



# Landslides and Mud Flows

Landslides and mudflows usually strike without warning. The force of rocks, soil, or other debris moving down a slope can devastate anything in its path.

Take the following steps to be ready.

## Before a landslide

- Get a ground assessment of your property.
- Your county geologist or county planning department may have specific information on areas vulnerable to land sliding. Consult a professional geotechnical expert for opinions and advice on landslide problems and on corrective measures you can take.

## Insurance

- Mudflow is covered by flood insurance policies from the National Flood Insurance Program. Flood insurance can be purchased through a local insurance agency.

## Minimize home hazards

- Plant ground cover on slopes to stabilize the land, and build retaining walls.
- In mudflow areas, build channels or deflection walls to direct the flow around buildings.
- Remember: If you build walls to divert debris flow and the flow lands on a neighbor's property, you may be liable for damages.

## Make evacuation plans

- Plan at least two evacuation routes since roads may become blocked or closed.
- In case family members are separated from one another during a landslide or mudflow (that is a real possibility during the day when adults are at work and children are at school), have a plan for getting back together.
- Ask an out-of-state relative or friend to serve as the "out-of-area" contact. After a disaster it's often easier to call long distance than to make local calls. Make sure everyone knows the name, address and phone number of the contact person.

## Learn to recognize the landslide warning signs

- 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 in new locations.
- Fences, retaining walls, utility poles, or trees tilt or move.
- You hear a faint rumbling sound that increases in volume as the landslide nears. The ground slopes downward in one specific direction and may begin shifting in that direction under your feet.

## 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.

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