



## **Infection control precautions in Cholera outbreak**

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## Healthcare providers should take precautions to prevent the spread of cholera in clinical settings

### Important advices

- Cholera patients admitted to health care settings frequently present vomits and profuse diarrhea, and therefore, Contact infection control measures should be applied to avoid direct unprotected contact with body fluids as per **Standard Precautions**.
- The use of **contact precautions** for diapered, incontinent patient or any patient presenting with extensive watery diarrhoea and/or vomiting is recommended.
- The most important elements of these infection precautions are hand hygiene and protection of hand and cloths (body) from the contact with vomit or stool.
- Use of glove and gown while providing care of all cholera patients presenting extensive watery diarrhoea and/or vomiting is recommended.
- Promotion of safety climate is a cornerstone of prevention of transmission of pathogens in health care.
- All treating physicians should notify infection control department and preventive medicine department for all suspected and confirmed patients.

### Infection control precautions in Cholera outbreaks

#### 1. Triage

- Rapid and early identification of patients suspected of cholera infection with prompt application of appropriate precautions, and implementation of source control is recommended.
- Identified patients should be placed in an area separate from other patients.
- Standard and contact precautions described below should be promptly implemented.

#### 2. Personal protective equipment (PPE) and hand hygiene

- For direct close care for patients with vomits and profuse diarrhea: Hand hygiene and proper PPE are mandatory.
- Perform hand hygiene by means of hand washing or hand rubbing i.e. wash with soap and water or rub with an alcohol-based hand rub
- Ensure availability of hand hygiene products (clean water, soap, single use clean towels, alcohol-based hand rub).
- Alcohol-based hand rubs should ideally be available at the point of care
- PPE are:
  - Clean, non-sterile, long-sleeved gown;
  - and clean gloves which should cover the cuffs of the gown.
- Donning PPE upon room entry and discarding before exiting the patient room.
- After patient care, remove gown and gloves and observe hand hygiene before leaving the patient-care environment.

### **3. Family members or visitors**

- Limit visit to those who are essential for the patient's support only.
- Family members or visitors who are required to provide care or have very close patient contact (e.g., feeding, holding) should use PPE correctly.
- Wear gloves whenever touching the patient's intact skin or surfaces and articles in close proximity to the patient (e.g., medical equipment, bed rails).
- Use gown upon entry into the room or cubicle.
- Remove gown and gloves and observe hand hygiene before leaving the patient area.
- Change personal clothes every day.

### **4. Patient placement**

- Isolate suspected or confirmed cases.
- Place together in the same room (cohort) patients who are infected with the same pathogen and are suitable roommates.
- Ensure that patients are physically separated (i.e., >3 feet apart) from each other.
- Change protective attire and perform hand hygiene between contact with patients in the same room, regardless of whether one or both patients are on Contact Precautions.

### **5. Patient-care equipment and instruments/devices**

- Use single use equipment for patients.
- For common use of equipment for multiple patients, clean and disinfect such equipment (i.e. thermometers, stethoscope and sphygmomanometer) before use on another patient.
- Use 70% ethanol solution or 0.1% hypochlorite solution (for no metal equipments).

### **6. Safe injection practices**

The following recommendations apply to the use of needles cannulas that replace needles, and, where applicable intravenous delivery systems

- Use aseptic technique to avoid contamination of sterile injection equipment.
- Do not administer medications from a syringe to multiple patients, even if the needle or cannula on the syringe is changed
- Do not use bags or bottles of intravenous solution as a common source of supply for multiple patients.

### **7. Placement of Intravascular Catheters in Adults and Children**

- Observe hand hygiene.
- Wearing clean gloves for the insertion of peripheral intravascular catheters.
- Disinfect clean skin with an appropriate antiseptic before catheter insertion and during dressing changes. (2% chlorhexidine, tincture of iodine, an iodophor or 70% alcohol).
- Use sterile gauze to cover the catheter site.

### **8. Environmental Control**

- Promptly clean and decontaminate spills of vomit, stools or other potentially infectious materials. Use protective gloves and other PPE appropriate for this task.

- Clean soiled and disinfect frequently touched surfaces regularly, including those that are in close proximity to the patient (e.g., chairs, bed, over bed tables) and floor with chlorine based agent twice a day using the concentrations below .
- Cleaning of the surface must precede the application of disinfectants.
- Use chlorine based agent ( sodium hypochlorite ) with the following concentrations:
  - 2% chlorine ( 20000 ppm)
    - Used for disinfecting vomit, feces, and corpses
    - Prepared by adding 40 tablets of 2.5gm over 2.5 litres of water
  - 0.5% chlorine ( 5000 ppm)
    - Used for foot baths, cleaning floors, bedding, latrines
    - Prepared by adding 10 tablets of 2.5gm over 2.5 litres of water
  - 0.05% chlorine ( 500 ppm)
    - Used for bathing soiled patients, rinsing dishes, laundry.
    - Prepared by adding 1 tablet of 2.5gm over 2.5 litres of water

## **9. Waste**

- All waste generated from those patients should be disposed of in suitable containers or bags and treated as infectious waste.
- Sharp containers shall be located at the point of use to discard slides or tubes with small amounts of blood, scalpel blades, needles and syringes, and unused sterile sharps.
- To prevent needle stick injuries, needles and other contaminated sharps should not be recapped, purposefully bent, or broken by hand.

## **10. Soiled laundry**

- Do not shake or handle items in any way that may aerosolize infectious agents.
- Avoiding contact of one's body and personal clothing with the soiled items.
- Containing soiled items in a water soluble bag.

## **11. Drinking vessels and eating utensils**

- Eating utensils and drinking vessels that are being used should not be shared
- If adequate resources for cleaning utensils and dishes are not available, disposable products may be used
- Water and detergents is sufficient to decontaminate dishware and eating utensils

## **12. Handling Corps**

People who wash and prepare the dead body must:

- Wear gloves, apron and mask.
- Clean the body with chlorine solution 2% ( 20000 ppm – 40 tablets 2.5 gm in 2.5 litres)
- Fill the mouth and anus with cotton wool soaked with chlorine solution.
- Bandage the head to maintain the mouth shut.
- Do not empty the intestines