ANNEX 7 Disinfecting Water for Drinking, Cooking and Cleaning

The Standard Precautions and VHF Isolation Precautions described in this manual recommend using a source of clean water. In an emergency situation, health facility staff may not have access to clean running water. For example, if the power supply is cut off, water cannot be pumped to the health facility. Other sources of water could be contaminated.

This Annex describes how to use household bleach to disinfect water when clean running water is not available in the health facility.

Adding a small amount of full strength household bleach to water will disinfect it enough so that it can be safely used for drinking, cooking, and cleaning.[15]

1. Locate several containers for storing the disinfected water. They should have:

   - A narrow mouth (to prevent hands being put into the water)
   - A screw top or attached lid
   - A spigot, if possible.

   Examples include jerry cans, large plastic jugs, or buckets with spigots and lids that can be firmly closed.

An example of a water container

2. Make available:

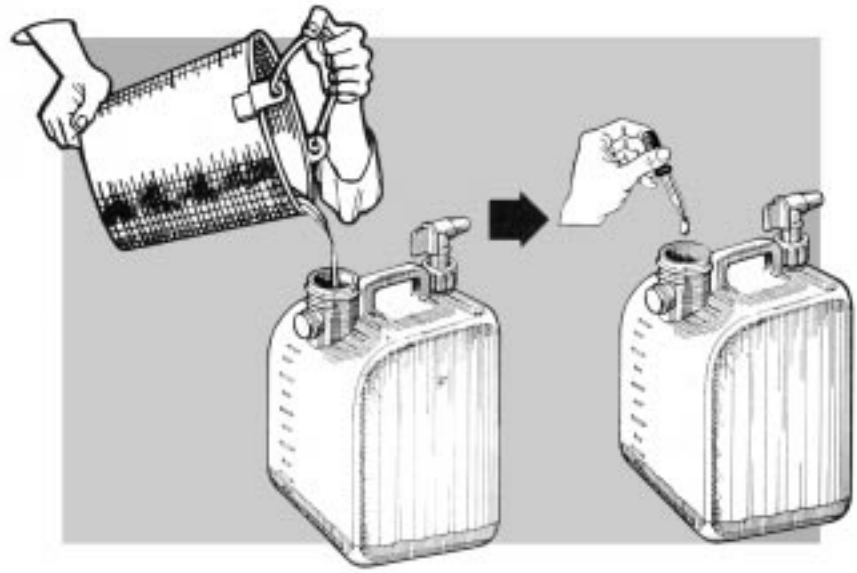
   - At least 1 litre of full strength household bleach. Use the instructions on the package to prepare a full-strength concentration.
   - Pieces of bar soap or powdered soap.

3. Clean and disinfect the containers. To disinfect the containers, wash them with soap and water, or rinse them with 1:100 bleach solution.

4. Collect water from the available source (for example, a river, stream, or well used by the village).

15 World Health Organisation: Cholera and other diarrhoeal diseases control -- technical cards on environmental sanitation. Document *WHO/EMC/DIS*/97.6. Geneva: 1997.

5. Place the water into the disinfected containers, and add 3 drops of full strength household bleach per litre of water.



Preparing drinking water

6. Mix the water and bleach drops together.

   Let the water stand for 30 minutes. This water is now safe to drink and to use for preparing meals. Clearly label the containers so that the health facility staff will know that the water is for drinking and is available for use. Use a marking pen to write *DRINKING WATER* on the container, or put a sign on it that says *DRINKING WATER*.

7. Provide clean water for the:

   — Handwashing stations in areas where health workers are likely to have contact with patients who have fever or with infectious body fluids.

   — Disinfection station where reusable needles and syringes are cleaned and disinfected.

Using stored clean water for handwashing

8. Assign the job of collecting and disinfecting water to a specific health facility staff person. Give the health staff person information about how to do the task and why it is important. Make a schedule for collecting and disinfecting water routinely.

To disinfect a large quantity of water:

1. Determine how many litres the container holds.

   Example: 25 litres

2. Calculate the amount of bleach that is needed to disinfect the specified quantity of water.

   Example: Use 3 drops of bleach per litre of clear water.
   3 drops x 25 litres = 75 drops.

3. Find a spoon, cup or bleach bottle cap that can be used to measure the required amount of bleach. Count the number of drops that the measuring spoon, cup or bottle cap will hold.

   Example: 75 drops of bleach = 1 teaspoon

4. Use the measuring spoon or cup to measure the amount of bleach each time the large quantity of water is disinfected.