READY NAVY

✓BE INFORMED ✓MAKE A PLAN ✓BUILD A KIT

Landslide

Preparedness Empowers You

It saves lives, property, and time.

Emergencies happen, often with little or no notice. By taking action beforehand you can be prepared for any emergency.

Be Ready Navy!
I am. Are you?

Landslides occur when rock, dirt, and other debris move or fall down a slope. A landslide also may be called a "debris flow" or a "mudslide," which flows through channels saturated with water. Landslides may be caused by storms, earthquakes, fires, volcanic eruptions, freezing and thawing cycles, erosion, or man-made construction. They can be small, large, slow, or rapid as well as extremely destructive.

How to Prepare

1. Be **informed**. If you live anywhere near a steep slope, mountain edge, drainage ways, or natural erosion valley, be aware of the history of landslide in your area and the danger of future landslides.
2. Make a family **evacuation plan**.
3. Make a family **communication plan** in case family members are separated.
4. Have flexible drainage pipes installed to minimize the risk of leaks.
5. Consult your insurance agent and make sure you are covered. Debris flow may be covered by flood insurance policies from the "*http://www.fema.gov/business/nfip/index.shtm*"National Flood Insurance Program (NFIP).
6. Avoid building on steep slopes, mountain edges, natural erosion valleys, and drainage.
7. Build retaining walls to divert flow. Make sure the flow is not diverted into someone else's property.
8. Plant ground cover on slopes to diminish the momentum of flow.
9. Build an **emergency kit**.

Know the Warning Signs

(Courtesy of Ready.gov)

- Changes occur in your landscape such as patterns of storm-water drainage on slopes, 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 in new locations.
- Fences, retaining walls, utility poles, or trees tilt or move.
- A faint rumbling sound that increases in volume is noticeable as the landslide nears.
- The ground slopes downward in one direction and may begin shifting in that direction 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.

Landslide

What to Do If There Is a Landslide

- Be on alert for a possible landslide if you live in an area prone to landslides and you are experiencing an extended period of heavy rain, as most landslides happen at night during heavy rainfall.
  - » If you are near a stream or channel, be alert for any sudden increase or decrease in water flow and notice whether the water changes from clear to muddy. Such changes may mean there is debris flow activity upstream, so be prepared to move quickly.
  - » Listen for unusual sounds that might indicate moving debris, such as trees cracking or boulders knocking together.
- If you suspect a landslide is imminent:
  - » Stay tuned to the radio and TV or call the local emergency departments to determine the risk and get further instructions.
  - » Evacuate (if it is safe to do so) to ensure that you are out of the path of the landslide.
- During a landslide, if you have not already evacuated, try to get as far away from the path of the landslide as possible.
- If you are unable to move out of the path of the landslide, curl into a tight ball and cover your head to provide the best protection for your body.
- Once you are in a safe place, muster with your command if you are military or civilian personnel or a member of the selective reserves.

What to Do after a Landslide

- Stay away from the slide area, as there may be danger of additional slides.
- Stay tuned to radio or TV for further information and instructions.
- Be aware of the possibility of and report to authorities any flooding, broken utility lines, and damaged roads or railways.
- Check for injured or trapped people near the slide, but do not enter the slide to help. Direct rescue personnel to those trapped in the slide area.
- When you are told it is safe to return to the slide area, check buildings for structural damage before entering.
- Replant damaged ground as soon as possible.
- After a declared emergency, register your needs with the Navy through the Navy Family Accountability and Assessment System (NFAAS) at *https://navyfamily.navy.mil* or call 1-877-414-5358 or 1-866-297-1971 (TDD).

Where to Find Additional Information

- Centers for Disease Control and Prevention (CDC)—*www.bt.cdc.gov/disasters/landslides.asp*
- Department of Homeland Security (Ready.gov)—*www.ready.gov/landslides-debris-flow*