



# **YOUR TEAM**

# **Your Doctor: Your Pediatrician: Your Specialist:**

# **INFORMATION**

Our Lady of the Lake Children's Health Pulmonology:
Our Lady of the Lake Children's Health Allergy/Immunology:
Our Lady of the Lake Children's Hospital Emergency Room:
Lake After Hours Kids: (225) 765-KIDS (5437)
ololchildrens.org

# **TABLE OF CONTENTS**

What is Asthma?
Asthma Medicines
How to Use Inhalers with a Spacer and Mask
How to Use Inhalers with a Mouthpiece 7
Asthma Triggers
What is an Asthma Action Plan?
Understanding Your Cannister Medicine
Understanding Your Nebulizer Medicine
Understanding Your Asthma Control Test
What is a Peak Flow Meter?
<b>FAQs</b>
Notes

## WHAT IS ASTHMA?

Asthma is inflammation (swelling) in the lung airways. Even when your child is not having an attack and looks well, the swelling is present. Asthma often runs in families, especially those with eczema or allergies.



## Asthma causes THREE things that make it hard to breathe:

- 1. Swelling inside the airways
- 2. Tightening of the muscles surrounding the airway
- **3.** Increase in mucus

# What are Asthma Symptoms?

- Coughing (often worse at night)
- Fast breathing/chest tightness
- Noisy breathing (wheezing)
- Chest caving in (retractions)

# Other early warning signs

- Scratchy, itchy throat
- Tummy hurts, throwing up
- Runny nose, sneezing
- Red, watery eyes, dark circles under eyes
- Feels tired, quiet, lays around
- Change in behavior can't sleep, decreased appetite

#### **ASTHMA MEDICINES**

# What types of medicine are used to treat asthma?

Asthma can be well controlled with the right medicines. Asthma medicines are safe and work well when taken correctly. The medicines are not addictive and your child will not become dependent on them. Please bring your medicines and spacers to doctor visits to review and make sure you're using them correctly.

#### There are two main asthma medications:

- 1. Rescue medicine or quick-relief medicine
- 2. Controller medicine

# What RESCUE or QUICK RELIEF Inhaler do you use?

Albuterol is a drug that relaxes the muscles around the breathing airway. It opens the airway within minutes. It rescues your child, but does not help the swelling in the bronchial tube. This medicine is your "quick relief medicine." Always have Albuterol available.

Using quick relief medicine more than two times in a week may be a sign your child's asthma is not controlled. Please contact your doctor to discuss.

Some children also need quick-relief medication to "pretreat" before exercise or active play. This should allow exercise or active play without any asthma symptoms.

Circle the medicine you use to quickly relieve your asthma symptoms.



# What CONTROLLER medicine do you use?

Controller medicine controls swelling of the airways. Swelling is the silent part of asthma which can be dangerous and cause death. This medicine has to be taken consistently every day to work.

Have your child take it when they wake up and before they go to sleep, even when they are not sick. The medicine does NOT work if your child misses a dose.

Tell your doctor if your child still uses quick relief or rescue medicine while taking controller medication regularly.

Controller medicine **should not be** used for symptoms of an asthma attack.

Circle your controller medicine.



#### **COMBINATION MEDICATIONS**

Contains both inhaled corticosteroid and long-acting beta<sub>2</sub>-agonist (LABA).

























4 | Asthma Education Handbook Asthma Education Handbook | 5

## **HOW TO USE INHALERS WITH A SPACER AND MASK**

# Important Tips for Children Under 9 Years Old

- Always use a spacer device with a face mask.
- Always sit or stand.
- Clean weekly in warm soapy water and air dry.

**Using Your Inhaler Medicine** 



## Using a spacer with facemask



1. Take off inhaler cap and make sure opening is clean. Shake inhaler 5 seconds.



2. Put inhaler into open end of spacer.



3. Put mask over the nose AND mouth. Press against the face gently so no air or medicine escapes.



4. Spray one puff of medicine and hold the mask in place.



5. Breathe in and out 6 times.

#### Best to use inhalers with a spacer.

More medicine will get into the lungs and less on your tongue and throat.

Use more than 1 puff of medicine? Wait at least 30 seconds between puffs.

## **HOW TO USE INHALERS WITH A MOUTHPIECE**

# Important Tips for Children 9 Years and Older

- Always use a spacer device.
- Always sit or stand.
- Clean weekly with warm soapy water and air dry.

#### **Using Your Inhaler Medicine**

#### Spray inhaler with a tube type spacer or holding chamber



Take off cap and Make sure opening is clean. Shake inhaler 5 seconds.



Start to take a slow deep If you hear a whistle, breathe

slower, but keep taking a deep Do not breathe through your

Step 5

Take the spacer out of your mouth and hold your breath. Count to 10 slowly.





Breathe out all the air in your lunas.



Step 6



Breathe out slowly, like cooling soup on a spoon.



Put spacer in your mouth and close lips tightly around the mouthpiece.

Spray one puff of medicine into the spacer.

Best to use inhalers with a spacer.

More medicine will get into the lungs and less on your tongue and throat.

Use more than 1 puff of medicine? Wait at least 30 seconds between puffs.

**6** Asthma Education Handbook Asthma Education Handbook | 7

# **ASTHMA TRIGGERS**

☐ Wash pets weekly.

An asthma trigger is something that makes your asthma flare up. Work with your doc

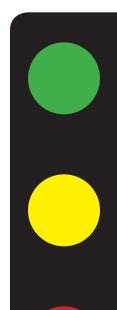
doctor to I	earr	your child's triggers.
Use this c	heck	clist to check boxes next to what could trigger your child.
	Tol	bacco Smoke
		Do not allow smoking in the home or car
		Call 1-800-QUIT-NOW for confidential support, coaches, patches and gum. Our Lady of the Lake also offers programs to help you quit. Visit ololrmc.com to learn more.
	Du	st Mites
		Dust mites are tiny bugs you cannot see that live in the carpet, bedding mattresses and stuffed animals
		Use dust-proof mattress and pillow covers with zippers
		Wash sheets and blankets once a week in hot water
		Use containers with lids to store books and toys
		Do not keep stuffed animals on the child's bed and wash them weekly
		Dust regularly with a damp cloth and vacuum carpet and fabric-covered furniture
		If possible, remove carpet
		Use a Hepa Filter system in major rooms
		Vacuum with a vacuum cleaner using a Hepa Filter
	Pe	t Dander
		Pet dander is the flakes of skin that come from animals with fur an feathers.
		When possible, keep pets with fur and feathers out of the home.
		Keep pets out of child's bedroom and sleeping areas.
		Keep pets off of fabric-covered furniture.
		Wipe fur off of furniture.
		Use a Hepa Filter system in major rooms.

Co	ckroaches
	Dried droppings from a cockroach can trigger asthma.
	Store open food in closed containers (do not leave food out).
	Empty the trash every day or keep in a closed container.
	Clean all food crumbs and spills right away.
	Avoid sprays by using roach baits and traps. If spraying is necessary, do not spray when the child is home.
Mc	old
	Dry areas that are damp (especially in basements and attics)
	Fix leaky faucets, pipes or other sources of water.
	Clean mold with bleach.
	If possible, use dehumidifier.
Str	ong Odors
	Try to keep children away from strong odors and sprays such as perfume, cleaning products, bleach, incense, hair spray and paint
Exe	ercise
	Your child should be able to be active without symptoms.
	See your child's doctor if they have asthma symptoms with exercise, play or when working hard.
Res	spiratory Infections – Colds and the flu
	Wash hands often.
	Get a flu shot every year.
	Cough medication is NOT recommended.
Irri	tants
	Exhaust from cars, buses or other automobiles.
Em	notions - Laughing and crying
	Take slow, deep breaths in and out through your nose.
	Use quick relief medicine if needed.

8 | Asthma Education Handbook Asthma Education Handbook | 9

#### WHAT IS AN ASTHMA ACTION PLAN?

The doctor should give you a written plan to take care of your child with asthma. It tells you how to take your asthma medicines and what actions to take when symptoms flare-up. Everyone with asthma should have an asthma action plan. This plan is separated into three sections. This is the most important paper given to you.



#### **GREEN ZONE**

The first section is the green zone. The green zone means your child is having no symptoms. If your child needs a controller medication for swelling it would be located in the green section. This medication must be taken every day consistently to work. It is very slow acting.

#### **YELLOW ZONE**

The next section is called the yellow zone. The yellow zone means your child is having symptoms. The rescue or quick relief medication to loosen the tight bands will be located in the yellow section.

#### **RED ZONE**

The last section is called the red zone. The red zone means your child is having severe symptoms. If your child needs the rescue medication sooner than four hours they need to see a doctor.

The school nurse, coach, and other caregivers will need a copy in order to know what to do for your child if an attack happens at school. The nurse will also need the proper papers signed to give your child their medication at school. The nurse will need your child's rescue medication.



#### **GREEN ZONE**

#### You have all of these:

- Breathing is good
- No cough or wheeze
- Can work/play
- Sleeps all night

#### **DOING WELL**

#### Other Instructions:

Take these long-term control medicines each day If you have exercise induced asthma use the pre-exercise medication 15 min before exercise.



#### YELLOW ZONE

## You have any of these:

- Cough
- Wheeze

- Tight chest
- Coughing at night

## **ASTHMA IS GETTING WORSE**

#### **Other Instructions:**

FIRST: Take RESCUE INHALER Albuterol (Proair, Ventolin, Proventil) or Levalbuterol (Xopenex) 4 puffs every 20 minutes until symptoms resolve (MAXIMUM of 3 treatments)

#### SECOND:

- A. If your symptoms (and peak flows) return to Green Zone 20 minutes after the last albuterol treatment:
  - 1. Take the Albuterol (Proventil, Ventolin) inhaler 4 puffs every 4 hours for 1 or 2 days
  - 2. Call your doctor if not better after 1-2 days
- B. If your symptoms (and peak flows) do NOT return to Green Zone 20 minutes after the last Albuterol treatment
  - 3. Take RESCUE INHALER 4 puffs one more time AND call your doctor NOW!
  - **4.** Follow RED ZONE instructions if unable to reach doctor after 20 minutes

continued on next page



#### **RED ZONE**

## You have any of these:

- Medicine is not helping
- Breathing is hard and fast
- Nose opens wide

- Can't walk or talk well
- Ribs show

#### **MEDICAL ALERT!**

#### Other Instructions:

#### FIRST:

Take RESCUE INHALER Albuterol (Proair, Ventolin, Proventil) or Levalbuterol (Xopenex) 6 puffs **NOW!** 

#### **SECOND:**

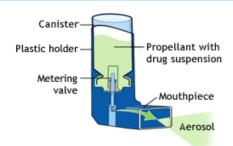
Call 911 or go to the closest ER NOW!

Take RESCUE INHALER 6 puffs every 20 minutes until paramedics/ER arrival

## **CHECKLIST**

Do you have an asthma action plan at home?
Do you have a rescue inhaler at home?
Do you have an asthma action plan at school/daycare?
Do you have a rescue inhaler at school/daycare?

## **UNDERSTANDING YOUR CANNISTER MEDICINE**



- 1. Inside the medication canister is filler (or Propellant), the medication is floating at the top of this filler. SHAKE the canister five seconds before each spray.
- 2. When used for the first time: Spray \_\_\_\_ times in the air. See chart below for number of times to spray your inhaler. REPEAT IF NOT USED FOR two weeks
- 3. Always use a spacer.
- **4.** Keep the spacer clean. Wash weekly in warm soapy water and air dry.

MEDICATION	FIRST TIME TO GIVE MEDICINE	REPRIME					
VENTOLIN	4 Sprays	If not used for 2 weeks					
PROAIR	3 Sprays	If not used for 2 weeks					
PROVENTIL	4 Sprays	If not used for 2 weeks					
XOPENEX	4 Sprays	After not using for 3 days					
FLOVENT	4 Sprays	1 Spray after dropping or 7 days of not using it					
DULERA	4 Sprays	If not used for 5 days					
ADVAIR 4 Sprays		2 Sprays after dropping or 4 weeks of not using					
QVAR	2 Sprays	After 10 days of not using					
SYMBICORT	2 Sprays	After dropping or 7 days of non use					
ROUND DISC Dry Powder	Do fast inhale and hold breath for 10 seconds						

## **UNDERSTANDING YOUR NEBULIZER MEDICINE**

#### **Using Your Nebulizer Medicine**





## **Getting Ready**



Step 1

1. Put the nebulizer compressor (machine) on a hard surface and plug machine into outlet.



5. Put mouthpiece onto nebulizer with valve facing down (outlet away from eyes).

Step 5



2. Unscrew top of nebulizer.



Step 6

6. Press the tubing firmly to the bottom of the nebulizer.

Step 2



3.. Put a dose of medicine in the nebulizer cup.

Step 3



Step 4

4. Put top of nebulizer back on and turn until tight.

7. Attach opposite end of tubing to machine's outlet port.

Step 7

# **Using the Nebulizer**



Step 8

8. Turn compressor (machine) on.



At The End:

11. Use a mask if you cannot breathe through your mouth.. Blowing medicine in the face is not a good way to get medicine into the

Step 11



9. Look at mouthpiece to see if there is a steady mist.





12. After medicine is gone, turn compressor off.

lungs.

Step 12



Step 10

10. Put mouthpiece between teeth and top of tongue.

Breathe in through mouth.

13. Clean nebulizer parts with hot soapy water, or vinegar and hot water.

Step 13

Tips: Do not wash tubing. Change when it looks wet or dirty. Change filter on machine when it turns gray or looks dirty. Rinse mouth after using inhaled steroid in nebulizer.

**14** Asthma Education Handbook

# **UNDERSTANDING YOUR ASTHMA CONTROL TEST**

	ood Asthma Con					
your child sele	ct the response. Com	olete the remaining <b>three q</b> u			nding the question, you may but letting your child's respons	
your answers.  Step 2 Write the numb	There are no right or to	-			is 19 or less, your child	
Step 2 Write the number Step 3 Add up each so		ите эсоге пох ргочией.	-		as well controlled as they c	
		out your child's total score.	19 or less	ndication that thei	score is 12 or less, this n r asthma is very poorly or r child's healthcare prov ase)	ontr
lave your child c	-	questions.	Th	ere may be more yo	u and your child's healthca I your child's asthma sympt	
0 Very had		1 Bad	2		3 Very good	SI
,	your asthma when you	run, exercise or play sports?	4000		101, 6000	
a big problem, I can't do	what I want to do. It's	a problem and I don't like it.	It's a little proble	om but it's okay.	3 It's not a problem.	
Do you cough because of y	our asthma?					
O Yes, all of the tim	e.	Yes, most of the time.	Yes, some	of the time.	3 No, none of the time.	
Do you wake up during the	night because of your a	sthma?				
O Yes, all of the time	ı.	Yes, most of the time.	Yes, some o	f the time.	3 No, none of the time.	
-		<b>questions on your c</b> your child have any daytime		?		
5	4	3	2	1	0	) [
Not at all	1-3 days	4-10 days	11-18 days	19-24 days	Everyday	
During the <u>last 4 weeks</u>	, how many days did y	our child wheeze during the	day because of as	thma?		
5 Not at all	4 1-3 days	3 4-10 days	2 11-18 days	19-24 days	0 Everyday	
During the last 4 weeks	. how many days did y	our child wake up during th	,	•		
	,					
5	4	3	2		0	

	hma	a Con	tro	l Test	™ is	:				
		with asthma 12 e National Insti	-	•			-	assess asthr	na control.	
-	-	d against speci		. ,		-	163.			
PATIENT	2.	Write the num Add up the so Discuss your	ore boxe	s to get the To	OTAL.	•	I.			
1. In the past	4 weeks, ho	ow much of the	time did y	our <u>asthma</u> keep	you from	getting as much	done at	work, school or	at home?	SCORE
All of the time	1	Most of the time	2	Some of the time	3	A little of the time	4	None of the time	5	
	past 4 wee	eks, how often l	have you l		of breath?		_			
More than once a day	1	Once a day	2	3 to 6 times a week	3	Once or twice a week	4	Not at all	5	
4 or more	1	2 or 3 nights	(2)	Once a week	(3)	Once or twice	4	Not at all	5	
nights a week	. •	a week eks. how often		used vour rescu	e inhaler o				erol)?	
nights a week	. •	eks, how often  1 or 2 times per day		used your rescu 2 or 3 times per week	e inhaler o				erol)?	
4. During the 3 or more times per day	past 4 wee	eks, how often 1 or 2 times per day	have you i	2 or 3 times per week	3	or nebulizer me Once a week	dication (	such as albut		
4. During the	past 4 wee	eks, how often	have you i	2 or 3 times per week	3	or nebulizer me Once a week	dication (	such as albut		
4. During the 3 or more times per day 5. How would Not controlled at all	past 4 wee  1  you rate you core i	eks, how often  1 or 2 times per day  our asthma con Poorly controlled  is 19 or le . No matt	have you of the control during t	2 or 3 times per week  g the past 4 we somewhat controlled  Our asthr	eeks?  3 ma ma	or nebulizer me Once a week or less  Well controlled	dication (	Not at all  Completely controlled	5 olled	TOTAL
4. During the 3 or more times per day 5. How would Not controlled at all If your sas it couhealthca	past 4 were  1  you rate you  core i  ld be.  are pro score is set your he	eks, how often of the per day our asthma comporty controlled ovider.  15 or less, this althcare provider	trol durin 2  ess, year where where some and the some and	2 or 3 times per week  g the past 4 we Somewhat controlled  Our asthroat your san indication to	aeeks?  3 ma ma score, hat your a	Once a week Once a week Or less  Well controlled  y not be share the	dication (  4  4  as we resu	Not at all  Completely controlled  ell controlled  ults with	5 olled	TOTAL
4. During the 3 or more times per day 5. How would Not controlled at all If your sas it couhealthca	past 4 were  1  you rate your attention of the core is a core in a	eks, how often of the per day our asthma con Poorty controlled on the No matter ovider.  15 or less, this halthcare provider PROVIDI	have you u  2  atrol durin  2  PSS, you  ter wh  s may be cler right a	2 or 3 times per week  g the past 4 we somewhat controlled  our asthmat your some an indication that your some away if this is the some per week.	3 ma ma score, hat your a the case.	Once a week or less  Well controlled  Ly not be share the state of the	as we resu	Not at all  Completely controlled  ell controlled  untrolled.	5 olled	TOTAL
4. During the 3 or more times per day  5. How would Not controlled at all  If your S as it cou healthca  NOTE: If your Please contact  HEALTH Include 1  Copyright 2002, b	past 4 were  1 you rate your ate your de la	eks, how often of the per day our asthma con Poorty controlled on the per day our asthma con Poorty controlled ovider.  No matter ovider.  15 or less, this halthcare provider PROVIDINA Control Tes	have you to  2  atrol durin  2  BSS, you  ter wh  s may be der right a  ER:  t** score	2 or 3 times per week  g the past 4 we Somewhat controlled  Our asthroat your san indication to away if this is in your patien	3 ma ma score, hat your a the case.	Once a week or less  Well controlled  Ly not be share the state of the	as we resu	Not at all  Completely controlled  ell controlled  untrolled.	5 olled	TOTAL

16 Asthma Education Handbook Asthma Education Handbook

## WHAT IS A PEAK FLOW METER?

A peak flow meter can help tell you if your child has swelling at home. It measures the breath blown out. It cannot diagnose asthma, but it can be used to monitor asthma at home. It is important to blow into the peak flow meter with great effort even when not feeling well.

Use your meter every day and write down the best number of three attempts. Peak flow should not be a substitute to using your inhalers.

Green zone is 80-100% of best effort, yellow zone is 50-80% of best effort, and red zone is below 50% of the best effort.



# How to use a peak flow meter

- Place indicator at the bottom of the scale.
- Stand up.
- Take a deep breath.
- Place the meter in the mouth and close lips around the mouthpiece.
- Blow out as hard and fast as you can.
- Write the number you get
- Repeat two more times
- Mark the highest of the three numbers you get on your peak flow record.

# My predicted peak flow is \_\_\_\_\_.

DATE							
A.M.							
P.M.							

My personal best peak flow is \_\_\_\_\_.

#### **FAQS**

# Can asthma be cured?

Asthma cannot be cured, but it can be controlled.

# What is the goal of asthma treatment?

To decrease airway swelling and narrowing so children have fewer symptoms and flare-ups.

## What is controlled asthma?

- Symptom free most of the time or not using quick relief medicine more than twice in a week
- Able to exercise and play like other children
- Sleeping through the night without coughing
- Not missing school or work due to asthma flare-ups
- Not needing to fill your rescue or quick relief medicine more than twice a year unless needed for exercise.

# How can I help my child have controlled asthma?

- Attend regular doctor visits every three to six months. Asthma is a chronic disease that can change over time, and your doctor may need to increase or decrease your medication.
- Work with your doctor to learn your child's asthma triggers (things that may increase symptoms) and learn how to avoid them.
- Understand how your medications work

# How is asthma diagnosed?

- By a doctor's visit, history and physical exam.
- A spirometry test may be performed. It can help the doctor know more about your child's asthma. It is a simple breathing test than can be done by the age of four or five years old.

# Should I give cough medicine when my child coughs?

Cough medication is NOT recommended. Remember some kids' only symptom of asthma is a cough!

## When do I call the doctor?

- Becomes worse even though you have been giving the asthma medications
- Is sick enough to miss school because of wheezing
- Has a fever of 101 degrees by mouth
- Cannot sleep at night because of wheezing, breathing trouble and coughing
- Has a peak flow meter that
  - Falls into the yellow zone
  - Does not respond to medicine

# When do I go to the emergency room?

- His or her neck, chest or ribs sinking in deeply when breathing
- Trouble breathing, walking or talking
- Fingernails or lips that turn blue
- Cannot speak well because he or she is working so hard to breathe
- Peak flow meter reading that drops after treatment
- Falls into the red zone on the asthma action plan

# Remember the RULE OF 2

- If your child is using rescue medication more than twice in a week
- If your child is waking up at night more than twice in a month
- If your child is using more than two canisters in a year
- If their peak flow drops lower than 20% of their best effort

This may mean their asthma is not being well controlled. Tell your doctor.

# What about the flu shot?

Yes! It is recommended that all children and their families get a flu shot every year. Children with asthma should not get the nasal flu vaccine.

NOTES		



5000 Hennessy Boulevard | Baton Rouge, LA 70808

www.ololchildrens.org