

EPI Update for Friday, February 7, 2020
Center for Acute Disease Epidemiology (CADE)
Iowa Department of Public Health (IDPH)

Novel Coronavirus (2019-nCoV)

Background

2019 Novel Coronavirus (2019-nCoV) has been identified as the cause of an outbreak of respiratory illness first detected in Wuhan, China. Early in the outbreak, many patients were linked to a large market, which suggested animal-to-person spread. However, the virus is now spreading person-to-person. There have been 12 confirmed cases identified in the United States. There have been no cases identified in Iowa to date.

This is a rapidly evolving situation and information will be updated as it becomes available.

CDC travel notice

CDC is recommending that travelers avoid nonessential travel to all of China.

Traveler monitoring

CDC will notify IDPH of incoming asymptomatic travelers from China (symptomatic travelers will be assessed by healthcare providers prior to being released from the airport). Public health will evaluate these asymptomatic individuals for risk level and issue public health monitoring orders outlining requirements to report symptoms to public health twice daily and restrictions on daily activities.

In Iowa, as of February 7, 12 individuals are being monitored by public health for symptoms. Of these, 2 symptomatic individuals have been tested, with results pending.

IDPH will update these numbers at idph.iowa.gov/Emerging-Health-Issues/Novel-Coronavirus.

Patient screening and assessment

Because a person could have returned from China prior to implementation of traveler monitoring, it is important for all Iowa healthcare facilities to continue screening procedures before or at patient check-in.

Recommended patient screening questions:

1. Do you have a fever and respiratory symptoms (e.g., cough or difficulty breathing)?
2. Did you travel to China in the 14 days before you got sick OR did you have contact with someone with possible 2019-nCoV in the 14 days before you got sick?

If the answer to both screening questions is yes, and

- If screening was conducted before the patient presented for care, direct the patient to don a surgical mask and enter the facility through a private entrance (if possible).
- If the screening was conducted at patient check-in, direct the patient to don a surgical mask and do not allow the patient to sit in the waiting room.
 - Immediately direct the patient to an exam room or another well-ventilated area that allows patients to be separated by at least six feet.

Healthcare providers should assess the patient (using Standard, Contact, and Airborne Precautions, including use of eye protection) in a private room with the door closed, ideally in an airborne infection isolation room.

During the assessment, please collect the following information:

1. Respiratory symptoms
2. Vital signs including measured or subjective fever
3. Date of illness onset
4. Location and date of travel to China
5. Description of any contact with ill persons in China
6. Description of any contact with the healthcare system in China

If symptoms are present and travel history is re-affirmed, please contact the Iowa Department of Public Health, which will provide guidance on whether testing is needed.

- **During business hours call 800-362-2736 or after hours, call 515-323-4360 (ask State Patrol to page the epi on call)**

If testing is approved, IDPH and SHL will provide sample collection guidance and specimens transport will be arranged. Currently all testing must be performed at CDC; therefore, testing will take at least 48 hours.

While testing is pending,

- If the patient does not require hospitalization, the patient will be released. Public health will issue a voluntary home confinement order requiring self-isolation or a mandatory isolation order if the patient is not cooperative.
- If patient hospitalization is required, place the patient in an airborne infection isolation room and continue using standard, contact, and airborne precautions (with eye protection). Public health will issue a facility isolation order.
 - If an airborne infection isolation room is not available, IDPH will consult on potential patient transfer.

Routine cleaning and disinfection procedures (e.g., using cleaners and water to pre-clean surfaces prior to applying an EPA-registered, hospital-grade disinfectant to frequently touched surfaces or objects for appropriate contact times as indicated on the product's label) are appropriate for 2019-nCoV in healthcare settings, including those patient-care areas in which aerosol-generating procedures are performed. Management of laundry, food service utensils, and medical waste should also be performed in accordance with routine procedures.

CDC resources

Interim Clinical Guidance for Management of Patients with Confirmed 2019 Novel Coronavirus (2019-nCoV) Infection

www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html

Interim Infection Prevention and Control Recommendations for Patients with Confirmed 2019 Novel Coronavirus (2019-nCoV) or Patients Under Investigation for 2019-nCoV in Healthcare Settings

www.cdc.gov/coronavirus/2019-nCoV/hcp/infection-control.html

Additional information

There are seven different coronaviruses known to infect humans. There are four common coronaviruses (229E, NL63, OC43 and HKU1) that circulate widely. Most people will get infected with one or more of the common human coronaviruses in their lifetime.

The four common coronaviruses:

- Usually cause mild to moderate upper-respiratory tract illnesses, like the common cold
- Are generally self-limiting and last for a short period of time in otherwise healthy people
- Can cause lower respiratory tract illness (like pneumonia or bronchitis) in people with underlying disease conditions or weakened immune systems
- More commonly circulate during the fall and winter, but can happen any time of the year

The remaining three coronaviruses are rare and include:

1. Middle East Respiratory Syndrome (MERS-CoV)
2. Severe Acute Respiratory Syndrome (SARS-CoV)
3. 2019 Novel Coronavirus (2019-nCoV) - associated with the current ongoing outbreak

These three rare coronaviruses are associated with more severe symptoms that may lead to pneumonia and life-threatening illness.

Many diagnostic test manufacturers have developed syndromic panels to rapidly diagnose patients with respiratory symptoms. The current FDA approved panels generally identify a number of viral and bacterial respiratory pathogens, which include the four common coronaviruses listed above. However, the clinical microbiology community recently demonstrated (by patient testing as well as by in silico analysis) that none of the available panels detect the three rare coronaviruses (MERS-CoV, SARS-CoV or 2019-nCoV).

Please visit www.cdc.gov/coronavirus/2019-ncov/index.html.

Infographic: Common coronaviruses vs. novel coronavirus



To view in full size, visit idph.iowa.gov/Emerging-Health-Issues/Novel-Coronavirus.