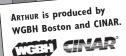


The National Environmental Asthma **Educator Award** 

from the U.S. Environmental Protection Agency













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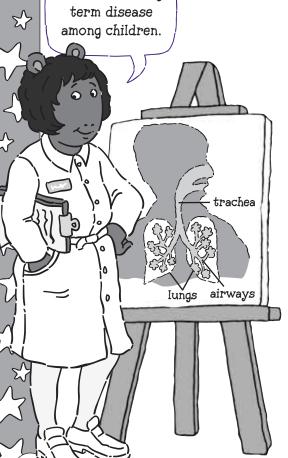


# **All About Asthma**

What is asthma? What can trigger an asthma attack? How can you stay active and healthy if you have asthma? To introduce this unit, show the ARTHUR episode "Buster's Breathless." Share the background information below as you do the classroom activities on page 3.

# ASTHMA STATISTICS I in every 13 school-aged children has asthma. I in every 5 pediatric emergency room visits is related to asthma. Asthma accounts for 10 million missed school days each year.

Asthma is the number one longterm disease among children.



## Background Information

**What is asthma?** People with asthma have very sensitive airways in their lungs. Triggers such as dust or mold can cause the airways to swell and the muscles around the airways to constrict, making it difficult to breathe. This can make the person cough, wheeze, or feel tightness in the chest. While there is no cure for asthma, with proper treatment people with asthma can lead healthy and active lives.

What causes an asthma episode? Many things can trigger an asthma episode. Common indoor triggers include: tobacco smoke, dust, mold, pets, cockroaches, and strong odors and fumes. Outdoor triggers include: pollens, pollution, cold air, and changes in temperature. Intense crying or laughing, colds and viral infections can also cause asthma attacks. It is important for a child with asthma to know his/her own triggers and how to avoid them. For helpful tips on minimizing exposure to triggers, visit the Grown-Ups area of the Arthur Web site: pbskids.org/arthur or order the EPA publication, "Clear Your Home of Asthma Triggers." Call 1-800-438-4318 or visit the EPA Web site: epa.gov/iaq/pubs/asthma.html.

How is asthma treated? Many children with asthma take a daily controller medicine to prevent asthma attacks. They also use quick-relief medicine to combat asthma episodes. Exercise can trigger asthma attacks, so some children take medicine before they go out to play, especially in cold weather. Many asthma medicines come in the form of a spray that goes directly to the lungs, dispensed by an inhaler.

**Family and school communication.** Because asthma is so widespread, it is important for all families to know about the disease. Students with asthma should have an Asthma Treatment Plan listing the medicines they should take in various situations and the people to contact. "Tips for Parents" and an Asthma Treatment Plan are provided in English and Spanish (pages 6-8). They are also available in Chinese, Vietnamese, and Tagalog on the Arthur Web site: **pbskids.org/arthur** (click Grown-Ups).

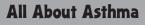
This guide was produced by the Educational Programming and Outreach department of WGBH.

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## Activities

#### Watch and discuss "Buster's Breathless." Ask children:

- What happened when Buster was reading Arthur's old joke books?
- What did the doctor tell Buster and his mom?
- Francine was afraid of catching asthma germs from Buster. What would you tell her?
- Can Buster still run around and play with his friends? How can he help himself not get asthma attacks?

**All About Asthma.** Distribute page 4. Encourage students to share their own experiences and knowledge about asthma. Invite the school nurse or a parent with asthma to visit the class and show devices such as an inhaler and a peak flow meter. (These things can also be seen on "A Word from Dr. Griffith," the video segment following "Buster's Breathless.")

What does asthma feel like? Give each child a drinking straw. Ask children to breathe through the straw and give a "thumbs up" sign if it is easy to breathe, or a "thumbs down" sign if it is hard. Then ask them to slowly pinch the straw as they continue breathing, and again give the thumbs up or down sign. Explain that having asthma can feel like breathing through a pinched straw. Be aware of children's breathing during this demonstration, especially children with asthma.

**Environmental triggers.** Talk about common asthma triggers at home, at school, and outside (see page 2). Try these discussion starters:

- Pets with fur or feathers can cause asthma attacks. What are some pets that might be better choices for a kid with asthma?
- Imagine that your friend has asthma. You love playing together after school, but being around your dog makes your friend start to wheeze. How could you and your friend solve this problem?
- Imagine that chalk dust bothers some of your classmates with asthma. How could you make the classroom a healthier place for them?
- What things collect dust in a bedroom? (rugs, stuffed animals, blankets, etc.) How can Buster's mom help reduce the dust in his bedroom?



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**Family Activity Sheets.** Discuss the pictures in the maze, "Stay Active with Asthma." Let children take the maze home to share with their families. Also send home "Tips for Parents" and the "Asthma Treatment Plan" (pages 5–8).

**Helping out.** List things a child should do during an asthma attack: stop, sit down and relax, drink some water, tell a friend or adult. Ask students: *How can you help when a friend has an asthma attack?* 

**Reflect and draw.** Have children draw pictures and write or dictate sentences about something they learned about asthma, how it feels to have asthma, or ways to make the school more trigger-free. Make a class Big Book from the students' work.

#### Read All About It

ABC's of Asthma by Kim Gosselin and Terry Ravanelli

*I'm Tougher Than Asthma* by Alden R. Carter and Siri M. Carter

The Lion Who Had Asthma by Jonathan London

Taking Asthma to School and Taking Asthma to Camp by Kim Gosselin and Terry Ravanelli

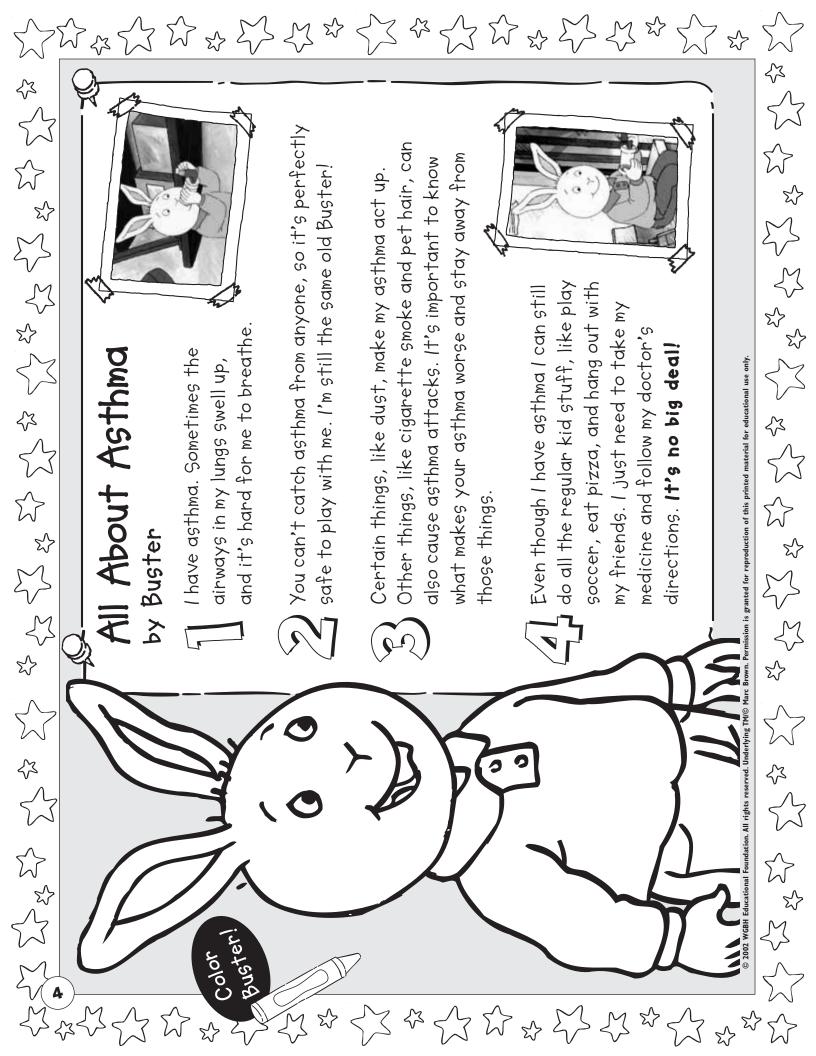
#### **Buster's Breathless**

Will Buster's friends ever treat him the same after they learn that he has asthma? Watch the episode to find out.
Then stay tuned for "A Word from Dr. Griffith," a visit with two healthy, active boys with asthma and their doctor.

"Buster's Breathless" is included on the home video *Arthur Goes to the Doctor*. To order this or any other ARTHUR video, call **1-800-949-8670**. For a special 10% educator discount, mention the code "ARTEDUC." (Offer expires August 31, 2002.)



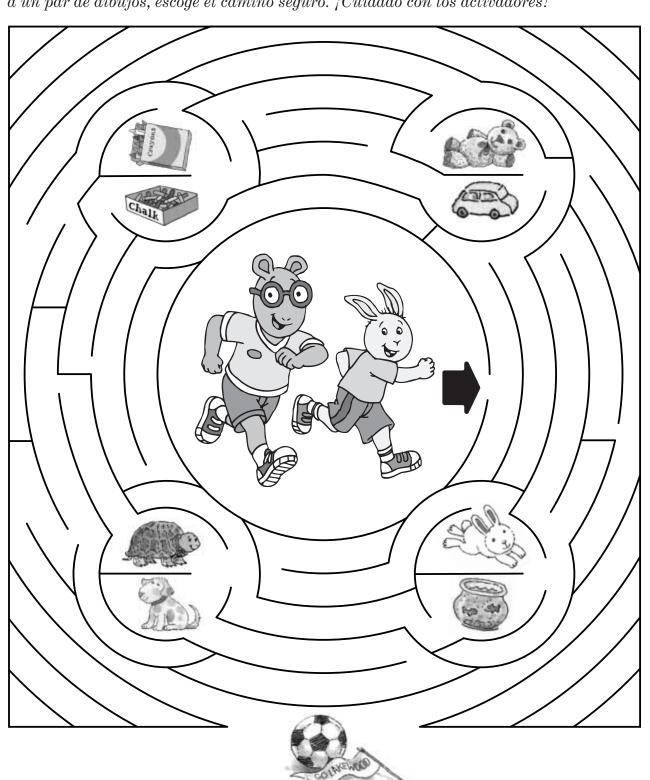
All About Asthma



## Stay Active with Asthma!

Help Buster and Arthur make it to the soccer game on time! When you come to a pair of pictures, choose the safe path. Watch out for the triggers!

Ayuda a Buster y a Arthur a llegar a tiempo a su partido de fútbol. Cada vez que llegues a un par de dibujos, escoge el camino seguro. ¡Cuidado con los activadores!



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English/Spanish

3 M A A A A A A A A

Family Activity Sheet



# Learning About Asthma Tips for Parents

One of every thirteen children has asthma. During an asthma attack, the airways in the lungs swell and the muscles around them constrict, making it hard to breathe. Things such as smoke, dust, pets, and mold can cause asthma attacks. There is no cure for asthma, but with proper care and medicine, children with asthma can lead active, healthy lives.

If your child has any of the following symptoms, he or she may have asthma. Talk to your doctor to find out more.

- Wheezing, a whistling noise made while breathing
- Chronic cough, especially at night, after exercise, or in cold weather
- Shortness of breath, especially when exercising

If your child has asthma, fill out an Asthma Treatment Plan and give copies to your child's teacher, coach, childcare provider, babysitter, etc. so they know what to do and who to call if your child has an asthma attack.

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Datos sobre el asma Consejos para los padres

Uno de cada trece niños padece de asma. Durante un ataque de asma, las vías respiratorias en los pulmones se hinchan y los músculos que las rodean se aprietan, dificultando así la respiración. El humo, el polvo, los animales domésticos y el moho pueden causar ataques de asma. El asma no se puede curar, pero con el debido cuidado y medicamentos, los niños con asma pueden llevar vidas activas y saludables.

Si el niño presenta cualquiera de estos síntomas, puede padecer de asma. Consulte con el médico para enterarse de más detalles.

- Resuellos, se oye un silbido cuando respira
- Tos crónica, sobre todo de noche, después de hacer ejercicio o cuando hace frío
- Falta de aliento, sobre todo cuando hace ejercicio

Si el niño tiene asma, complete el formulario 'Plan para tratar el asma' y dé copias del mismo al maestro, entrenador, cuidador, niñera, etc. para que sepan qué hacer y a quién llamar si al niño le da un ataque de asma.



**English/Spanish** 



## Asthma Treatment Plan

Plan para tratar el asma

## Child/Niño

NAME / NOMBRE		
DATE OF BIRTH/FECHA DE NACIMIENTO		
ADDRESS/DIRECCIÓN		
Parents, Guardians, Emergency Contacts /	Padres, tutores, contactos en caso de urgencia	
NAME/NOMBRE	RELATIONSHIP/PARENTESCO	
ADDRESS/DIRECCIÓN		
PHONE (HOME)/TELÉFONO (EN CASA)	(WORK)/(EN EL TRABAJO)	
NAME / NOMBRE	RELATIONSHIP/PARENTESCO	
ADDRESS/DIRECCIÓN		
PHONE (HOME)/TELÉFONO (EN CASA)	(WORK)/(EN EL TRABAJO)	
NAME / NOMBRE	RELATIONSHIP/PARENTESCO	
ADDRESS/DIRECCIÓN		
PHONE (HOME)/TELÉFONO (EN CASA)	(WORK)/(EN EL TRABAJO)	
Doctor/Médico		
NAME / NOMBRE		
ADDRESS/DIRECCIÓN		
PHONE/TELÉFONO	HOSPITAL/HOSPITAL	
Triggers / Activadores Which things cause your child to have asthma episodes?/	¿Qué cosas le producen episodios de asma al niño?	
☐ Smoke/ <i>Humo</i>	☐ Chalk dust/Polvo de tiza (gis)	
☐ Molds/Mohos ☐ Animals/Animales	<ul><li>☐ Dust and Dust mites/Polvo y ácaros</li><li>☐ Pollens/Polen</li></ul>	
☐ Exercise/Ejercicio	☐ Changes in temperature/Cambios de temperatura	
☐ Strong odors and fumes/Olores y vapores fuertes	Other/Otros:	
COMMENTS/COMENTARIOS:		
DATE/FECHA DOCTOR'S SIGNATURE/FIRMA	A DEL MÉDICO PARENT'S SIGNATURE/FIRMA DE PADRE	















## Asthma Treatment Plan

Plan para tratar el asma

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## **GREEN ZONE: Doing Fine!** ZONA VERDE: ¡Vas bien!

Use control medicine every day to stay well (if prescribed by doctor). Usa el remedio de control diario para estar bien (si así te lo recetó el médico).

Breathing is good./Respira bien. No cough or wheeze./No tose ni resolla. Can work and play. / Puede trabajar y jugar.

IF A PEAK FLOW METER IS USED Peak flow: more than (80% or more of best peak flow) SI USASTE EL ESPIRÓMETRO Fluio máximo: más de (80 % o más del mejor flujo máximo)

Medicine Medicamento	How Much? ;Cuánto?	When? ;Cuándo?
Medicamento	¿Cuanto:	¿Cuando:
Before sports or exer	rcise/Antes de practicar u	n deporte o hacer ejercicio
Medicine	How Much?	When?
Medicamento	¿Cuánto?	¿Cuándo?

## **YELLOW ZONE: Caution** ZONA AMARILLA: Precaución

Use quick-relief medicine.

Usa el medicamento de alivio rápido.

Cough, wheeze, chest tightness, or waking at night because of asthma Tos, resuellos, opresión en el pecho o despertarse de noche por causa del asma

Peak flow: more than \_ (50% - 80% or more of best peak flow) Flujo máximo: más de (50 al 80 % o más del mejor flujo máximo)

Medicine	How Much?	When?
Medicamento	¿Cuánto?	¿Cuándo?

If you need to use your quick relief medicine more than twice a week or wake up more than once a week because of your asthma, call your doctor. Si tienes que usar el medicamento para alivio rápido más de dos veces por semana o te despiertas más de una vez por semana debido al asma, llama al médico.

## **RED ZONE: Danger!** ZONA ROJA: ¡Peligro!

## GET HELP FROM A DOCTOR NOW! JACUDE AL MÉDICO AHORA MISMO!

Very short of breath. Quick-relief medicines have not helped. Muy falto de aliento. Los medicamentos de alivio rápido no ayudan.

Peak flow: under \_ (less than 50% of best peak flow) Flujo máximo: menos de \_ (menos del 50 % del mejor flujo máximo)

Medicine	How Much?	When?
Medicamento	¿Cuánto?	¿Cuándo?
	-	

Go to the hospital or call 911 if you are still in the red zone after 15 minutes and haven't reached a doctor. /Acude al hospital o llama al 911 si permaneces en la zona roja más de 15 minutos y no te has comunicado con el médico.

#### RED ZONE DANGER SIGNS/SEÑALES DE PELIGRO DE LA ZONA ROJA

Can't walk or talk well./No puede caminar ni hablar bien. Lips or fingernails are blue./Los labios o las uñas se le han puesto azules.



**Call 911 NOW!** Llama al 911 ¡YA!















