



New Jersey Department of Health
Surveillance Criteria and Testing for Novel Coronavirus 2019 (2019-nCoV)

Protocol for Healthcare Providers and Local Health Departments
 January 31, 2020

Key steps in case screening for Novel Coronavirus 2019 (2019-nCoV)

- 1. Confirm that the report meets current SURVEILLANCE CRITERIA**
- 2. Ensure implementation of CONTROL MEASURES**
- 3. Ensure COLLECTION OF SPECIMENS for diagnostic testing**
- 4. Ensure NOTIFICATION procedures are followed**
- 5. Ensure completion of the 2019-nCoV PERSON UNDER INVESTIGATION FORM**

SURVEILLANCE CRITERIA

Healthcare Providers

To rapidly detect the importation of 2019-nCoV, NJDOH requests health care providers to report patients meeting one of the following criteria. Only individuals meeting the criteria below will be considered for testing at CDC.

Clinical Features	&	Epidemiologic Risk
Fever ¹ or signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)	AND	Any person, including health care workers, who has had close contact ² with a laboratory-confirmed 2019-nCoV patient within 14 days of symptom onset
Fever ¹ and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath)	AND	A history of travel from Hubei Province , China within 14 days of symptom onset
Fever ¹ and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) requiring hospitalization	AND	A history of travel from mainland China within 14 days of symptom onset

The criteria are intended to serve as guidance for evaluation. Patients should be evaluated and discussed with public health departments on a case-by-case basis if their clinical presentation or exposure history is equivocal (e.g., uncertain travel or exposure).

1. Fever ($\geq 100.4^{\circ}\text{F}$) may not be present in some patients, such as those who are very young, elderly, immunosuppressed, or taking certain medications. Clinical judgement should be used to guide testing of patients in such situations.
2. Close contact is defined as: a) being within approximately 6 feet (2 meters), or within the room or care area, of a novel coronavirus case for a prolonged period of time while not wearing recommended personal protective equipment or PPE (e.g., gowns, gloves, NIOSH-certified disposable N95 respirator, eye protection); close contact can include caring for, living with, visiting, or sharing a healthcare waiting area or room with a novel coronavirus case. – *or* – b) having direct contact with infectious secretions of a novel coronavirus case (e.g., being coughed on) while not wearing recommended personal protective equipment.
3. Documentation of laboratory-confirmation of 2019-nCoV may not be possible for travelers or persons caring for patients in other countries.

INDIVIDUALS WHO DO NOT MEET PUI CRITERIA

Health care providers evaluating individuals who have respiratory symptoms and have traveled to China but do not meet other criteria (e.g., hospitalization) in the surveillance criteria described above should:

- Determine if the patient requires an inpatient admission for management of clinical illness.
- If admission is not warranted but patient is symptomatic with a respiratory infection provide guidance on respiratory hygiene. This would include staying home while symptomatic except to get medical care, washing hand frequently, covering coughs and sneezes with a tissue or sleeve, and avoiding close contacts within the home by staying in a separate room. Symptomatic patient should also stay home from work or school while ill.
- Advise the patient to seek additional medical care if their condition worsens. They should contact their provider ahead of this visit to alert them of their travel history and wear a mask during transport to/from this visit.

INFECTION CONTROL

- Health care entities should put in place measures to detect suspect cases early (e.g., signage, triage assessments) and isolate all suspect cases immediately upon suspicion.
 - 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, ideally an airborne infection isolation room if available. Healthcare personnel entering the room should use standard precautions, contact precautions, airborne precautions, and use eye protection (e.g., goggles or a face shield). ***Immediately notify your healthcare facility's infection control personnel and local health department.***
- **Standard, contact, and airborne precautions plus eye protection** are recommended for management of hospitalized patients with known or suspected 2019-nCoV infection. Infection preventionists, hospital epidemiologists and healthcare providers should carefully review information contained in the **[Interim Infection Prevention and Control Recommendations for Patients with Known or Patients Under Investigation for 2019 Novel Coronavirus \(2019-nCoV\) in a Healthcare Setting](#)** regarding infection control and prevention measures to minimize possible exposure to, and transmission of 2019-nCoV.
- People who are confirmed to have, or being evaluated for, 2019-nCoV infection and ***do not require hospitalization for medical reasons*** may be cared for and isolated in a residential setting after a healthcare professional and public health official determines that the setting is suitable. Providers should consult with both NJDOH and their local health department to discuss home isolation, home quarantine, or other measures for close contacts and for patients who are being evaluated for 2019-nCoV or who have tested positive. Additional guidance on this topic can be found at: **<https://www.cdc.gov/coronavirus/2019-ncov/guidance-home-care.html>**

- Health care providers who care for patients with 2019-nCoV should be monitored. Guidance on case and contact management can be found on NJDOH website at: <https://www.nj.gov/health/cd/topics/ncov.shtml>
- These recommendations will be updated as additional information on 2019-nCoV, its transmissibility, epidemiology, available treatment, or vaccine options become available. These interim recommendations are based upon currently available information.

COLLECTION AND TRANSPORT OF CLINICAL SPECIMENS

The Centers for Disease Control and Prevention (CDC) has the ability to test for 2019-nCoV. Approval for testing will be granted only after clinical and epidemiologic criteria of the suspect report is reviewed by the local health department and the NJDOH.

CDC currently recommends the collection of specimens from three different sources for each suspect report. Collection of one lower respiratory tract specimens (i.e., bronchoalveolar lavage, tracheal aspirate, pleural fluid, sputum), two upper respiratory tract specimens (one nasopharyngeal and one oropharyngeal), and one serum sample are strongly recommended. *Ideally, all three specimen types should be collected on all suspected 2019-nCoV patients.* It is advisable for respiratory specimens to be collected as soon as possible after symptoms begin – ideally within 7 days of symptom onset. However, if more than a week has passed since symptom onset and the patient is still symptomatic, respiratory samples should still be collected, especially lower respiratory specimens since respiratory viruses can still be detected by rRT-PCR.

Additional information on specimen collection, handling and testing is available at: <https://www.cdc.gov/coronavirus/2019-nCoV/guidelines-clinical-specimens.html>
<https://www.cdc.gov/coronavirus/2019-nCoV/lab-biosafety-guidelines.html>

Appropriate infection control procedures should be followed when collecting samples and can be found at: <https://www.cdc.gov/coronavirus/2019-nCoV/hcp/infection-control.html>

Shipping

NJDOH Communicable Disease Service (CDS) staff will carefully evaluate each report to determine the immediacy in which the specimen should be transported and tested. CDS will work with the local health department and healthcare facility to ensure that samples are properly shipped either directly to CDC or via the State Public Health and Environmental Laboratory (NJPHLEL). When shipping via commercial carrier you must abide by IATA shipping regulations which can be found at www.iata.org or <http://www.fmcsa.dot.gov/regulations/hazardous-materials>. Specific specimen storage instructions can be found in the following document on the CDC website: <https://www.cdc.gov/coronavirus/2019-nCoV/guidelines-clinical-specimens.html>.

Submission Forms

Shipping Direct to CDC

Laboratories may be asked to complete a CDC 50.34 form for each specimen that will be transported to CDC. This form is available at: <https://www.cdc.gov/laboratory/specimen-submission/pdf/form-50-34.pdf>. Laboratories should be prepared to complete and electronically email this document in an encrypted fashion to NJDOH if requested. Label the **vial containing the specimen** with patient's first and last name, date of birth, medical record number, date of collection, and specimen type. Incorrectly labeled samples may be denied for testing. Specimen tracking information should be email to NJDOH at Influenzaadvisorygroup@doh.nj.gov.

Shipping to NJPHEL for forwarding to CDC

The SRD-1 form (available at <http://www.state.nj.us/health/forms/srd-1.dot>) should be completely filled out for **each** specimen that is sent. Label the **vial containing the specimen** with patient's first and last name, date of birth, medical record number, date of collection, and specimen type. Incorrectly labeled samples may be denied for testing.

NOTIFICATION

Healthcare Providers

Cases meeting the above surveillance criteria should be reported **IMMEDIATELY** to the local health department (LHD) where the patient resides. If the patient residence is unknown, report to your own local health department. Local health departments are available 24/7/365. Contact information for local health departments can be found at: www.localhealth.nj.gov. If LHD personnel are unavailable, healthcare providers should report the case to the New Jersey Department of Health (NJDOH), Communicable Disease Service (CDS) at 609-826-5964, Monday through Friday 8:00 AM - 5:00 PM. On weekends, evenings and holidays, CDS can be reached at (609) 392-2020.

Local Health Departments

When a local health department receives a report regarding a patient meeting the 2019-nCoV surveillance criteria, the protocols contained within this document for screening, isolation, and collection of lab specimens should be followed. Information should be communicated **IMMEDIATELY** to NJDOH CDS at 609-826-5964, Monday through Friday 8:00 AM - 5:00 PM. On weekends, evenings and holidays, CDS can be reached at (609) 392-2020.

The healthcare provider and/or the local health department should complete the **2019-nCoV Patient Under Investigation (PUI) Short Form** (please see the last page of this document). Completed forms should be faxed to CDS at 609-826-5972 or emailed via encrypted message to InfluenzaAdvisoryGroup@doh.nj.gov. This form will be reviewed by CDS staff who will make the final determination if the case meets surveillance criteria and if a specimen will be accepted for testing.

REFERENCES

- NJDOH – General Information Page
 - <https://www.nj.gov/health/cd/topics/ncov.shtml>
- CDC – General Information Page
 - <https://www.cdc.gov/coronavirus/2019-ncov/index.html>
- CDC – Information on Infection Control in Health Care Setting
 - <https://www.cdc.gov/coronavirus/2019-nCoV/hcp/infection-control.html>
- CDC – Information for Laboratories
 - <https://www.cdc.gov/coronavirus/2019-nCoV/guidance-laboratories.html>
- CDC - Hospital Preparedness Checklist
 - <https://www.cdc.gov/coronavirus/2019-ncov/hcp/hcp-hospital-checklist.html>
- CDC - Healthcare Providers Preparedness Checklist
 - <https://www.cdc.gov/coronavirus/2019-ncov/hcp/hcp-personnel-checklist.html>
- EPA guidance on Emerging Viral Pathogens
 - https://www.epa.gov/sites/production/files/2016-09/documents/emerging_viral_pathogen_program_guidance_final_8_19_16_001_0.pdf

Interim 2019 novel coronavirus (2019-nCoV) patient under investigation (PUI) form

For Patients Under Investigation (PUIs), complete and send this form to influenzaadvisorygroup@doh.nj.gov or fax to (609) 826-5972. Include additional pages if necessary.

Today's date _____ State ID (CDRSS) _____

Patient address _____ State _____ County _____

Interviewer's name _____ Phone _____ Email _____

Physician's name _____ Phone _____ Pager or Email _____

Sex M F Age _____ yr. mo. Residency US resident Non-US resident, country _____

Occupation: _____

PUI Criteria

Date of symptom onset _____

Does the patient have any of the following signs and symptoms (check all that apply)?

- Fever ($\geq 100.4^{\circ}\text{F}$) Cough Sore throat Shortness of breath Chills Headache Muscle aches Vomiting Abdominal pain Diarrhea Other, Specify _____

In the 14 days before symptom onset, did the patient:

Travel outside of the U.S.? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unknown If yes, specify country/province/city _____
Reside in Wuhan City <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unknown
Spend time in Wuhan City, China? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unknown If yes, date traveled to Wuhan City _____ Date traveled from Wuhan City _____ Date arrived in US _____
Flight Details: <input type="checkbox"/> Direct Flight <input type="checkbox"/> Indirect Flight Specify Flight Connections (e.g., WUH→HKG→EWR) _____
Have close contact with a person who is under investigation for 2019-nCoV while that person was ill? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unknown
Have close contact with a laboratory-confirmed 2019-nCoV case while that case was ill? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unknown

Additional Patient Information

Is the patient a health care worker? Y N Unknown

Does the patient have a history of being in a healthcare facility (as a patient, worker, or visitor) in Wuhan City, China? Y N Unknown

Does the patient have a history of being in a healthcare facility (as a patient, worker, or visitor) outside of U.S.? Y N Unknown

If yes, where? _____

Is patient a member of a cluster of patients with severe acute respiratory illness (e.g., fever and pneumonia requiring hospitalization) of unknown etiology in which nCoV is being evaluated? Y N Unknown

Diagnosis (select all that apply): Pneumonia (clinical or radiologic) Y N Acute respiratory distress syndrome Y N

Comorbid/underlying conditions (check all that apply): None Unknown Pregnancy Diabetes Cardiac disease Hypertension

Chronic pulmonary disease Chronic kidney disease Chronic liver disease Immunocompromised Other, specify _____

Is the patient pregnant? Y N Unknown

Is/was the patient: Hospitalized? Y N If yes: Admitted to ICU? Y N Facility name: _____

Intubated? Y N On ECMO? Y N Patient died? Y N

Does the patient have another diagnosis/etiology for their respiratory illness? Y, Specify _____ N Unknown

Respiratory diagnostic results

Test	Pos	Neg	Pending	Not done
Influenza rapid Ag <input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Influenza PCR <input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RSV	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. metapneumovirus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parainfluenza (1-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adenovirus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Test	Pos	Neg	Pending	Not done
Rhinovirus/enterovirus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coronavirus (OC43, 229E, HKU1, NL63)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>M. pneumoniae</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>C. pneumoniae</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, Specify _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Specimens for 2019-nCoV testing

Specimen type	Specimen ID	Date collected	Sent to CDC?
NP swab			<input type="checkbox"/>
OP swab			<input type="checkbox"/>
Sputum			<input type="checkbox"/>
BAL fluid			<input type="checkbox"/>
Tracheal aspirate			<input type="checkbox"/>

Specimen type	Specimen ID	Date collected	Sent to CDC?
Stool			<input type="checkbox"/>
Urine			<input type="checkbox"/>
Serum			<input type="checkbox"/>
Other, specify _____			<input type="checkbox"/>