

Asthma Demonstration



What you need:

- Coffee stirrer straw (one stirrer per participant)
- Regular sized straw (one straw per participant)
- Timer/watch

Before you begin:

Let the class know they will be physically active and the activity simulates a circumstance where it is difficult to breathe – this serves as a qualifier for any children who may have asthma who may need to opt out.

Desired Outcomes:

- Understand the connection between air quality and health
- Encourage making a hypothesis and then testing it out
- Encourage the use of the Air Quality Index (AQI)

Steps:

1. Pass out straws to each student, asking them not to touch them just yet.

2. Ask children to breathe normally and mentally note how it feels.

Before going on, ask children first to hypothesize what they think will happen when we breathe through the different straws.

3. Have each student take the small/regular straw and breathe only through this straw. Ask for feedback on how it feels to breathe through this – harder, more difficult, less intake of air, etc.

[simulates breathing when air quality is poor – give examples of when that might happen – for example wild fire smoke]

4. Have each student take the stir stick and breathe only through this. Ask for feedback on how it feels to breathe through this – harder, not getting enough air, etc.

[simulates breathing when you have a health condition such as asthma – air flow is restricted due to constricted or narrowing airways – like the reduction in straw size]

5. Ask the students:

- Do any of the students have asthma?
- Did breathing through the stir stick feel like an asthma attack?
- How might air pollution outside affect someone with asthma?
- Have students do jumping jacks while you count for ~ 30 seconds (this is where anyone with asthma would want to sit out).

