

Activity:

Narrowing Airways Race

Overview

In this activity, participants will learn the effect of narrowing airways.

Learning Objectives

By the end of the activity, participants will be able to:

- Compare and contrast normal breathing to asthmatic breathing.
- Correctly state three environmental triggers of an asthma attack (if the variation is used).

Audience

6th grade to adult

Materials

- Four pieces of rope to block off two distinct airways

Duration

10 minutes

Activity Preparation

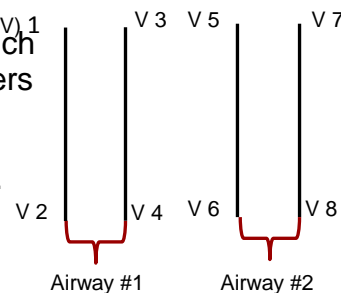
Background Information:

Asthma is not contagious but can run in families. Environmental asthma triggers include: dust, mold, carbon monoxide, cleaning products (polish or dusting spray). During an asthma attack, the airways in your lungs (bronchi and bronchioles) become inflamed and constricted, which causes the size of the airways to decrease. The lining of the airways become larger and thicker mucus is formed. With less space in the airways, it is harder to breathe.

Instructions

Note: Before beginning this activity, tell participants it includes physical activity and participants can choose not to participate.

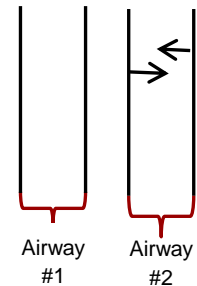
1. Select eight volunteers to hold the ends of four pieces of rope, which will mark off two pathways to represent airways. Align the volunteers to form two distinct, evenly spaced (~5 feet in width) pathways.
2. Have the remainder of the participants divide into two even teams. One by one, have the participants that are not holding the ropes race through the airways.



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3. Once the race is over, instruct the participants holding the ropes for Airway #2 to move closer together. Airway #2 should be ~3 feet in width and represents an airway narrowing during an asthma attack.
4. Have participants race through the airways again.
5. Once the race is over, instruct the participants holding the ropes for Airway #2 to move closer together. Airway #2 should now be ~1.5 feet in width.
6. Have participants race through the airways one more time.
7. Once the race is over, ask participants what it was like to move through the different airways. Ask participants to imagine that they were oxygen and have them consider which airway was easier to move through.



Variation: Before each race, hold up a trigger or a solution photo from the *Matching Asthma Triggers and Solutions* activity and have the participants decide if the photo depicts an asthma trigger or a solution. If the photo is a problem, have Airway #2 decrease in width. If the photo is a solution, both airways remain the same width. Have participants race through the airways. Repeat with additional triggers and solutions.

Evaluation

- This activity is designed to reinforce content introduced during the slide presentation. Pre/post-workshop surveys should be administered at the beginning and end of the session to measure participants' knowledge gained. Question #5 relates to this activity.