

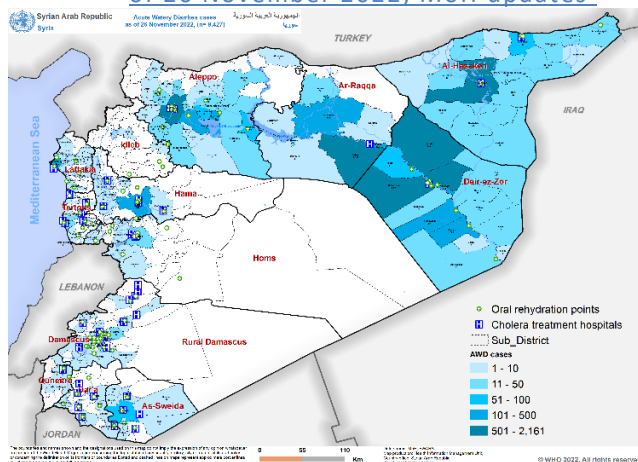


Total AWD cases	Total positive cholera cases / RDTs	Total confirmed cholera cases / Culture	Total AWD Deaths	Case Fatality Rate	Attack Rate
9,427	1,724	94	49	0.52	0.04
New cases W47	New positive RDTs	New confirmed culture	New deaths	% change in AWD cases with the previous week	New affected sub-districts
348	73	9	0	↓-27.8 %	3

Background and Situation Overview

- The first case was detected on 22 August 2022 in Aleppo and confirmed on 25 August 2022.
- On 10 September 2022, the Syrian Ministry of Health declared 15 cholera laboratory-confirmed cases in Aleppo governorate and one death.
- By the end of August, AWD was extended to other governorates; Ar-Raqqa, and Deir-ez-Zor. Later in September, AWD cases were reported from new governorates in Hassakeh, Lattakia, Damascus, Hama, Homs, and Rural Damascus. on 22 October 2022 cholera confirmed cases were reported by MoH in 13 governorates.

Figure 1: Map Distribution of AWD in Syria as of 26 November 2022, MoH updates



- As of 26 November 2022, a total of 9,427 AWD cases associated with 49 deaths (CFR=0.52) were reported by MoH and EWARS teams in 14 governorates, of which MoH reported 6,249 AWD cases and confirmed

1,529 cholera cases, while EWARS teams in NES reported 3,178 AWD cases; of which 195 were confirmed by the RDTs in Deir-ez-Zor, Ar-Raqqa, and Hassakeh.

- In week 47 AWD cases decreased by 27.8% compared to the previous week, and cases were reported from three new sub-districts namely; (Hasyaa) Homs, (Kansaba, Al-Haffa) Lattakia, (Quneitra) Quneitra.

MoH Standard Case Definitions

Acute watery diarrhoea

- Acute watery diarrhoea is an illness characterized by three or more loose or watery (non-bloody) stools within 24 hours.

Suspected cholera case

- In areas where a cholera outbreak has not yet been declared, any person aged 2 years or older presenting acute watery diarrhoea and severe dehydration or dying from acute watery diarrhoea.
- In areas where a cholera outbreak has been declared, any person presenting or dying from acute watery diarrhoea.

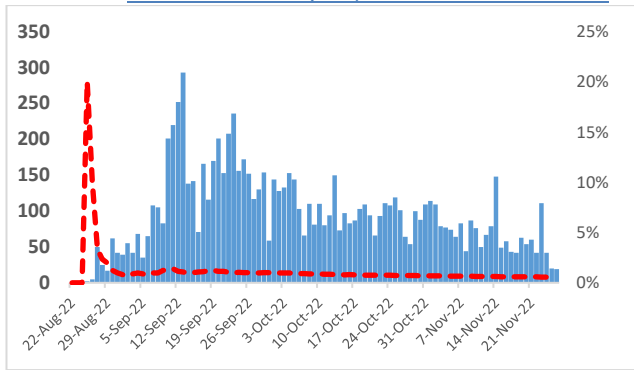
Confirmed cholera case

- A suspected case with *Vibrio Cholerae* O1 or O139, confirmed by culture or PCR.

Description of the outbreak

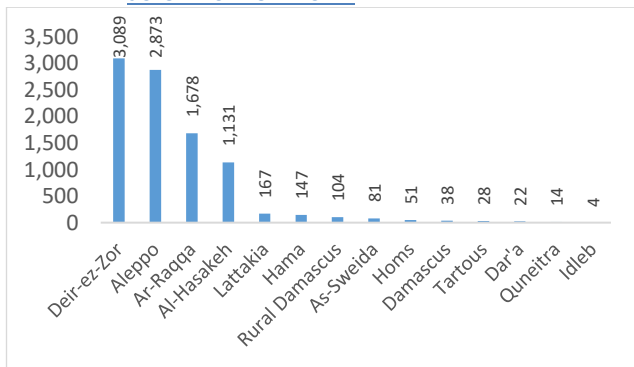
- AWD cases are still reported in (14 governorates). **Figure 2** shows the surge of AWD cases since 25 August 2022.

Figure 2: Epidemic curve of Acute watery Diarrhoea in Syria, as of 26 Nov 2022



- In week 47, the number of reported AWD cases (348) decreased by 27.8% compared to cases reported in the previous week (482 in week 46). Despite this decline in weekly cases, delays in reporting and data entry should be considered when interpreting this decline. Most of the cases reported by MoH were for patients admitted to hospitals with moderate and severe dehydration, while reporting of mild and moderate cases is still limited to a few health centres.
- As of 26 November 2022, a total of 9,427 acute watery diarrhoea cases, including 49 associated deaths (CFR=0.52) were reported, while no new deaths were reported this week.
- A total of 1,724 reported AWD cases tested positive by RDTs, of which 439 were tested by culture and the result was positive for 94 cases (positivity rate 21.4%).
- All 14 governorates in Syria reported AWD cases and cholera was confirmed in 13 of them distributed in Deir ez-Zor (3,058 cases, 32.4%), Aleppo (2,885 cases, 30.5%), Ar-Raqqa (1,674 cases, 17.7%), Al-Hassakeh (1,151 cases, 12.2%), Lattakia (168 cases, 1.8%), Hama (144 cases, 1.5%), Damascus (99 cases, 1.1%), As-Sweida (83 cases, 0.9%), Rural Damascus (53 cases, 0.6%), Homs (51 cases, 0.5%), Tartous (28 cases, 0.3%), Dara'a (18 cases, 0.2%), Qunitera (18 cases, 0.2%) respectively please see (Figure 3).

Figure 3: Distribution of AWD by governorate as of 26 Nov 2022

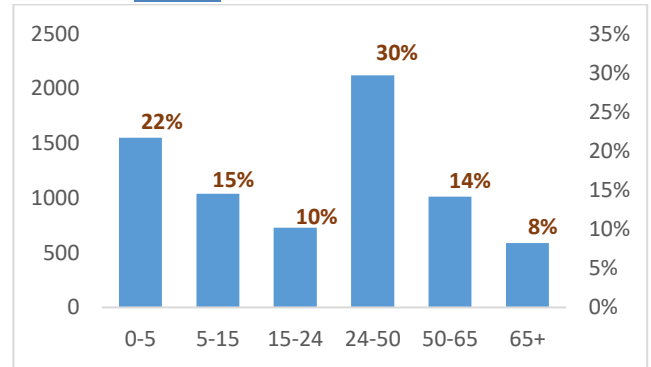


- 113 cases of AWD were detected in 12 IDP camps and

settlements, of which only 5 tested positive by the RDT: 2 in Serykanie camp, 1 in Areesha in Hassakeh governorate, and 2 cases in Al-Nirab camp in Aleppo. There is one attributed death to AWD in Serykanie camp in NES this week (under investigation)

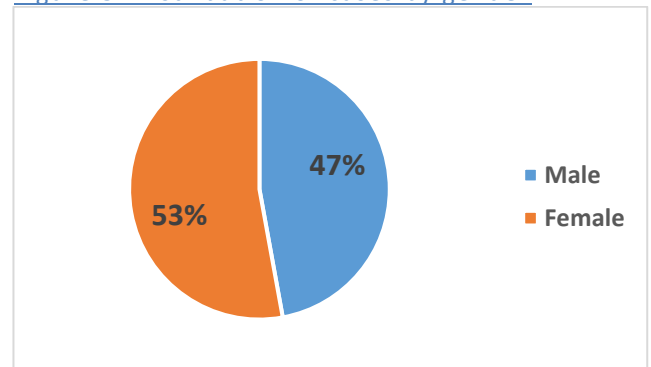
- **Distribution of cases by age groups** AWD cases range from 1 to 98 years (median 14), 65% of all cases are among adults, while 35% of cases are children under 15 years. The predominant age group is 24-50 (30% of the total number of AWD cases; n=2,120) **Figure 4.**

Figure 4: Distribution of AWD cases by age groups



The AWD cases among females are higher than among males (53%, 47%), **Figure 5.**

Figure 5: Distribution of cases by gender



- Forty-nine associated deaths were reported (40 from Aleppo, 4 from Hassakeh, 2 from Deir-ez-Zor, 1 from Hama, 1 from Homs, and 1 from Damascus). The majority of deaths are over 30 years (CFR 0.51%). Aleppo reported the highest (CFR of 1.38%) which is considered high compared to the recommended CFR during cholera outbreaks (below 1%). This might be explained as MOH reports only severe cases that are admitted to the hospitals. Despite the high attack rate in Aleppo, it is worth mentioning that the CFR of Aleppo declined in November compared with CFR in October. This could be explained by improvement in health professionals' adherence to the treatment protocol, in addition to patients' awareness to seek health care quickly once they develop moderate symptoms.

Laboratory confirmation

- Currently, there are 5 functional laboratories in 5 governorates; 2 labs (in Damascus and Hama) have the full capacity for the final confirmation of cholera testing and 3 labs (in Tartous, Latakia, and Homs) have the capacity for culture test only and they send the

positive samples to the Central Public Health Lab (CPHL) to be confirmed by the antiserum antibodies.

- Out of 439 samples tested, 94 were confirmed by culture tests at CPHL premises; the positivity rate is 21.4%

Acute watery diarrhoea cases and deaths, confirmed cholera cases by RDTs and culture

Governorate	AWD	RDTs	RDT +	culture +	deaths	Source of reporting
Aleppo	2,885	1,350	933	29	40	MoH
Deir-ez-Zor	783	385	228	6	2	MoH
Ar-Raqqa	1,442	255	54	0	0	MoH
Hassakeh	477	473	88	0	4	MoH
Lattakia	168	146	89	9	0	MoH
Damascus	99	95	20	10	1	MoH
Homs	51	50	25	18	1	MoH
Rural Damascus	53	53	15	3	0	MoH
Dara'a	18	18	5	0	0	MoH
Hama	144	144	33	15	1	MoH
Quneitra	18	18	3	0	0	MoH
Tartous	28	28	10	2	0	MoH
As-Sweida	83	83	26	2	0	MoH
Total	6,249	3,098	1,529	94	49	MoH
EWARS results						
Deir-ez-Zor	2,275	294	171	0	0	EWARS Sites in NES
Hassakeh	674	34	18	0	0	EWARS Sites in NES
Ar-Raqqa	229	14	6	0	0	EWARS Sites in NES
Total	3,178	342	195	0	0	EWARS Sites in NES
Total AWD						
Total	9,427	3,440	1,724	94	49	

WHO Response

WHO is working to respond to the outbreak by scaling up surveillance and testing capacity, training healthcare workers, and delivering IV fluids and ORS, in addition to adopting a multisectoral approach to control the outbreak.

Pillar 1: Coordination and Leadership

- Weekly inter-agency (WHO, UNICEF) AWD/Cholera Task Force meetings took place.
- Daily Coordination meetings held with Hubs
- Daily coordination meetings with DOH CDs team, investigation teams and rapid response teams in Latakia
- Updated and shared the multi-sectorial response plan for CHOLERA/AWDs outbreak in Lattakia
- Conducted coordination meeting with Tartous DOH to review the epidemiological situation there.
- Convened meetings with UNICEF every 2 days for the planning of OCV campaign
- Initiated plans on Cholera contingency stocks for NES and Aleppo
- In response to escalating tensions in northern Syria, contingency plans for OCV implementation and movement of IDPs were developed

- Shared integrated AWD/Cholera case distribution (3 sources) at the community level
- Attended OCV TOT in Damascus on 28 & 29 Nov 2022
- Shared guidance on the application of OCV in Pregnancy with MOH
- Press release OCV in Syria developed and shared

Pillar 2: Disease Surveillance

- For the assessment of the Rapid Response Teams (RRTs) capacity and operations conducted initially in 10 governorates, data are currently being entered to enable analysis and feedback.
- Supported the operational costs of 101 RRTs at central and governorate levels (transportation, sample shipping, and communications).
- Supported transporting the samples collected from patients, and different sources of water (drinking water, tanks, and sewage) to the reference lab in Damascus.
- Data analysis of AWD cases at the community level is updated weekly to direct the response teams based on the identified risk: any locality with AR > 0.5% is to be considered a priority for intervention, especially with WASH and RCCE.
- Supported RRTs in 14 governorates with 800 cholera Rapid Diagnostic Tests. Additional 4 500 tests are now

in the process of shipping.

Pillar 3: Laboratory Diagnostics

- The fourth batch of training on cholera diagnostic protocols is ongoing at the CPHL for eight technicians from Lattakia (2), Tartous (4), and As-Sweida (2).

Pillar 4: Case management

- To date, 94 training courses were conducted in 14 governorates as follows: Al-Hassakeh (8 training sessions), Ar-Raqqa (5), Homs (5), Hama (7), As-Sweida (7), Dara'a (8), Quneitra (7), Damascus (8), Rural Damascus (8), Aleppo (6), Idleb (2), Lattakia (7), Deir-ez-Zor (8) and Tartous (8). Over 2 350 health professionals working in public and private health facilities were trained on cholera standard case definition, case management, and IPC.

Pillar 5: OCV

- On 29 Nov 2022, 2 million doses of the Oral Cholera Vaccine (OCV) were received in Syria. The MOH planned the campaign to take place in 32 sub-districts located in 10 districts in 4 governorates. The target areas are according to the below criteria: Attack rate, accessibility, presence of high-risk population (refugees/IDPs camp setting, informal settlements), and lack of or decreased WASH interventions. Additionally, population movements and the risk of disease spread to other communities, governorates, and countries were considered.
- The OCV campaign is planned during the period 4-15 Dec 2022 using a house-to-house strategy. Approximately 2,270 health workers, supervisors, and communication officers will be deployed to 63 PHC centres and 685 mobile teams in the selected districts.
- Vaccination cards, reporting forms and guidelines are being printed in Qamishli and Damascus to allow easy distribution of those materials.

Pillar 6: Water Sanitation and Hygiene (WASH)

Aleppo

- During this week, 186 samples were tested as follows: 92 reservoirs of which 36 were contaminated, and 44 jerrycan samples were tested 28 of which were bacteriologically contaminated, and out of 32 wells, all were contaminated.
- Issues were identified in Al- Bayyadah, Al-Farafrah, Al-Jazmaty, Al-Katergy in the City of Aleppo and Wadha, Al-Hayet in Maskana/ Eastern rural, Hazazah villages in Dair Hafer / Eastern rural in Eastern rural of Aleppo. Subsequently, 4,590 chlorine tablets were distributed for purification and advice was given to the residents about the need to clean and disinfect reservoirs and jerry cans and renew water regularly.

Al-Hassakeh and NES

- 2,152 samples were tested for drinking quality. The samples this week covered 38 water pumping stations to northeast Deir-ez-Zor, 11 camps and 40 IDP communities in Ar-Raqqa, Deir-ez-Zor, and Aleppo.
- 49 (2.28%) samples turned out to be contaminated, contamination is still noticed at the jerrycan level.

Deir-ez-Zor

- An ongoing awareness-raising campaign, including the distribution of aqua tablets, to affected populations in high-risk areas. 4,435 HHs reached through door-to-door visits and 47,460 aqua tablets were distributed during the reporting period.

Rural Damascus

- During this week, 17 samples were tested as follows: 4 wells, all of which were contaminated; 6 tanks and 5 reservoirs were all contaminated; 1 of 2 water networks (tap water) was contaminated. Related authorities were informed to act regarding the network in the identified areas.

Pillar 7: RCCE

- Participated in 2 follow-up meetings with UNICEF to discuss the upcoming OCV campaign
- 540,000 flyers on cholera prevention as well as 6,400 posters on cholera case management were printed and distributed among health partners.
- A KAP survey was designed and finalized to assess the knowledge, attitudes and perceptions of community members after having disseminated cholera-related prevention measures.
- The Oral Cholera Vaccine (OCV) guidance has been prepared and will be printed and distributed CHWs.
- IEC material about OCV is being designed and will be printed and distributed within the community.

Challenges

- New security developments across northern Syria may change the dynamics of response if escalated, particularly the OCV campaign rollout.
- Limited access to some areas due to conflict and/or insecurity, including in camps.
- Limited funding to fulfil the cholera response plan, in particular WASH (WHO).
- A poor WASH situation is due to disabled water networks and high-priced safe water (availability, accessibility, and affordability); which led people to get drinking water directly from the Euphrates River in Deir-ez-Zor and Ar-Raqqa.
- A fragile health system affects health services and reporting quality.
- Delays in the reporting of daily cases lead to an unclear epidemiological picture and impact timely, localised response.