Maine EMS is working collaboratively with the Maine Center for Disease Control and Prevention (Maine CDC) to monitor an outbreak of respiratory disease caused by a novel (new) coronavirus that was first detected in Wuhan City, Hubei Province, China. The WHO has named the disease COVID-19. The situation is still rapidly evolving, but since its first discovery there have been thousands of patients confirmed in China and other parts of the world including all continents aside from Antarctica. COVID-19 has been detected in the United States from travelers returning from affected regions as well as person-to-person spread amongst those who were infected and their close contacts. On February 25, 2020, the U.S. CDC confirmed its first case of COVID-19 that reportedly did not have relevant travel history or exposure to another known patient with COVID-19.

All impacted regions have seen person-to-person spread of the virus between people who are in close contact with one another (within approximately six (6) feet) via respiratory droplets produced when an infected person coughs or sneezes. While not thought to be the main way the virus spreads, it may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly eyes. People are thought to be the most contagious when they are the most symptomatic or the sickest. Some spread might be possible before symptoms appear, but this is not thought to be the main way of spread. Most patients with this illness have been reported to have fever, cough, and difficulty breathing. Care is supportive. There is no vaccine or specific treatment for this infection.

Maine EMS, in collaboration with the State EMS Medical Directors, has activated the Emerging Infectious Diseases Surveillance Tool for 911 call centers. Effective immediately, call takers trained in emergency medical dispatch (EMD) will begin screening all medical calls with the tool. In order to effectively convey the information to providers, call centers have been instructed to provide the following information based on the screening outcomes:
• “Negative U21” – this indicates that the individual reports NOT having symptoms of a lower respiratory infection or fever and they have NOT had known contact with a presumed positive COVID-19 patient
• “Positive U21” – this indicates that the individual may have symptoms of a lower respiratory infection, fever, OR have had close contact with a presumed positive COVID-19 patient
• “Inconclusive U21” – this indicates that the call taker was unable to gather accurate and/or sufficient information to make a determination

Based on recommendations from the U.S. CDC and the Maine CDC, we recommend the following:

EMS Clinicians should consider patients presenting with fever and/or symptoms of lower respiratory illness (e.g. cough or shortness of breath) as possible PUIs. Clinicians should also consider whether the patient has been exposed to a laboratory-confirmed COVID-19 patient within the past 14 days.

If you identify a PUI or potential PUI, please take the following steps:

1. EMS clinicians should use gown, gloves, eye protection, and airborne respiratory protection (fit-tested N-95 level or higher respirator);
2. Place a surgical (simple) mask on the patient;
3. If the transport vehicle does NOT have an isolated driver’s compartment, the driver should continue to wear respiratory protection throughout the transport;
4. Contact the receiving hospital prior to initiating the transport and utilize the term, “PUI for coronavirus” during the consultation; and
5. Decontaminate the ambulance

If ventilatory equipment, such as BVMs, are required to support the patient’s respiratory system and equipped with HEPA filtration it should be used to filter the patient’s expired air. When possible, use vehicles that have isolated driver and patient compartments that can provide separate ventilation to each area. During transport, vehicle ventilation in both compartments should be on non-recirculated mode to maximize air changes that reduce potentially infectious particles in the vehicle. If the vehicle has a rear exhaust fan, use it to draw air away from the cab, toward the patient-care area, and out the back of the vehicle. If a vehicle without an isolated driver compartment and ventilation must be used, open the outside air vents in the driver area and turn on the rear exhaust ventilation fans to the highest setting. This will create a negative pressure gradient in the patient area.

After transporting the patient, leave the rear doors of the transport vehicle open to allow for sufficient air changes to remove potentially infectious particles for at least 30 minutes. To decontaminate the ambulance, any visibly soiled surface must first be cleaned using an EPA-registered hospital disinfectant according to directions on the label. Disinfect all potentially contaminated surfaces (e.g., stretcher, rails, control panels, floors, walls, and work surfaces) with an EPA-registered hospital disinfectant according to directions on the label. Medical equipment (stethoscope, BP cuff, etc.) making patient contact should be disposable or cleaned and disinfected using appropriate disinfectants before use on another patient.

All clinicians should use quality handwashing techniques to help protect themselves and their patients. Maine EMS continues to emphasize the importance of clinicians obtaining influenza
(flu) vaccinations. Individuals who are unable to receive a vaccination or refuse for any reason should be using appropriate personal protective equipment, such as using a mask while entering healthcare facilities and/or interacting with patients. Clinically permitting, all patients who are suspected of having the flu or flu-like illness should wear a surgical face mask at all times (e.g. transfer to the ambulance, during transport, and entering the healthcare facility).

Additionally, Maine EMS has added the following questions to MEFIRS for all 911 patient encounters. Please answer all the supplemental COVID-19 questions to the best of your ability.

- Has the patient traveled outside the United States in the past 30 days?
- If yes, please provide the travel begin date, end date, and countries visited (appearing as three separate questions in MEFIRS).
- Does this patient meet the criteria of a person under investigation (PUI) based on the most recent Maine EMS Clinical Bulletin for COVID-19?

Thank you for your prompt attention to this emerging infectious disease. Please be aware that the screening criteria for this novel coronavirus may change with time. Maine EMS will provide updates as additional information comes available.

Attachments:

Novel Coronavirus (COVID-19) Overview for Maine EMS Clinicians (as of March 18, 2020)
Consider Novel Coronavirus EMS Decision Poster
Novel Coronavirus (COVID-19) Overview for Maine EMS Clinicians (as of March 18, 2020)

In light of the outbreak of a novel coronavirus (COVID-19), Maine EMS urges all EMS clinicians to take the following actions:
1. Ask all patients about recent travel, particularly those with fever and acute respiratory illness;
2. Don appropriate PPE when patients meet the following Person Under Investigation (PUI) criteria; and
3. If a patient meets PUI criteria, contact the receiving hospital before initiating transport, and utilize the term "PUI for coronavirus" when speaking with the staff.

PPE Recommendations: If the patient meets PUI criteria, clinicians should don gloves, gowns, eye protection, and N-95 or equivalent respirators. A surgical mask, NOT an N-95, should be placed on the patient. If the transport vehicle does NOT have an isolated driver's compartment, the driver should continue to wear respiratory protection throughout the transport. If ventilatory equipment, such as BVMs, are equipped with HEPA filtration it should be used to filter the patient’s expired air. When possible, use vehicles that have isolated driver and patient compartments that can provide separate ventilation to each area. During transport, vehicle ventilation in both compartments should be on non-recirculated mode to maximize air changes that reduce potentially infectious particles in the vehicle. If the vehicle has a rear exhaust fan, use it to draw air away from the cab, toward the patient-care area, and out the back of the vehicle. If a vehicle without an isolated driver compartment and ventilation must be used, open the outside air vents in the driver area and turn on the rear exhaust ventilation fans to the highest setting. This will create a negative pressure gradient in the patient area.

Ambulance Decontamination: After transporting the patient, leave the rear doors of the transport vehicle open to allow for sufficient air changes to remove potentially infectious particles for at least 30 minutes. Any visibly soiled surface must first be decontaminated using an EPA-registered hospital disinfectant according to directions on the label. Disinfect all potentially contaminated surfaces (e.g., stretcher, rails, control panels, floors, walls, and work surfaces) with an EPA-registered hospital disinfectant according to directions on the label. Medical equipment (stethoscope, BP cuff, etc.) making patient contact should be disposable or cleaned and disinfected using appropriate disinfectants before use on another patient.

Maine EMS encourages all providers to be insistent that patients experiencing any flu-like symptoms wear a surgical mask.

References and Resources:

Note: Interim guidance, epidemiological risk area and other factors are subject to change.
CONSIDER Novel Coronavirus (COVID-19)

Person Under Investigation (PUI) Criteria (Updated)

Determination of Risk is Subjective based on the EMS Clinician's Impression of the Patient's Signs and Symptoms:

Clinical Features:
Fever and/or symptoms of lower respiratory illness (e.g., cough or shortness of breath)

If the PUI criteria above are met:

Isolate and place simple (surgical) mask on the patient

AND

Don appropriate PPE, including gloves, gown, eye protection, and N-95 mask or equivalent; drivers should also wear respiratory protection during transport

AND

Utilize U.S. CDC COVID-19 transport guidelines regarding ambulance compartment ventilation

AND

Notify the receiving hospital before initiating transport, utilizing the term "PUI for coronavirus" during the consult;

AND

Decontaminate your unit based on CDC Decontamination Guidelines for COVID-19.

For More Information: 

Note: Interim guidance, epidemiological risk area and other factors are subject to change. Information current as of March 18, 2020