



EMS System for Metropolitan Oklahoma City and Tulsa 2026 Medical Control Board Treatment Protocols



Approved 9/17/25, Effective 1/15/26, replaces all prior versions

16K – DIPHENHYDRAMINE (BENADRYL®)

PARAMEDIC

Class: Antihistamine, Anticholinergic

Actions/Pharmacodynamics: Diphenhydramine competes for H1 – histamine receptor sites on effector cells, thus blocking histamine release. Histamine release creates some of the common signs and symptoms of an allergic response: pruritis (itching), mucus secretion, and capillary leaking, which contributes to the formation of urticaria (hives), erythematous skin, and mucosal edema. In the setting of a dystonic reaction, the balance of dopamine and choline must be changed within the brain. The most clinically feasible method of reversing a dystonic reaction, though inhibiting the enzyme acetylcholinesterase, is through the anti-cholinergic effect of a medication like diphenhydramine.

Indications: Dystonic Reactions (6F)
Acute Allergic Reactions (8D)
Bee/Wasp Stings (8F)

Contraindications: Known hypersensitivity to diphenhydramine. While rare, allergic reaction to diphenhydramine is possible and should be considered valid if stated or documented in a patient's medical history.

Pharmacokinetics: Onset within 15 – 30 minutes; duration is approximately 6 hours.

Side Effects: Drowsiness, dizziness, disturbed coordination.

Dosage: **Dystonic Reactions - Adult (6F)**
Acute Allergic Reactions- Adult (8D)
Bee/Wasp Stings - Adult (8F)
50 mg IM/IVP

Dystonic Reactions - Pediatric (6F)
Acute Allergic Reactions- Pediatric (8D)
Bee/Wasp Stings - Pediatric (8F)
1 mg/kg IM/IVP to maximum of 50 mg

How Supplied: 50 mg/1 mL in vial, ampule, or pre-filled syringe.
(Always check concentration and dose per container at time of patient medication administration)