

Responses during Flash Floods

The response during a flash flood event is critical. It is imperative to maintain good coordination and management of organisations and activities to contain the flood disaster and minimise loss of life and injury during the flood. Possible responses during a flood may include the actions outlined below.

7.1 Evacuation

The aim of evacuation is to move people away from flooding and associated hazards. As there is little or sometimes no prior warning of flash floods, early planning and guidelines are necessary to minimise loss and damages.

The following factors must be considered by the evacuation and rescue team of the CFFRMC during a flash flood event:

- The severity of the flood (height and velocity) determines whether people can walk or drive out of the area (only possible in shallow and slow-moving water) or if they have to move to higher ground or the tops of buildings to await assistance.
- Warning lead time determines the evacuation procedures. People should know not to lose any time once a warning has been issued.
- When the flash flood has receded, people should be aware of possible secondary hazards such as landslides, mudslides, moving debris, polluted floodwaters, live power cables, and snakes.
- Special consideration should be given to the evacuation of vulnerable groups such as children, the elderly, pregnant women, and people with disabilities.
- The evacuation and rescue team should consider the availability and type of transport such as walking, non-motorised vehicles, buses, cars, boats, helicopters, and army vehicles. Alternative evacuation routes should be clearly marked in the social flood hazard map.
- A communication cell based on the CFFRMC is needed to notify people of evacuation and safe areas (e.g., control room as described in Chapter 6).

Much of this information will be available if the community has already prepared a social flood hazard map.

Safe areas

Safe areas should be provided for people to convene temporarily before evacuation camps and temporary shelters are arranged, or until they can return to their houses. This allows people to find their friends and relatives and provides them with basic needs such as blankets, water, food, medication, first aid, and sanitation facilities.

Security

Many people may resist evacuation and rescue in order to protect their houses and assets, thus endangering their lives. Preventing looting after the emergency phase by protecting people's assets will reduce the individual losses incurred. The military or police may provide security for the period of time after the flood event until people can return to their homes. The CFFRMC should coordinate security with the military and police. Women's safety and privacy must be prioritised.

7.2 Search and Rescue

As soon as possible after the onset of the flash flood, the evacuation and rescue team should initiate search and rescue activities. Trained, untrained, or semi-trained volunteers can be mobilised and led by an experienced team leader. Volunteers must be dispatched in groups working on a rotational basis to minimise stress and exhaustion. Search and rescue work plans can be arranged allowing for 4-6 hours on and 4-6 hours off for each rescue worker (ADPC/UNDP 2005). They should have communications equipment to maintain contact with the control room at all time.

Suggested equipment for a search and rescue team

- suitable rescue ropes
- ladders
- buckets
- torches
- loudspeakers
- blankets
- floating rescue devices, inflatable boats
- 2-way radios and other reliable communication equipment

The search methods must be systematic and planned.

There will be time constraints as people left in floodwaters may be affected by continuous time spent in the water. Furthermore, prolonged exposure to floodwater for the members of the proposed rescue team could expose them to health risks. Rescue work should be fast and effective.

7.3 Temporary Shelters

Temporary shelters must be adequate to protect people immediately after flooding and provide them with a level of security and privacy. The shelter management and logistics team of the CFFRMC should do adequate planning so that the shelter meets people's needs. As soon as the affected people enter the shelter they must be registered so that missing people can be identified and people can search for their relatives.

Site selection: The shelter location should be close enough for people to get to, but far enough not to be affected by the flash flood if it worsens.

Capacity: The population must be managed so that requirements do not exceed supplies.

Relief item distribution: Relief items can include, food, clothing, medicines, cooking utensils, and general household items. Distribution of relief material should be well managed. In some cases, supplies have been intercepted and sold on the black market instead. False claims of relief distribution are also common in the region. The shelter management and logistics team should work to avoid such situations and work with other teams and the committee to inform the authorities about the real situation.

Gender: Arrangements for women in temporary settlements are often very poor. No matter how bad the situation is, minimum sanitation, security, and privacy are essential. See Chapter 3 for details.

7.4 Health Response

The first aid and health team of the CFFRMC must be able to deal with a large number of people injured directly by flooding, and with secondary health problems such as water-related diseases. There are various communicable diseases related to water during and after floods. Thus, it is important to ensure the availability of enough medicines and vaccines to treat affected people. Diseases like typhoid, acute diarrhoea, skin infections, scabies, malaria, dengue, and so on are very common in flood affected areas.

These diseases can be prevented by encouraging good hygiene practices and preventing flies from gathering in waste disposal areas. The spread of disease from decomposing bodies should be another important concern. The death of dear ones is always difficult to face, but proper management is necessary to prevent spreading of disease.

The team should arrange the following key measures in relation to health and sanitation during flood events.

- Provide facilities for people to defecate safely and hygienically.
- Protect water supplies from contamination (Annex 4 describes water-purifying methods).
- Use oral saline when there is an outbreak of diarrhoea; if deemed necessary, quickly transfer the patients to the nearest hospital/healthcare facility. Give aspirin if a scorpion bites or put ice on the sting, if possible, or use calcium tablets or powdered eggshell to minimise allergic reactions (for details, see Annex 5).
- Keep carbolic acid in small bottles (mouth remaining open) hanging on the outside walls of shelters out of reach of children to avoid snake invasion and snakebites.
- Control house flies by using deltamethrin and permethrin around cooking and eating places.
- Provide at least the minimum amount of water needed for drinking, cooking, personal, and domestic hygiene.
- Ensure that people have enough containers to collect and store water cleanly.
- Ensure people have sufficient cooking utensils, equipment, and fuel to cook and store food safely.
- Make people aware of health hazards.
- Ensure that people have soap for hand washing.

Some DOs and DON'Ts in emergency response are provided in Annex 6.