

**2019 Novel Coronavirus Outbreak: Clinical Bulletin #5****February 28, 2020****KEY POINTS**

- 1) **NEW:** On February 27, 2020, the U.S. Centers for Disease Control and Prevention (CDC) revised their definitions of a person under investigation (PUI) for coronavirus disease 2019 (COVID-19) (see “Case Definitions” section below). The updates reflect the current epidemiology of COVID-19. Major changes in the PUI definitions include:
  - Expansion of the list of countries deemed to represent an “epidemiologic risk” for COVID-19. The list of countries now includes: mainland China, Iran, Italy, Japan, and South Korea.
  - A new PUI category for persons with fever and severe acute lower respiratory illness (e.g., pneumonia, ARDS) requiring hospitalization and without alternative explanatory diagnosis (e.g., influenza). No epidemiologic risk/exposure is required for this group of persons.
- 2) **NEW:** NYP screening protocols have been revised to reflect the updated CDC PUI definitions.
- 3) Recommended infection prevention and control strategies for persons with suspected or confirmed COVID-19 (i.e., persons who meet the definition of a COVID-19 PUI) remain the same:
  - Patient should immediately be given a surgical mask and moved to a negative pressure room with AIRBORNE, CONTACT, and DROPLET (eye protection) PRECAUTIONS.
- 4) Notify Infection Prevention and Control and the local Department of Health of all suspected cases of COVID-19.
- 5) NYP personnel who have had contact with a person with COVID-19 **MUST** contact Workforce Health & Safety (WH&S) **BEFORE** returning to work.
- 6) **NEW:** Personnel returning from mainland China, Iran, Italy, Japan, or South Korea **MUST** contact WH&S for further guidance **BEFORE** returning to work. Persons planning to travel to any of these countries should contact WH&S prior to their trip.
- 7) The risk of exposure to SARS-CoV-2 currently remains low in the U.S.; however, it is anticipated that community spread of the virus will occur in the U.S. at some point in the future.

**Additional information and resources are available on the NYP Infonet**

This is an emerging, rapidly evolving situation and updated information will be provided as it becomes available.

## BACKGROUND

In December 2019, an outbreak of pneumonia of unknown etiology in Wuhan City, China was reported to the World Health Organization (WHO). Since that time, the cause of the outbreak has been determined to be a novel type of coronavirus (previously called 2019 novel coronavirus, or 2019-nCoV), now known as SARS-CoV-2. As of February 27, 2020, the World Health Organization (WHO) had reported a total of 83,809 confirmed cases of respiratory infection caused by SARS-CoV-2, known as coronavirus disease 2019 (COVID-19). Of these, 78,824 cases were reported from China. Sixty cases of COVID-19 were confirmed in the U.S. states. Fifty-seven of these cases occurred in persons with travel-related exposure to SARS-CoV-2, including persons repatriated to the U.S. from Wuhan, China and the Diamond Princess cruise ship. Two cases occurred in close personal contacts of persons with travel-related disease. Additionally, on February 26, the CDC reported a confirmed case of COVID-19 in California in a person who reportedly did not have relevant travel history or exposure to another known patient with COVID-19. As of February 28, no cases of COVID-19 had been identified in New York.

## CASE DEFINITIONS (revised 2/28/20)

All persons presenting with fever<sup>1</sup> and symptoms of lower respiratory illness should be screened for **travel to a geographic area affected by COVID-19<sup>1</sup> or close contact<sup>2</sup> with a person with COVID-19 within 14 days of symptom onset** (see PUI Definitions below for more details). Any person meeting those criteria should be managed as outlined in the “Evaluation, reporting, and management of a COVID-19 Patient Under Investigation (PUI)” section below. **NOTE: The CDC’s PUI definitions are subject to change as the epidemiology of the outbreak evolves.**

### PUI Definitions

Clinical Features		Epidemiologic Risk
Fever <sup>3</sup> 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 <sup>2</sup> with a laboratory-confirmed COVID-19 patient within 14 days of symptom onset
Fever <sup>3</sup> and signs/symptoms of lower respiratory illness (e.g., cough or shortness of breath)	AND	A history of travel from affected geographic areas <sup>1</sup> within 14 days of symptom onset <b>(Currently: mainland China, Iran, Italy, Japan, South Korea)</b>
Fever <sup>3</sup> with severe acute respiratory illness (e.g., pneumonia, ARDS) requiring hospitalization and without alternative explanatory diagnosis (e.g., influenza) <sup>4</sup>	AND	No source of exposure has been identified

<sup>1</sup>Affected areas are defined as geographic areas where sustained community transmission has been identified. These areas are those for which CDC has issued a Level 2 or Level 3 Travel Health Notice. As of 2/27/20, these areas include: China, Iran, Italy, Japan, and South Korea.

<sup>2</sup>Close contact is defined as:

- Being within approximately 6 feet (2 meters) of a COVID-19 case for a prolonged period of time while not wearing recommended personal protective equipment of PPE (e.g., gowns,

gloves, N95 respirator, eye protection); close contact can include caring for, living with, visiting, or sharing a healthcare waiting area or room with a COVID-19 case  
OR

- Having direct contact with infectious secretions of a novel coronavirus case (e.g., being coughed on) while not wearing recommended personal protective equipment

<sup>3</sup>Fever may be subjective or confirmed

<sup>4</sup> Clinical features that should prompt a higher level of clinical suspicion for COVID-19 in this group are acute respiratory distress syndrome (ARDS), unexplained lymphopenia or thrombocytopenia, or bilateral peripheral ground glass opacities with patchy consolidation on chest CT. Children and otherwise healthy young adults are less likely to develop severe disease due to COVID-19. The presence of unilobar pneumonia or leukocytosis suggests an alternative diagnosis.

**COVID-19 screening protocols** for NYP [Emergency Departments](#) and [outpatient locations](#), including Ambulatory Care Network sites, Medical Group practices, and the WCM and Columbia Doctors physician organizations, have been developed. **Note: These protocols will continue to be updated as new guidance is provided by the CDC.**

## **EVALUATION, REPORTING, AND MANAGEMENT OF A SARS-CoV-2 PATIENT UNDER INVESTIGATION (PUI)**

### **Infection prevention measures**

- 1) Immediately provide the patient and accompanying visitors with a surgical mask and have the patient perform hand hygiene.
- 2) Move the patient and accompanying visitors to an airborne isolation room (i.e., negative pressure room) and keep the door closed.
  - a. If an airborne isolation room is not immediately available, use a non-negative pressure single-patient room and keep the door closed. Move the patient to a negative pressure room as soon as possible.
- 3) Implement AIRBORNE, CONTACT, AND DROPLET (I.E., EYE PROTECTION) PRECAUTIONS.
  - a. At all NYPH campuses, except at NYP-LH, this can be ordered using the “Emerging Infectious Diseases” precautions order in Allscripts or Epic.
  - b. At all other hospitals, order airborne, droplet and contact precautions (three separate orders)
- 4) The patient should remain in the airborne isolation room EXCEPT for medically necessary tests and procedures that cannot be performed inside the airborne isolation room. *\*When such a test or procedure is necessary, consult with IP&C or the local health department prior to transporting the patient to other parts of the facility, including Radiology.\**

### **Reporting**

- 1) Immediately notify Infection Prevention & Control (IP&C) of any COVID-19 PUI:
  - a. NYP-AH: 212-932-5219
  - b. NYP-CU, MSCH, ACN: 212-305-7025
  - c. NYP-LH: 914-787-3045
  - d. NYP-LMH: 212-312-5976



- e. NYP-WC, WBHC, ACN: 212-746-1754
- f. NYP-BMH: 718-780-3569
- g. NYP-HVH: 914-734-3927
- h. NYP-Q: 718-670-1255

- 2) After discussion with IP&C, notify the local Department of Health in order to discuss the case and arrange for possible testing for SARS-CoV-2:
  - a. New York City: 866-692-3641
  - b. Westchester County: 914-813-5159

### **Medical evaluation and testing for COVID-19**

Tests that are currently available for the detection of respiratory viruses, including commonly circulating human coronaviruses, do **NOT** detect SARS-CoV-2. Testing for SARS-CoV-2 is currently available only through CDC. If, after discussing the case, the local Department of Health determines that testing for SARS-CoV-2 is warranted, the DOH will help to arrange testing. The following specimens will be requested: serum, nasopharyngeal swab, oropharyngeal swab, and one lower respiratory tract specimen (e.g., sputum, tracheal aspirate, bronchoalveolar lavage, pleural fluid).

Even in cases when COVID-19 is being considered as a potential diagnosis, there may be another, more common etiology of the patient's illness. Thus, routine evaluation should proceed, including, as appropriate based on patient's symptoms and signs:

- 1) Testing for other respiratory pathogens
- 2) Chest x-ray (a portable chest x-ray should be ordered in order to prevent the patient from leaving the negative pressure examination room)

### **Treatment**

There are currently no specific treatments available for COVID-19. Treatment is supportive. Specific treatments for other confirmed or suspected diagnoses (e.g., influenza, bacterial pneumonia) should not be withheld while testing for SARS-CoV-2 is in progress.

### **REFERENCES AND RESOURCES**

NYP Infonet. [Coronavirus Disease 2019 \(COVID-19\)](#) webpage

Centers for Disease Control and Prevention (CDC). [Coronavirus Disease 2019 \(COVID-19\)](#)

New York City Department of Health. [2019 Novel Coronavirus \(COVID-19\)](#)

New York State Department of Health. [Novel Coronavirus Information for Providers](#)

World Health Organization. [Coronavirus disease \(COVID-19\) outbreak](#)