

## 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.