

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
Outpatient Worker
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

Messages to be given to the Community:

Refer to the General Knowledge Pocket Card for key WHO points on how a community can avoid diarrhea.

The community also needs to know where the nearest health facilities are located. If you are using 'ORS stations' the community should be informed where those are located. In addition, community messages about the prevention of dehydration and malnutrition during dehydration are important:

- Give someone with diarrhea ORS
- If ORS is not available, give home fluids
- Continue feeding during diarrhea
- Continue breastfeeding during diarrhea

Messages to be given to Caregivers:

Caregivers should be informed to bring family members to a health facility if they have:

- Many watery stools
- Blood in the stool
- Fever
- Repeated vomiting
- Marked thirst
- Eating/drinking poorly

How caregivers should provide maintenance hydration with ORS:

Maintenance ORS Hydration

Age	Approximate ORS amount following each stool;	Approximate ORS amount following each stool;
	By milliliters (ml)	By household measures
Children <2 years	50-100ml	10-20 teaspoons
2-10 years	100-200ml	½ - 1 glass
>10 years	As much as is tolerated	Minimum 1 glass

In addition to ORS, how caregivers can also use standard home fluids for hydration:

The best home fluids to use are those that have salt, including soups like chicken broth, rice broth or gruel, or other fluids like unsweetened tea, natural juices, or green coconut water. Never give artificially sweetened drinks, like juice or colas, as these products can make the diarrhea worse.

Outpatient workers should closely observe patients:

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 (see the cholera management section for an explanation of dehydration assessment and management)
- Unconscious patients
- Hypo- or hyperthermic patients
- Patients who have had a convulsion with their illness

* In children: if the caretaker knows the weight of the patient, advise the patient caretaker to administer one teaspoon per kilogram of ORS for each loose stool. ORS should be given in small amounts (small spoons of 5ml for children <2 years and sips from a cup for older patients) frequently (every 1-2 minutes). If the patient vomits, wait 10 min. and continue to give ORS but more slowly.