

JAG03 Unit 5 Cause and effect

Task 1 Speaking

- A) What kind of effect have your studies had on you?
- B) What natural hazards do you know? What impact do they have (e.g. social, economic, environmental, political)? Can they ever have a positive effect?

Task 2 Reading

- A) What are the main effects of tropical cyclones? Scan the article to answer the question.

Tropical cyclones

Tropical cyclones are defined as intense cyclonic storms that originate over warm tropical seas. In North America, the term 'hurricane' is used because cyclone refers to an intense, counterclockwise rotating, extra-tropical storm. In Japan and south-east Asia tropical cyclones are called 'typhoons'. The hazards relating to tropical cyclones can be grouped under three headings: storm surge, wind and rain effects. Storm surge is a phenomenon whereby water is physically piled up along a coastline by low pressure and strong winds. This leads to loss of life through drowning, inundation of low-lying coastal areas, erosion of coastline, loss of soil fertility due to intrusion by ocean salt-water and damage to buildings and transport networks. High-wind velocities can directly cause substantial property damage and loss of life and constitute the main agent for crop destruction. Surprisingly, strong winds – simply because they are so strong – can also exacerbate the spread of fires in urban and forested areas, even under heavy rainfall. Rainfall is responsible for loss of life, property damage and crop destruction from flooding, especially on densely populated floodplains. Contamination of water supplies can lead to serious disease outbreaks weeks after the cyclone. Heavy rain in hilly or mountainous areas is also responsible for landslides or mud flows as floodwaters in stream and river channels mix with excess sediment brought down slopes. The destruction of crops can also result in famine that can kill more people than the actual cyclone event.

Earthquakes are not an obvious consequence of cyclones, however, there is substantial evidence for their occurrence during cyclones. Pressure can vary dramatically in a matter of hours with the passage of a cyclone, bringing about a consequentially large decrease in weight of air above the Earth's surface. In addition, tidal waves or surges can occur in shallow seas with a resulting increase in pressure on the Earth's surface. In total the passage of a cyclone along a coast can induce a change in load on the Earth's crust. In areas where the Earth's crust is already under strain, this pressure change may be sufficient to trigger an earthquake. The classic example of a cyclone-induced earthquake occurred with the Tokyo Earthquake of 1923. A typhoon swept through the Tokyo area on 1 September and was followed by an earthquake that evening. The earthquake caused the rupture of gas lines, setting off fires that were fanned by cyclone-force winds through the city on 2 September. There is also evidence that tropical cyclones have triggered earthquakes in other places along the Pacific plate and along plate boundaries in the Caribbean Sea. In Central America the coincidence of earthquakes and cyclones has a higher probability of occurrence than the joint probability of each event separately.

(adapted from Bryant, E. *Natural Hazards*. Cambridge University Press, 1991.)

B) Read the first paragraph again. Find the phrases used to link the causes and effects and write them in the table.

cause		effect
storm surge high wind velocities strong winds rainfall contamination of water supplies heavy rain destruction of crops	<i>leads to</i>	loss of life through drowning property damage spread of fires loss of lives serious disease outbreaks landslides famine

Read the second paragraph and underline other phrases that link cause and effect.

Using some of the phrases from above write three new sentences linking cause and effect relevant to your subject.

C) Vocabulary building: collocations

Try to infer the meaning of the words in italics from context.

There is *substantial* evidence for the occurrence of earthquakes during cyclones.
 The passage of a cyclone along a coast can *induce* a change in load on the Earth's crust.
 High-wind velocities *constitute* the main agent for crop destruction.
 Pressure can *vary* dramatically in a matter of hours.
 The earthquake caused the *rupture* of gas lines, setting off fires.

Complete the gaps using the words in italics from above.

1. a threat / a problem / an offence
2. greatly / considerably / constantly
3. childbirth / asthma / somebody to do something
4. fortune / amount / rise
5. of a pipeline / of a muscle / between families

D) Vocabulary building: phrasal verbs

A number of phrasal verbs associated with cause and effect have the same particle. Can you guess which one it is?

We accidentally set the burglar alarm when we came into the house.

The crisis sparked a bitter civil war.

The PM's speech triggered violent protests in cities up and down the country.

Complete the sentences.

1. The new airport has brought ...
2. Do you know what lies ...
3. Inadequate communication skills contributed ...
4. Environmental damage to some of the last wilderness of the Earth is a possible consequence ...
5. The soil no longer contains enough nutrients ...
6. Landslides are sometimes caused ...
7. A career in a particular field may result ...
8. A slight rise in the temperature of the sea can result ...
9. The film sparked ...

- A) by mild land tremors.
- B) from an early influence of an inspiring teacher.
- C) about many changes on the island.
- D) of the endless search for new sources of oil.
- E) off a lively discussion in the class.
- F) to his poor performance at the interview.
- G) in an increased level of water in the air.
- H) behind their decision?
- I) due to overcultivation.