

Immediate Post-Cardiac Arrest Care Algorithm

Return of Spontaneous Circulation (ROSC)

Optimize ventilation and oxygenation

- Maintain oxygen saturation $\geq 94\%$
- Consider advanced airway and waveform capnography
- Do not hyperventilate

Treat hypotension (SBP <90 mm Hg)

- IV/IO bolus
- Vasopressor infusion
- Consider treatable causes
- 12-Lead ECG

Follow commands?

Consider induced hypothermia

No

Yes

Coronary reperfusion

Yes

STEMI OR high suspicion of AMI

No

Advanced critical care

Doses/Details

Ventilation/Oxygenation

Avoid excessive ventilation. Start at 10-12 breaths/min and titrate to target PETCO₂ of 35-40 mm Hg. When feasible, titrate FIO₂ to minimum necessary to achieve SpO₂ $\geq 94\%$.

IV Bolus

1-2 L normal saline or lactated Ringer's. If inducing hypothermia, may use 4°C fluid.

Epinephrine IV Infusion:

0.1-0.5 mcg/kg per minute (in 70-kg adult: 7-35 mcg per minute)

Dopamine IV Infusion:

5-10 mcg/kg per minute

Norepinephrine IV Infusion:

0.1-0.5 mcg/kg per minute (in 70-kg adult: 7-35 mcg per minute)

Reversible Causes

- Hypovolemia
- Hypoxia
- Hydrogen ion (acidosis)
- Hypo-/hyperkalemia
- Hypothermia
- Tension pneumothorax
- Tamponade, cardiac
- Toxins
- Thrombosis, pulmonary
- Thrombosis, coronary