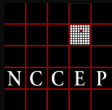


High Consequence Pathogens
(Respiratory Diseases, SARS, MERS-CoV, COVID-19)

EMS Dispatch Center Screening

1. Use Emerging Infectious Disease (EID) Surveillance Tool or Pandemic Guide Protocols with the following chief complaints:
   Fever **Flu-Like Symptoms** **Respiratory Illness (cough, difficulty breathing)**
   Sick Person **Breathing Problem**

2. Ask the following screening questions:
   Do you have FEVER AND RESPIRATORY SYMPTOMS?
   (cough, breathing difficulty, or other respiratory symptoms?)

- ***Community spread is now in North Carolina so travel history is not a necessary screening question.***

******CONSIDER SENDING FIRST RESPONDERS ONLY ON PRIORITY CALLS INVOLVING CARDIAC or RESPIRATORY ARREST, UNCONTROLLED BLEEDING, RESCUE INCIDENTS, MVC, EXTENDED EMS RESPONSE TIMES, etc.******
This will limit PPE use given critical nationwide shortages.

Evolving Protocol:
Protocol subject to change at any time dependent on changing outbreak locations.

Monitor for protocol updates.

Positive EMD Screening

DO NOT DISPATCH FIRST RESPONDERS
- Dispatch EMS Unit only.
- Ask caller to place a mask on patient if available.

Negative EMD Screening

EMS Screening
Do not rely solely on EMD personnel to identify a potential exposure patient:
- EMD may be constrained by time and caller information
- Repeat the EMD screening above: Patients with Fever and Cough (or other respiratory symptoms are at risk of Influenza and/or COVID-19.)
- Limit number of providers necessary for care and to limit potential exposures

EMS Immediate Concern
Fever AND signs of a respiratory illness:
- Stand 6 feet away and perform quick screening. If patient screens positive, place mask or covering over patient's mouth and nose.
- Patients with fever and respiratory symptoms are at risk of Influenza and COVID-19.

Negative EMS Screening

Exit to Appropriate Protocol(s)

PPE Supply Chain Disruptions:
- Prioritize Respirators/ N95 Masks to aerosol-generating procedures until supply chain restored.
- Prioritize Gowns to aerosol-generating procedures.
- It is reasonable for providers to wear a simple/surgical mask during their duty-shift and change only when soiled or damaged. However, this will contribute to increased PPE use. Adjust use based on supply chain.

Positive EMS Screening

Place Simple/Surgical Mask on source patient

EMS PPE

Patient:
- Use non-rebreather mask if oxygen needed
- If unable to tolerate mask, have patient cover mouth and nose when coughing

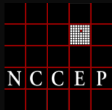
Providers utilize:
- Follow PPE precautions listed below:
- Eye protection
- Simple/surgical mask {N95 mask (or higher) or PAPR for aerosol-producing treatments}
- Exam gloves
- Goggles (aerosol generating)
- Disposable gown or coveralls
- Create negative pressure in care compartment (See Pearls)

Personnel in ambulance cab utilize:
- Surgical mask for driver and passenger

EMS General Treatment Considerations

Aerosol generating procedures:
NIPPV / Nebulizer therapy / Intubation / BIAD / Suctioning) / CPR
Use all PPE devices and strategies listed above
- **Notify receiving facility of infection control requirements prior to arrival.**

Exit to Appropriate Protocol(s)



High Consequence Pathogens

(Respiratory Diseases, SARS, MERS-CoV, COVID-19)

Entering Healthcare Facilities:

Long-term care facilities

Facilities are screening all visitors who enter, including EMS. Please comply with their screening process. We should be self-monitoring and can report to the facilities you are well and have no fever through work screening which many will accept.

This screening is being done to protect a very vulnerable population.

Hospitals

If you have dressed out in gowns and masks during patient care, please place a new pair of gloves on prior to entering a hospital.

After you have given your hand-off report, change into a new pair of gloves to exit.

Perform your self and unit decontamination and then doff all PPE outside the hospital.

This will decease PPE use and prevent contamination of a hospital space.

Aerosol generating procedures:

Limit CPAP and nebulizer therapy to that only absolutely necessary with a patient who has positive COVID-19 screening. Patient's who have negative COVID-19 screening should be treated according to applicable protocol in the usual fashion

If necessary to use nebulizer in a patient who has a positive COVID-19 screening, use the facemask, and place a surgical mask over the nebulizer/facemask circuit. You can also use a triangular bandage fashioned to form a facemask to cover the circuit.

Do not enter the hospital with CPAP or nebulizer therapy in progress.

If transporting a patient into the hospital for direct admit to an inpatient ward and the patient requires a NRB Mask for appropriate oxygenation, cover the NRB facemask portion with a surgical mask to decrease chance of aerosol production

First Responder Limited Response:

We are limiting FR response to decrease use of PPE. We have a critical nationwide shortage of PPE.

We are also limiting FR response to maintain a reserve pool of medically trained personnel in the event we need help in manning EMS units going forward.

If you need assistance, ask for help and be specific in your request and needs to assign the correct resource.

Pearls

- **Place simple/surgical mask on any patient complaining of respiratory problems with or without a fever.**
- **Dispatch Screening:**
  - **If caller interrogation results in positive screen this only means first responders should not be sent. Remember this screening process will result in many False Positive screens in order to be very sensitive.**
- **EMS Screening:**
  - **Limit distance initially to ≥ 6 feet and conduct a secondary screening using both the EMD specific questions and EMS specific questions. If this results in a positive screen, immediately place a simple/surgical mask on the source patient and all providers don appropriate PPE and limit provider number to that which necessary for patient care.**
- **Close Contact Definition:**
  - **Healthcare provider exposure is defined as being within 6 feet for ≥ 10 minutes in a patient with suspected illness.**
  - **Unprotected (no or incorrect PPE) direct contact with body fluids, including respiratory generated body fluids.**
- **Transport:**
  - **Occupants in cab of vehicle all should wear simple/surgical masks. Riders should be discouraged to limit PPE use.**
  - **Limit number of providers in vehicle required to provide patient care in order to limit exposures.**
  - **Ensure use of all PPE for crew and passengers when aerosol-producing procedures utilized.**
- **Negative Pressure in care compartment:**
  - **Door or window available to separate driver's and care compartment space:**
    - **Close door/window between driver's and care compartment and operate rear exhaust fan on full.**
  - **No door or window available to separate driver's and care compartment space:**
    - **Open outside air vent in driver's compartment and set rear exhaust fan to full.**
  - **Set vehicle ventilation system to non-recirculating to bring in maximum outside air.**
  - **Use recirculating HEPA ventilation system if equipped.**
- **Airborne precautions:**
  - Standard PPE with fit-tested N95 mask (or PAPR respirator) and utilization of a gown or coveralls, change of gloves after every patient contact, and strict hand washing precautions. This level is utilized with Aspergillus, SARS/MERS/COVID-19, Tuberculosis, Measles (rubeola) Chickenpox (varicella-zoster), Smallpox, Influenza, disseminated herpes zoster, or Adenovirus/Rhinovirus.
- **Contact precautions:**
  - Standard PPE with utilization of a gown or coveralls, change of gloves after every patient contact, and strict hand washing precautions.
  - This level is utilized with GI complaints, blood or body fluids, C diff, scabies, wound and skin infections, MRSA.
  - Clostridium difficile (C diff) is not inactivated by alcohol-based cleaners and washing with soap and water is indicated.
- **Droplet precautions:**
  - Standard PPE plus a standard surgical mask for providers who accompany patients in the treatment compartment and a surgical mask or NRB O2 mask for the patient.
  - This level is utilized when Influenza, Meningitis, Mumps, Streptococcal pharyngitis, Pertussis, Adenovirus, Rhinovirus, and undiagnosed rashes.
- **All-hazards precautions:**
  - Standard PPE plus airborne precautions plus contact precautions.
  - This level is utilized during the initial phases of an outbreak when the etiology of the infection is unknown or when the causative agent is found to be highly contagious (e.g. SARS, MERS-CoV, COVID-19).
- **COVID-19 (Novel Coronavirus): For most current criteria to guide evaluations of patients under investigation:**
  - http://www.cdc.gov/coronavirus/2019-nCoV/clinical-criteria.html

High Consequence Pathogens
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Decontamination Recommendations

EMS Personnel Requires Decontamination

Driver:

- Should wear full PPE as described when caring for patient.
- Remove all PPE, except N95 mask (or higher) or PAPR and perform hand hygiene prior to entering cab of vehicle to prevent contamination of driver's compartment. **Cab occupants only need to wear simple/surgical masks if N95 not already used.**

Wash hands:

- Thoroughly after transferring patient care and/or cleaning ambulance

Maintain records:

- All prehospital providers exposed to patient at the scene and during ambulance transport (self-monitoring for symptoms for 14 days is recommended, even if wearing appropriate PPE).
  This does not mean the providers can no longer work.
- List all prehospital provider names (students, observers, supervisors, first response etc.) in the Patient Care Report.

EMS Equipment / Transport Unit Requires Decontamination

Safely clean vehicles used for transport:

- Follow standard operating procedures for the containment and disposal of regulated medical waste.
- Follow standard operating procedures for containing and reprocessing used linen.

Wear appropriate PPE when:

- Removing soiled linen from the vehicle. Avoid shaking the linen.
- Clean and disinfect the vehicle in accordance with agency standard operating procedures.
- Personnel performing the cleaning should wear a disposable gown and gloves (a respirator should not be needed) during the clean-up process; the PPE should be discarded after use.
- 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 an **EPA-registered disinfectant** appropriate for SARS, MERS-CoV, or coronavirus in healthcare settings in accordance with manufacturer's recommendations.

EMS Provider Exposure Risk and Monitoring Recommendations

Close Contact
Less than 6 feet for > 10 minutes
Source patient **NOT WEARING A MASK**

PPE Utilized	Exposure Risk	Monitoring	Work Restrictions
NONE	HIGH	Self-monitor Supervision	**If symptomatic:** Fever and Respiratory symptoms (cough, difficulty breathing or other respiratory symptoms) **Exclude from work:** • At least 72 hours after fever resolution with no use of fever reducing medications. AND • At least 7 days since symptom onset.
No Mask N95 or PAPR	HIGH		
No Eye Protection	MEDIUM		
No Gown/ Coveralls or Gloves	LOW		
All recommended PPE Except Mask instead of N95 or PAPR	LOW		

Close Contact
Less than 6 feet for > 10 minutes
Source patient **WEARING A MASK**

PPE Utilized	Exposure Risk	Monitoring	Work Restrictions
NONE	MEDIUM	Self-monitor Supervision	**If symptomatic:** Fever and Respiratory symptoms (cough, difficulty breathing or other respiratory symptoms) **Exclude from work:** • At least 72 hours after fever resolution with no use of fever reducing medications. AND • At least 7 days since symptom onset.
No Mask N95 or PAPR	MEDIUM		
No Eye Protection	LOW		
No Gown/ Coveralls or Gloves	LOW		
All recommended PPE Except Mask instead of N95 or PAPR	LOW		

Placing a simple/surgical mask on the patient within 10 minutes of contact decreases exposure risk.

Return to Work Practice and Restrictions (if excluded from work for 3 to 7 days):

- Wear mask at all times and restrict care of immunocompromised patients (Cancer, Transplant, Steroid use) until all symptoms have resolved or 14 days after onset of illness, whichever is longest.

Self-Monitoring with Delegated Supervision:

- Self-monitoring with oversight by agency's infection control officer, occupation or public health department per agency policy.
- Prior to duty shift measure temperature and assess for illness symptoms either by provider, infection control officer, occupational or public health.

https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html **AND** https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/hcp-return-work.html