

“Does My Child Have Asthma?”

Provided by the Solano Asthma Coalition

What is Asthma?

Asthma is a disease of the breathing tubes in the lungs. In asthma the breathing tubes become very sensitive. Simple things – like smoke, dust, or animal dander cause the breathing tubes to become swollen and inflamed. The muscle that surrounds the breathing tube goes into spasm and squeezes the breathing tube tight. This makes it very hard to get air in and out of the breathing tubes.

Asthma causes breathing problems called flare-ups (or *episodes or attacks*). Asthma flare-ups are periods of:

- ✓ wheezing (a high pitched almost musical sound when breathing out)
- ✓ shortness of breath (hard to “catch your breath”)
- ✓ coughing
- ✓ tightness in the chest.

Flare-ups usually take hours or days to develop. They vary in severity.

In an asthma flare-up, it is difficult to move air in and out of the lungs because of three things:

- ✓ The muscles around the airways squeeze tight
- ✓ The airways get a lot of mucus in them so the air has a hard time getting through
- ✓ The inside of the airways swell up.

In a severe asthma flare-up a person may have:

- ✓ Fast breathing
- ✓ Sucking in of the chest or stomach
- ✓ Difficulty walking
- ✓ Difficulty speaking more than a word or two at a time
- ✓ Lips or fingers turning blue

Any of these severe symptoms require IMMEDIATE medical attention. It indicates a medical EMERGENCY.

Asthma Can Be Controlled

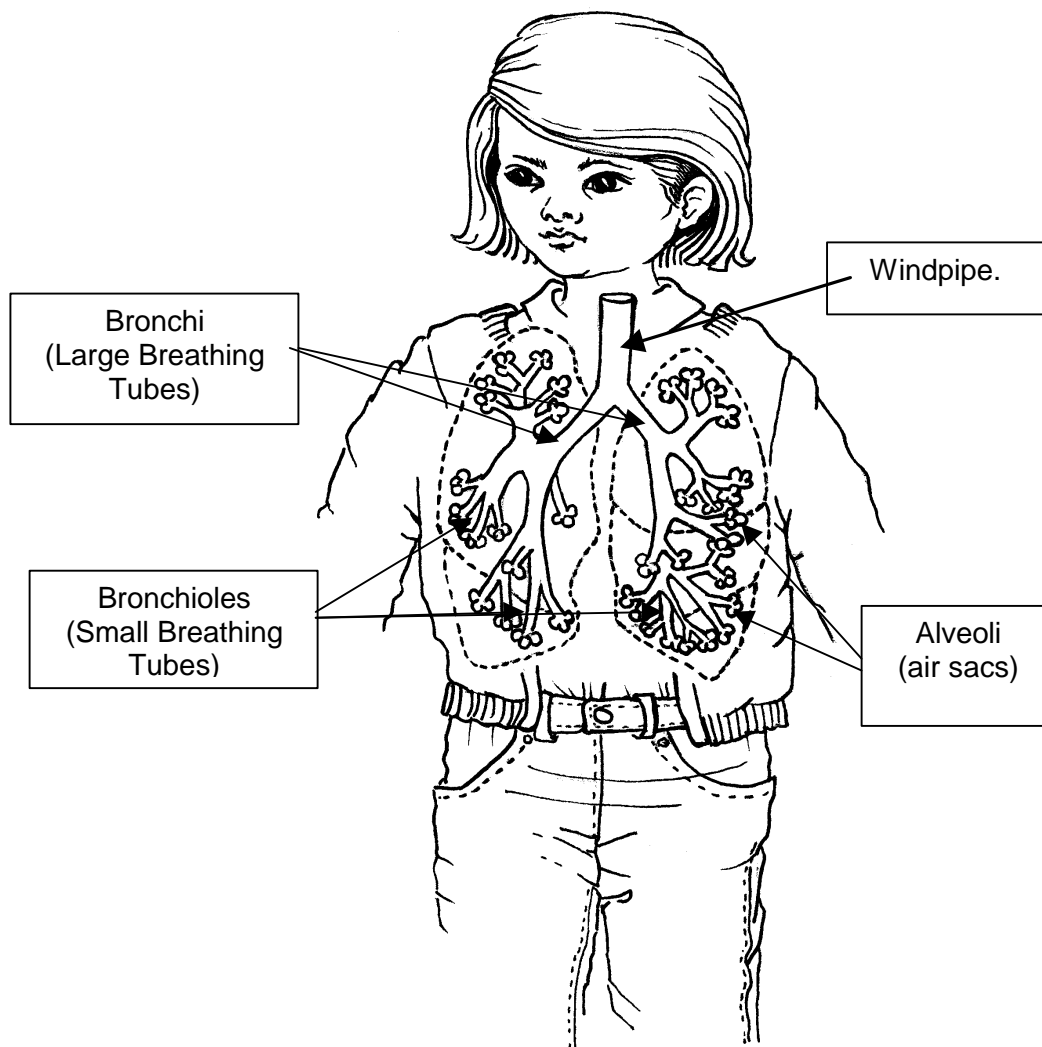
Twenty years ago asthma care was, for the most part, crisis care for asthma

attacks. Now with new medications and new asthma care strategies, asthma can be controlled. Asthma attacks can be prevented.

When asthma is controlled:

- There are no asthma symptoms. No cough. No wheeze. No chest tightness.
- Your child can run and play as hard as he/she wants.
- Your child is not having asthma attacks daytime or nighttime.
- You can't remember the last time you had to rush to the Emergency Room.

How the Lungs Work

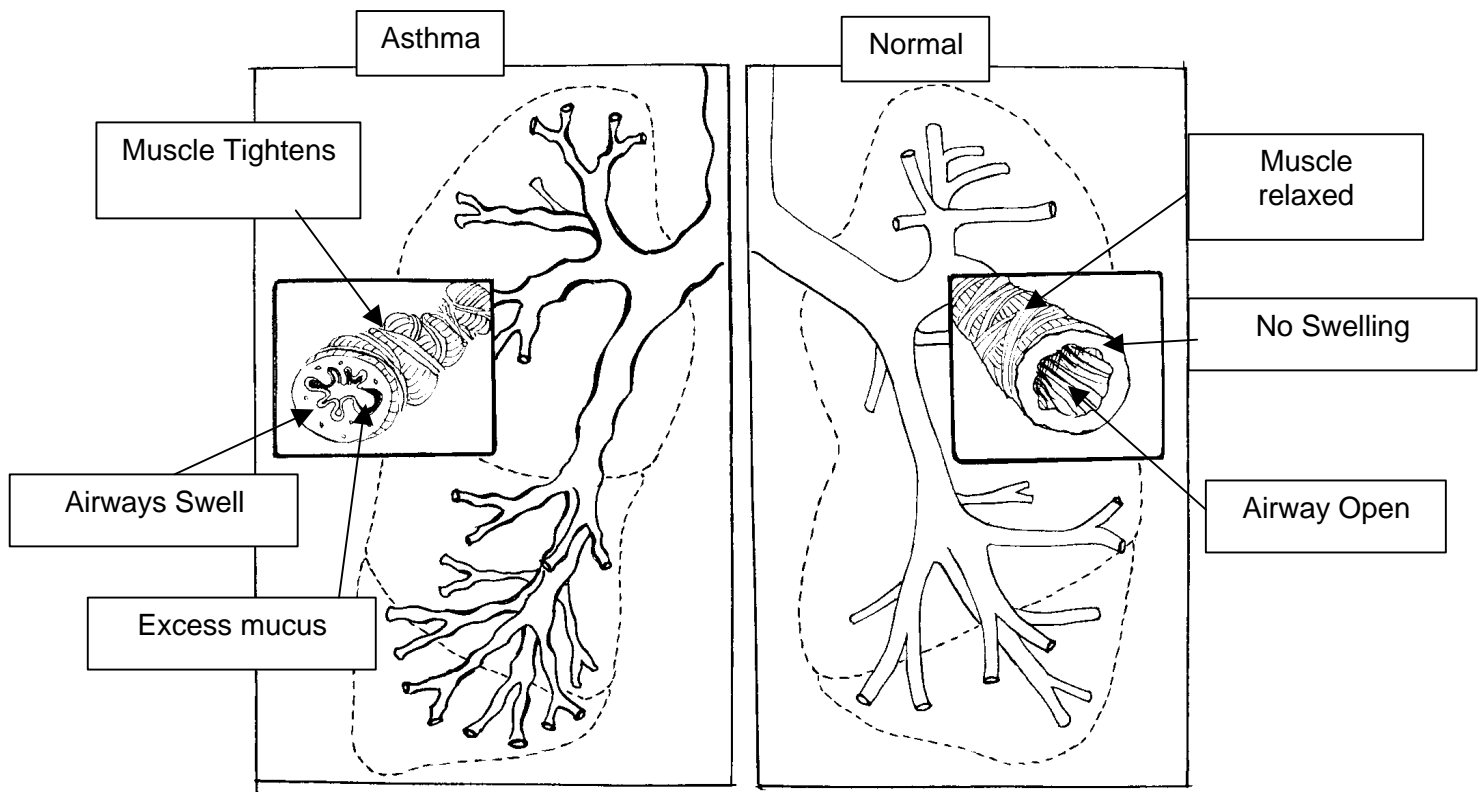


Adapted from Farber H, Boyette M *Control Your Child's Asthma: A Breakthrough Program for the Treatment and Management of Childhood Asthma* (Henry Holt, 2001). Used with Permission.

When you breathe in (inhale), oxygen filled air enters the body through the nose and mouth. From there it passes through the windpipe (trachea), to the large breathing tubes (bronchi) which branches to form smaller and smaller breathing tubes (bronchioles) which finally get small enough to enter the air sacs (alveoli). The air sacs are the business end of the lung. It is where the good air (oxygen) enters the blood stream and the bad air (carbon dioxide) leaves the body.

When you breathe out (exhale) the bad (carbon dioxide filled) air leaves the air sacs (alveoli). It travels up the small breathing tubes to the large breathing tubes to the windpipe to finally leave the body through the nose and mouth.

What Happens to the Breathing Tubes in Asthma



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Who gets asthma?

Researchers don't know fully what causes asthma. They think it is a combination of things.

1. Genetics:

Asthma and allergies run in families. More and more, though, people with no family history are getting asthma. The inheritance of asthma is not as simple as

“single gene” diseases like sickle cell disease or hemophilia. Many different genes influence the risk for asthma.

2. Environment:

Things in the environment that can affect getting asthma include pollution and infections. Research shows that asthma is more common among children whose parents smoke. And research shows that asthma risk is higher in more polluted areas. Ozone and diesel smoke seem to play a very important role in causing children to get asthma.

3. A new theory:

There is a new theory about what causes asthma. It is called the “hygiene hypothesis”. It states that there is a critical time in infancy and early childhood that is important for the development of the immune system. Having infections and being exposed to triggers such as animals and dust during this “critical time” may actually protect children from getting asthma and allergies.

Routine childhood immunizations do NOT cause or add to the risk of a person getting asthma.

What should I do if you think my child has asthma?

1. See your doctor. A doctor is an important partner in dealing with asthma. Ask questions. Work together to develop a plan to get your child’s asthma under good control.
2. If the doctor gives your child a medicine, ask:
 - ✓ What is the name of the medicine? What is its generic name?
 - ✓ What does the medicine do?
 - Quickly relieve asthma symptoms?
 - Offer long-term control of asthma symptoms?
 - ✓ How long does the medicine take to work? How will I know if it is working?
 - ✓ What are the side effects?
 - ✓ How exactly do I use this? Will you show me? Can I show you so I know I’m doing it correctly?
 - ✓ Do I need a spacer? How do I use it?
3. An Action Plan outlines how to deal with asthma on an every day basis and how to deal with changes in symptoms. Be sure to ask your doctor:
 - ✓ What is a peak flow meter? How do I use it? How can it help me?
 - ✓ Ask for an Asthma Action Plan.
 - ✓ Give a copy of your child’s Asthma Action Plan to his/her school. Be sure that your child’s school teacher, principal, and nurse know what your child needs to stay healthy.
4. Learn all you can about asthma. Good information is available from these websites:
 - American Lung Association www.lungusa.org
 - Allergy and Asthma Network/Mothers of Asthmatics www.aanma.org

Asthma Triggers

The things that cause asthma to flare up are called “triggers”. Triggers vary from person to person. Sometimes, it is a combination of triggers that causes problems. Triggers can be allergens (substances that cause an allergic response) or irritants (substances that irritate the nose or airways). Allergens only affect people who are allergic to them. Allergy testing can tell you if your child is allergic. Irritants and infections affect everyone, but they affect the sensitive breathing tubes of people with asthma even more.

Irritants should be avoided by everyone.

- ✓ Smoke, especially tobacco smoke. Tobacco smoke is one thing that makes **everyone’s** asthma and everyone’s breathing worse. Don’t forget about other sources of smoke: fireplaces, wood burning stoves, incense, pellet stoves
- ✓ Strong chemicals
 - Hairspray
 - Air fresheners, including sprays and plug-ins
 - Perfumes, colognes, body sprays
 - Cleaning agents with a strong smell (such as bleach)
 - Magic markers and paints with a strong smell (water colors are ok)
 - Nail polish and polish removers

Allergens should be avoided (if your child is allergic to them)

- ✓ Dust mites
- ✓ Chalk dust
- ✓ Animal dander and saliva
- ✓ Mice, rats and other rodents
- ✓ Mold and mildew
- ✓ Pollen from trees, plants, and grass
- ✓ Cockroaches

Infections

- ✓ Colds
- ✓ Flu (Children with asthma should get a yearly flu shot)
- ✓ Sinus infections

Other triggers

- ✓ Cold, dry air
- ✓ Strong emotions (can make asthma worse but do not cause asthma).

Exercise

- ✓ Exercise can trigger asthma if the asthma is not in control. But no child should stop exercising because he or she has asthma. **Regular exercise is very important for the health of the heart and the lungs.** If exercise triggers your child’s asthma, talk to your doctor about a plan so your child can fully join in activities.

Warning signs and symptoms of asthma

Warning signs tell you that an asthma episode is coming. Asthma flare-ups usually take hours or days to develop. Warning signs are different for different people. If you pay attention to the warning signs and follow the plan you worked out with your doctor, you can take quick action to avoid an asthma flare-up.

Signs of a mild asthma flare-up:

- . Slight cough
- . Mild wheeze
- . Mild chest congestion
- . Slight chest tightness
- . Breathing rate may be a little bit faster than normal

Signs of a moderate to severe asthma flare-up:

- . Constant cough
- . Constant wheeze
- . Waking at night due to cough or wheeze
- . Sucking in of skin between ribs or below chest
- . Fast breathing:
 - Over 50 breaths per minute for an infant
 - Over 40 breaths per minute for a toddler
 - Over 30 breaths per minute for a school age child.

Signs of extreme danger – **go to the nearest Emergency Room or call 911 NOW.**

- . Very fast or hard breathing
- . Sucking in the stomach or ribs to breathe
- . Breathing so hard the child can't walk or speak
- . Lips or fingers turn blue

How do I know if asthma is not well controlled?

If you answer **yes** to any of these questions, your child's asthma is not well controlled:

Does your child:

- ✓ Wake up at night coughing, wheezing or short of breath?
- ✓ Cough, wheeze or is short of breath when she or he wakes up in the morning?
- ✓ Need to take reliever medicine (Albuterol, aka Ventolin, Proventil, Alupent, etc.) more than 2 times a week?
- ✓ Miss school because of asthma?
- ✓ Avoid exercise because she or he gets short of breath?

How do I get involved in community asthma action?

Please call the Solano Asthma Coalition at **707 434-9685** to join us in the effort to build a community where people with asthma live in a healthy environment and have the capacity to enjoy full participation in all activities.

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