

Earthquake Preparedness

Q & A for educators derived from the animation



Animation: An IRIS—Washington Division of Emergency Management collaboration

We don't know where we will be when an earthquake strikes, but we can know how to protect ourselves when it happens.

Watch this animation on YouTube:
<https://youtu.be/gAyuUnXVzGM>

Or download mpg file from IRIS:
www.iris.edu/hq/inclass/animation/604

ABOUT EARTHQUAKE HAZARDS:

- 1. Is it easy to run during earthquake ground shaking?**
Ground movement can be disorienting and violent like a small boat on rolling waves. This makes walking or running difficult and dangerous.
- 2. What is the greatest danger during an earthquake?**
Falling down during the shaking, and unsecured objects falling, flying or sliding and hitting you, which is why you need to drop to the ground and take cover. Take cover under something sturdy, if possible. Protect your head and neck with your arms or other objects. Be aware of your surroundings, and things that could become a danger to you during an earthquake.
- 3. How long does earthquake shaking last?**
Earthquake shaking can last from seconds to minutes. It depends on how close the earthquake hypocenter was, and what type of bedrock is beneath you. Hold on for the entire time. The first shaking is sometimes just the beginning of a larger, longer rolling surface wave.

WHAT IS THE BEST THING YOU CAN DO FOR THE FOLLOWING SCENARIOS?

- 4. If you are inside a building?**
Do *not* run outside! Drop Cover and Hold On. Drop to your hands and knees, take cover under something sturdy and cover your head and neck, and Hold on until the shaking stops. In the absence of sturdy furniture such as a table or desk, move to an interior wall, away from windows and heavy objects that could fall on you, covering your head and neck.
- 5. If you are in bed?**
Roll onto your stomach, cover your head and neck with a pillow, and hold on.
- 6. If you are in a classroom?**
Drop, take cover under a desk, and hold on.
- 7. If you are in a lab, or other areas with chemicals or machinery?**
Be aware of all hazards, extinguish open flames, move to a nearby safer area as quickly and safely as possible.

8. **If you are using a wheelchair or walker?**
Lock your wheels if possible, then cover your head and neck, and hold on until shaking stops.
9. **If you are in a high rise?**
First, Drop, Cover, and Hold on. Then, when shaking stops, if you need to leave the building, use the stairs. Do not use the elevator.
10. **In a store or where there are free-standing shelves?**
Drop, Cover, and Hold on next to a shopping cart, beneath clothing racks or within the first level of warehouse racks.
11. **If you are outdoors?**
Move to a clear area if you can safely do so: avoid power lines, buildings, signs, vehicles and other hazards. Then, Drop, Cover and Hold On.
12. **If driving in a vehicle?**
Pull over to a safe location, avoiding overpasses, bridges, powerlines, and other hazards. Stop, set the parking brake. Stay in the vehicle until shaking stops.
13. **If you are near a shoreline?**
If you feel an earthquake near the shore, be aware that a tsunami may be coming. First, Drop, Cover, and Hold on during the shaking, then as soon as you feel it is safe, move immediately to high ground or inland. Walk, rather than drive, to avoid traffic, debris, and other hazards. Do not return to the shoreline until directed to do so.

Two Background Animations

Building Resonance: Why do some buildings fall in earthquakes?
www.iris.edu/hq/inclass/animation/224

Earthquake Intensity: What controls the shaking you feel during an earthquake?
www.iris.edu/hq/inclass/animation/517

Based on protocol from Earthquake Country Alliance: www.earthquakecountry.org/dropcoverholdon/

In MOST situations, you will reduce your chance of injury if you:



DROP where you are, onto your hands and knees. This position protects you from being knocked down and also allows you to stay low and crawl to shelter if nearby.



COVER your head and neck with one arm and hand

- If a sturdy table or desk is nearby, crawl underneath it for shelter
- If no shelter is nearby, crawl next to an interior wall (away from windows)
- Stay on your knees; bend over to protect vital organs



HOLD ON until shaking stops

- Under shelter: hold on to it with one hand; be ready to move with your shelter if it shifts
- No shelter: hold on to your head and neck with both arms and hands.

QUESTIONS ABOUT THE ANIMATION

Is it easy to run during earthquake ground shaking?

What is the greatest danger during an earthquake?

How long does earthquake shaking last?

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- 4. If you are in a lab, or other areas with chemicals or machinery?**
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- 9. If driving in a vehicle?**
- 10. If you are near a shoreline?**