

Atropine Sulfate

Formulary

Douglas County Kansas EMS System

March 2021

Approved Provider: Paramedic

Referenced Protocols: [Drug Overdose/Poisoning](#), [Dysrhythmias](#)

Dosing and Administration	
ADULT Medications: <ul style="list-style-type: none">• <u>Symptomatic Bradycardias:</u> 1mg IV/IO q 3-5 min. (Max of 3mg)• <u>Organophosphate Poisoning:</u> 1-3 mg IV/IO/IM repeat every 5 minutes depending on severity of poisoning	PEDIATRIC Medications: Refer to HandTevy <ul style="list-style-type: none">• <u>Symptomatic Bradycardias:</u> 0.02mg/kg IV/IO repeat only once in 5min. (Max of 1mg)• <u>Organophosphate Poisoning:</u> 0.05 mg/kg IV/IO/IM repeat every 5 minutes depending on severity of poisoning

Pharmacology and Actions:

- Atropine is an Anti-Cholinergic (Parasympatholitic). It is a positive chronotropic which increase heart rate and a positive dromotropic which increases electrical conduction within the heart

Indications:

- Symptomatic bradycardias including:
 - Sinus bradycardia
 - Sinus arrest/block
 - Sinus bradycardia with PVC's
- Cholinergic poisoning

Contraindications:

- None

Precautions:

- Atropine may induce tachycardia and increase myocardial oxygen consumption, therefore, it should be used with caution in patients with:
 - Coronary Artery Disease
 - Ongoing myocardial ischemia
 - CHF
- **Reflex bradycardia if given slowly or at a dose of <0.5mg adult, <0.1mg Ped**
- Not effective in 2° and 3° AV block with wide QRS

Administration:

- Intravenous (IV) Fast push
- Intraosseous (IO) Fast push
- Intramuscular (IM)

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Side Effects:

- Ventricular fibrillation has occurred after IV administration of atropine
- Excessive doses of atropine may cause delirium, ataxia, blurred vision, tachycardia or coma