

## Northwest of Syria Cholera Outbreak

### Situation Report No.64

#### Epidemiological Week - 51 (17 Dec - 23 Dec / 2023)

Date of Onset of Outbreak: 16 September 2022

Reporting Date of outbreak: 17 September 2022

Confirmation Date: 19 September 2022

Suspected Cases: 191807

Confirmed Cases: 1181

Cholera Deaths : 24

Case Fatality Rate: 0.01%

NWS Attack Rate: 4.15%

#### Key Highlights

Cumulatively, a total of **191807 suspected** cases (**83318** in Aleppo governorate, **108489** in Idlib governorate) including **1181 confirmed** have been reported by EWARN team since 16 September, including **24 deaths** case.

The highest number of cases were reported in Harim district (**52469**) and Idlib district (**40397**) in Idlib governorate, then Azaz district (**23600**), and Afrin district (**20030**) in Aleppo governorate.

**36725** total suspected cases (including **688** new cases in Epi week 51 - 2023) were reported from camps. **56.94 %** Of the suspected cases are in the age group <5 years. Males are 50% of the total and females are 50%.

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

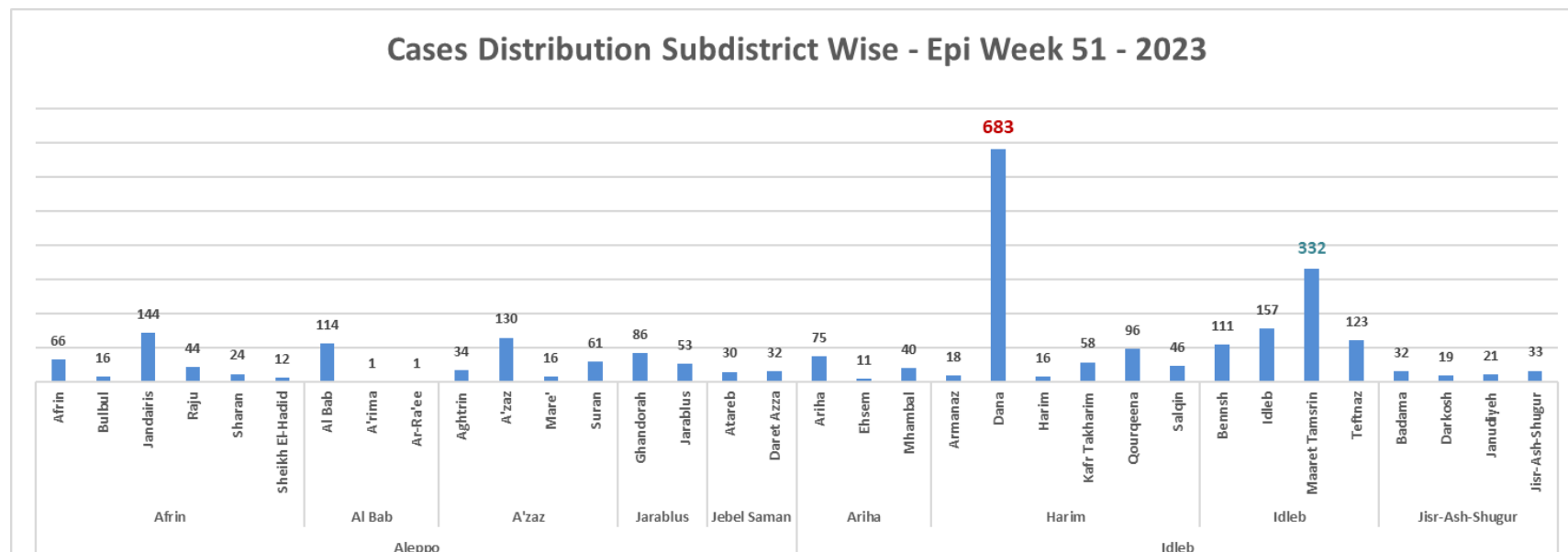
Updated case definition: A resident of outbreak areas with sudden onset of acute watery diarrhea with or without vomiting.

In Epi week 51 - 2023, **2735 suspected cases of cholera were reported**. The affected governorates are Aleppo (864 suspected cases, 2 confirmed), and Idleb (1871 suspected cases, 0 confirmed). 25% of the total were in the camps

The age group less than 5 reported 56.99 %. Sex distribution of the suspected\_cases is 49% Male, and 51% Female

There is no new death in epi week 51.

Dana subdistrict in Idled governorate reported the highest number of cases (683), in contract Jandairis subdistrict reported the highest number in Aleppo governorate (144).

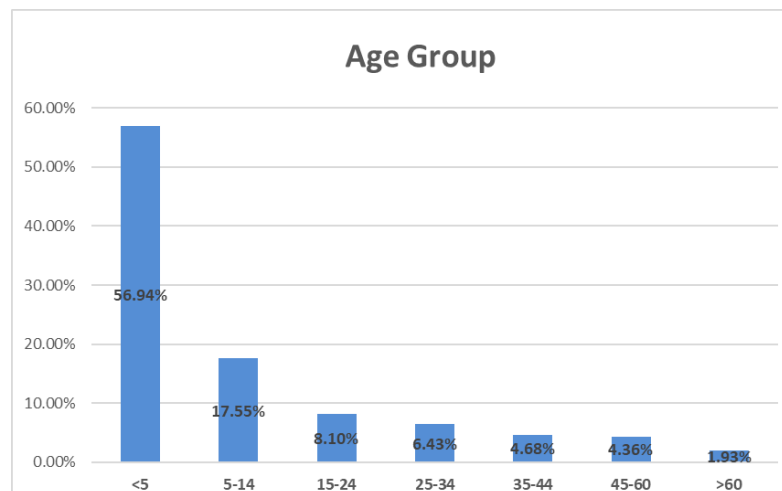
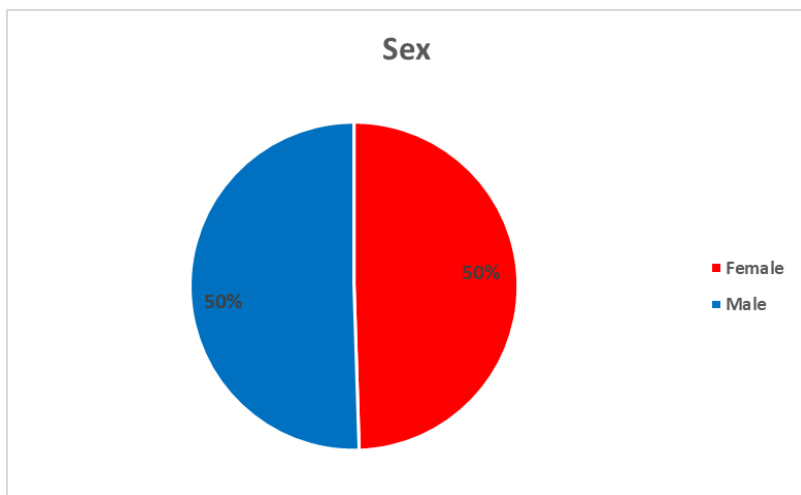


The overall sex distribution of the suspected cases is 51% Male, and 49% Female.

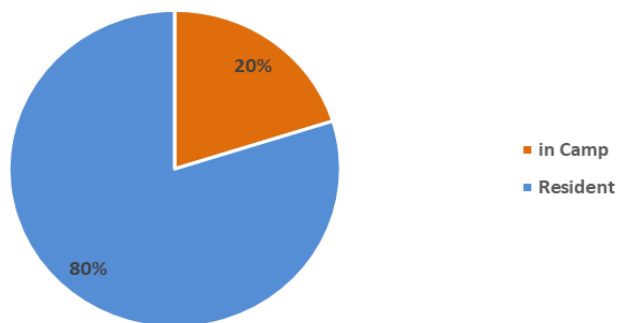
100% of the line listed cases were presented as Acute watery Diarrhea, 20% with vomiting, 5% as rice watery diarrhea, and 9% were dehydrated.

20% of the total cases live in camps (34276), and 80% out of camps (136188).

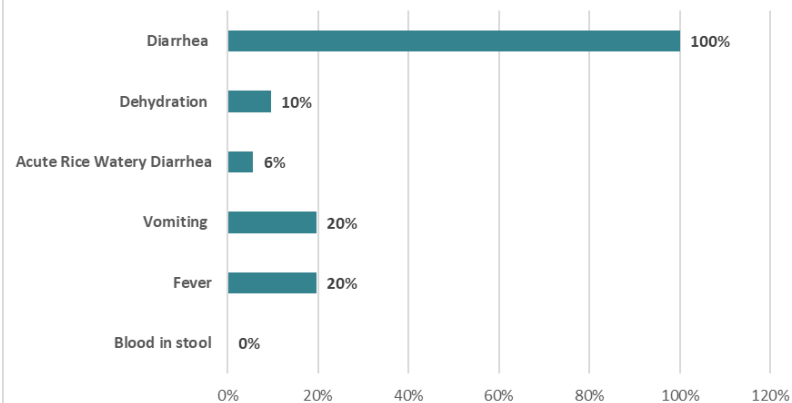
As the outbreak progresses, sensitivity should be increased by including smaller age groups and mild/moderate symptom groups in order to estimate the burden of the outbreak. According to WHO, in areas where a cholera outbreak has been confirmed, any person presenting with or dying from acute watery diarrhea is considered a suspected cholera case. The age group less than 5 years was 56.94%.



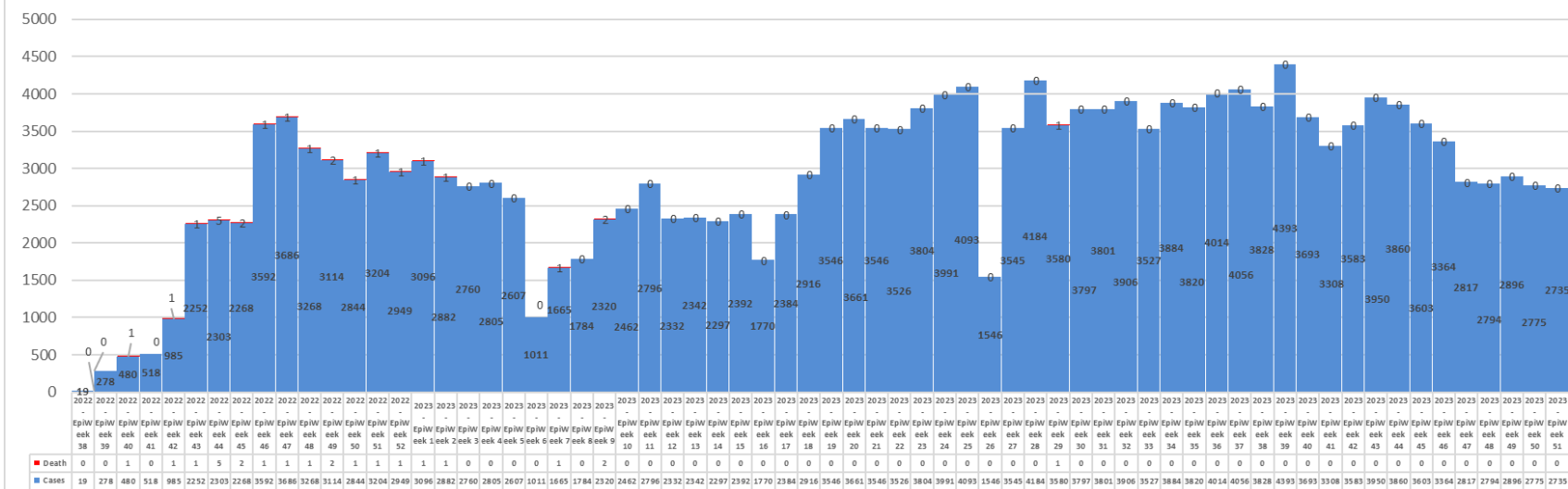
### Cholera Cases Residency Distribution



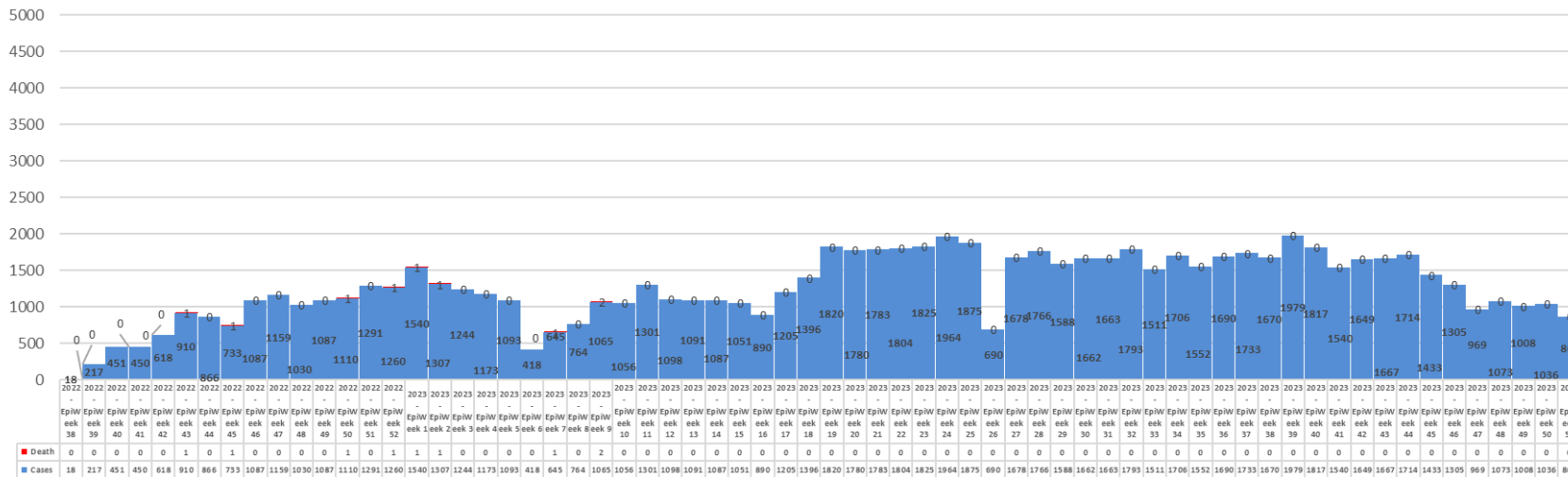
### Signs and Symptoms



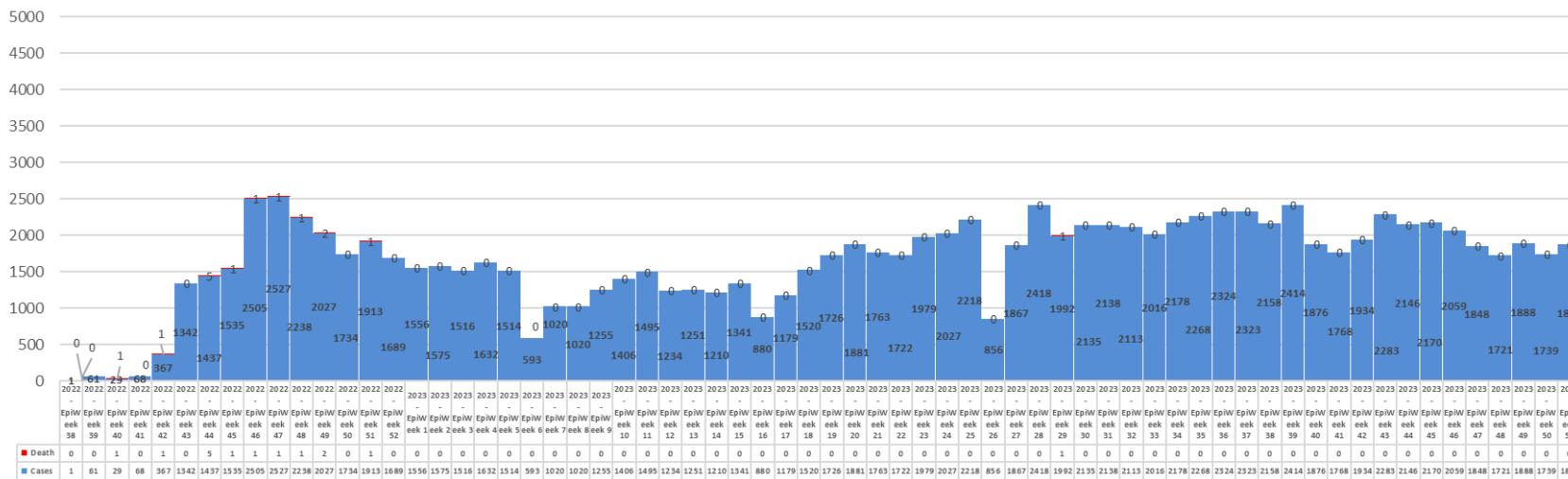
### EPI Curve - Reporting Date - NWS



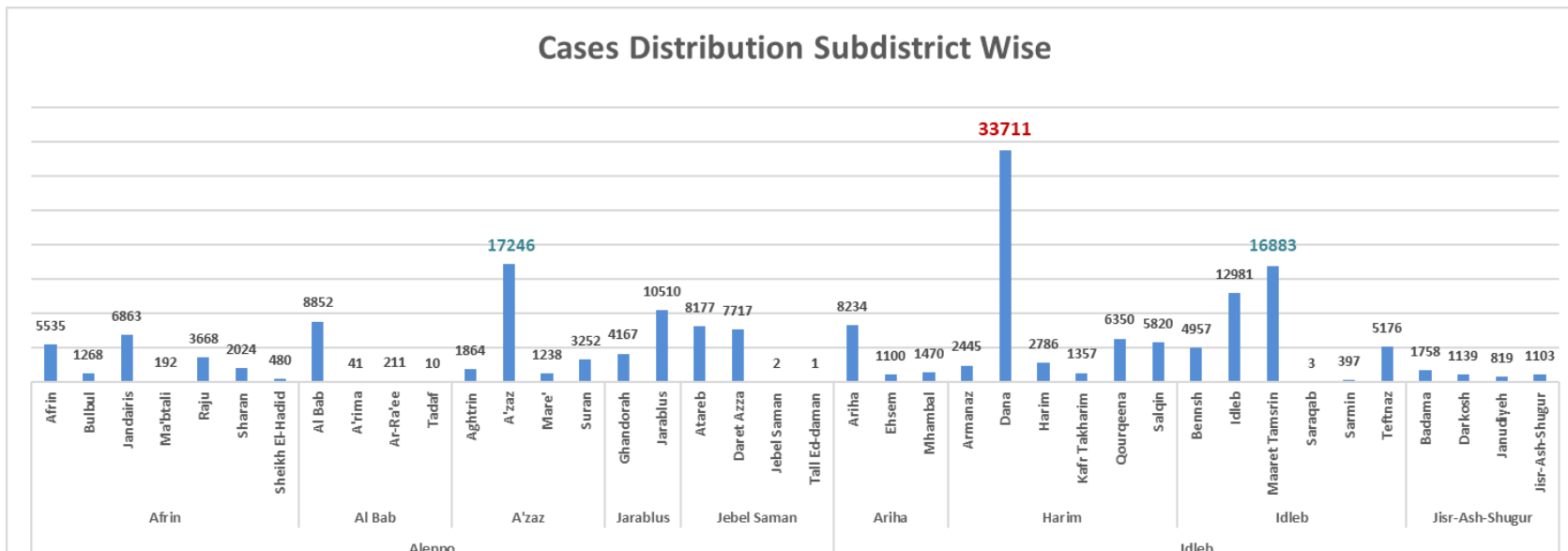
### EPI Curve - Reporting Date - Aleppo Governorate



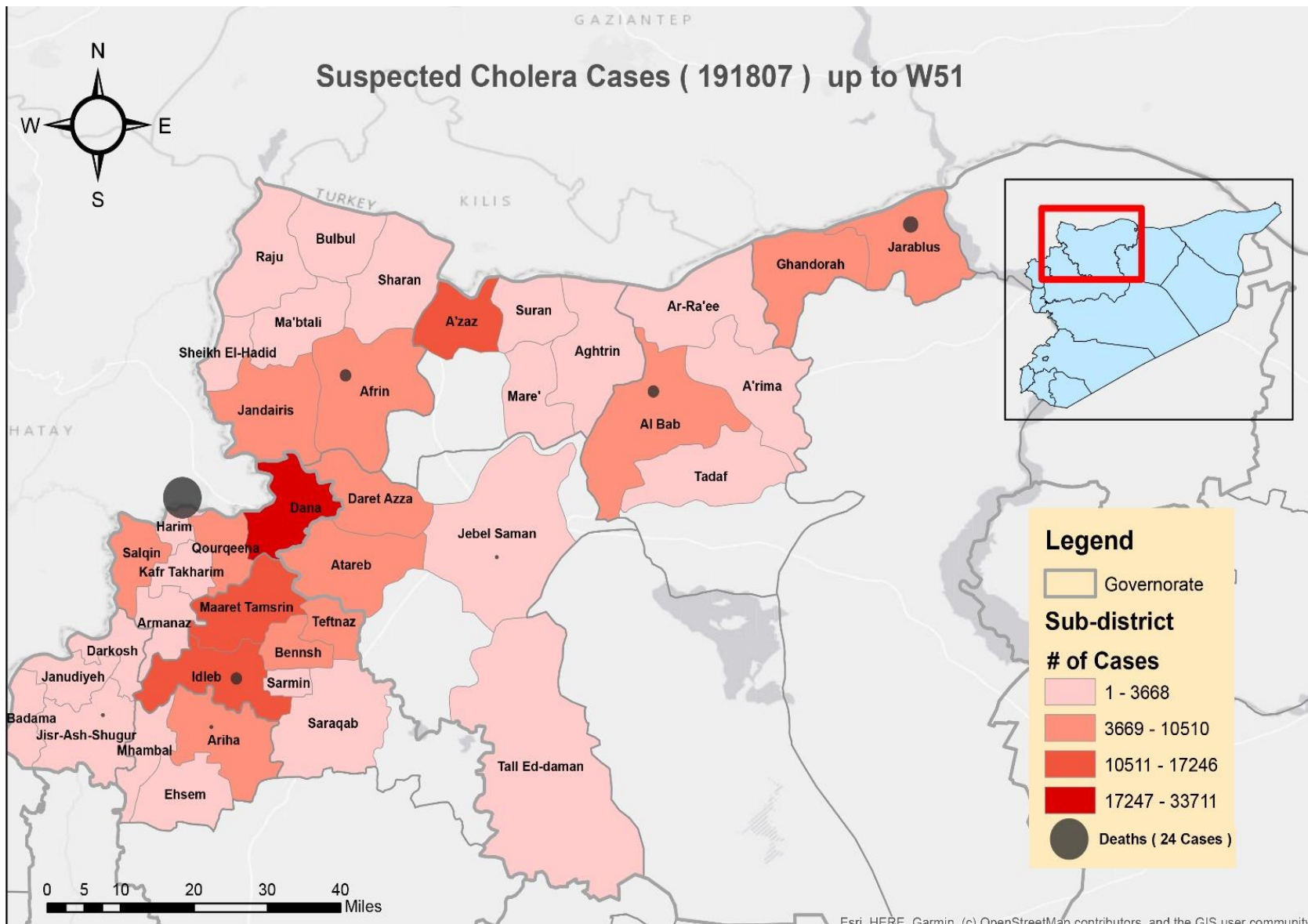
### EPI Curve - Reporting Date - Idleb Governorate



### Cases Distribution Subdistrict Wise

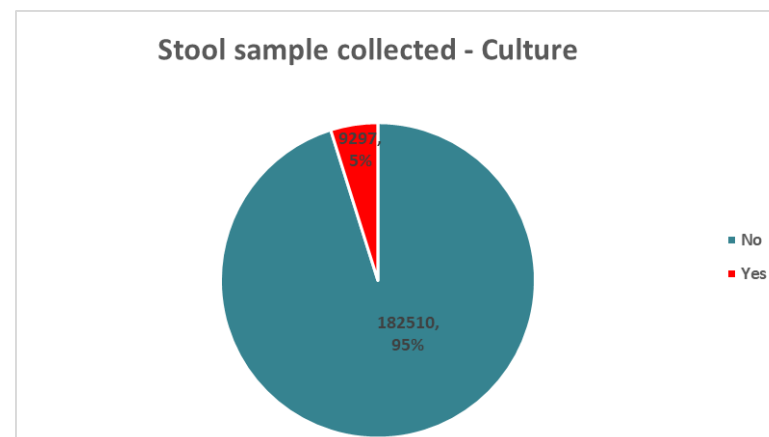


Epi Week	Governorate	District	Date of Onset	Population	New cases	Cumulative Cases	New Death	Cumulative Deaths	Case Fatality Rate	Incidence Rate	Attack Rate
Up to W51 - 2023	Idleb	Ariha	20-Sep	185,668	126	10804	0	1	0.01%	67.9	5.82%
		Harim	6-Sep	1,586,820	917	52469	0	10	0.02%	57.8	3.31%
		Idleb	14-Sep	713,933	723	40397	0	3	0.01%	101.3	5.66%
		Jisr-Ash-Shugur	25-Sep	310,973	105	4819	0	1	0.02%	33.8	1.55%
	Aleppo	A'zaz	9-Sep	648,600	241	23600	0	0	0.00%	37.2	3.64%
		Afrin	21-Sep	467,090	306	20030	0	3	0.01%	65.5	4.29%
		Al Bab	17-Sep	339,812	116	9114	0	2	0.02%	34.1	2.68%
		Jarablus	12-Sep	121,938	139	14677	0	4	0.03%	114.0	12.04%
	Jebel Saman	10-Sep	251,785	62	15897	0	0	0.00%	24.6	6.31%	
	<b>Total</b>				4,626,619	2735	191807	0	24	<b>0.01%</b>	<b>59.1</b>

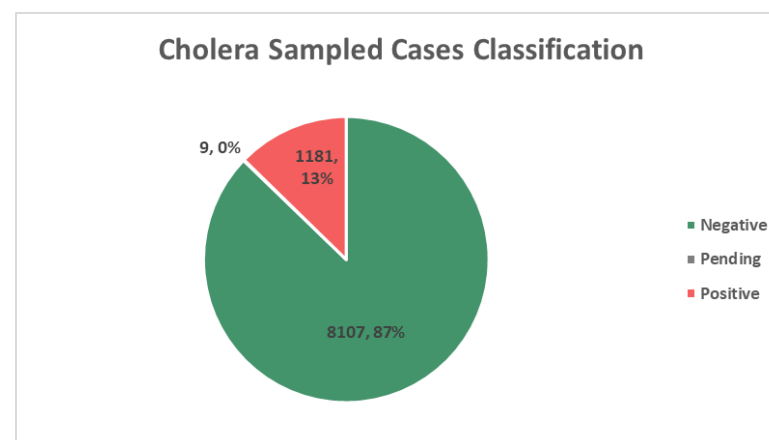


### Laboratory:

- In Epi week 51- 2023, the total number of stool specimens or rectal swabs is 62, (35 in Aleppo – 2 confirmed), (27 in Idleb – 0 confirmed).
- A cumulative of 9297 samples were collected since the start of the outbreak (5 % of overall line listed cases), of which 1181 have tested positive by stool culture. The total positivity rate in NWS is 12.7 %
- The Total number of negative cases by stool culture is 8107, and the remaining 9 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% of the total suspected cholera cases per subdistrict and 5 samples from the admitted cholera suspected cases in the CTC /CTU per week.

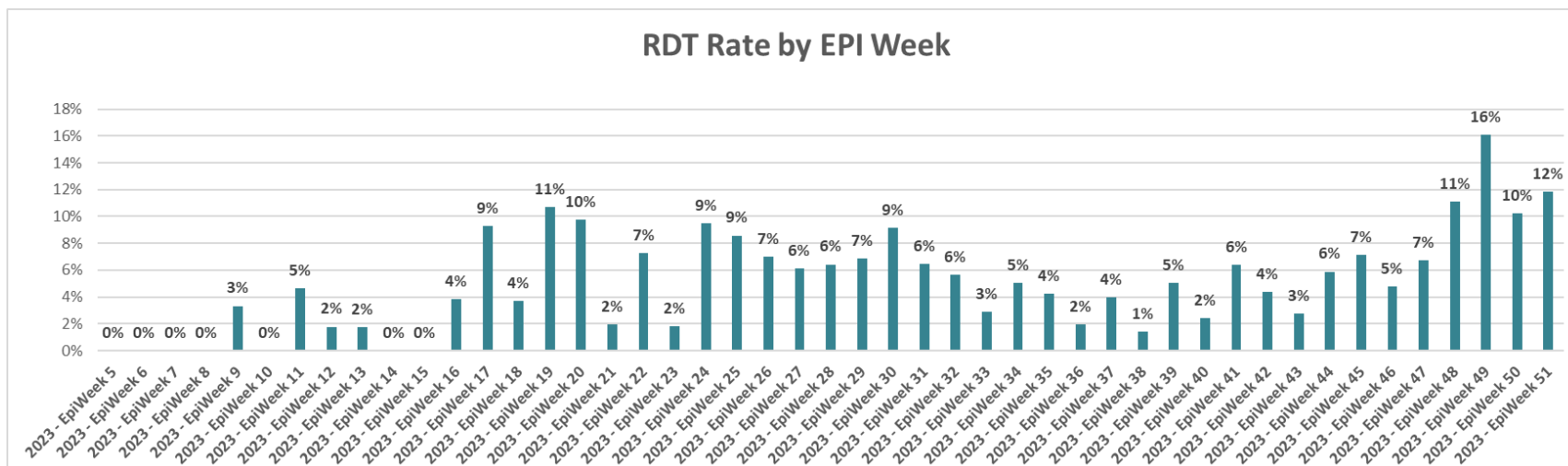
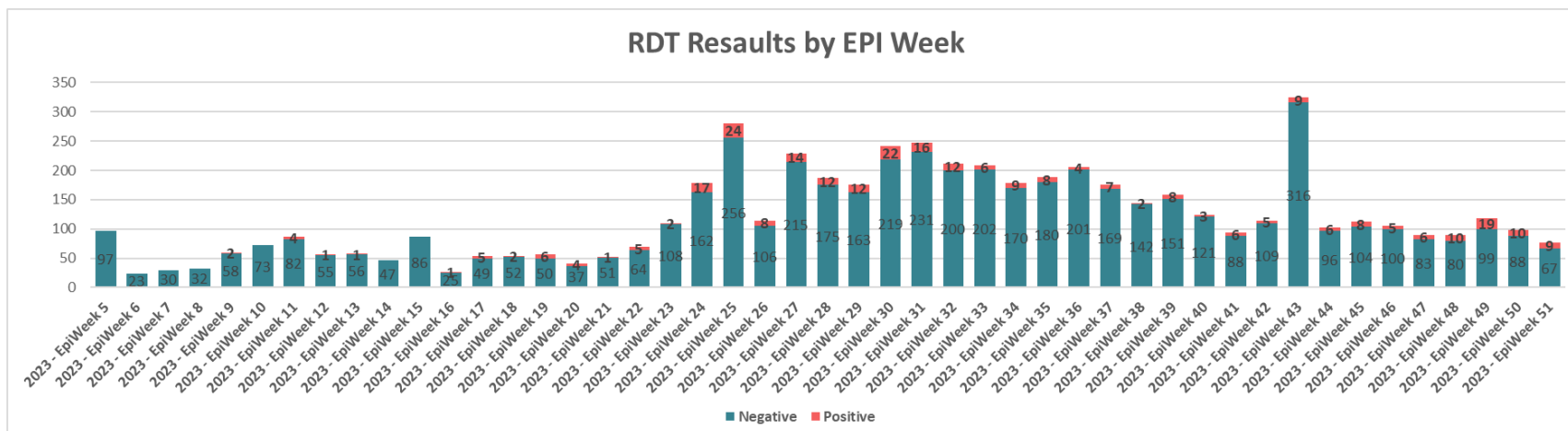




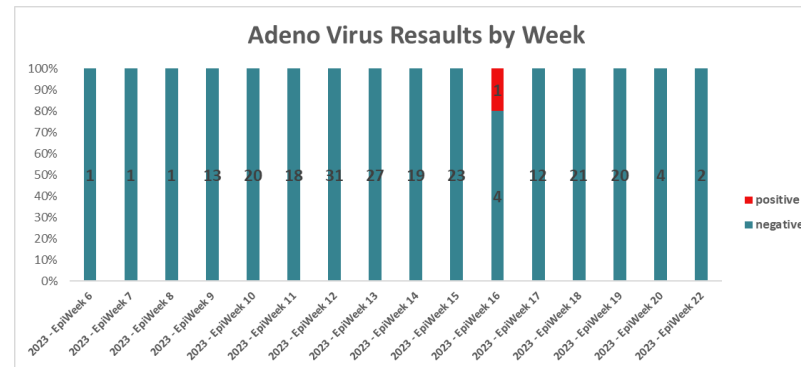
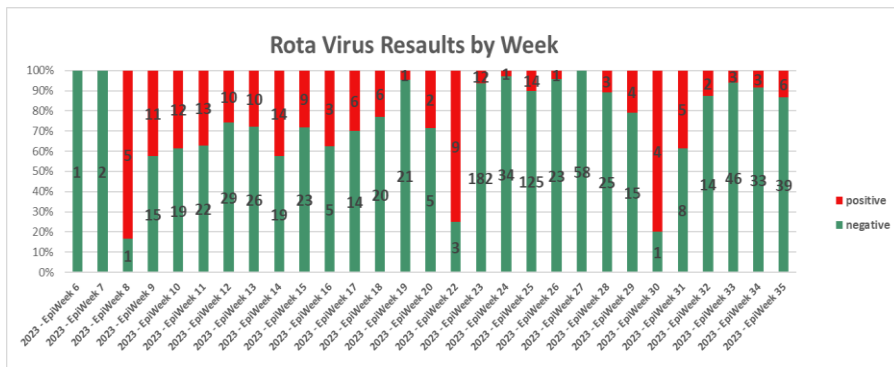
During epi week 51, EWARN received 76 RDT results from the HFs, 9 of them were positive for Cholera.

The total of RDT tests between epi weeks (5 - 51) reached 5679, and the total positive is 311.

The positivity rate of RDTs, from epi week 5 – 2023 up to epi week 51 – 2023 is 5.47 %. But the positivity rate since the beginning of cholera outbreak up to epi week 51 – 2023 is 5.8%.

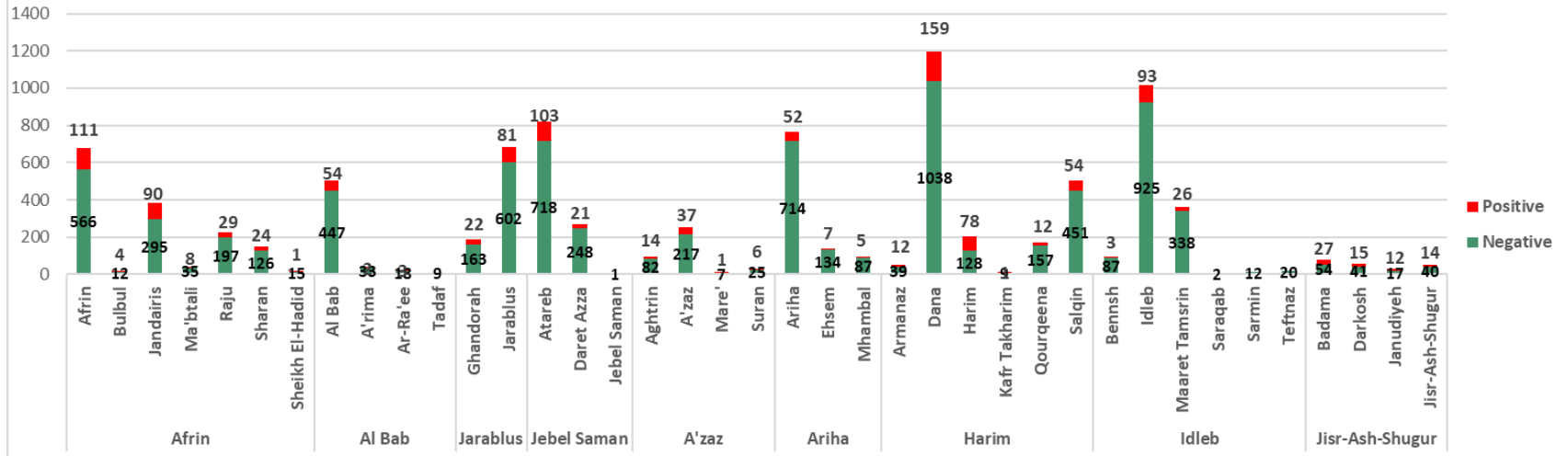


- For children under 5 years of age with a stool culture negative for cholera:  
The total samples collected between (epi week 6 and epi week 35) for Rotavirus reached 997 (169 were positive), while the total samples for Adenovirus were 218 (one positive)  
The EWARN labs ran out of Rotavirus tests in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

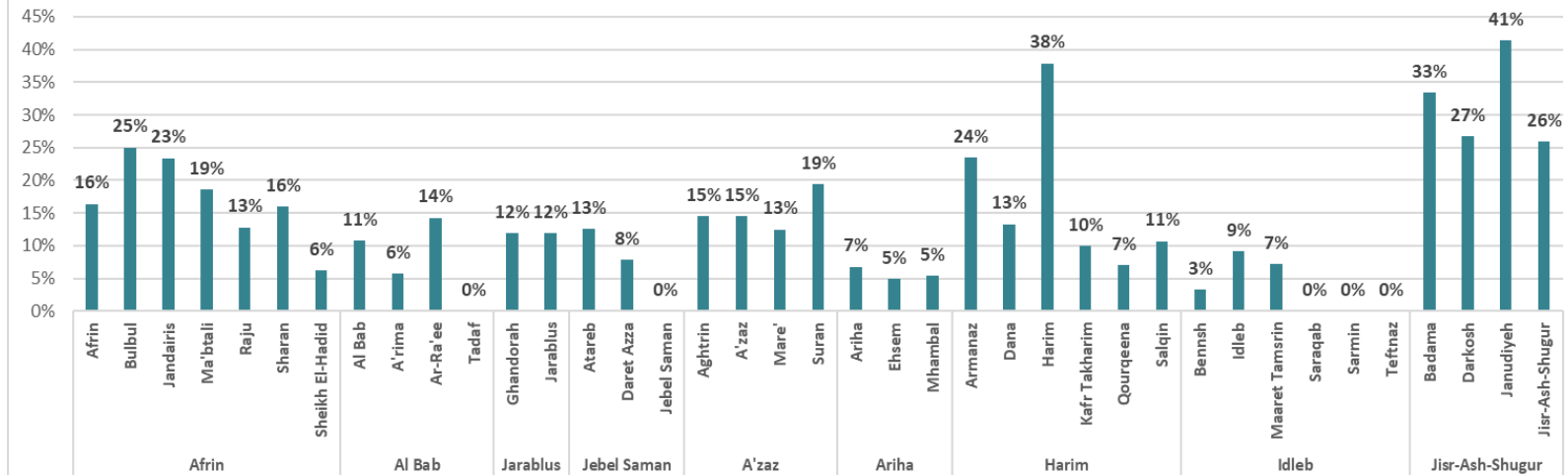


Epi Week	Governorate	District	RDT+	RDT-	Postivity Rate for RDT	Stool Culture Positive	Stool Culture Negative	Postivity Rate for Culture
Up to 51 - 2023	Aleppo	Afrin	127	760	14.3%	267	1246	17.6%
		Al Bab	33	455	6.8%	59	507	10.4%
		A'zaz	31	226	12.1%	58	331	14.9%
		Jarablus	15	303	4.7%	103	765	11.9%
		Jebel Saman	14	302	4.4%	124	967	11.4%
	Idleb	Ariha	5	292	1.7%	64	935	6.4%
		Harim	95	1370	6.5%	316	1822	14.8%
		Idleb	23	1405	1.6%	122	1384	8.1%
		Jisr-Ash-Shugur	4	525	0.8%	68	152	30.9%
	<b>Total</b>		<b>347</b>	<b>5638</b>	<b>5.8%</b>	<b>1181</b>	<b>8109</b>	<b>12.7%</b>

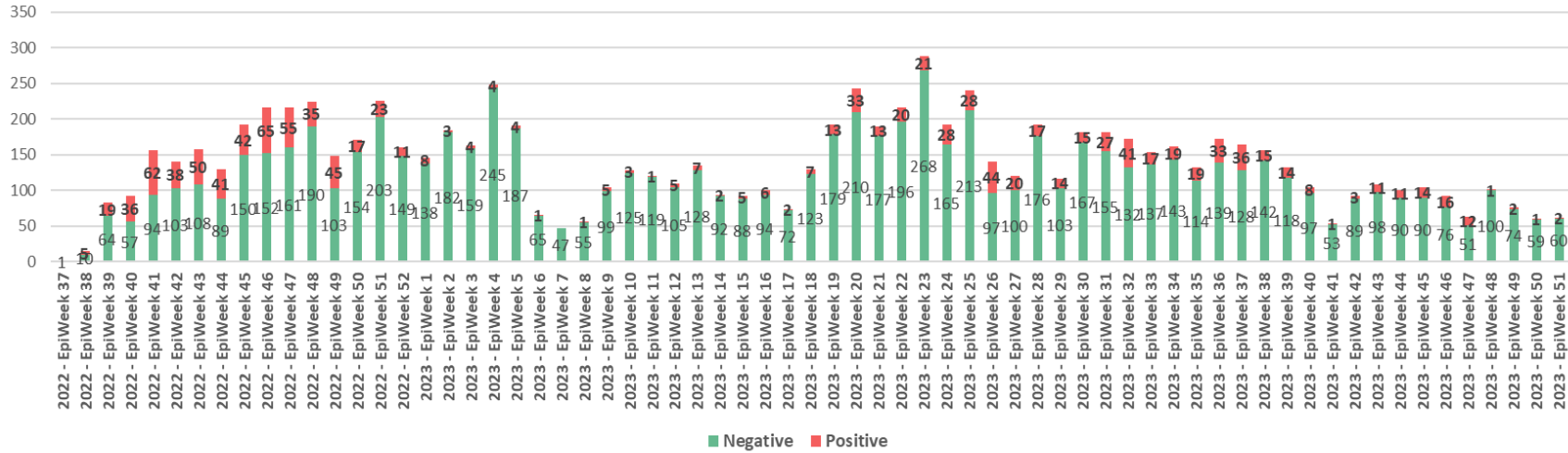
### Classification of Cholera Cases by Sub-district



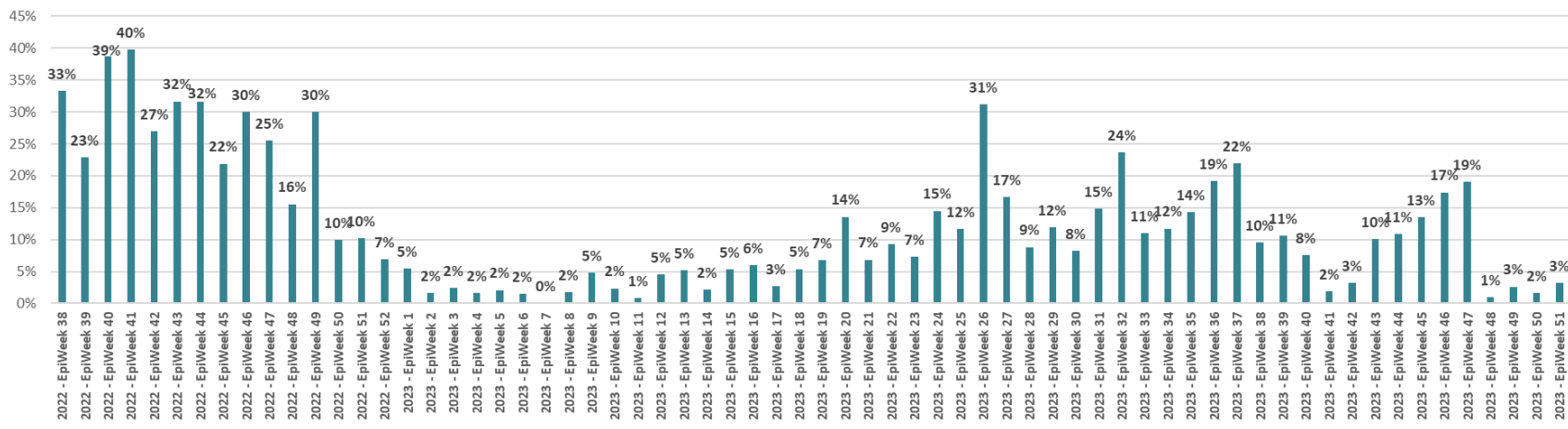
### Positivity Rate by Subdistrict



### Sample Collected by Week - Culture



### Positivity Rate by Week - Culture



## WASH:

### **Cholera Investigation:**

ACU had to suspend water quality monitoring practice due to shortcomings in the fund, where the previous grand 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 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.
- ACU's WASH team is conducting a joint IPC/WASH assessment targeting the Health Facilities that will function as an alternative CTC in NWS. 15 health facilities out of 19 have been visited and assessed. The assessment launched in mid of Nov and is planned to be finalized on the first of Dec.

### **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.

