

Critical Reading: Worksheet Key

"Does Civilization Cause Asthma?" by Ellen Ruppel Shell Atlantic Monthly

1. Define the following terms from the article in your own words:
 - a. Pediatrician - *A doctor who specializes in treating children.*
 - b. Harbinger - *A sign or forerunner of something yet to come.*
 - c. Paraphernalia - *The articles used in a particular activity.*
 - d. Lethality - *Deadliness*
 - e. Morbidity - *Frequency of disease*
 - f. Chronic - *Of long duration, continuing.*
 - g. Episodic - *Occuring in episodes, attacks.*
 - h. Smog - *A form of air pollution produced by sunlight reacting with various chemicals common in auto emissions which creates a haze (smoke+ fog).*
 - i. Epicenter - *The point on the Earth's surface directly above the focus of an earthquake or other major event.*
 - j. Inversion - *An atmospheric condition in which the air temperature increases with increasing altitude, preventing dispersion of pollutants.*
 - k. Equivocal - *Open to two or more interpretations.*
 - l. Immunology - *The medical study of the immune system.*
 - m. Fecal material - *poop*
 - n. Armada - *a large army, a historical reference to the Spanish Armada.*
 - o. Paradoxical - *Pertaining to a seemingly contradictory statement which may yet be true.*
 - p. Predisposition - *a tendency, a susceptibility or liability that is determined in advance.*
 - q. Homogenous - *the same or similar nature or kind.*
 - r. Allergen - *Something to which someone is allergic.*
 - s. Concurrent - *Happening at the same time.*

- t. Sporadic - *Infrequent, occurring at infrequent intervals.*
- u. Palliative - *Relieving or soothing symptoms without curing.*
- v. Naïve - *innocent*

Answer the following questions from the article:

2. Health care costs associated with asthma this year will be approximately *\$14.5 billion*
3. How many dust mites can you expect to find on one square meter of mattress? *24*
4. What two social groups tend to have higher rates of asthma than Caucasian Americans do?
African Americans
Hispanic Americans
5. What possible reasons for this does the author give?
Genetic predisposition
High rates of premature births
6. How many Americans estimated to be killed by asthma annually?
5,000
7. What sentence best captures the main idea of the article?

"By legitimately protecting our kids from dangerous infections we may have kept parts of their immune systems from maturing."

8. What possible factors influence asthma occurrence according to the author?
Genetics, stress, pollution, allergens, diet, low physical activity, poor medical treatment.
9. What does the author suggest should be done specifically to reduce asthma in the U.S.?
Redesign the health care system to address the needs of chronic illness, more efforts to improve the quality of low-income housing.

Concluding Questions for Group Discussion

The two articles presented are both factual, written by credible journalists and are published in mainstream publications. However, they differ strongly in their conclusions about what should be done in regard to reducing rates of asthma in the U.S. and abroad. Which of the articles seem to agree with the following statements, Shell, Pianin and Morgan, or both?

1. Asthma is a serious health problem facing the U.S. and the world.

Shell

Pianin and Morgan

both

2. Understanding the medical cause of asthma is the most important key to improving health.

Shell Pianin and Morgan both

3. Air pollution is an important factor in asthma-related illness.

Shell Pianin and Morgan both

4. Controlling air pollution is the most important means we have to reduce premature deaths related to asthma and respiratory illness.

Shell Pianin and Morgan both

5. Scientists do not understand the relationship between asthma and air pollution.

Shell Pianin and Morgan both

6. Asthma has many causes so it is impossible to know how to control it.

Shell Pianin and Morgan both

7. Many people suffer chronic illness and die prematurely as the result of asthma and respiratory problems.

Shell Pianin and Morgan both

8. Bonus Question: What do you think should be done to reduce the apparently increasing rates of asthma?

Possible answers include: improving preventive and other medical services, better housing particularly for poor people in urban areas, increased education of the public concerning asthma and its prevention and treatment

Teacher's Key to Air Pollution Paragraph Discussion

1. "Schroeder can't be sure..." this language instills doubt about the validity of the pediatrician's thoughts.
2. "Scientists are equivocal." Confirm that the students understand the meaning of "equivocal." While science may be equivocal about whether air pollution *causes* asthma, it has been well documented that air pollution aggravates the symptoms of people suffering from respiratory ailments, as the Washington Post article notes. By focusing narrowly on the cause of asthma in an individual, it makes it possible to dodge the larger environmental (as well as political, social, and practical) issue of controlling air pollution.
3. "Studies done in the 1990's" Here the author cites two studies that support her point that greater air pollution doesn't necessarily mean more air pollution. She neglects to mention studies that have found increased emergency room admissions and deaths related to asthma on days with high air pollution.
4. The author notes the comments by Dr. Douglas Dockery about air pollution worsening symptoms, but concludes with "most [scientists] agree ... that symptoms are provoked by any number of pollutants, and that substances found indoors are often more irritating than auto and truck emissions." The author acknowledges the air pollution argument, and then downplays its significance by switching to the issue of indoor air quality.
5. It is important to understand the nature of certain publications; for instance, the Atlantic Monthly tends to have a readership that is politically conservative and anti-government regulation.