Nebraska Board of Emergency Medical Services
COVID-19 EMS Supplemental Protocols
Basic and Advanced Life Support
All Provider Levels
Last updated 5/4/2020

For the most recent updates CLICK HERE

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# Nebraska EMS Supplemental Protocols

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ALL LEVELS
• Follow current cardiac arrest algorithm with these special considerations

CARDIAC ARREST OF THE SUSPECTED OR CONFIRMED COVID-19 PATIENT

Adjustments to CPR algorithms in suspected or confirmed COVID-19 patients.

Reduce provider exposure:
• Don PPE before entering the room/scene
• Limit personnel
• Consider using mechanical CPR devices for adults and adolescents who meet height and weight criteria
• Communicate COVID-19 status to any new providers

Prioritize oxygenation and ventilation strategies with lower aerosolization risk:

EMR
• Use a HEPA filter, if available, for all ventilation
• Consider passive oxygenation with non-rebreather face mask covered by a surgical mask as alternative to bag-mask device for short duration
• Minimize closed circuit disconnections

EMT and AEMT
• Intubate early with auffed tube, if possible
• Assign the provider intubating with highest chance of first-pass success to intubate
• Pause chest compressions to intubate
• Before intubation, use a bag-mask device with a HEPA filter and a tight seal
• If intubation delayed, consider manual ventilation with a supraglottic airway or bag-mask device with a HEPA filter

EMT-I and Paramedic
• Intubate early with auffed tube, if possible, and connect to mechanical ventilator, when able
• Consider use of video laryngoscopy, if available

Consider the appropriateness of starting and continuing resuscitation:
• The risk to the clinical team is increased and resources can be profoundly more limited, particularly in regions that are experiencing a high burden of disease.
• Therefore, it is reasonable to consider age, comorbidities, and severity of illness in determining the appropriateness of resuscitation and balance the likelihood of success against the risk to rescuers and patients from whom resources are being diverted.
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Telecommunication (Dispatch):

- Telecommunicators, consistent with local protocols, should screen all calls for COVID-19 symptoms (e.g., fever, cough, shortness of breath) or known COVID-19 infection in the victim or any recent contacts, including any household members.
  - For lay rescuers, telecommunicators should provide guidance about risk of exposure to COVID-19 for rescuers and instructions for compression-only CPR, as above.
  - For EMS, telecommunicators should alert dispatched EMS teams to don PPE if there is any suspicion for COVID-19 infection.

Transport:

- Family members and other contacts of patients with suspected or confirmed COVID-19 should not ride in the transport vehicle.
- If return of spontaneous circulation (ROSC) has not been achieved after appropriate resuscitation efforts in the field, consider not transferring to hospital given the low likelihood of survival for the patient, balanced against the added risk of additional exposure to prehospital and hospital providers.
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CARDIAC ARREST – CPR & AED (Revised 5/4/2020)

EMR – EMT – AEMT

BLS Healthcare Provider Adult Cardiac Arrest Algorithm for Suspected or Confirmed COVID-19 Patients

Updated April 2020

EMR Options if Approved
- Place patient on back/CPR board
- Initiate transport
- Call for intercept from backup service

EMT
- Place patient on back/CPR board

EMT Options if Approved and AEMT, Paramedic
After First Cycle of CPR and Shock or No Shock
- Consider an advanced airway using above listed methods
- Consider impedance threshold device
- Consider IV Access with Normal Saline or LR
- AEMT
- Consider IO access
- EMT/AEMT/Paramedic
- Consider mechanical CPR

ALL LEVELS

- Follow current cardiac arrest algorithm with these special considerations

CARDBIAC ARREST OF THE SUSPECTED OR CONFIRMED PEDIATRIC COVID-19 PATIENT

Adjustments to CPR algorithms in suspected or confirmed COVID-19 patients.

Reduce provider exposure:

- Don PPE before entering the room/scene
- Limit personnel
- Communicate COVID-19 status to any new providers

Prioritize oxygenation and ventilation strategies with lower aerosolization risk:

**EMR**

- Use a HEPA filter, if available, for all ventilation
- Consider passive oxygenation with non-rebreather face mask covered by a surgical mask as alternative to bag-mask device for short duration
- Minimize closed circuit disconnections

**EMT and AEMT**

- Intubate early with a cuffed tube, if possible
- Assign the provider intubating with highest chance of first-pass success to intubate
- Pause chest compressions to intubate
- Before intubation, use a bag-mask device (or T-piece in neonates) with a HEPA filter and a tight seal
- If intubation delayed, consider manual ventilation with a supraglottic airway or bag-mask device with a HEPA filter

**EMT-I and Paramedic**

- Intubate early with a cuffed tube, if possible, and connect to mechanical ventilator, when able
- Consider use of video laryngoscopy, if available

**Telecommunication (Dispatch):**

- Telecommunicators, consistent with local protocols, should screen all calls for COVID-19 symptoms (eg, fever, cough, shortness of breath) or known COVID-19 infection in the victim or any recent contacts, including any household members.
  - For lay rescuers, telecommunicators should provide guidance about risk of exposure to COVID-19 for rescuers and instructions for compression-only CPR, as above.
  - For EMS, telecommunicators should alert dispatched EMS teams to don PPE if there is any suspicion for COVID-19 infection.

**Transport:**

- Family members and other contacts of patients with suspected or confirmed COVID-19 should not ride in the transport vehicle.
- If return of spontaneous circulation (ROSC) has not been achieved after appropriate resuscitation efforts in the field, consider not transferring to hospital given the low likelihood of survival for the patient, balanced against the added risk of additional exposure to prehospital and hospital providers.
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CARDIAC ARREST – MATERNAL AND NEONATAL (Revised 5/4/2020)

MATERNAL AND NEONATAL CONSIDERATIONS

Neonatal Resuscitation:

**ALL LEVELS**
- Every newly born baby should have a skilled rescuer prepared to resuscitate irrespective of COVID-19 status.
- The mother is a potential source of aerosolization for the neonatal team.
- Initial steps:
  - Routine neonatal care and the initial steps of neonatal resuscitation are unlikely to be aerosol-generating.
  - Include drying, tactile stimulation, placement into a plastic bag or wrap, and assessment of heart rate.
- Suction:
  - Suction of the airway after delivery should not be performed routinely for clear or meconium-stained amniotic fluid.
  - Suctioning is an aerosol-generating procedure and is not indicated for uncomplicated deliveries.

**EMT and AEMT**
- Consider placement of pulse oximetry and electrocardiograph leads.

**EMT-I and Paramedic**
- Endotracheal medications:
  - Endotracheal instillation of medications, such as surfactant or epinephrine, are aerosol-generating procedures, especially via an uncuffed tube.
  - Intravenous delivery of epinephrine via a low-lying umbilical venous catheter is the preferred route of administration during neonatal resuscitation.

Maternal Cardiac Arrest:

- The cardiopulmonary physiological changes of pregnancy may increase the risk of acute decompensation in critically ill pregnant patients with COVID-19.
- Preparation for perimortem delivery, to occur after 4 minutes of resuscitation, should be initiated early in the resuscitation algorithm to allow the assembly of obstetrical and neonatal teams with PPE even if ROSC is achieved and perimortem delivery is not required.
EMR – EMT – AEMT

Cardiac Arrest – CPR & AED (Revised 5/4/2020)

**EMR Options If Approved**
- Place patient on back/CPR board
- Initiate transport
- Call for intercept from backup service

**EMT**
- Place Patient On Back/CPR Board

**EMT Options if Approved and AEMT**
- After First Cycle of CPR and Shock or No Shock
  - Consider an advanced airway using above listed methods
  - Consider IV access with normal saline or LR

**AEMT**
- Consider IO access
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BLS Healthcare Provider
Pediatric Cardiac Arrest Algorithm for 2 or More Rescuers for Suspected or Confirmed COVID-19 Patients

Updated April 2020

- **Verify scene safety**
  - Don PPE
  - Limit personnel

- **Victim is unresponsive. Shout for nearby help. First rescuer remains with victim. Second rescuer activates emergency response system and retrieves AED and emergency equipment.**

- **Monitor until emergency responders arrive.**
  - Normal breathing, has pulse
  - No normal breathing, has pulse
  - No breathing or only gasping, no pulse

- **Look for no breathing or only gasping and check pulse (simultaneously). Is pulse definitely felt within 10 seconds?**

- **CPR**
  - First rescuer begins CPR with 30:2 ratio (compressions to breaths) using bag-mask device with filter and tight seal.
  - When second rescuer returns, use 15:2 ratio (compressions to breaths). Use AED as soon as it is available.

- **AED analyzes rhythm. Shockable rhythm?**
  - Yes, shockable
    - Give 1 shock. Resume CPR immediately for about 2 minutes (until prompted by AED to allow rhythm check). Continue until ALS providers take over or victim starts to move.
  - No, nonshockable
    - Resume CPR immediately for about 2 minutes (until prompted by AED to allow rhythm check). Continue until ALS providers take over or victim starts to move.

- **EMR Options If Approved**
  - Place patient on back/CPR board
  - Initiate transport
  - Call for intercept from backup service

- **EMT**
  - Place Patient On Back/CPR Board

**EMT Options if Approved and AEMT After First Cycle of CPR and Shock or No Shock**
- Consider an advanced airway using above listed methods
- Consider IV access with normal saline or LR

**AEMT**
- Consider IO access
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