

COVID-19 Trends in St. Louis County

07/23/2020

Overall Trends

	6/21-7/4	7/2-7/15
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	●	●

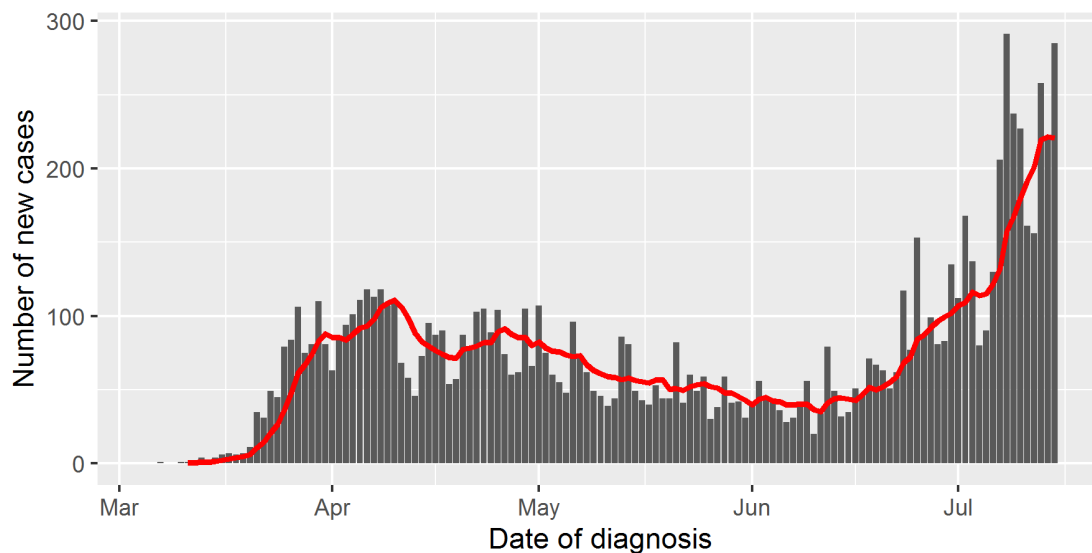
NOTE: To account for reporting and data entry delays, this report focuses on data about COVID-19 cases diagnosed and laboratory specimens collected for COVID-19 testing through 07/15. Unless otherwise specified, all averages are seven-day rolling averages. Data are current as of 07/22. *Black dot represents an indicator currently in development.

New Cases

The average number of new COVID-19 cases diagnosed among St. Louis County residents increased by 102 percent between 07/02 (109.3 new cases per day) and 07/15 (220.6 new cases per day).

Reported COVID-19 Cases Over Time

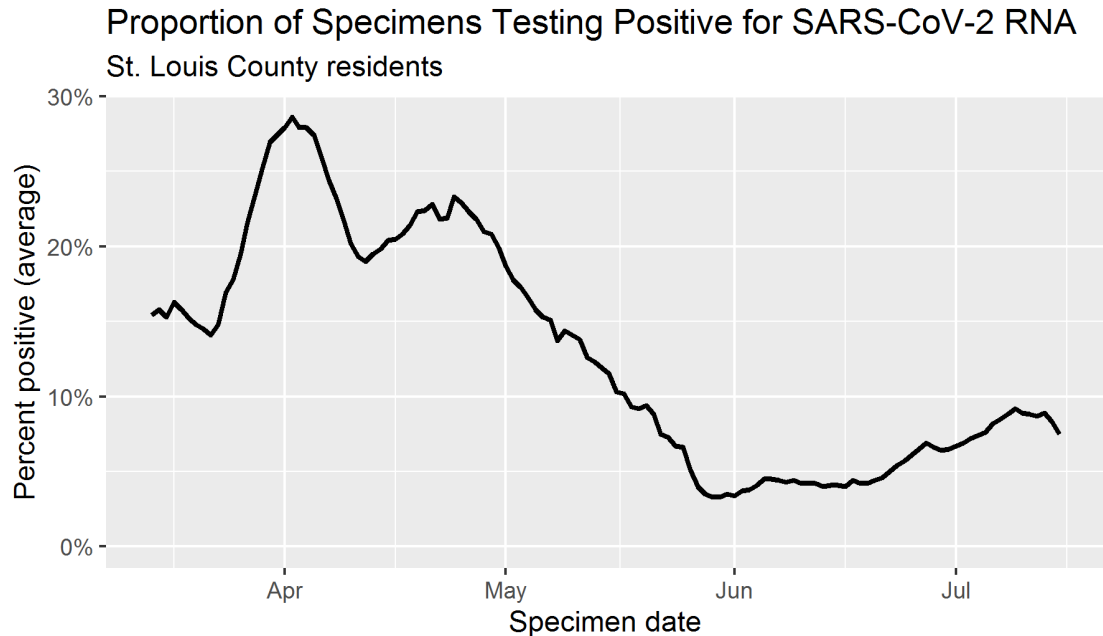
St. Louis County residents



The red line is a rolling seven-day average.

Test Positivity Rate

The overall positivity rate for specimens collected from St. Louis County residents for COVID-19 PCR testing is 7.5 percent as of 07/15, but has been gradually climbing since mid-June.



Testing data from before 3/14 have been omitted to improve readability.

Hospital Admissions

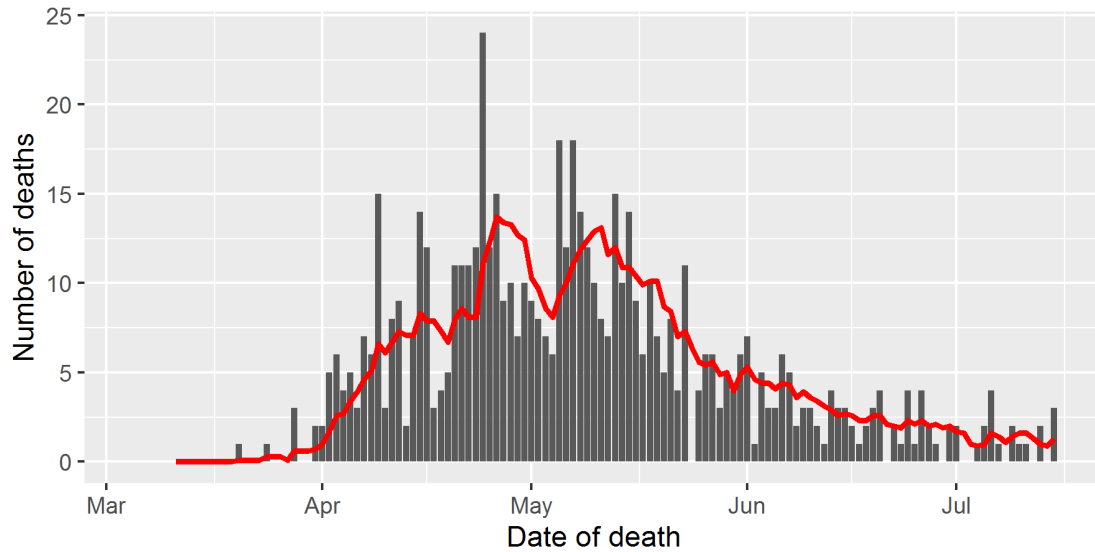
Based on data released by the Pandemic Task Force and [analyzed by Dr. Christopher Prener at St. Louis University](#), average new hospitalizations for COVID-19 at SSM, BJC, Mercy, and St. Luke's hospitals in the St. Louis metro area increased by 73 percent between 07/02 (19.43 admissions per day) and 07/15 (33.57 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 19 percent between 07/02 (1.6 deaths per day) and 07/15 (1.3 deaths per day).

Reported COVID-19 Associated Deaths Over Time St. Louis County residents

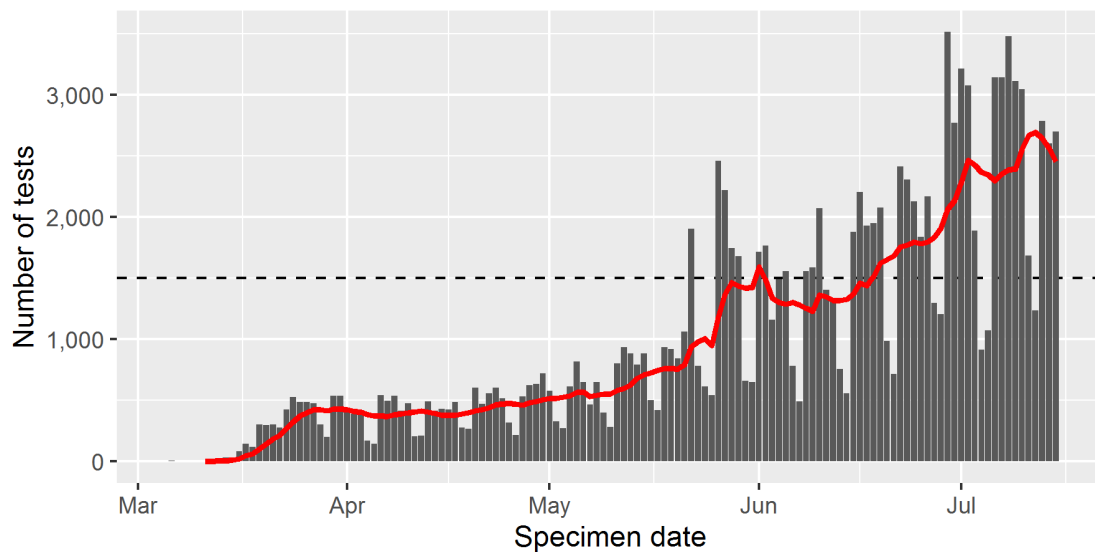


The red line is a rolling seven-day average.

Tests per Day

As of 07/15, the average number of specimens being collected for COVID-19 PCR testing from St. Louis County residents is 2,453 per day, which is 164 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, 70.6 percent of the inpatient beds at SSM, BJC, Mercy, and St. Luke’s hospitals in the St. Louis metro area are filled as of 07/15.

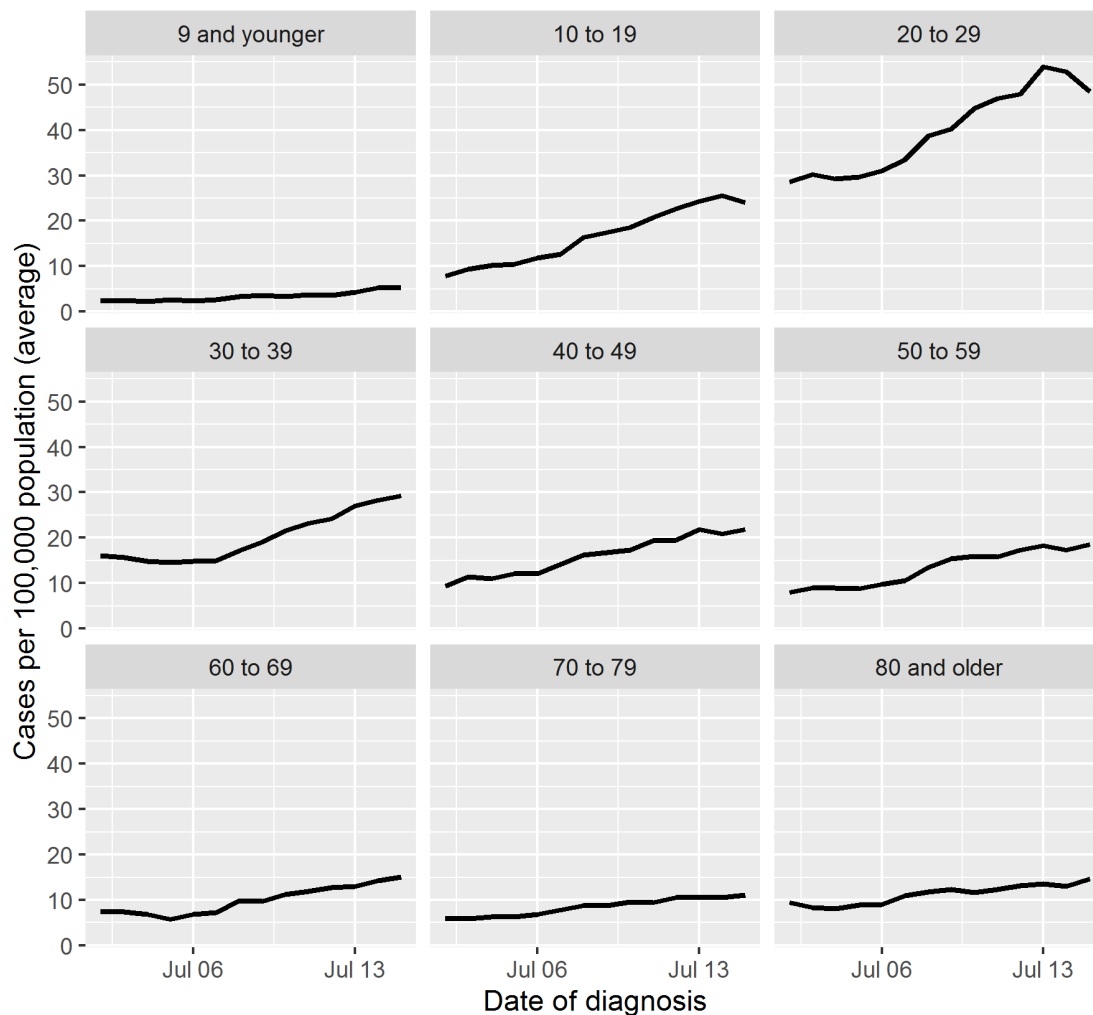
Demographic Trends

Age Groups

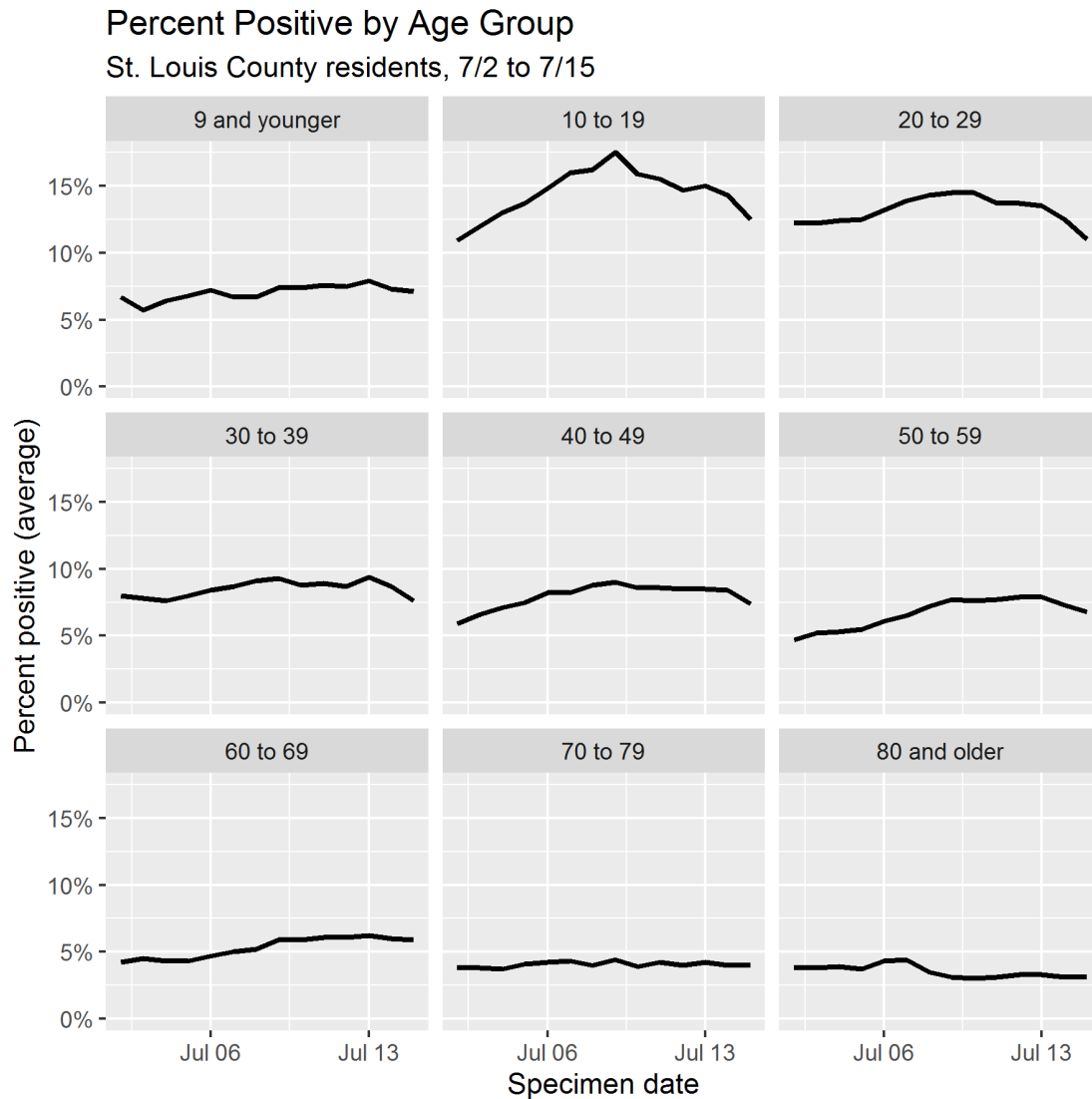
New COVID-19 diagnoses increased across all age groups between 07/02 and 07/15. In relative terms, the steepest increase (+204 percent) has been reported among people aged 10 to 19 years. New diagnoses more than doubled during the same period among people aged 19 years and younger and people aged 40 to 59 years. Currently, the rate of new diagnoses is highest among people aged 20 to 29 years (48.4 cases per 100,000 per day) and lowest among people aged 9 years and younger (5.4 cases per 100,000 per day).

Rate of New COVID-19 Diagnoses by Age Group

St. Louis County residents, 7/2 to 7/15

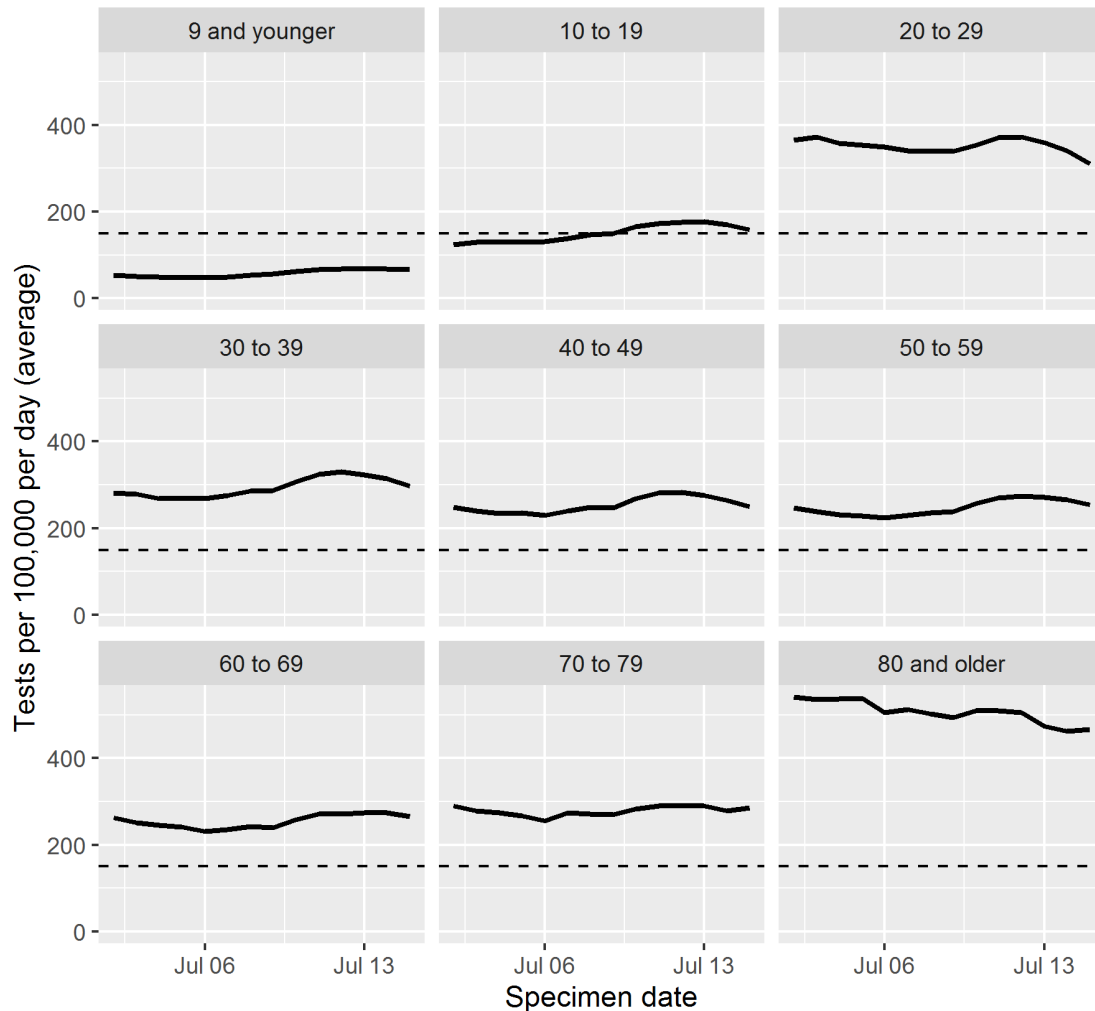


As of 07/15, the prevalence of SARS-CoV-2 infection among those tested in St. Louis County is highest among people aged 10 to 19 years (12.5 percent) and 20 to 29 years (11.0 percent). Positivity is below 5 percent among people aged 70 and older and between 5 and 10 percent for all other age groups.



Testing coverage varies considerably by age group. People aged 20 and older are being tested at rates comfortably above St. Louis County's target of 150 tests per 100,000 population per day. As of 7/15, people aged 80 and older are being tested at a rate of 466 tests per 100,000 per day, due in part to the aggressive COVID-19 surveillance and prevention strategies being implemented in long-term care facilities. The rate of testing among people aged 10 to 19 years is fluctuating at or around the target rate, while the rate among children aged 9 years and younger remains below 100 tests per 100,000 per day.

Testing Volume by Age Group St. Louis County residents, 7/2 to 7/15

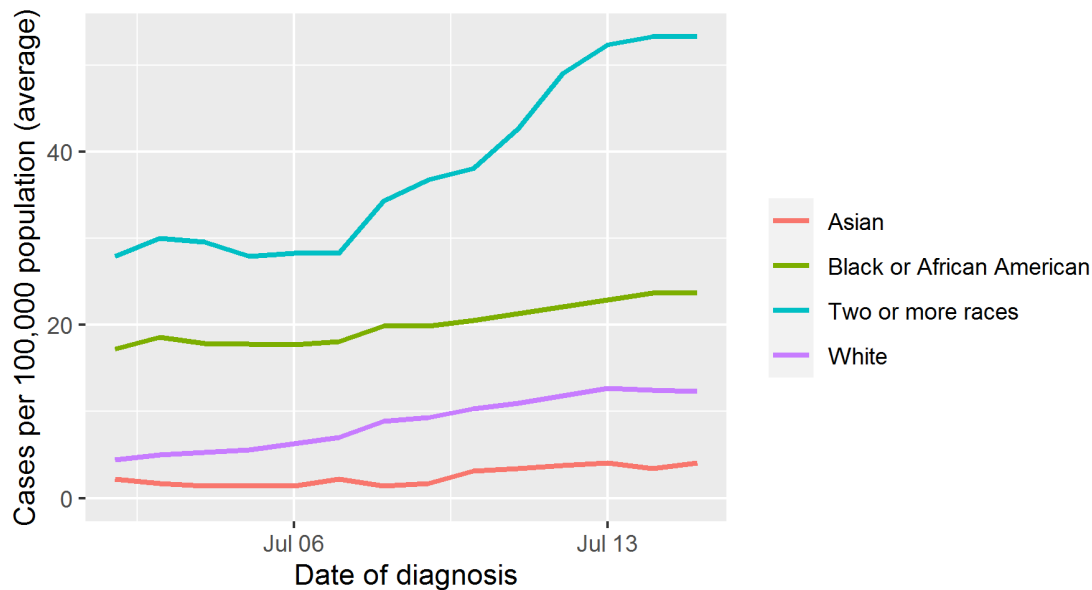


Race

Between 07/02 and 07/15, the rate of new COVID-19 diagnoses increased among all racial groups. New diagnoses increased by 38 percent among Black or African American residents, by 180 percent among whites, by 86 percent among Asians, and by 91 percent among people identifying as multiracial. As of 07/15, rates of newly diagnosed cases are highest among multiracial (53.3 cases per 100,000 per day) and Black residents (23.7 residents).

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.

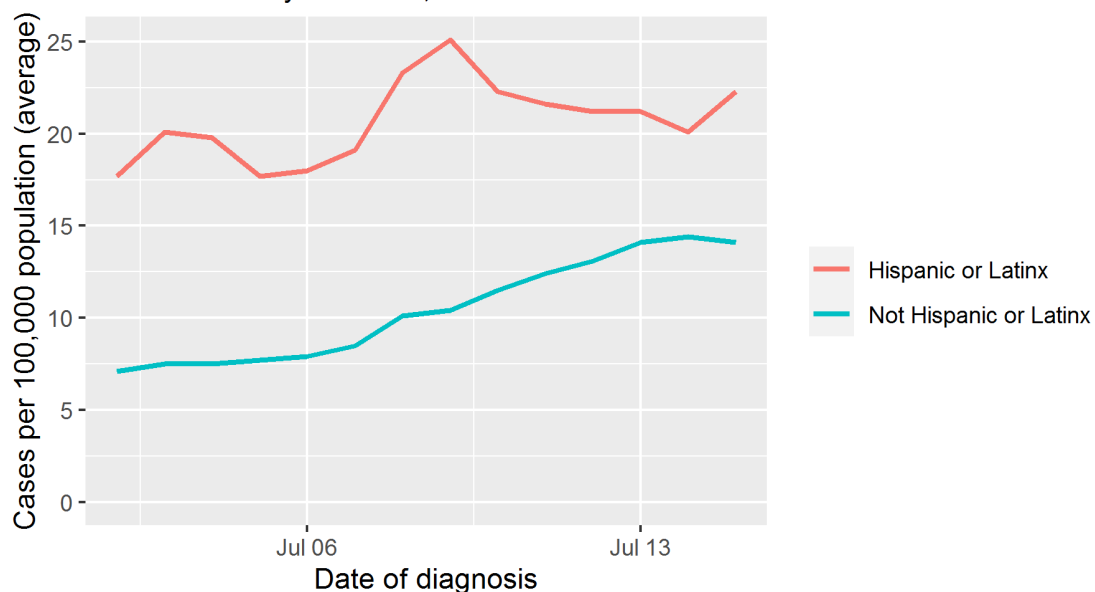
Rate of New COVID-19 Diagnoses by Race St. Louis County residents, 6/21 to 7/4



Ethnicity

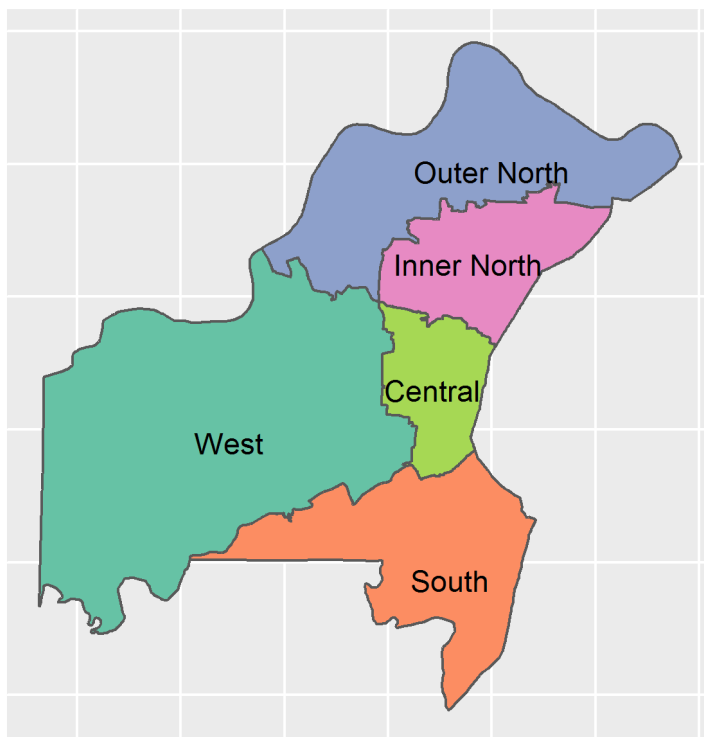
Between 07/02 and 07/15, the rate of new COVID-19 diagnoses increased by 26 percent among people of Hispanic or Latinx ethnicity (from 17.7 to 22.3 cases per 100,000 per day) and by 99 percent among non-Hispanics (from 7.1 to 14.1 cases per 100,000 per day). However, the rate of new diagnoses among Hispanic or Latinx residents remains 53 percent higher than the rate among non-Hispanics.

Rate of New COVID-19 Diagnoses by Ethnicity St. Louis County residents, 6/21 to 7/4



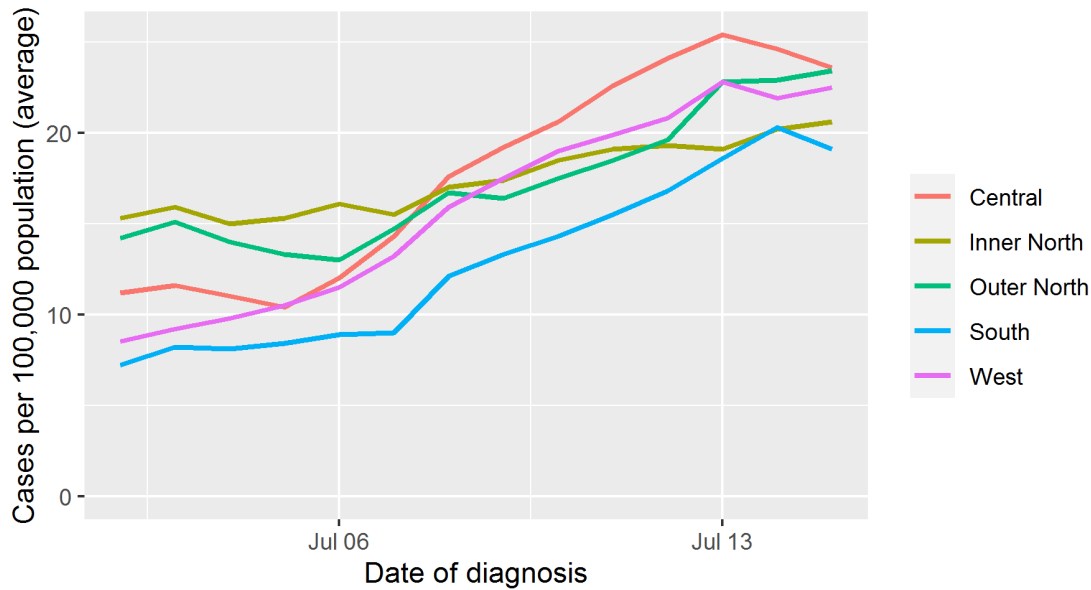
Region

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.



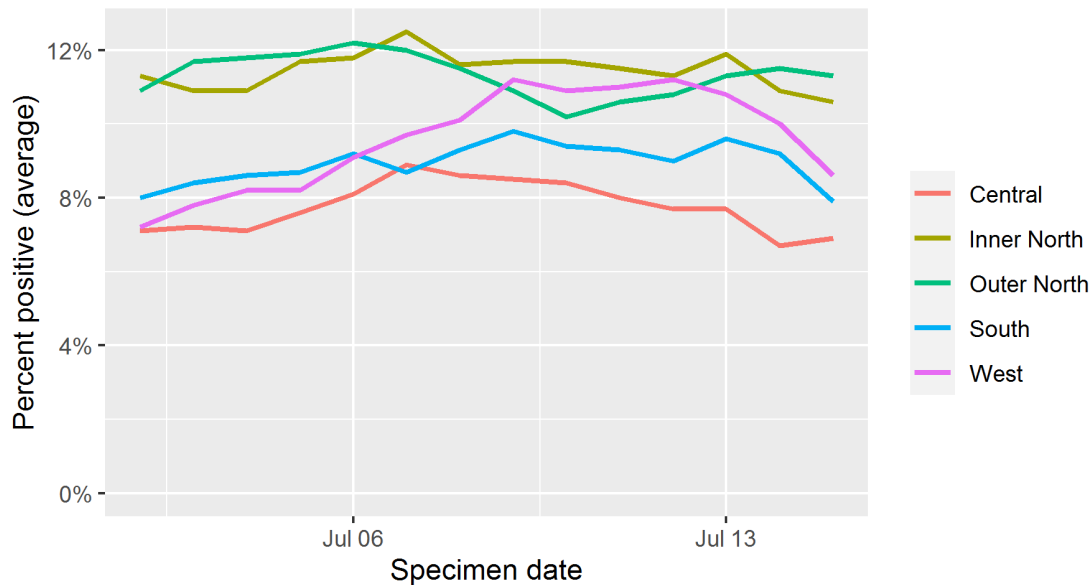
Rates of newly diagnosed COVID-19 cases are similar across all five regions, ranging from 19.1 cases per 100,000 per day in the South region to 23.6 cases per 100,000 per day in the Central region. Between 07/02 and 07/15, the rate of new diagnoses increased by 165 percent in the South and West regions, by 111 percent in the Central region, by 65 percent in the Outer North region, and by 35 percent in the Inner North region.

Rate of New COVID-19 Diagnoses by Sub-County Region St. Louis County residents, 7/2 to 7/15



As of 07/15, the positivity rate is 11.3 percent among residents of the Outer North county and 10.6 percent among residents of Inner North county, with positivity rates between 5 and 10 percent for the three other regions.

Percent Positive by Sub-County Region St. Louis County residents, 7/2 to 7/15

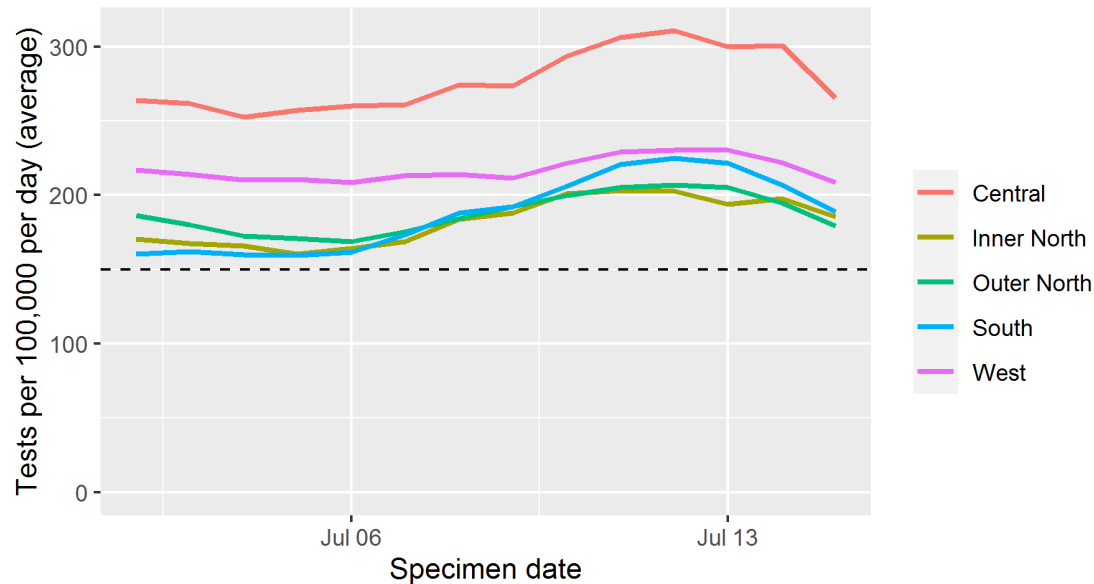


As of 07/15, testing coverage is highest among residents of the Central region (266 tests per 100,000 per day). Coverage is similar across the other four regions, ranging from 179 to 208

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.

Testing Volume by Sub-County Region

St. Louis County residents, 7/2 to 7/15



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)