Prevention (CDC).

*Healthy People* is an initiative created by the U.S. Department of Health and Human Services to provide evidence-based, 10-year goals and objectives to improve the nation’s health and well-being.<sup>16</sup> Healthy People 2020 (HP2020) is the fourth Healthy People initiative. Healthy People objectives were created to monitor the nation’s progress and motivate change that will prevent further disease. Injury and Violence Prevention Objectives *IVP-11: Reduce unintentional injury deaths (ICD-10 codes V01–X59, Y85–Y86)* and *IVP-13.1 Reduce motor vehicle crash related- deaths (ICD-10 codes V02–V04[.1,.9], V09.2, V12–V14[.3–.9], V19[.4–.6], V20–V28[.3–.9], V29–V79[.4–.9], V80[.3–.5], V81.1, V82.1, V83–V86[.0–.3], V87[.0–.8], V89.2)* were referenced in this report. Although there is not a HP2020 goal for unintentional drug overdose deaths (*ICD-10 codes X40–X44*), this has become an emerging issue in injury and violence

prevention, and HP2020 calls for monitoring drug overdose deaths to better understand the trends, causes, and prevention strategies.

## Chronic Disease Epidemiology Program

The Chronic Disease Epidemiology (CDE) program is responsible for analysis, interpretation, and presentation of health data related to chronic diseases and their risk factors.

The CDE program supports the Saint Louis County Department of Public Health (DPH) by providing the following services:

- Develop study designs, questionnaires, and case definitions.
- Evaluate chronic disease programs.
- Locate or develop surveillance systems, and analyze epidemiologic data sets.
- Provide county, state, and national comparison data.
- Interpret St. Louis County chronic disease and risk factor data.
- Conduct epidemiologic investigations and special studies of chronic diseases and chronic disease risk factors of public health importance.
- Monitor St. Louis County chronic disease trends.
- Provide scientific advice and technical assistance to community groups and outside partners with respect to surveillance and other epidemiology data expertise.
- Publish reports and web pages on chronic disease and risk factors.

For more information about the CDE program please contact us at: [ChronicDisease.DOH@stlouisco.com](mailto:ChronicDisease.DOH@stlouisco.com)

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