Cardiac Arrest

*Triple zero= no blood pressure, pulse, or respiratory rate

Table1. Step-by-step approach to cardiac arrest

Primary Action	Simultaneous additional measures
Call a code	
Start CPR	• Oxygen
	• Monitor
Check rhythm	VF/VT → Shock**
	PEA/Asystole → NO shock
CPR*	• IV/IO
Check rhythm	
CPR	Switch person doing CPR
	• Epinephrine 1mg q5mins/ Vasopressin 40 U IV
	• Intubation***
Check rhythm	
CPR	VF/VT that is shock-resistant and vasopressor-resistant → administer antiarrhythmic
	• 1 st dose: Amiodarone 300 mg
	• 2 nd dose: Amiodarone 150 mg
Check rhythm	
CPR	Switch person doing CPR
	• 5H's + 5T's

CPR: Cardiopulmonary Resuscitation; VF: Ventricular Fibrillation; VT: Ventricular Tachycardia; PEA: Pulseless Electric Activity; IV: Intravenous; IO: Intraosseous;

^{*}CPR guidelines: uninterrupted compressions for 2 minutes; 2 inches deep; 100 compressions/minute; check waveform capnography which should be 35-45 mmHg of End-tidal CO₂ (ETCO₂)

^{**}Shock: monophasic is 360 J; biphasic is 120-200 J

^{***}Definitive airway is ETT (endotracheal tube); other option is LMA (laryngeal mask airway)

Table 2. Troubleshooting the 5H's and 5T's

5H's and treatment	5T's and treatment
Hypovolemia → IV Fluids	Tension pneumothorax → Needle
Hypoxia → Oxygen	Tamponade → Needle
Hydrogen ion → Bicarbonate	Toxins (TCA) → Bicarbonate
Hyperkalemia → Bicarbonate	Thrombus - PE → tPA
Hypokalemia → Potassium	
Hypothermia → Warm up	Thrombus - ACS → Catheterization

TCA: Tricyclic Antidepressants; PE: Pulmonary Embolus; tPA: tissue Plasminogen Activator; ACS: Acute Coronary Syndrome

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