

IV SOLUTIONS

PHARMACOLOGY & MICHANISM OF ACTIONS:

- ❑ Electrolytes
- ❑ These are solutions which consist of balanced electrolytes in water
 - Both normal saline (NS) and lactated ringers (LR) contain sodium chloride. LR also contains sodium acetate, sodium gluconate, potassium chloride, and magnesium chloride hexahydrate.
- ❑ They provide water and electrolytes for replacement of acute extracellular fluid losses and they do not disturb the normal electrolyte balance since the electrolyte composition and tonicity approach that of normal plasma.
- ❑ NS does not contain calcium and will not lead to precipitation when mixed with blood or pre-hospital medications.

INDICATIONS:

- ❑ Replacement of fluid volume losses such as in trauma, burns, dehydration, or shock
- ❑ Facilitate IV medication administration

CONTRAINDICATIONS:

- ❑ None noted

ADMINISTRATION:

| | ADULT | PEDIATRIC | |
|---------|--|---|---------|
| A - EMT | <ul style="list-style-type: none">❑ Doses vary | <ul style="list-style-type: none">❑ SAME AS ADULT | A - EMT |

PRECAUTIONS & SIDE EFFECTS:

- ❑ Varies depending on dose
- ❑ Normal saline should be used with caution with patients with renal impairment (hyperkalemia) and cardiac and respiratory disorders (fluid overload), or extremes of age.

SPECIAL NOTES:

- ❑ Where IVs are used to maintain venous access, an IV lock may be substituted. After placement, these lines should be flushed with normal saline. The line should also be flushed after each administration of medication.