

Asthma

What is asthma?

Asthma is a chronic lung disease that cannot be cured. It can be controlled by taking medicine and making changes in your environment.

People with asthma have very sensitive airways that react to many things, such as cigarette smoke, allergies, infections, or cold air. Asthma episodes may come and go, but the lungs stay sensitive to the things that trigger asthma.

Poor control of asthma may lead to frequent emergency room visits or hospital stays. Poor asthma control can also cause death.

What causes asthma?

The basic cause of asthma is not yet known, but it tends to run in families. It may be more common in children with allergies.

What are the signs of asthma?

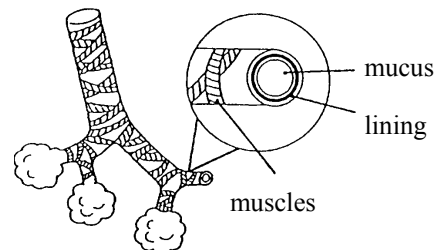
The main signs (symptoms) of asthma are:

- coughing
- shortness of breath
- wheezing
- tightness of the chest
- unable to sleep through the night without symptoms
- unable to exercise without symptoms
- prolonged coughing or wheezing after viral infections

What happens during an asthma episode?

It is important to know how the lungs work normally so you can understand what happens during an asthma episode. See the picture of the lungs at the end of this document.

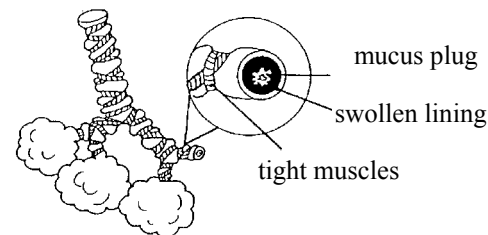
When you breathe in, air goes in through the nose and mouth. It goes down your windpipe, through your airways, and into the air sacs. The air goes into your blood and is traded for the used air that you get rid of when you breathe out.



Close-up view of normal airways

During an asthma episode a person has a hard time breathing because:

- The lining of the airways becomes swollen.
- The muscles around the airways tighten, making the airways smaller.
- Thick mucus forms, blocking small airways.



Asthma episode

What causes asthma episodes?

Triggers such as colds, smoke, allergies, or exercise can cause an asthma episode.

When triggers are present together, they have a stronger effect. Some people only have episodes when 2 or more triggers are present.

Since each person has different triggers, it is important to determine which ones affect your child's asthma so you can learn how to avoid them. See the education sheet "Asthma trigger control."

What are some early warning signs of an asthma episode?

Asthma episodes rarely come on suddenly. Often there are clues or early warning signs that an episode may occur. Some early warning signs may be:

- runny nose
- coughing
- shortness of breath
- not sleeping well at night
- decrease in peak flow (see the education sheet, "Peak flow meter")

It is important to know these signs so you can begin to treat the episodes early and prevent them from becoming severe.

How should we treat episodes?

- Work with your child's doctor to develop an asthma action plan that helps you control asthma and treat asthma episodes.
- Your child should have a rescue medicine (such as albuterol) to treat an episode of coughing, wheezing, or shortness of breath.

How can we prevent episodes?

- Learn all you can about asthma to help you control it.
- Avoid asthma triggers.
- Use a controller medicine daily, if prescribed by your doctor. Be sure to give it **every day**, even when your child feels good.
- Schedule an asthma check up every 6 months to get prescriptions renewed and get an asthma action plan.
- Share the asthma action plan with school/daycare

How do I know if asthma is in control?

Signs that asthma is under control:

- No coughing, wheezing, or shortness of breath during the day.
- No waking up at night because of asthma symptoms.
- Able to play and exercise without asthma symptoms.
- No school absences.
- No asthma episodes that require an emergency room, urgent care, or doctor visit.

When should I call the clinic?

Call the clinic if:

- coughing, wheezing, or shortness of breath not controlled with rescue medicine for at least 4 hours
- coughing or wheezing at night or with exercise
- in the Yellow Zone for more than 12 to 24 hours

See the doctor right away if:

- coughing or wheezing is not better or gets worse after rescue medicine has been given
- retracting (chest or neck skin pulls in with each breath)
- peak flow rate goes down or stays the same after rescue medicine has been given
- unable to lie down flat without trouble breathing

If you cannot reach the doctor, go to the Emergency Room.

Call 911 if:

- trouble walking or talking.
- lips or fingernails are blue or gray.
- stops breathing.
- you are worried about how your child will get through the next 30 minutes.

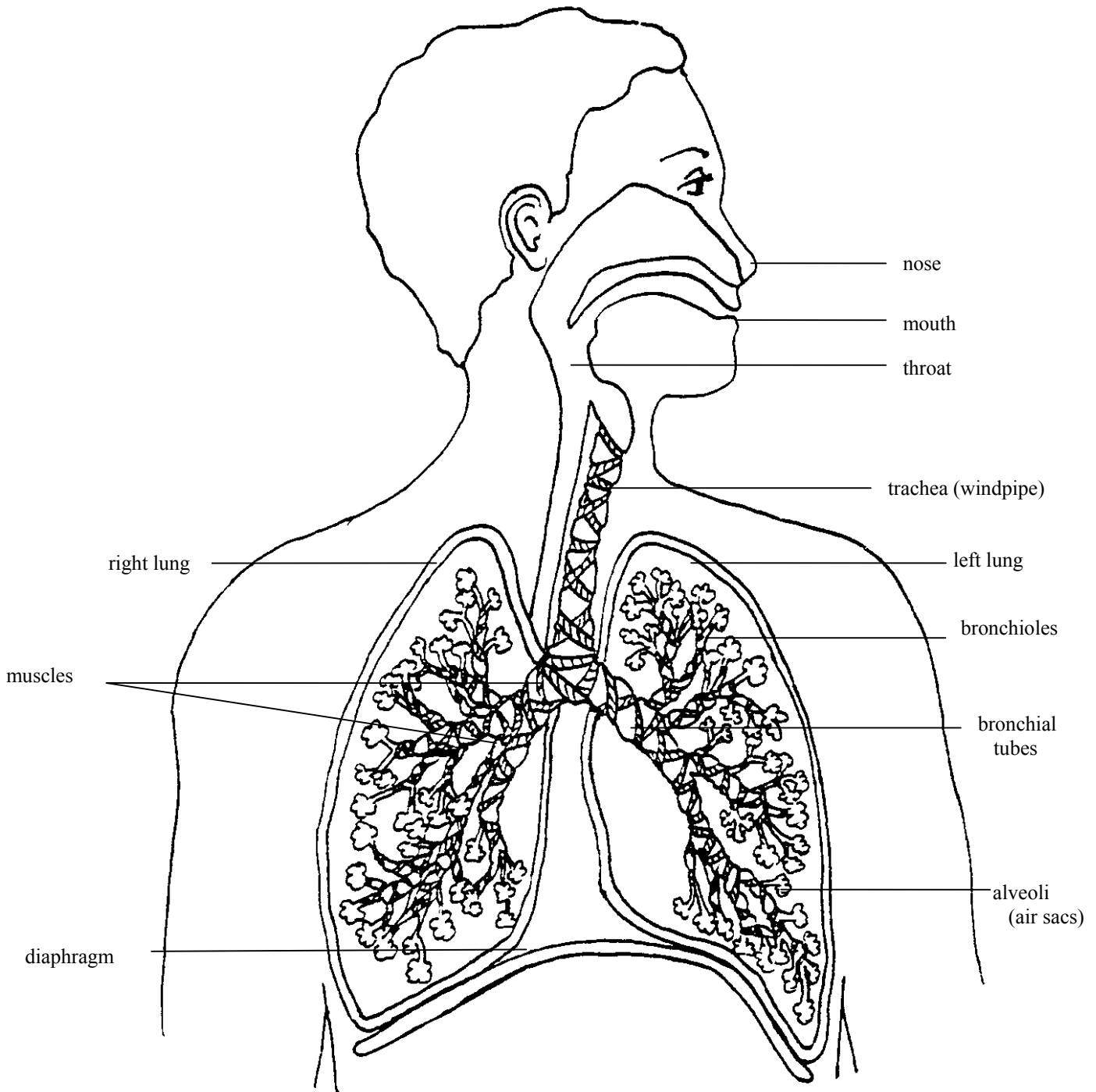
Questions?

This sheet is not specific to your child, but provides general information. If you have any questions, please call the clinic.

We recommend that you and your child attend an asthma education program, to learn more ways to control asthma. Ask your doctor, nurse, or the American Lung Association for information about available programs.

For more reading material about this and other health topics, please call or visit the Family Resource Center library, or visit our Web site: www.childrensmn.org.

Normal lungs



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