

Natural Disasters

Humans seem to have an instinct to control things but nature keeps some things out of our reach. Natural disasters make no distinction between the types of people or the areas of the world they affect—rich, poor, seaside, mountains, congested Asian cities, or the wide open American “bread basket” are all subject to a possible natural disaster.

What are “natural disasters”? They are natural events that cause destruction often of enormous proportions. The most dramatic ones include tornadoes, hurricanes, earthquakes, volcanoes, and tsunamis but wildfires, blizzards, droughts, mudslides, and landslides can also cause devastation to humans and the environment.

Tornadoes

Approximately 1000 tornadoes form each year in the United States. The least-damaging tornado packs winds of 70-plus miles per hour. A “killer tornado” is defined as one that has winds in excess of 205mph lasting over an hour. Luckily, only 2% of all tornadoes fall into the “killer” category, but they account for 70% of all tornado-related deaths. Most tornado deaths are caused by flying debris. A tornado “watch” means the conditions are right for a tornado to pop up in your area; a tornado “warning” means an actual tornado has been sighted by radar.

Hurricanes

Even though hurricanes can usually be tracked better than tornadoes, they rank as the deadliest of storms in the United States and cause widespread damage. Hurricanes are tropical storms that form in a counterclockwise direction around an “eye” and have winds of over 75mph. The strongest hurricane is called a “category 5” with winds in excess of 155mph and an ocean storm surge of as much as 18 feet. An average of six hurricanes form in the Atlantic each year but not all reach land.

Volcanoes

Volcanoes give us one distinct advantage over other natural disasters: We know where they are located—with a few exceptions! There are four main kinds of volcanoes: cinder cones, composite, shield, and lava domes. Some of our most beautiful mountains, like Mount Rainer in Washington and Mount Fuji in Japan are volcanoes. In 1963, a volcano erupted off the southwest coast of Iceland and created the newest land mass on Earth, the one-square-mile island called Surtsey Island.

Earthquakes

When the earth’s crust moves, it causes vibrations we call earthquakes. Earthquakes often happen along a “fault lines,” which is a place in the earth’s crust where two pieces of crust have slipped past each other. Like many natural disasters, the earthquake itself is often not as vastly damaging as the other events that earthquakes trigger, such as tsunamis and landslides.

Tsunamis

The giant waves called tsunamis are caused by a few different natural events such as crashing meteorites and pieces of glaciers falling into the sea. But tsunamis most commonly tend to be the offspring of earthquakes.

However, in 1883, a tsunami was caused by the eruption of a volcano, Krakatoa, and killed at least 34,000 people.

The 2004 Asian tsunami that killed over 150,000 people in several Asian countries was caused by an earthquake resulting from a natural process known as “subduction.” Deep below the ocean, separations in the earth’s crust, called “plates,” shifted. This resulted in a deep ocean wave that, by the time it reached shore, had picked up height and speed and became a tsunami.

Early Warning

We haven't managed to control our weather. But what humans have managed to do is create devices to monitor things like volcanoes and tornadoes. This allows people to be able to get as much warning as possible so they have time to protect their property and themselves.

Some impending disasters allow for more warning than others—hurricanes and blizzards, for instance, usually take a long enough time to form that people in the path can get several days of warning. These storms can unexpectedly change course or build into much more or less of a storm than predicted, but for the most part people can be forewarned.

Events like tornadoes and tsunamis can form in a matter of minutes, providing little chance for warning. However, even these events are being better predicted by scientists who are constantly monitoring the atmosphere and the ocean floor looking for hints of a coming tornado or tsunami.

1. In paragraph 2, the word **devastation** means _____.

- (A) large proportion
- (B) dramatic forest fires
- (C) human failure
- (D) enormous destruction

2. Most tornado deaths are caused by _____.

- (A) lightning
- (B) the funnel cloud
- (C) flying debris
- (D) hail

3. What is the article mainly about?

- (A) Tornadoes, hurricanes, and earthquakes
- (B) Natural disasters that cause enormous destruction all over the world
- (C) Scientists' ability to predict natural disasters
- (D) Human beings controlling the weather to avoid loss of life and property

4. Based on the article, where would you be most likely to find extreme and dangerous weather?

- (A) at a weather station because that's where the most weather happens
- (B) on a mountain because altitude increases danger
- (C) in Washington State because there is evidence of volcanic activity
- (D) near the ocean because many natural disasters seem to start there

5. Which type of natural disaster ranks as the deadliest in the United States?

- (A) Volcanoes
- (B) Tornadoes
- (C) Hurricanes
- (D) Earthquakes

6. What can you conclude from the article?

- (A) Even though we are better able to predict natural disasters and storms, we still can't control the weather.
- (B) Natural disasters occur most frequently in the United States.
- (C) We can predict when tornadoes and earthquakes are going to happen.
- (D) Natural disasters hurt people but not the environment.