

Teacher's Guide

This guide includes:

- Standards
- Related Links
- Discussion Questions
- Activities for Students
- Reproducible Materials

Standards

This guide correlates with the following National Health Education Standards:

Students will:

- Comprehend concepts related to health promotion and disease prevention to enhance health.
- Analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.
- Demonstrate the ability to access valid information and products and services to enhance health.
- Demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
- Demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
- Demonstrate the ability to advocate for personal, family, and community health.

National Health Education Standards:
www.cdc.gov/healthyschools/sher/standards/index.htm



Grades 6 to 8 • Health Problems Series Asthma

These activities will help your students learn about asthma and how it can affect people's lives.

Related KidsHealth Links

Articles for Kids:

Asthma minisite

KidsHealth.org/en/kids/center/asthma-center.html

Asthma

KidsHealth.org/en/kids/asthma.html

Asthma: Alexis' Story (Video)

KidsHealth.org/en/kids/alexis-vd.html

Kat's Asthma Story

KidsHealth.org/en/kids/kat-story.html

School and Asthma

KidsHealth.org/en/kids/school-asthma.html

Articles for Teens:

Asthma minisite

TeensHealth.org/en/teens/center/asthma-center.html

Asthma

TeensHealth.org/en/teens/asthma.html

Asthma: Jordan's Story (Video)

TeensHealth.org/en/teens/jordan.html

Asthma: Monica's Story (Video)

TeensHealth.org/en/teens/monica.html

School and Asthma

TeensHealth.org/en/teens/school-asthma.html

Resources for Teachers:

Asthma Special Needs Factsheet

KidsHealth.org/en/parents/asthma-factsheet.html

Asthma and Sports Special Needs Factsheet

KidsHealth.org/en/parents/asthma-sports-factsheet.html

Asthma: Exercise-Induced Asthma Special Needs Factsheet

KidsHealth.org/en/parents/exercise-asthma-factsheet.html

Discussion Questions

Note: The following questions are written in language appropriate for sharing with your students.

1. Explain some of the ways people handle their asthma. What could you do to support a friend who just found out that he or she has asthma?
2. Describe what happens during an asthma flare-up. What types of things can cause an asthma flare-up? How can people with asthma avoid these triggers?



Activities for Students

Note: The following activities are written in language appropriate for sharing with your students.

Breaking Bronchial News!

Objectives:

Students will:

- Learn how the respiratory system is affected by asthma
- Describe what happens during an asthma flare-up

Materials:

- Computer with Internet access
- "Breaking Bronchial News!" handout
- Pen, pencil, or markers

Class Time:

90 minutes

Activity:

You've just been given your first big assignment as a news reporter for Human Body News. You're going on location ... inside the lungs! The editor wants you to get the scoop on what's happening inside the bronchial tubes of a person having an asthma flare-up. Your report should include:

- A description of what the bronchial tubes look like before the flare-up
- An in-depth account of what happens in the bronchial tubes during the flare-up
- An illustration of the changes in the bronchial tubes

Extensions:

1. Write a follow-up news story describing the how the person having a flare-up takes asthma medication and how the medication affects the lungs.
2. Invite a doctor or nurse to your classroom to provide information about dealing with asthma.



Asthma Video Game

Objectives:

Students will:

- Learn about potential asthma triggers
- Explore strategies for avoiding asthma symptoms and flare-ups

Materials:

- Computer with Internet access
- Plain paper and art supplies (colored pencils, markers, etc.), or word processing and graphic arts applications

Class Time:

2 hours

Activity:

HealthBox Gaming Systems has hired you to design a new video game, the latest in a series about health issues. HealthBox wants an interactive game in which the main character has asthma and comes in contact with various triggers. First, read articles at KidsHealth.org to learn more about asthma and triggers that set off asthma symptoms. Then name and design your game, making sure to address these elements:

- What are the triggers?
- How does the character come in contact with them?
- How can the character avoid them?
- What happens in the game if the character doesn't avoid them?
- What effect does taking asthma medication have?

Extension:

Your friend was just diagnosed with asthma and she feels self-conscious using her quick-relief medicine (rescue medicine), so she doesn't bring it with her to school. Write a letter to your friend, explaining why she should carry the inhaler.

Reproducible Materials

Handout: Breaking Bronchial News!

KidsHealth.org/classroom/6to8/problems/conditions/asthma_handout1.pdf

Quiz: Asthma

KidsHealth.org/classroom/6to8/problems/conditions/asthma_quiz.pdf

Answer Key: Asthma

KidsHealth.org/classroom/6to8/problems/conditions/asthma_quiz_answers.pdf



Name: _____

Date: _____

Breaking Bronchial News!

Instructions: Write your story on what happens inside the bronchial tubes of a person having an asthma flare-up. If you need more room, continue your story on the back of this sheet. Include a headline for your article as well as an illustration that shows the changes that take place in the bronchial tubes.





Name: _____

Date: _____

Quiz

Instructions: Answer each question.

1. What's another term for a person's airways?
 - a. tracheas
 - b. windpipes
 - c. bronchial tubes
 - d. bronchoconstriction
2. What do you call something that sets off an asthma flare-up? _____
3. A _____ attaches to an inhaler and holds asthma medication in place.
4. List three possible asthma triggers:

5. Describe what happens to a person's bronchial tubes during an asthma flare-up. _____

6. True or false: Asthma is contagious. _____
7. List three asthma symptoms:

8. A _____ is used to measure how well a person can blow air out of the lungs.
9. Which of the following is a substance that can cause an allergic reaction?
 - a. peak flow meter
 - b. allergen
 - c. trachea
 - d. asthma flare-up
10. Explain why smoking is especially bad for people with asthma:



Quiz Answer Key

1. What's another term for a person's airways?
 - a. tracheas
 - b. windpipes
 - ☒ c. bronchial tubes
 - d. bronchoconstriction
2. What do you call something that sets off an asthma flare-up? trigger
3. A spacer (or holding chamber) attaches to an inhaler and holds asthma medication in place.
4. List three possible asthma triggers:
any of the following: allergens (dust mites, molds, pollen, animal dander, cockroaches),
irritants (chalk dust, smoke, perfumes, cosmetics, cleaning solutions, fresh paint, gasoline fumes)
pollutants (ozone), exercise, weather, respiratory tract infections (cold, flu)
5. Describe what happens to a person's bronchial tubes during an asthma flare-up. The bronchial tubes are inflamed.
They swell and produce thick mucus. The smooth muscle that surrounds the airway lining tightens up. It is difficult for the
air to move through.
6. True or false: Asthma is contagious. false
7. List three asthma symptoms:
any of the following: wheezing, coughing, tightness in chest, difficulty breathing, shortness of breath
8. A peak flow meter is used to measure how well a person can blow air out of the lungs.
9. Which of the following is a substance that can cause an allergic reaction?
 - a. peak flow meter
 - ☒ b. allergen
 - c. trachea
 - d. asthma flare-up
10. Explain why smoking is especially bad for people with asthma:

The airways of a person with asthma can be very sensitive to smoke from cigarettes, cigars, and pipes. Smoking can cause asthma flare-ups to happen more often. Smoking can undo the effect of controller medicine that a person with asthma is using. Smoking can force someone to use quick-relief medicine (rescue medicine) more often.