First Case of 2019 Novel Coronavirus in the United States

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Summary

An outbreak of novel coronavirus (2019-nCoV) that began in Wuhan, China, has spread rapidly, with cases now confirmed in multiple countries. We report the first case of 2019-nCoV infection confirmed in the United States and describe the identification, diagnosis, clinical course, and management of the case, including the patient’s initial mild symptoms at presentation with progression to pneumonia on day 9 of illness. This case highlights the importance of close coordination between clinicians and public health authorities at the local, state, and federal levels, as well as the need for rapid dissemination of clinical information related to the care of patients with this emerging infection.
COVID-19, the common name for SARS-CoV-2, is a new virus spread through close contact with other people and touching contaminated surfaces.

- It has touched every county in the state of Missouri.
- It impacts all ages, demographics, and geographies.
- Infected individuals may be asymptomatic but still contagious.
- New treatments and therapeutics are increasing in availability, but the virus can still be deadly.

This virus is a new challenge, but we are learning as we fight it.
Who is at highest risk?

- Older adults
- People of any age with underlying health conditions
- People in congregate living: prisons, long-term care facilities, group homes, etc
- Minorities: lack of access to healthcare, intergenerational family homes, higher likelihood of pre-existing conditions
- People living in urban settings: population density
- People working in congregate settings: meat packing, manufacturing, etc
- Health care workers
- Young adults in congregate settings: higher education, social settings, etc
Stop the Spread

What can YOU do?

- Wear a mask
- Wash your hands
- Watch your distance

What are healthcare providers doing?

- Remdesivir
- Dexamethasone
- Convalescent Plasma
- High-flow nasal cannula
- Prone ventilation
- Using and conserving PPE
- Intensive testing
COVID-19 Briefings

- **Religious Leaders Conference Calls**: 22-Mar, 29-May, *12 Calls*
- **MO Hospital Association**: 19-Mar, 4-August, *14 Calls*
- **Medical Experts Conference Calls**: 17-Mar, 20-June, *13 Calls*
- **Mayors Conference Calls**: 22-Mar, 18-June, *16 Calls*
- **Local Leaders**: 10-Mar, 16-June, *17 Calls*
- **County Executives**: 31-Mar, 18-June, *12 Calls*
- **MO State Medical Association**: 13-Mar, 27-July, *16 Calls*

*Total No. of Meetings/ Calls*

Data as of Aug 2020
Missouri has 14th lowest cases per 100k in the nation at 962
Missouri has 20th lowest deaths per 100k in the nation at 21
Increased testing volume is not the only driver of case growth, as the positivity rate is increasing.

Test Encounters and Rolling 7-day Average Positivity

Data available as of 10 Aug 2020
COVID-19 deaths remain low, when compared to cases.

Data available as of 10 Aug 2020.
Young adults are now the largest age group of COVID-19 cases

Missouri Covid-19 Cases By Age

Data available as of 10 Aug 2020
Community testing has been performed across Missouri

- DHSS Led Community Sample
  - Event Results: (April 26 – July 21)
  - Total Tests = 31,763
  - Total Positive Results = 860
  - Positivity Rate = 2.7%

Data available as of 21 July 2020
Fighting COVID in nursing homes remain a top priority

- People 65+ are at highest risk of infection and death
- Completed 101,805 tests of residents and staff in 442 long-term care facilities (3,021 positive)
- State has provided:
  - Infection control advice
  - PPE
  - Access to testing
- % of total cases 65+
  - 22% in mid-April
  - 15% in early August
  - 16.7% positivity rate 65+ mid-April → 7.5% early August

Data available as of 7 Aug 2020
Contact tracing is a critical tool in controlling localized COVID-19 outbreaks

<table>
<thead>
<tr>
<th>Pre-Contact Tracing</th>
<th>Contact Tracing</th>
<th>Follow-up, monitoring and support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Testing</strong></td>
<td><strong>Identification</strong></td>
<td><strong>Notification</strong></td>
</tr>
<tr>
<td>Testing is a prerequisite for Contact Tracing</td>
<td>After an individual is identified as COVID-19 positive:</td>
<td>Contact close contacts of the COVID-19 positive individual:</td>
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<tr>
<td>Contact Tracing is the process of identifying the contacts of someone who has tested positive for COVID-19 and providing them with the best public health guidance for their situation</td>
<td>• Notify individual of positive result</td>
<td>• Notify of their exposure</td>
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<td></td>
<td>• Identify close contacts 2 days prior to symptom onset, or 2 days prior to specimen collection days (if asymptomatic)</td>
<td>• Advise of their next steps (e.g., self-quarantine, testing, medical care, etc.)</td>
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<td></td>
<td>• Ask activities 14 days prior to onset of symptoms (collection date asymptomatic) for possible source identification</td>
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<td>Conduct regular follow-up with identified contacts:</td>
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<td>• Monitor for symptom development</td>
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<td></td>
<td>• Continue to test for infection</td>
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### How is the State supporting local health authorities with contact tracing?

| **Funding** | The State allocated $500+ million in CARES Act funding to counties to support COVID-19 response activities, including testing and contact tracing. DHSS will allocate a portion of the Expanding Laboratory Capacity grant from the CDC to each LPHA to support contact tracing. |
| **Surge Support** | DHSS will provide surge support to reinforce LPHA’s boxing-in of localized outbreaks. |
| **Specialized Services** | DHSS will provide specialized services, such as language translation support when localized outbreaks include communities where English is not the first language. |
| **Training** | DHSS will provide free training for all contact tracers – state and local – to foster a common approach and accelerate collaboration:  
  - Level 1: Introductory course by Johns Hopkins University available through Coursera  
  - Level 2: Skills-building course by the Centers for Disease Control (CDC) Training Intervention Center  
  - Level 3: Specialized training for jurisdictions with unique needs on an as-required basis from DHSS |
| **Technology** | DHSS is providing the backbone technology to support contact tracing with the Missouri Advanced Contact Tracing System (MO ACTS):  
  - Each LPHA will have a number of free seats for contact tracers  
  - Additional seats will be locally funded  
  - DHSS is providing EpiTrax, open source, comprehensive surveillance and outbreak management application |
What do these investments mean for Missouri?

- Currently there are 922 local contact tracers and case investigators working in Missouri, up from 770 last month.
- DHSS has identified ~114 staff from across state agencies to volunteer as surge support – and the number continues to grow:
  - DHSS has 37 full-time case investigators assisting LPHAs in contact tracing.
- The State’s investment in MOACTS and Epitrax has totaled over $7.6 million, and represents a historic investment in Missouri’s public health infrastructure which will:
  - Improve the collaboration between DHSS and local health authorities.
  - Increase the speed and efficiency of case investigations and contact tracing.
  - Last through the current pandemic and beyond, to ensure that Missouri is prepared for any future public health crisis.

Data as of Aug 6 2020
Operation Warp Speed Summary

Vaccine Status Update: LTG (R) Ostrowsky (5 Aug 2020)

- Federal government is funding multiple vaccines for simultaneous development
- Federal government will not take risk on vaccine safety or efficacy; however, they will take financial risk by fast-tracking manufacturing
- Vaccine trials underway across the United States, including Missouri
- Federal government is optimistic that by December/January there will be a vaccine approved for deployment in the United States
- However, there is not yet a process to track and distribute vaccines
What is next in the fight against COVID-19?

- Counties have received over $817M in CARES Act funding; ensure local health authorities have access to the resources they need to fight the virus
- Testing and Contact Tracing
  - Continue efforts to increase testing volume
  - Grant to expand expanded lab capacity and decrease turn around time
  - Expand availability of rapid testing technologies to most vulnerable communities
  - Deploy resources to support contact tracing across the state
- Influenza vaccination campaign will kick off in September
- Work with federal government on the distribution of COVID-19 vaccine when it becomes available
- Improve data analysis and availability to sharpen response accuracy by state and local authorities, and keep the public informed
Missouri’s pillars of a “Show Me Strong Recovery”
THANK YOU

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