

My Asthma Guide



Hennepin County **Medical Center**

My Asthma Guide

This is my guide

Patient's Name

Table of Contents



Section 1

What is Asthma?

What is Asthma?	3
Asthma Symptoms	3
Asthma Can be Controlled	3
Airways When You Don't Have Asthma	4
Airways When You Have Asthma Symptoms	5



Section 2

So I Have Asthma. Now What Do I Do?

Working with Your Healthcare Team	6
What Causes Asthma Symptoms?	7
Asthma Triggers and What YOU Can Do About Them	8



Section 3

Controlling Your Asthma

Asthma Medicines	14
How to Use an MDI Inhaler With a Holding Chamber	16
How to Use an MDI Inhaler With a Mask	17
How to Use an MDI Inhaler Without a Holding Chamber	18
How to Use a Diskus [®]	19
How to Use a Flexhaler [®]	20
How to Use a Twisthaler [®]	21
How to Use a Nebulizer	22
Peak Flow Meter	23
How to Use Your Peak Flow Meter	24
Daily Asthma Record	25
What is an Asthma Action Plan?	26
What to Do if You Have an Asthma Flare-up	27

Table of Contents



Section 4

Living with Asthma

Plan to Stay Active	28
Talking About Your Asthma	28
For Parents/Guardians of Children with Asthma	28
When Can You Go to School or Work and When You Should Stay Home	29
When You Have Other Medical Problems	29
When There Are Changes in Your Life	29
When You Travel	30
Other Things You Can Do	30
When Your Infant has Asthma	31
Pregnancy and Asthma	22



Appendix

Local Resources for Asthma Patients and Their Families	33
National Resources for Asthma Patients and Their Families	33
Glossary	34
Questions for Your Doctor	36

What is Asthma?

What is Asthma?

Asthma is a chronic lung disease. That means you may have it your whole life. When you have asthma, the insides of your airways are narrowed from swelling. Asthma may get worse with certain triggers, like colds or allergies. The cause of asthma is not yet known.

We do know that:

- Asthma runs in families.
- You may develop asthma at any time in your life.
- Asthma is common in people of all ages.
- More than 1 out of 10 children have asthma.
- Asthma can not be cured, but it can be controlled.
- You need to take your medicines regularly and avoid asthma triggers.

Asthma Symptoms

Each person's asthma is different. It may be mild or severe. You may have one or more of these symptoms:

- Wheezing
- Coughing that lasts for more than 2 weeks
- Waking up at night with a cough or trouble breathing
- Chest tightness
- Heavy breathing
- Shortness of breath with activity

It is important to treat even mild asthma symptoms to keep symptoms from getting worse.

Asthma Can Be Controlled

Treatment can control asthma. With treatment you should be able to:

- Be free of any asthma symptoms.
- Be physically active (sports, exercise, and school activities).
- Sleep through the night.
- Prevent asthma flare-ups.
- Avoid hospital stays and emergency department visits.

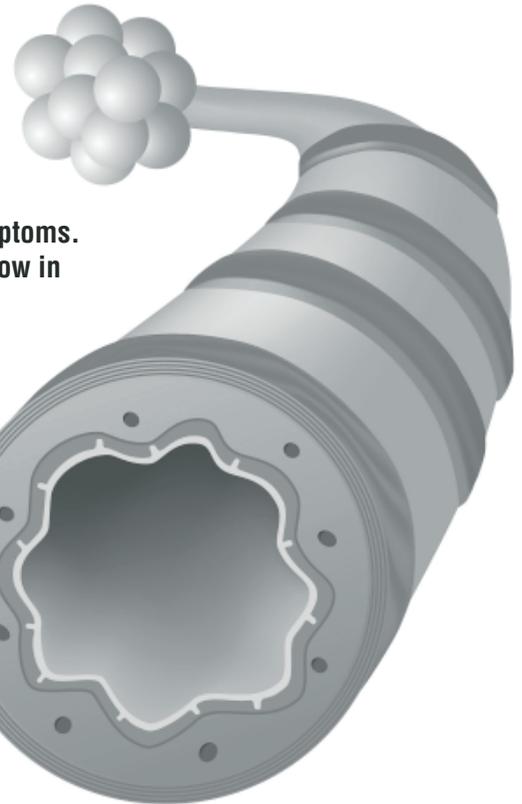
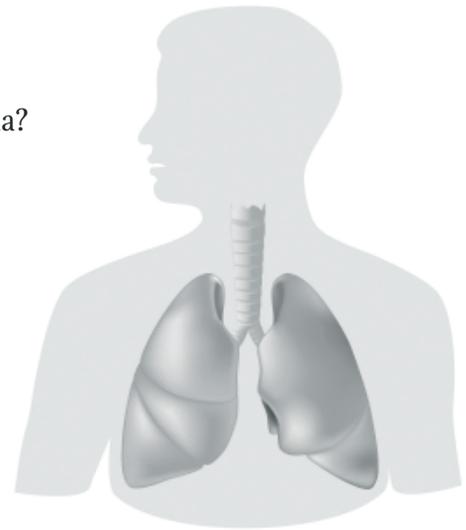


What is Asthma?

Airways When You Don't Have Asthma

What happens during breathing when you don't have asthma?

- When you take a breath, air enters your nose and mouth.
- The air goes down your windpipe, through your airways into the air sacs. This is how oxygen gets to your body.
- When you breathe out, old air leaves your lungs.



This is a close up of an airway without asthma symptoms. The inside of the airway is wide open and air can flow in and out easily.

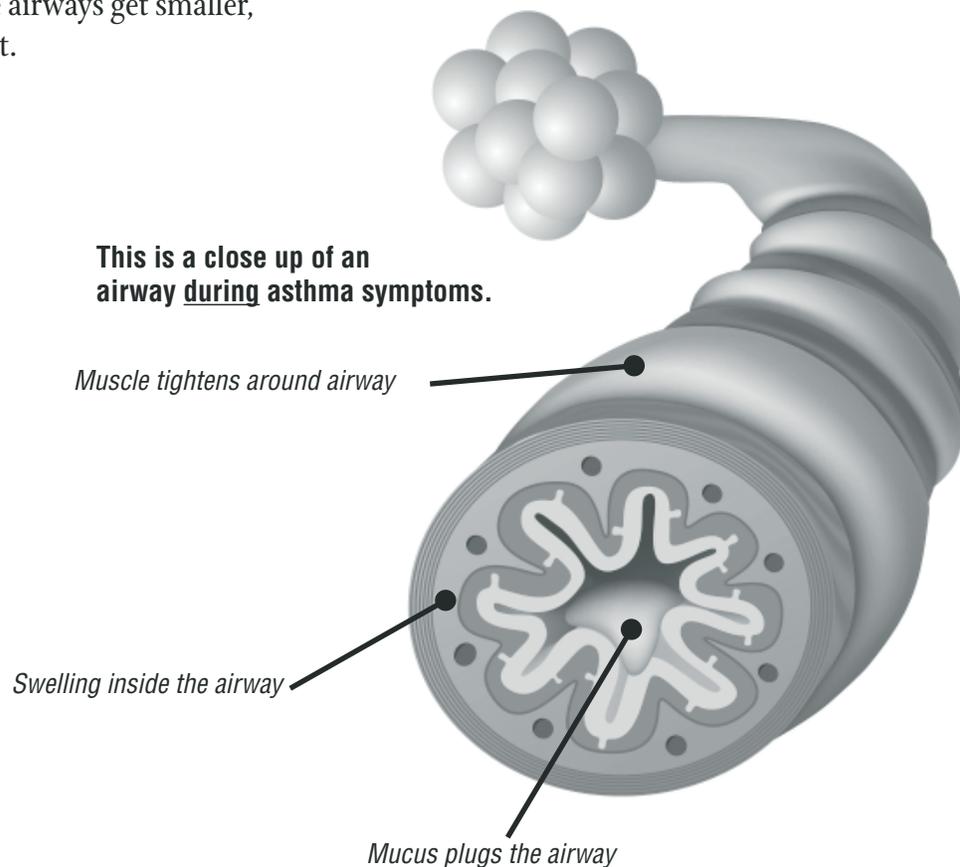
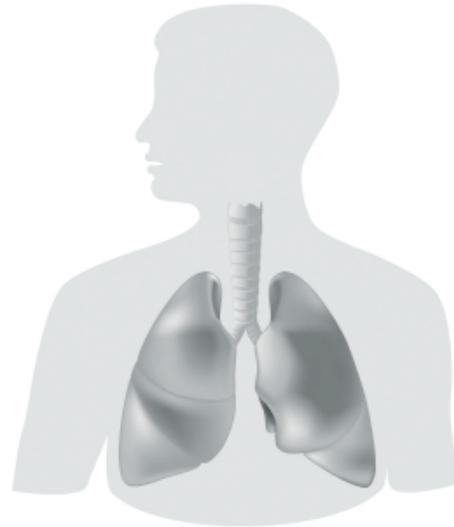
What is Asthma?

Airways When You Have Asthma Symptoms

When you have asthma symptoms, the inside of the airways gets smaller and it is harder for the air to move in and out. This makes it hard to breathe:

1. The muscles around the airways get tighter.
2. There is swelling inside the airway.
3. The airways make mucus, which plugs the airways.

When the inside of the airways get smaller, asthma symptoms start.



So, I Have Asthma. Now What Do I Do?

This part of My Asthma Guide will help you learn how to recognize and control your asthma.

Working with Your Healthcare Team



Your healthcare team includes your doctor, nurse practitioner, nurse, respiratory therapist, pharmacist, school nurse, and others involved in your asthma care. You and your healthcare team will work together with you to improve your asthma. Talking things over with your doctor or other healthcare team member will help you feel more comfortable with your asthma action plan.

Plan together.

- Your asthma action plan is a written guide on how to manage your asthma.
- Use your asthma action plan at home, school, and work.

Work together.

- Create an asthma action plan that works for you.
- Write it down.
- Don't be afraid to ask questions.

Follow the plan.

- Agree to a plan that works for you and follow it.
- If you find out later that you can't follow the plan, tell your doctor.

Create reminders.

- Take your written action plan home.
- Put it up in a place where you'll be reminded of the plan, such as on the refrigerator.
- Schedule a visit to your doctor at least one or two times a year to check your asthma when you are doing well, not just when you have an asthma flare-up.

Get ready for your asthma check-up.

Things to bring with you to your visit:

- Your asthma action plan
- Daily asthma record
- Peak flow meter
- All medicines
- Any questions and concerns

Remember the Rules of Two

1. Do you take your rescue inhaler more than **TWO TIMES** a week?
2. Do you wake up at night with asthma symptoms more than **TWO TIMES** a month?
3. Do you refill your rescue inhaler more than **TWO TIMES** a year?

If you answer YES to any of these questions, your asthma may not be in control. Schedule an asthma visit with your doctor.

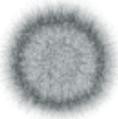
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So, I Have Asthma. Now What Do I Do?

What Causes Asthma Symptoms?

People with asthma have airways that are very sensitive to things that may not bother other people. These things are called “triggers” because when you come in contact with them, they cause you to have asthma symptoms. Common triggers for asthma symptoms include cigarette smoke, dust mites, pets, molds, cockroaches, food, and strong odors.

Triggers are what cause an asthma flare-up. Triggers may be different for different people. The following pages tell you what you can do about your triggers. Check the “triggers” that make your asthma worse.

<input type="checkbox"/> Tobacco Smoke 	<input type="checkbox"/> Car and Bus Exhaust 
<input type="checkbox"/> Dust and Dust Mites 	<input type="checkbox"/> Incense and Candles, Hair Spray, Wood-burning Stoves, etc. 
<input type="checkbox"/> Pets (with fur or feathers) 	<input type="checkbox"/> Cleaning Products, Fumes, Odors, Insecticides, Pesticides, etc. 
<input type="checkbox"/> Molds 	<input type="checkbox"/> Foods 
<input type="checkbox"/> Cockroaches 	<input type="checkbox"/> Medicines 
<input type="checkbox"/> Colds and Flu 	<input type="checkbox"/> Exercise, Sports, Play, and Work 
<input type="checkbox"/> Pollens 	<input type="checkbox"/> Weather 
<input type="checkbox"/> Strong Odors (like perfume, cologne, marking pens, etc.) 	<input type="checkbox"/> Other _____

So, I Have Asthma. Now What Do I Do?

Asthma Triggers and What YOU Can Do About Them

Tobacco Smoke



- Contributes to 26,000 new cases of asthma each year.
- 4,000 poisons and chemicals are found in second-hand smoke.
- Second-hand smoke causes 3,000 deaths from lung cancer each year.

What You Can Do

- If you smoke, stop.
- Urge family members to quit smoking.
- See your doctor if you want help to stop smoking.
- Do not smoke, or allow others to smoke, in your home or car.
- Eat in smoke-free restaurants only.
- Do not bring your children with you to smoky places.

Dust and Dust Mites



- Many people are allergic to dust mites.
- Mites are bugs that are too small to see.
- Dust mites live in pillows, bedding, furniture, carpets, and stuffed toys.
- Mites are found in every house.
- They feed on flakes of skin that we shed each day.

What You Can Do

- Put your pillow and mattress in zippered, dust-proof covers.
- Wash sheets and blankets each week in hot water (130 degrees) and dry in dryer.
- Avoid carpet if possible.
- If you can't avoid carpet, vacuum carpet twice a week.
- Reduce humidity in your home to less than 50%.

Pets



- Some people are allergic to animals with fur or feathers, like cats, dogs, birds, mice, gerbils, and rabbits.
- It is the flakes of skin (dander) or dried saliva from animals that cause the problem.
- Cat allergies are twice as common as dog allergies.

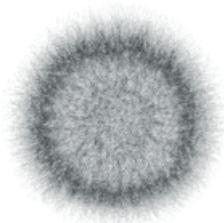
What You Can Do

- Choose a pet without fur or feathers, such as a fish or a lizard.
- Limit contact with pets that have feathers or fur.
- Keep pets out of your bedroom because this is where you spend so much time.
- Keep pets off furniture.
- Bathe your cat or dog every week.

So, I Have Asthma. Now What Do I Do?

Asthma Triggers and What YOU Can Do About Them

Molds



- Molds can be found almost anywhere.
- Mold is spread by the wind outside and by air inside.
- When too much moisture builds up indoors, mold grows.
- Indoor molds are found in damp areas like bathrooms, kitchens, basements, and in potted plants.

What You Can Do

- Fix all plumbing leaks and other moisture problems.
- Reduce humidity in your home to less than 50%.
- Use a HEPA (High Efficiency Particulate Air) filter with your furnace and central air conditioning.
- Set the air conditioning to “re-circulate” or “fan” to continuously remove much of the pollen and mold from the air.
- Don’t keep houseplants.
- Encourage your child’s teacher to keep plants out of the classroom.

Cockroaches



- Many homes have cockroaches. For every cockroach you see, there are 800 more running around.
- Cockroaches come into the home with groceries, furniture, cardboard boxes and luggage.
- More than half of the people living in cities have an allergy to cockroaches.
- Allergy to cockroaches is increasing among children.
- They can live in cracks in the wall, spaces around cabinets, outlets, pipes, baseboards, windowsills, etc.

What You Can Do

- Do not leave food or garbage uncovered.
- Fix plumbing leaks and other moisture problems.
- Seal any small spaces where cockroaches may live. If you must store items in cardboard boxes, completely seal all edges of each box with duct tape.
- Use baits, boric acid, and traps according to product instructions.
- Call in pest control experts or use a pesticide according to directions.
- If you live in an apartment building, it is important that all apartments are treated at the same time. Otherwise, cockroaches will move from one apartment to another.

So, I Have Asthma. Now What Do I Do?

Asthma Triggers and What YOU Can Do About Them

Colds and Flu



- Colds and flu are common triggers.
- Germs are spread mainly by hands and through the air from sneezing and coughing.
- Germs can survive on hands and other objects, such as doorknobs, pencils and toys, for up to 3 hours.

What You Can Do

- Wash your hands often.
- Don't touch your eyes, nose, or mouth.
- If you sneeze or cough, cover your mouth with a tissue or your sleeve and *wash your hands afterwards*.
- Get a flu shot every year.

Pollens



- Pollen is a very fine powder released by trees, grass, and weeds.
- Pollen counts are higher in the spring, summer, and fall.
- Breathing in pollen can cause asthma symptoms.

What You Can Do

- Limit your time outdoors when the pollen count is high.
- Use central air conditioning.
- Set the air conditioning to “re-circulate” or “fan” to remove much of the pollen and mold from the air.

Remember the Rules of Two

1. Do you take your rescue inhaler more than **TWO TIMES** a week?
2. Do you wake up at night with asthma symptoms more than **TWO TIMES** a month?
3. Do you refill your rescue inhaler more than **TWO TIMES** a year?

If you answer YES to any of these questions, your asthma may not be in control. Schedule an asthma visit with your doctor.

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So, I Have Asthma. Now What Do I Do?

Asthma Triggers and What YOU Can Do About Them

Air Quality



- Air quality refers to the amount of allergens and irritants in the air you breathe.
- You can reduce allergy and asthma symptoms by improving the air quality around you.
- Incense, scented candles, and wood smoke bother sensitive airways.

What You Can Do

- Don't smoke. Avoid smoke.
- Reduce the humidity as much as possible.
- Small room-size air cleaners do not clean the air. If you choose to use an air cleaner, use a HEPA filter.
- Use a filter for your furnace and air conditioner that is labeled HEPA "ultra" or "micro".
- Replace your filter as often as the directions tell you.
- Do not use a wood-burning stove, kerosene heater, or fireplace.
- Do not burn candles or incense.
- Stay away from strong odors and sprays: perfume, powder, hair spray, after-shave, spray deodorant, room deodorizers, scented bath and body products, and cleaning products.
- Stay away from bus exhaust fumes.

So, I Have Asthma. Now What Do I Do?

Asthma Triggers and What YOU Can Do About Them

House Cleaning & Repairs



- Common household cleaning products can cause problems: spray cleaners, chlorine bleach, ammonia, toilet bowl cleaner, carpet deodorizers, some laundry detergents, and fabric softeners.
- Sweeping, dusting, and vacuuming stir up allergens.
- Be aware of household projects and repairs that put you in contact with sawdust or the fumes from paint, varnish, turpentine, solvents, or glue.

What You Can Do

- Reduce the dust in your home.
- While cleaning or using any household chemicals, open the windows and/or use fans to improve ventilation.
- Stay away from strong odors and sprays such as paints and cleaners.
- Avoid using spray cleaners for your home. It is best to use liquid, paste, or gel cleaners. Be sure the area is well ventilated.
- Carpet sprays, powder carpet fresheners and foam carpet cleaners should not be used.
- Use water, a damp cloth or unscented dusting cloths to clean.
- Use a vacuum cleaner that has a HEPA filter, if possible.
- Wear a mask when you dust, vacuum, or work on household projects or repairs.

Foods



- Food allergies sometimes cause asthma symptoms.
- The most common foods that people are allergic to are peanuts, nuts, eggs, seafood, fish, and sulfites.
- Allergies to milk, soy, wheat, and eggs are most common in young children.
- Food allergies can become life threatening, especially with nuts, peanuts, seafood, and fish.

What You Can Do

- If foods trigger your allergies, see an allergy specialist.
- Avoid foods that you are allergic to.
- Read food labels! Look for ingredients you are allergic to.
- Ask your care provider about an “epi pen” if you have severe food allergies. Carry it with you at all times.

So, I Have Asthma. Now What Do I Do?

Asthma Triggers and What YOU Can Do About Them

Medicines



- Medicines can also cause asthma symptoms.
- The most common are aspirin and pain medicines like ibuprofen (Advil and Motrin) and naproxen (Aleve).
- Read the medicine label.
- Many medicines contain aspirin, ibuprofen, or naproxen. Ask the pharmacist.

What You Can Do

- Do not take medicines that trigger your asthma.
- Tell your care provider which medicines trigger your asthma.
- Tell your doctor about all the medicines you take, including:
 - all over-the-counter products.
 - herbs.
 - eye drops.
 - vitamins and minerals.
 - prescription drugs.

Physical Activity



- Physical activity is often an asthma trigger.

What You Can Do

- It is important to be active even if you have asthma.
- Warm up slowly for 5 minutes before you start to exercise.
- See your doctor if you have asthma symptoms when you exercise, play, or work hard.
- Take your control medicine every day to help prevent symptoms.

Weather



- Weather changes, such as cold, wind, and humidity are asthma triggers.

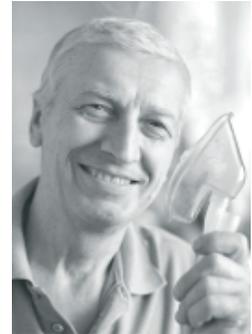
What You Can Do

- Warm the air you breathe in by wearing a scarf or mask.
- Try to stay indoors with air conditioning on humid days or when pollen counts are high.

Controlling Your Asthma

This part of *My Asthma Guide* will help you learn about the asthma tools that help you manage your asthma. The Asthma Toolkit includes:

- Asthma Medicines
- Peak Flow Meter
- Asthma Action Plan



There are 2 kinds of asthma medicines:

1. Asthma Control medicines
2. Asthma Rescue medicines

Most people with asthma need to take more than one kind of medicine to manage their asthma.

Asthma Control Medicine

- Is sometimes called Preventer or Control medicine.
- Help to stop the swelling and mucus inside the airways.
- To prevent asthma symptoms, Control medicine needs to be taken every day, even if you feel okay.
- It is not fast acting. It may take weeks for your Control medicine to fully reduce swelling and mucus.
- Control medicine does not provide quick relief of asthma symptoms. Rescue medicine is needed for quick relief.

Side Effects of Control Medicines

- Common side effects may include: white patches in the mouth, hoarseness, cough, and dry mouth.
- To prevent side effects, rinse your mouth and spit after using. Use a holding chamber (spacer) with your metered dose inhaler.
- Call your doctor if you are concerned about these or any other symptoms.

My Control Medicine is:

*The above information is a brief summary about asthma medicine.
Please talk with your doctor, nurse, or pharmacist for more information.*

Controlling Your Asthma

Asthma Rescue Medicines

- Is sometimes called Quick Relief or Reliever.
- Relaxes the tight airway muscles and makes it easier to breathe.
- Rescue medicine works fast.
- Rescue medicine does not decrease the swelling inside the airways — only Control medicines do that.
- You may need to use your Rescue medicine 15 minutes before exercise to prevent asthma symptoms.

Side Effects of Rescue Medicines

Common side effects may include:

- Feeling shaky or nervous
- Fast heart beat
- Nausea
- Problems sleeping

Call your doctor if you are concerned about these or any other symptoms.

About Oral Steroids (such as prednisone)

- An oral steroid is a Rescue medicine that is taken by mouth. It most often used for a short period of time to treat asthma flare-ups.
- It stops the swelling and mucus inside the airways.
- It can take several hours to start working.
- Take it exactly as prescribed by your doctor.
- Take it with food or milk to prevent an upset stomach.
- Steroids used to treat asthma are not the same as the steroids some athletes use to build muscle.

Side Effects of Oral Steroids

- Oral steroids may cause stomach upset, problems sleeping, restlessness, mood changes, increased appetite, weight gain, high blood pressure, and skin rash.
- Call your doctor if you are concerned about these or any other symptoms.

My Rescue Medicine is:

My Oral Steroid is:

*The above information is a brief summary about asthma medicine.
Please talk with your doctor, nurse, or pharmacist for more information.*

Controlling Your Asthma

How to Use an MDI Inhaler With a Holding Chamber

(An MDI is also called a Metered Dose Inhaler)

1. Shake the inhaler for at least 10 seconds. Remove the caps and put the inhaler into the end of the holding chamber.
2. Tilt your head back slightly and breathe out fully.
3. Press down on the inhaler to put 1 puff of medicine into the holding chamber.
4. Put the mouthpiece into your mouth, over your tongue and close your lips around it.
5. Breathe in slowly and deeply. If it whistles, it means you are breathing in too fast. Breathe in more slowly.
6. Take the inhaler out of your mouth and hold your breath and count to 10. Breathe out and replace the caps.
7. Wait at least 1 minute between each puff.



Tips:

- It is helpful to use a holding chamber or spacer to help the medicine get into your lungs and not get stuck in your mouth and throat.
- Be sure to read the instructions that come with your inhaler. This will tell you how to prime, clean, and store your inhaler.

If you have any questions, please talk with your doctor, nurse, or pharmacist.

Controlling Your Asthma

How to Use an MDI Inhaler With a Mask

(An MDI is also called a Metered Dose Inhaler)

An MDI inhaler can be used with a holding chamber and a mask for infants and young children. Select the mask size that fits over the child's nose and mouth.

1. Shake the inhaler for at least 10 seconds.
2. Remove the caps and put the inhaler into one end of the holding chamber. Attach the mask to the mouthpiece end of the holding chamber.
3. Place the mask gently over the child's nose and mouth. Make sure that the mask is in close contact with the face, but do not press too hard.
4. As your child is breathing out, press down once on the inhaler.
5. Keep the mask pressed to the child's face until he or she takes 5 or 6 breaths. Then take the mask off of his or her face.
6. Wait at least 1 minute between each puff.



Tips:

- Be sure to read the instructions that come with your inhaler. This will tell you how to prime, clean, and store your inhaler.

If you have any questions, please talk with your doctor, nurse, or pharmacist.

Controlling Your Asthma

How to Use an MDI Inhaler Without a Holding Chamber

(An MDI is also called a Metered Dose Inhaler)

1. Shake the inhaler for at least 10 seconds.
2. Hold the inhaler upright and remove the cap.
3. Tilt your head back slightly and breathe out fully.
4. Put the mouthpiece into your mouth, over your tongue and close your lips around it.
5. Start to breathe in slowly and deeply as you press down to release 1 puff.
6. Take the inhaler out of your mouth, and hold your breath as you count to 10.
7. Breathe out and replace the cap.
8. Wait at least 1 minute between each puff.



Tips:

- It is helpful to use a holding chamber or spacer to help the medicine get into your lungs and not get stuck in your mouth and throat.
- Be sure to read the instructions that come with your inhaler. This will tell you how to prime, clean, and store your inhaler.



If you have any questions, please talk with your doctor, nurse, or pharmacist.

Controlling Your Asthma

How to Use a Diskus®

1. First, to open the Diskus, hold the case with one hand. Place thumb of your other hand on the thumb grip. Push your thumb away from you until it “clicks” and you see the mouthpiece.
2. Next, hold the Diskus level with the ground like a hamburger. Push the lever away from you until you hear and feel a click. The dose counter will go down by one. Every time the lever is pushed back, the dose is ready.
3. Sit up, turn your head away and breathe out. Do not breathe or blow into the Diskus.
4. Put the mouthpiece between your lips — seal your lips around the mouthpiece. Then, breathe in quickly and deeply.
5. Take the Diskus out of your mouth. Hold your breath as you count to 10, and then breathe out slowly.
6. To close the Diskus, wipe the mouthpiece dry, and slide the thumb grip towards you as far as it will go.



Tips:

- Since this is a Control Inhaler, rinse your mouth with water and spit it out after using this inhaler.
- Be sure to read the instructions that come with your inhaler. This will tell you how to prime, clean, and store your inhaler.



If you have any questions, please talk with your doctor, nurse, or pharmacist.

Controlling Your Asthma

How to Use a Flexhaler®

1. Remove the cover.
2. To load a dose of medicine, hold the Flexhaler upright. Twist the bottom grip fully to the right and then back to the left. You will hear a click.
3. Turn your head away from the inhaler and breathe out. Do not breathe or blow into the inhaler.
4. Put the mouthpiece between your lips and teeth. Seal your lips around it.
5. Breathe in as quickly and as deeply as you can. Hold your breath until you count to 10.
6. Wipe the inhaler dry, replace the cover, and twist it on.



Tips:

- Since this is a Control Inhaler, rinse your mouth with water and spit it out after using this inhaler.
- Be sure to read the instructions that come with your inhaler. This will tell you how to prime, clean, and store your inhaler.

If you have any questions, please talk with your doctor, nurse, or pharmacist.

Controlling Your Asthma

How to Use a Twisthaler®

1. Hold the upright with the colored base at the bottom. Holding the base with one hand, twist the cap fully to the left to remove it. Removing the cap loads the dose.
2. Turn your head away from the inhaler and breathe out. Do not breathe or blow into the inhaler.
3. Put the mouthpiece between your lips and teeth. Seal your lips around it.
4. Breathe in as quickly and as deeply as you can. Hold your breath until you count to 10. Breathe out.
5. Wipe the inhaler dry and replace the cap. Be sure that the indented arrow is in line with the dose counter. Turn it counterclockwise as you gently press down until you hear a “click”.



Tips:

- Since this is a Control Inhaler, rinse your mouth with water and spit it out after using this inhaler.
- Be sure to read the instructions that come with your inhaler. This will tell you how to prime, clean, and store your inhaler.



If you have any questions, please talk with your doctor, nurse, or pharmacist.

Controlling Your Asthma

How to Use a Nebulizer

A nebulizer (neb) machine is another way to take asthma rescue and control medicines. Use a mouthpiece for those who are able to keep it in their mouth. Use a mask for infants, young children and adults who cannot use the mouthpiece.

Using a mask

1. Gather supplies: nebulizer cup, tubing, and mask.
2. Attach the hose to the neb machine and cup.
3. Put the medicine into the nebulizer cup.
4. Attach the mask to nebulizer cup.
5. Turn on the neb machine.
6. Place mask over nose and mouth.
7. Be sure the mask is touching the face. If you hold the mask away from the face, the medicine is lost into the air and will not help breathing as much.



5. Place the mouthpiece between the teeth and lips and on top of the tongue.
6. Turn on the neb machine.
7. Breathe normally, but take a deep breath every minute or so. You should see the misty air blow in and out with each breath.

Cleaning the nebulizer and supplies

- It is very important to keep your nebulizer machine and supplies clean. This will help prevent infections and keep the supplies working well. Never share your supplies with others.
- **After each use**, rinse the mask or mouthpiece and T-piece under warm running water for 30 seconds. Shake off the water. Set it on clean paper towel to air dry
- **Once every day**: Wash the mask or mouthpiece and T-piece with a mild dishwashing soap and warm water. Rinse them under warm running water for 30 seconds. Shake off the water. Set on clean paper towel to air dry.
- If your nebulizer machine has a filter, remember to check it once a month and change it when it gets dirty. Wipe off the outside of the nebulizer machine with a damp cloth if it gets dirty.
- Keep the nebulizer machine off the floor.

Using a mouthpiece

1. Gather supplies: nebulizer cup, tubing, a T-piece, tube, and mouthpiece.
2. Attach the hose to the neb machine and cup.
3. Put the medicine into the nebulizer cup.
4. Attach the T-piece, tube, and mouthpiece.

Controlling Your Asthma

Peak Flow Meter

What is a peak flow meter?

A peak flow meter is used to check asthma the way that a blood pressure cuff is used to check high blood pressure.

A peak flow meter measures how well air moves out of your lungs. Your peak flow number may get lower, even before you wheeze or cough. It can tell you when a problem is starting, even before you feel asthma warning signs. By taking your medicine before your symptoms start, you may avoid an asthma flare-up.

Knowing your peak flow number helps:

- You and your doctor to know how well your asthma is controlled and how well your asthma medicine is working.
- You avoid an asthma flare-up.
- You know when to take extra asthma medicine.

When should I use my peak flow meter?

- Check your peak flow before you take your medicine.
- Do this each morning and at bedtime.
- Always use the same meter because meters may be different.
- Keep a record of your peak flow numbers (See sample Daily Asthma Record, page 25).
- Bring your peak flow meter and your record to your clinic visit.
- Everyone with moderate or severe asthma should use a peak flow meter. Children can often start using a peak flow meter at about 5 years old.

There are many different kinds of peak flow meters. Here are a few examples:



Controlling Your Asthma

How to Use Your Peak Flow Meter



1. Slide the marker down to zero.



2. Stand up. Take a big breath with your mouth open. Hold the meter in one hand. Keep your fingers away from the marker.



3. Put the mouthpiece between your teeth. Close your lips tightly around the tube. Do not put your tongue in the hole.



4. Blow once as fast and hard as you can.

5. The marker will slide to your peak flow reading. Find the number where the marker stopped.



6. Slide marker down to zero. Repeat your peak flow two more times.



7. Write down the highest number of the 3 on your peak flow record chart.

Your personal best peak flow number

- Have your healthcare provider help you figure out your personal best peak flow number.
- Your personal best peak flow number will be used to set your zones.

Zones:

- Your peak flow number determines what “zone” you are in.
- We use a “traffic light system” with Green, Yellow, and Red zones.
- As your peak flow changes, you can find what zone you are in and know what you can do.

My personal best peak flow number:

Controlling Your Asthma

What is an Asthma Action Plan?

An asthma action plan is a written guide to tell you how to manage your asthma at home, school, or work. You and your healthcare provider will work out a plan together. One way to think of your plan is to think of a traffic light with Green, Yellow, and Red zones.

Each zone has a peak flow number and asthma signs and symptoms that show what zone you are in. Your asthma plan will tell you what medicines to take when you are in each zone. Follow your plan every day, even when you are feeling well.

SAMPLE
Asthma Action Plan

My Asthma Action Plan

My Asthma Severity: _____

My Peak Flow Number: _____

Avoid asthma triggers: _____

Name: _____

LABEL

Date: _____

My Doctor or Clinic: _____

My Doctor or Clinic phone: _____



Go

- I feel good
- No cough or wheeze
- Can work, sleep and play without asthma symptoms

My peak flow number is above _____



Green Zone: Asthma in good control

1. Take your asthma control medicine every day:
 - _____
 - _____
2. If exercise triggers your asthma, take:
 - 15 minutes before exercise or sports, and
 - during exercise if you have asthma symptoms
3. Spacer to use with inhaler: _____



Slow

I have any of these:

- I do not feel good
- Cough or wheeze
- Wake up at night
- Chest feels tight

My peak flow number is between _____



Yellow Zone: Asthma getting worse

1. Keep taking your Green Zone medicines.
2. Start taking your rescue medicine:
 - _____ every 20 minutes for up to 1 hour. Then every 4 hours for 24-48 hours.
3. If you do not return to the Green Zone in 12-24 hours, or you get worse, start taking your oral steroid medicine:
 - _____
4. If you stay in Yellow Zone more than 12 -24 hours, call your doctor.



Stop

I have any of these:

- I feel awful
- Breathing getting harder
- Medicine not helping
- Trouble walking or talking
- Nose opens wide to breathe

My peak flow number is below _____



911

Red Zone - Medical Alert - Get help

1. Take your rescue medicine NOW:
 - _____
2. Take your oral steroid medicine NOW:
 - _____
3. Call your doctor NOW.
4. If you are still in the Red Zone after 20 minutes, and you have not reached your doctor:
 - Take your rescue medicine again, and
 - Call 911 or go to the emergency room right away.

Provider name, print and sign: _____

Clinic & phone number for follow up: _____ When: _____

Name of person given Asthma Action Plan and Trigger Control sheet: _____

Controlling Your Asthma

What to Do if You Have an Asthma Flare-up

What is Happening	Zones	What You Can Do
<ul style="list-style-type: none"> • Your breathing is easy. • You can play, work, and sleep without asthma symptoms. 	<p style="text-align: center;">“Go! All Clear”</p> <p style="text-align: center;">My Green Zone is: _____ to _____</p> <p style="text-align: center;"><i>(80-100% of personal best)</i></p>	<ol style="list-style-type: none"> 1. Keep using your asthma action plan. 2. Keep taking daily control medicines. My control medicine is _____. 3. Avoid your asthma triggers.
<p>You start to have early warning signs or symptoms:</p> <ul style="list-style-type: none"> • Your peak flow number drops. • You cough, wheeze, or wake up at night. • You feel tired and/or out of breath. • You breathe faster than normal. • Your eyes and nose are itchy and watery. 	<p style="text-align: center;">“Caution”</p> <p style="text-align: center;">My Yellow Zone is: _____ to _____</p> <p style="text-align: center;"><i>(50-80% of personal best)</i></p>	<ol style="list-style-type: none"> 1. Keep taking your Green Zone (daily) medicines. 2. Take your rescue medicine now. My rescue medicine is _____. 3. If you stay in the Yellow Zone for 12-24 hours or if your breathing symptoms get worse, call your doctor. 4. Make sure you are drinking enough fluids.
<p>You are having worse signs or symptoms:</p> <ul style="list-style-type: none"> • Your breathing is hard and fast. • You cannot walk or talk without taking a breath. • Your ribs show when breathing. • You are hunched over to breathe. • Your rescue medicine is not working. • You’ve been in the Yellow Zone for more than 12 hours. 	<p style="text-align: center;">“Stop! Medical Alert!”</p> <p style="text-align: center;">My Red Zone is: _____ to _____</p> <p style="text-align: center;"><i>(below 50% of personal best)</i></p>	<ol style="list-style-type: none"> 1. Take your Red Zone medicines. My Red Zone medicine(s) is/are: _____. 2. Call your doctor or clinic now! 3. If your signs or symptoms get worse or you cannot reach your healthcare provider, go to the emergency room or call “911” right away.

Living with Asthma

Plan to Stay Active

Asthma should not stop you from being active. Exercise and activity are important for your health. By using your asthma action plan, you should be able to take part in physical activity without having asthma symptoms. Talk to your doctor about using your asthma medicine before you exercise. Remember, many athletes have asthma.

When you exercise remember to:

- Use your quick relief inhaler 20-30 minutes before starting an activity.
- “Warm up” and “cool down” before and after an activity.
- Check your peak flow before and after an activity to see if it has changed.
- Take a break if you feel symptoms starting.

Talking About Your Asthma

It is important to talk about your asthma to others. Tell your family, friends, co-workers, and teachers that you have asthma.

- Explain that when your asthma is under control you can do things just like other people.
- Explain that you know how to take care of your asthma flare-ups.
- Explain that an asthma flare-up may happen, and they may have to call 911 if the flare-up is severe.



For Parents/Guardians of Children with Asthma

- Tell those who have frequent contact with your child (teachers, school nurse, coaches, babysitters) that your child has asthma.
- Let them know what triggers cause your child’s asthma to flare-up.
- Let them know if your child is carrying an inhaler.
- Check with your school nurse to see what forms need to be signed for your child to get or be given his medicine.
- Give a copy of your child’s asthma action plan to the school nurse and to your day care provider. Do this each time the plan is changed.

Living with Asthma

When You Can Go to School or Work and When You Should Stay Home



You can go to school or work if:

- You have a stuffy nose but no wheezing.
- You have a little wheezing that goes away after taking rescue medicine.
- You are able to do usual daily activities.
- No extra effort is needed to breathe.
- Your peak flow number is in the Green Zone.

You should stay home if:

- You have an infection, sore throat, or swollen, painful neck glands.
- You have a fever over 100° F.
- You are wheezing or coughing one hour after taking your rescue medicines.
- You have no relief of symptoms after taking your rescue medicines.
- You have trouble breathing.
- You are breathing faster than normal.
- Your peak flow number is in the Yellow or Red Zone.

When You Have Other Medical Problems



- Talk to your doctor about all of your medical problems: such as high blood pressure, emphysema, glaucoma, vision problems, or hearing problems.
- Asthma medicines can affect other medicines you are taking.
- Be sure your doctor is aware of all medicines you take. This includes over-the-counter, herbal, vitamins, and minerals.
- If you have arthritis, there are products that make it easier to use your inhaler.

When There are Changes in Your Life



Major life changes can cause stress and depression, which can be asthma triggers.

- Take care of yourself.
- Keep taking your medicine.
- Join a support group.

Living with Asthma

When You Travel



- Talk to your doctor to find out if you need additional medicines.
- Make sure you have enough medicine to last a few days longer than you plan to be gone.
- Keep medicine in original containers.
- Keep your medicines with you in your purse or carry-on bag, not in your check-in luggage.
- If you are traveling overseas, take an electric adapter for your nebulizer machine.
- Know how to get emergency medical care wherever you go.
- Carry your insurance card with you.

Other Things You Can Do



- Take care of yourself such as eating healthy foods, getting enough sleep, and taking your medicines!
- Talk to your doctor, family, and friends.
- Join a support group.
- Get counseling if you feel depressed or overwhelmed.

Living with Asthma

When Your Infant has Asthma



- The lungs of your infant are not fully developed. Their airways are smaller and any swelling can quickly lead to an asthma emergency.
- Do not bring your children with you to smoky places.
- It's important to have your child see their doctor regularly even when there are no signs of asthma problems.

What to do if your infant has signs of an asthma flare up?

- You can tell what “zone” they are in by how they look and act.
- You need to act quickly. Follow your infant's asthma action plan.
- Watch your infant closely for problems with breathing, such as wheezing or fast breathing.

Call “911” if:

- Your infant's breathing rate is faster than 40 breaths per minute while sleeping.
- Your infant stops sucking or feeding.
- The skin between your infant's ribs is pulled in tight (retracting).
- The color of your infant's skin changes (pale, gray, or red face; blue lips or fingernails).
- Your infant's breathing sounds like “grunting”.

Be Prepared to Act:

- Do not wait until the last minute to learn how to handle an emergency.
- Have a plan to get to the doctor or hospital that includes:
 1. Know how you will get there, such as car or cab.
 2. Know how much it will cost, such as cab fare or parking meters.
 3. Know who will watch your other children while you are away.

Living with Asthma

Pregnancy and Asthma



When you are pregnant, you should know:

- One third of pregnant women with asthma have their asthma get worse. This is more likely if you had severe asthma before your pregnancy.
- One third of pregnant women with asthma have their asthma improve.
- Another one third of pregnant women with asthma will have no change in their asthma.
- ***Remember: If your asthma is not under control, your lungs are not able to get enough oxygen to your baby.***

Not giving the baby enough oxygen is a far greater risk than taking asthma medicines. If you follow your asthma action plan early in your pregnancy, you will have fewer flare-ups.

Working with your healthcare team

- Tell your doctor or nurse-midwife that you have asthma and tell the doctor who treats your asthma that you are pregnant.
- Make regular visits to your doctor(s) or nurse-midwife.
- If you have a cold or start of an asthma episode, call your doctor.
- Avoid contact with your asthma triggers.
- Follow your asthma action plan.
- ***Do not smoke. Do not let people around you smoke.***

Taking your medicines

- Most medicines for asthma are safe to take when you are pregnant. Tell your doctor what medicine you are on.
- Check with your doctor or pharmacist before you take any non-prescription medicine or herbal products.
- If allergies trigger your asthma symptoms, ask your doctor or pharmacist for allergy medicines that are safe while you are pregnant.
- You may continue allergy shots if you were getting them before pregnancy. Do not begin them while pregnant.
- Wait until the third month of your pregnancy to get a flu shot.
- Most asthma medicines are okay to use while breast feeding.

Local Resources for Asthma Patients and Their Families

Hennepin County Medical Center

612-873-3000
www.hcmc.org

Asthma Home Visiting/Public Health Nurse

612-617-4700
www.mvna.org

Minnesota Department of Health

651-201-5000
www.health.state.mn.us

Pediatric Home Services

651-642-1825
www.pediatrichomeservice.com



National Resources for Asthma Patients and Their Families

American Lung Association of Minnesota

651-227-8014
www.lung.org/associations/states/minnesota

Asthma and Allergy Foundation of America

1-800-727-8462
www.aafa.org

Allergy and Asthma Network/ Mothers of Asthmatics

1-800-878-4403
www.aanma.org

American Academy of Allergy, Asthma and Immunology

414-272-6071
www.aaaai.org

National Jewish Medical and Research Center

1-800-222-5864
www.njc.org

National Heart, Lung, and Blood Institute

1-301-592-8573
www.nhlbi.nih.gov

Glossary

Acute – a short and fairly severe asthma flare-up.

Aerosol – a medicine that is given off in a fine mist that is inhaled.

Airway(s) – the path air follows to get into and out of the lungs.

Allergens – substances that can cause an allergic reaction in the body in certain people, such as pollen, dander, and mold.

Anti-inflammatory medicine – used to prevent asthma flare-ups; makes airways less likely to react to triggers; decreases the swelling in airways, which causes asthma symptoms.

Asthma action plans – a written plan to help manage and treat asthma.

Asthma Daily Record – a form to write down asthma information every day, such as peak flow numbers, and asthma signs and symptoms.

Bronchial tubes – large and small airways in the lungs.

Bronchodilators – medicines that relax the muscles that have tightened around the airways.

Chronic conditions – diseases that someone has for a long time, sometimes for a lifetime.

Control Medicine – medicines that reduce swelling in the airways; these medicines are used every day to help prevent asthma flare-ups.

Corticosteroids – medicines that reduce the amount of mucus and swelling in the airways.

Environment – the area around you; where you live, work, play and go to school.

Episodes – also called “asthma flare-ups” or “asthma attacks”; a period of time when asthma symptoms are present and getting worse.

Exhale – to breathe out.

Face mask – the mask that is placed over the nose and mouth that delivers asthma medicine from a nebulizer.

Flare-ups – also called “asthma episodes”; a period of time when asthma symptoms are present and getting worse.

Flu – also called influenza; an upper airway infection caused by a virus.

Generic medicine – medicine that is the same as brand name medicine; generic medicines are cheaper than brand name medicines; for example: cromolyn (generic) is the same as Intal (brand name).

Healthcare Provider – most often refers to doctors and nurse practitioners; may also refer to nurses, respiratory therapists, pharmacists, and others who are involved in your care.

HEPA filters – High Efficiency Particle Air filters which remove many of the smallest pieces of dust, dust mites, pollen, smoke and many other irritants and allergens.

Glossary

Inflammation – swelling of the lining of the airways.

Inhale – to breathe in.

MDI (metered-dose-inhaler) – a small canister used to spray puffs of medicine that are inhaled.

Mites – tiny insects, like dust mites, that can trigger an allergic reaction or asthma symptoms.

Mucus – thick substance from the glands in the mucous membranes that clogs up airways.

Nebulizer – machine that delivers asthma medicine in a mist.

Oral medicine – medicine taken by mouth, can be a pill or liquid.

Peak flow meter – a device that measures how well air moves out of your lungs.

Pollen – fine, powdery material made by flowering plants and trees that can cause allergic symptoms.

Primary care provider – the doctor or nurse practitioner who takes care of your regular healthcare needs.

Pulmonary function test – determines the flow of air from the lungs.

Rescue Medicine – quick-acting medicine used at the first sign of an asthma flare-up; relaxes the muscles around the airways.

Respiratory – refers to breathing.

Side effects – symptoms that may occur or result from taking a medicine. For example, albuterol may cause an increased heart rate and jitteriness.

Spacer – a device to help direct the medicine into the lungs instead of the back of the mouth.

Spirometry – measurement of air inhaled and exhaled from the lungs.

Trachea – windpipe or tube that carries air to the lungs.

Triggers – things that cause asthma symptoms.

Thrush – white, patchy infection in the mouth and throat.

Viral infection – an infection caused by a virus; the most common cause of asthma episodes.



Hennepin County **Medical Center**

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Hennepin County Medical Center provides services without regard to race, color, creed, religion, age, sex, disability, marital status, sexual orientation, gender identity, public assistance, or national origin.