



FIGURE 10
Lightning Striking Earth
Lightning occurs when electricity jumps within clouds, between clouds, or between clouds and the ground. Lightning can cause fires or serious injuries.

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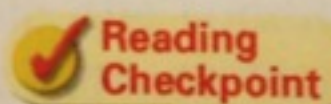
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Thunderstorm Damage Thunderstorms can cause severe damage. The heavy rains associated with thunderstorms can flood low-lying areas. Lightning can also cause damage. When lightning strikes the ground, the hot, expanding air can shatter tree trunks or start forest fires. When lightning strikes people or animals, it acts like a powerful electric shock. Lightning can cause unconsciousness, serious burns, or even heart failure.

Floods A major danger during severe thunderstorms is flooding. Floods occur when so much water pours into a stream or river that its banks overflow, covering the surrounding land. In urban areas, floods can occur when the ground is already saturated by heavy rains. The water can't soak into the water-logged ground or the many areas covered with buildings, roads, and parking lots. A flash flood is a sudden, violent flood that occurs shortly after a storm.

Thunderstorm Safety The safest place to be during a thunderstorm is indoors. If you are inside a house, avoid touching telephones, electrical appliances, or plumbing fixtures, all of which can conduct electricity. It is usually safe to stay in a car with a hard top during a thunderstorm. The electricity will move along the metal skin of the car and jump to the ground. However, do not touch any metal inside the car. **During thunderstorms, avoid places where lightning may strike. Also avoid objects that can conduct electricity, such as metal objects and bodies of water.**

How can you remain safe if you are caught outside during a thunderstorm? It is dangerous to seek shelter under a tree, because lightning may strike the tree and you. Instead, find a low area away from trees, fences, and poles. Crouch with your head down. If you are swimming or in a boat, get to shore and find shelter away from the water.



How can lightning be dangerous?

Tornadoes

A tornado is one of the most frightening and destructive types of storms. A **tornado** is a rapidly whirling, funnel-shaped cloud that reaches down from a storm cloud to touch Earth's surface. If a tornado occurs over a lake or ocean, the storm is known as a waterspout. Tornadoes are usually brief, but can be deadly. They may touch the ground for 15 minutes or less and be only a few hundred meters across. But wind speeds in the most intense tornadoes may approach 500 kilometers per hour.