

Classification

Crystalloid fluid / Electrolytes

LA County Prehospital Indications

Multiple provider impressions including (not exhaustive): anaphylaxis, burns, hyperglycemia, hyperthermia, hypotension, shock, sepsis

Other Common Indications (Not authorized for EMS administration in LA County)

None

Adult and Pediatric Dose

Dose varies by indication.

Common initial dosing:

Adult: 1 L IV/IO

Pediatric: 20 mL/kg IV/IO

Mechanism of Action

Isotonic, crystalloid solution containing 0.9% sodium chloride (154 mmol/L each of sodium and chloride in 1L of water). Expands intravascular volume which can increase preload, cardiac output, and tissue perfusion.

Pharmacokinetics

Onset is immediate; duration of effect is typically 30 minutes

Contraindications

Pulmonary edema

Adverse Effects

Fluid overload leading to pulmonary edema or heart failure exacerbation

Dilutional coagulopathy (in major hemorrhage where clotting factors are depleted)

Hyperchloremic metabolic acidosis can occur with large volumes