DIPHENHYDRAMINE (SYSTEMIC)

- Diphenhist [OTC] see DiphenhydrAMINE (Systemic) on page 34

**DiphenhydrAMINE (Systemic)**

**Brand Names:** US Aler-Dryl [OTC]; Allergy Relief Childrens [OTC]; Allergy Relief [OTC]; Altaryl [OTC]; Anti-Hist Allergy [OTC]; Banopen [OTC]; Benadryl Allergy Childrens [OTC]; Benadryl Allergy [OTC]; Benadryl Dye-Free Allergy [OTC]; Benadryl [OTC]; Complete Allergy Medication [OTC]; Complete Allergy Relief [OTC]; Dicopanol FusePaq; Dicopanol RapidPaq; Diphen [OTC]; Diphenhist [OTC]; Genahist [OTC]; Gen-Dryl [OTC]; GoodSense Allergy Relief [OTC]; Naramin [OTC]; Nighttime Sleep Aid [OTC]; Nytol Maximum Strength [OTC]; Nytol [OTC]; Ormir [OTC]; PediaCare Childrens Allergy [OTC]; Pharbedryl; Pharbedryl [OTC]; Q-Dryl [OTC]; QlearQuil Nighttime Allergy [OTC]; Quenalin [OTC] [DSC]; Scott-Tussin Allergy Relief [OTC]; StilaDryl Allergy [OTC]; Stilphen Cough [OTC]; Simply Allergy [OTC]; Simply Sleep [OTC]; Sleep Tabs [OTC]; Sominex Maximum Strength [OTC]; Sominex [OTC]; Tetra-Formula Nighttime Sleep [OTC]; Total Allergy Medicine [OTC]; Total Allergy [OTC]; Triaminic Cough/Runny Nose [OTC]; ZzzQuil [OTC]

**Pharmacologic Category** Ethanolamine Derivative; Histamine H$_1$ Antagonist; Histamine H$_2$ Antagonist, First Generation

**Dental Use** Symptomatic relief of nasal mucosal congestion; symptomatic relief of oral erosions (systemic diphenhydramine used topically) including aphthous stomatitis

**Use** Symptomatic relief of allergic symptoms caused by histamine release including nasal allergies and allergic dermatosis; adjunct to epinephrine in the treatment of anaphylaxis; insomnia, occasional; prevention or treatment of motion sickness; antitussive; management of Parkinsonian syndrome including drug-induced extrapyramidal symptoms (dystonic reactions) alone or in combination with centrally acting anticholinergic agents

**Dental Usual Dosage** Symptomatic relief of nasal mucosal congestion: Adults: Oral: 25 to 50 mg every 6 to 8 hours

**Symptomatic relief of oral erosions (used topically)**: Adults: Rinse with 5 to 10 mL every 2 hours and expectorate

**Dosing**

**Adult**

- **Allergic reactions:** Oral: 25 to 50 mg every 4 to 8 hours; maximum: 300 mg daily; IM, IV: 10 to 50 mg per dose; single doses up to 100 mg may be used if needed; not to exceed 400 mg daily

- **Antitussive:** Oral: 25 mg every 4 to 6 hours; maximum: 150 mg daily

- **Motion sickness:** **Note:** When used for prophylaxis, administer 30 minutes before motion.

- **Oral (treatment or prophylaxis):** 25 to 50 mg every 6 to 8 hours; maximum: 150 mg (treatment); 10 to 50 mg per dose; single doses up to 100 mg may be used if needed; maximum: 400 mg daily

- **Insomnia, occasional:** Oral: 50 mg at bedtime

**Pediatric**

- **Allergic reactions:** Infants, Children, and Adolescents: IM, IV, Oral: 5 mg/kg/day in divided doses every 6 to 8 hours: maximum: 300 mg daily

- **Alternate dosage by age:** Oral: 2 to <6 years (off-label use): 6.25 mg every 4 to 6 hours; maximum: 37.5 mg daily (Kliegman, 2011)

- 6 to <12 years: 12.5 to 25 mg every 4 to 6 hours; maximum: 150 mg daily

- ≥12 years: Refer to adult dosing.

- **Anaphylaxis (adjunct to epinephrine)/allergic reaction (off-label use):** Infants, Children, and Adolescents: IM, IV, Oral: 1 to 2 mg/kg/dose; maximum: 50 mg/dose (Hegenbarth, 2008; Kliegman, 2011; Liberman, 2008; Liberman, 2010; Simons, 2011)

- **Antitussive:** Children ≥12 years: Refer to adult dosing.

- **Dystonic reactions (off-label use):** Infants, Children, and Adolescents: IM, IV: 1 to 2 mg/kg/dose; maximum single dose: 50 mg (Hegenbarth, 2008; Kliegman, 2011)

- **Insomnia, occasional:** Oral: Children 2 to 12 years, weighing 10 to 50 kg (off-label use): Limited data available: 1 mg/kg administered 30 minutes before bedtime; maximum single dose: 50 mg (Russo, 1976)

- Children ≥12 years and Adolescents: Refer to adult dosing.

**Motion sickness:**

- **Phrophylaxis:** Oral: Manufacturer's labeling: Infants, Children, and Adolescents: **Note:** Administer 30 minutes before motion

- **Weight-directed dosing:** Infants: Oral: 5 mg/kg/day divided into 3 to 4 doses; maximum: 300 mg daily

- Fixed dosing: 12.5 to 25 mg 3 to 4 times daily

- **Alternate dosing:** Children 2 to 12 years: Limited data available: 0.5 to 1 mg/kg/dose every 6 hours; maximum single dose: 25 mg; First dose should be administered 1 hour before travel (CDC, 2014)

**Treatment:** Infants, Children, and Adolescents: IV, IM: 5 mg/kg/day divided into 4 doses; maximum: 300 mg daily

- Oral: Weight-directed dosing: 5 mg/kg/day divided into 3 to 4 doses; maximum: 300 mg daily

- Fixed dosing: 12.5 to 25 mg 3 to 4 times daily

- **Rhinitis, sneezing due to common cold:** Oral: Children 6 to <12 years: 12.5 to 25 mg every 4 to 6 hours; maximum: 150 mg daily

- Children ≥12 years and Adolescents: Refer to adult dosing.

**Renal Impairment** There are no dosage adjustments provided in the manufacturer's labeling.

**Hepatic Impairment** There are no dosage adjustments provided in the manufacturer's labeling.

**Mechanism of Action** Competes with histamine for H$_2$-receptor sites on effector cells in the gastrointestinal tract, blood vessels, and respiratory tract; anticholinergic and sedative effects are also seen

**Index Terms** Benadryl; Diphenhydramine Citrate; Diphenhydramine HCl; Diphenhydramine Hydrochloride; Diphenhydramine Tannate

- **Diphenhydramine Citrate** see DiphenhydrAMINE (Systemic) on page 34

- **Diphenhydramine HCl** see DiphenhydrAMINE (Systemic) on page 34

- **Diphenhydramine Hydrochloride** see DiphenhydrAMINE (Systemic) on page 34

- **Diphenhydramine Tannate** see DiphenhydrAMINE (Systemic) on page 34

- **DoubleDex** see Dexamethasone (Systemic) on page 30

- **Duramorph** see Morphine (Systemic) on page 51

- **Durlaza** see Aspirin on page 27

- **EACA** see Aminocaproic Acid on page 25

- **Ectoin [OTC]** see Aspirin on page 27

- **Ectoin Arthritis Strength [OTC]** see Aspirin on page 27

- **Ectoin Low Strength [OTC]** see Aspirin on page 27

- **Endo Avitene** see Collagen Hemostat on page 30

**EPINEPHRine (Systemic)**

**Brand Names:** US Adrenaclick; Adrenalin; Auvi-Q [DSC]; EpiPen 2-Pak; EpiPen Jr 2-Pak; EpiPenSnap; EPY; EPY II

**Pharmacologic Category** Alpha/Beta Agonist

**Dental Use** Emergency drug for treatment of anaphylactic reactions; used as vasoconstrictor to prolong local anesthesia

**Use** Hypersensitivity: Treatment of type I allergic reactions including anaphylactic reactions.

Hypotension/shock: Treatment of hypotension associated with septic shock in adults (increase mean arterial blood pressure).

Mydriasis during intraocular surgery: Induction and maintenance of mydriasis during intraocular surgery.

**Dental Usual Dosage** Hypersensitivity reaction: Self-administration following severe allergic reactions (eg, insect stings, food): **Note:** World Health Organization (WHO) and Anaphylaxis Canada recommend the availability of 1 dose for every 10 to 20 minutes of travel time to a medical emergency facility. More than 2 sequential