

Epidemiological Overview

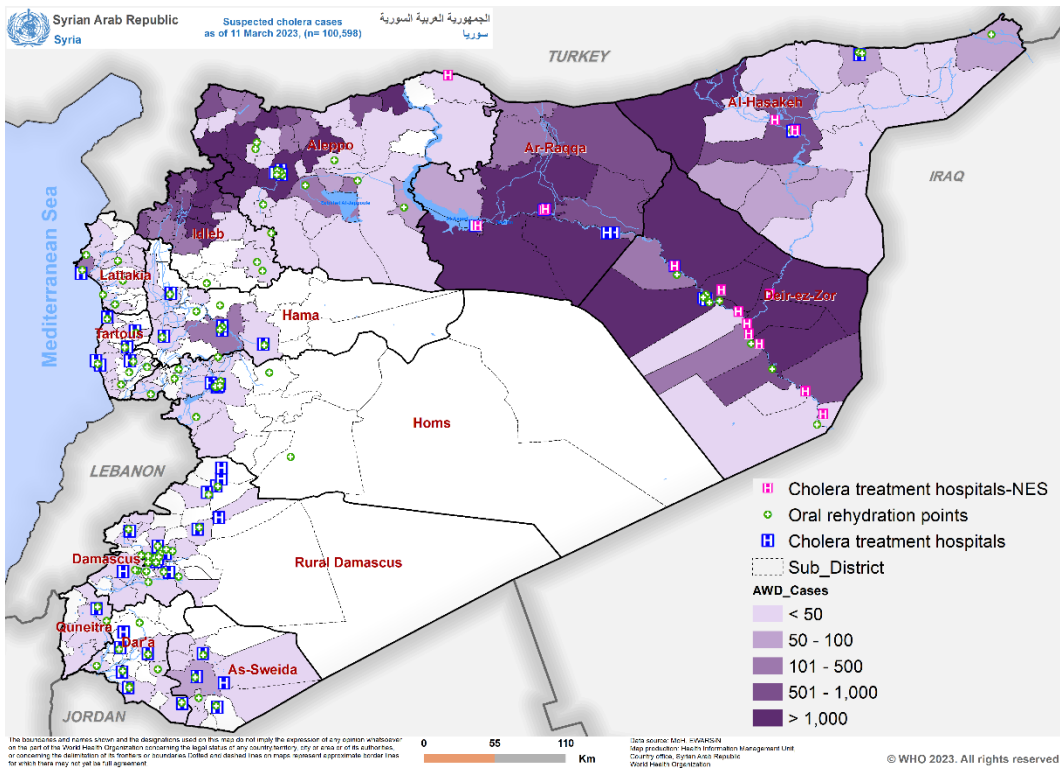
Between 25 August and 4 March, 100,598 suspected cases have been reported from all 14 governorates, including 104 associated deaths to date at a case fatality rate of 0.1%. 7,949 new suspected cases since the last SITREP 13 was issued. The most affected governorates to date are Idlib (31,422 cases, 31.2%), Aleppo (24,839 cases, 24.7%), Deir Ez-Zor (20,673 cases, 20.6%), and Ar-Raqqa (18,955 cases, 18.8%).

To date, 4,813 stool samples have been cultured, of which 956 have tested positive for Vibrio Cholera. The positivity rate is 19.8%. Further to that, a total of 4,841 samples were tested with rapid diagnostic tests (RDTs), with 1,913 of them testing positive. The overall proportion of RDT-positive cases is 39.5%.

Six weeks have passed since the devastating earthquake which had a significant impact on the cholera response operations. Thousands of people are still housed in overcrowded emergency shelters, many without adequate access to sufficient safe water, sanitation, and hygiene measures. Although infectious disease surveillance systems and laboratory capacity across affected areas have been fully restored, the risk of increase of waterborne diseases – including cholera – is still very high due to over-crowded settings, extensive damage to water and sanitation infrastructure, and damage and disruption to cholera treatment infrastructure.

- Suspected Cases**
100,598
- Positive Cases**
1,913
- Cholera Sus. Deaths**
104
- Case Fatality (CFR)**
0.1%
- Overall Attack Rate**
0.47%
- Affected Governorates**
14
- Grade**
2

Figure 1 Distribution of suspected cholera cases by date of onset as of 4 March 2023



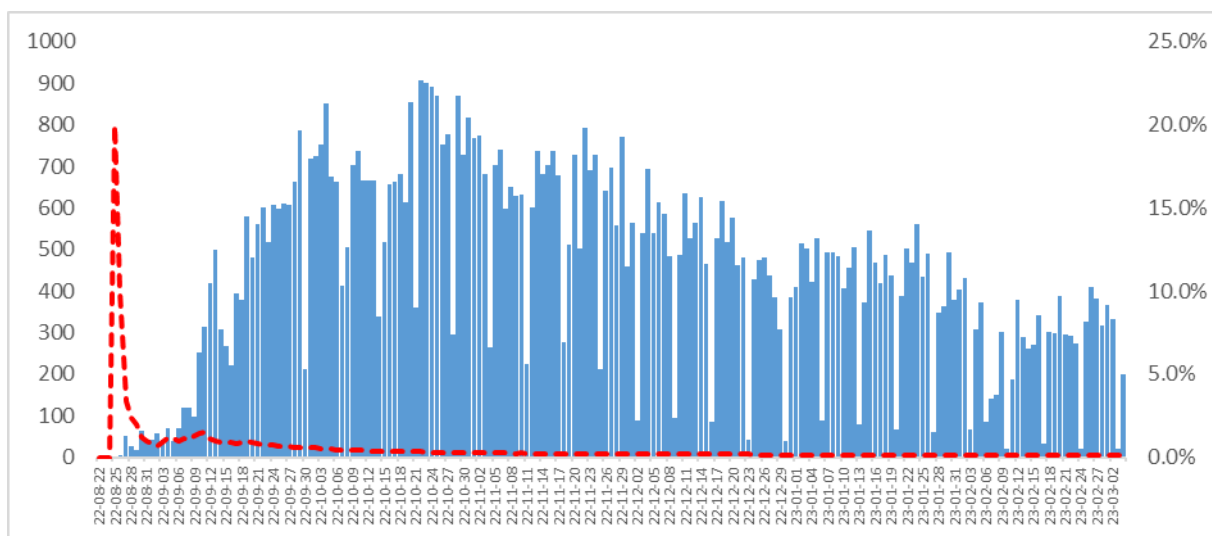
Epidemiological Data

Table 1 provides a breakdown of reported suspected cholera cases and deaths, as well as the number and type of tests performed in Syria’s governorates.

Table 1: Epidemiological data, as of 4 March 2023

Governorate	Suspected Cases (AWD)	Population	Attack Rate (%)	RDTs	Positive RDTs	Culture + Tests	Attributed Deaths	CFR%
Aleppo	24,839	4,170,826	0.60	2,076	1,033	257	49	0.2%
Al-Hasakeh	3,967	1,160,335	0.34	632	115	23	4	0.1%
Ar-Raqqa	18,955	767,956	2.47	352	74	101	10	0.1%
As-Sweida	81	380,118	0.02	81	26	2	0	0.0%
Damascus	43	1,829,796	0.00	40	20	10	1	0.0%
Dar’a	22	1,037,690	0.00	22	5	0	0	0.0%
Deir-ez-Zor	20,673	779,283	2.65	736	419	100	24	0.1%
Hama	195	1,344,853	0.01	188	52	55	1	0.5%
Homs	60	1,520,283	0.00	59	31	25	1	0.0%
Idleb	31,422	2,826,874	1.11	339	9	346	14	0.0%
Lattakia	184	1,274,118	0.01	161	98	31	0	0.0%
Quneitra	17	113,254	0.02	17	4	1	0	0.0%
Rural Damascus	112	3,032,345	0.00	111	17	3	0	0.0%
Tartous	28	943,399	0.00	27	10	2	0	0.0%
Total	100,598	21,181,130	0.47	4,841	1,913	956	104	0.10%

Figure 1: Distribution of suspected cholera cases by date of onset, as of 4 March 2023



Cholera Outbreak Response

Leadership and Coordination

- WHO continues to coordinate the overall cholera response and Health and WASH clusters are jointly coordinating the overall cholera response at all levels of the Whole of Syria (WoS) response architecture. WHO, UNICEF, and OCHA are working together to ensure the leadership of the different response pillars.
- WHO Syria attended a cholera preparedness meeting with Ministry of Health (MoH) and provided updates and technical inputs to support planning for the current period.
- Joint monitoring activities under the M&E framework outlined in the Response Plan are ongoing; an infographic on the 2022 cholera key performance indicators (KPIs) is being finalized.
- Cholera forecasting was revised to reflected an elevated 2% attack rate in earthquake-affected areas, while other areas remained unchanged.
- HLG WASH and Health clusters are coordinating the cholera preparation for the expected spike in cases as a result of the earthquake.
- WASH focal points have been identified for surveillance (including cholera) in the most vulnerable locations, e.g. emergency shelters and camps.

Surveillance and Laboratory

- WHO Syria has supported activation of 5 laboratories, while an additional two are underway in Deir-ez-Zor and Hama.
- Across all affected areas, WHO has successfully restored the surveillance system to full capacity in the aftermath of the earthquake.
- The surveillance has been also expanded to cover all emergency shelters across earthquake-affected areas of Syria. Sample collection, testing, and reporting are constantly being improved and adapted to meet the population's needs after the earthquake.
- Cholera supplies continue to flow from WHO SYRIA and WHO GZT to their respective operational areas. This includes lab kits, treatment kits, and RDTs.
- WHO SYRIA has increased support to further mobilize Rapid Response Teams (RRTs) operations from 19 to 43 as follows: Aleppo (25), Latakia (7), Tartous (4), and Hama (7).
- In NWS, testing for Rota and Adeno viruses has been introduced. Training of cholera treatment centers/cholera treatment units (CTCs/CTUs), surveillance, and lab teams on the new RDT strategy is ongoing.

Case Management

- WHO Syria supported 6 trainings where 180 health care workers (HCWs) of different cadres from the Ministry of Health CTCs were trained on standard case definition, infection prevention and control (IPC), health promotion, and case management.
- WHO GZT has supported the resumption of 8 cholera CTCs and is coordinating with partners to activate additional CTCs to scale up the cholera response in earthquake-affected areas.
- In NWS, repurposing of current Mobile Medical Teams to serve as oral rehydration points (ORPs) is ongoing, and additional CTCs are being installed.

Oral Cholera Vaccine (OCV)

- The OCV campaign in NWS began on March 7 and lasted 10 days, with 1.7 million doses of cholera vaccine administered to individuals over the age of one, particularly those living in areas most severely impacted by the earthquake and at the highest risk of cholera, including Sarmada, Maaret Tamsrin, Dana, and Atmeh districts in Idleb countryside, and A'zaz districts in northern Aleppo countryside.
- The targeted administration of OCV in Harem, Afrin, and Salqin has been successfully completed (Feb 19-Mar 06), with 8,679 doses administered to populations sheltered at the Reception Centers.

Water Sanitation and Hygiene (WASH)

WASH Rapid Response

- Rapid response in NES is no longer taking place due to a lack of timely data and funding.
- HLG partners are utilizing the case-area targeted intervention (CATI) approach to respond to cases, most significantly in Al Bab Sub District where cases have recently increased sharply.

Access to Safe Water

Safe water and NFI provision

- Through UNICEF partner AAH, 25 new tanks of 5 m³ are currently being installed in different parts of the southern neighborhoods of Al-Hasakeh providing additional quantities in areas with little storage capacity.
- In Al-Hassakeh, AAH team continues with disinfection with chlorine and light maintenance to the 365 already installed tanks.
- Between the 1st and 13th of March through UNICEF support, Hama Water Authority received 60 tons of Sodium Hypochlorite for drinking water disinfection.
- UNICEF partner SFPa continues to conduct awareness sessions on cholera (including distribution of soaps for the promotion of hand hygiene) in Homs and Hama governorates.
- Water trucking is continued to be provided by partners to communities in the Northern and Eastern rural of Deir ez Zor, Rural Damascus, Hasakeh City, and IDP camps.
- HLG partners are improving chlorination in water stations, and trucked water through investment in dosing pumps, chlorine, and training in the use and monitoring of free residual chlorine (FRC).
- HLG health and WASH have daily exchanges of case rates to facilitate the CATI approach.
- NGOs in NES have provided quick-fix support to 61 WS stations along the Euphrates river to enable the water disinfection process.

Water Quality Monitoring

- WHO SYRIA supported water quality surveillance and monitoring teams conducted testing in 39 earthquake shelters in Aleppo and Hama of which 16% were found to be contaminated by bacteria. In response, WHO distributed 1650 aqua tablets were to the affected population. Water quality monitoring (and implementation of corrective measures based on findings) continues in the other areas (e.g. Al-Hasakeh, Ar-Raqqa, Deir Ez-Zor, Rural Damascus, Hama etc.).

- In coordination with the Water Establishment in Latakia, Homs/Hama, and Aleppo regular water quality monitoring is carried out.

Sanitation

- The sanitation network is a major need for reconstruction/rehabilitation which is the leading cause of continued AWD and Cholera cases.
- HLG WASH partners are reviewing critical sanitation issues focusing on where sewage networks and septic systems have a significant impact on the environment and putting communities at risk.

WASH in Institutions

- UNICEF continues to provide safe water by tankers to 83 at-risk schools in 12 communities in both Northern and Eastern rural Deir Ez-Zor. 39,663 students are benefiting from this service, as 150,000 liters of water are being trucked with an estimated share of 4-5 liters per student per day.
- In Rural Damascus, UNICEF continues providing a daily quantity of 300 m³ through water trucking to 47 schools and communities in Haran Al-Awameed and Nashabiyeh sub-districts in East Ghouta. More than 60,000 people and students are benefiting through this intervention.
- HLG health cluster is conducting a survey of the WASH status of Health Care Facilities (HCFs) post-earthquake that will simultaneously serve to assess cholera preparedness within HCFs.

Risk Communication and Community Engagement (RCCE)

- In Aleppo Governorate, 40 community health workers were trained on cholera-related messaging by AAH (HCT partner), and to be responsible for risk communication and community engagement. These community health workers distributed 1,800 cholera hygiene kits together with RCCE. An additional 26 community health workers will be trained in Aleppo and will be responsible for distributing 650 cholera hygiene kits together with RCCE. (joint intervention between WASH & RCCE)
- In Al-Hasakeh, 81 community health workers were trained on cholera messaging by AAH to carry out the RCCE activities, and 2,100 cholera hygiene kits were distributed. (joint intervention between WASH & RCCE).
- Two community awareness training have been conducted by WHO in Damascus where 70 HCWs have been trained on their role in cholera preparedness and response.
- WHO supported the distribution of 136,750 brochures, posters, and IEC materials on cholera in Aleppo and Rural Damascus.
- HCT partners have visited 46 schools and carried out hygiene promotion activities.
- In Homs, UNICEF's partner GOPA continues to conduct awareness sessions about cholera in Homs and Hama governorates. During the reporting period, they communicated with a total of 662 individuals.
- In Tartous and Latakia, UNICEF continues to deliver water disinfectant materials to the water establishments in the coastal area.

Logistics, Equipment, and Supplies

- WHO SYRIA distributed 41 cholera kits to all governorates, with a main focus in earthquake-affected areas. Additionally, WHO Syria has supplied 6000 RDTs to the MoH to distribute to affected areas.
- Cholera treatment kits received pre-earthquake, and have been successfully positioned in NWS by WHO GZT. 5000 RDTs have been positioned and will be distributed to CTCs/CTUs and RRTs.

Challenges / Gaps

- The earthquake had a devastating impact on overall cholera response operations. In earthquake affected areas, water networks have been disrupted, displaced populations live in overcrowded conditions with poor WASH services, this has increased risk.
- The lack of cases in HCT response areas (decreased cases) has resulted in reduced interest regarding preparedness and response efforts.
- Despite re-programming by Health and WASH partners, lack of funding continues to pose an imminent risk of cholera response discontinuation; some projects have already ended, and other available limited funds will be depleted in a few weeks. Lack of funding for sewer networks will continue to pose risks, including rehabilitation, maintenance, covering open sewage lines, and establishing new sewage treatment plants.
- In NES, three of the four current WASH partners active in the response are stopping or significantly reducing their response by the end of March.
- Difficulty accessing some camps, particularly those built on agricultural lands where roads become impassable when it rains.
- The disruption of the Alouk water station for 7 months has deprived Al-Hasakeh city and surrounding communities of their only reliable source of drinking water. While we are still nearing the end of the winter season, the small aquifer being abstracted for trucking is showing early signs of depletion, implying that the situation will rapidly deteriorate with the coming summer season.
- The extremely low water level on the Euphrates River and its linked dams drastically reduces the power supply, and drinking water stations that are not connected to the service line operate only infrequently. Low levels result in operational challenges for operators (need to clean, and excavate around the intake pipe) and degrade raw water quality (increased concentration of pollutants), affecting the treatment/disinfection process. All of these unfavorable conditions contribute to AWD and cholera outbreaks.

Key Priorities

- Urgent advocacy for funding to support the implementation of the cholera response plan, including support for installing solar energy systems to secure energy for the operation of water pumping stations and improve water and sanitation systems in schools.
- Enhance and scale up a surveillance system and lab capacities to all affected areas to ensure timely reporting, detection, and response.
- Expand cholera Health and WASH response into emergency shelters and earthquake-affected rural communities.
- Identify and address WASH issues within schools.

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- Intensify behavior change/risk communication and community engagement actions.
- Maximise rehabilitation of sanitation systems as much as is financially feasible.

Funding

- An estimated total of USD 55,490,944 million is required under the AWD/Cholera Response Plan for the coming six months (Jan – June 2023).

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