## Lebanon

# Cholera Outbreak Situation Report No 1

23 October 2022

## **Epidemiological Overview**

On 4 October 2022, a person residing in an informal settlement in Akkar was admitted to Halba Governmental Hospital and presented with dehydration and clinically reported rice-water diarrhea. Symptoms reportedly started on October Cholera Surveillance Update – 22 October 2022 1st.

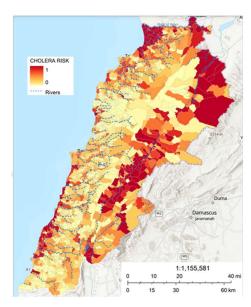
All cases (suspected and confirmed)	Confirmed Cases past 24 hours		Deaths	
Cumulative	New	Cumulative	New	Cumulative
448	12	239	3	10

Upon further contact tracing and investigation, additional individuals residing in the same settlement were confirmed to be positive. All tested water samples in this camp returned positive for Vibrio cholerae. The Lebanese Ministry of Public Health (MoPH) officially declared an outbreak of cholera on 6 October 2022.

As of 22 October 2022, the MoPH has reported 239 confirmed cases and 10 deaths. The Caza of Akkar, Minieh-Dennieh, Tripoli, Baalbeck, Keserwan, Zahle, Zgharta, Baabda, Saida and Metn are affected so far. More than half of cases (53%) are children under the age of 15 and 57% are women.

WHO has conducted a grading exercise of the current cholera outbreak in Lebanon and has assessed the overall risk to be very high at the national level due to:

- Initial outbreak arising in a higher risk area;
- Pre-existing compounded crises in Lebanon;
- Derelict health, water and sanitation services and systems;
- · Scarcity and unaffordability of reliably safe water, triggering reliance on other unsafe water sources;
- Funding shortfalls for already on-going humanitarian programs;
- Limited knowledge, technical expertise experience about cholera among the general population, health care providers and organizations in Lebanon due to nearly 20 years since the previous outbreak; and



Hotspot Areas in Lebanon

Continuous movements across the borders of Lebanon and Syria where outbreaks are occurring in both countries.

#### **Cholera outbreak Response**

#### Multi-Sectoral Coordination and Leadership

The MoPH has developed the Lebanon Cholera Preparedness and Response Strategic Plan and Operational Plan with the support of the aid community under the overall coordinating and advising role of the WHO as lead in Health Emergency response. The overall response to the cholera outbreak is led by the MoPH on behalf of the Government of Lebanon. A national Task Force, chaired by the Minister of Public Health, convenes twice a week and gathers representatives from the different Ministries involved in the response, as well as the LCR, ICRC, and representatives from the UN agencies and NGO partners. A cross-ministerial group is also meeting on an *ad hoc* basis under the chairmanship of the Prime Minister, with the secretarial support of the Disaster Risk Management (DRM) unit in the office of the Prime Minister.

Representatives from WHO, UNHCR, UNICEF and OCHA are attending the national Task Force on behalf of the HCT and Health, WASH and RCCE sectors and task force.

WHO, as the overall coordinator of this health emergency, along with UNHCR and Amel Association (Amel) as co-lead and co-coordinator of the joint Health sector respectively (in close coordination with MoPH as lead ministry on the LCRP), play a critical technical advisory role in the response planning. The joint Water, Sanitation and Hygiene (WASH) sector, under the co-coordination of UNICEF and LebRelief (in close coordination with the Ministry of Energy and Water as lead ministry on the LCRP), as well as the RCCE Task Force and other sectors are also supporting the development and implementation of the plan.

The Health and WASH sectors have initiated a partner mapping across the country to assess level of readiness and identify gaps. At the same time, MoPH has initiated a registration of all health actors coordinating efforts with the Disaster Risk Management (DRM) unit in the Office of the Prime Minister.

At the sub-national level, Disaster Risk Management (DRM) committees, within the offices of the Governors, are being activated to support coordination. The regional UNHCR Health sector coordinators continue working closely with the Health sector at national level as well as other sectors, including as part of regional Inter-Sector Working Groups, to ensure an integrated response. Hariri Foundation for Sustainable Human Development (Hariri Foundation) is facilitating multisectoral and multistakeholder coordination at the federation of Saida-Zahrani municipalities while launching a preparedness and needs assessment for schools, hospitals, PHCs, nurseries, nursing homes and cafes.

Health, WASH and RCC sectors are supporting the rapid response capacity of the Government through integrated Cholera Rapid Response Teams (C-RRT) which intervene at the household level, alongside MoPH officials, for CATI and cross-sectoral support for patients families and surroundings.

#### Health

The aim of the multisectoral cholera prevention, preparedness and response plan is to reduce the potential of mortality and morbidity from cholera and acute watery diarrhea (AWD) amongst the affected population during the outbreak through preparedness, early detection and implementation of appropriate control and public health containment measures. The health sector strategy for controlling and eliminating cholera includes enhancing case management capacity for severe cholera cases; ensuring effective routine surveillance and referral networks together with laboratory capacity at peripheral levels to confirm suspected cases, inform the response and track progress towards elimination; strengthening healthcare system – through capacity building for staff, pre-positioning of resources and supplies for diagnosis, patient care and emergency WASH interventions.

#### Surveillance:

WHO has supported training of trainers (ToT) led by the Epidemiological Surveillance Unit (ESU) at the MoPH targeting ESU peripheral staff on surveillance and reporting. An additional training was conducted for Cada physicians. In addition, 28 similar training sessions were undertaken for staff in hospitals, health facilities, medical centres, and NGOs at all levels.

Amel, Humedica, International Orthodox Christian Charities (IOCC), Relief International (RI), UNHCR, and UNRWA are supporting the ESU with alert investigation and sample collection. Together with Hariri Foundation, International Medical Corps (IMC), IOM, Medair, Médecins du Monde (MdM), and Médecins Sans Frontières (MSF), they have also established daily monitoring and reporting of suspected cases within their service delivery.

Following a consultative process across sectors and lead agencies, the Health sector has developed a Cholera Rapid Response Team (RRT) package which includes a guide for field implementation, terms of reference, standard operating procedures (SOP) and practical tools to support MoPH's early response. RRTs integrate health and WASH components, with case-area targeted interventions (CATI) a critical component of the rapid response.

#### Laboratory

The AUB-WHO collaborating center is already operational and receiving daily samples for confirmatory culture of Vibrio Cholera. WHO is upgrading the RHUH reference laboratory. In addition, WHO is conducting environmental (water and sewage) surveillance across the country. Hariri Foundation is supporting Saida Governmental Hospital's laboratory while also increasing the preparedness of private laboratories on rapid detection of Vibrio Cholera.

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

As of 18 October 2022, WHO conducted a rapid assessment in seven public hospitals designated to be diarrhea treatment centers (DTCs), assessing mainly IPC measures and their capacity to safely treat and manage cholera patients. Most hospitals are in need of enhancing waste management capacity and IPC support, case management and supply kits, as well as training on case management and adequate care for severe cases.

Clinical care guidelines and SOPs have been disseminated to referral hospitals, PHCs and other frontline health workers. SOPs on management of acute malnutrition in the context of Cholera

have also been developed by the Nutrition sector and shared with partners. Amel, Anera, Caritas, Humedica, IMC, IOCC, IRC, MdM, Medair, RI, and UNICEF have trained frontline staff at PHCs and mobile medical units (MMUs), as well as community health workers on topics such as cholera case identification, case management, referral and IPC. UNRWA has also initiated training of cleaners in health centers and schools to ensure proper IPC. Amel, Anera, Humedica, IMC, IOM, and MedAir have also provided IPC materials, including PPE, to facilities supporting the response and frontline workers.

At the request of Halba Governmental Hospital, UNHCR has assessed necessary construction works to convert the COVID-19 facility into a DTC. It was also assessed two additional hospitals in the North and BML to be converted from COVID-19 wards to DTCs.

UNRWA has established a fast track procedure for symptomatic patients and referral for those in need of higher level care within its 27 supported PHCs.

MoPH committed to cover the hospitalization costs of Lebanese cholera patients, while IOM and UNHCR will cover hospital-related costs of severe cholera patients among migrants and refugee populations respectively.

#### Oral Cholera Vaccines (OCV)

Despite a worldwide shortage, WHO is aiming to secure up to 600,000 OCV doses targeting the most vulnerable populations as part of the cholera response strategy.

#### Logistics, Kits and Supplies

WHO has procured 1,000 rapid diagnosis tests (RDT) which were distributed to the emergency rooms of 17 referral hospitals. An additional 13,000 RDTs are expected to be delivered to the MoPH within the coming days.

WHO procured and delivered the following Cholera kits:

- 1 central reference medication kit for case management delivered to each of the following hospitals: RHUH, Hermel, Halba, Dahr el Bachek, Machghara, Menieh, Tripoli, Hiram, Nabatiyeh, Ain w Zein, Dar Al Amal, LAU Rizk
- 1 central reference kit for renewable supplies delivered to each of the following hospitals: Halba, Menieh and Tripoli
- 1 peripheral reference kit for renewable supplies delivered to each of the following hospitals: Hermel, Dahr El Bechek and Machghara
- 1 peripheral case management kit delivered to each of the following prisons: Roumieh,
   Tripoli, Zahle

UNHCR dispatched an emergency stock of medicines and supplies to Halba Government Hospital for the treatment of the admitted patients and for IPC.

UNICEF distributed 15,000 sachets of oral rehydration solution (ORS) to health partners. ACF, Anera, IOCC, IMC and RI are distributing ORS to symptomatic persons and vulnerable communities.

Amel, Anera, Hariri Foundation, Humedica, IMC, IOCC, Medair, MSF, PUI and RI are conducting awareness sessions and distributing IEC materials within their supported PHCs and mobile medical units.

BEYOND, Ibad Al Rahman Association, IOM, MSF, UNHCR, UNRWA and WHO have initiated procurement of key cholera supplies and equipment including cholera kits, ORS, PPEs, RDTs, IV and IV kits, medical supplies and medicines for hospitals.

#### **Water Sanitation and Hygiene (WASH)**

In order to ensure readiness and response capacity under the multi-sectoral plan, the WASH sector will prioritize improving water safety, including through ensuring safe drinking and domestic water, adequate hygiene and awareness in the community and at schools; restoring and sustaining functionality of wastewater treatment systems; ensuring WASH services in the Informal Settlements; or sustainable improvements in water supply, sanitation, food safety and proper water quality monitoring as well as community awareness of preventive measures, particularly at identified AWD/cholera hotspots throughout the country.

### Support to Communities

The WaSH sector has developed the cholera risk map and mapped partners' capacity and available stocks across the country.

Preventive and preparedness interventions in all informal settlements supported by the WaSH sector partners are ongoing across the country. Partners ensure the services are delivered in line with the sector standards and according to agreed protocols, with water provision at the level of 35 l/c/d. Partners have enhanced water safety monitoring with the Free Residual Chlorine level of 0.5mg/l at the point of delivery and desludging conducted with monitoring of the level of the wastewater cesspools/pits. Partners promote water tanks and jerry can cleaning campaigns and raise awareness on cholera prevention.

UNICEF with its partners LebRelief, SI, LOST, AAH and WVI has initiated the full-scale cholera WaSH response in 32 informal settlements 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 4,934 Cholera family hygiene kits. To date, partners have distributed 425 Cholera disinfection kits and 538 Cholera family hygiene kits.

#### Prepositioning:

Sector partners have prepositioned various relief items across the country, including over 10,000 Cholera disinfection kits, over 30,000 Cholera family hygiene kits and 10,000 PPE disinfection

kits for frontliners, 150,000 soap bars, 100 water tanks and limited household level water treatment tablets. In addition, UNICEF has prepositioned 30 tons of gas, liquid, and powder chlorine, that are ready to be dispatched to Water Establishments based on their requests/needs.

#### WASH support to Water Establishments and Wastewater Systems:

UNICEF has continued to maintain and repair pumping stations and chlorination systems across Lebanon. Maintenance and repair of 13 chlorination systems in the North Lebanon Water Establishments has been completed in the following stations: Kwachra, Mashta Hassan, Mashta Hammoud, Qobayat station, Kfarhabo, Kadi spring, Jradeh, Chakdouf, Deir Amar, Markebta, Hekr el Koussa and Sir el Dinnieh village. Two main generators in Tripoli, Abouhalka and Al Manar, have been maintained.

Fuel distribution has also been a priority with a total of 98,800 litres distributed by UNICEF. To run the most critical water supply systems in affected areas the North Lebanon Water Establishments was supported with 54,000 litres, while Bekaa Water Establishments were supported with 7,800 litres. Tripoli wastewater treatment plant has also received 37,000 litres of fuel to resume and maintain the operation and be able to receive desludging trucks from the North and Akkar.

The replenishment of all four Water Establishments' chlorine stock nationally has been completed.

In 12 Palestinian camps, UNRWA continued bacteriological water testing of main water tanks and several end-user points, and chlorinated the main water tanks, schools and health centers. Collection of solid waste from camps to main municipalities' dumping areas in the five areas of operations continued.

### **Risk Communication and Community Engagement (RCCE)**

In consultation with WHO and partners, UNICEF developed a preparedness and response RCCE strategic plan included in the integrated inter-sectoral National Cholera Prevention, Preparedness and Response Plan, led by the Ministry of Public Health. The RCCE plan aims to promote key identified behaviors, practices, and messages in scaled-up community engagement and social mobilization interventions with community-level, local, and national stakeholders.

RCCE partners have been mobilized and are conducting awareness raising and community engagement activities in all governorates, targeting all communities in country with specific efforts in hotspot areas, to increase the public's knowledge on Cholera prevention and positive behaviours, in addition to the distribution of ORS to people suffering from diarrhea. UNICEF, as RCCE Task Force lead, is ensuring coordination with other sectors and actors on the ground to ensure an integrated response. Furthermore partners are gathering concerns and questions from communities to better inform collective interventions and messages.

To better inform outreach, community engagement and social mobilization interventions as well as contextualized awareness sessions were designed and are being conducted by UNICEF and Balamand University for partners and community-based organizations (CBOs) to increase

knowledge on Cholera and AWD (Acute Water Diarrhea). The sessions include key messages on Cholera/AWD overview, transmission, symptoms, treatment, prevention, FAQs, and referral mechanisms. From 8 to 19 October, 22 training sessions were conducted, while additional sessions are currently being planned. So far, more than 4,369 participants from NGOs, CBOs, and sectors were trained which included UNICEF partners, UNHCR partners and outreach volunteers, technical and vocation education and training (TVET) teachers and nurses, WASH/Health/Child Protection sector and partners, frontline workers, municipalities, and community volunteers.

UNICEF has facilitated the activation of crisis cells in several localities to raise awareness on prevention measures such as monitoring water trucking and mobilizing key stakeholders. Several local consultations are also being conducted including in the South and Mount Lebanon, in addition to engagement with municipalities in Bekaa and Baalbek-Hermel, and crisis cells in North and Akkar. Furthermore, key prevention measures were identified and are mainstreamed across all partners, who are encouraged to attend the sensitization sessions.

Cholera IEC materials have been designed, shared, and disseminated with partner organizations, key actors, and the media. This includes:

- A 2-pager flyer with information for the general public, community groups, caregivers, healthcare workers, and teachers. The flyer can be printed or shared digitally through platforms like WhatsApp.
- Posters disseminated in key public places in the affected areas like clinics, schools, and markets.
- Leaflets with more detailed information for sectors, partners, and frontline workers/volunteers are being shared in Arabic and English.
- Information shared via social media.
- An animation video for TV and social media has been disseminated
- Child friendly messages and materials are being designed to target schools, children and teachers, and materials translated in several languages with IOM to reach out migrant workers population. Messages were also adapted for capacity building to engage people with disabilities.
- Cholera IEC materials (posters and flyers) have been printed and massively distributed to
  municipalities and communities with the Lebanese Red Cross through the MMUs under
  the immunization program, as well as through direct distribution to partners and other
  stakeholders from UNICEF. Several social media post and videos were also regularly
  shared on partners' and national social media and TV channels.

Regarding RCCE specifically within health institutions, Amel, ANERA, Hariri Foundation, Humedica, IMC, IOCC, Medair, MSF, PUI and RI are conducting awareness sessions and distributing IEC materials within their supported PHCs and MMUs. Mobile midwifery teams have also integrated cholera awareness within their outreach activities.

## 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 (DTC) level.
- The crisis also has impacted health and surveillance systems which have very limited capacity. In addition there are global shortages of critical cholera supplies (RDTs) and vaccines (OCV).
- 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.
- Prevention requires substantial investment in systems particularly water supply, wastewater treatment and their connections to functioning electrical service lines.

## **Key Priorities**

- The government, donors and response actors should invest in both prevention/preparedness and response, including fuel to operate water supply and wastewater treatment systems in priority areas. Ensuring sustained electricity supply over the longer term remains critical to avoid a long-lasting and wide outbreak.
- The government, donors and response actors should 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:
  - Continuing flexible funding for the UN sector lead agencies, namely UNICEF, WHO and UNHCR to allow for greater responsiveness to rapidly evolving priorities across the whole country.
  - Fund INGOs and local NGOs directly, noting that NGOs coordinate via the sectors and are often the closest entities to communities, 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**

			Immediate Needs (3 months)	
#	Pillar	Six-Month Budget (USD)	Preparedness	Response
1	Leadership & Coordination	285,000	100,000	15,000
2	Surveillance	833,400	110,000	560,100
3	Laboratory	1,131,650	294,850	551,000
4	Case Management and IPC	8,148,650	0	6,865,325
5	Oral Cholera Vaccine*	4,560,000	0	4,560,000
6a	WASH: critical O&M support to systems, incl. fuel and subsidies	20,000,000	9,285,000	1,500,00
6b	WASH: prevention, preparedness and response	21,100,000	5,700,000	3,750,000
7	RCCE, Hygiene promotion	1,185,000	75,000	475,000
8	Logistics, Equipment & Supplies	6,916,000	2,108,000	3,750,000
	Sub-total	64,159,700	18,212,850	22,026,425
	7% PSC	4,491,179	1,274,900	1,541,850
	TOTAL	68,650,879	19,487,750	23,568,275
	GRAND TOTA		43,056,024	