

# COVID-19 and Safe Operations: What You Should Know FAQs

**So that we do not see an increase in healthcare provider suicides as soon as this crisis is over, how can we remind our brothers and sisters in healthcare that we are doing everything we can to support them?**

As a community, we need to do everything in our power to protect our providers. EMS leaders and providers alike are concerned about the mental wellbeing of our people. To that end, we must ensure we are taking care of each other and not stigmatizing or emotionally isolating our providers. I have heard anecdotal stories of friends, family, and peers who did not want providers to come home after a shift or deployment. Much of this is borne out of a lack of evidence-based information on modes of transmission. Currently, there is a lot of information circulating on this topic, and I would recommend that all EMS leaders and providers take a moment to inform themselves. Most regions in the U.S. have access to crisis response teams that can be accessed by contacting your state EMS bureau. Additionally, take a look at these resources:

<https://info.lexipol.com/coronavirus-stress-management>

[http://www.naemt.org/docs/default-source/ems-preparedness/naemt-resilience-guide-01-15-2019-final.pdf?Status=Temp&sfvrsn=d1edc892\\_2](http://www.naemt.org/docs/default-source/ems-preparedness/naemt-resilience-guide-01-15-2019-final.pdf?Status=Temp&sfvrsn=d1edc892_2)

<https://codegreencampaign.org/covid19/>

**How do we deal with inconsistencies between CDC guidance and local healthcare professionals who downplay the risk of COVID-19?**

At the time that I respond to this question, May 11, 2020, there have been 4.1 million reported COVID-19 cases and 283,120 deaths, globally. We understand that as more and more people get access to testing, the number of confirmed cases will continue to climb. In fact, over 25 days, March 1—April 25, 2020, COVID-19 became the number one cause of death in the U.S. The facts and risk associated with this virus are hard to dispute. To that end, I have consistently relied on information based on evidence from sources such as the Centers for Disease Control and Prevention (CDC). Submitting to a single source of truth is important because it prevents confusion among our providers and allows for a sustained and consistent response.

**How do we keep employees from hoarding equipment out of fear?**

Provide your people with good, evidence-based information regarding PPE use and supply availability and be honest about the real risks. Beyond that, controlling PPE through daily allotments has helped some organizations control hoarding. Our providers must know that some agencies—maybe their own—are in a crisis capacity, and PPE hoarding puts their peers at risk.

**Is it safe to use a non-rebreather on a COVID patient without a surgical mask, or should we use a nasal cannula with a surgical mask?**

Consult with medical control for oxygenation guidelines for COVID-19 patients. Additionally, several resources are available for review:

<http://www.emdocs.net/covid-19-oxygen-escalation-therapy-and-noninvasive-ventilation/>

or

<https://www.nebraskamed.com/sites/default/files/documents/covid-19/respiratory-inpatient-guide-for-covid19.pdf>

**What PPE recommendations can you offer for extended, pressurized medical evacuations flights, sometimes lasting more than eight hours?**

Extended transports present a unique set of challenges that include provider safety, comfort, and durability of the selected PPE ensemble. Keep in mind that full Tyvek suits may offer greater durability, but they can increase the potential for dehydration and that the donning/doffing procedures need to be carefully reviewed and practiced. Whichever ensemble is chosen, providers should ensure they have enough PPE on hand to complete the entire flight. Further, we should ensure that we do not return home in an aircraft that has not been properly cleaned and disinfected.

**Can sweating cause PPE to lose effectiveness?**

Anecdotally, the answer to this question is *yes*. Moderate to heavy sweating can cause PPE to fit poorly, and in some cases, if the respirator becomes saturated with sweat, it may become difficult to breathe through.

**Is the 160-degree reference for "hot water" a Fahrenheit reference, or should we use a steam sanitizer if our washing machines cannot reach that temperature?**

Check your washing machine owner's manual (many sanitize cycles achieve temperatures of as much as 165 degrees); you may also want to check the temperature setting on your hot water heater.

**Can I use hydrogen peroxide in the vaporizer to sanitize my vehicle?**

Hydrogen peroxide is routinely used in disinfecting operations, and its use in fogging applications is well documented. Remember, you should only use foggers that are approved for this application and then with the appropriate chemical. Use all PPE and take precautions associated with the chemical in accordance with the safety data sheet.

**Is placing your mask in direct sunlight and turning it over a few times an effective form of sanitation?**

It is not! See CDC guidelines for appropriate disinfecting techniques:

<https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html>

**When used alone, do NIOSH-approved safety glasses provide sufficient protection for high risk or positive COVID-19 patients?**

This type of eyewear should be used only when indirect vent goggles or face shields are not available. When performing aerosolizing procedures, your first option should be a face shield and safety glasses or indirect vented goggles meeting ANSI Z87.1 standards.

### **Do you have advice regarding the use of negative pressure airflow in units?**

A review of available data on the use of negative pressure flow units in the EMS community does not yield much information. Current data suggests that HEPA filters, exhaust fans, vents for outside air and environmental controls systems be operated on high and in the “no recirculation” mode. Many industry experts have opined that this is an area warranting more research and collaboration with ambulance manufacturers.

### **Do you have advice regarding the use of positive pressure hoods?**

Powered air-purifying respirators (PAPR) have not been used to a great extent in the EMS community, but have gained more attention from EMS organizations through the Ebola and COVID-19 crises. Here are a few important points about PAPR use:

- PAPR’s must be accounted for in your organization’s respiratory protection plan (OSHA 1910.134). The respiratory plan should address when to use proper donning/doffing procedures, cleaning/disinfecting, and storage to name a few.
- Providers should realize that these devices come with their own set of unique challenges that include battery life, potential for heat-related injuries, communication difficulties, and patient treatment challenges, i.e. checking lung sounds, etc.
- A final thought: PAPRs should not be routinely used where employees simply do not want to maintain a clean-shaven face in accordance with OSHA/CDC guidance and fit-testing protocols.