

Environmental Science and Human Health

Environmental Science · Answer Key · 10 Questions

1. Exposure to fine particulate matter (PM2.5) in air pollution is most strongly linked to which health outcome?

- A) Improved lung capacity
- B) Increased risk of cardiovascular and respiratory diseases**
- C) Enhanced cognitive function
- D) Reduced susceptibility to infections

2. Which heavy metal is a common contaminant in older plumbing and can lead to developmental problems in children?

- A) Iron
- B) Calcium
- C) Lead**
- D) Potassium

3. Pesticides, when ingested or absorbed, can interfere with nerve function. This type of environmental toxin primarily affects which system in the body?

- A) Digestive system
- B) Nervous system**
- C) Skeletal system
- D) Integumentary system

4. The presence of elevated levels of nitrates in drinking water can be particularly harmful to infants, potentially causing a condition known as:

- A) Anemia
- B) Blue baby syndrome (methemoglobinemia)**
- C) Rickets
- D) Jaundice

5. Bioaccumulation refers to the buildup of substances, such as mercury, in an organism's tissues over time. In which type of food are mercury levels often a concern for human consumption due to bioaccumulation?

- A) Leafy greens
- B) Dairy products
- C) Large predatory fish**
- D) Root vegetables

6. Exposure to high levels of ultraviolet (UV) radiation from the sun is a significant risk factor for the development of which type of cancer?

- A) Lung cancer
- B) Leukemia
- C) Skin cancer**
- D) Liver cancer

7. Indoor air quality can be compromised by volatile organic compounds (VOCs) released from common household products. Which health issue is commonly associated with prolonged exposure to high VOC levels?

- A) Improved immune response
- B) Increased bone density
- C) Respiratory irritation and allergic reactions**
- D) Enhanced athletic performance

8. Certain industrial chemicals, known as endocrine disruptors, can interfere with the body's hormonal system. Which of these is a potential consequence of endocrine disruption?

- A) Improved fertility rates
- B) Enhanced thyroid function
- C) Reproductive and developmental abnormalities**
- D) Increased muscle growth

9. The transmission of vector-borne diseases, such as malaria and dengue fever, is often influenced by environmental factors like temperature and rainfall. These diseases are primarily spread by:

- A) Contaminated food
- B) Airborne particles
- C) Insects and other arthropods**
- D) Direct human contact

10. Asbestos, a mineral fiber historically used in building materials, poses a significant health risk when inhaled. Exposure to asbestos is a known cause of which serious lung disease?

- A) Asthma
- B) Pneumonia
- C) Mesothelioma and asbestosis**
- D) Bronchitis