

## **Cholera**

Agent: *Vibrio cholerae* (serogroup O1 and O139)

Mode of Transmission: Epidemics and pandemics are strongly linked to the consumption of unsafe water and food, poor hygiene, inadequate water treatment, poor sanitation, and crowded living conditions. Conditions leading to epidemics exist in many developing countries where cholera is either endemic or a recurring problem in a large number of areas. The disease is unlikely to spread directly from one person to another.

Signs/Symptoms: Sudden onset of profuse, painless watery stools, often described as rice-water stool, provoked by an enterotoxin that affects the small intestine. Nausea and profuse vomiting occur early in the course of illness. In untreated cases, rapid dehydration, acidosis, circulatory collapse, hypoglycemia in children and renal failure can rapidly lead to death. In most cases infection is asymptomatic or causes mild diarrhea.

Prevention: Safe drinking water and proper sanitation are the keys to cholera prevention. When traveling in countries where cholera is present, eat only thoroughly cooked hot foods or fruits/vegetables that you peel just before eating. Use only bottled beverages or water that has been boiled or treated with chlorine for drinking, brushing teeth, or cleaning food preparation surfaces. Thorough hand washing with soap after using the bathroom and before preparing or eating food is always important. Seafood should be cooked thoroughly before it is eaten.

Other Important Information: In severely dehydrated cases, death may occur within a few hours and the case-fatality rate may exceed 50%. With proper and timely rehydration, this can be less than 1%.

One case of toxigenic *V. cholera* O1, Ogawa, was reported in Virginia in 2010. The infection was reported in a resident of northern Virginia, who became ill after providing assistance in Haiti as part of the cholera outbreak response efforts. Case reports indicate no administration of the cholera vaccine to this patient. Prior to this case, the last case of cholera in Virginia occurred in 1994 in a resident of northern Virginia who was part of an outbreak among passengers on a cruise to Southeast Asia.