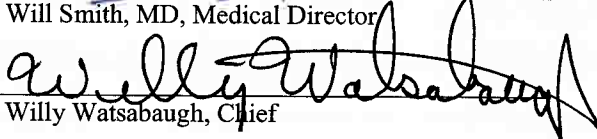




Jackson Hole Fire/EMS Operations Manual

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Title: **Medication Protocol:
Epinephrine 1:10,000**

Division: 17
Article: 1.13
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EPINEPHRINE 1:10,000 (Medication Protocol)

EMT-INTERMEDIATE PROVIDERS

STANDING ORDER – Cardiac Arrest
VOICE ORDER – Anaphylaxis

PARAMEDIC PROVIDERS

STANDING ORDER – Cardiac Arrest
STANDING ORDER – Anaphylaxis

CLASS: Sympathetic agonist (sympathomimetic)

**PHARMACOLOGY/
ACTIONS:** Epinephrine acts directly on α - and β -adrenergic receptors. Its effect on β -receptors is much more profound than its effect on α -receptors. Effects include: \uparrow HR, \uparrow cardiac contractile force, \uparrow electrical activity in the myocardium, \uparrow systemic vascular resistances, \uparrow BP, \uparrow automaticity

ONSET/DURATION: Onset: < 2 mins. [IV/IO/ET] / Duration: 5-10 mins.

**USE IN FIELD/
INDICATIONS:** Cardiac arrest (asystole, v-fib, pulseless v-tach, PEA), Anaphylaxis

CONTRAINDICATIONS: None in Cardiac Arrest

SIDE EFFECTS: Tachycardia including V-Tach & V-Fib, palpitation, anxiety, tremor, headache, nausea, weakness, restlessness, hypertension

DRUG INTERACTIONS: MAO inhibitors may potentiate effects. β -adrenergic antagonists may blunt inotropic response. Sympathomimetics and phosphodiesterase inhibitors may exacerbate dysrhythmia response

ROUTE: IV, IO

DOSAGE:	ADULT	PEDIATRIC (<45 kg)
Cardiac Arrest	1 mg (10 ml) rapid IV, IO push every 3-5 min. PRN	Cardiac Arrest 0.01 mg/kg (0.1 ml/kg) IV, IO push every 5 minutes PRN
Anaphylaxis	0.3-0.5 mg (3-5 ml) slow IV, IO push. May repeat every 5-20 minutes PRN	Anaphylaxis Pediatric: 0.01 mg/kg (0.1 ml/kg - maximum 3 ml) slow IV, IO push. May repeat every 5-20 minutes PRN.

PREGNANCY SAFETY: Category C – give only if potential benefits justifies risk to fetus

COMMENTS: Epi is pH dependant and can be deactivated by alkaline solutions such as sodium bicarbonate. Effects can be intensified in patients who are taking antidepressants