Personal Protection During Treatment of Patients at Risk for Coronavirus Disease (COVID-19) and Decontamination of Equipment after Use

Purpose: To outline precautions when providing treatments for patients who are at risk for COVID-19. To outline the appropriate decontamination for people, equipment, and vehicles utilized in treatment and transport of patients at risk for COVID-19.

I. Applicable patients –
   a. Patients encountered by EMS personnel who:
      i. Have signs and symptoms of respiratory illness (cough, shortness of breath, hypoxia) AND fever (may be subjective)
      ii. Have signs and symptoms of respiratory illness (cough, shortness of breath, hypoxia) AND known exposure to patient with confirmed COVID-19
   b. Patients who have been identified prior to arrival as at risk 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, per Destination and Transport for Patients at Risk for Coronavirus Disease Protocol 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.
   d. Assess the patient respiratory symptoms and fever. If patient has fever AND cough or shortness of breath, refer to Clinical Treatment of a Patient with Suspected COVID-19, maintain source control and appropriate PPE.

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 when clinically indicated (e.g., moderate to severe respiratory distress, significant hypoxia, failure to improve with nasal oxygen).
   b. Aerosol Generating Procedures -
      i. In addition to PPE, there should be extreme caution in aerosol-generating procedures (BVM, suctioning, emergency airways, nebulizers, etc)
      ii. Perform aerosol-generating procedures only when necessary, according to Clinical Treatment of a Patient with Suspected COVID-19.

Protocol Source/References:
https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html,
https://www.cdc.gov/infectioncontrol/guidelines/isolation/precautions.html,
https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2
iii. Keep patient and aerosolization away from others without PPE (e.g., bystanders, EMS personnel not in PPE, etc).
iv. Do not reach into drug box/ bag with contaminated gloves.
v. Close drug/ bag box when performing aerosolized procedure to prevent contamination of drug box/ bag.
vi. When treating patient in the ambulance, activate patient compartment exhaust fan at maximum level.
vii. When possible, consider using HEPA filtration to expired air from the patient.

IV. Patient Compartment –
a. When practical, utilize a vehicle with an isolated driver and patient compartment.
b. Only necessary personnel should be in the patient compartment with the patient.
c. All compartments should have ventilation maintained, with outside air vents open and set to non-recirculated mode.

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

VI. 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. Any medication that have been handled

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.