

Landslides & Debris Flows



In a landslide, masses of rock, earth or debris (rubble or trash) move down a slope. Debris and mud flows are rivers of rock, earth, and other debris soaked with water. They develop when water builds up quickly in the ground, during heavy rainfall or rapid snowmelt and changes the earth into a flowing river of mud or "slurry." They can occur quickly, striking fast with little or no warning. They also can travel several miles from their source, growing in size as they pick up trees, boulders, cars, and other materials.

Am I at risk?

Landslides occur in all U.S. states and territories and can be caused by a variety of things including earthquakes, storms, volcanic eruptions, fire, and even construction. They are more common in mountain, canyon and coastal regions.



FACT CHECK

- Which of the following is a warning sign of a landslide? Check all that apply:
 - Leaning Trees
 - Water coming through the ground in new places
 - Slowly developing, widening cracks in the ground, streets, and driveways
 - Tilting utility poles
 - Decks or patios that start to lean away from a house
 - Unusual sounds like trees cracking or boulders knocking together
 - Doors or windows that stick or jam for the first time
 - New cracks in tiles, bricks, or building foundations
- True or False?** You can outrun a mudslide.
- What other natural disasters **cannot** cause a land or mudslide?

a. Earthquake	c. Drought	e. Volcanic eruption
b. Flood	d. Hurricane	

(1) All are warning signs of a landslide.
 (2) False.
 (3) C. All disasters listed except for drought can increase the risk for a land or mudslide.

ANSWERS



For more facts and info on landslides and debris flows visit
<http://www.ready.gov/kids/know-the-facts/landslides-debris-flows>
<http://emergency.cdc.gov/disasters/landslides.asp>

Landslides & Debris Flows

Be Prepared

BEFORE

- ✓ Build an emergency kit.
- ✓ Make a family communications plan.

DURING

- ✓ Stay alert and awake. Many people die from landslides when they are sleeping.
- ✓ Listen for unusual sounds like trees cracking or boulders knocking together. If you hear something, tell an adult immediately!
- ✓ Move away from the path of a landslide or debris flow as fast as you can.
- ✓ Avoid river valleys and low-lying areas.
- ✓ If you can't escape, curl into a tight ball and cover your head with your hands and arms.

AFTER

- ✓ Stay away from the slide area. There may be additional slides.
- ✓ If you see dangling or loose wires, stay away and tell an adult.
- ✓ Listen to safety officials about where it's safe to go.
- ✓ Text, don't talk. Unless there's a life-threatening situation, send a text so that you don't tie up phone lines needed by emergency workers. Plus, texting may work even if cell service is down.

WORDS TO KNOW

Debris Rubble, trash, random material like large pieces of wood, metal, or plastic

Slurry River of flowing mud

Slope Cracks in the rocks below the earth's surface

Low-lying Area Land that is close to a coast or near water or sea levels

