Instructor Notes

"Are We Scaring Ourselves to Death?": An ABC News Report by John Stossel

In this activity, participants watch the video "Are We Scaring Ourselves to Death?" and discuss some of the issues that this news report raises. These issues might include the role of the media in amplifying public fears about environmental hazards, how New York City was guilty of "statistical murder" in removing all asbestos from their public schools, and whether the EPA was impartial in their assessment of the lead hazard in the Aspen, Colorado, case.



The activity is written for workshop participants and may need modification for classroom use.

Suggested Background Readings

- An Introduction to Probability
- An Introduction to Toxicology
- A Scientific View of Risk

National Science Education Standards for Grades 5–12

Science as Inquiry

• Abilities Necessary to Do Scientific Inquiry

Communicate and defend a scientific argument. Students develop abilities associated with accurate and effective communication during discussions on perceptions and risks of environmental and health hazards.

Science in Personal and Social Perspectives

- Personal and Community Health

 Hazards and the potential for accidents exist. Although health hazards and accidents

 are possible regardless of the environment, students realize that humans have a variety

 of mechanisms that can reduce and modify these hazards.
- Risks and Benefits
 Important personal and social decisions are made based on perceptions of benefits and risks. Students learn about real incidents in which the media or specific organizations offered their perceptions of environmental or health risk, thereby amplifying public fears.
- Environmental Quality

 Natural ecosystems provide an array of basic processes that affect humans. Students concerned with environmental issues learn that humans change natural ecosystems by

affecting air, water, and soil quality and that many of these changes may be detrimental to humans.

• Natural and Human-Induced Hazards

Human activities can enhance potential for hazards. Students discuss activities that can cause environmental hazards, such as burning fossil fuels, urban growth, and waste disposal.

Natural and human induced hazards present the need for humans to assess potential danger and risk. Although humans change the environment to benefit society, students identify the risks associated with these benefits and discuss the costs and trade-offs of the environmental and health hazards created by these benefits.

• Science and Technology in Local, National, and Global Challenges

Progress in science and technology can be affected by social issues and challenges.

Students recognize that media coverage and funding priorities affect the progress of environmental and medical programs.

Individuals and society must decide on proposals involving new research and the introduction of new technologies into society. Students discuss the importance of decision-making related to new research development and new technology implementation. Individuals making these important choices need to consider risk, cost, benefits, and possible alternatives.

Procedure Notes and Outcomes

After watching the second and third segments of the video "Are We Scaring Ourselves to Death?," participants discuss the questions listed in the Activity Instructions and decide whether they fear the effects of certain technologies on their lives or whether they need more evidence to make a judgment.

Answers to the questions will vary based on participants' opinions and experience.

Activity Instructions

"Are We Scaring Ourselves to Death?": An ABC News Report by John Stossel

What the public sees, hears, or reads in the news media may not be as accurate as you might think. A report by John Stossel of ABC News reveals that the media does at times skew the facts in hopes of getting better ratings or capturing the public's attention. Watch the Stossel report and answer the following questions.

Questions

- 1. What are your five biggest environmental fears?
 - a. What is the basis for each fear?
 - b. How often do you engage in these activities or come into contact with these risks?
 - c. Classify each risk as voluntary (you can choose whether to assume the risk) or involuntary (you have no choice but to assume the risk).
 - d. How could you minimize your risk for each issue?
 - e. Do you think your fears are rational or irrational? Explain.
- 2. Give three examples of environmental health issues reported in the news in the past few years.
 - a. What type of statistical evidence was given for each study?
 - b. Describe the sampled group.
 - c. What bias, if any, did you find in the results due to the methods used?
 - d. In light of the methods used, did you accept the findings?
 - e. Has the knowledge of these findings altered your behavior? If so, how?
 - f. Were the issues local, national, or global?
- 3. List three examples of environmental health hazards that were "big news" as reported by the media.
 - a. In what year (decade) did each event occur?
 - b. What effects do you think these events have had on the way we live?
- 4. The video explored "the Phenomenon of Familiarity." List three health hazards that most humans encounter regularly but that are not publicized.
- 5. On whom do we seem to spend the most money to protect? On whom do we seem to spend the least money to protect? Why do you think some groups are protected more than others?

- 6. Give an example of a public environmental fear or issue in your school district.
 - a. What group was the most vocal about this issue?
 - b. Were citizen fears consistent with scientific information? If they differed, explain how.
 - c. What was the social outcome?
- 7. In the video, a parent of a New York City child made the statement "Experts are sometimes wrong."
 - a. Comment on this statement.
 - b. How would you respond to that parent?
- 8. What would you say to someone who responds with an emphatic "No" to the question "Is any risk OK?"
- 9. What do you think are the top three environmental fears of middle and high school students?
 - a. Where do students get these fears?
 - b. Are they justified?
 - c. What skills do students need in order to sort out perception from reality?
- 10. If the media says "Environmental health problems are getting worse," and also says "We are living healthier and longer," can both statements be true?
- 11. A woman made the statement, "One out of every 42,000 preschoolers could develop cancer at some point in their lives just as a result of exposure to Alar."
 - a. Comment on this statement.
 - b. If you had the chance to interview her, what questions would you ask?
- 12. Consider the statement "Cell phones are hazardous to your health." Now consider that statement in relation to items such as coffee, newspapers, makeup, and fast food.
- 13. List three consumer products that have been taken off the market or recalled in the last 25 years due to health or safety issues. For each product, approximately how many people were at risk? How many were harmed?
- 14. It seems as if everyone knows someone who died of cancer of one type or another. Explain the perception of the increasing rate of cancer.
- 15. Should saving lives be thought of in terms of cost-effectiveness? How do we decide which risks worth paying to approach zero risk?

- 16. Many people want the government to design laws and regulations to protect them from health hazards.
 - a. At what point do we limit the government's involvement in health issues?
 - b. Name some cases where regulation or cleanup was necessary and important.
 - c. When is it a waste of money to make things "too clean"?
 - d. How could stricter regulations cause shorter human life spans?
- 17. On packages of cigarettes is the following: "SURGEON GENERAL'S WARNING: Smoking causes lung cancer, heart disease, emphysema, and may complicate pregnancy." Why are there no warning statements on packages of high-fat junk foods (for example, pork rinds and potato chips) about their link to heart disease?