

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 ½ a tablespoon to 10 liters of water (WRITE: 0.05%)	7 grams or ½ 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 Triage Nurse 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 **SEPERATED** 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

Step 1: Immediate dehydration assessment. Know danger signs for diarrheal and shigellosis patients. Alert the doctor of danger signs. Fast action is key to saving lives.

Dehydration Criteria:		Observation	
General Condition	Well/ alert	Restless/ irritable	Lethargic/ unconscious
Eyes	Normal	Sunken	Very sunken
Thirst	None	Drinks eagerly and/ or is thirsty	Drinks poorly or unable to drink
Radial pulse	Full volume	Low volume	Weak/absent
Skin pinch	Goes back quickly	Goes back slowly (≥ 2 seconds)	Goes back very slowly (≥ 3 seconds)
Dehydration Status	NO Dehydration	SOME Dehydration (if ≥ 2 criteria above present)	SEVERE Dehydration (if ≥ 2 criteria above present)
% Dehydration	0-5%	5- < 10%	$\geq 10\%$
Treatment plan	Maintenance Hydration:	Correction of SOME Dehydration:	Correction of SEVERE Dehydration:
	ORS volume to match stool volume. If no danger signs (see below), then NO need for hospitalization	Hydration with ORS. KEEP for observation	Rapid IV hydration. Monitor closely in treatment center

Immediate general assessment for all diarrheal patients:

- Dehydration Status (shown in above table)
- Vital signs
 - Temperature: cholera does not cause fever — if there is an elevated temperature consider a co-morbid condition like malaria, dysentery, or pneumonia.
 - Respiratory rate: Kussmaul breathing is seen due to metabolic acidosis, distinguish between this respiratory compensation and signs of a co-morbid lung disease.
 - Pulse: weakened pulse can be a sign of severe dehydration as described in the table.
 - Blood pressure: as available, can be an important indicator of shock.
- Urine output
- Number, appearance and volume of stools and vomit
- General physical exam (look for co-morbid conditions that may complicate the clinical course)

Danger signs for all diarrheal patients:

- Increase in temperature
 - Becomes lethargic
 - Convulsions
 - Turns blue
 - Increased vomiting
 - Abdominal distension
 - Loss of appetite
- Fast breathing (consider pneumonia):
 - 0-2 months >60 breaths/minute
 - 2-12 months >50 breaths/minute
 - 1-5 years >40 breaths/minute
 - >5 years >30 breaths/minute

Danger signs specific to shigellosis patients (these patients are at an increased risk of death)

- Patients not improving on conservative treatment after two days
- Age (infants and adults >50 years old)
- Children who are not breastfed
- Children recovering from measles
- Malnourished patients
- Dehydrated patients
- Unconscious patients
- Hypo-thermic or hyper-thermic patients
- Patients who have had a convulsion with their illness

Step 2: Send patients to appropriate site

- Send patients with no dehydration to outpatient center or home with ORS and instructions on its use
- Send patients with some dehydration to the treatment center for ORS and observation
- Send patients with severe dehydration immediately for IV fluid replacement in the hospital