

# COVID-19 Trends in St. Louis County

08/20/2020

## Overall Trends

	7/20–8/2	8/4–8/17
1. Daily number of new cases*	●	●
2. Contacts per case**	●	●
3. Test positivity rate	●	●
4. Hospital admissions	●	●
5. Deaths	●	●
6. Daily tests	●	●
7. Hospital capacity	●	●

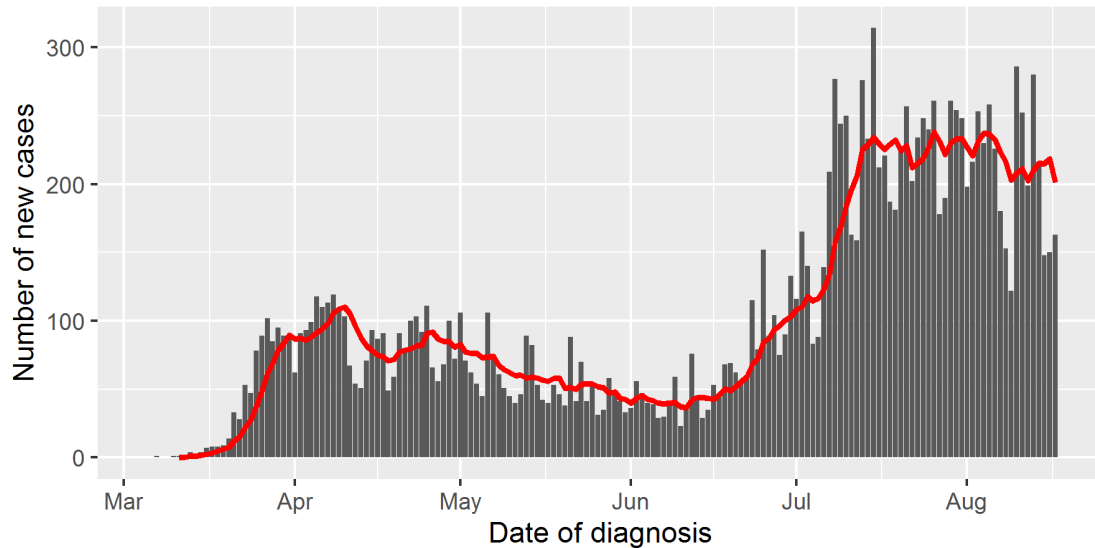
NOTE: To account for reporting and data entry delays, this report focuses on data about COVID-19 cases diagnosed and laboratory specimens collected for COVID-19 testing through 08/17. Unless otherwise specified, all averages are seven-day rolling averages. Data are current as of 08/20. \*\*Indicator still in development.

## New Cases

The average number of new COVID-19 cases diagnosed among St. Louis County residents decreased by 15.2 percent between 08/04 (237 new cases per day) and 08/17 (201 new cases per day). \*While the number of new cases per day decreased by more than 10% to meet the green threshold, the current number is still close to its peak, as seen below on the graph.

## Reported COVID-19 Cases Over Time

St. Louis County residents



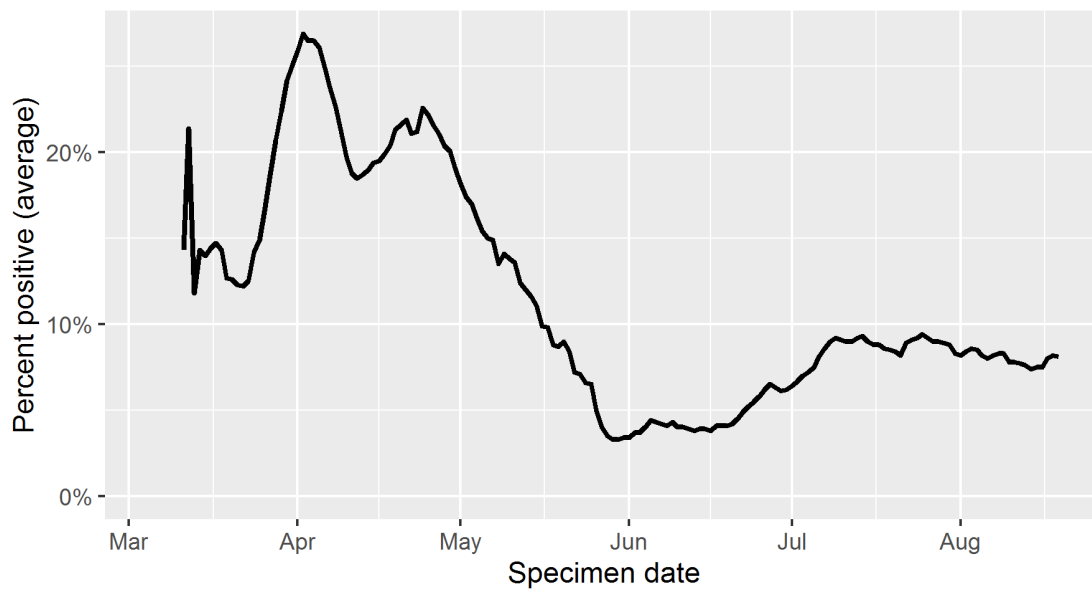
The red line is a rolling seven-day average.

## Test Positivity Rate

The COVID-19 positivity rate as of 08/17 is 8.0 percent. The positivity rate among St. Louis County residents has been relatively stable since early July, fluctuating between 7.5 and 9.5 percent of specimens tested.

## Proportion of Specimens Testing Positive for SARS-CoV-2 RNA

St. Louis County residents



## Hospital Admissions

Based on data released by the Pandemic Task Force and analyzed by Dr. Christopher Prener at St. Louis University, average new hospitalizations for COVID-19 at SSM, BJC, Mercy, and St. Luke’s hospitals in the St. Louis metro area decreased by 10.3 percent between 08/04 (44.29 admissions per day) and 08/17 (39.71 admissions per day).

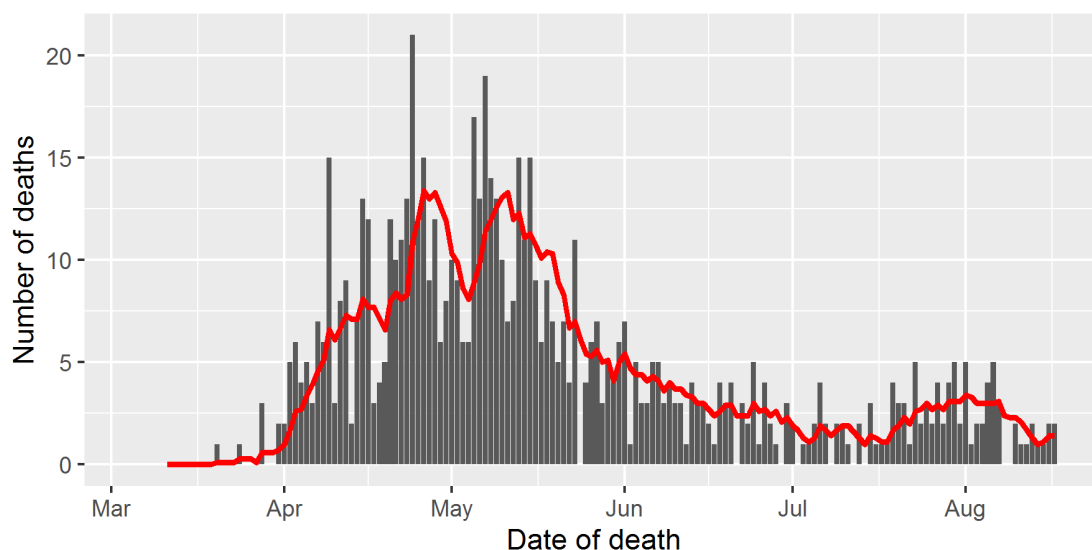
St. Louis County DPH is still developing its ability to more specifically track COVID-19-associated hospitalizations among St. Louis County residents.

## Deaths

COVID-19-associated deaths decreased by 53 percent between 08/04 (3.0 deaths per day) and 08/17 (1.4 deaths per day).

### Reported COVID-19 Associated Deaths Over Time

St. Louis County residents

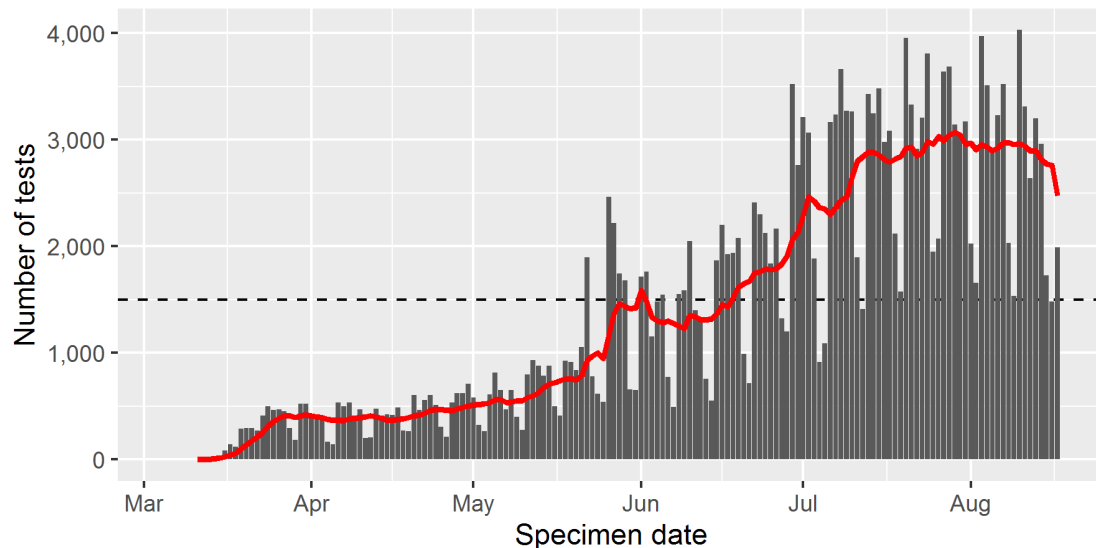


The red line is a rolling seven-day average.

## Tests per Day

As of 08/17, the average number of specimens being collected for COVID-19 PCR testing from St. Louis County residents is 2,474 per day, which is 165 percent of St. Louis County’s target of 1,500 tests per day (approximately 150 tests per 100,000 residents per day).

## COVID-19 Tests per Day St. Louis County residents



The red line is a rolling seven-day average.

### Hospital Capacity

According to data released by the Pandemic Task force, 65.8 percent of the inpatient beds at SSM, BJC, Mercy, and St. Luke's hospitals in the St. Louis metro area are filled as of 08/17.

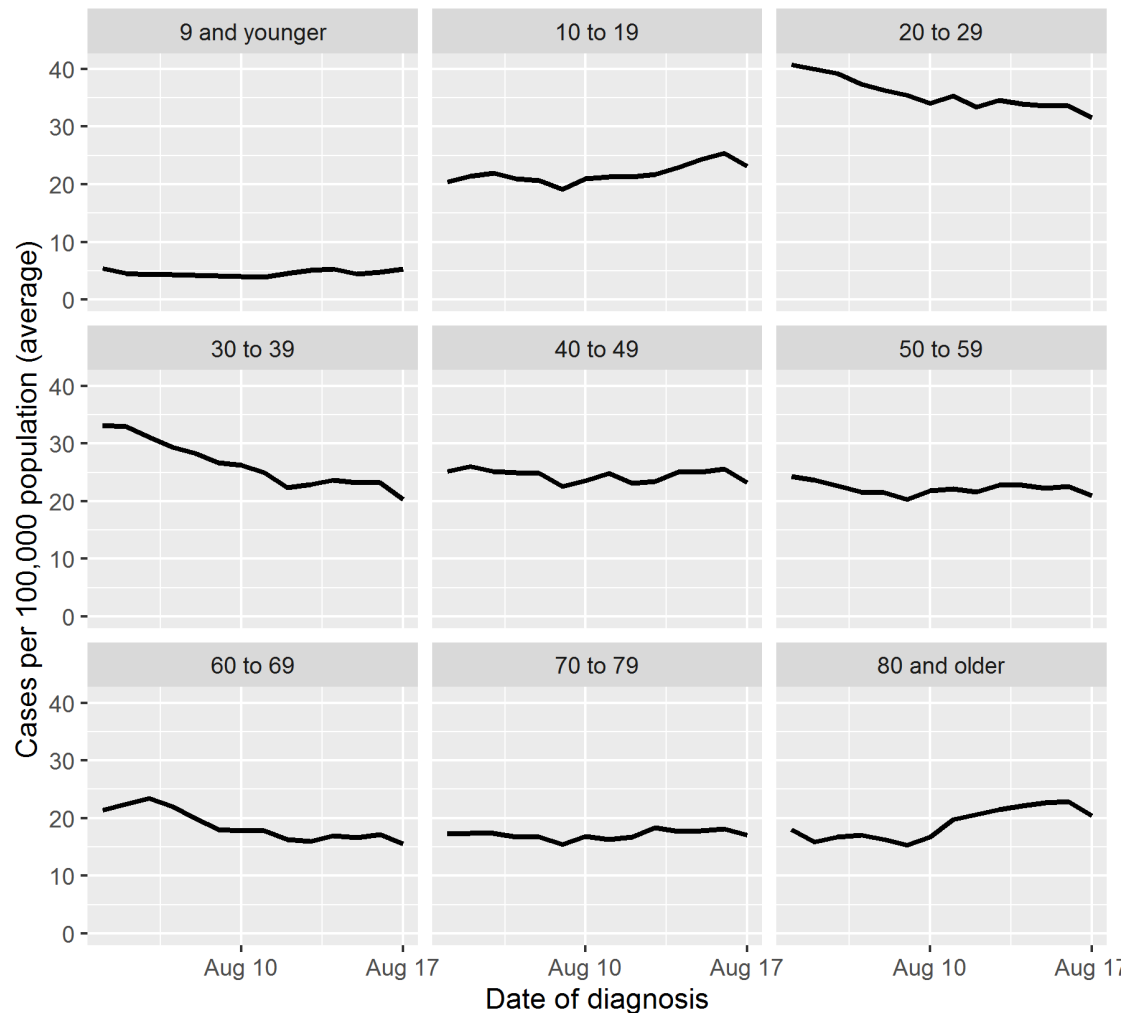
### Demographic Trends

#### Age Groups

New COVID-19 diagnoses decreased across most age groups between 08/04 and 08/17, while diagnoses increased by 13 percent among people aged 10–19 years and people aged 80 years and older. In both relative terms, the largest decrease has been reported among people aged 30–39 years (-38.9 percent). Currently, the rate of new diagnoses is highest among people aged 20–29 years (31.6 cases per 100,000 per day) and lowest among people aged 9 years and younger (5.3 cases per 100,000 per day).

## Rate of New COVID-19 Diagnoses by Age Group

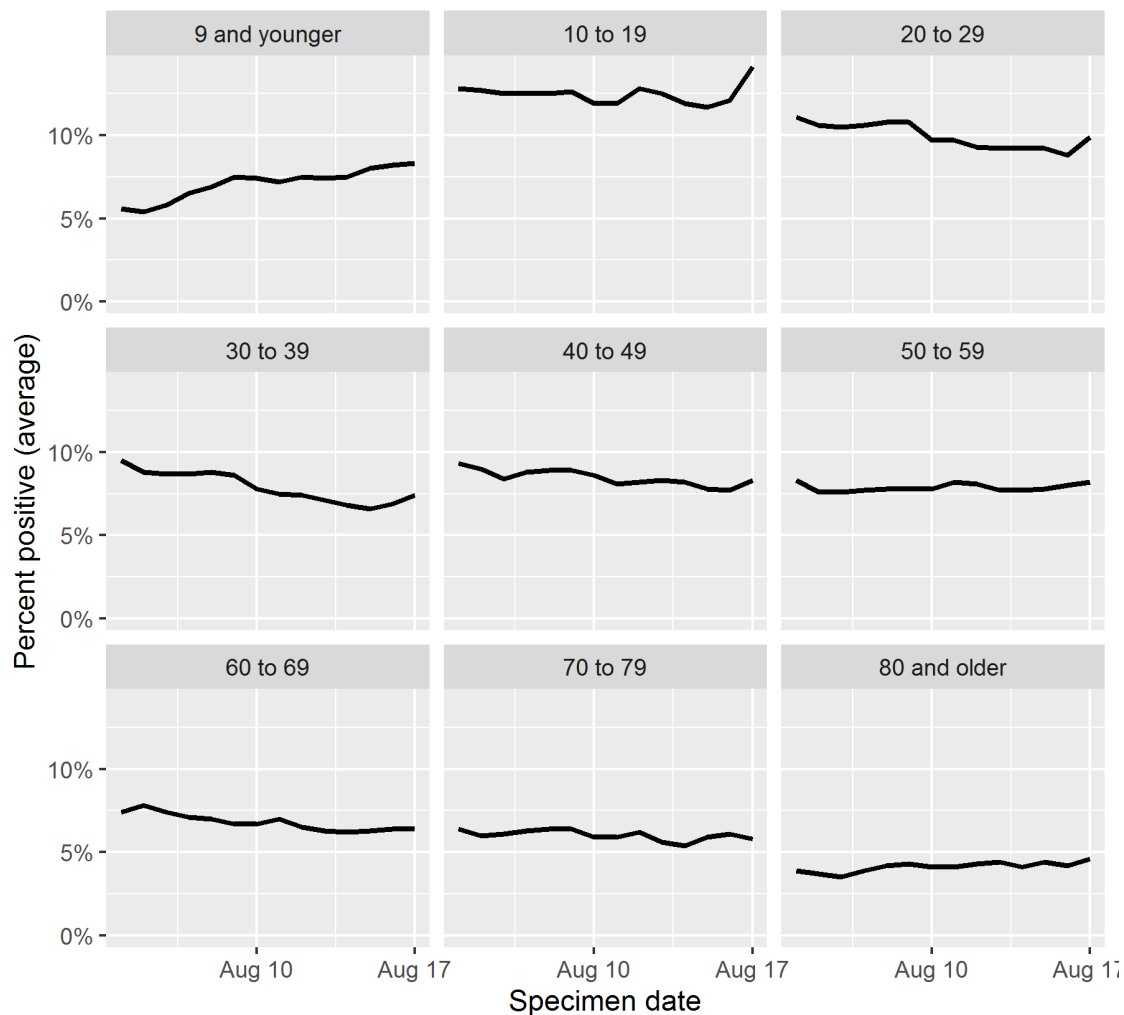
St. Louis County residents, 8/4 to 8/17



As of 08/17, the prevalence of SARS-CoV-2 infection among those tested in St. Louis County is highest among people aged 10–19 years (14.1 percent) and 20–29 years (9.9 percent). Positivity is currently above 10 percent among people aged 10–19 years, below 5 percent among people aged 80 and older (4.6 percent), and between 5 and 10 percent among all other age groups.

## Percent Positive by Age Group

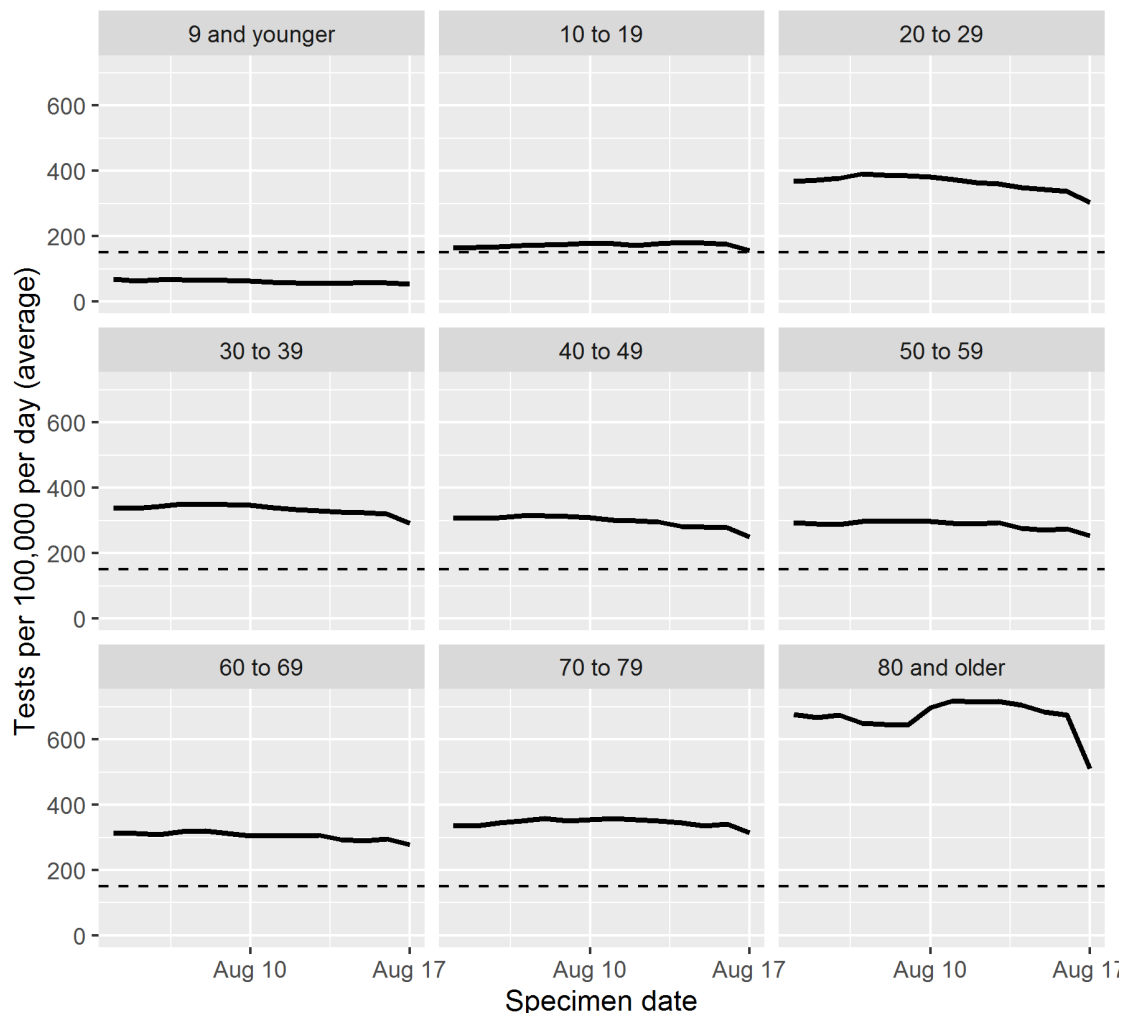
St. Louis County residents, 8/4 to 8/17



Testing coverage is at or above St. Louis County's target of 150 tests per 100,000 population per day for all age groups except children aged 9 and younger. Coverage is between 200 and 400 tests per 100,000 per day among people aged 20 to 79, and considerably higher among people aged 80 and older, due in part to the aggressive COVID-19 surveillance and prevention strategies being implemented in long-term care facilities.

## Testing Volume by Age Group

St. Louis County residents, 8/4 to 8/17

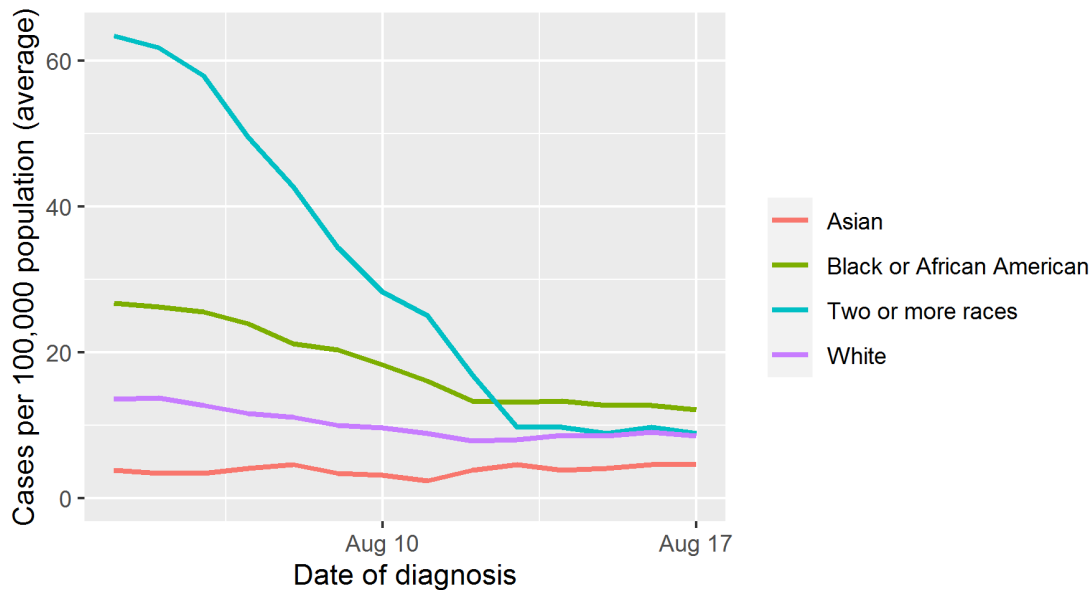


## Race

Between 08/04 and 08/17, the rate of new COVID-19 diagnoses increased by 21 percent among Asian residents of St. Louis County and decreased among all other racial groups. The steepest decrease has been reported among people identifying as multiracial (-86 percent). As of 08/17, rates of newly diagnosed cases are highest among Black residents (12.1 cases per 100,000 per day), followed by multiracial (8.9 per 100,000 per day), white (8.5 per 100,000 per day), and Asian residents (4.6 per 100,000 per day).

Racial groups with fewer than one case diagnosed per day (American Indian/Alaska Native, Native Hawaiian/Other Pacific Islander, and other race) have been excluded from this analysis.

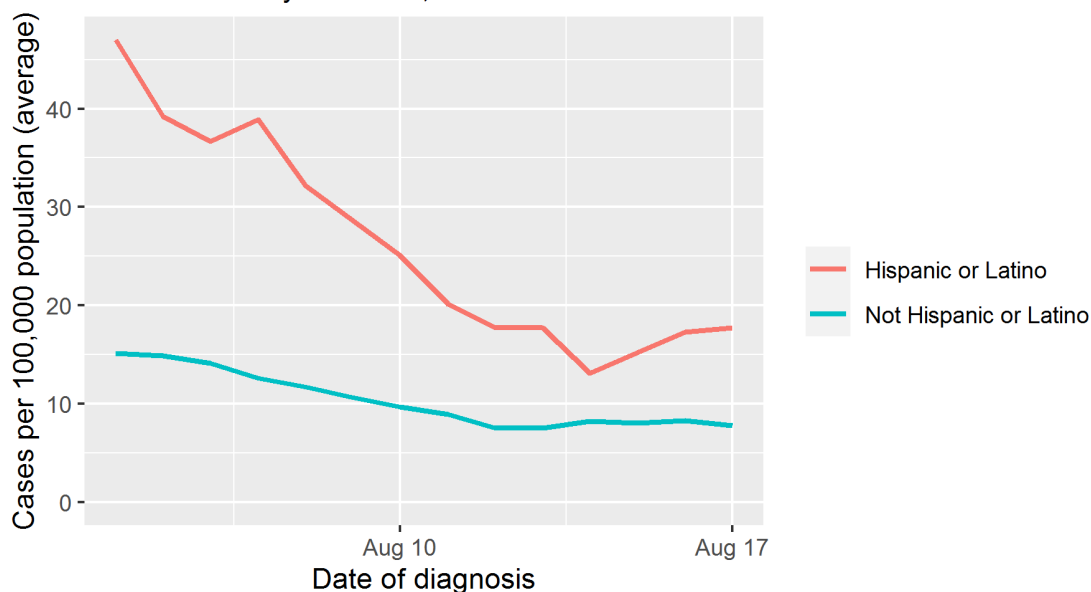
### Rate of New COVID-19 Diagnoses by Race St. Louis County residents, 8/4 to 8/17



### Ethnicity

Between 08/04 and 08/17, the rate of new COVID-19 diagnoses decreased by 62 percent among St. Louis County residents of Hispanic or Latino ethnicity and by 48 percent among non-Hispanic residents. The rate of new diagnoses among Hispanic or Latino residents (17.7 cases per 100,00 population per day) is currently 2.3x the rate among non-Hispanic residents (7.8 per 100,000 per day).

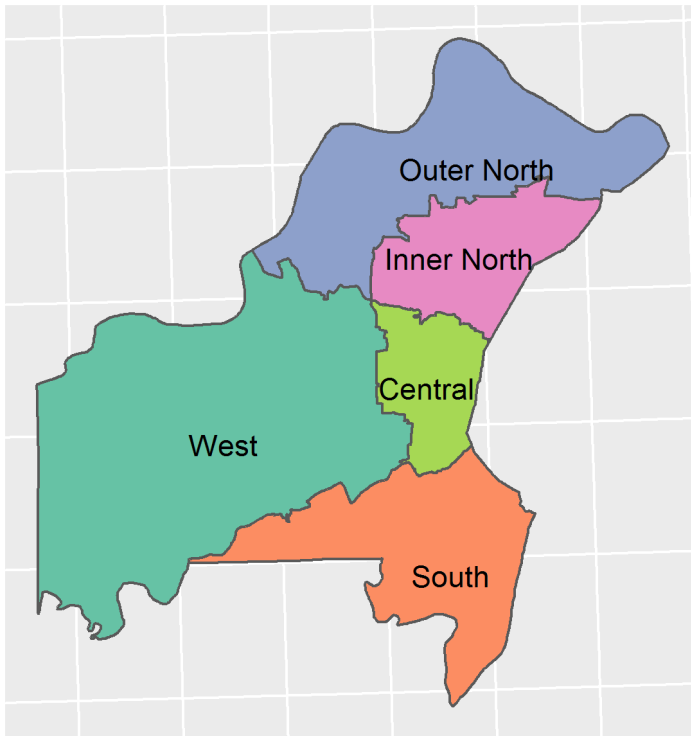
### Rate of New COVID-19 Diagnoses by Ethnicity St. Louis County residents, 8/4 to 8/17





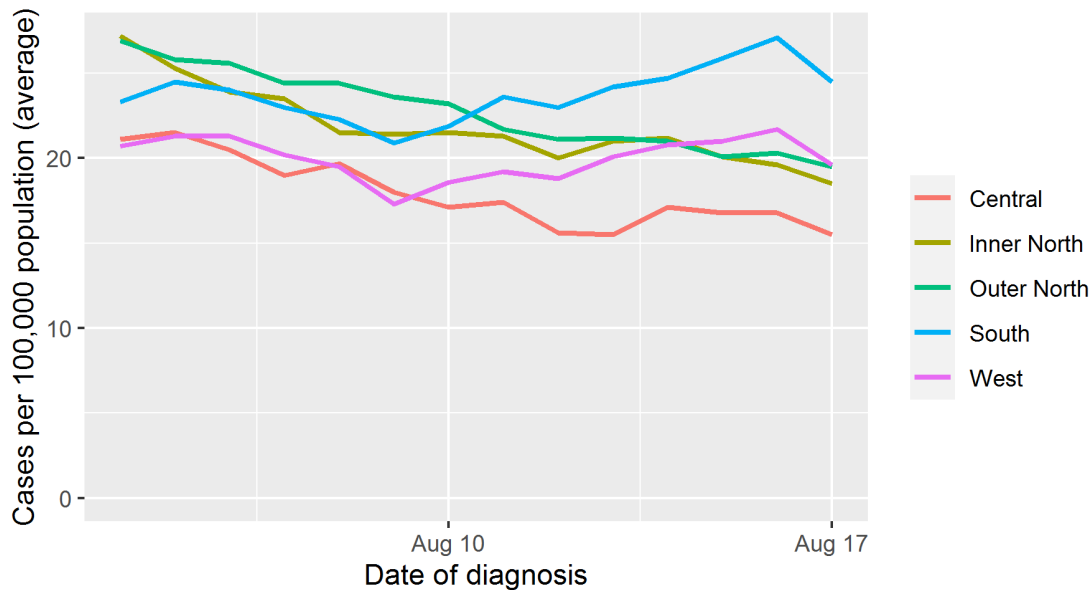
## Region

St. Louis County DPH often divides the county by ZIP Code into five regions, based on economic and demographic factors, for the purpose of measuring broad geographic trends below the county level.



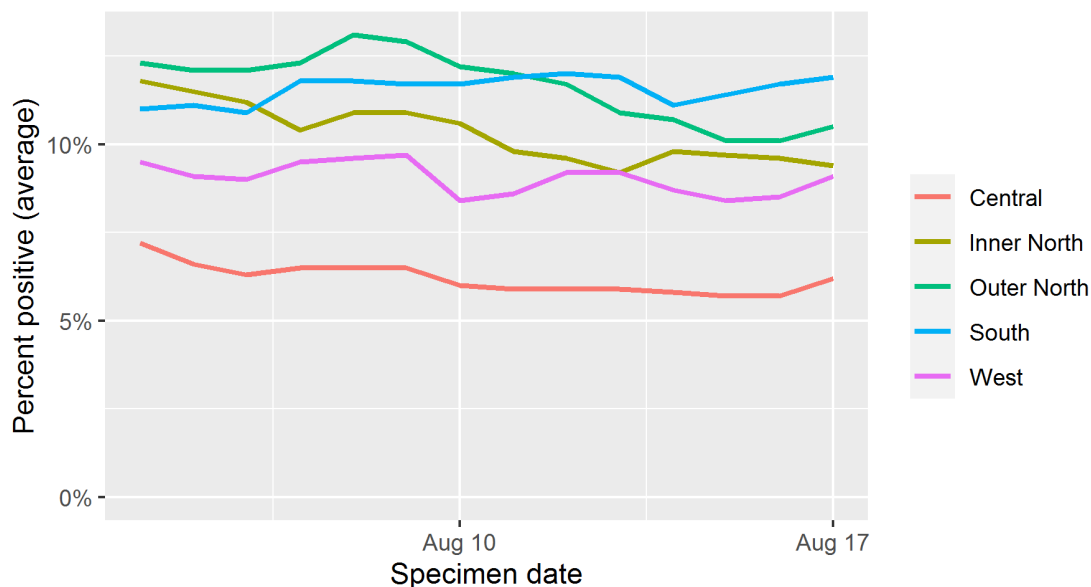
Rates of newly diagnosed COVID-19 cases increased by 5 percent in south St. Louis County and decreased in all other regions between 08/04 and 08/17. The steepest decrease was reported in the Inner North region (-32 percent). Currently, the rate of new diagnoses is highest in the South region (24.5 cases per 100,000 population per day).

### Rate of New COVID-19 Diagnoses by Sub-County Region St. Louis County residents, 8/4 to 8/17



As of 08/17, the positivity rate is 11.9 percent among residents of the South region and 10.5 percent in the Outer North region, with positivity rates between 5 and 10 percent for the other three regions.

### Percent Positive by Sub-County Region St. Louis County residents, 8/4 to 8/17



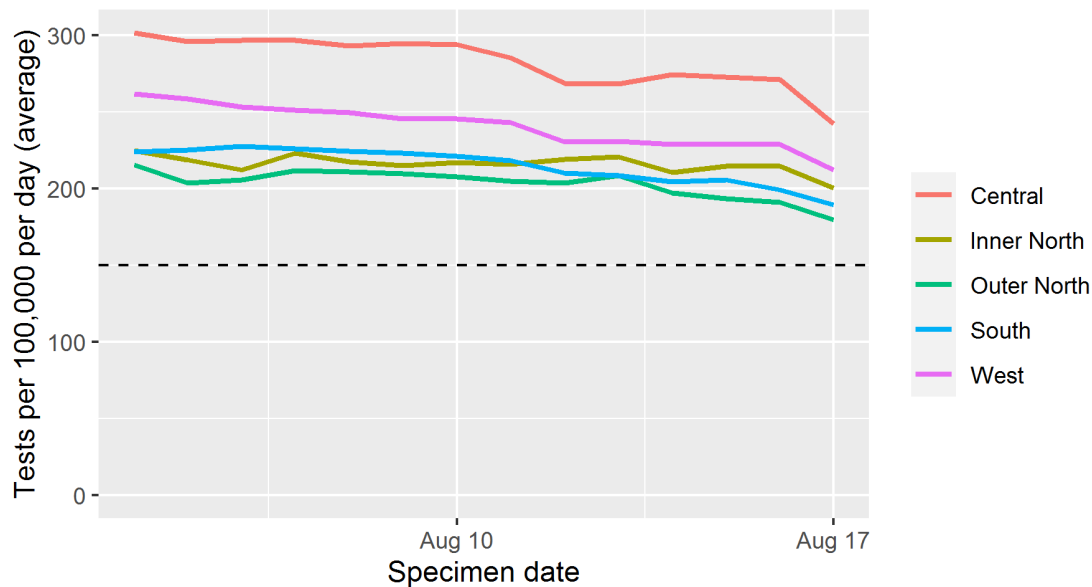
As of 08/17, testing coverage is highest among residents of the Central region (272.5 tests per 100,000 per day). Coverage is similar across the other four regions, ranging from about 191 to

227 tests per 100,000 per day. The rate of testing is above St. Louis County’s target of 150 tests per 100,000 population per day for residents of all five regions.

As of 08/17, testing coverage is highest among residents of the Central region (242.2 tests per 100,000 per day). Coverage is similar across the other four regions at between 180 and 212 tests per 100,000 per day. All five regions remain above St. Louis County’s target of 150 tests per 100,000 residents per day.

### Testing Volume by Sub-County Region

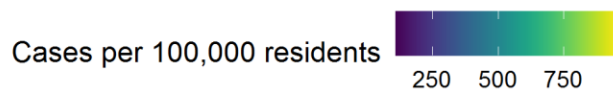
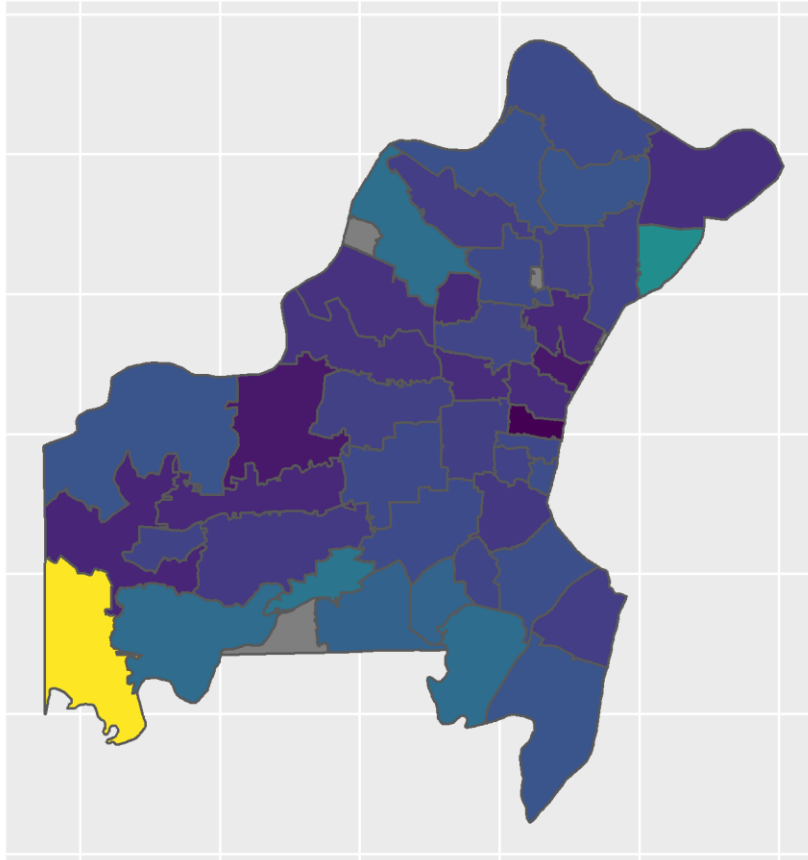
St. Louis County residents, 8/4 to 8/17



### ZIP Code

Between 08/04 and 08/17, the rate of new diagnoses among St. Louis County residents was highest in the 63069 ZIP Code, driven largely by an ongoing outbreak at the Missouri Eastern Correctional Center in Pacific. See below for a map and data table of COVID-19 case counts and rates by ZIP Code tabulation area (ZCTA). ZCTAs with fewer than five cases diagnosed between 08/04 and 08/17 have been excluded.

Rate of New COVID-19 Diagnoses by ZIP Code  
St. Louis County residents, 8/4 to 8/17



ZIP Code	Cases, total	Cases, last 14 days	Population	Cases per 100,00 population, total	Cases per 100,000 population, last 14 days
63069	145	47	4885	2968.3	962.1
63137	424	73	13839	3063.8	527.5
63088	138	37	8376	1647.6	441.7
63044	238	44	10536	2258.9	417.6
63128	407	122	29823	1364.7	409.1
63025	205	34	8387	2444.3	405.4
63127	54	19	4986	1083	381.1
63026	400	83	22241	1798.5	373.2
63033	1046	142	42991	2433.1	330.3
63005	295	59	17887	1649.2	329.8

63129	700	177	53671	1304.2	329.8
63031	1095	151	47419	2309.2	318.4
63123	679	153	48614	1396.7	314.7
63143	92	22	7134	1289.6	308.4
63122	538	117	38686	1390.7	302.4
63034	410	54	17879	2293.2	302
63134	334	40	13525	2469.5	295.7
63131	264	52	17627	1497.7	295
63117	158	25	8543	1849.5	292.6
63114	607	102	35487	1710.5	287.4
63126	161	42	14781	1089.2	284.1
63040	103	23	8258	1247.3	278.5
63136	1031	120	43517	2369.2	275.8
63144	138	24	8725	1581.7	275.1
63135	372	60	21869	1701	274.4
63141	320	56	20550	1557.2	272.5
63124	191	29	10827	1764.1	267.8
63125	428	86	32750	1306.9	262.6
63042	342	51	19443	1759	262.3
63021	719	142	56233	1278.6	252.5
63119	537	83	33829	1587.4	245.4
63146	419	71	30178	1388.4	235.3
63043	432	52	22524	1918	230.9
63138	468	42	18582	2518.6	226
63130	423	62	28551	1481.6	217.2
63132	224	29	13427	1668.3	216
63074	249	32	15234	1634.5	210.1
63121	473	50	24634	1920.1	203
63011	416	78	38436	1082.3	202.9
63038	94	14	7077	1328.2	197.8
63133	141	12	7304	1930.4	164.3
63017	675	67	41556	1624.3	161.2
63105	155	19	17382	891.7	109.3

## Indicators and Thresholds

### Indicator 1: Daily number of new cases

Data are collected daily and include all new cases among Saint Louis County residents. This is the last 14 days of confirmed or probable COVID cases using a 7-day moving average by diagnosis date.

Red: If cases are increasing (more than a 10% change) during the 14-day period

Yellow: If cases are flat (less than a 10% change in either direction) during the 14-day period

Green: If cases are decreasing (more than a -10% change) during the 14-day period

### Indicator 2: Number of non-household contacts

This is an average of the total number of contacts divided by the total number of cases (using a 7-day moving average), where the number of cases and contacts is taken from REDCap.

Red: If the average number of non-household contacts is increasing (more than a 10% change)

Yellow: If the average number of non-household contacts is flat (less than a 10% change in either direction) during the 14-day period

Green: If the average number of non-household contacts is decreasing (more than a -10% change) during the 14-day period

### Indicator 3: Percent positivity

Data on the number of positive and negative PCR tests for COVID-19 are provided daily by the Missouri Department of Health and Senior Services. This metric uses the latest 7-day moving average of tests conducted.

Red: >10% positive tests

Yellow: 5% to 10% positive tests

Green: <5% positive tests

### Indicator 4: New Hospital Admissions

Data on the number of new hospital admissions provided daily by the regional pandemic task force across the four major hospital systems. This metric uses the 7-day moving average of new hospital admissions.

Red: If new hospital admissions are increasing (more than a 10% change) during the 14-day period

Yellow: If new hospital admissions are flat (less than a 10% change in either direction) during the 14-day period

Green: If new hospital admissions are decreasing (more than a -10% change) during the 14-day period

### Indicator 5: Number of COVID-associated deaths

Data are collected daily and include all deaths among Saint Louis County residents. This is the last 14 days of COVID-associated deaths using a 7-day moving average by date of death.

Red: If deaths are increasing (more than a 10% change) during the 14-day period

Yellow: If deaths are flat (less than a 10% change in either direction) during the 14-day period

Green: If deaths are decreasing (more than a -10% change) during the 14-day period

**Indicator 6: Percent of test target**

The group behind COVID Exit Strategy use a test target of 500,000 tests conducted per day across the United States. Using that per capita national expectation, the test target for Saint Louis County is 1,500 tests conducted per day, using the latest 7-day moving average of tests conducted.

Red: Less than 50%

Yellow: 50% to 99%

Green: Reaches or surpasses 100%

**Indicator 7: Hospital bed capacity**

The data on hospitalizations is provided daily by the Pandemic Task Force. Calculating this metric is dependent on those data continuing to be collected and available.

Red: Occupancy is more than 80% (Extremely low availability of beds)

Yellow: Occupancy is between 60% and 80% (Low availability of beds)

Green: Occupancy is below 60% (Sufficient availability of beds)