

Introduction to Environmental Health

Purpose

To introduce students to the basic concepts of environmental health, as opposed to ecology.

Overview

Students brainstorm and explore the basic concepts of environmental health.

Time

One hour introductory session

Key Concepts

The environment can affect human health.

Human impacts on the environment, as well as natural factors, can impact human health.

Having scientific research data is key to identifying environmental health problems.

Certain populations (children, workers) are at increased risk of environmental health problems.

Skills

Generating questions

Categorizing information

Working in a group

Sharing information with others

Weighing solutions

Materials

Large butcher paper or other means of posting student ideas

Tables and desks for filling out worksheets in groups

Facilitator Preparation

You will be acting as a guide for the students' own brainstorming session about what is encompassed by the field of environmental health. Break students into four groups and give each a work sheet. Let students generate some ideas before beginning a group discussion and writing student ideas on the poster(s).

The teacher's key has some ideas about what type of answers students might give in each section. The main idea to emphasize is that beyond the health of the environment itself (i.e. ecosystems, wildlife), the environment ultimately can affect human health.

Student Assessment

The students will generate a rough "map" of ideas about how to proceed in investigating the environmental health risks associated with the chosen site. This idea map will precede the actual mapping they will be doing in the following days.

Students should all contribute ideas and ask questions that indicate their basic understanding of the concept of environmental health. The students' group work should indicate some obvious future research steps they should take in their investigation.

1) What are some potential environmental health problems?

2) What do we need to know to determine if an environmental health problem exists in a given place?

3) What might be some solutions to environmental health problems?

AMBIENT Introduction to Environmental Health **Answer Key**

1) What are some potential environmental health problems?

Pollution (air, water soil) causing illness in adults and children
Safety hazards
Occupational hazards -- repetitive motion, vibration, etc.
Global change causing health problems

2) What do we need to know to determine if an environmental health problem exists in a given place?

Data about health problems
Data about toxins, exposure
Historical records to see trends
An understanding of land use/exposure through use

3) What might be some solutions to environmental health problems?

Elimination of toxins (i.e. cleanup)
Elimination of exposure, through change in use
Education to change behavior
Identification of responsibility, regulating authority