Lebanon

Cholera Outbreak Situation Report No 4

12 November 2022

Epidemiological Overview

All cases (suspected and confirmed)		Confirmed Cases		Deaths (confirmed)	
New (past 24 h)	Cumulative	New (past 24 h)	Cumulative	New	Cumulative
93	3253	10	521	0	18

Cholera Surveillance Update - 11 November 2022

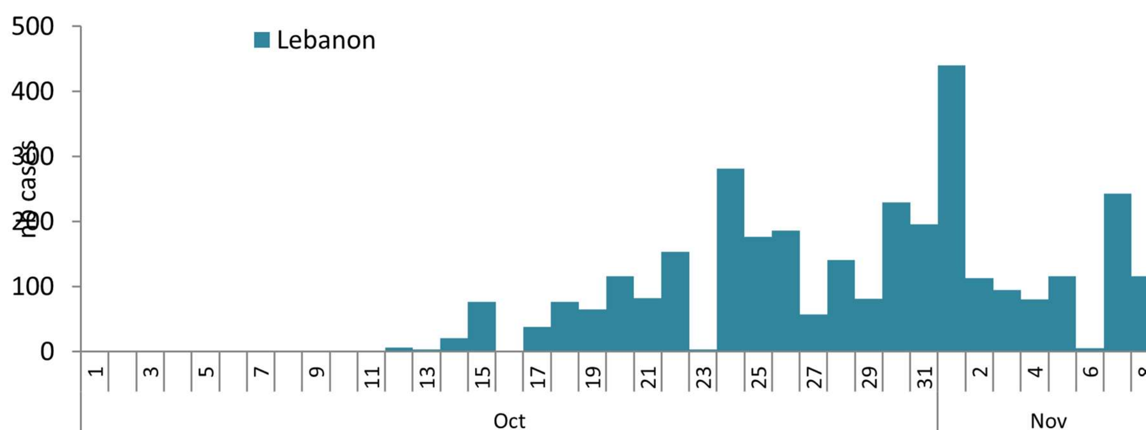
The outbreak is spreading across the 8 governorates of Lebanon and across 18 out of the 26 districts. The number of suspected cases is gradually increasing across all affected areas. As of 11 November, a total of 3,253 suspected cholera cases (out of which 521 are laboratory-confirmed) have been reported along with a total of 18 associated deaths, resulting in a case fatality ratio of less than 0.6%. About 45% of suspected and confirmed cases are less than 15 years of age, 15% are between 15 and 24 years of age, 22% are between 25 to 44 years of age, 11% are between 45-64 and 7% are aged 65 years and older.

Overall, 98% of suspected and confirmed cases who presented to a health facility have exhibited symptoms. 19% of suspected and confirmed cases have required hospitalization. Across the country, 62 beds are currently occupied for cholera treatment. The majority of cases continue to be predominantly reported from Akkar and the North, and to a lesser extent from Mount Lebanon, Bekaa, and Baalbek-Hermel. Tripoli, Halba and Minieh hospitals continue to receive an increased number of cholera patients. As of 31st October, 57.9% of stool samples, and 33.5% of water samples tested at AUB – WHO collaborating center turned out positive for cholera.

Serotype Vibrio Cholerae O1 El-Tor Ogawa was identified as the currently circulating Cholera strain in Lebanon, similar to the one circulating in the region.

WHO has graded the overall risk of the Cholera outbreak in Lebanon to be very high at the National level and high at the regional level.

Figure 1. Distribution of confirmed Cholera cases by date, as of 8 November 2022



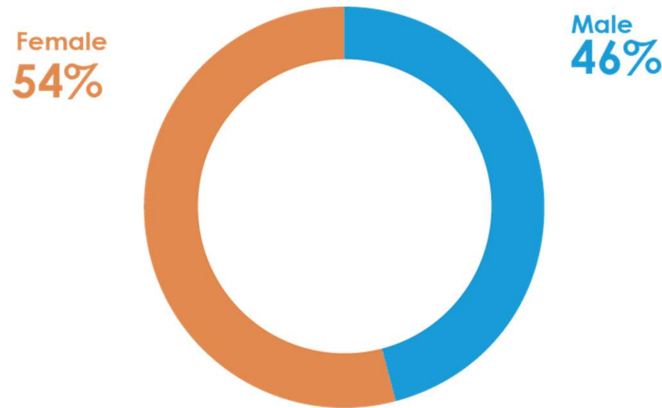


Figure 2. Distribution of confirmed cases by gender, as of 10 November 2022

Cholera Outbreak Response

Multi-Sectoral Coordination and Leadership

At the national level, the National Cholera Task Force, headed by the Minister of Public Health (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.

A cholera committee was created at the Baalbeck-Hermel Disaster Risk Management (DRM) sub-office after the first cholera case was detected in Arsal. The WHO team visited Arsal and met its committee tasked to coordinate the cholera response among stakeholders, under the leadership of the Governor, including the Qada Physicians, Lebanese Red Cross (LRC), Civil Defence, Civil Society, INGOs, NGOs and political party representatives.

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. Under the Education sector, SC is part of the task force on cholera and is leading on cholera non-formal education (NFE) guidance.

As co-leads with MoPH of the Reproductive Health sub-working group, UNFPA coordinated with key actors from this group the development of key messages on cholera in pregnancy, targeting the health care providers and the community at large. The key messages were disseminated to all actors involved in the cholera response through the Health sector.

UNHCR, UNICEF and WHO joined the Minister of Public Health, Dr. Firas Abiad, to visit the North and Bekaa to sensitize and mobilize the municipalities and communities around the OCV campaign.

Health

Surveillance

The WHO team together with the Epidemiological Surveillance Unit (ESU) conducted a field visit to Akkar to assess cholera surveillance and reporting at the level of health facilities. They also provided technical support to strengthen the use of proper case definitions in addition to ensuring adequate and timely linkages to case management.

IOCC and Relief International (RI) continue their support to the ESU in terms of stool collection and water sampling in Beirut/Mount Lebanon, North and targeted informal temporary settlements (ITS)in Akkar, the North and Bekaa.

RI continues to follow up on suspected and confirmed cases in Baalbek/Hermel, Bekaa and the North governorates. Meanwhile, IMC continues their daily surveillance of suspected d cholera cases at the community level and in the primary health care centers (PHCCs), referring the suspected cases to the hospitals or PHCCs according to MoPH guidelines. The number of identified cases of notifiable disease at the PHCC level are 8 in Tripoli, 24 in Beirut/Mount Lebanon, 8 in the South and 35 in Bekaa.

In Bekaa, RI continues to coordinate the cholera rapid response teams (C-RRT). Meanwhile, MDM have trained 13 C-RRT members from Bekaa and 8 from Tripoli on the available surveillance tools.

SC has collected water samples for further testing in 186 public schools and 75 community centers of local partners. 10 confirmed cases were detected in 3 ITSs in Bekaa and hygiene promotion sessions, hygiene kits and water tank cleaning were provided.

IOM donated 10 tablets to the ESU and continues to refer cases of cholera once they have been detected.

Laboratory

WHO has supported the testing of over 700 stool and water samples at AUB – WHO collaborating center and RHUH reference laboratories. 57.9% of stool samples and 33.5% of water samples tested positive for cholera. Some of the positive stool samples will be transferred to Pasteur Institute and US-CDC for quality control and genetic sequencing.

Case Management, and Infection, Prevention and Control (IPC)

WHO has assessed the first private hospital to manage cholera patients, Ain w Zain hospital in Chouf. The hospital is ready to receive cholera patients with dedicated separate space for20 beds with the possibility of extension.

WHO deployed 2 nurses and 2 specialized doctors experts in intensive care unit (ICU) care and infectious diseases, to diarrhea treatment centers (DTCs) for coaching and monitoring the clinical management and IPC practices. Minieh Governmental Hospital, Tripoli Governmental Hospital, Bebnine field Hospital and Halba Governmental Hospital are already benefiting from the coaching of experts. They will continue to monitor the practice after the initial 5 days of training and weekly follow-up missions will be conducted for the next three weeks. In parallel, a total of 134 additional nurses and 5 medical doctors are currently deployed to Halba Government Hospital and Tripoli Governmental Hospital as additional capacity to support cholera patient management. Similar support is under preparation for other designated hospitals receiving cholera patients.

MSF started training 21 C-RRT members engaged by MDM on case management.

IOM conducted two IPC trainings for 60 healthcare workers, in coordination with the MoPH.

UNHCR completed phase 1 of the support to Tripoli Governmental Hospital. Additionally, UNHCR reported ongoing activation of C-RRT and follow-up on individual cases.

Oral Cholera Vaccines (OCV)

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.

WHO supported the MoPH in covering the full cost of the 600,000 doses and by providing technical guidance for the selection of the target areas, the development of the related microplans, and training to implementing partners responsible for vaccine deployment. Additionally, WHO continues to support the MoPH and Minister of Interior and Municipalities (MoIM) in the deployment of the Schanchol OCV doses donated from Sanofi forprisoners and health care workers. WHO is actively engaged with the OCV task force to finalize the target populations, microplanning needs, implementing partners, training, logistics, data reporting, and pharmacovigilance. Furthermore, WHO is supporting the MoPH to complete a second ICG application for additional 1.5 million doses of OCV as part of phase 2 of this campaign to cover the 18 additional cadasters.

The OCV campaign for other high-risk areas will be launched on 12 November for three weeks and will target Lebanese and refugees.

UNHCR is covering the operational costs of the OCV campaign. Microplans for each partner have been completed, and teams including outreach volunteers are already on the ground conducting mobilization activities to enhance the awareness and acceptability of the community for the vaccines. Outreach volunteers are also capturing community concerns, knowledge, practices,

health-seeking behaviors, and barriers to vaccination, to inform and tailor OCV-related risk communication and community engagement (RCCE) messaging accordingly.

On 4 November, UNHCR, in collaboration with MoPH, UNICEF and WHO, held a training of trainers (ToT) to partners implementing the OCV campaign. ToT included both technical and operational components for partners: MSF, AMEL, MEDAIR, LRC, and RHUH nurses.

Logistics, Kits and Supplies

WHO delivered additional rapid diagnostic tests (RDTs) to the MoPH, and more RDTs are expected to be delivered by 13 November.

UNICEF distributed 44,000 Oral Rehydration Salts (ORS) to Health, WASH, and RCCE partners across the different areas affected with Cholera. UNICEF partners, such as IOCC and MDM, have distributed 5,985 ORS to symptomatic and/or high-risk individuals. In addition, RI distributed ORS for both suspected and confirmed cases in Bekaa and the North.

SC has distributed over 4,000 dioxide chlorine tabs in 42 public schools and 45 community centers, improving water quality for children. In addition, SC procured 100,000 dioxide chlorine tablets for treatment of contaminated water in schools and community centers, and distributed ORS and 135 cholera/hygiene kits in Bekaa.

IOM is procuring hygiene kits, including ORS for IOM beneficiaries, cholera beds, RDTs, PPEs for non-health staff at border crossing points and frontliners in coordination with MoPH.

UNHCR fast tracked 1,000 RDTs. The remaining 14,000 tests will be arriving in two weeks. Some delays are observed due to high demand and global shortage.

Water Sanitation and Hygiene (WaSH)

Support to Communities

Nearly 29,000 m^3 of water has been distributed through water trucking, while 1,572 m^3 of wastewater has been disinfected and desludged since the start of the outbreak. UNICEF with its partners AAH, DPNA, LebRelief, LOST, SAWA, SC, SI, and WVI has continued the full-scale cholera WaSH response in almost 90 informal settlements and some collective shelters with suspected or confirmed cases (including water testing, water tanks cleaning, hygiene kits distribution and awareness raising, disinfection spraying, increasing the safety of water and wastewater disposal). UNICEF has supplied WaSH partners with a total of 7,934 cholera family hygiene kits, while ICRC provided LRC with 2,700 kits and 49,000 aquatabs, which will support around 60,000 people (each kit supports on average five to six people). To date, 1,262 cholera disinfection kits and 3,712 cholera family hygiene kits have been distributed by UNICEF partners, LRC, IRC and Oxfam.

Support to Water and Wastewater Systems

Over 216,000 liters of fuel have been distributed to Water Establishments and Wastewater Treatment Plants across Lebanon, benefitting approximately, 850,000 people living across the affected areas (see details below). In addition, 20 tons of chlorine powder have been purchased and distributed to LRC who distributed it to municipalities to chlorinate the water used in water trucking. This has begun in Bebnine and Ryanyet and will continue in six locations within Akkar. The rehabilitation of the water supply system in Bebnine is underway, which will benefit 10,000 community members by providing them with access to clean water (UNICEF). Rehabilitation of the solar system of Wadi Sweid Pumping Station (Arsal) by replacing missing PV panels was completed by ICRC, while rehabilitation of Wadi Matlab Pumping Station (Arsal) is ongoing. Following an assessment of the Bebnine PHC, UNICEF will begin rehabilitation work through the construction of semi-temporary latrines alongside a new wastewater holding tank.

Water Establishment	Water Station Name	Type of Water Station	Fuel Distribution (Liters)
NLWE	Al Ouyoun	Water Pumping Station	43,000
	Ain Yaaqoub	Water Pumping Station	30,000
	Beddawi	Wastewater Lifting Station	10,000
	Qoabayat	Water Pumping Station	10,000
	Tripoli	Water Pumping Station	25,000
	Qoabayat	Water Pumping Station	10,000
	Mohammara	Water Pumping Station	4,000
	Rahbe	Water Pumping Station	2,500

	Ouadi El Jamous	Water Pumping Station	2,000
	Bourj Arab	Water Pumping Station	1,000
BWE	Kabb Elias	Water Pumping Station	3,000
	Thermine et Thata	Water Pumping Station	2,353
	Nassrieh	Water Pumping Station	2,350
	Ain Ali	Water Pumping Station	24,000
TWWTP	Minieh	Wastewater Lifting Station	21,000
	Tripoli	Wastewater Treatment Plant	19,000
	Nahr el Bared	Wastewater Lifting Station	7,000

Risk Communication and Community Engagement (RCCE)

RCCE response aims to increase the public's knowledge on cholera prevention, the importance of chlorination, and how to use ORS. As the RCCE Lebanon Task Force lead, 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.

Activities have included the following:

- An RCCE plan for the OCV rollout has been developed in coordination with MOPH, UNHCR, and WHO which includes community mobilization components and the dissemination of IEC materials by partners across hotspot locations.

- Over 117,000 people received and were engaged in awareness messages on cholera prevention and treatment through community messaging and door-to-door campaigning in high risk and vulnerable areas.
- Consultations and workshops took place across Akkar, North Lebanon, South Lebanon, Mount Lebanon, Bekaa, and Baalbek-Hermel during which UNICEF shared information about the outbreak with key local stakeholders, including religious and community leaders.
- UNICEF supported an in-person session that included two prominent infectious disease specialists, Professor Jacques Mokhbat and Dr. Jamil Barhoun, on Cholera awareness and sensitization. Attendees included different mayors, crisis cell members, and volunteers from municipalities in Akkar.
- Through its RCCE partner Balamand University, UNICEF supported 24 Cholera sensitization sessions with over 5,000 participants. Attendees included UN partner organizations, teachers, frontline workers, municipality workers, and community volunteers.
- Balamand University has also delivered cholera awareness sessions with approximately 400 participants in public and private schools in collaboration with the MEHE.
- Cholera IEC materials, such as posters and flyers, have been printed and mass-distributed to municipalities and communities with the LRC through mobile medical units under the immunization program, as well as through direct distribution to partners and other stakeholders.
- More than 257,000 families, WFP beneficiaries, were reached with SMS messages on cholera prevention and awareness, as well as an animated video.
- In the past week, UNHCR disseminated five audio messages via WhatsApp communication tree to raise awareness on prevention of cholera, with an approximate reach of 180,000 individuals. In addition, UNHCR and partners' outreach volunteers held 94 awareness and info-sharing sessions on acute watery diarrhea/cholera and shared 219 messages on community-based WhatsApp networks, reaching more than 87,000 persons over the past two weeks.
- IOM have printed 10,000 copies of IEC material in other languages for migrant population.

A structured media campaign to intensify prevention and awareness through local TVs is currently under preparation with support from WHO and UNICEF and in consultation with the MoPH team.

Challenges/Gaps

- Due to the ongoing economic crisis in Lebanon and related migration of professionals out of the country, there is an insufficient number of health care workers operating across the country while at the same time there is a shortage of health partners to support at the secondary level. Similarly, there is a significant 'brain drain' of technical and managerial

staff of Water Establishments, disabling proper functionality of the water and sanitation systems.
- The crisis also has impacted health and surveillance systems which have very limited capacity.
- Ongoing electricity blackouts and heavy reliance on generators in Lebanon have a devastating impact on the ability of water and wastewater systems to properly function, as well as operational impact across all actors and partners involved in the response. The current water tariffs are inadequate to the context. Collection and subscription rates are chronically insufficient, contributing to a huge gap between expenses and revenues, resulting in the inability of Water Establishments to cover operation and maintenance costs.
- Prevention requires substantial investment in systems – particularly water supply, wastewater treatment and their connections to functioning electrical service lines.
- Failure to mobilize a rapid, comprehensive response could result in cholera becoming endemic in Lebanon.

Key Priorities

- The outbreak is rapidly spreading and Government leadership, as well as the involvement and coordination of all relevant Government institutions and partners is critical.
- Both prevention/preparedness and response activities, including fuel to operate water supply and wastewater treatment systems, are priority to ensure swift and efficient curbing of the outbreak. Ensuring sustained electricity supply over the longer term remains critical to avoid a long-lasting and wide outbreak.
- OCVs are not a standalone solution, but rather they contribute to other preventive measures such as water and sanitation, health education, surveillance and clinical management. Response activities should aim to prioritize the needs of high-risk and vulnerable groups and settings, including securing adequate WaSH service provision in informal settlements and ensuring a focus on individuals living in overcrowded conditions such as in collective shelters and institutions.
- Response activities for cholera are mostly repurposing of planned activities within existing response plans - with the addition of some cholera specific response activities. Swift disbursing of extra funding is required to ensure that critical and time sensitive new and previously planned activities can be implemented in a timeline manner.

Further, donors should:

- Prioritize funding for activities identified as critical and in line with the coordinated response strategies developed by the WASH, Health and RCCE sectors and task force.
- Continuing flexible funding for the UN agencies, in particular UNICEF, WHO and UNHCR as sector lead agencies, to allow for greater responsiveness to rapidly evolving priorities across the whole country.

- Allow flexibility in on-going grants and continue direct funding to international and national NGOs, noting that NGOs coordinate via the sectors and are often the closest entities to communities and affected people, especially those with special needs.
- Fund the Lebanon Humanitarian Fund: LHF is particularly efficient and effective to support NGOs to respond.

Funding

Priority Funding Needs Health, WASH & RCCE

#	Pillar	Urgent Needs - 3 months
1	Leadership & Coordination	15,000
2	Surveillance	200,000
3	Laboratory	300,000
4	Case Management and IPC	2,865,325
5	Oral Cholera Vaccine*	2,000,000
6a	WASH: critical O&M support to systems, incl. fuel and subsidies	6,570,500
6b	WASH: prevention, preparedness and response	5,792,000
7	RCCE, Hygiene promotion	250,000
8	Logistics, Equipment & Supplies	2,000,000
	Sub-total	18,992,825
	7% PSC	1,329,498
	TOTAL	**21,322,323**
	GRAND TOTAL IMMEDIATE NEEDS (USD): 21,322,323	

A meeting with the donors was held on 11 November where a prioritized set of time-sensitive emergency interventions was presented for a total of US$21M for three months – out of which US$9.5M are already covered by the United Nations Central Emergency Response Fund (CERF) and Lebanon Humanitarian Fund (LHF).

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