

3. Adventures in Climate and Health: Asthma Adventures: Breathing Easy and Exploring Fun



Student Objectives:

- The student will have an understanding of what asthma is.
- The student will be able to link air pollution to asthma and breathing.
- The student will be able to identify triggers that can start or worsen asthma.

Materials Required:

“I Have Asthma What Does That Mean?” and “All About Asthma”, A poster about asthma and asthma triggers, Asthma Gators Coloring books (all from NH DES)

Key Vocabulary:

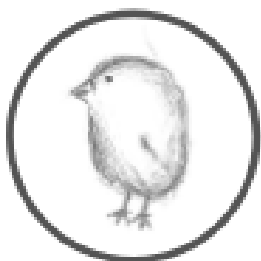
Asthma: a condition that causes breathing problems

Airways: the passage by which air reaches a persons lungs

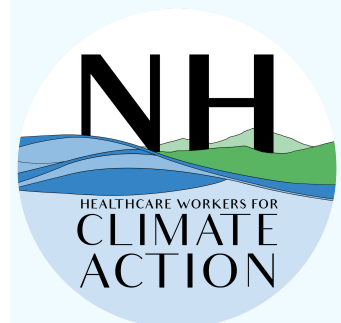
Respiratory: the system that allows us to breathe

Allergens: foreign substances that cause allergies

Triggers: something that causes an event to happen



**Climate and Health Initiative
for Children
in Kearsarge & Sunapee**



Background Information:

Asthma is a health problem that makes it hard to breathe. This happens because airways in the lungs swell up, fill with mucus, and get smaller. Some people say having asthma feels like breathing through a straw.

Asthma doesn't make your breathing harder all the time – just sometimes. This happens because the airways get more irritated than normal. When this happens, it's called an asthma "flare-up" or "attack.

You'll know you're having a flare-up if you:

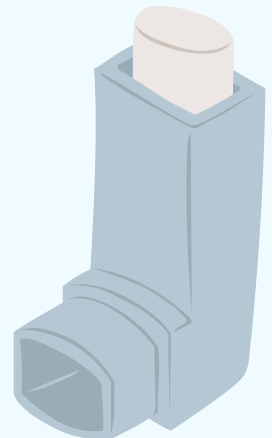
- have a whistling sound when breathing (this is called wheezing)
- cough a lot
- have a tight or painful feeling in the chest

Things that can cause you to have an asthma flare-up are called "triggers." Different kids have different triggers. Common triggers include:

- breathing in things that cause allergies (called allergens), such as dust, pollen, dander from animals, and mold
- breathing in things that irritate your airways, like cigarette smoke, perfume, and chalk dust
- infections, like a cold or the flu
- exercising

breathing in cold air”

Source: <https://kidshealth.org/en/kids/asthma.html>



Procedure:

1. Fill out the K and W of the KWL chart.
2. Talk with the students about asthma. Ask them what they think it is, what happens when you have it, and what causes it.
 - a. <https://kidshealth.org/en/kids/asthma.html>
3. Tell the students to hold their finger in front of their mouths and to pretend to blow it out like a candle. Then, tell the students to extend their arm and imagine blowing out that same candle from a farther distance. It will take more breath and effort when the “candle” is farther away, imitating the breathing difficulties that people experiencing asthma face.
4. Asthma Trigger Hunt:
 - a. Pages 7-10 of this file:
https://www.swcpeh.org/_documents/pdf/fc_asthma_campaign-triggers.pdf
 - b. Cut out the asthma trigger words and hide them around the room, or an outdoor space. Allow the kids to hunt down all the triggers, then share what they found. Follow up questions and discussion can be, which triggers are most difficult to avoid? Why would this trigger worsen asthma?
5. Provide the students with the following resources from NH DES:
 - a. two books per site: “I Have Asthma What Does That Mean?” and “All About Asthma”
 - b. A poster about asthma and asthma triggers
 - c. Asthma Gators Coloring books
6. Complete L of the KWL chart.