

ROCKFALLS & ROCKSLIDES

Pieces of rock falling, bouncing, or rolling down a slope

Large masses of rock detaching, sliding, and breaking apart down a slope



Rocks can easily break through walls and roofs



Rockslides can easily destroy roads, railways, and buildings

Smaller rockfalls often precede larger rockfalls and rockslides

Rocks can reach speeds faster than cars



Rocks can be larger than a truck



Rocks can bounce and roll long distances

Events occur mostly during heavy rain, freeze/thaw cycles, or earthquakes

Houses at the base of steep slopes are at greatest risk

Boulders might be evidence of past rock-falls and rockslides



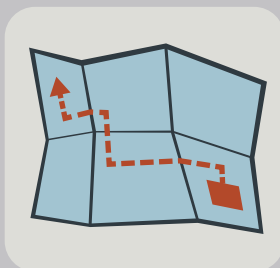
BEFORE

Stay informed



Keep updated with weather advisories, such as heavy rainfall warnings and repeated cycles of freeze/thaw.

Prepare and plan



Prepare an emergency kit for your home, vehicle, and workplace. Plan a safe evacuation route and muster point. Know which rooms are safest if you have to shelter in place.

Know the signs



Look/listen for loud cracking, clouds of dust, and shaking ground (like an earthquake). Smaller rockfalls often come before larger ones.

Know the hazard zones



Consult your local hazard map to learn where the slope hazard zones are located.

Limit exposure



Limit time spent in the slope hazard zones. Do not park beneath steep slopes or rock cuts.

Safe home design



Put high occupancy rooms like bedrooms on the top floor and on the downhill side (away from slopes).

DURING

DECISION: evacuate



If you believe your life to be in imminent danger and you see a clear path to safety, evacuate. Get away from the slope as fast as you can.

DECISION: shelter



If it is unsafe to evacuate, shelter in a room on the downhill side of your house, preferably on the top floor.

DO NOT cross rock path



Crossing fallen debris is very dangerous since more rocks will likely fall here. Take a route away from the slope and debris.

DO NOT stay to watch



Rocks can bounce irregularly and roll long distances. Get away from the slope instead of watching or filming them.

PROTECT YOURSELF FROM ROCKFALLS & ROCKSLIDES

AFTER

Assume more will fall



Rocks may continue to come down because the slope is unstable.

Notify authorities



Report any rockfalls and rockslides (big or small) to local authorities.

If safe, help neighbours



Help evacuate your neighbours when it's safe to do so, and offer assistance to search and rescue personnel.

Obey closures



Evacuation orders and road closures must be taken seriously. Only return when local authorities declare it safe to do so.

NOTES

BGC Engineering Inc. (BGC) prepared this infographic with artwork by Sophia Zubrycky. This infographic depicts some measures that may help to lower but not eliminate certain kinds of risk associated with rockfalls and rockslides. Simply following the measures shown in this infographic does not make it safe to occupy areas at risk of rockfalls and rockslides. Even if the measures shown in this infographic are taken, rockfalls and rockslides may still cause serious personal injury (including death) or property damage. BGC provides no guarantee or warranty of any kind related to the information in this infographic. Persons and entities using or relying on this infographic do so at their own risk. BGC will not be responsible or liable for any loss or damage including any personal injury, death, or property damage that any person or entity may suffer or sustain as a result of the information in this document, or any use of or reliance on this document.

Photo references:

[Top left] Rockfall damage from Christchurch, New Zealand earthquake. Photo: Julian Thomson.
[Top right] Rockslide blocking Sea-to-Sky highway near Porteau Cove, BC. Photo: THE CANADIAN PRESS/Jonathan Hayward.
[Bottom left] Site of rockfall tragedy in Rockville, Utah. Photo: Daily Mail U.K. Available from: <https://www.dailymail.co.uk/news/article-2523067/Boulder-size-elephant-crushes-entire-house-instantly-kills-inhabitants-Utah-landslide.html>
[Bottom right] Semi-truck smashed by boulder east of Spences Bridge, BC. Photo: Matt Ruscheinski. Available from: <https://www.cbc.ca/news/canada/british-columbia/trans-canda-highway-rock-slide-semi-boulder-1.4502567>