

Northwest of Syria Cholera Outbreak

Situation Report No.58

Epidemiological Week - 45 (05 Nov - 11 Nov/ 2023)

Date of Onset of Outbreak: 16 September 2022

Reporting Date of outbreak: 17 September 2022

Confirmation Date: 19 September 2022

Suspected Cases: 174415

Confirmed Cases: 1147

Cholera Deaths : 24

Case Fatality Rate: 0.01%

NWS Attack Rate: 3.77%

Key Highlights

Cumulatively, a total of **174415 suspected** cases (**77057** in Aleppo governorate, **97358** in Idlib governorate) including **1147 confirmed** have been reported by EWARN team since 16 September, including **24 deaths** case.

The highest number of cases were reported in Harim district (**47175**) and Idlib district (**36178**) in Idlib governorate, then Azaz district (**21756**), and Afrin district (**17716**) in Aleppo governorate.

33275 total suspected cases (including **720** new cases in Epi week 45 - 2023) were reported from camps. **55.38 %** 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

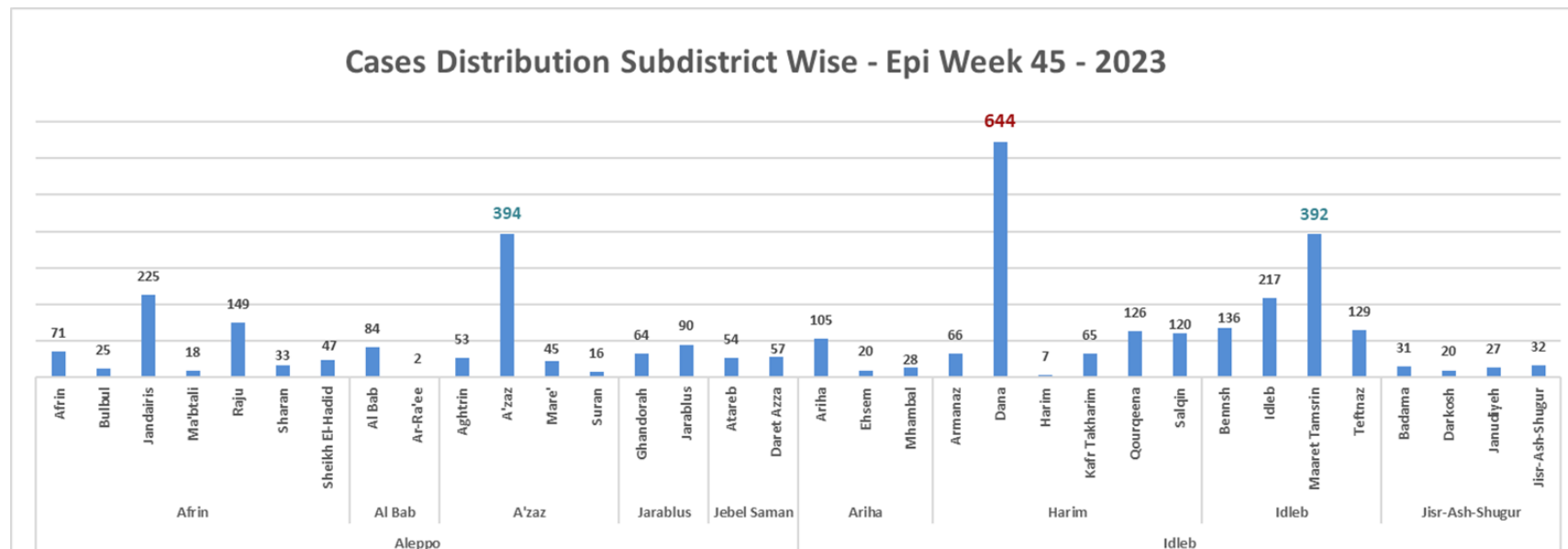
Updated case definition: A resident of outbreak areas with sudden onset of acute watery diarrhea with or without vomiting.

In Epi week 45 - 2023, **3592 suspected cases of cholera were reported**. The affected governorates are Aleppo (1427 suspected cases, 6 confirmed), and Idleb (2165 suspected cases, 8 confirmed). 20% of the total were in the camps

The age group less than 5 reported 55.38 %. Sex distribution of the suspected_cases is 49% Male, and 51% Female

There is no new death in epi week 45

Dana subdistrict in Idled governorate reported the highest number of cases (644), in contract Azaz subdistrict reported the highest number in Aleppo governorate (394).

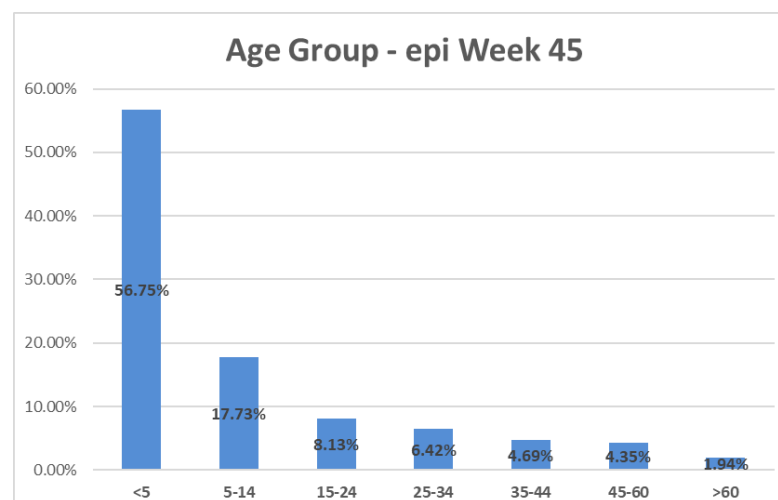
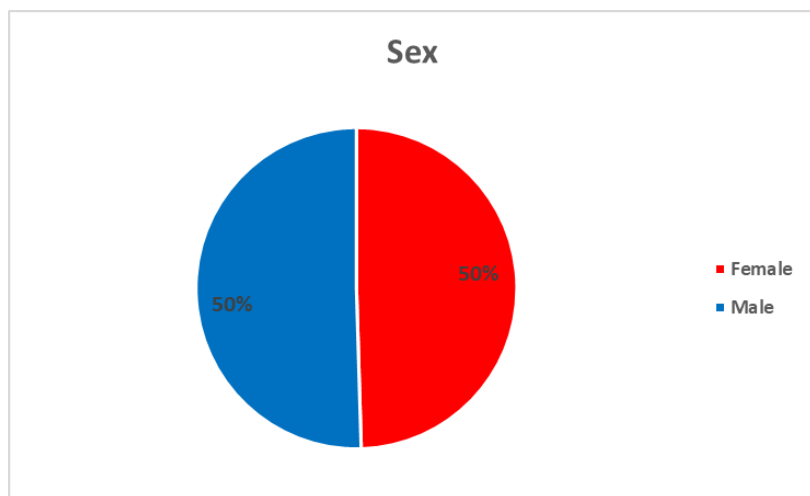


The overall sex distribution of the suspected_cases is 50% Male, and 50% Female.

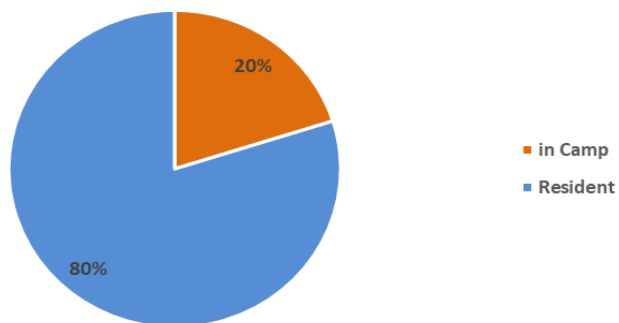
100% of the line listed cases were presented as Acute watery Diarrhea, 20% with vomiting, 5% as rice watery diarrhea, and 9% were dehydrated.

20% of the total cases live in camps (33275), and 80% out of camps (130997).

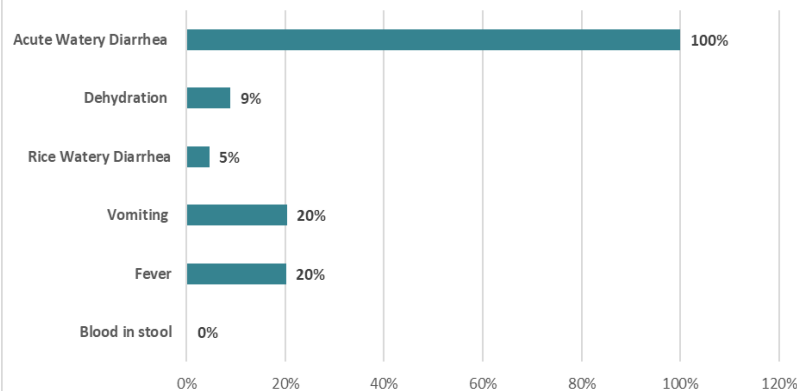
As the outbreak progresses, sensitivity should be increased by including smaller age groups and mild/moderate symptom groups in order to estimate the burden of the outbreak. According to WHO, in areas where a cholera outbreak has been confirmed, any person presenting with or dying from acute watery diarrhea is considered a suspected cholera case. The age group less than 5 years was 56.75%.



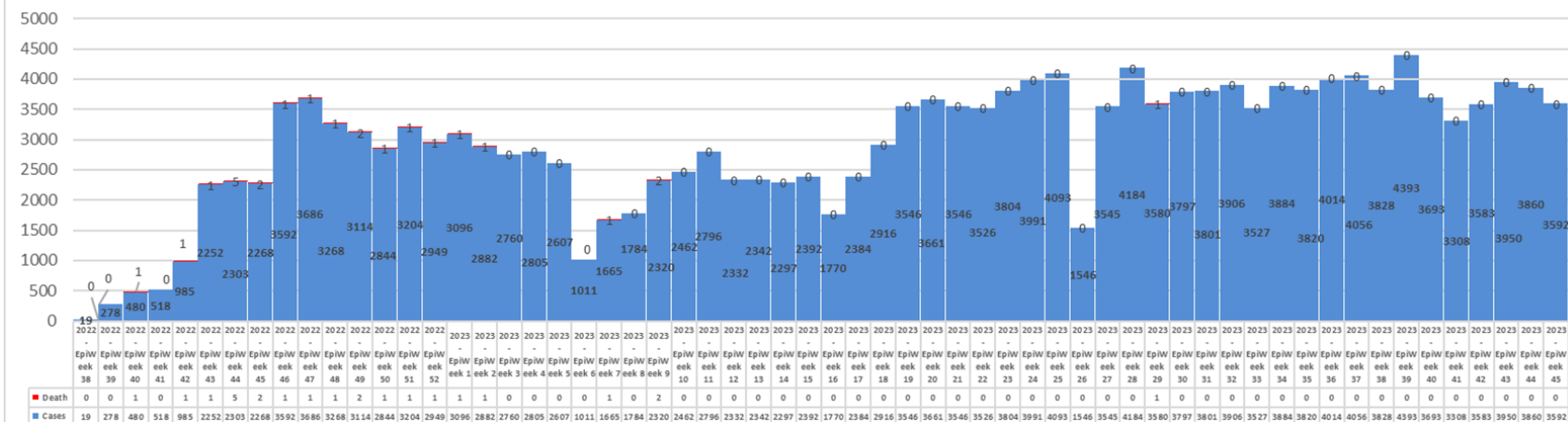
Cholera Cases Residency Distribution



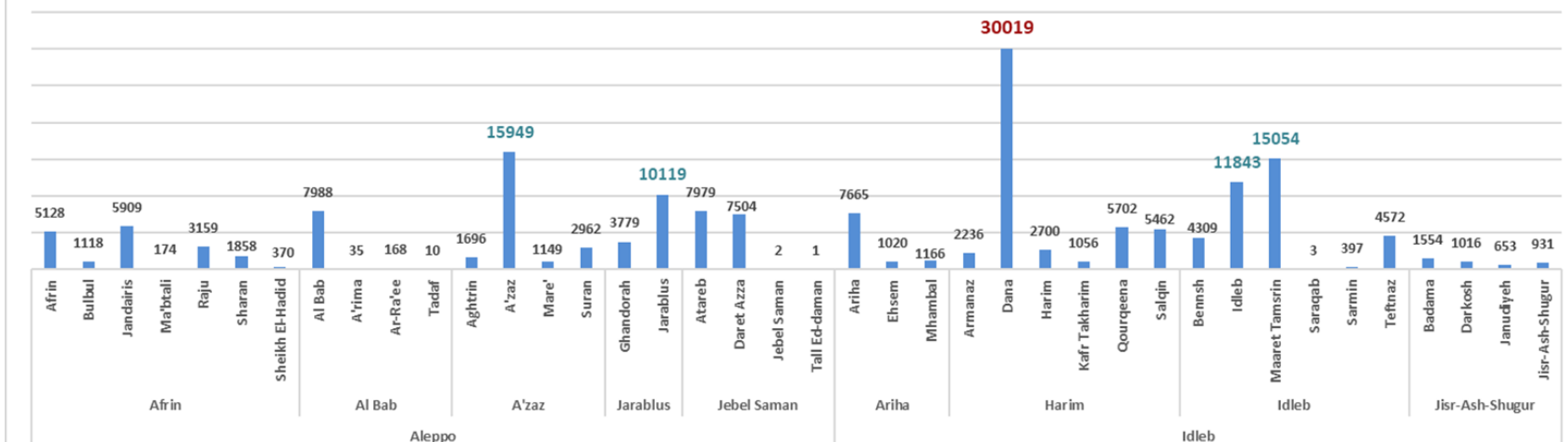
Signs and Symptoms



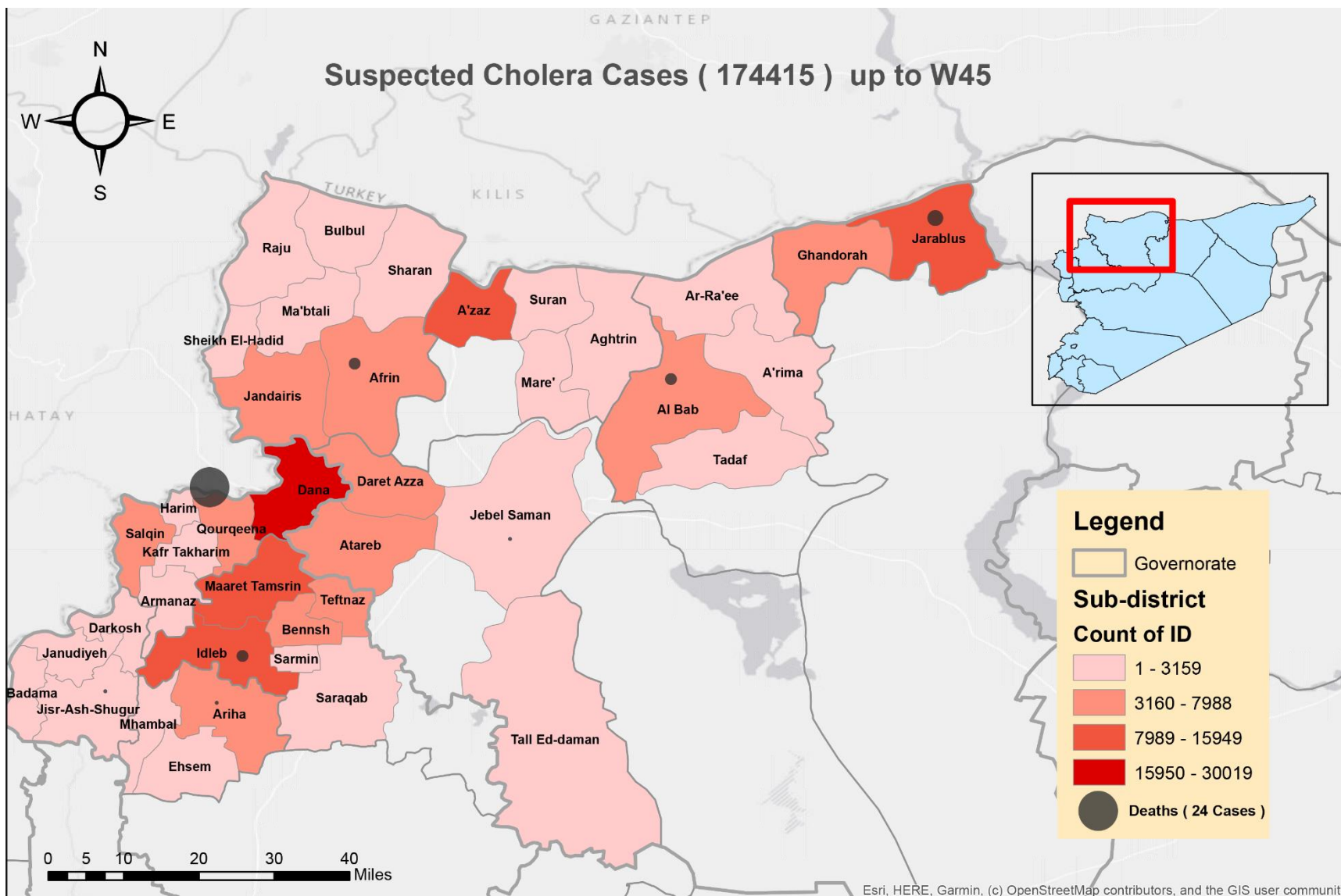
EPI Curve - Reporting Date - NWS



Cases Distribution Subdistrict Wise - up to Epi Week 45 - 2023

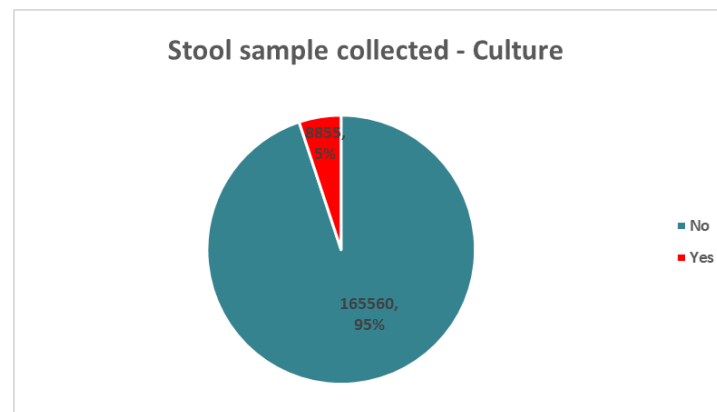


Epi Week	Governorate	District	Date of Onset	Population	New cases	Cumulative Cases	New Death	Cumulative Deaths	Case Fatality Rate	Incidence Rate	Attack Rate
Up to W44 - 2023	Idleb	Ariha	20-Sep	185,668	129	9698	0	1	0.01%	69.5	5.22%
		Harim	6-Sep	1,586,820	986	46147	0	10	0.02%	62.1	2.91%
		Idleb	14-Sep	713,933	889	35304	0	3	0.01%	124.5	4.95%
		Jisr-Ash-Shugur	25-Sep	310,973	142	4044	0	1	0.02%	45.7	1.30%
	Aleppo	A'zaz	9-Sep	648,600	570	21248	0	0	0.00%	87.9	3.28%
		Afrin	21-Sep	467,090	592	17148	0	3	0.02%	126.7	3.67%
		Al Bab	17-Sep	339,812	205	8115	0	2	0.02%	60.3	2.39%
		Jarablus	12-Sep	121,938	169	13744	0	4	0.03%	138.6	11.27%
	Jebel Saman	10-Sep	251,785	178	15375	0	0	0.00%	70.7	6.11%	
	Total				4,626,619	3860	170823	0	24	0.01%	83.4

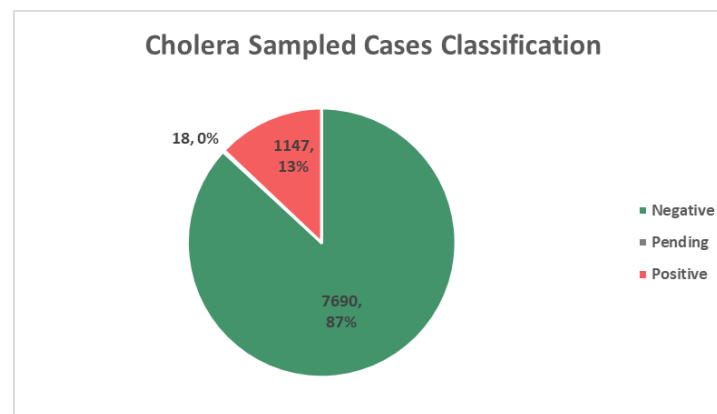


Laboratory:

- In Epi week 45- 2023, the total number of stool specimens or rectal swabs is 107, (42 in Aleppo –6 confirmed), (65 in Idleb – 8 confirmed).
- A cumulative of 8855 samples were collected since the start of the outbreak (5 % of overall line listed cases), of which 1147 have tested positive by stool culture. The total positivity rate in NWS is 13 %
- The Total number of negative cases by stool culture is 7690, and the remaining 18 are still pending.



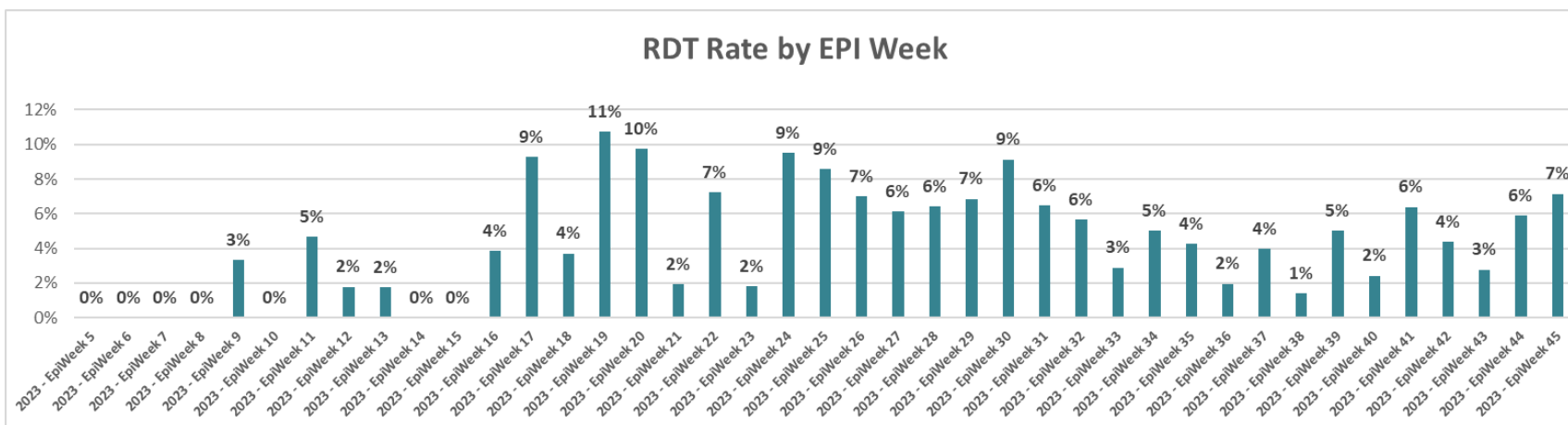
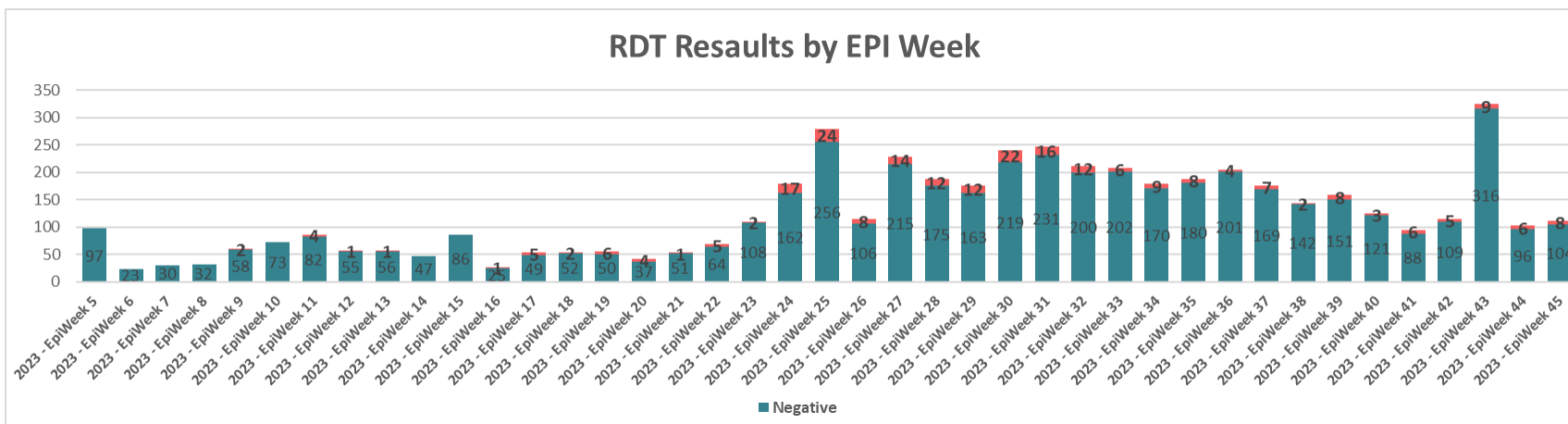
- Isolation and identification of V. cholera serogroup O1 or O139 by a culture of a stool specimen remain the gold standard for laboratory diagnosis.
- Currently, at EWARN laboratories (Idleb, Afrin, Jarablus, and Tal-Abiad) Fecal specimens are subcultured onto selective and nonselective media, including 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.



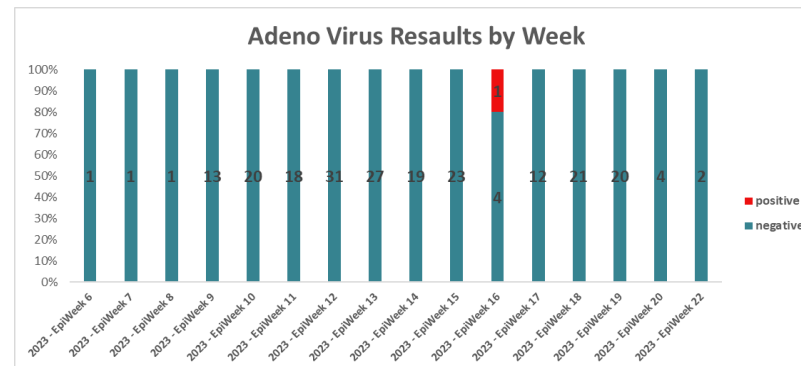
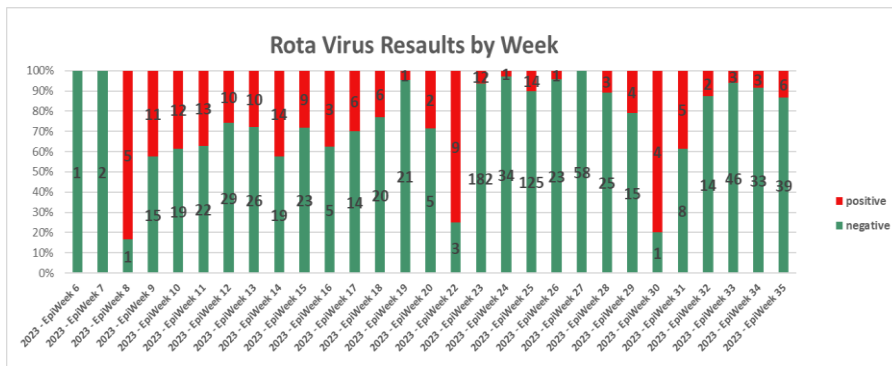
During epi week 45, EWARN received 112 RDT results from the HFs, 8 of them were positive for Cholera.

The total of RDT tests between epi weeks (5 - 45) reached 5103, and the total positive is 252.

The positivity rate of RDTs, from epi week 5 – 2023 up to epi week 45 – 2023 is 4.9 %. But the positivity rate since the beginning of cholera outbreak up to epi week 45 – 2023 is 5.3 %.

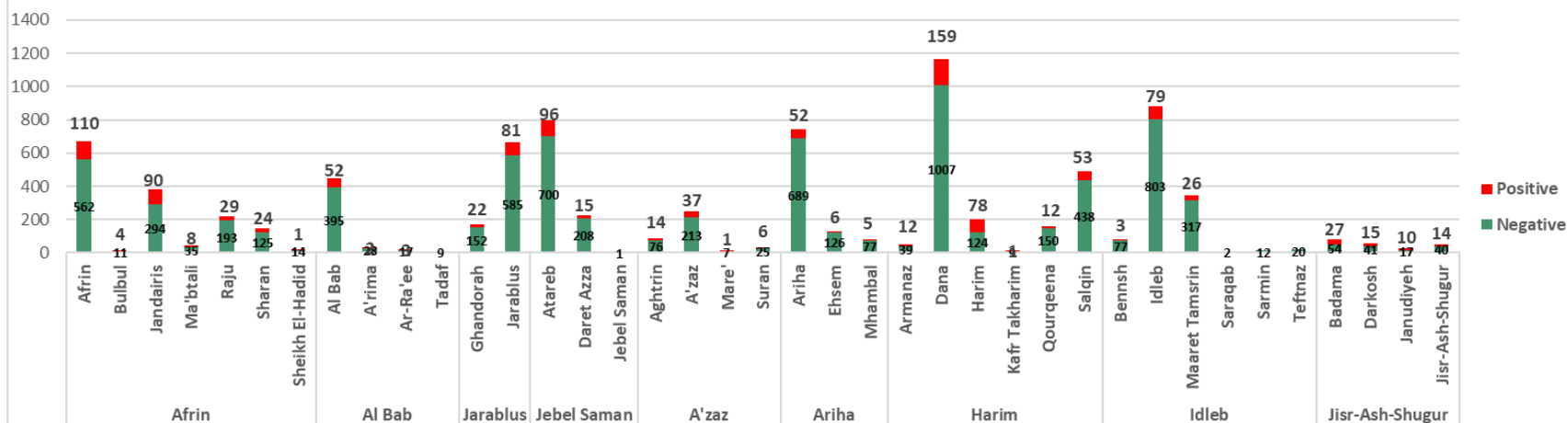


- For children under 5 years of age with a stool culture negative for cholera:
The total samples collected between (epi week 6 and epi week 35) for Rotavirus reached 997 (169 were positive), while the total samples for Adenovirus were 218 (one positive)
The EWARN labs ran out of Rotavirus tests in epi week 36.

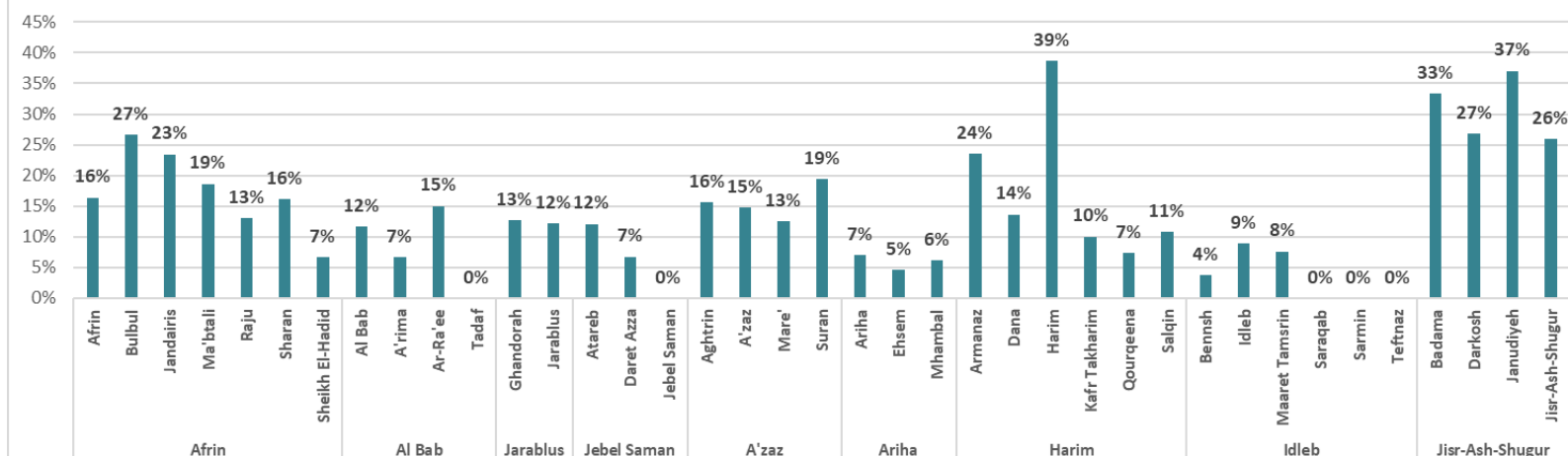


Epi Week	Governorate	District	RDT+	RDT-	Postivity Rate for RDT	Stool Culture Positive	Stool Culture Negative	Postivity Rate for Culture
Up to W45 - 2023	Aleppo	Afrin	84	680	11.0%	266	1234	17.7%
		Al Bab	27	399	6.3%	57	449	11.3%
		A'zaz	30	215	12.2%	58	321	15.3%
		Jarablus	14	278	4.8%	103	737	12.3%
		Jebel Saman	14	298	4.5%	111	909	10.9%
	Idleb	Ariha	4	291	1.4%	63	892	6.6%
		Harim	88	1307	6.3%	315	1767	15.1%
		Idleb	23	1163	1.9%	108	1231	8.1%
		Jisr-Ash-Shugur	4	490	0.8%	66	152	30.3%
	Total		288	5121	5.3%	1147	7692	13.0%

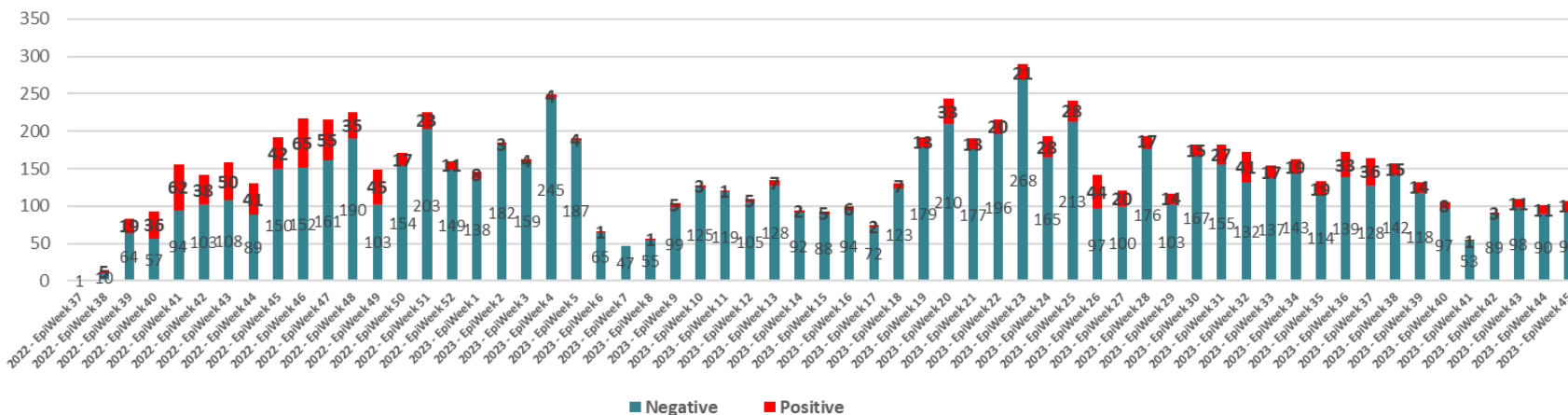
Classification of Cholera Cases by Sub-district



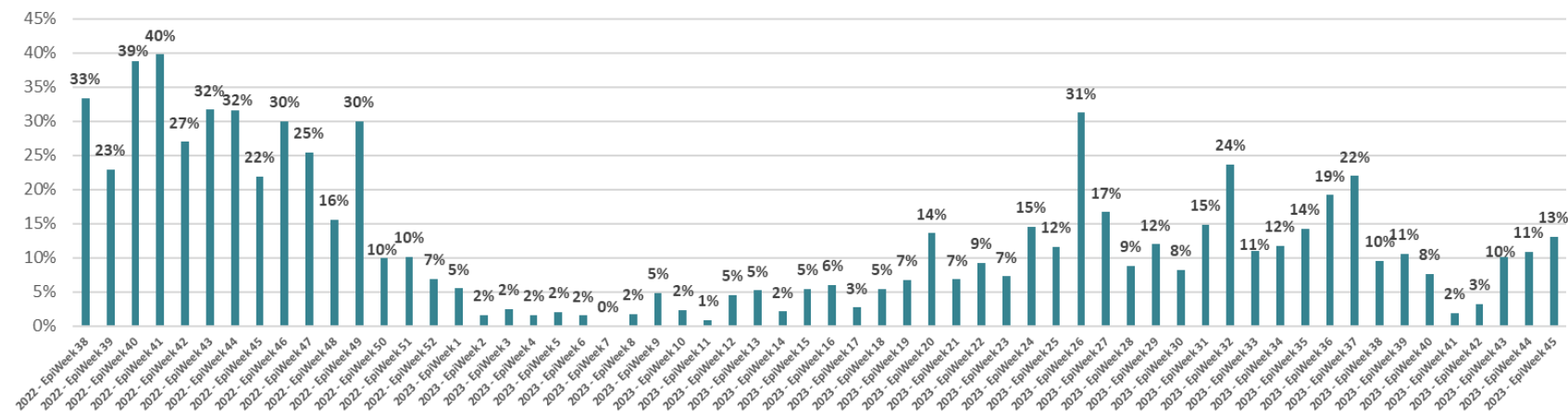
Positivity Rate by Subdistrict - Stool Culture



Sample Collected by Epi Week - Culture



Positivity Rate by Week - Culture



WASH:

Reporting period: 04 -11, November

ACU's WASH team, in collaboration with SRD, is working on evaluation forms to assess the infrastructure of hospitals that would host/treatment of cholera cases in Northern of Syria.

The first draft was issued and is being discussed internally. A session will be held to discuss with the field team and the estimated time to initiate this practice, on 15 or 16 of November for 10 days.

Cholera Investigation:

ACU had to suspend water quality monitoring practice due to shortcomings in the fund, where the previous grant ended by first of Oct and ACU covered the team up to end of the month.

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.
- 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.

Challenges

- The closure of the cholera treatment center negatively affected the number of cholera rapid test results and the number of samples drawn for culture.
- The stock of Rotavirus tests in EWARN labs ran out in week 36.