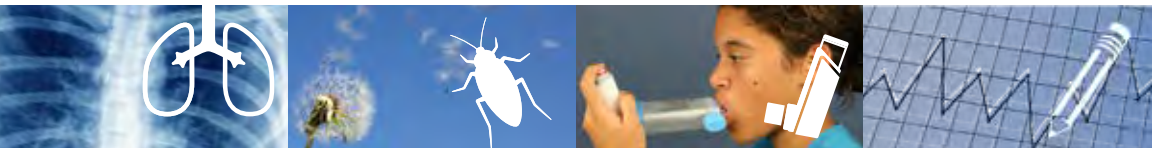
Asthma Self-Management Skills



VA/DoD Clinical Practice Guideline for Management of Asthma in Children and Adults, 2019

Contact Information

Healthcare Provider:

Name: _____

Phone Number: _____

Other Healthcare Team Members:

Name: _____

Phone Number: _____

Name: _____

Phone Number: _____

Pharmacy (Refill):

Name: _____

Phone Number: _____

Depending on your facility, your team may also include other members. Some examples are: pharmacist, counselor, exercise physiologist, respiratory therapist, asthma educator.
The content provided here is not intended to be a substitute for professional medical advice.

Always seek the advice of your qualified healthcare provider with any questions you may have regarding your healthcare.

Contents

When You Have Asthma

Asthma is a chronic lung disease causing swelling (inflammation) and constriction (tightening) of the airways. Asthma cannot be cured, but can be controlled by taking medicine and making changes in your environment.

What is Asthma?

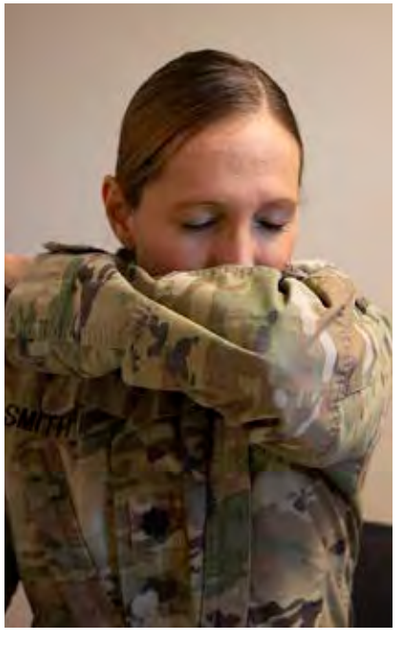
When you have asthma, the airways in your lungs are very sensitive and react to many things called triggers, which can make asthma symptoms start or get worse. When the airways react strongly to triggers, breathing may be difficult. This is called an asthma attack (episode). Asthma symptoms may come and go, but the lungs stay sensitive to the things that trigger asthma. Asthma attacks can be mild or very serious. People can die from a severe asthma attack.

The basic cause of asthma is not yet known. You can get asthma at any age, but you cannot catch asthma from other people. Sometimes more than one person in the family has asthma. It may be more common in children with allergies or eczema.

People with asthma may have a recurrent cough especially at night. They may also wheeze when breathing, become short of breath or experience chest pain or tightness. Poor control of asthma may lead to frequent emergency room visits or hospital stays.

This book provides information to help you and your family control your asthma. Here you can find information and advice on how to:

- Work closely with your healthcare team to learn how to manage your asthma
- Learn which medications you should take, when to take them and how to use inhalers and spacers
- Identify the things that bring on your asthma symptoms— your asthma triggers. Then avoid them or reduce your exposure to them
- Learn how to monitor your asthma and to recognize and respond quickly to warning signs of an asthma attack

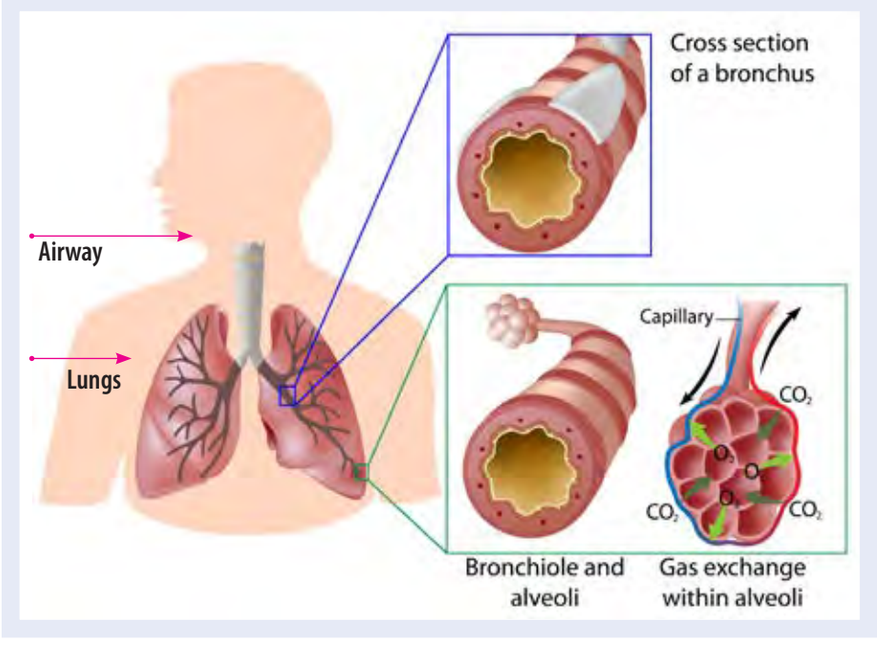


How Your Lungs Work

The lungs are very important because they bring oxygen into your body and remove other gases that the body does not need. The airways of the lungs look like an upside down tree. The large airway (bronchus) branches into smaller and smaller airways called bronchioles.

When you breathe in (inhale), air travels through your nose and mouth into your airways until it reaches the alveoli. Alveoli are tiny air sacs where the oxygen (O2) is taken into your blood. When you breathe out (exhale), your lungs remove carbon dioxide (CO2) from the body.

When asthma is under control, the airways are clear and air flows easily in and out.



How Asthma Affects Your Lungs

Asthma causes the airways to narrow so it is hard to move air through them. Air gets trapped in the alveoli. This can make it difficult to breathe. Asthma can affect the airways of the lungs in three ways. You may have only one or all three of these changes in your airway at anytime:

Inflammation

The inner lining of the airways can become inflamed and swollen, making it difficult for air to move through the lungs.

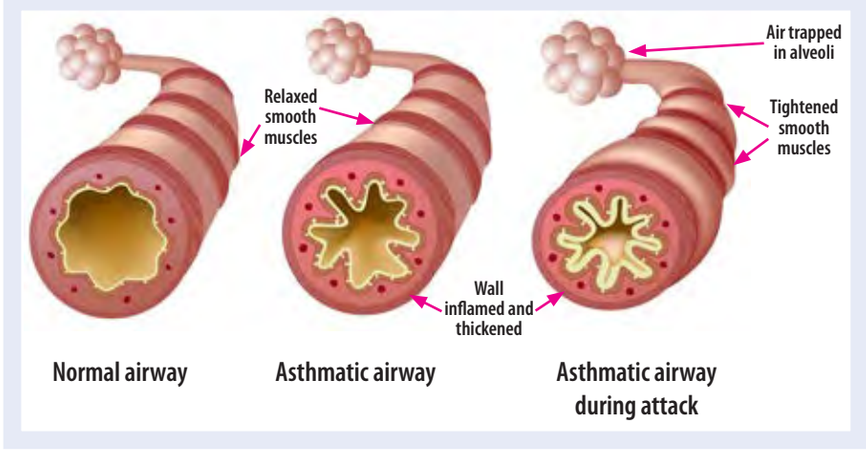
Constriction

The muscles surrounding the airways can tighten up, and narrow the airways even more.

Mucus

The inflamed lining of the airways produces lots of thick, sticky mucus, which clogs the airways making it even harder for air to get through.

The narrow airways can block the flow of air and may cause breathing problems like coughing, wheezing, chest tightness, shortness of breath or other symptoms.



What is Inflammation?

Inflammation is swelling in the airways which often occurs during an asthma attack. People with asthma can develop chronic (ongoing) inflammation that makes their airways very sensitive all the time. When exposed to asthma triggers the inflammation can increase and cause symptoms. An actual asthma attack is more likely to occur.

Your asthma will always be present even when you are feeling fine and have no symptoms. Sometimes people with asthma are so used to how they feel with chronic inflammation that they begin to think that this is "normal". They often do not "feel" their asthma until they are wheezing or having trouble breathing. Asthma can flare up at anytime. If left untreated, chronic inflammation can cause permanent damage in the airways (scar tissue) or can cause reduced lung growth in children.

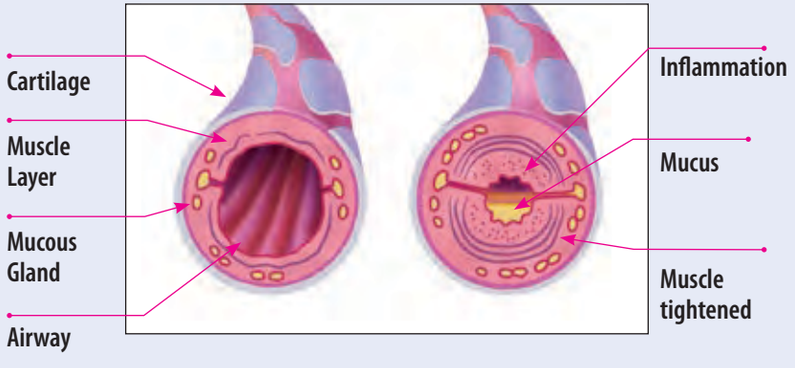
Treatment for people with asthma who have chronic inflammation includes taking anti-inflammatory medication every day to control the asthma.

You can have a normal, active life when you learn to control your asthma. When your asthma is under control, you can work, play, and go to school. You can sleep well at night and you can avoid most asthma attacks.

Most people with asthma can keep their asthma under control and live a normal active life!

- The lungs are very important because they bring oxygen into the body and remove other gases that the body does not need.
- The airways of the lungs look like an upside down tree because they branch into smaller and smaller airways.
- Asthma causes the airways of the lungs to get narrow and makes it harder to breathe.

During an Asthma Attack



Normal airway (on the left)

You are breathing well because inflammation is not present.

Asthmatic airway (on the right)

When asthma is not treated the airways become inflamed (swollen), mucus builds up and muscles around the airway become tight.

Asthma Symptoms

Most people with asthma may experience some of the following symptoms:

- **Coughing –** Sometimes coughing is your only symptom. Some people cough up mucus, or phlegm. Coughing from asthma is often worse at night or early morning, making it hard to sleep.
- **Wheezing –** You may hear a whistling or squeaky sound when you breathe. Sometimes only your healthcare provider may be able to hear it with a stethoscope.
- **Chest tightness –** This can feel like something is squeezing you or sitting on your chest making it hard to breathe.
- **Shortness of breath –** Some people say they can't catch their breath, or they feel out of breath. You may feel like you can't get enough air.

Symptoms of asthma are different for different people. The frequency and severity of asthma symptoms may vary from person to person:

Some people have symptoms only once every few months, others have symptoms every week, and still others have symptoms every day.

Asthma symptoms can sometimes be mild; other times they can be serious enough to make you stop what you are doing. Sometimes symptoms can be so serious that they are life threatening.

In a severe asthma attack, your airways can narrow so much that not enough oxygen can get into the blood. This condition is a medical emergency. **You can die from a severe asthma attack.**

With effective asthma management you can expect to have few, if any, symptoms.

You may get some warning signs before you have an asthma attack. It is important to recognize them and treat early symptoms, even if they are mild, so you can prevent a severe attack.

Early Warning Signs of Asthma:

- Breathing difficulty or feeling short of breath
- Coughing frequently, especially at night
- Feeling chest tightness
- Wheezing
- Breathing faster than normal (unable to catch your breath)
- Feeling very tired or more tired than usual
- Seeing a decrease in home peak flow measures

Dangerous Symptoms of Asthma

- Trouble talking, eating or drinking
- Can't talk or walk because of shortness of breath
- Lips or fingernails turn gray or blue
- Retractions (the muscles between the ribs are pulled in sharply)
- Feel dizzy and confused
- Breathing gets very quiet

Call 911

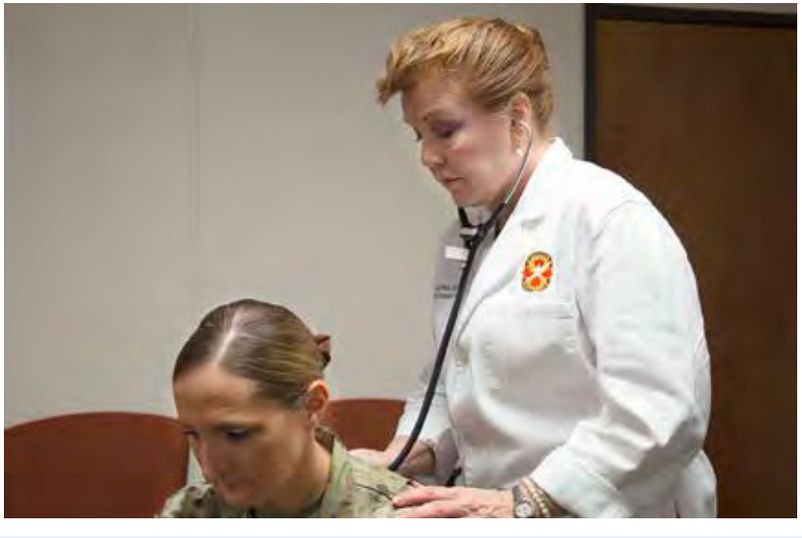
If you have any of these symptoms, call 911 or go to the Emergency Department

How Asthma Is Diagnosed?

Now that you know more about the symptoms of asthma, you can see that it is easy to confuse them with symptoms of other conditions—for example, a cold or bronchitis. Asthma can be serious. If you have a cough that won't go away or if you are often short of breath or wheeze a lot, especially at night or after being active, it's a good idea to see your healthcare provider.

Your healthcare provider will use a stethoscope to listen to your breathing and ask you questions about:

- Your symptoms such as coughing, wheezing, shortness of breath or chest tightness that come on suddenly
- When your symptoms occur
- What things seem to bring on your symptoms or make them worse
- Colds that seem to "go to the chest" or take more than 10 days to go away
- Other people in your family that have a history of asthma or allergies
- If you smoke now or in the past or if others smoke around you



When you go to see your provider always bring a list of ALL the medications (including over the counter products) you are taking for any other condition, in case one of them might affect your asthma or interact with your asthma medicine.

Lung Function Test (Spirometry)

Although patients can be diagnosed with asthma based on physical exam and symptoms, for adults and children older than age five, the provider may also use a device called a spirometer to check how well the lungs are working. All you have to do is take a deep breath in and then breathe out as hard and fast as you can into a tube that is connected to the spirometer.

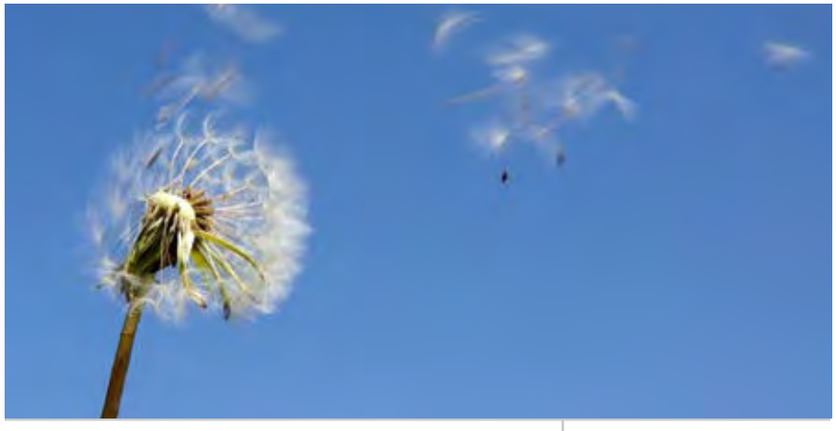
The spirometer will measure the amount and speed of the air you breathe out. The results will show if your airways are narrowed or if the muscles around your airways have tightened up. The lung function test can help to diagnose asthma, determine asthma severity and adjust management. It is important to understand that a person can have "normal" spirometry results and still have asthma.

As part of the test, your provider may give you a medicine to help relax your airways. You then will breathe out again into the tube to see if your spirometry results improve after taking the medicine.

Other Tests

The healthcare team may also suggest doing some other tests to:

- Find out if you have sensitivity (allergies) to certain allergens
- See how your airways react to exercise
- Test if you have gastroesophageal reflux disease (GERD)
- Look for sinus problems
- Check for lung or heart disease (x ray or an electrocardiogram may be ordered)



Asthma Triggers

Because you have asthma, your airways are very sensitive. They may react to things called triggers, which can make asthma symptoms start or get worse. Every person with asthma can have different triggers.

It is important to find out what your asthma triggers are and learn ways to stay away from them or to control them. Try to keep a written diary of your symptoms (including when and where they occur). Together with your healthcare team you will use your diary to identify what your asthma triggers are, and what you can do to prevent them. Knowing and managing your triggers will help you have fewer asthma symptoms and will make your asthma plan work better.

Allergens

Allergens can worsen asthma and trigger symptoms. It is important to identify the allergens that trigger your asthma and to learn how to avoid or reduce your exposure to them. In some cases, you may also need to take allergy medications.

Pollen

Pollen from plants such as trees, grasses, and weeds is a common allergen. In different seasons the pollen count outdoor is high. To decrease exposure to the pollen:

- Watch the daily local weather forecast to find out when the pollen count is high
- Stay indoors and keep windows closed on high pollen days when possible
- Use air conditioning or a dehumidifier
- Keep your furnace, air conditioner filters, and ducts clean and use quality filters
- After being outside, shower and change clothing

Mold

Mold can grow inside your house in humid areas, such as bathrooms.

- Keep damp areas clean to avoid mold growth (damp basements or closets)
- Fix leaky faucets, pipes or other sources of water that have mold around them
- Use bleach or mold-remover to clean mold and mildew
- Avoid using humidifiers or vaporizers

Animal Dander

Animals with fur or feathers, including dogs, cats, birds, and rodents, can make some people's asthma worse. If you are allergic to pets, you should not have a pet or keep them outdoors if possible.

However, if you decide to keep an animal:

- Keep animals out of your bedroom, and other sleeping areas at all times and keep the door closed
- Keep animals away from fabric-covered furniture and carpets
- Wash and brush pets weekly
- Wash your hands after playing with a pet

Dust/Dust Mites

Exposure to dust mites can cause asthma or asthma symptoms. Dust mites are microscopic insects that are found in every home. They live in warm humid environments like mattresses, fabric-covered furniture, pillows, curtains, stuffed animals, and carpets. They are found everywhere humans and warm-blooded animals live.

To decrease exposure to dust and dust mites:

- Vacuum at least once a week
- Dust often with a damp cloth or mop
- Use HEPA filters in vacuum cleaners and heating, ventilation and air conditioning systems. Change the filters on a regular basis
- Avoid heavy curtains, mini-blinds, carpeting, and upholstered furniture that collect dust

Keep the bedroom and sleeping areas "dust free".

- Cover pillows, mattresses, and box springs with allergen-proof cases
- Wash sheets and pillow cases every week
- Decrease the number of stuffed animals in the bedroom and wash them weekly
- Wash blankets and comforters every two weeks

Cockroach Allergen

Cockroaches are found in all types of neighborhoods. They produce allergens and leave droppings that can trigger an asthma attack.

To get rid of cockroaches:

- Keep food in closed, tight-lidded containers. Never leave out food or dirty dishes
- Do not leave out pet food or dirty food bowls
- Keep floors and counter tops clean
- Throw out garbage and remove recyclables from your home frequently
- Fix leaky pipes and faucets promptly
- Plug up holes around the house where cockroaches can enter
- Use roach baits if you notice roaches in your home, or call an exterminator

Irritants

Smoke

Tobacco smoke irritates the airways and over time can cause permanent damage to the lungs.

- If you smoke, quit!
- Do not allow smoking in your home or car
- Avoid fireplaces, wood-burning stoves, open fires and kerosene heaters

Chemicals, Strong Odors and Pollution

Chemicals and strong odors can be irritating to the airways and trigger asthma symptoms.

- Avoid paints, incense, vaping, strong cleaning products, perfumes, hair sprays, room deodorizers, scented candles or other sources of strong smells
- Use odor free products and liquids instead of aerosols
- Keep areas well ventilated when using chemicals
- Keep track of the daily local air quality index

Other Triggers

Strong Emotions

Emotions and stress that come with feeling upset or excited can change your breathing and trigger asthma symptoms. Bursts of crying or laughing may trigger asthma.

- Ask your healthcare team to teach you relaxing breathing techniques to help manage strong emotions
- Consider speaking with a behavioral health professional

Changes in Temperature and Humidity

Extreme weather conditions, such as very cold air or high humidity can be a trigger for people with asthma.

- Dress appropriately for the weather. Wear a scarf or mask over your mouth and nose in cold weather to warm the air as it enters your airways
- Limit outdoor exposure during weather changes when possible
- Keep windows closed and use air conditioning when humidity levels are high

Colds and Respiratory Infections

Colds and other upper respiratory infections are common asthma triggers.

To reduce colds and other upper respiratory diseases:

- Get a flu vaccine **every year**
- Avoid contact with people who have a cold or the flu
- Wash your hands frequently or use an anti-microbial hand sanitizer
- When sick, be sure to follow your Asthma Action Plan, rest, and drink plenty of fluids
- Talk with your healthcare provider before taking over-the-counter cold medicines such as antihistamines and cough syrup

Gastroesophageal Reflux Disease (GERD)

The symptoms of reflux (e.g., heartburn) are common in both children and adults who have asthma. Reflux during sleep can contribute to nighttime asthma symptoms.

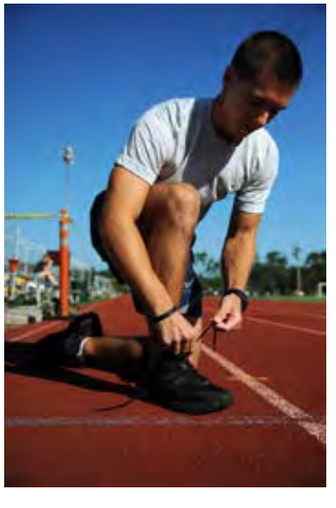
To decrease GERD signs and symptoms:

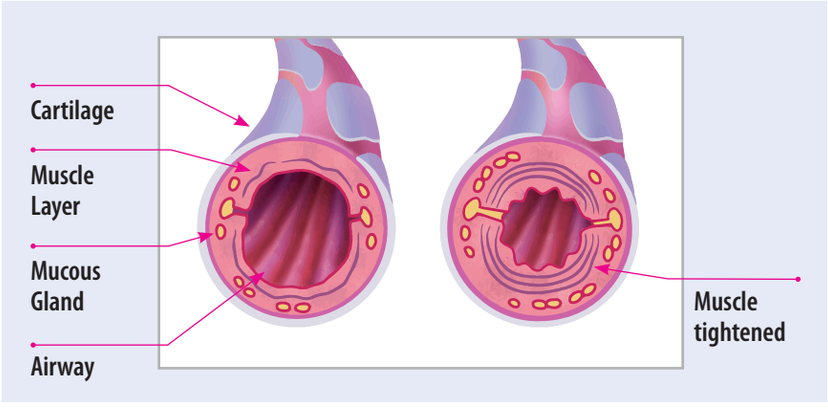
- Avoid heavy meals, foods and drinks that cause reflux
- Avoid eating and drinking 3-4 hours before going to bed
- Elevate the head of the bed
- Follow your healthcare provider's instructions for treatment of GERD

Exercise

Physical activity can trigger symptoms in most people with asthma. Symptoms may occur either during or right after being active. However, regular physical activity is good for everyone. In fact, healthcare providers recommend that most people, including people with asthma, get at least 30 minutes of moderate physical activity most days of the week. Most people with asthma should be able to participate in any physical activity they like without having asthma symptoms.

- Ask your provider about using medication before exercise. Using before exercising can prevent and control symptoms
- Tell your provider if you are having symptoms during or after exercise and ask about ways to control these symptoms
- Always warm-up before exercise





Exercise Induced Bronchospasm

Exercise can also cause symptoms similar to asthma in those who do not have asthma – it is called Exercise Induced Bronchospasm (EIB). EIB is diagnosed with special testing. Symptoms can occur during or after exercise and are treated with quick-relief (rescue) medication.

Preventing or Reducing Exercise Induced Bronchospasm (EIB):

- Drink plenty of water before and during exercise
- Warm up and cool down before strenuous exercise
- Avoid exercising outside in cold, dry air, or when there is a sudden change in temperature or humidity
- Take medication prior to exercise to prevent symptoms
- Have your quick-relief (rescue) inhaler available at all times

Asthma Treatment

You can control your asthma and avoid an attack by taking medicine and by avoiding things (triggers) that can cause an attack. You can control your asthma and live a healthy, active life with few or no asthma symptoms.

Asthma Medicines

Asthma medicines come in two kinds — quick-relief (rescue) and long-term controller medicines:

Quick-relief (Rescue) medicines can relieve the symptoms during the asthma attack. You take the quick-relief inhaler only "as needed" for asthma symptoms. If you need to use your quick-relief medicines more and more because of symptoms (rather than pre-exercise), you should visit your healthcare provider to see if you need a different medicine.

Long-term Controller medicines reduce the inflammation (swelling) of the airways and will keep your asthma under control so you will have fewer and milder attacks. A long term controller will not help you if you're having an asthma attack. You take a long-term controller medicine every day, even when you are feeling well. Untreated **chronic inflammation may cause permanent damage in the airways.**

Not everyone with asthma takes the same medicine. Some medicines can be inhaled, or breathed in, and some can be taken as a pill or tablet. You should only take medicine exactly as your healthcare provider tells you to do.

Quick-relief (Rescue) medicine - relaxes the muscles of your airway during an asthma attack, to let air flow in and out

Long-term Controller medicine - reduces the inflammation (swelling) of the airways and helps keep your asthma under control

Quick-Relief (Rescue) Medications

A rescue medication works fast to stop the symptoms of an asthma attack after it has started. Everyone with asthma needs a **quick-relief or rescue medicine** available to stop asthma symptoms before they get worse. You should use your rescue medicine only "as needed". The rescue medicine acts quickly to relax the muscles in your airways and helps you breathe better. If you are taking your **daily controller medicine** as prescribed you would not need to use your rescue medicine very often**.** An inhaled short-acting bronchodilator (for example, albuterol) is the preferred quick-relief medicine.

- Your healthcare provider may recommend that you take the rescue medicine at other times as well—for example, before exercise, sports or physical activity
- If you need your quick-relief medicine frequently it is a sign of poorly controlled asthma. Tell your healthcare provider if you are using your quick-relief inhaler more than twice a week during the day, or more than twice a month during the night

Quick-Relief

- Take your quick-relief medicine by inhaling it (breathing in) using a spacer with a metered dose inhaler (MDI)
- Take your rescue medicine at the first sign of any asthma symptom (such as coughing or wheezing)
- You should use your rescue medicines only "as needed" and follow the instructions in your Asthma Action Plan

Long-term Controller Medications

Controller medications (anti-inflammatory) help prevent the symptoms of asthma from happening. The best way to prevent or reduce airway inflammation (swelling) and decrease the amount of mucus in the lungs is to take your controller medication every day, even if you feel well. The anti-inflammatory medicines use corticosteroids (for example, fluticasone, budesonide and mometasone). They work more slowly than quick-relief medicines, and it may take time before you feel their positive effect.

Many people are concerned when they hear the word steroid. However, inhaled corticosteroids are safe when taken as directed. Inhaled corticosteroids use a very small amount of steroid that is inhaled directly into the lungs where it is needed. To avoid any side effects always use a spacer with steroid metered-dose inhalers and rinse your mouth with water and spit it out after using any inhaled steroid. Parents should use a clean damp cloth to clean their child's face and wipe inside their mouth when a mask is used.

Inhaled Corticosteroids

- Help reduce swelling and inflammation of the airways
- Must be taken every day for the medication to work
- Must be taken even when you are feeling fine

Rinse your mouth with water and spit it out after each use

Other Asthma Medications

- Other medicines available to treat asthma are long-acting bronchodilators combined with inhaled corticosteroids. These medicines should not be used for quick relief to treat an asthma attack.
- Leukotriene modifiers (for example: montelucast), are another kind of anti-inflammatory medicines that are sometimes used along with an inhaled corticosteroid to control asthma. These medicines block the effects of leukotriene, a substance that can increase airway inflammation in people with asthma and can also be used for patients with exercise-induced asthma prior to exertion.

Oral Steroids

Oral steroids are strong anti-inflammatory medicines (for example, prednisone). Some people may have a severe asthma attack that will not respond to quick-relief medicines alone. Oral steroids will then be prescribed for a short period of time to reverse the inflammation. These medications are taken by mouth in a pill or liquid form. You should take oral steroids only according to your provider's instructions in your Asthma Action Plan.

Other Medical Treatments

- Antibiotics are not recommended for either routine or emergency treatment of asthma
- There are new medicines, devices and delivery systems that are being developed. You should consult with your healthcare provider before changing your medicines
- Check with your healthcare provider before taking other medications or nutritional supplements. Always take the medications your provider prescribed and do not replace them with other supplements or therapies
- You should check with your healthcare provider about a pneumococcal (pneumonia) vaccine and annual influenza (flu) vaccine

How to Take Your Medicine

Most asthma medicines—both quick-relief and long-term controller medicines—come as sprays or powders in an inhaler. An inhaler is a hand-held device that delivers the medication right to the airways in your lungs, where it is needed. There are several kinds of inhalers:

Metered dose inhaler (MDI)

The MDI is a small canister that delivers a measured dose of medicine as you take a slow breath in. The MDI should always be used with a spacer or "valved holding chamber" that allows more of the medicine to get into the airways.

Children or adults who are not able to breathe in slowly and hold their breath should use a mask with the spacer and inhaler.

Dry powder inhaler (DPI)

The DPI is a device that delivers dry powder medication into the airways. DPIs deliver a fine powder to the airways when you breathe in. You must inhale more forcefully with a DPI than with an MDI. Do not use spacers with DPIs.

Nebulizer

People who cannot use a MDI with a spacer or a DPI may be given medication via a nebulizer which provides medicine in an aerosol mist.

No matter what type of medicine you take, it is important you know how to take it correctly. Your healthcare team will give you instructions and train you how to take your specific medicine.

Using a MDI with a Spacer (without a mask):

Image 1:

Shake the inhaler to mix the medication properly. Remove the cap from the inhaler mouthpiece, check that the opening is clear and connect the inhaler to the spacer.

Image 2:

Remove the cap from the spacer mouthpiece.

Sit up straight and breathe out away from the spacer.

Image 3:

Put the mouthpiece in your mouth between your teeth and close your lips around it. Press the inhaler ONCE to put one puff of medicine into the spacer. Never do two puffs at the same time.

Image 4:

Slowly breathe in as deeply as you can. Slow your breathing down if you hear a whistling sound in the spacer.

Hold your breath for ten seconds. This allows the medication time to deposit into the airways.

Remove the mouthpiece from your mouth and breathe out slowly.

If you need to take a second puff,
WAIT ONE MINUTE
and then repeat steps 2- 4

Image 5:

Remember to rinse your mouth with water and spit the water out after using your controller/corticosteroid inhaler. Rinsing is not required with albuterol inhaler.

Image 6:

Clean your spacer weekly – see the instructions that come with the device.

Using a MDI with a Spacer and a Mask (usually for infants and young children):

Infants, children or adults who are not able to breathe in slowly and hold their breath should use a mask with the spacer and inhaler. A child should be in an upright position and as calm as possible.

Image 1:

Shake the inhaler to mix the medication properly. Remove the cap from the inhaler mouthpiece, check that the opening is clear.

Image 2:

Connect the inhaler to the spacer with the mask.

Image 3:

Hold the mask to the face so that both the nose and mouth are covered. It is important to create a good seal between the face and mask so that all medication will be delivered to the airways.

Image 4:

Press the inhaler once to put one puff of the medicine into the spacer. Never do two puffs at the same time.

Image 5:

Instruct the child to breathe in and out normally for 5-6 breaths.

Do not remove the mask until the sixth breath is complete.

If the child needs to take a second puff,
WAIT ONE MINUTE
and then repeat steps 2- 5

Image 6:

Remove the mask from the child's face.

Image 7:

Have child rinse mouth with water and spit and wipe the child's face and mouth with a clean damp cloth after using a steroid inhaler.

Using a Dry Powder Inhaler (DPI):

DPIs are only used by people who are able to breathe in quickly and deeply. Do not use a DPI with a spacer. Follow the medication package direction or your provider instructions on how to use and how often to take. The following images are one example of a DPI).

Image 1:

Slide the cover to open the mouthpiece.

Image 2:

Hold the DPI in a level position – DO NOT tilt.

Image 3:

Slide the lever away from you as far as it will go.

Image 4:

Turn your head and breathe out normally.

Image 5:

Place the mouthpiece into your mouth, while keeping it leveled. Breathe in (inhale) FAST and DEEP once.

Image 6:

Remove the DPI from your mouth. Hold your breath for 10 seconds. Turn your head and breathe out slowly (not through the DPI).

Image 7:

Close the cover mouthpiece.

Image 8:

Rinse your mouth with water and spit after using your the DPI.

ALWAYS:

- Carry your quick-relief medications with you at all times
- Use your rescue medication inhaler with your spacer, with or without a mask
- Take your controller medication every day, even when you are feeling fine

Dose Counters

- Most MDIs and DPIs have counters on their devices that will tell you how many doses of medication are left
- If your device has no counter, you can place a label on the outside of the inhaler and mark it each time you use the inhaler
- Do not shake, spray, or float the inhaler in water to see if there is any medication in your device
- When the counter on your MDI or DPI shows 0 it is empty and you must get a new device
- Always replace your device before it is empty. You may not realize that your device is empty unless you check the counter. An aerosol spray may still come out of an empty MDI; and an empty DPI may still click open
- Plan ahead. Remember to refill your prescriptions. Make a note on your calendar to order the next refill before the medicine is due to run out

How to Remember To Take Your Medication

It is important to remember to take your controller medication every day. Here are some ideas:

- Keep your medicine on the night stand next to your side of the bed
- Take your asthma medicine before you brush your teeth and keep it with your toothbrush as a reminder
- Put "sticky" notes in visible places , for example on the bathroom mirror, on the refrigerator, on the kitchen cabinet
- Set up a reminder on the computer (such as calendar, alarm, e-mail) or consider an app if you have a smartphone to help remember to take your medicine every day.
- Set up an alarm on your watch or cell phone to beep and remind you to take your medicine

Keep a list of your asthma medicines.
See page 43 for a form to use.

Monitoring Your Asthma

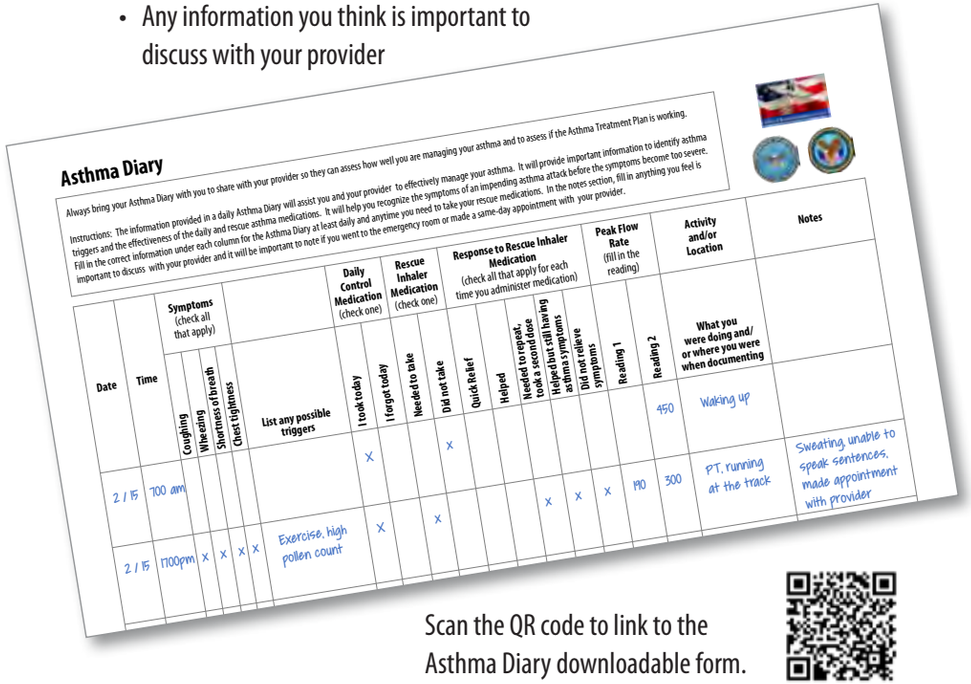
Monitoring your asthma on a regular basis will help you keep it under control. Writing down your symptoms and what action you took when you had them will help you and your healthcare team adjust your treatment over time.

Asthma Diary

Monitoring your asthma is important. Tracking symptoms and noticing patterns will help you to predict and prevent attacks. One way to monitor your asthma is to keep a daily asthma diary or notebook. Tracking where you were and what you were doing when you had symptoms may help you and your healthcare team identify your asthma triggers. This information can also help determine if you need an adjustment in your asthma medications.

What to Track in Your Asthma Diary:

- Symptoms such as coughing, wheezing, shortness of breath or chest tightness
- When and where the symptoms occurred as well as exposure to possible triggers
- When you took your daily control medications (or when you forgot to take it)
- When you needed to take your rescue inhaler
- How you responded to treatment
- If you were instructed by your provider to use a peak flow meter, record your peak flow numbers in your diary
- Any information you think is important to discuss with your provider



Asthma Diary

Always bring your Asthma Diary with you to share with your provider so they can assess how well you are managing your asthma and to assess if the Asthma Treatment Plan is working.

Instructions: The information provided in a daily Asthma Diary will assist you and your provider to effectively manage your asthma. It will provide important information to identify asthma triggers and the effectiveness of the daily and rescue asthma medications. It will help you recognize the symptoms of an impending asthma attack before the symptoms become too severe. Fill in the correct information under each column for the Asthma Diary at least daily and anytime you need to take your rescue medications. In the notes section, fill in anything you feel is important to discuss with your provider and it will be important to note if you went to the emergency room or made a same-day appointment with your provider.

Date	Time	Symptoms (check all that apply)				List any possible triggers	Daily Control Medication (check one)		Rescue Inhaler Medication (check one)		Response to Rescue Inhaler Medication (check all that apply for each time you administer medication)					Peak Flow Rate (fill in the reading)		Activity and/or Location	Notes
		Coughing	Wheezing	Shortness of breath	Chest tightness		I took today	I forgot today	Needed to take	Did not take	Quick Relief	Helped	Needed to repeat, took a second dose	Helped but still having asthma symptoms	Did not relieve symptoms	Reading 1	Reading 2	What you were doing and/or where you were when documenting	
2/15	700 am						X			X							450	Waking up	
2/15	1100pm	X	X	X	X	Exercise, high pollen count	X			X				X	X	X	190	300	PT, running at the track	Sweating, unable to speak sentences, made appointment with provider

Scan the QR code to link to the Asthma Diary downloadable form.

Monitor Breathing with a Peak Flow Meter

Monitoring the air flow in the airways may be helpful for some people with asthma. The peak flow meter measures how fast you can blow air out. These measures will sometimes drop before signs/symptoms of asthma are noticed. Therefore you must determine your personal best measure. Your personal best is the number you get when feeling well. The best way to determine your personal best is to check your peak flow readings twice a day for 2 to 3 weeks when not having any signs or symptoms of asthma.

If your provider wants you to use a peak flow meter as part of monitoring your asthma, write down the numbers in your diary. Bring your meter and diary to all asthma appointments.

Using The Peak Flow Meter

1. You should stand up unless your provider instructs you to sit.
2. Slide the meter indicator to the
3. Take a deep breath
4. Close your lips tightly around th flow mouthpiece
5. Blow out as hard and fast as you
6. Check the number and write it d
7. Slide the meter marker back to t bottom and repeat the test 2 mo times
8. Record the best of the three numbers in your peak flow chart/diary
9. Always use the same peak flow meter each time you do the test

Asthma Action Plan

Your healthcare team will work with you to develop a plan to manage your asthma. The Asthma Action Plan directs you on how to monitor your asthma daily and manage the symptoms when they occur. If you follow the plan, you can keep the symptoms from getting worse and avoid going to the emergency room.

The action plan is not a substitute for routine follow-up care from your provider or for emergency care for a serious asthma attack.

The asthma action plan is arranged in zones with the colors of a traffic light (green, yellow and red). The green zone is where you want to be all the time. If you start to have symptoms, you are now in the yellow zone. The Action Plan will tell you what to do. If your symptoms do not improve you will be in the red zone and should follow the steps of your asthma action plan for the red zone. You will work with your healthcare provider to determine your individual zones and what actions to take in each zone.

- **Green zone – Symptom free**
- **Yellow zone – Mild to moderate symptoms**
- **Red zone – Severe symptoms**

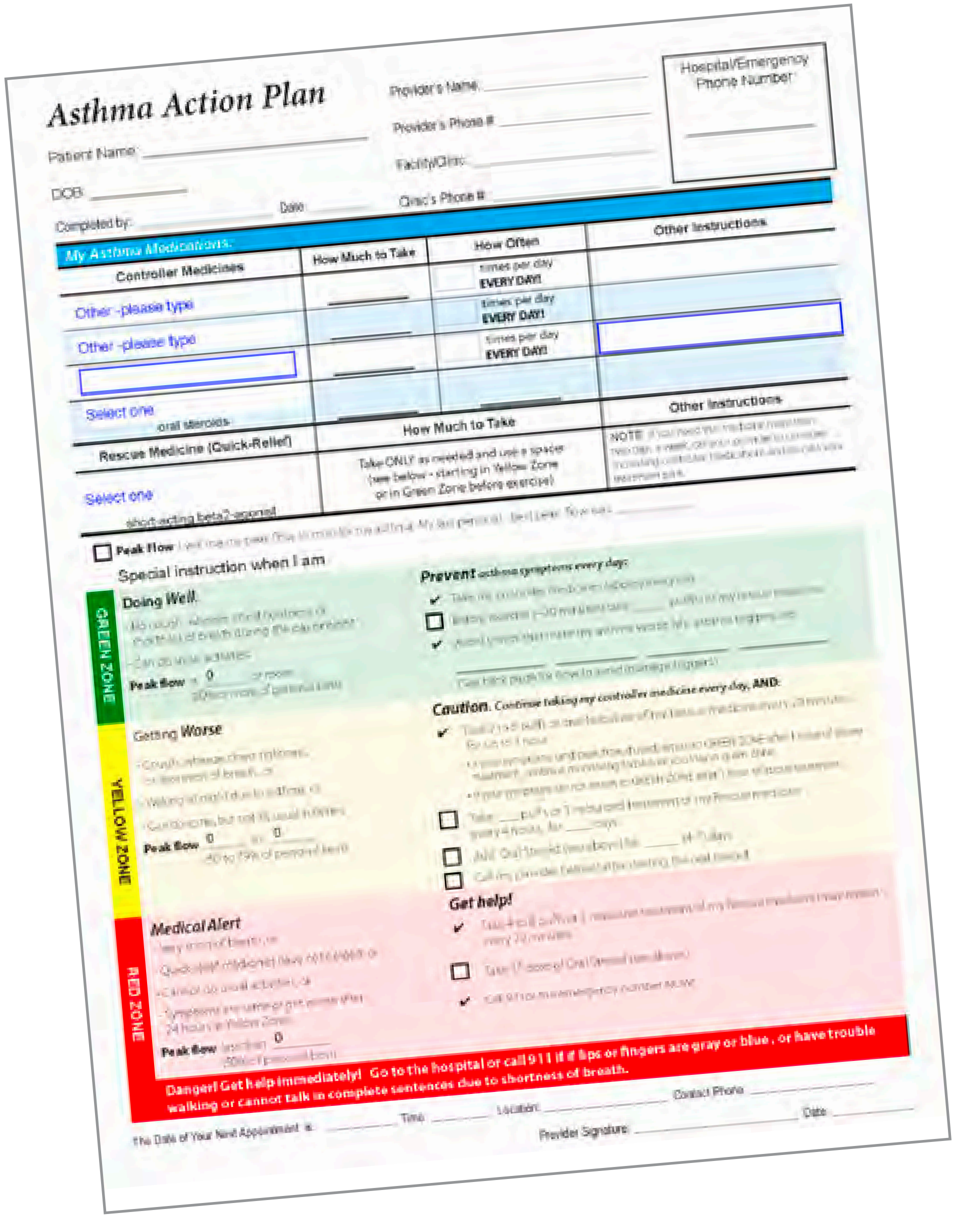
Is Your Asthma in Control?

Ask yourself three questions:

1. Do you have symptoms during the day more than 2 days a week?
2. Do you wake up at night with symptoms more than 2 times a month?
3. Do you use your rescue inhaler more than 2 times a week [other than before exercise]?

If you answer "Yes" to any of the questions, your asthma may not be controlled as well as it could be. Talk to your healthcare team. You may need to adjust your treatment plan.

Sample Asthma Action Plan


Asthma Action Plan

Patient Name:

DOB:

Completed by:

Date:

Provider's Name:

Provider's Phone #

Facility/Clinic:

Clinic's Phone #

Hospital/Emergency Phone Number

My Asthma Medications:	How Much to Take	How Often	Other Instructions
Controller Medicines		times per day EVERY DAY!	
Other -please type		times per day EVERY DAY!	
Other -please type		times per day EVERY DAY!	
Select one oral steroids			

Rescue Medicine (Quick-Relief)	How Much to Take	Other Instructions
Select one short-acting beta2-agonist	Take ONLY as needed and use a spacer (see below - starting in Yellow Zone or in Green Zone before exercise)	NOTE:

Peak Flow

Special instruction when I am

GREEN ZONE: Doing Well. Peak flow

Prevent asthma symptoms every day:

YELLOW ZONE: Getting Worse. Peak flow

Caution. Continue taking my controller medicine every day, AND:

RED ZONE: Medical Alert. Peak flow

Get help!

Danger! Get help immediately! Go to the hospital or call 911 if if lips or fingers are gray or blue, or have trouble walking or cannot talk in complete sentences due to shortness of breath.

The Date of Your Next Appointment is: Time: Location: Contact Phone: Provider Signature: Date:

Scan the QR code to link to the Asthma Action Plan form.

GREEN ZONE (Doing Well) :

Your asthma is controlled! You are not having any asthma symptoms and can do all of your daily activities. If measured, your peak flow is more than 80% of personal best. Continue to take your daily controller medicine to keep your asthma controlled. Green zone is always the goal of asthma management.

DO NOT STOP TAKING DAILY CONTROL MEDICATIONS JUST BECAUSE YOU ARE FEELING WELL.

YELLOW (Getting Worse):

You are having mild to moderate symptoms or have some warning signs that your asthma will be flaring up. Symptoms can include frequent coughing, wheezing, feeling short of breath or tightness in your chest. If measured, your peak flow is **between 50% and 80%** of personal best. Follow the directions in the yellow zone at the first sign of asthma symptoms. If your symptoms do not improve, call or visit your healthcare provider.

RED (Medical Alert) :

This is a sign of a severe asthma attack and an emergency! Symptoms may include difficulty breathing, trouble walking or talking, rapid breathing, chest retractions (in infants) and lips turning blue. If measured, your peak flow is less than 50% . Follow the directions for the red zone and call 911.

Share Your Asthma Action Plan With:

- Day care/school nurse
- After school programs, coaches, at sleepovers, and with anybody who takes care of your child
- Family members, friends, co-workers

Living well with Asthma

Asthma Management Goals

Agreeing on your treatment goals is key to the partnership with your healthcare team. You may have special personal goals as well. Perhaps you like to travel, or one of your goals is to be able to play sports without having to worry about your asthma. Take a look at the following list of asthma treatment goals and add your own goals to it. Show this list to your healthcare team.

My Asthma Treatment Goals

- Few, if any, asthma symptoms
- No waking up during the night because of asthma symptoms
- No need to take time off from school or work due to asthma
- No limits on full participation in physical activities
- No emergency department visits or stays in the hospital
- Few or no side effects from asthma medicines
- Keep normal (or near normal) lung function – lungs that work well
- Be satisfied with your asthma care
- My personal goals:

_____

_____

Establishing Good, Clear Communication With Your Provider

- Partnering with your healthcare provider means staying in close touch with him or her. If your medicines work well, you should plan on checking in again within the next 3–6 months. If not, call to schedule another visit right away
- Each visit with your healthcare provider is an opportunity for you to confirm that you are doing the right things to manage your asthma and to learn about new things that may improve your asthma control
- To make sure you get the most out of each visit, if used, bring your asthma diary, peak flow meter, a record of your peak flow measures, your inhaler and spacer, and all prescribed and other medications and nutritional supplements
- Speak up. Tell your provider about your asthma treatment goals and what you want to achieve with improved asthma management. Ask your healthcare provider for help in achieving those goals
- When your provider asks you questions, answer as honestly and completely as you can. Briefly describe your symptoms, when each symptom started, how often it happens, and whether it has been getting worse
- If you don't understand something, ask the provider for a simple explanation. You may want to ask that they write down the instructions for you. Be especially sure that you understand how to take any medicines you are given

Partnership With Your Healthcare Team

Asthma is a complex condition, and managing it can require some real know-how. In the previous sections your learned what you need to know to manage your asthma. Now you and your healthcare team can work together to put this information into action.

Based on your treatment goals, as well as your medical history and test results, you and your provider can start working on a written asthma action plan that is tailored to help you make asthma management part of your daily routine.

This plan should provide you with step-by-step information about each of the following topics:

- Medications: Names, how much you need to take and when you need to take them
- What your specific asthma triggers are and how to avoid them
- If peak flow monitoring will be helpful, how and when to use a peak flow meter to monitor your asthma
- How to recognize when your asthma is getting worse
- What to do if your asthma is getting worse
- How to recognize an emergency and what to do, and who to call

My Asthma Triggers Are:

(Things that Make my Asthma Worse)

My Asthma Medication(s) Are:

Things to Ask or Share with My Healthcare Provider at My Next Appointment:

Spirometry and other tests: _____

Triggers: _____

Medications: _____

Symptoms: _____

Asthma Action Plan: _____

Immunization: _____

My next appointment: _____

This edition of the "Self-Management Skills for the Person with Asthma" is based on the VA/DoD Clinical Practice Guideline for Management of Asthma in Children and Adults, revised in 2019. The guideline includes evidence-based recommendations for diagnosis and management of patients with asthma.

The full text of the Guideline can be found at:

https://www.qmo.amedd.army.mil or http://www.healthquality.va.gov

Scan a QR code below with your smartphone for additional resources.

Primary Care Management of Asthma Clinical Practice Guideline

Asthma Diary Downloadable Form

Asthma Action Plan