

ATROPINE SULFATE

PUBLIC COMMENT JULY 2026

ACTION: Anticholinergic (~~Vagolytic~~)

- Blocks acetylcholine receptors resulting in reduction of parasympathetic tone and increasing heart rate ~~conduction through the~~ (SA and AV node)
- ~~Increases sinus node automaticity and AV conduction when suppressed by abnormal parasympathetic or vagal discharges~~
- Blocks acetylcholine at muscarinic receptors, also responsible for reducing secretions, and relieving bronchospasm. ~~Antagonizes action of organophosphate agents~~

INDICATIONS

- Symptomatic bradycardia
- Organophosphate or carbamate insecticide or nerve agent exposure (in addition see **PRALDOXIME (2-PAM Chloride)**)

CONTRAINDICATIONS.

- Known hypersensitivity to atropine
- Bradycardia secondary to hypothermia (rewarm first)
- Heart transplant patients (atropine is ineffective; denervated heart does not respond)

PRECAUTIONS

- ~~Atrial fibrillation or atrial flutter~~
- Type II 2nd degree AV block or 3rd degree AV block with wide QRS complexes
- ~~Glaucoma~~

POTENTIAL SIDE EFFECTS

- ~~Increased Heart Rate causing~~ ~~• Doses lower than 0.5mg can produce slowing of the heart~~
Tachycardia
- Dilated pupils ~~• Post-atropine tachycardias can precipitate V-FIB or V-TACH~~
- Flushed, hot skin ~~• Can worsen patient's ischemia or extend the size of infarct~~
- Dry mouth/decreased salivation

ADULT DOSE/ROUTE

- **Symptomatic Bradycardia:** 1mg IVP or IO. May repeat every 5 min up to 3 mg if no resolution of bradycardia.
- **Organophosphate Poisoning/Nerve agent Exposure:** 2 – 5mg IVP or IO. May repeat in 5 minutes until symptoms improve (i.e. bronchorrhea resolves). No max dose.

PEDIATRIC DOSE/ROUTE (e.g. before signs of puberty, ≤ 14 years of age, ≤ 40kg)

- **Symptomatic Bradycardia:** 0.02 mg/kg IVP or IO (min dose 0.1mg, max single dose 0.5mg)
May repeat once
- **Organophosphate Poisoning:** 0.02 mg/kg IVP or IO (min dose 0.1mg, no max dose). May repeat every 5 minutes until symptoms improve (i.e. bronchorrhea resolves).

ATROPINE SULFATE

PUBLIC COMMENT JULY 2026

NOTES:

- ~~External~~ Transcutaneous pacing is the treatment of choice for symptomatic bradycardia, if there is suspected myocardial ischemia, or 2nd or 3rd degree AV blocks are present.
- Bradycardia in pediatric patients may be caused by hypoxia

DRAFT