

Northwest of Syria Cholera Outbreak

Situation Report No.16

Epidemiological Week - 2 (8 Jan – 14 Jan 2023)

Suspected Cases: 37738

Confirmed Cases: 555

Cholera Deaths : 20

Case Fatality Rate: 0.05%

NWS Attack Rate: 0.82%

Date of Onset of Outbreak: 16 September 2022

Reporting Date of outbreak: 17 September 2022

Confirmation Date: 19 September 2022

Key Highlights

Cumulatively, a total of **37738 suspected** cases (**15134** in Aleppo governorate, **22604** in Idleb governorate) including **555 confirmed** have been reported by EWARN team since 16 September, including **20 deaths** case.

- The highest number of cases were reported in Harim district (11740) and Idleb district (6665) in Idleb governorate, then Jebel Saman district (3569), Azaz district (3551), and Jarablus district (3480) in Aleppo governorate.
- 6694 total suspected cases (including 417 new cases in Epi week 02 - 2023) were reported from camps.
- 44.5 % Of the suspected cases are in the age group <5 years. Males are 52% of the total and females are 48%.
- Since the outbreak started, surveillance and reporting from facilities are being supported and strengthened. For better understanding of the background and context, [please read pervious sitreps.](#)
- Line list is shared with WHO and WASH team to aid Targeted response at a household level being conducted for identified cases.
- Active case search is ongoing, especially in the camps.

Situation Updates

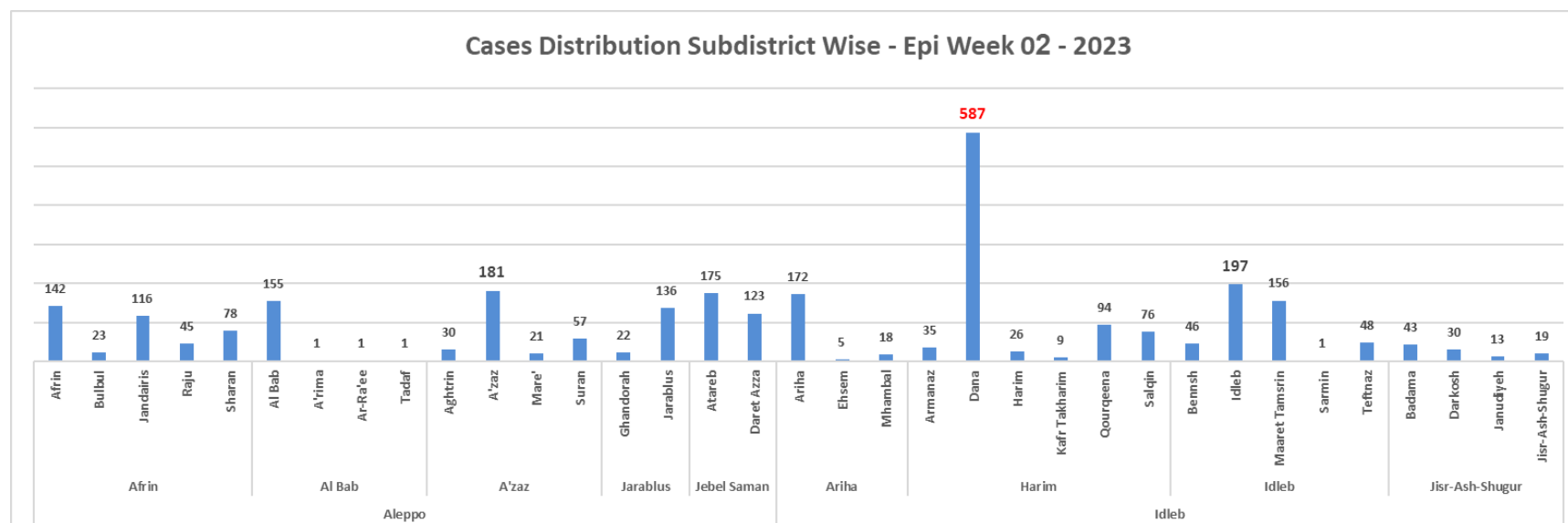
1. Epidemiology

Updated case definition: A resident of outbreak areas with sudden onset of acute watery diarrhea with or without vomiting.¹

In Epi week 02 - 2023, **2882 suspected cases of cholera were reported, including 3 positive cases**. The affected governorates are Aleppo (1307 suspected, 3 confirmed), and Idleb (1575 suspected, 0 confirmed).

The age group less than 5 reported 43.75 %, while the age group more than 60 reported 31.4 % of the total

Dana subdistrict in Idled governorate reported the highest number of cases (587), Idleb subdistrict (197), then Azaz subdistrict (181) in Aleppo governorate.



In epi week 02 - 2023, one new death was reported (a total of 20 deaths).

A seventeen-year-old male

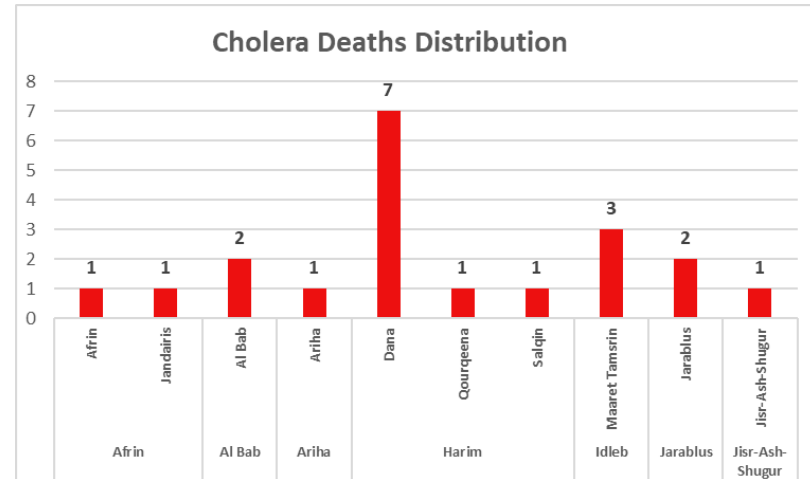
Jarablus city, Jarablus district, Aleppo governorate.

Date of onset: 10-Jan-2023

Date of death: 13-Jan-2023

A stool sample is negative for Vibrio Cholera

[for More Details about This Death Click Here](#)



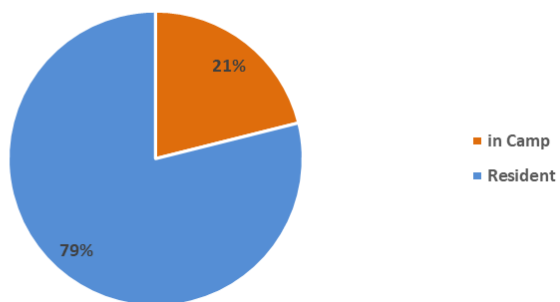
The overall sex distribution of the suspected cases is 52% Male, and 48% Female.

100% of the line listed cases were presented as Acute Diarrhea, 21% with vomiting, 5% as rice watery diarrhea, and 6% were dehydrated.

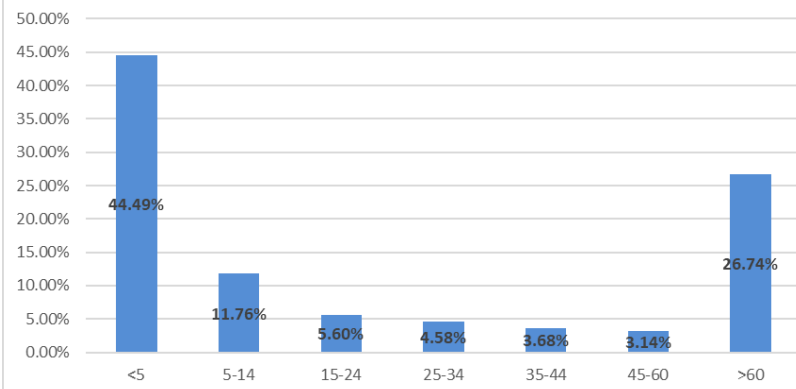
21% of the total cases live in camps.

As the outbreak progresses, sensitivity should be increased by including smaller age groups and mild/moderate symptom groups in order to estimate the burden of the outbreak. According to WHO, in areas where a cholera outbreak has been confirmed, any person presenting with or dying from acute watery diarrhea is considered a suspected cholera case.² The age group less than 5 years was 45.27%.

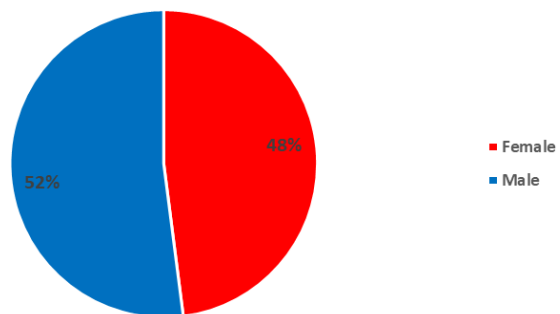
Cholera Cases Residency Distribution



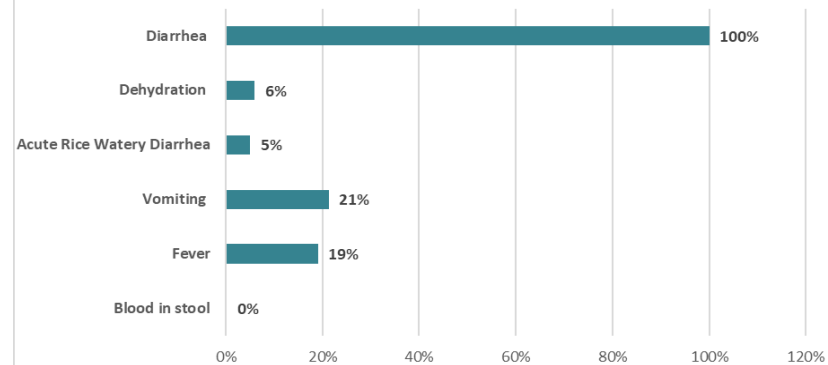
Age Group

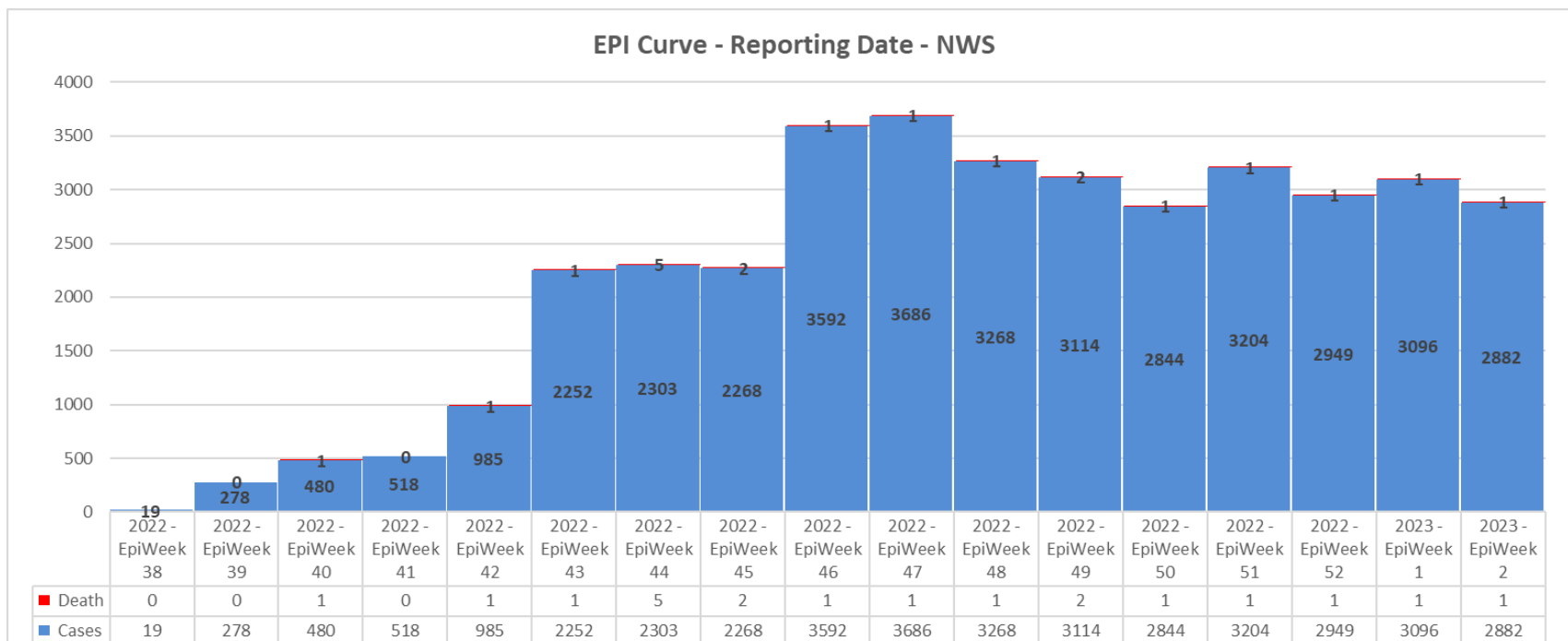


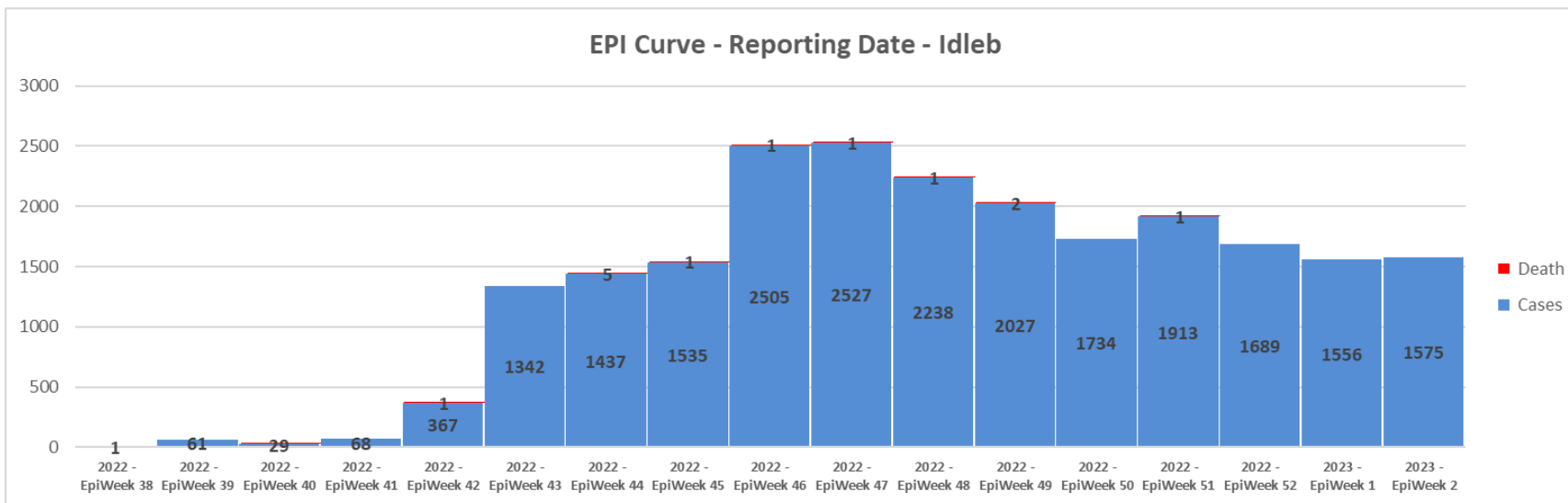
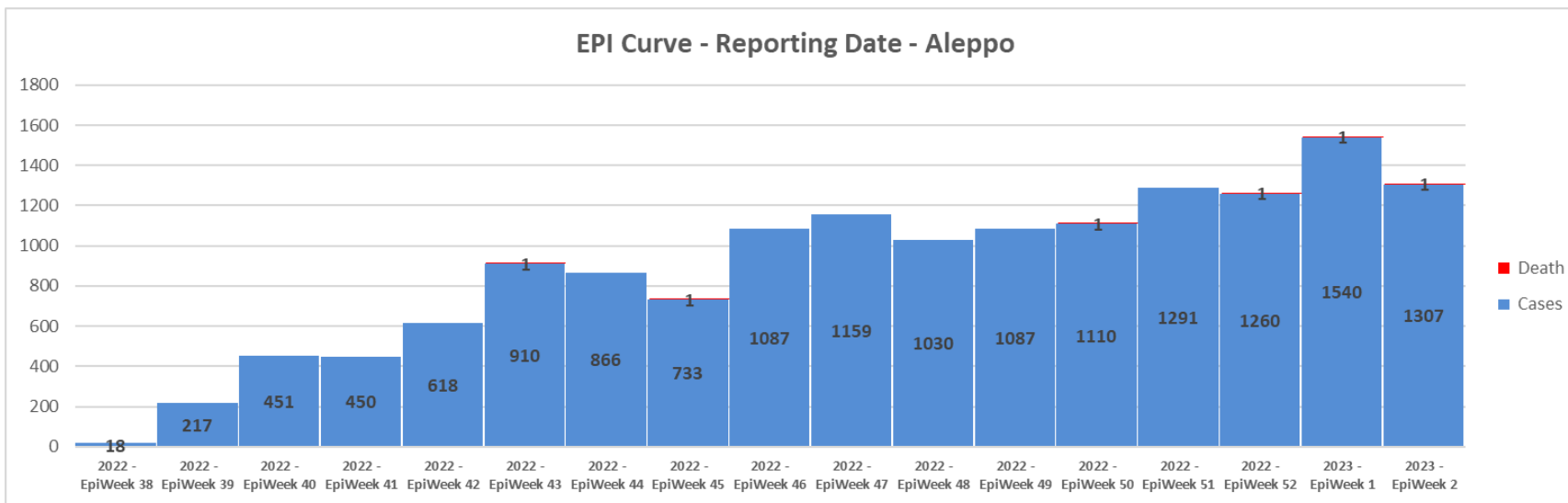
Sex

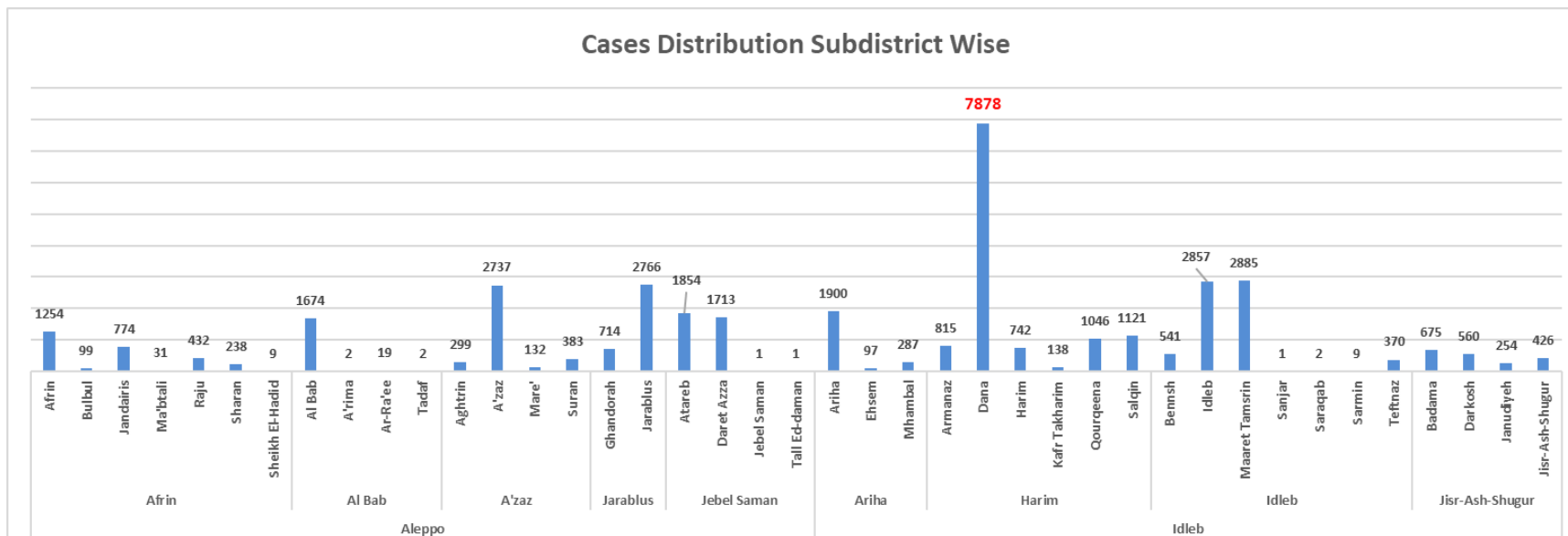


Signs and Symptoms

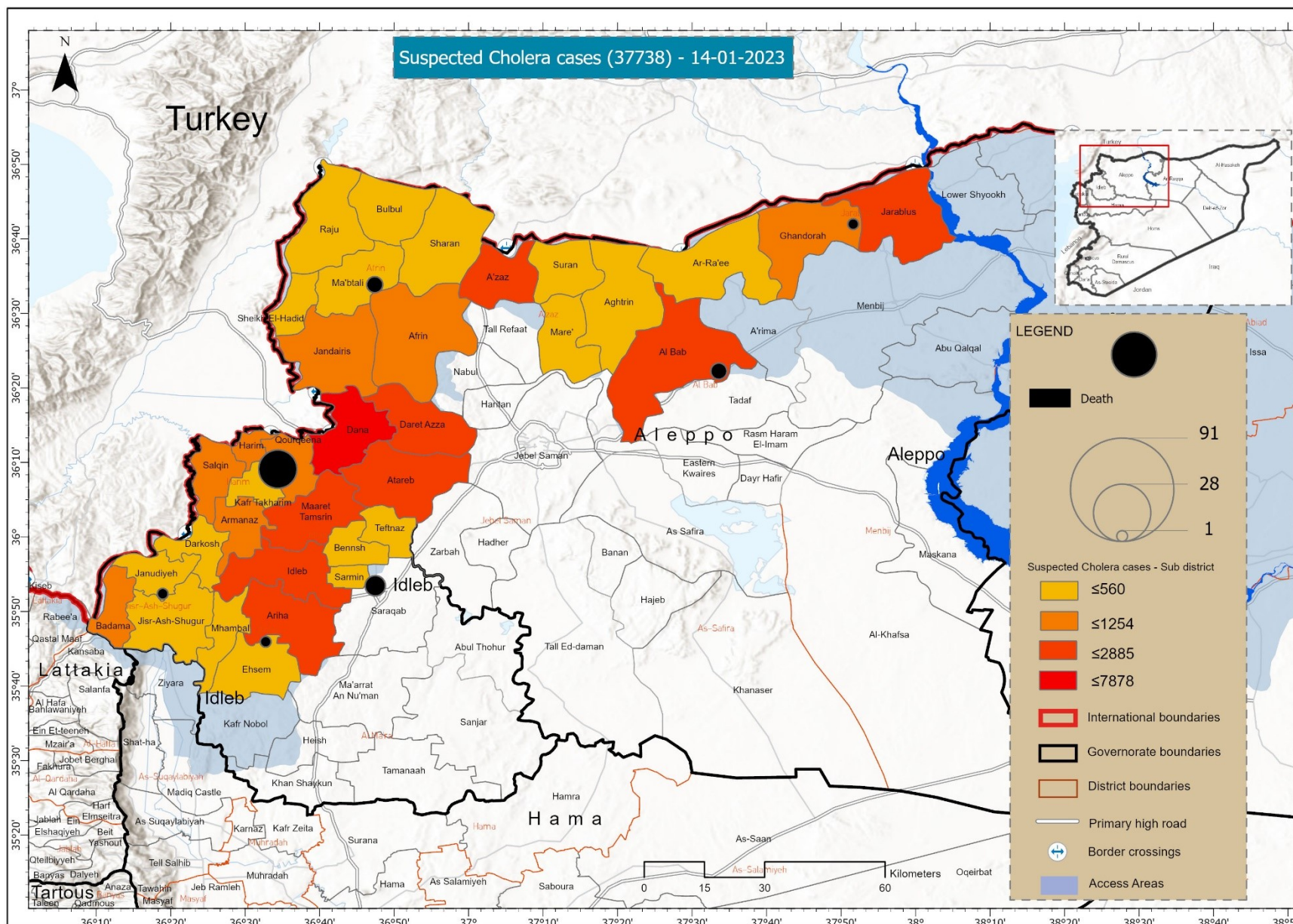






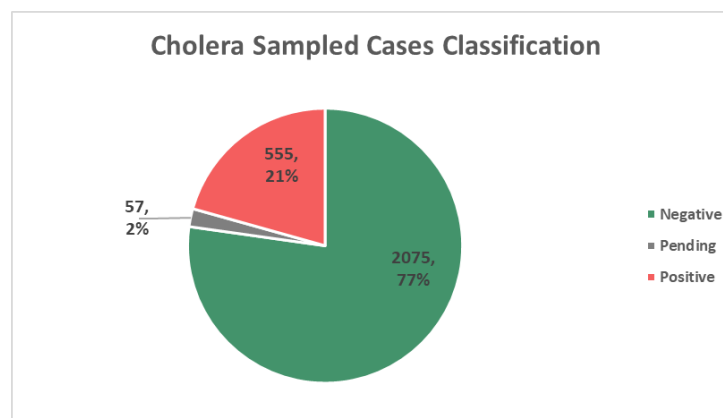
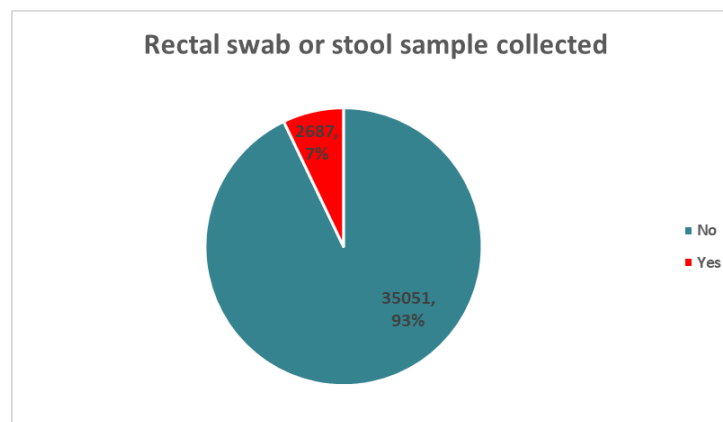


Epi Week	Governorate	District	Date of Onset	Population	New cases	Cumulative Cases	New Death	Cumulative Deaths	Case Fatality Rate	Incidence Rate	Attack Rate
Up to W02 - 2023	Idleb	Ariha	20-Sep	185,668	195	2284	0	1	0.04%	105.03	1.23%
		Harim	6-Sep	1,586,820	827	11740	0	9	0.08%	52.12	0.74%
		Idleb	14-Sep	713,933	448	6665	0	3	0.05%	62.75	0.93%
		Jisr-Ash-Shugur	25-Sep	310,973	105	1915	0	1	0.05%	33.76	0.62%
	Aleppo	A'zaz	9-Sep	648,600	271	3531	0	0	0.00%	41.78	0.54%
		Afrin	21-Sep	467,090	404	2837	0	2	0.07%	86.49	0.61%
		Al Bab	17-Sep	339,812	177	1718	1	2	0.12%	52.09	0.51%
		Jarablus	12-Sep	121,938	157	3479	1	1	0.03%	128.75	2.85%
	Jebel Saman	10-Sep	251,785	298	3569	0	0	0.00%	118.35	1.42%	
	Total				4,626,619	2882	37738	2	20	0.05%	62.29

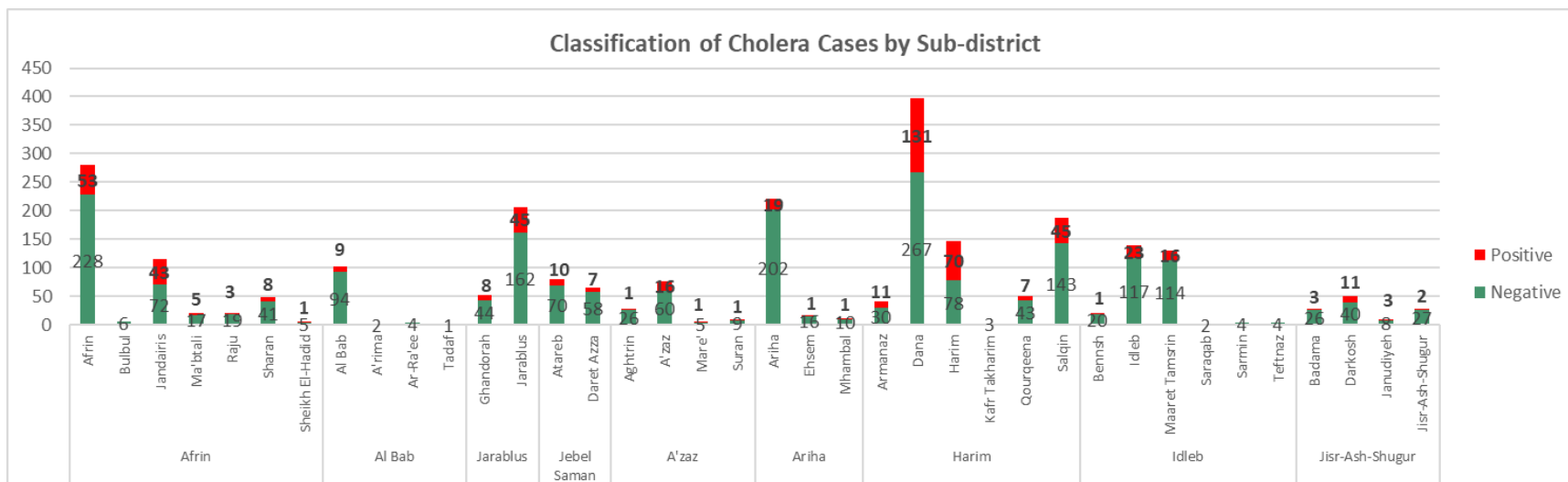


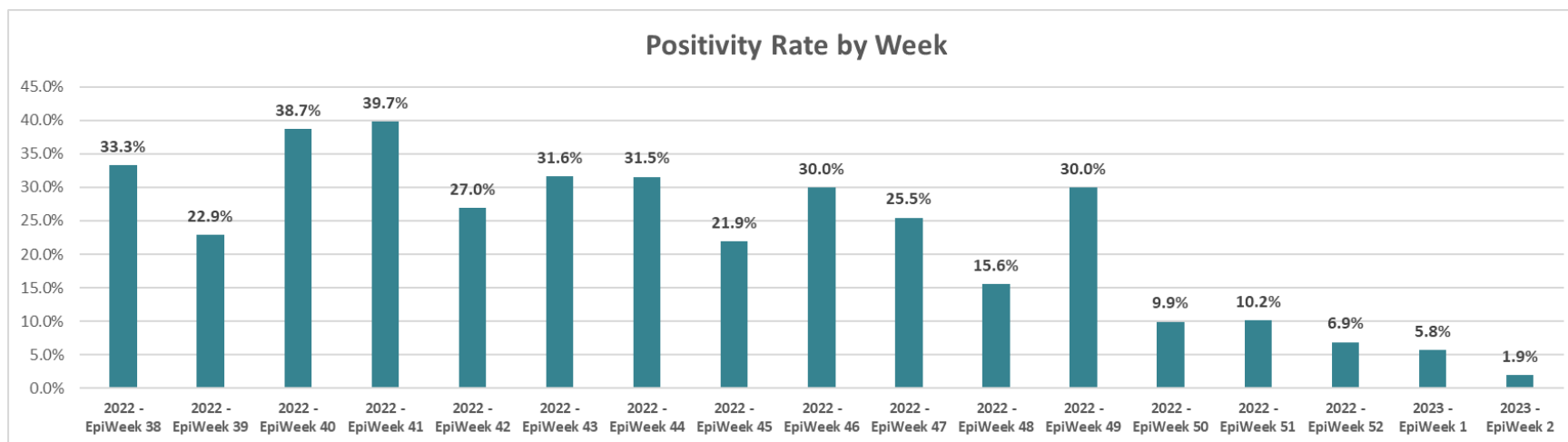
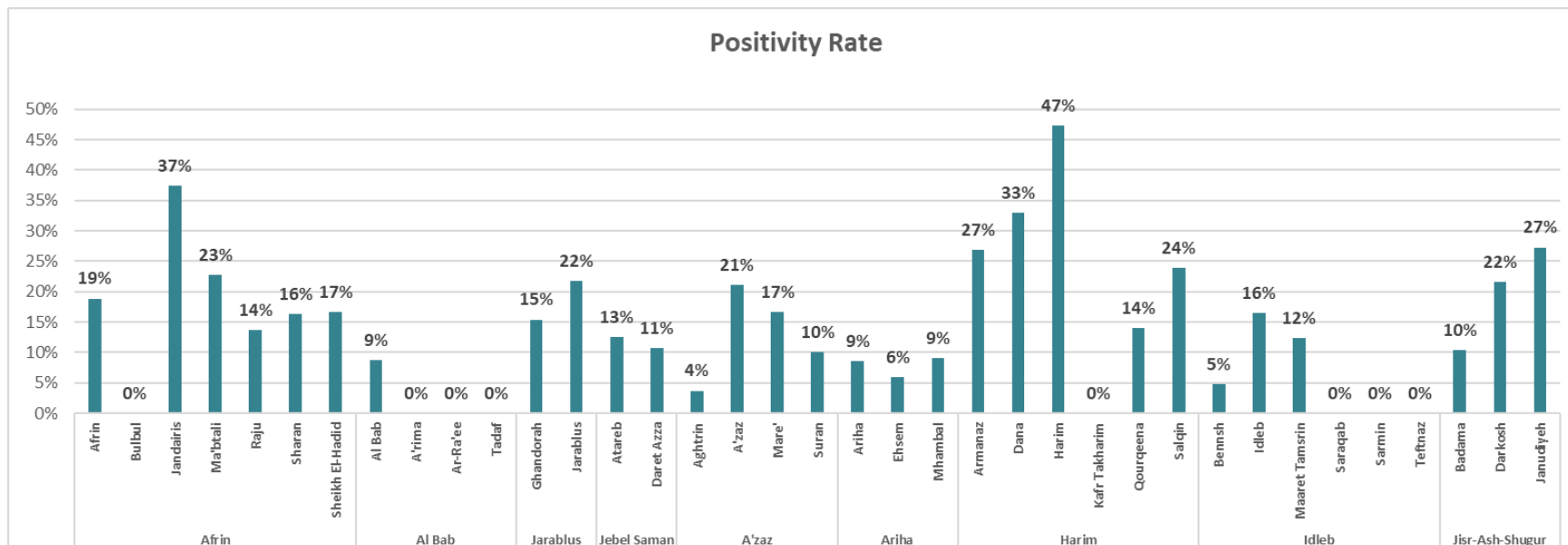
aboratory:

- In Epi week 02 - 2023, the total number of stool specimens or rectal swabs is 162, of which 3 have tested positive for Vibrio Cholera.
- A cumulative of 2687 samples were collected since the start of the outbreak (7 % of overall line listed cases), of which 555 have tested positive by stool culture. The positivity rate in NWS is 21 %.
- The Total number of negative cases by stool culture is 2075, and the remaining 57 are still pending.
- Diagnostic delays may result in higher case numbers and case fatality rates, without quick and effective diagnosis and treatment, case fatality maybe 50%.
- Isolation and identification of V. cholerae serogroup O1 or O139 by a culture of a stool specimen remain the gold standard for laboratory diagnosis.
- Currently, at EWARN laboratories (Idleb, Afrin, Jarablus, Raqqa, and Tal-Abiad) Fecal specimens are subcultured onto selective and nonselective media, including Nutrient agar and TCBS agar, for detection of V. cholerae O1.
- Suspicious, oxidase-positive isolates are serotyped in polyvalent antisera raised against the O1 Antigen.
- Antimicrobial-susceptibility testing is performed to detect resistance
- The culture sensitivity results came sensitive for the following antibiotics: Azithromycin, Imipenem, Chloramphenicol, Ciprofloxacin, and Norfloxacin.
- The resistance is to Tetracycline, Doxycycline, and Sulfamethoxazole Trimethoprim.
- The laboratory team handles the specimens and waste management according to infection control standards.
- The samples collection protocol is 5-10 stool samples per subdistrict, and 5 samples from the admitted cholera suspected cases in the CTC /CTU per week.



Epi Week	Governorate	District	Samples Collected on current week	Stool Culture Positive	Stool Culture Negative	Positivity Rate
Up to W02 - 2023	Idleb	Ariha	17	21	226	9%
		Harim	25	264	564	32%
		Idleb	18	40	261	13%
		Jisr-Ash-Shugur	1	19	101	16%
	Aleppo	Al Bab	19	9	102	8%
		Jarablus	15	53	206	20%
		Jebel Saman	22	17	128	12%
		A'zaz	16	19	99	16%
		Afrin	22	113	388	23%
	Total		155	555	2075	21%





2. WASH:

The WASH team works closely and in high coordination with RRT (Rapid Response Team), formed from EWARN staff.

The team, after receiving any alert, focuses on the investigation of WASH services in the hotspot areas.

The investigation includes:

1. Taking samples from drinking water resources (main stations, wells, water trucks, water taps.... etc.).
2. Investigate sewage networks and septic tanks' locations and other sanitation services.
3. Identify Hygienic practices.... etc.
4. Assessing agriculture markets (Identify irrigation water and resource of agricultural products if applicable).

Total number of investigations: 1, distributed as follows:

Sharan Sub-district / Deir Siwan Community: the community is being supplied with water through private wells located inside the houses in addition to public wells located near the community—water trucking. There was a plan to set up a water station and the preparation works started, but due to contamination of water resources feeding this station, which is a public well dug previously, the plan was canceled.

A full WASH investigation took place, covering taking samples from different points, as follows:

1. Medical center supported by Qatar Charity (water stations); the result showed that water is safe to drink, where the water resource is a private well.
2. Deir Siwan's school; the result showed that water—private well—is safe to drink and not contaminated.
3. The mosque: there are a well and a tank; the water of the tank is not safe to drink physically (where the turbidity is high). Also, the well is contaminated and not safe to drink.
4. Private wells: 5 private and public wells were investigated.
 - Al hayani well (public well) is contaminated biologically.
 - Abu Firas (public well) is safe to drink. (Used by organizations to feed the camps).
 - Abu Bilal (public well) is safe to drink.

- Private well 1 isn't safe to drink physically.
- Private well 2 is safe to drink.

There is no water network connected to the community and the sewer network is old and open and the wastewater flows to valley (with no controlling).

Actions taken

- The Assistance Coordination Unit is currently conducting health awareness sessions about cholera, methods of infection, and its prevention through the Zoom application (online), as it is scheduled to complete 40 sessions during the current month (so far 38 sessions have been implemented). The total number of attendees reached 340 in 16 communities.
- The EWARN team is currently conducting active surveillance in the most important health facilities in northwest Syria (25 HFs). In Epi week 2- 2023, 24 field visits were completed. During the visit, the team reviews with the health facility staff the records to ensure the reported cases, also discusses the challenges, and recommendations, and collaborates to treat the problems.
- The EWARN team is preparing to receive 1000 cholera RDTs by WHO, and the distribution plan in the field was completed in collaboration with SAMS.
- The response teams conducted an expanded investigation of the deaths that occurred since the beginning of the outbreak (20 deaths), where some possible causes were identified, and the teams made appropriate recommendations.
- Strengthening surveillance to collect cases from all HFs.
- ACU teams conduct regular awareness sessions about Cholera, prevention, and control measures for local authorities and affected people during the investigation. Besides, the result of investigations is shared with the WASH cluster and acting organization in the area to take immediate action.

Challenges

- Continuing movements of population.
- Supplies of laboratory reagents and consumables are not enough for reliable testing services.

- The number of WASH officers is low and needs to be increased, particularly in Harim district, where the number of cases surges, and the number of camps and population is higher than in other locations.

Recommendations

- enhance reporting from functioning treatment centers (CTCs, CTUs, and ORPs).
- Support the laboratory with more consumables and supplies, especially for O139 and O1 Antisera.
- Enhancement coordination mechanisms with WHO and Taskforce members.
- Strengthening the community's role in reporting cases
- Enhancing the potential sources of Cholera death reporting.
- Increase efforts to educate the population about cholera and encourage them to go to medical centers to receive medical services
- Emphasis on health centers to immediately notify any suspected case of cholera
- Training CTC and CTU personnel to prepare the different types of chlorine solutions and where to use them properly. Moreover, providing them with a pool tester to measure the FRC of the water supplied to these centers.
- Provide the cholera treatment center with free resident chlorine (FRC) testers.
- Periodic testing of drinking water in schools, with the implementation of general hygiene campaigns