

Cholera in Lebanon

What is cholera ?

Cholera is an acute intestinal infection caused by ingestion of food or water contaminated with the bacterium *Vibrio Cholerae*. The incubation period goes from two to five days. The symptoms are severe, acute watery diarrhea often without fever, which may lead to dehydration.

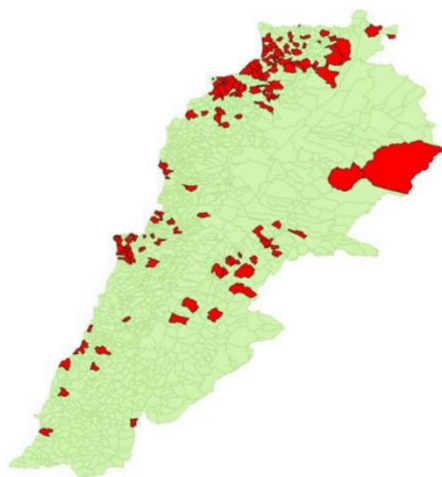
The mode of transmission are :

- Consumption of contaminated water and food
- Contaminated hands, raw or undercooked food

Immunocompromised individuals, children and the elderly are at greater risk of complications if they become infected. The causative bacteria remain in the stool of an infected person for a period of 7 to 14 days. They reappear in the environment with the potential to infect many other individuals.

Cholera remains a global public health threat and an indicator of inequity and inadequate social development. It is estimated that there are 1.3 to 4 million cases of cholera each year, and 21,000 to 143,000 deaths from the disease worldwide.¹

What is the situation today in Lebanon ?



The first cholera case was detected in Menieh-Doniyyeh district of the North governorate, Lebanon on October 4th, 2022.

On December 19th, 661 confirmed cases have been identified throughout Lebanon, and 18 districts out of 26 are affected.

The most affected areas are Akkar and northern Lebanon, and to a lesser extent the Bekaa and Balbeck.

Ministry of Public Health, December 12th, 2022

¹ Updated global burden of cholera in endemic countries, Ali M, Nelson AR, Lopez AL, Sack D. (2015).

The high risk situation of the water and sanitation sector in Lebanon

Lebanon is considered high risk due mainly to deterioration in water and sanitation across the country, limited access to hygiene measures among the most vulnerable populations, and very limited resources at government level.

These issues are compounded by the current energy crisis, as pumping stations for water services operate only few hours a day. This intermittent distribution does not ensure the drinkability of water that is stored by households in uncontrolled reservoirs. Failures on public networks force households to resort to bottled water, tanker trucks and private boreholes, sometimes poorly controlled and using contaminated sources.

The operation of wastewater treatment plants is also impacted, leading to untreated water discharges throughout the country. Today in Lebanon, less than 10% of wastewater is treated.

The response to the epidemic

- Multi-sectorial coordination

The Ministry of Public Health (MoPH), with support from WHO, UNICEF, UNHCR and other partners, has initiated the response to increasing readiness and containment of the cholera outbreak. A Joint National Cholera Preparedness and Response plan has been developed.

At the national level, the National Cholera Task Force, headed by the MoPH, was expanded to include representatives from line Ministries, donors and NGOs and currently meets twice per week.

The two national technical task forces focusing on clinical case management and oral Cholera vaccine (OCV) roll out at the MoPH are currently operational.

Save the Children (SC) is coordinating with the Ministry of Education and Higher Education (MEHE) the operationalization of cholera task teams to ensure implementation of WASH activities in schools.

- Method of intervention

Partners are implementing the Case Area Targeted Intervention (CATI) approach, which targets households that fall within a 50-100m radius of a suspected case, and the community-level water supply modalities and wastewater disposal and treatment.

- Health sector

WHO is the lead stakeholder in that sector, in coordination with their partners.

A chain of intervention has been set up :

Surveillance :

Partners follow up on suspected and confirmed cases with daily surveillance at the community level and in the primary health care centers. They also proceed with stool collection and water sampling in schools, informal settlements, community centers.

Laboratory :

Stool and water samples are daily tested in laboratories. WHO also supports 6 laboratories in governmental hospitals (Halba, Tripoli, Nabatieh, Saida, Baalbek, and Zahle) providing training on Cholera testing.

Case management, prevention and control :

Numerous trainings are implemented by partners to train health workers, hospital staff, frontline staff and community health workers in case detection and management.

UNHCR fully covers the cost of hospitalization for all suspected and confirmed cases of Cholera for its Persons of Concern.

Oral Cholera Vaccines :

600,000 doses of vaccine were received by the end of October, WHO supported the MoPH in covering their full cost.

The Oral Cholera Vaccination campaign was launched on 4 November in three central prisons and on 5 November for frontline healthcare workers in hotspot areas. On November, 12, a campaign for high risk areas was launched targetting lebanese and refugees

WHO supported the MoPH in providing technical guidance for the selection of the target areas as well as training to implementing partners responsible for vaccine deployment.

UNCHR is covering the operational costs of the vaccine campaign, implemented on the field by AMEL, Lebanese Red Cross, Medair, MSF Belgique and MSF Suisse.

MoPH has completed a second application for an additional two million doses of OCV, which was accepted in the beginning of December.

Logistics, kits, supplies :

WHO, UNICEF and other partners regularly deliver rapid diagnostic tests to the MoPH. They also provide partners with oral rehydration salts and hygiene kits, for them to distribute on the field.

- [WaSH sector](#)

UNICEF is the leading stakeholder in the WaSH actor, acting in coordination with their partners.

The response to the cholera epidemic in the WaSH sector is organized around two lines of action :

Support to communities :

More than 60 000 m³ of water have been distributed through water trucking and more than 12 000 m³ of wastewater has been disinfected and desludged since October.

UNICEF with its partners act on the field to contain cholera : water testing, water tanks cleaning, hygiene kits distribution and awareness raising, disinfection spraying, increasing the safety of water and wastewater disposal.

Support to water and wastewater systems :

Fuel is being distributed to Water establishments and wastewater treatment plants in hot areas across Lebanon. Over 270 000 liters of fuel were distributed since October.

In certain areas, the rehabilitation of the water supply system is being done, as in Bebnine (Akkar) or Arsal, where damaged solar panels are being replaced to make the pumping station work.

- Risk communication and community engagement

UNICEF is leading coordination efforts with other sectors and actors on the ground to ensure an integrated response and intervention through awareness raising and community engagement

Community messaging is ongoing with door-to-door campaign, workshops on cholera, sharing information with key local stakeholders, sensitization sessions, distribution of posters and flyers, audio messages.

Long-term response : strenghtening the water and sanitation sector

The cholera epidemic that Lebanon is experiencing today highlights the problems of the water and sanitation sector.

In the long term, the solution to contain cholera lies in strengthening health and sanitation services. It requires substantial investment in systems, particularly water supply, wastewater treatment and their connections to functioning electrical service lines.

Ressources

[Updated global burden of cholera in endemic countries. Ali M, Nelson AR, Lopez AL, Sack D. \(2015\)](#)

[The incubation period of cholera: a systematic review. Azman AS, Rudolph KE, Cummings DA, Lessler J. J](#)

[Rapport annuel 2020 sur le choléra, OMS](#)

[Vaccins anticholériques : note de synthèse de l'OMS – août 2017](#)

[Cholera outbreak in Lebanon, UNICEF, Octobre 2022](#)

[Cholera surveillance in Lebanon, Ministry of Public Health](#)