COVID-19 and K-12 Schools

Departments of Health & Senior Services and Elementary & Secondary Education

January 6, 2021
COVID-19 in Missouri – 1/6

• Daily case rates continue to put tremendous stress on healthcare system
  • We may be seeing early indications of a holiday surge

• COVID-19 hospitalizations remain high since hitting peak levels in November

• Transmission rates ("Re") remain above 1, so case rates are still increasing and leave us vulnerable to the type of surge seen in other states
COVID-19 in Missouri to Date

Cases to Date
408,443
(6,655 per 100k)

Deaths to Date
5,858

Tests to Date
3,724,603
(60,687 per 100k)
### Public executive dashboard – 1/6

<table>
<thead>
<tr>
<th>Cases</th>
<th>New Cases in the Past 7 Days</th>
<th>Average of 2,539 per day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17,775</td>
<td>290 cases per 100K residents</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deaths</th>
<th>New Deaths in the Past 7 Days</th>
<th>Average of 10 per day (see note)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>70 (see note)</td>
<td>1.1 deaths per 100K residents</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tests</th>
<th>New Tests in the Past 7 Days</th>
<th>Average of 13,698 per day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>95,883</td>
<td>1,562 tests per 100K residents</td>
</tr>
</tbody>
</table>

| Positivity Rate | Positivity Rate over the Past 7 Days (CDC method) | 19.7% |

<table>
<thead>
<tr>
<th>Hospitalizations</th>
<th>COVID-19 Patients in the Hospital</th>
<th>624 in the ICU</th>
<th>344 on ventilators</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>2,738 (as of 1/3/2021)</td>
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Positivity rate has ticked back upward in the past few days

Moving 7-day positivity rate (CDC method) since March

Source: Data are from DHSS
Hospitalizations remain near peak levels

Statewide suspected and confirmed COVID-19 hospitalizations, data through from Aug 1 through Jan 5

Previous peak: 2,851 on 11/18
New peak: 2,862 on 12/22

2,776 Missouri hospitalizations on 1/5

Source: Data are from HHS via TeleTracking
COVID-19 hospital admissions continue at high rates

Statewide suspected and confirmed COVID-19 hospital admissions by day, August 1 through January 5

499 hospital admissions in the past 24 hours on 1/5

Source: Data are from HHS via TeleTracking
Missouri is #11 in hospitalizations per capita

<table>
<thead>
<tr>
<th>Top 20 states</th>
<th>Bottom 10 states</th>
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<tbody>
<tr>
<td>Nevada</td>
<td>Iowa</td>
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<tr>
<td>Arizona</td>
<td>Minnesota</td>
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<tr>
<td>Alabama</td>
<td>Utah</td>
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<tr>
<td>California</td>
<td>Washington</td>
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<tr>
<td>Tennessee</td>
<td>North Dakota</td>
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<tr>
<td>Mississippi</td>
<td>Maine</td>
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<tr>
<td>Oklahoma</td>
<td>Oregon</td>
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<tr>
<td>Georgia</td>
<td>Alaska</td>
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<tr>
<td>Pennsylvania</td>
<td>Hawaii</td>
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<tr>
<td>West Virginia</td>
<td>Vermont</td>
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<td></td>
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<tr>
<td>Missouri</td>
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<td>Delaware</td>
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<td>Indiana</td>
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<tr>
<td>Texas</td>
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<tr>
<td>New Jersey</td>
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<tr>
<td>New York</td>
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<tr>
<td>Rhode Island</td>
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<tr>
<td>Arkansas</td>
<td></td>
</tr>
<tr>
<td>South Carolina</td>
<td></td>
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<tr>
<td>Ohio</td>
<td></td>
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</tbody>
</table>

COVID-19 hospitalizations per 100k as of Jan 3, 7-day average

- Note: Each state will have a different levels strain based on their health care system size and capacity
- Population demographics will also affect these numbers

Source: Nationwide data are from COVID Tracking Project
Transmission rates ("$R_e$") are holding steady above 1, so case rates are still increasing.

**Understanding $R_e$**

$R_e > 1 =$ COVID cases are growing

*Data date range: 12/29/20 - 01/04/21*
SARS-CoV-2 and Children

Rachel C. Orscheln, MD
Associate Professor of Pediatrics
Division of Pediatric Infectious Diseases
Washington University
Missouri COVID-19 Cases by Age

Compared with children who tested negative for the virus that causes COVID-19, children who tested positive were...

More likely to have...
- Attended gatherings
  - Weddings
  - Parties
  - Playdates
  - Funerals

Not more likely to have...
- Attended child care or school in person

*In the 2 weeks before the positive test
Case control investigation (154 case-patients, 243 control-participants), MS, September-November, 2020

CDC.GOV bit.ly/MMWR121520
COVID-19 and Schools

• Study by St. Louis area pediatricians (WUPAARC) suggests children in school are at lower risk for infection than those in the community

Why we need new guidance

In July, we published guidance for school leaders making decisions about school re-openings that offered a tiered structure for thinking about risk at different levels of community spread. We recommended that schools be closed once the average daily case rate rose above 25 cases/100,000 people, at the county level. Since July, our scientific understanding of COVID has increased significantly, as has our understanding of degrees of risk in schools, and we can now recommend that schools be open even at the very high levels of spread we are now seeing, provided that they strictly implement strategies of infection control. Evidence supports the view that student, staff, and educator risk can all be brought to acceptably minimal levels with robust infection control practices when implemented in a collaborative and transparent way among all stakeholders, including educators and other school personnel, administrators and district leaders, families, and students.
The AAP continues to strongly advocate that all policy considerations for school COVID-19 plans should start with the goal of having students physically present in school.
Classroom Organization
3 Feet Versus 6 Feet
Positive Cases Among Quarantined Students/Staff

- 83 Missouri Schools Reporting
  - 1861 Positive Cases
  - 17,974 Quarantined
  - 126 (0.7%) Positive from Quarantine
  - >50% of Schools Reported NO Positives in Quarantined Students/Staff

Personal Communication: Dr. Randall Williams, Director of the Missouri Department of Health, 12/06/2020
Mitigation Strategies in Schools are Effective

- Low risk symptoms:
  - Fever (≥100.4°F)
  - Congestion/runny nose
  - Headache
  - Nausea/vomiting/diarrhea
  - Body aches

- High risk symptoms:
  - Cough
  - Difficulty breathing
  - Loss of taste/smell

Exposure to COVID-19 positive person?

- Close contact: less than 6 feet, more than 15 min

**NO**

1. 1 low risk symptom
   - Stay home
   - Return to school 24 hr after symptom resolution

2. >2 low risk symptoms
   - Stay home
   - Evaluation by Healthcare Provider

3. OR 1 high risk symptom
   - Healthcare provider confirms alternative diagnosis for symptoms. A healthcare provider’s note must be on file.
   - Return to school after 24 hours without fever and symptoms improving

- Negative SARS-CoV-2 PCR test
  - Return to school after 24 hours without fever and symptoms improving

- Positive SARS-CoV-2 PCR test
  - Return to school only after 10 days since symptoms onset, 24 hours without fever, and approval of local health department; quarantine contacts
  - Return to school after 14 days from last contact unless symptoms develop. If symptoms develop, perform SARS-CoV-2 PCR test

**YES**

- Stay home
Missouri CDC Collaboration

• Prospective Data Collection in Schools

Weekly Absence Tracker

Weekly Metrics for Daugherty University

Cumulative Positive Cases
0
+0 Since Week Prior
↓0 Change From Previous Week

Cumulative Cases Associated With School Exposure
0
+0 Since Week Prior
↓0 Change From Previous Week

Cumulative Quarantined
0
+0 Since Week Prior
↓0 Change From Previous Week

School Population
680

• Prospective Observational Study of Mitigation Strategies in Schools
## Vaccine Update

<table>
<thead>
<tr>
<th>Name</th>
<th>Efficacy</th>
<th>Dosing</th>
<th>EUA</th>
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<tbody>
<tr>
<td>Pfizer/BioNTech</td>
<td>95%</td>
<td>2 doses</td>
<td>Hearing 12/10/20</td>
</tr>
<tr>
<td>mRNA in lipid nanoparticle</td>
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<td></td>
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<tr>
<td>Moderna/NIH</td>
<td>94.5%</td>
<td>2 doses</td>
<td>Hearing 12/17/20</td>
</tr>
<tr>
<td>mRNA in lipid nanoparticle</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>AstraZeneca/Oxford</td>
<td>Up to 90%</td>
<td>2 doses</td>
<td>Results Published</td>
</tr>
<tr>
<td>Viral vector vaccine</td>
<td></td>
<td></td>
<td>Lancet</td>
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<tr>
<td>Chimp Adenovirus</td>
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</tr>
</tbody>
</table>
Pfizer/BioNTech Vaccine Vs. Placebo

1 Seriously ill

Received vaccine

8 participants sick with covid-19

Received placebo

162 sick with covid-19

9 Seriously ill

Cumulative Incidence Curves for the First COVID-19 Occurrence After Dose 1

https://www.fda.gov/media/144245/download
Adverse Reactions after 2\textsuperscript{nd} Dose of Vaccine
COVID-19 Vaccine Update

• Availability phases & tiers determined at the state level
  ▪ Local jurisdictions cannot change
• Healthcare professionals in Phase 1A began receiving vaccinations the week of December 14, 2020
  ▪ School nurses among Phase 1A
    o DHSS communicating with school nurses soon
• School staff = part of the Phase 1B essential workforce
• Timeline & logistics are TBD (when, where, how, etc.)

Email questions live to Communications@dese.mo.gov
COVID-19 Vaccine Update

COVID-19 Vaccine Availability

**Phase 1A**
- Long-Term Care Facility Residents and Staff
- Healthcare Workers (Patient Facing)
- Essential Workers (See below)

**Phase 1B**
- High Risk Individuals (18-64) and Individuals >65
- First Responders (See below)

**Phase 2**
- Populations at Increased Risk (Prisoners, Homeless, etc.)

**Phase 3**
- All Missouri Residents

Important Note:
We anticipate this list will be updated with more information on Phase 1B from the CDC in mid-December.

Healthcare Workers
Healthcare personnel and staff who may have direct or indirect exposure to SARS-CoV-2 and are unable to work from home.

Essential Workers
First Responders
Childcare Workers
Teachers & Education Staff
Water/Wastewater Workers
Energy Workers
Critical Manufacturing Workers
Food & Agriculture Workers

High Risk Populations
Those at increased risk for severe COVID-19 illness, including those 65 years of age or older, may receive priority:
- BMI > 30
- Chronic Kidney Disease
- Chronic Obstructive Pulmonary Disease
- Diabetes
- Hypertension
- Chronic Heart Disease

Details at MOStopsCOVID.com
Myth-busting & FAQs:

- No plans at the state level to make mandatory.
- You cannot get COVID-19 from the vaccine.
- There is no live virus present in the mRNA vaccine.
- Receiving the vaccine will not affect PCR or antigen test results; these check for the active disease.
- You must receive the same vaccine for both doses.

FAQs at MOStopsCOVID.com
COVID-19 Vaccine Update

GET THE FACTS

Making sure you have the facts about the COVID-19 vaccine is important. Your choice to get vaccinated can make a positive impact not only you and your family, but your entire community.

FAQs at MOStopsCOVID.com
COVID-19 Vaccine Update

GET THE FACTS
COVID-19 Vaccine for Children
MOStopsCovid.com

GET THE FACTS
COVID-19 Vaccine Safety & Effectiveness
MOStopsCovid.com
What do we know in Missouri?
Are mitigation strategies affected or not?
How does this variant impact children?
Antigen Testing Program for K-12

• Local health officials determine if antigen tests can be used for release from quarantine options
  ❑ Standing order & guidance updated to allow this
• Dashboard reflects program status & test usage
• Evaluating test usage before sending second shipment to existing participants
• May need to recoup inventory before expiration

Email questions live to Communications@dese.mo.gov
New Federal Relief Package

• ESSER II
  - $871 million (est.)
  - No equitable share requirement
  - 15 allowable uses

• GEER II
  - $24 million public (est.)
  - $67.5 million non-public (est.)

• CRF extension

Email questions live to Communications@dese.mo.gov
• Mark your calendar for our remaining 2021 webinars
  - First Wednesday of each month – 1:00-2:30 p.m.
    - February 3
    - March 3
    - April 7
    - May 5

Email questions live to Communications@dese.mo.gov
Held weekly on Thursdays
4:00-5:00 PM

Register here

GOALS:
- Bring together pediatric infectious disease specialists, school leaders, school nurses, LPHAs & primary care physicians to discuss COVID-19 & kids
- Share timely information about COVID-19 & kids
- Provide a platform for information sharing & learning across communities caring for children
Email live webinar questions to: Communications@dese.mo.gov
Updates: dese.mo.gov/covid19