

PLEASE DISTRIBUTE TO YOUR HEALTH CARE PROVIDERS

URGENT HEALTH BULLETIN

Additional Guidance for Healthcare Providers Regarding 2019 Novel Coronavirus (2019-nCoV)

This bulletin contains hyperlinks and can be accessed on our [website \(https://kernpublichealth.com/health-bulletin/\)](https://kernpublichealth.com/health-bulletin/)

February 11, 2020

Dear Kern County Health Care Provider:

Kern County Public Health Services Department (KCPHSD) now has a webpage specific to 2019 Novel Coronavirus (2019-nCoV). It can be accessed at <https://kernpublichealth.com/2019-novel-coronavirus/>. Information and resources for healthcare providers will continue to be added to the site as they become available.

An [Urgent Health Bulletin](#) regarding 2019 novel coronavirus (2019-nCoV) was issued on January 23, 2020. Since then, additional cases have been identified in California, including person-to-person transmission in a close household contact of a confirmed 2019-nCoV case who traveled to Wuhan, China. Currently, no sustained person-to-person transmission in the community has been identified in the United States. KCPHSD continues to actively monitor reports and communicate regularly with the California Department of Public Health (CDPH) and U.S. Centers for Disease Control and Prevention (CDC).

To ensure your facility is able to implement appropriate infection control measures, please disseminate pertinent information regarding 2019-nCoV to all medical staff, as well as non-clinical staff who make initial contact with patients.

- Update to [Patient Under Investigation](#) (PUI) criteria
 - CDC's criteria for testing patients under investigation continues to evolve. Currently, both epidemiologic risk factors and clinical features are required.

Epidemiologic Risk Factor	And	Clinical Features
Any person, including healthcare workers, who has had close contact* with a laboratory-confirmed 2019-nCoV patient within 14 days of symptom onset	&	Fever or signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)
A history of travel from Hubei Province, China (including Wuhan), within 14 days of symptoms onset	&	Fever <u>and</u> signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)
A history of travel from mainland China within 14 days of symptom onset	&	Fever <u>and</u> signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath) requiring hospitalization

*Close contact defined as being within 6 feet of a 2019-nCoV case for prolonged period of time without recommended PPE, or having direct contact with infectious secretions of a 2019-nCoV case while not wearing recommended PPE. This includes household members, intimate partners, and caregivers, as well as healthcare personnel.

February 4, 2020

Additional Guidance for Healthcare Providers regarding 2019 Novel Coronavirus

Page 2

- [Clinical Care of Patients with Suspected or Confirmed 2019-nCoV](#)
 - There is no specific treatment for 2019-nCoV infection at this time. Corticosteroids should be avoided unless indicated for other reasons due to potential for prolonged viral replication.
 - KCPHSD should be consulted when considering [home care](#) of patients with suspected or confirmed 2019-nCoV.
 - Patients that do not require hospitalization should be monitored in the outpatient setting. Clinical signs may worsen during the second week of illness.
 - A negative test result does not preclude a patient from developing symptoms later; patients who re-present should be reevaluated, and potentially retested for 2019-nCoV.
 - No commercial testing is available at this time. All testing must be requested through KCPHSD for CDC approval and transport arrangements.

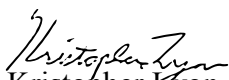
- [Infection Control Recommendations](#)
 - All patients suspected of 2019-nCoV should be immediately masked and isolated.
 - All healthcare personnel should adhere to standard, contact, and airborne precautions, plus eye protection (gloves, gown, mask, goggles/face shield).
 - Dedicated, disposable medical equipment should be used whenever possible.
 - Routine cleaning and disinfection procedures with EPA-registered hospital-grade disinfectants are appropriate for 2019-nCoV. This includes laundry, food services utensils, and medical waste.

- Travel Restrictions regarding China
 - [CDC Level 3 – Avoid Nonessential Travel](#) and the [U.S. State Department Level 4 - Do Not Travel](#) recommendations are in effect.
 - [Inbound flights are being routed through specific airports](#) including LAX and SFO. Air travel from affected areas is decreasing likely due to exit screening, entry screenings, and reduced carriers.
 - [Proclamation on Suspension of Entry](#) for those at risk of transmitting 2019-nCoV restricts entry of certain travelers who have been to China in past 14 days.
 - Land ports and sea ports are also being monitored by U.S. Customs and Border Protection for potentially ill travelers. Land and sea ports regularly consult with CDC regarding ill persons.

The situation regarding 2019-nCoV continues to evolve. Interim guidance and recommendations are subject to change as more and more information becomes available. For the most up to date information, please refer to the [CDC website](#) and the [CDPH website](#).

If you have any questions, please contact KCPHSD by phone at 661-321-3000, via email at publichealth@kerncounty.com, or visit our [website](#).

Thank you,


Kristopher Lyon, MD
Health Officer

2019 Novel Coronavirus Frequently Asked Questions for Healthcare Providers

This document contains hyperlinks and can be accessed on our [Health Bulletin webpage \(https://kernpublichealth.com/health-bulletin/\)](https://kernpublichealth.com/health-bulletin/) or on the [2019 Novel Coronavirus webpage \(https://kernpublichealth.com/2019-novel-coronavirus/\)](https://kernpublichealth.com/2019-novel-coronavirus/)

What is the 2019 Novel Coronavirus (2019-nCoV)?

Beginning in December 2019, an outbreak of respiratory illnesses was detected in Wuhan, China. The cause of illness was identified as a new, or novel, coronavirus which has been named 2019 Novel Coronavirus (2019-nCoV). While there are still many unknowns regarding 2019-nCoV, it is likely to be similar to other human coronaviruses. Person-to-person transmission is thought to occur mainly through respiratory droplets and the main symptoms are fever, cough, and shortness of breath.

What's the difference between regular coronavirus and 2019 Novel Coronavirus?

Coronaviruses are a group of viruses named for the crown-like spikes on their surface. There are four human coronaviruses that circulate regularly around the world that typically cause mild symptoms (229E, NL63, OC43, HKU1). Most people get infected with common human coronavirus at some point in their lives. Symptoms of common human coronavirus include runny nose, headache, cough, sore throat, and fever; often times, common human coronaviruses cause symptoms which are used to describe the common cold.

On commercial laboratory tests, common human coronaviruses are often identified in laboratory results collectively as "coronavirus." 2019-nCoV is a new coronavirus that has been shown to cause a range of illness from mild symptoms to severe disease and death. Testing for 2019-nCoV is only available through the U.S. Centers for Disease Control and Prevention (CDC) and must be arranged through Kern County Public Health Services Department (KCPHSD). Commercial laboratory tests such as respiratory panels neither rule out nor identify 2019-nCoV.

It is important to communicate to patients and families that, if they test positive for a common human coronavirus, it is not the same virus as 2019-nCoV, which caused the outbreak in China. Common human coronavirus typically present with mild to moderate symptoms, have few complications, and are rarely associated with fatalities.

Who do I contact regarding 2019 Novel Coronavirus?

Healthcare providers should contact KCPHSD with any questions regarding 2019-nCoV. During normal business hours, (661) 321-3000. After hours, on weekends, and holidays, call (661) 324-3551 and asked to be connected to Public Health Staff On Call.

What do I do if I suspect a patient with 2019 Novel Coronavirus?

- **Mask.** All patients presenting with respiratory symptoms should be given a mask to wear. This is expected to be a standard practice in all healthcare facilities as protection for all respiratory illnesses.
- **Isolate.** A patient suspected of 2019-nCoV should be immediately placed in an airborne infection isolation room (AIIR), also known as a negative pressure room. If an AIIR is not available, the patient should be placed in a single-occupancy room with the door kept closed.
- **Protect.** Personal protective equipment (PPE) must be worn while assessing or examining a patient suspected of 2019-nCoV. Standard precautions, droplet precautions, airborne precautions, and eye protection are recommended. This includes gloves, gown, respirator (N-95 or greater protection) and goggles or face shield. Additional respiratory protection, such as a powered air purifying respirator (PAPR), is recommended if aerosol-generating procedures are performed.
- **Assess.** Patients must meet the CDC's criteria for a [patient under investigation](#) (PUI) in order to request testing. The [PUI form](#) can be used as a tool to determine if the patient meets PUI criteria.
- **Report.** Contact KCPHSD immediately by phone for any patient suspected of 2019-nCoV. During regular business hours, call (661) 321-3000. After hours, on weekends, and holidays, call (661) 324-6551 and as to be connect to Public Health Staff On Call.
- **Collect.** If patient is approved for 2019-nCoV testing, collect specimens in accordance with [specimen collection guidelines](#). Specimens required for testing include bronchoalveolar lavage, tracheal aspirate, or sputum; NP swab *and* OP swab, nasopharyngeal wash/aspirate, or nasal aspirate; and serum. Additional specimens, such as stool and urine should also be collected. Viral culture is NOT recommended in the clinical laboratory as it should be performed under BSL3 conditions. At this time, diagnostic testing for 2019-nCoV is only available at CDC and must be requested through KCPHSD.
- **Clean.** Disinfection with an EPA-registered hospital grade disinfectant is appropriate for 2019-nCoV. Regular established procedures should be followed.

How do I protect myself and my staff from potentially infectious patients?

CDC has developed preparedness checklists for [Healthcare Providers](#) and [Hospitals](#) to evaluate their existing infection control processes. Steps include, but are not limited to:

- Triage all patients for symptoms and travel history. Place a mask on any patient with respiratory symptoms.
- Designate an airborne infection isolation room (AIIR) or other private room for assessing patients and identify the quickest path to that room with the least exposure to others.
- Ensure recommended PPE are available and easily accessible. Staff must be appropriately fit-tested and trained in correct doffing. Gloves, gown, respirator (N-95 or higher) and eye protection are recommended for 2019-nCoV.
- Reinforce hand hygiene and appropriate disinfection methods throughout your facility.

Early identification and isolation of suspect cases is critical. Many front line staff, such as greeters, security, and receptionists, are non-clinical. It is important to ensure these staff members are also included in protocols designed to recognize potentially infectious patients, trained in the processes, and kept up to date on the latest information. At this time, there is no recommendation for the general public to wear face masks for everyday activities.

What is the current Patient Under Investigation (PUI) criteria?

Healthcare providers should obtain a detailed travel history for all patients being evaluated for fever and acute respiratory illness. The criteria for a PUI for 2019-nCoV include both epidemiological risk factors and clinical features.

Epidemiologic Risk Factor	And	Clinical Features
Any person, including healthcare workers, who has had close contact* with a laboratory-confirmed 2019-nCoV patient within 14 days of symptom onset	&	Fever or signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)
A history of travel from Hubei Province, China (including Wuhan), within 14 days of symptoms onset	&	Fever <u>and</u> signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)
A history of travel from mainland China within 14 days of symptom onset	&	Fever <u>and</u> signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath) requiring hospitalization

All patients who meet PUI criteria, and any patient with ambiguous epidemiological risk factors or clinical features, should be reported immediately to KCPHSD for further consultation.

The PUI criteria may be updated after this FAQ is published. Please refer to the CDC's [Criteria to Guide Evaluation of Persons Under Investigation for 2019-nCoV](#) webpage for the most up to date criteria.

How else can I identify risk of 2019-nCoV in my patients?

CDC has developed some [guidance](#) regarding high-, medium-, and low-risk exposures in association with public health follow up. While these are not meant to apply to healthcare settings, it can provide additional information to further assess exposure risk levels in patients. In general,

- High risk exposures include
 - Travel to Hubei Province (include Wuhan) in the past 14 days
 - Close contact with a confirmed 2019-nCoV case without recommended PPE
- Medium risk exposures include
 - Travel to mainland China outside Hubei Province in the past 14 days
 - Close contact with a 2019-nCoV case while wearing recommended PPE
 - On an aircraft, sitting within 6 feet (two seats) of a confirmed 2019-nCoV case
- Low risk exposures include
 - Sitting within two rows (but not within 6 feet) of a confirmed 2019-nCoV case
 - Being in the same indoor environment as a confirmed 2019-nCoV case for an extended period of time.
- No identified risk includes
 - Transient contact, such as walking past in a hallway or briefly sharing the same room.

In general, the geographic exposures do not apply to travelers who only transit through an airport. Therefore, persons who have a short layover in an airport in China are not considered to have a medium- or high-risk exposure unless other exposures apply. For example, if the person is exposed to a confirmed 2019-nCoV case while in flight, their risk level may change.

Do all patients suspected with 2019-nCoV need to go to the Emergency Department or be admitted to the hospital?

No. 2019-nCoV can present with a range of symptoms severity. Many patients with mild symptoms may be assessed in the outpatient setting. If the healthcare facility does not have an AIIR, the patient should be placed in a single-occupancy patient room with door kept shut. Staff should adhere to the recommend PPE of gloves, gown, respirator (N-95 or greater protection) and goggles/face shield. Patients with severe symptoms (e.g. acute respiratory distress) should be referred to higher level of care. Home care is possible for patients who do not need to be admitted to an acute care facility or are medically ready to be discharged home. Patients who are still suspected of 2019-nCoV upon discharge should receive education regarding [home isolation](#). KCPHSD must be notified prior to patient discharge.

How do I clinically manage a patient with suspected or confirmed 2019-nCoV?

Patients identified with 2019-nCoV have been reported with a range of symptoms and severity. Most studies have been performed in hospitalized patients with pneumonia, which may skew data towards more severe. Frequently reported symptoms include fever, cough, and myalgia or fatigue. Sore throat has been reported in some patients early in the clinical course. Less commonly reported symptoms include sputum production, headache, hemoptysis, and diarrhea. Risk factors for severe illness are not yet clear. Older patients and those with chronic medical conditions such as diabetes, hypertension, and cardiovascular disease may be at higher risk for severe illness. Some reports suggest the potential for clinical deterioration during the second week of illness, so patients should be closely monitored. Acute respiratory distress syndrome (ARDS) developed in 17%-29% of hospitalized patients, and some hospitalized patients have required advanced life support with invasive mechanical ventilation.

Currently, there is no specific treatment for 2019-nCoV. Clinical management includes prompt infection control methods and supportive care of complications, including advanced organ support if needed. Corticosteroids should be avoided unless indicated for other reasons (e.g. COPD exacerbation or septic shock) due to potential prolonged viral replication.

The most common laboratory abnormalities reported among hospitalized patients include leukopenia, leukocytosis, lymphopenia and elevated ALT/AST. Most patients have normal serum levels of procalcitonin upon admission. Chest CT images have shown bilateral involvement in most patients. Multiple areas of consolidation and ground glass opacities are typical findings reported to date.

Adherence to PPE, including standard, contact, airborne precautions with eye protection, should be carefully monitored in healthcare facilities. Healthcare providers may be excluded from work for up to 14 days after last exposure if they have unprotected or inadequately protected exposure to a confirmed 2019-nCoV case. Improper doffing of used PPE would also warrant exclusion from work. Transmission from infected patients to healthcare workers has been reported in China, but there has been no transmission from a confirmed 2019-nCoV patient to a healthcare worker documented in the U.S.

Patients who do not clinically need to be admitted to the hospital may be discharged home in consultation with KCPHSD. A discharge plan may be required to ensure the home setting is appropriate for limiting the risk of transmission to others.

How do I request testing for 2019-nCoV?

Currently, testing for 2019-nCoV is only available through the CDC. All testing should be requested through KCPHSD by calling (661) 321-3000 during business hours and (661) 324-3551 after hours. CDC will approve testing based on the Patient Under Investigation (PUI) epidemiological and clinical criteria. Testing for respiratory infections, such as influenza, should be performed concurrently with 2019-nCoV testing. Results for common respiratory infections should be sent to KCPHSD for all PUIs.

How do I interpret test results for 2019-nCoV?

Current CDC testing methods provide accurate results when detecting virus in the nose or throat of symptomatic patients. Symptomatic patients who test negative are highly likely to be negative. However, the sensitivity of test results in asymptomatic persons is unknown. A negative test in an asymptomatic person does not preclude the possibility of 2019-nCoV infection. A previously negative asymptomatic or mildly symptomatic person who presents with new or increasingly severe symptoms should be reevaluated for 2019-nCoV. If the patient meets the epidemiological and clinical criteria for a PUI, the patient should be retested.

What if I (a healthcare worker) was exposed to a patient with 2019-nCoV?

Current [CDC guidance](#) is intended for exposure to a confirmed 2019-nCoV case; however, it may be applied to suspect 2019-nCoV cases while testing and evaluation are ongoing. In general

- High risk exposures include
 - Performing or being present during an aerosol-generating procedure or during which respiratory secretions are likely to be poorly controlled (e.g. cardiopulmonary resuscitation, intubation, extubations, bronchoscopy, nebulizer therapy, sputum inductions) when the healthcare provider's eyes, nose, or mouth are not protected.
- Medium risk exposures include
 - Prolonged close contact with a 2019-nCoV where healthcare provider's mucous membranes or hands were exposed to material potentially infected with 2019-nCoV.
- Low risk exposures include
 - Prolonged close contact with a 2019-nCoV case while adhering to recommended infection control practices (including PPE). Current recommendations should protect healthcare providers from exposure; however low risk is classified to account for any inconsistencies in use or adherence that could result in unrecognized exposure.
- No identified risk
 - Applies to healthcare providers with no direct patient contact and no entry into an active patient management area who adheres to routine safety precautions.

Healthcare workers who are identified with a high- or medium-risk exposure may be excluded from work for up to 14 days after the last exposure. Healthcare workers include all paid and unpaid persons serving in healthcare settings who have the potential for direct or indirect exposure to patients or infectious materials, including body substances; contaminated medical supplies, devices, and equipment; contaminated environmental surfaces; or contaminated air. The above risk assessment does not include clinical laboratory personnel.

How should I advise my patients who are scheduled to travel to China?

Travel restrictions are changing rapidly. CDC has issued a [Level 3 Travel Alert](#) (Avoid Nonessential Travel) for China. The U.S. State Department has issued a [Level 4 Travel Advisory](#) (Do Not Travel) for China. As of February 2, 2020, a [federal proclamation](#) limits entry into the U.S. for those who have been in China in the past 14 days.

The risk of 2019-nCoV in China and abroad continues to evolve. Persons who plan to travel to China should assess the current risks and potential future risks of 2019-nCoV. They should be aware that travel restrictions may change while they are in China and that they may be required to undergo quarantine or isolation upon their return.

How should I advise my patients who have recently traveled to China?

Symptomatic travelers should be advised to contact their healthcare provider regarding symptoms. They should call their healthcare provider and KCPHSD prior to seeking medical care whenever possible so that infection control measures for proper assessment can be implemented.

At minimum, asymptomatic persons who recently traveled should self-monitor for symptoms such as fever, cough, and shortness of breath until 14 days after leaving China. Returning travelers should avoid congregating settings (such as shopping centers, movie theaters, stadiums, workplaces, and schools or classroom settings). Returning travelers should practice social distancing, which includes avoiding public transportation, limiting contact with others, and maintaining physical distance from others. Asymptomatic persons who recently traveled to China and others who may have a potential exposure to a 2019-nCoV case may be subject to additional restrictions by order of the Health Officer.

What is the risk of nCoV in Kern County?

Currently, there is no evidence of sustained person-to-person transmission of 2019-nCoV in the U.S. While there have been cases identified in California, including person-to-person transmission in a close household contact, there is no evidence of transmission to the general public at this time. KCPHSD continues to work with healthcare providers and the community to prepare for the potential of 2019-nCoV in Kern County.

Where can I find additional information?

KCPHSD will continue to update our [2019-nCoV website](https://kernpublichealth.com/2019-novel-coronavirus/) (<https://kernpublichealth.com/2019-novel-coronavirus/>) with new information as we receive it. As this is a rapidly evolving situation, we encourage healthcare providers to also visit the 2019-nCoV websites for [CDPH](#), [CDC](#), and [WHO](#) to get the most up-to-date information.