St. Louis Metropolitan Area COVID-19 Status Indicators

Last Updated on May 18, 2022

Hospitalizations

COVID+ Bed Occupancy (7-Day Average)

2.0%

COVID+ ICU Bed Occupancy (7-Day Average)

1.8%

New Admissions Per 100k Population (7-Day Total)

8.1

New Cases per 100k population (7-Day Average)

169

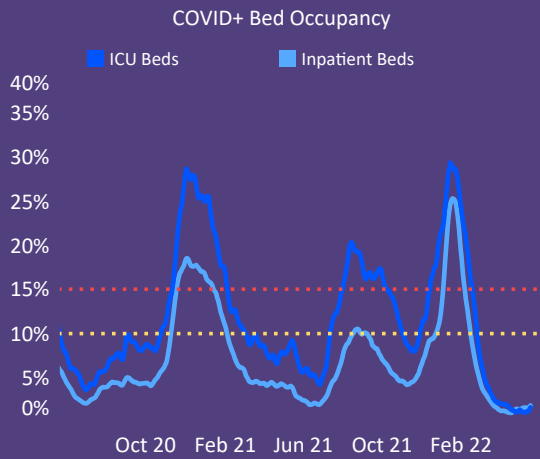Weekly % Change in New Cases

32.5%
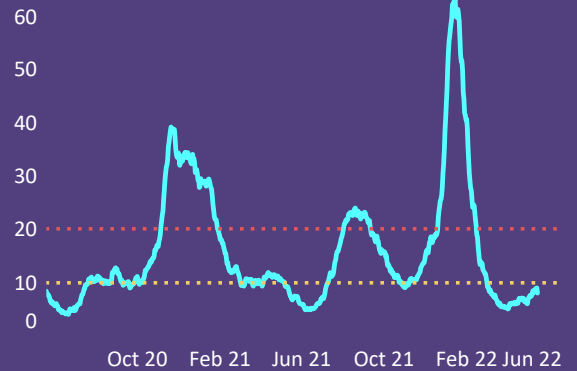
Positivity Rate

15.8%

Reproduction Number

1.23

Risk Tiers
- Low Risk
- Moderate Risk
- High Risk

COVID+ Bed Occupancy

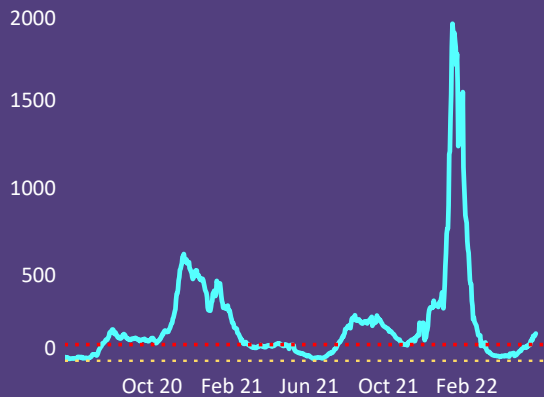ICU Beds   Inpatient Beds

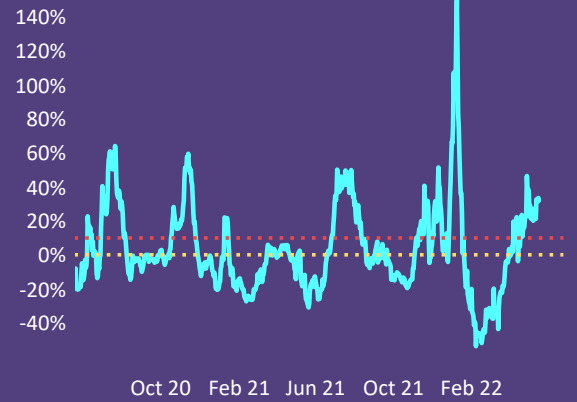### New Admissions Per 100k Population (7-Day Total)

Cases

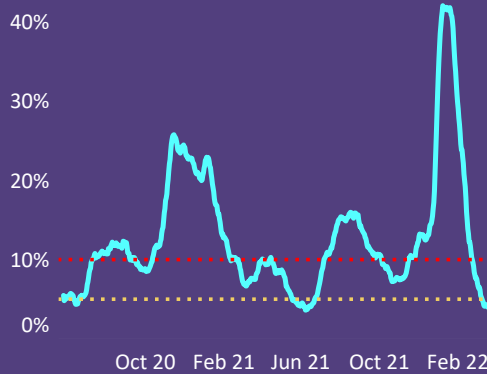### New Cases per 100k Population (7-Days Average)

Weekly % Change in Reported New Cases
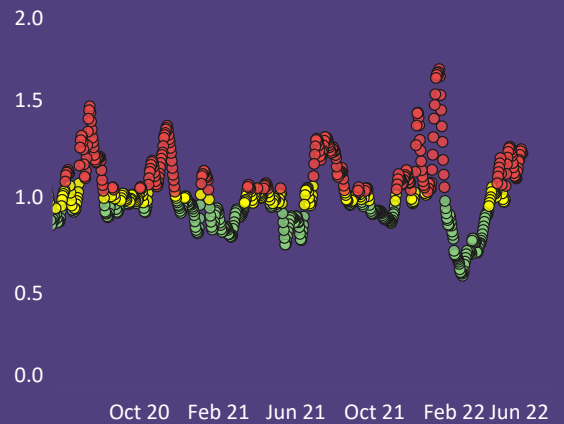

Testing

Positivity Rate

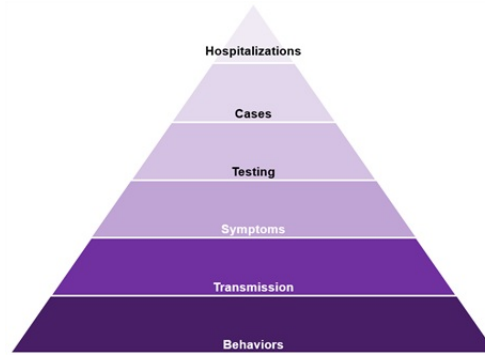## Transmission

Reproduction Number

St. Louis Metropolitan Area COVID-19 Status Indicators

The COVID-19 Indicators for the St. Louis Metropolitan Area are used by the St. Louis Metropolitan Pandemic Task Force, healthcare providers, health departments, and elected officials to monitor the level of COVID-19 in our community and assess the ability of our health care system to respond to the pandemic.

Regional leaders will use the indicators to consider various policy changes.

Indicators are grouped into this organizational framework.

Domain	Measure Name (Description)	Purpose	Low Risk	Moderate Risk	High Risk
Hospitalizations	COVID+ bed occupancy | COVID+ ICU bed occupancy (7-day rolling average of percent beds occupied by COVID+ patients)	Informs how well our health care systems can handle a potential surge in COVID-19 patients while also caring for other patients	<10%	10%-14.9%	≥15%
	New admissions (7-day rolling sum of daily COVID+ new admissions)	Reflects the immediate burden of COVID-19 on our health care systems, as well as serves as a lagging indicator of virus transmission in the community	<10	10-19.9	≥20
Cases	New cases per 100k persons in the past 7 days	Approximates the number of people actively shedding virus in the community and likelihood that a hospital visitor has the virus. Masking is recommended in communities at the high risk threshold. True prevalence is likely to be significantly higher.	<10 / 100k	Between 10 and 100 / 100k	>100 / 100k
	Weekly change in reported new cases (Weekly percent change in 14-day rolling average of reported new confirmed COVID cases)	Reflects how rapidly the virus is spreading across the community and informs whether community mitigation measures are needed to control the spread and prevent overwhelming our public health and health care systems	<0%	0-10%	>10%
Testing	Positivity rate among diagnostic tests (7-day rolling average of COVID+ tests / all tests among diagnostic tests (excluding screening tests))	Used for interpreting whether changes in COVID-19 incidence/prevalence reflect true changes in the burden and spread of COVID-19 or changes in testing volumes	<5%	5% - 9.99%	≥10.0%
Transmission	Reproduction number with confidence limits (Derived from formula based on 7-day rolling average of reported new confirmed COVID cases)	Estimates how many people on average one case is infecting to reflect the spread of the virus and inform modeling efforts	Upper confidence limit <1	Upper confidence limit >1	Lower confidence limit >1

Population

The St. Louis Metropolitan Areas is defined by the St. Louis MO-IL Metropolitan Statistical Area comprised of 15 counties:

* Missouri: Franklin, MO | Jefferson, MO | Lincoln, MO | St. Charles, MO | St. Louis City, MO | St. Louis, MO | Warren, MO

* Illinois: Bond, IL | Calhoun, IL | Clinton, IL | Jersey, IL | Macoupin, IL | Madison, IL | Monroe, IL | St. Clair, IL

Data Sources

• The date of the most recent data point will vary by indicator due to the differences in reporting lags across data sources.

• **Hospitalizations and Testing data** are from the St. Louis Metropolitan Pandemic Task Force data provided by the St. Louis health systems (BJC HealthCare, Mercy Health, SSM Health and Saint Luke's Health System). Hospitalizations have a 2-day reporting lag to allow time for COVID+ labs to result, and testing data are collected on a weekly basis starting in May.

• **Case data** are from The New York Times with a 1-2 day reporting lag. Detailed methodology can be found here: https://github.com/nytimes/covid-19-data Case data will not always match what is reported on other sites due to different data processes for collecting, compiling, and reporting data. Aggregating cases using 7- and 14-day sums and averages minimize differences and smooth out any reporting variances.

• **Transmission** as measured by the reproduction number is based on the 7-day average of new cases using the *EpiEstim* package from the R software with mean serial interval of 4.7 (SD: 2.9) days. The serial interval is the time from illness onset in a primary case to illness onset in a secondary case.

Thresholds

Thresholds for risk levels were determined based on regional historical data and input from regional leaders with expertise in infectious diseases, public health, healthcare delivery, epidemiology, and statistics.

Contact for Questions

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