

**ATROPINE SULFATE**

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**Description**

Atropine is an endogenous antimuscarinic, anticholinergic substance. It is the prototypical anticholinergic medication with the following effects:

- Increased heart rate and AV node conduction
  - Decreased GI motility
  - Urinary retention
  - Pupillary dilation (mydriasis)
  - Decreased sweat, tear and saliva production (dry skin, dry eyes, dry mouth)
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**Indications**

- Symptomatic bradycardia
  - 2nd and 3rd degree heart block
  - Organophosphate poisoning
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**Adverse Reactions**

- Anticholinergic toxidrome in overdose, think “blind as a bat, mad as a hatter, dry as a bone, red as a beet”
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**Dosage and Administration****Hemodynamically Unstable Bradycardia****Adult:**

- 1 mg IV/IO bolus.
- Repeat if needed at 3-5 minute intervals to a maximum dose of 3 mg.
- (Stop at ventricular rate which provides adequate mentation and blood pressure)

**Pediatric:**

- 0.02 mg/kg IV/IO bolus. Minimum dose is 0.1 mg, maximum single dose 0.5 mg

**Poisoning/Overdose****Adult:**

- 40kg and up: 2mg IV/IM for signs of moderate/severe toxicity. Contact base for additional doses.

**Pediatric:**

- Under 40kg: 0.02mg/kg IV/IM moderate to severe toxicity. Minimum dose is 0.1 mg. Contact base for additional doses.
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**Precautions**

- Should not be used without medical control direction for stable bradycardias
  - Closed angle glaucoma
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**Protocol**

- Bradycardia with poor perfusion
  - Poisoning/Overdose
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**Special Considerations**

- Atropine causes pupil dilation, even in cardiac arrest settings.