



GUIDE FOR CORONAVIRUS PLANNING & RESPONSE

IAFC Coronavirus Task Force

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IAFC Guide for Coronavirus Planning and Response

The 2019 novel Coronavirus (COVID-19) is creating a rapidly changing environment for public safety agencies. This is a dynamic event that will likely stretch out for months. As a result, recommendations will undoubtedly change over time. We would request that chief officers return back to the [IAFC Coronavirus Resources page](#) frequently to check for updates.

As fire departments and local governments continue planning to respond to Coronavirus (COVID-19) occurrences in their communities, the IAFC Coronavirus Task Force has developed a guide to identify key recommendations, best practices, and considerations.

The recommendations contained in this guide are based largely on guidance from the U.S. Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO). When planning for COVID-19, fire chiefs must also be sure to collaborate with local stakeholders including their local volunteer firefighter's association or IAFF Local union, human resources administrator, worker's compensation insurance carrier, municipal attorney, local hospitals, local EMS agencies (if not fire-based EMS), and public health agencies. Some aspects of a COVID-19 preparedness plan will rely heavily on local and state regulations, collective bargaining agreements, and a fire department's respective insurance policies or benefit plans.

The information below provides a general overview of the recommendations available for fire departments. Anyone seeking additional information is encouraged to review the complete list of resources which is available on the [IAFC Coronavirus Resource page](#).

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Self-Monitoring Before and During Shifts

Fire chiefs should work with their medical director, occupational health director, and/or local health authorities to create a checklist of symptoms against which individuals should assess themselves. All personnel should assess themselves once at the beginning of their shift and once in the evening. Volunteer personnel and off-duty personnel should assess themselves at least once each morning. This is especially important for volunteer personnel as they will be unable to assess their symptoms before responding to an emergency call.

Recommended Symptoms for Checklist

When developing the checklist of symptoms, fire chiefs should consider including the following commonly-reported COVID-19 symptoms:

- Running nose
- Dry cough
- Shortness of breath
- Sore throat
- Runny eyes
- Temperature greater than 100°F¹

It is important to note that there are no cardinal symptoms of COVID-19. Unfortunately, this means that the virus may be difficult to detect in its early stages. Temperature is an especially difficult symptom since it may not appear readily. As a result, personnel should note any unusual symptoms that they might be experiencing. Fire chiefs should develop a process through which on- and off-duty personnel can report symptoms which appear consistent with COVID-19. Fire chiefs should have these individuals consult with a physician or other healthcare provider to assess their availability for duty.

A sample exposure tracking form can be found in Appendix A.

¹ A high temperature alone may not indicate COVID-19. However, a high temperature could indicate another virus or infection which would require the individual to not report for duty.

Dispatch Screening and Protocols

A fire department's primary answering point (PSAP), or 9-1-1 center, should be their first line of infection control and force protection. When COVID-19 first began to spread, many PSAPs focused their questions on a caller's travel history and contact with confirmed COVID-19 patients. Over the past few weeks, many patients have contracted COVID-19 despite not traveling to heavily impacted locations or having contact with known COVID-19 patients. These cases of unexplained occurrences of COVID-19 are known as "community spread" and indicate the virus is in a more pervasive state across the nation.

Due to the community spread of COVID-19, PSAPs should ask all callers seeking emergency medical assistance about whether they are experiencing flu-like symptoms such as a cough, difficulty breathing, fever, and/or body aches. Fire chiefs should work closely with their medical director to identify a full list of symptoms which are consistent with COVID-19. Fire chiefs, medical directors, and PSAP directors should review the CDC's [guide for evaluating individuals](#) who suspected of having COVID-19, as well as CDC [Guidance for Emergency Medical Services \(EMS\) Systems and 911 Public Safety Answering Points \(PSAPs\)](#).

Upon identifying a possible COVID-19 called based upon the pre-determined screening questions, PSAP telecommunicators should immediately notify responding personnel of the patient's potential status as a COVID-19 patient. EMS personnel should prepare to don the appropriate PPE prior to interacting with any patients identified as being suspected for COVID-19.

If transportation of the patient is required, EMS personnel or telecommunicators should notify the receiving hospital that a suspected COVID-19 patient is en-route to their facility.

Personal Protective Equipment

Identifying and selecting the appropriate personal protective equipment (PPE) is a crucial component to protecting EMS personnel when assessing, treating, and transporting potential COVID-19 patients. Firefighters and EMS personnel should exercise the same precautions when treating confirmed and suspected COVID-19 patients. In addition to reviewing the recommendations below, the IAFC also encourages fire chiefs to review the CDC's [interim guidance for EMS agencies and PSAPs](#).

Patient Assessment and Care

The CDC currently identifies several areas of PPE which should be worn when directly interacting with known or suspected COVID-19 patients:

- **Masks/Respiratory Protection:** All suspected COVID-19 patients should be given a surgical mask immediately. Any EMS clinician coming into close contact with a known or suspected COVID-19 patient should utilize respiratory protection. According to the CDC, an N95 mask is ideal. However, demand for N95 masks is creating shortages. In cases when N95 masks are unavailable, EMS personnel should wear a surgical mask at a minimum or a higher level of protection such as a P100, APR, or PAPR. Fire chiefs should work with their medical director in advance to identify a secondary form of respiratory protection in the event that N95 masks are unavailable or otherwise must be rationed.
- **Eye Protection:** EMS clinicians should wear a disposable face shield, goggles, or other protection which covers the front and sides of the face. Glasses and contact lenses *are not considered adequate* eye protection.
- **Gloves/Gowns:** EMS clinicians should wear a single pair of disposable gloves and a disposable gown. Shortages of gowns also are possible. When these occur, disposable gowns should be reserved for wear when performing aerosolizing procedures, physically transferring patients to/from a cot, and other high-contact patient care activities

In addition to the recommendations above, fire chiefs should note an additional consideration:

- **High Risk Procedures:** Aerosol-generating procedures, such as oral suctioning and intubation, convey an especially high risk of exposing EMS personnel to COVID-19. As a result, EMS personnel should wear an N95 mask, full face/eye protection, a disposable gown, and disposable gloves when performing these procedures. If possible, high risk procedures like these should be performed with the ambulance stopped and all doors and windows opened to allow as much ventilation as possible within the ambulance.

Once the appropriate PPE has been identified, all EMS personnel should be instructed to familiarize themselves with proper donning and doffing procedures. The National Ebola Training and Education Center has [produced a video](#) which demonstrates the proper donning and doffing procedure following an interaction with a known or suspected COVID-19 patient.

Patient Transportation

Known or suspected COVID-19 patients ideally should be transported in an ambulance with an enclosed patient compartment. However, this may not be possible in many agencies. When an ambulance without an isolated driver's compartment is used, the driver should wear a respirator or facemask. If the driver previously was wearing full PPE, they should doff their eye protection, gown, and gloves before performing full hand hygiene. Their original respirator or facemask should remain in place.

PPE Ordering and Needs Assessment

Fire departments are encouraged to assess their PPE stock levels as soon as possible and identify their "burn rate." This is the rate at which PPE is utilized and disposed each day. Many fire departments are experiencing much higher "burn rates" than usual due to an increase in responses to EMS calls associated with flu-like symptoms. Accurately identifying this number is crucial to determining how soon a fire department will need to order new PPE. It is important to note that due to supply shortages, many manufacturers are limiting fire department orders to approximately 65% of their normal order rate. Fire chiefs are encouraged to place PPE replenishment orders as soon as the need is identified since manufacturers likely will be delayed in fulfilling orders.

Discarding Expired PPE

Due to the likelihood of PPE shortages and unusually high PPE burn rates, fire chiefs are encouraged to retain all unused, but expired, PPE. While fire departments should make every effort to use only PPE which is within date, these unused but expired PPE should be placed at the bottom of a fire department's stockpile. If a fire department finds itself in a position where no PPE is available, this unused but expired PPE may be a better choice than to operate without any PPE for firefighters and EMS personnel.

Decontamination and Disinfection

Decontamination is always a central part of any infection control procedure. This step is especially important when preventing the spread of COVID-19 to other EMS practitioners as well as future patients.

Ambulance Decontamination Procedures

After the patient has been transferred to a receiving facility, the ambulance crew should open the rear doors of the transport vehicle to allow an air exchange to facilitate the removal of infectious particles from the air. The CDC currently believes that the time spent transferring the patient and completing all patient care reports is sufficient to ventilate the ambulance.

When cleaning the ambulance, EMS personnel should wear a disposable gown and gloves. A surgical mask or disposable face shield also is recommended if splashes of the cleaning agent are anticipated. Hospital-grade disinfectants are strong enough to kill the COVID-19 virus and should be used on any surface which may have come in contact with the patient or patient's bodily fluids, regardless of whether the ambulance crew noticed contamination of the surfaces. Particular attention should be given to cleaning the following areas:

- Stretcher
- Rails
- Control panels and switches
- Floors
- Walls
- Seats
- Work surfaces
- Cabinets

Ambulance crews should adhere strictly to the usage instructions provided by the disinfectant manufacturer as well as any applicable standard operating procedures. All fire chiefs should work closely with their medical director to assess whether additional disinfection processes should be instituted.

Fire Apparatus Decontamination Procedures

Patients, regardless of whether they have COVID-19, should not be transported in fire apparatus unless explicitly approved. Regardless, fire chiefs should work with their medical director to establish a cleaning and disinfection schedule for all non-transport

apparatus. When cleaning these apparatus, fire suppression crews should utilize an approved disinfectant to sanitize all touch surfaces in the apparatus.

Fire Station Decontamination Procedures

In addition to the cleaning of transport and non-transport apparatus, fire chiefs should consider increasing the frequency with which fire stations are cleaned. Appropriate disinfectant should be used to clean touch surfaces through the fire station as well as floors. Particularly close attention should be given to thoroughly cleaning all quarters, kitchens, gyms, bathrooms, and day rooms.

Fire chiefs also should work with their medical directors to develop protocols in the event that a suspected COVID-19 patient seeks treatment at a fire station. While it is likely that the patient should be kept outside of the station if possible, the decision of where and how to treat the patient should be guided by the agency medical director. If the patient does enter a fire station, they should be kept to a confined space such as an office. This space should be thoroughly disinfected with a hospital-grade cleaning solution after they depart the fire station.

Approved Disinfectants

The U.S. Environmental Protection Agency (EPA) has identified a [list of disinfectants](#) which can be used to eliminate the COVID-19 virus. All fire chiefs are encouraged to work with their medical director and suppliers to select an appropriate disinfectant as well as alternate disinfectants which can be used in the event of a shortage of the primary disinfectant.

Quarantine Guidance

Fire chiefs should work closely with their medical director, city/county attorney, benefits administrator, and union (when applicable) to pre-plan for the event when an EMS provider must be quarantined or isolated. The most important information to know is that the chances of needing to quarantine or isolate an EMS provider can be nearly eliminated when a) proper PPE adherence is achieved and b) a surgical facemask is placed on a patient.

Fire chiefs should ensure their personnel always follow proper PPE protocol and place a surgical facemask on patients with flu-like symptoms. If both goals are achieved, there likely is no need to quarantine an EMS provider.

Quarantine vs. Isolation

Before examining this issue, it is important to note the difference between quarantine and isolation:

- Quarantine: Quarantine is used to separate people who *may* have been exposed to COVID-19 from those who *have not* been exposed to COVID-19. Individuals placed into quarantine are not ill and are under observation to determine if they will develop symptoms. The CDC recommends that individuals who may have been exposed, or are known to have been exposed, to COVID-19 be placed into quarantine for 14 days. This quarantine period is most often completed in the individual's home. If an individual is quarantined in their home, fire chiefs and medical directors may want to consider whether it is appropriate for the individual to distance themselves from other family members or roommates who have not experienced a potential COVID-19 exposure.
- Isolation: Isolation is meant to separate sick individuals from non-sick individuals. A helpful note to remember is that isolation = ill. In most cases, these individuals may complete their isolation at home. However, it is critically important to routinely monitor these individuals and transfer them to a hospital if their symptoms worsen.

Fire chiefs also may need to consult a local attorney and public health officials to understand the legal aspects of quarantine and isolation orders.

Personal vs. Professional Exposures

Fire chiefs should develop policies which require immediate notification of the fire department if a firefighter or single-role EMS provider is quarantined at home due to an exposure which occurred in their personal life. In the event of quarantines or isolations resulting from an exposure conclusively linked to an individual's private life, the fire

department likely will compensate the individual at the rate which they would be paid for any other sick leave. However, fire chiefs are encouraged to consult a local attorney, benefits administrator, and their collective bargaining agreement (when applicable) for any circumstances which may be unique to their situation.

Quarantines which are the result of a workplace exposure raise a host of unique considerations such as the individual's compensation rate during the quarantine period (specifically whether they must be provided compensation at an overtime rate), and responsibilities that the fire department has to the individual under federal laws such as the Fair Labor Standards Act, Occupational Safety and Health Act, or the Family and Medical Leave Act. Additionally, there may be state and local regulations as well as collective bargaining agreement rules which identify the individual's compensation rate.

Lastly, fire chiefs should research whether their fire department's worker's compensation insurance will cover instances of firefighters or EMS personnel contracting COVID-19 as a result of a workplace exposure. The IAFC is aware of several states where worker's compensation insurance carriers are pre-emptively declining any COVID-19 related claims. It may be possible that state law does not require worker's compensation policies in to cover COVID-19 claims. In these instances, fire chiefs may need to collaborate with their benefits administrator, local union or volunteer firefighters' organization, and state chiefs association to seek legislative and/or regulatory changes.

Quarantine/Isolation Locations

Fire chiefs should work closely with their medical director, local public health authorities, and other municipal administrators to identify proper quarantine and isolation locations for individuals who may have been exposed to COVID-19. These locations often can be in an individual's home. However, some individuals may express concern about a home quarantine if their family is not under a quarantine order. Due to this concern, some fire chiefs have established quarantine/isolation housing in a pre-designated fire station, hotel, apartment, or other housing. Ultimately, the selection of this housing will be left to the fire chief, medical director, and other municipal administrators. When possible, fire chiefs are encouraged to be transparent in these plans and to work collaboratively with their local union in order to secure organization-wide support for these plans.

Physical, Mental, and Behavioral Health Concerns

Regardless of the location, fire chiefs also should consider the mental stress that a quarantine or isolation may place on an individual. Fire chiefs should develop plans to ensure that individuals are routinely contacted throughout the day to assess their physical symptoms as well as to address any mental or behavioral health concerns which arise during the quarantine or isolation. The use of a peer support, chaplain, or critical incident stress management team may be especially helpful in monitoring and addressing mental and behavioral health concerns of individuals in quarantine or isolation.

Routine monitoring of an individual's physical health symptoms also is important as they may need medical attention if symptoms develop. Some fire departments have utilized phone and/or video conferencing systems to assess the health of quarantined/isolated individuals. Fire chiefs should work with their local and state health authorities to develop a plan for monitoring quarantined individuals for COVID-19 symptoms. Additionally, a fire department's medical director should play an active role in developing any plans to assess the physical, mental, and behavioral health of quarantined individuals.

Mental and Behavioral Health Resources

Additional resources for supporting mental and behavioral for firefighters and EMS personnel can be found at the following websites:

- IAFC – [Yellow Ribbon Report: A Proactive Approach to Ensuring Mental Wellness](#)
- IAFF – [Behavioral Health Program](#)
- NFFF – [Finding Peace of Mind and Wellness in the Fire Service](#)

Volunteer Specific Concerns for Quarantines

Volunteer personnel may be especially impacted by mental or financial stressors as a quarantine or isolation could have negative impacts on their paid careers. As a result, some volunteer personnel may be reluctant to continue their service in light of a growing biological threat. In cases when a volunteer firefighter or EMS provider is subject to a quarantine or isolation as a result of their volunteer service, fire chiefs should offer any reasonable accommodations and assistance. Some of these accommodations may include:

- Assist in contacting a volunteer's employer to explain their quarantine
- Identify the needs of the volunteer and/or their families during the quarantine
- Assist the volunteer in filing for any applicable worker's compensation, health insurance, or other wage insurance claims

Extent of Quarantine/Isolation Following a Workplace Exposure

The CDC has developed a [helpful guide](#) for assessing the level of risk that an individual faces following interaction with a known or suspected COVID-19 patient. It is important to note that if an EMS provider was wearing their full PPE and adhered to proper donning and doffing procedures, their chances of contracting COVID-19 are minimal, and they should not be quarantined or isolated. Placing an individual under quarantine or isolation should only be done following an unprotected exposure to a known or suspected COVID-19 patient.

The CDC establishes that placing a face mask on a patient to achieve source control is one of the most effective means to reducing exposure risk for EMS personnel. All suspected COVID-19 patients should be instructed to don a surgical mask upon arrival of EMS personnel. Additionally, fire chiefs and medical directors should consider developing protocols to limit the number of EMS personnel who interact directly with suspected or confirmed COVID-19 patients. Adopting a “Two-In, Two-Out” style policy can be helpful to limit the number of EMS personnel faced exposure to COVID-19.

The CDC has created a larger guidance document which contains information on [assessing the exposure risk](#) for healthcare providers. The following table is provided courtesy of the CDC and explains the risk factors for healthcare practitioners (HCPs) who experienced unprotected interactions with a known or suspected COVID-19 patient

Epidemiologic Risk Factors	Exposure category	Recommended Monitoring for COVID-19 (until 14 days after last potential exposure)	Work Restrictions for Asymptomatic HCP
Prolonged close contact with a COVID-19 patient wearing a facemask (i.e., source control)			
HCP PPE: None	Medium	Active	Exclude from work for 14 days after last exposure
HCP PPE: Not wearing a facemask or respirator	Medium	Active	Exclude from work for 14 days after last exposure
HCP PPE: Not wearing eye protection	Low	Self with delegated supervision	None
HCP PPE: Not wearing gown or gloves	Low	Self with delegated supervision	None
HCP PPE: Wearing all recommended PPE (except wearing a	Low	Self with delegated supervision	None

Epidemiologic Risk Factors	Exposure category	Recommended Monitoring for COVID-19 (until 14 days after last potential exposure)	Work Restrictions for Asymptomatic HCP
facemask instead of a respirator)			
Prolonged close contact with a COVID-19 patient who was not wearing a facemask (i.e., no source control)			
HCP PPE: None	High	Active	Exclude from work for 14 days after last exposure
HCP PPE: Not wearing a facemask or respirator	High	Active	Exclude from work for 14 days after last exposure
HCP PPE: Not wearing eye protection	Medium	Active	Exclude from work for 14 days after last exposure
HCP PPE: Not wearing gown or gloves	Low	Self with delegated supervision	None
HCP PPE: Wearing all recommended PPE (except wearing a facemask instead of a respirator)	Low	Self with delegated supervision	None

Recommended Actions Following Interaction with a Known COVID Patient

In addition to taking the above mentioned precautions when caring for and transporting COVID-19 patients, the IAFC recommends that fire departments develop policies to adhere to following interactions with known COVID-19 patients. When developing these policies, the IAFC encourages fire chiefs to consider the following items:

- **Confirm Diagnosis:** If possible, attempt to confirm the patient's COVID-19 diagnosis with the receiving hospital. A presumed positive does not necessarily mean a confirmed positive.
- **Interview Crew:** Interview the personnel involved in the call/transport and review the interaction to ensure adherence to PPE and other policies. Information from these conversation should then be documented in an incident exposure report. Additionally, fire chiefs should educate their personnel on the common COVID-19 symptoms such as a runny nose, runny eyes, dry cough, shortness of breath, and/or fever.² Personnel also should be instructed to regularly monitor their temperature to ensure it stays below 99.9°F and that they do not experience other symptoms. If any individuals report a temperature or other symptoms, they should discuss the situation with the agency medical director, human resources administrator, or occupational health director to assess whether the individual(s) should quarantine themselves and remain off-duty.
- **14-Day Monitoring:** Assuming all members who interacted with the patient adhered to proper PPE protocols and are not experiencing any symptoms, personnel should continue working and document checking their temperature and potential symptoms twice per day for 14 days. If a temperature of >99.9°F or other symptoms appear, the individual should remove themselves from duty-status and notify their fire department. Fire chiefs should work with their medical directors, occupational health department, and local health officials to develop a list of symptoms for which individuals should self-monitor twice per day. A sample checklist and documentation form is provided in Appendix A.

² COVID-19 does not have an early, cardinal symptoms. As a result, these are common symptoms to monitor for, however all decisions to quarantine an individual should be made in concert with the agency medical director and local or state health authorities.

Appendix A – Sample Exposure Tracking Form

COVID-19 Exposure Tracking Form

Employee: _____ Exposure Date: _____

Presumptive Y/N Date: _____ Confirmed Y/N Date: _____

Symptom/Time	Day 1		Day 2		Day 3		Day 4		Day 5		Day 6		Day 7	
	0800	2000	0800	2000	0800	2000	0800	2000	0800	2000	0800	2000	0800	2000
Your Temperature														
Runny Nose														
Sore Throat														
Dry Cough														
Runny Eyes														
Fever														
Short of Breath														
Other Symptoms?														

Symptom/Time	Day 8		Day 9		Day 10		Day 11		Day 12		Day 13		Day 14	
	0800	2000	0800	2000	0800	2000	0800	2000	0800	2000	0800	2000	0800	2000
Your Temperature														
Runny Nose														
Sore Throat														
Dry Cough														
Runny Eyes														
Fever														
Short of Breath														
Other Symptoms?														