

COVID-19 RESPIRATORY DISTRESS Supplement - 03.26.2020

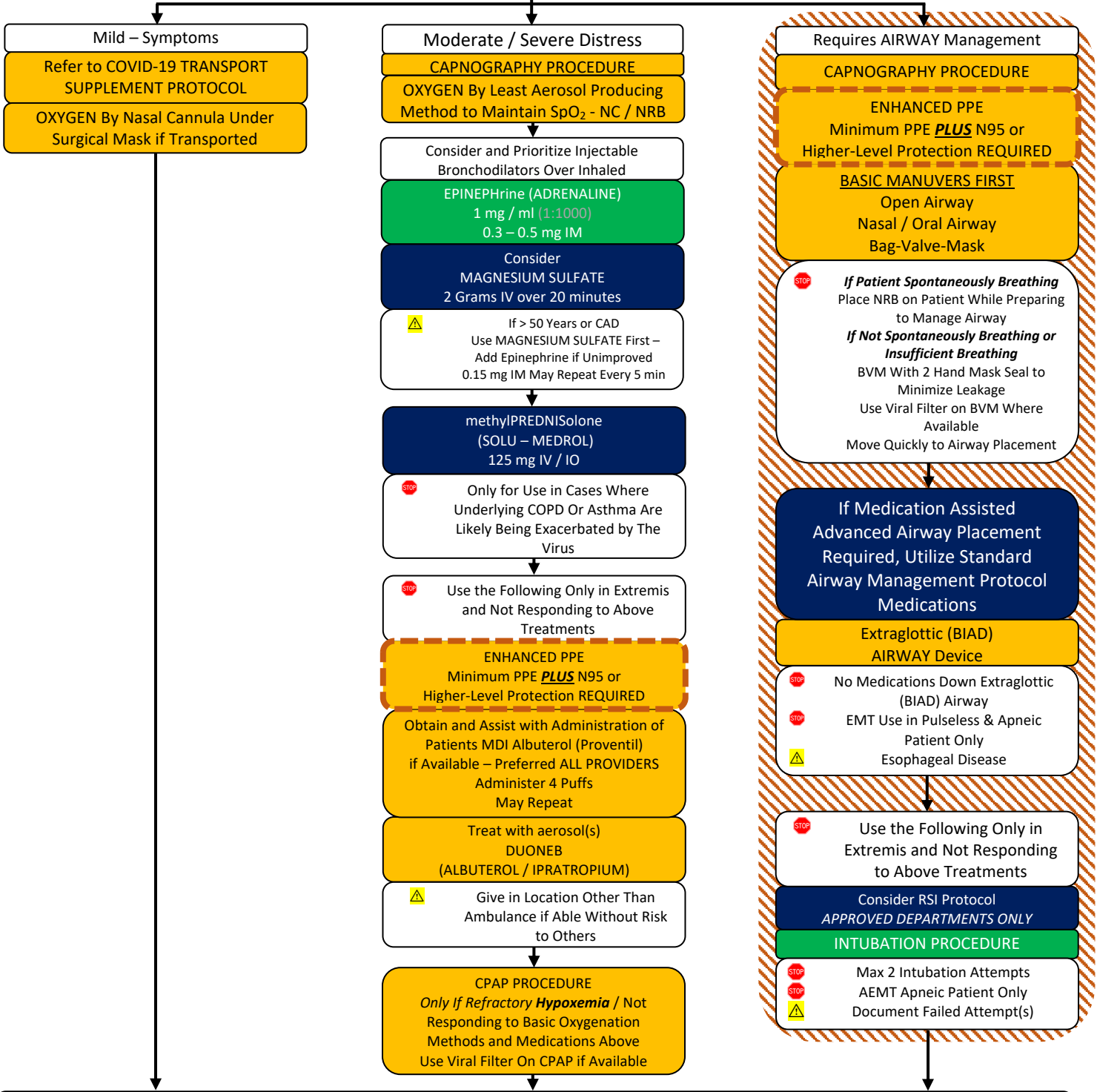
**UNIVERSAL PATIENT CARE PROTOCOL**

PPE Minimum  
Surgical Mask / Gown / Gloves / Eye Protection  
Surgical Mask on Patient

12 LEAD EKG PROCEDURE  
⚠️ 1<sup>ST</sup> Contact to EKG and Transmission < 10 Min

IV / IO PROCEDURE

This protocol is intended to be used in place of the standard Adult Respiratory Distress protocol and Adult Airway protocol for patients who present with viral symptoms



TRANSPORT to appropriate facility CONTACT receiving facility with EARLY NOTIFICATION of potential Covid-19 case AND VERIFY HOSPITAL ARRIVAL / ACCESS PROCESS before taking patient inside CONSULT Medical Direction where indicated APPROPRIATE transfer of care

EMT Intervention      AEMT Intervention      PARAMEDIC Intervention      Online Medical Control

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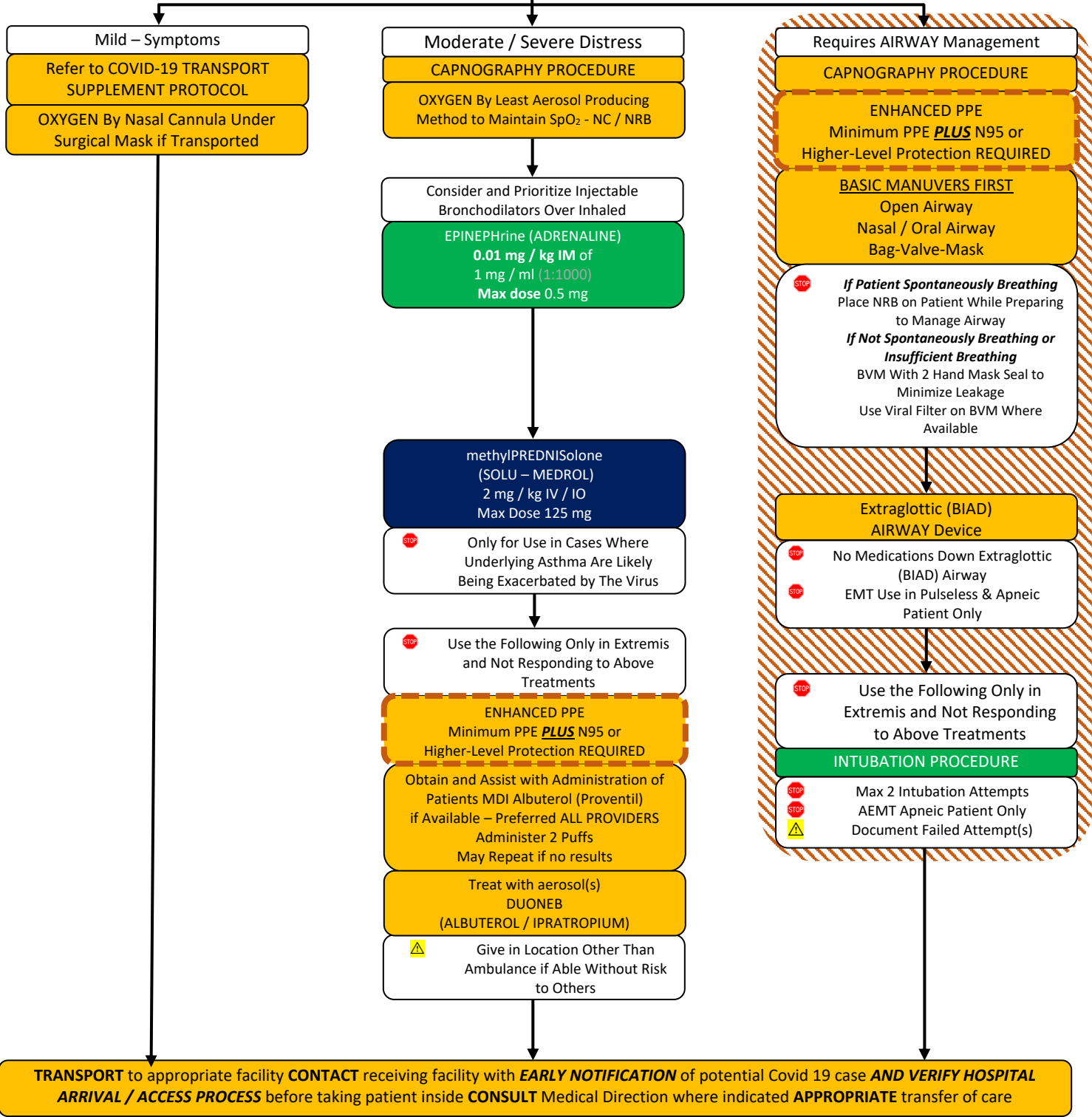
3-5 kg	6-7 kg	8-9 kg	10-11 kg	12-14 kg	15-18 kg	19-23 kg	24-29 kg	30-36 kg
6-11 lbs	13-15 lbs	18-20 lbs	22-24 lbs	26-31 lbs	33-37 lbs	42-51 lbs	53-64 lbs	66-81 lbs
18-24 in	24-26 in	26-29 in	29-33 in	33-38 in	38-43 in	43-48 in	48-52 in	52-57 in

**UNIVERSAL PATIENT CARE PROTOCOL**

PPE Minimum  
Surgical Mask / Gown / Gloves / Eye Protection  
Surgical Mask on Patient

**IV / IO PROCEDURE**

This protocol is intended to be used in place of the standard Pediatric Respiratory Distress protocol and Pediatric Airway protocol for patients who present with viral symptoms



**TRANSPORT** to appropriate facility **CONTACT** receiving facility with **EARLY NOTIFICATION** of potential Covid 19 case **AND VERIFY HOSPITAL ARRIVAL / ACCESS PROCESS** before taking patient inside **CONSULT** Medical Direction where indicated **APPROPRIATE** transfer of care

EMT Intervention      AEMT Intervention      PARAMEDIC Intervention      Online Medical Control

# COVID-19 RESPIRATORY DISTRESS Supplement - 03.26.2020

History	SIGNS AND SYMPTOMS	DIFFERENTIAL DIAGNOSIS
<ul style="list-style-type: none"> <li>Flu-like Illness</li> </ul>	<ul style="list-style-type: none"> <li>Fever greater than 100.4 F</li> <li>Dyspnea</li> <li>Upper respiratory infection</li> <li>Cough</li> <li>Chills</li> <li>Weakness</li> <li>Body Aches</li> <li>Diarrhea, plus one of the above</li> </ul>	<ul style="list-style-type: none"> <li>Cancer / tumors / lymphoma</li> <li>Medication or drug reaction</li> <li>Hyperthyroidism</li> <li>Heat related emergency</li> <li>Meningitis</li> <li>Pneumonia</li> <li>Influenza A/B or RSV</li> </ul>

## COVID-19 TREATMENT POINTS

- If the patient has a metered dose inhaler, make sure this goes with the patient if transported. EMS may utilize patients MDI in place of standard aerosol treatments to help minimize risk of these procedures in these patients.
- When high risk droplet procedures are required, the provider is recommended to wear a minimum of eye protection, gown, gloves and a N95. This may include intubation, CPAP, suction, aerosol treatments or care management of symptomatic tracheostomy patient.
- If nebulized treatments must be given, attempt to give in location other than the ambulance, but also nowhere that will expose others. Assure receiving facility is aware of this in EMS to Hospital report.
- In-line HEPA filters, where available, should be utilized during ventilation of patients with ETT or supraglottic airway. Use with CPAP or nebulized treatments can vary with product. If using in-line sampling capnography as well, make sure the HEPA filter is placed closest to the patient and capnography sampling connector is after the HEPA filter.
- Consider the use of IM epinephrine or IV magnesium per standard respiratory distress protocols for severe cases. This is indicated earlier and for milder symptoms in these cases to help minimize the risk associated with nebulized treatments.
- If a patient has an unstable airway, don PPE as described above and place an advanced airway. An extraglottic airway creates less exposure to aerosols / droplets and is preferred. Intubation is permitted as a backup.
- If your PPE supply allows, all patients are to arrive at the hospitals wearing a surgical mask. If limited surgical mask, prioritize mask placement on patients with fever, cough, dyspnea or other flu like symptoms discussed in prior updates. Receiving EDs may want to place a mask on patients when then arrive.
- Do not use delivery of high flow oxygen via nasal cannula during intubation procedure in Covid-19 cases.

## GENERAL KEY POINTS

- Exam: Mental Status, HEENT, Skin, Neck, Heart, Lungs, Abdomen, Extremities, Neuro
- Status asthmaticus** - severe prolonged asthma attack unresponsive to therapy - life threatening!
- If the patient is over 50 years of age, has a history of cardiac disease, or if the patient's heart rate is >120 EPINEPHrine (Adrenaline) may precipitate cardiac ischemia.
- Monitor pulse oximetry continuously during treatment and transport.
- A silent chest in respiratory distress is a pre - respiratory arrest sign.
- Be alert for respiratory depression in COPD patients on prolonged high flow oxygen administration.
- DO NOT withhold oxygen from hypoxic patients.
- If Albuterol (Proventil) and / or Ipratropium (Atrovent) is given, monitor the patient's cardiac rhythm and initiate IV.
- Patient with known COPD, asthma and a history of steroid use should receive IV MethylPREDNISolone (Solu-Medrol). Use with caution in diabetics (hyperglycemia), GI bleeds, and febrile patients (sepsis / infections).
- Assure enough expiration time when ventilating COPD or asthma patients to prevent breath stacking and Co2 elimination.
- Albuterol (Proventil) and Ipratropium (Atrovent) can be given down an ETT or Tracheotomy during ventilation if there is evidence of bronchoconstriction.
- EtCo2 measurement is mandatory with all methods of intubation. Document results of SpO2.**
- Limit intubation attempts to 2 per patient max.**
- BVM and oral airway is acceptable means of airway control and ventilation during prehospital care.**
- If unable to intubate, continue BVM ventilations, transport rapidly, and **notify receiving hospital early.**
- Do not assume hyperventilation is psychogenic - use oxygen, not a paper bag.
- Continuous pulse oximetry should be utilized in all patients with an inadequate respiratory function.
- Consider c-collar to help maintain airway placement for all managed airway patients.
- Consider the use of intubation aids such as a bougie or video laryngoscope to facilitate intubation.

Extraglottic airway device / BIAD (Blind Insertion Airway Device)  
 Examples (not limited to); King Airway, LMA, Combitube, iGel

# COVID-19 TRANSPORT Supplement - 03.26.2020

Known or suspected Covid-19 Patient

One or more viral symptoms present;

- Fever
- Cough
- Nasal / Chest Congestion
- Sore Throat
- Body Aches
- Dyspnea

Provider and Patient PPE for droplet precautions per most current guidelines

Limit number of providers with patient contact, only as many as required for indicated interventions

UNIVERSAL PATIENT CARE PROTOCOL

Conduct Patient Assessment – EMS Taken Vitals

**Vital Signs – All**

- SBP  $\geq$  100
- Resp  $<$  22
- Spo2  $\geq$  94 RA
- HR  $<$  110
- No decreased LOC

**Patient Medical History - All**

- Age  $<$  60  $>$  3 years
- Not ESRD on dialysis
- No CAD/HF
- No lung or heart disease
- Not immunocompromised
- No History of HTN

**Stable for NO TRANSPORT**

Determine Suitability for Home Care

- Appropriate Care Givers are available (if needed)
- There is separate space for the patient to recover without sharing with others
- The patient has access to food, water, and other necessities
- There are no household members with high risk history (Noted above)

Release without transport to care of self with standard non-transport release if patient consents to non-transport. Contact Medical Control only if the patient does not consent. Medical Control contact not required if within above criteria.

Provide patient resources for hotlines, testing, and / or telemedicine.

Complete thorough PCR regarding assessment and instructions given.

**Vital Signs – Any**

- SBP  $<$  100
- Resp  $>$  22
- Spo2  $<$  94 RA
- HR  $>$  110
- Decreased LOC

**Unstable - TRANSPORT**

**Patient Medical History - Any**

- Age  $>$  60  $<$  3
- ESRD on dialysis
- Lung or heart disease
- Immunocompromised
- History HTN/CAD/HF

**Patient Complaint - Any**  
Chest Pain, Shortness of breath, or Syncope

ALS ASSESSMENT (WHERE AVAILABLE)

Minimize aerosol or droplet producing procedures unless required such as CPAP and aerosol treatments

Obtain phone numbers for key family / caregivers and provide to receiving Hospital as visitation / access to patient likely to be restricted

**TRANSPORT** to appropriate facility  
**CONTACT** receiving facility as early as possible to indicate a person of interest for Covid-19.  
Follow Hospital instructions for access to Hospital once at destination.  
**CONSULT** Medical Direction where indicated

Remove PPE with caution following established doffing techniques and discard appropriately.  
Through decontamination for ambulance and equipment following current disinfection standards.

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**KEY POINTS**

- If a patient is not transported from a location other than home, discourage the use of public transportation.
- Please do not enter the Emergency Department with a suspected COVID-19 patient until you have verified the ED is ready to receive the patient. This usually involves clearing hallways of other personnel/patients, preparing isolation rooms, and closing other patient's doors.
- Consider finishing or halting aerosol producing treatments during transition from ambulance to the Emergency Department.
- If patient is transported, obtain phone numbers for family and / or caregivers if applicable as the visitation of the patient is likely to be restricted at the hospital. Give this information to the receiving facility.

# COVID-19 PPE and EXPOSURE Supplement - 03.26.2020

PPE REQUIREMENTS	
PPE Requirements <b>WITHOUT</b> Aerosol Generating Procedures	PPE Requirements <b>WITH</b> Aerosol Generating Procedures <small>Such as Breathing Treatments, Suction, CPAP, Airway Management</small>
<ul style="list-style-type: none"> <li>• Surgical mask on patient during care</li> <li>• Surgical mask minimum on all providers</li> <li>• Gown</li> <li>• Gloves</li> <li>• Eye Protection</li> </ul>	<ul style="list-style-type: none"> <li>• Surgical mask on patient when not actively managing airway</li> <li>• N95 or greater level respiratory protection</li> <li>• Gown</li> <li>• Gloves</li> <li>• Eye Protection</li> </ul>

PPE KEY POINTS
<ul style="list-style-type: none"> <li>• Follow CDC guidelines for proper donning/doffing of PPE – PPE requirements may change frequently, check for updates</li> <li>• Surgical masks are to be used and reused throughout a shift unless soiled, damaged or exposed to person of concern (ex: coughing, aerosol generating procedure/treatment).</li> <li>• All providers are to wear at minimal a surgical mask, gloves and eye protection on all patient encounters.</li> <li>• If your PPE supply allows, all patients are to arrive at the hospitals wearing a surgical mask. If limited surgical mask, prioritize mask placement on patients with fever, cough, dyspnea or other flu like symptoms discussed in prior updates. Receiving EDs may want to place a mask on patients when then arrive.</li> <li>• N95 masks can be used by a single EMS provider until soiled, damaged, or exposed to a person of concern. This could mean multiple shift use for N95 mask. Consider placing initials on masks that are being reused and storing in a paper bag to allow moisture in a used mask to dissipate.</li> <li>• Departments using CAPR/PAPRs please follow your department policies for use and cleaning.</li> <li>• If gowns are not available and concerning droplet exposure occurred, change into a clean uniform, remembering to wash hands after touching soiled clothing.</li> <li>• Higher level of respiratory protection in excess of N95 include N99 mask, N100 mask, PAPR/CAPR, or full or partial facemasks with N95 or greater filters.</li> </ul>

EXPOSURE	
Exposure to Covid-19 Positive Patient <b>WITH</b> Appropriate PPE	Exposure to Covid-19 Positive Patient <b>WITHOUT</b> Appropriate PPE
<ul style="list-style-type: none"> <li>• Safe to return to work without restrictions</li> <li>• Self - monitor for symptoms</li> <li>• If symptoms develop during the shift, the provider should wear a surgical mask, place themselves in self isolation and notify the receiving hospital's Infection Control Department or follow departmental policy</li> </ul>	<ul style="list-style-type: none"> <li>• Notify the receiving hospital's Infection Control Department and follow departmental exposure policies</li> <li>• The provider is to complete an exposure form</li> <li>• Self – monitor for symptoms following departmental policy</li> <li>• If symptoms develop during the shift, the provider should wear a surgical mask, place themselves in self isolation</li> </ul>

EXPOSURE KEY POINTS
<ul style="list-style-type: none"> <li>• Self-Monitoring for symptoms includes taking temperature at least twice per day</li> <li>• Self-Monitoring programs are being initiated by many departments to assure staff are well and not reporting to work with possible symptoms. Departments may decide to use these for routine employee monitoring or just after possible exposure.</li> </ul>