Updated May 15, 2020

Section 8.37

Personal Protection, Treatment of Patients after screening positive for Coronavirus Disease (COVID-19) and Decontamination of Equipment after Use

Purpose: To outline precautions and treatments for patients who screen positive for COVID-19. To outline the appropriate decontamination for people, equipment, and vehicles utilized in treatment and transport of patients who screen positive for COVID-19.

I. Applicable patients
   a. Patients encountered by EMS personnel who:
      ii. Are known positive for COVID-19 and have not fully recovered.
   b. Patients who have screened positive for COVID-19 by a 911 Public Safety Answering Point (PSAP) and/or Emergency Medical Dispatch Center (EMDC), local health department, or CDC quarantine station.

II. Initial assessment
   a. Standard, contact, and airborne precautions must be observed if within six feet of the patient.
   b. The number of responders within six feet of the patient should be limited to the fewest number to provide essential patient care.
   c. A (surgical type) facemask should be placed on the patient for source control, if tolerated. Do not place N-95 or similar masks on patients as these increase the work of breathing.

III. Treatment Precautions
   a. Oxygen administration
      i. Nasal cannulas may be worn by the patient under a facemask as clinically indicated.
      ii. Non-rebreather masks should be used only when clinically indicated (e.g., severe respiratory distress, clinically significant hypoxia, failure to improve with nasal oxygen). Use the minimum oxygen flow setting necessary to improve/stabilize the patient.
   b. Aerosol Generating Procedures-
      i. Perform aerosol-generating procedures only as the last resort.
      ii. In addition to PPE (N-95 mask, face-shield, gloves, and gown) use extreme discretion when considering the use of aerosol-generating procedures, including:
         • BVM ventilations
         • Nebulizers
         • Suctioning
         • Supraglottic Airway
         • CPAP/BiPAP
 iii. Keep the patient and aerosols generated during the procedure away from others without PPE (e.g., bystanders, EMS personnel not in PPE, etc.).
 iv. Avoid cross contamination.  
    • Do not reach into drug box/ bag, or medical bag(s) with contaminated gloves.  
    • Close drug box/bag, and medical bag(s) when performing aerosolized procedure to prevent contamination of drug box/ bag and medical bag(s).
 v. When treating patient in the ambulance, activate patient compartment exhaust fan at maximum level.
 vi. When available, use HEPA filtration to filter expired air from the patient. If a HEPA filter is not available, attempt to contain exhausted air by another means.
 vii. If rescue breathing is performed, avoid hyperventilation, whenever possible.

 V. Cardiac Arrest
 a. For patients in cardiac arrest follow the Cardiac Arrest General Protocol 5-1 with the following modifications:
   i. Administer a nasal cannula to deliver oxygen. Place a surgical mask over the patients nose, mouth and nasal cannula.
   ii. Avoid performing rescue breaths, and do not attempt ET intubation.
   iii. If the airway must be secured, utilize only a supraglottic airway device. Refer to Emergency Airway Protocol, 7-9.
   iv. **CAUTION:** Do not allow oxygen to flow across the defibrillator’s adhesive pads during defibrillation.
   v. Patients in continuous cardiac arrest **WILL NOT BE TRANSPORTED**, regardless of mechanical CPR device. Resuscitation will either be terminated on scene or ROSC sustained (continued palpable pulse and systolic BP ≥60 mmHg for >5 minutes) **BEFORE** moving the patient to the patient compartment of a vehicle.
   vi. For witnessed arrests inside the patient care compartment:
      • Pull vehicle to the side of the road and perform resuscitation in full PPE, with doors OPEN.
      • If patient has mechanical CPR device in place and has lost ROSC, the device may be resumed with continued transport to the hospital, as long as all personnel in the patient compartment have sufficient respiratory PPE in place.

 IV. Transport
 a. **Patient Compartment**
   i. Interventions should be performed PRIOR to loading into or closing patient compartment of the ambulance.
   ii. Only one provider will remain with patient for transport, if possible.
   iii. When practical, utilize a vehicle with an isolated driver and patient compartment.
   iv. Only necessary personnel should be in the patient compartment with the patient.
v. All compartments should have ventilation maintained, with outside air vents open and set to non-recirculated mode.

b. Patient Transfer and Documentation-
   i. Friends and family of the patient should not ride in the transport vehicle with the patient.
      • If they must accompany the patient, they should have a surgical mask applied and be in the driver compartment of the vehicle.
      • This should be limited to extenuating circumstances (parents with minor children or similar).
      • Family members with possible exposure should be advised to STAY AT HOME or in the current location and contact their local health department.
   ii. Personnel driving the transport vehicle should don PPE (with the exception of respirator) and perform hand hygiene before entering the driver’s compartment. Respirator (N95) should be maintained throughout.
   iii. Notification of infectious risk should be made to receiving facility as soon as feasible and on a secure channel.
   iv. Maintain mask on patient and filtered exhaust while transporting patient to room.
   v. Avoid transporting the patient within 6 feet of others (e.g., unprotected hospital staff, patients, bystanders, etc.)
   vi. Do not carry drug box or bag into hospital until it is decontaminated.
   vii. Transfer patient care via verbal report.
   viii. Doff PPE after leaving patient room and perform hand hygiene before touching documentation tools.

V. Cleaning of Transport Vehicle & Equipment
   a. Leave patient compartment open for ventilation while patient is taken into receiving facility.
   b. Personnel should wear disposable gown and gloves for decontamination of the vehicle & equipment. A face shield or facemask and goggles should be worn if there is a potential for splashing or sprays.
   c. Maintain doors open during cleaning.
   d. Clean exterior of drug box or bag prior to taking it into the receiving facility.
   e. Dispose of any medications that have been handled, per 9-6 Southeast Michigan Medication Exchange and Replacement Procedure.
   f. Driver’s compartment should be included in the cleaning process.
   g. Disinfect after cleaning using EPA-registered, hospital-grade disinfectant to all surfaces that were touched, or all surfaces if aerosol-generating procedures were performed. Products with statements for emerging viral pathogens should be used.