

Asthma on Wheels

Teacher Training Module



**Charlotte-Mecklenburg Schools/
Mecklenburg County Health Department
Asthma Education Program
908-343-0367
www.cms.k12.nc.us
Search word: asthma**



Teacher Training Module

Upon completion of Asthma On Wheels Trainer Module, participant will be able to:

- **Provide a lesson plan to students with discussions of asthma and learning activities using the Asthma Wheel of Questions.**
- **Integrate asthma topics into math, science, language arts/English, reading, or character education curriculum.**
- **List ways to educate students about asthma being a controllable condition in which students can live active, healthy lives.**
- **Incorporate strategies that promote Asthma Friendly Classrooms in their school.**

Introduction

- ❑ Over 14,000 students identified with asthma in Charlotte-Mecklenburg Schools (CMS)
- ❑ Number one chronic disease in CMS
- ❑ Leading cause of school absences
- ❑ Education and Awareness are the keys for students, parents, and teachers to manage asthma at home and school



Asthma On Wheels

An Asthma Awareness Program for All Students



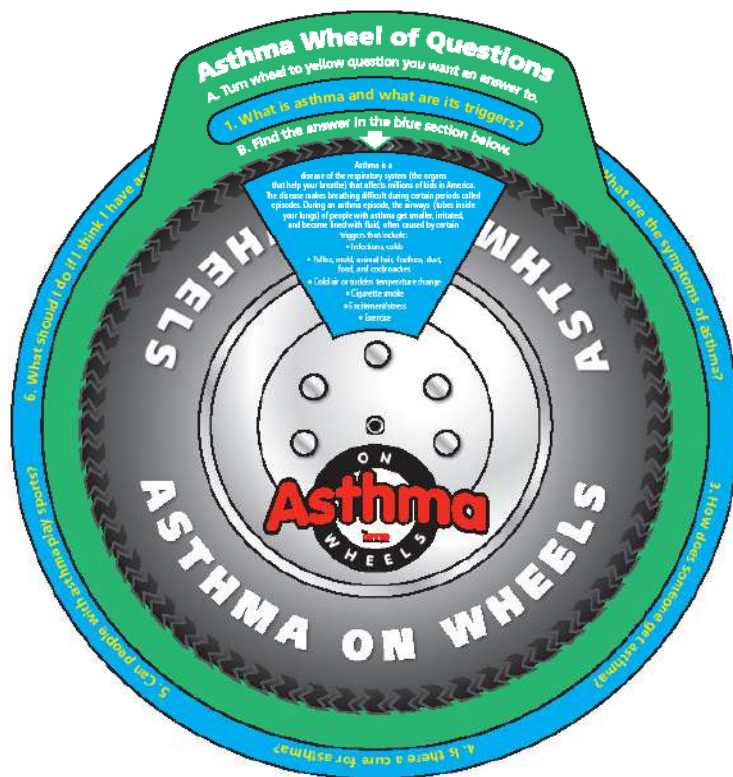
Student Learning Objectives

Students should be able to:



- ❑ Define asthma
- ❑ Explain that asthma is not contagious
- ❑ Define asthma triggers
- ❑ List ways to control asthma
- ❑ State how children with asthma can lead active healthy lives
- ❑ Identify ways to help a friend with asthma
- ❑ Asthma On Wheels Trainer

Wheel of Questions & Asthma On Wheels Cart





Asthma on Wheels Program

- ❑ Provides basic understanding of asthma for ALL students
- ❑ Corrects misinformation
- ❑ Promotes asthma self-management
- ❑ Teaches empathy to help others with asthma
- ❑ Hands-on, interactive tool with six asthma related topics
- ❑ Question and answer format

Tips for Teachers

- ❑ Education is the key to asthma control!
- ❑ Managed symptoms = healthy, active lives
- ❑ Important to know your students with asthma and once identified:
 - Notify School Nurse
 - Request copy of student's Asthma Action Plan
 - Learn about each student's triggers
 - Notify PE teacher about student with exercised induced asthma



Asthma Friendly Classroom Tips

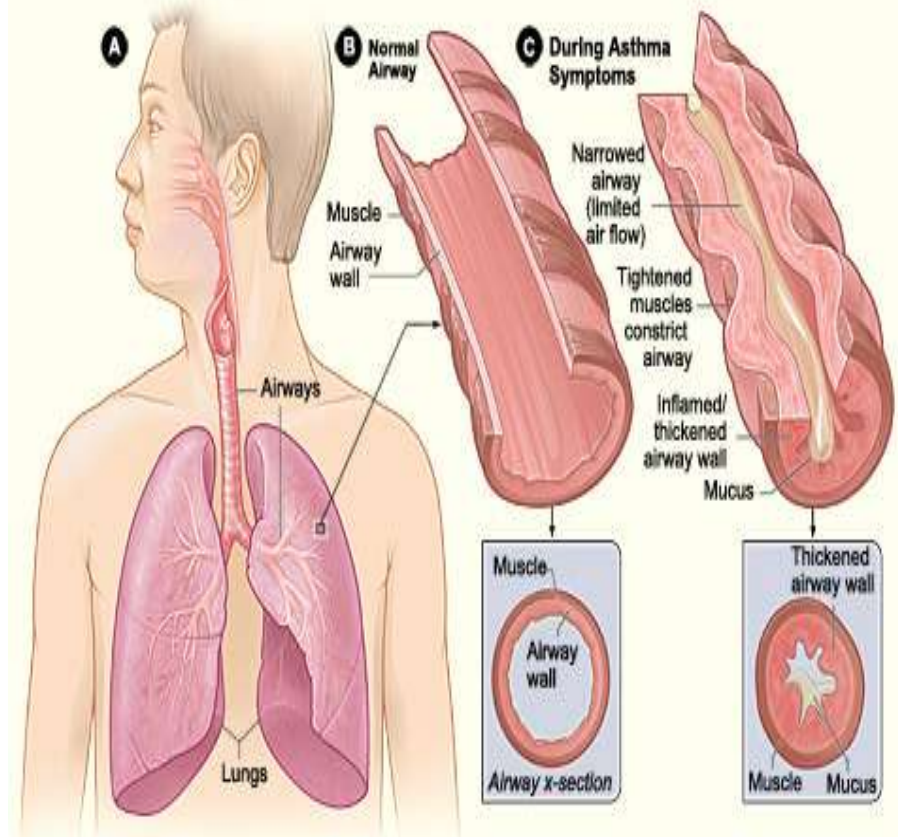
- Keep classrooms free of clutter
- Do not use scented cleaners or air deodorizers
- Avoid furry or feathered animals in the classroom
- Do not block air vents and windows
- Use only CMS approved non-toxic cleaning supplies
- Alert maintenance staff about any leaks, condensation or mold

Question 1:

What is Asthma and who gets it?

Answer:

- A condition that affects the airways in the lungs that can cause difficulty breathing. Both kids and grown-ups can have asthma. It is not contagious, you **cannot** catch asthma from anyone.



Question 2:

How do I know if I have asthma?

Answer:

Main asthma symptoms:

- **Wheezing: whistling sound when you breath**
 - **Shortness of breath: when you talk or walk**
 - **Tightness in chest: feels like a heavy weight**
 - **Coughing**
-
- **Some students with asthma may have one or all of these symptoms.**
 - **They may have them every day or only once in a while.**
 - **If you have these symptoms tell your school nurse or a grown-up you live with.**
 - **See your doctor for diagnosis and treatment**

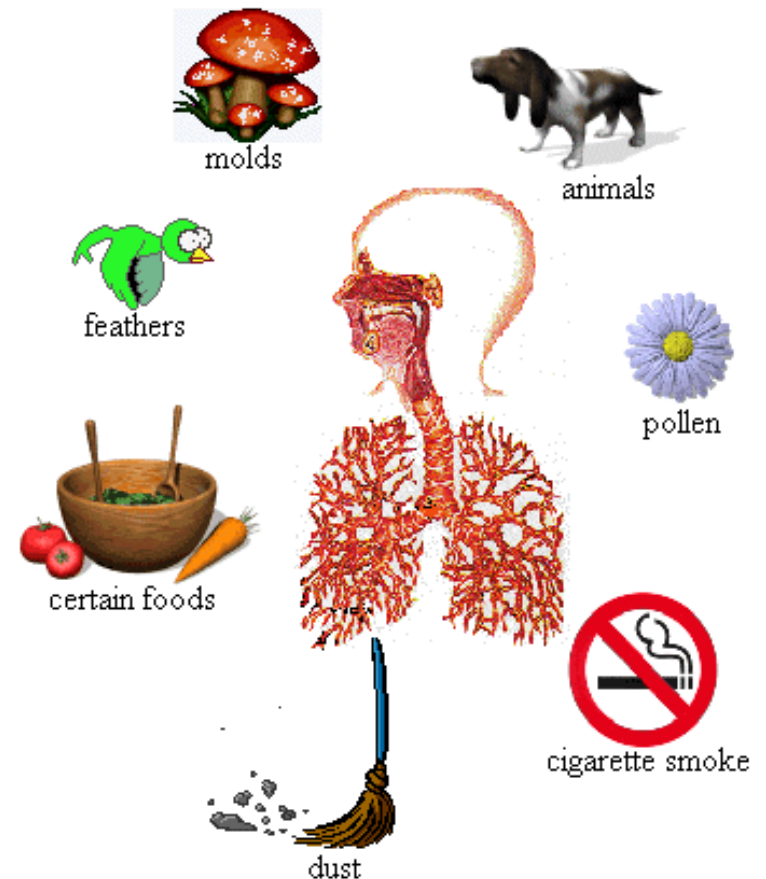
Question 3

What causes an asthma attack?

Answer:

- ❑ An asthma attack happens when someone with asthma is around something or doing something that “triggers” the airways in their lungs to swell, tighten, and fill with extra mucus.
- ❑ This makes breathing difficult.
- ❑ They may need help and their rescue medicine (quick-relief inhaler) immediately.

Triggers include: dust, animal hair or feathers, smoke, pollen, mold, cockroaches, cold air, exercise, strong emotions and having a cold.



Question 4:

Is there a cure for asthma?

Answer:

- ❑ There is no cure for asthma, but it can be controlled.
- ❑ Symptoms can be controlled by seeing your doctor, taking your medicines ,and having an **Asthma Action Plan**.
- ❑ Asthma Action Plan may include using a peak flow meter, a **controller medicine** (everyday), a **rescue** medication (during an episode), and avoiding triggers.
- ❑ With the right plan, kids w/asthma can run, play, and go to school just like anyone else.

Asthma Relievers

Short-Acting Beta₂-Agonist



Alupent®
metaproterenol
sulfate



Xopenex HFA®
levalbuterol tartrate



Pro Air® HFA
albuterol sulfate



Proventil HFA®
albuterol



Ventolin HFA®
albuterol sulfate HFA



Generic
albuterol



Zenith Goldline®
albuterol



Martec®
albuterol



Dey, L.P.®
albuterol sulfate
inhalation solution



Xopenex™
levalbuterol HCl
inhalation solution

Methylxanthine



Theo-Dur®
theophylline

Anticholinergic



Combivent®
ipratropium bromide /
albuterol sulfate



Atrovent®
ipratropium bromide

Asthma Controllers

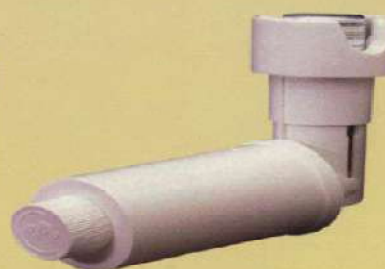
Steroidal



AeroBid®
fluticasone



AeroBid-M®
fluticasone



Azmecort®
triamcinolone
acetonide



QVAR®
beclomethasone
dipropionate HFA



Asmanex®
mometasone
furoate



Flovent®
fluticasone
propionate



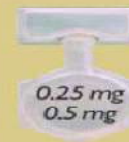
Flovent Rotadisc®
fluticasone propionate
inhalation powder



Pulmicort Turbuhaler®
budesonide
inhalation powder



Pulmicort Respules®
budesonide
inhalation suspension



Leukotriene Modifier



Singulair®
montelukast
sodium



Zyflo® Filmtab®
zileuton



Accolate®
zafirlukast

Long-Acting Beta₂-Agonist



Serevent Diskus®
salmeterol xinafoate
inhalation powder



Foradil® Aerolizer™
formoterol fumarate
inhalation powder



Intal®
cromolyn
sodium



Cromolyn®
sodium inhalation
solution, USP



Tilade®
nedocromil
sodium

Non-Steroidal

Dual Component Therapy



Advair HFA®
inhalation
Aerosol



Advair Diskus®
fluticasone propionate/
salmeterol inhalation powder

Question 5:

Can people with asthma play sports?



Answer:

- ❑ Exercise is important for everybody especially people with asthma. With the right medicines students with asthma can play the sports they want.
- ❑ Many professional athletes, like Chris Draft, professional football player in the NFL, have asthma. Some Olympic athletes have even won a gold medal.

Question 6:

What if someone has an asthma attack at school?

Answer

- Get help immediately (teacher, nurse, coach, or parent, or adult).
- Stay calm & reassure them that help is on the way.
- Help your friend with asthma by reminding them to follow their Asthma Action Plan, know where they keep their quick-relief inhaler & help them locate the medicine.
- When they are well, include them in activities



Steps to Follow for an Asthma Episode in the School Setting

*If you see a student having trouble breathing,
do not wait, get help immediately:*



- Stop Activity. Help to an upright position.
- Stay calm and speak reassuringly.
- DO NOT RECLINE!



- Encourage the student to take a prescribed quick relief inhaler.



- Call a School Health Professional and/or activate your building Emergency Response Team.
- Never Send to the Health Office alone!

Always notify a parent or guardian.

**Call
911**

**IF THE RESCUE MEDICATION
DOES NOT HELP, IS NOT AVAILABLE,
OR IF YOU ARE UNSURE WHAT TO DO,
CALL 911.**

For additional information contact the Asthma Education Program at 980-343-0367, or contact your school nurse.

Materials in Asthma On Wheels



ASTHMA VOCABULARY

Airways - Small tubes inside the lungs that allow us to breathe air in and out.

Asthma - Disease of the lungs making it difficult for someone to breathe.

Breathe - Moving fresh air into the lungs and used air out of the lungs.

Coughing - Helps to clear the airways of mucus.

Inhaler - Device used to deliver medication to the lungs.

Lungs - A pair of organs in the chest that are used for breathing.

Mucus - Thick, sticky substance made by the lungs.

Respiratory System – Parts of the body that deliver oxygen to the blood

Symptoms - Physical changes and feelings that someone has with a disease or illness.

Trigger - Something that may cause asthma symptoms to become worse.

Wheezing - A whistling noise made when breathing caused by swelling in the airways.

Asthma Quiz



ASTHMA QUIZ

Fill in the blanks:

1. Three main symptoms of asthma are _____, _____, and _____.
 2. Asthma affects the _____ in the lungs.
 3. A _____ is something that may cause an asthma attack.
 4. List four possible triggers for someone with asthma:
_____, _____,
_____, _____.
 5. Asthma can be controlled by following the right _____.
- True or False:
6. ____ Asthma is a disease that is contagious.
 7. ____ People with asthma can play sports and exercise.
 8. ____ If you see someone coughing a lot during PE it is OK to ignore them because they are probably faking.
 9. ____ Avoiding triggers when possible is one way to manage asthma.
 10. ____ People with asthma should not tell anyone because it is not a serious condition.

Asthma On Wheels Parent Letter



Dear Parents:

In school we have been learning about asthma. Did you know that more than 6 million children have asthma and it is the leading cause of absences among children with a chronic disease? You probably have a friend or family member with asthma. Asthma is sometimes hard to diagnose because it can be mild or severe. If you have noticed any of the following signs in your children talk with your family doctor or school nurse:

- Frequent coughing during the day without a cold
- Waking at night due to coughing
- Not able to participate in physical activity for long periods of time due to shortness of breath
- Able to hear wheezing or whistling noise when child breathes
- Child complains of tightness in his/her chest
- May have more of the symptoms during cold weather

If your child is already receiving treatment for asthma and still has some of the above symptoms or has to use extra medicine to breathe better it may not be well controlled and they may need to see the doctor for follow-up. With the right plan and treatment children with asthma can live healthy, active lives.

You may contact your school nurse for any questions you may have about asthma.



Objectives of Asthma on Wheels Teacher Training Module

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- 2. Integrate asthma topics into math, science, language arts/English, reading, or character education curriculum.**
- 3. List ways to educate students about asthma being a controllable condition in which students can live active, healthy lives.**
- 4. Incorporate strategies that promote Asthma Friendly Classrooms in their school.**
- 5. Become an Asthma On Wheels Trainer**

Questions?





Thank you for attending! Please fill out your evaluation before you leave!