

Helping your child manage reactive airways

What are reactive airways?

Reactive airways is a medical term for breathing problems that occur when something triggers a reaction in the airways (breathing passages).

In the reaction, airways become narrow due to:

- a build-up of mucus
- inflammation and swelling
- tightened muscles around the airways

When airways get narrow the opening for air gets smaller. This makes it hard to breathe.

Common symptoms	Other symptoms
<ul style="list-style-type: none"> • wheezing (the sound of air passing through narrowed airways) • shortness of breath • coughing 	<ul style="list-style-type: none"> • taking small, faster breaths • nostrils flare with each breath • skin pulling in between and under ribs because breathing in takes so much effort

What causes airways to react?

The cause or “trigger” for the reaction varies. Children’s airways may react to infections, viruses, allergens or something in the environment. It is helpful to learn what starts your child’s symptoms or makes them worse. Knowing your child’s triggers will help you control his or her symptoms.

Triggers that cause the lungs to swell and fill with mucus	Triggers that cause airway muscles to tighten
<ul style="list-style-type: none"> • allergens • smoke • infections such as a cold or the flu 	<ul style="list-style-type: none"> • exercise • cold air or a change in temperature • pollution • humidity • emotion and stress

How do medications help?

There are two kinds of medication for treating reactive airways.

1. Rescue or reliever medication

- Rescue medication relaxes the tightened muscles around the airway. This "opens" the airway and makes breathing easier.
- This medication is used "as needed" to quickly relieve your child's wheeze or cough and rescues his/her breathing. It starts to work right away.
- This medication is called Salbutamol (Ventolin[®]). It is a blue puffer and should always be given using an aerochamber.

2. Preventer or controller medication

- Preventer medications work over a long period of time to help control reactive airway symptoms and prevent them from coming back.
- These medications help reduce inflammation around the airways and reduce mucous build-up in the airways.
- Your child may need to start taking more of a preventer medication during a flare-up, but it does not work to rescue breathing. Your child will still need to take rescue medication.
- Preventer medications can be either puffers or medications taken by mouth.

What is the best way to control or treat my child's reactive airways?

The nurse, doctor and/or pharmacist will help you learn how to control your child's reactive airways, how to avoid triggers, and what medications will help to relieve symptoms.

Use the chart on the next page to manage your child's reactive airways. The severity of your child's symptoms determine the zone (green, yellow and red like a traffic light) and the best treatment.

Managing your child's reactive airways

Rescue medication: Salbutamol (Ventolin) in blue puffer. Give with aerochamber.

	How your child looks or feels	Treatment
Green Zone		
<ul style="list-style-type: none"> Breathing is easy. Your child has no symptoms. Airways are under control. 	<ul style="list-style-type: none"> No coughing or wheezing during the day or night. Seldom uses rescue medication. Can do normal activities (such as playing, gym class or sports) without coughing, wheezing or feeling short of breath. 	<ul style="list-style-type: none"> Give your child preventer medication every day (good days and bad days). Always use the aerochamber (spacer) with the puffer. To prevent symptoms with exercise: give 2 puffs of rescue medication 15-20 minutes before exercise. Continue to check for symptoms. Keep your child away from triggers if possible.
Yellow Zone		
<ul style="list-style-type: none"> Starting to show symptoms such as coughing and wheezing. Your child needs more rescue medication to get relief. 	<ul style="list-style-type: none"> Coughing and/or wheezing during daily activities. Coughing and/or wheezing during the night or awakes even 1 night a week with cough or wheeze. Needs rescue medication more than 3 times a week. Unable to play or exercise without cough or wheeze. A cold or flu may cause airways to get worse within 1 to 2 days. 	<ul style="list-style-type: none"> Continue to give preventer or controller medication as directed. Take rescue medication: _____ puffs. If there is no improvement in 20-60 minutes: provide treatment as listed in the Red Zone. If symptoms return in 4 hours or less: repeat the rescue medication: _____ puffs 4 times a day for the next 2 days. If symptoms continue to improve after the 2 days: reduce the rescue medication to the usual "as needed" dose. If symptoms get worse or you are concerned about your child: see your family doctor or go to the Emergency Department.
Red Zone		
<ul style="list-style-type: none"> Your child needs medical help to control the reactive airways. 	<ul style="list-style-type: none"> Coughing, wheezing or shortness of breath all day. Difficulty sleeping or symptoms lasting all night. Rescue medication relieves symptoms for less than 2 hours. Difficulty talking or catching a breath. Breathing is fast, difficult or chest feels heavy. Fear symptoms are getting worse. 	<ul style="list-style-type: none"> Call 911 if your child has difficulty talking, can't catch his/her breath or is turning blue. Give rescue medication: 2 puffs every 10-15 minutes until medical help arrives. If symptoms improve with the rescue medication: continue with treatment listed in the Yellow Zone and have your child seen by a doctor within 24 hours.

When you go home from the Emergency Department

1

Give ____ puffs of Salbutamol (Ventolin/blue puffer) with the aerochamber every 4 hours for ____ day(s).



2

If you see improvement in your child's symptoms (ie; your child is no longer wheezing or having difficulty breathing) you can reduce the Salbutamol (Ventolin/blue puffer) to the usual "as needed" dose (____ puffs every 4 hours as needed).



3

Your child needs a follow-up visit with:

Doctor: _____

Date: _____

Type of Medication	Name of Medication	How much?	How often?	Specific Instructions
Rescue/Reliever Medication				
Controller/Preventer Medication				
Other medications (such as antibiotics or steroids)				