

Join the national conversation!



Focus Words

intervention | phenomenon | priority | suspend | transmit



Weekly Passage

Asthma is a respiratory illness that makes breathing difficult. Sometimes it is connected to plant and animal allergies. Asthma is not a contagious illness; it cannot be transmitted from person to person. Instead, asthma is a health condition that is triggered by environmental factors, such as indoor and outdoor pollutants that make the air dirty. But health experts are noticing a pattern. Asthma appears to be getting worse in low-income, urban areas, affecting more and more children who live there.

A study of rich and poor neighborhoods showed big differences in asthma rates. The low-income area of the Bronx in New York had high rates of asthma, 222 cases per 10,000 residents, while wealthier neighborhoods in Seattle had only 96 cases per 10,000. Factories, power plants, and other industrial facilities are major contributors to air pollution. Many poor residential communities are located near

these industrial areas. Automobile emissions are another common cause of air pollution, and cities have more traffic than suburban areas.

Since widespread asthma is a public health phenomenon that is directly linked to pollution, many people think something should be done to fix the problem. But who should pay for expensive clean-up efforts and other interventions to improve the air quality in homes, schools, and neighborhoods? Should factories be expected to clean up after themselves? Is the government responsible for making asthma prevention a priority? Will teaching people about the asthma problem help? Should operations in power plants be suspended until they lower their pollution levels? What do you recommend?

Unit I.14 - Asthma: More than a medical problem?

Focus Word Chart

Word	Meaning	Forms	Examples of Use	Notes
intervention	(n.) – action intended to solve a problem			
phenomenon	(n.) – event; occurrence			
priority	priority (n.) – main concern			
suspend	(v.) – to stop temporarily			
transmit	(v.) – to pass on			

Unit 1.14 - Asthma: More than a medical problem?

Problem of the Week



There was a dramatic increase in the asthma rate in the 1980's and 1990's. More recently, 14% of children in the U.S. today have been diagnosed with asthma. Researchers have been working to understand this **phenomenon**. Asthma is a complicated illness. Unlike HIV or the common cold, it is not **transmitted** from person to person. Rather, doctors think a combination of genetic factors and environmental factors, like pollution, determine who gets asthma. Asthma attacks can be life-threatening, and treating asthma is expensive. For these reasons, some say fighting asthma should be a national **priority**. But how can we fight asthma? Realistically, we cannot **suspend** all activities that cause pollution. To plan effective **interventions** we need to know which groups are most affected. Here are some statistics.

- ▶ 17% of boys have been diagnosed with asthma, as compared to 11% of girls
- ▶ 18% of children from poor families have been diagnosed with asthma, as compared to 13% of children from non-poor families

Option 1: According to these statistics, which of the following groups would you expect to have the highest asthma diagnosis rate?

- A) girls from poor families
- B) girls from non-poor families
- C) boys from non-poor families
- D) boys from poor families

Option 2: Two boys are chosen at random. According to the statistics given above, what is the likelihood that they both have asthma?

Math Discussion Question: Childhood asthma places a real burden on families. An asthma attack is a frightening **phenomenon**. Normal life is **suspended** when a child suffers an attack, and helping the child breathe becomes the family's **priority**. Sometimes, using an inhaler helps relieve the symptoms. Other times, a more serious **intervention** is necessary, like a doctor visit or a hospital stay. Doctors and social workers try to **transmit** up-to-date medical knowledge to families to help them avoid asthma triggers, like mold, pollen, and cigarette smoke. Should families pay for all of these services themselves? What about families that can't afford to pay?

Asthma: More than a medical problem?



I. Get ready...

Pick one of these positions (or create your own).

A Factories are to blame for the high incidence of asthma in the cities. They should suspend their activities until they can find a way to reduce air pollution.

B The government should make preventing asthma a priority. They should pass laws that make it illegal for factories and automobiles to pollute the air with dangerous chemicals.

C Asthma is such a problem because there are too many cars in urban areas. Individual people should take responsibility for the problem by walking or riding bicycles instead of driving.

D There is no way to prevent asthma in urban areas. Air pollution will continue no matter what we do. We should make finding a cure a priority instead.

E _____

GO!

Be a strong participant by using phrases like these.

...because...

I disagree with part of that...

An example might help convince me. Can you give me an example?

What part of the passage makes you think that?

2. Get set...

Be ready to provide evidence to back up your position during your class discussion or debate. Jot down a few quick notes:

Unit 1.14 - Asthma: More than a medical problem?

Science Activity



This activity is designed to help you practice thinking like a scientist and to use this week's focus words. Sometimes the data are based on real research, but they should never be considered true or factual.

A highway is being built through Professor Kahn's town. She is worried about her two children. Their health is her biggest **priority**. It is a well-known **phenomenon** that kids who live near highways have higher rates of asthma.

Professor Kahn thinks that the government should **intervene** to **suspend** construction of the highway. She is writing a letter about her opinion, and will ask her state senator to **transmit** the letter to the governor. To show how highways affect local children, Professor Kahn did an experiment.

Question:

Are children who live near major highways more likely to have asthma?

Hypothesis:

Children who live near major highways will be more likely to have asthma.

Materials:

- ▶ 100 kids who live near major highways
- ▶ 100 kids who don't live near a major highway

Procedure:

1. Find 100 kids who live near major highways.
2. Find 100 kids who do not live near a major highway.
3. Ask all 200 kids if they have asthma.
4. Calculate the percentage of children in each category who have asthma.

Data:

Location	Asthma Rate
Near Major Highways	20%
Far from Major Highways	6%

Conclusion:

Is the hypothesis supported or not by the data?

What evidence supports your conclusion?

How would you make this a better experiment?



Writing Prompt

What should be done to
reduce the incidence of
asthma in urban areas?

Support your position with clear reasons and specific examples. Try to use relevant words from the Word Generation list in your response.

Focus Words

intervention | phenomenon | priority | suspend | transmit

A tool to help you think about your own writing!

Remember you can use focus words from any of the WG Units.

Check off what you accomplished:

Good Start

- ☐ Stated my own position
- ☐ Included 1 focus word

Pretty Good

- ☐ Stated my own position clearly
- ☐ Included 1-2 arguments
- ☐ Included 1-2 focus words

Exemplary

- ☐ Stated my own position clearly
- ☐ Included 1-2 arguments
- ☐ Included 1 counterargument
- ☐ Used 2-5 focus words

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.