

Vibrio cholerae Fact Sheet

Cholera is an acute diarrheal illness caused by the bacterium *Vibrio Cholerae*. It is transmitted by eating contaminated food or water. Infection causes copious amounts of diarrhea that can cause severe dehydration and death if not treated immediately; however, 90 % of cholera cases are mild. Cholera affects millions of people worldwide mainly in developing countries.

General Information

Bacteriology

Vibrio Cholerae is a motile, gram negative, non-spore forming facultative anaerobe with a curved rod shape that is part of the Vibrionaceae family. It can survive on surfaces, in food and in water (or other drink) for prolonged periods.

Clinical manifestations

After the bacterium is ingested, it colonizes in the small intestines. Incubation can take as little as a few hours to 5 days. The two main symptoms of cholera are vomiting and sudden watery “rice water” diarrhea with a fishy odor. Diarrhea can be so profuse that rapid dehydration can occur along with these additional symptoms: abdominal cramps, dry mouth and skin, rapid heart rate, nausea, poor urine output and lack of tears. Antibiotics are not normally administered unless symptoms are severe which only serves to shorten the duration of symptoms. Severe dehydration can cause death but with rehydration therapy (oral or intravenous) prognosis is positive.

Epidemiology of transmission

Cholera is typically spread through water contaminated with feces and occasionally from raw consumption of aquatic animals as *Vibrio cholerae* grows naturally in salt and fresh water. There is a tremendous amount of vibrio shed in the stool of infected persons and with poor sanitary conditions, cholera can easily be transmitted. Asymptomatic carriers of cholera may shed bacteria in their stool.

Basic Prevention

As with all highly contagious pathogens hand washing is extremely important. When in close contact or caring for a sick individual, implement hand hygiene before, after and prior to the preparation of food. Maintaining good hygiene and sanitation in the home environment is also very important. Avoid potentially contaminated food and water. In the absence of adequate sanitation, ensure disposal of waste is not in close proximity to a clean water source.



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Infection Prevention and Control Measures

Healthcare Prevention Measures

In addition to Routine / Standard Precautions, Contact Precautions should be implemented with patients who are suspected or confirmed to have Cholera

- Patients with suspected or confirmed Cholera may be placed in private rooms or cohort with other patients with the same infection.
- Follow hand-hygiene guidelines by thoroughly washing hands with soap and water or with Alcohol-Based Hand Sanitizers (ABHS) after contact with patients.
- Use gowns and gloves when in contact with, or caring for patients who are symptomatic and for all interactions that may involve contact with the patient or potentially contaminated areas in the patient's environment

Environmental control measures

All horizontal and frequently touched surfaces should be cleaned twice daily and when soiled. All patient care equipment (e.g., thermometers, blood pressure cuff, pulse oximeter, etc.) should be dedicated to the use of one patient. All patient care equipment should be cleaned and disinfected as per Routine / Standard Practices before reuse with another patient or a single use device should be used and discarded in a waste receptacle after use. Toys, electronic games or personal effects should not be shared by patients.

References:

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