



Tsunami

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Key facts

Tsunamis are usually associated with earthquakes and cause high levels of destruction along coastlines.

Initially, high levels of drowning, trauma and injuries are typical. This is followed by water, sanitation and hygiene (WASH-) and vector-related diseases.

Main health impacts

Health concern	Risk factors	
Mental health consequences	<ul style="list-style-type: none"> • 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 a tsunami (for example, homelessness; losing loved ones; loss of livelihood; etc.). • Experiencing multiple traumatic events can lead to compound or complex trauma. 	
Trauma (injury) and drowning	<ul style="list-style-type: none"> • Initial injuries from the earthquake are often complicated by areas flooded with the tsunami wave water. • During and in the immediate aftermath of a tsunami, rising flood waters and debris often result in trauma and/or drowning. • High rates of infected wounds should be expected. 	
Diarrhoeal diseases	<ul style="list-style-type: none"> • Contamination of water supply can be caused by flood water or by damaged or destroyed sanitation facilities. • Difficulty maintaining proper sanitation and hygiene practices can lead to an increase in diarrhoeal diseases. 	

Vector-borne and zoonotic diseases	<ul style="list-style-type: none"> • 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. • 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). 	
Respiratory illnesses, skin diseases and vaccine- preventable diseases	<ul style="list-style-type: none"> • Tsunamis and large-scale flooding 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. • Emergency responders and community members may be at increased risk for wounds and injuries that become contaminated with flood waters, soil, dirt, human or animal waste. • A major flood 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. 	
Overall adverse health outcomes	<ul style="list-style-type: none"> • 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). • Loss of livelihoods and poor socioeconomic outcomes. 	

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)

- > Yellow fever
- > Chikungunya
- > Dengue fever
- > Malaria
- > Zika virus infection
- > Acute respiratory infections (ARIs)
- > Lassa fever
- > Rift Valley fever