VISITING NURSE SERVICE OF NEW YORK

VNSNY

PATIENT SELF-CARE GUIDE:

My Asthma Manual

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My Asthma Manual

This guide was written to help you and your family understand and manage your asthma.

The steps necessary for good asthma management are:

- Identifying your asthma symptoms early
- Taking your medications effectively
- Knowing your triggers and avoiding them
- Working with your provider and health care team

Live the slogan for the NYC Asthma Initiative:

"I have asthma.
Asthma doesn't have me."

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We would like to thank Dr. M. Cabrera and Dr. E. Fleck
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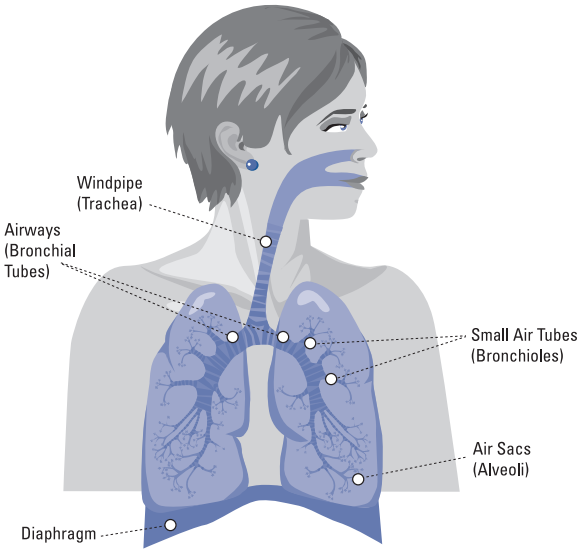
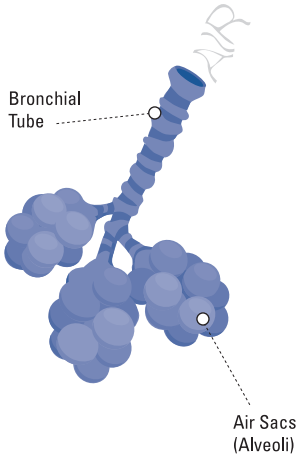
About Your Lungs

When you breathe, air moves in and out of your lungs. The air travels through small tubes in your lungs that are called bronchial tubes.

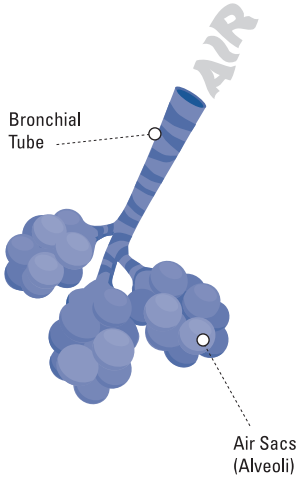


At the end of each bronchial tube, there are tiny air sacs that fill up with air so your body can get the oxygen it needs.



The bronchial tubes are wrapped with narrow muscles. If you have asthma, these muscles sometimes tighten up and pinch off the air. This is called a Bronchospasm (see below).

When this happens, you have trouble breathing because the air cannot move freely through your lungs.



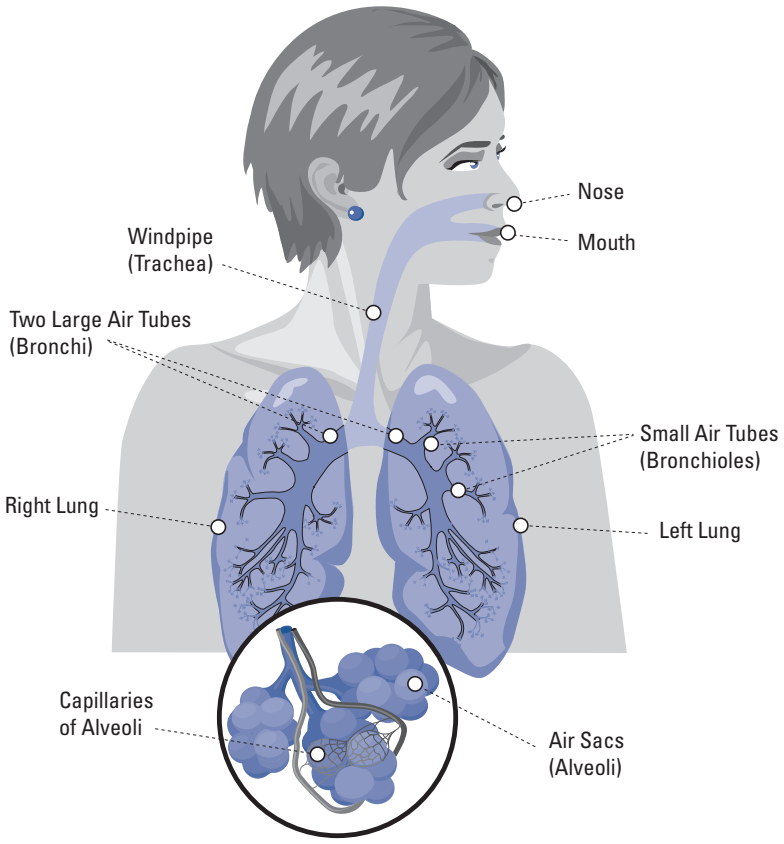
About Asthma

The medical definition of asthma is: “a chronic inflammatory disorder of the airway, with increased sensitivity and obstruction.”

The drawings on the next two pages show how the airways look during normal breathing and what they look like during an asthma attack.

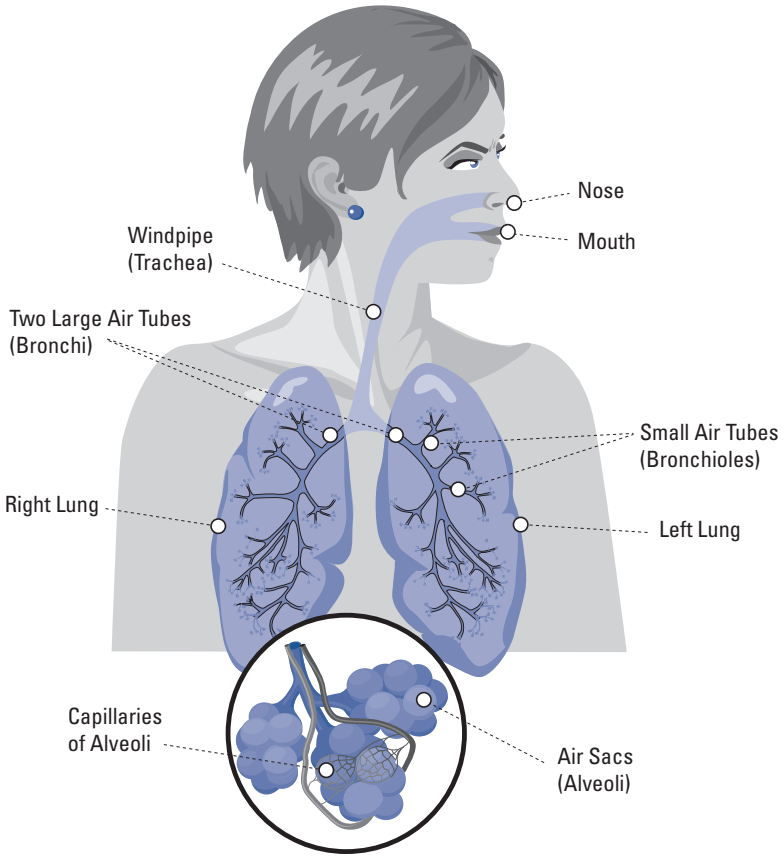
AIRWAYS DURING NORMAL BREATHING

Air comes in through the nose and mouth, goes through the windpipe (trachea) and then into the lungs through the two large air tubes (bronchi). Air then passes into the small air tubes (bronchioles) and into the air sacs (alveoli). In the air sacs, oxygen goes into the blood through small blood vessels called capillaries, and carbon dioxide is returned to the air sacs and breathed out.



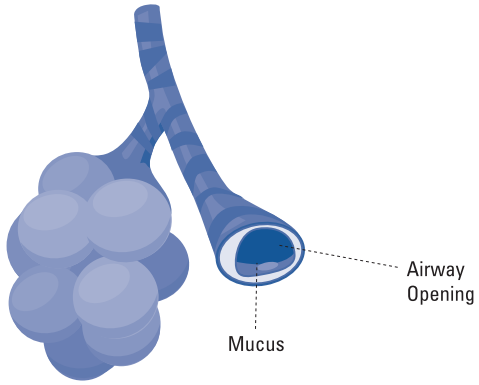
AIRWAYS DURING AN ASTHMA ATTACK

Asthma affects the air tubes not the air sacs. Look at how much smaller both the bronchi (2 large air tubes) and the bronchioles (small air tubes) have gotten in this picture. The tubes become smaller because of bronchospasms (see page 5) and inflammation.



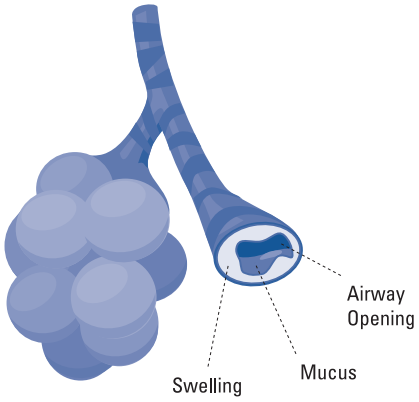
Inflammation

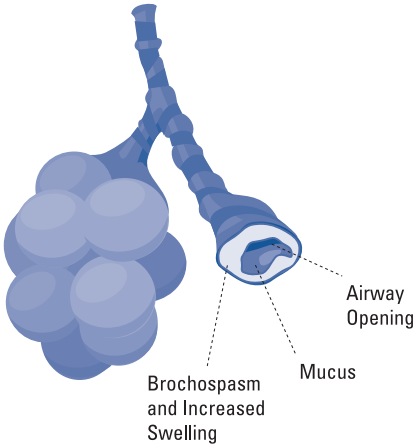
Inflammation is the lung's response to things that irritate it, such as an infection or trigger. Inflammation causes swelling and increased mucus. The swelling and mucus also makes the opening in the tubes smaller and more difficult for air to move in and out.



This is a normal looking tube and air sac.

Look at what happens when you are exposed to a trigger. The trigger causes inflammation (swelling and increased mucus) in the tubes. The tube opening has become smaller. The inflammation may occur before an attack begins and may last for several weeks.





Continued exposure to the trigger causes brochospasm and more inflammation. Notice how the opening of the tube is even smaller than in the second picture.

Inflammation

- Inflammation of the bronchial tubes is the major factor in asthma
- Inflammation causes swelling and mucus in the bronchial tubes
- Your triggers cause irritation and inflammation

The key to controlling asthma is to reduce and control the inflammation in the lungs.

What are Asthma Symptoms?

Asthma symptoms may include breathing problems like wheezing, coughing, and being unable to catch your breath. Not everyone with asthma will have the same symptoms. Some symptoms happen early before an attack. Others, like wheezing, occur later, during an attack.

It is important to identify early signs that an attack is going to happen because you may be able to prevent it from worsening. Think about what you feel before an asthma attack.

EARLY WARNING SIGNS

Here are some possible early warning signals:

__ Feel "funny" or "tight" in the chest
__ Pale
__ Eyes look glassy
__ Irritable/ Want to be alone
__ Cough, especially at night
__ Runny nose
__ Difficulty eating
__ Reduced Peak Flow Meter readings (see page 10 for a full explanation)
__ Headache
__ Tired
__ Dark circles under eyes
__ Feeling anxious
__ Itchy throat
__ Head/Nose stuffed up
__ Nightmares
__ Breathing faster than usual
__ Others: _____

Do you experience any of the early warning signs listed above? Completion of a diary might help you identify your asthma symptoms. For the next month record your asthma symptoms in the diary on pages 9-12. Also record your activity and location and the time you experience the symptoms.

MY HOME DIARY

Name: _____ Provider's Name: _____

Month: _____ Diary Page #: _____

DATE	EVENT	COUGH	WHEEZE	SHORT OF BREATH	CONGESTION	ACTION TAKEN	PEAK FLOW AM/PM
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

MY HOME DIARY

Name: _____ Provider's Name: _____

Month: _____ Diary Page #: _____

DATE	EVENT	COUGH	WHEEZE	SHORT OF BREATH	CONGESTION	ACTION TAKEN	PEAK FLOW AM/PM
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

MY HOME DIARY

Name: _____ Provider's Name: _____

Month: _____ Diary Page #: _____

DATE	EVENT	COUGH	WHEEZE	SHORT OF BREATH	CONGESTION	ACTION TAKEN	PEAK FLOW AM/PM
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

MY HOME DIARY

Name: _____ Provider's Name: _____

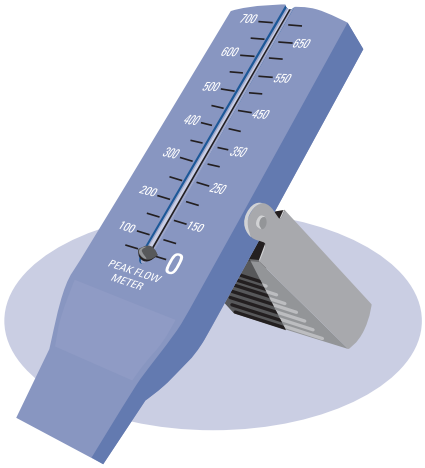
Month: _____ Diary Page #: _____

DATE	EVENT	COUGH	WHEEZE	SHORT OF BREATH	CONGESTION	ACTION TAKEN	PEAK FLOW AM/PM
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

Using a Peak Flow Meter

A Peak Flow Meter is a simple tool that measures the openness of your airways (bronchial tubes). If you use the meter everyday, you will be able to tell when you are in the early stages of an asthma attack. And, if you take your medication in this stage, you may be able to keep from having a full blown asthma attack. A Peak Flow Meter reading is not the only measure of your pending asthma attack.

USING THE PEAK FLOW METER

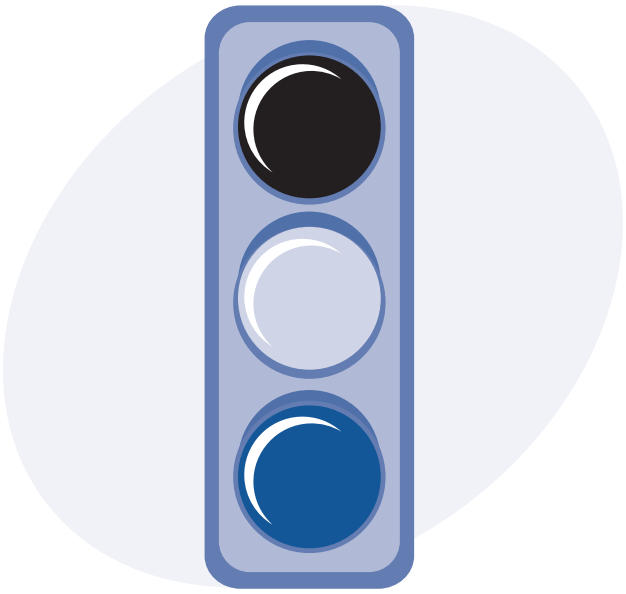


1. Set the arrow on the scale to zero (0). Stand up take a deep breath, and put the mouthpiece in your mouth. **Blow as hard and as quickly as you can** as if you were blowing out birthday candles. Empty your lungs as completely as you can.
2. Do this 3 times. Remember each time to reset the peak flow meter to zero.
3. Write down the highest of these 3 numbers on your calendar (see next page).
4. To obtain your baseline, measure your peak flow in the morning, afternoon, and before bed.

Share this information with your provider. A number that is lower than normal is an early sign of an asthma attack.

Your provider can tell you what numbers to watch out for and what you should do to keep from having a full asthma attack (see the Asthma Action Plan page 31).

Peak Flow Meter Zones



When you think about peak flow zones, think about a traffic light.

The **Green Zone** - means GO, your asthma is under control

The **Yellow Zone** - means CAUTION, you are experiencing early signs of an asthma attack.

The **Red Zone** - means STOP, you need to seek medical attention immediately. Your provider or nurse will help you calculate your peak flow zones.

Record your values here:

Green Zone (80-100% of Personal Best) _____

Yellow Zone (50-80% of Personal Best) _____

Red Zone (Below 50% of Personal Best) _____

Your personal best and peak flow zones may change over time, as you grow, as you get older, by the season, and as your asthma and general health changes.

Asthma Medications

In managing your asthma, it is important to keep your medication schedule up-to-date and in a convenient place so you can be sure you are taking the right amount of the medicine at the right time.

MEDICATION SCHEDULE

NAME OF THE MEDICATION	COLOR AND FORM	TYPE Reliever or Controller	HOW MUCH DO I TAKE?	WHEN DO I TAKE IT?	POSSIBLE SIDE EFFECTS
ALBUTEROL	WHITE/ INHALER	RELIEVER	2 PUFFS	AS NEEDED	

HELPFUL TIPS:

- Make sure you always have enough medication to last another week if used regularly.
- Carry your medication with you.
- Don't take other people's medication and don't share your medications.
- Tell your provider if a medication makes you sick, feel funny or doesn't seem to help.
- Tell your provider if you are taking over-the-counter medications or natural products.

Ways To Take Medications

Asthma medications are usually given either by systemic or inhaled routes:

Systemic medications travel in the blood and go to the whole body. Most systemic medications for asthma are taken by mouth (a pill, capsule or liquid).

Inhaled medications are breathed directly into the lungs. They work quickly and directly on the airways. Since the medication goes directly into the lungs, inhaled medications generally have fewer side effects than systemic medicines and work more quickly in the event of an attack.

Types of Medications

Most asthma medications can be classified as either RELIEVERS or CONTROLLERS.

RELIEVERS (also called “rescue” or “quick relief” medications) provide prompt relief of acute symptoms at the time of an attack. Most of the relievers are inhaled and decrease bronchospasms. These are the most common medications to treat an asthma attack. All asthmatics should have a reliever inhaler.

The goal to good asthma management is to use your reliever as little as possible. Please let your provider know if you are finishing more than one reliever inhaler unit a month.

INHALED RELIEVERS	ORAL RELIEVERS
Proventil, Ventolin (Albuterol) *Brethaire, Brethine* (Terbutaline) *Maxair* Other _____	*Prednisone* (oral steroid) *

* *For more information about oral steroids see page xx*

CONTROLLERS (also known as preventive or long term control medications) control and prevent asthma symptoms. If you have asthma symptoms or wake up from sleep because of your asthma more than twice a week you may need a controller. Controllers take longer than relievers to have an effect on your asthma symptoms. With some controllers you may need to wait up to a month before you notice an improvement in your asthma symptoms. *You need to take these medications every day, as ordered by your provider, even if you do not have symptoms.*

Based on how they work, controllers may be classified as either anti-inflammatory medications or long-acting bronchodilators.

Anti-inflammatory medications make up the largest group of controllers. They decrease and help prevent mucus and swelling in the bronchial tubes. There are three groups of anti-inflammatory medications.

- Inhaled steroids are the most common group of anti-inflammatory medications. Inhaled steroids are among the most effective medications to manage asthma. However, they may cause a yeast infection in the mouth or hoarseness. Using a spacer and/or rinsing your mouth after inhaling will prevent these side effects.

- Leukotriene modifiers are a new group of anti-inflammatory medications taken by mouth. They are not steroids. Leukotriene modifiers can be given with inhaled steroids or sometimes in place of inhaled steroids. They help prevent asthma symptoms but may not be effective for everyone.
- Some anti-inflammatory medications, such as Intal, do not fall into either of the above groups. Intal is inhaled but it is not a steroid.

Long acting bronchodilators (also known as delayed or sustained release bronchodilators) are also controllers. They help to control asthma symptoms by preventing bronchospasms. Unlike your reliever, they do not relieve symptoms at the time of an attack.

Some common controllers are:

DRUGS USED FOR ASTHMA MANAGEMENT

RELIEVERS (RESCUE):

DRUG	DOSAGE/ROUTE	SIDE EFFECTS/COMMENTS
Proventil, Proventil HFA, Ventolin, Albuterol, Volmax	Inhaled Oral Syrups	May cause increase in activity level.
Brethaire, Brethine, Terbutaline	Inhaled	Adult medication may be tried in teenagers
Maxair	Inhaled	Adult medication, interacts with beta agonist
Alupent	Inhaled	Adult medication
Prednisone, Prelone, Pediapred	Oral	Used for short term use in exacerbations, slow taper of dose, no effect on growth
Others:		

CONTROLLERS:

DRUG	DOSAGE/ROUTE	SIDE EFFECTS/COMMENTS
(Steroids)Pulmicort, Aerobid, Vanceril, Beclovent, Flovent, Azmacor	Inhaled	Rinse mouth after use. Bursts are effective for gaining quick control.
(Long acting Bronchodilators) Serevent, Salmeterol	Inhaled	Delayed release of this medication also exists for PM use. Always used with anti-inflammatory meds.
(Beta Agonist) Intal, Advair	Inhaled, Diskus	Dry Powder Inhaler Rinse mouth after use. Used also as a reliever, inhaled is quickly effective.
(Leukotriene Modifers) Singulair, Accolate, Zyflo Montelukast, Zileuton, Zafirlukast	Oral tablets and granules	Some are not used in young children, they provide extra benefit when combined with glucocorticosteroids
(Oral Steroids) Prednisone, Prednisolone, Pediapred,	Oral tablets	Short term use only. Bursts are effective in regaining control and are tapered.
Others:		

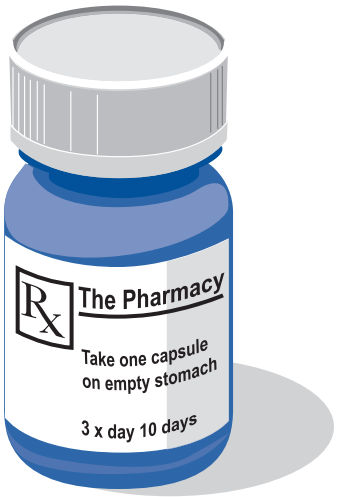
OTHER ASTHMA MEDICATIONS:

DRUG	DOSAGE/ROUTE	SIDE EFFECTS/COMMENTS
(Omalizumab)Xolair	SC injection-administered by MD-office visit only. Adult only	Used for severe asthmatics, not used during attacks, maintenance drug
(Levabuterol) Xopenex	MDI, solution for inhalation	Used for Bronchospasms, results in smooth muscle relaxation
Others		

Leukotrienes are released during an attack and cause constriction of the lung that results in airway tightening. This is what causes the shortness of breathe during your asthma attack. **Leukotriene Modifiers** are medications that have been developed to block this reaction, limit the inflammation and stop the constriction of the airway. These medications are not steroids. They have few side effects and are very effective in managing asthma. Some examples are Montelukast, Zileuton, Zafirlukast, they are best in children greater than age 6.

Oral steroids (such as Prednisone) are confusing because they may be given as a Reliever or a Controller. Some people may take an oral steroid during an acute attack to decrease the inflammation even though the onset of action is slower than most relievers (about 4 hours). (During a severe attack you may receive a steroid through an IV). Other people may need to take an oral steroid every day to control and prevent symptoms. Like all medications, be sure to take oral steroids as ordered by your provider.

It is important to remember that your medications were ordered for YOU. The type and amount of your medications are based upon the severity of your symptoms, age, time of year and other health problems you may have.



How To Use An Inhaler

1. Shake the inhaler real well. Stand up for administration.
2. Breathe out slowly, a little more than usual, but don't force all the air out of your lungs.
3. Tip your head back a little, and put the inhaler mouthpiece in your mouth.
    a. Be sure to hold the inhaler up straight.
    b. Be sure that your tongue and teeth don't get in the way of the mouthpiece.
4. Close your lips around the mouthpiece when you use a spacer.
5. Breathe in slowly while you squeeze the inhaler one (1) time.
6. Hold your breath for 5 to10 seconds. Take the inhaler out of your mouth and breathe out.
7. Wait 1 minute before taking another puff of the medication. Only use your inhaler for the number of times that your provider has told you to use it.
8. If it's been a while since you've used your inhaler, shake and squirt out 2 puffs to prime the device prior to using.

GENERAL CARE OF INHALER:

- Wash the plastic mouthpiece every day.
- Check the opening of mouthpiece to make sure it is clear and nothing is stuck in it. If the opening is blocked, you can clear it with a needle or pin.
- Keep the inhaler cap on when not in use.

IS YOUR INHALER EMPTY OR FULL?

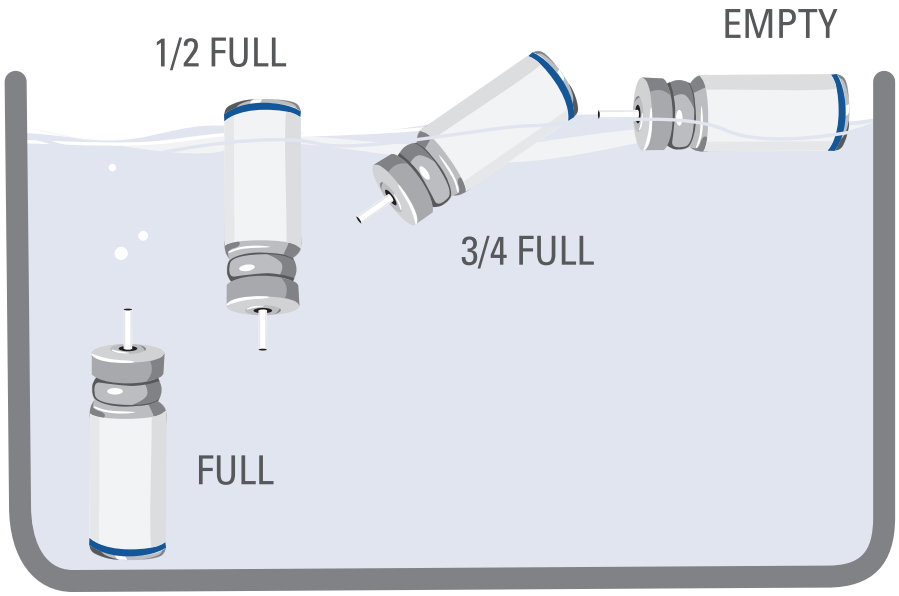
Never use an empty inhaler. There is no medication left in that mist to help you control your asthma. Here are 2 ways to check if your inhaler is empty or full.

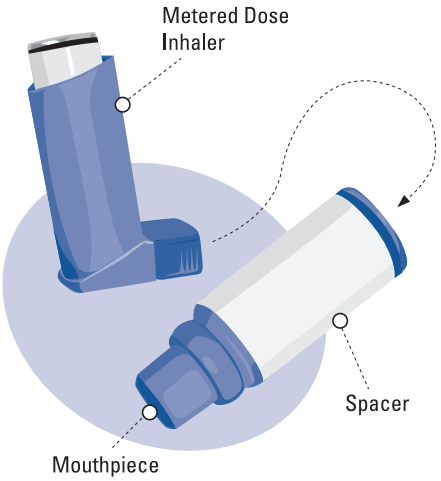
1. Place it in a bowl/sink of water. If it floats it is empty. If it sinks, it is full.
2. On the front of your inhaler are the words "metered inhalations" and a number, such as 112. This means you can use your inhaler 112 times. It is hard to keep track of how many times you use it. But if you remember when you bought it and how many times per day you are supposed to use it, you can figure out how much is left.

A bronchodilator inhaler, like Albuterol, should last for at least a month. If it doesn't, talk to your provider.

BE AWARE AND DON'T SHARE.

YOUR MEDICATION WAS PRESCRIBED FOR YOU AND ONLY YOU.





SPACER

This is a tool that is used with the metered dose inhalers. It will help you get the most out of your medication.

If you don't time your breath just right with a metered dose inhaler, you end up with medication in your mouth (where it doesn't belong) instead of in your lungs (where it does belong). The spacer keeps this from happening. It can also help get rid of the metallic taste of some medications. Spacers come in many different shapes.

Use a spacer with your inhaled steroids.

HOW TO USE A SPACER

1. Follow instructions for use of spacer. There are a number of different types. Attach the spacer to the inhaler after removing caps.
2. Shake the inhaler.
3. Stand and put mouth on mouthpiece of spacer. Release one puff of medication into the holding chamber of the spacer. Breathe slowly for about 3-5 seconds. Then hold your breath for 5-10 seconds and exhale into spacer.
4. Wait 1 minute before your next puff, shake the inhaler again and repeat.
5. Only take the number of puffs that your doctor has instructed you to take.
6. Follow the instructions on the box for keeping your spacer clean. Store in a safe place.

How To Use A Dry Powder Inhaler

WHAT IS A DRY POWDER INHALER?

Dry powder inhalers are a new form of inhaler which contains asthma medication in a powder form.

USING A DRY POWDER INHALER

1. Stand or sit up straight.
2. There are several different dry powder inhalers available. Ask your provider, pharmacist, or nurse to demonstrate how to "prime" your dry powder inhaler. Priming your inhaler prepares the medication for delivery into your lungs.
3. After you prime the inhaler, breathe all of the air out of your lungs.
4. Put the dry powder inhaler to your mouth and seal your lips on it.
5. Take a **quick** but **deep** breath. (This helps the medication get all the way into your lungs.) You will not taste or feel the medication.
6. Hold your breath for 5-10 seconds (count to ten).
7. Repeat the above steps to take the next dose (if ordered).
8. Rinse your mouth with water after you are finished using the inhaler.

OTHER IMPORTANT INFORMATION

1. Make sure that your doctor, nurse or pharmacist has shown you how to release the first dose of the dry powder inhaler.
2. Do not use with a spacer.
3. Keep the inhaler in a dry place. Do Not Wash or Get Wet.
4. Your dry powder inhaler has a "window" where you can see either the number of doses left in the inhaler, or a "window" with a pink line which tells you when there are 20 doses left.

How To Use A Nebulizer

1. Always wash your hands before and after you do any treatments.
2. Pick a comfortable place where you can put the nebulizer, and do this treatment without anyone bothering you.
3. Get your medication ready and plug the machine cord into an electric outlet.
4. Take the T-piece out of the nebulizer. Fill the nebulizer container with the exact amount of medication that your provider has decided you should use. Put the nebulizer back together.
5. Hook up the nebulizer to the tubing. Make sure the tubing is connected to the machine and then turn it on. Check and see if the medication is misting.
6. Put the mouthpiece to your mouth, or make sure the mask is securely in place.
7. Breathe in normally and deeply. Hold your breath and count 1,2. Now breathe out slowly. Do this until you have used up all of the medicine, and then turn off the machine.

8. Now you need to cough and loosen up the "junk" (mucus) in your throat. Cough up and spit out as much of this as you can. Ask the nurse or your family member to pat you on your back to help you remove the mucus.

9. Always clean the equipment when you are finished.

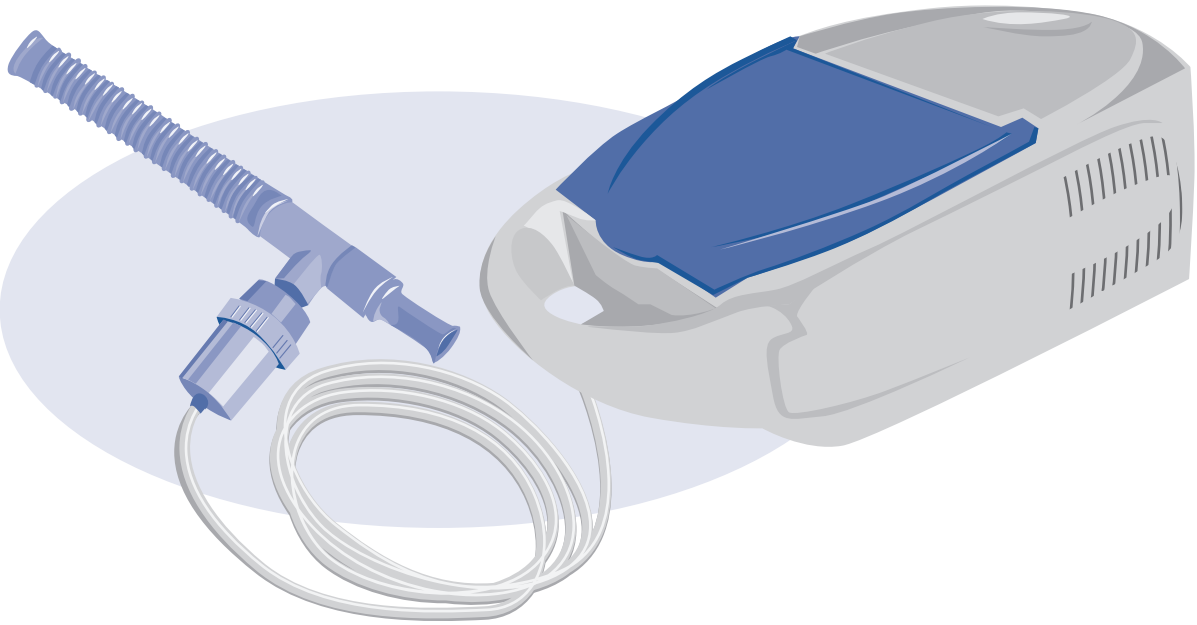
    a. Wash the pieces with warm, soapy water.

    b. Rinse everything with alcohol.

    c. Put everything in a clean place to air dry.

    d. On a regular basis, weekly or monthly, depending upon use, soak in 1 part white vinegar and 2 parts water for 30 minutes. Air dry.

10. Always wash your hands when you are finished with your treatment.



Asthma Action Plan

To avoid an emergency and a feeling of panic, you need to have a plan for when your symptoms start to get worse. Record your own "Asthma Action Plan" on the next page.

COMPLETE YOUR "ASTHMA ACTION PLAN" WITH YOUR PROVIDER

Write down the asthma medications you take every day (your control/anti-inflamatory medications) and any medications you may take before trigger exposure or exercise (your bronchodilators). This is your GREEN ZONE Plan. Add your green zone peak flow values (80-100% of your personal best).

Next, write down what your provider has told you to do if you begin to feel early asthma symptoms. This will usually include your Bronchodilator Inhaler. This is your YELLOW ZONE plan. Add your yellow zone peak flow values (50-80% of your personal best). Be sure to record how often you can take your bronchodilator before calling your provider.

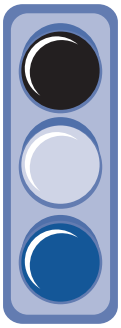
Last, write down what your provider has told you to do when your symptoms get worse, your bronchodilator does not help or your peak flow values fall into the red zone. This is your RED ZONE plan. Add your red zone peak flow values (**below 50%** of your personal best).

KEEP A COPY OF THIS PLAN ON YOUR REFRIGERATOR, AT HOME, AND WITH YOU.

Call your provider if your medication is not working and your symptoms are not improving or are getting worse. If you can not reach your provider call 911 and go to the nearest hospital emergency room immediately.

ASTHMA ACTION PLAN

Name	Date
Doctor	Medical Record #
Doctor's Office Phone Number: Day	Night/Weekend
Emergency Contact	
Doctor's Signature	



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

Green means **Go Zone!**
Use preventive medicine.

Yellow means **Caution Zone!**
Add quick-relief medicine.

Red means **Danger Zone!**
Get help from a doctor.

Personal Best Peak Flow _____

GO

You have *all* of these:
- Breathing is good
- No cough or wheeze
- Sleep through the night
- Can work and play

Peak flow from _____ to _____

CAUTION

You have *any* of these:
- First signs of a cold
- Exposure to known trigger
- Cough
- Mild wheeze
- Tight chest
- Coughing at night

Peak flow from _____ to _____

DANGER

Your asthma is getting worse fast:
- Medicine is not helping
- Breathing is hard and fast
- Nose opens wide
- Ribs show
- Can't talk well

Peak flow below _____

Use these daily preventive anti-inflammatory medicines:

MEDICINE	HOW MUCH	HOW OFTEN / WHEN

For asthma with exercise, take:

Continue with green zone medicine and add:

MEDICINE	HOW MUCH	HOW OFTEN / WHEN

CALL YOUR PRIMARY CARE PROVIDER.

Take these medicines and call your doctor now.

MEDICINE	HOW MUCH	HOW OFTEN / WHEN

Get help from a doctor now! Do not be afraid of causing a fuss.
Your doctor will want to see you right away. It's important! If you cannot contact your doctor, go directly to the emergency room. DO NOT WAIT.

Make an appointment with your primary care provider within two days of an ER visit or hospitalization.

Triggers

What Causes Your Asthma Symptoms?

Controlling triggers is an important part of your asthma management. By controlling your triggers you may be able to decrease the frequency and severity of your asthma symptoms. You may also need less medication.

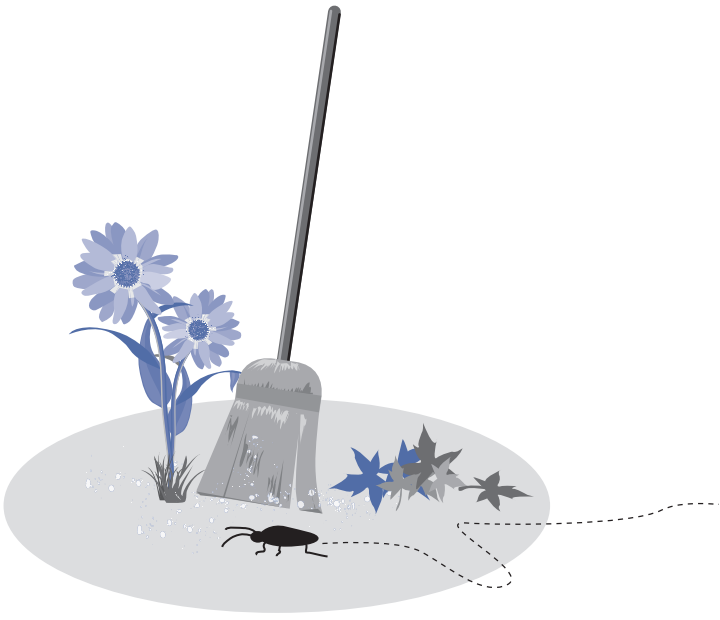
The first step to controlling your triggers is to find out what makes you wheeze, sneeze, cough or have problems breathing. The reasons for asthma are not always the same for everyone. Review your diary on pages 8 and 9.

Where were you and what were you doing before an asthma attack started?

Were you outside? Inside? At home? At the office? In school? Were you in the bedroom? Living room? Were you stressed? Upset?

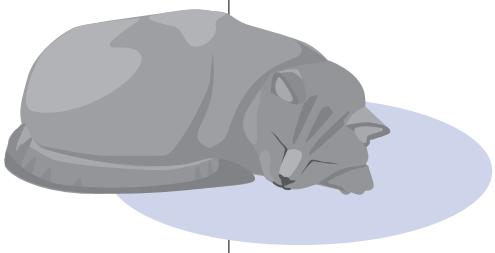
As you think about your triggers, ask yourself the questions listed on the next several pages.

Some triggers are easier to avoid or eliminate than others. Listed on the next several pages are common triggers and things to do to minimize the effect of the trigger.



COMMON TRIGGERS

TRIGGER	WHAT TO LOOK FOR	WHAT TO DO
Dust Mites	Do you have asthma symptoms during the night?	• Put mattress/pillows in "mite" proof covers. • Use washable cotton blankets. • Wash linen and bedding in VERY HOT water —130° F weekly. • Use an air filter. • Remove carpet in the bedroom. • Use synthetic washable pillows.
Dust	Do you have... • open shelves or bookcases? • knickknacks? • carpet? • visible signs of dust? • stuffed animals? • window blinds? • falling plaster?	• Store items/knickknacks behind closed doors. • Avoid bookcases in the bedroom. • Damp dust and mop. • Remove carpet (especially in bedroom). • Use a HEPA vacuum cleaner bag. • Use an air filter. • Wash stuffed animals in very hot water. • Clean upholstered furniture, draperies and blinds that gather dust. • Avoid being in the room while someone vacuums. • Avoid ceiling fans. • Clean A/C filters weekly.
Cockroaches, Mice, Rats	Do you have • visible signs of cockroaches? • a supply of cardboard boxes, newspapers, bags? • food in open containers?	• Exterminate your home regularly. • Store boxes, newspaper and bags in plastic. • Store food in closed containers. • Avoid eating in the bedroom.

TRIGGER	WHAT TO LOOK FOR	WHAT TO DO
Mold 	Do you have • visible signs of mold? • decaying plants/ dead leaves? • a humidifier?	• Clean mold off surfaces with 1:10 strength bleach solution. • Remove plants and/or dead leaves. • Do not use a humidifier. • Use a de-humidifier or an air conditioner. • Have your plumbing leaks repaired. • Use the fan or open the windows in the bathroom and kitchen. • Avoid aged cheese, beer and canned tomatoes because they may cause symptoms. • Change A/C filters frequently. • Add a mold preventative to paint.
Dander	Do you have pets that clean themselves (cats, dogs, birds)?	• Keep your pet out of the bedroom. • Bathe your pet weekly with special soap. • Remove pet from house. • Avoid using feather pillows and comforters.
Cigarette Smoke	Who smokes in your home?	 • Do not smoke inside home. • Do not smoke in bedroom. • Use an air filter. • Ask smoker to change clothes before coming in contact with asthmatic.
Odors and Fragrances	Do you have an allergy to cleaning solutions, soaps, detergents or perfumes?	• Avoid use of products with strong fragrance. • Open windows during cleaning. • Use unscented soaps and detergents. • Use air filter.

TRIGGER	WHAT TO LOOK FOR	WHAT TO DO
Pollens	Do you have asthma symptoms during the pollen season? 	• Stay inside while the pollen count is high. (Pollen is highest 5-10 am and 4-7 pm) • Keep windows closed during pollen season. • Ask your provider about allergy medications. • Wipe your pet down with a special solution to remove pollens from his fur. • Do not hang laundry outside during pollen season. • Wash pollen off hair and body at night. • Avoid window fans or set to “exhaust”. • Set intake on A/C to “closed”.
Exercise	Do you have asthma symptoms while exercising? Or after exercising?	• Ask your provider about taking a “reliever” 10-15 mins. before exercising. • Warm-up and cool-down from exercising. • Avoid exercising in cold or hot weather. • Try sports without constant activity such as baseball, golf, or volleyball. • Exercise in a climate controlled place. Try mall walking. • Swim. • Inhale through your nose. Exhale through pursed lips.

TRIGGER	WHAT TO LOOK FOR	WHAT TO DO
Weather extremes (Heat/Cold)	Do you have asthma symptoms in the cold or hot weather?	• Dress for the temperature. • Avoid exercising or over-exertion in hot humid or cold weather. • Maintain a healthy temperature in home. • Use an air conditioner. • Cover mouth with a scarf in cold weather.
Colds and Infections	Do you have any symptoms when you get a cold or ill?	• Avoid people with colds or who are sick. • Ask your provider about the flu shot. • Ask your provider about the pneumonia vaccine. • Practice healthy habits.
Food 	Do you have asthma symptoms after you eat certain foods?	• Common allergies include peanuts, eggs, strawberries, wheat, and pineapples. • Avoid foods that you are allergic to. • Read labels on food products. • Ask about the contents of prepared foods. • Talk to provider about allergy testing.
Stress 	Do you have asthma symptoms when you are stressed?	• Express your feelings. • Ask your provider about an exercise program. • Use a relaxation exercise (see page 33). • Start a hobby. • Avoid situations that stress you.

Working With Your Providers

Contacting your provider during an attack

Hopefully you can manage your attack without contacting your provider. However, this is not always possible. Do not hesitate to call your provider if you have a question about how to manage the attack or if your medications are not working.

CALL MY PROVIDER AND SAY:

1. What my symptoms are and how long they have lasted.
2. What do I think caused my symptoms.
3. What medicine I have taken. When and how much.
4. What else I have done to stop the symptoms.
5. If my medicine is working or not.
6. How I feel right now.

The list of all my medicines in case my provider asks me what I have at home.

_____

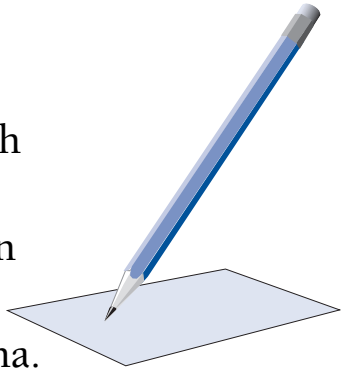
_____

_____

_____

Dial 911 if symptoms progress rapidly.

Visits to the Provider



When you visit your provider, be prepared ahead of time with any question and worries that you have about your asthma. In the space below, write down your questions. Writing down your questions and talking about them with your provider will help you and your provider to better manage your asthma.

QUESTIONS	ANSWERS

Some other questions you may want to ask your health care providers...

QUESTIONS	ANSWERS
Questions about medications • Should I receive the flu shot or the pneumonia vaccine? If so, when? • Can I take over-the-counter medicines along with my asthma meds? Is there anything I should never take? • What do I do if my medicine runs out and I have no refills? **Questions about what to do during an attack** • Who can I call after office hours for advice if I'm confused about my treatment plan, or if I'm not sure if I should go to the hospital? • Who do I discuss my care with when you (provider) are not in the office? • How often can I repeat taking my bronchodilator inhaler before seeking medical attention? • How do I get seen as an emergency in the office? Are there walk-in times/days? • Which emergency room should I go to with a severe attack? • Are there any alternatives to calling 911? • How do I know when I need an ambulance? **Questions about other resources** • Are there any special asthma programs or support groups available to me/ my child? • Should I see an allergist for testing? • Will my insurance pay for any of the "asthma proofing" supplies or equipment?	

Telephoning My Provider

When you talk to the provider on the phone, it is sometimes hard to remember all of the instructions. Use this page to write down your questions and the provider's answers.

Reasons for Calling: _____ **Date:** _____

Check (3) Physical Symptoms You Have:

____ Temperature: _____

____ Wheezing: On breathing in or breathing out?

____ Coughing: Is it hacking, sound high pitched and feel tight?
Is it loose and "junky"?

____ Tightness in chest ____ Headache

____ Nasal symptoms ____ Stomach problems

____ Decreased activity level

____ Overall appearance: _____

____ Any other symptoms: _____

What medications have been given? When? Have the medications helped at all?

_____

_____

_____

If you use a **Peak Flow Meter**, describe the peak flow numbers over the past few hours/days. Give the peak flow numbers before and after taking medications:

_____

_____

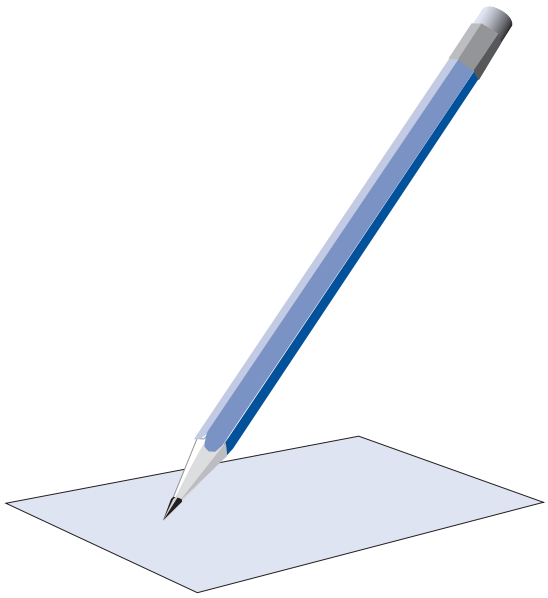
_____

What The Provider Says To Do:

_____

_____

_____



Appendix

Relaxation Techniques

When I am unhappy and upset, I sometimes have an asthma attack.

It is true that things that happen around you can upset you and cause you to have problems breathing. You may find that a relaxation exercise may help with your stress.

A Short Exercise To Help You Relax:

1. Slowly take a deep breath.
2. When your lungs are full, let the air out slowly.
3. As you breathe out, let your shoulders go limp and let your jaw and tongue relax.
4. Tell yourself that you're going to stay calm.

This won't make the thoughts in your head or your feelings go away, but it will help your body stay loose and relaxed. You can also try closing your eyes and counting to ten when you feel yourself getting anxious and upset.

Practicing Relaxation:

Write down some of the things that upset you during the next week. If you did your short relaxation exercise, tell if it helped or not.

What happened: _____

How I felt: _____

What I did: _____

Did it help: _____ Yes ? _____ No ? _____

What other ways do you have to relieve stress? Write them here:

_____

_____

_____

_____

_____

Relaxation Exercise

When you get really tense or when you go to bed at night, you might want to try to relax your whole body. You can read this exercise to yourself or ask someone in your family to read it to you.

Concentrate on your feet. Feel the bones inside your feet. Feel the muscles that move these bones. Tense your feet by curling your toes. Now relax your toes. Feel a soothing, tingling sensation that comes into your feet. Notice the difference between when they were tense and the way they are now. Now tense your legs. Point your toes and lift your legs up off the floor an inch or two. Now let your legs drop. Let all the tightness drain out.

Now tighten your fists. Clench them really hard. Now let them go limp.

Move your jaw back and forth, then let your jaw and tongue go limp.

Just lie there and imagine that you're in a warm bathtub or in a very pleasant place.

Now imagine that you're a turtle. Shrug your shoulders up towards your head, like you're going to pull your head into your shell. Feel the tension around your neck. Count to 5 and let all the tension go away...

In your mind, think about your whole body, and gently check it out. Find any part of your body that isn't fully relaxed. Take a deep breath, and as you let out the air, pretend that you are blowing the air right out through your skin where there's any tension or tightness.

Start at the top of your head. See if there's a place where tension is still hiding out. Move down your shoulders, your arms, and your chest.

Keep breathing slowly and quietly...

Imagine that you feel very warm and very comfortable, like floating on a cloud.

Let your breath flow in and out without any problem.

Imagine that you are still floating on a cloud...

Think about drifting off to sleep....

Community Resources

Here is a list that tells about places where you can find out more about asthma. There's lots of information that you can get if you want it. It's important to remember that this information can help you better manage your asthma. Most of the information is free. Check out the websites.

1. **NYC Department of Health Asthma Action Line (877)-Asthma0 / www.nys.gov**
   Learn more about how to manage asthma. Ask about asthma, events and support groups in your community.
2. **American Lung Association (212) 889-3370/ www.lungusa.org**
   The people who work here will answer questions Monday through Friday, 9:00 am to 5:00 pm. They can give you reading materials and tell you about lectures you can hear in the neighborhood where you live. They also have a "Super Stuff" educational package.
3. **Nassau-Suffolk Lung Association (516)231-5864/ www.lungusa.org**
   Associated with the American Lung Association. They'll answer questions and can give you reading material if you ask for it.
4. **Parents of Asthmatic & Allergic Children (PAAC) (212) 532-6703; (212) 255-7030 - (no website)**
   Support groups for parents with children who are asthmatic and allergic. They use doctors who are allergy specialist as leaders for their groups. Groups are available in all borough and can be very helpful for parents.
5. **Local Adult Support Group (212) 777-0486**
   Meets once a month in Manhattan. Call for more information.

6. **American Academy of Allergy & Immunology (800) 822-2762/ www.aaaai.org**
   This is a national association that has all kinds of general information and literature. You provide zip code and they will provide an allergist in your area.

7. **American College of Allergy & Immunology (800) 842-7777/ http://allergy.mcg.edu**
   Provides literature and listing of local doctors for your area.

8. **Asthma Update - No telephone number available.**
   Newsletter published quarterly; fee of $10. Write to Asthma Update, 123 Monticello Ave., Annapolis, MD 21401. This newsletter has the latest information on asthma research.

9. **Asthma & Allergy/Mothers of Asthmatics (800) 878-4403/ www.aanma.org**
   A non-profit organization focuses on parents of children with asthma. For more information, write to: National Allergy & Asthma Network, 3554 Chain Bridge Rd., Fairfax, VA 22030.

10. **National Heart, Lung & Blood Institute (301) 592-8573/ www.nlm.nih.gov**
    Guidelines for treatment publication. Write to: National Asthma Education Program, 4733 Bethesda Avenue, Suite 530, Bethesda, MD 20814.

11. **Allergy Control Products, Inc. (800) 422-DUST/ www.allergycontrol.com**
    Provides a catalog of environmental control products for the home. The catalog is free. Some products are expensive but effective. 96 Danbury Road, Ridgefield, CT 06877

12. **National Center for Complementary & Alternative Medicine / www.nccam.nih.gov/nccam**
13. **US Department of Environmental Protection / www.EPA.org**
14. **NIH Global Strategy Report / www.ginasthma.org**
15. Record other community resources below:

_____

_____

_____

_____

_____

Glossary

ADRENALIN
This is a drug that you take when you are having trouble breathing because of an allergic reaction to something. It is also called Epinephrine.

AEROSOL SPRAY
This is medicine that comes in a fine spray or mist. You breathe it directly into your lungs.

ALLERGENS
These are things that can cause you to have an allergic reaction. Some examples are: things in the air, like dust, pollen, perfume, smoke; foods you eat, like eggs, chocolate, wheat, strawberries; drugs that you might take, like aspirin, penicillin; and other things like animals., plants, too much heat, too much cold.

ALLERGY
This is what you have when you get a reaction to an allergen, like the things listed above. An allergy makes you have symptoms like sneezing, itchy eyes, runny nose, coughing, wheezing, difficult breathing.

ALVEOLI
These are tiny air sacs in your lungs. They are at the end of the bronchioles (small air tubes), and there are many of them. (See picture on page 3.) When you breathe in, they get bigger; when you breathe out, they collapse. They help oxygen get into your blood.

BECLOMETHASONE
This drug is used in the inhalant medicine called Beclovent. It helps to cut down on the swelling that happens in your lungs when you have an asthma attack.

BRONCHI OR BRONCHIAL TUBES
These are the large air tubes that lead from your trachea (wind pipe) into your lungs. You can see these in the picture on pages 2, 3 and 4. Every time you breathe, oxygen comes in and carbon dioxide goes out through these tubes.

BRONCHIOLES
These are much smaller air tubes. They are at the end of the bronchi and lead to the alveoli. You can also see these in the pictures on pages 2, 3 and 4.

BRONCHODILATOR
This is a general name for medicine that is used during an asthma attack. It helps to cut down the swelling. The bronchioles open up wider so that more air can come into your lungs. If you use a bronchodilator, like Alupent, or Ventolin, at the very beginning of an asthma attack, it works to help slow down or stop the attack.

BRONCHOSPASM
This is when the muscles in your bronchioles start to swell and tighten up. This makes it hard for air to move easily in and out of your lungs, and it feels hard to breathe. This is what happens at the beginning of an asthma attack.

CC
This is the abbreviation for cubic centimeter. It's a way to measure liquid medicine using the Metric system. You can also use a teaspoon to measure a liquid medicine, but a teaspoon and a cc are not equal amounts.

CONSTRICT OR CONSTRICTED
This is when something gets smaller, tighter, or narrower. During an asthma attack, the bronchi become constricted and cause a feeling of "tightness" in your chest, and it feels harder for you to breathe.

CONTROLLER
This is a medication that controls and prevents asthma symptoms (also known as preventive or long-term medication)

CORTICOSTEROID
This is another general name for a group of drugs or medicines that are used to reduce inflammation in your lungs caused by asthma. These drugs should only be used for maintenance of asthma, not as a bronchodilator.

DECADRON
This is also called Dexamethasone. It is an oral corticosteroid preparation given early in an episode of severe asthma to prevent progression of the inflammation.

DRUG
This is another word for medication.

INHALANT
A medicine that you can breathe in. Drugs that are inhalants work quickly.

INHALATION
Breathing in, it also means breathing medicine into your lungs using an inhaler.

INHALER
A gadget that has medicine in it that you can breathe directly into your lungs.

INJECTION
Getting your medicine in a shot at your Doctor's office, at your health clinic, or from the visiting nurse who comes to your home.

INTERVENTION
This is an action that you take to keep an asthma attack from getting worse. Taking your medicine is an intervention. Staying away from things that you are allergic to is also an intervention.

ML
This is the abbreviation for milliliter. It is another way to measure liquid medicine in the Metric system.

MUCUS
This is the thick, yellowish or greenish "junk" that you get in your nose and throat and lungs. Your body makes this stuff to protect those areas from things that are irritating, like pollen, dust and smoke.

NEBULIZER
This is a piece of equipment that turns liquid medicine into a very fine spray so that you can inhale it directly into your lungs.

PEAK FLOW METER
This a piece of equipment used to measure the amount of air in your lungs and how open or closed your airways are (See the picture on page 10). This tool is used to help you know when you are in the early stage of an asthma attack. If you know this and you take your medicine right away, you can possibly keep an attack from getting worse.

POLYESTER
Some pillows are made out of this man-made FIBERFILL foam material, instead of feathers. Many people are allergic to feather pillows, so it's a good idea for people with asthma not to sleep on feather pillows.

PREDNISONE
This is another asthma medicine. It is a cortico-steroid that is used to help cut down on the inflammation that happens during an asthma attack. It is a powerful drug, and it is only taken for a short time.

PREVENTIVE
Something preventive is what you do to help you to avoid having an asthma attack. The things listed on the pages called "Common Triggers" (see pages 25-28) are all preventive things you can do to help manage your asthma.

PROCEDURE
This is a way to do something by following certain steps in a certain way and exactly the same way every time. For example: When you use an inhaler, you follow each of the steps the way they are listed in the directions. Look at page 17 — "How To Use An Inhaler". This is a procedure.

PROVIDER
This is the person who manages your medical care (for example, your doctor, nurse practitioner or physician assistant).

RELIEVER
This is a medication that provides prompt relief of acute symptoms at the time of an attack.

SALINE
This is salt water that is sterile, which means it has no germs in it. It is often used to mix with a liquid medicine when you get ready to put it in a nebulizer.

SPACER
This is a product made to attach to a metered dose inhaler to aid in receiving medication. It improves the percentage of medication that reaches the lungs. (Many different models are available — read individual instructions.)

STEROID
This is another general name for drugs that can be taken to stop a bronchospasm or an asthma attack.

STRESS
Something that bothers you, upsets you, or causes you to worry. Different things bother different people, but stress always affects how you think, how you act, and how you feel in your body.

SYMPTOM
This is a "clue" your body gives you that something isn't just right. Some common asthma symptoms are: coughing, wheezing, itchy eyes, runny nose, and a feeling that it's hard to breathe. Symptoms tell you that it's time to take your medicine.

SYSTEMIC
Involves the entire organs of the body.

TRIGGER
Something that causes asthma symptoms, irritates your lungs.

TRACHEA
This is your windpipe. It leads from the back of your throat down into your lungs, and it is the largest airway in your body (look at the picture on page 2).

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VISITING NURSE SERVICE OF NEW YORK
1250 Broadway, New York, NY 10001
www.vnsny.org