

waterlines

Technical Brief No.44: Emergency water supply

This is an overview of the principles of providing water in emergency situations. It outlines the planning procedures necessary for ensuring adequate supply, rather than focusing on design.

As well as food, shelter, and medical aid, providing clean water is usually one of the highest priorities in the event of an emergency. It should be considered alongside immediate sanitation measures, however, which are just as important in controlling many of the most common diseases found in disaster situations (see Technical Brief No. 38).

Responding to an emergency

An appropriate response to an emergency depends on whether the emergency affects people where they live, such as in the case of an earthquake or flood, or whether the population is displaced as a result of other pressures such as famine or war. Although the measures may differ, planning considerations for water supply are similar in both situations

Planning what to do

There are several planning considerations:

- **Demand assessment**
How much water is needed?
- **Location and protection of water sources**
Where are the nearest/most convenient sources of water? How can they be protected?
- **Water treatment**
What is the level of water treatment required for use/consumption? What methods are available for treatment?

- **Water distribution**
Where will people collect water from?
- **Collection and storage**
How will the water be collected? How will it be stored for domestic use?

These questions must be considered as soon as an emergency occurs. It is also important to prioritize action. A phased action plan comprises:

- Immediate measures (to sustain life);
- intermediate measures (from about 2 to 6 weeks after the disaster, or the arrival of refugees in a camp); and
- long-term solutions (from about 6 weeks).

The actual duration of these phases is usually determined by three factors:

- Accessibility of the disaster area or refugee camp for local, national, and international assistance;
- the nature of the disaster, and
- the availability of water, materials, and skilled labour.



Figure 1: A refugee camp