

Short-term measures

Chlorination of water

Ensuring uninterrupted provision of safe drinking water is the most important preventive measure to be implemented following flooding, in order to reduce the risk of outbreaks of water-borne diseases.

- Free chlorine is the most widely and easily used, and the most affordable of the drinking water disinfectants. It is also highly effective against nearly all waterborne pathogens (except *Cryptosporidium parvum* oocysts and *Mycobacteria* species). At doses of a few mg/litre and contact times of about 30 minutes, free chlorine generally inactivates >99.99% of enteric bacteria and viruses.
- For point-of-use or household water treatment, the most practical forms of free chlorine are liquid sodium hypochlorite, solid calcium hypochlorite and bleaching powder (chloride of lime; a mixture of calcium hydroxide, calcium chloride and calcium hypochlorite).
- The amount of chlorine needed depends mainly on the concentration of organic matter in the water and has to be determined for each situation. After 30 minutes, the residual concentration of active chlorine in the water should be between 0.2-0.5 mg/l, which can be determined using a special test kit.

Vaccination against hepatitis A

- The use of hepatitis A vaccines for mass immunization is not recommended.
- Vaccination of high-risk groups, such as persons involved in the management of drinking water, waste water or sewage might be considered.
- In case of an outbreak of hepatitis A consider immunization of contacts. The use of immunoglobulins is not recommended.
- Diagnosis of acute hepatitis A is confirmed by anti-HAV IgM antibodies.

Malaria prevention

- Insecticides: flooding does not necessarily lead to an immediate major increase in mosquito numbers, and there may still be time to implement preventive measures such as indoor residual spraying, or the

retreatment/distribution of Insecticide Treated Nets(ITNs) in areas where their use is well-known. This will also have an effect on other mosquito-borne diseases.

- Early detection: it is important to track weekly case numbers and provide laboratory-based diagnosis (perhaps only for a 10% of fever cases to track the slide/test positivity rate), to pick up the early stages of a malaria epidemic.
- Free medical care: with artemisinin-based combination therapy should be provided when a falciparum malaria epidemic is confirmed, and an active search for fever cases may be necessary to reduce mortality in remote areas with reduced access to health care services.

Health education

- Promote good hygienic practice.
- Ensure safe food preparation techniques.
- Ensure boiling or chlorination of water.
- Vital importance of early diagnosis and treatment for malaria (within 24 hours of onset of fever).

Handling corpses

- Burial is preferable to cremation in mass casualties and where identification of victims is not possible.
- The mass management of human remains is often based on the false belief that they represent an epidemic hazard if not buried or burned immediately. Bodies should not be disposed of unceremoniously in mass graves and this does not constitute a public health a public health measure, violates important social norms and can waste scarce resources.
- Families should have the opportunity to conduct culturally appropriate funerals and burials according to social custom.
- Where customs vary, separate areas should be available for each social group to exercise their own traditions with dignity.
- Where existing facilities such as graveyards or crematoria are inadequate, alternative locations or facilities should be provided.

- The affected community should also have access to materials to meet the needs for culturally acceptable funeral pyres and other funeral rites.

For workers that routinely handle corpses

- Graveyards should be at least 30m from groundwater sources used for drinking water
- The bottom of any grave must be at least 1.5m above the water table with a 0.7m unsaturated zone. Surface water from graveyards must not enter inhabited areas.
- Ensure universal precautions for blood and body fluids
- Ensure use and correct disposal of gloves (no re-use)
- Ensure use of body bags
- Ensure hand-washing with soap after handling bodies and before eating
- Ensure disinfection of vehicles and equipment
- Bodies do not need to be disinfected before disposal (except in case of cholera)
- Vaccinate rescue workers against hepatitis B