

Northwest of Syria Cholera Outbreak

Situation Report No.48

Epidemiological Week - 35 (27 Aug – 2 Sep 2023)

Date of Onset of Outbreak: 16 September 2022

Reporting Date of outbreak: 17 September 2022

Confirmation Date: 19 September 2022

Suspected Cases: 136127

Confirmed Cases: 1001

Cholera Deaths : 24

Case Fatality Rate: 0.02%

NWS Attack Rate: 2.94%

Key Highlights

Cumulatively, a total of **136127 suspected** cases (**60172** in Aleppo governorate, **75955** in Idleb governorate) including **1001 confirmed** have been reported by EWARN team since 16 September, including **24 deaths** case.

- The highest number of cases were reported in Harim district (37466) and Idleb district (26661) in Idleb governorate, then Azaz district (16676), Jebel Saman district (13242) in Aleppo governorate.
- 25707 total suspected cases (including 760 new cases in Epi week 35 - 2023) were reported from camps.
- 56.57 % Of the suspected cases are in the age group <5 years. Males are 51% of the total and females are 49%.
- 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

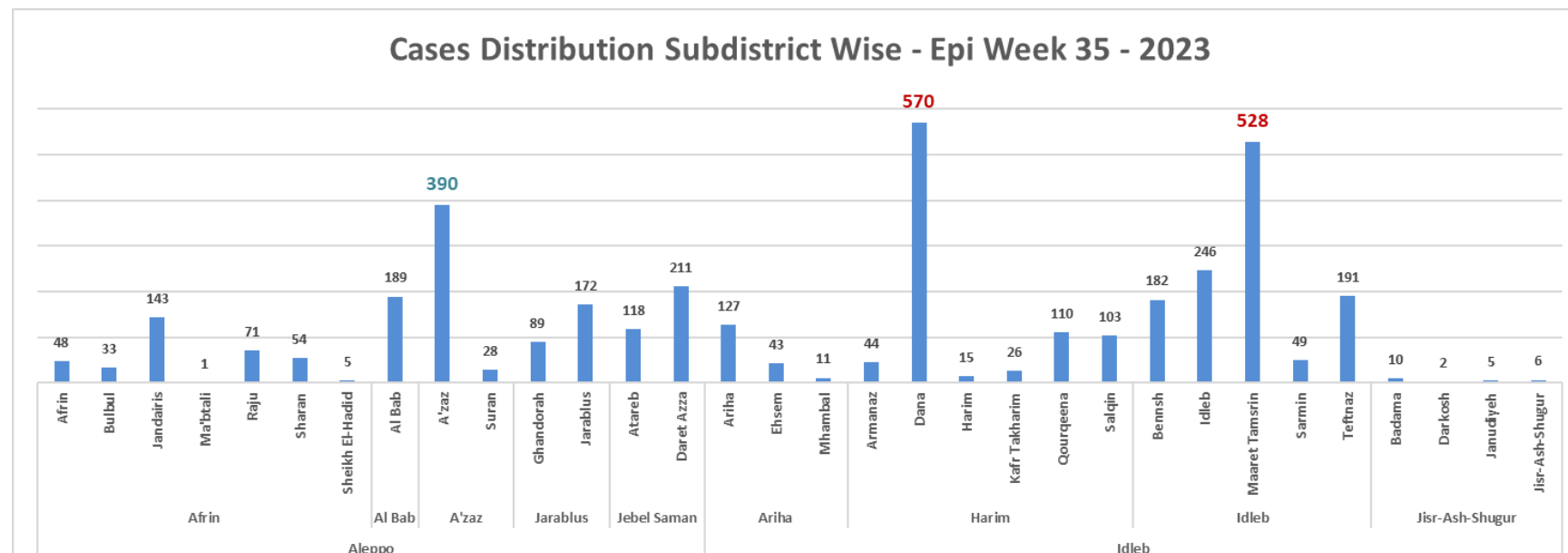
Updated case definition: A resident of outbreak areas with sudden onset of acute watery diarrhea with or without vomiting.

In Epi week 35 - 2023, **3820 suspected cases of cholera were reported**. The affected governorates are Aleppo (1552 suspected cases, 8 confirmed), and Idlib (2268 suspected cases, 11 confirmed). 20% of the total were in the camps

The age group less than 5 reported 50.54 %. Sex distribution of the suspected_cases is 48% Male, and 52% Female

There is no death in epi week 35

Dana subdistrict in Idlib governorate reported the highest number of cases (570), then Maaret Tamsrin subdistrict (528) in contract Azaz subdistrict reported the highest number in Aleppo governorate (390).

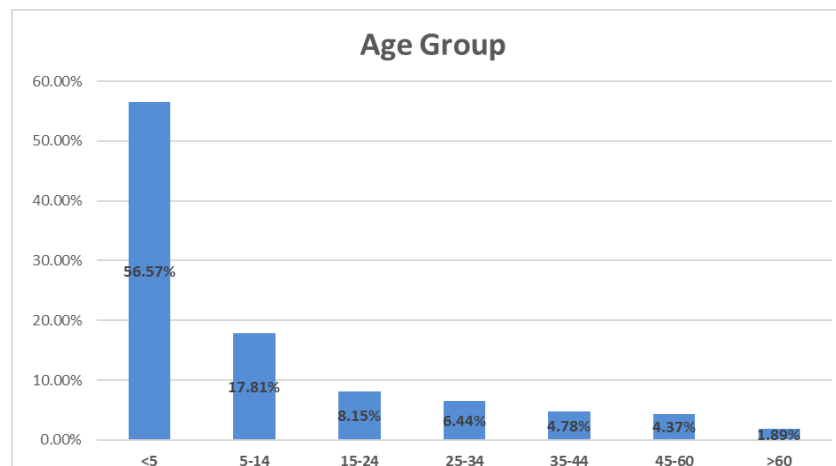
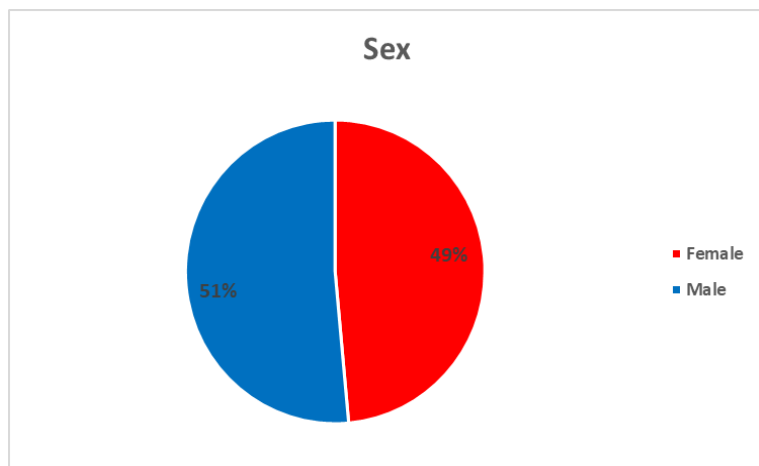


The overall sex distribution of the suspected cases is 51% Male, and 49% Female.

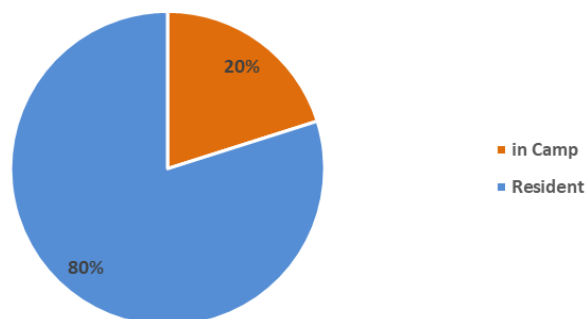
100% of the line listed cases were presented as Acute watery Diarrhea, 20% with vomiting, 5% as rice watery diarrhea, and 9% were dehydrated.

20% of the total cases live in camps (25707), and 80% out of camps (101056). (9363 of the total line listed cases are unknown)

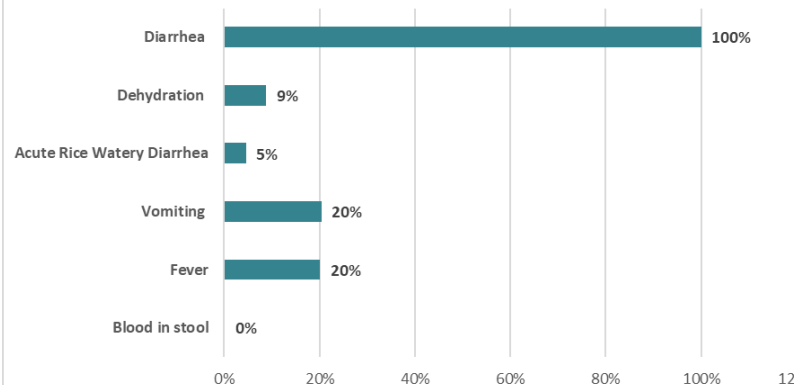
As the outbreak progresses, sensitivity should be increased by including smaller age groups and mild/moderate symptom groups in order to estimate the burden of the outbreak. According to WHO, in areas where a cholera outbreak has been confirmed, any person presenting with or dying from acute watery diarrhea is considered a suspected cholera case. The age group less than 5 years was 57.11%.



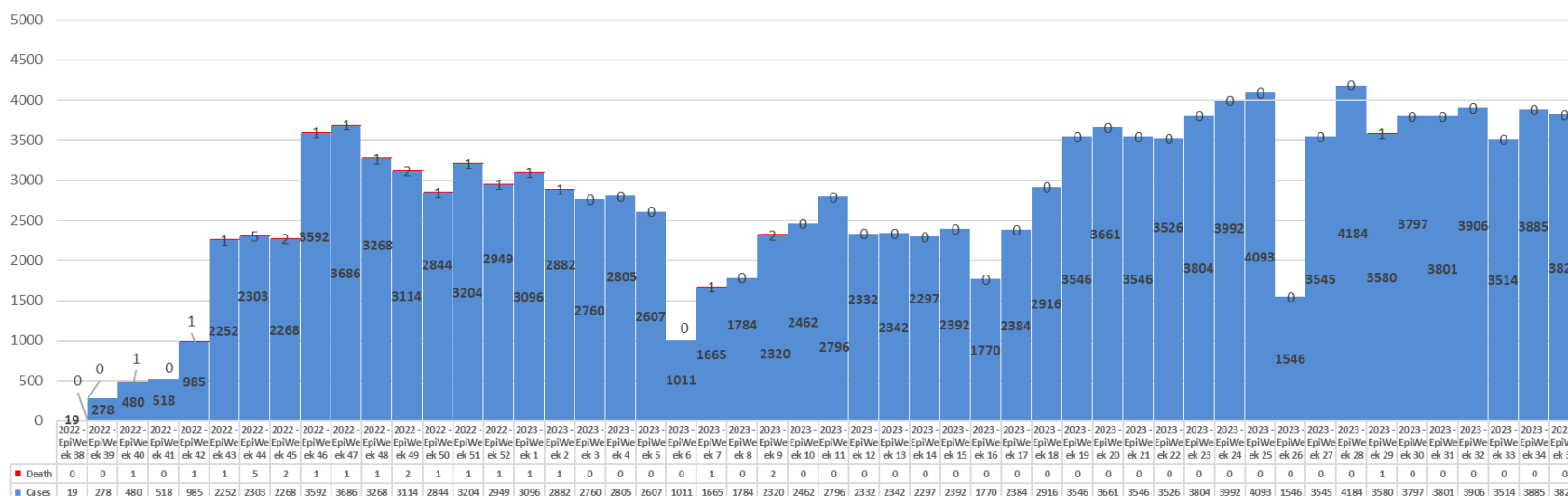
Cholera Cases Residency Distribution



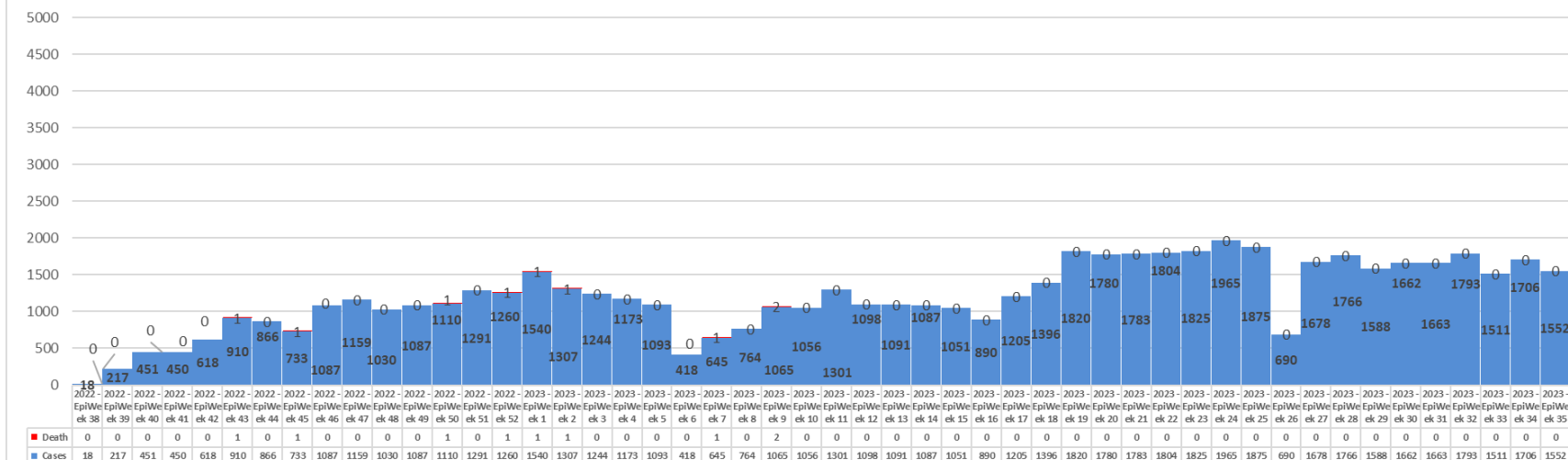
Signs and Symptoms



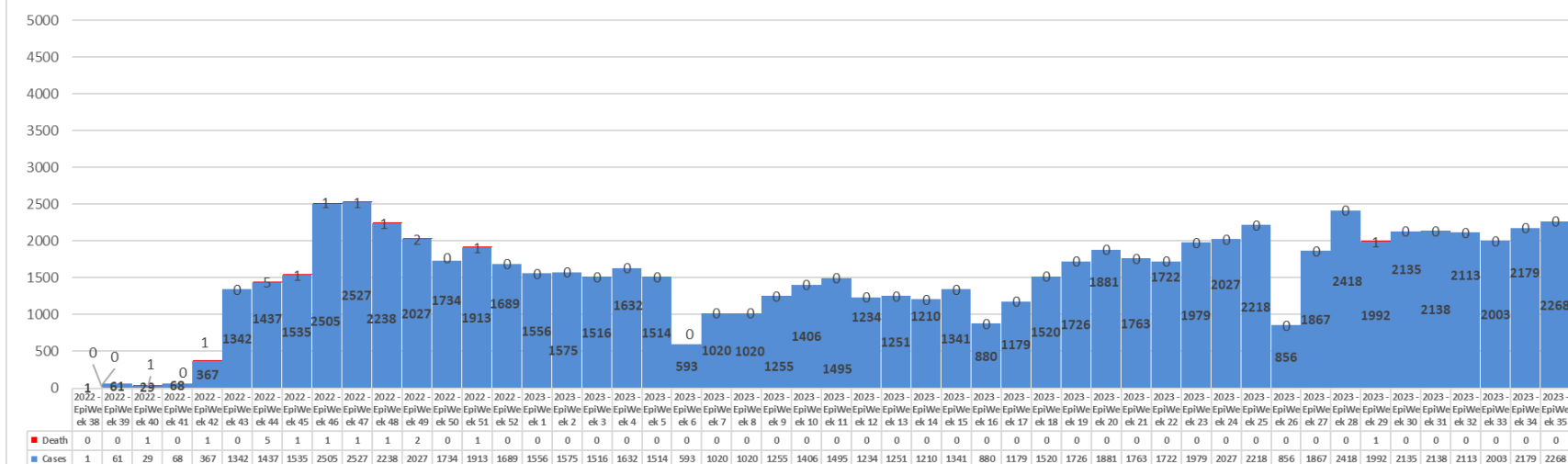
EPI Curve - Reporting Date - NWS



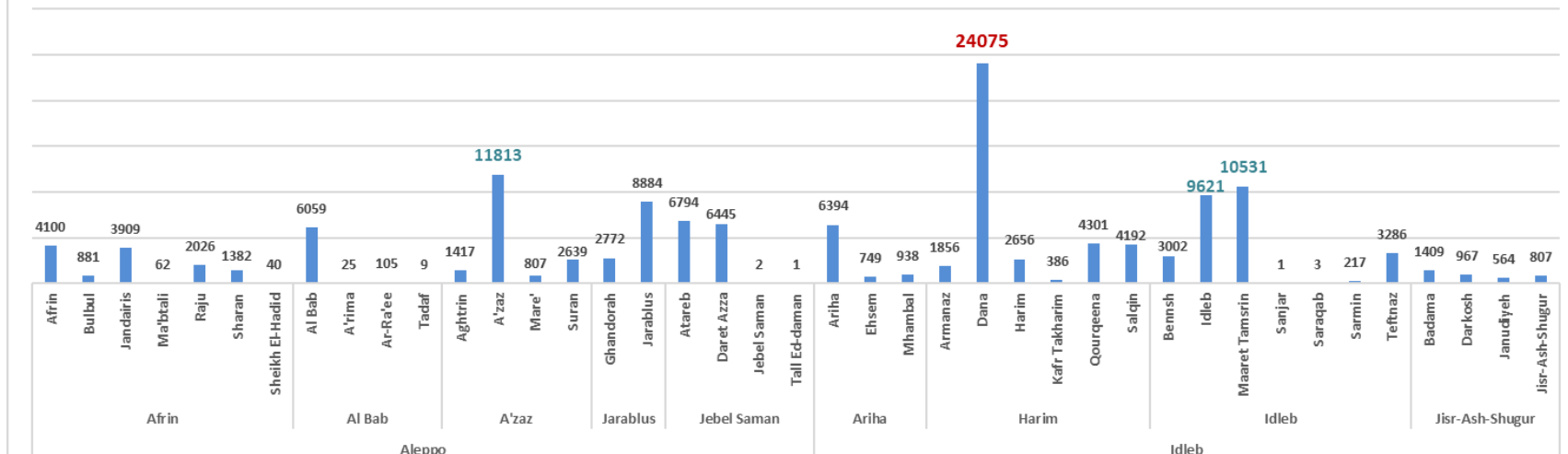
EPI Curve - Reporting Date - Aleppo Governorate



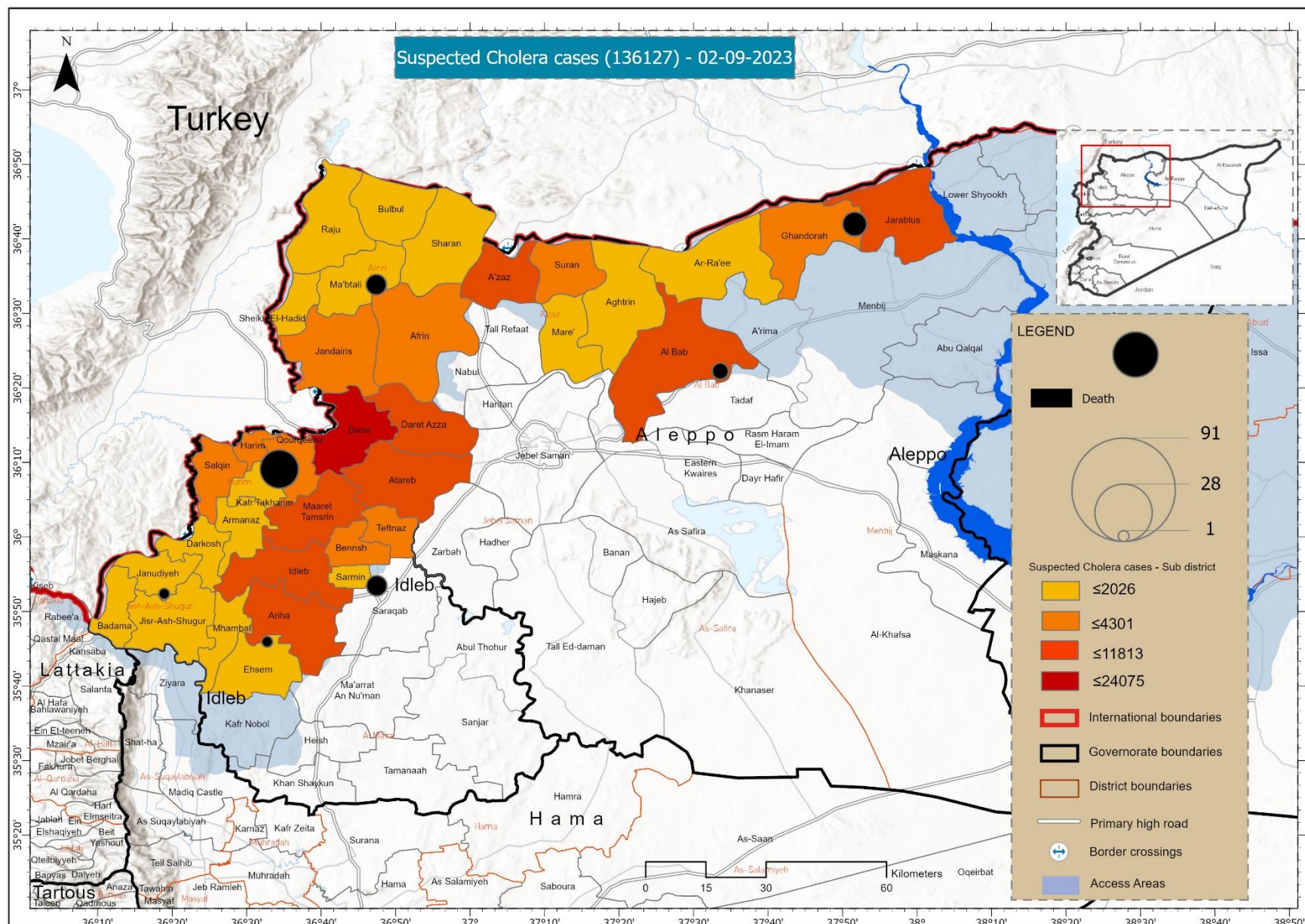
EPI Curve - Reporting Date - Idleb Governorate



Cases Distribution Subdistrict Wise



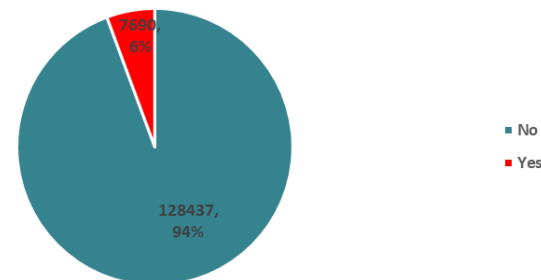
Week	Governorate	District	Date of Onset	Population	New cases	Cumulative Cases	New Death	Cumulative Deaths	Case Fatality Rate	Incidence Rate	Attack Rate
Up to W35 - 2023	Idleb	Ariha	20-Sep	185,668	181	8081	0	1	0.01%	97.5	4.35%
		Harim	6-Sep	1,586,820	868	37466	0	10	0.03%	54.7	2.36%
		Idleb	14-Sep	713,933	1196	26661	0	3	0.01%	167.5	3.73%
		Jisr-Ash-Shugur	25-Sep	310,973	23	3747	0	1	0.03%	7.4	1.20%
	Aleppo	A'zaz	9-Sep	648,600	418	16676	0	0	0.00%	64.4	2.57%
		Afrin	21-Sep	467,090	355	12400	0	3	0.02%	76.0	2.65%
		Al Bab	17-Sep	339,812	189	6198	0	2	0.03%	55.6	1.82%
		Jarablus	12-Sep	121,938	261	11656	0	4	0.03%	214.0	9.56%
		Jebel Saman	10-Sep	251,785	329	13242	0	0	0.00%	130.7	5.26%
	Total			4,626,619	3820	136127	0	24	0.02%	82.6	2.94%



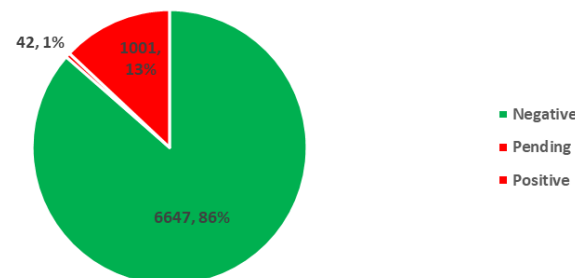
Laboratory:

- In Epi week 35- 2023, the total number of stool specimens or rectal swabs is 91, (19 in Aleppo –8 confirmed), (72 in Idleb – 11 confirmed).
- A cumulative of 7690 samples were collected since the start of the outbreak (6 % of overall line listed cases), of which 1001 have tested positive by stool culture. The total positivity rate in NWS is 13.1 %
- The Total number of negative cases by stool culture is 6647, and the remaining 42 are still pending.

Stool Sample Collected - Culture



Cholera Sampled Cases Classification

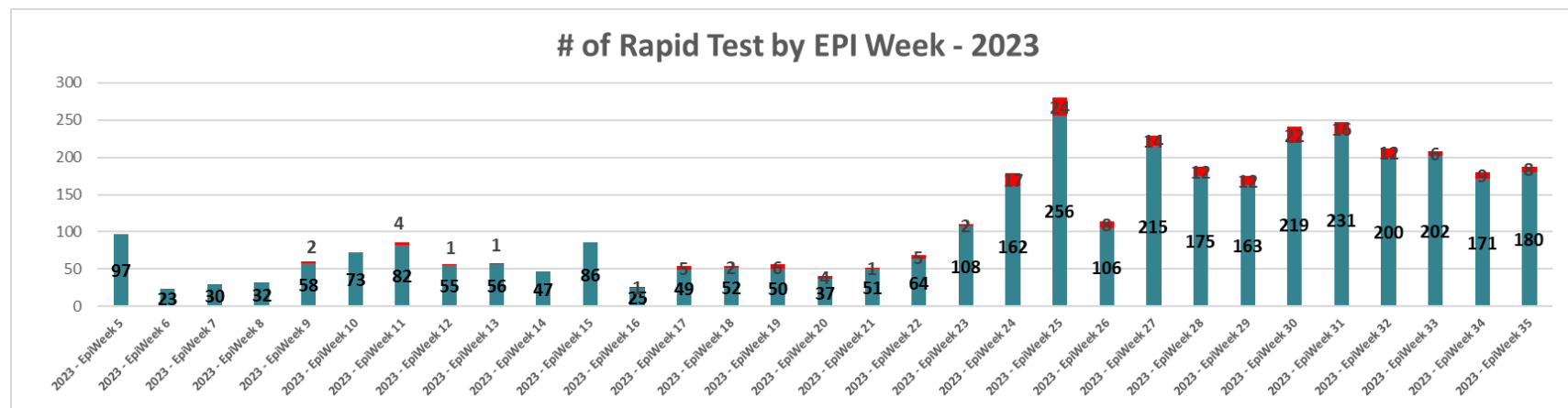


- Isolation and identification of V. cholera serogroup O1 or O139 by a culture of a stool specimen remain the gold standard for laboratory diagnosis.
- Currently, at EWARN laboratories (Idleb, Afrin, Jarablus, and Tal-Abiad) Fecal specimens are subcultured onto selective and nonselective media, including Nutrient agar and TCBS agar, for detection of V. cholera O1.
- Suspicious, oxidase-positive isolates are serotyped in polyvalent antisera raised against the O1 Antigen.
- Antimicrobial-sensitivity testing is performed to detect resistance.
- The culture sensitivity results came sensitive for the following antibiotics: Azithromycin, Imipenem, Ciprofloxacin, and Norfloxacin.
- The resistance is to Tetracycline, Doxycycline, Chloramphenicol, and Sulfamethoxazole Trimethoprim.
- The laboratory team handles the specimens and waste management according to infection control standards.
- The sample collection protocol is to collect stool samples in 5-6 % of the total suspected cholera cases per subdistrict and 5 samples from the admitted cholera suspected cases in the CTC /CTU per week.

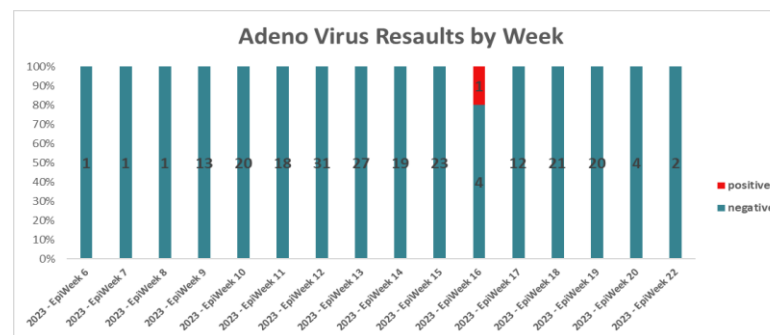
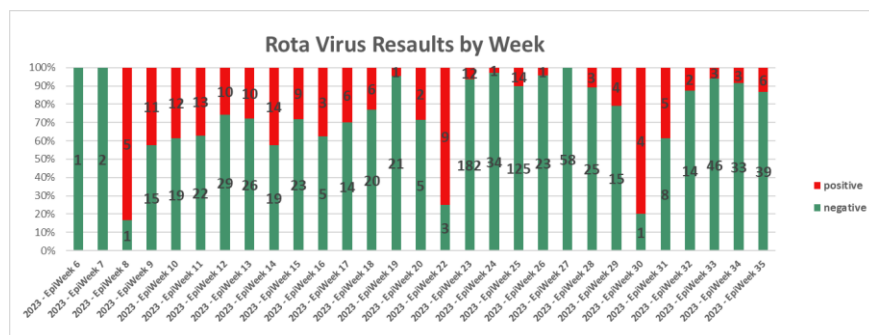
During epi week 35, EWARN received 188 RDT results from the CTC/CTUs and some HFs, 8 of them were positive for Cholera.

The total of RDT tests between epi weeks (5 - 35) reached 3549, and the total positive is 194.

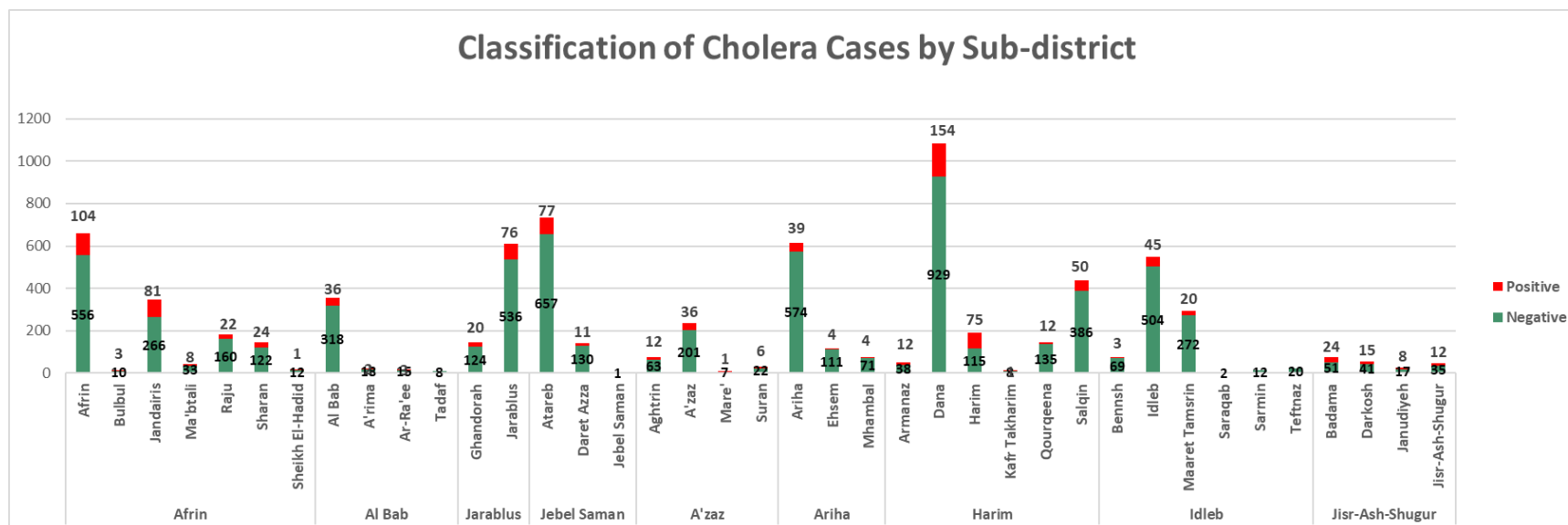
The positivity rate of RDTs, from epi week 5 – 2023 up to epi week 35 – 2023 is 5.46 %. But the positivity rate since the beginning of cholera outbreak up to epi week 35 – 2023 is 6.0 %.



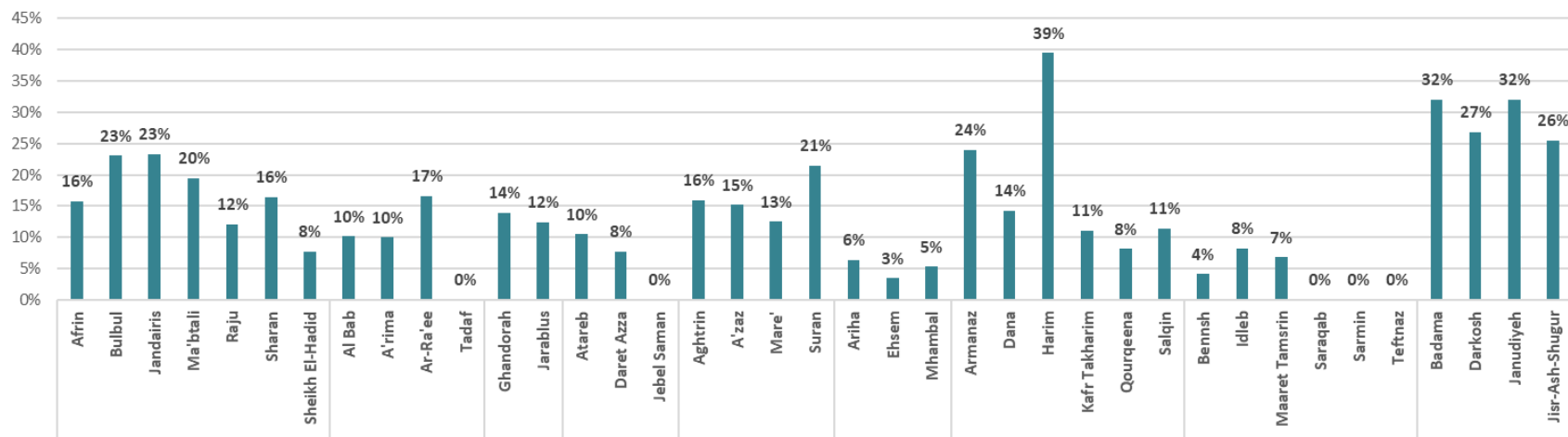
- For children under 5 years of age with a stool culture negative for cholera:
In epi week 35, the EWARN lab tested 45 samples to detect Rotavirus, 6 of them were positive.
- The total samples collected for Rotavirus reached 997 (169 were positive), while the total samples for Adenovirus were 218 (one positive)



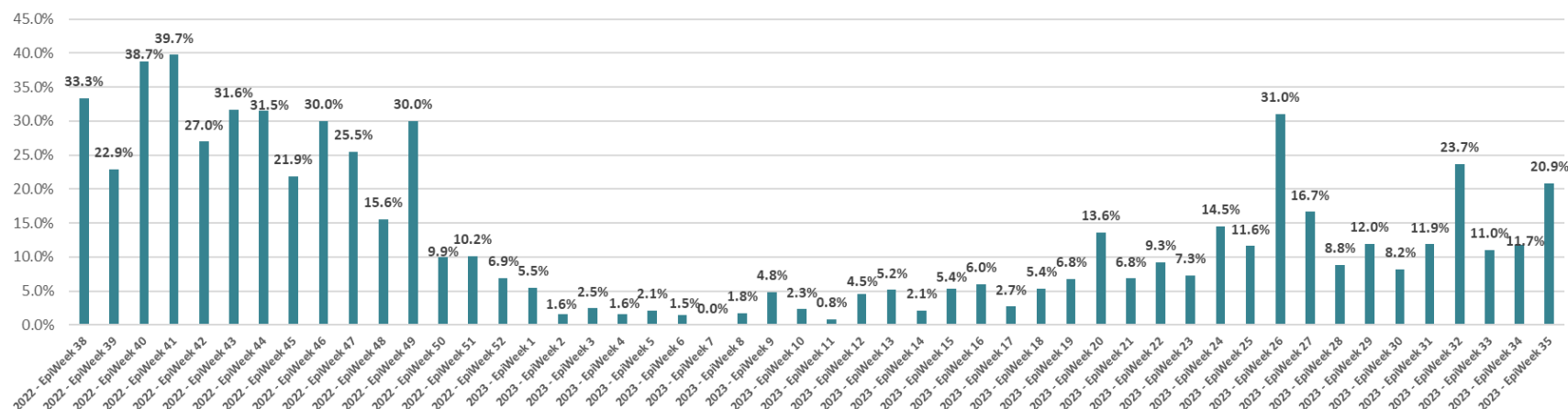
Epi Week	Governorate	District	RDT+	RDT-	Postivity Rate for RDT	Stool Culture Positive	Stool Culture Negative	Postivity Rate for Culture
Up to W31 - 2023	Aleppo	Afrin	63	524	10.7%	243	1159	17.3%
		Al Bab	12	129	8.5%	41	359	10.3%
		A'zaz	28	200	12.3%	55	293	15.8%
		Jarablus	10	216	4.4%	96	660	12.7%
		Jebel Saman	14	256	5.2%	88	788	10.0%
	Idleb	Ariha	4	205	1.9%	47	756	5.9%
		Harim	79	1122	6.6%	304	1611	15.9%
		Idleb	16	654	2.4%	68	879	7.2%
		Jisr-Ash-Shugur	4	319	1.2%	59	144	29.1%
	Total		230	3625	6.0%	1001	6649	13.1%



Positivity Rate by Subdistrict - Culture



Positivity Rate by Week - Culture



2. WASH:

Reporting period: (26 -31) - August

Since 12 of August, ACU in consultation with WHO team has shifted the regular approach of WASH investigation to a new approach focused on water quality monitoring in hotspot communities across NWS.

The monitoring of the quality includes taking samples at different levels to test FRC values, as follows:

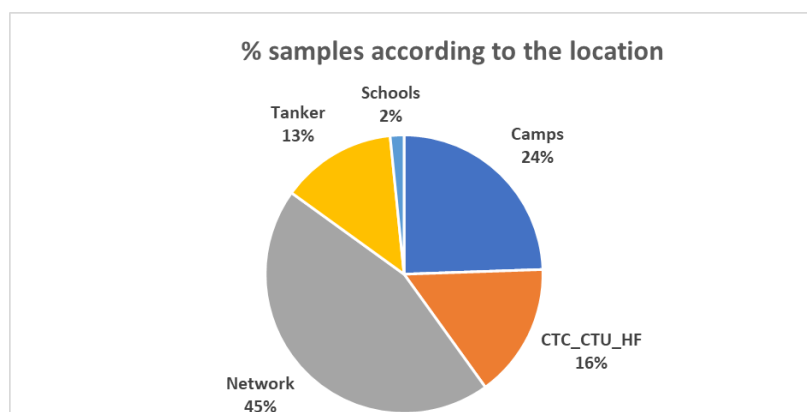
1. Samples at HH level from water taps connected to network (water pumped through water stations).
2. Camps exist inside or near the hotspot communities.
3. Schools.
4. Tankers.
5. HFs (including CTUs and CTCs)

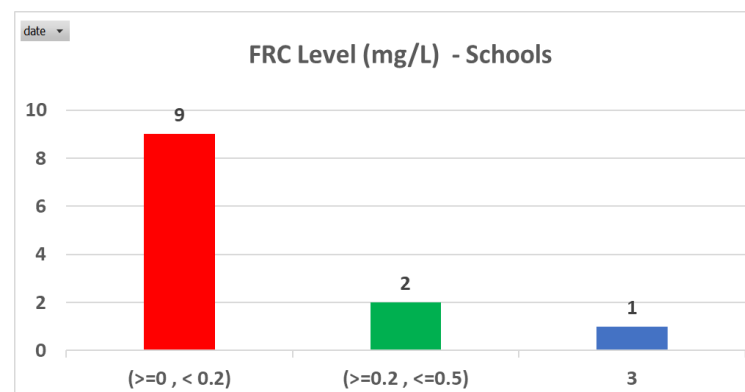
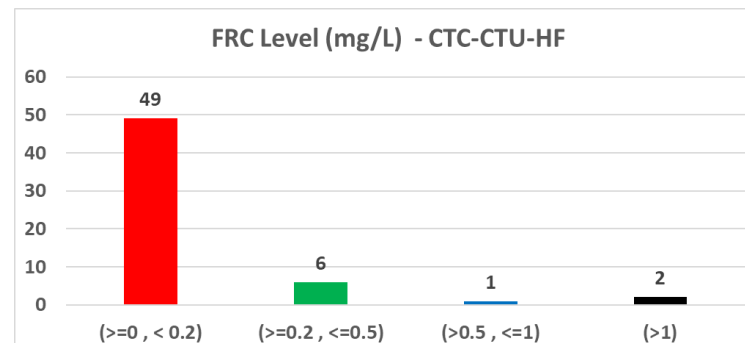
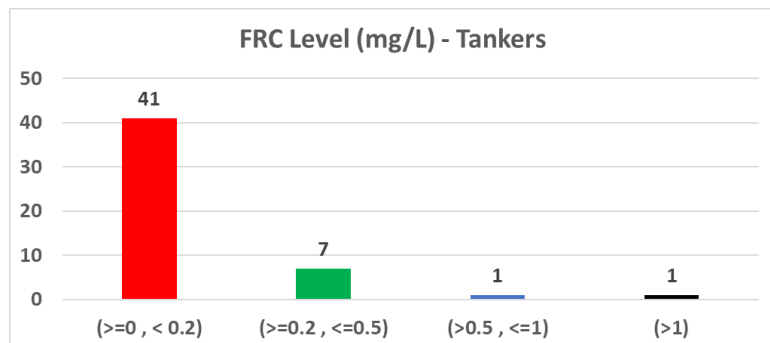
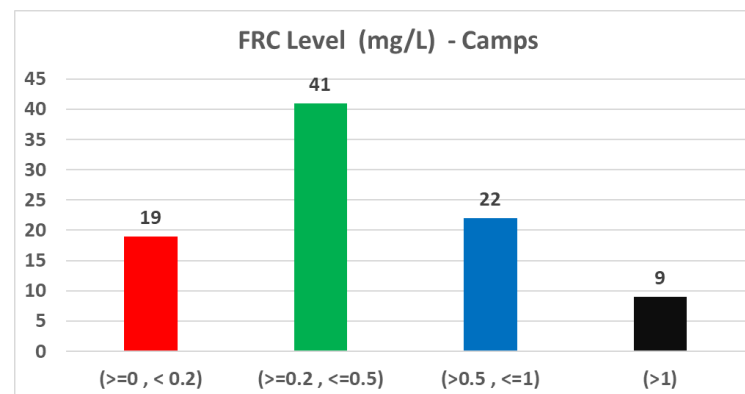
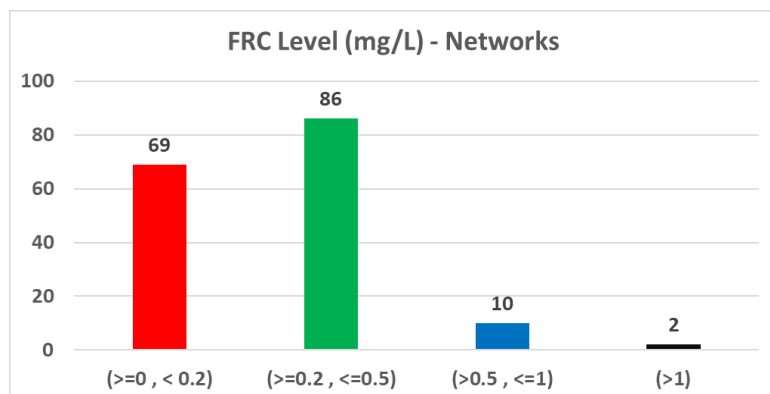
This new approach aims at tracking whether the water supplied at different levels in these areas is safe to drink or not according to standard, through collection samples 3 times or more a week.

This facilitates the intervention that might be made by organizations to ensure that the drinking water is potable and decrease the WBDs particularly AWD/Cholera.

Monitoring Results:

Number of samples collected was **372** ones, as follows:

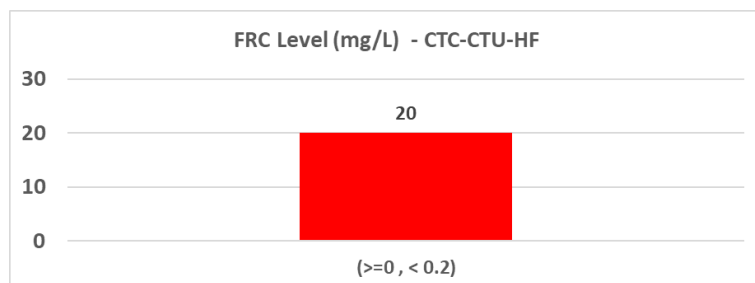
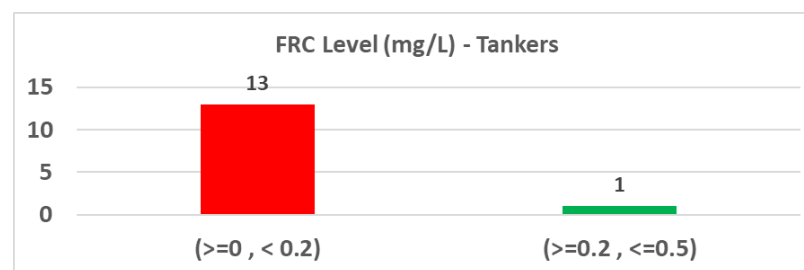
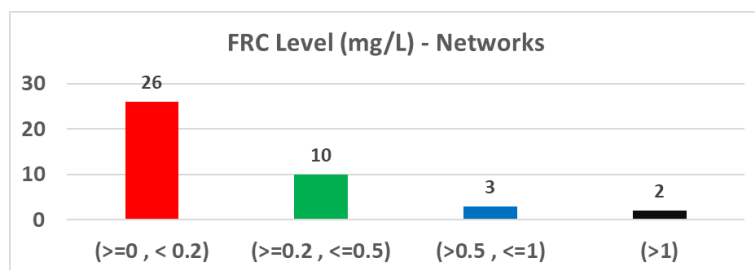




Highlighting Point:

Due to increase numbers of cases over the passing two weeks in Daret Azza, Batbu, Ma'arrat Tamasrin.

Daret Azza and Batbu are covered under the new approach and the continues monitoring showed the following result:



The charts reflect the values of FRC at different levels and demonstrate that the water provided did not match the standard as the majority of samples showed that FRC values are less than 0.2 mg/l.

Whereas a dedicated investigation was conducted in Ma'arrat Tamasrin (as it is now out of the scope of work of the new approach). The investigation showed that water at different levels was not contaminated but also did not match the standard, as one sample out of 8 showed FRC value.

Actions taken

- The EWARN team is currently conducting active surveillance in the most important health facilities in northwest Syria (25 HFs). 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 receiving the RDT results from health facilities and CTC/CTUs and sharing them.
- To determine the causes of acute watery diarrhea in children under 5 years (the children have a negative cholera result), the EWARN lab is conducting Rotavirus rapid diagnostic tests (RDTs).
- The response teams conducted an expanded investigation of the deaths that occurred since the beginning of the outbreak (24 deaths), where some possible causes were identified, and the teams made appropriate recommendations.
- 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.