

Diphenhydramine

Indications: Allergic Reaction, Anaphylaxis, Adult dystonic reaction, or Persistent nausea/vomiting

Contraindications: Known allergy

Concentration: 50 mg/mL or 1 Tablet = 25 mg

ADULT DOSING

Indication	Dose	Rate & Route	Note
Moderate/Severe Allergic Reaction – or – Dystonia	50 mg 1 mL	IV/IO/IM	
Mild Allergic Reaction with Only Hives/Rash	25 mg 0.5 mL	IV/IM/PO	Slow IVP for mild allergic reaction
Persistent Nausea/Vomiting		IV/IO/IM	May repeat x1 q 20 minutes

ADULT DOSING

PEDIATRIC DOSING

Indication	Dose	Rate & Route	Note
Mild to Severe Allergic Reaction – or – Dystonia	1 mg/kg Max dose: 50 mg	IV/IO/IM/PO	Do Not Administer if < 5 kg
Persistent Nausea/Vomiting	1 mg/kg Max dose: 25 mg	IV/IO/IM	

PEDIATRIC DOSING

Pediatric Dosing Diphenhydramine

3 kgs	4kgs	5 kgs	6-7 kgs	8-9 kgs	10-11 kgs	12-14 kgs	15-18 kgs	19-23 kgs	24-29 kgs	30-36 kgs
6.6 lbs	8.8 lbs	11 lbs	13-15 lbs	17-20 lbs	22-24 lbs	26-30 lbs	33-40 lbs	42-50 lbs	53-64 lbs	66-80 lbs
in18.25-20.25	in20.25-21.5	in21.5-23.25	in23.25-26.25	in26.25-29.25	in29.25-33	in33-37.5	in37.5-42.5	in42.5-47.75	in47.75-51.25	in51.25-56.25
Diphenhydramine for IV/IO/IM Concentration = 50mg/ml										
None	None	0.1 mL	0.1 mL	0.2 mL	0.2 mL	0.3 mL	0.3 mL	0.4 mL	0.5 mL	0.7 mL
Diphenhydramine for PO Solution; Patient must be able to protect their airway Concentration = 2.5mg/ml										
None	None	2 mL	2.5 mL	3 mL	4 mL	5 mL	6 mL	7.5 mL	10 mL or 25 mg cap	10 mL or 25 mg cap

Precautions

Antihistamine toxicity:

- Remember: "red as a beet, dry as a bone, hot as a hare, blind as a bat, mad as a hatter, and full as a flask."
- Brugada-like ECG patterns are seen with anticholinergic toxicity.
- Elimination mechanism concerns
- Potent anticholinergic agent
- Pregnancy Category B

Adverse/Side Effects

Mydriasis, photophobia, ataxia, tachycardia, dizziness, drowsiness

Class

Antihistamine, Ethanolamine, Anticholinergic

Mechanism of Action

Diphenhydramine blocks the effects of Histamine (H1 histamine) on the H1 receptor site through a competitive competition for the peripheral H1 site. When diphenhydramine is bound the H1 site cannot be stimulated preventing the effects of histamines (swelling, etc...). As an antihistamine, diphenhydramine one of the most effective antihistamines.

Onset of Action

Rapid (Injection)
Varies (PO)

Peak Effect

1 – 3 hours

Duration of Action

6 – 12 hours