



*DELAWARE HEALTH AND SOCIAL SERVICES*

Division of Public Health

Emergency Medical Services and Preparedness Section

# **DPH COVID-19 Guidance For First Responder Operations**

**VERSION 1.0**

**Created: 12.10.2020**

## **DPH COVID-19 Guidance First Responder Operations Version 1.0**

**Created: 12/10/2020**

The following guidance has been adopted by the Delaware Division of Public Health (DPH) to:

- Support prevention of workplace-associated spread of COVID-19;
- Support the safe management of persons with suspected or known COVID-19 in workplace settings;
- Preserve supply of the personal protective equipment (PPE) and resources needed to protect First Responders.

This guidance has been updated based on currently available information about COVID-19 and the current situation in Delaware and the United States. Agency practices should be based on the most up-to-date clinical recommendations and information from appropriate public health authorities and EMS medical direction about SARS-CoV-2 (COVID-19) infection. Changes are based on the CDC's *Criteria for Return to Work for Healthcare Personnel with SARS-CoV-2 Infection (Interim Guidance)*, (07/17/2020) and *Delaware Division of Public Health Guidance for Management of Persons with Suspected COVID-19 Exposure, Discontinuation of Home Isolation and Return to Work* (07/20/2020), *Interim U.S. Guidance for Risk Assessment and Work Restrictions for Healthcare Personnel with Potential Exposure to COVID-19* (11/06/2020), *Options to Reduce Quarantine for Contacts of Persons with SARS-CoV-2 Infection Using Symptom Monitoring and Diagnostic Testing* (12/02/2020)

### **Key Highlights of This Document**

- Guidance for all First Responders, including EMS, Fire, Law Enforcement and ambulance personnel
- This version has been reorganized to reflect all First Responder guidance.
- The EMS and ambulance-specific guidance has been moved to Section 4.

**While this guidance may be updated, it is the responsibility of each agency's leadership and infection control designated officer to monitor and follow Centers for Disease Control and Prevention (CDC) guidance.**

*Due to the dynamic nature of information which continues to emerge about COVID-19 and the virus that causes it (severe acute respiratory syndrome coronavirus 2, shortened to SARS-CoV-2), this information is subject to change.*

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## Adoption and Enforcement of these First Responder Public Health Guidelines

This guideline, written using the Centers for Disease Control and Prevention (CDC) guidelines, Delaware Division of Public Health guidance and the Governor’s Declaration of Emergency, is to be adopted and enforced by all First Responder agencies within the State of Delaware.

- Failure by an agency to adopt and enforce these guidelines may result in citations from the Division of Public Health.
- Providers who violate these guidelines may have action taken by the Division of Public Health against their certification for being a threat to the public’s health, safety and welfare.

## DEFINITIONS:

**Aerosol Generating Procedure (AGP):** Procedures performed on patients that generate higher concentrations of infectious aerosols.

- Suctioning
- Cardiopulmonary resuscitation (CPR)
- Manual ventilation
- Endotracheal intubation/extubation
- CPAP/BiPAP
- Nebulizer administration

**Appropriate Personal Protective Equipment (PPE):**

- a) Face mask or N95 respirator, eye protection (face shield, goggles or safety glasses), gloves and gown – if no aerosol-generating procedures performed
- b) N95 Respirator, eye protection (face shield, goggles or safety glasses), gloves and gown – if an aerosol-generating procedure was performed

**Close Contact:**

- a) being within approximately 6 feet (2 meters) of a COVID-19 infected person for a prolonged period of time (see **Prolonged Exposure** definition below) or caring for or visiting a person infected with COVID-19, or sitting within 6 feet of the person infected with COVID-19 in a vehicle or room; close contact can occur while caring for, living with, visiting, or sharing a living or working area or room with a person infected with COVID-19, **OR**
- b) having direct contact with infectious secretions of a COVID-19 infected person (e.g., being coughed on).

**Encounter:** If a first responder is wearing appropriate PPE for the situation, the responder has had an **encounter** and they do not need a risk assessment or testing, regardless of the patient's COVID-19 status.

**Exposure:** a first responder is considered to have an **exposure** and should have a risk assessment completed when one of the following occur:

- a) Appropriate PPE was not worn on a suspected or confirmed COVID-19 patient, **OR**
- b) had a breach in their PPE, especially the mask, respirator or eye protection, **OR**
- c) the responder self-exposes themselves by inappropriately doffing the PPE, **OR**
- d) the responder has been in close contact and/or has had a prolonged exposure to a person who is positive for COVID-19.

**First Responder:** a first responder is defined as an employee or volunteer of emergency medical services, fire companies, ambulance providers and law enforcement agencies.

**Healthcare Providers:** HCPs are defined as “all persons, paid and unpaid, working in healthcare settings, including emergency medical services (EMS), engaged in patient care activities, including: patient assessment for triage, working in ambulances, entering examination rooms or patient rooms to provide care or clean and disinfect the environment, obtaining clinical specimens, handling soiled medical supplies or equipment, and coming in contact with potentially contaminated environmental surfaces.” ([Centers for Disease Control and Prevention, 2020](#)).

**Infection Control Practices (ICP):** The practices taken to reduce a person's exposure to an infectious disease. These include, but are not limited to source control hand hygiene, appropriate PPE, social distancing, quarantine

**Isolation:** The separation of an infected individual from non-infected individuals.

**Prolonged Exposure:** consider a cumulative exposure of 15 minutes or more during a 24-hour period as prolonged. This could refer to a single 15-minute exposure to one infected individual or several briefer exposures to one or more infected individuals adding up to at least 15 minutes during a 24-hour period. However, any duration should be considered prolonged if the exposure occurred during performance of an aerosol generating procedure.

**Quarantine:** the limitation of movement of persons that have been exposed to a disease but are not yet manifesting signs/symptoms of the disease.

**Severely Immunocompromised:** For the purposes of this guidance, the following definition was created to more generally address healthcare personnel occupational exposures:

- Some conditions, such as being on chemotherapy for cancer, untreated HIV infection with CD4 T lymphocyte count < 200, combined primary immunodeficiency disorder, and receipt of prednisone >20mg/day for more than 14 days, may cause a higher degree of immunocompromise and require actions such as lengthening the duration of healthcare personnel work restrictions.
- Other factors, such as advanced age, diabetes mellitus, or end-stage renal disease, may pose a much lower degree of immunocompromise and not clearly affect occupational health actions to prevent disease transmission.
- Ultimately, the degree of immunocompromise for healthcare personnel is determined by the treating provider, and preventive actions are tailored to each individual and situation.

**Signs and Symptoms of COVID-19:**

- Elevated temperature (measured temperature  $\geq 99.5^{\circ}\text{F}$  or subjective fever)
- Cough, shortness of breath, sore throat, shaking chills, myalgias
- Loss of taste and/or smell

**Social Distancing:** decreases the congregating of groups and/or encourages persons to keep a minimum of a 6-foot distance from one another.

**Source Control:** Source control refers to use of cloth face coverings or facemasks to cover a person's mouth and nose to prevent the release of respiratory secretions when they are talking, sneezing, or coughing.

## Section 1: Infection Prevention and Control (IPC) Practices for All First Responders

With wide-spread community infection of COVID-19, it is important that all First Responder agencies and personnel practice CDC and Delaware Public Health guidance to help prevent the spread of the disease amongst First Responders, their families, their co-workers and the public.

### General Guidelines Agency Responsibilities

Each station/agency **MUST** have a policy in place that is being strictly enforced regarding the following:

- Develop Infection Control Procedures (IPC) policies and procedures that include a recommended sequence for safely donning and doffing PPE.
- Develop a Continuity of Operations Plan (COOP) in the event the agency faces leadership and/or staff shortages due to absences.
- Develop clear policies and procedures that are enforceable regarding mask-wearing, return to work guidance, quarantine guidance, etc.
- Provide all personnel with job- or task-specific education and training on preventing transmission of infectious agents, including refresher training.
- Ensure that personnel are educated, trained, and have practiced the appropriate and correct use of PPE including attention to preventing self-contamination and contamination of environmental surfaces during the process of removing such equipment.
- As part of the Occupational Safety and Health Administration (OSHA) respiratory protection program, ensure all personnel that are authorized to use respiratory protection devices (e.g., N95 filtering facepiece, or powered air-purifying respirator – PAPR) are medically cleared, trained, and fit tested for use.
- First Responder agencies should provide adequate supplies (e.g., hand sanitizer, cleaning supplies, EPA-registered disinfectants, PPE) so personnel can adhere to recommended IPC practices.
- Ensure that all personnel and professional cleaners contracted by the employer tasked to clean and disinfect the station, offices, living quarters, vehicles and equipment are educated, trained, and have practiced the process according to EPA-registered label instructions, equipment manufacturer's instructions, and the agency's standard operating procedures.

### Station Procedures

- Facemasks for source control **MUST BE WORN AT ALL TIMES** except for eating or drinking.
  - If First Responders must remove their facemask, for example, in order to eat or drink, they should separate themselves from others.
- **SOCIAL DISTANCING MUST OCCUR IN ALL PARTS OF THE STATION**, to include offices, radio/dispatch rooms, booking areas, day rooms, kitchen/dining areas, apparatus bays, dormitories/sleeping quarters and other common areas.
- Social gatherings, visitors and off-duty visiting is to **NOT TO BE PERMITTED**.
- If personnel are off duty they are not be in the station/admin facilities.
- Eliminate in-person, non-essential meetings. Use teleconferencing if possible. Promote telecommuting for non-essential personnel.

- Cease the use of humidifiers in stations/bunk rooms.
- Eliminate social functions (bingo, pancake breakfast, company meetings, allowing the public into the station for station tours, etc.).
- Screen personnel when they are coming on duty and then 12 hours later (24-hour shifts). If they have  $\geq 99.5^{\circ}\text{F}$  temperature or signs/symptoms of illness, send them home. If any personnel are identified, notify your Infection Control Officer.
- Continue to promote hygiene practices and cleaning of workspaces.
- Increase the frequency of wiping down door handles and all surfaces at the station and in the vehicles.

## Response Procedures

- With wide-spread community infection, it is safe to assume any member of the public may be infected with COVID-19. Treat all encountered people as if they are infected.
- Develop a maximum and minimum staffing level plan.
- For volunteer companies, develop maximum and minimum staffing levels per type of apparatus.
- Wear facemasks **at all times** – on crash scenes, pump operations, traffic stops, investigations, etc., **unless it is UNSAFE to do so** (SCBA, etc.).
- Limit the number of members having contact with patients and the public to essential personnel only.
- When personnel respond to emergencies, have them slow down and assess the scene before entering. Don PPE prior to entering the scene.
- A mask should be placed on patients and the person the responder is interacting with if it can be tolerated.
- Limit personnel entering the hospital at time of transfer of care and other needs to visit the hospital.
- Allow units to temporarily go out of service to clean their unit, change their uniform and shower if they encounter a patient or member of the public with flu/COVID-19 signs and symptoms.
- Ensure an exposure form has been completed for tracking purposes.

## Guidelines for First Responder Personnel

The responsibilities described in this section are for the safe interaction, treatment and transport of all persons, and not only for those with suspected or confirmed COVID-19 infection.

**If a Responder is Employed or Volunteers for More Than One Agency:** If a Responder is a close contact and is exposed to a confirmed COVID-19 positive person, **OR** the First Responder is symptomatic or tests positive for COVID-19, the first responder is required to notify all employers and agencies they respond with that they are either confirmed positive or are under quarantine due to an exposure. ***Failure to do so may result in having action taken by the Division of Public Health against their certification for being a threat to the public's health, safety and welfare.***

## Screen all Personnel for Signs or Symptoms of COVID-19 Infection

Although screening for symptoms will not identify asymptomatic or pre-symptomatic individuals with COVID-19 infection, symptom screening remains an important strategy to identify those who could have COVID-19 and require prompt assessment and response.

- Personnel should be aware of the signs and symptoms of COVID-19.
  - Elevated temperature (measured temperature  $\geq 99.5^{\circ}\text{F}$  or subjective fever)
  - Cough, shortness of breath, sore throat, shaking chills, myalgias

- Loss of taste and/or smell
- Screen all personnel and visitors (i.e., anyone entering the station) for symptoms consistent with COVID-19 and exposure to others with COVID-19 infection.
  - Screen personnel at the start of each shift, and if working a 24-hour shift, 12 hours into the shift.
  - Screen visitors prior to entry to the station.
  - All First Responder personnel need to honestly conduct a self-assessment before reporting to their station either for duty or to respond to a call for services.
    - If feeling sick or have any signs/symptoms, STAY HOME.
  - Actively take their temperature and confirm absence of symptoms consistent with COVID-19. Fever is either measured temperature  $\geq 99.5^{\circ}\text{F}$  or subjective fever.
  - If First Responder personnel do not report to a physical location at the start of their shift, they are to self-monitor for a fever and symptoms.
  - Ask them if they have been advised to self-quarantine because of exposure to someone with COVID-19 infection.
  - Ask them if they have tested positive or are under work restrictions from any other job or first responder agency.
- Promptly manage employee with symptoms of COVID-19 or who has been advised to self-quarantine:
  - Personnel should don a facemask if not already wearing one, return home, and notify their Chief and Infection Control Designated Officer to arrange for further evaluation.

### Implement Source Control - Wear Facemasks or Face Coverings at all Times

Source control refers to use of cloth face coverings or facemasks to cover a person's mouth and nose to prevent the release of respiratory secretions when they are talking, sneezing, or coughing. Because of the potential for asymptomatic and pre-symptomatic transmission, source control measures are recommended for everyone, even if they do not have symptoms of COVID-19.

First Responder personnel are to wear a facemask at all times while they are in service, including in breakrooms or other spaces where they might encounter co-workers, such as during station activities, meetings, roll calls, shift changes, etc., or when out in the public.

- If First Responders must remove their facemask, for example, in order to eat or drink, they should separate themselves from others.
- When available, facemasks are preferred over cloth face coverings for First Responder personnel as facemasks offer both source control and protection for the wearer against exposure to splashes and sprays of infectious material from others.
  - Cloth face coverings should NOT be worn instead of a respirator or facemask if more than source control is needed.
- All members of the public should be wearing their own cloth face covering (if tolerated) prior to the arrival of First Responder personnel and throughout the duration of the encounter. If they do not have a face covering, they should be offered a facemask or cloth face covering, as supplies allow.
  - Facemasks and cloth face coverings should not be placed on young children under age 2, anyone who has trouble breathing, or anyone who is unconscious, incapacitated or otherwise unable to remove the mask without assistance.
  - If a person is **symptomatic** a facemask is recommended, not a gaiter style face covering.

- For EMS, if a nasal cannula is used, a facemask should (ideally) be worn over the cannula. Alternatively, an oxygen mask can be used if clinically indicated. If the patient requires intubation, see below for additional precautions for aerosol-generating procedures.
- To reduce the number of times personnel must touch their face and potential risk for self-contamination, personnel should consider continuing to wear the same respirator or facemask throughout their entire work shift, instead of intermittently switching back to their cloth face covering.
- Respirators with an exhalation valve are not recommended, as they allow unfiltered exhaled breath to escape.
- Personnel should remove their respirator or facemask, perform hand hygiene, and put on their cloth face covering when leaving at the end of their shift.
- Agencies need to educate all personnel about the importance of performing hand hygiene immediately before and after any contact with their respirator or facemask.

## Hand Hygiene

- Personnel should perform hand hygiene before and after all contact with the public, contact with potentially infectious material, and before putting on and after removing PPE, including gloves.
- Hand hygiene after removing PPE is particularly important to remove any pathogens that might have been transferred to bare hands during the removal process.
- Perform hand hygiene by using alcohol-based hand sanitizer (ABHS) with 60-95% alcohol or washing hands with soap and water for at least 20 seconds. If hands are visibly soiled, use soap and water before returning to ABHS.
- First Responders should ensure that hand hygiene supplies are readily available within their vehicles.

## Implement Physical (Social) Distancing

Whenever possible, physical social distancing (maintaining at least 6 feet between people) is an important strategy to prevent COVID-19 transmission.

- Social distancing is to be maintained at all times (if possible), including, but not limited to:
  - Vehicles
  - Station (all common areas, to include sleeping areas and dayrooms)
  - Hospitals
  - Booking areas
  - All common areas
  - When out in the public
- Whenever transporting someone, limit the number of personnel to the minimum number of essential personnel needed to safely manage the situation.

## Personnel Interaction at the Scene

With wide-spread community infection, it is safe to assume any member of the public may be infected with COVID-19. Treat all encountered people as if they are infected.

- Personnel should put on appropriate PPE (as described below) before entering the scene.
- If information about potential for COVID-19 infection has not been provided by the PSAP/ECC, First Responder personnel should exercise caution when responding to any call. Initial assessment should begin from a distance of at least 6 feet from the person, if possible. If the condition allows, the person

may be directed to meet the responder(s) at an appropriate location outside or in a more ventilated area.

- All persons, regardless of COVID-19 symptoms, should be instructed to don a facemask or cloth face covering (if tolerated) and maintain a 6-foot distance (if possible). Contact should be minimized to the extent possible until a cloth face covering, or facemask is on the patient.
- If possible, First Responder personnel should ask the person about signs and symptoms of COVID-19 or if the patient has had recent close contact with someone with COVID-19 infection.

## Implement Universal Use of Personal Protective Equipment

First Responders are likely to encounter asymptomatic or pre-symptomatic persons with COVID-19 infection. If COVID-19 infection is not suspected in a person (based on symptom and exposure history), personnel should follow Standard Precautions (and Transmission-Based Precautions if required based on the suspected diagnosis). They should also:

- Wear eye protection in addition to their facemask to ensure the eyes, nose, and mouth are all protected from splashes and sprays of infectious material from others.
- Wear an N95 or equivalent or higher-level respirator, instead of a facemask, for aerosol generating procedures

## Facemasks or Respirators

**NOTE:** Cloth face coverings are NOT PPE and should not be worn for the care of patients with suspected or confirmed COVID-19 infection or other situations where use of a respirator or facemask is recommended.

- Put on a facemask before interacting with anyone from the public or beginning patient care.
- N95 respirators or respirators that offer an equivalent or higher level of protection should be used instead of a facemask when performing or present for an aerosol generating procedure.
  - Other respirators include other disposable filtering facepiece respirators, powered air purifying respirators (PAPRs), or elastomeric respirators.
- Disposable respirators and facemasks should be removed and discarded after each incident unless implementing extended use or reuse.
  - Perform hand hygiene after removing the respirator or facemask.
- If reusable respirators (e.g., PAPRs or elastomeric respirators) are used, they should also be removed after exiting the patient's care area.
  - They must be cleaned and disinfected according to manufacturer's reprocessing instructions prior to re-use.
- When the supply chain is restored, EMS personnel using facemasks instead of respirators should return to use of respirators for patients with suspected or confirmed COVID-19 infection.

## Eye Protection

- Put on eye protection (i.e., goggles or a face shield that covers the front and sides of the face) before interacting with anyone from the public.
- Protective eyewear (e.g., safety glasses, trauma glasses) with gaps between glasses and the face likely do not protect eyes from all splashes and sprays.
- Personal eyeglasses and contact lenses are NOT considered adequate eye protection.
- Remove eye protection after performing patient care, unless implementing extended use.

- Reusable eye protection (e.g., goggles) must be cleaned and disinfected according to manufacturer's reprocessing instructions prior to re-use.
- Disposable eye protection should be discarded after use unless following protocols for extended use or reuse.

### Gloves

- Put on clean, non-sterile gloves before interacting with anyone from the public. Change gloves if they become torn or heavily contaminated.
- Remove and discard gloves after providing patient care, and immediately perform hand hygiene.

### Gowns

- Gowns may not be practical for all First Responders.
- If gowns are not worn with a COVID-19 positive patient, First Responders should perform hand hygiene, shower and change clothes as soon as possible.
- Change the gown if it becomes soiled. Remove and discard the gown in a dedicated container for waste or linen after the encounter. Disposable gowns should be discarded after use. Cloth gowns should be laundered after each use.

## Managing PPE Supply Issues

First Responder agencies should develop processes to facilitate ongoing PPE inventory, ensuring that agency supply-chain managers and infection prevention staff are in communication about PPE shipment or order delays as well as increased PPE needs to support training, fit testing, and patient care. Should a potential PPE shortage be identified, the following steps should be taken:

- Define severity of the shortage. Note when interruptions in operations would occur if the shortage were to persist.
- Review CDC guidance on PPE supply optimization and implement conservation strategies as appropriate.
- Determine whether other PPE vendors can be utilized and review current contract specifications.
- Leverage mutual-aid agreements and memoranda of understanding (MOUs) to obtain PPE supply from other partners.
- If all internal and partner-based options to obtain a sufficient PPE supply have been exhausted, contact the DPH Office of Emergency Medical Services.

## Work Exclusion and Monitoring Determinations

EMS agencies should have a process for notifying the Office of EMS about suspected or confirmed cases of COVID-19 infection amongst their staff. Agencies should also have a policy and procedure to clear their responders to return to work.

**If a Responder is Employed or Volunteers for More Than One Agency:** The exposed or positive first responder is required to notify all employers and agencies they respond with that they are either confirmed positive or are under quarantine due to an exposure. ***Failure to do so may result in having action taken against their certification.***

Exposures in First Responder personnel and subsequent contact tracing will be investigated and managed through the Delaware Office of Infectious Disease and Epidemiology.

## Section 2: Management of First Responders with Suspected COVID-19 Exposure, Discontinuation of Home Isolation and Return to Work Guidance

*This section is intended to serve as guidance for discontinuation of home isolation as well as return-to-work guidance for first responders with suspected, presumed, or confirmed coronavirus disease 2019 (COVID-19) infection in the state of Delaware. This document is for guidance only - **each first responder agency is responsible for developing their own policies and process to clear their first responders to return to work.***

### Quarantine Procedures

The Centers for Disease Control and Prevention and the Delaware Division of Public Health requires a quarantine period of 14 days for a person who has tested positive for COVID-19, and/or exhibit symptoms of COVID-19.

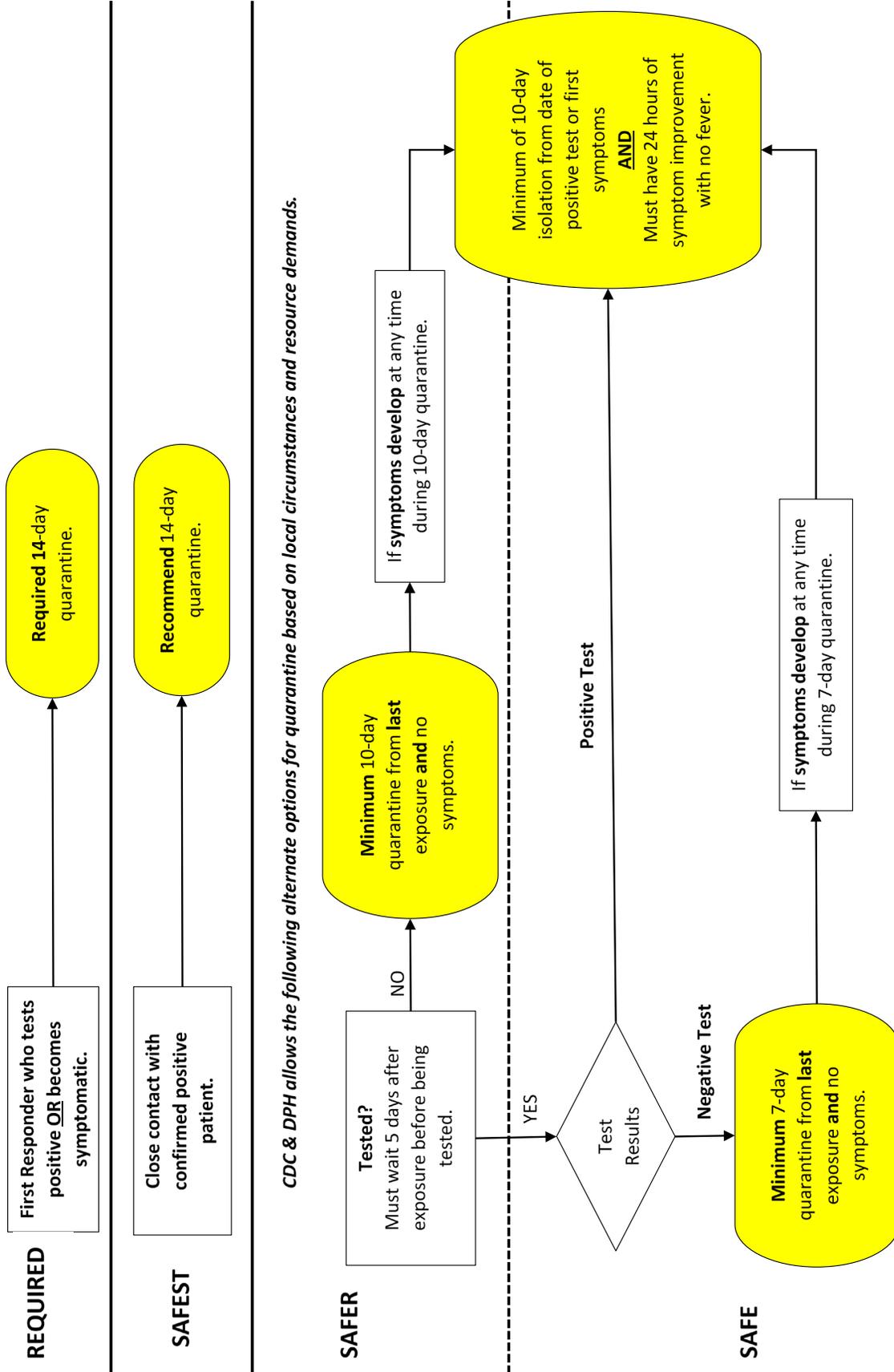
For First Responders who have been identified as a close contact to a confirmed positive patient, the CDC has come up with what they believe are acceptable options for ending quarantine sooner.

- These updated options only apply to those who are identified as close contacts of COVID-positive persons, and **not those who have tested positive for COVID-19 or are symptomatic.**
- The safest option for people who are close contacts is to quarantine at home for 14 days.
- CDC recognizes that reducing the length of quarantine may make it easier for people to complete it by reducing the time they cannot work.
- They are leaving the decision up to the state and local health agencies on how or if to implement their guidance.

Delaware Public Health has decided that the following options may be considered for a person to end quarantine:

- **As long as the person remains asymptomatic,** DPH endorses as:
  1. **Safest:** 14 days quarantine
  2. **Safer:** 10-day quarantine; *risk of becoming COVID-positive between days 10 and 14 is between 1 and 10%.*
  3. **Safe:** On day 7 after receiving a negative test result either PCR or antigen. The test must occur on day 5 or later but if antigen, we strongly recommend that test on day 7. A couple of qualifiers: If you get a negative test result on or before day 7, the person may not end quarantine before day 7 ends. If the person tests positive, they must immediately begin a 10-day isolation from the date of the test. *Risk of becoming COVID-positive between test date and day 7 is between 5% and 12%.*
- If stopping quarantine early, you must
  - Watch for symptoms until 14 days after exposure.
  - If you have symptoms, immediately self-isolate and contact your local public health authority or healthcare provider.
  - Wear a mask, stay at least 6 feet from others, wash your hands often, avoid crowds, and take other steps to prevent the spread of COVID-19.

See the following page for a Quarantine Decision Flow Chart.



## Conducting A Risk Assessment on An Exposure

When a first responder believes they have had an exposure to a suspected or confirmed patient with COVID-19, the responder should contact the agency's infection control Designated Officer who is to follow this procedure:

1. Please submit only those incidents where you believe the responder has had a true exposure for a risk assessment. When you submit the information, please indicate if you want the patient's COVID test results (if available).
2. Exposure to a symptomatic or confirmed positive COVID-19 patient occurs when:
  - a. First Responder not wearing a facemask or respirator (if AGP).
  - b. First Responder not wearing eye protection if the person was not wearing a cloth face covering or a facemask.
  - c. First Responder not wearing all recommended PPE during AGP (see table on next page).
3. All inquiries must be in writing. An email can be sent to [oems@delaware.gov](mailto:oems@delaware.gov)
4. Please document thoroughly:
  - a. Date of possible exposure and Incident Number
  - b. Name of the first responder(s)
  - c. Name of patient (law enforcement only – name will be determined from DEMRS for EMS)
  - d. Description of PPE worn by the first responder(s)
  - e. Thorough documentation of what occurred and why the responder believes they were exposed. (PPE breach, inappropriate use of PPE, self-exposure, etc.)
5. Once this information is received in the Office of Emergency Medical Services, staff will conduct a risk assessment to determine the need for testing based on CDC Risk Assessment Guidance for decision-making.
  - a. PPE use
  - b. Proximity and duration of exposure to the patient
  - c. Patient symptoms (coughing, etc.)
  - d. Patient wearing of a surgical mask
  - e. Aerosol generating procedures (AGP)
  - f. Patient test status confirmed through DPH Office of Infectious Disease and Epidemiology

## Guidance for Asymptomatic First Responders Who Were Exposed to Individuals with Confirmed COVID-19

Higher-risk exposures generally involve exposure of a Responder's eyes, nose, or mouth to material potentially containing SARS-CoV-2 (COVID-19), particularly if these Responders were present in the immediate area during an aerosol-generating procedure (AGP).

DPH Office of EMS uses this guidance to determine a First Responder's potential exposure to patients the general public, visitors, or other First Responders with confirmed COVID-19. Exposures can also occur from a suspected case of COVID-19 or from a person under investigation (PUI) when testing has not yet occurred or if results are pending. Work restrictions described in this guidance might be applied to First Responders exposed to a PUI if test results for the PUI are not expected to return within 48 to 72 hours. Therefore, a record of First Responders exposed to PUIs should be maintained by the First Responder agency. If test results will be delayed more than 72 hours or the patient is positive for COVID-19, then the work restrictions described in this document should be applied.

Using the table below from the CDC, a responder is determined to either be a **LOW** risk or a **HIGH** risk.

DPH COVID-19 Guidance\_FR\_Ver\_1.0 2020.12.10 Update

Exposure	Personal Protective Equipment Used	Work Restrictions	Risk Analysis
FR who had prolonged <sup>1</sup> close contact <sup>2</sup> with a patient, member of the public, or FR with confirmed COVID-19 <sup>3</sup>	<ul style="list-style-type: none"> <li>• FR not wearing a respirator or facemask<sup>4</sup></li> <li>• FR not wearing eye protection if the person with COVID-19 was not wearing a cloth face covering or facemask</li> <li>• FR not wearing all recommended PPE (i.e., gown, gloves, eye protection, respirator) while performing an aerosol-generating procedure<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Exclude from work for 14 days after last exposure<sup>5</sup></li> <li>• Advise FR to monitor themselves for fever or symptoms consistent with COVID-19<sup>6</sup></li> <li>• Any FR who develops fever or symptoms consistent with COVID-19<sup>6</sup> should immediately contact their established point of contact (e.g., Infection Control Designated Officer) to arrange for medical evaluation and testing.</li> </ul>	<b>HIGH</b>
FR other than those with exposure risk described above	<ul style="list-style-type: none"> <li>• N/A</li> </ul>	<ul style="list-style-type: none"> <li>• No work restrictions</li> <li>• Follow all recommended infection prevention and control practices, including wearing a facemask for source control while at work, monitoring themselves for fever or symptoms consistent with COVID-19<sup>6</sup> and not reporting to work when ill, and undergoing active screening for fever or symptoms consistent with COVID-19<sup>6</sup> at the beginning of their shift.</li> <li>• Any FR who develop fever or symptoms consistent with COVID-19<sup>6</sup> should immediately self-isolate and contact their established point of contact (e.g., Infection Control Designated Officer) to arrange for medical evaluation and testing.</li> </ul>	<b>LOW</b>

FR=First Responder personnel

1. Data are insufficient to precisely define the duration of time that constitutes a prolonged exposure. Until more is known about transmission risks, it is reasonable to consider an exposure of 15 minutes or more as prolonged. However, **any duration** should be considered prolonged if the exposure occurred during performance of an aerosol generating procedure.
2. Data are limited for the definition of close contact. For this guidance it is defined as: a) being within 6 feet of a person with confirmed COVID-19 or b) having unprotected direct contact with infectious secretions or excretions of the person with confirmed COVID-19.
3. While respirators confer a higher level of protection than facemasks and are recommended when caring for patients with COVID-19, facemasks still confer some level of protection to FR, which was factored into this risk assessment. Cloth face coverings are not considered PPE because their capability to protect FR is unknown.
4. If staffing shortages occur, it might not be possible to exclude exposed FR from work. For additional information and considerations refer to Strategies to Mitigating FR Staffing Shortages.
5. \*For the purpose of this guidance, fever is defined as subjective fever (feeling feverish) or a measured temperature of 99.5 F or higher. Note that fever may be intermittent or may not be present in some people, such as those who are elderly, immunocompromised, or taking certain fever-reducing medications (e.g., nonsteroidal anti-inflammatory drugs [NSAIDS]).

## Risk Analysis:

The following verbiage is used for consistency and is communicated to the responder and the agency's Infection Control Designated Officer via email.

### **LOW RISK**

Based on the information provided in your email to the Delaware Office of Emergency Medical Services, and guidance from the Centers for Disease Control (CDC), we believe that the responder is at a **LOW** risk for contracting the COVID-19 coronavirus.

- The responder is under no work restrictions.
- The responder must follow all recommended infection prevention and control practices, including wearing a facemask for source control while at work, monitoring themselves for fever or symptoms consistent with COVID-19 and not reporting to work when ill, and undergoing active screening for fever or symptoms consistent with COVID-19 at the beginning of their shift.
- Any HCP who develop fever or symptoms consistent with COVID-19 should immediately self-isolate and contact their established point of contact (e.g., Infection Control Designated Officer) to arrange for medical evaluation and testing.

DPH is suggesting that all first responders self-monitor by checking their temperature twice a day and to report any trouble breathing or fever to the Division of Public Health 1-866-408-1899 or call their personal physician.

### **HIGH RISK**

Based on the information provided in your email to the Delaware Office of Emergency Medical Services, and guidance from the Centers for Disease Control (CDC), we believe that the responder is at a **HIGH** risk for contracting the COVID-19 coronavirus.

- CDC and DPH recommends a 14-day quarantine.
- **As long as the person remains asymptomatic**, the following options may be considered for a person to end quarantine earlier:
  1. Quarantine can end after Day 10 without testing and if no symptoms have been reported during daily monitoring. *Risk of becoming COVID-positive between days 10 and 14 is between 1 and 10%.*
  2. Quarantine can end after Day 7 if a COVID-19 test is negative and if no symptoms were reported during daily monitoring. The test may be obtained after a minimum of 5 days, but quarantine cannot be discontinued until **after** Day 7. *Risk of becoming COVID-positive between test date and day 7 is between 5% and 12%.*

***NOTE: If the responder's test comes back POSITIVE, they must begin an additional 10-day quarantine.***

Persons can discontinue quarantine at the above time points **only** if the following criteria are also met:

1. No elevated temperature (measured temperature  $\geq 99.5^{\circ}\text{F}$  or subjective fever) or other symptoms consistent with COVID-19 (e.g., cough, shortness of breath, sore throat, shaking chills, myalgias) have been identified during daily symptom monitoring during the entire quarantine period – up to the time at which quarantine is discontinued; **and**,
2. Daily symptom monitoring continues throughout the entire 14-day quarantine period; **and**,
3. For the remainder of the 14 day quarantine period, persons are **required** to correctly and

consistently wear a face mask (**medical grade – not a gaiter or bandanna**), follow social distancing, use hand and cough hygiene, avoid crowds, and self-monitor for symptoms of COVID-19 illness.

If they develop any symptoms, they should notify DPH OIDE at 1-888-295-5156 and their employer promptly so that they can coordinate consultation and PCR testing for COVID-19 if indicated.

**If a Responder is Employed or Volunteers for More Than One Agency:** The exposed or positive first responder is required to notify all employers and agencies they respond with that they are either confirmed positive or are under quarantine due to an exposure. ***Failure to do so may result in having action taken by the Division of Public Health against their certification for being a threat to the public's health, safety and welfare.***

## Testing Procedures:

With the increase in availability of community testing, individual providers are encouraged to utilize community test sites. (<https://coronavirus.delaware.gov/testing>) If a provider is having difficulty finding a community testing site they can also use the public health clinics. If calling a public health clinic, please identify themselves as a first responder so that the test can be prioritized for completion. If there is difficulty in getting an appointment or they are concerned that the test is not being prioritized please contact OEMS.

## Discontinuation of Home Isolation/Return to Work

### **SYMPTOMATIC Persons with CONFIRMED or SUSPECTED COVID-19**

**Options include a time-since-illness-onset and time-since-recovery (“symptom-based”) strategy and a “test-based” strategy.**

#### **“Symptom-based” strategy**

Persons with *CONFIRMED* or *SUSPECTED* COVID-19 who have symptoms and were directed to care for themselves at home may discontinue home isolation under the following conditions:

- At least 1 day (24 hours) has passed *since recovery* defined as resolution of fever without the use of fever-reducing medications **and** improvement in symptoms (e.g., cough, shortness of breath); **and**,
- At least 10 days have passed *since symptoms first appeared*.

*Personnel with severe to critical illness or who are severely immunocompromised should extend the period of isolation and may return to work when at least 1 day (24 hours) has passed since recovery defined as resolution of fever without the use of fever-reducing medications and improvement in symptoms (e.g., cough, shortness of breath); and at least 20 days have passed since symptoms first appeared.*

*After discontinuation of home isolation, persons must continue to avoid sustained close contact with others and maintain strict social distancing and hand hygiene due to the possible risk of continued infectiousness. Persons may return to work however should continue to recognize the risk of infectiousness and self-monitor for symptoms.*

#### **“Test-based” strategy (simplified from initial protocol)**

A test-based strategy is contingent on the availability of ample testing supplies and laboratory capacity as well as convenient access to testing. At this time, test-based strategy should **ONLY** be employed for persons with close contact with a COVID-19 patient. Except for rare situations, a test-based strategy is not recommended to determine when to allow personnel to return to work. A test-based strategy could, for example, be considered

for some personnel (e.g., those who are severely immunocompromised) in consultation with local infectious diseases experts if concerns exist for the person being infectious for more than 20 days.

Persons who have *CONFIRMED* COVID-19 who have symptoms and were directed to care for themselves at home may discontinue home isolation and return to work under the following conditions:

- Resolution of fever without the use of fever-reducing medications **and**
- Improvement in symptoms (e.g., cough, shortness of breath), **and**
- Negative results of an FDA-authorized molecular viral assay to detect COVID-19 RNA from at least two consecutive respiratory specimens collected  $\geq$  24 hours apart (total of two negative specimens)

### **ASYMPTOMATIC Persons with CONFIRMED COVID-19**

Individuals with *CONFIRMED* COVID-19 who have **not** had any symptoms may discontinue home isolation when at least 10 days have passed since the date of their first positive COVID-19 diagnostic test **and** have had no subsequent illness. For personnel who are severely immunocompromised, however, (but who were asymptomatic throughout their infection), may return to work when at least 20 days have passed since the date of their first positive viral diagnostic test. If there has been illness subsequent to first positive test, the individual must proceed according to the guidance for symptomatic persons with confirmed COVID-19 above.

## **First Responder Personnel upon Returning to Work**

All first responders should practice self-monitoring. DPH recommends that individual risk assessments for COVID-19 exposures based on setting, personnel, and type of activity be performed:

- **Pre-Screen**: Employers should measure the employee's temperature and assess symptoms prior to them starting work. Ideally, temperature checks should happen before the individual enters the facility.
- **Regular Monitoring**: As long as the employee doesn't have a temperature or symptoms, they should self-monitor under the supervision of their employer's occupational health program (if available).
- **Wear a Mask**: The employee should **wear a face mask at all times** while in the workplace for 14 days after last exposure. Employers can issue facemasks or can approve employees' supplied cloth face coverings in the event of shortages.
- **Social Distance**: The employee should maintain 6 feet and practice social distancing as work duties permit in the workplace.
- **Disinfect and Clean Workspaces**: Clean and disinfect all areas such as offices, bathrooms, common areas, shared electronic equipment routinely.

## **Immunity and Re-infection**

The immune response, including duration of immunity, to COVID-19 infection is not yet understood. It is not yet known whether similar immune protection will be observed for persons infected with COVID-19 as seen with MERS-CoV and SARS-CoV-1 infections.

If there is a new exposure the quarantine process and evaluation should be restarted.

## Section 3: Crisis Strategies to Mitigate First Responder Staffing Shortages

When staffing shortages reach a crisis level, First Responder agencies (in collaboration with agency human resources, infection control designated officers and any occupational health services) may need to implement crisis strategies to continue to provide emergency first response to their communities.

***An agency must understand and comprehend the extreme risk taken when adopting these procedures, both to responder personnel, their families, coworkers, and to the public that they are sworn to serve, protect and keep safe. As such, THESE POLICIES ARE ONLY TO BE UTILIZED if/when the First Responder agency has demonstrated:***

- A crisis-level staffing shortage exists that severely and critically interferes with public safety.
- A written infection control plan and policy that incorporates the Delaware Division of Public Health (DPH) and the Centers for Disease Control and Prevention (CDC) guidelines. These policies must address both response and in-station procedures.
- A history of strict enforcement of the plans and procedures, especially as they pertain to wearing masks, social distancing and sanitation procedures.

### Mitigation Strategies

When there are no longer enough staff to provide safe response to the community, it may be necessary to modify the provision of first response during COVID-19.

#### 1. Modified Resource Assignments

- Reduce multi-unit response unless clearly required.
- Implement mutual aid plans to have mutual aid agencies with adequate staffing respond.

#### 2. Modified Personnel Policies

If a First Responder is **EXPOSED** to a confirmed COVID-19 positive person but is **asymptomatic** and has **not yet tested positive** may continue to work **IF** they adhere to the following requirements:

- **Self-Monitoring:** First Responders are to monitor their temperatures twice a day and report any signs/symptoms.
  - Elevated temperature (measured temperature  $\geq 99.5^{\circ}\text{F}$  or subjective fever)
  - Cough, shortness of breath, sore throat, shaking chills, myalgias
  - Loss of taste and/or smell
- **Facemasks:** First Responders are required to wear a medical-grade facemask (for source control) at all times while in the station or response vehicle, for 14 days after the exposure event. This is the time period during which an exposed responder might develop symptoms (see above).
  - **This must be a medical-grade facemask - NOT a cloth mask or a gaiter-style face covering.**
  - If First Responders must remove their facemask, for example, in order to eat or drink, they must separate themselves from others.
  - A facemask for source control does not replace the need to wear an N95 or equivalent or higher-level respirator (or other PPE) when indicated, including for the care of patients with suspected or confirmed COVID-19.
  - After this time period, First Responders should revert to their agency's policy regarding universal source control during the pandemic.

- **Testing:**
  - First Responders should seek testing 7-10 days after the suspected exposure, to allow for enough viral load to develop to show in a test.
  - **Testing has its limitations.** Testing only identifies the presence of virus at the time of the test. It is possible that First Responders can test negative because they are very early in their infection when their sample is collected. In such situations, they could become infectious later and transmit the virus to others; for this reason, repeat testing could be considered.

***NOTE: If the responder develops any fever (measured temperature  $\geq 99.5^{\circ}\text{F}$  or subjective fever) or other symptoms consistent with COVID-19 (e.g., cough, shortness of breath, sore throat, shaking, chills, body aches, loss of taste and/or smell) they should immediately self-isolate (separate themselves from others) and notify DPH Office of Infectious Disease and Epidemiology (OIDE) at 1-888-295-5156 and their supervisor/employer promptly so that they can coordinate consultation and PCR testing for COVID-19 if indicated.***

### 3. Modified Station Policies

Each station/agency **MUST** have a policy in place and is being strictly enforced regarding the following:

- Facemasks (**NOT A CLOTH FACE COVERING**) for source control **MUST BE WORN AT ALL TIMES** except for eating or drinking.
  - **This must be a medical-grade facemask - NOT a cloth mask or a gaiter-style face covering.**
  - If First Responders must remove their facemask, for example, in order to eat or drink, they should separate themselves from others.
- **SOCIAL DISTANCING MUST OCCUR IN ALL PARTS OF THE STATION**, to include day rooms, kitchen/dining areas, apparatus bays, dormitories/sleeping quarters and other common areas.
- Social gatherings, visitors and off-duty visiting is to **NOT TO BE PERMITTED**.

### First Responder who Tests Positive or is Symptomatic

Once a responder tests positive or becomes symptomatic, they must self-isolate for 10 days from the date of the test or the start of the symptoms. They cannot be permitted to respond on calls or be at the station during this time.

First Responders are not permitted to return to work before meeting all **Return to Work Criteria**. The responder must have 24 hours of symptom improvement with no fever while not taking fever-reducing medications **AND** a minimum of 10 days of isolation since first date of symptoms.

Upon returning, they must continue to adhere to all **Return to Work Practices and Work Restrictions** recommendations described in that guidance.

**If a Responder is Employed or Volunteers for More Than One Agency:** The exposed or positive first responder is required to notify all employers and agencies they respond with that they are either confirmed positive or are under quarantine due to an exposure. ***Failure to do so may result in having action taken by the Division of Public Health against their certification for being a threat to the public's health, safety and welfare.***

If staff shortages occur due to positive tests or symptomatic staff, the agency should contact the Office of Emergency Medical Services immediately to discuss possible solutions.

## Section 4: EMS and Ambulance Personnel Specific Strategies

For EMS personnel, the potential for exposure to COVID-19 is not limited to direct patient care interactions. Transmission can also occur through unprotected exposures to asymptomatic or pre-symptomatic co-workers in breakrooms, co-workers or visitors in other common areas, or other exposures in the community. Examples of how physical distancing can be implemented for EMS personnel include:

- Reminding EMS personnel that the potential for exposure to COVID-19 is not limited to direct patient care interactions.
- Emphasizing the importance of source control and physical distancing when engaged in non-patient care activities.
- Maintaining a minimum of six feet from other persons during station activities, meetings, roll calls, shift changes, etc. Consider postponing or cancelling all nonessential gatherings, meetings, etc.
- Designating areas for EMS personnel to take breaks, eat, and drink that allow them to remain at least 6 feet apart from each other, especially when they must be unmasked.

EMS personnel who will directly care for a patient with suspected or confirmed COVID-19 infection or who will be in the compartment with the patient should adhere to [Standard Precautions](#) and use a NIOSH-approved N95 or equivalent or higher-level respirator (or facemask if a respirator is not available), gown, gloves, and eye protection.

When available, respirators (instead of facemasks) are preferred; they should be prioritized for situations where respiratory protection is most important, including the care of patients with pathogens requiring Airborne Precautions (e.g., tuberculosis, measles, varicella).

### Hand Hygiene

- EMS personnel should perform hand hygiene before and after all patient contact, contact with potentially infectious material, and before putting on and after removing PPE, including gloves. Hand hygiene after removing PPE is particularly important to remove any pathogens that might have been transferred to bare hands during the removal process.
- EMS personnel should perform hand hygiene by using alcohol-based hand sanitizer (ABHS) with 60-95% alcohol or washing hands with soap and water for at least 20 seconds. If hands are visibly soiled, use soap and water before returning to ABHS.
- EMS personnel should ensure that hand hygiene supplies are readily available to all personnel on the transport vehicle.

### Personal Protective Equipment Training

EMS should select appropriate PPE and provide it to EMS personnel in accordance with OSHA PPE standards (29 CFR 1910 Subpart I). EMS personnel must receive training on and demonstrate an understanding of:

- when to use PPE
- what PPE is necessary
- how to properly [don, use, and doff PPE](#) in a manner to prevent self-contamination
- how to properly dispose of or disinfect and maintain PPE
- the limitations of PPE.

Any reusable PPE must be properly cleaned, decontaminated, and maintained after and between uses. Agencies should have policies and procedures describing a recommended sequence for safely donning and doffing PPE.

## Recommended PPE when caring for a patient with suspected or confirmed COVID-19 infection includes the following:

### Respirator or Facemask

Cloth face coverings are NOT PPE and should not be worn for the care of patients with suspected or confirmed COVID-19 infection or other situations where use of a respirator or facemask is recommended.

- Put on an N95 respirator (or equivalent or higher-level respirator) or facemask (if a respirator is not available) before performing patient care, if not already wearing one as part of extended use [strategies to optimize PPE supply](#). Other respirators include other disposable filtering facepiece respirators, powered air purifying respirators (PAPRs), or elastomeric respirators.
- N95 respirators or respirators that offer an equivalent or higher level of protection should be used instead of a facemask when performing or present for an aerosol generating procedure.
- Disposable respirators and facemasks should be removed and discarded after exiting the patient's care area unless implementing extended use or reuse. Perform hand hygiene after removing the respirator or facemask.
- If reusable respirators (e.g., PAPRs or elastomeric respirators) are used, they should also be removed after exiting the patient's care area. They must be cleaned and disinfected according to manufacturer's reprocessing instructions prior to re-use.
- When the supply chain is restored, EMS personnel using facemasks instead of respirators should return to use of respirators for patients with suspected or confirmed COVID-19 infection.

### Eye Protection

- Put on eye protection (i.e., goggles or a face shield that covers the front and sides of the face) before performing patient care, if not already wearing as part of extended use [strategies to optimize PPE supply](#).
- Protective eyewear (e.g., safety glasses, trauma glasses) with gaps between glasses and the face likely do not protect eyes from all splashes and sprays.
- Personal eyeglasses and contact lenses are NOT considered adequate eye protection.
- Ensure that eye protection is compatible with the respirator so there is not interference with proper positioning of the eye protection or with the fit or seal of the respirator.
- Remove eye protection after performing patient care, unless implementing extended use.
- Reusable eye protection (e.g., goggles) must be cleaned and disinfected according to manufacturer's reprocessing instructions prior to re-use. Disposable eye protection should be discarded after use unless following protocols for extended use or reuse.

### Gloves

- Put on clean, non-sterile gloves before performing patient care. Change gloves if they become torn or heavily contaminated.
- Remove and discard gloves after providing patient care, and immediately perform hand hygiene.

## Gowns

- Put on a clean isolation gown before performing patient care. Change the gown if it becomes soiled. Remove and discard the gown in a dedicated container for waste or linen after providing patient care. Disposable gowns should be discarded after use. Cloth gowns should be laundered after each use.
- If coveralls are used as an alternative to gowns, put on a clean coverall before performing patient care. A new coverall is required for each patient. Change the coverall if it becomes soiled. Remove and discard the coverall in a dedicated container for waste after providing patient care. Disposable coveralls should not be reused.

## Aerosol-Generating Procedures (AGP)

- If possible, consult with medical control before performing aerosol-generating procedures for specific guidance. EMS personnel should exercise caution if an **aerosol-generating procedure (AGP)** is necessary
- An N95 or equivalent or higher-level respirator such as disposable filtering facepiece respirators, PAPR, or elastomeric respirator instead of a facemask, should be used in addition to the other PPE described above, by EMS personnel present for or performing aerosol-generating procedures.
- Bag valve masks (BVMs), and other ventilatory equipment, should be equipped with HEPA filtration to filter expired air.
- EMS systems should consult their ventilator equipment manufacturer to confirm appropriate filtration capability and the effect of filtration on positive-pressure ventilation.
- If possible, the rear doors of the transport vehicle should be opened, and the HVAC system should be activated during AGPs. This should be done away from pedestrian traffic.
- If possible, discontinue AGPs prior to entering the destination facility or communicate with receiving personnel that AGPs are being implemented.
- **Any** AGP is to be considered a prolonged exposure.

## EMS Transport of a Patient with Suspected or Confirmed COVID-19 Infection to a Healthcare Facility (including interfacility transport)

- Limit others riding in the ambulance while the patient is transported to the healthcare facility to only those essential for the patient's physical or emotional well-being or care (e.g., care partner, parent, etc.)
  - They should wear a cloth face covering if possible, and, ideally, be screened for symptoms of COVID-19 or close contact with an individual with COVID-19 prior to transport including taking their temperature before entering the ambulance.
  - Those with symptoms or a history of close contact in the prior 14 days should not be permitted in the ambulance.

If a patient with suspected or confirmed COVID-19 infection requires transport to a healthcare facility for further evaluation and management (subject to EMS medical direction), the following actions should occur during transport:

- EMS personnel should notify the receiving healthcare facility that the patient has suspected or confirmed COVID-19 infection so that appropriate infection control precautions may be taken prior to patient arrival.
- Isolate the ambulance driver from the patient compartment and keep pass-through doors and windows tightly shut.

- When possible, use vehicles that have isolated driver and patient compartments that can provide separate ventilation to each area.
  - Before entering the isolated driver's compartment, the driver (if they were involved in direct patient care) should remove and dispose of PPE and perform hand hygiene to avoid soiling the compartment.
  - 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.
  - Some vehicles are equipped with a supplemental recirculating ventilation unit that passes air through HEPA filters before returning it to the vehicle. Such a unit can be used to increase the number of air changes per hour. (ACH) (<https://www.cdc.gov/niosh/hhe/reports/pdfs/1995-0031-2601.pdf>).
- If a vehicle without an isolated driver compartment and ventilation must be used, open the outside air vents in the driver area and turn on the rear exhaust ventilation fans to the highest setting to create a pressure gradient toward the patient area.
  - Before entering the driver's compartment, the driver (if they were involved in direct patient care) should remove their gown, gloves and eye protection and perform hand hygiene to avoid soiling the compartment. They should continue to wear their respirator (or facemask if a respirator was not available).
- Follow routine procedures for a transfer of the patient to the receiving healthcare facility (e.g., wheel the patient directly into an examination room, wheel to dedicated receiving area). At a minimum, EMS personnel should continue to wear their respirator (or facemask) and eye protection while transferring the patient from the ambulance into the facility. Depending on the level of direct patient contact and care being provided during transfer (e.g., CPR), it may be appropriate for EMS personnel to also continue wearing their gown and gloves when entering the facility. In such circumstances, transfer should be coordinated with receiving facility and care must be taken to avoid contaminating surfaces in the healthcare facility.

## Documentation of Patient Care

- EMS documentation should include a listing of EMS personnel 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 and level of PPE worn). This documentation may need to be shared with local public health authorities if contact tracing becomes necessary.

## Cleaning EMS Transport Vehicles after Transporting a Patient with Suspected or Confirmed COVID-19 Infection

The following are general guidelines for cleaning or maintaining EMS transport vehicles and equipment after transport:

- After transporting the patient, leave the rear doors of the transport vehicle open to allow for sufficient air changes to remove potentially infectious particles.
  - The time to complete transfer of the patient to the receiving facility and complete all documentation should provide sufficient air changes.

- When cleaning the vehicle, EMS personnel should wear a disposable gown and gloves, as well as their respirator or facemask. A face shield or goggles should also be worn if splashes or sprays during cleaning are anticipated.
- 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 should remain open when cleaning the vehicle.
- Routine cleaning and disinfection procedures (e.g., using cleaners and water to pre-clean surfaces prior to applying an EPA-registered, hospital-grade disinfectant to frequently touched surfaces or objects for appropriate contact times as indicated on the product's label) are appropriate for COVID-19 in healthcare settings, including those patient-care areas in which aerosol-generating procedures are performed.
  - Refer to [List N](#) on the EPA website for EPA-registered disinfectants that have qualified under EPA's emerging viral pathogens program for use against COVID-19.
- Clean and disinfect the vehicle in accordance with standard operating procedures. 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 hospital grade disinfectant in accordance with the product label.
- Clean and disinfect reusable patient-care equipment before use on another patient, according to manufacturer's instructions.
- Follow standard operating procedures for the containment and disposal of used PPE and regulated medical waste.
- Follow standard operating procedures for containing and laundering used linen. Avoid shaking used linens.