

Volcanic Hazards and Human Health

Volcanology · Answer Key · 15 Questions

1. Which part of the human body is most immediately irritated by volcanic ash particles?

- A) The lungs and respiratory system**
- B) The toenails
- C) The inner ear
- D) The hair follicles

2. Volcanic ash is primarily composed of which material, which can cause abrasion to the human eye?

- A) Soft silk fibers
- B) Tiny fragments of glass and rock**
- C) Water vapor
- D) Compressed cotton

3. What is the primary way volcanic gases like sulfur dioxide affect human health?

- A) They turn skin blue
- B) They cause irritation to the nose and throat**
- C) They improve muscle density
- D) They increase hair growth

4. Long-term inhalation of fine volcanic ash is most likely to cause which of the following health issues?

- A) Enhanced vision
- B) Silicosis or breathing difficulties**
- C) Increased bone density
- D) Better hearing

5. Which safety gear is recommended to protect the human respiratory system during heavy volcanic ashfall?

- A) Sunglasses
- B) A high-quality particulate respirator mask**
- C) Leather gloves
- D) Wool socks

6. What is a common skin reaction for people exposed to acidic volcanic gases or ash?

- A) Immediate healing
- B) Skin irritation and rashes**
- C) Increased tanning
- D) Sudden height growth

7. Volcanic ash is considered harmful to the human body mainly because it is:

- A) Highly nutritious
- B) Chemically inert and smooth
- C) Sharp, abrasive, and small enough to inhale**
- D) A source of pure oxygen

8. Why are people with pre-existing asthma at higher risk during a volcanic eruption?

- A) Ash can trigger severe respiratory distress**
- B) Ash cures asthma
- C) Ash increases lung capacity
- D) Ash has no effect on asthma

9. Which of the following is a symptom of inhaling high concentrations of volcanic gases?

- A) Extreme happiness
- B) Headaches and dizziness**
- C) Increased ability to run
- D) Faster hair growth

10. During an ashfall, why is it advised to wear goggles instead of contact lenses?

- A) Lenses make you look like a scientist
- B) Ash can get trapped under lenses and scratch the cornea**
- C) Lenses are too heavy
- D) Lenses absorb volcanic heat

11. What should a person do to protect their throat if they must be outside during volcanic ashfall?

- A) Shout loudly
- B) Drink carbonated soda
- C) Cover their mouth with a damp cloth**
- D) Run as fast as possible

12. Volcanic gases can sometimes cause a metallic taste in which part of the human body?

- A) The hands
- B) The feet
- C) The mouth**
- D) The ears

13. Which mineral in volcanic ash is known to be particularly dangerous to lung tissue?

A) Crystalline silica

B) Table salt

C) Sugar

D) Compressed charcoal

14. How does volcanic activity affect the water supply, which is essential for human health?

A) It makes water taste like fruit

B) It can contaminate water with fluoride and acidic chemicals

C) It purifies all water automatically

D) It turns water into steam instantly

15. What is the most effective way to prevent ash from entering the human digestive system during an eruption?

A) Keeping food and water containers covered

B) Eating only raw vegetables

C) Drinking from open puddles

D) Leaving windows open while eating