



CLACKAMAS & WASHINGTON COUNTY EMERGENCY MEDICAL SERVICES



Clackamas and Washington County COVID19 FAQs.

April 29, 2020

This document serves as an informational tool to answer FAQs regarding patient care in the context of continued community presence of SARS-CoV-2 causing COVID19 (C19).

First – some general thoughts:

- Your PPE works. The minimum standard in our county plan will keep you safe. We have had no EMS providers in Clackamas or Washington County become positive with C19 that is causally related to a patient care encounter. This is consistent with the experience reported from our colleagues in Seattle and King County.
- However, potential exposure should be minimized.
 - o This means that personnel not directly participating in care should not be in the room or ambulance if an aerosolizing procedure is being performed.
 - o When possible, aerosolizing procedures should be performed before taking the patient to the ambulance and consider doing it outside (while wearing appropriate PPE)
 - o First arriving crew should send in a scout that is wearing, at a minimum, N95 mask, eye protection and gloves. A gown may be worn if likely high risk. The purpose of the scout is to determine risk AND to help preserve PPE. If a patient is stable and requires minimal intervention, the scout may bring the patient to the ambulance or ask one ambulance crew member to don PPE and help further evaluate/move the patient.
- We should still focus on providing high quality patient care. We must avoid “secondary casualties” because we try to do too much different. Make knowledge-based decisions. Do not avoid needed interventions out of fear. If a patient has high potential for significant illness, then follow our normal standards of care while protecting yourself. Your PPE works.

Frequently Asked Questions:

What is considered droplet vs airborne? If COVID-19 can theoretically be aerosolized for up to 3 hours, would that then be airborne?

Unfortunately, this is more complicated than we thought. We still believe that the MAJORITY of transmission is through droplet transmission. However, we do know that there is some airborne transmission and certain procedures can aerosolize the virus and that is when airborne precautions are needed.

Should we stop doing nebulizers?

As you know, nebulized albuterol is highly effective for asthma and COPD. It is, however, an aerosolizing procedure and therefore it should be used in a thoughtful manner. You may consider alternative treatments, such as:

- Albuterol MDI with spacer 4 puffs. May be repeated as need x 2.
- Epinephrine 0.3-0.5mg IM
- Consider calling OLMC for IV Magnesium





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However, if the patient has severe respiratory distress and you believe it is in the best interest to provide a nebulizer, then it is acceptable to treat the patient with a nebulizer. Ideally, this should be performed and completed before placing the patient in the ambulance. Consider doing it outside if possible. If a nebulizer is used in an ambulance, then it should be stopped before removing the patient from the ambulance after arrival at the hospital.

Should we consider the following for CPR? –

- **No CPR without BVM or Advanced airway placement**
- **No CPR without high-risk PPE, even if this causes a 1-2-minute delay**
- **Always maintain great BVM seal**
- **Stop CPR during airway procedures**

The minimal airborne PPE package of N95, gloves, eye protection and disposable gown have been demonstrated to protect staff when performing aerosolizing procedures. “Higher levels” of PPE such as an p100 mask (or PAPR) or Tyvek suits, are reusable and help agencies that maintain PPE supply for the long-term.

While we should minimize potential exposure, changing our practice too much runs the risk of worsening patient outcome with no real benefit in provider safety. Your PPE is protective when used appropriately. When dispatched to cardiac arrest, you should don your full PPE package prior to entering the scene. Working a cardiac arrest generates aerosol and we should just assume that, regardless of interventions, that we are in a high-risk environment.

The science and conventional best practices of cardiac arrest resuscitation hasn’t changed because of COVID. The use of PPE has changed and is of critical importance, but how we deliver high performance CPR, excellent ACLS, and overall patient care has not and should not change because of SARS-CoV-2.

Regarding the above questions:

- Compressions are key to survival. The entire arrest is aerosolizing. Initiate compressions immediately and wear appropriate PPE. Do not wait for airway intervention before starting CPR. If available, you may place a mask on the patient after initiating compressions
- If dispatched to a cardiac arrest, PPE should be donned prior to entering scene. If dispatched to a non-arrest and the “scout” identifies a cardiac arrest, then compressions should be initiated right after notifying the rest of the crew that this is an arrest. If the scout was not in a gown, then the uniform should be removed/changed as soon as feasible.
- Maintaining a great BVM seal is always great practice! This requires ideally a two-person technique.
- We will not be stopping compressions for intubation. Stopping compressions during intubation has been demonstrated to reduce survival. The entire arrest is aerosolizing, and all caregivers involved should be in PPE. The airway provider should be in full PPE.





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- Finally, please remember that, in most cases, transporting the patient without ROSC has no benefit. We should focus only on transporting those patients with ROSC or intermittent ROSC.

Should we minimize bag valve mask ventilation?

If a patient is hypoxic and hypoventilating, then provide bag-valve mask ventilation. Holding a tight seal along with use of HEPA filters may potentially reduce viral exposure. All BVM (whether not there is a good seal or filters are used) is considered an aerosolizing procedure. PPE will maintain safety.

When is more testing going to be available?

Testing continues to become more available. Testing turnaround times have been significantly reduced and are around 24-48 hours. All frontline healthcare workers (including EMS) who are symptomatic can be tested by either OHSU or Providence. There is still little benefit to testing asymptomatic people unless they are part of a contact tracing effort.

Are healthcare workers going to be tested for immunity?

Antibody testing is coming online now. There are a lot of antibody tests available that are of questionable benefit. Currently, it is unclear if having IgG antibodies to SARS-CoV-2 provides immunity. If a reliable test becomes available and we learn that having antibodies provides immunity, then we will determine how to best utilize them in the system. There is also concern that the antibodies detected by some of these tests may be directed at other coronaviruses and not SARS-CoV-2. Antibody testing is likely to be more valuable as a population surveillance tool at this time. Depending on the prevalence of disease in a community, these tests can also lead to false positives which can provide for misleading reassurance to health care workers.

When do we expect this current outbreak to be over and potentially return to normal? Do you think this is going to become cyclical and return next year?

We will never return to practice exactly the way it was before. We must continue to be aware of the potential of transmission of communicable disease. Our vigilance to prevent transmission should be increased even if this coronavirus becomes a thing of the past.

With regards to the current outbreak, we have no idea when it will be over. Expect coronavirus to circulate in the community until a vaccine is available and we finally get some herd immunity. Public health will be playing “whack-a-mole” with new SARS-CoV-2 infections until this happens. A vaccine by best estimates is 12-18 months out. Based on the Spanish 1918 influenza experience we can expect to have recurrent waves of infection. The virus is also mutating, and so immunity may need to be boosted regularly like we do for influenza.



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Should we be checking temperatures on all patients to help us determine levels of PPE required?

We are basically presuming all patients could transmit it to you, even though it appears that prevalence in Oregon is low. Therefore, we ask you to place a mask on all patients and wear a mask when caring for all patients.

How long does a CV19 carrier remain contagious?

We do not know. Some people can test positive for weeks after an infection, but we do not believe they are actively contagious. Most patients appear to not be contagious if they have had no fever (without antipyretics) for 72 hours, have improvement of their symptoms with an illness duration of more than 7 days. However, in the current situation if you are transporting a patient who has previously tested positive for C19, then please wear high risk PPE. We are learning more about this and it is important to note that the virus is also found in the stool which could be a source of exposure as well. This is why strict hand hygiene is always so important.

Reviewed and approved by the following Metro Regional EMS MDs:

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