#### DIPHENHYDRAMINE HYDROCHLORIDE- diphenhydramine hydrochloride injection West-ward Pharmaceutical Corp.

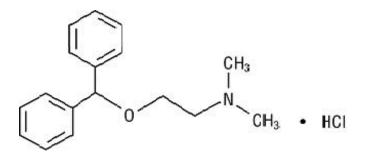
\_\_\_\_\_

Diphenhydramine Hydrochloride Injection, USP Rx only

#### DESCRIPTION

Diphenhydramine Hydrochloride Injection is a sterile, nonpyrogenic solution for intravenous or deep intramuscular use as an antihistaminic agent. Each mL contains diphenhydramine hydrochloride 50 mg and benzethonium chloride 100 mcg in Water for Injection. pH 4.0-6.5; sodium hydroxide and/or hydrochloric acid added, if needed, for pH adjustment.

The chemical name of diphenhydramine hydrochloride is 2-(Diphenylmethoxy)-N,N-dimethylethylamine hydrochloride. The structural formula is as follows:



## $C_{17}H_{21}NO \bullet HCl MW 291.82$

Diphenhydramine hydrochloride occurs as a white crystalline powder and is freely soluble in water and alcohol.

## CLINICAL PHARMACOLOGY

Diphenhydramine hydrochloride is an antihistamine with anticholinergic (drying) and sedative side effects. Antihistamines appear to compete with histamine for cell receptor sites on effector cells.

Diphenhydramine hydrochloride in the injectable form has a rapid onset of action. Diphenhydramine is widely distributed throughout the body, including the CNS. A portion of the drug is excreted unchanged in the urine, while the rest is metabolized via the liver. Detailed information on the pharmacokinetics of Diphenhydramine Hydrochloride Injection is not available.

## INDICATIONS AND USAGE

Diphenhydramine Hydrochloride Injection is effective in adults and pediatric patients, other than premature infants and neonates, for the following conditions when the oral form is impractical:

#### Antihis taminic

For amelioration of allergic reactions to blood or plasma, in anaphylaxis as an adjunct to epinephrine and other standard measures after the acute symptoms have been controlled and for other uncomplicated allergic conditions of the immediate type when oral therapy is impossible or contraindicated.

## **Motion Sickness**

For active treatment of motion sickness.

## Antiparkins onis m

For use in parkinsonism, when oral therapy is impossible or contraindicated, as follows: parkinsonism in the elderly who are unable to tolerate more potent agents, mild cases of parkinsonism in other age groups and in other cases of parkinsonism in combination with centrally acting anticholinergic agents.

#### CONTRAINDICATIONS

#### Use in Neonates or Premature Infants

This drug should *not* be used in neonates or premature infants.

#### **Use in Nursing Mothers**

Because of the higher risk of antihistamines for infants generally, and for neonates and prematures in particular, antihistamine therapy is contraindicated in nursing mothers.

#### Use as a Local Anesthetic

Because of the risk of local necrosis, this drug should not be used as a local anesthetic.

## Antihistamines are also Contraindicated in the Following Conditions

Hypersensitivity to diphenhydramine hydrochloride and other antihistamines of similar chemical structure.

#### WARNINGS

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.

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

## **Use in Pediatric Patients**

In pediatric patients, especially, antihistamines in *overdosage* may cause hallucinations, convulsions or death.

As in adults, antihistamines may diminish mental alertness in pediatric patients. In the young pediatric patient, particularly, they may produce excitation.

## Use in the Elderly (approximately 60 years or older)

Antihistamines are more likely to cause dizziness, sedation and hypotension in elderly patients.

## PRECAUTIONS

#### General

Diphenhydramine hydrochloride has an atropine-like action and, therefore, should be used with caution in patients with a history of bronchial asthma, increased intraocular pressure, hyperthyroidism, cardiovascular disease or hypertension. Use with caution in patients with lower respiratory disease, including asthma.

## **Information for Patients**

Patients taking diphenhydramine hydrochloride should be advised that this drug may cause drowsiness and has an additive effect with alcohol.

Patients should be warned about engaging in activities requiring mental alertness, such as driving a car or operating appliances, machinery, etc.

## **Drug Interactions**

Diphenhydramine hydrochloride has additive effects with alcohol and other CNS depressants (hypnotics, sedatives, tranquilizers, etc.)

MAO inhibitors prolong and intensify the anticholinergic (drying) effects of antihistamines.

## Carcinogenesis, Mutagenesis, Impairment of Fertility

Long-term studies in animals to determine mutagenic and carcinogenic potential have not been performed.

## Pregnancy

Teratogenic Effects—Pregnancy Category B

Reproduction studies have been performed in rats and rabbits at doses up to 5 times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to diphenhydramine hydrochloride. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

## Pediatric Use

Diphenhydramine should not be used in neonates and premature infants (see **CONTRAINDICATIONS**).

Diphenhydramine may diminish mental alertness, or in the young pediatric patient, cause excitation. Overdosage may cause hallucinations, convulsions or death (see **WARNINGS** and **OVERDOSAGE**).

See also **DOSAGE AND ADMINISTRATION** section.

## **ADVERSE REACTIONS**

The most frequent adverse reactions are italicized.

## General

Urticaria; drug rash; anaphylactic shock; photosensitivity; excessive perspiration; chills; dryness of mouth, nose and throat.

## Cardiovas cular System

Hypotension, headache, palpitations, tachycardia, extrasystoles.

## Hematologic System

Hemolytic anemia, thrombocytopenia, agranulocytosis.

## Nervous System

*Sedation, sleepiness, dizziness, disturbed coordination,* fatigue, confusion, restlessness, excitation, nervousness, tremor, irritability, insomnia, euphoria, paresthesia, blurred vision, diplopia, vertigo, tinnitus, acute labyrinthitis, neuritis, convulsions.

## Gas trointes tinal Sys tem

*Epigastric distress*, anorexia, nausea, vomiting, diarrhea, constipation.

## Genitourinary System

Urinary frequency, difficult urination, urinary retention, early menses.

## **Respiratory System**

*Thickening of bronchial secretions*, tightness of chest and wheezing, nasal stuffiness.

## OVERDOSAGE

Antihistamine overdosage reactions may vary from central nervous system depression to stimulation. Stimulation is particularly likely in pediatric patients. Atropine-like signs and symptoms, dry mouth; fixed, dilated pupils; flushing, and gastrointestinal symptoms may also occur.

*Stimulants* should **not** be used.

Vasopressors may be used to treat hypotension.

## DOSAGE AND ADMINISTRATION

THIS PRODUCT IS FOR INTRAVENOUS OR INTRAMUSCULAR ADMINISTRATION ONLY.

Diphenhydramine Hydrochloride Injection is indicated when the oral form is impractical.

DOSAGE SHOULD BE INDIVIDUALIZED ACCORDING TO THE NEEDS AND THE RESPONSE OF THE PATIENT.

## Pediatric Patients, Other Than Premature Infants and Neonates

5 mg/kg/24 hours or 150 mg/m<sup>2</sup>/24 hours. Maximum daily dosage is 300 mg. Divide into four doses, administered intravenously at a rate generally not exceeding 25 mg/min, or deep intramuscularly.

## Adults

10 to 50 mg intravenously at a rate generally not exceeding 25 mg/min, or deep intramuscularly; 100 mg if required; maximum daily dosage is 400 mg.

## Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit.

## HOW SUPPLIED

Diphenhydramine Hydrochloride Injection, USP 50 mg/mL

1 mL vials packaged in 25s (NDC 0641-0376-25)

## Storage

# Protect from light. Keep covered in carton until time of use. Store at 20°-25°C (68°-77°F), excursions permitted to 15°-30°C (59°-86°F) [See USP Controlled Room Temperature].

To report SUSPECTED ADVERSE REACTIONS, contact West-Ward Pharmaceutical Corp. at 1-877-845-0689, or the FDA at 1-800-FDA-1088 or www.fda.gov/medwatch. For Product Inquiry call 1-877-845-0689.

Manufactured by:



WEST-WARD PHARMACEUTICALS Eatontown, NJ 07724 USA

Revised May 2011 462-220-01

#### PRINCIPAL DISPLAY PANEL

Diphenhydramine Hydrochloride Injection, USP 50 mg/mL NDC 0641-0376-21



Diphenhydramine Hydrochloride Injection, USP 50 mg/mL NDC 0641-0376-25

Lot: Exp.:	LIGHT SEKSTITVE: Keep sovered in carton until time of To open - Cut seal along dotted line.				
NDC 0641-0376-25					
DiphennydrAM	INE HCI Injection, US				
50 mg/mL	R <sub>k</sub> only				
HIGH POTENCY	Each mL contains diphenhydramine hydro- chloride 50 mg and benzethonium chloride 100 mcg in Water for Injection, pH 4.0-6.5;				
FOR DEEP INTRAMUSCULAR OR SLOW INTRAVENOUS USE	sodium hydroxide and/or hydrochloric acid added, if needed, for pH adjustment,				
25 x 1 mL Vials	Usual Dosage: See package insert. PROTECT FROM LIGHT: Keep covered in carton until time of use.				
Eatontown, NJ 07724 USA 462-219-01	Slore at 20°-25°C (68°-77°F) [See USP Controlled Room Temperature]_				

## DIPHENHYDRAMINE HYDROCHLORIDE

diphenhydramine hydrochloride injection

Pro	duct Informatio	n							
Prod	luct T yp e		HUMAN PRESCRIPTION DRUG Item Code (S			ode (Sour	NDC:0641-0376		
Rout	e of Administratio	on	INTRAMUSCULAR, INTRAVENOUS						
Acti	ve Ingredient/A	Active Moi	ety						
							Strength	n Strengtl	
DIPHENHYDRAMINE HYDRO CHLO RIDE (UNII: TC2D6 JAD40) (DIPHENHYDRAMINE - UNII:8 GTS82S83M) DIPHENHYDRO CHLO RIDE (UNII: TC2D6 JAD40) (DIPHENHYDRAMINE - HYDRO CHLO									
Inac	tive Ingredient	ts							
Ingredient Name							Strength		
BENZETHONIUM CHLORIDE (UNII: PH41D05744)							100 ug in 1 mL		
WAT	<b>ER</b> (UNII: 059QF0K	00R)							
SOD	UM HYDRO XIDE (	UNII: 55X04Q0	C32I)						
HYDI	ROCHLORIC ACID	(UNII: QTT175	582CB)						
Pacl	kaging								
#	Item Code	Pacl	kage Description	Marketing Start Date		te	Marketing End Date		
1 ND	C:0641-0376-25	25 in 1 PA	CKAGE						
1 ND	C:0641-0376-21	1 mL in 1	VIAL						
Ma	rketing Info	rmation							
	rketing Infor keting Category		on Number or Monogr	aph Citation M	arketin	g Start Da	te Mar	keting End Date	

## Labeler - West-ward Pharmaceutical Corp. (946499746)

Establishment								
Name	Address	ID/FEI	Business Operations					
West-ward Pharmaceutical Corp		946499746	ANALYSIS, LABEL, MANUFACTURE					

Revised: 6/2011

West-ward Pharmaceutical Corp.