

Why do natural disasters occur in Mexico?



From 1980 to 1998, Mexico underwent 79 major natural disaster events. Over half of these were weather related. One fourth were geological events that included volcanic eruptions, landslides, and earthquakes. Direct damage from natural disasters totaled US \$6.5 billion for the period between 1980 and 1998.

The geographic location of Mexico exposes it to particular types of natural disasters. For example, on the east coast, it is exposed to tropical storms originating in the Caribbean and Gulf of Mexico. These violent natural phenomena often cause and accelerate other related phenomena including flooding, coastal erosion, and mass earth movements.

The Pacific coast of the country is also vulnerable to many of the same types of natural hazards. Tropical cyclone activity, such as hurricanes (Rick, Nora, Pauline), can be frequent. In the aftermath of tropical cyclones, coastal areas typically flood. Seasonal rain activity can also cause extensive flooding.

Seismic hazards pose a very great threat to Mexico. Earthquakes have occurred with frequency and severity. In 1985, Mexico City was seriously damaged by an event occurring, not under Mexico City, but hundreds of miles west of the city, along the Pacific coastline.

Over the last 100 years or so there have been about 180 earthquakes in Mexico with a magnitude equal to or greater than 6.5. Most of them are associated with the subduction zone where the Pacific Cocos Plate slides underneath the continental North American Plate on Mexico's west coast. The regularity of earthquakes along this zone prompted seismologists to identify seismic zones called seismic **gaps**.



2

Read the text and choose the right answer.

1. What about Mexico is related to its natural disasters?
a. **human activity** b. **geographic location**
c. **tropical storms**
 2. How many major natural disasters did Mexico suffer from 1980 to 1998?
a. **180** b. **6.5** c. **79**
 3. An aftermath of tropical cyclones is flooding. What other activity can cause flooding?
a. **hurricanes** b. **earthquakes**
c. **seasonal rain activity**
 4. In which year was Mexico City seriously damaged by an earthquake?
a. **1985** b. **1980** c. **over the last 100 years**
 5. How many earthquakes greater than or equal to 6.5 have occurred in Mexico over the last 100 years?
a. **180** b. **79** c. **100**
-
6. What is one of the main causes for the earthquakes in Mexico?
a. **tropical storms** b. **the subduction zone**
c. **human activities**

3 Circle the correct answer.

1. Which natural disaster cannot be caused by shifts in tectonic plates?
 - a. earthquake
 - b. volcanic eruption
 - c. hurricane
2. What do the tropical storms that affect Mexico produce?
 - a. earthquakes
 - b. volcanic eruptions
 - c. floods
3. Where do most earthquakes occur?
 - a. along subduction zones
 - b. in the Gulf of Mexico
 - c. on the continent of Antarctica
4. What happened on September 19, 1985, in Mexico City?
 - a. presidential elections
 - b. an earthquake
 - c. Hurricane Pauline
5. What factors contribute to flooding?
 - a. tropical cyclones
 - b. seasonal rain activity
 - c. both tropical cyclones and seasonal rain activity
6. What could cause a wildfire?
 - a. mass earth movements
 - b. tornados
 - c. lightning and human activities

4 Do you know what to do in case of an earthquake? With a classmate, list all that you know you have to do and what you shouldn't do in case of an earthquake.

