San Diego Fire-Rescue and AMR San Diego COVID-19 Protocol

This protocol shall be followed unless directed differently by a Base Hospital

Steps 1-4 apply to all patient contacts. For patients that have a positive prehospital screen for potential COVID-19 infection, the remainder of this protocol shall be used in addition to the appropriate Treatment Protocol(s) based on Provider Impression(s).

1. Assume that all patients, regardless of dispatch complaint, may have COVID-19 and place a surgical mask on them at initial encounter, as tolerated. ❶
   Minimum PPE for all patient encounters is a surgical mask, goggles, and gloves. ❷
2. Perform initial assessment of all patients, including COVID-19 screen, from at least 6 feet away if possible. ❸
3. If approaching the patient is required to complete the screening, have a single provider don PPE (including at minimum a surgical mask, goggles, and gloves, and gown) and approach the patient to perform an assessment to determine what level of PPE is required. ❹❺❻
4. For patients in cardiac/respiratory arrest, all providers shall don the appropriate PPE (including N95/N100 mask, goggles, and gloves, and gown) prior to approaching the patient. ❺
5. For any patient who screens positive for potential COVID-19 infection all providers shall: ❸
   Utilize this protocol in addition to the appropriate protocols based on provider impression(s).
   - Place a surgical mask on the patient, as tolerated.
   - Don PPE prior to approaching the patient, including surgical mask or N95/N100 as appropriate, goggles, gloves, and gown. ❺❻
6. Consider if the patient is appropriate for non-transport per protocol S-415A.
7. Limit interventions to essential procedures only.
   - Auscultations of lung sounds in patients without respiratory distress, administration of nebulized medications and use of CPAP is discouraged except as outlined below.
8. Assess airway and initiate basic and/or advanced airway maneuvers as needed. ❺
   - If advanced airway is required, King Airway is preferred to endotracheal intubation. Use a HEPA filter for all positive-pressure ventilation.
9. Administer **Oxygen** for O_2 sat <94% at the lowest flow possible to achieve O_2 sat ≥94%. Place a surgical mask on the patient over the oxygen delivery device.
10. For **mild respiratory distress** (abnormal breathing that is neither severe nor moderate).
    - Do not perform any field treatment.
11. For **moderate respiratory distress** (not severe, but retractions, RR>24, or SpO2 <94%).
    - Do not administer nebulized medications or apply CPAP.
    - For bronchospasm, assist patient with use of their own metered-dose inhaler (MDI). ❼
12. For **severe respiratory distress** (altered level of consciousness, diaphoresis, inability to maintain work of breathing, difficulty speaking between breaths, bradycardia, increasing EtCO2).
    - Utilize CPAP with appropriate PPE. ❹
    - For bronchospasm, administer Albuterol/Atrovent via nebulizer with

appropriate PPE. ❹❼
    - For patients with known asthma or suspected allergic reaction presenting with severe bronchospasm, epinephrine IM is the preferred treatment in addition to MDI as the initial intervention.
13. During transport, restrict the number of providers in the patient compartment to only essential personnel to minimize possible exposures and, if possible, adjust the ventilation system air changes/hour to the highest rate and consider opening windows. ❽
14. Notify the receiving hospital for any patient who screens positive for possible COVID-19. Provide notification for all patients, including those who are transported BLS.
    - Prior to entry into the hospital, one provider should doff PPE and discuss plan for handoff with the triage RN.
    - You may be directed to an alternative triage area or handoff may occur outside the hospital.
15. Discontinue all aerosolizing procedures (including nebulized medication and/or CPAP prior to entry into the hospital triage area); discuss with the triage RN before entry for patients in severe distress requiring these interventions so that appropriate handoff can be arranged.

Special Considerations

❶ Do not rely on dispatch pre-arrival screening to catch all possible screened positive patients, repeat screening yourself. Patients with COVID-19 may present with complaints other than shortness of breath or fever. In addition, there is documented community spread, so travel or contact with a known case is not required for a positive screen.

❷ This PPE is recommended as the supply chain allows.

❸ A positive screen is any patient with these symptoms or combinations of symptoms:
- Cough
- Shortness of breath or difficulty breathing

Or at least two of these symptoms:
- Fever
- Repeated shaking with chills
- Muscle pain
- Headache
- Sore throat
- New loss of taste or smell

❹ If the patient is ambulatory in a home or residential building, consider asking them to come out to you to reduce exposure to surfaces in the home.

❺ Droplet and contact precautions should be taken for all potential COVID-19 patients. Airborne and contact precautions should be taken for all aerosolizing procedures including suctioning, CPAP, nebulized medications, bag-mask ventilation, CPR, advanced airway placement, as well as patients with significant coughing/sneezing; this includes an N95/N100 respirator and gown, in addition to the goggles and gloves required for all patients screening positive for potential COVID-19.

❻ There is no data to suggest that N95/N100 masks are more effective than surgical masks for preventing infection during routine care of COVID-19 patients. Therefore, N95/N100 masks should be reserved for use during high-risk aerosolizing procedures unless there is

adequate supply.

❼ Administration of Albuterol via a metered-dose inhaler (MDI) with spacer is considered equivalent to nebulized Albuterol; a spacer is typically required for this route to be effective in novice users. MDIs are single use and should be left with the hospital staff upon handoff of the patient; be sure to leave it with the hospital since MDIs are in short supply.

❽ Family members and other contacts of patients with possible COVID-19 should NOT ride in the transport vehicle, if possible. Consider allowing one parent or caregiver of an infant or child to be transported. If riding in the transport vehicle, they should wear a surgical mask. All areas of the transport cabin are exposed (as well as the driver compartment if connected). The higher air changes/hour may reduce the concentration of infectious particles, but does not eliminate risk.

*Fanny Packs (with masks, goggles, gowns, & gloves) shall be carried by all personnel, at all times, to ensure proper PPE is easily accessible.

*****All captains, supervisors, and crews shall ensure the following takes place:***

Ambulance Transport

During transport, limit the number of providers in the patient compartment to essential personnel to minimize possible exposures.

Isolate the ambulance driver from the patient compartment and keep pass-through doors and windows tightly shut, if equipped.

- Close the door/window between these compartments before bringing the patient on board.
- 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 end of the vehicle.

If a vehicle without an isolated driver compartment must be used, the driver must 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.

- Driver not directly involved in patient care should wear at least a surgical mask while driving.
- Driver directly involved in patient care must keep respirator on, but remove gown, gloves, and goggles before entering the driver compartment.

Decontamination of Personnel

Wash hands a minimum of 20 seconds with warm water and soap.

- If hand washing is not an option, use of hand sanitizer with at least 60% alcohol content is acceptable until proper hand washing is available.

Wash dirty uniform following normal laundry procedures (hot water with normal laundry detergent).

Contaminated firefighting PPE shall follow the specialized PPE washing procedures.

Shower and change uniform (have extra uniforms immediately available at station/quarters).

Decontamination of Equipment and Ambulance

Decontaminate equipment and ambulances with an EPA approved COVID-19 cleaner and follow instructions for SARS-associated Coronavirus.

After transporting the patient, leave the rear doors of the ambulance open to allow for sufficient air changes (at least 10 minutes) to remove potentially infectious particles.

When cleaning the vehicle and equipment used in patient care, personnel should wear a disposable gown, gloves, mask and goggles.

Ensure that environmental cleaning and disinfection procedures are followed consistently and correctly, to include the provision of adequate ventilation when chemicals are in use (doors open).

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 using the products described above.

Clean and disinfect reusable patient-care equipment before use on another patient, according to agency and manufacturer's instructions.

PPE worn by clinicians providing direct patient care, gurney sheets/blankets, and products used for cleaning/disinfecting should be disposed of in a red biohazard bag.

Vehicles used to transport confirmed COVID-19 patients, or after transporting suspected COVID-19 patients with aerosol-generating procedures, should return to AMR Station 1 AFTER normal decontamination for use of the Decontamination Fogger.

For additional information on Ambulance Fogger decontamination and decontamination of ambulances, equipment, and uniforms, please see the most up-to-date guidelines at www.globalmedicalresponse.com/coronavirus and click the link for Decontamination and Disinfecting Procedures.

Encounter (within 6' of a patient who screens positive for potential COVID-19)

- Full PPE (N100/N95, gown, gloves, and goggles) without a PPE breach.
- Option to document on a Minor Injury form.
- DICO contact is **not** required.

Exposure (within 6' of a patient who screens positive for potential COVID-19)

- Missing any PPE (N100/N95, gown, gloves, or goggles) or a PPE breach.
- Any aerosolizing procedures including suctioning, CPAP, nebulized medications, bag-mask ventilation, advanced airway placement, chest compressions, as well as patients with significant coughing/sneezing.
- Extensive body contact with patient.
- When the scene stabilizes, contact DICO.
- Complete Communicable Disease Exposure Report.
    - Complete on scene (legible, include FS#), enter names of exposed crew members, take a photograph of form and email to DICO call taker who contacted you, send form to hospital with patient (if not possible, ensure form is delivered to hospital ASAP).

Documentation

- Documentation of patient care should be done after personnel have completed transport, removed their PPE, and performed hand hygiene.
- Document positive COVID-19 screening.
- Include the type of PPE used, when it was put on, and if there were any breaches.
- EMS documentation should include a listing of EMS clinicians and public safety providers involved in the response and level of contact with the patient (for example, no contact with patient, provided direct patient care).
- Use the COVID-19 button on the ePCR to flag COVID-19 patients.