



# Earthquake

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## Key facts

The impact depends on the intensity, duration, day and time of day the earthquake hits. It also depends on the quality of buildings and infrastructure (such as roadways and bridges). There is a larger impact in areas of high population and building density.

Earthquakes generally occur without warning. Aftershocks can remain a significant hazard, causing further damage and increasing the psychological stress of both affected communities and humanitarian workers.

In the immediate aftermath, earthquakes can result in other health hazards including fires, landslides, avalanches, tsunamis and soil liquefaction (ground instability).

Earthquakes can damage health facilities and interrupt services, impacting access to essential care. They can be followed by a large influx of search and rescue and medical teams.

## Main health impacts

Health concern	Risk factors
Mental health consequences	<ul style="list-style-type: none"> <li>• Mental health impacts including (but not limited to) severe anxiety, post-traumatic stress disorder (PTSD), and depression may occur as a result of experiencing the trauma of an earthquake (for example, homelessness; losing loved ones; loss of livelihood; etc.)</li> <li>• Experiencing multiple traumatic events can lead to compound or complex trauma</li> </ul>
Trauma or injury	<ul style="list-style-type: none"> <li>• Building collapse causes the majority of trauma, but other injuries can occur from landslides, fires or tsunamis triggered by the earthquake.</li> <li>• Mortality and the injury peak are usually within the first 72 hours.</li> </ul>

Diarrhoeal diseases	<ul style="list-style-type: none"> <li>• Contamination of water supply can occur when sanitation facilities are damaged or destroyed.</li> <li>• Displacement or destroyed homes can lead to difficulty maintaining proper sanitation and hygiene practices which can lead to problems such as diarrhoeal diseases.</li> </ul>
Respiratory illnesses, skin disease and vaccine-preventable diseases	<ul style="list-style-type: none"> <li>• Earthquakes may lead to population displacement. Overcrowded, communal emergency shelters, coupled with difficulty maintaining proper sanitation and hygiene practices can lead to problems such as respiratory illnesses, skin diseases and some vaccine-preventable diseases.</li> <li>• A major earthquake can cause severe damage to health facilities and lead to the disruption of routine health services such as vaccination programmes, increasing the risk of transmission of vaccine-preventable diseases.</li> </ul>
Vector-borne and zoonotic diseases	<ul style="list-style-type: none"> <li>• Flooding and break-down in waste management and sanitation services can lead to areas of stagnant water and an increase in certain vector (for example, mosquito) breeding sites.</li> <li>• Interruption of solid waste management can result in certain vectors (for example, rats) coming into closer contact with humans (due to increased feeding sites and breeding grounds).</li> <li>• Injury to animals and inadequate care may increase risk of animal and zoonotic disease outbreaks</li> </ul>
Overall adverse health outcomes	<ul style="list-style-type: none"> <li>• Damage to health facilities and means of communication, power and stock disruptions, and staff absenteeism limit access to all health care services from emergency care, maternal and child health services and essential care of noncommunicable diseases (NCDs).</li> <li>• Loss of livelihoods and poor socioeconomic outcomes</li> </ul>

## Disease tools that may be relevant

- > Acute diarrhoea
- > Cholera
- > Hepatitis A
- > Hepatitis E
- > Typhoid fever
- > Acute respiratory infections preventable by vaccine - Diphtheria, chickenpox, mumps, rubella, whooping cough
- > Measles
- > Meningococcal meningitis

- > Poliomyelitis (polio)
- > Chikungunya
- > Dengue fever
- > Malaria
- > Zika virus infection
- > Acute respiratory infections (ARIs)
- > Lassa fever
- > Acute malnutrition