Cholera Outbreak

On October 6, 2022, the Lebanese Ministry of Public Health announced the first laboratory-confirmed case of cholera in Lebanon since 1993 and declared a national outbreak. Lebanon’s cholera outbreak was declared six weeks after the first case was reported in nearby Syria.

A total of 239 cases have been confirmed in Lebanon. The majority are located in informal tented settlements and in surrounding areas. A total of 10 deaths were reported and three have been confirmed due to cholera infection. Most cases were reported in the governorates and districts of Akkar, El Minieh-Dennie, Zgharta, Tripoli, Baalbek, Kesrwane, Zahle, and Baabda.

Lebanon’s poor infrastructure, including a dysfunctional electricity sector, water supply shortages, and inadequate solid waste and wastewater management systems, could contribute to a large-scale cholera outbreak. Moreover, 30% of healthcare workers in Lebanon have migrated to other countries, which negatively impacts response to the crisis.

By October 18, seven patients with cholera were admitted to Tripoli Governmental Hospital. The hospital administration opened an ICU cholera unit to manage the rapid increase in the number of affected individuals. Most patients presented at the hospital with high creatinine levels, indicating severe dehydration. Some patients require up to 10 intravenous hydration bags a day. Unfortunately, local suppliers are delaying supplies of critical medications to increase the demand.

On October 21, the World Health Organization announced that sewage water testing in Ain Mreisse (central Beirut) and Burj Hammoud in Mount Lebanon confirmed the presence of cholera.* Some of the sewage and water specimens collected from the tented settlements have tested positive as well.

Lebanese health authorities are urging the international community to support Lebanon’s refugee communities in fighting against cholera after the increase in the number of cases and deaths. The Lebanese government has developed a National
Cholera Operational Plan with the Joint Health and Water/WASH sectors and the Risk Communication and Community Engagement Task Force. The National Plan prioritizes early disease detection, hygiene promotion, and gifts in-kind support from partners.

About Cholera

Cholera is an acute diarrheal disease that can kill within hours if left untreated. It is caused by the ingestion of food or water contaminated with the *Vibrio cholerae* bacterium. Researchers have estimated that each year there are 1.3 to 4 million cases and 21,000 to 143,000 deaths worldwide due to cholera. Cholera remains a global threat to public health and an indicator of inequity and inadequate social development.

Most people infected with the cholera bacteria do not develop any symptoms. But because the bacteria remain present in feces for one to ten days after infection, it can spread rapidly in areas with poor sewage and water infrastructure.

Cholera symptoms appear two to five days after contracting the disease. Symptoms range from mild to severe watery diarrhea and vomiting, causing severe dehydration that can lead to death within 48 hours if left untreated. Immunocompromised patients, children, and the elderly have a higher risk of developing complications.

**Diagnosis:** Cholera detection is facilitated using rapid diagnostic tests. Confirmation of infection is done by laboratory culture or PCR test.

**Treatment:** Cholera can be treated simply and successfully through prompt replacement of lost fluids and salts. Milder cases can be treated with an oral rehydration solution. Severe cases also require intravenous fluid replacement. With prompt rehydration, less than one percent of cholera patients die. Early diagnosis and treatment is key. While antibiotics shorten the course and diminish the severity of the illness, they are not as important as receiving rehydration. The vaccine for cholera is not currently available in Lebanon.

**Medicine and Medical Supplies Needed in Lebanon**

- Contingency stock of hydration solution (Ringer’s lactate)
- Contingency stock of oral rehydration salts used for mild cases of cholera
- Stock of disinfection kits (including 200 mg chlorine disinfecting tablets to help disinfect domestic water containers and wash fruits and vegetables), hygiene kits, and protective personal equipment (gloves and gowns)
- Oral cholera vaccine (part of the cholera response strategy)
- Dipstick rapid test for cholera bacteria, such as Crystal Cholera used to detect bacteria in human and community settings