

Hot Tips
a Public Health Advisory

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Please copy and distribute to ALL physicians at your location.

## Pneumonia of Unknown Etiology (PUE)

The Centers for Disease Control and Prevention (CDC) is closely monitoring a reported cluster of pneumonia of unknown etiology (PUE) with possible epidemiologic links to a large wholesale fish and live animal market in Wuhan City, Hubei Province, China. An outbreak investigation by local officials is ongoing in China. Currently, there are no known U.S. cases nor have cases been reported in countries other than China.

Ventura County Public Health requests that health care providers ask patients with severe respiratory disease about travel history to Wuhan City. Wuhan City is a major transportation hub about 700 miles south of Beijing with a population of more than 11 million people.

## **Background**

According to a report from the Wuhan Municipal Health Commission, as of January 5, 2020, the national authorities in China have reported 59 patients with PUE. The patients had symptom onset dates from December 12 through December 29, 2019. Patients involved in the cluster reportedly have had fever, dyspnea, and bilateral lung infiltrates on chest radiograph. Of the 59 cases, seven are critically ill, and the remaining patients are in stable condition. No deaths have been reported and no health care providers have been reported to be ill. The Wuhan Municipal Health Commission has not reported human-to-human transmission.

Reports indicate that some of the patients were vendors at the Wuhan South China Seafood Wholesale Market where, in addition to seafood, chickens, bats, marmots, and other wild animals are sold, suggesting a possible zoonotic origin to the outbreak. The market has been closed for cleaning and disinfection. Local authorities have reported negative laboratory test results for seasonal influenza, avian influenza, adenovirus, severe acute respiratory syndrome-associated coronavirus (SARS-CoV), and Middle East respiratory syndrome coronavirus (MERS-CoV) among patients associated with this cluster. However, on January 8 it was reported that a coronavirus was isolated from one of the patients and has now been found in several others. There are six coronaviruses known to infect humans. Four of them typically cause common cold symptoms. The other two— SARS and MERS-CoV—have been linked to two sometimes fatal illnesses. The agent of PUE may prove to be a seventh coronavirus that infects humans. Additional laboratory testing is ongoing to clarify the source of the outbreak. Health authorities are monitoring more than 150 contacts of patients for illness.

CDC has issued a level 1 travel notice ("practice usual precautions") for this destination. (https://wwwnc.cdc.gov/travel/notices/watch/pneumonia-china). On January 5, 2020, WHO posted an

update on this situation, including an early risk assessment, which is available at: <a href="https://www.who.int/csr/don/05-january-2020-pneumonia-of-unkown-cause-china/en/external icon">https://www.who.int/csr/don/05-january-2020-pneumonia-of-unkown-cause-china/en/external icon</a>.

## **Recommendations for Health Care Providers**

- 1. Providers should consider pneumonia related to the cluster for patients with severe respiratory symptoms who traveled to Wuhan since December 1, 2019 and had onset of illness within two weeks of returning, and who do not have another known diagnosis that would explain their illness. Providers should notify infection control personnel and Ventura County and California State health departments immediately if any patients meet these criteria. The demographics of these patients has not yet been clarified but if these cases turn out to share a similar etiologic agent as SARS and MERS-CoV, then it could be expected that people over 50 years of age may turn out to be those who become the most severely ill.
- 2. Multiple respiratory tract specimens should be collected from persons with infections suspected to be associated with this cluster, including nasopharyngeal, nasal, and throat swabs. Patients with severe respiratory disease also should have lower respiratory tract specimens collected, if possible. Consider saving urine, stool, serum, and respiratory pathology specimens if available.
- 3. Although the etiology and transmissibility have yet to be determined, and to date, no human-to-human transmission has been reported and no health care providers have been reported ill, CDC currently recommends a cautious approach to symptomatic patients with a history of travel to Wuhan City. Such patients should be asked to wear a surgical mask as soon as they are identified and be evaluated in a private room with the door closed. Personnel entering the room to evaluate the patient should use contact precautions and wear an N95 disposable facepiece respirator. For patients admitted for inpatient care, contact and airborne isolation precautions, in addition to standard precautions, are recommended until further information becomes available. For additional information see:

https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html.

This bulletin is intended to improve the public health in our county by keeping physicians and nurses informed of noteworthy diagnoses, disease trends and other events of medical interest. Another goal of a public health department is to educate. We hope that you will use this information to increase your awareness. Please allow us to continue in our role of speaking to the press so that we may maximize the educational message to the benefit of all citizens of Ventura County.