

WEATHER & DISASTERS

Landslide & mudslide safety

Recognize changing ground conditions and plan an early exit from threatened areas.

If you see active ground movement or a fast-moving debris flow, call 911 from a safe location.

Know where movement could occur

- Learn whether your route or property lies below a steep slope, near an old slide, or along a drainage channel. Follow local risk assessments.
- Heavy rain, wildfire damage and changes to a slope can increase concern. A familiar road or hillside can still become unstable.
- Ask a qualified geologist or engineer about property concerns. Do not attempt emergency excavation, retaining walls or drainage changes yourself.

Watch for a change

- New ground cracks, bulging surfaces, leaning poles or trees, sticking doors and broken utilities can signal movement.
- Listen for unusual rumbling, cracking timber or moving rocks. A sudden stream-level change during heavy rain can also be a warning.
- Report concerns to local authorities. Some slides occur without warning, so no visible signs does not establish safety.

Act before the route closes

- Have more than one exit route and a meeting place. Keep medicines, communications and footwear ready to take.
- Obey evacuation instructions. Leave early when a safe route remains; do not approach a moving slope to investigate.
- If a building is already being struck by a slide, do not run into moving debris. Follow emergency instructions and protect yourself inside.

Keep away after the first slide

- Do not cross debris, damaged roads or floodwater. More slides or pulses of debris may follow the first movement.
- Return only when officials permit it. Keep clear of damaged structures and utilities until qualified personnel assess them.
- Give responders the location and observed changes. Document damage only from safety, without entering unstable ground for photographs.

Sources & further guidance

[USGS - landslide warning signs and response](https://www.usgs.gov/landslide-warning-signs-and-response) | www.usgs.gov

[American Red Cross - landslide safety](https://www.redcross.org/landslide-safety) | www.redcross.org