Updated 3/6/2020:

Background:
In December 2019, an outbreak of respiratory symptoms caused by a novel coronavirus (named SARS-CoV-2, previously 2019-nCoV) which causes the illness coronavirus disease 2019 (abbreviated COVID-19), was first reported. Cases originated in Wuhan City, Hubei Province in China, and epidemiologic investigation linked these cases to an outdoor seafood and animal market, suggesting this emerged from exposure to animals (as was the case with two other recent emerging coronavirus infections, SARS and MERS, which also cause serious lower respiratory infections). Cases have been found in 70 locations internationally including the United States; two presumptive positive cases have been reported in Colorado, both with pertinent travel history.

Most cases have caused mild illnesses. Current data indicate that older age and underlying disease (e.g. COPD, diabetes, immunosuppression, etc.) may be risk factors for severe disease. Estimates on mortality are variable at this time. Case-fatality rates have been much discussed in the popular media, often stated as about 2.3%. The actual rate may be closer to 1% which is still higher than for seasonal influenza which is 0.1%.

Current Case Definition and Testing:
Recognizing persons at risk for COVID-19 is a critical component of identifying cases and preventing further transmission. Currently, all testing is being done at the state laboratory at the Colorado Department of Public Health and Environment. Testing is being done 7 days a week and the turn-around time is expected to be within 24 hours from receipt at their lab. At this time, specimens will only be tested if they meet one of the three criteria below. Asymptomatic people and patients with URI symptoms will not be tested.

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<tr>
<th>Clinical Features</th>
<th>Epidemiological Risk</th>
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<tr>
<td>1. Fever or signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)</td>
<td>AND Any person, including health care workers, who has had close contact with a laboratory-confirmed COVID-19 patient within 14 days of symptom onset</td>
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<td>2. Fever or signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) without alternative explanation diagnosis (e.g., influenza)</td>
<td>AND A history of travel to areas with ongoing community transmission within 14 days of symptom onset</td>
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<td>3. Fever with severe acute lower respiratory illness (e.g., pneumonia, ARD; common laboratory features include leukopenia and mild transaminase elevation) requiring hospitalization and without alternative explanatory diagnosis (e.g., influenza)</td>
<td>AND No source of exposure has been identified</td>
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All patients considered for testing should have an order for a respiratory viral panel if not done (nasopharyngeal) in the last 48 hours and two orders for SARS CoV-2 NAAT (nasopharyngeal AND oropharyngeal).

All patients are being screened for travel to affected international areas every 7 days at the time of scheduling, check in or admission. Geographic areas with ongoing community transition are changing rapidly and up to date information can be found at https://www.cdc.gov/coronavirus/2019-ncov/travelers/index.html.

Countries that currently meet epidemiologic criteria for testing include:

- China including Hong Kong
- Japan
- Italy
- Iran
- South Korea

Travel sites within the United States are being considered in the criteria for testing, this information is rapidly evolving. Available information from the CDC about cases reported in the United States can be found at https://www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html.

Infection Control and PPE:

If you suspect a patient has COVID-19, remember to IDENTIFY, ISOLATE and INFORM:
- Immediately place a mask on the patient identified as a person under investigation (PUI)
- The patient should be placed in a private room with door closed, negative pressure room if available.
  - Per the CDC, placement of a patient into a room with the door closed and the patient masked while in the room is acceptable for patient evaluation.
- Enhanced Precautions (gloves, gown, eye protection [other than prescription eye glasses], and N-95 Respirator or PAPR) should be followed.
- Visitors to the room should be limited while the patient is a suspected COVID-19 case.
- If the PUI is admitted, the house supervisor (listed on Amion) should be notified to ensure appropriate precautions and patient placement.
- If the PUI is sent home while their test results are pending they should self-quarantine.

Complete information on specific UCHealth processes can be found here (password protected with university login and password): https://thesource.uchealth.org/News/Forms/DispNewsForm.aspx?ID=1429

We are carefully monitoring our supplies of all personal protective equipment (PPE) and are working with our suppliers to maximize PPE availability as the outbreak evolves. However, we must be prepared in the event PPE supplies become limited due to manufacturer issues and shortages. We are asking staff and faculty to take the following steps to conserve PPE include:
• Droplet masks have been removed from flu stations. Patients and visitors will be
directed to ask for them at check in or nurses stations if they have symptoms of
respiratory infection.
• For patients on any isolation precautions (Contact, Droplet, or Airborne), limit the
number of personnel who enter the room only to those medical necessary to care for
the patient.
  o Please check that the patient is in the room and available before putting on PPE
  and entering the room.
  o Teams should perform rounds outside of rooms on patients on isolation. Only
  one trainee and one attending per team should round on patients in isolation.
  o If possible, medical students should not be assigned to patients who are on
  isolation. Medical students will not take care of patients with suspected or
  confirmed COVID-19.
• N-95 respirators used for the care of certain patients on Airborne Precautions should be
reused unless they become damp or soiled. They should not be reused on patients with
suspected or confirmed COVID-19.

**Vaccine and Treatment:**
No vaccine or specific treatment is currently available for SARS-CoV-2 infection, so it is
imperative that we remain vigilant for any potential cases and implement infection prevention
precautions rapidly. In the event that we see cases, our Infectious Diseases physicians and
pharmacists will consult with the CDC regarding investigational treatments.

**Employee Health:**
CDC has generated guidance on recommendations for monitoring and work restriction which
take into account duration of exposure, clinical symptoms of the patient, whether the patient
was wearing a facemask, whether an aerosol generating procedure was performed, and the
type of PPE used by the healthcare worker. Employee Health in consultation with Infection
Prevention and if needed Public Health authorities will follow the below guidance along with
clinical judgement to assign risk and determine need for work restrictions. Healthcare workers
will not be restricted from work while test results are pending. We will be tracking all
healthcare workers that care for suspected and confirmed COVID-19 patients.

**Additional Resources:**
https://www.who.int/emergencies/diseases/novel-coronavirus-2019
https://campustechnology.com/articles/2020/03/05/johns-hopkins-dashboard-maps-global-
coronavirus-cases.aspx?m=1
https://www.colorado.gov/pacific/cdphe/resources-local-public-health-agencies-and-
healthcare-providers

For additional guidance from public health, healthcare providers can contact Colorado
Department of Public Health (CDPHE) at the following numbers:
From Monday thru Friday, 8:30 a.m.- 5:00 p.m., please call 303-692-2700.
For after-hours, holidays, and weekends, please call 303-370-9395.

Patients with general questions about COVID-19 can contact CDPHE via by calling CO-Help at 303-389-1687 or 1-877-462-2911 or emailing COHELP@RMPDC.org, for answers in English and Spanish (Español), Mandarin (普通话), and more.