



Nebraska Department of Health and Human Services
HEALTH ALERT NETWORK
Advisory



TO: Healthcare Providers, Infection Control, Labs, and Public Health

FROM: Thomas J. Safranek, M.D. Gary Anthone, MD
State Epidemiologist Director of Public Health and Chief Medical Officer
PHONE: 402-471-2937 PHONE: 402-471-8566

RE: Updated Guidance on Evaluating and Testing Persons for Coronavirus Disease 2019 (COVID-19)

DATE: March 11, 2020

This advisory is to update the Nebraska medical community about laboratory testing for the COVID-19 virus in Nebraska.

Specimen Collection Advice for Clinics and Emergency Rooms Evaluating Patients with Febrile Respiratory Illness

Patients presenting to healthcare facilities for evaluation of any febrile respiratory illness should be fitted with a surgical facemask upon arrival and should be segregated from other patients (e.g., immediately moved to an exam room). This is to prevent transmission of respiratory pathogens include COVID-19.

If the clinical presentation and the epidemiologic risk factors create a HIGH index of suspicion of COVID-19 (this is a clinical judgement-further guidance below) personnel who collect NP (nasopharyngeal) swabs should don full personal protective equipment (PPE) prior to specimen collection.

- Ideally this should include an N95 respirator, eye protection, disposable gloves, and a gown.
- If N95 respirators or equivalent PPE are not available, the patient should be referred to a location where the person undertaking specimen collection has all CDC-recommended PPE.

If it is determined that the risk of COVID-19 is low based on factors described below, facilities lacking a supply of N95 respirators should substitute a surgical mask on persons collecting the specimen. If available, a face shield would be preferable to goggles. At the time of specimen collection, the patient's surgical facemask should be lowered sufficiently to expose the nares, and a proper swabbing should commence per the instructional video cited below. The patient's surgical facemask should be properly repositioned immediately upon completion of specimen collection.

Public health authorities, working with providers, hospitals and health care systems around the state, have prioritized the establishment of dedicated COVID-19 specimen collection locations and the distribution of N95 respirators to clinics collecting NP specimens. Additional guidance will be shared once such plans are formalized.

It is imperative that providers know and practice the strategies for preserving the supply of N95 respirators as outlined by the CDC: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html>

Methodology of Specimen Collection

- It remains CRITICALLY IMPORTANT that staff responsible for collecting nasopharyngeal (NP) swabs be thoroughly trained and strictly compliant with specimen collection protocols. Failure to collect a proper specimen could result in a FALSE

NEGATIVE test which could have major consequences for controlling COVID-19. A training video can be found here: <https://www.youtube.com/watch?v=hXohAo1d6tk>

- Use only synthetic fiber swabs with plastic shafts. Do not use calcium alginate swabs or swabs with wooden shafts, as they may contain substances that inactivate some viruses and inhibit PCR testing. Place swabs immediately into sterile tubes containing 2-3 ml of viral transport media.
- Nasopharyngeal swab: Insert a swab into the nostril parallel to the palate. Leave the swab in place for a few seconds to absorb secretions.
- At this time influenza is still circulating widely, and should be ruled out before additional testing.

Availability of Testing: Capacity is Expanding

- The Nebraska Public Health Laboratory (NPHL) performs the CDC-approved test, can test 30 specimens per run, and could expand in the days to come. This requires approval through a local health department (LHD) (<http://dhhs.ne.gov/CHPM%20Documents/contacts.pdf>)
- The University of Nebraska Medical Center (UNMC) has a separate test which is available through their Regional Pathology Laboratory (RPL), for clinics and providers within the Nebraska Medicine/UNMC system, with an initial capacity of 64 specimens per day.
- LabCorp and Quest are providing commercial COVID-19 virus tests through their referral networks. Mayo Clinic, ARUP and Viracor will be in production later this week. Published turnaround time is 3-4 days. Any patient (+) for COVID-19 virus at a commercial lab needs to be immediately reported to local/state public health office. All such (+) tests from commercial labs are provisional pending confirmation at NPHL.

Testing Algorithms

- To discourage testing of specimens with low/lesser likelihood of positivity, screen for travel and exposure history, such as travel to areas where the virus is known to be spreading (e.g., any Level 3 or 2 country---at present this is China, Iran, Italy, South Korea, Japan but please refer to CDC website <https://www.cdc.gov/coronavirus/2019-ncov/travelers/after-travel-precautions.html> as this can change), or exposure to a known (+) person.
- Clinicians should consider and test for infectious agents known to be circulating for which testing is readily available:
 - rapid influenza tests
 - multiplex PCR respiratory viral panels.
- Anyone with a severe respiratory disease of unclear etiology, especially with a negative flu and respiratory viral panel multiplex PCR test (RVP) (e.g., Biofire respiratory panel) should be tested for COVID-19.
- For additional guidance see the CDC Health Alert below for advice on clinical decisions to test for the COVID-19 virus (Criteria to Guide Evaluation and Laboratory Testing for COVID-19)

Written instructions from NPHL and CDC on handling samples:

- <http://www.nphl.org/documents/NPHL%20Alert%20COVID-19%20Collection%20and%20Handling%20in%20NE%20v2020%2002%2012.pdf>
- <https://www.cdc.gov/coronavirus/2019-nCoV/lab/guidelines-clinical-specimens.html>

Video for Donning and Doffing: Important that HCP obtaining specimens be in all required PPE including either an N95 or a PAPR. If using an N95 also ideally use a face shield

- <https://www.youtube.com/watch?v=c20Cfl-Cr8M>

This is an official **CDC HEALTH UPDATE**

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Updated Guidance on Evaluating and Testing Persons for Coronavirus Disease 2019 (COVID-19)

Summary

The Centers for Disease Control and Prevention (CDC) continues to closely monitor and respond to the COVID-19 outbreak caused by the novel coronavirus, SARS-CoV-2.

This CDC Health Alert Network (HAN) Update highlights guidance and recommendations for evaluating and identifying patients who should be tested for COVID-19 that were shared on March 4, 2020, on the CDC COVID-19 website at <https://www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html>. It supersedes the guidance and recommendations provided in CDC's HAN 428 distributed on February 28, 2020.

The outbreak that began in Wuhan, Hubei Province, has now spread throughout China and to 101 other countries and territories, including the United States. As of March 8, 2020, there were more than 105,000 cases reported globally. In addition to sustained transmission in China, there is now community spread in several additional countries. CDC has updated travel guidance to reflect this information (<https://www.cdc.gov/coronavirus/2019-ncov/travelers/index.html>).

As of March 7, 2020, there were a total of 213 cases within the United States, of which, 49 were among repatriated persons from high-risk settings. Among the other 164 cases that were diagnosed in the United States, 36 were among persons with a history of recent travel in China or other affected areas, and 18 were persons in close contact with another confirmed COVID-19 patient (i.e., person-to-person spread); 110 cases are currently under investigation. During the week of February 23, community spread of the virus that causes COVID-19 was reported in California in two places, Oregon, and Washington. Community spread in Washington resulted in the first reported case of COVID-19 in a healthcare worker, and the first outbreak in a long-term care facility. The first death due to COVID-19 was also reported from Washington; there have now been 11 reported deaths in the U.S. from COVID-19. As of March 7, 2020, COVID-19 cases had been reported by 19 states. CDC will continue to work with state and local health departments, clinicians, and laboratorians to identify and respond to other cases of COVID-19, especially those with an unknown source of infection, to limit further community spread. The most recent update describing COVID-19 in the United States can be found at <https://www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html>.

Recognizing persons who are at risk for COVID-19 is a critical component of identifying cases and preventing further transmission. With expanding spread of COVID-19, additional areas of geographic risk are being identified and the criteria for considering testing are being updated to reflect this spread. In addition, with increasing access to testing, the criteria for testing for COVID-19 have been expanded to include more symptomatic persons, even in the absence of travel history to affected areas or known exposure to another case, to quickly detect and respond to community spread of the virus in the United States.

Criteria to Guide Evaluation and Laboratory Testing for COVID-19

Clinicians should work with their local and state health departments to coordinate testing through public health laboratories. In addition, COVID-19 diagnostic testing, authorized by the Food and Drug Administration under an Emergency Use Authorization (EUA), is becoming available in clinical laboratories. This additional testing capacity will allow clinicians to consider COVID-19 testing for a wider group of symptomatic patients.

Clinicians should use their judgment to determine if a patient has signs and symptoms compatible with COVID-19 and whether the patient should be tested. Most patients with confirmed COVID-19 have developed fever¹ and/or symptoms of acute respiratory illness (e.g., cough, difficulty breathing). Priorities for testing may include:

1. Hospitalized patients who have signs and symptoms compatible with COVID-19 in order to inform decisions related to infection control.
2. Other symptomatic individuals such as, older adults (age \geq 65 years) and individuals with chronic medical conditions and/or an immunocompromised state that may put them at higher risk for poor outcomes (e.g., diabetes, heart disease, receiving immunosuppressive medications, chronic lung disease, chronic kidney disease).
3. Any persons including healthcare personnel², who within 14 days of symptom onset had close contact³ with a suspect or laboratory-confirmed⁴ COVID-19 patient, or who have a history of travel from affected geographic areas⁵ (see below) within 14 days of their symptom onset.

There are epidemiologic factors that may also help guide decisions about COVID-19 testing. Documented COVID-19 infections in a jurisdiction and known community transmission may contribute to an epidemiologic risk assessment to inform testing decisions. Clinicians are strongly encouraged to test for other causes of respiratory illness (e.g., influenza).

Mildly ill patients should be encouraged to stay home and contact their healthcare provider by phone for guidance about clinical management. Patients who have severe symptoms, such as difficulty breathing, should seek care immediately. Older patients and individuals who have underlying medical conditions or are immunocompromised should contact their physician early in the course of even mild illness.

International Areas with Sustained (Ongoing) Transmission

Last updated March 8, 2020

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

- China: Level 3 Travel Health Notice (<https://wwwnc.cdc.gov/travel/notices/warning/novel-coronavirus-china>)
- Iran: Level 3 Travel Health Notice (<https://wwwnc.cdc.gov/travel/notices/warning/coronavirus-iran>)
- Italy: Level 3 Travel Health Notice (<https://wwwnc.cdc.gov/travel/notices/warning/coronavirus-italy>)
- Japan: Level 2 Travel Health Notice (<https://wwwnc.cdc.gov/travel/notices/alert/coronavirus-japan>)
- South Korea: Level 3 Travel Health Notice (<https://wwwnc.cdc.gov/travel/notices/warning/coronavirus-south-korea>)

Recommendations for Reporting, Laboratory Testing, and Specimen Collection

Clinicians should immediately implement recommended infection prevention and control practices (<https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html>) if a patient is suspected of having COVID-19. They should also notify infection control personnel at their healthcare facility and their state or local health department if it is suspected that a patient may have COVID-19. State health departments that have identified a person suspected of having COVID-19 or a laboratory-confirmed case should complete a PUI and Case Report form through the processes identified on CDC's

Coronavirus Disease 2019 website (<https://www.cdc.gov/coronavirus/2019-ncov/php/reporting-pui.html>). If specimens are sent to CDC for laboratory testing, state and local health departments can contact CDC's Emergency Operations Center (EOC) at 770-488-7100 for assistance with obtaining, storing, and shipping, including after hours, on weekends, and holidays

Guidance for the identification and management of potentially exposed contacts of a confirmed case of COVID-19 can be found in Interim US Guidance for Risk Assessment and Public Health Management of Persons with Potential Coronavirus Disease 2019 (COVID-19) Exposures: Geographic Risk and Contacts of Laboratory-confirmed Cases (<https://www.cdc.gov/coronavirus/2019-ncov/php/risk-assessment.html>).

Separate guidance for the management of potentially exposed contacts of a COVID-19 case who are healthcare personnel is provided in Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease (COVID-19) (<https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html>).

For initial diagnostic testing for COVID-19, CDC recommends collecting and testing upper respiratory tract specimens (nasopharyngeal AND oropharyngeal swabs). CDC also recommends testing lower respiratory tract specimens, if available. For patients who develop a productive cough, sputum should be collected and tested for SARS-CoV-2. The induction of sputum is not recommended. For patients for whom it is clinically indicated (e.g., those receiving invasive mechanical ventilation), a lower respiratory tract aspirate or bronchoalveolar lavage sample should be collected and tested as a lower respiratory tract specimen. Specimens should be collected as soon as possible once a person has been identified for testing, regardless of the time of symptom onset. See Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Patients Under Investigation (PUIs) for COVID-19 (<https://www.cdc.gov/coronavirus/2019-nCoV/lab/guidelines-clinical-specimens.html>) and Biosafety FAQs for handling and processing specimens from suspected cases and PUIs (<https://www.cdc.gov/coronavirus/2019-ncov/lab/biosafety-faqs.html>).

¹Fever may be subjective or confirmed

²For healthcare personnel, testing may be considered if there has been exposure to a person with suspected COVID-19 without laboratory confirmation. Because of their often extensive and close contact with vulnerable patients in healthcare settings, even mild signs and symptoms (e.g., sore throat) of COVID-19 should be evaluated among potentially exposed healthcare personnel. Additional information is available in CDC's Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease 2019 (COVID-19) (<https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html>).

³Close contact is defined as—

a) being within approximately 6 feet (2 meters) of a COVID-19 case for a prolonged period; close contact can occur while caring for, living with, visiting, or sharing a healthcare waiting area or room with a COVID-19 case

– or –

b) having direct contact with infectious secretions of a COVID-19 case (e.g., being coughed on)

If such contact occurs while not wearing recommended personal protective equipment (PPE) (e.g., gowns, gloves, NIOSH-certified disposable N95 respirator, eye protection), criteria for PUI consideration are met.

Additional information is available in CDC's updated Interim Infection Prevention and Control Recommendations for Patients with Confirmed COVID-19 or Persons Under Investigation for COVID-19 in Healthcare Settings (<https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html>).

Data to inform the definition of close contact are limited. Considerations when assessing close contact include the duration of exposure (e.g., longer exposure time likely increases exposure risk) and the clinical symptoms of the person with COVID-19 (e.g., coughing likely increases exposure risk as does exposure to a severely ill patient). Special consideration should be given to healthcare personnel exposed in healthcare settings as described in CDC's Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with COVID-19 (<https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html>).

⁴Documentation of laboratory-confirmation of COVID-19 may not be possible for travelers or persons caring for COVID-19 patients in other countries.

⁵Affected areas are defined as geographic regions where sustained community transmission has been identified. For a list of relevant affected areas, see Coronavirus Disease 2019 Information for Travel (<https://www.cdc.gov/coronavirus/2019-ncov/travelers/index.html>).

For More Information

More information is available at the COVID-19 website: <https://www.cdc.gov/coronavirus/2019-ncov/index.html>.

The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.

Categories of Health Alert Network messages:

Health Alert	Requires immediate action or attention; highest level of importance
Health Advisory	May not require immediate action; provides important information for a specific incident or situation
Health Update	Unlikely to require immediate action; provides updated information regarding an incident or situation
HAN Info Service	Does not require immediate action; provides general public health information

###This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, epidemiologists, HAN coordinators, and clinician organizations###