

Allergies¹

What are allergies? It is a type 1 Hypersensitivity disorder of the immune system, resulting in an inflammatory response which activates immunoglobulin E (IgE). This causes excessive amount of mast cells and white blood cells, which is a mediated inflammatory condition of the nose and upper respiratory tract.

Signs and Symptoms:

Signs: Rubbing the nose, rubbing/scratching at the eyes, mouth breathing, and dark circles under the eyes

Symptoms: Runny nose, sneezing, itching, snorting, sniffing, clearing throat, nasal congestion, poor appetite, sleep disturbances, headache, mild facial or ear pain or fullness, fatigue, eye manifestations (itch, redness, and tearing), and quality of life impairment: absenteeism from work or school

Asthma¹

What is Asthma? It is characterized by airway inflammation and obstruction. Asthma is the most ubiquitous chronic disease during childhood. It is associated with morbidity and mortality in both children and adults. Asthma can be either acute or chronic

Signs and Symptoms:

Signs Wheezing, a dry cough, excessive rapid heartbeat & rapid breathing.

Symptoms: Difficulty breathing, cough, wheezing, chest tightness. This can occur more with exercising, in the morning, and/or in the evening.

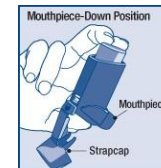
How to use a Nasal Corticosteroid?²

1. Prime pump as directed
2. Shake gently before each use
3. Clear nasal passage before administration
4. Tilt head forward slightly and close one nostril
5. Spray medication gently into the other nostril
6. Breathe gently in through the nose and out the mouth
7. Avoid sneezing or blowing the nose for at least 10 minutes



How to use an Meter Dose Inhaler?³

1. Take the cap off the mouthpiece of the actuator. **Shake the inhaler well** before each spray



2. Hold the inhaler with the mouthpiece down **Breathe out through your mouth** and push as much air from your lungs as you can. Put the mouthpiece in your mouth and close your lips around it.
3. **Push the top of the canister all the way down while you breathe in deeply and slowly through your mouth** (see Figure 3). Right after the spray comes out; take your finger off the canister. After you have breathed in all the way, take the inhaler out of your mouth and close your mouth.

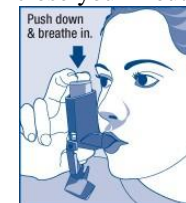


Figure 3

4. **Hold your breath as long as you can**, up to 10 seconds, and then breathe normally.
5. If your doctor has prescribed more sprays, wait 1 minute and **shake** the inhaler again. Repeat steps 2 through 4.
6. Put the cap back on the mouthpiece after every time you use the inhaler, and make sure it snaps firmly into place.

Did You Know?



GET THE FACTS
FROM YOUR
PHARMACIST

Did you know
over 50 million
Americans
suffer from
allergies &
approximately
22.9 million
people in U.S.
are diagnosed
with asthma
every year?

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KRISTY LIDDIC, PHARM D

Quinee Patel P2 student

1. Chisholm-Burns, M., *et al.*, eds. Pharmacotherapy Principles and Practice. 2nd ed. New York: McGraw-Hill; 2010
2. Berardi, R. *et al.*, eds. Handbook of Nonprescription Drugs. 16th ed. APhA Publications; 2009. 181
3. "How to Use VENTOLIN® HFA (Albuterol Sulfate) Inhalation Aerosol." VENTOLIN HFA Rescue Inhaler Home Page. GalxoSmithKline, 2011. Web. 10 Mar. 2011. <<http://www.ventolin.com/how-to-use-ventolin-hfa/how-to-use-ventolin-hfa.html>>.