

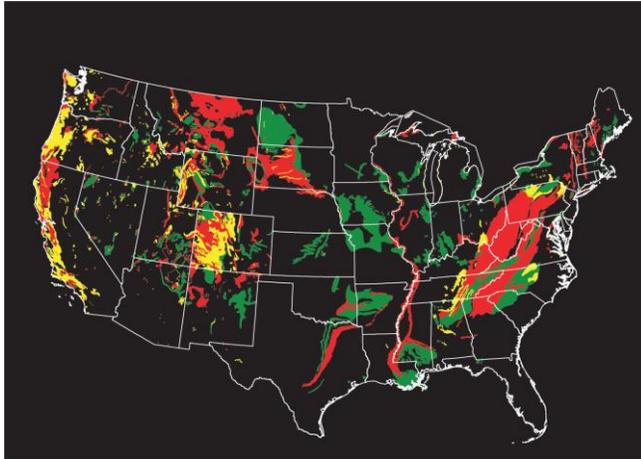
LANDSLIDES

Fact Sheet - Landslides

What Are Landslides?

Landslides are rock, earth, or debris flows on slopes due to gravity. They can occur on any terrain given the right conditions of soil, moisture, and the angle of slope. Visually, a landslide resembles a snow avalanche, only with a louder rumbling noise, and is capable of generating enough force and momentum to wipe out anything in its path.

- Landslides often accompany earthquakes, floods, storm surges, hurricanes, wildfires, or volcanic activity. They are often more damaging and deadly than the triggering event.



Landslide potential of the conterminous U.S.: Red areas have very high potential, yellow areas have high potential, and green areas have moderate potential. Landslides can and do occur in the black areas, but the potential is low. Sources: The National Atlas and the USGS.

- Human activities, such as deforestation, cultivation and construction, as well as population expansion are major factors in increased landslide damage and costs.
- Insurance against landslides is generally unavailable in most areas of the United States. As a result, many victims of landslides resort to litigation in order to recover damages.

- The May, 1980 eruption of Mount St. Helens caused the largest landslide in America's history – a rock slide debris avalanche large enough to fill 250 million dump trucks to the brim traveled about 14 miles, destroying nine highway bridges, numerous private and public buildings, and many miles of highways, roads, and railroads.



- Landslides occur and can cause damage in all 50 states. They include: falls, slides, flows and lahars.
- Landsliding in the United States is estimated to cause an annual loss of about \$1.5 billion and at least 25 fatalities.

***What to do if you suspect
Immediate Landslide
Danger:***

- *Contact your local fire, police or public works department*
- *Inform affected neighbors*
- *Leave the area quickly*

After Intense Storms:

- *Keep looking for signs that the land is moving. Landslides can occur weeks or even months after intense storms.*

How to Prepare Ahead of Time:

- Get a ground assessment of your property.
- Minimize home or business hazards, such as building retaining walls.
- Learn to recognize the landslide warning signs.
- Make evacuation plans. Plan at least two evacuation routes since roads may become blocked or closed.
- Develop an emergency communication plan. If you are separated from your family, have a plan in place to know how to contact each other. It might be better to use an out-of-state relative as a contact person because it is easier to call long distance after disasters strike.

WHAT TO DO During a Landslide:

If inside a building:

- Stay inside.
- Take cover under a desk, table, or other piece of sturdy furniture.

If outdoors:

- Try and get out of the path of the landslide or mudflow.
- Run to the nearest high ground in a direction away from the path.
- If rocks and other debris are approaching, run for the nearest shelter such as a group of trees or a building.
- If escape is not possible, curl into a tight ball and protect your head.

SINKHOLES

A sinkhole occurs when groundwater dissolves a vulnerable land surface such as limestone, causing the land surface to collapse from a lack of support. In June 1993, a 100-foot wide, 25-foot deep sinkhole formed under a hotel parking lot in Atlanta, killing two people and engulfing numerous cars.

WHAT TO DO After a Landslide:

- Stay away from the slide area. There may be danger of additional slides.
- Check for injured and trapped persons near the slide area. Give first aid if trained.
- Remember to help your neighbors who may require special assistance--infants, elderly people, and people with disabilities.
- Listen to a battery-operated radio or television for the latest emergency information.
- Remember that flooding may occur after a mudflow or a landslide.
- Check for damaged utility lines. Report any damage to the utility company.
- Check the building foundation, chimney, and surrounding land for damage.
- Replant damaged ground as soon as possible since erosion caused by loss of ground cover can lead to flash flooding.
- Seek the advice of geotechnical expert for evaluating landslide hazards or designing corrective techniques to reduce landslide risk.