

LANDSLIDES

Landslides, also known as mudslides and debris flow, occur in all U.S. states and territories. A variety of factors, including earthquakes, storms, fires, and heavy rains can cause landslides. Landslides happen quickly and with little notice and can travel several miles from their source, growing in size and picking up trees, cars, boulders, and other objects and materials.

Before

- Follow proper land-use procedures and avoid building near steep slopes or along natural erosion valleys.
- Talk to your insurance agent to find out if flood insurance could cover your property and belongings.
- Plant ground cover on slopes and build retaining walls.
- In mud flow areas, build channels or deflection walls to direct the flow around buildings. Keep in mind, though, that you may be liable for damage if you divert debris flow onto someone else's property.
- Know the signs that a landslide is possible, including: Changes in the landscape, including patterns of storm-water drainage, land movement, small slides, flows, or progressively leaning trees. Doors or windows stick or jam for the first time. New cracks appear in plaster, tile, brick, or foundations. Outside walls, walks, or stairs begin pulling away from the building. Slowly developing, widening cracks appear on the ground or on paved areas, such as streets or driveways. Underground utility lines break. Bulging ground appears at the base of a slope. Water breaks through the ground surface at a new location. Fences, retaining walls, utility poles, or trees tilt or move.
- Know the signs that a landslide may be occurring, including: A faint rumbling sound that increases as the landslide nears. The ground slopes downward in one direction and may begin shifting that way under your feet. Unusual sounds, such as trees cracking or boulders knocking together, might indicate moving debris. Collapsed pavement, mud, fallen rocks, and other indications of possible debris flow can be seen when driving, particularly near embankments along roadsides.
- Contact your local fire, police, or public works department if you suspect imminent landslide danger. Also, let neighbors know of the potential risk.

During

 Consider leaving if it is safe to do so. Driving during an intense storm can be dangerous. Watch for collapsed pavement, mud, fallen rocks, and other indications of possible debris flow.



- Curl into a tight ball and protect your head if you can't get out of the landslide's path.
- Move to a second story, if possible.
- Listen for any unusual sounds that may indicate moving debris, such as trees cracking or boulders knocking together.

After

- Stay away from the slide area. Additional slides may
- Listen to local radio or television stations for the latest emergency information.
- Watch for flooding.
- Check for injured or trapped people near the slide without entering the direct slide area. Show rescuers the locations of anyone trapped.
- Help neighbors who may need assistance.
- Report broken utility lines and damaged roadways and railways.
- Check the building foundation, chimney, and surrounding land for damage.
- Replant damaged ground as soon as possible.
- Seek professional advice for evaluating landslide hazards or designing corrective techniques to reduce landslide risk.
- If you smell gas, get our of the area and only use your phone to call the gas company if you can safely distance yourself from the odor of the gas. Remember not to use any appliance or open flame in areas where you still smell gas.