

DIPHENHYDRAMINE [BENADRYL]

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| DRUG CLASSIFICATION | First-Generation H ₁ Receptor Antagonist Competitive Muscarinic Acetylcholine Antagonist Antihistamine Agent |
| MECHANISM OF ACTION | Competes with histamine for H ₁ -receptor sites located on effector cells of the respiratory smooth muscle, vascular endothelial tissue, gastrointestinal tract tissue, cardiac tissue, immune tissue, and central nervous system (CNS) neurons. Acts as an inverse agonist at the H ₁ receptor, reversing the effects of histamine on capillaries and reducing symptoms of allergic reaction. Readily crosses blood-brain barrier and inversely agonizes the H ₁ CNS receptors, resulting in drowsiness and medullary cough center suppression. |
| CLINICAL INDICATIONS | Mild-to-Moderate Allergic Reaction Extrapyramidal Reaction |
| STANDARD CONTRAINDICATIONS | Hypersensitivity to Diphenhydramine or Structurally-Related Antihistamines Neonates and Premature Infants Breastfeeding Mothers |
| POTENTIAL ADVERSE EFFECTS | Anticholinergic or Antimuscarinic Effects / Drowsiness / Fatigue / GI-Discomfort / Hypotension / Tachycardia |
| GENERAL RISKS & PRECAUTION | 1) Use with caution in the presence of moderate-to-severe hypertension. 2) Use with extreme caution in patients with a chronic history of asthma, cardiovascular disease, or thyroid dysfunction. 3) Closely and consistently monitor recipients for signs and symptoms of CNS depression and nervous system agitation. 4) Diphenhydramine overdose may produce significant signs of toxicity such as severe agitation, dry mucous membranes, flushed skin, elevated body temperature, blurry vision, tachyarrhythmias, rhabdomyolysis, etc. 5) Diphenhydramine should NOT be given to a patient with decreased mental status and/ or a hypotensive patient as this may cause nausea, vomiting, and/ or worsening mental status. 6) In anaphylaxis, Diphenhydramine may decrease mental status. |
| PROTOCOL INDEX | Allergic Reaction / Anaphylaxis (AM-1) Pediatric Allergic Reaction (PM-1) Behavioral Health Crisis (UP-17) |

MEDICATION ADMINISTRATION

ADULT

PEDIATRIC

Mild-to-Moderate Adult Allergic Reaction

25 – 50 mg [IV/IO/IM/PO]

Extrapyramidal Reactions – See UP-17 Pearls

50 mg [IV/IO/IM/PO]

Mild-to-Moderate Pediatric Allergic Reaction

1 mg/kg [IV/IO/IM/PO]; (Maximum 50 mg)

Extrapyramidal Reactions – See UP-17 Pearls

1 mg/kg [IV/IO/IM/PO]; (Maximum 50 mg)