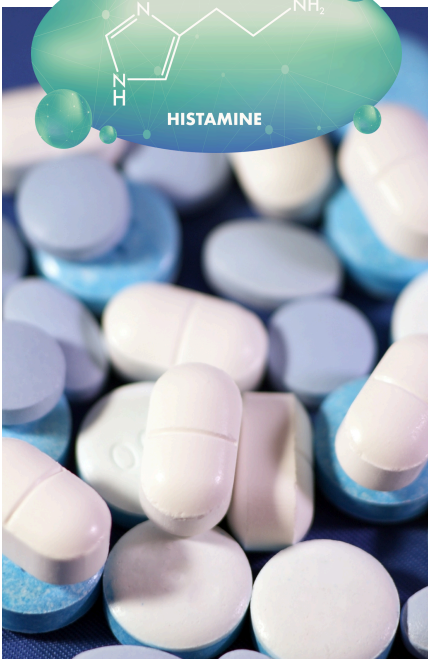
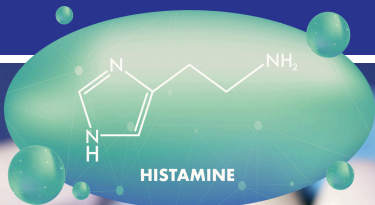


# ABSOLUTE SCOOP

## DID YOU KNOW?

Antihistamines can be used to treat allergies, colds, stomach problems, anxiety, and more.

Patients receiving antihistamine medications should be monitored for anticholinergic side effects, especially individuals with an increased risk for falls.



## ANTIHISTAMINES

*Written by Amanda Mattingly, R.Ph., BCGP, BCMTMS, Consultant Pharmacist*

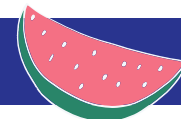
Antihistamines are a class of medications that are used to treat conditions caused by too much histamine, a chemical produced by our body's immune system in response to allergens. Histamine affects the body in many different ways. It dilates blood vessels, causes gastric acid secretion, cardiac effects, and contraction of smooth muscle. It is released during an allergic reaction and can cause symptoms such as swelling, itching, and sneezing. Antihistamines can be used to treat allergies, colds, stomach problems, anxiety, and more. There are two main classes of histamine receptors in the body: H-1 receptors and H-2 receptors. Antihistamine medications that bind to H-1 receptors are mainly used to treat allergic rhinitis, urticaria (hives), anxiety, motion sickness, etc. Medications that bind to the H-2 receptors are used to treat gastrointestinal conditions caused by excess stomach acid, such as gastroesophageal reflux disease (GERD) and peptic ulcer disease.

H-1 antagonists are further classified into first or second generation agents. First generation antihistamines easily cross the blood-brain barrier and cause anticholinergic side effects such as constipation, confusion, blurred vision, and urinary retention. While younger patients can have trouble tolerating anticholinergic medications, they are particularly problematic in the elderly who are already at risk for falls, declining functional status, and cognitive decline. Second generation antihistamines do not easily cross the blood-brain barrier, and therefore have a far more favorable side effect profile.

H-2 antagonists are often used second line for gastrointestinal conditions such as GERD, while proton pump inhibitors (PPIs) remain the medical treatment of choice. H-2 blockers are generally well tolerated, but can also cause CNS side effects such as dizziness, fatigue, and confusion. These side effects are more likely in older individuals and those with impaired kidney function. Cimetidine is associated with antiandrogenic effects including impotence and gynecomastia, and it carries several potential drug interactions.

Patients receiving antihistamine medications should be monitored for anticholinergic side effects. This is especially true in elderly individuals with an increased risk for falls. When possible, using non-drug approaches are the safest option. For reflux symptoms, consider weight loss, avoiding meals 2-3 hours before bedtime, and elevating the head of the bed. Non-pharmacological interventions for allergy symptoms include use of air purifiers, limiting triggers (animals, pollen, dust), and regular washing of blankets and furniture. These medications should be assessed regularly for continued need, and attempted to be discontinued or reduced to "as needed" when symptoms subside.

*Continued on next page...*



**Histamine-1 Antagonists**

Brand Name	Generic Name	Common Uses	Dosing Considerations
<b>1st Generation</b>			
Atarax, Vistaril	hydroxyzine	Anxiety, pruritus, urticaria	Avoid use in the elderly
Benadryl	diphenhydramine	Allergies, adjunct in anaphylaxis, motion sickness, insomnia	Avoid use in the elderly
Chlor-Trimeton	chlorpheniramine	Motion sickness, upper respiratory tract conditions, urticaria	Avoid use in the elderly
Unisom	doxylamine	Insomnia	Avoid use in the elderly
Dramamine	dimenhydranate	Motion sickness	Avoid use in the elderly
Antivert	meclizine	Motion sickness, vertigo	Avoid use in the elderly
<b>2nd Generation</b>			
Allegra	fexofenadine	Allergies, urticaria	Reduce dose in kidney impairment
Zyrtec	cetirizine	Allergic rhinitis, urticaria	Lower maximum dose of 5mg/day recommended in elderly
Claritin	loratadine	Allergic rhinitis, urticaria	Reduce dose in kidney impairment
Xyzal	levocetirizine	Allergic rhinitis, urticaria	Reduce dose in kidney impairment
Clarinex	desloratadine	Allergic rhinitis, urticaria	Reduce dose in kidney impairment

**Histamine-2 Antagonists**

Brand Name	Generic Name	Common Uses	Dosing Considerations
Tagamet	cimetidine	GERD, off-label use for sexually inappropriate behaviors	Significant drug interactions exist. Reduce dose in kidney impairment
Pepcid	famotidine	GERD, Peptic ulcer disease	Reduce dose in kidney impairment

## About the Author



*Outside of work Amanda enjoys cooking, playing tennis, and working on house projects.*

Amanda has been a consultant pharmacist for over 15 years. She joined Absolute Pharmacy last year, and since then has made a tremendous impact on our clinical services. Amanda enjoys the challenge of helping to solve the medication related issues of the senior population. Amanda is a graduate of Ohio Northern University and lives with her husband Josh and 10 year old twins Reese and Lincoln, and their dog Pepper.

**Did you hear about the ice cream truck accident?**

It crashed on rocky road.



**Why should you bring an umbrella to the ice cream shop?**

In case it sprinkles.