

Asthma Symptoms, Treatment, Health Management and Activities™

My ASTHMA Care Book



ada Asthma and Allergy Foundation of America

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Asthma and Allergy Foundation of America (AAFA)

Founded in 1953, AAFA is the oldest and largest non-profit patient organization dedicated to saving lives and reducing the burden of disease for people with asthma, allergies, and related conditions through research, education, advocacy, and support. AAFA offers extensive support for individuals and families affected by asthma and allergic diseases, such as food allergies and atopic dermatitis (eczema).

Through its online patient support communities, network of local chapters, and affiliated support groups, AAFA empowers patients and their families by providing practical, evidence-based information and community programs and services. AAFA is the only asthma and allergy patient advocacy group that is certified to meet the standards of excellence set by the National Health Council. AAFA also helps consumers identify products for a healthier home through its **asthma & allergy friendly**[®] Certification Program. For more information, visit **aafa.org**.

ASTHMA Care for Adults

ASTHMA (Asthma Symptoms, Treatment, Health Management and Activities[™]) Care for Adults is an interactive curriculum to help adults manage their asthma. It covers asthma basics, recognizing symptoms and triggers, asthma action plans, and an overview of different types of asthma medicines. ASTHMA Care is available as a free online course for adults with asthma at **aafa.org/asthmacare**.

How to Use My ASTHMA Care Book

This book is to help you follow along during your ASTHMA Care lessons. It has information and handouts to help you better manage your asthma. Bring this book to every lesson and use it to take notes. You can also take the book with you to your next doctor's appointment to discuss ways you can keep your asthma well-controlled.

Centers for Disease Control and Prevention

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ASTHMA BASICS





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LESSON	
	ASTHMA BASICS
	MY ASTHMA CARE BOOK NOTES

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Learning Objectives

By the end of this lesson, you will be able to:

- Define asthma
- Recognize three signs or symptoms of asthma
- Recall one reason why learning how to manage asthma is important
- Understand asthma control and levels of asthma
- List four asthma control goals
- Set a personal goal for your asthma management

What Is Asthma?

Asthma is a chronic (long-term) lung disease that cannot be cured but can be managed.

When we breathe in, air moves through our airways. It moves from our nose or mouth, down a large hollow tube in the front of the neck (called a windpipe or trachea) and into our lungs. The trachea divides into two bronchi, or bronchial tubes, in the lungs. They look like upside-down trees.

As the bronchial tubes pass through the lungs, they divide into smaller air passages called bronchioles. At the end of each bronchiole are tiny air sacs that fill up with air, like tiny balloons, each time we breathe in. These are called alveoli.

Air comes into our lungs each time we breathe in. This air has oxygen in it. Oxygen has a special job. It helps feed, or give energy to, all parts of our body so we can walk, talk, eat, and exercise.

The picture of The Lungs on the following page shows how we breathe and how asthma affects the lungs.

Asthma causes inflammation, or swelling, in the lungs. It can also cause squeezing, called bronchoconstriction, and extra sensitive or twitchy airways. When something bothers your airways, you have trouble breathing.

It gets harder to breathe because the tiny muscles around your airways squeeze tightly and the airways have swelling inside. There is also more mucus being made inside the airways, which makes it even harder to breathe. These changes in the lungs can cause coughing and wheezing.

Asthma symptoms can last minutes, hours, or days. An asthma episode is also called an:

- Asthma flare-up
- Asthma attack
- Asthma exacerbation

How to pronounce:

Trachea: TREY-kee-uh Bronchi: BRAHN-ki Bronchial: BRAHN-kee-uhl Bronchioles: BRAHN-kee-ohl-z Alveoli: al-VEE-uh-lie Bronchoconstriction: BRAHN-koh-kahn-STRIK-shun





THE LUNGS







What Are the Symptoms of Asthma?

Common signs and symptoms of asthma include:

- Shortness of breath
- Cough
- Chest tightness or pain
- Wheeze (a whistling sound when you breathe)
- Waking at night due to asthma symptoms
- A drop in your peak flow meter reading (if you use one)

Not everyone with asthma has the same symptoms. You may only have one symptom, or you may have many symptoms.

You may also have early warning signs and symptoms of asthma before you have the common symptoms. Early warning signs let you know that asthma symptoms may be coming. Early signals can include:

- Increased mucus/sputum production
- Runny/stuffy/congested nose
- Itchy neck or chin
- Feeling tired, weak, or lack of energy
- Raised shoulders, slouching

Your symptoms can be a sign of how bad your asthma currently is. You can also check how your asthma is doing by using a handheld device called a peak flow meter. It measures how well air moves out of your lungs.

We can think of asthma symptoms like a stoplight. **Green means "Go," Yellow means "Caution,"** and **Red means "Danger."**

On the next page, review Red Light, Green Light: Signs and Symptoms of Asthma.

A document called an Asthma Action Plan tells you what to do if you have symptoms in the Green/Go, Yellow/Caution, or Red/Danger Zones. It tells you when to take certain medicines and when to call your health care provider or 911.

You can find a copy of the Asthma Action Plan on page 11. If you don't have one already, work with your doctor to fill it out.

(We will talk more about Asthma Action Plans and peak flow meters in Lesson 5.)



RED LIGHT, GREEN LIGHT: Signs and Symptoms of Asthma

GREEN/GO

- Breathing is good
- No coughing or wheezing
- Sleeping through the night
- Can work and play

YELLOW/CAUTION

- Shortness of breath
- Cough
- Chest tightness or pain
- Wheezing
- Waking at night due to asthma symptoms
- Having any signs or symptoms after an exposure to a known trigger
- Having breathing difficulty when sick with a cold or respiratory illness

Early signs and symptoms to monitor include:

- Increased mucus/sputum production
- Runny/stuffy/congested nose
- Itchy neck or chin
- Feeling tired, weak, or lack of energy
- Raised shoulders, slouching

RED/DANGER

ACT IMMEDIATELY! Follow your Asthma Action Plan and take your prescribed medicines. Then get medical attention. Call 911 or go directly to the emergency department.

- Asthma is getting worse quickly
- Asthma quick-relief medicines are not helping
- Chest tightness or pain
- Severe shortness of breath
- Breathing is faster or slower than normal
- Breathing may be hard or shallow
- Trouble walking or talking due to shortness of breath
- Ribs or stomach moving in and out deeply and rapidly
- Expanded chest that does not deflate when you exhale
- Shoulders hunched over ("posturing")
- Change in color on tongue, lips, around the eyes, fingertips, or nail beds – the color may appear grayish, whitish, or bluish depending on skin tone

ALERT: You want to be in the Green/Go Zone as much as possible. When you are in the green zone, your asthma plan is working! ALERT: If you are in the Yellow/Caution Zone two times or more per week, your asthma is not under control.

ALERT: See your asthma care provider within two days of an ER trip or hospital stay.



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ASTHMA ACTION PLAN

Name:	Date:
Doctor:	Medical Record #:
Doctor's Phone #: 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		Use these daily controller medicines:		
You have <i>all</i> of these: • Breathing is good • No cough or wheeze	Peak flow:	MEDICINE	HOW MUCH	HOW OFTEN/WHEN
Sleep through the night	from			
• Can work & play	to			
		For asthma with exercise, take:		
CAUTION		Continue with green zone medicine and add:		
You have <i>any</i> of these: • First signs of a cold • Exposure to known trigger • Cough • Mild wheeze • Tight chest • Coughing at night		MEDICINE	HOW MUCH	HOW OFTEN/ WHEN
	Peak flow:			
	from			
	to			
		CALL YOUR ASTHMA CARE PROVIDER.		
DANGER		Take these medicines a	and call your doctor	now.
Your asthma is getting worse fast:		MEDICINE	HOW MUCH	HOW OFTEN/WHEN
 Medicine is not helping Breathing is hard 	Peak flow:			
« rast • Nose opens wide	reading below			
Trouble speakingRibs show (in children)				

GET HELP FROM A DOCTOR NOW! 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 asthma care provider within two days of an ER visit or hospitalization.

PLAN DE ACCIÓN PARA EL ASMA

Nombre:	Fecha:
El doctor/La doctora:	Número de registro médico:
El número de teléfono del doctor o doctora durante el día:	Durante la noche y el fin de semana:
El contacto de emergencia:	
Firma de doctores:	



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Los colores del señal de trafico pueden avudar usar los medicamentos de asma.



VERDE significa la zona para ir! Usa medicina preventiva.

AMARILLO significa zona de precaución!



Agrega medicina de alivio rápido. **ROJA** significa zona de peligro!

Get help from a doctor.

Mejor flujo máximo personal: _

VAYA		Utilice estos medicamentos de control diario:			
Tiene <i>todos</i> estos:		MEDICINA	CUÁNTO/ QUE CANTIDAD	CON QUÉ FRECUENCIA/ CUÁNDO	
es buena	De				
 No toz o silbido/ resuello 					
 Duerme durante la noche 	d				
 Puede trabajar y juga 	ar	PARA ASMA CON EJERCICIO, UTILICE:			
PRECAUCIÓN		Continúe con la med	licina de la zona verc	le y añada:	
Si tiene <i>alguno</i> de esta • Tos	os: Eluio máximo:	MEDICINA	CUÁNTO/ QUE CANTIDAD	CON QUÉ FRECUENCIA/ CUÁNDO	
Silbido/Resuello leve	De				
Pecho apretadoTos por la noche					
 Primeras señales de un resfriado 					
 Exposición a un desencadenador conocido 	nocido	LLAME A SU DOCTOR O DOCTORA DE ASMA.			
		Tomo ostos modiosm		ete v /de ete ve ele eve	
PELIGRO		Tome estos medicam	entos y liame a su do	ctor/doctora anora.	
Su asma está empeora rápidamente:	ando Flujo máximo:	MEDICINA	CUÁNTO/ QUE CANTIDAD	CON QUÉ FRECUENCIA/ CUÁNDO	
• La medicina no esta	Numeros				
 La respiración es 	debajo de/ menos de				
dificil y rápida • La nariz se abre					
ampliamente				·J	

• Dificultad para hablar

OBTEN AYUDA DE UN DOCTOR O DOCTORA AHORA! Su doctor o doctora querrá verle en seguida. Es importante! Si no puede comunicarse con su doctor o doctora, vaya directamente a la sala de emergencia. NO ESPERE. Haga una cita con su proveedor de cuidado del asma dentro de dos días de una visita de urgencias (ER) o hospitalización.



What Are the Different Levels of Asthma?

There are four levels of asthma, based on how severe it is. How often you have symptoms, and your lung function determines what level asthma you have. Tell your doctor how often you have symptoms and wake up at night from coughing or have trouble breathing. They may also ask how often you have trouble doing normal activities or need to use your quick-relief medicines.



Intermittent Asthma You have symptoms less than two times a week and wake up less than two nights a month.



Mild Persistent Asthma You have symptoms two or more days a week and wake up three to four nights a month.



Asthma You have symptoms at least every day and wake up one or more nights a week.



Severe Persistent Asthma You have symptoms during the day and

during the day and wake up every night due to asthma.

What Is Asthma Control?

Asthma is a chronic disease - meaning it is long-term. There are times when you may have asthma symptoms, which may be called asthma attacks or episodes. There are also periods when you have few or no symptoms.

During these periods without symptoms, you may believe, or be told, that your asthma is under control. It is important to continue to manage your asthma because symptoms can come back.

There is no cure for asthma, but there are steps you can take to control it!

The medical definition of asthma control means:

- You have asthma symptoms two or fewer times per week
- You use your quick-relief medicine two or fewer times per week
- You wake up from asthma two or fewer times per month
- You use oral corticosteroids to treat your asthma fewer than two times per year

Keep in mind the number two. Your asthma is not well-controlled if:



You have asthma symptoms **more than two** times a week.



You use your quick-relief medicine **more than two** times a week.



You wake up from asthma **more than two** times a month.



You use oral corticosteroids to treat your asthma **two or more** times per year.





Some other signs your asthma is not well-controlled are:





You need emergency medical care.

What Is the Goal of Asthma Treatment?

The goal of asthma treatment is to:

- Prevent symptoms when possible
- Act quickly if symptoms occur
- Keep the symptoms from getting worse

When you talk with your doctor, it is important to share your personal asthma goals with them so you can work on an asthma management plan that improves your health and quality of life.

Learning about asthma and its signs can help you manage the disease and work to prevent future asthma attacks.

Setting a Personal Goal of Asthma Control

Your personal goal of asthma control may be that you want:

- No coughing, wheezing, or chest tightness
- No difficulty breathing
- To sleep through the night without asthma symptoms
- To do normal activities such as sports, exercise, or other physical activities
- No emergency room visits or hospital stays
- No missed time from work, college, or other activities
- No decreased productivity
- Normal (or near normal) lung function

On the following page, complete the Setting a Personal Goal for Your Asthma

handout. Take this handout with you the next time you see your asthma care provider.





SETTING A PERSONAL GOAL for Your Asthma

Write down something you enjoy but are limited in doing right now because of your asthma.

Set a personal goal to control your asthma so you can do this activity.

What action could you take to try to reach the goal above?

How long should it take?

What is the biggest roadblock? What steps can you take to overcome any challenges that may stop you from reaching your goal?

Discuss your action steps and personal goals with your asthma specialist. They need to know what is important to you. They will work with you to help you reach your goal.

Once you reach your personal goal, it is time to set a new one!





ASTHMA TRIGGERS



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LESSON 2	ASTHMA TRIGGERS MY ASTHMA CARE BOOK NOTES





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ASTHMA TRIGGERS MY ASTHMA CARE BOOK

Learning Objectives

By the end of this lesson, you will be able to:

- Define asthma "triggers"
- Identify the types of asthma triggers
- List four things that can make asthma worse
- Identify triggers in your home using the Asthma-Friendly Home Checklist

What Is an Asthma Trigger?

When you have asthma, your airways are sensitive to things which may not bother other people. These things are "triggers."

Triggers are found everywhere and are different from person to person. Symptoms and reactions can be different, too. Sometimes a trigger can cause asthma symptoms quickly. You may have a mild reaction to a trigger at one time and a much more severe reaction to the same trigger another time.

Often, people are sensitive to several different triggers that may be present at the same time.

What Are the Types of Asthma Triggers?

It's important to know what triggers your asthma so you can create a plan to manage those triggers.



Allergens are a common asthma trigger. Allergens affect the immune system, causing an allergic reaction and asthma symptoms. When allergens cause asthma symptoms, it's called **allergic asthma**.

Some examples of allergens are:

- Pollen: from trees, grasses, and weeds
- Dust mites: tiny bugs you can't see that mostly live in fabric and fabriccovered items and thrive in warm, humid environments
- Cockroaches: insects that live in dark, damp areas
- Animal dander: skin, urine, and saliva proteins from a furry or feathery animal
- Mold: spores from mold that form in warm, damp and dark places
- Food: although food allergies do not trigger asthma, if you are allergic to a food, your asthma may make the allergic reaction to the food worse



ASTHMA TRIGGERS



Irritants in the air can make asthma worse by irritating the airways and causing symptoms.

Some examples of airborne irritants are:

- Pollution: harmful chemicals in the air (both indoor and outdoor)
- Smoke: from cigarettes, e-cigarettes/vape pens, cigars, fireplaces, campfires, wildfires, candles, ovens/cooking
- Scents and smells: cleaning fluids, perfume, paint, air fresheners



Illnesses or infections can affect your lungs when you have asthma. They can cause inflammation (swelling) and narrowing of your airways. These changes could trigger asthma symptoms (an asthma episode or attack).

Examples of illnesses or infections include:

- Common colds and the flu
- Other respiratory illnesses like pneumonia
- GERD (gastroesophageal reflux disease when acid comes up from the stomach into the throat)



Exercise or other physical activities are a common asthma trigger. Everyone needs to exercise, even people with asthma! A strong, healthy body is one of your best defenses against disease. But some people with asthma have asthma episodes during or after exercise. With proper prevention and management, you should be able to exercise free of symptoms.



Feeling and expressing strong emotions may cause asthma symptoms in someone with asthma. When you feel strong emotions, your breathing changes – even if you don't have asthma. Examples of feelings or strong emotions include anger, fear, excitement, laughter, yelling, and crying.



Weather can also trigger asthma, including dry wind, cold air, thunderstorms, and sudden changes in weather or temperature.



Some **medicines** can also trigger asthma. For example, if you are sensitive to aspirin and non-steroidal anti-inflammatory drugs (NSAIDs), these can trigger your asthma. If you take medicines known as beta blockers, they can also make asthma harder to control.

Other asthma triggers to consider and discuss with your doctor are:

- Sulfites in food
- Hormonal changes during the menstrual cycle
- Other medical issues that can complicate asthma, such as obesity





What Triggers Your Asthma?

You first need to know what you are allergic to, so you know what allergens to remove from your environment. Do you know your allergies? If not, see a board-certified allergist to be tested for allergies. The allergist may test your blood and/or do a test on your skin.

Asthma triggers can be present at home, work, and school.

Fill out the Asthma-Friendly Home Checklist on the following pages. This checklist will help you learn how to reduce asthma triggers in your living spaces.

We will talk more about controlling asthma triggers in **Lesson 3**. Avoiding or reducing asthma triggers is an important way to prevent asthma symptoms.



Asthma-Friendly HOME CHECKLIST

This checklist will help you learn about and control your asthma triggers. Follow this checklist to help make your home asthma and allergy friendly.

This checklist gives you a list of questions, information on the most common triggers, and ways you can get rid of or reduce a trigger.

- Start with the "Is This Your Trigger?" column and answer Yes, No or Don't know/Not sure.
- In the other columns, read about the trigger, where it is found, and recommended ways to fix it.
- When you have questions, talk with your health care provider or asthma educator (for example, if you checked "Don't know/Not sure" as an answer).

For more information, visit:

Asthma and Allergy Foundation of America: **aafa.org** • 800-7-ASTHMA **asthma & allergy friendly**[®] Certification Program: **aafa.org/certified** Centers for Disease Control and Prevention: **cdc.gov/asthma/triggers.html** Environmental Protection Agency: **epa.gov/asthma**



More resources for managing asthma are available in this course: aafa.org/asthmacare



Is this your trigger?	What is this trigger?	Where is it found?	Recommended ways to fix it
Are your asthma/ allergy symptoms worse during certain seasons? Yes Spring Fall Summer Winter No Sometimes Don't know/Not sure	Pollen: Tiny grains released from trees, weeds, and grasses that blow through the air	 Pollen is found outside most seasons, but is usually worse in spring and fall. Spring: Trees and grasses Summer: Grasses and weeds Fall: Ragweed and other weeds, some trees Winter: Some trees in warmer climates 	 Keep windows shut and use air conditioning. If you do not have air conditioning, go to a cool place during hot days (library, mall, cooling center). Stay inside if it's a high pollen day. Cover your hair when you go outside or shower from head to toe before bed. Take allergy medicine per doctor's orders. Check pollen levels on your local news, allergist's website, weather app, or pollen.aaaai.org.
Are your asthma/ allergy symptoms worse when around furry or feathered animals? Yes No Don't know/Not sure	Furry or Feathered Animals and Pets: Dander (proteins) from any animal's saliva, urine, or skin cells, such as: • Dogs • Cats • Guinea pigs • Hamsters • Birds	Dander can be found on and under furniture, on clothing, carpets, and walls.	 Keep all animals out of the bedroom. Vacuum weekly with a CERTIFIED asthma & allergy friendly[®] vacuum. If possible, remove carpet or use washable rugs. Cover fabric furniture with washable slipcovers. Wash often in hot water. Wash hands and face after touching animals.



Is this your trigger?	What is this trigger?	Where is it found?	Recommended ways to fix it
Are there a lot of fabric-covered items in your house and	Dust Mites: Tiny bugs you can't see with your eyes. They live	In anything made of cloth or fabric:	 Use CERTIFIED asthma & allergy friendly[®] pillows, pillow covers and bedding.
bedroom? Yes	nearly everywhere and you can be allergic to their "dead bodies" and droppings	Wall-to-wall carpeting	 Wash sheets and blankets weekly in hot water 130° F or hotter.
No Don't know/Not sure		Upholstered furniture	 Keep humidity between 30 and 50%.
		 Bedding and mattresses Stuffed animals/toys 	 Reduce fabric items. Items should be washable or easy to clean. For example, remove extra throw pillows.
	y y y y		 If possible, remove carpet or use washable rugs. Cover fabric furniture with washable slipcovers. Wash often in hot water.
			 Dust weekly with a damp cloth.
			Keep rooms clutter free.
			 Store items in closed containers, drawers, or behind cabinet doors.
			 Vacuum weekly with a CERTIFIED asthma & allergy friendly[®] vacuum.
Do you see cockroaches, rats	Pests: Cockroaches, rats or mice	Pests live everywhere, especially in dark,	 Keep all food and garbage in closed, sealed containers.
or mice in your home? Do you see evidence of pests like droppings		damp places and behind walls, furniture and clutter.	 Remove clutter, like piles of paper, boxes, and bags.
(poop) from rats			• Fix water leaks.
or mice? Yes	$\sqrt{\cdot}$		 Don't leave water sitting in sinks or pots and pans.
No	2		 Plug up cracks around foundations, windows.
Sometimes			and doors with caulk.
Don't know/Not sure			 Use poison baits and traps instead of bombs and sprays.



Is this your trigger?	What is this trigger?	Where is it found?	Recommended ways to fix it
Is there water damage, moisture or leaks in your home? Do you have damp carpet or	Mold and Mildew: Black, brown, or red spots	Mold and mildew can be found in places that are damp or wet like:	• Run a fan or open a window (if pollen counts are low) during a bath or shower and for 20 minutes after.
you smell mold or mildew?	0	BathroomsLaundry rooms	 Keep areas where mold grows clean and dry (like sinks, bathtubs)
Yes		• Kitchens	and garbage cans).
No		Basements	 Use soap and water or other safe products to
Don't know/Not sure	° 🔿	 Outdoors in leaves, grass, and dirt 	clean, then dry the area.
			 Fix leaks quickly.
			 Use a dehumidifier.
			 Wear a mask when raking leaves or mowing. Or have someone else do it for you.
Do you have a food allergy? Has it been diagnosed by your doctor? Yes No Don't know/Not sure	Food: Food allergy is not a trigger of asthma attacks, but if you have asthma and food allergies, you are at higher risk for severe allergic reactions. Common food allergens: • Milk • Peanuts • Tree nuts • Eggs • Sesame • Soy • Wheat • Fish or shellfish • Other foods	If you have asthma, it can make an allergic reaction to food worse. A severe allergic reaction to food (called anaphylaxis) can cause even more swelling in your airways. Avoidance of the food is the best way to prevent allergic reactions.	 Get a food allergy action plan from your doctor. Share with trusted friends, family and co-workers. Always have epinephrine with you. If you have a severe allergic reaction, use your epinephrine auto-injector first, and then seek medical attention. Follow up with your health care provider right away.



Is this your trigger?	What is this trigger?	Where is it found?	Recommended ways to fix it
Does anyone smoke or vape in your home or car? Yes No Don't know/Not sure	Tobacco Smoke: Smoke from cigarettes, vape pens, cigars, and pipes can make asthma worse.	Tobacco smoke exposure comes from firsthand smoke (you smoking a tobacco product), secondhand smoke (you breathe in the smoke from someone else who is smoking), or thirdhand smoke (you are exposed to tobacco chemicals on surfaces like clothing, walls, and furniture).	 Avoid tobacco smoke from all sources. Stop smoking. Talk with your health care provider about ways to stop smoking, or visit smokefree.gov, or call 1-800-QUIT-NOW (800-784-8669). Make a rule that no one can smoke in your home or car.
Do you have a gas stove, wood stove, or fireplace? Do you use portable propane, natural gas, or kerosene heaters? Yes No Don't know/Not sure	Smoke and Combustion Fumes: Burning any fuel product, like wood, charcoal, or kerosene gives off smoke and/ or combustion fumes. The smoke and fumes contain gases and particles that can irritate your lungs.	 Pollutants from any source of fire can cause asthma symptoms: Gas stoves/cooktops Wood stove or fireplace Portable propane, natural gas, or kerosene heaters Fireplaces/fire pits Incense and candles Barbecues or grills Wildfires Outdoor trash burning Controlled field burning 	 Avoid combustion fumes and smoke from all sources. Use electric heat instead of fireplaces, wood stoves, or non-electric portable heaters if possible. When it's time to replace your stove or cooktop, choose electric instead of gas.





Is this your trigger?	What is this trigger?	Where is it found?	Recommended ways to fix it
Are your asthma/ allergy symptoms	Air Pollution: Harmful gases and	Air pollution can trigger symptoms	 Check air quality at AirNow.gov.
worse on hazy days or when you are near running cars or buses?	chemicals in the air and/or tiny specks of dirt or other airborne compounds	year-round.	 On bad air pollution days, stay indoors, close windows, and use air conditioning
Yes			or fans.
No Don't know/Not sure			 Use CERTIFIED asthma & allergy friendly[®] air cleaners (purifiers) and/or filters.
			 Use cleaner options for transportation (mass transit, hybrid or electric vehicles, walking, and biking).
Are your asthma/ allergy symptoms	Smells and Scents	Any item that has an odor might trigger	 Avoid items that have any odor.
worse around products with strong		an asthma flare-up. Common ones include:	 Switch to less toxic "free and clear" or "green" products.
odors or fumes?		Cleaners	Learn how to make your own
Yes		• Bleach	safe and "green" cleaners.
No	.11	 Pesticides 	Avoid paint or other
Don't know/Not sure		• Air fresheners or plug-ins	products with strong odors. If you can't, open windows and use fans and a mask.
	v v ^r	• Potpourri, scented candles, essential oils	Look for CERTIFIED asthma & allergy friendly® paint.
		 Perfume/aftershave 	• Use an exhaust fan or open
		Cosmetics	unvented gas or kerosene
		• Lotions	space heater or a gas stove.
		• Paints	Use products with low emissions of volatile organic
		• Glues	compounds (VOCs).



Is this your trigger?	What is this trigger?	Where is it found?	Recommended ways to fix it
Does getting a cold or flu make asthma/ allergy symptoms	Colds, Flus, and Other Viruses	Respiratory infections like colds and the flu spread from person to	 Wash hands often. Use hand sanitizers when soap and water are not available.
worse? Yes		person through the air and by contact with	 Sneeze or cough into the fold of your elbow, not hands.
No Sometimes Don't know/Not sure	(V)		 Do not share food or drinks with anyone who has a cold, flu, or other spreadable illness.
	T I		 Wear an N95 or KN95 mask when in crowded, indoor spaces.
			 Stay active and get plenty of sleep to boost your health.
Do you have other illnesses (like GERD, "heartburn") that worsen symptoms? Yes No Don't know/Not sure	GERD and Other Illnesses	GERD causes heartburn. It is a disease that causes a burning feeling in the chest that happens when stomach acid backs up.	 Do not lie down 2 to 3 hours after eating. Avoid foods that cause GERD symptoms. Take medicine as recommended.
Do you have shortness of breath or tire easily when running and exercising hard?	Exercise-Induced Asthma: Symptoms during or after sports, running, or exercise	During or after sports, exercise or when running hard, you may have symptoms.	Talk with your doctor about using quick-relief medicine before activity.
Do asthma/allergy symptoms get worse during or after sports			 Warm up for 10 to 15 minutes before activity with jumping jacks, walking or stretching.
or exercise? Yes	72		 Cool down after activity for 10 minutes.
No Sometimes			 Breathe through your nose to warm the air going into your airways.
Don't know/Not sure			 If it is cold outside, cover your mouth and nose with a scarf or mask if possible.



Is this your trigger?	What is this trigger?	Where is it found?	Recommended ways to fix it
Do asthma/allergy symptoms get worse when you are angry or excited? Yes No Sometimes Don't know/Not sure	Emotions: Muscles tighten up, and breathing rate increases	Strong emotions, like laughing hard or crying, can trigger asthma symptoms.	 Laughing is great! If laughing triggers your asthma, work with your health care provider on a plan for this. You do not want to avoid laughing. Learn how to express frustration without yelling. Breathe deeply and slowly when stressed out.
Are your symptoms worse on cold, hot or stormy days? Yes No Sometimes Don't know/Not sure	Extreme Weather: Changes in temperature and storms that stir up pollen and dust, like thunderstorms	Weather can trigger symptoms when you go outside.	 Stay cool and indoors if you are hot and drink water and sports drinks. Cover your mouth and nose with a mask or scarf when outside in cold weather. If your area has a thunderstorm warning, stay indoors with the windows closed.
Are your asthma/ allergy symptoms worse after using any medicines? Yes No Sometimes Don't know/Not sure	Medicines	Common medicines: • Nonsteroidal anti-inflammatory drugs (ibuprofen, naproxen, aspirin) • Beta-blockers (acebutolol, carvedilol, betaxolol) • ACE Inhibitors (lisinopril, fosinopril, benazepril)	 Avoid over-the-counter medicines that are a known asthma trigger for you. Tell your health care provider about any medicines, herbs, supplements, or vitamins you are taking. ACE Inhibitors can cause a chronic cough which could be mistaken for an asthma symptom. Talk with your doctor or pharmacist about other medicine options.

Did you know? AAFA can help you find products that are healthier for your home. Our **asthma & allergy friendly**[®] certification program sets high standards for home and indoor products. We test products in independent labs and only the products that pass every test become CERTIFIED **asthma & allergy friendly**[®]. Look for this mark on products or visit **aafa.org/certified** to find products that meet these standards.





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CONTROLLING ASTHMA TRIGGERS



Asthma and Allergy Foundation of America

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LESSON	
$\overline{3}$	CONTROLLING ASTHMA TRIGGERS
	MY ASTHMA CARE BOOK NOTES





CONTROLLING ASTHMA TRIGGERS MY ASTHMA CARE BOOK

Learning Objectives

By the end of this lesson, you will be able to:

- Make a plan to avoid asthma triggers
- Take simple, low-cost actions to reduce triggers
- Understand your role in preventing asthma symptoms

How Can You Prevent Asthma Symptoms?

Managing or controlling asthma is possible. If asthma is well-controlled, you should not have asthma symptoms or need to take quick-relief medicines too often. The best way to manage asthma is to try to prevent asthma symptoms before they begin. In other words, do things that will make symptoms less likely.

You can prevent or reduce asthma symptoms by:

- Avoiding or reducing exposure to triggers
- Using control medicines as prescribed by your health care provider
- Treating other related conditions that may be making your asthma worse
- If you have allergic asthma, doing immunotherapy (like allergy shots) under the guidance of an allergist

Avoiding, reducing, and properly managing triggers can help cut down the need for medicine and help you feel better overall. Follow what your health care provider has told you, and do not stop or change the dose of a medicine without talking to your doctor.

How Can You Control Asthma Triggers?

Each person is different, so you should focus on the asthma triggers that affect you the most.

In the last session, we went over the Asthma-Friendly Home Checklist. It included some tips for reducing triggers and allergens in your home. In this session, we will look at your triggers and discuss more ways you can make your home asthma friendly, according to the Controlling Asthma Triggers handout.

Refer to the Asthma-Friendly Home Checklist that you completed in Lesson 2 (pages 22-29). Find the asthma triggers that affect you the most. On the following pages, review the recommendations for Controlling Asthma Triggers that match your asthma triggers.

If you don't know what triggers your asthma, try keeping an asthma diary until your next appointment with your doctor.





CONTROLLING ASTHMA TRIGGERS MY ASTHMA CARE BOOK

There are products that can help you reduce your exposure to asthma triggers and allergens in your home. Many companies sell products that are labeled "hypoallergenic." But the Food and Drug Administration (FDA) does not have

policies in place to regulate these claims. Anyone can put these claims on their products, but that doesn't mean they actually work to reduce exposure to triggers and allergens.

The Asthma and Allergy Foundation of America created a program to help people find products that are better choices for a healthier indoor space. The **asthma & allergy friendly**[®] Certification Program sets high standards and then independently tests products to see if they meet those standards. Only products and services that pass every test to prove they reduce asthma and allergy triggers will receive this mark. You can find a list of CERTIFIED products at: **aafa.org/certified**



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CONTROLLING ASTHMA TRIGGERS Pollen

Pollen counts from trees and plants can be very high in the spring and fall. Check pollen levels by visiting the National Allergy Bureau at **pollen.aaaai.org** or use a service like **Pollen.com**.

- Keep windows closed and use air conditioning with a CERTIFIED **asthma & allergy friendly**[®] filter, if possible. If you do not have air conditioning and your area has a heat wave, go to a cool place like a library, mall, or your city's cooling center.
- Stay inside on days when the pollen count is high.
- Talk with your health care provider about medicine and/or immunotherapy for allergies.
- Cover your hair when you go outside, or take a shower from head to toe, with soap, before bed. (Pollen will stick to you throughout the day, so if you don't bathe, you will be sleeping in pollen.)
- Pollen is worse in the morning, especially between 5 and 10 a.m. Limit outdoor activity during those times.
- Avoid line-drying laundry outside on high pollen days because pollen will stick to clean laundry.
- During high pollen times, limit garden and lawn chores and outdoor exercise like golf and running if you have pollen allergies. When you go outside, wear a hat and sunglasses to keep pollen out of your hair and eyes. If you must do lawn work, wear an allergy mask rated N95 or better. You can buy these in hardware stores, pharmacies, and online.



Look for this mark when buying products (like air cleaners and air filters) that help you reduce your exposure to pollen.



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CONTROLLING ASTHMA TRIGGERS Dust Mites

Dust mites are tiny bugs found in dust, carpets, and other fabrics. They are so small that you can't see them with your eyes. You can't get rid of all of them so you have to avoid contact with these bugs. Try to:

- Use special dust mite or allergy-proof covers that zip all the way around mattresses and pillows. Wash these covers following the manufacturer's instructions. Look for allergy barrier covers that are CERTIFIED **asthma & allergy friendly**[®]. These have been tested and proven to prevent dust mites from getting through the fabric.
- Replace all pillows at least every two years. Replace mattresses every 10 years.
- Wash sheets and blankets every week in hot water that is 130°F or hotter and dry them in the dryer, if possible.
- Keep humidity in your home between 30 and 50% by using a dehumidifier, if needed. Dust mites thrive in humid environments.
- Have someone without a dust mite allergy clean rooms at least once a week. Remove dust with a damp cloth. Use a vacuum that is CERTIFIED **asthma & allergy friendly**® or at least has a HEPA filter. If someone can't do it for you, wear an allergy mask rated N95 or better. Shower and change your clothes after you are done cleaning. Stay out of the cleaned rooms for at least two hours. It can take that long or more for any remaining dust to settle.
- Keep as many fabric items out of rooms as possible, especially the bedroom. This includes stuffed animals, toys, rugs, window treatments, and upholstery. Items in the bedroom should be washable or easy to clean.
- Clutter-free rooms are asthma-friendly rooms.



Look for this mark when buying bedding products (like sheets, mattress covers, and pillows) to help you reduce your exposure to dust mites.



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CONTROLLING ASTHMA TRIGGERS Cockroaches

Cockroaches live in all kinds of buildings and neighborhoods. It's the droppings and bodies of cockroaches that can trigger an asthma attack.

They are everywhere and can be hard to get rid of. But there are things you can do to help avoid this trigger:

- Keep all food out of bedrooms.
- Keep food and garbage in closed and sealed containers. Never leave food (even crumbs) out.
- Remove clutter, such as piles of newspapers, paper bags, boxes, and other clutter.
- Fix water leaks, and don't leave water sitting out in pots, pans, or the sink.
- Don't leave dirty dishes out or in the sink.
- Use caulk to plug small spaces around your house, such as cracks in the wall or floor.
- Don't leave pet food out, except when your pet is eating.
- Use poison baits and traps. They are better and healthier than sprays and bombs.
- Spraying poison in the house actually can be more harmful than helpful. If you need the services of a professional, be sure that they are an Integrated Pest Management (IPM) certified exterminator. If you are renting your home, contact your landlord or property maintenance to report the infestation and request assistance.







CONTROLLING ASTHMA TRIGGERS Mice and Rats

Mice and rats are common triggers of asthma symptoms. Most homes have some level of mice allergens, especially older homes and rental housing, like apartment buildings in cities. You are also more likely to find them inside when the weather is colder outside.

- Watch for droppings, gnawing, and nests. These are signs you have rodents.
- Mop and clean surfaces at least weekly. The kitchen floor tends to have the highest levels of rodent allergens. If possible, have someone else who isn't allergic to rodents do this cleaning.
- Eat food in the same location in your home to contain crumbs to one area.
- Keep food and garbage in closed and sealed containers. Never leave food (even crumbs) out.
- Store less-used items in plastic bins instead of cardboard boxes.
- Don't leave dirty dishes out or in the sink.
- Use caulk or steel wool to plug small spaces around your house, such as cracks in the wall or floor, under sinks, etc. Rodents can squeeze their bodies in very small spaces.
- Add or repair door sweeps to keep the rodents from getting in underneath doors.
- Repair or fill cracks in your foundation.
- Fix water leaks, and don't leave water sitting out in pots, pans, or the sink.
- Place traps where you see signs of rodents. Remove dead rodents immediately.
- Rodents can multiply quickly. Consider hiring a professional Integrated Pest Management (IPM) certified exterminator. If you are renting your home, contact your landlord or property maintenance to report the infestation and request assistance.









Birds and Furry Animals

Furry or feathered animals (birds, cats, dogs, rabbits, and others) can trigger asthma symptoms. The trigger from these animals are the proteins in their dander (skin flakes), urine and saliva. Pets can be a wonderful addition to the family. But if they are a trigger, take these steps for better control:

- Keep all furry and feathered animals out of the bedrooms.
- Encourage everyone to wash their hands after touching any furry and feathered animal.
- Clean or brush the furry or feathered pet outside, and have the pet bathed weekly. This may cut down on the dander. Someone without asthma or a pet allergy should do this.
- Vacuum carpets and furniture weekly using a CERTIFIED asthma & allergy friendly[®] vacuum, if possible. CERTIFIED vacuums have been tested and proven to send less particles back into the air while using the machine.
- Replace carpets with washable rugs and cover fabric furniture with washable slipcovers, if possible. Wash the rugs and slipcovers in hot water that is 130°F or hotter.
- Use a CERTIFIED **asthma & allergy friendly**[®] air cleaner in rooms where pets spend the most time. CERTIFIED air cleaners are tested and proven to improve air quality, trap allergens and do not contribute to worsening air quality. Some air cleaners use ionization, which releases ozone (an air pollutant and asthma trigger). CERTIFIED air cleaners are tested to ensure they adhere to recommended guidelines and standards.
- Replace heating and air conditioning filters with CERTIFIED **asthma & allergy friendly**[®] filters and change regularly.
- Talk with your doctor about taking medicine before going to a place where there are birds or furry animals, like a zoo or animal farm.
- Talk with your doctor about immunotherapy (allergy shots).
- Do not use pillows or comforters that are stuffed with down or other feather stuffing unless they have been CERTIFIED asthma & allergy friendly[®].
- If your asthma is still out of control after taking all of these steps, talk with your doctor about any other options. If you have a cat allergy, there are new cat foods that may reduce cat allergen in your home. If you ultimately decide to rehome your animal, be mindful that the animal allergens will remain in your home for months. Animal dander sticks to the walls, floors, ceilings, and your belongings.



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Look for this mark when buying products (like vacuums, air cleaners, and air filters) to help you reduce your exposure to pet dander.



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Mold and mildew live everywhere: on logs, fallen leaves, and in wet places like bathrooms and kitchens.

Here are some ways to reduce mold and mildew:

- Don't run the shower for a long time before you get in. Use a fan or dehumidifier after a bath or shower for at least 20 minutes to remove moisture from the air so it doesn't cause mold.
- Fix leaks as soon as possible to stop mold from growing.
- Use soap and water to get rid of mold. If soap and water don't get rid of mold, try using a mixture of one part bleach and nine parts water. Spray it on the mold and leave it 10 minutes, scrub, then rinse. This will get rid of most of the mold. Remember, someone without asthma should do this. Diluted bleach mixtures should only be used by someone without asthma.
- Use a dehumidifier to keep your house dry, between 30 and 50% humidity.
- Check for mold under sinks, in dark closets, and behind wallpaper.
- Outside, stay away from piles of leaves, grass clippings, and compost piles.
- Stay away from moldy places, like basements or places with water leaks or with water damage.
- Improve air circulation in your home.
 - Use exhaust fans when you cook.
 - Keep interior doors open.
 - Keep furniture a few inches away from walls.
- If you have house plants or potted herbs, only water them when the soil is dry. Here are some other ways to prevent mold in houseplants:
 - Plant them in sterile soil.
 - Give them more light.
 - Use a fan to circulate air around the plant.
 - Trim dead leaves often.



Look for this mark when buying products like dehumidifiers to reduce your exposure to mold.



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CONTROLLING ASTHMA TRIGGERS Food-Related

For some people, there may be an indirect connection between food and asthma. Food is not a common asthma trigger. But your asthma can be affected by eating. Asthma can also affect how you react if you have food allergies.

Sulfites

For some people, they may notice certain foods bother their asthma. Sulfites, a type of preservative used in foods, can trigger asthma if you eat high amounts. High sulfite foods may include:

- Dried fruits and vegetables
- Packaged potatoes
- Wine and beer
- Bottled lime and lemon juice
- Shrimp
- Pickled foods

Food Allergies

If you have a food allergy, having asthma can make allergic reactions worse. If your doctor has said you have a food allergy, then staying away from the food you are allergic to is the only way to prevent allergic reactions to that food. Visit **kidswithfoodallergies.org** for more information that applies to children as well as adults.

Mild and severe symptoms can lead to a serious allergic reaction called anaphylaxis (anna-fih-LACK-sis). This reaction usually involves more than one part of the body and can worsen quickly. Anaphylaxis must be treated right away to provide the best chance for improvement and prevent serious, potentially life-threatening complications.

A severe food allergy reaction can cause trouble breathing. It may be hard to know if you are having a food allergy reaction or an asthma attack. Here are some ways to know the difference:

- If you are only coughing, wheezing, or having trouble breathing, and do not have any symptoms from other body systems, it's probably asthma. Follow your Asthma Action Plan.
- If you had asthma symptoms before eating food, it's probably asthma. Follow your Asthma Action Plan.
- Food allergy symptoms usually come on quickly, after you eat the food you are allergic to.
- Severe allergic reactions involve two or more body systems. An allergic reaction may involve breathing difficulties, hives, swelling, itchy mouth and throat, nausea, or vomiting. Follow your Anaphylaxis Action Plan.





If you have a food allergy, remember:

- Keep epinephrine with you at all times.
- Ask your health care provider to help you create an Anaphylaxis Action Plan, which will tell you what to do if you have a severe reaction. You can find a sample plan on **kidswithfoodallergies.org**.
- Train trusted friends, family, and co-workers on how to use an epinephrine auto-injector in an emergency and have them practice regularly.
- If you are having trouble breathing and aren't sure if you are having an allergic reaction or an asthma attack, treat it like a food allergy reaction and use your epinephrine auto-injector.

Reflux

Heartburn and gastroesophageal reflux disease (GERD) can also trigger asthma symptoms. Try the following to reduce reflux symptoms:

- Eat smaller meals.
- Do not lie down for two to three hours after eating.
- Avoid foods that can trigger your heartburn or GERD symptoms.
- Talk with your health care provider about medicine that may help your GERD.









Air Pollution and Extreme Weather

Air pollution can make it harder to breathe and can trigger asthma symptoms. Paying attention to air quality reports will help reduce your exposure to air pollution. Check out **AirNow.gov** to get a daily forecast for the Air Quality Index (AQI) in your area.

You can also:

- Watch a local TV station, listen to a local radio station, or read a newspaper to prepare for and keep track of days with poor air quality, like Orange (Unhealthy for Sensitive Groups) and Red (Unhealthy) days.
- Stay inside and keep windows closed when air pollution is at Orange (Unhealthy for Sensitive Groups), Red (Unhealthy), Purple (Very Unhealthy), or Maroon (Hazardous) warning levels.
- Use air conditioning to help filter the air coming into your home. Use CERTIFIED **asthma & allergy friendly**® air filters on your HVAC system. If it is too hot to stay in your home and you do not have air conditioning, go to a cool place like a library, mall, or your city's official cooling center.
- Plan outdoor activities at times when the air pollution levels are lower (Green (Good) days).
- Be aware of weather changes, especially at times when it's really hot or cold. Stay cool and indoors when it's hot. Remember to drink water. If it's cold, stay warm and cover your mouth and nose when outside. You can use a scarf or mask to cover your mouth and nose. This will warm up the air before you breathe. Cold air can trigger an asthma attack.

Extreme weather can also worsen the impact of other asthma triggers:

- On hot, humid days, mold spore counts can be higher.
- During extremely hot, windy days, pollen counts can be higher.
- High winds with thunderstorms can stir up and carry higher levels of mold spores and dust particles.
- Hot weather tends to result in poor air quality or increased air pollution.
- Sometimes in the winter, cold air gets trapped at the Earth's surface under a layer of warm air. This also traps smoke and other pollutants from rising and can worsen your air quality. Watch weather forecasts for these "temperature inversions" and air quality alerts.



Look for the mark when buying products (like air cleaners and filters) to reduce your exposure to air pollution.



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Colds, the Flu, and Other Respiratory Infections

Both colds and the flu are caused by viruses. They are spread by contact with another person who has the virus, through airborne droplets (coughing, sneezing) and by hand-to-hand contact or by contact with objects both people touch.

Try the following to prevent the spread of colds, the flu, and other respiratory infections:

- Wash your hands with soap and water often. Sing the "Happy Birthday" song in your head two times while washing. Or count at least 20 seconds. This means you have washed long enough to get rid of germs and bacteria.
- Use hand sanitizers when soap and water are not available. (Note: Using hand sanitizers is not effective at removing food from your hands and so is not recommended for use for people with food allergies. Use hand wipes instead.)
- Wear a face mask in crowded indoor spaces when colds and viruses are actively spreading.
- Ask everyone in the house to use paper tissues rather than cloth handkerchiefs to blow their noses.
- Cough and sneeze into your elbow, not your hands.
- Try your best to avoid touching your eyes, nose, or mouth.
- Do not share food or drinks with anyone who has a cold, virus, the flu, or other respiratory infections.
- Get the flu vaccine every year. People with asthma are at a high risk for dangerous complications from the flu. Encourage your family or others you live with to get the vaccine to protect you from getting it.
- Get the COVID-19 vaccine. People with moderate-to-severe asthma may be at higher risk for more severe COVID-19.
- Talk with your doctor about the pneumococcal vaccine. Pneumococcal disease is a serious bacterial infection. Anyone can get it, but people with asthma may be at high risk for serious complications.







Smoke and Fumes

Smoke and fumes are a trigger for most people with asthma. Exposure to tobacco smoke has been shown to impact lung function and is linked to increased asthma symptoms. You should not allow people to smoke in your house or in your car, even if the windows are open. Smoke also makes it hard to breathe and may cause permanent damage to airways and make asthma worse.

Avoid smoke and fumes from any source. Stay away from:

- Smoky rooms, cars, buses, or trains
- People smoking (cigarettes, e-cigarettes/vape pens, cigars, or pipes)
- Wood-burning or gas fireplaces, fire pits, cooktops, or stoves
- Barbecues or grills
- Candles or incense
- Burning outdoor trash
- Wildfires or controlled burning of fields

Important!

Keep in mind, the dirty and toxic chemicals from cigarette or cigar smoking stay behind on all surfaces like skin, hair, furniture, walls, clothes, and car seats. So smoking even when other people aren't present can still be harmful to them. (This is called thirdhand smoke and it has been shown to cause harm to your health.)

E-cigarettes (or vape pens) are not safer than tobacco cigarettes. They also contain harmful chemicals that can be bad for your health.

Remind friends and family of this and do not allow anyone to smoke where you live, work, and travel.

Smokers should visit **SmokeFree.gov** or call 1-877-44U-QUIT for free help to quit smoking.







CONTROLLING ASTHMA TRIGGERS Physical Activity

Exercise, sports, and even sexual activity can be a trigger for some people. But being healthy and fit makes it easier to breathe.

People with asthma need exercise just like everyone else. They just need to take a little extra care to prepare for physical activity. There are many people with asthma who live a physical life and succeed at life and sports, like tennis player Serena Williams, soccer player David Beckham, and many others.

If exercise is a trigger, take these steps:

- Talk with your doctor about quick-relief medicine that can be used before activity.
- To prevent trouble breathing, do some warm-ups for 10 minutes before exercise or sports.
- Do not exercise or play sports outside when the air pollution or pollen levels are high.
- Cover your mouth and nose with a scarf or face mask when it's cold outside. This will prevent the cold air from irritating your airways. If you can't wear a scarf or mask, try to breathe in through your nose during the activity. This helps warm the air that goes into your airways.
- Cool down after activity for 10 minutes.
- Stop for a few minutes when you start to have trouble breathing.
- Talk with your doctor about taking a quick-relief medicine (like albuterol) BEFORE you start exercise. This may become part of your Asthma Action Plan.
- Drink plenty of fluids (water and/or sports drinks).

You can do any sport or exercise you truly enjoy. In fact, many athletes with asthma have found that with proper training and medicine, they can play any sport they choose.







CONTROLLING ASTHMA TRIGGERS Medicines

Sometimes a medicine can trigger asthma symptoms. Be sure to tell your health care provider about all medicines, herbs, supplements, and vitamins you take.

Make sure all the health care providers you see know you have asthma. Talk with your health care provider before starting any of the following:

- Aspirin
- Non-steroidal anti-inflammatory drugs, like ibuprofen (Motrin[®] or Advil[®]) and naproxen (Aleve[®] or Naprosyn[®])
- Beta-blockers, which are usually used for heart conditions, high blood pressure, and migraines

For example (brand name, generic name): Corgard®, nadolol Inderal®, propanolol hydrochloride Normodyne, labetalol Visken®, pindolol Trandate®, labetalol hydrochloride

• ACE inhibitors, which are used for heart disease and high blood pressure, can cause a cough which could be mistaken for an asthma symptom

For example (brand name, generic name): Accupril®, quinapril Aceon®, perindopril Altace®, ramipril Capoten®, captopril Lotensin®, benazepril Mavik®, trandolapril Monopril®, fosinapril Prinivil®, lisinopril Univasc®, moexipril Vasotec®, enalapril Zestril®, lisinopril



Never stop a medicine before talking with your health care provider. If you currently take any of these medicines, call your doctor to discuss the medicine and your asthma.





CONTROLLING ASTHMA TRIGGERS Scents and Smells

Scents, smells or odors from products, chemicals, and sprays can cause your asthma to be worse.

- Some items in your home can release gasses called volatile organic compounds (VOCs). This is called offgassing. VOCs can be two to five times higher indoors than outdoors. VOCs can have some short-term effects that irritate your lungs, but experts aren't sure yet of long-term effects. Sources of VOCs can include items like new furniture, new carpet, paint, cleaning supplies, and air fresheners.
- Stay away from odors and sprays such as perfume, air fresheners, powder, and hairspray. Family members should avoid using these in your home. If it's something used at work, talk with your human resources department about making changes that will reduce or eliminate the chemical smell or your exposure to them.
- Switch from strong-smelling cleaning products to products with low or no VOCs. You can also make your own cleaners, but be aware that things like essential oils can contain VOCs.
- Open windows and use fans when painting or using other chemicals at home or school. Avoid these rooms and open windows until fumes are gone.
- Cleaning products and paint can be sources of VOCs. And if they have heavy scent, they can trigger asthma symptoms. Use CERTIFIED **asthma & allergy friendly**[®] cleaning products and paints.
- Turn on the exhaust fan or open a window when cooking on a gas stove or using an unvented kerosene or gas space heater. If possible, switch to electric appliances.

Natural All-Purpose Scented Cleaner

1 part water 1 part white vinegar 1 orange or lemon rind, cut in pieces

In an empty cleaning spray bottle, add water and vinegar. Add orange or lemon rind. Shake and let sit for a few days before using.



Look for this mark when buying paints or cleaners to reduce your exposure to VOCs.



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Strong Emotions

Laughing or crying can also trigger asthma symptoms. It is not the emotion itself that causes the asthma symptoms. Instead, your breathing changes during strong emotions, causing muscles to tighten up or your breathing rate to increase.

- Laughing is part of the joy of life and should not be discouraged. If laughter is an asthma trigger for you, talk with your health care provider about your asthma treatment.
- Find ways to stay calm and express yourself without yelling. Remember to breathe deeply and slowly when feeling stressed out, upset, or angry.
- Studies show that mindful breathing and observation can reduce stress and enhance overall health.

Two Tips for Stress Reduction:

Mindful Breathing: Start by breathing in and out slowly. Breathe in through your nose and out through your mouth, letting your breath flow easily. Try inhaling for 7 seconds, holding your breath for 7 seconds and letting your breath out for 7 seconds. While focusing on your breathing, try to let go of other thoughts and just be in the moment. Try doing this for three rounds.

Observation: Pick an object from nature that's around you. Focus on watching it for a minute or two. This could be a tree, insect, or even the clouds or the moon. Don't do anything except notice the thing you are looking at. Look at it as if you are seeing it for the first time. Just relax into this observation for as long as your focus allows.







CONTROLLING ASTHMA TRIGGERS MY ASTHMA CARE BOOK

What Is Your Role in Preventing Asthma Symptoms?

Remember, you have the most influence on preventing asthma symptoms before they begin. You can:

- Limit your exposure to triggers.
- Take your controller medicine as prescribed by your health care provider.
- Work with your health care provider to identify problems.
- Stay healthy by eating healthy foods, drinking water, managing stress, staying active every day, and getting plenty of sleep.

Fill out the Starting a Plan for an Asthma-Friendly Home handout on the following pages. Pick two of your asthma triggers to create an action plan for removing them.

When removing or reducing a trigger in your home, think of it as a three-step process:



Choose a trigger and think of how it will help you, and maybe even the rest of your family, if you controlled that trigger in your home or even just in your bedroom.



Think of things that would make it difficult to control this trigger. What would you or others have to give up? What routines would you have to change? How much effort or cost would be involved? Talk with any other people who are involved and explain how this trigger may produce long-term irritation and swelling in your lungs, even without obvious symptoms.



Decide to make a change that might have a long-term benefit for you (and maybe for other people in your home). Getting rid of your triggers in your home can be hard, but it is important to help reduce asthma symptoms and maybe the need for some medicines.

Keep in mind that the way your body responds to asthma triggers can change throughout your life.



STARTING A PLAN for an Asthma-Friendly Home

Check things that exist in or around your home environment and may make your asthma worse. Underline those that may be found in your sleeping area or places you spend the most time in your home.

Plants or trees	Grass pollen Weed pollen Tree pollen Other
Weather	Hot or cold temperatures Change in weather Wind Thunderstorms Air pollution, smog and fumes Damp or humid weather Other
Animals	Birds, feathers and down Cats Dogs Horses Rabbits Rats or mice Other
Things Inside	Cigarettes, e-cigarettes/vape pen, cigars, pipe smoke House dust and dust mites Molds Cockroaches Strong or musty odors Wood-burning or gas fireplaces or stoves Other
List two triggers that you m	night be able to reduce in your environment.

Trigger 2:_____



STARTING A PLAN for an Asthma-Friendly Home

Trigger 1: __

How I would get rid of the trigger:

Good things about getting rid of the trigger:

Things that would make it difficult to get rid of the trigger:

Trigger 2: _

How I would get rid of the trigger:

Good things about getting rid of the trigger:

Things that would make it difficult to get rid of the trigger:







ASTHMA MEDICINES AND EQUIPMENT

LESSON



Asthma and Allergy Foundation of America

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54 ASTHMA Care for Adults ©2018 Asthma and Allergy Foundation of America First Edition and Medical Review August 2018 Updated Review and Revised Edition February 2022



Asthma and Allergy Foundation of America



Learning Objectives

By the end of this lesson, you will be able to:

- Explain the difference between controller, quick-relief, and combination medicines
- Know when to use each type of medicine
- Demonstrate the correct use of an inhaler
- Demonstrate the correct use of a spacer/holding chamber
- Explain how to use and care for a nebulizer
- List two strategies, in addition to medicines, to manage asthma symptoms

What Should You Know About Asthma Medicines?

Remember, there is no cure for asthma. Limiting trigger contact helps reduce asthma symptoms. But medicines are important in controlling asthma too.

It is important for you to understand:

- Why you use asthma medicines
- How to use asthma medicines
- When to use asthma medicines
- What possible side effects asthma medicines may cause

Your medicines are a part of your Asthma Action Plan. Remember to work with your doctor to fill out your Asthma Action Plan.

Self-management is a big part of good asthma care. This is done by:

- Getting rid of or reducing your exposure to triggers
- Taking the right medicines, at the right time, and in the right way
- Working closely with your health care provider, asthma educator, and/or community health worker to get the best results





ASTHMA MEDICINES AND EQUIPMENT MY ASTHMA CARE BOOK

What Are the Different Types of Asthma Medicines?

There are four categories of asthma medicines, or treatments.



Quick-relief medicines – These medicines work quickly to relieve sudden symptoms. You take them as needed and at the first sign of symptoms. Some people call these "rescue" medicines, but there may be times when you should take these medicines even when there is not an emergency. They are better named as "quick-relief" medicines. Your doctor may recommend you use your quick-relief medicine before exercise or sports or when you have difficulty breathing while sick with a cold or the flu. Always carry your quick-relief medicine with you at all times.



Controller or control medicines – These medicines help control asthma by treating the underlying changes in the airways, such as swelling and excess mucus. Your doctor may prescribe one or more asthma control medicines (including biologics).



Biologics – This type of treatment targets a cell or protein to prevent swelling inside the airways. They are for people with certain types of persistent asthma and are given by injection or infusion. They are a type of asthma control treatment.



Combination of quick-relief and/or control medicines – These medicines are used for both short-term relief and control. They are inhalers that contain two medicines in one device.





How Do Asthma Medicines Work?

To better understand asthma medicines and how they work, it helps to remember the three changes that happen in your airways when you have asthma:

- Swelling inside the airways
- Excess mucus that clogs the airways
- Muscles tighten and squeeze around the airways

This swelling, clogging, and muscle tightening makes the airway smaller or narrow. This makes it harder for air to flow easily through your airways, and it becomes harder to breathe. There are asthma medicines that target these three changes, opening your airways, and making it easier to breathe.

Asthma medicines work in two ways:

- 1. To relax the muscles that tighten around the airways. (These medicines are bronchodilators.)
- 2. To reduce the swelling and mucus inside the airways. (These medicines are anti-inflammatories.)

Bronchodilators

Bronchodilators are medicines that relax the muscles around the airways and "relieve the squeeze". They work to dilate (open) the bronchioles. By opening the airways, they also help remove and cut down mucus.

Short-acting bronchodilators are quick-relief medicines that work for four to six hours. An example is albuterol. If you use short-acting bronchodilators (quick-relief medicines) more than two days a week, talk with your doctor about your asthma control. You may need to make changes to your treatment plan to better control your asthma.

Long-acting bronchodilators are control medicines that can keep the airways open for 12 to 24 hours. An example is formoterol.

Anti-inflammatories

Anti-inflammatories are controller medicines that reduce swelling and mucus inside the airways. They will not relieve sudden symptoms. Anti-inflammatories include inhaled or oral corticosteroids that supplement the natural corticosteroids made by your body in your adrenal glands.





ASTHMA MEDICINES AND EQUIPMENT MY ASTHMA CARE BOOK

Inhaled corticosteroids (ICS) target the airways specifically. They work for 12 to 24 hours. They can be prescribed two ways – to take daily or as needed. If your doctor prescribed an ICS inhaler to use as needed, take it at the same time as your quick-relief medicine as directed – one right after the other. Remember to wait one minute in between puffs. An example of ICS is fluticasone.

Oral corticosteroids (OCS) like prednisone are systemic medicines which means the medicine affects the whole body. They are taken in pill or liquid form instead of through an inhaler. This medicine may be prescribed for the treatment of asthma attacks that don't respond to other asthma medicines. They also are used as long-term therapy for some people with severe asthma. OCS have serious long-term side effects compared to inhaled corticosteroids. These can include mood swings, weight gain, high blood pressure, cataracts, osteoporosis, and infections.

Biologics

Biologics are a controller option for people with moderate-to-severe asthma. These are shots or infusions given every few weeks. Biologics are for asthma that is hard to treat with inhaled corticosteroids and/or other daily control medicines. Biologics can also be used to help manage asthma that is dependent on oral corticosteroids.

Biologic treatments work by targeting overactive cells or proteins in your body to prevent airway swelling and asthma symptoms. There are currently six biologics approved for asthma in the United States:

- Omalizumab (brand name XOLAIR[®]) targets allergy antibodies known as immunoglobulin (IgE) and is used to treat allergic asthma
- Benralizumab (brand name FASENRA®), mepolizumab (brand name NUCALA®), and reslizumab (brand name CINQAIR®) target pathways that affect white blood cells known as eosinophils and are used to treat severe eosinophilic asthma
- Dupilumab (brand name DUPIXENT®) blocks proteins that drive allergic inflammation and is used to treat moderate-to-severe eosinophilic asthma or OCS-dependent asthma
- Tezepelumab-ekko (brand name TEZSPIRE[™]) targets a protein to reduce inflammation and is used for a broad range of people with severe asthma

If your asthma specialist prescribes a biologic for you, they may also have you take it with your ICS. Over time, you may be able to reduce the ICS.







Other Types of Asthma Medicines and Treatments

- Leukotriene modifiers are taken in pill form.
 - They prevent your body from making or activating leukotrienes.
 - The FDA has strengthened existing warnings about serious behavior and mood-related changes with montelukast (brand name SINGULAIR® and generic forms).
- Cromolyn sodium is sometimes used via a nebulizer.
 - It is a mast cell stabilizer that prevents the release of certain natural chemicals, such as histamines and leukotrienes, into the body.

Single Maintenance and Reliever Therapy (SMART)

Single maintenance and reliever therapy, also known as SMART, uses one inhaler that has two medicines (combination medicine). This inhaler acts as both a quick-relief and controller medicine. When on SMART, you can either take your medicine only as needed to relieve sudden symptoms, or you can take it daily as a controller as well as needed for quick relief. This is based on your age and the severity of your asthma.

Learn more about this therapy option by reviewing the Understanding Single Maintenance and Reliever Therapy (SMART) handout on the following page.



UNDERSTANDING SINGLE MAINTENANCE AND RELIEVER THERAPY (SMART)

What Is Single Maintenance and Reliever Therapy (SMART)?

SMART is another way to take asthma medicines.¹ Instead of taking two asthma medicines – one for control and one for quick relief – you use one inhaler for both.

SMART has been used in Europe for a long time and is now recommended in the United States, according to the latest asthma management guidelines from the National Institutes of Health (NIH).² Using one inhaler for both quick relief and control is a highly effective and easier way to manage asthma.

How Does SMART Work?

SMART uses one inhaler for quick relief and controller medicine. This inhaler has two medicines and is called a combination medicine.

Based on your age and the severity of your asthma, your provider may recommend you use the combination medicine in one of two ways:

- Only as needed to relieve sudden symptoms, or
- Daily as a controller plus as needed to quickly relieve symptoms.

Which Medicines Are Used for SMART?

The current asthma management guidelines recommend a long-acting beta-agonist called formoterol to be used in combination with budesonide (an inhaled corticosteroid) for SMART. This combination is found in SYMBICORT[®]. Budesonide supplements the natural corticosteroids that are made by your body's adrenal glands. They are low dose and target the airways specifically. Formoterol acts quickly to open the airways and relieve sudden symptoms. It also works as a controller by keeping the airways open for up to 12 hours. (DULERA[®] offers formoterol in combination with a different corticosteroid called mometasone furoate.)

As of March 2022, the Food and Drug Administration (FDA) has not yet approved these medicines to be used in this way. If you are interested in SMART, talk with your doctor.

Learn more:

- 1. Asthma Medicines aafa.org/asthma-treatment
- 2. Asthma Diagnosis, Management, and Treatment in the U.S.: 2020 Guidelines community.aafa.org/blog/asthma-diagnosis-management-and-treatment-in-the-u-s-is-changing-what-the-new-guidelines-say







What Asthma Medicines Will I Be Prescribed?

Your provider will prescribe asthma medicines to help you control or prevent symptoms, as well as medicines that work to relieve symptoms when they happen. You may be prescribed two separate medicines or a medicine that combines them into one.

The medicines your doctor prescribes will depend on the severity of your asthma. Follow your Asthma Action Plan to know which medicines to take and when to take them. Your plan may call for:

- An inhaled corticosteroid (ICS) taken daily to control and prevent symptoms plus a quick-relief inhaler (like albuterol) to treat symptoms when they happen
- An ICS inhaler plus a quick-relief inhaler taken as needed, one right after the other, to treat symptoms when they happen
- A combination inhaler that includes both types of medicines (control and quick-relief) into one inhaler that can be used daily and/or as needed
- Only a quick-relief inhaler to treat symptoms when they happen (for intermittent asthma only)
- Adding a biologic medicine (a shot or infusion) to your control and quick-relief medicines

The difference between these asthma treatments can be confusing. It is important to understand what each treatment does and how they help your asthma. Learning how to use each correctly can you help keep your asthma well-controlled.

It is important to take your medicines exactly the way and as often as your doctor says to take them. Follow your Asthma Action Plan.

If you have trouble affording your asthma medicine, including biologics, there are patient assistance programs offered by the drug manufacturers that may help you get the medicine for free or lower cost.





My Medicine Review

The most commonly prescribed asthma medicines come in inhaler form or liquids for nebulizers.

Inhalers come in different forms:

- Metered dose inhaler (MDI)
- Dry powder inhaler (DPI)
- Breath actuated inhaler
- Soft mist inhaler

Some inhalers need to be primed when first opened and some may need to be prepared before each use. Check your medicine's instructions. Breath actuated inhalers (like a RediHaler[™]) and DPIs do not need to be primed.

Priming the inhaler means you spray it into the open air, away from anyone. This action gets the inhaler ready for use.

Nebulizers are machines that deliver asthma medicine in the form of a mist. Tubing and a mouthpiece or mask are used to breathe in the medicine. Nebulizers are an option for anyone who has difficulty using an asthma inhaler.

On the following pages, fill out the My Medicine List handout by writing down all of your asthma medicines you take each day. Note why you take them, how much, when, and how to take them. List possible side effects. Mark if they are controller, quick-relief, or combination medicines.

Work with your asthma provider or asthma educator to complete the handout or visit **aafa.org/asthmameds** for a full list of asthma medicines. Your pharmacist is another great resource for information on your medicines.

Always review the pamphlet that comes with every medicine for information on the specific side effects. If you have any more questions or concerns about your medicines, contact your health care provider.

Share this list with all of the health care providers you visit every time you have an appointment and keep it up to date.

While you complete this activity, remember to check if your medicines are expired or empty. If a medicine is expired or empty, it's important to fill the prescription as soon as possible. **Once you've listed your medicines, review the How to Correctly Use Your Asthma Devices guide on pages 65-74.**



MY MEDICINE LIST

Directions: Write down all of your asthma medicines and other medicines you take each day. Note why you take it, how much, when, and how to take it. List possible side effects. For a full list of asthma medicines, visit: aafa.org/asthmameds

Name:

Date:

Recommendation: Share this list with all of the health care providers you visit every time you have an appointment, and keep it up to date.

Name of medicine.	Name	of	medicine:
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Type of medicine (check one): Biologic (injection or infusion)	Liquid Inhaler	Tablet or capsule (pill Nebulizer solution))
Is used for (check all that apply):	Quick-	relief	Controller	Other
Dose (how much to take):				
When and how I should take it:				
Possible side effects:				
Name of medicine:				
Type of medicine (check one): Biologic (injection or infusion)	Liquid Inhaler	Tablet Neb	or capsule (pil))
Is used for (check all that apply):	Quick-	relief	Controller	Other
Dose (how much to take):				

When and how I should take it:

Possible side effects:

REMINDER:

Always ask your doctor to show you how to use the medicine they prescribe to you.



MY MEDICINE LIST

Name of medicine:				
Type of medicine (check one): Biologic (injection or infusion)	Liquid Inhaler	Tablet Neb	or capsule (pill) ulizer solution)
Is used for (check all that apply):	Quick-r	elief	Controller	Other
Dose (how much to take):				
When and how I should take it:				
Possible side effects:				
Name of medicine:				
Type of medicine (check one): Biologic (injection or infusion)	Liquid Inhaler	Tablet Neb	or capsule (pill) ulizer solution)
Is used for (check all that apply):	Quick-r	elief	Controller	Other
Dose (how much to take):				
When and how I should take it:				
Possible side effects:				
Name of medicine:				
Type of medicine (check one): Biologic (injection or infusion)	Liquid Inhaler	Tablet Neb	or capsule (pill) ulizer solution)
Is used for (check all that apply):	Quick-r	elief	Controller	Other
Dose (how much to take):				
When and how I should take it:				

Possible side effects:

REMINDER:

Always ask your doctor to show you how to use the medicine they prescribe to you.



How to Correctly Use Your **ASTHMA DEVICES**



More resources for managing asthma are available in this course: aafa.org/asthmacare



ASTHMA Care for Adults 65 ©2018 Asthma and Allergy Foundation of America First Edition and Medical Review August 2018 Updated Review and Revised Edition February 2022

HOW TO CORRECTLY USE YOUR ASTHMA DEVICES How Do You Use a Metered Dose Inhaler?

If you use a metered dose inhaler (MDI), it is important to use it the right way. If you use it correctly, the medicine makes it into your lungs to help you manage your asthma. If you don't, the medicine might end up on your tongue, the back of your throat, or in the air. If that happens, you won't get the medicine you need, and you might not be able to control your asthma symptoms.

The National Institutes of Health's guidelines on the treatment of asthma recommend three ways to use an inhaler the right way:

- Get trained again on the right way to use your MDI at every asthma checkup.
- Use a dry powder inhaler or breath actuated inhaler that releases a puff of medicine as you inhale on the mouthpiece.
- If it is hard for you to use an MDI, ask your doctor about other options. There are other types of inhalers that release a puff of medicine as you inhale on the mouthpiece.

What Is a Spacer or Holding Chamber?

A spacer is a plastic tube you attach to your inhaler to add space between the mouth and the MDI. This lets the medicine break into smaller droplets so you can inhale more.

A valved holding chamber adds a one-way valve to the mouthpiece of the spacer. It traps and holds the medicine, giving you time to breathe all of the medicine in.

Spacers and chambers come in many designs. For adults and older children, the end has a mouthpiece to insert into your mouth. For young children, the end may have a maskpiece to cover the mouth and nose. Your health insurance may cover much of the cost. Some kinds of spacers work better with certain MDIs. Talk with your doctor about the right spacer or holding chamber for you.

Do not use a spacer or holding chamber with a dry powder or a breath actuated inhaler.

How Do You Prime Your Inhaler?

Most MDIs need to be primed when you first open them. They also need to be primed if you haven't used the inhaler for two weeks or more.

Priming the inhaler mixes the propellant and medicine, which makes sure you get the proper dose. It is important to prime your inhaler to make sure you get the right amount of medicine in your lungs with each puff.

To prime your inhaler, remove the cap and shake it well for at least 5 seconds (about 10 hard shakes). Then spray it into the air and away from your face and other people. Repeat as many times as needed according to the directions on the medicine.



HOW TO CORRECTLY USE YOUR ASTHMA DEVICES

How Do You Use a Metered Dose Inhaler?

How Do You Use an MDI With a Spacer or Holding Chamber?

- 1. Stand up, if possible. Standing or sitting straight allows your lungs to fully breathe in and out. Hold your head in a normal position, not too far back or forward.
- 2. Remove the cap on the inhaler and shake well for at least 5 seconds (about 10 hard shakes).
- 3. Attach the MDI to the spacer as explained by your health care provider or in the directions that came with the spacer.
- 4. Place the mouthpiece of the spacer/chamber in your mouth between your teeth and above your tongue and close your lips around it. (Note: Spacers for young children have mask pieces and work differently.)
- 5. Press down on the top of the inhaler canister. This will put one puff of medicine into the holding chamber. Inhale slowly.
- 6. Hold your breath for 10 seconds and then exhale.
- 7. If you need to take more puffs, repeat steps 1 through 7. Your doctor will tell you how many puffs to take. Wait 1 minute between puffs.
- 8. Wipe off the mouthpiece and replace the cover. Store your inhaler at room temperature and keep it dry.
- 9. If the inhaler was a steroidal (control) medicine, rinse out your mouth with water and then spit it out. Rinsing helps to prevent thrush or sores in your mouth.

How Do You Clean Your Spacer or Chamber?

Clean your spacer or chamber once a week to remove powder residue and bacteria.

To clean your spacer or chamber:

- Remove the parts that can be removed, like the back piece.
- Soak them in warm water and dish soap for about 15 minutes.
- Rinse the parts in clean water.
- Air dry the parts. Do not dry with a towel.
- Put the spacer back together and use again when all the parts are dry.

Remember, most MDIs work better with a spacer or holding chamber, except for breath actuated inhalers (like a RediHaler[™]). Breath actuated inhalers use different instructions.



HOW TO CORRECTLY USE YOUR ASTHMA DEVICES

How Do You Use a Metered Dose Inhaler?

How Do You Use Your MDI Without a Spacer?

It is best for everyone who uses a press-and-breathe MDI to use it with a spacer or chamber. If one is not available, you can use the inhaler directly in your mouth. Try to obtain a spacer/chamber as soon as you can.

- 1. Stand up, if possible. Standing or sitting straight allows your lungs to fully breathe in and out. Hold your head in a normal position, not too far back or forward.
- 2. Remove the cap on the inhaler and shake well for at least 5 seconds (10 hard shakes).
- 3. Breathe in and out a few times to get your lungs ready. You should exhale before putting the inhaler in your mouth.
- 4. Put the inhaler in your mouth between your teeth, above your tongue and close your lips around the mouthpiece.
- 5. Push down once on top of the inhaler to let out one puff of medicine. Release only one puff at a time.
- 6. Take a slow (3 to 5 seconds) and deep breath in through your mouth.
- 7. Hold your breath for 10 seconds and then exhale.
- 8. Relax and breathe out slowly.
- 9. If you need to take more puffs, repeat steps 1 to 9. Your health care provider will tell you how many puffs to take. Wait 1 minute between puffs.
- 10. Wipe off the mouthpiece and replace the cover. Store your inhaler at room temperature and keep it dry.
- 11. If the inhaler was a steroidal (control) medicine, rinse out your mouth with water and then spit it out. Rinsing helps to prevent thrush or sores in your mouth.



HOW TO CORRECTLY USE YOUR ASTHMA DEVICES How Do You Use a Dry Powder Inhaler?

A dry powder inhaler (DPI) delivers controller medicine as a powder. It doesn't need an aerosol spray to work.

DPIs are different than press-and-breathe inhalers. DPIs deliver the medicine when you inhale. Some people may prefer a DPI over other inhalers. Children, people with severe asthma, and people who have acute (sudden) attacks may not have enough airflow to use DPI inhalers.

- 1. Stand up, if possible. Standing or sitting straight allows your lungs to fully breathe in and out. Hold your head in a normal position, not too far back or forward.
- 2. Open the cover or remove the cap and hold the inhaler upright. If you are using a diskus, hold it flat, like a hamburger.
- 3. Load a dose of the medicine into the inhaler by either twisting it or flipping the lever, depending on the instructions.
- 4. Breathe in and out a few times to get your lungs ready, and then finally breathe out to empty your lungs before putting the inhaler into your mouth. Never breathe into your inhaler.
- 5. Put the end of the mouthpiece into your mouth between your teeth and above your tongue and close your lips firmly around it.
- 6. Breathe in fast and hard through the mouthpiece, not your nose.
- 7. Remove the inhaler from your mouth and close your lips. Hold your breath for 10 seconds and slowly breathe out. This is one "puff."
- 8. Your doctor will tell you how many puffs to take. To take another puff, repeat steps 1 through 7. Follow your Asthma Action Plan or take medicine as instructed.
- 9. Wipe off the mouthpiece and replace the cover if it has one. Store your inhaler at room temperature and keep it dry.
- 10. Rinse your mouth with water and then spit it out. Rinsing helps to prevent thrush or sores in your mouth.

Note: Dry powder inhalers DO NOT need a spacer or chamber, to be shaken, or to be primed before each use.



HOW TO CORRECTLY USE YOUR ASTHMA DEVICES How Do You Use a Breath Actuated Inhaler?

A breath actuated inhaler is not a press-and-breathe inhaler. When you take a fast, deep breath in, it pulls the medicine out of the device and into your lungs.

There are some that contain controller medicine and some that contain quick-relief medicine. Some people may prefer a breath actuated inhaler over other inhalers. Children, people with severe asthma, and people who have acute (sudden) attacks may not have enough airflow to use breath actuated inhalers.

- 1. Stand up, if possible. Standing or sitting straight allows your lungs to fully breathe in and out. Hold your head in a normal position, not too far back or forward.
- 2. Flip the cap or open the cover all the way until you hear a click. This prepares the dose of medicine.
- 3. Hold the inhaler upright. Be careful not to cover the air vents on the inhaler with your fingers.
- 4. Breathe in and out a few times to get your lungs ready, and then finally breathe out to empty your lungs before putting the inhaler into your mouth. Never breathe into your inhaler.
- 5. Put the end of the mouthpiece into your mouth between your teeth and above your tongue and close your lips firmly around it.
- 6. Breathe in fast and hard through the mouthpiece, not your nose.
- 7. Remove the inhaler from your mouth and close your lips. Hold your breath for 10 seconds and slowly breathe out. This is one "puff."
- 8. Your doctor will tell you how many puffs to take. To take another puff, put the cap back on and repeat steps 1 through 7. Follow your Asthma Action Plan or take medicine as instructed.
- 9. Wipe off the mouthpiece and replace the cover. Store your inhaler at room temperature and keep it dry.
- 10. Rinse out your mouth with water and then spit it out. Rinsing helps to prevent thrush or sores in your mouth.

Note: Breath actuated inhalers DO NOT need a spacer or chamber, to be shaken, or to be primed before each use. Do not open the cover unless you are going to use the inhaler.



HOW TO CORRECTLY USE YOUR ASTHMA DEVICES How Do You Use a Soft Mist Inhaler?

Soft mist inhalers (Respimat[™]) release medicine through a slow moving, soft mist spray.

Soft mist inhalers need to be primed before the *first time* you use them. Priming gets the device ready for use. Follow your specific device's instructions. They can be found in the patient information paper that comes in the prescription box or on the drug manufacturer's website.

Do not use a spacer or valved holding chamber with a soft mist inhaler, and do not shake before use. When priming and using the inhaler, be careful not to get the spray in your eyes.

How Do You Put a Soft Mist Inhaler Together?

The soft mist inhaler comes in two pieces: the cartridge that holds the medicine and the inhaler that delivers the medicine. You must put the cartridge into the inhaler before you can use it.

- 1. With the cap closed, press the gray safety catch and pull the clear base of the inhaler.
- 2. Take the narrow end of the cartridge and push it into the inhaler as far as it will go.
- 3. Push the cartridge down firmly on a hard surface to make sure the cartridge has gone in all the way. (You will still see a small amount of the cartridge even after you push it in all the way.)
- 4. Put the clear base back into place.

Do not remove the cartridge or clear base once you have put inhaler the together.

How Do You Prime a Soft Mist Inhaler?

Prime the inhaler before you use it for the first time.

- 1. Hold the inhaler upright with the cap closed.
- 2. Turn the clear base in the direction of the arrows until you hear a click.
- 3. Flip the cap open.
- 4. Point the inhaler down away from your face. Press the release button.
- 5. Close the cap.
- 6. Repeat steps 1 through 5 three more times.



HOW TO CORRECTLY USE YOUR ASTHMA DEVICES How Do You Use a Soft Mist Inhaler?

How Do You Use a Soft Mist Inhaler?

- 1. Hold the inhaler upright.
- 2. Turn the clear base half a turn in the direction of the arrows until you hear a click.
- 3. Flip the cap open.
- 4. Breathe out slowly.

5. Bring the inhaler to your mouth. Keep your head up, looking straight ahead (do not bend your head or neck).

- 6. Point the inhaler to the back of your throat. Close your lips around the mouthpiece.
- 7. Press the release button and inhale the mist slowly and deeply.
- 8. When the spray stops, remove the inhaler from your mouth.
- 9. Hold your breath for 10 seconds.
- 10. Exhale slowly.
- 11. To take another puff, follow steps 2 through 10 (if prescribed).
- 12. Close the cap.


HOW TO CORRECTLY USE YOUR ASTHMA DEVICES How Do You Use a Nebulizer Machine?

A nebulizer machine, or "breathing machine," turns liquid asthma medicine into a mist. You then breathe in the medicine through a mask or mouthpiece. They come in tabletop, portable, and handheld models. If your doctor recommends that you use a nebulizer, it is important to know what your options are and how they work.

Nebulizers may be easier to use than some asthma inhalers. Inhalers come in many shapes and sizes. Each inhaler must be held and inhaled correctly. If the inhaler is not primed and breathed in the right way, all the medicine will not get into the lungs. You do not need to prime a nebulizer or time when you inhale, like with an inhaler. Once the nebulizer is set up and ready to use, simply breathe in and out slowly. The soft mist will get deep into your lungs where it is needed most.

To use a nebulizer:

- 1. Wash your hands with soap and warm water.
- 2. Connect the parts of the nebulizer machine according to the manufacturer's directions. Make sure the tubing and mouthpiece or mask are tightly connected.
- 3. Pour the nebulizer solution as prescribed into the nebulizer's medicine cup. Tighten the cap over the cup.
- 4. Place the mouthpiece in your mouth between your teeth and above your tongue and create a tight seal with your lips. If you use a mask, make sure you have a tight fit over your nose and mouth. Turn the machine on.
- 5. As the mist starts, breathe in slowly for 3 to 5 seconds. Continue until the mist stops or until there is not medicine left in the cup.
- 6. Turn off the machine. Rinse your mouth with water and spit it out.
- 7. Clean and dry the medicine cup and mouthpiece or mask.

To clean your nebulizer:

- 1. Wash your hands with soap and warm water.
- 2. Take the nebulizer kit apart. Remove the mouthpiece or mask. Disconnect the tubing from the nebulizer and the medicine cup.
- 3. Hold the medicine cup and gently twist the top to the left to remove it.
- 4. Discard remaining medicine in the medication cup. Use fresh medicine each time you use the nebulizer.
- 5. Rinse all the parts (except the tubing) with hot tap water.
- 6. Air dry in a clean environment or hand dry using a soft, clean, lint-free cloth.
- 7. Store the nebulizer kit in a dry bag or clean container to keep them clean and free of dust and germs.

Note: Parts of your nebulizer kit may be reusable while others may be disposable. You can confirm your replacement schedule with your insurance plan or durable medical equipment (DME) provider.



HOW TO CORRECTLY USE YOUR ASTHMA DEVICES

How Do You Know When Your Inhaler Is Empty?

Inhalers have counters located on the inhaler. The counter tracks the number of puffs or doses left in the inhaler.

The counter may be on the top, bottom, or side of the inhaler. Find the location of the counter when you start a new inhaler.

Some inhalers must be primed before you first use them. Priming gets your inhaler ready for use by making sure the dosing chamber is filled with medicine and propellant (to help the medicine "propel" or spray into the lungs). This ensures you will receive the full dose of medicine.



If you use a metered dose inhaler (MDI) that needs to be primed before its first use, the dose counter will include the number of sprays needed for priming. For example, if your inhaler has 200 puffs and should be primed using four puffs, the counter will start at 204. Four of those doses will be sprayed in the air to prime the inhaler. The inhaler is ready to use when the counter hits 200.

Remember, not all inhalers need to be primed and not all priming instructions are the same. Check your inhaler's package insert or talk to your pharmacist or doctor.

When the counter reads O (zero), there is no more medicine left in the inhaler. You should throw it away. Get your refill before your inhaler reaches O! Inhalers may still spray even if the counter is at zero. This is because MDIs have both medicine and propellants inside the canister.

Check the counter after each use.

After each puff (dose) you take, check the counter to make sure it is working. By checking the counter after each use, you will know when it's time to order a new inhaler. On some inhalers, the numbers on the counter will turn red to let you know it's time to order a new one.

Inhalers may need to be cleaned to avoid clogging. Follow the manufacturer's instructions on how to clean your inhaler and how often.

Do NOT put your inhaler in water to float it and see if it is empty. This does not work and could cause your inhaler not to work properly.



OTHER WAYS TO MANAGE ASTHMA SYMPTOMS

Once you are confident with taking your asthma medicines and avoiding your triggers, there are some other helpful ways to keep your asthma symptoms under control.

The most important ways to manage your asthma symptoms are by:

- Taking your medicines properly and when you are supposed to
- Avoiding and reducing triggers as much as possible
- Getting medical help when needed

But there are other ways, in addition to medicine, that can reduce discomfort and symptoms.

Note: You should never use these techniques as a replacement for taking asthma medicines and avoiding your triggers. These tips are to be used along with the asthma treatment plan from your doctor. You should always take your medicines as prescribed by your doctor. Watch your symptoms and follow your Asthma Action Plan to know when to call your doctor or go to the emergency room.



Do Something Quiet

You will need to reduce your activity level. Normally, you want to be as active as possible. But when you are having symptoms, you should reduce your activity. Activity increases your need for oxygen.

- Sit and rest in a comfortable position.
- Make it a comforting time. Read, listen to music or watch TV.
- Try sitting upright.



Stay Calm

Being upset or panicky can make symptoms worse. Practice techniques to stay calm, like observation and mindful breathing.



Use Pursed-Lip Breathing

Pursed-lip breathing is a simple way to control shortness of breath. It can slow your pace of breathing, making it more effective. Pursed lips look like a kiss.

- 1. Breathe in slowly through your nose, keeping your mouth closed. This should be a normal, not deep, breath.
- 2. Pucker or "purse" your lips as if you were going to whistle or blow out a candle.
- 3. Breathe out slowly and gently through your "pursed" lips. Exhale normally. Do not force air out.





ASTHMA ACTION PLAN





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LESSON	
(5)	ASTHMA ACTION PLAN
	MY ASTHMA CARE BOOK NOTES





Learning Objectives

By the end of this lesson, you will be able to:

- Know how to use an Asthma Action Plan
- Describe what to do when early symptoms appear
- List five asthma symptoms that require immediate help
- State two things to do when having severe symptoms
- Describe what a peak flow meter does, how to use it, and what the readings/ numbers mean

What Is an Asthma Action Plan?

The best way to manage asthma is to have a plan. We first talked about Asthma Action Plans in Lesson 1. This is a written plan that helps you know what to do when you have asthma symptoms and how to respond in an emergency. The plan tells you which medicines to take when, and how often you should take them. It also tells you when to call 911 or your doctor if symptoms get worse.

Refer to the Asthma Action Plan that you saw in Lesson 1 (page 11). You can also download a copy of the Asthma Action Plan at: aafa.org/asthmaplan

You and your provider should work together to complete your Asthma Action Plan. Keep a copy of your Asthma Action Plan with your medicines. Your doctor and caregivers should also have a copy.

How Does an Asthma Action Plan Work?

An Asthma Action Plan is divided into three zones: Green (Go), Yellow (Caution), and Red (Danger). These zones are based on your level of asthma signs and symptoms. They can also include peak flow numbers, which we will discuss later in this lesson.

Work with your doctor to fill out your Asthma Action Plan. They can help you find out which medicine to use for each zone and have it written in the plan.

The **Green Zone** means "Go." Take your controller medicines as directed (if prescribed). Use your quick-relief medicine before exercise or physical activity (if prescribed). You are in the Green/Go Zone if you have all of these:

- Breathing is good
- No cough or wheeze
- No chest tightness or pain
- Can sleep through the night
- Can work and play
- Peak flow numbers between 80 to 100% of your personal best (if you use a peak flow meter)





Yellow Zone means "Caution." Signs and symptoms that your asthma is getting worse include any or all the following:

- Shortness of breath
- Cough
- Chest tightness or pain
- Wheezing
- Waking at night due to asthma symptoms
- Having any signs or symptoms after an exposure to a known trigger
- Having breathing difficulty when sick with a cold or respiratory illness
- Peak flow numbers between 50 to 80% of personal best (if you use a peak flow meter)

Red Zone means "Danger." Severe asthma episodes can be life-threatening. The Red Zone signs and symptoms are an asthma emergency that need urgent medical care:

- Asthma is getting worse quickly
- Asthma quick-relief (rescue) medicines are not helping
- Chest tightness or pain
- Severe shortness of breath
- Breathing is faster or slower than normal
- Breathing may be hard or shallow
- Trouble walking or talking due to shortness of breath
- Chest retractions (skin sucks in between or around the neck, chest plate, and/or rib bones when inhaling; this is rare in adults)
- Ribs or stomach moving in and out deeply and rapidly
- Expanded chest that does not deflate when you exhale
- Shoulders hunched over ("posturing")
- Cyanosis, a tissue color change on mucus membranes (tongue, lips, and around the eyes) and fingertips or nail beds the color appears grayish or whitish on darker skin tones and bluish on lighter skin tones
- Peak flow numbers below 50% of personal best (if you use a peak flow meter)

Take your quick-relief medicines right away as directed on your Asthma Action Plan and then get immediate medical attention. Call 911 or go directly to the emergency room. Follow up with your doctor within two days of an emergency room visit or hospital stay.





How Do You Recognize Your Early Warning Signs of Asthma?

Sometimes you may notice early warning signs before a noticeable asthma flare-up or attack. You may notice certain feelings in your body, like an itchy neck, chin, or throat. These early warning signs are a signal that your asthma may be worsening.

You will know these signs before anyone else, so you need to act as soon as you start feeling one of these early warning signs. The earlier you can recognize breathing problems, the earlier you can, and should, start treatment.

Fill out the My Early Warning Asthma Signs handout. Check the symptoms you have had. Did you notice that an asthma attack followed these signs?

Then, look at your Asthma Action Plan. Find what zones your early warning signs fall in. Whenever you notice any of your early warning signs or a symptom listed on your Asthma Action Plan, follow the instructions for that zone.



MY EARLY WARNING ASTHMA SIGNS

Asthma symptoms may develop before you have trouble breathing. These feelings can be early warning signs of an asthma attack or episode. Early warning signs may be different for each person and different for each asthma episode. Knowing your early warning signs (or mild symptoms) can be helpful so that you can begin your asthma treatment as soon as possible.

You may need help identifying your early warning signs. Sometimes someone else around you may notice an early warning sign before you do.

Check the early warning signs you have experienced:

Changes in breathing	Paleness		
Changes in your mucus (sputum)	Difficulty speaking/talking		
Runny/stuffy/congested nose	in full sentences		
Sneezing	Raised shoulders/slouching		
Itchy/sore/scratchy throat	Clammy skin		
Itchy neck or chin	Sweaty		
	Chest pain		
	Tight chest		
Dark circles under eyes	Anxious		
Feeling tired, weak or have no energy			
Feverish	Excitable		
Moodiness	Withdrawn/quiet mood		
Restless	Faster heart beat		
Not cleaning well	Headache		
Not sleeping well	Poor tolerance for exercise		
Hoarse voice or dry mouth			

Do you have any other early warning signs? What are they?



How Do You Use a Peak Flow Meter With the Asthma Action Plan?

Some people with asthma use a peak flow meter to check their asthma. A peak flow meter is a handheld device that measures how well air moves out of your lungs.

During an asthma flare-up or attack, the muscles of the upper airway become tight, and the airways become narrow. This makes it harder for your lungs to take air in and push air out. Your airways also become swollen on the inside and you produce extra mucus. This may be happening in your body before you feel any symptoms.

A peak flow meter, when used correctly, can find changes in your airways well before you notice the signs of an asthma attack. When you take your asthma medicines early, before symptoms, you may stop the asthma flare-up or attack.

The peak flow meter can also be used to help you and your doctor:

- Communicate more easily about your asthma
- Decide if your Asthma Action Plan is working well
- Decide when to add, increase, or even stop a medicine
- Decide when to seek emergency care
- Identify triggers (things that cause your asthma symptoms to increase)
- Better understand and talk about your asthma

If you have asthma symptoms, but your peak flow measurement is good, follow your plan based on your symptoms. This means that if your peak flow numbers are in the Green/Go Zone but you have Yellow/Caution symptoms, you should follow your Asthma Action Plan for the Yellow/Caution zone.

There are many different types of peak flow meters, but they all work in the same way. Read the instructions that come with your peak flow meter. Ask your doctor or a certified asthma educator if you have any questions on how to properly use it or clean it.

If you are using more than one peak flow meter (such as one at work and one at home), be sure they are all the same brand so your readings are accurate.

Review the How to Use a Peak Flow Meter handout on the following pages.

If you have questions about using your peak flow meter, work with your provider.

Not everyone uses a peak flow meter to find their Asthma Zone. Asthma symptoms can guide which Asthma Zone you are in. But for some people, a peak flow meter can help detect airway changes before the symptoms become obvious. This helps guide early treatment to stop an asthma from getting worse.



HOW DO YOU USE A PEAK FLOW METER?

A peak flow meter is a handheld device that measures how well air moves out of your lungs. During an asthma episode, the airways in the lungs swell and squeeze. A peak flow meter can be used to measure this in the airways hours, even days, before you have any symptoms of asthma.

Measure your peak flow at least once a day, usually in the morning before you have taken your asthma medicines. More frequent peak flow monitoring may be necessary if you are having more episodes than usual, or if your reading is below 80 percent of your personal best. Check your Asthma Action Plan.

How Do I Use a Peak Flow Meter?

- 1. Place the marker at the base of the numbered scale.
- 2. Stand up.
- 3. Take a slow, deep breath and hold it.
- 4. Place the meter in your mouth between your teeth and above your tongue and close your lips around the mouthpiece. Do not let your tongue block the hole in the mouthpiece.
- 5. Blow out as hard and fast as you can in a single blow.
- 6. Write down the number you get. But if you cough as you use the meter, or make a mistake, don't use that number. Blow into the meter again and get a new reading.
- 7. Immediately repeat steps 1 through 6 two more times.
- 8. Write down the highest of the three numbers in your asthma diary.

If you need help using your peak flow meter, ask your doctor or asthma educator to show you how to use the peak flow meter you have.

How Do I Find My Personal Best Number?

Your personal best peak flow number is the highest peak flow number you have over a two- to three-week period when your asthma is under good control. Good control is when you feel good and do not have any asthma symptoms.

Everyone's asthma is different. Your Asthma Action Plan needs to be based on **your** personal best peak flow number.

To find your personal best peak flow number, take peak flow readings:

- At least two times a day for two to three weeks
- When you wake up and between noon and 2 p.m.
- Before and after taking your inhaled quick-relief medicine
- When you get a new peak flow meter, even if it is the same kind as you have used before
- As instructed by your health care provider



HOW DO YOU USE A PEAK FLOW METER?

What Are the Peak Flow Zones?

Once you know your personal best peak flow number, your doctor will give you a range of numbers that tell you what to do. The peak flow numbers are put into a chart with zones that are set up like a traffic light. It is easiest if these target zones are added to your Asthma Action Plan. This will help you know what to do when your peak flow number changes. For example:



Green/Go Zone (80 to 100% of your personal best number) signals all clear. No asthma symptoms are present. Take your controller medicines (if prescribed), as usual.

Yellow/Caution (50 to 80% of your personal best number) signals caution. You should take a quick-relief medicine and check to see if your peak flow returns to the Green/Go Zone. You may be having an asthma episode that requires an increase in your medicines or the addition of new medicines. Or your overall asthma may not be under control. Your health care provider may need to change your medicines and your Asthma Action Plan. Follow your Asthma Action Plan and seek additional medical care as indicated.



Red/Danger (below 50% of your personal best number) signals a medical emergency. If you have no symptoms, do another peak flow reading to confirm you are in the Red/Danger Zone. Take your quick-relief medicines right away as directed on your Asthma Action Plan and then get immediate medical attention. Call 911 or go directly to the emergency room. Follow up with your doctor within two days of an emergency room visit or hospital stay.

What Are Some Important Things to Remember?

- Write down your peak flow number in your asthma diary every day.
- A decrease in peak flow of 20 to 30% of your personal best may mean the start of an asthma episode. Ask your health care provider to help you determine this number range.
- Your Asthma Action Plan may tell you to take your peak flow reading more often and to adjust your medicines.
- Use the same brand of meter at home, school, and work. And be sure to bring it to your asthma check-ups.





COMMUNICATING WITH THE ASTHMA TEAM



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COMMUNICATING WITH THE ASTHMA TEAM MY ASTHMA CARE BOOK

Learning Objectives

By the end of this lesson, you will be able to:

- Create a list of people to communicate with about your asthma
- List two things to share with an employer or school staff
- Explain three ways to improve communication with health care providers
- List two techniques for working with a trusted person

Who Is Part of the Asthma Team?

Taking care of your asthma takes a team effort. There will be times when you are with others, such as co-workers, friends, or family members. It is important that you work with your health care team and the close people around you to manage your asthma.

Your asthma team may include:

- Co-workers or your employer
- Friends
- Classmates, faculty or school staff
- Family members or caregivers
- Health care providers such as doctors, nurses, respiratory therapists
- Asthma educators, community health workers, promotoras

Make a list of the people on your asthma team. These are the people who can help you with your asthma management. Giving information about your asthma to these people in your life is very important. They can help reduce your exposure to asthma triggers. They will also be able to help you if you have an asthma attack.

How Should You Communicate With Your Employer or School Community?

Settings free of asthma triggers are important for people with asthma. This includes places where you spend a lot of time, like at home, work, school dorms, and school classrooms.

Sometimes substances found in workplaces – like chemicals if you work in a plant, or flour if you work in a bakery – can be an asthma trigger. Secondhand smoke from your co-workers, clients, or classmates can trigger your asthma. If your workplace or school is not smoke-free, work with your supervisor or human resources department on ways to minimize your exposure to any secondhand or thirdhand smoke.

Depending on your job, you may not be able to remove all triggers. You may have to talk with your employer about other possible jobs or departments you can work in without triggering your asthma. If you are in school, you may have to consider moving to another dorm or changing classes.





COMMUNICATING WITH THE ASTHMA TEAM MY ASTHMA CARE BOOK

If other work options or environments are not possible, brainstorm with your employer, human resources department, or school staff about ways to reduce your exposure to triggers.

People with asthma are protected by both the **Americans With Disabilities Act** (ADA) and Section 504 of the Rehabilitation Act of 1973. The ADA gives people with disabilities the right to ask for reasonable accommodations in certain cases where policies, practices, or conditions leave you out or put you at a disadvantage.

The ADA defines a person with a disability as someone who has a physical or mental impairment that seriously limits one or more major life activities, or who is regarded as having such impairments. Major life activities include breathing, eating, working, and going to school. In 2008, the ADA was changed to include more people in the definition of "disabled." Conditions that only show symptoms at certain times are now included. Asthma and allergies fit this definition.

The ADA protects people with asthma and allergies even if reactions or attacks happen only when triggered. The ADA can help to create an environment where people with asthma can avoid triggers.

In most cases, everyone works together to improve conditions and promote equal access and include those with disabilities. This is called an **accommodation**. Accommodations are made on an individual basis because the needs of each person vary depending upon the situation.

Examples of accommodations could include:

- Reorganizing work spaces to reduce odors
- Restricting asthma triggers in shared spaces (smoke-free or pet-free zones)
- Removing old carpet

But an organization does not have to make an accommodation that causes an "undue burden" or that would create a "fundamental alteration" to its program. One example of an undue burden might be a small business without the money to cover the extra costs of an accommodation. Some accommodations may impact a company's ability to do business, resulting in a major change.

An organization must make a good faith effort to find and make acceptable changes. Organizations can refuse to make accommodations only after they have considered all options. Finding what works may require creative thinking and flexibility.

The Asthma-Friendly Work and School Spaces Checklist on the following pages can help you improve your environment. Talk with your employer or school staff about which of these changes would help you reduce your exposure to asthma triggers. As you work with your employer or school staff to reduce triggers, you may also want to give them a copy of your Asthma Action Plan. You can give a copy to your direct supervisor and possibly the human resources department.





Asthma-Friendly WORK AND SCHOOL SPACES CHECKLIST

Asthma is a serious condition that affects 25 million Americans. It is a chronic disease that causes your airways to become inflamed and swollen, making it hard to breathe. It is made worse by allergens and irritants. There is no cure for asthma.

Asthma is a leading cause of missed work and school days. By making your spaces more asthma friendy, you can help reduce your symptoms and chance of illness. Use this tool to evaluate the health and safety of your work or school spaces.

For more information, visit:

Asthma and Allergy Foundation of America: aafa.org • 800-7-ASTHMA

asthma & allergy friendly® Certification Program: aafa.org/certified





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Recommended Policies and Practices	Yes	No
Create a smoke-free environment by banning all smoking in the areas where people with asthma work or frequent for school. If smoking is allowed outside, create smoking zones away from entrances to buildings, open windows, and outdoor common areas. Strictly enforce these rules. Note: Encourage staff to participate in smoking cessation programs and give referrals and assistance.		
Train staff to watch for symptoms of asthma, warning signs that asthma is flaring up, and how to recognize emergency situations. Have new staff receive this training when hired as applicable.		
Train necessary staff members to administer emergency medicine.		
Have employees or students with asthma provide a written plan to be kept on file, listing allergies and asthma triggers, medicine schedule, and emergency instructions.		
Post signs reminding everyone to wash their hands frequently to reduce the spread of viral infections. The World Health Organization offers many free tools for the workplace/school, like downloadable posters that can be shared as reminders. The Centers for Disease Control and Prevention offers handwashing and flu prevention resources.		
Reduce chemical fumes, fragrances, and other odors.		
 Ask staff not to wear perfume, cologne, or other scented personal products. 		
 Don't use air fragrance sprays, incense, candles, and air fresheners. 		
 Avoid materials with fragrances or fumes (for example, markers, paints, adhesives). If they are used, provide extra ventilation. 		
 Air out new purchases (such as pressed-wood furnishings or plastic laminated products) before installation. 		
 Place office/school equipment that emits fumes (for example, photocopiers) in vented areas away from the staff/students. 		



Recommended Policies and Practices	Yes	No
Don't allow furry or feathered pets in the areas where people with asthma work or frequent for school (like cats, dogs, gerbils, hamsters, or birds).		
Don't use feather-stuffed furnishings and pillows.		
Keep indoor plants, which can develop mold growth, out of areas where people with asthma work or frequent for school.		
Switch to non-latex products and keep them out of the areas if someone has a latex allergy.		
 Avoid latex gloves. If gloves are used, use only non-powdered, non-latex gloves. 		
 Avoid latex balloons and other latex products. 		
Don't use fireplaces and wood or coal stoves.		



Routine Cleaning	Yes	No
Have vacuuming and other cleaning done when staff/ students with asthma are not around.		
If rugs or carpets must be used, have them vacuumed frequently (every day or two) using a CERTIFIED asthma & allergy friendly [®] vacuum. Have cleaning staff do this after hours, or have the employee or student with asthma stay out of the area for at least two hours.		
Shampoo rugs and upholstery with low-emission, fragrance-free products.		
Make sure shampooed items are dried thoroughly to prevent growth of mold and dust mites.		
Have dusting done often with a damp cloth to avoid stirring up the dust. (Don't use aerosol "dusting" sprays.)		
Keep garbage in tightly covered containers and remove promptly to outdoor enclosed trash area that is not accessible to staff/students.		
Use scent-free cleaners, such as water with plain soap or baking soda.		
Prevent mildew growth in bathrooms and other damp areas (such as refrigerator drip pans) by regular wiping with plain soap and water.		
Use vinyl-coated mats on carpeted floors (especially in basement areas) and wipe regularly with plain soap and water.		
If lightweight curtains are used, wash regularly in hot water at least 130°F or hotter.		
If window shades are used, wipe often with a damp cloth.		
Store supplies, materials, books, and magazines in closed cabinets and avoid piles of paper.		

Visit the **asthma & allergy friendly**[®] Certification Program at **aafa.org/certified** to locate products and services to help make your indoor spaces healthier. When you see the **asthma & allergy friendly**[®] Certification Mark on a product, you know it has been scientifically tested in accredited laboratories and proven to be more suitable for people with asthma and allergies.



General Physical Space Cleaning and Maintenance	Yes	No
Use proper ventilation to provide good air flow in all rooms and halls in every season so there is no stale or musty smell. Check outdoor intake and inside supply vents for blockages.		
 If ventilation is adequate, keep windows closed when pollen counts are high. Pollen levels can be monitored by visiting the National Allergy Bureau at pollen.aaaai.org. 		
 Use air conditioners with CERTIFIED asthma & allergy friendly[®] filters during warm seasons, if possible. 		
 Change heating or cooling system filters often and follow other service guidelines and routine maintenance procedures. 		
Prevent outdoor fumes (such as from car exhaust, idling vans or buses, or nearby businesses) from entering the building through open windows or doors. Don't allow buses, delivery trucks, and cars to idle on the premises.		
Keep outdoor landscaping and gutters clear of fallen leaves, compost piles, and cut grass.		
Check the building periodically for leaks and areas of standing water.		
Fix plumbing leaks promptly.		
Have painting, repairs, or construction work done when people with asthma and allergies are not present. Relocate them away from the work while it is happening and until all fumes and dust are gone.		
Protect indoor spaces from construction dust, debris, strong odors, and fumes.		

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General Physical Space Cleaning and Maintenance	Yes	No
Monitor humidity levels using a humidity gauge, if possible. Use dehumidifiers if necessary. (Dust mites and mold thrive on humidity.) Use exhaust fans in bathrooms, kitchens, and basement areas to help remove humidity.		
Remove and replace wet carpeting and padding if not dry within 24 hours after getting wet to prevent mold growth. If possible, replace wall-to-wall carpeting with hard surface flooring and washable rugs to reduce mold and other allergens.		
Place doormats outside all entrances to reduce the amount of allergens brought in.		
Aggressively control cockroach or mice infestations using preventive practices and less toxic extermination methods.		
 Use integrated pest management techniques to limit the amount of pesticides needed (for example, seal all cracks in walls, floors and ceilings; eliminate clutter; keep food in airtight containers). 		
• Apply pesticides properly with adequate ventilation at a time when people with asthma and allergies are not present. If you use a professional pest control agency, be sure that they are an Integrated Pest Management (IPM) certified exterminator.		

Visit the **asthma & allergy friendly**[®] Certification Program at **aafa.org/certified** to locate products and services to help make your indoor spaces healthier. When you see the **asthma & allergy friendly**[®] Certification Mark on a product, you know it has been scientifically tested in accredited laboratories and proven to be more suitable for people with asthma and allergies.







How Should You Communicate With Members of Your Family or Caregivers?

Having a chronic condition can be stressful. This stress can affect your relationships, your ability to feel good about yourself and even your ability to do a good job dealing with your asthma.

Some people with asthma report:

- Feeling inadequate (lacking) or burned out
- Fighting with loved ones
- Feeling stressed or depressed
- Feeling exhausted and fatigued

These feelings are normal. Don't be too hard on yourself. Try the following strategies:

- Don't expect to be perfect.
- Find a source of support, like a relative, a good friend, a member of the clergy or a counselor, another person with asthma, AAFA's online community or a support group.
- If you have a trusted partner, friend, or family member, plan special times to be together.
- Involve your trusted person fully in the care of your asthma. Be sure they know what your doctor is saying and what needs to be done to prevent and treat symptoms. Teach them about asthma to help them better understand it. Make decisions together, if possible.
- If you live with a significant other or housemate, talk with them about problems and feelings as they arise, rather than keeping things to yourself.

Open communication keeps you from feeling isolated, burdened, and stressed. If you are already having problems with a partner, friend, or family member, you might want to seek outside help. Things only get worse when you try to ignore them. It's sort of like asthma – the sooner you treat the problem, the less of a problem it will become in the long run.

Get the support you need to manage your asthma and allergies. Join our community to stay up to date on the latest asthma and allergy education, advocacy, news, and research. Our community also gives you the chance to connect with others who manage these conditions in an encouraging environment. Visit: aafa.org/join





How Should You Communicate With Your Health Care Provider?

You and your health care provider (doctor, nurse, respiratory therapist, etc.) should partner together fully to best manage your asthma.

Good communication between you and your health care provider is extremely important because:

- You are the one who knows your asthma best. You manage your asthma every day, while the health care provider sees you less often.
- While you are the expert on your own asthma, your health care provider is an expert on asthma in general. They have the experience of treating hundreds of patients with asthma.
- You are the one who must carry out your treatment plan.
- You are the one who will know if it is working or if there are any problems, like side effects. No treatment or prevention program can work unless it is carried out correctly.
- If you have an asthma emergency, your ability to carry out the necessary steps is essential.

Review the handout called Talking With Your Health Care Provider (on the following page) for possible solutions to situations you have had or may have during office visits.

Communicating With Your Health Care Provider in an Urgent Situation

During an asthma emergency, you may need to talk with your doctor, nurse, emergency department, or urgent care clinic staff. To get the best help, you need to give them accurate information. Have accurate information ready to make it easier for your medical team to help you and avoid unnecessary visits or dangerous delays in treatment.

Be prepared to provide information about:

- Your condition and symptoms
- A list of all of your current medicines, both prescription and over-the-counter
- How long your symptoms have been going on
- What you have already done to treat it
- How you are responding to the treatment

Review the handout called What to Tell Your Health Care Provider When You Have Asthma Symptoms (on page 101). When you are having symptoms and have followed your Asthma Action Plan, fill out this handout if you are able so the health care provider (doctor, nurse) knows how you are doing. Be sure to bring it with you to your appointment or emergency department.



TALKING WITH YOUR HEALTH CARE PROVIDER

Possible Problem	Possible Solutions
"When I go see my doctor or nurse, I forget some of the things I was going to ask or tell them."	Write down your questions and concerns ahead of time. Bring them with you when you go to see your health care provider. Track them in the "Notes" app on your cell phone if you have one.
"It does not seem like there is enough time to ask questions when I see my doctor."	Ask "Do you have time right now for a couple of questions?" If not, ask when a better time would be, or schedule follow-up visits.
"I cannot remember everything my nurse tells me."	Take notes while you are with your nurse or doctor, or ask them if you can record audio of the appointment. Ask your provider for a summary of the visit. Consider bringing someone with you.
"I am not sure when to call my pharmacist."	Ask your pharmacist to describe the situations when you should call the pharmacist or doctor. Write them down and then call when these situations arise.
"My doctor never gives me complete details for my symptoms and treatment."	Bring all of your asthma medicines with you to each appointment. Ask your doctor to explain in detail why you get the symptoms you get. Also ask why you are receiving the treatment you are getting.



TALKING WITH YOUR HEALTH CARE PROVIDER

Possible Problem	Possible Solutions
"I feel like my doctor doesn't take the concerns I have seriously. Sometimes I'm really afraid the situation could become serious."	Explain to your doctor how you feel.
"I need to find out more about managing my asthma."	Ask your nurse, doctor, or asthma educator for written information, or ask them where you can get more information.
"I have done a lot of reading about asthma, but my respiratory therapist will not allow me to express my opinion about the medical treatment."	Tell your respiratory therapist you would like to be more involved in treatment decisions because of your knowledge. If they disagree, you may want to consult with another health care provider who is more open to you.
"I read about a new treatment for asthma. Should I ask my health care provider about it?"	Bring the article with you, because they may not have seen it. Include the source of the article, such as the publication it appeared in or the website address.
"The call center never lets me speak with my doctor when I call."	Express your concerns to your doctor on your next visit. Make notes about what happened with the call center so you can be specific when you bring it up with the doctor.



WHAT TO TELL YOUR HEALTH CARE PROVIDER When You Have Asthma Symptoms

If you are having asthma symptoms, first follow your Asthma Action Plan. After you have followed your Asthma Action Plan, fill out this form (if you are able) and bring it with you to your appointment or to the emergency department.

Current Condition

I have a cold o	or other	respirate	ory infectio	on: Y	es	No		
I have a fever:	Yes	No	My fever	is:		My fever started at		
My breathing	feels: _							
My best peak	flow rat	e is usua	ally:					
My current peak flow rate is:								
Other Sym	ptoms							
Wheezing:	Yes	No	Fatigue:	Yes	No	Coughing a lot:	Yes	No
My symptoms	began	at						

Where I was when symptoms started:		
I was exposed to a possible trigger:	Yes	No
If yes, the trigger was:		

What Have You Done to Treat Symptoms?

I took my medicines listed on my Asthma Action Plan: Yes No

I took them at: ______ a.m./p.m.

Dose/Medicine:

Other things I did to treat symptoms:

My symptoms:	My peak flow rate:
Got better	Got better
Stayed the same	Stayed the same
Got worse	Got worse





COMMUNICATING WITH THE ASTHMA TEAM MY ASTHMA CARE BOOK

When Should You Go to an Asthma Specialist?

It's OK to ask your primary care provider (doctor) for a referral to a board-certified asthma specialist (such as an allergist or pulmonologist), especially if you and your primary care provider are unable to control your asthma. An asthma specialist can help you learn more about your asthma and develop a treatment plan that works for you.

According to national asthma care guidelines, you should see an asthma specialist if you:

- Experience asthma symptoms every day and often at night that cause you to limit your activity
- Have had a life-threatening asthma attack
- Do not meet the goals of asthma treatment after three to six months, or your doctor believes you are not responding to current treatment
- Have symptoms that are unusual or hard to diagnose
- Have conditions such as severe seasonal allergies (hay fever) or sinusitis that complicate your asthma
- Need more tests to find out more about your asthma and the causes of symptoms
- Need more help and instruction on the treatment plan, medicines, or asthma triggers
- Might be helped by allergy shots
- Need oral corticosteroid therapy or high-dose inhaled corticosteroids
- Have taken oral corticosteroids more than twice in one year
- Have stayed in a hospital because of your asthma
- Need help to identify your asthma triggers

The American Academy of Allergy, Asthma & Immunology and the American College of Allergy, Asthma, & Immunology websites both have tools to help you find a board-certified asthma specialist.

Find an Asthma Specialist:

American Academy of Allergy, Asthma & Immunology allergist.aaaai.org/find

American College of Allergy, Asthma, & Immunology acaai.org/find-an-allergist







STAYING HEALTHY WITH ASTHMA



Asthma and Allergy Foundation of America

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STAYING HEALTHY WITH ASTHMA MY ASTHMA CARE BOOK

Learning Objectives

By the end of this lesson, you will be able to:

- Lower your chances of getting sick, and know what to do when you get sick
- Learn about changes in asthma during pregnancy
- Understand how to get medical assistance and how to cope curing a crisis
- Set an asthma control goal
- Explain how you will self-manage your asthma

Dealing With Colds, Flu, and Other Respiratory Infections

When you have asthma, it is important to avoid catching colds, the flu, and other respiratory infections. People with asthma are at a higher risk of complications from some illnesses.

The flu is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness. It can also cause death in severe cases. The flu can affect your lungs when you have asthma. It can cause inflammation (swelling) and narrowing of your airways.

If you have asthma, defending yourself against the flu is very important. Most healthy people recover from the flu without problems. But having asthma puts you at risk of serious health problems from the flu. If you develop flu-like symptoms, contact your doctor right away. There are medicines that can help.

COVID-19 is a disease caused by a coronavirus. Coughing and trouble breathing are some of the symptoms. Studies show that having asthma does not put you at a greater risk of getting COVID-19 or having severe COVID-19. People with well-controlled asthma have less severe COVID-19 outcomes than people with uncontrolled asthma.

Even though people with asthma are not at the highest risk for COVID-19, it is still important to keep your asthma under control.

To lower your chance of getting sick, take these steps:

- Wash your hands often with soap and water.
- Avoid touching your eyes, nose, or mouth.
- Get a yearly flu vaccine.
- Stay healthy by getting other vaccinations as recommended. (Visit **aafa.org** for more information on COVID-19 and pneumococcal [noo-muh-kok-uhl] vaccines.)
- Keep your asthma equipment clean (inhaler, spacer/chamber, nebulizer, tubing and mouthpiece) and do not share with other people.
- Wear a face mask in indoor public spaces, especially when cases of COVID-19 or flu are high in your community.

On the following page, review the Is it Asthma, Allergies, a Cold, Covid-19, the Flu, or RSV? symptoms chart.



IS IT ASTHMA, ALLERGIES, A COLD, COVID-19, THE FLU, OR RSV?

Symptoms	Asthma Gradual or abrupt onset of symptoms	Seasonal Allergies Abrupt onset of symptoms	Cold Gradual onset of symptoms	Coronavirus [†] (COVID-19) Symptoms range from mild to severe	Flu Abrupt onset of symptoms	Respiratory Syncytial Virus (RSV) Gradual onset of symptoms
Length of symptoms	Can start quickly or last for hours or longer*	Several weeks	Less than 14 days	7-25 days	7-14 days	7-10 days
Cough	Common (can be dry or wet/productive)	Rare (usually dry unless it triggers asthma)	Common (mild)	Common (usually dry)	Common (usually dry)	Common
Wheezing	Common	No**	No**	No	No**	Common
Shortness of breath or trouble breathing	Common	No**	No**	Common	No**	No*** (sometimes in infants)
Chest tightness/ pain	Common	No**	No**	Sometimes	No**	No**
Rapid breathing	Common	No**	No**	Rare	No**	No*** (sometimes in infants)
Sneezing	No**	Common	Common	Rare	No	Common
Runny or stuffy nose	No**	Common	Common	Common	Sometimes	Common
Sore throat	No**	Sometimes (usually mild)	Common	Common	Sometimes	Rare
Fever	No	No	Short fever period	Common	Common	Common
Feeling tired and weak	Sometimes	Sometimes	Sometimes	Common	Common	Rare
Headaches	Rare	Sometimes (related to sinus pain)	Rare	Common	Common	No
Body aches and pains	No	No	Common	Common	Common	Rare
Diarrhea, nausea and vomiting	No	No	Rare	Common	Sometimes	No
Chills	No	No	No	Common	Sometimes	Sometimes
Loss of taste or smell	No	Sometimes	Rare	Common	Rare	No

Your symptoms may vary. If you have any cold, COVID-19, or flu-like symptoms, talk with your doctor, get tested, and stay home. *If you are having trouble breathing and your quick-relief medicine is not helping your asthma symptoms, call your health care provider or seek medical attention immediately. **Allergies, colds, and flus can all trigger asthma which can lead to shortness of breath, chest tightness/pain, and rapid breathing. People with both allergies and asthma may have runny nose, sore throat, and sneezing. ***This is not common but may be seen in babies 6 months or younger. †Information about COVID-19 is still evolving. Many people may not have symptoms.

Sources: Asthma and Allergy Foundation of America, World Health Organization, Centers for Disease Control and Prevention. Edited with medical review: 2/08/23 • aafa.org/rti

¿PUEDE SER ASMA, ALERGIAS, UN RESFRIADO, EL COVID-19, LA GRIPE O VRS?

Síntomas	Asma inicio gradual o abrupto de los síntomas	Alergias estacionales inicio abrupto de los síntomas	Resfriado inicio gradual de los síntomas	Coronavirus [†] (COVID-19) Los síntomas varían de leves a graves.	Gripe inicio abrupto de los síntomas	Virus respiratorio sincitial (VRS) inicio gradual de los síntomas
Duración de los síntomas	Los síntomas pueden aparecer rápidamente o durar horas o más.*	Varias semanas	Menos de 14 días	7-25 días	7-14 días	7-10 días
Tos	Común (puede ser una tos seca o productiva)	Raro (normalmente seca a menos que desenca- dene asma)	Común (leve)	Común (normalmente seca)	Común (normalmente seca)	Común
Sibilancia	Común	No**	No**	No	No**	Común
Falta de aire o dificultad para respirar	Común	No**	No**	Común	No**	No** (a veces en bebés)
Dolor/presión en el pecho	Común	No**	No**	A veces	No**	No**
Respiración rápida	Común	No**	No**	Raro	No**	No** (a veces en bebés)
Estornudos	No**	Común	Común	Raro	No	Común
Congestión o goteo nasal	No**	Común	Común	Común	A veces	Común
Dolor de garganta	No**	A veces (normalmente leve)	Común	Común	A veces	Raro
Fiebre	No	No	Corto período de fiebre	Común	Común	Común
Fatiga o debilidad	A veces	A veces	A veces	Común	Común	Raro
Dolor de cabeza	Raro	A veces (relacionado con dolor sinusal)	Raro	Común	Común	No
Dolor corporal	No	No	Común	Común	Común	Raro
Diarrea, náusea y vómitos	No	No	Raro	Común	A veces	No
Escalofríos	No	No	No	Común	A veces	A veces
Pérdida del sentido del gusto u olfato	No	A veces	Raro	Común	Raro	No

Sus síntomas pueden variar. Si tiene síntomas de COVID-19, resfriado o gripe, hable con su doctor, hágase una prueba y quédese en casa. *Si su medicamento de alivio rápido no mejora sus síntomas de asma, llame a su proveedor de atención médica o busque atención médica de inmediato. **Las alergias, los resfriados y la gripe pueden desencadenar el asma, lo cual puede provocar falta de aire, dolor o presión en el pecho y respiración rápida. Las personas con alergias y asma pueden tener secreción nasal, dolor de garganta y estornudo. ***Esto no es común, pero se puede ver en bebés de 6 meses o menos. †La información sobre el COVID-19 sigue evolucionando. Muchas personas pueden contagiarse sin mostrar síntomas. *Fuentes: Asthma & Allergy Foundation of America, World Health Organization, Centers for Disease Control & Prevention* Editado con revisión médica 02/08/23 • aafa.org/rti



STAYING HEALTHY WITH ASTHMA MY ASTHMA CARE BOOK

Managing Asthma During Pregnancy

Asthma is one of the most common medical concerns that occur during pregnancy. Complications (related health issues) from asthma are possible. They may include:

- A small increased risk of preterm (early) labor and delivery
- High blood pressure and a related condition known as pre-eclampsia
- Low birth weight (babies born weighing less than 5 pounds, 8 ounces)

It is not known if asthma is the direct cause of these problems or if other reasons are to blame. Keeping asthma well-controlled may help reduce the chance of complications. Well-controlled asthma during pregnancy can reduce the chances of fetal or newborn death. It also improves your baby's growth inside the uterus.

If you have asthma and get pregnant, you may notice some changes to your asthma. Asthma symptoms may get worse, stay the same, or get better during pregnancy. About one-third of people who are pregnant with asthma will see their asthma symptoms get worse. Another third will stay the same. The last third will see their asthma symptoms improve.

If your asthma symptoms change in any way during pregnancy, they will likely return to their pre-pregnancy condition within three months after giving birth. If your asthma symptoms increase or decrease during one pregnancy, you may be likely to experience the same thing in later pregnancies.

Work with your doctors to follow your asthma closely. This way, they can change your treatment and update your Asthma Action Plan, if necessary. This calls for good teamwork between you, your obstetrician, your primary care doctor, and your asthma doctor.

During pregnancy, doctors may change some of your asthma medicines. Work with your doctors to find the best treatment for you. These may include:

- Short-acting inhaled bronchodilators
- Anti-leukotriene agents like montelukast (SINGULAIR®)
- Some inhaled corticosteroids, like budesonide

If your asthma is very severe, oral steroids (such as prednisone) may be necessary for the health of you and your baby.




STAYING HEALTHY WITH ASTHMA MY ASTHMA CARE BOOK

Seeking Medical Assistance

There are two situations when you must get medical help:

- 1. When your symptoms are sudden and severe right at the start, or whenever you have any of the Red/Danger Zone symptoms. Severe asthma episodes are a medical emergency and can be life-threatening. Follow your Asthma Action Plan and take your prescribed medicines. Then get medical attention. Call 911 or go directly to the emergency department.
- 2. When symptoms persist meaning they don't get better, or they get worse, even after you have taken your quick-relief medicine as your doctor prescribed.

If you closely watch your early warning signs and begin treatment early, you can avoid events that require emergency medical attention or treatment. But you still need to know what to do if you have an asthma attack.

Coping During a Medical Crisis

Some of these feelings are common for people with asthma to feel during a medical crisis:

Negative feelings

- Alone
- That you were going to die
- Scared and frightened when you had to be hospitalized
- Inadequate
- Out of control
- People were not moving fast enough to help you
- Afraid to go to bed
- Panicky

Positive feelings

- Confident about your decisions
- Knowing it's important to stay calm
- Reassured to know that you can get help
- Feeling OK because you know what to expect

These feelings are completely normal, and many people with asthma have felt them at one time or another. It's normal to feel fearful and anxious when you have an asthma attack. You may even be afraid that the situation will become even more serious. There is no reason to feel guilty about anything you may have done. You may have feelings of anger caused by fear and anxiety. This is normal.





STAYING HEALTHY WITH ASTHMA MY ASTHMA CARE BOOK

What Should Your Asthma Management Goals Be?

Asthma is a chronic disease (meaning it is long-term). There is no cure for asthma. But there are steps you can take to control and manage it. Asthma can be controlled in most cases. Refer back to these sections of **Lesson 1** to refresh your memory on asthma control and goals for asthma treatment:

- What Is Asthma Control? (page 13)
- What Is the Goal of Asthma Treatment? (page 14)
- Setting a Personal Goal of Asthma Control (page 14)

Now that you have learned more about asthma, do you have an updated asthma goal? Complete or update the Setting a Personal Goal handout. Take this handout with you the next time you see your asthma care provider.

SETTING A PERSONAL GOAL for Your Asthma

Write down something you enjoy but are limited in doing right now because of your asthma.

Set a personal goal to control your asthma so you can do this activity.

What action could you take to try to reach the goal above?

How long should it take?

What is the biggest roadblock? What steps can you take to overcome any challenges that may stop you from reaching your goal?

Discuss your action steps and personal goals with your asthma specialist. They need to know what is important to you. They will work with you to help you reach your goal.

Once you reach your personal goal, it is time to set a new one!



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