Water and sanitation

Meeting water, sanitation and hygiene promotion needs in emergencies
A guide to standardized tools for rapid response

Water and sanitation disaster response kits

There are three different kits available, according to location, number of beneficiaries, types of intervention, water volume and services required. The kits conform to Sphere and WHO standards, which stipulate that each person should have access to 15 litres of safe water per day and access to safe excreta disposal as well as hygiene items. The kits contain equipment only. For information on personnel requirements, please see individual kit descriptions. The kits can be deployed separately or together, based on need.

Water and sanitation disaster response kit 2
household level (for up to 2,000 beneficiaries)

This kit provides water treatment at household level for up to 2,000 beneficiaries (400 families), with no central treatment or storage capacity. This kit provides very basic sanitation facilities for a small population and is designed for response to the needs of scattered populations at household level and when beneficiary numbers are limited.

Hygiene promotion, as well as training in the use of materials and tools in the kit, is an essential part of the operation and must be carried out alongside distribution activities. Availability of local water sources is required. Local water and sanitation technicians and Red Cross Red Crescent volunteers are needed to ensure that the beneficiaries are familiar with household level water treatment methods. Approximate weight: 1.5 MT, volume: 8 m³. This kit should be pre-positioned at country level.

Water and sanitation ERU modules

International Federation of Red Cross and Red Crescent Societies
Water and sanitation disaster response kit 5
(for up to 5,000 beneficiaries)

Designed for the treatment and distribution of water for small populations, this kit can treat up to 75,000 litres of water a day for a population of up to 5,000 people. This kit requires the availability of local surface or ground water supply. Limited sanitation capacity for a first response is supplied within the kit, as well as some capacity for water trucking. The kit allows for the transport of treated water to several distribution points (capacity of up to 15,000 litres of water a day) with limited possibility of setting up different storage and distribution points (preconditions are the availability of flatbed trucks, fuel, road access).

Hygiene promotion, as well as training in the proper use of the equipment supplied, is an essential part of the operation and must be carried out alongside distribution activities. Local water and sanitation technicians and Red Cross Red Crescent volunteers for training and distribution of items are needed. **Approximate weight:** 3.5 MT, **volume:** 15 m³. This kit should be pre-positioned at country level.

Water and sanitation disaster response kit 10
(for up to 10,000 beneficiaries)

This kit is designed for the treatment and distribution of water for medium size populations, providing up to 150,000 litres of water a day for a population of up to 10,000 people. This kit requires the availability of a local surface or ground water supply. Limited sanitation capacity for a first response is supplied within the kit as well as some trucking capacity. It can provide the transport of treated water to several distribution points (capacity of up to 30,000 litres of water a day) with limited possibility to set up different storage and distribution points (preconditions are the availability of flatbed trucks, fuel, road access).

Hygiene promotion, as well as training in the proper use of equipment supplied, is an essential part of the operation and must be carried out alongside distribution activities. Local water and sanitation technicians and Red Cross Red Crescent volunteers for training and distribution of items are needed. **Approximate weight:** 7 MT, **volume:** 30 m³. This kit should be pre-positioned at zonal level.
In 1996, the International Federation of Red Cross and Red Crescent Societies created Emergency Response Units (ERUs), which respond to the needs of vulnerable people in major disasters. ERUs are part of the International Federation’s disaster response tools. They provide specific support or a direct service when local facilities are either destroyed, overwhelmed by needs, or do not exist.

Using a standardized modular system of equipment and pre-trained teams of National Red Cross and Red Crescent Society technical specialists, ERUs can be deployed within 48 hours to 72 hours. A total of 138 ERUs have been deployed, of which 47 have been water and sanitation ERUs. There are six types of ERUs, each offering a different specialist activity. These are as follows: Health – Logistics - Water and sanitation – IT and telecommunication – Relief – Base camp.

There are three water and sanitation modules available according to water volume required, hygiene requirements, and beneficiary numbers and locations. The work of the modules conforms to Sphere and WHO standards. On average, four to eight water engineers, technicians or hygiene promoters are deployed with each module. The three modules can be deployed separately or jointly depending on needs.

Water and sanitation module 15
(for up to 15,000 beneficiaries)

This module provides treatment and distribution of up to 225,000 litres of water a day for a population of up to 15,000 people, with a storage capacity of a maximum of 200,000 litres a day. This unit can also provide limited sanitation. The module is designed for response to scattered populations, with a flexible approach due to a number of smaller treatment units (minimum three), which can be split and set up as stand-alone units in different locations.

The availability of local water sources is required. Module 15 has integrated distribution and trucking capacity, for transport of treated water to dispersed populations with a capacity of up to 75,000 litres a day, with the capacity to set up nine different storage and distribution points (preconditions are availability of flatbed trucks, fuel, road access). Approximate weight: 22 MT, volume: 160 m³, (including technical and team equipment, vehicles)
This module provides basic sanitation facilities (latrines, vector control and waste management) for up to 20,000 beneficiaries as well as initiating hygiene promotion programmes.

Hygiene promotion is an important part of the revised mass sanitation module, to maximise the health benefits from appropriate excreta disposal and hand-washing in particular. **Approximate weight: 14 MT, volume: 90 m³**, (including technical and team equipment, vehicles).

This module provides treatment and distribution of water for larger populations, and can treat up to 600,000 litres a day for up to 40,000 people. This unit can also provide limited sanitation.

Availability of local water sources is required. Module 40 has integrated distribution and trucking capacity, for transport of treated water to dispersed populations with a capacity of up to 75,000 litres a day and the capacity to set up nine different storage and distribution points (preconditions are availability of flatbed trucks, fuel, road access). **Approximate weight: 25 MT, volume: 110 m³**, (including technical and team equipment, vehicles).

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