

Renewable Energy and Your Health

Renewable Energy · Answer Key · 15 Questions

1. What common renewable energy source harnesses the power of the sun to generate electricity, which can reduce air pollution and benefit respiratory health?

- A) Geothermal energy
- B) Solar power**
- C) Biomass energy
- D) Wind power

2. Wind turbines are a source of renewable energy. If manufactured and maintained properly, what potential health benefit can come from increased wind energy use by reducing reliance on fossil fuels?

- A) Improved hearing due to turbine sounds
- B) Reduced risk of skin cancer
- C) Cleaner air contributing to better lung function**
- D) Increased muscle strength from wind exposure

3. Hydropower uses moving water to generate electricity. How can a greater reliance on hydropower, compared to some fossil fuels, potentially benefit public health?

- A) Exposure to warmer water
- B) Reduced greenhouse gas emissions and related health issues**
- C) Increased exposure to mercury
- D) Lower availability of drinking water

4. Geothermal energy taps into the Earth's internal heat. Compared to burning fossil fuels, what is a primary health advantage of using geothermal energy for heating and electricity?

- A) Increased exposure to radiation
- B) No greenhouse gas emissions released into the atmosphere**
- C) Release of harmful airborne particles
- D) Higher levels of carbon monoxide

5. Biomass energy involves burning organic materials. When done with modern, efficient technology, what health-related benefit can biomass energy offer by replacing some fossil fuel use?

- A) Increased levels of smog
- B) Reduced particulate matter pollution**
- C) Higher incidence of asthma
- D) More ozone depletion

6. Investing in renewable energy infrastructure often creates jobs. What health benefit can be associated with a stronger economy driven by green jobs?

- A) Increased stress levels
- B) Improved access to healthcare and healthier lifestyles**
- C) Higher rates of occupational injuries
- D) Reduced community engagement

7. Reduced air pollution from renewable energy sources can lead to fewer respiratory problems. Which of these is a specific lung condition that can be aggravated by air pollution?

- A) Osteoporosis
- B) Diabetes
- C) Asthma**
- D) Glaucoma

8. The burning of fossil fuels releases harmful pollutants that can affect cardiovascular health. How does a shift to renewable energy contribute to better heart health?

- A) By increasing exposure to lead
- B) By reducing the incidence of heart disease linked to air pollution**
- C) By promoting higher blood pressure
- D) By causing more blood clots

9. Some renewable energy technologies, like solar panels, require manufacturing. What is a key factor in ensuring the health and safety of workers involved in manufacturing renewable energy components?

- A) Exposure to toxic chemicals without protection
- B) Strict safety regulations and proper protective equipment**
- C) Minimal training on machinery operation
- D) Working in poorly ventilated areas

10. Renewable energy can decentralize power generation. What is a potential health benefit for communities that can generate their own power from local renewable sources?

- A) Increased reliance on unstable grids
- B) Greater energy independence and improved emergency preparedness**
- C) Higher utility costs for basic needs
- D) Reduced access to essential services

11. What type of renewable energy often involves large structures that generate electricity from natural air currents, and the absence of smoke from this process is a health benefit?

- A) Tidal power
- B) Geothermal power
- C) Wind power**
- D) Solar power

12. The extraction and burning of fossil fuels can contaminate water sources. How does the increased use of renewable energy, like solar or wind, protect water quality and public health?

- A) By increasing chemical runoff
- B) By reducing the risk of water pollution from fuel extraction and waste**
- C) By encouraging over-extraction of groundwater
- D) By leading to more oil spills

13. Which renewable energy source utilizes the natural heat from within the Earth, providing a constant and clean source of energy with minimal air pollution impact on health?

- A) Wave power
- B) Biomass energy
- C) Geothermal energy**
- D) Solar thermal energy

14. Large-scale renewable energy projects, like solar farms, can sometimes displace habitats. However, in terms of human health, what is a significant advantage of using solar energy over fossil fuels?

- A) Increased reliance on coal mining
- B) No greenhouse gas emissions during operation**
- C) Greater risk of acid rain
- D) Higher levels of mercury in the environment

15. The reduced release of greenhouse gases from renewable energy sources helps mitigate climate change. What is a direct health benefit of slowing down climate change?

- A) Increased frequency of extreme weather events
- B) Reduced spread of vector-borne diseases like malaria**
- C) More heatstroke incidents
- D) Greater risk of flooding in coastal areas