

## Northwest of Syria Cholera Outbreak

### Situation Report No.22

#### Epidemiological Week - 08 (19 Feb – 25 Feb 2023)

Suspected Cases: 50370

Confirmed Cases: 568

Cholera Deaths : 21

Case Fatality Rate: 0.04%

NWS Attack Rate: 1.09%

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 **50370 suspected** cases (**20471** in Aleppo governorate, **29899** in Idleb governorate) including **568 confirmed** have been reported by EWARN team since 16 September, including **21 deaths** case.

- The highest number of cases were reported in Harim district (15647) and Idleb district (8583) in Idleb governorate, then Jebel Saman district (4933), Azaz district (4879), and Jarablus district (4301) in Aleppo governorate.
- 8782 total suspected cases (including 314 new cases in Epi week 8 - 2023) were reported from camps.
- 44.52 % 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

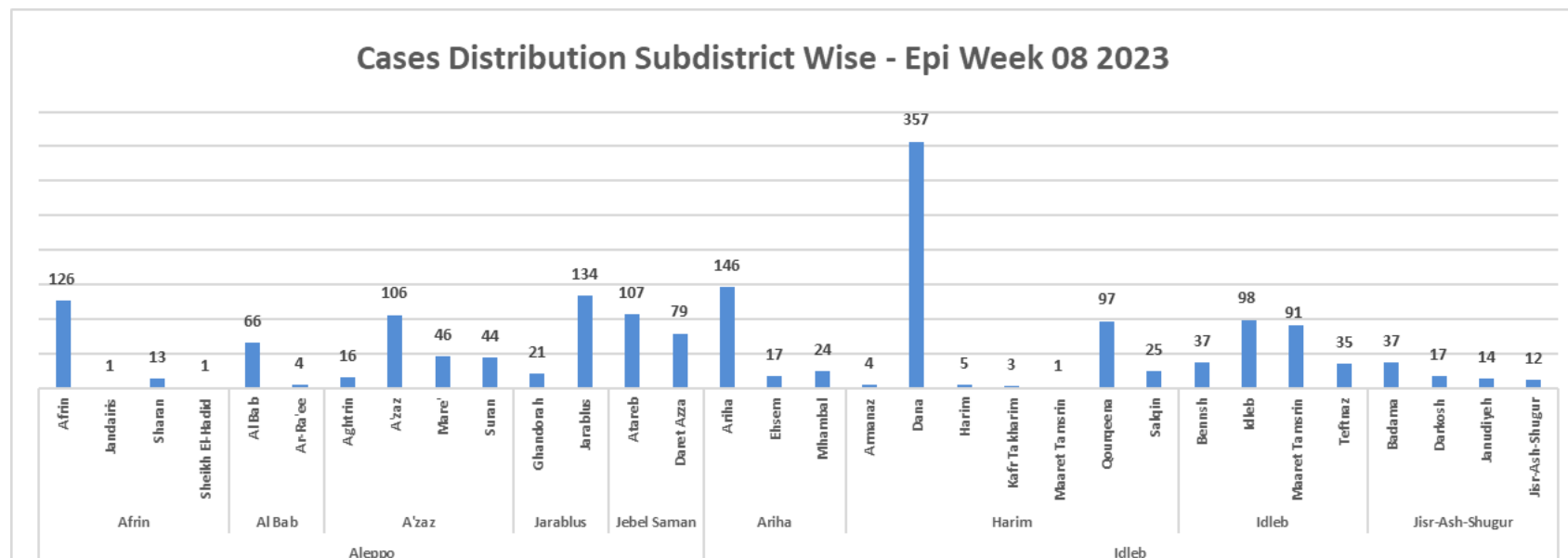
### 1. Epidemiology

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

In Epi week 08 - 2023, **1784 suspected cases of cholera were reported**. The affected governorates are Aleppo (764 suspected cases, 1 confirmed), and Idleb (1020 suspected cases, 0 confirmed).

The age group less than 5 reported 48.26 %, while the age group more than 60 reported 19.6 % of the total.

Dana subdistrict in Idled governorate reported the highest number of cases (357), and Ariha subdistrict (146), then Jarablus subdistrict in Aleppo governorate (134).



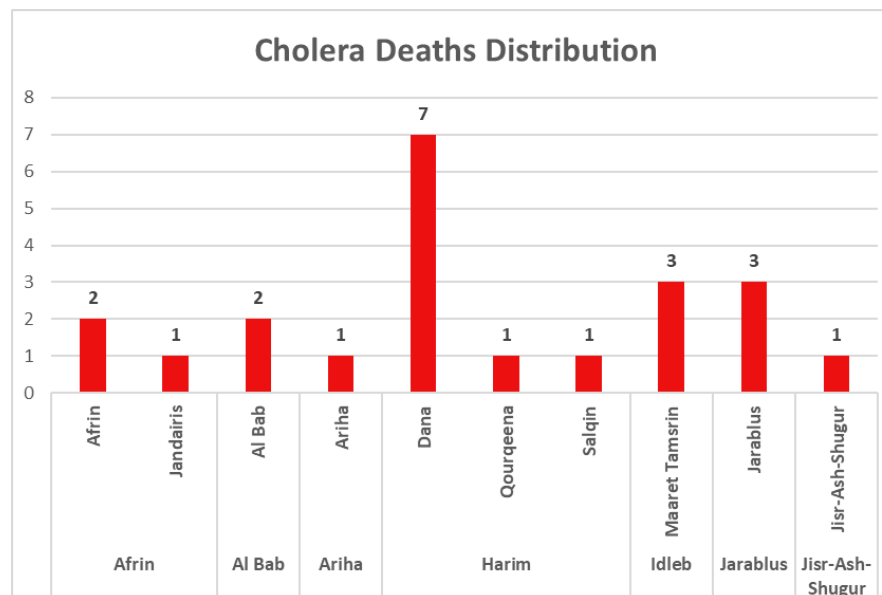
In epi week 02 - 2023, one new death was reported (a total of 22 deaths)

### Male newborn, 35 days old

Afrin subdistrict, Afrin district, Aleppo governorate.

- Date of onset: 23-Feb-2023
- Date of death: 25-Feb-2023
- A stool sample was collected on 23 Feb, the result has not come yet
- RDT was **negative**
- Rotavirus and Adenovirus were **negative**

[For more Details Click Here](#)

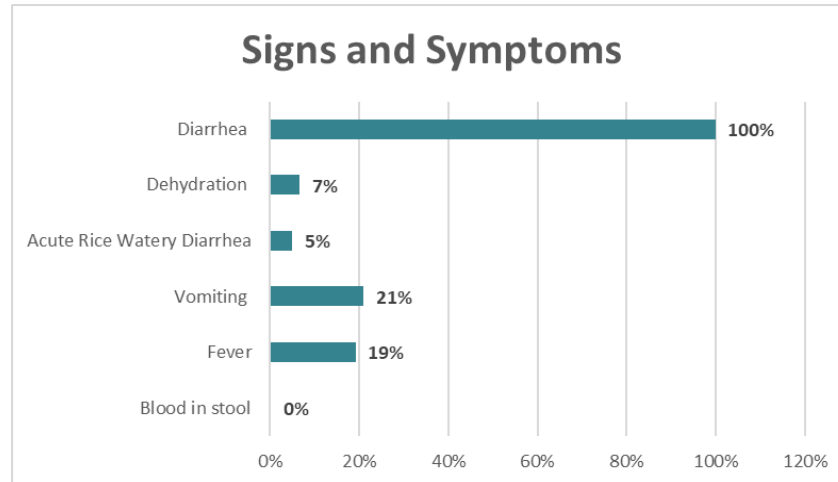
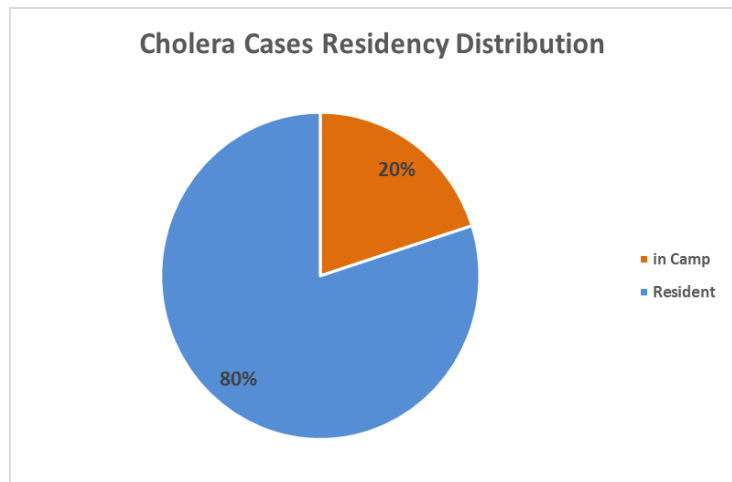
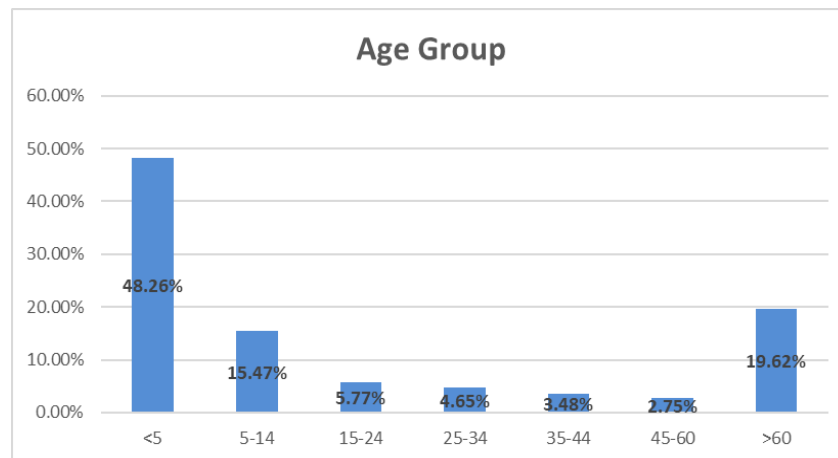
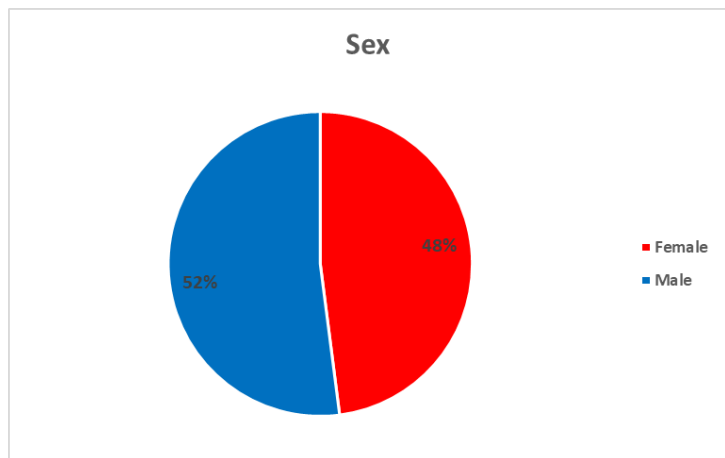


The overall sex distribution of the suspected\_cases is 52% Male, and 48% Female.

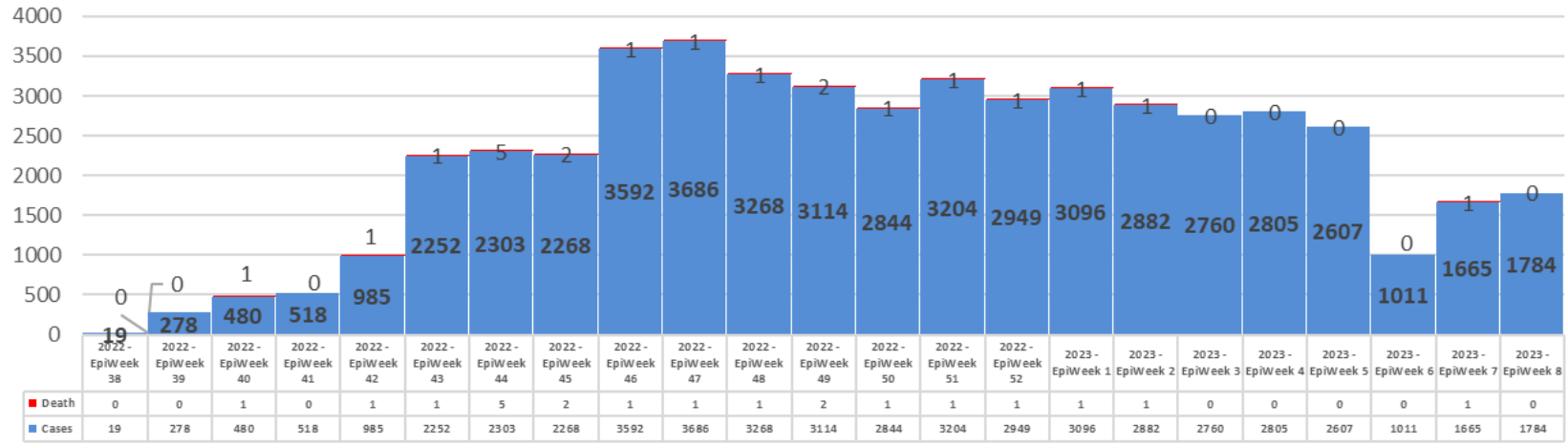
100% of the line listed cases were presented as Acute Diarrhea, 21% with vomiting, 5% as rice watery diarrhea, and 7% were dehydrated.

20% of the total cases live in camps (8782), and 80% out of camps (35263). (6320 of the total line listed cases are unknown)

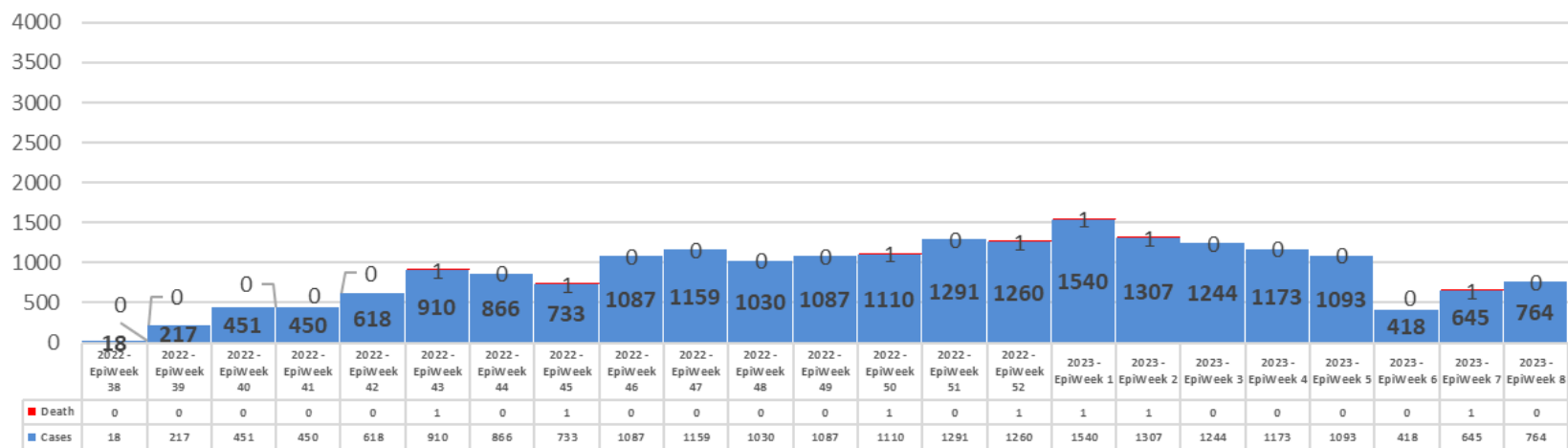
As the outbreak progresses, sensitivity should be increased by including smaller age groups and mild/moderate symptom groups in order to estimate the burden of the outbreak. According to WHO, in areas where a cholera outbreak has been confirmed, any person presenting with or dying from acute watery diarrhea is considered a suspected cholera case. The age group less than 5 years was 44.52%.



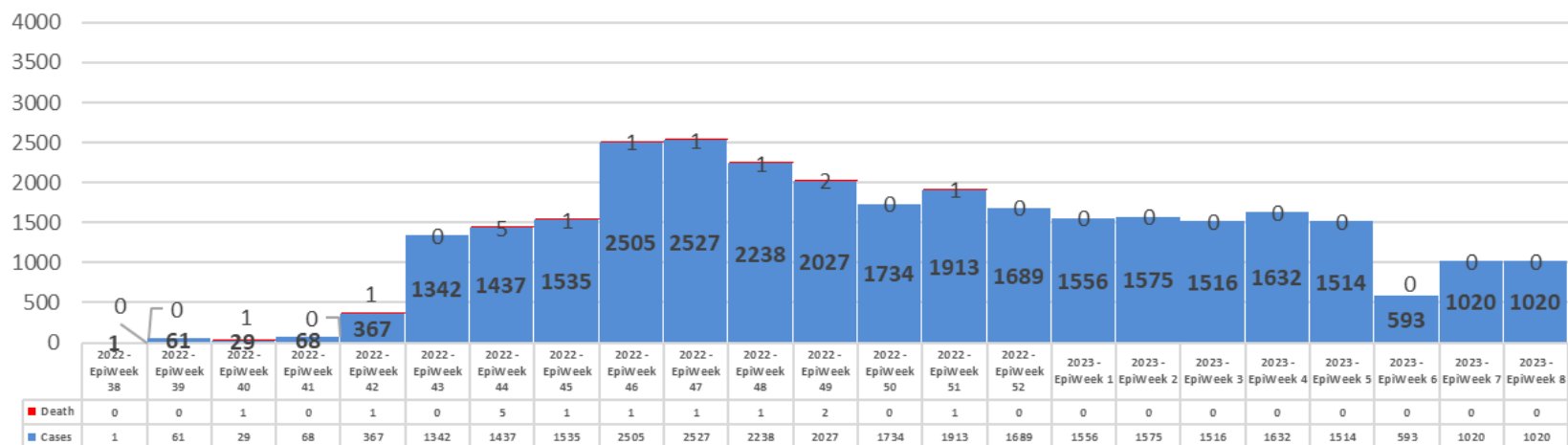
## EPI Curve - Reporting Date - NWS



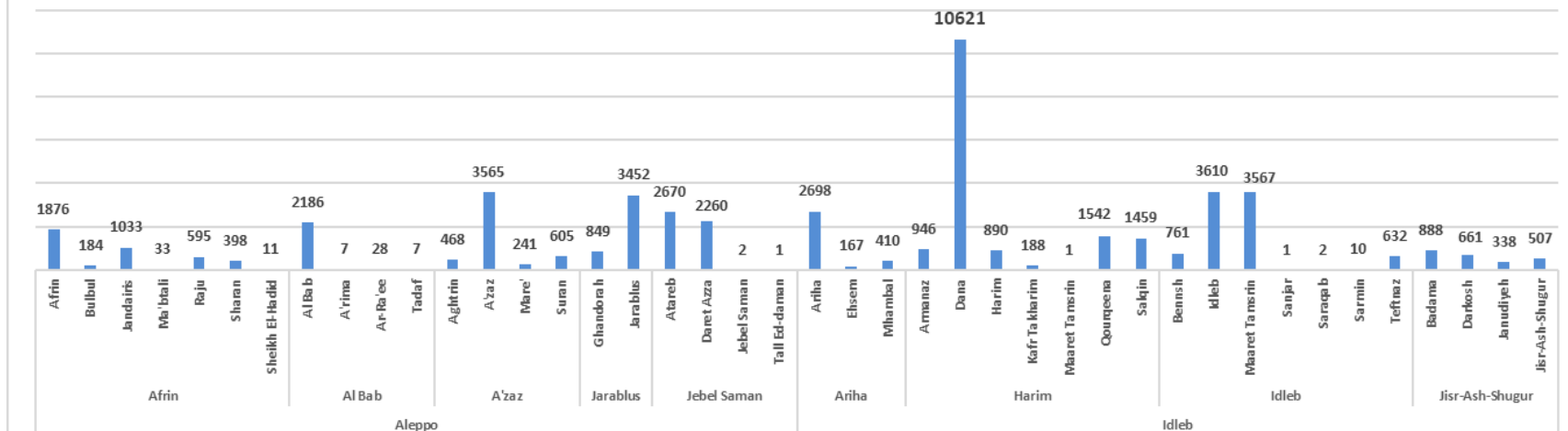
## EPI Curve - Reporting Date - Aleppo Governorate



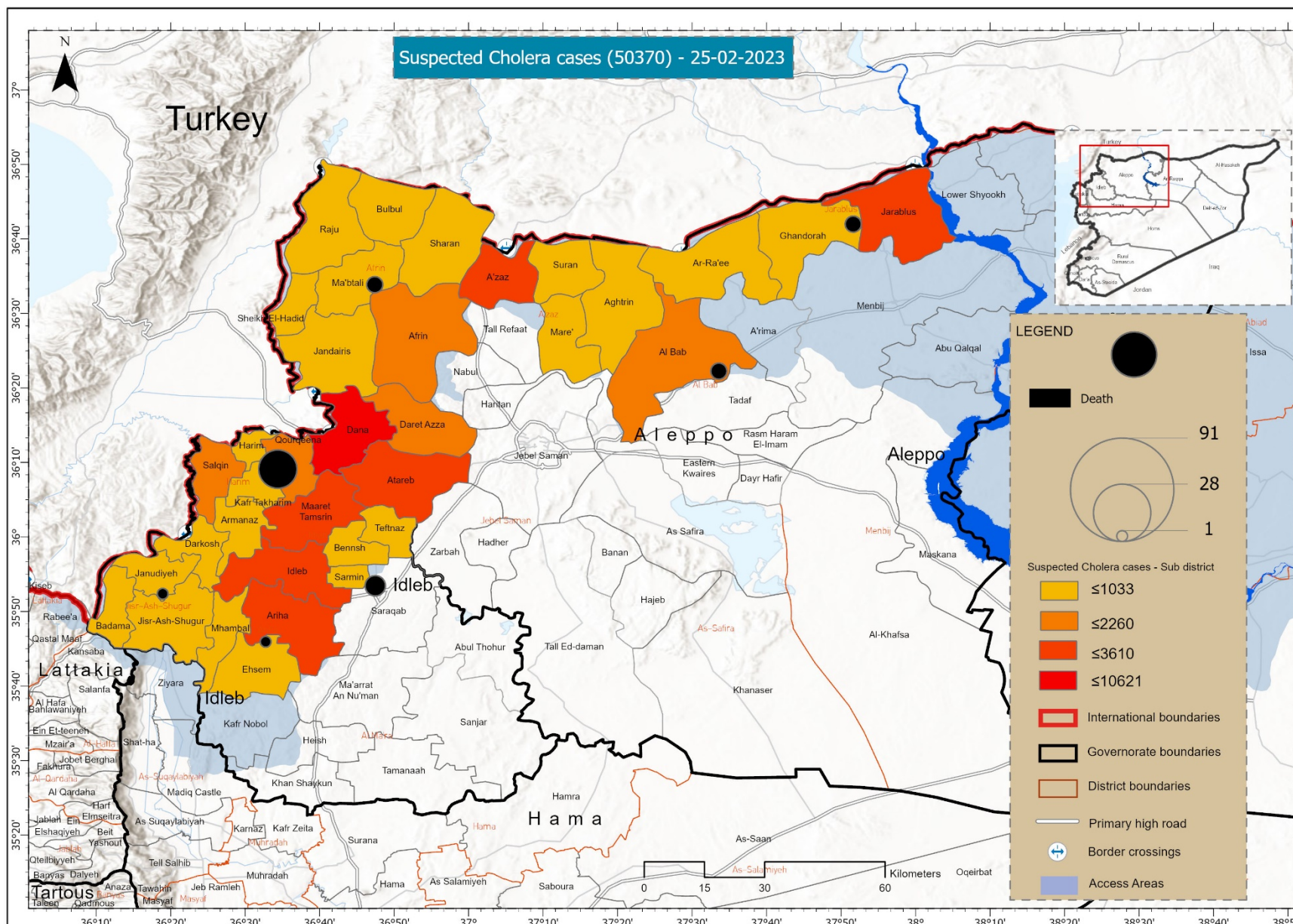
## EPI Curve - Reporting Date - Idleb Governorate



### Cases Distribution Subdistrict Wise



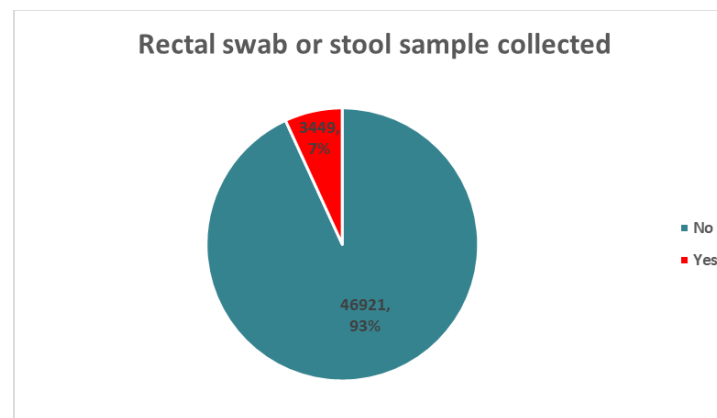
Epi Week	Governorate	District	Date of Onset	Population	New cases	Cumulative Cases	New Death	Cumulative Deaths	Case Fatality Rate	Incidence Rate	Attack Rate
Up to W08 - 2023	Idleb	Ariha	20-Sep	185,668	187	3275	0	1	0.03%	100.7	1.76%
		Harim	6-Sep	1,586,820	492	15647	0	9	0.06%	31.0	0.99%
		Idleb	14-Sep	713,933	261	8583	0	3	0.03%	36.6	1.20%
		Jisr-Ash-Shugur	25-Sep	310,973	80	2394	0	1	0.04%	25.7	0.77%
	Aleppo	A'zaz	9-Sep	648,600	212	4879	0	0	0.00%	32.7	0.75%
		Afrin	21-Sep	467,090	141	4130	1	3	0.07%	30.2	0.88%
		Al Bab	17-Sep	339,812	70	2228	0	2	0.09%	20.6	0.66%
		Jarablus	12-Sep	121,938	155	4301	0	3	0.07%	127.1	3.53%
	Jebel Saman	10-Sep	251,785	186	4933	0	0	0.00%	73.9	1.96%	
	<b>Total</b>				4,626,619	1784	50370	1	22	0.04%	38.6



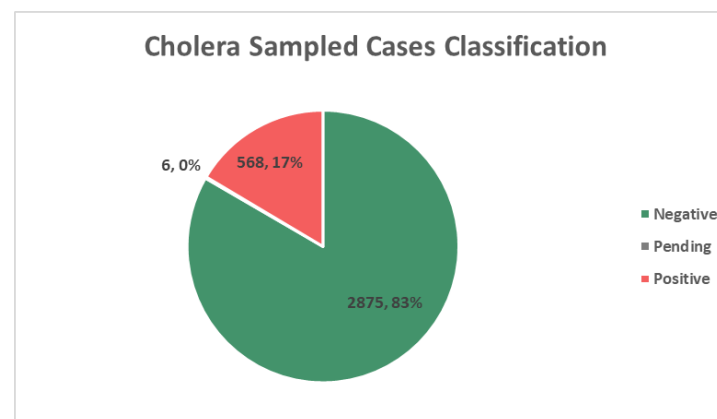


### Laboratory:

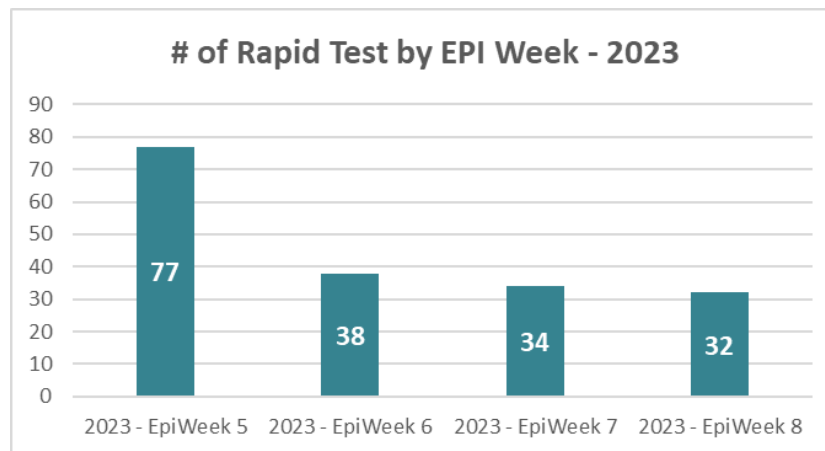
- In Epi week 08- 2023, the total number of stool specimens or rectal swabs is **64**, **one of them was positive for Vibrio Cholera by stool culture (in Afrin subdistrict - Aleppo)**.
- A **cumulative of 3449 samples were collected** since the start of the outbreak (7 % of overall line listed cases), **of which 568 have tested positive by stool culture. The total positivity rate in NWS is 16 %**.
- The Total number of negative cases by stool culture is 2875, and the remaining 6 are still pending.



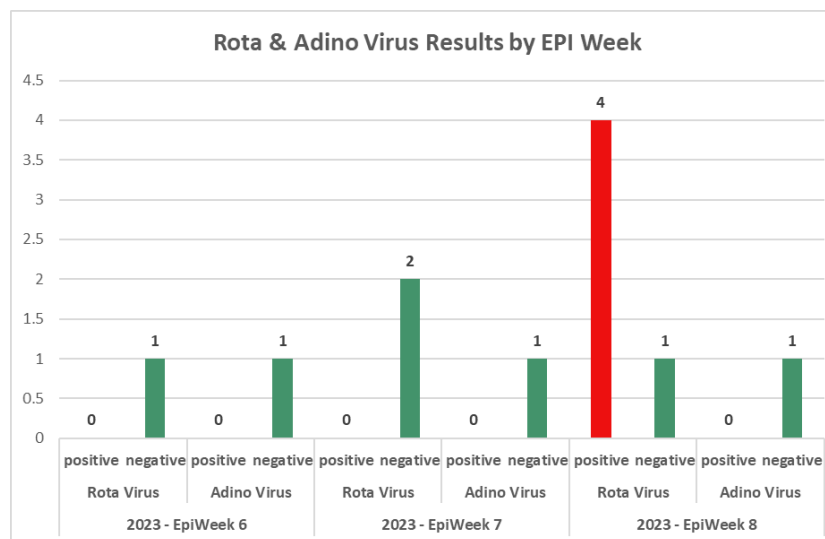
- Isolation and identification of V. cholera serogroup O1 or O139 by a culture of a stool specimen remain the gold standard for laboratory diagnosis.
- Currently, at EWARNS laboratories (Idleb, Afrin, Jarablus, Raqqa, and Tal-Abiad) Fecal specimens are subcultured onto selective and nonselective media, including Nutrient agar and TCBS agar, for detection of V. 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, 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 sample collection protocol is to collect stool samples in 7% of the total suspected cholera cases per subdistrict and 5 samples from the admitted cholera suspected cases in the CTC /CTU per week.



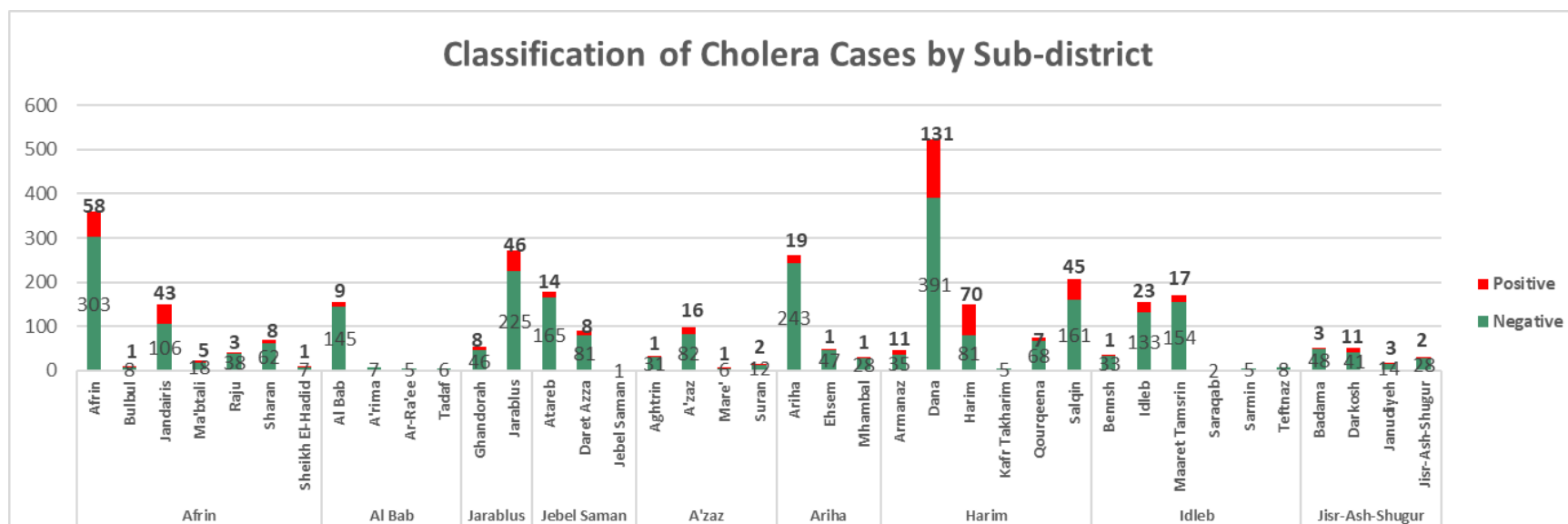
During epi week 8, the EWARN lab conducted RDTs for 32 cases, all of them were negative for Cholera, and the total of tests during the last 4 weeks reached 181.

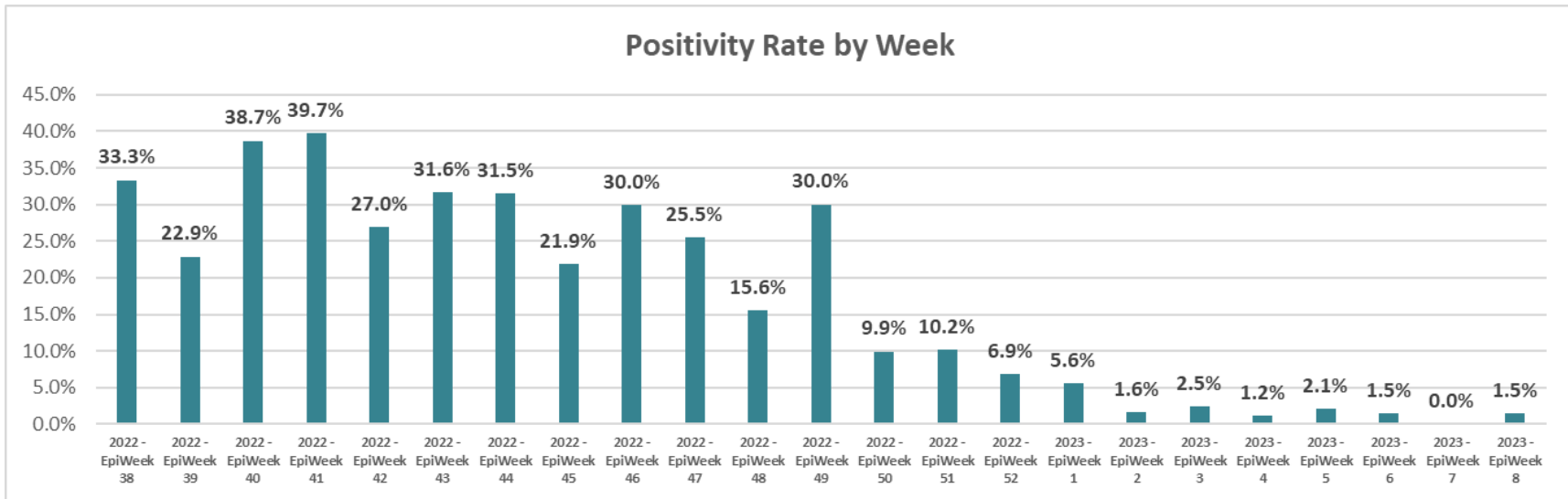
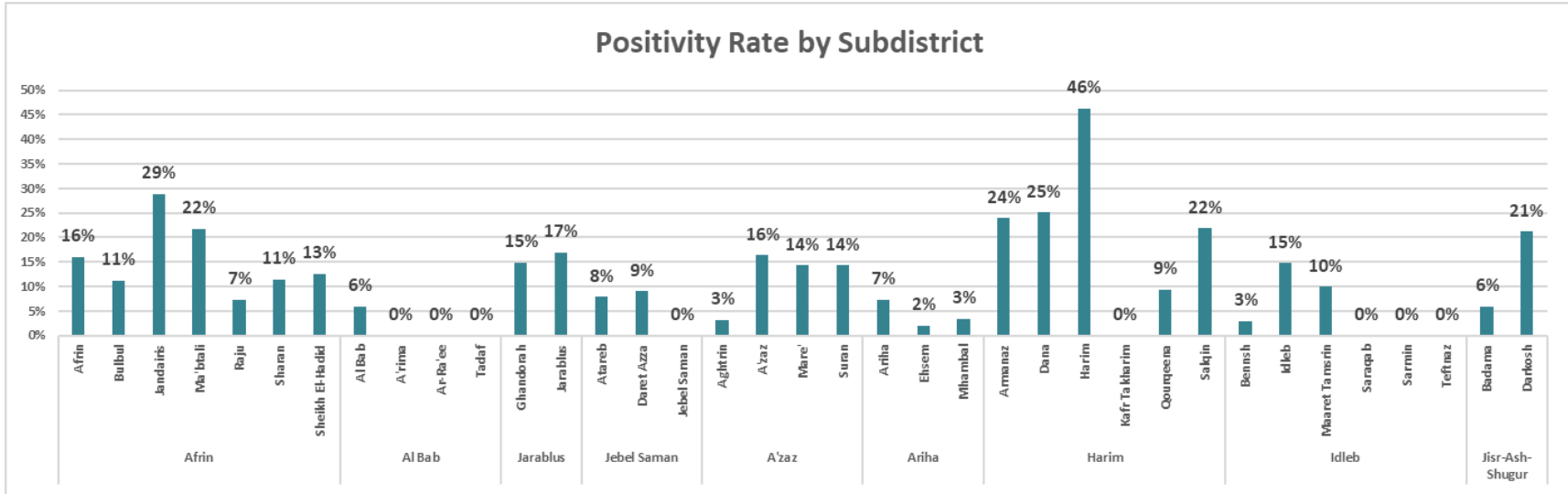


- For children under 5 years of age with a stool culture negative for cholera, 6 tests were carried out in epi week 8 to detect Rotavirus and Adenovirus (4 of them were positive for Rotavirus).
- The total number of samples for Rotavirus and Adenovirus is 11.



Epi Week	Governorate	District	Samples Collected on current week	Stool Culture Positive	Stool Culture Negative	Positivity Rate
Up to W08 - 2023	Idleb	Ariha	12	21	316	6%
		Harim	11	264	741	26%
		Idleb	4	40	335	11%
		Jisr-Ash-Shugur	5	19	131	13%
	Aleppo	Al Bab	2	9	163	5%
		Jarablus	10	54	271	17%
		Jebel Saman	6	22	247	8%
		A'zaz	0	20	131	13%
	Afrin	14	119	540	18%	
	<b>Total</b>		64	<b>568</b>	<b>2875</b>	<b>16%</b>

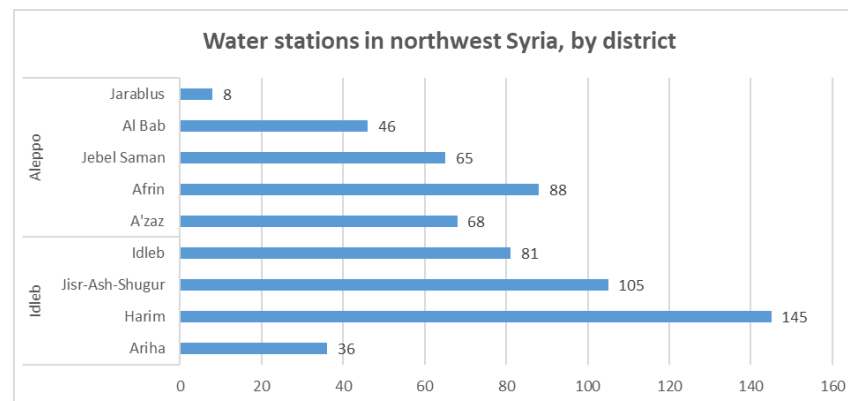




## 2. WASH:

ACU's WASH field team continued assessing the water stations across NWS, to evaluate the impact of the earthquake that hit southern Turkey and Northern of Syria. The number of assessed stations is 642 stations, the adjacent chart shows the distribution according to the sub-district

ACU has issued bulletins in three languages (Arabic, English and, Turkish), detailing the operational and chlorination status of stations. In addition to turkey-Syria Earthquake Impact on the Water Stations flash report. [Click here](#)



ACU is conducting field team water quality tests of water resources and sharing the result with the relevant parties. The number of samples received to be tested is 25 water resources. The results showed that most water resources are safe to drink.

### Actions taken

- The EWARN team is currently conducting active surveillance in the most important health facilities in northwest Syria (25 HFs). In Epi week 8- 2023, **11** 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 ACU team is still evaluating the water resources (water stations) to evaluate the damage, where more than 642 stations were evaluated.
- The EWARN team is currently training the CTC/CTUs staff in RDTs and sharing data in the line list.
- To determine the causes of acute watery diarrhea in children under 5 years (the children have a negative cholera result), the EWARN lab started conducting Rotavirus and Adenovirus rapid diagnostic tests (RDTs).
- The response teams conducted an expanded investigation of the deaths that occurred since the beginning of the outbreak (21 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

- Due to the devastating earthquake in northern Syria, there was a significant decrease in the number of reported cholera cases and collected samples, because a large number of health centers went out of service and others were responding to earthquake victims.
- Continuing movements of population.