# DYSRHYTHMIAS: PULSELESS ELECTRICAL ACTIVITY (PEA)



**ACTION/TREATMENT:**

- ABCs/CPR/monitor cardiac rhythm.
- IV access, rate titrated to perfusion. Fluid bolus as indicated by potentially correctable cause.
- Epinephrine: 1 mg 1:10,000 IVP every 3 - 5 minutes.
  ET: Epinephrine 1:1000 10 mg once.
- Atropine: for HR < 60: 1 mg IVP every 3 - 5 minutes to a maximum 3 mg.
  ET: 2 mg once.

**Pediatric**

- Fluid bolus 20 mL/kg - reassess - repeat.
- Epinephrine: 1:10,000 0.01 mg/kg IVP every 3 - 5 minutes.

NOTES:

— PEA includes pulseless electrical rhythms (otherwise known as electromechanical dissociation or organized electrical activity without palpable pulse) such as pulseless sinus rhythm, idioventricular rhythm, ventricular escape rhythm, bradyasystolic rhythm.

— Pulseless or cardiac arrest patients with rapid tachycardias (usually over 160/min) may require treatment of the tachycardia before other treatment of PEA.

— Consider sodium bicarbonate only in prolonged arrest, known renal failure or tricyclic overdose in adult and pediatric patients: 1 mEq/kg IVP then 0.5 mEq/kg IVP every 10 minutes.

— Consider correctable causes of PEA:

- Hypovolemia - most common cause.
- Hypoxia.
- Tension pneumothorax.
- Metabolic causes:
  - Hyperkalemia.
  - Hypoglycemia.
  - Severe acidosis.
- Drug OD.

Boxed text indicates BH order
Unboxed text indicates standing order