

Epi Update for Friday, January 24, 2020
Center for Acute Disease Epidemiology (CADE)
Iowa Department of Public Health (IDPH)

Items for this week's Epi Update include:

- **2019 Novel Coronavirus outbreak update and recommendations**
- **CDC Issues Level 3 Travel Warning for Wuhan and Level 1 Travel Watch for the Rest of China**
- **Seven different coronaviruses are known to infect humans**
- **In the news: What we Know about the Wuhan Coronavirus**
- **In the news: Snakes could be the source of the Wuhan coronavirus outbreak**
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2019 Novel Coronavirus outbreak update and recommendations

According to the most recent World Health Organization update, 581 confirmed cases of 2019 Novel Coronavirus (2019-nCoV) have been reported globally.

- Of the 581 cases reported, 571 cases were reported from China.
- The remaining 10 cases have been reported in Thailand, Japan, Hong Kong Special Administrative Region, Taipei Municipality, Macau Special Administrative Region, United States (one case each in the states of Illinois and Washington) and the Republic of Korea.
 - All 10 had a travel history to Wuhan, China.
- Of the 571 confirmed cases in China, 375 cases were confirmed from Hubei Province.
 - Of the 571 cases, 95 cases are severely ill and 17 deaths have been reported (all from Hubei Province).

The initial source of 2019-nCoV still remains unknown; however, it is clear the growing outbreak is no longer due to ongoing exposures at the Huanan seafood market in Wuhan. In the last week, less than 15% of new cases reported having visited Huanan market. There is now more evidence that 2019-nCoV spreads from human-to-human and also across generations of cases. Moreover, family clusters involving persons with no reported travel to Wuhan have been reported from Guangdong Province.

At this time, IDPH is not recommending China-specific travel screening at point of registration. Healthcare providers should routinely screen for travel as part of their normal clinical evaluation.

Currently, testing for 2019-nCoV is recommended in the following patients:

- Patients with fever AND lower respiratory symptoms (e.g., cough, difficulty breathing) AND travel to Wuhan City, China in the 14 days before illness onset
- Patients with fever AND lower respiratory symptoms (e.g., cough, difficulty breathing) AND close contact with a symptomatic person under investigation for 2019-nCoV infection
- Patients with fever OR lower respiratory symptoms (e.g., cough, difficulty breathing) AND close contact with a symptomatic person confirmed to be infected with 2019-nCoV

If a patient meets these testing criteria, healthcare providers are asked to contact IDPH at 800-362-2736 during business hours or 515-323-4360 after hours.

IDPH will advise healthcare providers on obtaining respiratory and other relevant specimens.

For additional information visit:

<https://idph.iowa.gov/Emerging-Health-Issues/Novel-Coronavirus>

<https://www.cdc.gov/coronavirus/2019-ncov/index.html>

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>

CDC Issues Level 3 Travel Warning for Wuhan and Level 1 Travel Watch for the Rest of China

Due to the ongoing 2019 Novel Coronavirus (2019-nCoV) outbreak, the CDC is recommending that travelers avoid all non-essential travel to Wuhan, China. Chinese officials have closed transport within and out of Wuhan, including buses, subways, trains and the airport.

Travelers to other areas of China should:

- avoid contact with sick people
- avoid animals (alive or dead), animal markets, and products that come from animals (such as uncooked meat)
- wash hands often with soap and water for at least 20 seconds - if soap and water are not available, use an alcohol-based hand sanitizer

For full CDC travel recommendations, visit

wwwnc.cdc.gov/travel/notices/watch/novel-coronavirus-china.

Seven different coronaviruses are known to infect humans

Coronaviruses are named for the crown-like spikes on their surface. 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 only 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 infections 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 in Wuhan, China

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

Over the past several years, many diagnostic test manufacturers have developed various 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).

The State Hygienic Lab has testing capability to detect MERS-CoV and SARS-CoV, but currently, identification for 2019-nCoV is only available at the CDC. An Emergency Use Authorization (EUA) is being developed to bring 2019nCoV testing to individual state labs, but the time frame for issuance is not yet known.

In the news: What we know about the Wuhan coronavirus

www.nytimes.com/article/what-is-coronavirus.html

In the news: Snakes could be the source of the Wuhan coronavirus outbreak

www.cnn.com/2020/01/22/health/snakes-wuhan-coronavirus-outbreak-conversation-partner/index.html

In the news: “Too early” to declare new coronavirus outbreak a global health emergency, WHO says

www.nbcnews.com/health/cold-and-flu/too-early-declare-new-coronavirus-outbreak-global-health-emergency-who-n1121171

Infographic: Reduce your risk of coronavirus infection

Reduce your risk of coronavirus infection:

- Clean hands with soap and water or alcohol-based hand rub
- Cover nose and mouth when coughing and sneezing with tissue or flexed elbow
- Avoid close contact with anyone with cold or flu-like symptoms
- Thoroughly cook meat and eggs
- No unprotected contact with live wild or farm animals

World Health Organization

To view in full size, visit

www.who.int/images/default-source/health-topics/coronavirus/1overall.png?sfvrsn=4f38434f_4.

Have a healthy and happy week!

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