Milwaukee County COVID-19 Data Summary

Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on January 28, 2021 and includes data through January 26, 2021. Note that data for recent weeks may be under-reported due to pending test results.

Milwaukee County COVID-19 Summary Statistics

Overall Milwaukee County COVID-19 Summary Statistics
March 3 - January 26

	Milwaukee County	**City of Milwaukee**	**Suburbs**
Total tests performed	1,026,681	646,416	380,265
Percent positive of all tests performed	10.1%	10.2%	10.1%
Number of confirmed cases	93,146	58,890	34,256
Number of hospitalizations	5,396	3,489	1,907
Number of deaths	1,155	600	555
Case fatality rate	1.2%	1.0%	1.6%

Weekly Milwaukee County COVID-19 Summary Statistics
January 20 - January 26

	Milwaukee County	**City of Milwaukee**	**Suburbs**
Total tests performed	19,595	12,053	7,542
Percent positive of all tests performed	7.1%	7.3%	6.9%
Number of confirmed cases	1,215	805	410
Number of hospitalizations	106	66	40
Number of deaths	18	10	8

Total Cases and New Cases

There are now a total of 93146 cases in Milwaukee County, since the first confirmed case on March 6th, 2020. Over the last week, we observed 1215 new confirmed cases in Milwaukee County, including 805 new cases in the city of Milwaukee. **Figure 1** shows the daily incidence of new cases (bars) and the average daily incidence within the last 7 days (line), which provides a smoothing effect to enhance visualization, for both the city and the county. To indicate a potential reporting delay, we shade the last seven days of data and exclude those days from the trend line.

Over the last week, we have seen a slight decrease in confirmed cases. The highest daily case count since the beginning of the epidemic occurred on November 9, 2020, with 1688 cases in the county overall. The highest daily case count over the entire epidemic in the suburbs occurred on November 9, 2020, with a total of 678 cases confirmed. The highest case count in the city occurred on November 9, 2020, with a total of 1010 cases confirmed.

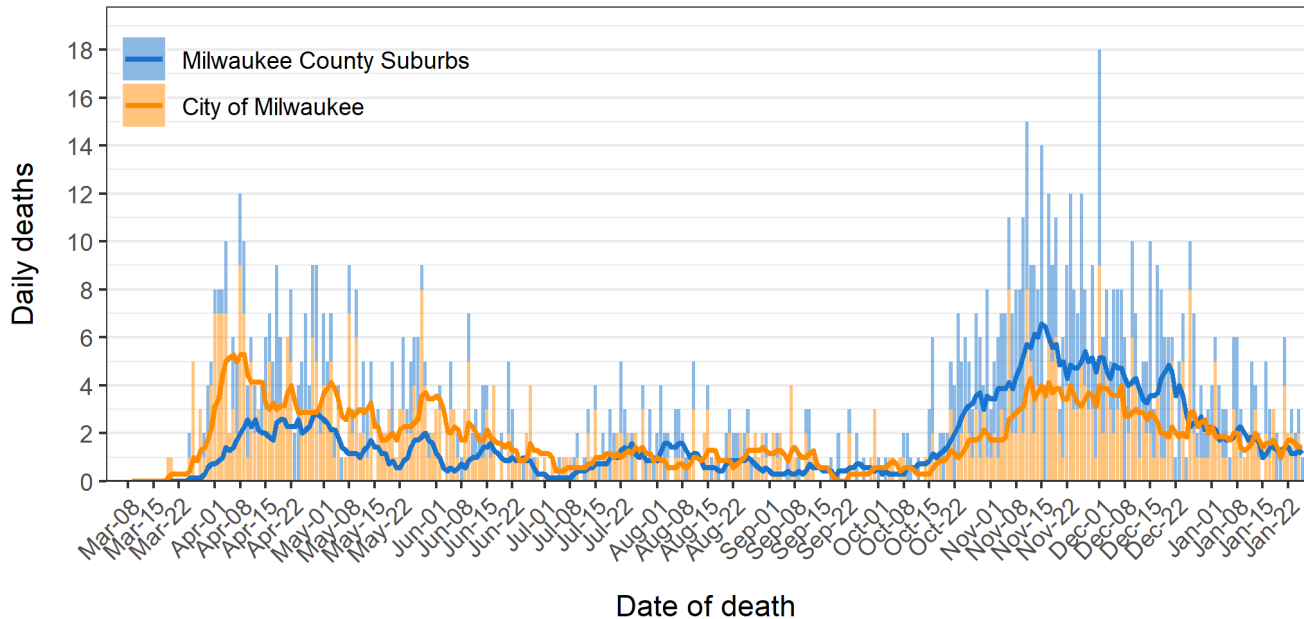**Figure 1: Milwaukee County daily number of COVID-19 cases**
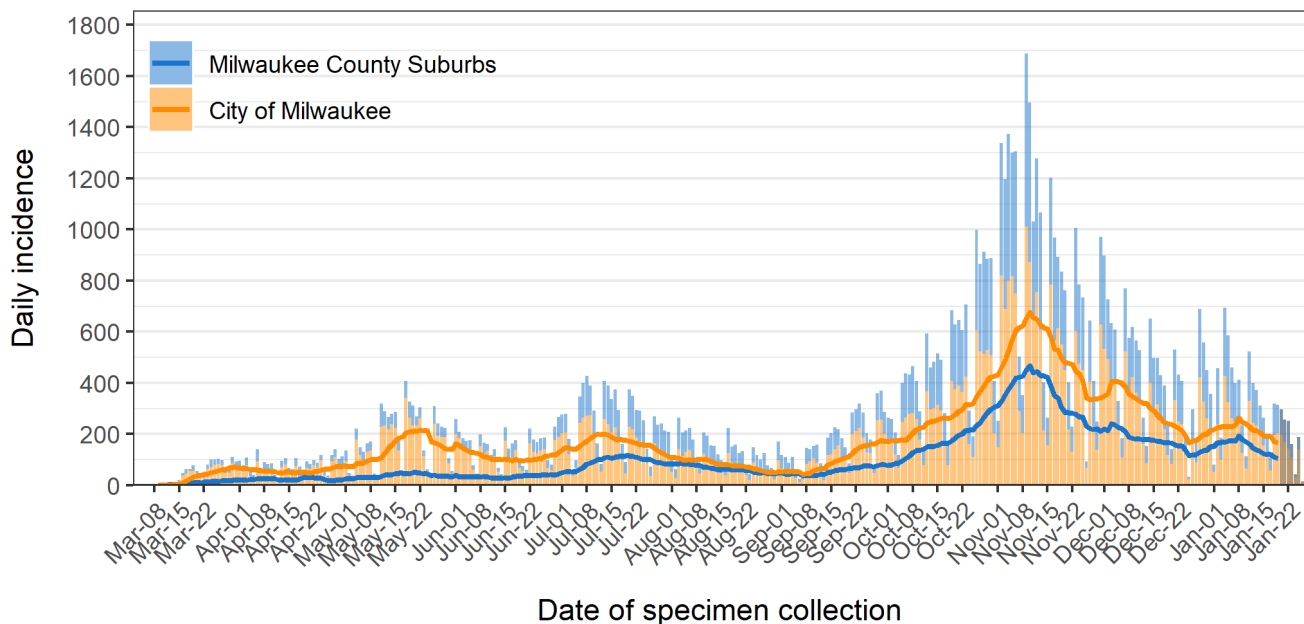
Data source: Wisconsin Electronic Disease Surveillance System (WEDSS)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Total Deaths and New Deaths

There are a total of 1155 COVID-19 related deaths in Milwaukee County. Over the last week, we observed 18 deaths, with 10 from the City of Milwaukee. **Figure 2** shows the number of daily COVID-19 related deaths among Milwaukee County and City of Milwaukee residents. The overlaid lines show the average daily deaths within the last 7 days for each jurisdiction. Deaths in the county peaked on December 1, 2020. Deaths in the city peaked on April 8, 2020 with 9 deaths, and in the suburbs on November 15, 2020 with 10 deaths. Over the last few months, the number of deaths in the suburbs rose to the highest level since the beginning of the epidemic, outpacing deaths in the city.
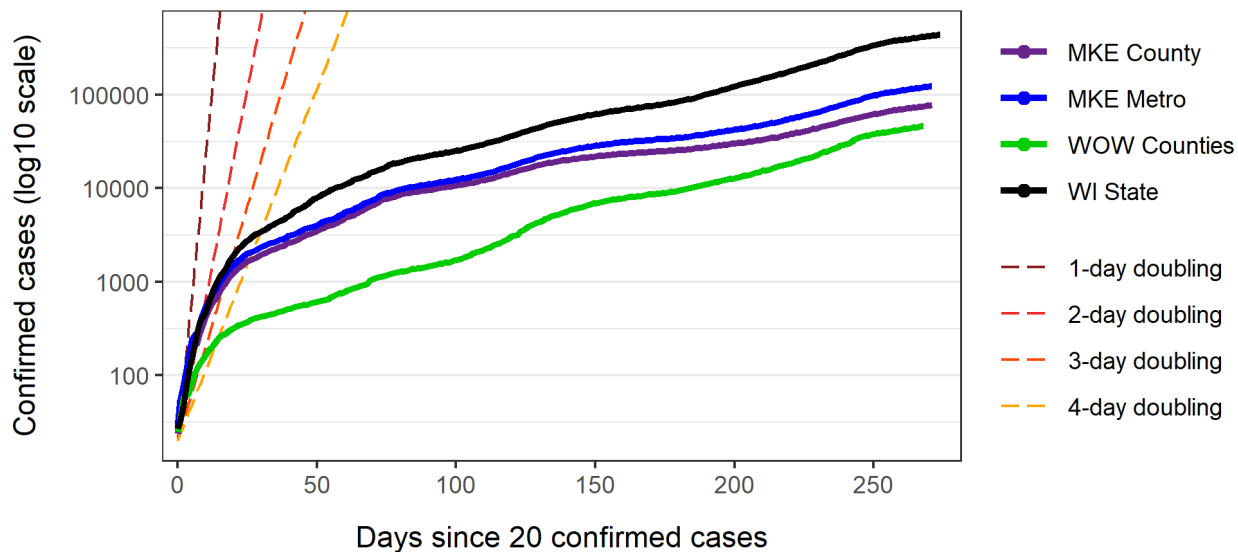
Figure 2: Milwaukee County COVID-19 daily deaths

Data source: Wisconsin Electronic Disease Surveillance System (WEDSS)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team
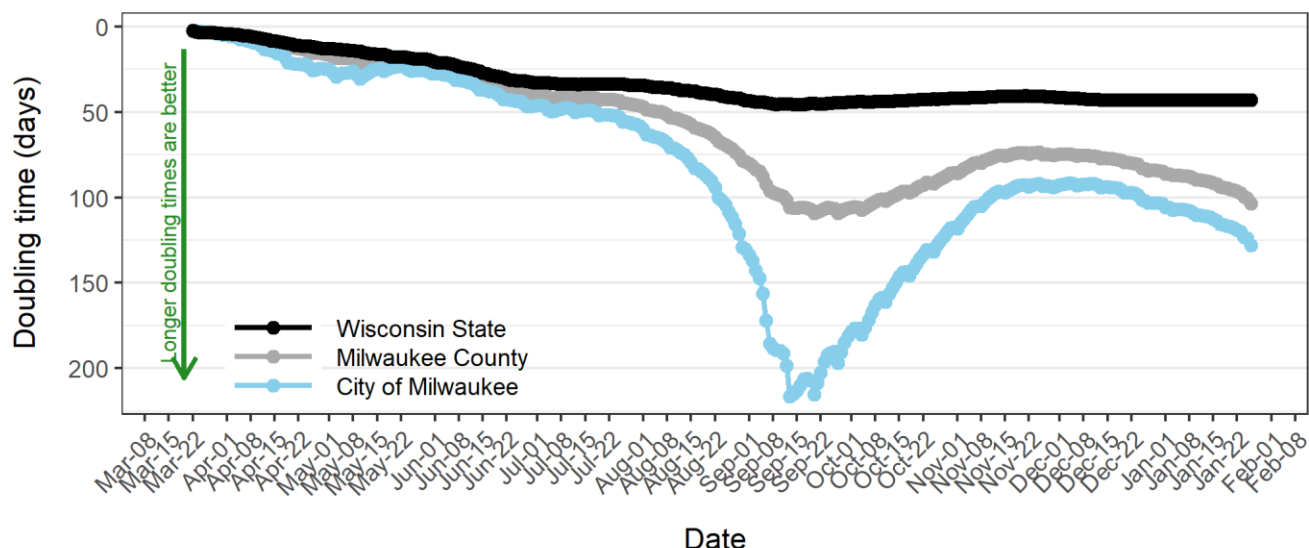
The COVID-19 Growth Rate

The time it takes for the number of cases to double is called the doubling time. **Figure 3** shows doubling times for Milwaukee County, the surrounding Waukesha, Ozaukee and Walworth (WOW) counties, the M7 (7-county) metropolitan area, and the state of Wisconsin. Dotted lines indicate doubling times of 1, 2 3 and 4 days, which are generally associated with a condition of exponential growth. The current doubling time in Milwaukee County is 103.52 days. The current doubling time for WOW counties is 54.39 days. The current doubling time for the state of Wisconsin is 42.95 days. **Figure 4** shows the trend in doubling times for Milwaukee County and the City of Milwaukee as compared to the state, over the course of the epidemic. As illustrated, the epidemic initially doubled more quickly in Milwaukee County and the city, but has since slowed (improved) more in the city and county than in the state as a whole.

Figure 3: Cumulative cases after 20 confirmed

Data source: Wisconsin Department of Health Services
Created by the Milwaukee County COVID-19 Epidemiology Intel Team
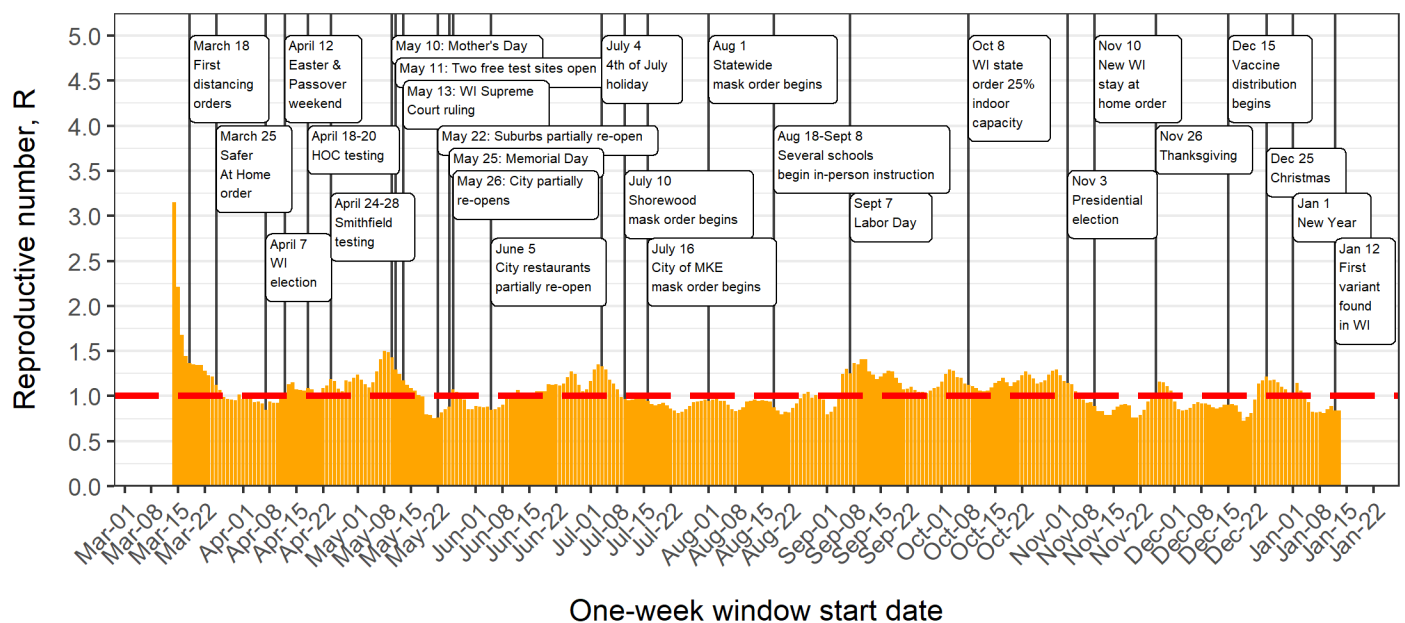
Figure 4: Trend in doubling times

Data sources: WI Department of Health Services & WI Electronic Disease Surveillance System
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

The COVID-19 Reproductive Number

Another way of examining the growth rate of the infection is to examine the reproductive number (R). This number captures the number of new cases that are the result of an existing case. For example, an R of 2 would indicate that each infected person infects 2 new people. The following plots show the change in R over time for Milwaukee County, **Figure 5**, the City of Milwaukee, **Figure 6a**, and Milwaukee County suburbs, **Figure 6b**. Each plot includes key dates related to physical distancing or focused testing campaigns affecting residents. The R for each date is calculated to represent the R for a 7-day period with the start day of that 7-day period represented on the graph. We do not report estimates for the most recent seven days due to a potential data reporting delay.

After the first minimum R value in Milwaukee County observed (R = 0.85 on April 7, 2020), we observed an increase in R to a high of 1.50 on May 8, 2020 and then a decrease to a low of 0.76 in the county on May 21, 2020. The R increased again to a more recent high of 1.41 on September 11, 2020. Patterns in the City of Milwaukee are very similar to those in the county overall. Patterns in the suburbs show more fluctuation. The R values for the week of January 13, 2021 through January 19, 2021 are 0.843 for the county, 0.849 in the city, and 0.834 in the suburbs.

Figure 5: One week reproductive number for Milwaukee County

Data source: Wisconsin Electronic Disease Surveillance System (WEDSS)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

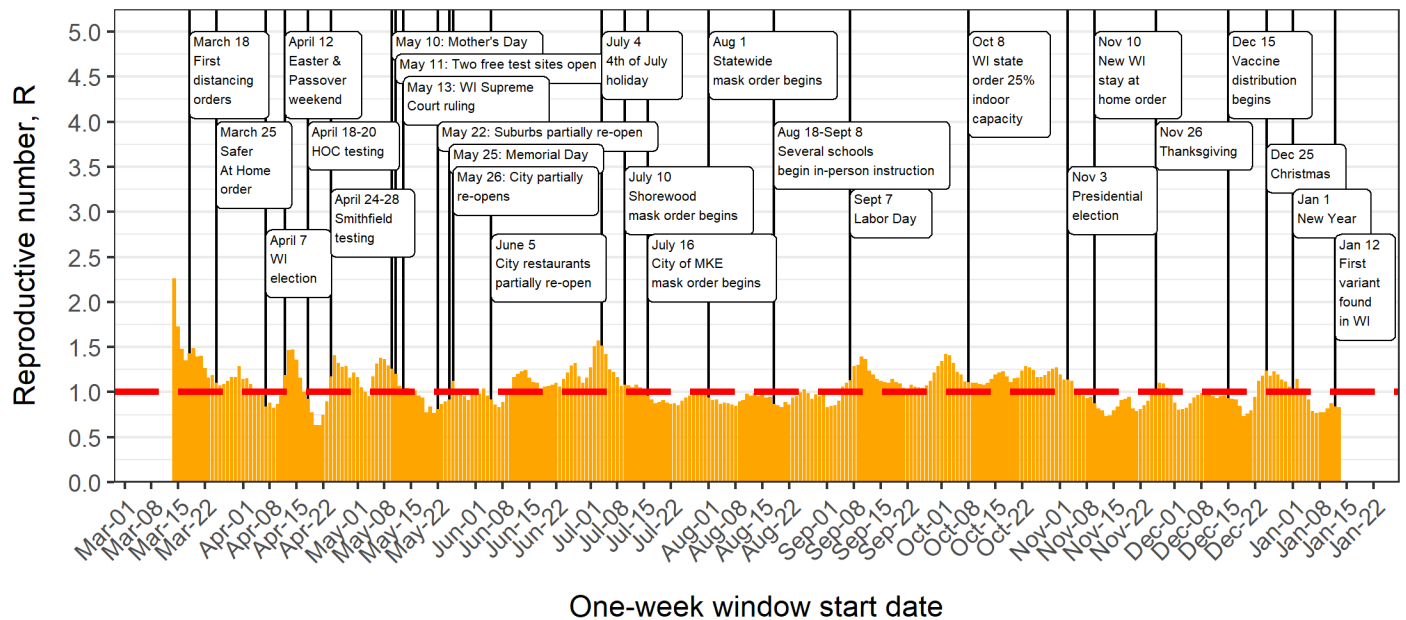## Figure 6a: One week reproductive number for City of Milwaukee
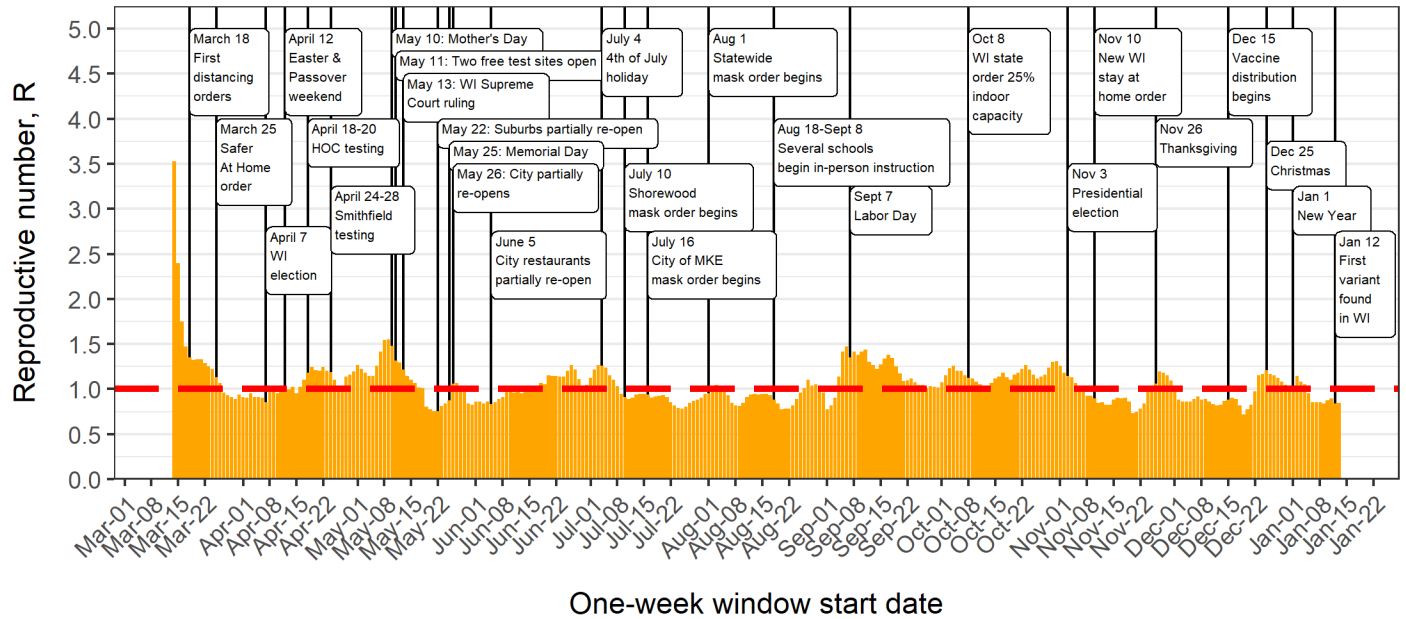
Data source: Wisconsin Electronic Disease Surveillance System (WEDSS)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Figure 6b: One week reproductive number for Milwaukee County suburbs

Data source: Wisconsin Electronic Disease Surveillance System (WEDSS)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

## Demographic Patterns – Age, Sex, Race and Ethnicity

Confirmed cases

COVID-19 cases vary by demographic characteristics. **Figure 7** shows cumulative case plots including confirmed positive cases with an available specimen collection date, plotted by census block group (CBG) median household income, sex, age, and race/ethnicity groups. Most diagnosed cases fall within the ages of 18-79. Of all confirmed cases, 47% are male and 53% are female. The largest number of cases have been identified among the non-Hispanic White population (N = 39613), followed by the Hispanic population (N = 21381), and the Black/AA population (N = 19929). The lower two quartiles of median household income ($0 to $35,833, and $35,834 to $50,096) have a larger number of cases than the higher two quartiles ($50,097 to $68,393, and $68,394 to $250,001), with the fewest cases identified among the highest income group.

Over the past week, we have observed increases among individuals in all income groups, most age groups, and among non-Hispanic Whites, non-Hispanic Black/AAs, and Hispanics, with similar increases for both sexes. Cases among females now markedly exceed cases among males. The cumulative number of cases among those ages 25-39 (N = 27442) still exceeds the number among the next highest group, those ages 40-59 (N = 25014). The number of cases under age 18 (N = 11174) approaches the number diagnosed among those 60-79 (N = 12481).

Figure 7: Cumulative confirmed cases in Milwaukee County
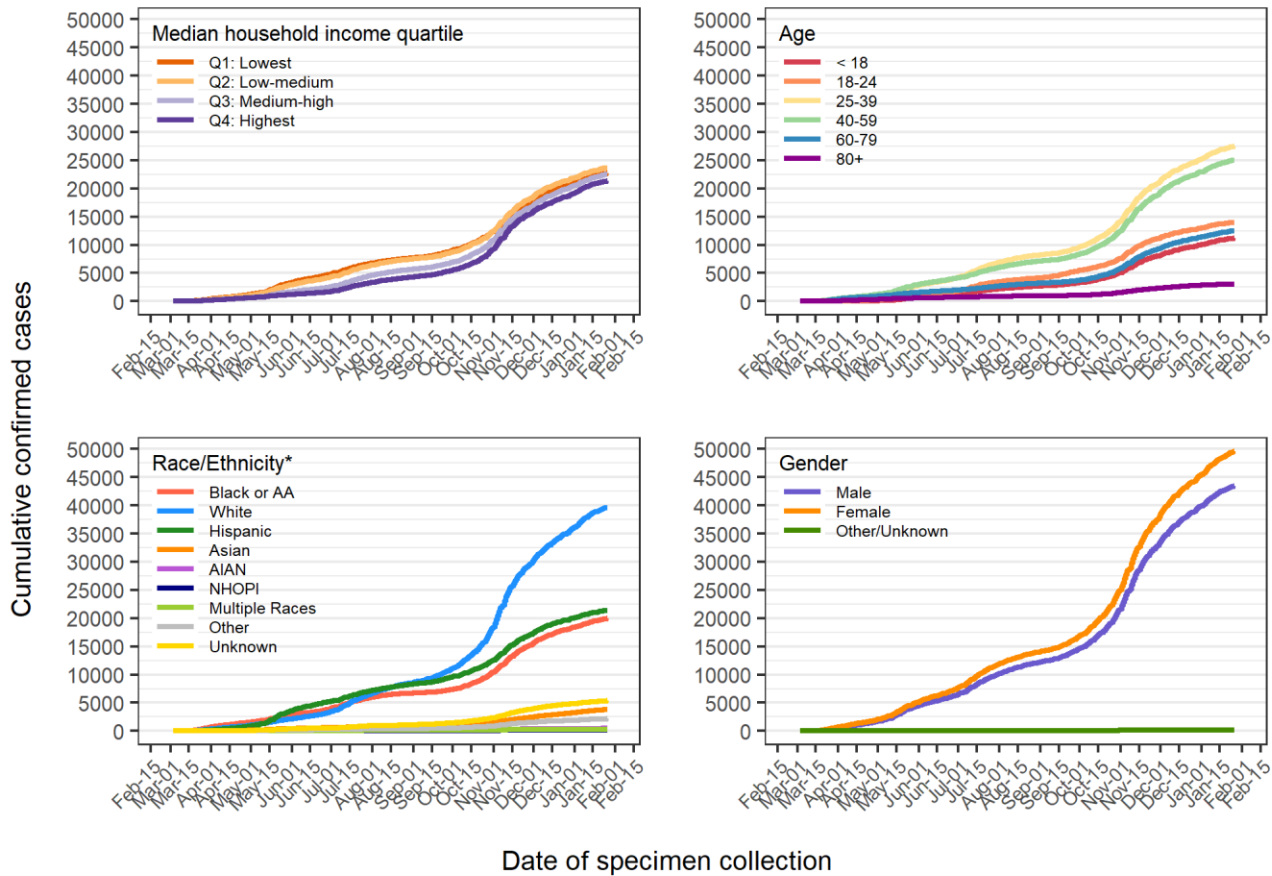
Data source: Wisconsin Electronic Disease Surveillance System (WEDSS)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team
*Race and ethnicity were combined into one variable where the Hispanic category includes Hispanics of any race.
AIAN stands for American Indian or Alaska Native and NHOPI stands for Native Hawaiian or Other Pacific Islander.

When examined as population-based rates in **Figure 8**, demographic patterns are also apparent. Early in the epidemic, we saw a clear age gradient in population-based rates, with older populations experiencing greater rates. However, in the last months, we have seen rates among the younger, working age groups (18-24, 25-39, and 40-59) exceed the rate of those aged 80+. The rate among those 60-79 (87.41 per 1,000) now exceeds that of those aged 80+ (86.35 per 1,000) and the rate among those 40-59 (108.34 per 1,000) exceeds that among those 18-24 (92.7 per 1,000). By race and ethnicity, the rate was highest among Black/AA populations until the beginning of May, when we observed a surge among Hispanics resulting in the Hispanic rate (152.1 per 1,000 people) exceeding that among all other racial and ethnic groups. The rate among AIANs (95.98 per 1,000 people) ranks second, with a recent increase in the rate among Asians (93.51 per 1,000 people) placing that rate third. Rates among Black/AAs and Non-Hispanic Whites are similar. The rate among females (100.56 per 1,000 people) exceeds the rate among males (94.09 per 1,000 people).

Figure 8: Population based incidence rates in Milwaukee County
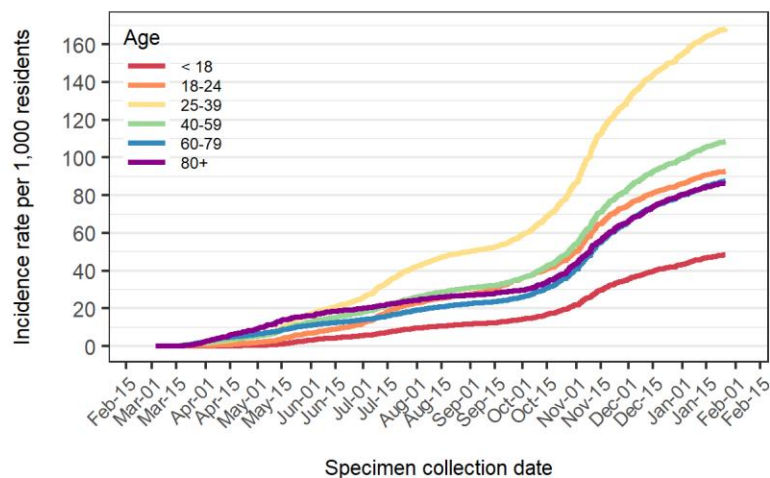
Age	N Cases	Population	Rate per 1,000 residents
< 18	11174	231111	48.35
18-24	13988	150895	92.70
25-39	27442	163246	168.10
40-59	25014	230887	108.34
60-79	12481	142783	87.41
80+	3047	35287	86.35
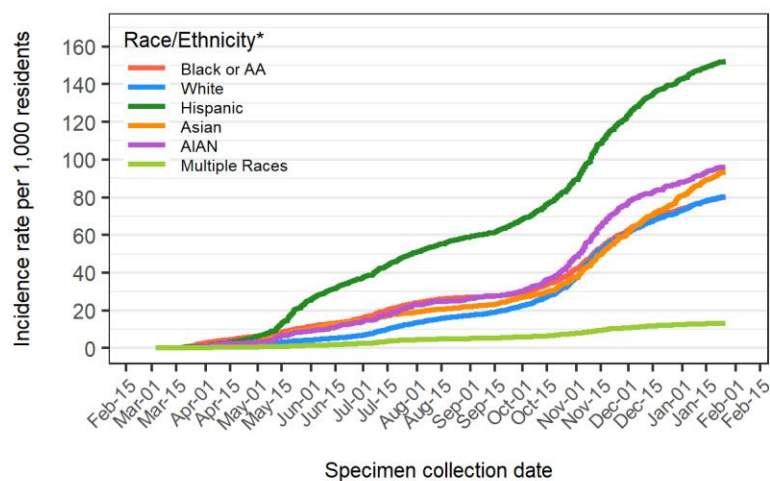
Race/Ethnicity*	N Cases	Population	Rate per 1,000 residents
Black or AA	19929	249011	80.03
White	39613	493723	80.23
Hispanic	21381	140575	152.10
Asian	3782	40443	93.51
AIAN	446	4647	95.98
Multiple Races	318	24224	13.13
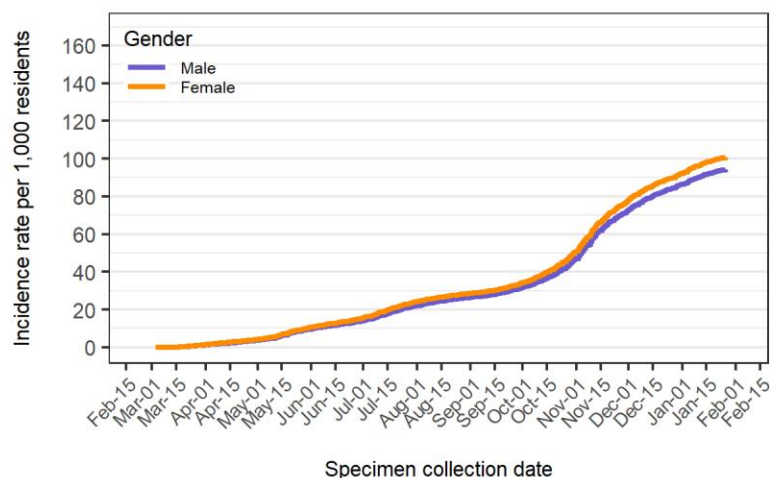
Gender	N Cases	Population	Rate per 1,000 residents
Male	43438	461670	94.09
Female	49528	492539	100.56

Data source: Wisconsin Electronic Disease Surveillance System (WEDSS)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team
*Race and ethnicity were combined into one variable where the Hispanic category includes Hispanics of any race.
AIAN stands for American Indian or Alaska Native and NHOPI stands for Native Hawaiian or Other Pacific Islander.

Hospitalizations

A total of 5396 Milwaukee County residents have been hospitalized due to COVID-19. **Figure 9** shows cumulative hospitalizations based on lab specimen collection date (as admission dates are incomplete). The highest number of hospitalizations continues to be among those ages 60-79 (N = 2099). The highest number of hospitalizations have now occurred among Non-Hispanic White community (N = 2203), followed by the Black/AA community (N = 1905), and then the Hispanic community (N = 888). Overall, counts are lower among other racial and ethnic groups. Females outnumber males, comprising 51.8% of all hospitalized cases. More individuals among lower income than higher income groups have been hospitalized, with a clear income gradient observed. Over the last week, we have seen an increase in hospitalizations among all income groups, those 60-79 and 80+, Non-Hispanic Black/AAs and Whites, and both sexes.

Figure 9: Cumulative hospitalizations in Milwaukee County

Data source: Wisconsin Electronic Disease Surveillance System (WEDSS)
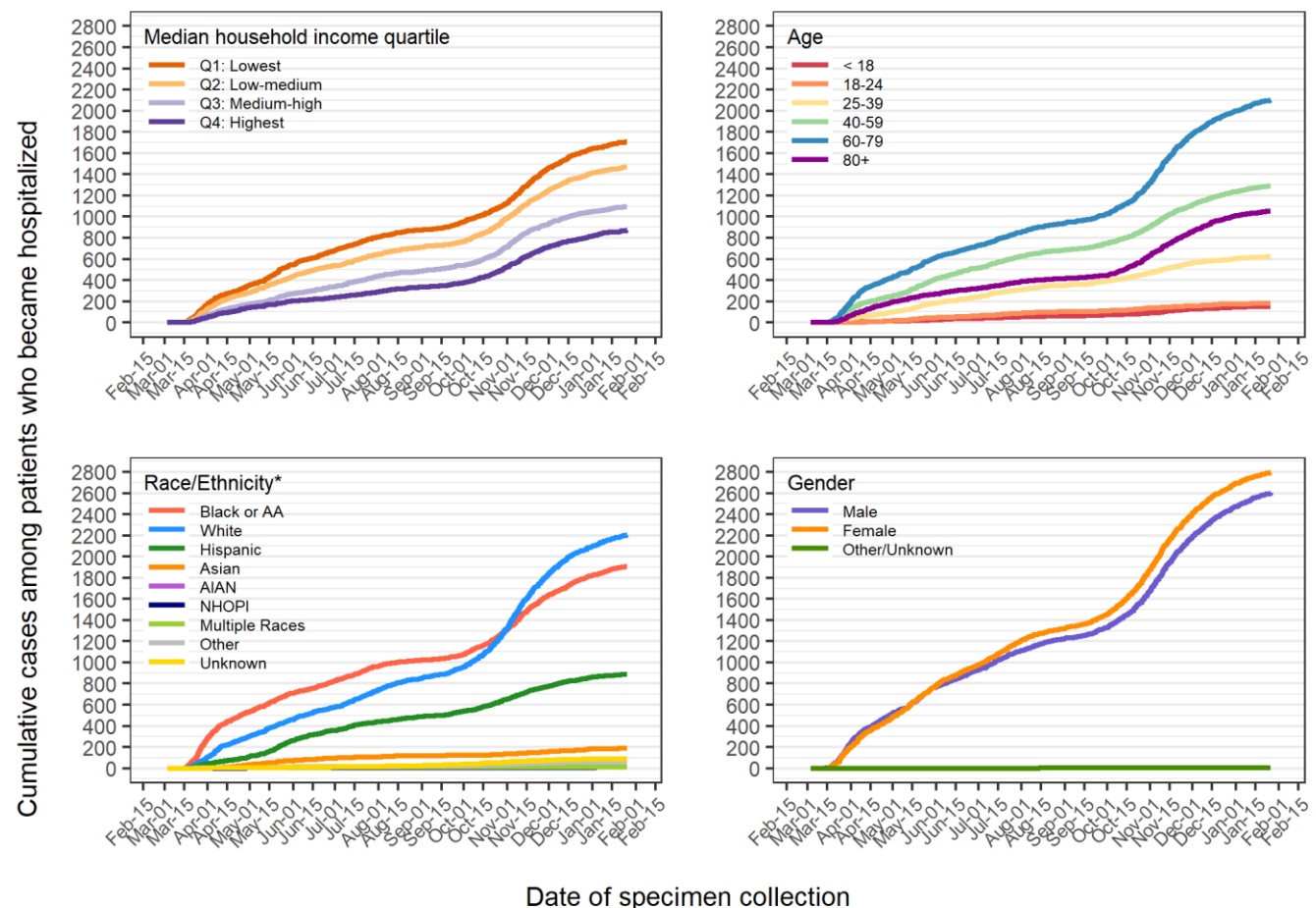Created by the Milwaukee County COVID-19 Epidemiology Intel Team
*Race and ethnicity were combined into one variable where the Hispanic category includes Hispanics of any race.
AIAN stands for American Indian or Alaska Native and NHOPI stands for Native Hawaiian or Other Pacific Islander.

When examined as population-based rates and case-based rates in **Figure 10**, hospitalization patterns are also apparent by demographic characteristics. Both population- and case-based hospitalization rates exhibit a clear age group gradient, with older age groups experiencing higher rates. By race and ethnicity, population and case-based hospitalization rates are highest among the AIAN and Black/AA populations and the population-based rate is lowest for non-Hispanic Whites. Rates by gender are very similar. All rates presented are crude rates and only groups with 10 or more total hospitalized cases are shown. Over

the last week, we have seen a slowed increase in the hospitalization rate among those 80+, and to a lesser degree, those 60-79.

Figure 10: Population and case based hospitalization rates in Milwaukee County
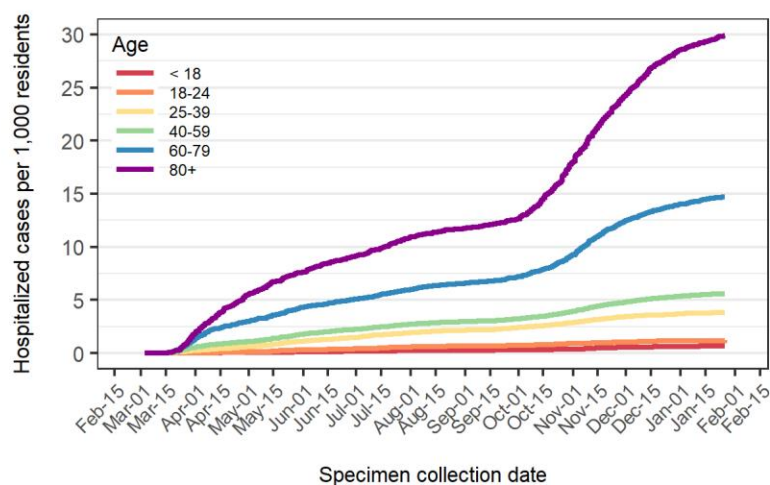
Age	N Hospitalized Cases	Rate per 1,000 residents	Rate per 100 cases
< 18	153	0.66	1.37
18-24	179	1.19	1.28
25-39	621	3.80	2.26
40-59	1291	5.59	5.16
60-79	2099	14.70	16.82
80+	1053	29.84	34.56
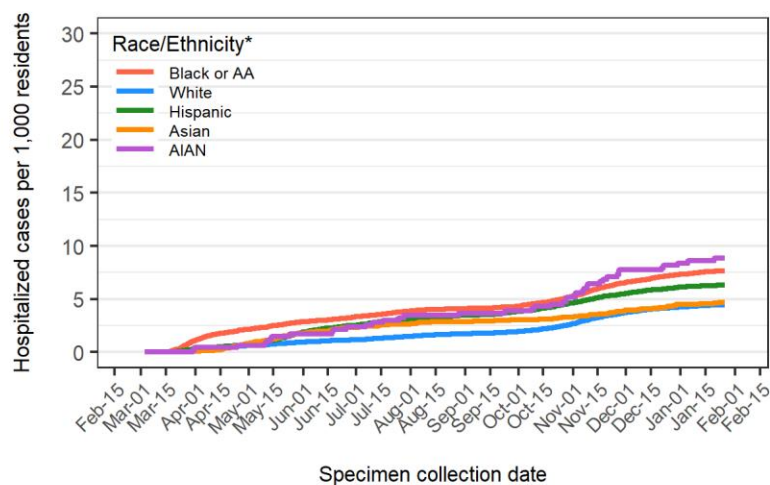
Race/Ethnicity*	N Hospitalized Cases	Rate per 1,000 residents	Rate per 100 cases
Black or AA	1905	7.65	9.56
White	2203	4.46	5.56
Hispanic	888	6.32	4.15
Asian	190	4.70	5.02
AIAN	41	8.82	9.19
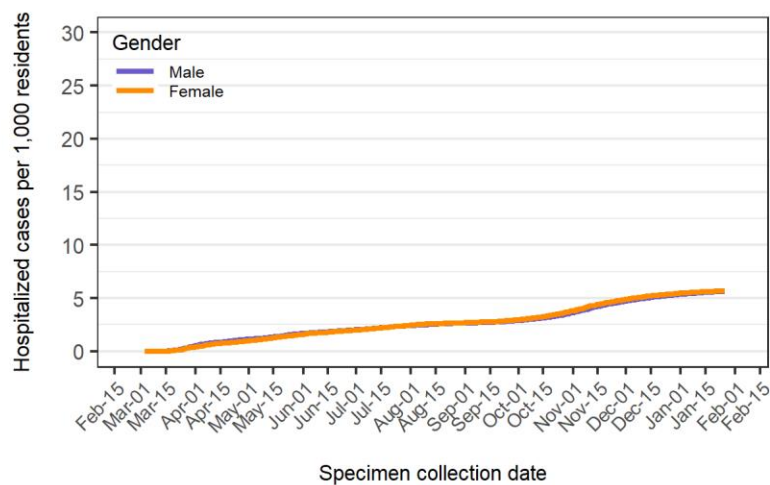
Gender	N Hospitalized Cases	Rate per 1,000 residents	Rate per 100 cases
Male	2601	5.63	5.99
Female	2793	5.67	5.64

Data source: Wisconsin Electronic Disease Surveillance System (WEDSS)
*Created by the Milwaukee County COVID-19 Epidemiology Intel Team*
*Race and ethnicity were combined into one variable where the Hispanic category includes Hispanics of any race.
AIAN stands for American Indian or Alaska Native and NHOPI stands for Native Hawaiian or Other Pacific Islander.

Deaths

There are now a total of 1155 confirmed deaths in Milwaukee County, representing a case fatality rate of 1.2%. We observed 18 new deaths over the past week in the county. Mortality patterns differ by demographic characteristics, as shown in **Figure 11**. The largest number of deaths are recorded among those age 60 or older. The largest number of deaths are recorded for males (N = 584) and for non-Hispanic Whites (N = 628) followed by Black/AA residents (N = 313). By income, there are a larger number of deaths among the two lower income groups as compared to the two higher income groups. Deaths among Hispanics remain relatively low. In recent weeks, we have seen an increase in deaths among non-Hispanic Whites, both sexes, ages 60+, and higher income groups. Of note, these increases correspond with higher numbers of deaths in the suburbs, relative to the city.

Figure 11: Cumulative deaths in Milwaukee County
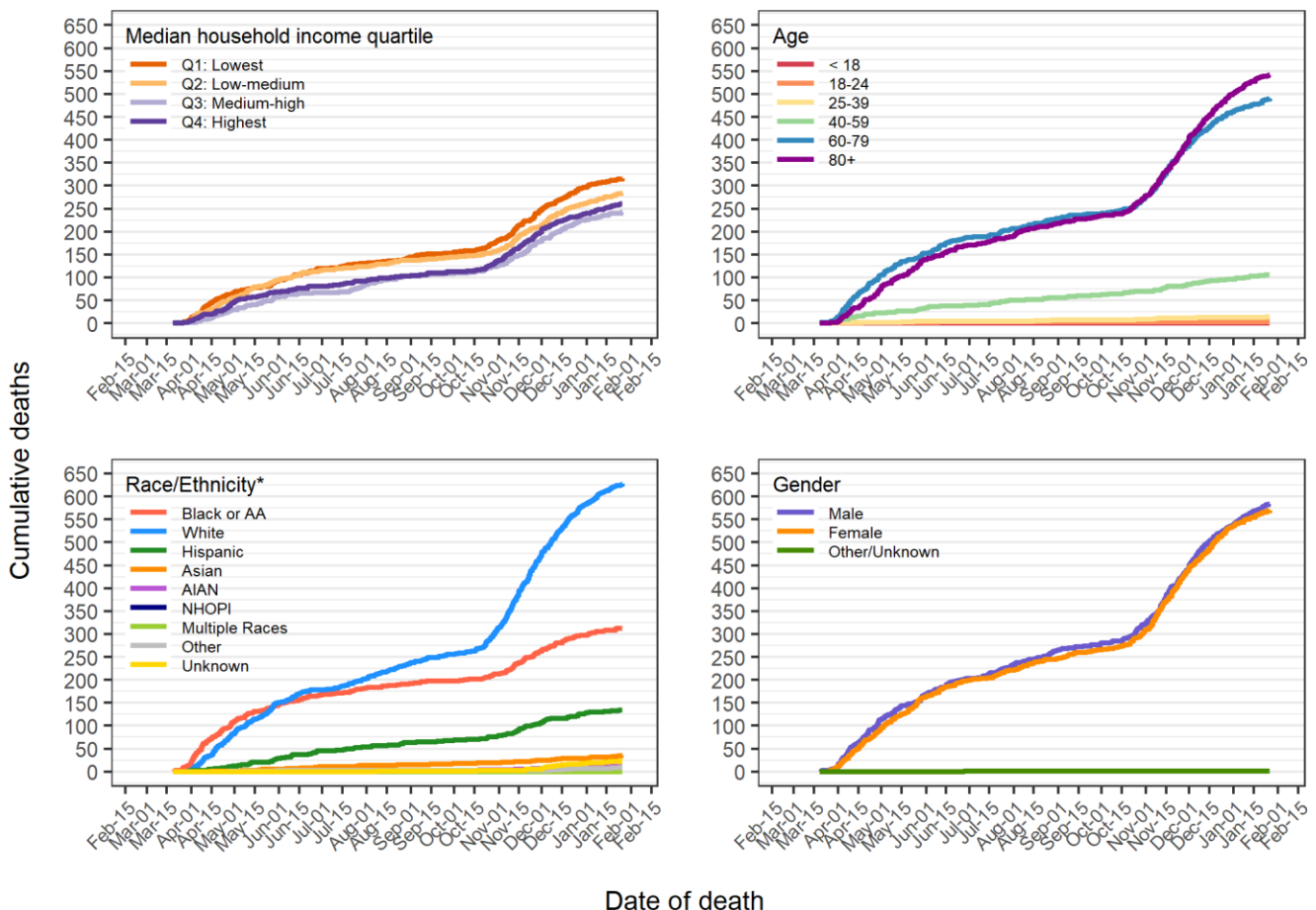
Data source: Wisconsin Electronic Disease Surveillance System (WEDSS)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team
*Race and ethnicity were combined into one variable where the Hispanic category includes Hispanics of any race.
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In terms of population- and case-based rates shown in **Figure 12**, there is a clear age category gradient, with higher death rates among older populations. Gender-based rates are very similar. This week, we reached 10 AIAN deaths, placing this group above our threshold for inclusion with the highest population and case based death rates. Black/AA populations and non-Hispanic Whites have the next highest population and case-based death rates. All rates presented are crude rates and only groups with 10 or more total deaths are shown.

# Figure 12: Population and case based death rates in Milwaukee County
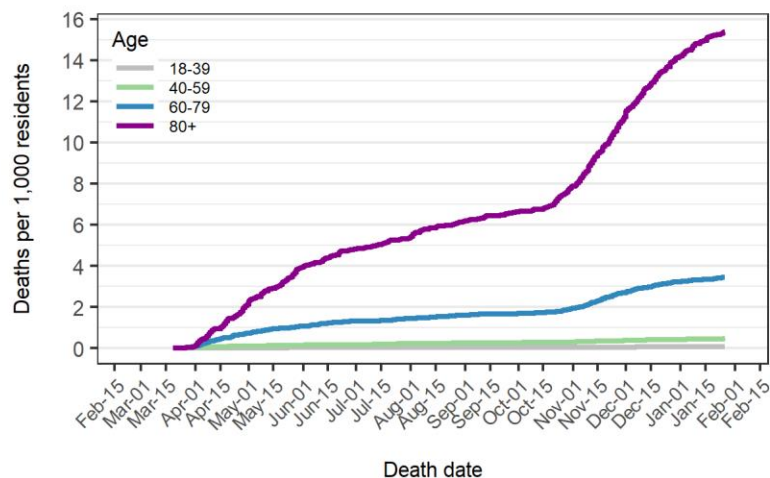
Age	N Deaths	Rate per 1,000 residents	Rate per 100 cases
18-39	17	0.05	0.04
40-59	106	0.46	0.42
60-79	490	3.43	3.93
80+	542	15.36	17.79
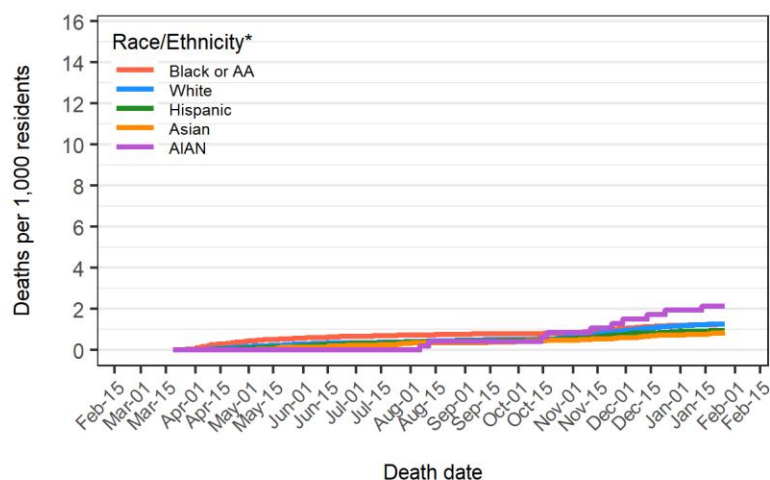
Race/Ethnicity*	N Deaths	Rate per 1,000 residents	Rate per 100 cases
Black or AA	313	1.26	1.57
White	628	1.27	1.59
Hispanic	134	0.95	0.63
Asian	35	0.87	0.93
AIAN	10	2.15	2.24
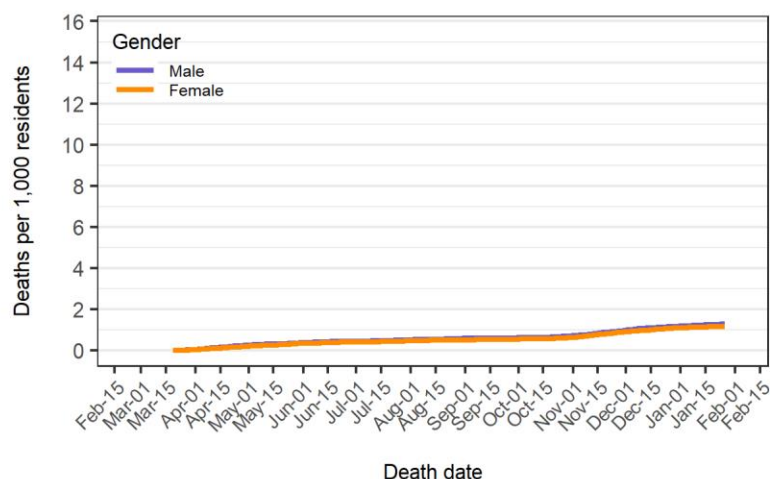
Gender	N Deaths	Rate per 1,000 residents	Rate per 100 cases
Male	584	1.26	1.34
Female	570	1.16	1.15

Data source: Wisconsin Electronic Disease Surveillance System (WEDSS)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team
*Race and ethnicity were combined into one variable where the Hispanic category includes Hispanics of any race.
AIAN stands for American Indian or Alaska Native and NHOPI stands for Native Hawaiian or Other Pacific Islander.

Testing Coverage

Testing for the novel coronavirus is an important public health response to limiting the spread of the infection. Testing capacity was limited in Milwaukee County and across the country earlier in the epidemic, but then increased. Since the first case of COVID-19 was diagnosed in Milwaukee County on March 6, 2020, a total of 1026681 COVID-19 tests have been performed, with 922559 negative results and 104122 positive results. This represents a positive test rate of 10.1% since the beginning of the epidemic.

As shown in **Figure 13**, total tests per week increased until early July and then declined, with another increase starting in early September and peaking in early November, followed by a decline. Testing markedly decreased the weeks of Thanksgiving, Christmas, and the New Year. As shown in **Figure 14**, the percentage of positive tests varied over the course of the epidemic, with a high of 25-30% in early April. The percentage of positive tests was 7.1% over the past week compared to 7.5% the previous week. **Figure 14** also illustrates the 14-day trend in the percent positive tests, showing a significant decrease. Percent positive should be interpreted in the context of potential data delays given the large numbers of tests conducted in recent weeks, and considering that data entry for positive tests is prioritized.

Figure 13: Milwaukee County number of tests per week

Data source: Wisconsin Electronic Disease Surveillance System (WEDSS)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team
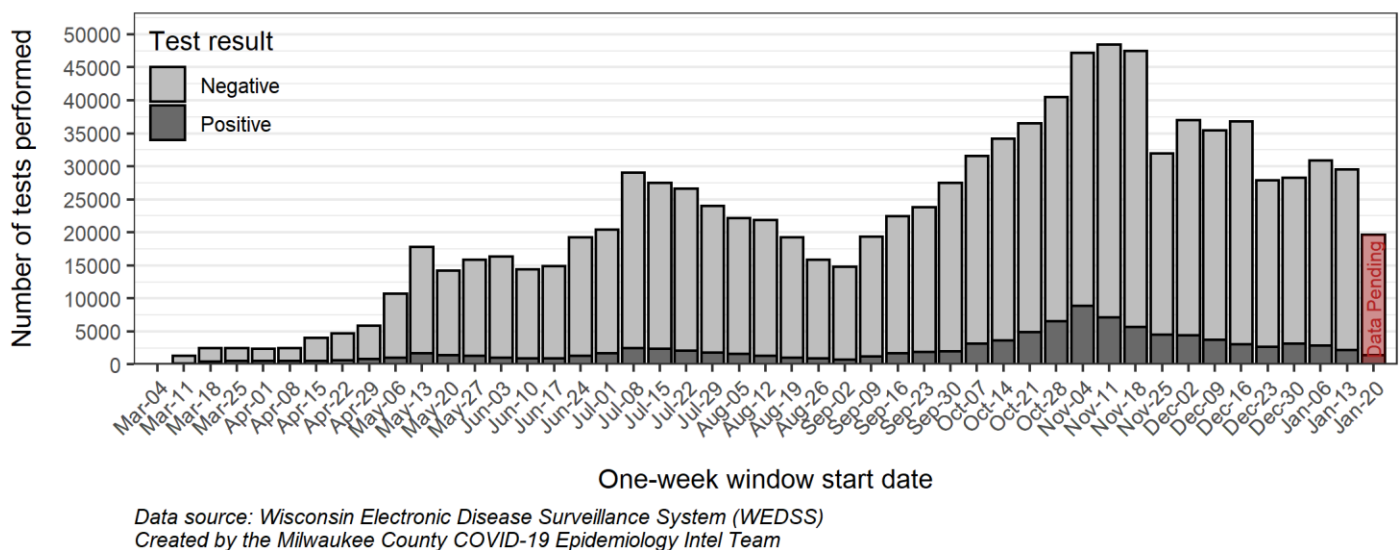
Figure 14: Milwaukee County percent positive tests

Data source: Wisconsin Electronic Disease Surveillance System (WEDSS)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team
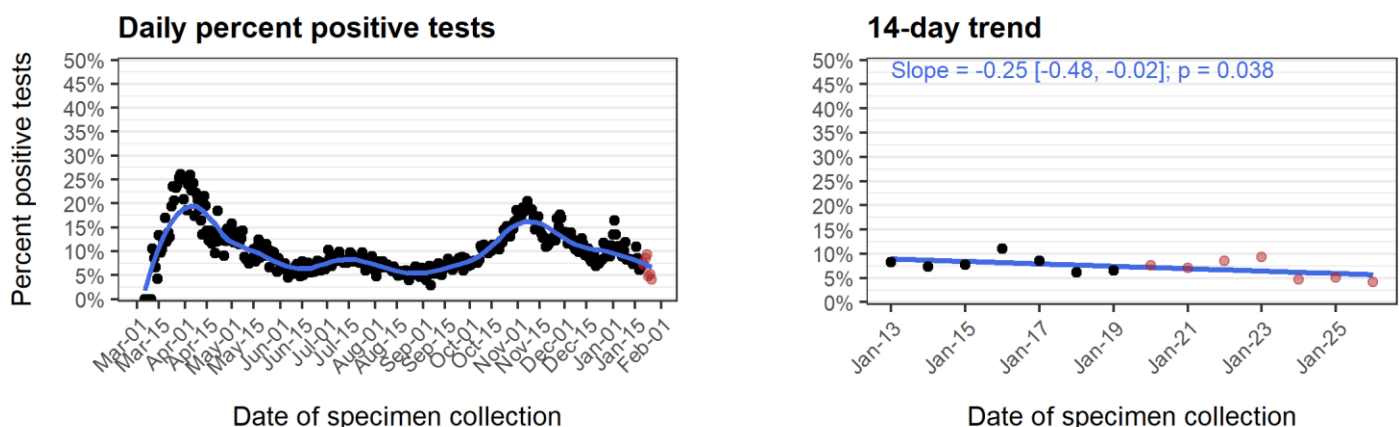
Spatial Patterns of Cases and Testing

COVID-19 spread is spatially patterned. **Map 1** below illustrates the cumulative burden (all confirmed cases) of COVID-19 in Milwaukee County. **Map 2** shows cases confirmed over the last two weeks. **Map 3** shows the overall testing rate across the population. **Map 4** shows the testing rate over the last two weeks. **Map 5** depicts the percentage of tests that were confirmed positive. **Map 6** shows cumulative COVID-19 related hospitalizations. **Map 7** shows the percentage of cases who have been hospitalized. **Map 8** shows the overall COVID-19 mortality rate, excluding cases and corresponding population denominators residing in group quarters such as nursing homes and long-term care facilities. All are crude rate maps created using census block group level COVID-19 data from WEDSS and population data from the US Census. The maps are smoothed to protect confidentiality and ensure that rates are stable while still providing geographic detail. Deciles are used to define categories. High rates are depicted in red with lower rates depicted in blue. Of note, some of the higher rates observed can be attributed to infections that have spread within group quarters, such as a nursing home, prison, or long-term care facility.

COVID-19 Incidence Rate
March 6, 2020 - January 26, 2021
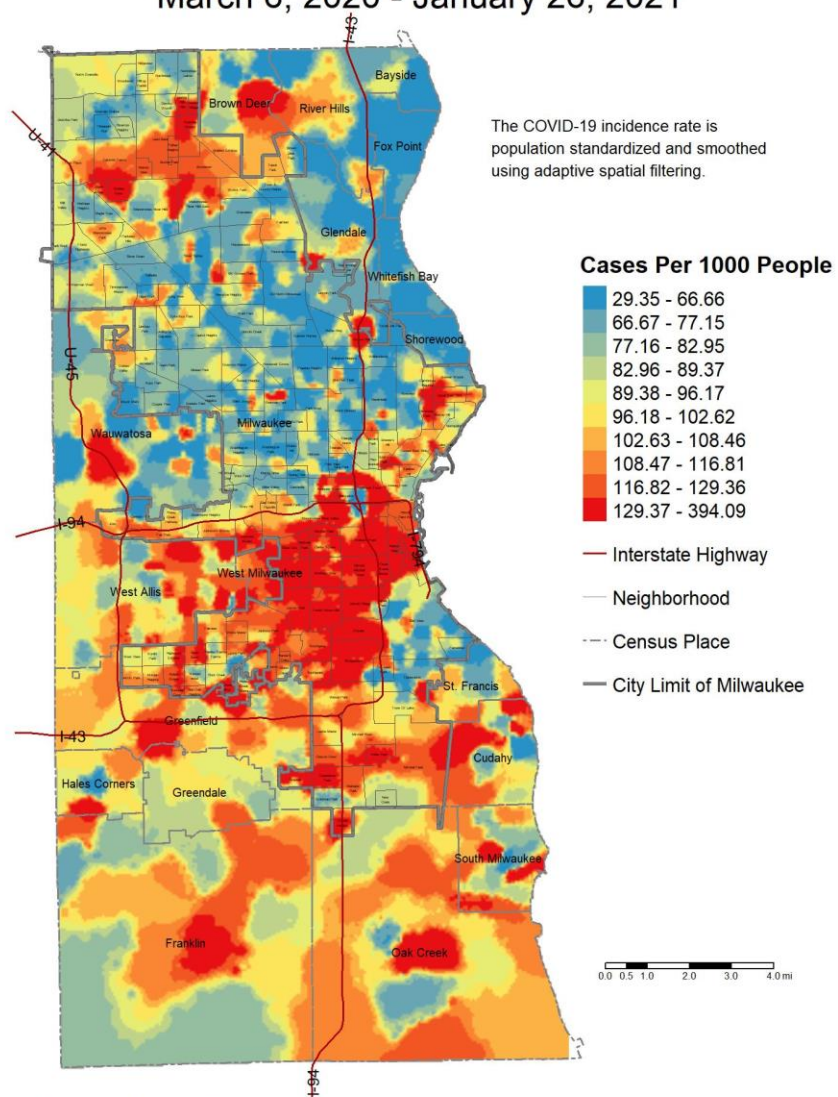
The COVID-19 incidence rate is population standardized and smoothed using adaptive spatial filtering.

Cases Per 1000 People

- 29.35 - 66.66
- 66.67 - 77.15
- 77.16 - 82.95
- 82.96 - 89.37
- 89.38 - 96.17
- 96.18 - 102.62
- 102.63 - 108.46
- 108.47 - 116.81
- 116.82 - 129.36
- 129.37 - 394.09

— Interstate Highway

— Neighborhood

--- Census Place

— City Limit of Milwaukee

Method: A grid of points is used to estimate rates continuously across the map, based on the nearest cases with a minimum of 15 confirmed cases included.
Data Sources: Wisconsin Electronic Disease Surveillance System (WEDSS) (incidence data)
2018 American Community Survey (population data)
City of Milwaukee Map Milwaukee Portal (neighborhood boundaries)
Census Bureau TIGER/Line Shapefiles (census place boundaries)
Created by the Milwaukee County Covid-19 Epidemiology Intel Team

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Decile Map 2: Confirmed cases of COVID-19 within the last two weeks

COVID-19 Incidence Rate
Latest 2 Weeks January 13,2020 - January 26,2021

The COVID-19 incidence rate is
population standardized and smoothed
using adaptive spatial filtering.

Cases Per 1000 People

	0.99 - 2.30
	2.31 - 2.69
	2.70 - 2.96
	2.97 - 3.20
	3.21 - 3.47
	3.48 - 3.77
	3.78 - 4.05
	4.06 - 4.49
	4.50 - 5.38
	5.39 - 13.84

—— Interstate Highway

—— Neighborhood

—·— Census Place

—— City Limit of Milwaukee

Method: A grid of points is used to estimate rates continuously across the map, based on
                  the nearest cases with a minimum of 15 confirmed cases included.
Data Sources: Wisconsin Electronic Disease Surveillance System (WEDSS) (incidence data)
                  2018 American Community Survey (population data)
                  City of Milwaukee Map Milwaukee Portal (neighborhood boundaries)
                  Census Bureau TIGER/Line Shapefiles (census place boundaries)
Created by the Milwaukee County Covid-19 Epidemiology Intel Team

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Decile Map 3: Overall testing rate

COVID-19 Testing Rate
March 6, 2020 - January 26, 2021

The testing rate is estimated as the number of total COVID-19 tests conducted per capita. The rate is smoothed using adaptive spatial filtering.

Tests Per 1000 People

- 352.12 - 737.72
- 737.73 - 802.41
- 802.42 - 845.27
- 845.28 - 890.57
- 890.58 - 934.28
- 934.29 - 986.04
- 986.05 - 1056.14
- 1056.15 - 1154.06
- 1154.07 - 1303.19
- 1303.20 - 5083.33

— Interstate Highway
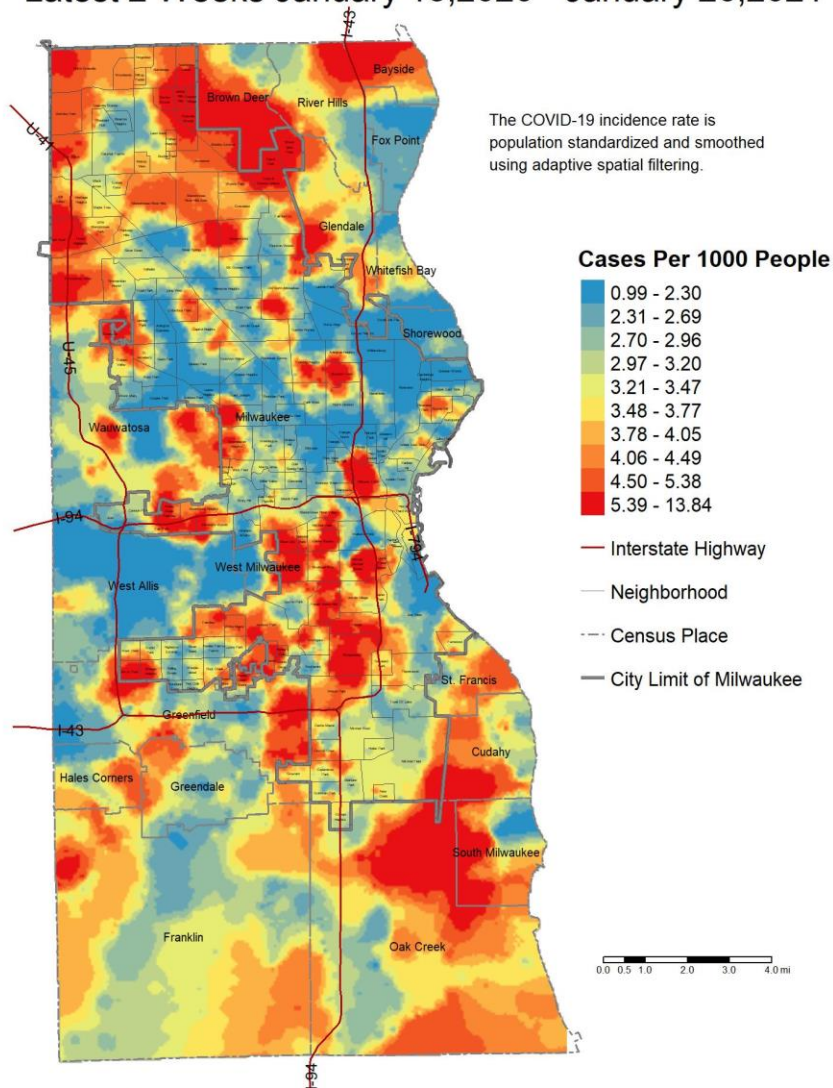
— Neighborhood

—·— Census Place

— City Limit of Milwaukee

Method: A grid of points is used to estimate rates continuously across the map, based on the nearest cases with a minimum of 15 tests included.
Data Sources: Wisconsin Electronic Disease Surveillance System (WEDSS) (incidence data)
2018 American Community Survey (population data)
City of Milwaukee Map Milwaukee Portal (neighborhood boundaries)
Census Bureau TIGER/Line Shapefiles (census place boundaries)
Created by the Milwaukee County Covid-19 Epidemiology Intel Team

Decile Map 4: Testing rate within the last two weeks

COVID-19 Testing Rate
Latest 2 Weeks January 13,2020 - January 26,2021

The testing rate is estimated as the number of total COVID-19 tests conducted per capita. The rate is smoothed using adaptive spatial filtering.

Tests Per 1000 People

- 7.85 - 33.47
- 33.48 - 38.03
- 38.04 - 41.01
- 41.02 - 43.24
- 43.25 - 46.07
- 46.08 - 49.09
- 49.10 - 53.47
- 53.48 - 57.29
- 57.30 - 66.06
- 66.07 - 343.69

— Interstate Highway

— Neighborhood

--- Census Place

— City Limit of Milwaukee

0.0 0.5 1.0   2.0   3.0   4.0 mi

Method: A grid of points is used to estimate rates continuously across the map, based on
               the nearest cases with a minimum of 15 tests included.
Data Sources: Wisconsin Electronic Disease Surveillance System (WEDSS) (incidence data)
               2018 American Community Survey (population data)
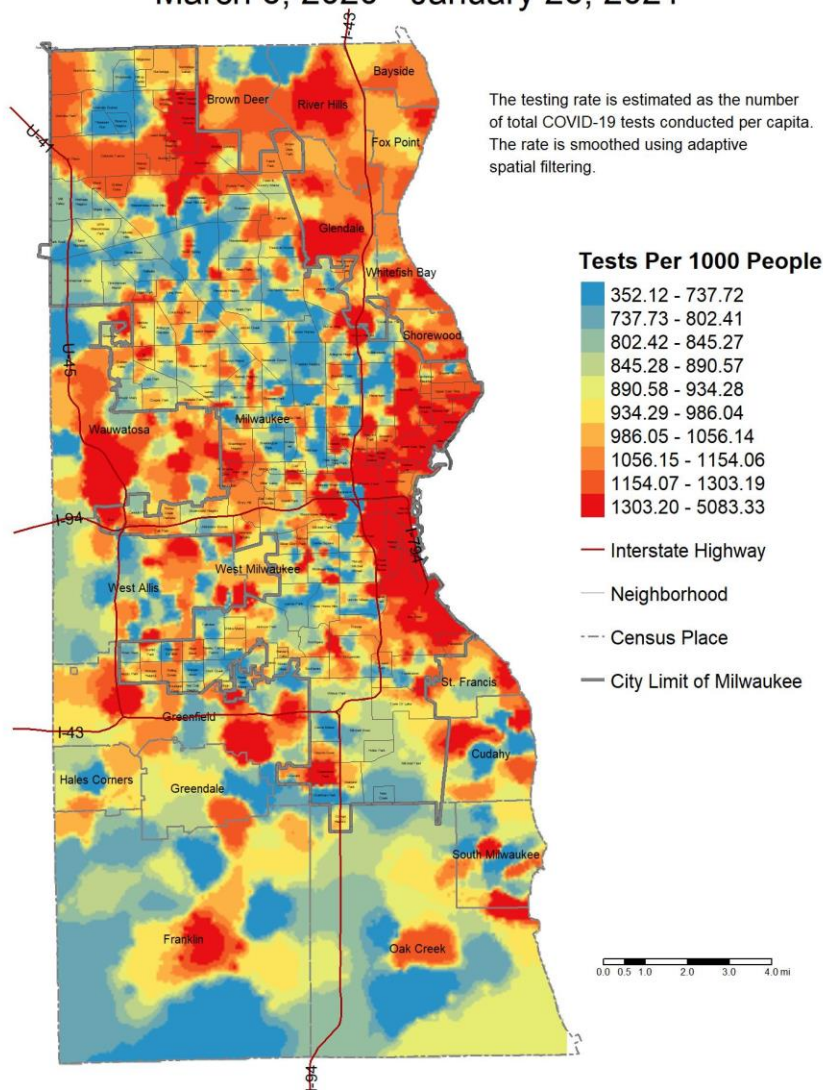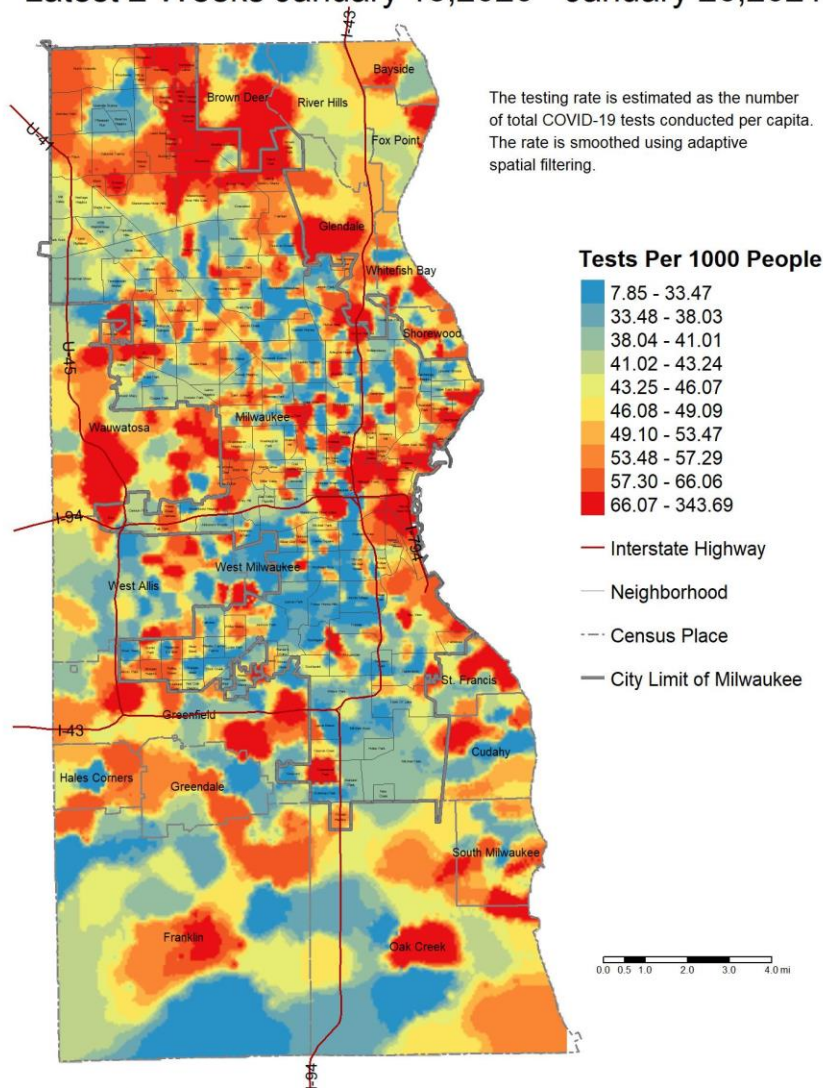   City of Milwaukee Map Milwaukee Portal (neighborhood boundaries)
               Census Bureau TIGER/Line Shapefiles (census place boundaries)
Created by the Milwaukee County Covid-19 Epidemiology Intel Team

Decile Map 5: Percentage of tests that were confirmed positive

COVID-19 Positive Testing Rate
March 6, 2020 - January 26, 2021

The positive testing rate is estimated as the proportion of total tests conducted that were positive for COVID-19. The rate is smoothed using adaptive spatial filtering.

Percent of Tests Confirmed Positive

- 3.37 - 7.38
- 7.39 - 8.58
- 8.59 - 9.74
- 9.75 - 10.77
- 10.78 - 11.65
- 11.66 - 12.28
- 12.29 - 12.91
- 12.92 - 13.54
- 13.55 - 14.69
- 14.70 - 23.72

— Interstate Highway

Neighborhood

--- Census Place

— City Limit of Milwaukee

Method: A grid of points is used to estimate rates continuously across the map, based on the nearest cases with a minimum of 15 positive tests included.
Data Sources: Wisconsin Electronic Disease Surveillance System (WEDSS) (incidence data)
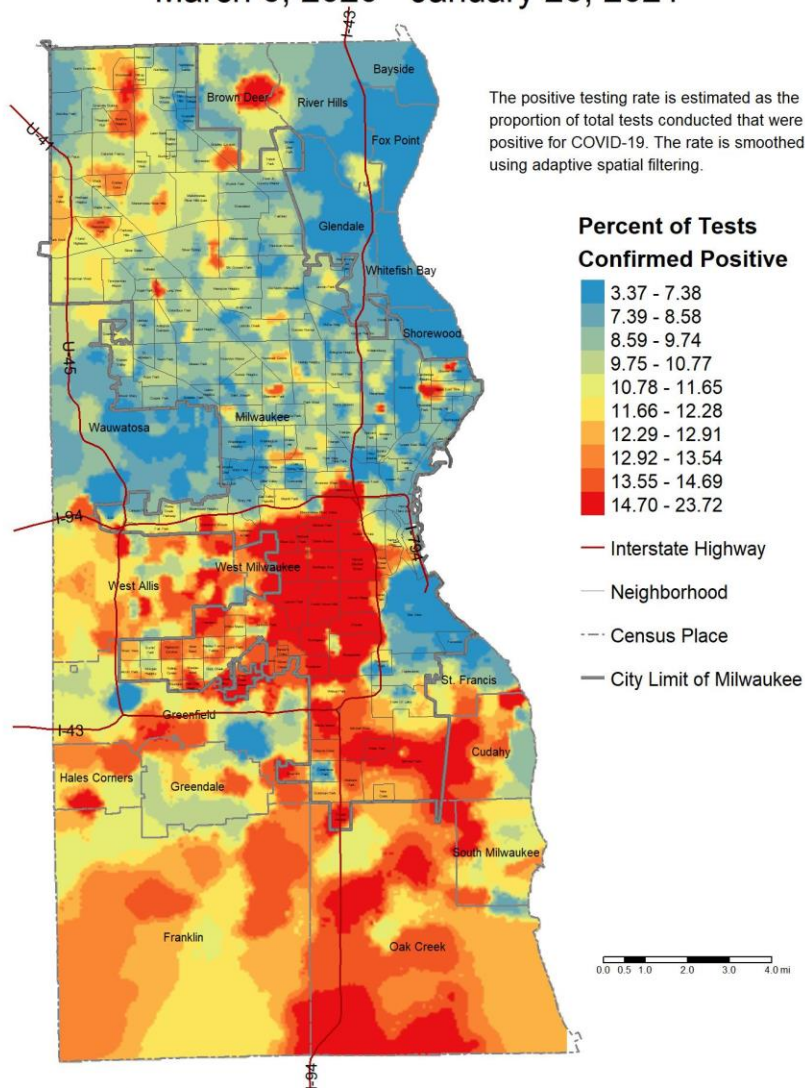2018 American Community Survey (population data)
City of Milwaukee Map Milwaukee Portal (neighborhood boundaries)
Census Bureau TIGER/Line Shapefiles (census place boundaries)
Created by the Milwaukee County Covid-19 Epidemiology Intel Team

Decile Map 6: COVID-19 related hospitalizations

COVID-19 Hospitalization Rate
March 6, 2020 - January 26, 2021

The COVID-19 hospitalization rate is population standardized and smoothed using adaptive spatial filtering.

Hospitalized Cases Per 1000 People

	1.05 - 2.93
	2.94 - 3.73
	3.74 - 4.47
	4.48 - 4.96
	4.97 - 5.45
	5.46 - 6.01
	6.02 - 6.65
	6.66 - 7.66
	7.67 - 9.73
	9.74 - 40.41

—— Interstate Highway

—— Neighborhood

-·- Census Place

—— City Limit of Milwaukee

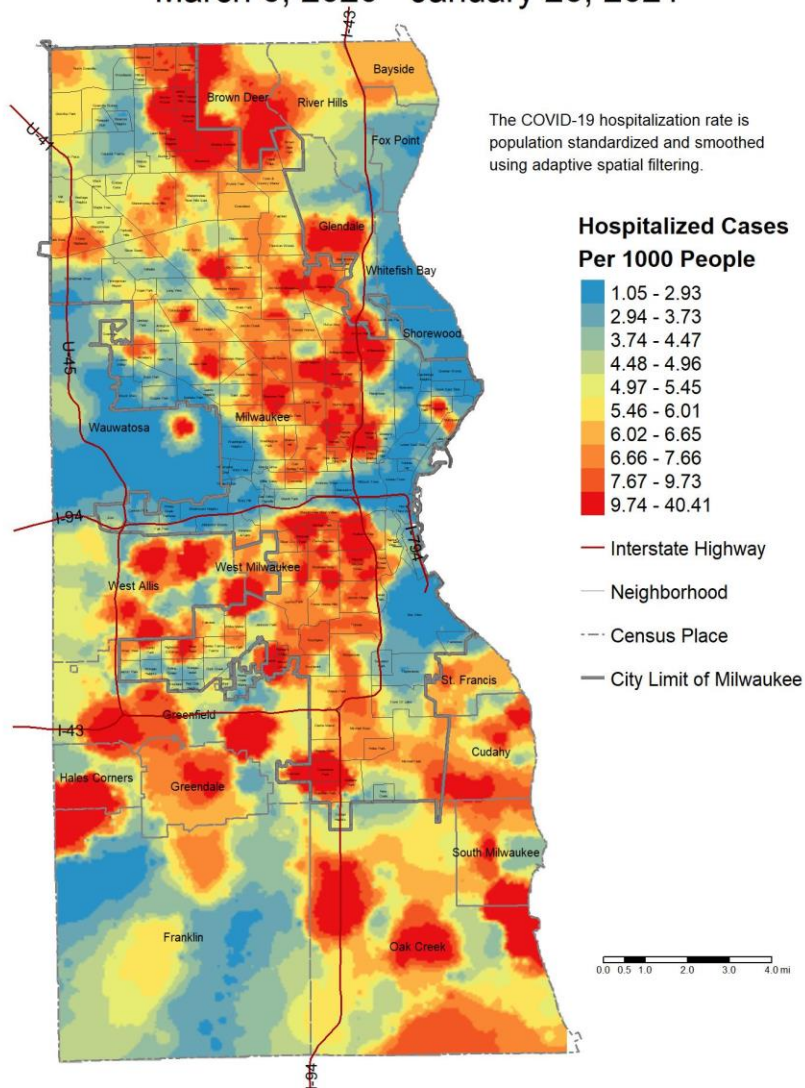0.0 0.5 1.0   2.0   3.0   4.0 mi

Method: A grid of points is used to estimate rates continuously across the map, based on
               the nearest cases with a minimum of 15 hospitalized cases included.
Data Sources: Wisconsin Electronic Disease Surveillance System (WEDSS) (incidence data)
               2018 American Community Survey (population data)
               City of Milwaukee Map Milwaukee Portal (neighborhood boundaries)
               Census Bureau TIGER/Line Shapefiles (census place boundaries)
Created by the Milwaukee County Covid-19 Epidemiology Intel Team

Decile Map 7: Percentage of COVID-19 cases that were hospitalized

COVID-19 Percent of Cases Hospitalized
March 6, 2020 - January 26, 2021

The COVID-19 percent of cases hospitalized is estimated as the proportion of confirmed cases that were hospitalized. The rate is smoothed using adaptive spatial filtering.

Percent of Cases Hospitalized

- 0.00 - 1.96
- 1.97 - 3.03
- 3.04 - 3.88
- 3.89 - 4.54
- 4.55 - 5.20
- 5.21 - 5.74
- 5.75 - 6.49
- 6.50 - 7.62
- 7.63 - 9.47
- 9.48 - 32.69

— Interstate Highway

— Neighborhood

--- Census Place

— City Limit of Milwaukee

Method: A grid of points is used to estimate rates continuously across the map, based on the nearest cases with a minimum of 15 confirmed cases included.
Data Sources: Wisconsin Electronic Disease Surveillance System (WEDSS) (incidence data)
2018 American Community Survey (population data)
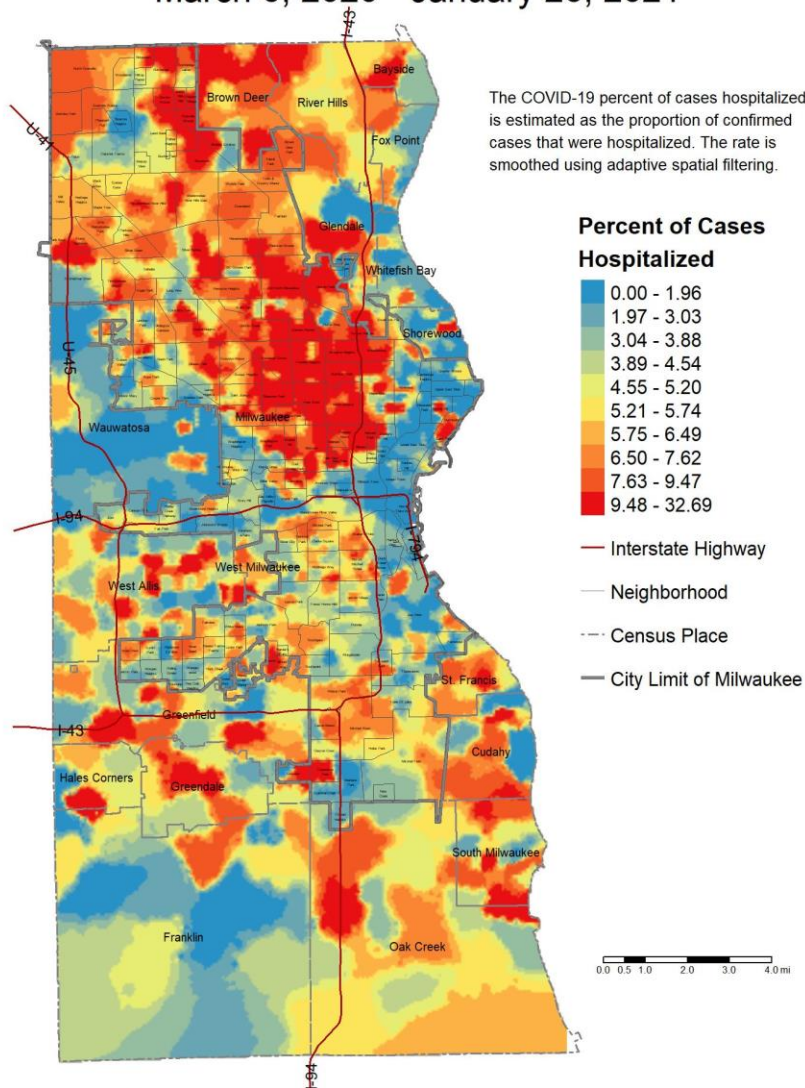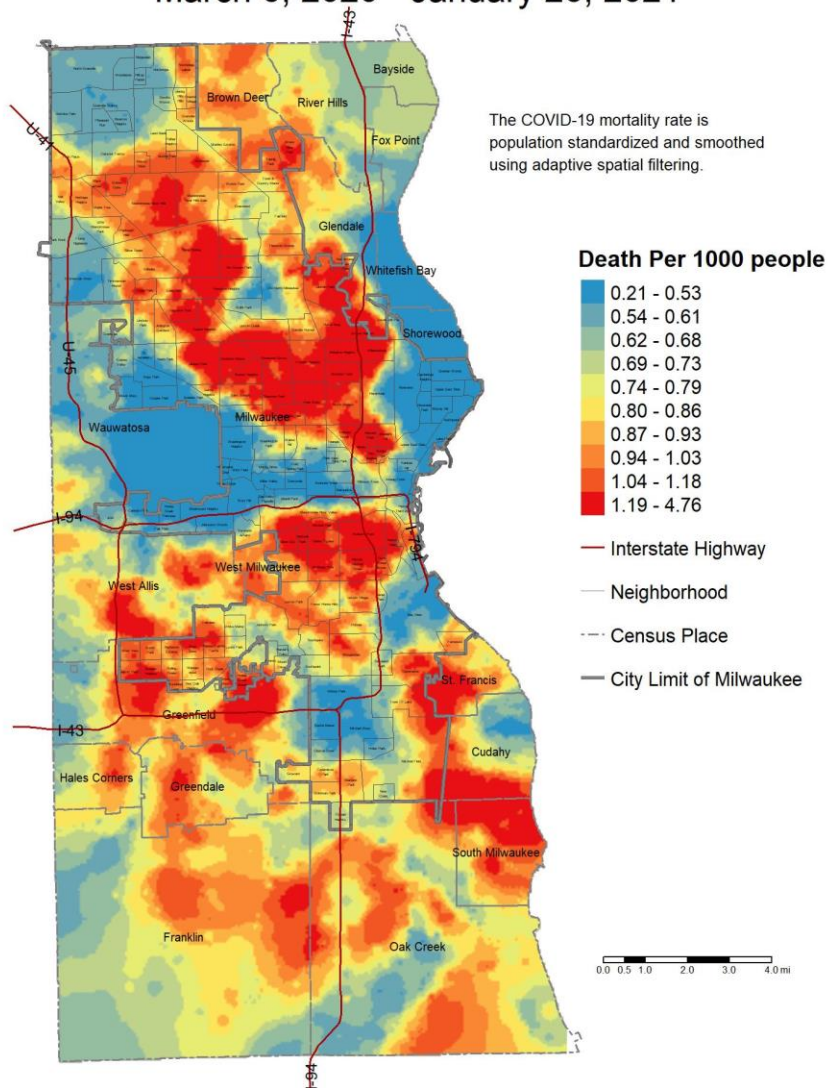City of Milwaukee Map Milwaukee Portal (neighborhood boundaries)
Census Bureau TIGER/Line Shapefiles (census place boundaries)
Created by the Milwaukee County Covid-19 Epidemiology Intel Team

Decile Map 8: COVID-19 mortality rate (group-quarter cases excluded)

COVID-19 Mortality Rate
March 6, 2020 - January 26, 2021

The COVID-19 mortality rate is population standardized and smoothed using adaptive spatial filtering.

Death Per 1000 people
- 0.21 - 0.53
- 0.54 - 0.61
- 0.62 - 0.68
- 0.69 - 0.73
- 0.74 - 0.79
- 0.80 - 0.86
- 0.87 - 0.93
- 0.94 - 1.03
- 1.04 - 1.18
- 1.19 - 4.76

— Interstate Highway

— Neighborhood

--- Census Place

— City Limit of Milwaukee

Method: A grid of points is used to estimate rates continuously across the map, based on the nearest cases with a minimum of 10 death cases included.
Data Sources: Wisconsin Electronic Disease Surveillance System (WEDSS) (incidence data)
2018 American Community Survey (population data)
City of Milwaukee Map Milwaukee Portal (neighborhood boundaries)
Census Bureau TIGER/Line Shapefiles (census place boundaries)
Created by the Milwaukee County Covid-19 Epidemiology Intel Team

Data Sources & Acknowledgments

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Contact Information

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