

*Michigan*  
**Adult Cardiac Protocols**  
**CARDIAC ARREST ROSC**

Date:

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***Cardiac Arrest – Return of Spontaneous Circulation (ROSC)***

This protocol should be followed for all adult cardiac arrests with ROSC. If an arrest is of a known traumatic origin, refer to the **Trauma Protocol** and **MCA Transport Protocol**. If it is unknown whether the arrest is traumatic or medical, consider other treatable causes. Initiate ALS response if available.

**Pre-Medical Control**

**MFR/EMT/SPECIALIST/PARAMEDIC**

1. If ventilation assistance is required, ventilate at 10-12 breaths per minute. Do not hyperventilate.
2. Reassess patient, if patient becomes pulseless begin CPR and follow **Adult** or **Pediatric Cardiac Arrest General Protocol**.
3. Monitor vital signs.
4. Check blood glucose (MFR, if MCA approved).

**SPECIALIST/PARAMEDIC**

5. Start an IV/IO NS KVO.
6. Treat hypotension (SBP less than 90 mm/Hg) with an IV/IO fluid bolus consistent with **Shock Protocol**.

**PARAMEDIC**

7. Perform 12-lead ECG
8. If ventilation assistance is required, target PETCO<sub>2</sub> of 35-40 mm Hg.
9. Transport to a facility capable of Percutaneous Coronary Intervention (PCI) and therapeutic hypothermia where available per MCA protocol.

**Post-Medical Control**

**PARAMEDIC**

10. If hypotension persists after IV/IO fluid bolus, administer Dopamine 5-20 mcg/kg/min. Mix drip by putting Dopamine 400 mg in 250 ml NS.<sup>[WK(1)]</sup>

**Notes:**

1. If a mechanical ventilator is available or there are spontaneous respirations in the non-intubated patient, titrate inspired oxygen on the basis of monitored oxyhemoglobin saturation to maintain a saturation of  $\geq 94\%$  but  $< 100\%$ .
2. If previously intubated and not tolerating endotracheal tube, administer initial dose of sedation medication. Consider extubation only if wide awake, following commands, and unable to tolerate endotracheal tube. If possible, sedation is preferred over extubation.

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**Section 2-4**

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- This protocol should be followed for all adult cardiac arrest patients with ROSC. If an arrest is if a known traumatic origin, refer to the **Trauma Protocol** and **MCA Transport Protocol**. If it is unknown whether the arrest is traumatic or medical, continue with this protocol.

- If the patient becomes pulseless, begin CPR and follow the **Adult or Pediatric Cardiac Arrest - General Protocol**.

- Perform 12 – lead ECG
- Consider treatable causes.
- If ventilation assistance is required with an advanced airway in place and quantitative waveform capnography if available, target PETCO<sub>2</sub> of 35 – 40 mm Hg.
- Transport to a facility capable of Percutaneous Coronary Intervention (PCI) and therapeutic hypothermia where available per MCA protocol.

CONTACT  
MEDICAL  
CONTROL

- If hypotension persists after IV/IO fluid bolus administer Dopamine 5-20 mcg/kg/min.
- Mix drip by putting Dopamine 400 mg in 250 ml NS

**Notes:**

If a mechanical ventilator is available or there are spontaneous respirations in the non-intubated patient titrate inspired oxygen on the basis of monitored oxyhemoglobin saturation to maintain a saturation of  $\geq 94\%$  but  $< 100\%$ .

[WK(2)][WK(3)][WK(4)]

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**Section 2-4**