

PROPER SANITATION IS THE ONLY METHOD TO SUCCESSFULLY BEAT A CHOLERA OR SHIGELLOSIS OUTBREAK!

What to use for disinfection*:

Chlorine product	Hands and skin	Floors, clothes, bedding, equipment.	Body fluids** (Rice Water stool, Diarrhea, Vomit treated in large containers)
	Final concentration: 0.05% active chlorine	Final concentration: 0.5% active chlorine	Final concentration: 2% active chlorine. Wait at least 2 hours before dumping.
Household bleach (5% active)	0.1 liters of bleach to 9.9 liters of water (WRITE: 0.05%)	1 liter of bleach mixed with 10 liters of water (WRITE: 0.5%)	4 liters of bleach mixed with 6 liters of water (WRITE: 2%)
Household bleach (30% active chlorine)	Add 16 grams or 1 tablespoon to 10 liters of water (WRITE: 0.05%)	16 grams or 1 tablespoon to 1 liter of water (WRITE: 0.5%)	64 grams or 4 tablespoons to 1 liter of water (WRITE: 2%)
Calcium hypochlorite powder or chlorine granules (70% active chlorine)	7 grams or 1/2 a tablespoon to 10 liters of water (WRITE: 0.05%)	7 grams or 1/2 a tablespoon to 1 liter of water (WRITE: 0.5%)	28 grams or 2 tablespoons to 1 liter of water (WRITE: 2%)

* ALWAYS label the solutions with a permanent marker.

** Note that if chlorine is limited, body fluids can be treated with a final concentration of 0.5% chlorine, but the fluids must be held and occasionally stirred for at least 6 HOURS before dumping.

Education of Patient Caretaker (Family Member):

Inform the Patient Caretaker of their duties in terms of how the patient waste should be handled, where the bathrooms or latrines are located, where hand washing stations are located, and what food items (including at what time) the family is expected to provide and what food items the treatment center will provide.



**COTS Program
Hospital Manager
Pocket Card**

WHO messages to avoid diarrhea:

- Wash your hands with soap:
 - After using toilets/latrines
 - After disposing of children’s feces
 - Before preparing food
 - Before eating
 - Before feeding children
- Boil or disinfect water with chlorine solution
- Only eat freshly cooked food
- Do not defecate near water sources
- Use latrines and keep them clean
- Peel it, cook it, or leave it

**Food and Water Hospital Policies
(in addition to WHO messages above):**

- ORS should not be stored for more than 6 hours.
- Health care workers should **NOT** handle food or water
- The kitchen should be **SEPERATE** from the hospital; kitchen staff should not handle hospital waste
- Dispose of all unused cooked food if there is no refrigeration (below 10°C)
- All food should be cooked thoroughly to at least 70°C
- Keep raw and cooked foods separately
- A treatment center must have 40-60 liters of clean water per patient per day
- Rice-water stool (diarrheal fluids) and vomitus fluids should be disposed of by the sanitation team

Communicate with Supply Manager to secure supplies for hospital and community needs.

Public Health supplies (key elements):

- Disinfectant (cresol)
- Chlorine for water treatment/disinfection
- pH testing kits
- DPD (diethyl-p-phenylenediamine) water testing kits for measuring residual chlorine levels

Estimated supplies to treat 100 patients (key elements of the WHO list):

Rehydration supplies

- 650 packets oral rehydration salts (1 liter each)
- 120 bags Ringer's lactate IV solution (1 liter each)
- 120 giving sets (must include large-bore IVs, such as 18-19 gauge or larger); Also called IV sets.
- 10 scalp-vein needle sets (21 gauge)

Medicine

- Antibiotics for 20 adults and 20 children

Other supplies

- 2 large water dispensers (marked at 5 and 10L levels) with tap; for making ORS in bulk
- 20 bottles (1 liter) for ORS (e.g. empty IV bottles)
- 20 bottles (½ liter) for ORS
- 40 cups (100-200ml)
- 20 teaspoons
- 5 kg cotton wool
- 3 reels masking tape

The 7 Key Concepts from the COTS Program:

The Hospital Manager should remind the hospital team members of these important messages on a regular basis.

Concept:	Action:
No one who arrives at a treatment center and is still breathing should die of cholera.	Train your staff regularly so that they can respond rapidly and effectively.
Cholera is essentially the only diarrheal disease where patients can become severely dehydrated in less than six hours.	Find out where the first cholera patients came from. This may help to target your resources.
Over 90% of diarrheal patients improve with ORS alone.	Only dehydrated patients require IV fluids.
Antibiotic treatment for cholera shortens the course of disease.	Use antibiotics for dehydrated patients, but these are not as important as fluid replacement therapy.
Antibiotic treatment plays a crucial role in shigellosis.	Determine the antimicrobial sensitivity trends and use appropriate antibiotics for shigellosis patients.
Develop strategies to minimize the risk of the next outbreak.	Promote the correct use of ORS, IV fluids, and zinc and improve health education, infrastructure and training of staff.
Acute management in a diarrheal outbreak is the same despite HIV status.	Follow the key concepts of epidemic diarrheal management regardless of the prevalence of HIV in your patient population.