

ATROPINE SULFATE

DRUG CLASSIFICATION	Tropane Alkaloid Non-Selective Muscarinic-Receptor Antagonist Antimuscarinic / Anticholinergic / Vagolytic / Antisialagogue / Antispasmodic / Mydriatic Agent
MECHANISM OF ACTION	Competitively blocks action of acetylcholine at parasympathetic sites of smooth muscle, secretory glands, & CNS. Promotes preexisting sympathetic stimulation, increasing cardiac output & drying secretions. Reverses muscarinic effects of cholinergic poisoning due to agents with acetylcholinesterase inhibitor activity by acting as a competitive antagonist of acetylcholine at muscarinic receptors which, reverses bronchoconstriction but has no effect on the nicotinic receptors responsible for muscle weakness, fasciculations, and paralysis.
CLINICAL INDICATIONS	Symptomatic Bradycardia Anticholinesterase Toxicity / Organophosphate Poisoning
STANDARD CONTRAINDICATIONS	Hypersensitivity to Atropine, Belladonna Alkaloids, or Relative Components
POTENTIAL ADVERSE EFFECTS	"Atropine Flush" / Arrhythmia / Chest Pain / Blood Pressure Changes
GENERAL RISKS & PRECAUTION	1) Atropine may inhibit sweating and could lead to heat illness; avoid administration to hypothermic patients. 2) Atropine is likely an ineffective treatment against Second-Degree Type II and Third-Degree AV Blocks. 3) Atropine is likely ineffective in heart transplant patients due to lack of vagal innervation of transplanted heart and may cause paradoxical bradycardia. 4) Use caution in patients with ischemia, heart failure, and hypertension due to potential increases in blood pressure. 5) Use caution in patients with chronic lung disease due to risk of thickening of bronchial secretions & mucus formation. 6) Use with caution for patients with severe or acute Narrow-Angle Glaucoma.
PROTOCOL INDEX	Bradycardia; Pulse Present (AC-2) Pediatric Bradycardia with Poor Perfusion (PC-2) WMD-Nerve Agent Protocol (TE-9)

MEDICATION ADMINISTRATION

ADULT

PEDIATRIC

Symptomatic Bradycardia with Pulse Present (HR < 60 bpm)

1 mg [IV/IO]; May repeat every 3-5 minutes as needed.
(Total Maximum: 3 mg)

Nerve Agent Toxicity with Highly-Severe Symptoms Present

2 mg [IV/IO/IM]; May repeat every 3-5 minutes until symptoms resolve.

Symptomatic Bradycardia with Poor Perfusion

0.02 mg / kg [IV/IO]; May repeat once after 3-5 minutes.
(MIN. Single Dose: 0.1 mg)
(MAX. Single Dose: 0.5 mg)

Nerve Agent Toxicity with Highly-Severe Symptoms Present

<i>if weight is ≤ 18 kg:</i>	<i>if weight is 19 – 39 kg:</i>	<i>if weight is ≥ 40 kg:</i>
0.5 mg [IV/IO/IM]	1 mg [IV/IO/IM]	2 mg [IV/IO/IM]

May repeat every 3-5 minutes until symptoms resolve.