



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 WASH- and vector-related diseases.

Main health impacts

Health concern	Risk factors
Trauma or injury	Initial injuries from the earthquake are often complicated by areas flooded with the tsunami wave water. Additional trauma injuries from debris from the force of the tsunami wave also occur. High rates of infected wounds should be expected.
Diarrhoeal diseases	Contamination of water supplies, damaged or destroyed sanitation facilities and poor hygiene practices.
Vector-borne diseases	Tsunamis can result in an increase in breeding sites for mosquitos in stagnant water, and after some time an increase in transmission of vector-related disease.
Respiratory illnesses, skin diseases and vaccine-preventable diseases	Significant population displacement and overcrowded, communal emergency shelters coupled with poor hygiene can lead to respiratory illnesses or skin diseases. Flood water does not increase the risk of tetanus, but 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. It is important that Red Cross Red Crescent responders are up to date with tetanus vaccination.
Overall adverse health outcomes	Destruction and damage to health facilities and stock disrupt provision of and access not only to primary health care such as maternal and child health services, but also to essential care for chronic noncommunicable diseases (NCD).

Priority actions for teams with community and public health response capacity

<p>Immediate steps</p>	<ul style="list-style-type: none"> • Provide first aid and ensure ambulance transport for injured and “near drowning” survivors. • Identify key disease risk factors and implement corresponding prevention and preparedness. • Identify and support authorities to manage possible sources of toxic contamination.
<p>Surveillance</p>	<ul style="list-style-type: none"> • Activate disease early warning systems. • Assess existing surveillance mechanisms (if any), and determine, if there is a need, the extent to which the National Red Cross Red Crescent Society could feasibly support community-based surveillance efforts. If necessary, set up a community-based surveillance system. • If vector control is needed, consider household vector surveillance and community clean-up activities for vectors and breeding sites to reduce vector density.
<p>Community-based action and social mobilization</p>	<ul style="list-style-type: none"> • Implement Risk Communication and Community Engagement (RCCE) interventions for prevention of water and vector-borne diseases. • Support social mobilization for emergency vaccination campaigns as needed. • Ensure procedures are in place to safely manage human and animal corpses and solid waste. • Support in restoring family links. • Assure convenient clothing and accommodation facilities for population in movement. • Support survivors of sexual or gender-based violence. • Ensure access to mental health and psychosocial support (MHPSS) services for community members and staff/volunteers which may include (but are not limited to): regularly assessing MHPSS needs; providing information on the situation regularly in cooperation with authorities; training volunteers for the provision of psychosocial support (PSS); using mobile teams providing a range of support; embedding PSS into evacuation centre/shelter facilities; providing special support to vulnerable groups; working closely with authorities in family tracing; coordinating points for further care. • Identification in the community of cases of high-risk diseases (see list of disease tools below) and referral to pre-identified health structures. This requires a prior elaboration of a referral pathway, that is, mapping of existing primary health facilities, and assessment of minimum quality care standards and accessibility (including geographic and cost-related barriers).

For teams with additional clinical capacity

Please always refer to the appropriate local or international guidelines for clinical management.

Important primary health care interventions after a tsunami

- Ensure triage, treatment, referral and transport for injured and “near drowning” patients.
- Support continuity of main service delivery, including maternal and child health services.
- If disrupted, advocate and/or support authorities to ensure access to services and medication for patients with NCD and who require palliative care.
- Specific primary care interventions for diarrhoeal diseases, respiratory tract infections, Hepatitis A, typhoid, skin infections, snake and insect bites.
- Treatment for malaria, dengue and other vector-borne diseases.
- Care of minor wounds and skin infections.
- Tetanus vaccination.

Disease tools that may be relevant

- > [Hepatitis A](#)
- > [Measles](#)
- > [Malaria](#)
- > [Cholera](#)
- > [Acute respiratory infections \(ARI\): Influenza \(avian and seasonal\)](#)
- > [Chikungunya](#)
- > [Dengue fever](#)
- > [Diphtheria](#)
- > [Diarrhoeal diseases](#)
- > [Hepatitis E](#)
- > [Meningococcal meningitis](#)
- > [Pertussis \(whooping cough\)](#)
- > [Poliomyelitis \(polio\)](#)
- > [Rubella](#)
- > [Typhoid fever](#)
- > [Yellow fever](#)
- > [Zika virus infection \(Zika\)](#)