

## **Centre for Prehospital Care**

Health Sciences North/Horizon Santé-Nord

## Medication Reference

AUTHORIZED BY: CPC Quality of Care Committee

ISSUE DATE: March 2007 REVISION DATE: Sept 2018
CATEGORY: PCP/ACP Medications PAGE: 1 of 2

TITLE: DIPHENHYDRAMINE HYDROCHLORIDE (Benadryl)

Other Names: • Benadryl

Classifications: 
• Antihistaminic, Antiemetic and Antispasmodic

Pharmacodynamics:

• Diphenhydramine is an H-1 receptor antagonist. Antagonism is achieved through blocking the effect of histamine more than blocking

its production or release.

• Inhibits most responses of smooth muscle to histamine and acts as a vasoconstrictor by inhibiting the vasodilator effects of histamine.

May also produce anticholinergic effects, antiemetic effects, and

significant sedative side effects.

Onset: • IV: 5 to 10 minutes IM: 30-60 minutes PO: within 60 minutes

Peak:

• IV: 1 to 4 hours

**Duration:** • IV: 3 to 6 hours PO: 4 to 6 hours

Allergic diseases such as hay fever, allergic rhinitis, urticaria, angioedema, atopic dermatitis, contact dermatitis, gastrointestinal allergy, pruritus, physical allergies, reactions to injection of contrast media, reactions to therapeutic preparations, allergic transfusion

reactions; postoperative nausea and vomiting and motion sickness.

**Contraindications:** • Use in Nursing Mothers

Hypersensitivity to diphenhydramine hydrochloride and other

antihistamines of similar chemical structure.

• Antihistamines should be used with considerable caution in patients with narrow-angle glaucoma, stenosing peptic ulcer, pyloroduodenal obstruction, symptomatic prostatic hypertrophy, or bladder-neck

obstruction.

Not recommended for children with chronic lung disease or glaucoma.

 Local necrosis has been associated with the use of subcutaneous or intradermal use of intravenous diphenhydramine.

• In pediatric patients, especially, antihistamines in over dosage may cause hallucinations, convulsions, or death.

Adverse Reactions:

 Drowsiness, dizziness, dryness of mouth, nausea and nervousness may occur. Other infrequently reported effects are vertigo, palpitation, blurring of vision, headache, restlessness, insomnia and thickening of bronchial secretions. Allergic reactions, diarrhea, vomiting and excitation may also occur. **CATEGORY:** PCP/ACP Medications **PAGE:** 2 of 2

SUBJECT: DIPHENHYDRAMINE HYDROCHLORIDE

**Drug Interactions:** • Effects of diphenhydramine are increased by the presence of alcohol,

MAOI's, diazepam, hypnotics, sedatives, tranquilizers, and other CNS depressants. Alcohol enhances such effects as drowsiness, sedation and decreased motor skills. These effects are more pronounced in the

elderly.

MAOI's prolong and intensify the anticholinergic effects of

diphenhydramine.

PreparationsSupplied in 50 mg/1 ml ampoule

Supplied in 25 mg caplets

**Special Considerations:** • Benadryl given IV should be diluted with 9 ml of Normal Saline prior

to administration

• Administer Benadryl slowly via IV push.

**References:** • Pharmacists Drug Handbook, Springhouse 2001

Compendium of Pharmaceutical and Specialties 2013

Ontario Provincial ALS Patient Care Standards, Version 4.5

DailyMed. (2012). DIPHENHYDRAMINE HYDROCHLORIDE elixir

[Cardinal Health]. Retrieved from

http://dailymed.nlm.nih.gov/dailymed/lookup.cfm?setid=4bd9e2d7-

61b2-4dd4-afe8-c1efe7c512d9.

<u>Note</u>: The information contained herein does not supersede or negate the MoHLTC Provincial Advanced Life Support Patient Care Standards and should only serve as general information for the medication itself. For medication dosages, please refer to the current version of the Ontario Provincial ALS Patient Care Standards.