

MY ASTHMA BOOKLET



Name: _____

Date: ____/____/____

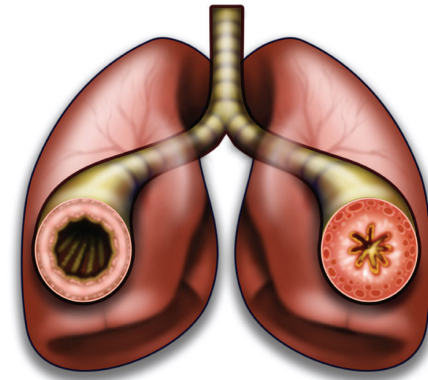


Children's Mercy
KANSAS CITY

WHAT IS ASTHMA?

WHAT IS ASTHMA?

- Asthma is a lung disease.
- The airways in the lungs get very small.
- It is hard for air to move through very small airways.
- It is hard to breathe.

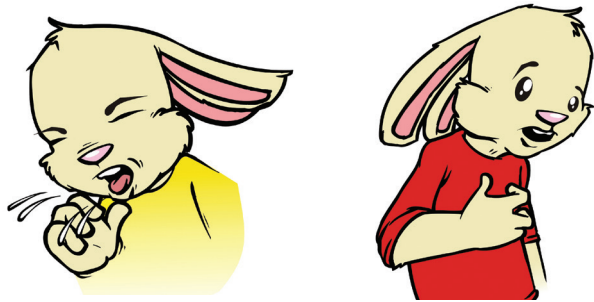


Asthma is often passed down through the family.



ASTHMA SIGNS AND SYMPTOMS

Very small airways cause asthma signs and symptoms.



Check your asthma signs and symptoms

✓	Cough
✓	Wheeze
✓	Tight chest
✓	Fast breathing
✓	Other: _____



CONTROL YOUR ASTHMA SIGNS AND SYMPTOMS

Asthma Goals

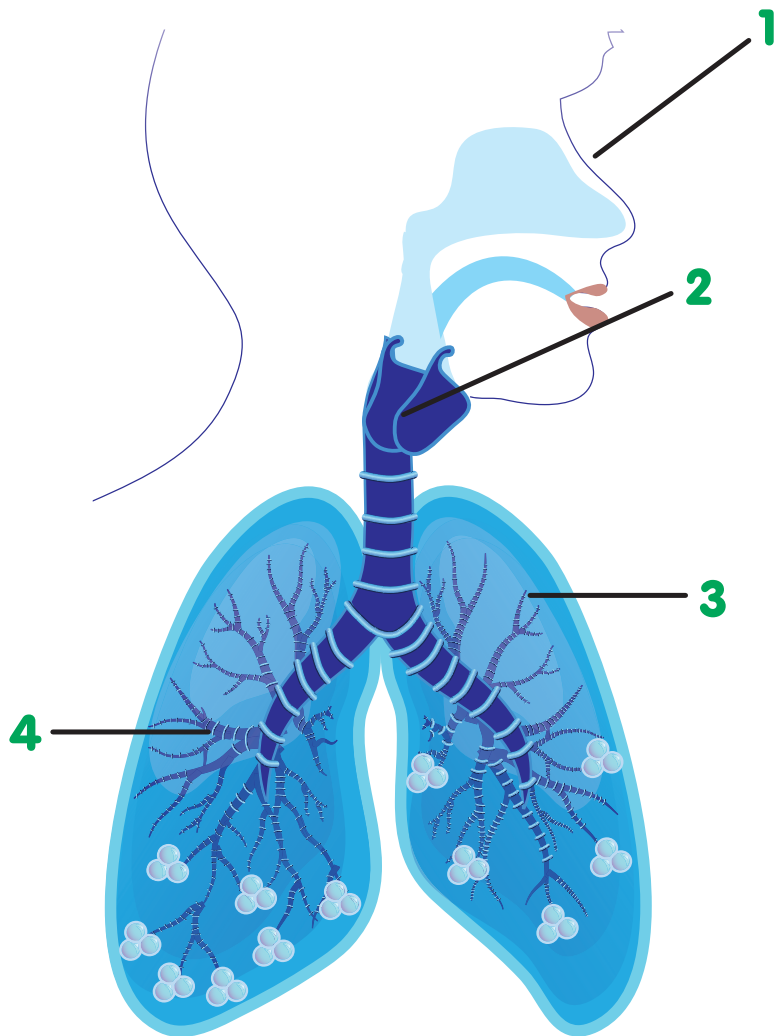
✓	Able to play without asthma signs and symptoms.
✓	Asthma signs and symptoms during day 2 or less times a week.
✓	Asthma signs and symptoms at night 2 or less times a month.
✓	Coming to hospital or emergency department for asthma 2 or less times a year.

✓ Check your asthma control often.



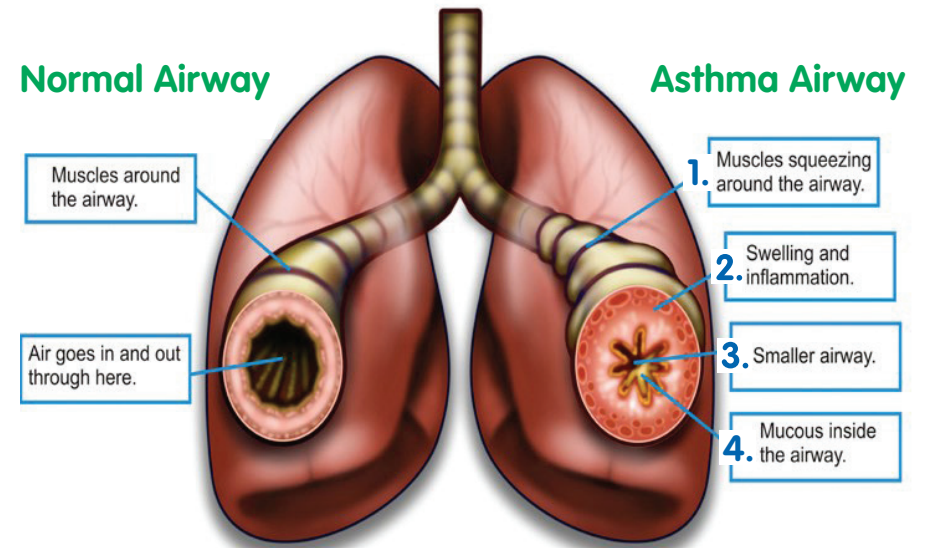
INSIDE LUNGS

1. We breathe through our nose and mouth.
2. The air goes into large airways.
3. Large airways branch into smaller airways.
4. Muscle bands wrap around the airways.



WHAT CAUSES ASTHMA SIGNS AND SYMPTOMS?

Asthma airways are sensitive or easily bothered.



What happens to the airway?
1. Muscle squeeze
2. The inside swells
3. Airway gets small
4. Mucous fills the airway



Asthma signs and symptoms
Cough
Wheeze
Tight chest
Fast breathing

WHAT MAKES YOUR ASTHMA SIGNS AND SYMPTOMS BETTER?

Types of asthma medicines

- 1. Quick reliever**
Relaxes muscles around the airway.
- 2. Controller**
Controls swelling and mucous in your airways.
- 3. Emergency medicine**
Brings back control of serious symptoms.



QUICK RELIEVER MEDICINE

- Works **FAST** (10-20 minutes).
- Lasts for up to 4 hours.
- Used to **STOP** asthma signs and symptoms.

CIRCLE the quick reliever you use at home.



Ventolin[®] SP
(albuterol)
available in generic



Combivent[®] Respimat[®]
(albuterol and ipratropium)



Proventil[®] SP
(albuterol)
available in generic



Albuterol[®] SP
(generic)



ProAir[®] Digihaler[®]
(albuterol)



Albuterol



ProAir[®] Respiclick[®]
(albuterol)



DuoNeb[™]
(albuterol and ipratropium)



Xopenex[®] SP
(levalbuterol)



Xopenex[®]
(levalbuterol)



Atrovent[®] SP
(ipratropium)

To prime your inhaler—see Priming Inhalers on page 28.

SP Use a spacer with this inhaler—see Spacer section starting on page 26.

Inhaler photos courtesy of Allergy & Asthma Network.

CONTROLLER MEDICINE

- Works **SLOW**.
- May take a few weeks to work.
- **PREVENTS** asthma signs and symptoms.
- Rinse mouth after use.

CIRCLE the controller you use at home.



Flovent® HFA SP
(fluticasone)



Asmanex® SP
(mometasone)



QVar® RediHaler™
(beclomethasone)



Asmanex® Twisthaler®
(mometasone)



Dulera® SP
(mometasone and formoterol)



Budesonide



Montelukast



Pulmicort Flexhaler™
(budesonide)



Advair®
(fluticasone and salmeterol)



Alvesco® SP
(cicleonide)



Symbicort® SP
(budesonide and formoterol)



Arnuity® Ellipta®
(fluticasone furoate)



Breo™ Ellipta™
(fluticasone - furoate and vilanterol)



Wixela® Inhub®
(fluticasone and salmeterol)



Spiriva®
(tiotropium)



AirDuo®
(fluticasone and salmeterol)
available in generic



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EMERGENCY MEDICINE

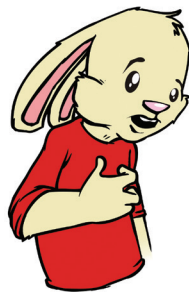


Use to bring back control of serious symptoms.

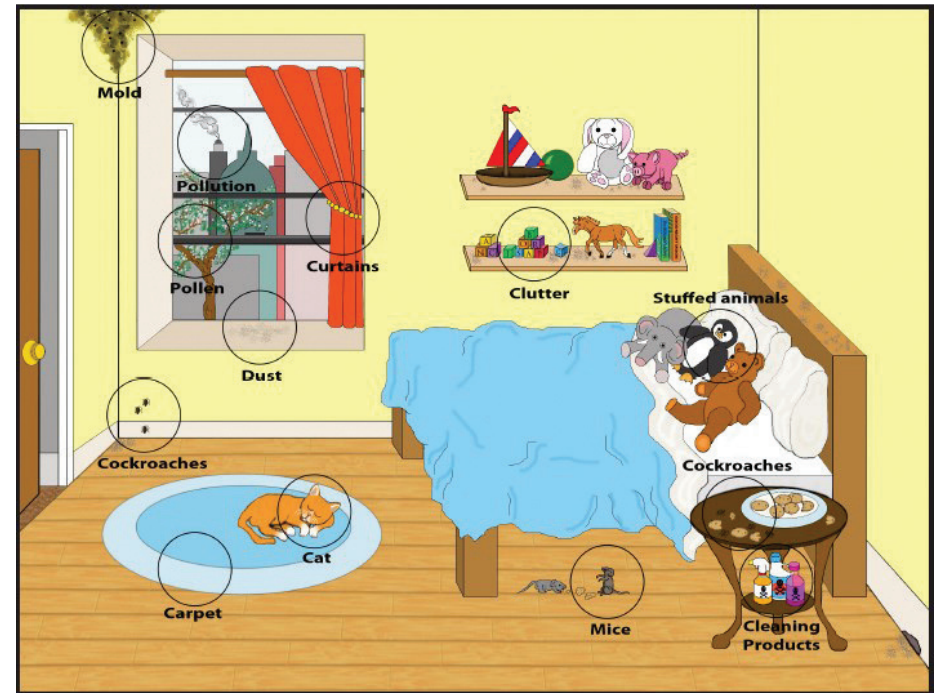
Pill or liquid

- Prednisolone
- Orapred
- Prednisone

See page 21 for more details.



REDUCE YOUR EXPOSURE TO TRIGGERS IN THE HOME



- Don't bring food in bedroom.
- Keep pets out of bedroom.
- Caulk holes and cracks in walls and corners.
- Remove carpets and rugs from bedroom.
- Wipe dust off regularly with a damp cloth.
- Remove dust collecting items from bedroom.
- Use zipper-encased, allergy free bedding.
- Replace curtains with shades or blinds.
- Don't smoke inside the house.
- Keep windows closed during allergy season.
- Keep humidity under 50%.
- Use only HEPA vacuums and air purifiers.
- Use 'green' cleaning supplies or water and vinegar.
- Put away stuffed animals and toys in a box.

List developed by the Asthma Literacy Project for the South Bronx Asthma Partnership.

REDUCE YOUR EXPOSURE TO TRIGGERS IN THE HOME

Triggers can start asthma signs and symptoms.

✓ Check Asthma Triggers

✓		<p>Cold or virus</p> <ul style="list-style-type: none"> • This is the most common asthma trigger. • Treat cough and wheeze during a cold with asthma medicines.
✓		<p>Exercise</p> <ul style="list-style-type: none"> • Warm up before exercise. • Cool down after exercise. • Use quick reliever before heavy exercise.
✓		<p>Weather</p> <ul style="list-style-type: none"> • Cold weather—Wear scarf over nose and mouth. • Hot weather—Use air conditioning.
✓		<p>Outdoor pollen</p> <ul style="list-style-type: none"> • Keep windows closed. • Stay indoors. • Wash clothes and hair after being outside.
✓		<p>Strong emotions</p> <ul style="list-style-type: none"> • Calm child down. • Use quick reliever as needed.

✓		<p>Mold</p> <ul style="list-style-type: none"> • Keep house dry. • Use exhaust fans. • Keep humidity less than 50%.
✓		<p>Dust</p> <ul style="list-style-type: none"> • Wash linens in hot water. • Vacuum with HEPA filter. • Change furnace filters. • Wipe dust with a damp cloth.
✓		<p>Smoke/Vape</p> <ul style="list-style-type: none"> • Try to quit. • Do not smoke/vape in the home or car. • Smoke/vape outside and wear a cover-up.
✓		<p>Strong smells</p> <ul style="list-style-type: none"> • Use fragrance-free cleaners. • Do not use strong smelling air fresheners or perfumes.
✓		<p>Cockroaches</p> <ul style="list-style-type: none"> • Keep home free of clutter. • Do not leave dishes in sink overnight. • Keep home dry. • Take trash out every night.
✓		<p>Animals</p> <ul style="list-style-type: none"> • Keep out of bedrooms and off furniture. • Bathe pets weekly.

HEALTHY HOME CHECKLIST

- Was your house built before 1980?
- Do you have carpeting or rugs?
- Are there any odors that do not go away?
- Do you notice damp, water leaks or stains?
- Do you notice mice, rats or cockroaches?
- Is there smoking inside your home?
- Is it hard to get rid of dust?
- Do you use sprays or foggers for pests?

If you answered YES to any of the questions please contact:

Environmental Health Program at (816) 302-8565,
or visit the website: childrensmercy.org/ceh.





ASTHMA ACTION PLAN

WHAT IS AN ASTHMA ACTION PLAN?

An **Asthma Action Plan** is a tool to help manage asthma signs and symptoms at home.

Keep asthma action plan where you can find it:

- Hang up on refrigerator.
- Take a picture and keep in your phone.

Patient information:		Asthma Action Plan childrensmercy.org/asthma		 GREEN - FEEL GOOD YELLOW - SLOW DOWN RED - STOP	 Children's Mercy KANSAS CITY
GREEN ZONE	No cough, wheeze or problems breathing				
GREEN ZONE					
YELLOW ZONE	Getting worse or starting to get a cold				
YELLOW ZONE	FIRST	Start Quick Reliever – Keep taking your GREEN ZONE medications			
YELLOW ZONE	SECOND	If your cough and wheeze gets better, continue Quick Reliever AND			
YELLOW ZONE					
RED ZONE	Emergency: STOP and take action now				
RED ZONE	Call your provider or the Children's Mercy nurse triage line at (816) 234-3188				
RED ZONE	Go to the Emergency Room or call 911 if:				
RED ZONE	- pulling in at the ribs or neck	- lips or fingernails are blue			
RED ZONE	- struggling to breathe	- concerned about your child's breathing			

ASTHMA ACTION PLAN ZONES

GREEN ZONE



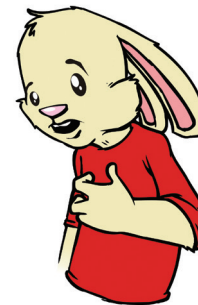
- I do not have asthma symptoms (cough, wheeze or problems breathing).
- I can play without symptoms.
- I can sleep without symptoms.

YELLOW ZONE



- Asthma symptoms getting worse.
- I have a cold.

RED ZONE



- Pulling in at the ribs or neck.
- Lips or fingernails are blue.
- Struggling to breathe.
- Concerned about your breathing.

GREEN ZONE



What is it?

- I **DO NOT** have asthma symptoms.
- Feeling great.

Actions to take:

- If controller medicine is part of your Green Zone, take medicine **EVERY DAY**.
- Use quick reliever medicine for asthma signs and symptoms.
- Take quick reliever medicine as needed before exercise.

If you have a seasonal plan:

- Take asthma medicine **EVERY DAY** during your worst asthma season.



YELLOW ZONE



What is it?

- Asthma signs and symptoms are starting.
- Starting to get a cold or virus.

What is my first sign of a cold or virus? Check here.

✓	Runny nose
✓	Sore or scratchy throat
✓	Tummy hurts
✓	Tired more than normal
✓	Other:

Actions to take:

- Continue my Green Zone medicines.
- Start quick reliever medicine.
- If I am not better in 2 weeks, I will talk to my provider.

YELLOW ZONE Continued

Evaluate your asthma signs and symptoms **NOW**.

Repeat quick reliever up to 3 times.



1

GIVE QUICK RELIEVER

If quick reliever does NOT work fast (in 20 minutes)



2

GIVE QUICK RELIEVER AGAIN

If quick reliever does NOT work fast (in 20 minutes)



3

GIVE QUICK RELIEVER AGAIN



NO SYMPTOMS



YELLOW ZONE



YES SYMPTOMS

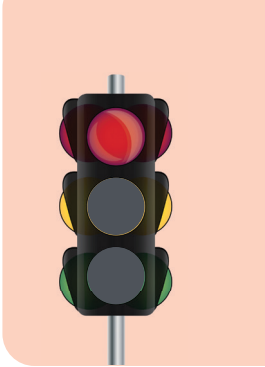


RED ZONE

RED ZONE

What is it?

- I am finding it hard to breathe.



Action to take

- Take emergency medicine **NOW** if listed on my asthma action plan.

Next

Seek emergency care. A caregiver should:

- Call your asthma provider or the Children's Mercy nurse triage line at (816) 234-3188.
- Go to the ER or call 911 if:
 - » Pulling in at the ribs or neck.
 - » Lips or fingernails are blue.
 - » Struggling to breathe.
 - » Concerned about your breathing.

UNDERSTANDING THE ASTHMA ACTION PLAN

Take the Asthma Action Plan Quiz

(Answers are at the bottom of the page.)

You wake up in the night with cough and wheeze. What is the first thing you should do?

- A. Give the quick reliever.
- B. Give the controller.
- C. Give emergency medicine.

Two quick reliever treatments did not work fast in 20 minutes. What is the first thing you should do?

- A. Give the controller.
- B. Give the quick reliever again.
- C. Give emergency medicine.

Your child feels better after 3 quick reliever treatments. What zone is this?

- A. Green Zone
- B. Yellow Zone
- C. Red Zone

Answers: 1=A 2=B 3=B

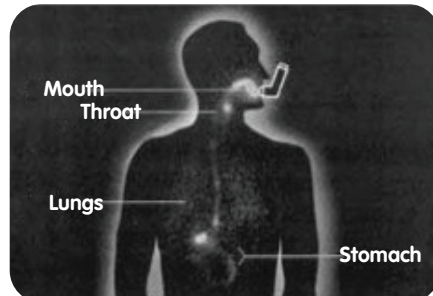
SPACERS

SPACERS

Why use a spacer with an inhaler?

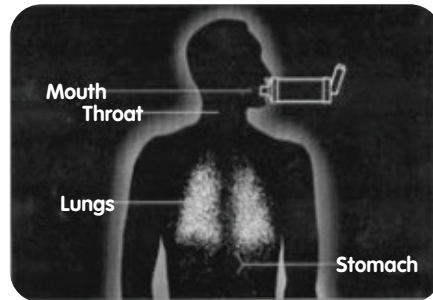
Inhaler alone

When an inhaler is used alone, medicine ends up in the mouth, throat, stomach and lungs.



Inhaler used with spacer device

When an inhaler is used with a spacer device, more medicine is delivered to the lungs.



- Always use a spacer with your inhaler.
- Children under the age of about 10 should use a mask with the spacer.



Scan this QR code for a video version of how to use a spacer.

"Comparative respiratory deposition of 99m Tc labeled particles of albuterol using a metered dose inhaler, a metered dose inhaler with Aerochamber® spacer and OptiChamber® spacer in healthy human volunteers using gamma-scintigraphy," R. Beihn, PhD, Scintiprox, Inc., Indianapolis, IN and D. Doherty, MD, Dept. of Pulmonology, University of Kentucky Medical Center, Lexington, KY, 1997.

Images kindly provided by Respironics HealthScan, Inc.

Allies Against Asthma, Cap Center for Pediatric Research, 855 W. Brambleton Ave., Norfolk, VA 23510, (757) 668-6435

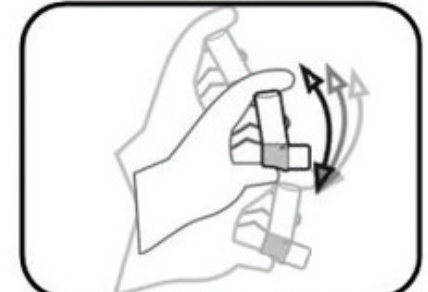
HOW TO GIVE ASTHMA MEDICINE WITH SPACER AND MASK

Spacer with mask

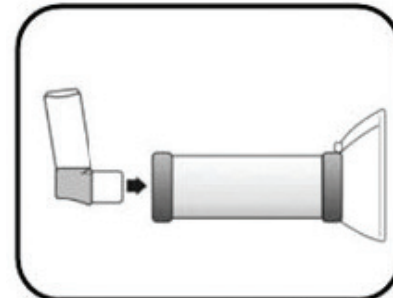
Use a spacer with the inhaler. More medicine will go into the lungs.



1. Sit with your child in your lap.



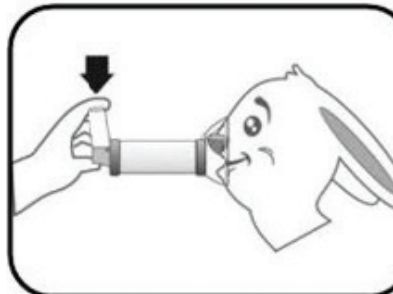
2. Shake the inhaler.



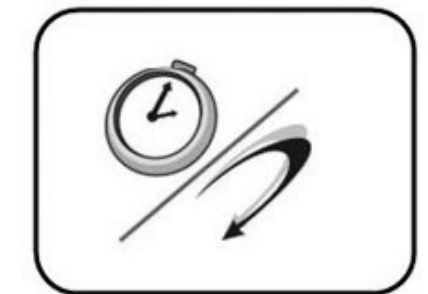
3. Remove cap from the inhaler. Place inhaler into spacer.



4. Seal the mask over the nose and mouth.



5. Push down on the inhaler. Release 1 puff into the spacer.

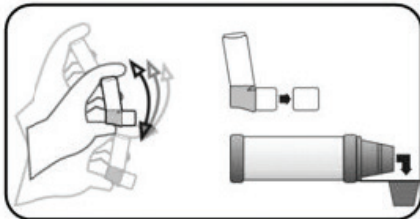


6. Hold mask on face for 5-10 breaths. Remove mask from face. Wait about 30 seconds. Repeat steps 1-6 for each puff.

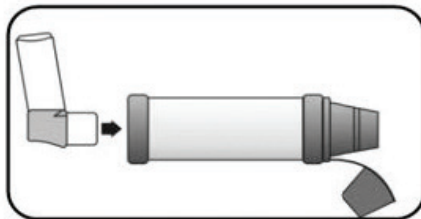
HOW TO GIVE ASTHMA MEDICINE WITH SPACER AND MOUTHPIECE

Spacer with mouthpiece

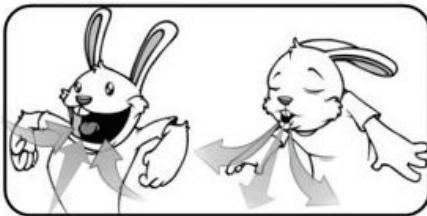
Use a spacer with the inhaler. More medicine will go into the lungs.



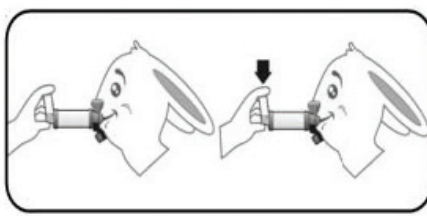
1. Shake the inhaler. Remove the caps from the inhaler and spacer.



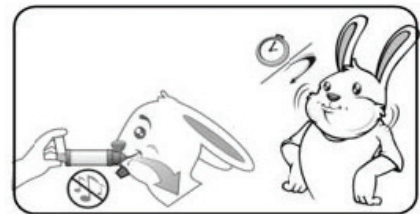
2. Place the inhaler into the back of the spacer.



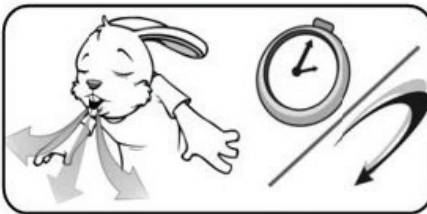
3. Take a deep breath and let it all the way out.



4. Seal lips around the mouthpiece. Push down on the inhaler to release 1 puff into the spacer.



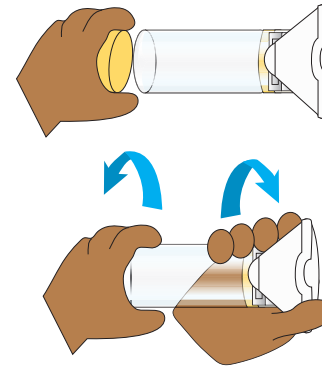
5. Breathe in slowly through the mouth. Hold breath for 10 seconds. The whistle sound means the breath is too fast. Slow down.



6. Let out your breath. Wait about 30 seconds. Repeat steps 1-6 for more puffs.

CLEANING SPACER

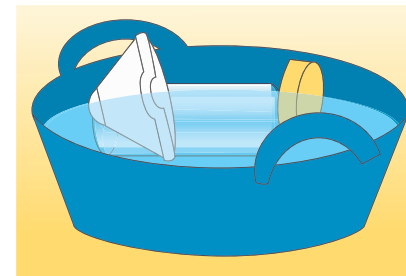
Some spacers may be cleaned in the dishwasher. Please read cleaning instructions for your spacer.



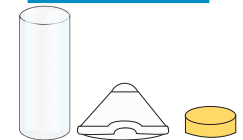
1. Remove the back piece. Twist chamber to remove the front piece.



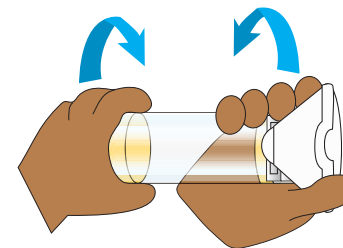
2. Soak all parts in warm water and liquid dish soap. Move gently. **DO NOT** scrub inside.



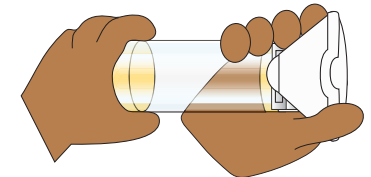
3. Rinse.



4. Air dry standing up. **DO NOT** rub dry.



5. Fit the front piece on the end of the chamber. Twist until locked.



6. Center the notch on the back piece with the line on the chamber. Press back piece firmly in place.

PRIMING INHALERS

Priming an inhaler means to spray it into the air before taking a dose. Follow the directions below to make sure you are getting the right amount of medicine with each puff.

Name	How to prime	
Ventolin[®] (albuterol)	First time: Spray 4 times in air.	If not used in 2 weeks or dropped, spray 4 times in air.
ProAir[®] (albuterol)	First time: Spray 3 times in air.	If not used in 2 weeks, spray 3 times in air.
Proventil[®] (albuterol)	First time: Spray 4 times in air.	If not used in 2 weeks or dropped, spray 4 times in air.
Xopenex[®] (levalbuterol)	First time: Spray 4 times in air.	If not used in 3 days, spray 4 times in air.
Flovent[®] (fluticasone)	First time: Spray 4 times in air.	If not used in 7 days or dropped, spray 4 times in air.
Asmanex[®] (mometasone)	First time: Spray 4 times in air.	If not used in 5 days, spray 4 times in air.
Symbicort[®] (budesonide and formoterol)	First time: Spray 2 times in air.	If not used in 7 days or dropped, spray 2 times in air.
Alvesco[®] (cicleonide)	First time: Spray 3 times in air.	If not used in 10 days, spray 3 times in air.
Advair[®] (fluticasone and salmeterol)	First time: Spray 4 times in air.	If not used in 4 weeks or dropped, spray 4 times in air.
Dulera[®] (mometasone and formoterol)	First time: Spray 4 times in air.	If not used in 5 days, spray 4 times in air.



Check dose counter and expiration date on inhalers prior to giving medication.

ASTHMA CONTROL

CHECK ASTHMA CONTROL OFTEN

✓	Able to play without asthma signs and symptoms.
✓	Asthma signs and symptoms during day 2 or less times a week.
✓	Asthma signs and symptoms at night 2 or less times a month.
✓	Coming to hospital or emergency department for asthma 2 or less times a year.

Contact your asthma provider if you do not check all of the boxes.



TRACK ASTHMA CONTROL AT HOME

Track symptoms every day using an Asthma Diary.

To print out an **Asthma Diary**, go to: childrensmercy.org/asthma and select **asthma control**.

Answer these questions every day:
 1. Did my child cough last night?
 2. Did my child need the quick-relief inhaler?
 3. Did my child have difficulty with exercise or activity?

Use these symbols to record any other symptoms your child had.
Symptoms: ☹️ Day Wheezing ☹️ Night Wheezing ☹️ Day Coughing ☹️ Stuffy Nose ☹️ Runny Nose ☹️ Sneezing ☹️ Itchy Eyes

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

Track symptoms once a month using an **Asthma Control Test**

To print out an **Asthma Control Test**, go to: childrensmercy.org/asthma and select **asthma control**.

Childhood Asthma Control Test for children 4 to 11 years.

How to take the Childhood Asthma Control Test

How your child completes these questions.

Please complete the following questions on your own.

1. During the past 4 weeks, how often did your child have an asthma flare-up (episode)?

2. During the past 4 weeks, how often did your child wake up during the night because of asthma?

3. During the past 4 weeks, how often did your child miss school because of asthma?

4. During the past 4 weeks, how often did your child miss play because of asthma?

Take the Asthma Control Test™ (ACT) for people 12 yrs and older.

Know your score. Share your results with your doctor.

1. In the past 4 weeks, how often did you feel your asthma has you from getting a good night's sleep, school or home work?

2. During the past 4 weeks, how often have you had shortness of breath?

3. During the past 4 weeks, how often did you have asthma symptoms including coughing, wheezing or chest tightness or pain when you are active or when you wake up in the morning?

4. During the past 4 weeks, how often have you used your rescue inhaler or other asthma medication such as a steroid?

5. How well do you feel your asthma is controlled during the past 4 weeks?

If your score is 19 or less, your asthma may not be controlled as well as it could be. Talk to your doctor.

ASTHMA HEALTH PROVIDERS

Partner with your health provider to assess asthma control.

Primary care provider

Provider: _____

Phone number: (_____) _____ - _____

Other asthma provider

Provider: _____

Phone number: (_____) _____ - _____

My next appointment is:

Date: _____

Time: _____

Location: _____

Always bring these items to your asthma visit:

- Medicines
- Diary
- Action Plan

LEARN MORE ABOUT ASTHMA

Join our free Asthma Class

Register online at childrensmercy.org/asthma or call (816) 302-3484.

Children's Mercy Adele Hall Campus

2401 Gillham Road
Kansas City, MO 64108
Monday-Friday, 11:15 a.m. – 12:15 p.m.

Can't attend an Asthma Class but still want to learn?

Try our Asthma Class online.

Visit childrensmercy.org/asthma and click on "Free Online Asthma Class" or scan this QR code.



For asthma facts and fun visit childrensmercy.org/asthma or scan this QR code.





childrensmercy.org/asthma



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03/23 23-ASTH-1446

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