



R I S K P A L

# EARTHQUAKE SAFETY GUIDANCE

This guide provides practical safety information both for individuals affected by an earthquake and for personnel deploying into earthquake-affected areas. For more advice or if you have any questions, **contact us**. We're here to help!

Earthquakes can cause catastrophic destruction within seconds, leading to widespread injuries, displacement, infrastructure collapse, and disruption to essential services. According to the [World Health Organization \(WHO\)](#), earthquakes account for more than half of all deaths related to natural disasters globally.

In addition to the immediate shaking, secondary hazards such as aftershocks, landslides, fires, tsunamis, damaged buildings, and infrastructure failure can continue to pose significant risks for days or weeks after the initial event.

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## DURING AN EARTHQUAKE

### Indoors

- ✓ **Drop** to your hands and knees before the earthquake knocks you down.
- ✓ **Cover** your head and neck under a sturdy table or desk if possible.
- ✓ **Hold** on to your shelter until the shaking stops.



If no shelter is available:

- ✓ Move against an interior wall away from windows.
- ✓ Protect your head and neck with your arms.
- ✓ Stay away from heavy furniture, shelves, mirrors, and hanging objects.

**Do not run outside during shaking.**

Many injuries occur when people attempt to leave buildings while debris is falling.

### Outdoors

- ✓ Move to an open area away from buildings, walls, streetlights, trees, bridges, and power lines.
- ✓ Stay alert for falling debris, broken glass, and collapsing facades.
- ✓ If near the **coast**, remain aware of tsunami risks after severe or prolonged shaking.
- ✓ If you are in the **mountains** or near unstable slopes, be alert for falling rocks, trees, or landslides.

## Driving

- ✔ Pull over safely away from bridges, overpasses, buildings, power lines, and tunnels. Do not stop under structures that may collapse.
- ✔ Remain inside the vehicle until the shaking stops. Be aware that people may try to enter your vehicle to seek shelter or get away.
- ✔ Expect damaged roads, debris, and erratic traffic afterwards.

## If Trapped Under Debris

- ▶ Stay calm and conserve energy.
- ▶ Cover your mouth and nose with cloth to reduce dust inhalation.
- ▶ Do not light matches or use lighters due to possible gas leaks.
- ▶ Tap on pipes or walls to signal rescuers.
- ▶ Shout only as a last resort to avoid inhaling dust.
- ▶ Minimise movement to avoid disturbing debris.



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# AFTER AN EARTHQUAKE

## Be Prepared for Aftershocks

Aftershocks can occur minutes, hours, or days after the main earthquake and may cause weakened structures to collapse.

- ✔ Move carefully and remain alert.
- ✔ Stay away from damaged buildings.
- ✔ Do not re-enter structures unless cleared by authorities or qualified engineers.

## Watch for Secondary Hazards

Earthquakes often trigger additional emergencies including fires, gas leaks, flooding, landslides, tsunamis, downed power lines, hazardous material spills, and structural collapse.

If you smell gas:

- ✔ Leave the area immediately.
- ✔ Do not use flames, switches, or electrical equipment.

Extinguish small fires if safe to do so, as post-earthquake fires are a major cause of secondary damage.

## Medical Assistance

Earthquake zones may present risks from contaminated water, poor sanitation, dust inhalation, hazardous materials, human remains, and vector-borne disease outbreaks. Local healthcare systems may be overwhelmed or non-functional.

- ✔ Provide first aid where possible.
- ✔ Do not move seriously injured casualties unless there is an immediate danger.
- ✔ Expect hospitals and emergency services to be overwhelmed.
- ✔ Keep basic medical supplies accessible.

## Utilities and Infrastructure

- ✔ Do not use elevators.
- ✔ Assume roads, bridges, and tunnels may be unsafe.
- ✔ Expect power outages and communication disruption.
- ✔ Conserve battery life on phones and radios.

## Structural Hazards

Many earthquake deaths occur from collapsing or weakened structures. Avoid cracked walls, leaning buildings, unsupported balconies, loose masonry, damaged stairwells, buildings with visible foundation damage.

Be especially cautious around:

- ✓ Older unreinforced masonry buildings.
- ✓ Areas with falling debris.
- ✓ Structures damaged by aftershocks.

Only enter damaged structures if operationally necessary and authorised.

**Only enter damaged structures if they have been cleared by authorities.**

## Tsunami Risk

If near coastal areas and the earthquake was severe or prolonged:

- ✓ Move inland immediately (at least 3 km / 2 miles) or seek higher ground (at least 30 m / 100 ft above sea level).
- ✓ Do not wait for official warnings if the sea suddenly recedes or behaves unusually.
- ✓ Follow evacuation routes where available.

## Security

Major disasters can create unstable security environments. Risks may include:

- ✓ Opportunistic crime
- ✓ Looting
- ✓ Crowd panic
- ✓ Civil unrest
- ✓ Disrupted policing

# SAFETY CHECKLIST

## Practical Steps for Deployment to an Earthquake-Affected Area

Personnel deploying into earthquake zones often face unstable environments, limited infrastructure, health hazards, and rapidly evolving security situations. Preparation and flexibility are critical.

### 1. Communication

- ☑ Establish regular check-in procedures with a designated contact.
- ☑ Expect mobile phone networks and internet access to be unreliable or unavailable.
- ☑ Carry backup communications where possible (e.g. satellite phone, satellite messenger, radio, local SIM cards).
- ☑ Monitor official alerts and local radio broadcasts for aftershock warnings, evacuation notices, weather updates, security incidents.

### 2. Movement and Emergency Planning

- ☑ Before entering identify safe spots, medical facilities, evacuation routes, rally points, fallback locations to regroup.
- ☑ Consider potential hazards on route like landslide-prone areas, damaged bridges, flooding, unstable roads, civil unrest.
- ☑ Be prepared to evacuate quickly.
- ☑ Maintain multiple routes in and out of affected areas.
- ☑ When parking face the vehicle towards your escape route and away from unstable buildings, debris hazards or other cars that could block yours.
- ☑ Do not rely solely on GPS or mobile applications. Carry physical maps where possible.

### 3. Medical and Health

- ☑ Be medically fit for deployment.
- ☑ Ensure routine vaccinations are up to date.
- ☑ Carry personal medication and adequate medical supplies.
- ☑ Ensure you have adequate first aid and medical supplies.

### 4. Equipment and PPE

- ☑ Quality face mask or a (N95 or FFP2) or a specialised breathing apparatus to protect from dust and hazardous chemicals or materials (e.g. asbestos).
- ☑ Water purification supplies (reusable filter bottle or water purification tablets).
- ☑ Several days' supply of non-perishable food.
- ☑ Eye protection (safety goggles).
- ☑ Climbing or rescue helmet.
- ☑ Heavy-duty gloves.
- ☑ Sturdy boots with puncture-resistant soles.
- ☑ Long sleeves and trousers, high-visibility clothing.
- ☑ Power supply might be erratic or completely down after an earthquake. Bring with you portable lighting, spare batteries, and a portable power source (if appropriate solar) or a generator.
- ☑ Other: headtorch, multi-tool, foil blanket or sleeping bag.

## Accommodation Safety

When selecting accommodation:

- ✓ Pick secure accommodation in a safe distance from the epicentre visibly damaged areas.
- ✓ Prefer lower floors where possible.
- ✓ Examine your room for potential damage.
- ✓ Remove any hazards such as paintings above the beds or large hanging mirrors.
- ✓ Identify emergency exits immediately upon arrival.

After significant aftershocks:

- ✓ Reassess structural safety.
- ✓ Check for gas leaks or electrical hazards.

## 6. Transport

Vehicles should be:

- ✓ Well-maintained
- ✓ Suitable for damaged roads with enough ground clearance and suitable tyres
- ✓ Properly insured
- ✓ Fully fueled up

Carry:

- ✓ Spare tyre and means to change it
- ✓ Fuel reserve
- ✓ Recovery equipment
- ✓ Vehicle repair kit
- ✓ Extra water and food

## 7. Security and Situational Awareness

- ✓ Maintain strong situational awareness.
- ✓ Check for the security updates before heading into affected areas
- ✓ Carry a handheld radio to monitor aftershock warnings.
- ✓ Use experienced local fixers or drivers.

- ✓ Seek updated information from local authorities, NGOs, humanitarian coordination networks, trusted local contacts.

Humanitarian and media networks will often establish **information sharing networks** in the aftermath of large disasters.

## 8. Working with Affected Communities

People affected by earthquakes may be traumatised, grieving, or displaced.

- ✓ Always seek consent before photographing or filming.
- ✓ Respect cultural sensitivities.
- ✓ Avoid obstructing rescue or relief operations.
- ✓ Be mindful that people may be desperate and may seek to take your supplies and equipment.

## 9. Psychological Wellbeing

Exposure to large-scale destruction, injury, and fatalities can significantly affect mental health.

Personnel should:

- ✓ Take regular breaks.
- ✓ Maintain hydration, nutrition, and sleep.
- ✓ Monitor colleagues for signs of stress or fatigue.
- ✓ Seek psychological support if required.
- ✓ Rotate staff where possible.

Check that your **insurance policy** covers you to work at an earthquake location, with an appropriate level of medical and emergency cover.

## ELEVATE YOUR RISK MANAGEMENT PROCESSES

At RiskPal, we make safety simple and compliance straightforward by helping you create, manage, and retain your risk assessments. RiskPal aligns organisational workflows with its easy-to-use platform that facilitates seamless collaboration with colleagues and streamlined management sign-offs, all within a single interface.

The RiskPal platform gives you access to customisable risk assessment templates and provides best practice safety guidance for hundreds of scenarios, including earthquakes and other natural disasters.

Our platform and team of experienced health and safety professionals can help you elevate your risk management processes to the next level and safeguard your team and operations.

Visit [RiskPal.com](http://RiskPal.com) to find out more or **get in touch** to talk to someone on the

