COVID-19 Situation Summary

Situation and Background

A novel coronavirus infection (COVID-19) was first reported December 31, 2019 in Wuhan, Hubei Province, China. The virus is similar but distinct from SARS and MERS. Initial cases were linked to an animal market but subsequent cases occurred through human-to-human spread.

Since December, additional cases reported widely in mainland China, and travel-related cases have been reported in multiple other countries, Hong Kong, Macau, and Taiwan. There have been 15 confirmed cases in the US (Washington, California, Arizona, Illinois, Massachusetts, Wisconsin, Texas) as of February 13, 2020. There have been 64,457 confirmed cases, and 1384 deaths.

Symptoms: Fever, cough, dyspnea, malaise, bilateral pneumonia. Some patients have sore throat and, less commonly, GI symptoms. The elderly and those with chronic medical conditions appear to be more severely affected, but severe illness in young, healthy individuals has also occurred.

COVID-19 PUI Definition (per CDC):

<table>
<thead>
<tr>
<th>Clinical Features</th>
<th>&amp;</th>
<th>Epidemiologic Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever(^1) or signs/symptoms of lower respiratory illness (e.g., cough or shortness of breath)</td>
<td>AND</td>
<td>Any person, including health care workers, who has had close contact(^1) with a laboratory-confirmed(^2) 2019-nCoV patient within 14 days of symptom onset</td>
</tr>
<tr>
<td>Fever(^1) and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath)</td>
<td>AND</td>
<td>A history of travel from HuBei Province, China within 14 days of symptom onset</td>
</tr>
<tr>
<td>Fever(^1) and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) requiring hospitalization(^3)</td>
<td>AND</td>
<td>A history of travel from mainland China within 14 days of symptom onset</td>
</tr>
</tbody>
</table>

\(^1\)Fever may be subjective or confirmed
\(^2\)Close contact is defined as—
  a) being within approximately 6 feet (2 meters), or within the room or care area, of a COVID-19 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 health care 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) while not wearing recommended personal protective equipment.
\(^3\)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 those exposed in health care settings.
\(^4\)Documentation of laboratory-confirmation of COVID-19 may not be possible for travelers or persons caring for patients in other countries.
\(^5\)Category also includes any member of a cluster of patients with severe acute lower respiratory illness (e.g., pneumonia, ARDS) of unknown etiology in which COVID-19 is being considered that requires hospitalization. Such persons should be evaluated in consultation with state and local health departments regardless of travel history.
Incubation Period: The incubation period likely varies but is approximately 5 days; based on what is known about SARS and other coronaviruses, the total range for incubation is estimated at 2-14 days.

Transmission: Human-to-human spread likely occurs through respiratory route and droplets (e.g. coughing, sneezing) and direct contact with respiratory secretions.

Screening: CDC has deployed screening personnel to multiple US airports and quarantine for travelers from affected areas. Healthcare facilities are required to have travel screening procedures in place.


Assessment and Recommendations:

New York City is a diverse community and a common destination for international travelers, making it likely that cases will occur here. Screening in Montefiore emergency departments and outpatient practices has been implemented, and Epic was updated on January 28, 2020 to reflect documentation of this screening. Updated signs have been produced by Marketing and are in the process of distribution.

The objective is to **Identify, Isolate, and Inform**.

**Identify:**

Screen every patient in the ED, pre-procedural areas, and ambulatory practices per protocol. Ask all patients about history of travel to China, contact with anyone who has or might have COVID-19, and symptoms of fever and cough or shortness of breath.

Basic screening questions* are:

1. Have you been to China in the last 14 days?
2. Have you been in contact with someone who has known or suspected COVID-19 in the last 14 days?
3. Do you have fever, cough, or shortness of breath?

If YES to 1 or 2 AND 3=Positive screen

*These questions have been adapted for optimal workflow in specific healthcare settings in some cases

Calls to 911 will be screened for symptoms and epidemiologic risk, and will notify EMS personnel responding to the call. EMS personnel will assess the patient wearing PPE, mask the patient, and inform the hospital on arrival and pre-notify when possible.

**Isolate:**

If a patient screens positive or there is clinical concern for potential COVID-19 infection, the patient should be escorted to an isolation room:

- ED/Inpatient: Patient is offered a surgical mask and escorted to a negative pressure room with the door closed. Providers should don N95 mask, yellow gown, gloves, and eye protection.
Inquire about fever, cough or shortness of breath and potential travel/exposure; if yes, call Emerging Infection Phone immediately.

- Outpatient: Patient is offered a surgical mask, and patient is escorted to a private room with the door closed. Providers should don N95 (or surgical mask if N95 unavailable) and yellow gown, gloves, and eye protection. Inquire about fever PLUS cough OR shortness of breath and potential travel/exposure; if yes, call Emerging Infection Phone immediately.

**Inform:**

If concern or suspicion for COVID-19 including positive screen should prompt immediate call to the Emerging/Novel Pathogen Phone, 24/7: **718-920-7800**. After discussion with the Hospital Epidemiologist on call, if the patient is considered a possible person under investigation, DOH will be contacted for confirmation and further guidance and testing.

Direct calls to DOH or CDC, use of HICS, or movement/disposition of potential persons under investigation should NOT occur independently; communication and decision making must be coordinated with Hospital Epidemiology.

**Procedures for PUI**

There is no plan to have designated treatment centers for this outbreak, and patients are expected to remain on-site for treatment unless clinically stable for discharge on home isolation and monitoring by DOH. If a patient at Montefiore is considered a PUI or there is clinical concern by Hospital Epidemiology and DOH, and requires admission, the patient will be admitted to a negative pressure room. Thus far, there is no indication from CDC or DOH that a mobile isolation unit will be required for patient transport through the facility and CDC recommends that the patient should be transported wearing a surgical mask. Staff caring for or transporting a PUI should wear appropriate PPE as above and perform diligent hand hygiene. Entry of non-clinical staff into the room should be limited to essential functions. Isolation will continue for the duration of illness and until the patient is cleared by DOH. Line lists of all close contacts will be maintained.

**Diagnostics:**

Please note that the Respiratory Pathogen Panel used at Montefiore will **NOT** identify the COVID-19. Furthermore, a patient without known exposure or risk for COVID-19 who has a positive result for coronavirus on this panel should **NOT** be treated as a person under investigation nor should disposition planning be delayed or care altered due to such a result. Coronaviruses represent a large family of viruses, and are a common cause of upper respiratory infections/common cold in the community.

All specimens for PUI must be clearly labeled as such for the protection of lab personnel.

The following specimens should be collected as soon as possible from each patient under investigation with approval of Hospital Epidemiology (718-920-7800) regardless of symptom onset for testing by DOHMH Public Health Lab and/or CDC:

a. One lower respiratory specimen, as feasible
b. **Two** nasopharyngeal (NP) swabs
c. One oropharyngeal (OP) swab
d. One serum specimen
• **Lower respiratory**
  a. Bronchoalveolar lavage or tracheal aspirate: 2-3 mL in a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.
  b. Sputum: Have the patient rinse the mouth with water and then expectorate deep cough sputum directly into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.

• **Upper respiratory**
  a. 2 NP swabs AND OP swab: Use a synthetic fiber swab with plastic shaft. Do not use calcium alginate swabs or swabs with wooden shafts. Place swab in a sterile tube with 2-3 ml of viral transport media Do NOT combine NP/OP swab specimens; Keep swabs in separate viral transport media collection tubes.
  b. NP wash/aspirate or nasal aspirate: 2-3 mL in a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container

• **Serum**
  a. Children and adults: Collect 1 tube (5-10 mL) of whole blood in a serum separator tube.
  b. Infant: A minimum of 1 mL of whole blood is needed for testing pediatric patients. If possible, collect 1 mL in a serum separator tube.

*Note: Serum separator tubes should be stored upright for at least 30 minutes, and then centrifuged at 1000–1300 relative centrifugal force (RCF) for 10 minutes before removing the serum and placing it in a separate sterile tube for shipping (such as a cryovial).*

At this time, CDC also recommends collecting the following specimens and storing them in case further testing is requested:
• **Stool**: Collect and place in a sterile, leak-proof container with a screw cap and without preservative.
• **Urine**: Collect a minimum of 10 mL in a sterile, leak-proof container with a screw cap and without preservative.

*Refrigerate all specimens at 2-8°C.
**Complete Test Requisition using the Public Health Laboratory (PHL) electronic requisitioning system known as eOrder. If your lab staff do not have access to eOrder, DOHMH staff will assist in form completion. **One PHL form is required for each specimen**.

**Treatment**: No vaccine and no specific treatment for this infection exist presently. Treatment is supportive.

**Isolation**: Airborne + Contact + Standard (including eye protection). Review [https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf](https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf) which covers how to put on and remove PPE.

**Environmental Cleaning**: Not considered Category A waste, no special cleaning procedures beyond normal terminal cleaning. Rooms where patient was located should be rested for 2 hours prior to opening to further patient care.
Communication:

All communication with Montefiore associates, the community, and the media should occur through Public Relations in coordination with Executive Leadership and Hospital Epidemiology in order to provide the most accurate information and promote safety and security for all. Montefiore’s public relations policy should be followed at all times.

Employee Exposure:

Any employee returning within 14 days from China or with exposure to a COVID-19 case must notify Occupational Health Service, will be furloughed for 14 days after travel/exposure per human resources policy, and should self-monitor consistent with the directives issued by the United States Department of Health and Human Services and the President’s Coronavirus Task Force.