



**Children's
Health Fund**

Family Asthma Guide



The Goal is Control!



Children's Health Fund (CHF) has been at the center of the movement for health equity for children for 35 years. CHF's National Network is a critical resource in ensuring that children living in under-resourced communities have the same chance to live a healthy life as every other child in this country. Bringing together the many providers of care in these communities in one network allows CHF to share knowledge that improves healthcare everywhere. It allows us to spot and head off emerging challenges. It allows us to act as one voice for policy change.

To request the Family Asthma Guide, please go to:
childrenshealthfund.org.

Contents

Introduction	4
The Goal is Control	6

Asthma	7
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What is Asthma?	7
Asthma Categories	10
Asthma Attacks	12

Triggers	13
-----------------	-----------

What is a Trigger?	14
Trigger Control	15
Allergies	16

Medicine	17
-----------------	-----------

What Medicine Should I Take?	17
Medicine Tips	19
Medicine Photos	20
Using an Inhaler	22
Using a Nebulizer	23
Peak Flow and Spirometry	24

Asthma Action Plan	25
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Important Phone Numbers & Appointments	28
National Asthma Resources	29

What
YOU
Can Do

Look for this symbol for tips on what
YOU can do to control your asthma.

.....

But I have asthma...

Can I?



Play basketball



Play the clarinet

Yes, you can!



Have the lead role in a play



Do karate

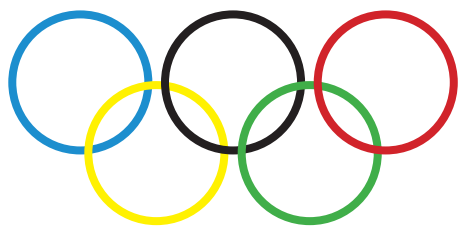


**Play outside
with my friends**

**Go to
camp**



**Play at
the park**



Did you know?

There are even Olympic athletes with asthma?



What do you like to do?

People with asthma do all these things. With good asthma control, you can too. Different people need different plans. Work with your medical provider to make a plan that is right for you. Don't let asthma hold you back!

The Goal is Control!

.....

This guide will help you and your family understand your asthma better. Learn **what YOU can do** to control your asthma.



Asthma control means:

- ☒ You can play and exercise without problems
- ☒ You can sleep well
- ☒ No missed school because of asthma
- ☒ No hospital stays
- ☒ Few or no emergency room visits
- ☒ Few or no side effects from medicine

What are **YOUR** goals for asthma control?

1

2

3





What is Asthma?



Asthma is a disease of the lungs. It makes the small airway tubes get narrow, so it is hard for air to get in and out.



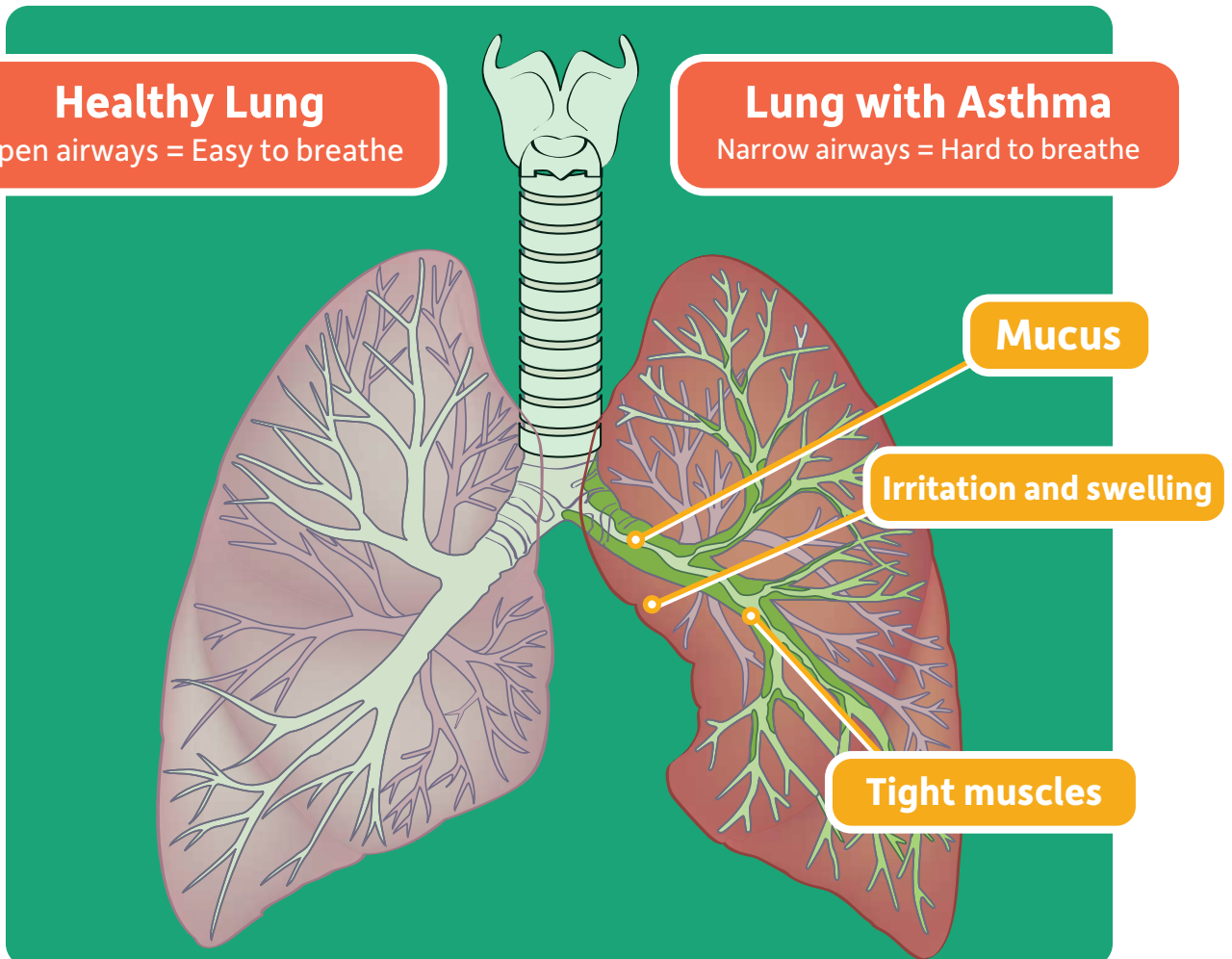
When your airways are too narrow, you get asthma symptoms, and it is hard to breathe.

Healthy Lung

Open airways = Easy to breathe

Lung with Asthma

Narrow airways = Hard to breathe



What is Asthma?

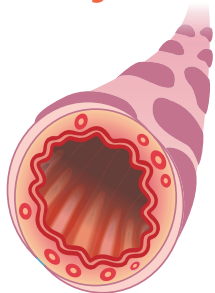


Asthma is a lung disease that makes it hard to breathe.

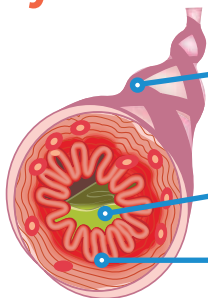
Asthma is a disease with symptoms that come and go. Some people have fewer symptoms as they get older. You may not have symptoms for a long time, but they can come back any time. Be ready to act quickly. Some people with asthma only have symptoms when they get a cold or exercise. Other people have symptoms every day. Some people are worse at certain times of the year.

Asthma can't be cured, but you CAN work with your medical provider to have fewer symptoms. Learn what to do to take control!

Healthy Airway



Airway with Asthma



Three things happen when you have asthma:

- 1 Muscles tighten** around airways
- 2 Mucus is produced**
- 3 Irritation and swelling** block airways

What
YOU
Can Do

Asthma can be controlled.
You can learn to manage your asthma.
.....

Asthma Symptoms

What does asthma feel like?



Asthma is not the same for everyone. You may have some or all these symptoms:



Cough

With asthma you may cough a lot, even when you don't have a cold. The cough may last a long time. It may wake you up at night. You may cough when you play or exercise.

Wheezing

Wheezing is a whistling sound when you breathe out. This is the air trying to go through narrow airways.

Out of breath

When you feel out of breath you may have trouble breathing or feel like you can't get enough air. You may need to breathe faster than normal.

Chest tightness

Chest tightness is when your chest feels tight or heavy. Your chest may hurt or feel like something is squeezing or pressing on it. You may feel like it is hard to get air in and out of your lungs.

Fatigue/tiredness

Fatigue or tiredness is when you get tired more easily than usual.

What
YOU
Can Do

Know your symptoms so you can act quickly when they begin. Plan with your medical provider. Acting early can keep symptoms from getting worse.

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Asthma Categories

How bad is my asthma?



Your medical provider will classify your asthma based on how often you have symptoms, or how sick you get.

The categories are:

Intermittent

Mild Persistent

Moderate Persistent

Severe Persistent

Ask your medical provider which category of asthma you have.

People in any category can get very sick when they have an asthma attack.

- ✓ **Be ready**
- ✓ **Have your medicines**
- ✓ **Know what to do**





A person who sleeps well can do better at school. If you wake up at night coughing a lot, your asthma is not in control.



Your medical provider will check your asthma control:

Well controlled

=

No symptoms at all

This is the goal for everyone.

Not well controlled

=

Some symptoms

Talk to your medical provider. Your plan may need changes to get your asthma well controlled.

Ask your medical provider how well you are doing.

Very poorly controlled

=

A lot of symptoms

Talk to your medical provider. Your plan may need changes to get your asthma well controlled.

What YOU Can Do

Talk to your medical provider to make sure you are on the right medicines, especially when your symptoms change.

.....



ATTENTION

Asthma Attacks

An asthma attack is when your asthma symptoms get out of control and make you sick. **Signs of a serious asthma attack can include:**

Trouble walking or talking well



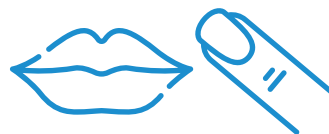
Cough, wheezing, or chest tightness that doesn't get better with medicine

Breathing hard and fast



Ribs sticking out when you are breathing in

Lips or fingernails turning blue

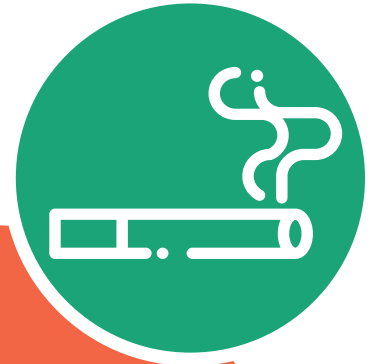
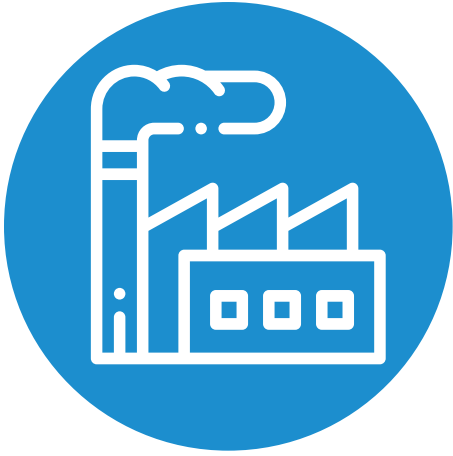


If this happens, get help immediately.

See the Asthma Action Plan on page 26



What is a Trigger?



What is a Trigger?



An asthma trigger is something that makes your asthma symptoms start or get worse. Different people have different triggers.



TIP:

Knowing your triggers will help you manage your asthma.

Common Triggers

Indoor

- Dust or dust mites
- Cats, dogs, or other animals
- Rats or mice
- Cockroaches
- Mold

Outdoor

- Pollen from flowers, grass, or trees
- Changes in weather or seasons

Irritants

- Cigarette smoke
- Strong smells
(like cleaning products or perfumes)
- Air pollution or smog

Other

- Stress, worry, or other emotions
- Colds or sickness
- Exercise or play
- Food allergies
- Cold air

What are **YOUR** asthma triggers?

1

2

3

Trigger Control

What triggers your asthma?
Try to avoid your triggers.
Plan for when you will be
around them.

In the house

Pests

- Use baits, not sprays, to kill cockroaches. Sprays can trigger asthma attacks.
- Use traps to kill rodents.
- Don't leave food out. This can bring mice or roaches into your home.
- Fix holes around pipes and in the walls where pests may enter.

Dust

- Clean dusty surfaces with a damp cloth so dust doesn't get in the air.
- Wait 30 minutes to go inside after sweeping to avoid dust in the air.
- Vacuum cleaners with a HEPA filter prevent dust from getting into the air.

Mold

- Mold grows on moist surfaces.
- Check for puddles of water under the refrigerator and in the bathroom and kitchen.
- Fix leaks. Water damage on the walls, floor, or ceiling can grow mold.

Smells and odors

- Sprays and cleaners with strong smells can bother your lungs.
- Lemon, baking soda, and vinegar are safer for cleaning.
- Air fresheners, candles, and perfumes can trigger asthma.
- Don't smoke or be around smoke.

Outside

If you have allergies to plants or pollen, know what months are worst for you. Plan. Talk to your medical provider about allergy medicines.

ATTENTION

Particles in the air
are bad for asthma!
**Particles come from
cigarette smoke,
vaporizers, and flames.**



You should avoid areas
where people have
smoked, vaporizers are
used, or candles and
incense are burned.



Allergies



People with allergies may need to take allergy medicines. Controlling allergies may help you control your asthma.

How do I know if I have allergies?

There are different ways to test for allergies. One way is with a blood test. Another is with a skin test. Your medical provider may do these tests in the office or send you to a special doctor called an allergist.

Do allergies make my asthma worse?

An allergy is when your body reacts to something that is harmless to most people. Allergies can cause a rash, hives, itchy eyes, runny nose, sneezing, or coughing. Allergies can make asthma worse.

Some people are allergic to dust mites, pollen, mold, rats, mice, cats, dogs, and cockroaches. Allergies can make asthma harder to control.

Related Conditions

Some medical conditions make asthma more difficult to control. Talk to your medical provider about your other health problems including:

- **Snoring:** If you snore most nights even without having a cold, ask your medical provider if you could have obstructive sleep apnea.
- **Bedwetting:** For some children, bedwetting is related to uncontrolled allergies.
- **Behavior issues:** Poor sleep can cause difficulty focusing, impulsiveness, and increased activity.
- **Anxiety:** Anxiety can make asthma worse, and asthma can make anxiety worse.
- **Trouble exercising:** It is important to be in good shape. When asthma is well controlled you should be able to exercise normally. If you get out of breath, cough, or wheeze, tell your medical provider.
- **Sickle cell:** Some blood disorders, like sickle cell disease, can cause serious asthma problems. See your hematologist regularly if you have a blood disorder.

What
YOU
Can Do

Ask your medical provider if you need to be tested for allergies.

.....



What Medicine Should I Take?

There are 2 kinds of medicine to treat asthma

Relievers

Relievers relax tight muscles around the airways. Use your reliever medicine for quick relief of asthma symptoms.

Controller

Controllers prevent irritation, swelling, and mucus that block airways. If you are on a controller medicine, use it every day to prevent symptoms. Ask your medical provider if you need a controller.



Everyone who has asthma should have a reliever medicine. People who have asthma symptoms often should be on a controller medicine too.

Asthma Medications

RELIEVERS

Everyone with asthma should have a reliever medicine.

Relievers are also called rescue medicines. They can come as inhalers or go in a nebulizer machine; you may need more than one.

What do relievers do?

- Some relax the muscles around the airways. Some decrease airway irritation.
- These medicines work quickly to help you feel better.

When should I use my reliever(s)?

- Only when you need it.
- For quick relief.
- When you are having symptoms (cough, wheezing, chest tightness, out of breath, fatigue/tiredness).
- Before exercise or activity, if needed.
- About half an hour before you are going to be around one of your triggers.

My Reliever(s):

CONTROLLERS

Some people also need a controller medicine. These medicines try to prevent asthma symptoms.

Controllers can be inhalers or medicine that goes in a nebulizer machine.

What do controllers do?

- They reduce irritation, swelling, and mucus in the airways.
- They take time to work. Don't expect to feel different right away.

When should I use my controller?

- Every day or twice a day (as directed by your medical provider).
- Whether or not you are having asthma symptoms.
- If used every day, you will have fewer symptoms over time.
- If used every day, they will help with your triggers.

My Controller(s):

Important!

- When you have symptoms or an asthma attack, use your reliever(s) for quick relief.
- If you are on a controller, use it every day, even when you are not having symptoms.
- If you are on a controller, you should also have a reliever. You will still need your reliever when you have symptoms.

Medicine Tips

TIP:

Talk to your medical provider if your medicine makes you feel bad or sick. You may need to use a spacer or change to a different medicine.







Rinse your mouth after using inhaled controller medicines.

If you are on a controller, use it every day. Make taking your controller part of your regular routine.

Always use a spacer with your inhalers. More medicine gets into your lungs, so less gets on the inside of your mouth.



Don't run out of medicine!

-  Plan.
-  Get refills before you run out of medicine.
-  If you run out of refills, call your medical provider. Don't wait for your next appointment.
-  Check the expiration date on your medicine.
-  Do not use it if it is past the expiration date.
-  Take your medicine when you are away from home.

Relievers



Albuterol Sulfate solution



Proventil HFA (albuterol)



Ventolin HFA (albuterol)



Xopenex HFA (levalbuterol)



ProAir HFA (albuterol)



ProAir RespiClick (albuterol)



Maxair Autohaler (pirbuterol)



Xopenex solution (levalbuterol)



Symbicort 80 or 160 (budesonide/formoterol)



Dulera 50 or 100 or 200 (mometasone/formoterol)

Controllers



Pulmicort Flexhaler 90 or 180 (budesonide)



Pulmicort Respules 0.25 or 0.5 or 1.0 (budesonide solution)



Qvar RediHaler 40 or 80 (beclomethasone)



Fluticasone MDI 44 or 110 or 220



Fluticasone Diskus 50 or 100 or 250



Avesco MDI 80 or 160 (ciclesonide)



Aerospan MDI (flunisolide)



Arnuity Ellipta 50 or 100 or 200 (fluticasone)



Asmanex Twisthaler 110 or 220 (mometasone)



Singulair 4 or 5 or 10 (montelukast)



Advair Diskus 100 or 250 or 500 (fluticasone/salmeterol)



Advair metered-dose inhaler 45 or 115 or 230 (fluticasone/salmeterol)



Wixela Inhub 100 or 250 or 500 (fluticasone/salmeterol)



AirDuo RespiClick 55 or 113 or 232 (fluticasone/salmeterol)



Dulera MDI 50 or 100 or 200 (mometasone/formoterol)



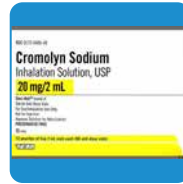
Symbicort 80 or 160 (budesonide/formoterol)



Accolate 10 or 20 (zafirlukast)



Zyflo 600 (zileuton)



Cromolyn solution



Serevent Diskus 50 (salmeterol)



Foradil DPI (formoterol)

Oral Steroids



Prelone syrup (prednisolone)



Orapred syrup (prednisolone)



Pediapred syrup (prednisolone)



Prednisone tablet



Methylprednisolone tablet

Allergy Medicines



Rhinocort Aqua (budesonide)



Nasonex (mometasone)



Flonase (fluticasone)



Nasacort (triamcinolone)



Singulair 4 or 5 or 10 (montelukast)



Zyrtec solution (cetirizine)



Zyrtec tablets (cetirizine)



Claritin syrup (loratadine)



Claritin tablets (loratadine)



Allegra syrup (fexofenadine)



Allegra tablets (fexofenadine)



Xyzal solution (levocetirizine)



Xyzal tablets (levocetirizine)

Using an Inhaler

How do I use an inhaler?



Inhaler

Sprays a mist of medicine that you breathe in



Spacer

A tube that connects to your inhaler

Allows more medicine to go deep into your lungs



Mask

Covers mouth and nose to create a seal while breathing

Used with spacer and inhaler for young children

INHALER

1. Shake inhaler.
2. Connect it to the spacer or spacer with mask, if you have one.
3. Put end of spacer in your mouth or mask over your nose and mouth.
4. Press down on inhaler.
5. Breathe in deeply and hold it for 10 seconds. If you can't do this, use a spacer, and take 4 to 6 deep breaths.
6. Wait 1 minute and repeat steps 1 to 5 if taking a second dose.

DRY POWDER INHALERS

There are other kinds of inhalers that have powder inside, instead of mist. Ask your medical provider if you don't know what kind you have.

1. Do not shake.
2. Make sure you hold inhaler or disk right side up.
3. Twist or click dose counter.
4. Hold inhaler to mouth.
5. Breathe in hard, deep, and fast.
6. Hold breath for 10 seconds.
7. Be sure to breathe out from your nose. You don't want to lose any powder from your mouth.

What
YOU
Can Do

Bring your inhaler with you when you see your medical provider. Ask them to watch you use it to make sure you are doing it right.

.....

Using a nebulizer

What is a nebulizer?

It is a machine that makes liquid medicine into a mist. You breathe the mist into your lungs.



How do I use a nebulizer?

1. Attach plastic tubing to the nebulizer machine.
2. Connect the other end of the tube to the medicine cup.
3. Put your medicine in the cup.
4. Attach mask or mouthpiece to medicine cup.
5. Put mask over mouth and nose or use mouthpiece.
6. Be sure not to breathe through your nose if you use the mouthpiece.
7. Turn on the machine.
8. Take slow, deep breaths.
9. Keep doing this, until all the medicine is gone from the cup and there is no more mist.
10. **Clean the mask, mouthpiece, tubing, and medicine cup** so that germs won't grow.



TIP:

A treatment usually takes 5-10 minutes

Sit with the medicine cup upright so it doesn't spill.

Parents' tip

Nebulizer treatments can be scary or boring. Try to distract your child by looking at a book or telling a story. If your child uses a nebulizer, ask your medical provider if an inhaler would work instead.

Peak Flow and Spirometry



What is a peak flow meter?

It is a small tool that measures how well air gets out of your lungs. High numbers mean better airflow. Low numbers mean it's harder to breathe.

- Your medical provider can help you practice. Find out your best number when you feel well. This is your goal.
- At home, check your peak flow to see how you are doing. When you get sick, your numbers will get lower. This is a sign to act using your Asthma Action Plan.
- If you feel well, high peak flow numbers show that your medicines are working.



How do I use the peak flow meter?

1. Stand up straight.
2. Put the pointer at the very bottom next to the smallest number.
3. Take a deep breath.
4. Place the mouthpiece in your mouth and close your lips around it.
5. Blow out as hard and as fast as you can, in one quick blow.

Repeat steps 1-5 two more times. Write down the numbers. The biggest is your peak flow.

What is spirometry?



This is a breathing test to see how your lungs are working. It is also called a pulmonary function test. For this test, you breathe into a mouthpiece connected to a special computer, called a spirometer. Some medical providers may have this machine in their office. Others use a special clinic for this test.

What
YOU
Can Do

Talk to your medical provider to see if you need a peak flow meter and when to use it.

.....



What is an Asthma Action Plan?

Your medical provider helps to make this plan with you.

- It tells you what to do when you have asthma symptoms.
- It reminds you to take your controller medicines every day, even when you are feeling well.
- It helps you decide when to use your reliever medicines.
- It helps you to know when you need to see your medical provider. It can help you decide when to go to the emergency room.

Your asthma action plan has all your asthma information. Carry it with you. Give a copy to your school and to people who take care of you.



Keep your asthma action plan up to date with all your medicines. Keep it where you can see it every day.

Asthma Action Plan



Everyone should have an asthma action plan!

Your medical provider will help you fill out a form like this one.

Patient Information

Patient: _____

Date of Birth: _____

Parent/Guardian: _____

Phone: _____

Medical Provider Information

Name: _____

Date filled out: _____

Phone: _____

GO! GREEN ZONE

Peak Flow: from _____ to _____

You have ALL of these:

- Breathing is easy
- No cough, wheeze, or trouble sleeping
- Energy level is normal
- No cough with play or exercise
- Peak Flow number is in your Green Zone

Take these medicines every day!

Medicine	How Much	How Often

Comments: _____

WARNING! YELLOW ZONE

Peak Flow: from _____ to _____

You have ANY of these:

- Having trouble catching your breath
- Coughing, day or night
- Mild wheeze
- Tiredness
- Chest feels tight
- Peak Flow is in your Yellow Zone

Take green and yellow zone medicines!

Medicine	How Much	How Often

Comments: _____

DANGER! RED ZONE

Peak Flow: from _____ to _____

GET HELP NOW!

- Green and yellow zone medicines are not helping
- Breathing is hard and fast. Can't catch a breath
- Ribs may show when breathing
- Nose opens wide
- Chest feels tight or hurts
- Trouble talking or walking
- Lips or fingernails are blue
- Peak Flow is in your Red Zone

Take red zone medicines & call a doctor now!

Medicine	How Much	How Often

Comments: _____

Get HELP from a medical provider. Do NOT Wait!
If you cannot reach the medical office, call 911
or go to an EMERGENCY ROOM right away

Write down your asthma triggers: _____

Be Ready!

Let your school, daycare, or babysitters know about your medicine plan and triggers.

Carry inhalers and spacer or leave them with the school nurse. You never know when you will need them!

School Medication Form – The form allows you to keep your asthma medicine in the nurse’s office or carry it yourself, if you are old enough



Have an emergency plan

Share it with your family, school, daycare, and babysitters. These are things you may need if you must go to the emergency room:

- ☒ **Important contact phone numbers**
- ☒ **Letter from your parent giving permission for you to get care**
- ☒ **A copy of your insurance cards**

What
YOU
Can Do

Trust yourself. If you feel like your asthma is acting up, act! Talk to your medical provider if you think your medicine or plan isn’t working.
.....



Phone Numbers & Appointments



MY MEDICAL PROVIDER

Name _____

Address _____

Phone number _____

Name _____

Address _____

Phone number _____

Name _____

Address _____

Phone number _____



MY PHARMACY

Name _____

Address _____

Phone number _____



MY SCHOOL / SCHOOL HEALTH OFFICE

Name _____

Address _____

Phone number _____









LOCAL ASTHMA RESOURCES

Remember: In an Emergency call 911

MY APPOINTMENTS:



National Asthma Resources

-  **National Heart, Lung, and Blood Institute (NHLBI)**
nhlbi.nih.gov
-  **American Academy of Allergy, Asthma, and Immunization (AAAAI)**
AAAAI.org
-  **American Lung Association (ALA)**
lungusa.org
-  **Consortium on Children's Asthma Camps**
asthmacamps.org
-  **Asthma & Allergy Foundation of America (AAFA)**
aafa.org
-  **The Allergy & Asthma Network/Mothers of Asthmatics Inc. (AAN/MA)**
aanma.org
-  **Centers for Disease Control and Prevention (CDC)**
cdc.gov/asthma
-  **American Academy of Pediatrics (AAP)**
aap.org



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