

NOLS WILDERNESS MEDICINE

Curriculum Updates Evolving from the COVID 19 Pandemic
June 10, 2020

The COVID 19 Pandemic is driving changes in first aid and emergency medical service (EMS) practices, as well as field practices for outdoor programs. As our understanding of the virus that is causing this pandemic, SARS-CoV-2, evolves, so will our wilderness medicine practices. The current changes in our curriculum are focused on infection control during patient assessment and care, basic life support (BLS or CPR) recommendations, and evacuation guidelines for outdoor programs.

The SARS-CoV-2 virus has also changed our classroom management practices. As close physical contact and hands-on practice are an essential part of our courses expect to be wearing mask and gloves, protective eyewear, and to wash your hands, and surfaces, frequently, while we do the best we can to maintain social distance during our courses.

Patient Assessment

Our body substance isolation (BSI) practices are evolving in light of the COVID 19 pandemic. In addition to the standard practice of wearing gloves to protect against bloodborne pathogens we also need to protect ourselves and the patient from respiratory pathogens. Assessing the likelihood that the patient has a respiratory illness is part of the scene-size up for many EMS organizations. In time we may develop WFR decision-making protocols for respiratory illness, but for now, since COVID-19 is always possible, we need a conservative approach.

Considerations in your Patient Assessment System

Scene Size-Up

- Stop at least 6' away
- Don your gloves and a *mask*.
 - If respiratory s/s not present (or no reason to suspect). Standard glove, and now, mask based BSI.
 - If any respiratory s/s present; ideally don a mask, goggles, gloves and your most impervious outerwear.

Initial Assessment

- After you introduce yourself and gain permission to treat the patient, assess airway and breathing, then ask the patient if they will wear a *mask*.

Comments:

- The patient assessment system remain the same except for the infection control additions of the mask and maybe outerwear. When HIV came on the scene we learned to wear gloves during patient care. SARS-CoV-2 is teaching us to wear a mask.
- Ideally the rescuer wears a fitted N95 mask to protect themselves against airborne infection. Practically the rescuer, and the patient, may wear a mask intended to reduce the number of particles we exhale, thus reducing exposure to others. In order of preference these mask are: medical/surgical, 3 layer cloth mask, or a buff doubled or tripled over.
- When it is environmentally safe to do so assess and treat the patient outside and upwind—rather than in an enclosed space like a tent or shelter.

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- Some sort of glasses are recommended; goggles (glasses with side protection) are best.
- Consider minimizing the number of responders, bystanders, family, friends coming into immediate contact with the patient.
- As much as possible, maintain physical distancing during evacuations; patient and litter carries are not risk-free.
- Psychological first aid will be very important in this stressful time. Especially valuable will be connection, efficacy and hope.

Basic Life Support (BLS) Curriculum

Classroom Practices

For the time being we will be suspending practicing rescue breathing via mouth-to-mask or mouth-to-mouth and we won't be practicing abdominal thrusts on each other.

BLS During the COVID 19 Pandemic

- The probability of survival from cardiac arrest in the wilderness is in theory higher for a drowning, avalanche burial or lightning patient compared to a cardiac arrest from heart disease or certainly a cardiac arrest from trauma, but regardless, wilderness CPR has a low probability of survival.
- CPR is a high-risk environment for COVID 19 exposure; rescuer safety is a legitimate factor in deciding not to attempt CPR.
- Lay rescuers in the community are unlikely to have access to adequate PPE and, therefore, are at increased risk of exposure to COVID-19 during CPR, compared to healthcare providers with adequate PPE.
- Rescuers with increasing age and the presence of comorbid conditions, such as heart disease, diabetes, hypertension, and chronic lung disease, are at increased risk of becoming critically ill if infected with SARS-CoV2.
- When the cardiac arrest occurs at home to a family member the rescuers are likely to already have been exposed to COVID-19. This may influence the decision – make the rescuer more willing - to perform chest compressions and ventilations (rescue breathing).

CPR Technique

- Compression-only CPR is a legitimate choice in a cardiac arrest if a suitable airway mask is not available.
- Mouth to mouth ventilations are high risk and should be avoided.
- If a mask is used, it should have a one-way valve and filter (vs the common flat face shields that just have a valve).
- If you are responding for an organized rescue group, or in the context of work, know your organization protocols.

Evacuation Protocols

Organized groups need to consider protocols relevant to their context.

- Daily Screening is suggested for:
 - Cough
 - Shortness of breath or difficulty breathing
 - Fever
 - Chills

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- Muscle pain
- Sore throat
- New loss of taste or smell
- Close contact in the past 14 days with someone suspected or confirmed as having COVID-19.
- People confirmed or suspected as having COVID-19 who have had a fever in the past three days and have had symptoms in the past 10 days.

Evacuation Guidelines

- If someone has respiratory or flu-like illness they should be isolated from the rest of the group. Ideally you can have a medical consult to determine the need for an evacuation..
- One person should be designated as the caregiver for the patient. The caregiver should wear a fitted N95 mask, eyewear and latex or nitrile gloves when in close contact with the patient.
- The evacuation team needs to maintain physical distance as much as possible, wear masks or face coverings when in close contact with others, and maintain isolation of the patient.
- The patient should wear a mask or face covering over their mouth and nose when in close contact with others; even the use of a bandana or buff etc. can limit, though not prevent, the spread of droplets that carry the virus.

Summary

Practices to protect ourselves against COVID 19 can seem complex, but if we understand the principles, we can simplify and we can make decisions when we are in unanticipated scenarios. The principles are:

- Physical distancing: strive to be at least 6' (2m) apart. This requires some awareness of where other people may be, and what is called the "COVID shuffle", a constant movement of a group of people as they adjust to one another.
- Masks when you cannot distance; keep your mask handy, don it when you're closer than 6' or just being busy and less aware of where others may be, for example when you first come into camp, or are unloading the vehicle at the trailhead or are cruising through the store.
- Meticulous hand hygiene discipline; think about what you have been touching and when in doubt, or just because you haven't done it in a while, sanitize or wash your hands.
- Glove during patient contact and when you can't sanitize your hands.
- Screen for symptoms. Pay attention to how you and others are feeling. When in doubt, isolate.
- Live in a culture of compliance that protects yourself, your patient, your friends, family and community.