

# RETURN OF SPONTANEOUS CIRCULATION (ROSC) ALS

ALWAYS USE BODY SUBSTANCE ISOLATION PRECAUTIONS

**INDICATION**

- The presence of a palpable pulse and/or blood pressure after cardiac arrest

**TREATMENT**

- ALS RMC
  - Maintain oxygen saturation 94%-99%
  - Perform ETCO<sub>2</sub> if available
  - Avoid excessive ventilation. Start at 10-12 breaths/min and titrate to target ETCO<sub>2</sub> 35-40 mm Hg
- 12-lead ECG / Early notification if STEMI
- Elevate head 30° if patient is conscious
- If patient remains comatose, initiate therapeutic hypothermia (do not initiate if arrest is due to hypothermia)
  - Expose patient and apply 8 ice packs: 2 to head, 1 over each carotid artery, 1 in each axillae, and 1 on each femoral artery at groin
  - If available, rapid infusion of ice-cold IV NS at 30 ml/kg
- Transport to nearest available STEMI Receiving Center
- For BP < 90 mm Hg:
  - NS 1-2 liter bolus (may use ice-cold fluids if inducing hypothermia); if no improvement:
  - **Dopamine** 10 mcg/kg/min. Titrate to SBP 100

<b>DOPAMINE</b>			
<b>400 mg in 250 ml D5W (pre-mixed)</b>		<b>60 drops/min = 60 ml/hr</b>	
<b>Weight (kg)</b>	<b>gtts/min to = 10 ug/kg/min</b>	<b>Weight (kg)</b>	<b>gtts/min to = 10 ug/kg/min</b>
35-44	15 gtts/min	85-94	35 gtts/min
45-59	20 gtts/min	95-109	40 gtts/min
60-74	25 gtts/min	110 & up	45 gtts/min
75-84	30 gtts/min		

**SPECIAL CONSIDERATION**

- Consider and treat possible contributing factors:

<ul style="list-style-type: none"><li>▪ Hypovolemia</li><li>▪ Hypoxemia</li><li>▪ Hydrogen ion (acidosis)</li><li>▪ Hypo/Hyperkalemia</li><li>▪ Hypoglycemia</li><li>▪ Hypothermia</li></ul>	<ul style="list-style-type: none"><li>▪ Toxins (overdoses)</li><li>▪ Tamponade, cardiac</li><li>▪ Tension pneumothorax</li><li>▪ Thrombosis (coronary / pulmonary)</li><li>▪ Trauma</li></ul>
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**DOCUMENTATION- ESSENTIAL ELEMENTS**

- Cardiac rhythm documentation
- 12-lead findings
- Time therapeutic hypothermia initiated

**RELATED POLICIES/ PROCEDURES**

- 12-lead Electrocardiogram ALS PR 12
- Destination Guidelines GPC 4