NORMAL SALINE

**ACTION:** Isotonic volume expander. Electrolyte replacement.
- Normal Saline is a sterile, nonpyrogenic solution for fluid and electrolyte replacement.

**INDICATIONS:**
- Hypotension
- Crush Syndrome
- Cardiac Arrest
- Therapeutic Hypothermia
- Suspected Sepsis
- Allergic Reaction
- AMS
- Burns
- Shock

**CONTRAINDICATIONS:**
- Severe hypertension.
- Pulmonary edema.

**POTENTIAL SIDE EFFECTS:**
- Pulmonary edema.
- Febrile response.
- Hypervolemia.

**ADULT DOSE/ROUTE:**
- IV/IO of Normal Saline TKO.
- If SBP < 90 or signs of poor perfusion, fluid bolus 500 mL if lungs are clear. Reassess and repeat if indicated.
- **Burns:** If partial thickness or total thickness burns > 10% BSA, fluid bolus 500 mL if lungs are clear. Reassess and repeat if indicated.
- **Crush Syndrome:** Bolus of 2 L followed by 500 mL/hr.
- **Cardiac Arrest in Pregnancy:** If SBP < 90 or signs of poor perfusion, fluid bolus 500 mL. Reassess and repeat if indicated.
- **Post Cardiac Arrest or Return of Spontaneous Circulation (ROSC):** If SBP < 90 or signs of poor perfusion, fluid bolus 1000 mL if lungs are clear. Reassess and repeat if indicated.
- **Therapeutic Hypothermia:** Infuse 30 mL/Kg of Normal Saline chilled to 3° C (66 Kg = 2 L using 300 mmHg pressure infusion sleeve(s) or BP cuff.
- **Suspected Sepsis:** For signs of hypoperfusion and HR > 100 or BP < 90, fluid bolus 1000 mL if lungs are clear. Reassess and repeat if indicated.

**PEDIATRIC DOSE/ROUTE:**
- IV/IO of Normal Saline TKO.
- **Pediatric hypovolemic shock:** IV/IO bolus of 20 mL/Kg. Repeat up to 60 mL/Kg if indicated.
- **Neonatal hypovolemic shock:** 10 mL/Kg. Repeat up to 30 mL/Kg.
- **Known or Suspected Hypoglycemia:** IV/IO bolus of 10 mL/Kg.
- **AMS of Unknown Cause:** IV/IO bolus of 10 mL/Kg.

**NOTES:**
- Use cautiously in patients with congestive heart failure, severe renal insufficiency, and in clinical states in which there exists edema with sodium retention (e.g., patients with diminished renal function.)
- Discontinue bolus if pulmonary edema develops.