Michigan Alliance for the Prevention of Sudden Cardiac Death of the Young (MAP-SCDY)

Recommendations for Michigan School Cardiac Emergency Response Teams to Safely Respond to Sudden Cardiac Emergencies during the COVID-19 Pandemic

Submitted on behalf of the MAP-SCDY 2020

- 1. Cardiac emergency response drills should be incorporated with all school safety drills such as fire, tornado, lock-down, or evacuation preparedness.
- 2. The American Heart Association (AHA) issued interim cardiopulmonary resuscitation (CPR) guidelines that apply during the COVID-19 pandemic. The AHA recommends bystanders and lay rescuers administer "hands-only" CPR without mouth-to-mouth ventilation to limit exposures to the SARS-CoV-2 virus that causes COVID-19.¹
- 3. Hands-only CPR has been shown to be as effective as conventional CPR for cardiac arrest at home, at work or in public. 1,2,3
- 4. In the event hands-only CPR is initiated prior to the automated external defibrillator (AED) kit arriving, both the responder and the victim should have a face mask. We recommend the responder use a face covering for the victim's face and mouth which may reduce the risk of transmission to a non-household responder/bystander. Options for alternative face coverings until the AED kit arrives with face masks include pulling the victim's shirt up to cover his/her mouth or using a towel.
- 5. 9-1-1 (or the designated local emergency number) should be called immediately.
- 6. Cardiac response should not be delayed. Early CPR improves the flow of blood and oxygen to the vital organs, an essential component of treating a cardiac arrest. The five chain of survival links to maximize the chances of survival following a cardiac are: early access to care, early CPR, early defibrillation, rapid delivery of Emergency Medical Services (EMS) care and early post-resuscitation care.³
- 7. The use of an AED is not expected to be a highly aerosolizing procedure and should be started as soon as possible.¹
- 8. There is always a risk to performing CPR. The risk versus benefit highly favors resuscitating the individual. School personnel participating on the emergency response team should consider their ability to perform the required duties in a timely manner. Staff who are on a response team should be physically able to perform hands-only CPR and apply the AED. 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 COVID-19.¹

- 9. Schools should add personal protective equipment (PPE) inside or alongside the AED toolkit. PPE should include at least five face masks, five sets of gloves, two face shields, and an alcohol-based hand sanitizer. Masks should be worn by the victim. Masks and eye protection (face shield) should be worn by the individual performing CPR and the person applying the AED pads.
- 10. After the use of the AED, responders or staff should clean the AED surface with disinfectant, following the manufacturer's guidelines. Gloves should be worn when cleaning and after, wash hands with soap and water or use an alcohol-based hand sanitizer. Avoid touching the face (e.g., eyes, mouth, or nose). Masks, gloves, and face shields should be disposed of properly.

References:

- 1. American Heart Association Interim FAQs for Communities: COVID-19 and CPR Training
- 2. https://www.ahajournals.org/doi/pdf/10.1161/CIRCULATIONAHA.120.047463
- 3. CARES: Cardiac Arrest Registry to Enhance Survival. 2018 Annual Report. https://mycares.net/sitepages/uploads/2019/2018 flipbook
- 4. AHA Fact Sheets / Resources:
 - Hands-Only CPR Fact Sheet
 - COVID-19 and Child and Infant CPR
 - FAQ: Hands-Only CPR
 - https://cpr.heart.org/en/cpr-courses-and-kits/hands-only-cpr