

## Northwest of Syria Cholera Outbreak

### Situation Report No.60

#### Epidemiological Week - 47 (19 Nov - 25 Nov/ 2023)

Date of Onset of Outbreak: 16 September 2022

Reporting Date of outbreak: 17 September 2022

Confirmation Date: 19 September 2022

Suspected Cases: **180607**

Confirmed Cases: **1175**

Cholera Deaths : **24**

Case Fatality Rate: **0.01%**

NWS Attack Rate: **3.90%**

#### Key Highlights

Cumulatively, a total of **180607 suspected** cases (**79337** in Aleppo governorate, **101270** in Idleb governorate) including **1175 confirmed** have been reported by EWARN team since 16 September, including **24 deaths** case.

The highest number of cases were reported in Harim district (**49044**) and Idleb district (**37634**) in Idleb governorate, then Azaz district (**22450**), and Afrin district (**18590**) in Aleppo governorate.

**34276** total suspected cases (including **425** new cases in Epi week 47 - 2023) were reported from camps. **56.86 %** 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

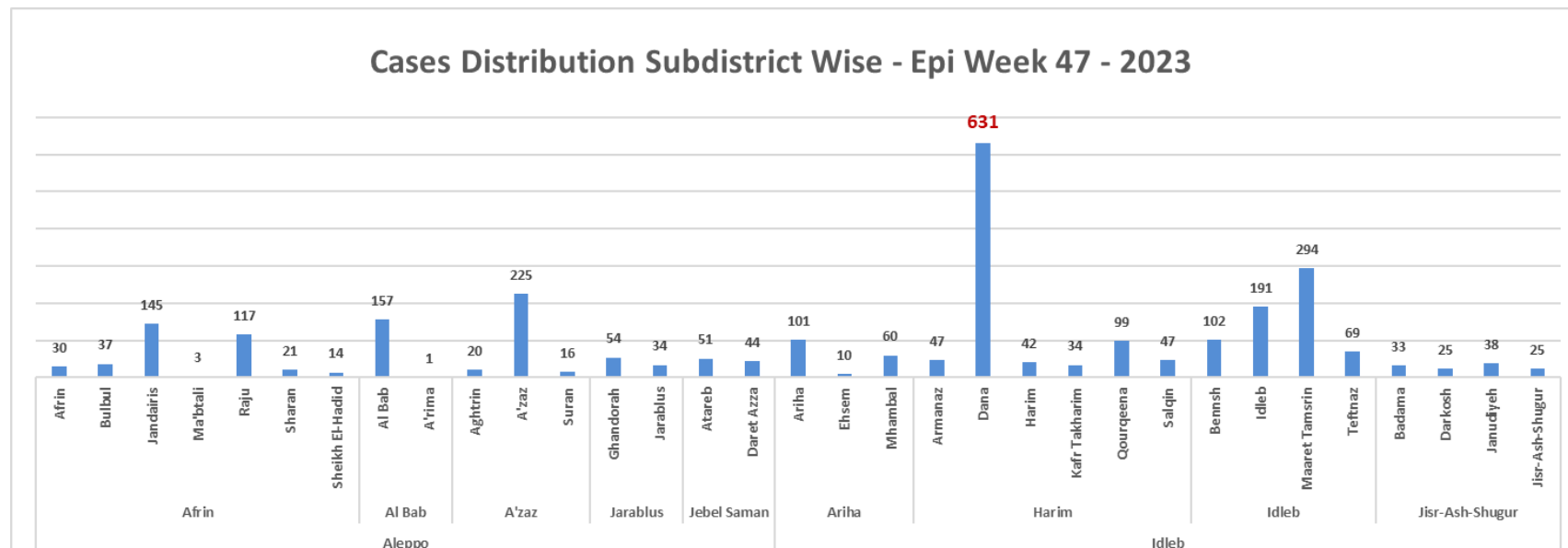
Updated case definition: A resident of outbreak areas with sudden onset of acute watery diarrhea with or without vomiting.

In Epi week 47 - 2023, **2817 suspected cases of cholera were reported**. The affected governorates are Aleppo (969 suspected cases, 6 confirmed), and Idleb (1848 suspected cases, 6 confirmed). 15% of the total were in the camps

The age group less than 5 reported 60.36 %. Sex distribution of the suspected\_cases is 50% Male, and 50% Female

There is no new death in epi week 47

Dana subdistrict in Idled governorate reported the highest number of cases (631), in contract Azaz subdistrict reported the highest number in Aleppo governorate (225).

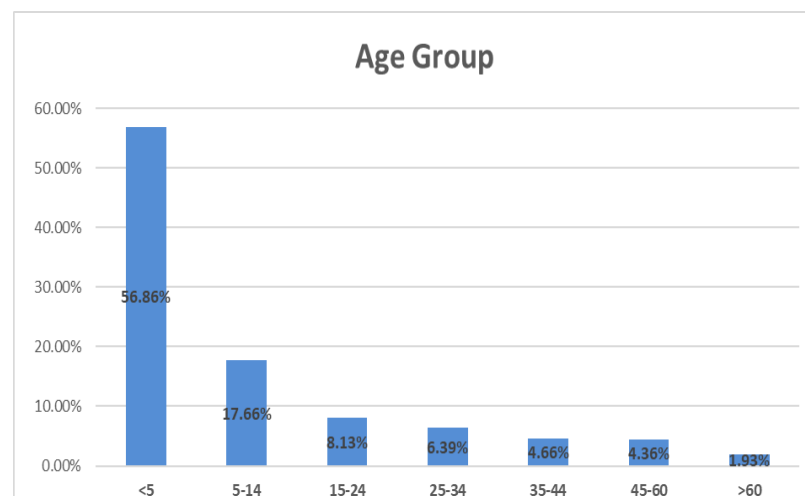
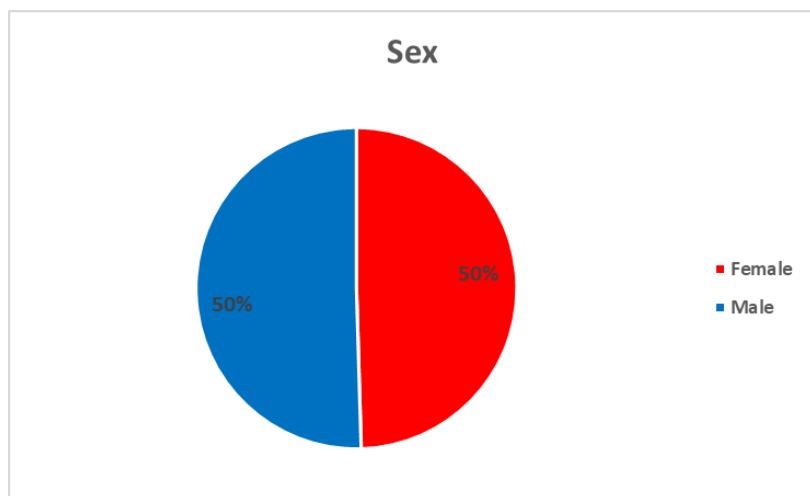


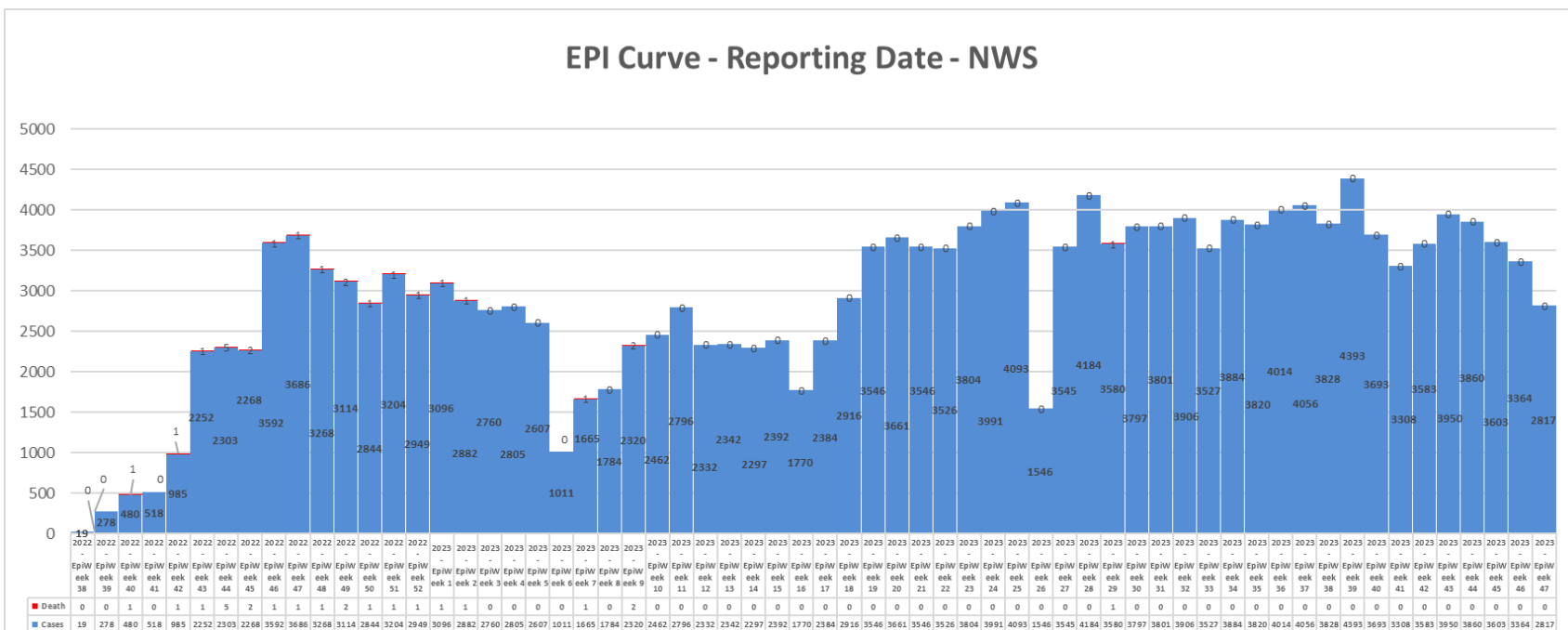
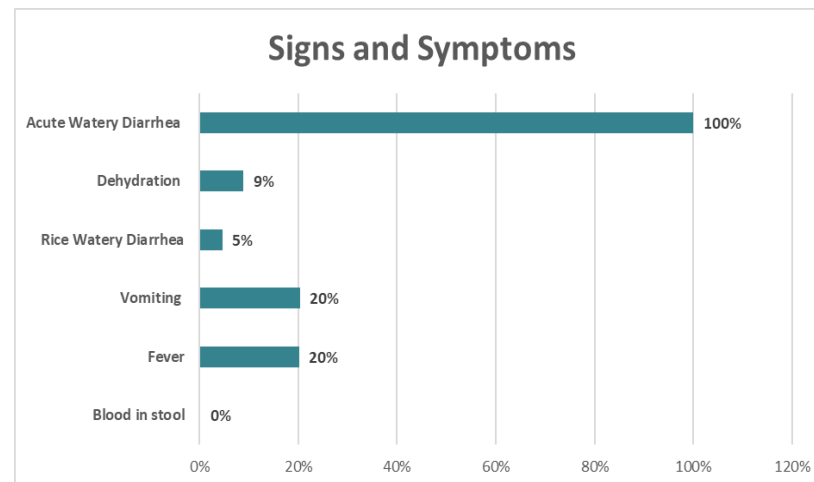
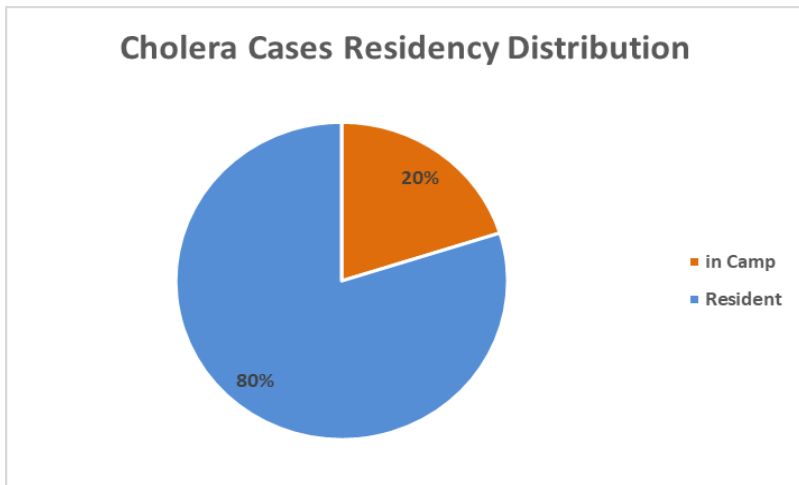
The overall sex distribution of the suspected\_cases is 50% Male, and 50% Female.

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

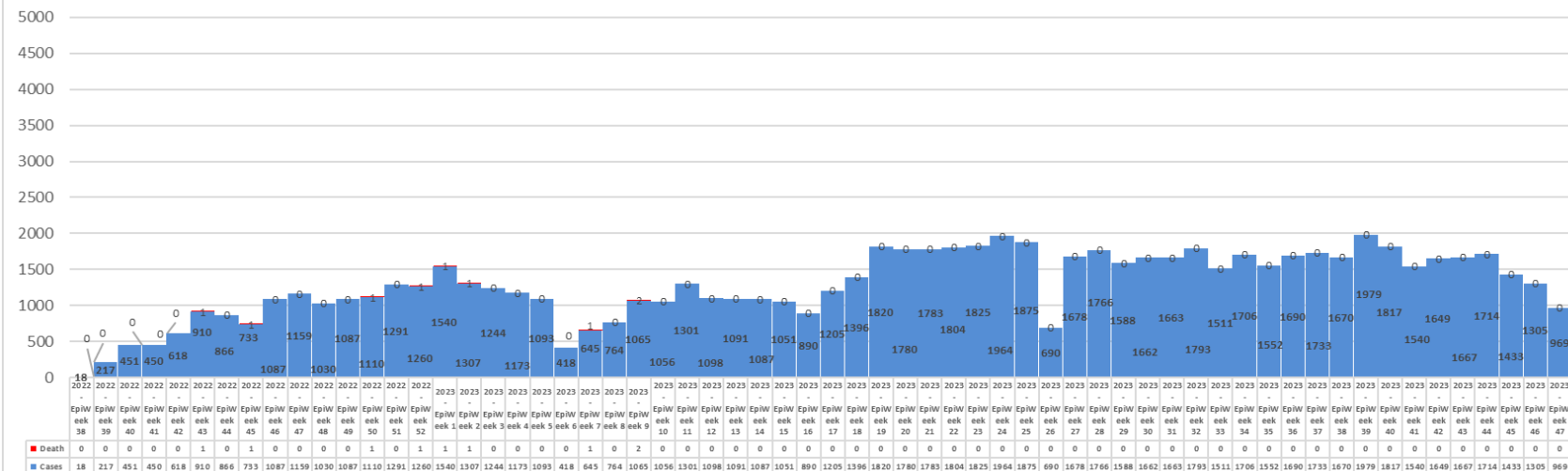
20% of the total cases live in camps (34276), and 80% out of camps (136188).

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 56.86%.

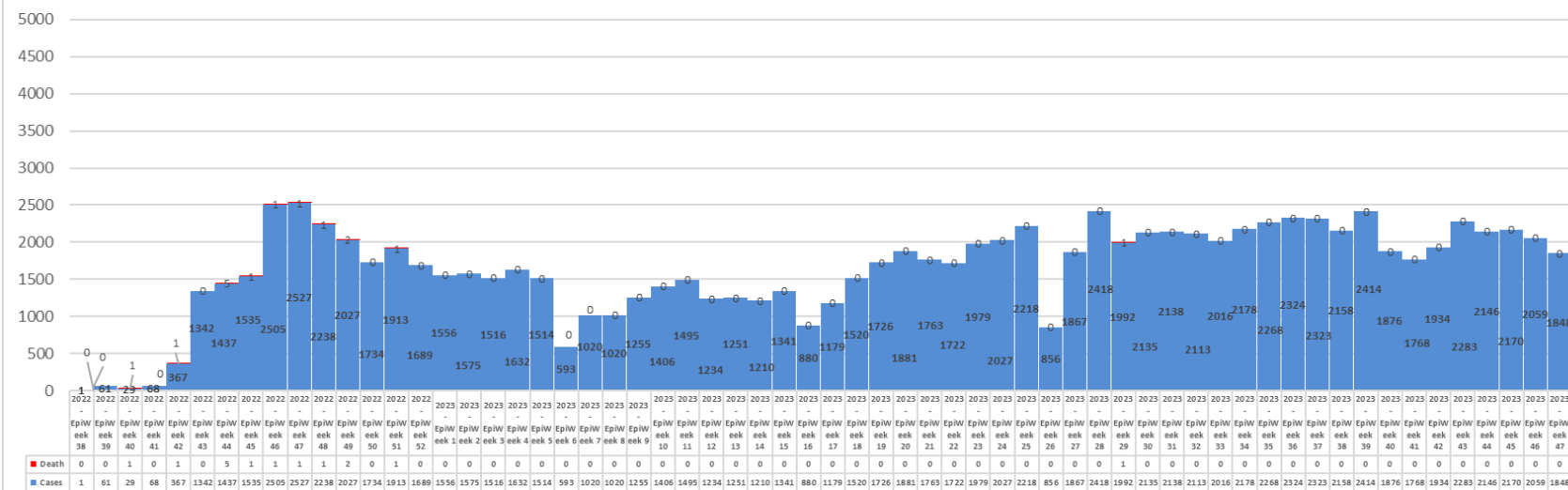




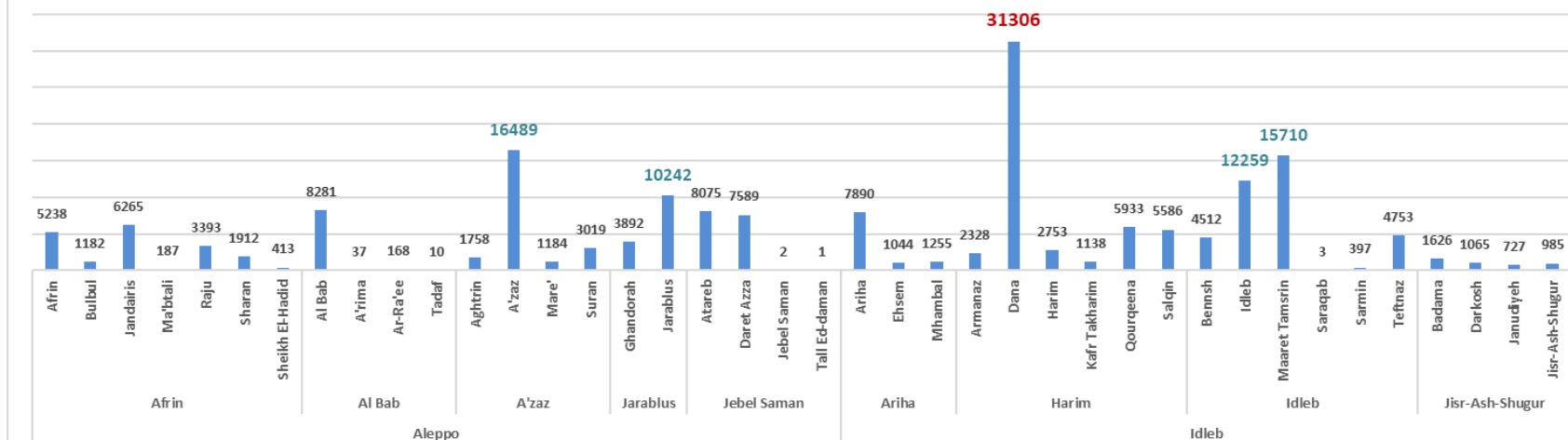
### EPI Curve - Reporting Date - Aleppo Governorate



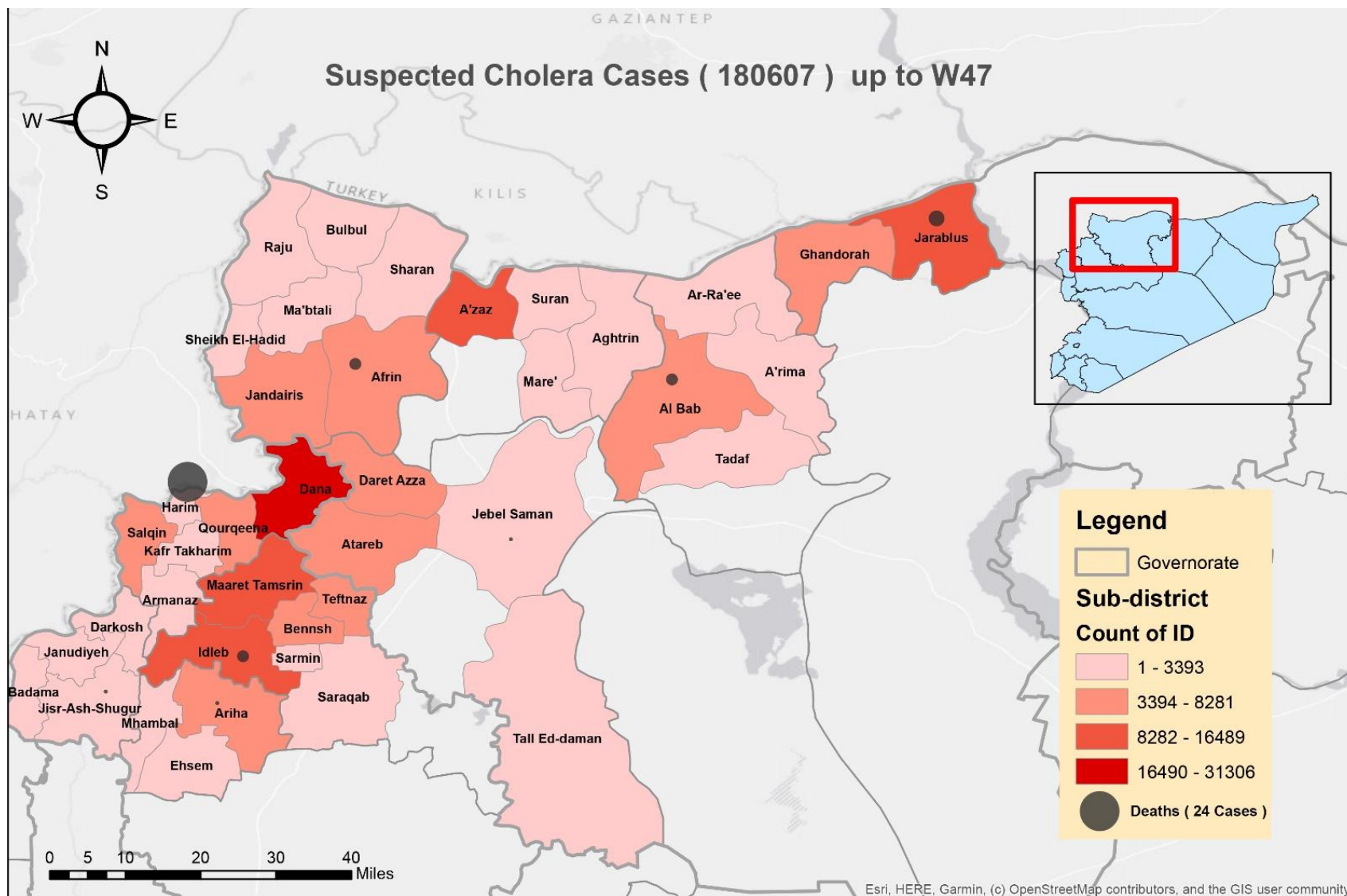
### EPI Curve - Reporting Date - Idleb Governorate



### Cases Distribution Subdistrict Wise - up to Epi Week 47 - 2023

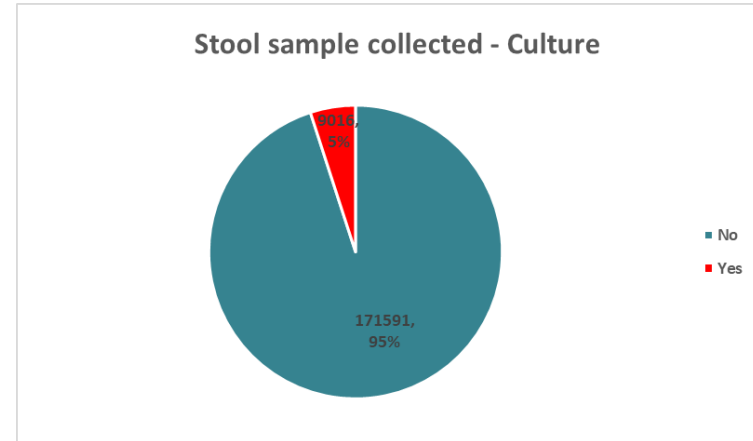


Epi Week	Governorate	District	Date of Onset	Population	New cases	Cumulative Cases	New Death	Cumulative Deaths	Case Fatality Rate	Incidence Rate	Attack Rate
Up to W47 - 2023	Idleb	Ariha	20-Sep	185,668	171	10189	0	1	0.01%	92.1	5.49%
		Harim	6-Sep	1,586,820	900	49044	0	10	0.02%	56.7	3.09%
		Idleb	14-Sep	713,933	656	37634	0	3	0.01%	91.9	5.27%
		Jisr-Ash-Shugur	25-Sep	310,973	121	4403	0	1	0.02%	38.9	1.42%
	Aleppo	A'zaz	9-Sep	648,600	261	22450	0	0	0.00%	40.2	3.46%
		Afrin	21-Sep	467,090	367	18590	0	3	0.02%	78.6	3.98%
		Al Bab	17-Sep	339,812	158	8498	0	2	0.02%	46.5	2.50%
		Jarablus	12-Sep	121,938	88	14132	0	4	0.03%	72.2	11.59%
	Jebel Saman	10-Sep	251,785	95	15667	0	0	0.00%	37.7	6.22%	
	<b>Total</b>				<b>4,626,619</b>	<b>2817</b>	<b>180607</b>	<b>0</b>	<b>24</b>	<b>0.01%</b>	<b>60.9</b>

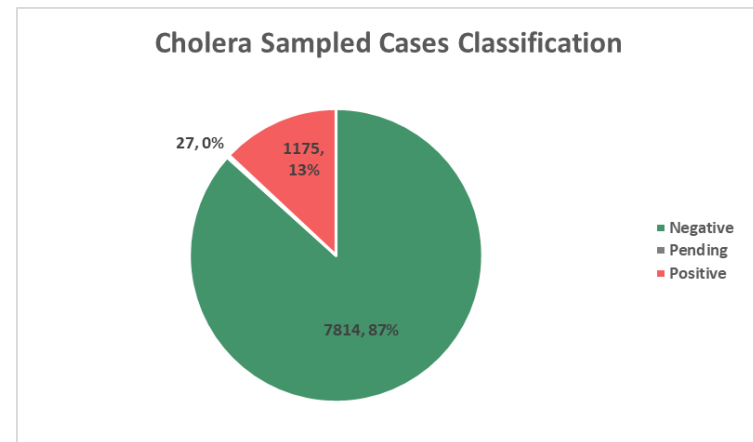


### Laboratory:

- In Epi week 47- 2023, the total number of stool specimens or rectal swabs is **63**, (26 in Aleppo –6 confirmed), (37 in Idleb – 6 confirmed).
- A **cumulative of 9016 samples were collected** since the start of the outbreak (5 % of overall line listed cases), **of which 1175 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 7814, and the remaining 27 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.

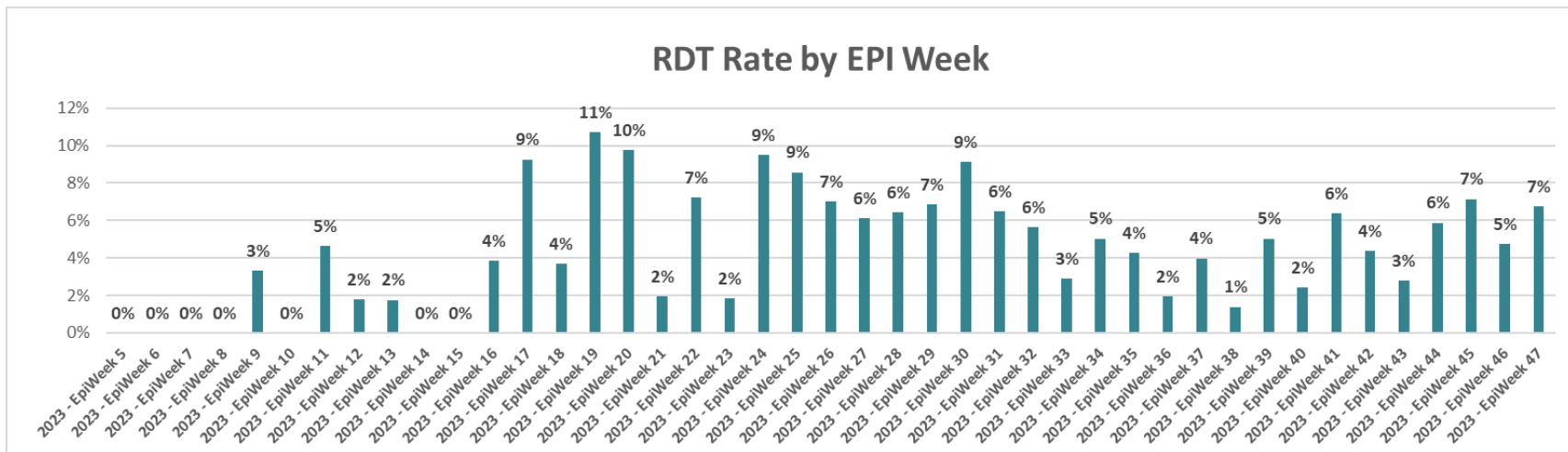
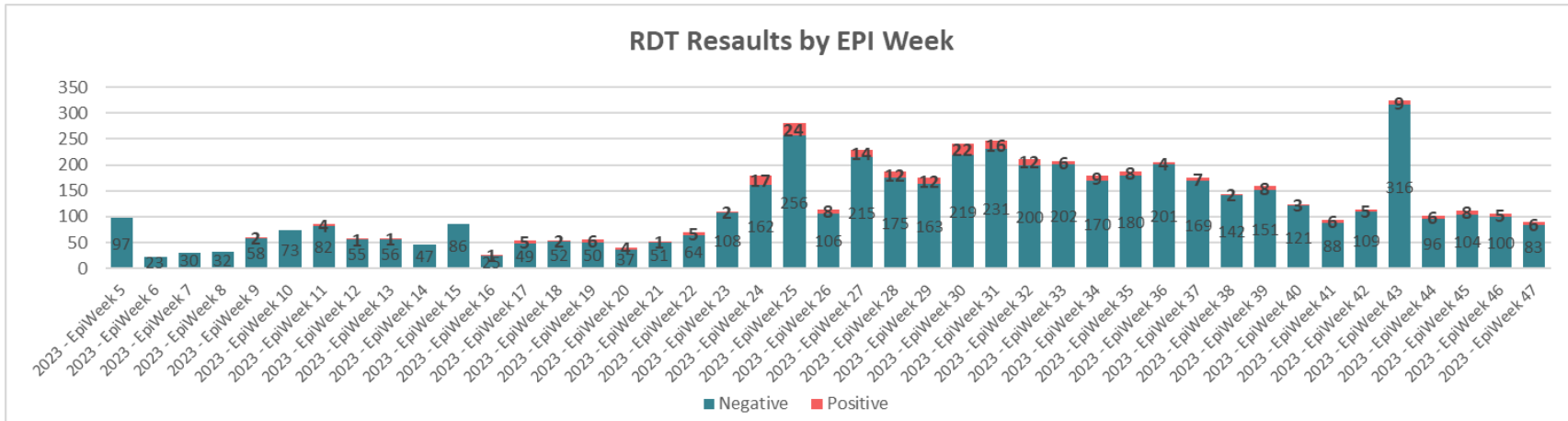




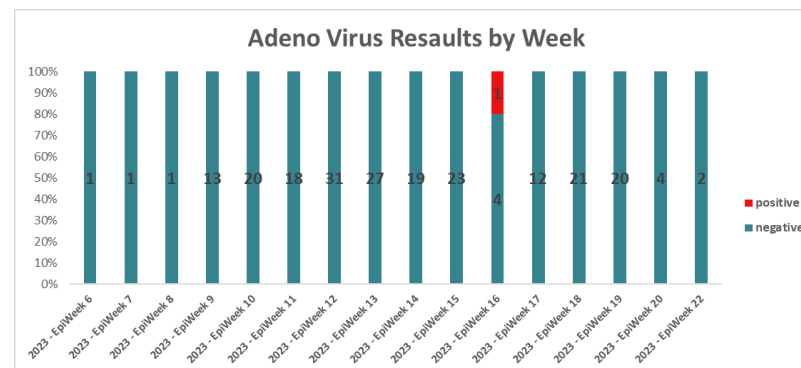
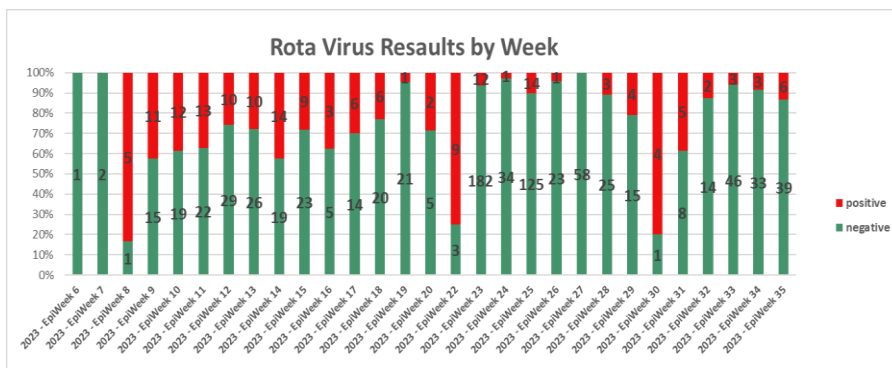
During epi week 47, EWARN received 89 RDT results from the HFs, 6 of them were positive for Cholera.

The total of RDT tests between epi weeks (5 - 47) reached 5297, and the total positive is 263.

The positivity rate of RDTs, from epi week 5 – 2023 up to epi week 47 – 2023 is 4.96 %. But the positivity rate since the beginning of cholera outbreak up to epi week 47 – 2023 is 5.3 %.

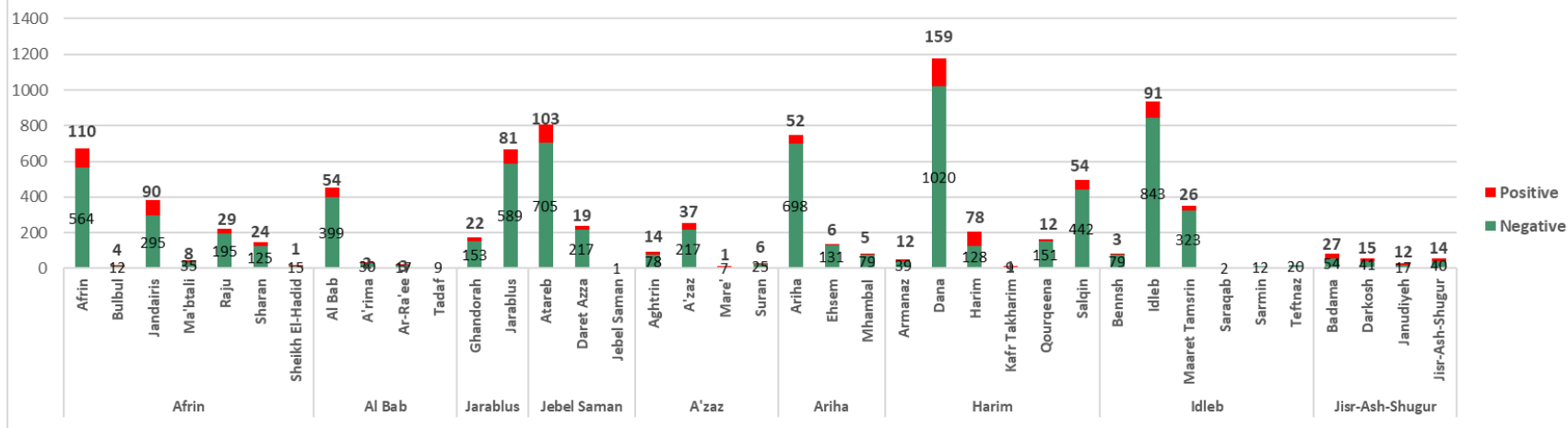


- For children under 5 years of age with a stool culture negative for cholera:  
The total samples collected between (epi week 6 and epi week 35) for Rotavirus reached 997 (169 were positive), while the total samples for Adenovirus were 218 (one positive)  
The EWARN labs ran out of Rotavirus tests in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

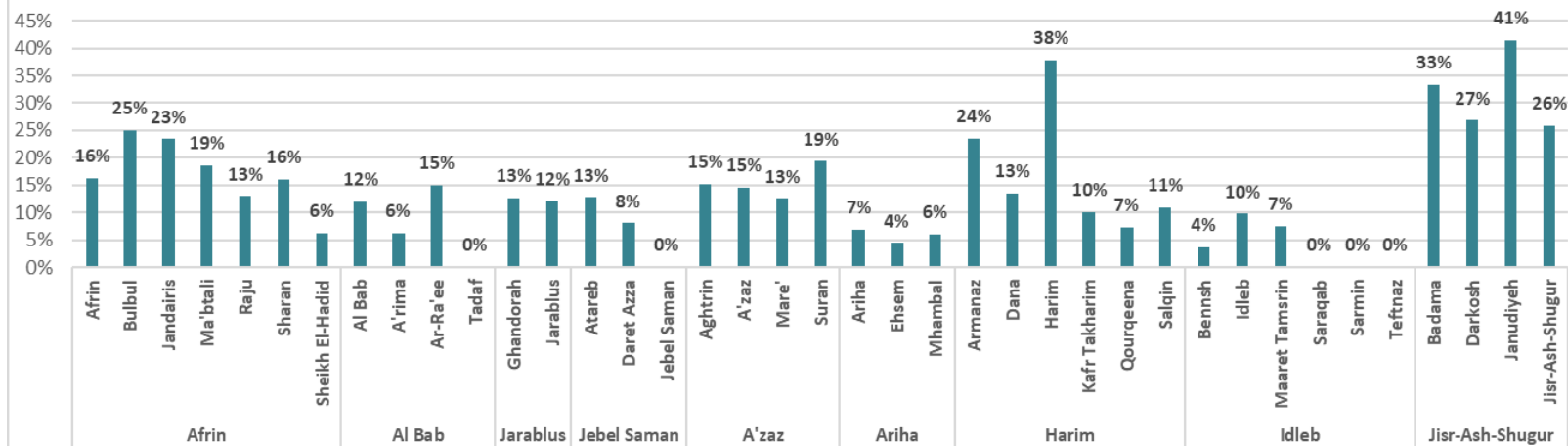


Epi Week	Governorate	District	RDT+	RDT-	Postivity Rate for RDT	Stool Culture Positive	Stool Culture Negative	Postivity Rate for Culture
Up to W46 - 2023	Aleppo	Afrin	87	697	11.1%	266	1241	17.7%
		Al Bab	29	409	6.6%	59	455	11.5%
		A'zaz	30	218	12.1%	58	327	15.1%
		Jarablus	14	284	4.7%	103	742	12.2%
		Jebel Saman	14	302	4.4%	122	923	11.7%
	Idleb	Ariha	5	292	1.7%	63	908	6.5%
		Harim	93	1331	6.5%	316	1789	15.0%
		Idleb	23	1263	1.8%	120	1279	8.6%
	Jisr-Ash-Shugur	4	508	0.8%	68	152	30.9%	
	<b>Total</b>			<b>299</b>	<b>5304</b>	<b>5.3%</b>	<b>1175</b>	<b>7816</b>

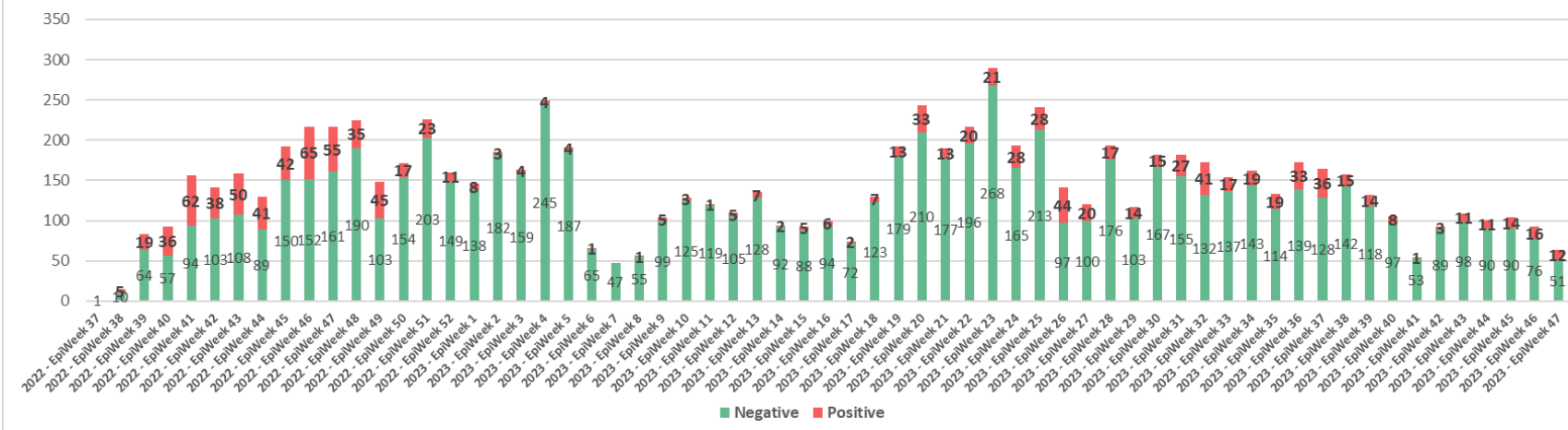
### Classification of Cholera Cases by Sub-district



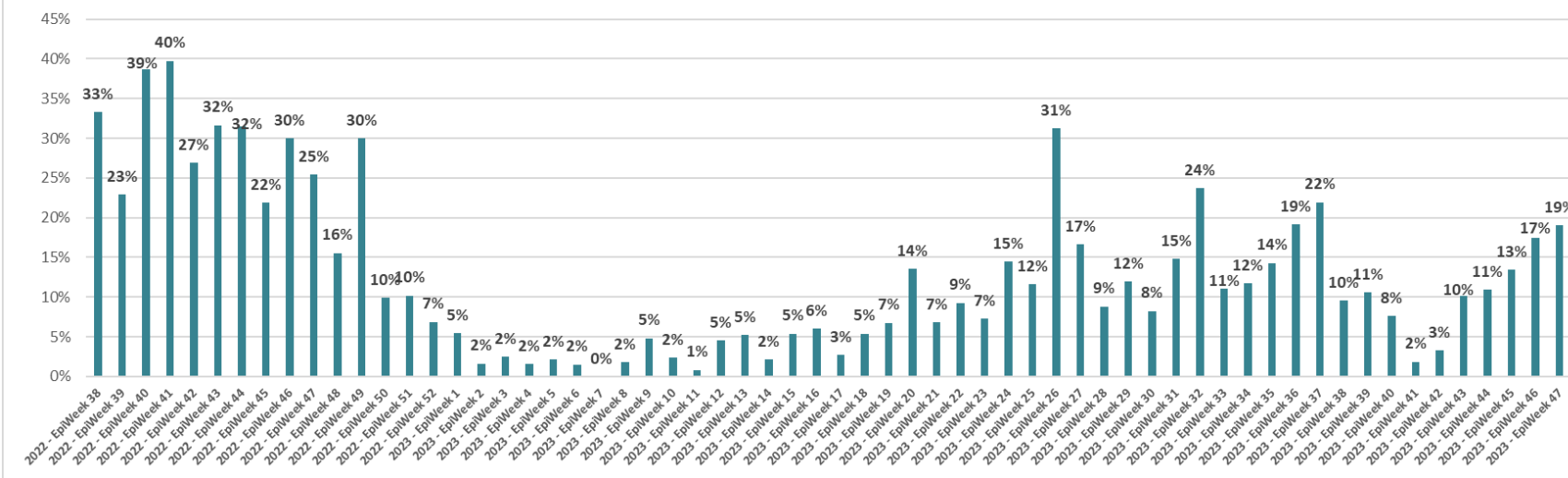
### Positivity Rate by Subdistrict



### 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.

### **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.