

Breath'n Easy Buzz

from Heritage Valley Health System's Community Health Services Pediatric Asthma Program

Cold Weather Asthma

In winter, the air is cold and crisp, but also very dry. Breathing in the cold, dry air can cause irritation to the lungs, causing them to become inflamed making it harder to take deep breaths, therefore leading to an asthma attack.

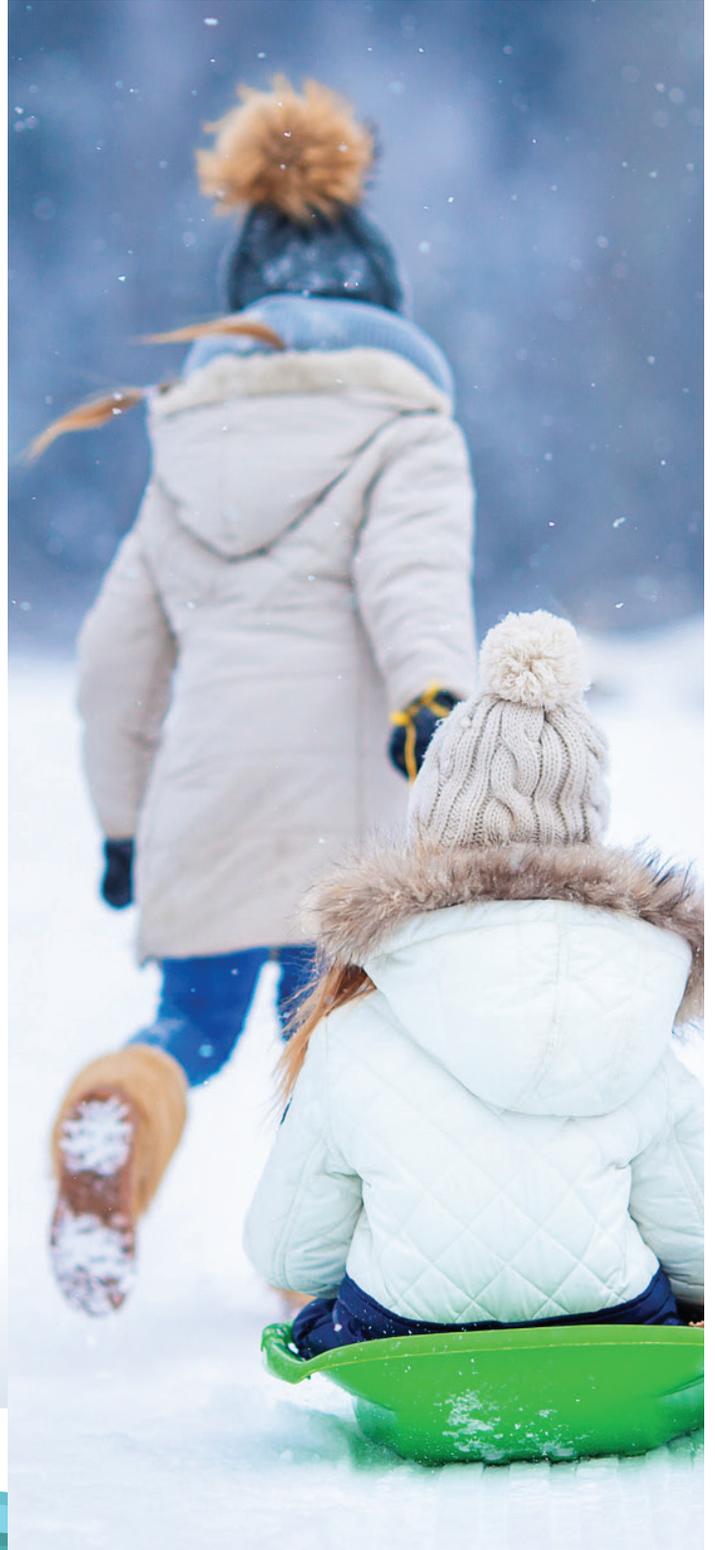
What is happening in your child's body?

When your child's airways are exposed to cold air, their body releases a chemical called Histamine. This is the same chemical released during an allergic reaction.

During an allergic reaction, it can cause swelling, itchiness, and trouble breathing. Histamine can cause the lungs to swell making the airways tighter. When their airways are tight, it makes it harder to take a good breath, which can result in an asthma attack.

What about winter sports?

Participating in winter sports can also be very challenging with asthma. When someone exercises they tend to breathe more deeply through their mouth instead of their nose. When your child breathes through their nose, the air gets warmed and moistened by their airways before reaching the lungs. Instead, when they breathe through their mouth, the air remains cold and dry, which can act as an asthma trigger.



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Tips to help prevent Cold Weather Asthma

Even though it can be challenging during winter for those with asthma, here are a few things that you can do as a parent to help your child enjoy this time of year.

Bundle Up. If possible, don't let your child go outside if the temperature drops below 10° F. If they have to go outside, be sure they wear warm, weather-appropriate clothing. One thing that should also be considered, is wearing a scarf or fabric mask over the face. Wearing one of these over the mouth and nose can help prevent cold-weather asthma by warming the air before it reaches the lungs.

Use your inhaler. If your child plans on exercising or playing outside in the cold weather, ask your healthcare professional about having them use their inhaler 15-30 minutes before they go outside. This will open their airways, making it easier for them to breathe in the cold air. Also, be sure to have their inhaler nearby while they are outside. Even though they took their inhaler ahead of time, they could still experience an asthma attack from extreme cold. Either have them keep it in their pocket if they are responsible, or hold onto it yourself and monitor their activity.

Keep an Asthma Log. Knowing how your child's breathing patterns change before an asthma attack and which winter asthma triggers might have been the cause can help you identify when one may be imminent. Building up this storehouse of information will not only help you, but it will also assist your physician in determining the best way to approach the care of your asthma. Generally, healthcare professionals recommend keeping a log as part of your asthma action plan. The more symptoms, triggers, and events you track, the more meaningful insights for your child's overall health.

Common Questions about Cold Weather Asthma

Here are a few of the most common questions people have about cold weather asthma and winter asthma triggers.

Can asthma be triggered by cold weather?

Temperature and humidity seem to exacerbate asthma symptoms. Cold, dry air is a common asthma trigger and can cause issues for those who play outdoor winter sports. Take precautions and talk to your physician about using an inhaler or taking other medicines to manage cold weather asthma.

What helps asthma in cold weather?

There are several things you can do to minimize the impact of winter asthma triggers. Get the flu shot and avoid contact with anyone showing signs of a respiratory virus. Don't sit by a wood-burning fireplace. Replace your HVAC filters frequently. Exercise indoors and avoid prolonged activity outside in colder weather. Finally, consider using a portable spirometer to monitor lung health.

How cold is too cold for asthma?

According to medical experts, people with cold-weather asthma should avoid going outdoors when the temperature falls below 10°F.

Is asthma worse in winter?

Asthma is a chronic condition that does not go away. However, asthma triggers differ from person to person. For those with cold-weather asthma, cold dry air can irritate their airways and cause bronchial spasms. There is also an increased risk of contracting a respiratory virus during the winter. A cold or flu can make asthma more difficult to manage.

Is cold or hot air better for asthma?

Extremes of either temperature can make asthma symptoms worse. A moderate temperature of 71°F has been shown to be ideal for many. However, humidity also has a distinct effect on those with asthma.

Know Your ASTHMA ZONES

The colors of a traffic light will help you know when to use your asthma medicines.

- GREEN means Go Zone!** Take your control or preventive medicines as directed (if prescribed).
- YELLOW means Caution Zone!** Take your quick-relief medicines.
- RED means Danger Zone!** Take your quick-relief medicines and get immediate medical attention.

Asthma and Allergy Foundation of America aafa.org

How to use my Inhaler

Each inhaler has its own directions. Your doctor or nurse will show you how your child should use their inhaler. Almost all children with asthma use an inhaler with a "spacer." A spacer is a device that attaches to the inhaler's mouthpiece. Pressing down on the canister causes the puff of medicine to spray into the spacer, then the person breathes it in. Some spacers also come with a facemask. In general, to use your metered dose inhaler, you:

- Take the cap off the mouthpiece and put the inhaler in the spacer
- Shake the inhaler for 5 seconds
- Hold the inhaler upright with 1 finger on the top of the canister, the thumb on the bottom of the inhaler, and your other hand holding the spacer
- Have your child breathe out normally
- Have your child close their lips around the mouthpiece of the spacer. If the spacer has a facemask, hold the facemask snugly over your child's mouth and nose.
- Press down on the canister
- Have your child take a deep, slow breath in, and then hold it for 5 to 10 seconds. Have your child let the breath out, then breathe in deeply and slowly and hold their breath again. If a mask is used, have your child breathe in and out normally for 10 seconds instead of taking a deep breath and holding it.
- If your child is supposed to take two puffs of the inhaler, wait 15 to 30 seconds before you give the second puff. Shake the inhaler again before the second puff.
- Remove the inhaler from the spacer and put the cap back on the mouthpiece, or leave the inhaler in the spacer for the next use
- If the inhaler is a steroid medicine (also called a "glucocorticoid" or "corticosteroid"), have your child rinse out their mouth, gargle, and spit out the water

