

# Guidance for Preventing Disease Spread During Transport of Patients at High Risk for COVID-19 Illness

## Product (EMS18) Purpose

Intended to provide recommendations for Emergency Medical Services (EMS) agencies providing transport for high risk COVID-19 patient population.

## Developed By

The Federal Healthcare Resilience Task Force (HRTF) is leading the development of a comprehensive strategy for the U.S. healthcare system to facilitate resiliency and responsiveness to the threats posed by COVID-19. The Task Force's EMS/Pre-Hospital Team is comprised of public and private-sector Emergency Medical Service (EMS) and 911 experts from a wide variety of agencies and focuses on responding to the needs of the pre-hospital community. This Team is composed of subject matter experts from NHTSA OEMS, CDC, FEMA, USFA, US Army, USCG, and non-federal partners representing stakeholder groups and areas of expertise. Through collaboration with experts in related fields, the team develops practical resources for field providers, supervisors, administrators, medical directors and associations to better respond to the COVID-19 pandemic.

## Intended Audience

State, Local, Tribal, and Territorial Governments (SLTTs) EMS agencies

## Expected Distribution Mechanism

EMS.gov, Stakeholder Calls, EMS stakeholder organization's membership distribution Email mechanisms, USFA website, Social Media posts

## Internal Routing Review

NRCC (for approval), All ESFs and HCRTF Teams & Threads (for SA only)

## Primary Point of Contact

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This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

## Guidance for Preventing Disease Spread During Transport with Populations at High Risk for COVID-19 Illness

- 1) Purpose: This guidance provides recommendations for EMS agencies to protect their personnel from COVID-19 exposure while providing transport of patients in the high-risk period of disease transmission.
- 2) Definitions: Based upon available information to date, those at high-risk for severe illness from COVID-19 include:
  - a) People aged 65 years and older.
  - b) People who live in nursing homes or long-term care facilities.
  - c) Other high-risk conditions could include:
    - i) People with chronic lung disease or moderate to severe asthma.
    - ii) People who have serious heart conditions.
    - iii) People who are immunocompromised including those undergoing cancer treatment.
    - iv) People of any age with severe obesity (body mass index [BMI] >40) or certain underlying medical conditions, particularly if not well controlled, such as those with diabetes, renal failure, or liver disease might also be at risk.
  - d) Women who are pregnant should be monitored since they are known to be at risk with severe viral illness; however, to date data on COVID-19 has not shown increased risk.
  - e) Many conditions can cause a person to be immunocompromised, including those undergoing cancer treatment, those who smoke, those status post bone marrow or organ transplantation, and those with immune deficiencies, poorly controlled HIV or AIDS, and those with prolonged use of corticosteroids and other immune weakening medications.
- 3) Preventative Actions for Transporting Personnel and Patients at High-Risk for Severe COVID-19 Illness:
  - a) Assess the patient for fever, difficulty breathing, dry cough, GI problems, and respiratory symptoms.
  - b) Ask the patient if they have had contact with someone diagnosed with or being checked for COVID-19.
    - i) Updated PPE recommendations for the care of patients with known or suspected COVID-19:
      - (1) Surgical masks are an acceptable alternative to N95 respirators until the supply chain is restored. Respirators should be prioritized for procedures that are likely to generate respiratory aerosols (bag valve mask, non-rebreather mask, CPAP, intubation, etc.) which would pose the highest exposure risk to health care providers.
      - (2) Cover any respiratory device that is being used for treatment of the patient i.e. nebulizer, or any administration of oxygen device i.e. nasal cannula with a simple facemask. If patient condition allows, discontinue use of the respiratory treatment device before entering the hospital.
      - (3) Eye protection, gown, and gloves continue to be recommended.
        - (a) 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 health care professionals.

- (4) When the supply chain is restored, fit-tested EMS clinicians should return to using respirators when treating and transporting patients with known or suspected COVID-19.
- c) Place surgical facemask on any patient that is contacted/transported.
- d) Wear recommended PPE when transporting patients with possible COVID-19.
- e) Family members and other contacts of patients with possible COVID-19 should not ride in the transport vehicle. Consideration may be given for a family member or guardian to go with the patient if the patient is a minor or there is a specific reason the family member or guardian needs to be with the patient in the transport vehicle. Individuals accompanying the patient should wear a facemask.
- f) On arrival to the facility/home, EMS/transport personnel should remove and discard PPE and perform hand hygiene. Used PPE should be discarded in accordance with established procedures.
- g) All persons in the transport vehicle should avoid touching their face, mouth, nose and eyes.
- h) Perform hand hygiene often, as well as before and after each patient contact.
- i) When transporting a patient to an appointment (e.g., to dialysis or medical office), ensure patients have contact information for their primary care provider/specialist, and that they have called ahead of their appointment to report fever or respiratory symptoms so the facility can be prepared for their arrival or triage them to an appropriate setting.
- j) Inform staff of any patient fever or respiratory symptoms immediately prior to arrival to the facility.
- k) Use cleaning procedures appropriate for SARS-CoV-2 (the virus that causes COVID-19), along with all routine cleaning and disinfection procedures. Refer to [List N on the EPA website](#) for EPA-registered disinfectants that have qualified under EPA's emerging viral pathogens program for use against SARS-CoV-2.
- l) After transporting the patient and decontaminating the unit, leave the rear doors of the transport vehicle open to allow for enough air exchange to remove potentially infectious particles.
  - i) The time it takes to complete transfer of the patient to the receiving facility and completion of all documentation should provide air changes for sufficient decontamination.
- m) When possible, use vehicles that have isolated driver and patient compartments that can provide separate ventilation to each area.
  - i) Close the door/window between these compartments before bringing the patient on board.
  - ii) During transport, vehicle ventilation in both compartments should be on non-recirculated mode to maximize air exchanges that reduce potentially infectious particles in the vehicle.
  - iii) 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 end of the vehicle.
  - iv) Some vehicles are equipped with a supplemental recirculating ventilation unit that passes air through HEPA filters before returning it to the vehicle. Such a unit can be used to increase the number of air exchanges per hour (ACH) [See the NIOSH study here](#).
- n) If a vehicle does not have an isolated driver compartment then ventilation should be used, open the outside air vents in the driver area and turn on the rear exhaust ventilation fans to the highest setting. This may create a negative pressure gradient in the patient area.

#### 4) Contingency Planning

- a) Follow EMS System medical director guidelines which may change based on evolving COVID-19 guidance.
- b) Understand that many patients need to continue their medical and procedure appointments in order to maintain their health, (e.g., dialysis treatment). Postponing or canceling their visits may be detrimental to their health.

- 5) Additional Resources:
- a) CDC [When and How to Wash Your Hands](#)
  - b) CDC [People At-risk for Serious Illness from COVID-19](#)
  - c) CDC [EMS Guidance](#)
  - d) CDC [Isolation Precautions](#)
  - e) CDC [Print Resources](#)
  - f) CDC [Optimization of PPE](#)
  - g) EPA [List N disinfectants to use against SARS-CoV-2](#)

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