

COVID-19

The 2019 novel Coronavirus (COVID-19) is the cause of an outbreak of respiratory illness that began in Wuhan, Hubei Province, China. It has led to thousands confirmed and suspected cases and a tragic number of deaths. There have been cases identified all over the world, with confirmed cases and potential cases under investigation here in New Mexico.

COVID-19 is a coronavirus, which are common throughout the world, and typically cause mild to moderate illness. COVID-19 is a member of this family, which includes SARS-CoV and MERS-CoV, that can lead to severe illness. Human-to-human transmission has been observed with an incubation period estimated to be about 6 to 14 days. Known and suspected symptoms include fever, difficulty breathing, cough and potentially other mild to severe respiratory symptoms including severe pneumonia. Available treatment is primarily supportive care.

PSAPs or Emergency Medical Dispatch (EMD) centers should coordinate with their local EMS agencies and medical direction to develop or utilize modified caller queries that question callers and determine the possibility that this call involves a person who may have signs or symptoms and risk factors for COVID-19. If a caller provides information about a potential patient with signs of a lower respiratory infection (cough, fever, etc.), or that has had close contact exposure to a person under investigation (PUI), that information should be confidentially relayed to responding field crews.

EMS clinicians are advised to maintain a high index of suspicion in patients who present with fever and respiratory symptoms, and correctly utilize recommended personal protection equipment (PPE).

Resources

- New Mexico DOH - <https://cv.nmhealth.org/>
- CDC - <https://www.cdc.gov/coronavirus/2019-ncov/index.html>
- **New Mexico Coronavirus Hotlines**
 - 1-855-600-3453** (Health Hotline - for those who feel ill or have questions about their health)
 - 1-833-551-0518** (General Information Hotline - for those who have non-health questions about resources and the community)
 - 1-866-699-4627** (Hotline for Seniors Citizens - for eligible senior citizens who need assistance with meal or grocery delivery)
 - 1-928-871-6868** (Hotline for Seniors Living on the Navajo Nation)
- State of NM - <https://www.newmexico.gov/>

SUMMARY of COVID-19 EMS MANAGEMENT AND TRANSPORT CONSIDERATIONS:

1. If the patient exhibits symptoms of an acute, lower respiratory infection (fever, shortness of breath/difficulty breathing, cough):
 - a. **Place a surgical mask on the patient AND**
 - b. Ask if the patient has a history of an acute respiratory infection with no alternative explanation (e.g. physician diagnosed influenza), had close contact with someone under investigation for COVID-19, or traveled within the past 14 days.
 - (i) Close contact is defined as being within about 6 feet, or within the same room or care area, of a patient with confirmed COVID-19 without wearing PPE for a prolonged period OR having direct contact with COVID-19 patient secretions.
2. **If there is a history consistent with concern for potential COVID-19, initiate standard contact and airborne precautions (gloves, gown, N95 respirator) and eye protection (goggles) for EMS clinicians.** Surgical/medical procedure masks may be substituted if N95 masks are in short supply. In some cases, N95 masks may be re-used.
3. Notify the receiving hospital (according to local protocols) of potential infection as soon as possible to allow emergency department preparation.
4. Use caution with aerosol generating procedures such as nebulizing medications. Contact medical control for guidance if possible. A minimum of a N95 respirator should be worn during any aerosol generating procedure.
5. Properly doff and dispose of PPE according to protocol.
6. Clean and disinfect using EPA registered disinfectants with known effectiveness against human coronaviruses. Leave doors open while cleaning the vehicle. **Wear PPE while cleaning.**
7. Waste management per policy for medical waste (red bag).
8. Continue to work with your agency infection control staff and local hospitals, emergency department and public health agencies to coordinate all response activities and notifications.
9. For any questions, call the DOH COVID Hotline at 505 827-0006; assistance with follow-up of a patient may be available by calling the EMS Bureau Epidemiologist at 505 476-8253 or EMS Program Manager at 505 476-8246.

We will continue to follow this event and keep the NM EMS system as up to date as possible.

CDC website link: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/index.html>

New Mexico Emergency Medical Services

COVID-2019 Preparedness and Guidance for 911 Call Centers, 911 EMS Response, Decontamination, and Transfer of Highly Suspected or Confirmed COVID-19 Patients

The New Mexico Department of Health Emergency Medical Systems Bureau strongly recommends that Emergency Medical Services (EMS) Medical Directors and EMS Agency supervisory personnel prepare for the possibility of dealing with COVID-19 by utilizing, in addition to this document, the CDC publications “Resources for Hospitals and Healthcare Professionals Preparing for Patients with Suspected or Confirmed COVID-19” and “Interim Guidance for Emergency Medical Services (EMS) Systems and 911 Public Safety Answering Points (PSAPs) for COVID-19 in the United States” both of which are referenced in this document.

- <https://www.cdc.gov/coronavirus/2019-ncov/hcp/preparedness-checklists.html>
- <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html>

911 (PSAP) and other EMS Call Centers

- When taking a call, all PSAP call takers should screen callers for individuals who have both signs and symptoms and risk factors for COVID-19.
 - An individual should be considered a person under investigation (PUI) for COVID-19 if they meet the following criteria:
 - Fever with acute lower respiratory illness (e.g. pneumonia, ARDS) without an alternative explanatory diagnosis (e.g. physician diagnosed influenza)
 - Fever **or** symptoms of lower respiratory illness (e.g. cough, shortness of breath) in any person who has had close contact with a laboratory-confirmed COVID-19 patient within 14 days of symptom onset.
 - Fever **and** symptoms of lower respiratory illness in any person who has a history of travel within 14 days of symptom onset
 - If PSAP call takers have information alerting them to a person who meets these criteria, they should make sure any first responders and EMS personnel enroute to the call are made confidentially aware (i.e., cell phone or data message) of the potential for COVID-19 and any noted symptoms before the responders arrive on scene.
 - If responding at an airport or other port of entry to the United States, the PSAP should notify the CDC Quarantine Station for the port of entry. The PSAP can call the CDC’s Emergency Operations Center at 770-488-7100 to be connected with the appropriate quarantine station. Further information for CDC Quarantine Stations can be accessed at the following link: <https://www.cdc.gov/quarantine/quarantinestationcontactlistfull.html>
- If the screening questions do not indicate that a patient meets the criteria to become a PUI, the call taker should proceed as per normal procedures and pre-arrival instruction guidelines.

911 EMS Response and Transport

- The New Mexico Department of Health EMS Bureau recommends that, especially in larger services, a limited number of crews and units be designated for response to a caller with symptoms and risk factors to limit exposure to as few as individuals as possible.
- If advised of a call taker's concern about the possibility of COVID-19 while enroute to a patient's location, EMS caregivers should don appropriate personal protection equipment (PPE) that meets the CDC guidelines. Drivers who provide patient care should also wear all recommended PPE. The CDC guideline states that all healthcare providers should follow standard, contact, and airborne precautions, including:
 - A single pair of disposable patient examination gloves. Change the gloves if they become torn or heavily contaminated.
 - A disposable isolation gown. If there are shortages of gowns, they should be prioritized for aerosol-generating procedures, care activities where splashes and sprays are anticipated, and high-contact patient care activities that provide opportunities for transfer of pathogens to the hands and clothing of EMS clinicians (e.g., moving patient onto a stretcher).
 - Ideal respiratory protection is at least as protective as a fit-tested NIOSH-certified disposable N95 filtering facepiece respirator. A surgical/medical type facemask can be used if a respirator is not available until the supply chain is restored. Assure the patient is also wearing a facemask if possible. If N95 respirators are in short supply, consider prioritizing them for performing or present for an aerosol-generating procedure. In some cases, a N95 may be reused (see page 6).
 - If reusable respirators (e.g., powered air purifying respirator/PAPR) are used, they must be cleaned and disinfected according to manufacturer's reprocessing instructions prior to re-use.
 - Eye protection (i.e. goggles or disposable face shield that fully covers both the front and sides of the face).
- If the driver has provided patient care (e.g. assisting with moving the patient or assessment) and is clad in PPE, they should remove their face shield or goggles, gown, and gloves (following proper doffing procedures) and perform appropriate hand hygiene before driving. Generally, the driver should continue to use respiratory protection during patient transport. If the driver's area is completely isolated from the patient care compartment, the driver may doff their mask along with their other PPE. If the driver must assist with patient off-loading and transfer, then the standard PPE must be donned again.
- If information about potential for COVID-19 has not been provided by PSAP, EMS clinicians should exercise appropriate precautions when responding to any patient with signs or symptoms of a respiratory infection. Initial assessment should begin from a distance of at least 6 feet from the patient. Patient contact should be minimized until a facemask is on the patient.
- If COVID-19 risk factors are identified, patient care should be continued per local treatment and transport guidelines.
- A surgical/medical type facemask should be worn by the patient. The facemask may be worn over a nasal cannula. An oxygen mask may also be used if clinically indicated.
- Some procedures performed on COVID-19 patients could generate infectious aerosols. Procedures that are likely to induce coughing (e.g., sputum induction, open suctioning of airways) should be performed cautiously and avoided if possible. EMS clinicians should exercise caution if an aerosol-generating

procedure [e.g., bag valve mask (BVM) ventilation, oropharyngeal suctioning, endotracheal intubation, nebulizer treatment, continuous positive airway pressure (CPAP), bi-phasic positive airway pressure (biPAP)], or resuscitation involving emergency intubation or cardiopulmonary resuscitation (CPR) is necessary. If possible, consult with medical control for specific guidance before performing aerosol-generating procedures. BVMs, and other ventilatory equipment, should be equipped with HEPA filtration to filter expired air. EMS organizations should consult their ventilator equipment manufacturer to confirm appropriate filtration capability and the effect of filtration on positive-pressure ventilation.

- Donning and doffing of PPE should follow the guidance published on www.CDC.gov, <https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>
- Care should be taken during transport to minimize the risk of transmission. The patient should be kept separated from others as much as possible, and family members and other contacts should not ride in the transport vehicle. Utilize air conditioning units on non-recirculating settings, as well as exhaust fans to maximize air changes in both the driver and patient compartments of the ambulance.
- EMS clinicians should notify the receiving facility that the patient has signs, symptoms, and risk factors suggestive of COVID-19. Upon arrival, follow routine procedures for a transfer of the patient to the receiving healthcare facility (e.g., wheel the patient directly into an Airborne Infection Isolation Room).
- Documentation of patient care should be done after EMS providers have transported, removed PPE, and performed appropriate hand hygiene.
 - EMS documentation should include a listing of public safety providers involved in the response and level of contact with the patient (such as, no contact with patient, provided direct patient care). This documentation may need to be shared with local public health authorities.

Cleaning EMS Transport Vehicles after Transporting a PUI or Patient with Confirmed COVID-19

The following are general guidelines for cleaning or maintaining EMS transport vehicles and equipment after transporting a PUI:

- After transporting the patient, leave the rear doors of the transport vehicle open to allow for sufficient air changes to remove potentially infectious particles.
 - The time to complete transfer of the patient to the receiving facility and complete all documentation should provide sufficient air changes.
 - Doors should remain open when cleaning the vehicle.
- When cleaning the vehicle, the NM DOH EMS Bureau recommends that clinicians wear standard PPE, including a disposable gown, gloves, respiratory protection, and face/eye protection, as splashes or sprays during cleaning are anticipated.
- Patient-care surfaces (including stretchers, railings, medical equipment control panels, and adjacent flooring, walls and work surfaces) are likely to become contaminated and should be cleaned and disinfected after transport.
- Products with EPA-approved emerging viral pathogens claims are recommended for use against SARS-CoV-2. Refer to [List Nexternal icon](#) on the EPA website for EPA-registered disinfectants that have qualified under EPA's emerging viral pathogens program for use against SARS-CoV-2.
- EMS providers should follow routine cleaning and disinfection procedures, including using cleaners and water to pre-clean surfaces prior to applying an EPA-approved disinfectant that is appropriate for SARS-

CoV-2. This disinfectant should be applied with the instructions as indicated on the product's label. All surfaces that may have come in contact with the patient or materials contaminated during patient care (e.g., stretcher, rails, control panels, floors, walls, work surfaces) should be thoroughly cleaned and disinfected.

- Clean and disinfect reusable patient-care equipment before use on another patient, according to manufacturer's instructions.
- Follow standard operating procedures for the containment and disposal of used PPE and regulated medical waste and for containing and laundering used linen. Avoid shaking the linen.

Follow-up and/or Reporting Measures by EMS Clinicians After Caring for a PUI or Patient with Confirmed COVID-19

It is strongly recommended that the PSAP, EMS caregivers, or hospital notify the New Mexico Department of Health of the transport of a PUI or confirmed COVID-19 patient by calling the 24/7/365 epidemiology hotline at 505-827-0006. The NM EMS Bureau will be working with personnel from the infectious disease program to assure contact is made with EMS personnel if there has been a concerning incident.

- Any unprotected exposure (e.g., not wearing recommended PPE) to a PUI or confirmed COVID-19 patient should require notification of an agency's chain of command and be reported to occupational health services, a supervisor, and/or a designated infection control officer for evaluation.
- EMS clinicians who have had contact with a COVID-19 PUI should be alert for fever or respiratory symptoms (e.g., cough, fever, shortness of breath, sore throat). If symptoms develop, they should self-isolate and notify occupational health services and/or their public health authority to arrange for appropriate evaluation.

LIMITED RE-USE OF AN N95 RESPIRATOR

The CDC/NIOSH guidelines state that, if in short supply, N95 respirators may be re-used for a limited number of times by the same EMS provider when contact transmission is not a concern if:

- The unit maintains its structural and functional integrity
- The respirator is not soiled with blood, respiratory or nasal secretions, or other bodily fluids from patients
- The provider did not use the N95 during aerosol-generating procedures

The recommendations go on to point out that the mask must be donned and doffed correctly and cared for properly between uses. Providers should perform [proper hand hygiene](#) before and after touching their N95 and use a clean pair of exam gloves when putting the N95 back on. Avoid touching the inside of the respirator.

Between uses, the respirator should either be hung in a designated storage area or placed in a clean, breathable container, such as a paper bag. Do not keep a used N95 mask in a sealed plastic bag or stuff it in a pocket.

In the absence of any re-use recommendations from the respirator manufacturer, the CDC says that its data suggests that masks should be used for no more than 5 applications before being disposed of.

USE OF EXPIRED N95 RESPIRATORS

The contingency capacity strategies posted by the CDC also address the use of N95 respirators that are beyond the manufacturer-designated shelf life. If the respirators are structurally intact, they may be considered for use. The elastic straps and the nose bridge material are the areas that commonly break down as the unit ages.

Check to confirm that the N95 will fit to the user properly and form a tight seal. Consider performing standard fit-testing with the units.