



EMSA-Intermediate Treatment Protocol 5406

Pediatric Emergencies Cardiac Arrest

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Cardiac arrest in infants and children is rarely a primary event. It is usually a result of deterioration of respiratory function resulting in decreased cardiac function. Cardiac arrest can be prevented if the symptoms of respiratory failure and/or shock are recognized and quickly treated.

Ventricular Fibrillation/Pulseless V-tach:

A. Perform **CAT Protocol 5204** with the following special notes for pediatric patients:

1. If unable to establish IV, **contact MCP** to establish IO.
2. Epinephrine 1:10,000, 0.01 mg/kg IV or IO every 3-5 minutes (tracheal tube 0.1 mg/kg, 1:1000), **per MCP order**.



3. Immediate defibrillation in witnessed arrest.
4. Confirm effectiveness of CPR during resuscitative effort.

B. Defibrillate at 2 joules/kg.

C. If no conversion perform the following as **ordered by MCP**:

1. Defibrillate at 4 joules/kg.
2. If no conversion, defibrillate again at 4 joules/kg.
3. If no conversion, establish airway and IV/IO access per **CAT**, and administer epinephrine (1:10,000) 0.01 mg/kg IV or IO, or epinephrine (1:1000) 0.1 mg/kg down ET tube.
4. If no conversion, within 30-60 seconds defibrillate at 4 joules/kg.
5. If no conversion, continue epinephrine every 3 to 5 minutes and administer lidocaine 1 mg/kg IV or IO or down ET tube.
6. If no conversion, defibrillate again at 4 joules/kg.





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7. If no conversion, repeat lidocaine 1 mg/kg IV or IO or down ET tube.
8. If no conversion, defibrillate at 4 joules/kg.
9. If no conversion, continue to alternate drug therapy with defibrillation **per order of MCP**.



10. Transport, per order of Medical Command.



D. If conversion occurs:

1. Monitor vital signs and treat new rhythm per appropriate protocol.

2. Notify Medical Command and transport **per MCP order**.



Asystole:

- A. Perform **CAT** with special notes as above.
- B. Confirm true asystole:
 1. Check lead and cable connections.
 2. Check monitor power is "on" and gain is "up".
 3. Verify asystole in at least 2 leads.

- C. Administer epinephrine (1:10,000) 0.01 mg/kg IV or IO, or epinephrine (1:1000) 0.1 mg/kg down ET tube. Repeat every 3 to 5 minutes, **per MCP order**.



- D. Notify Medical Command and transport, **per MCP order**.



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E. Search for and treat reversible causes as outlined in **MAMP Protocol 5201-F**.

F. Further treatment as **ordered by MCP**.



G. If conversion occurs:

1. Monitor vital signs and treat new rhythm per appropriate protocol.

2. Notify Medical Command and transport, **per MCP order**.



PEA (Pulseless Electrical Activity):

A. Perform **CAT** with special notes as above.

B. Review potentially reversible causes as outlined in **MAMP Protocol 5201-F**.

C. Administer epinephrine (1:10,000) 0.01 mg/kg IV or IO, or epinephrine (1:1000) 0.1 mg/kg down ET tube. Repeat every 3 to 5 minutes, **per order of MCP**.

D. Notify Medical Command and transport, **per order of MCP**.



E. Further treatment as **ordered by MCP**.



F. If conversion occurs:

1. Monitor vital signs and treat new rhythm per appropriate protocol.

2. Notify Medical Command and transport, **per order of MCP**.

