

Northwest of Syria Cholera Outbreak

Situation Report No.42

Epidemiological Week - 29 (16 July – 22 July 2023)

Date of Onset of Outbreak: 16 September 2022

Reporting Date of outbreak: 17 September 2022

Confirmation Date: 19 September 2022

Suspected Cases: 113405

Confirmed Cases: 863

Cholera Deaths : 24

Case Fatality Rate: 0.02%

NWS Attack Rate: 2.45 %

Key Highlights

Cumulatively, a total of **113405 suspected** cases (**50286** in Aleppo governorate, **63119** in Idleb governorate) including **863 confirmed** have been reported by EWARN team since 16 September, including **24 deaths** case.

- The highest number of cases were reported in Harim district (32282) and Idleb district (20286) in Idleb governorate, then Azaz district (13929), Jebel Saman district (11348) in Aleppo governorate.
- 21189 total suspected cases (including 736 new cases in Epi week 29 - 2023) were reported from camps.
- 57.30 % 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

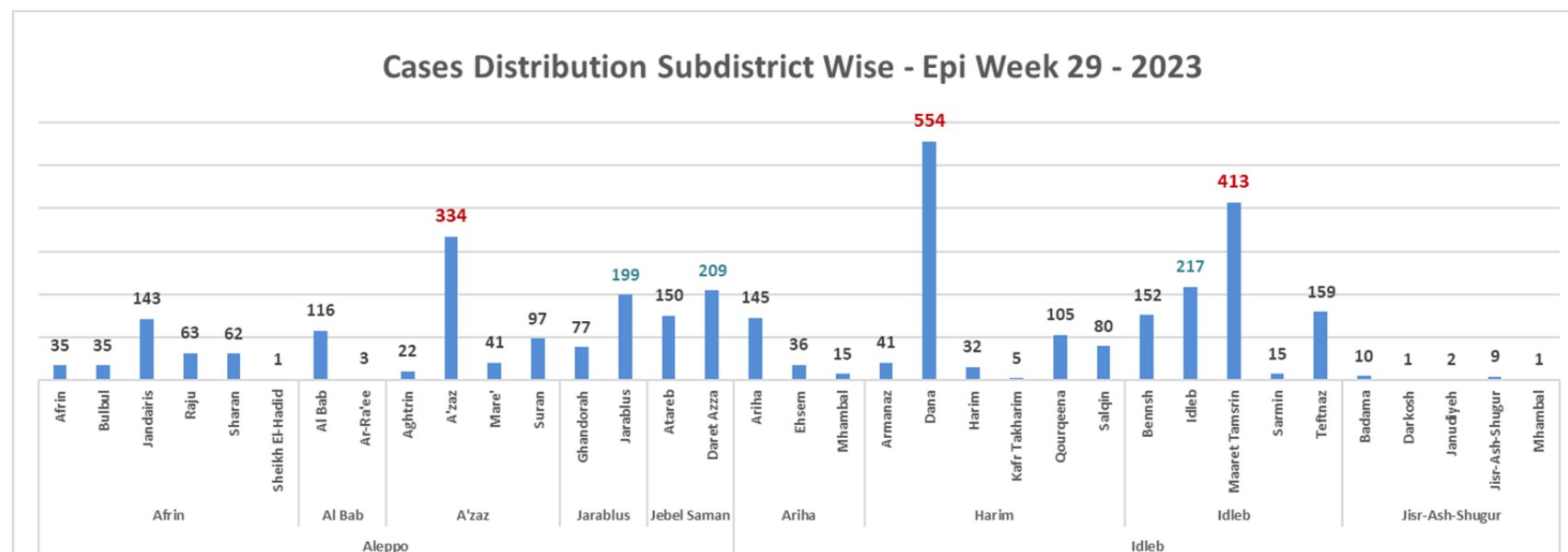
1. Epidemiology

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

In Epi week 29 - 2023, **3579 suspected cases of cholera were reported**. The affected governorates are Aleppo (1587 suspected cases, 14 confirmed), and Idleb (1992 suspected cases, 0 confirmed). 21% of the total were in the camps

The age group less than 5 reported 51.17 %. Sex distribution of the suspected_cases is 48% Male, and 52% Female

Dana subdistrict in Idled governorate reported the highest number of cases (554), in contract Azaz subdistrict reported the highest number in Aleppo governorate (334).



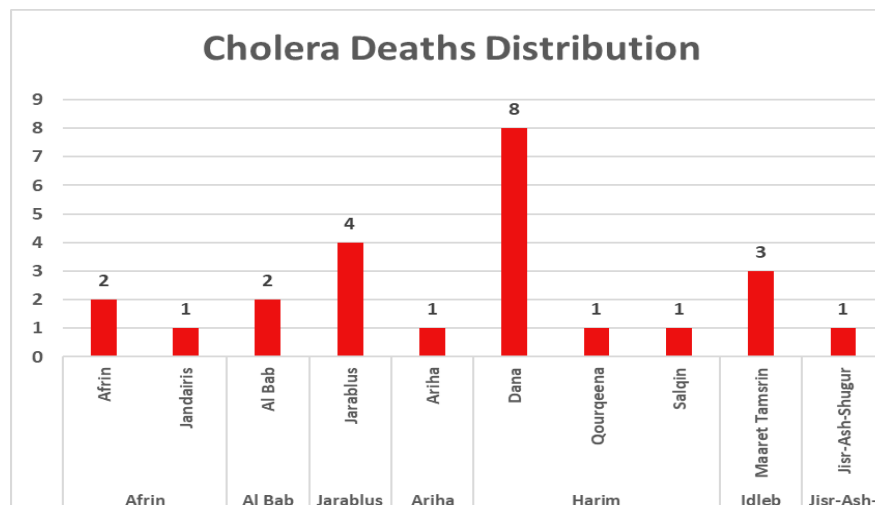
In the epi week 29, there is one new death

A 50-year-old woman

Burj Al Nomarah village, Sarmada community, Dana subdistrict, Harim district, Idlib governorate

- Date of onset: 17 Jul 2023
- Date of death: 18 Jul 2023
- Contact sample result: **Neg**

[For more details click here](#)

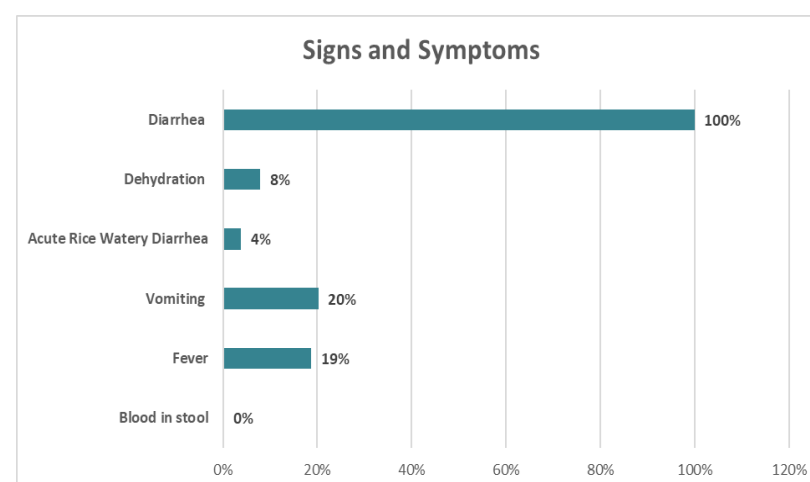
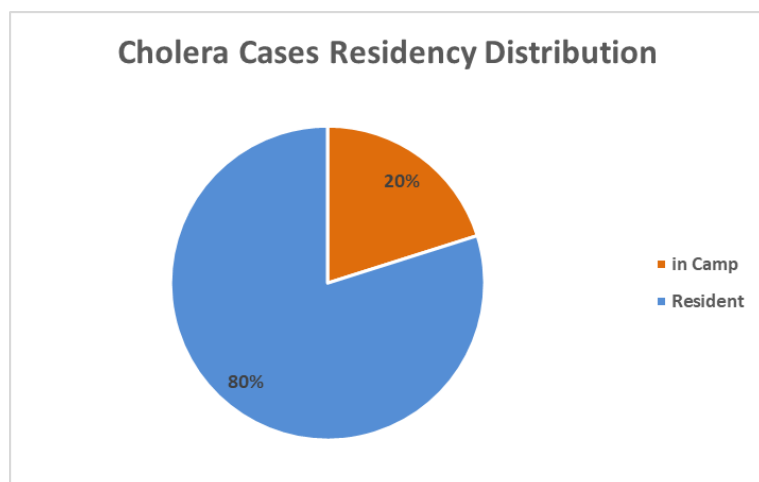
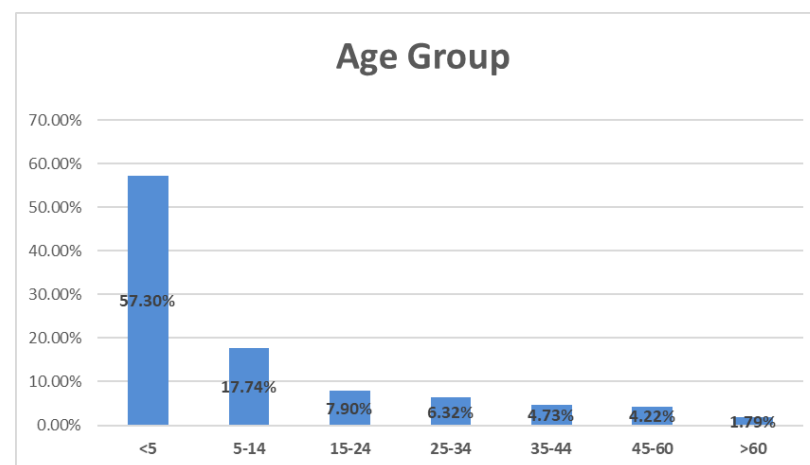
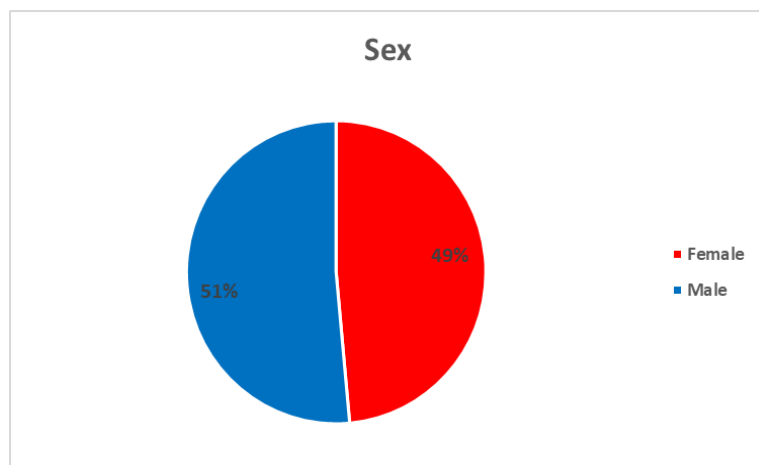


The overall sex distribution of the suspected_cases is 51% Male, and 49% Female.

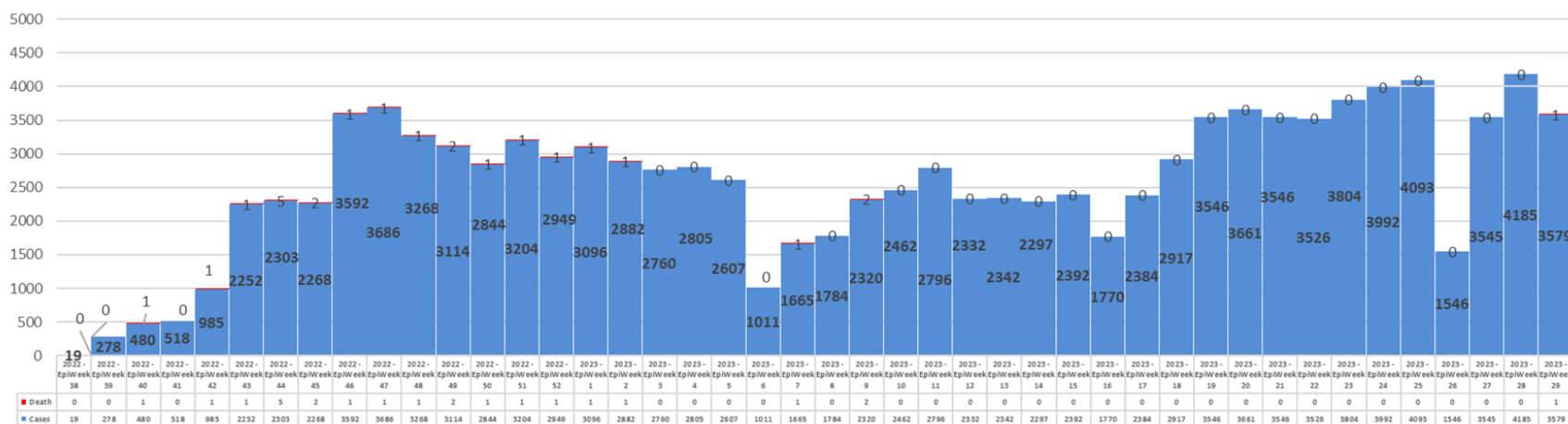
100% of the line listed cases were presented as Acute watery Diarrhea, 20% with vomiting, 4% as rice watery diarrhea, and 8% were dehydrated.

20% of the total cases live in camps (21189), and 80% out of camps (83238). (8977 of the total line listed cases are unknown)

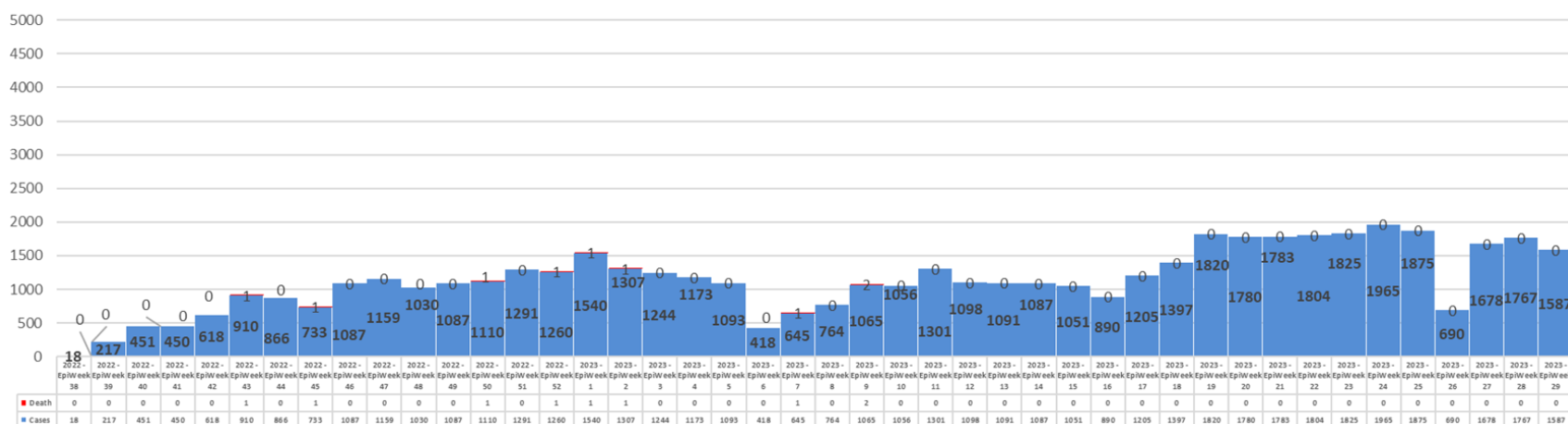
As the outbreak progresses, sensitivity should be increased by including smaller age groups and mild/moderate symptom groups in order to estimate the burden of the outbreak. According to WHO, in areas where a cholera outbreak has been confirmed, any person presenting with or dying from acute watery diarrhea is considered a suspected cholera case. The age group less than 5 years was 57.30%.



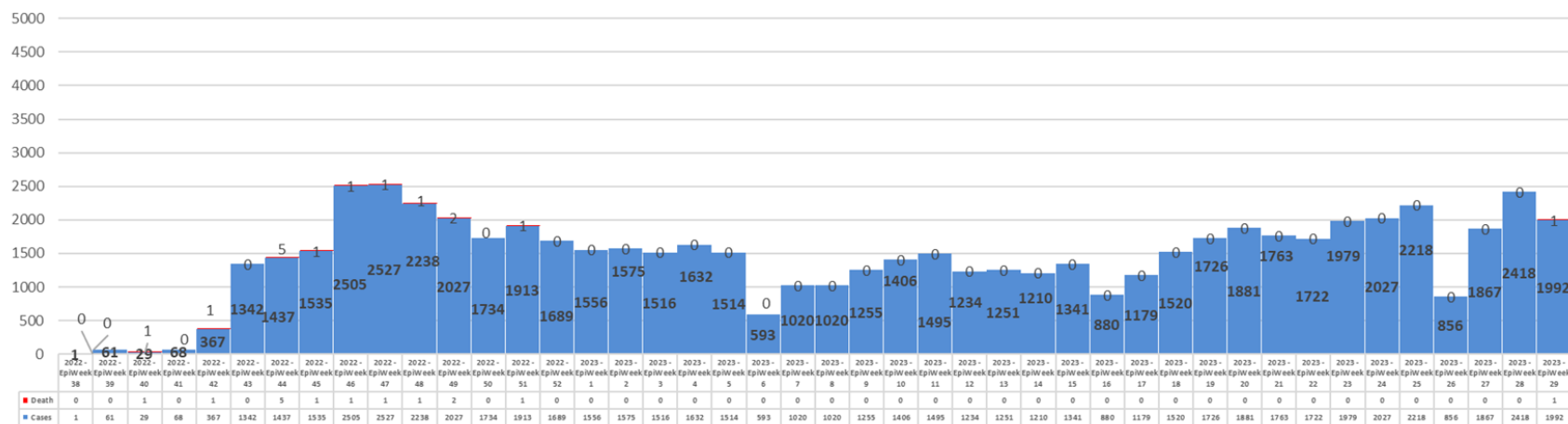
EPI Curve - Reporting Date - NWS



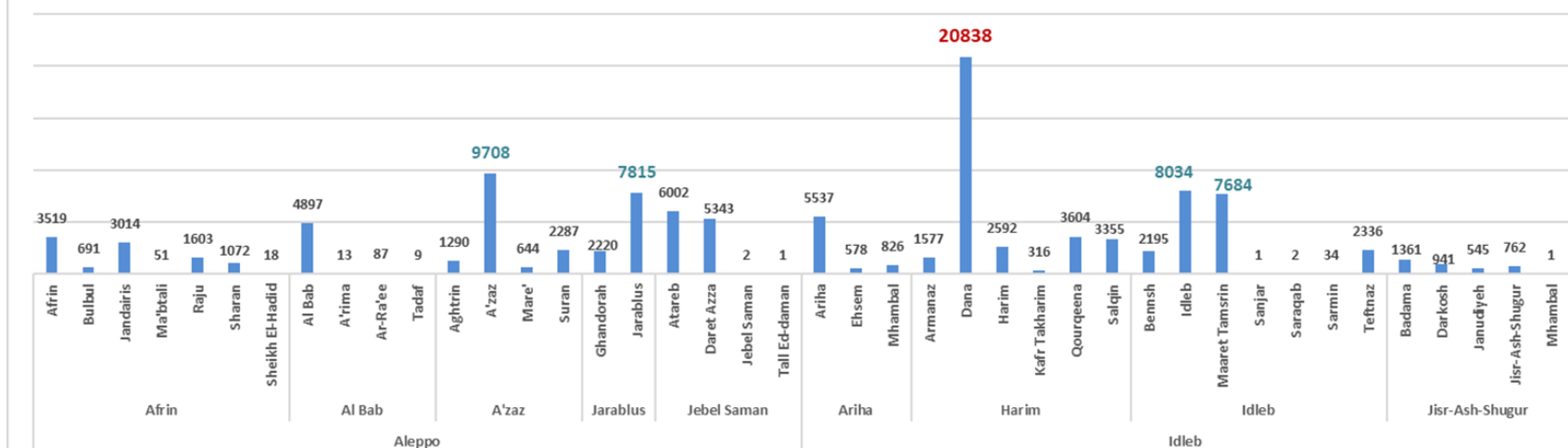
EPI Curve - Reporting Date - Aleppo Governorate



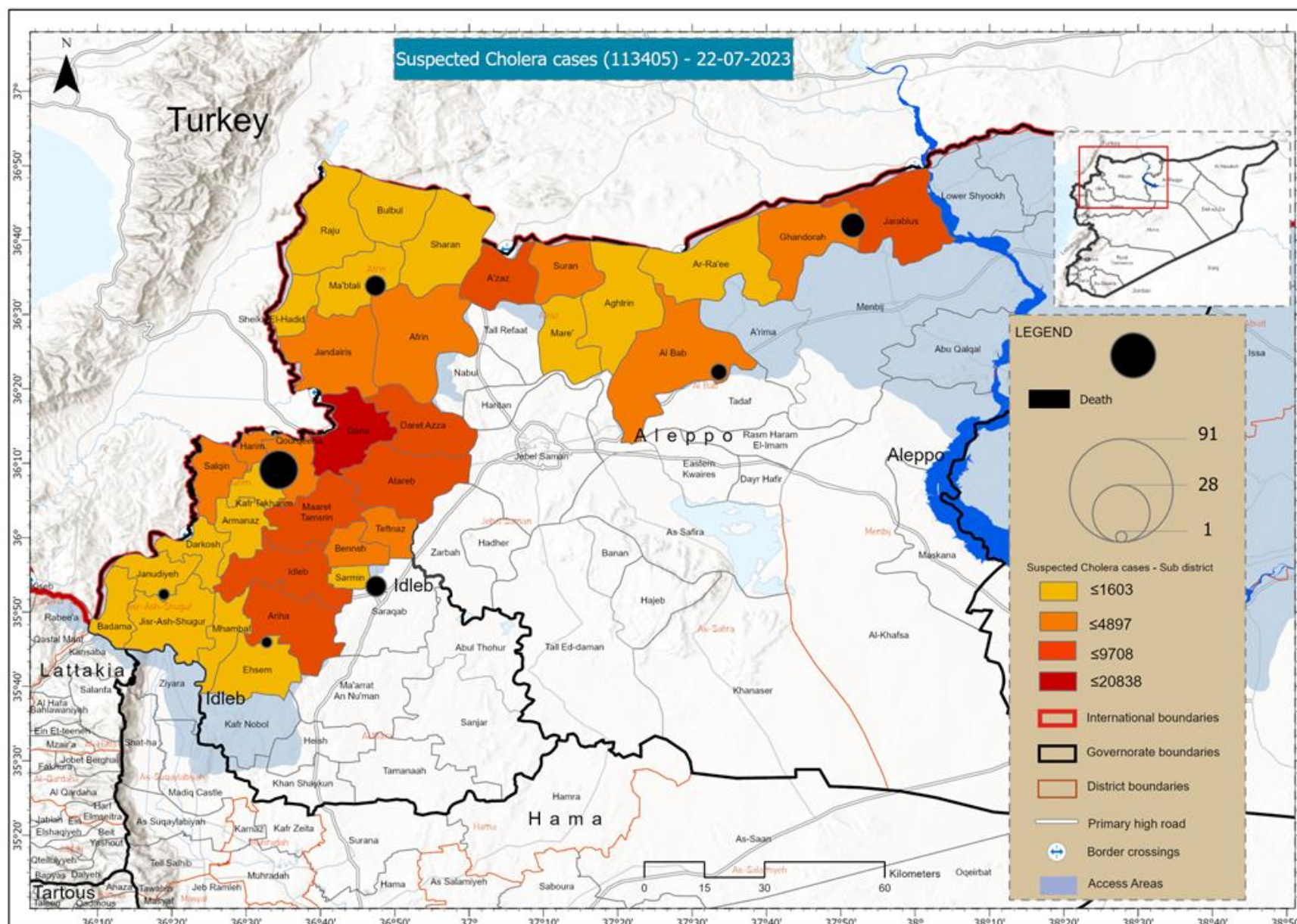
EPI Curve - Reporting Date - Idleb Governorate



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 W29 - 2023	Idleb	Ariha	20-Sep	185,668	196	6941	0	1	0.01%	105.6	3.74%
		Harim	6-Sep	1,586,820	817	32282	1	10	0.03%	51.5	2.03%
		Idleb	14-Sep	713,933	956	20286	0	3	0.01%	133.9	2.84%
		Jisr-Ash-Shugur	25-Sep	310,973	23	3610	0	1	0.03%	7.4	1.16%
	Aleppo	A'zaz	9-Sep	648,600	494	13929	0	0	0.00%	76.2	2.15%
		Afrin	21-Sep	467,090	339	9968	0	3	0.03%	72.6	2.13%
		Al Bab	17-Sep	339,812	119	5006	0	2	0.04%	35.0	1.47%
		Jarablus	12-Sep	121,938	276	10035	0	4	0.04%	226.3	8.23%
		Jebel Saman	10-Sep	251,785	359	11348	0	0	0.00%	142.6	4.51%
	Total			4,626,619	3579	113405	1	24	0.02%	77.4	2.45%



Laboratory:

- In Epi week 29- 2023, the total number of stool specimens or rectal swabs is **119**, (75 in Aleppo –14 confirmed), (44 in Idleb – 0 confirmed).
 - A **cumulative of 6734 samples were collected** since the start of the outbreak (6 % of overall line listed cases), **of which 863 have tested positive by stool culture. The total positivity rate in NWS is 13 %.**
 - The Total number of negative cases by stool culture is 5800, and the remaining 71 are still pending.
- Stool sample collected - Culture**

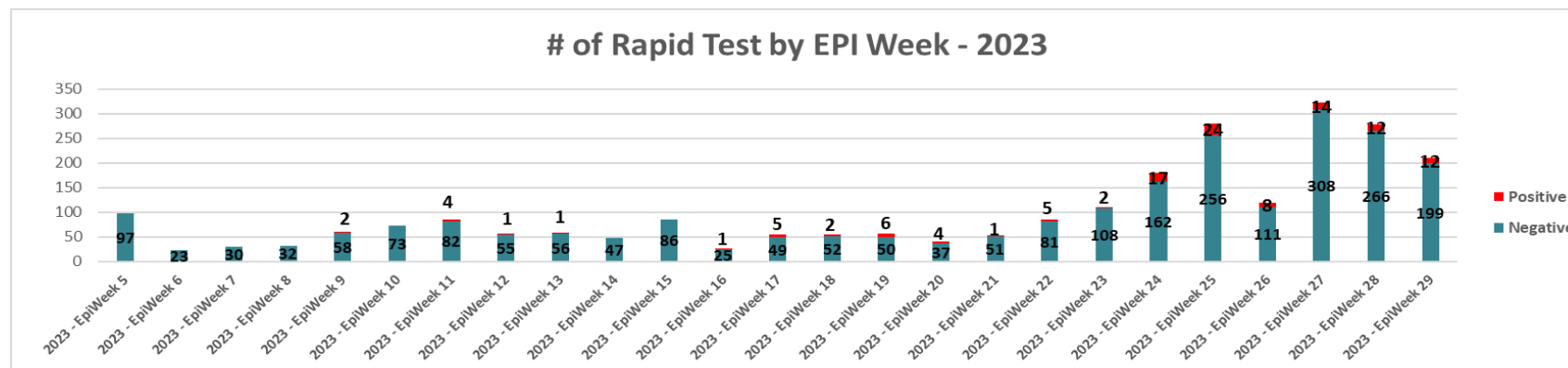
Category	Count	Percentage
No	106671	94%
Yes	6734	6%
- Isolation and identification of V. cholera serogroup O1 or O139 by a culture of a stool specimen remain the gold standard for laboratory diagnosis.
 - Currently, at EWARN laboratories (Idleb, Afrin, Jarablus, and Tal-Abiad) Fecal specimens are subcultured 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 newest update of 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.
- Cholera Sampled Cases Classification**

Category	Count	Percentage
Negative	5800	86%
Pending	71	1%
Positive	863	13%

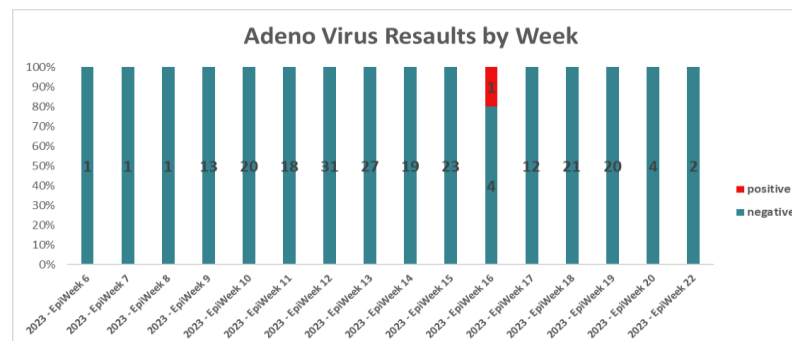
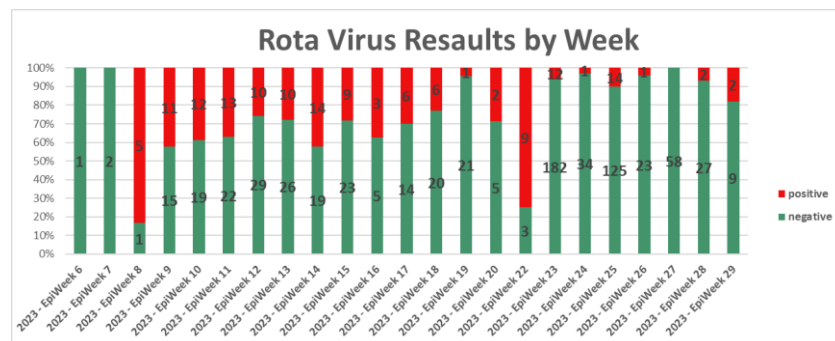
During epi week 29, EWARN received 211 RDT results from the CTC/CTUs and some HFs, 12 of them were positive for Cholera.

The total of RDT tests starting from epi week 5 reached 2515, and the total positive is 121.

The positivity rate of RDTs, from epi week 5 – 2023 up to epi week 29 – 2023 is 4.81 %. But the positivity rate since the beginning of cholera outbreak up to epi week 29 – 2023 is 5.6 %.

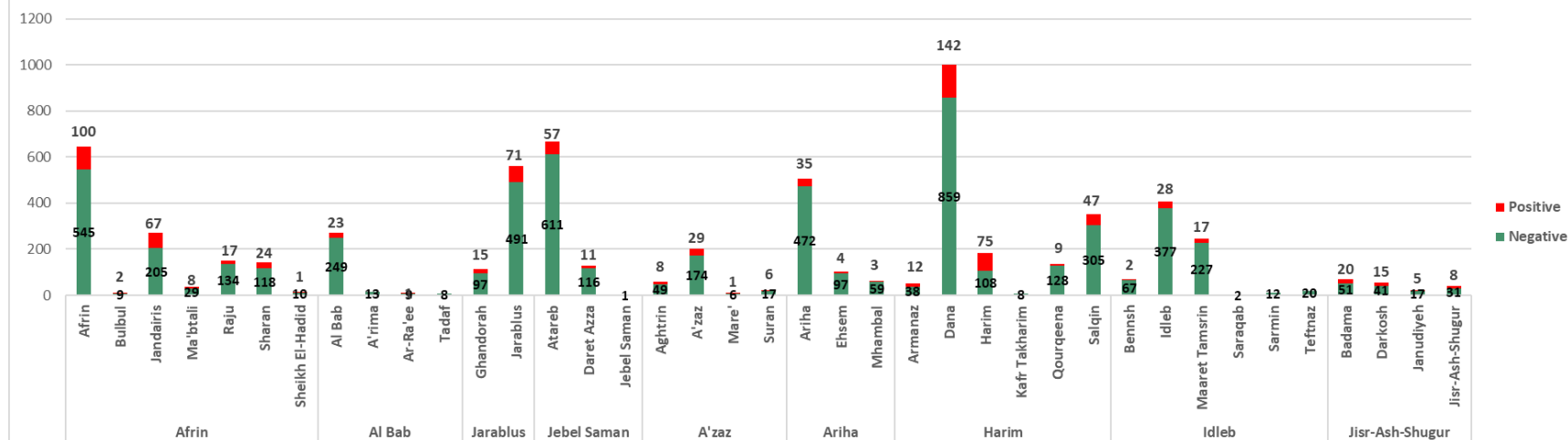


- For children under 5 years of age with a stool culture negative for cholera:
In epi week 29, the lab tested 11 samples to detect Rotavirus, two of them were positive
- The total samples collected for Rotavirus reached 826 (143 were positive), while the total samples for Adenovirus were 218 (one positive)

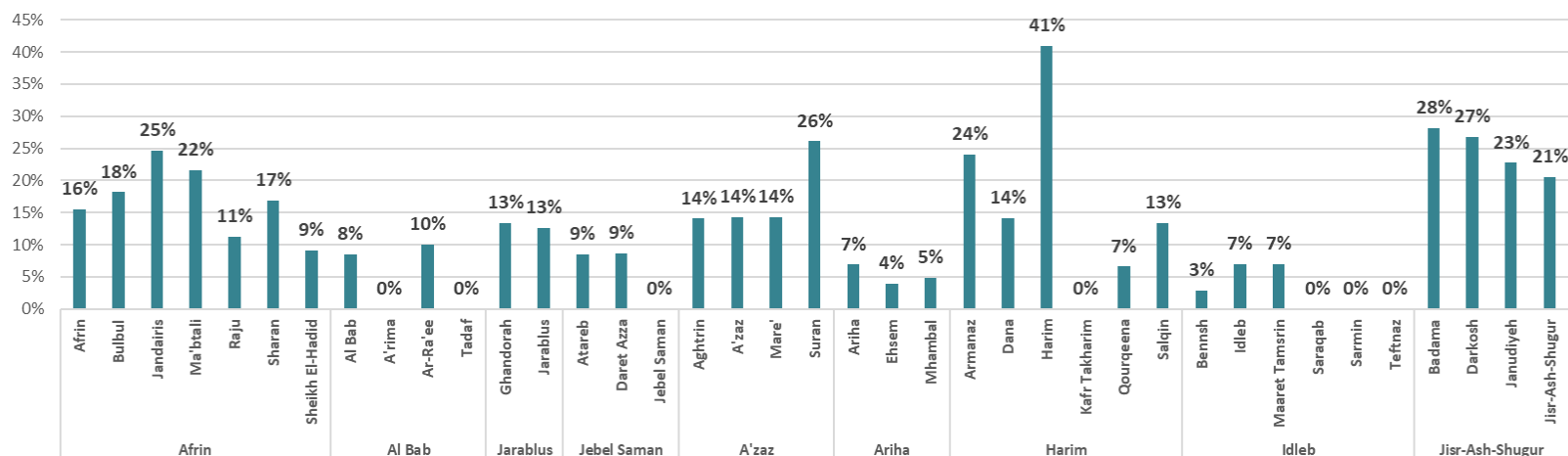


Epi Week	Governorate	District	RDT+	RDT-	Postivity Rate for RDT	Stool Culture Positive	Stool Culture Negative	Postivity Rate for Culture
Up to W29 - 2023	Aleppo	Afrin	51	305	14.3%	219	1050	17.3%
		Al Bab	2	99	2.0%	24	279	7.9%
		A'zaz	18	146	11.0%	44	246	15.2%
		Jarablus	8	168	4.5%	86	588	12.8%
		Jebel Saman	11	211	5.0%	68	728	8.5%
	Idleb	Ariha	3	132	2.2%	42	628	6.3%
		Harim	51	909	5.3%	285	1446	16.5%
		Idleb	10	511	1.9%	47	705	6.3%
		Jisr-Ash-Shugur	3	183	1.6%	48	140	25.5%
	Total		157	2664	5.6%	863	5810	12.9%

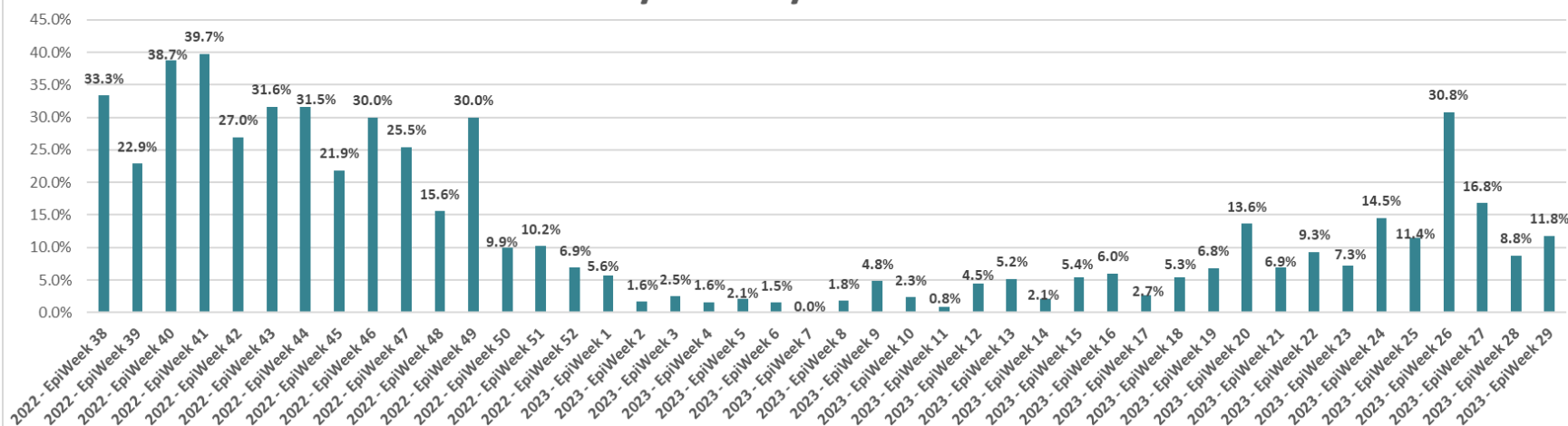
Classification of Cholera Cases by Sub-district



Positivity Rate by Subdistrict - Culture



Positivity Rate by Week - Culture



2. WASH:

The WASH team works closely and in high coordination with RRT (Rapid Response Team), formed from staff working in EWARN (DLOs, FLOs...).

The team, after receiving any alert, focuses on the investigation of WASH services in the hotspot areas.

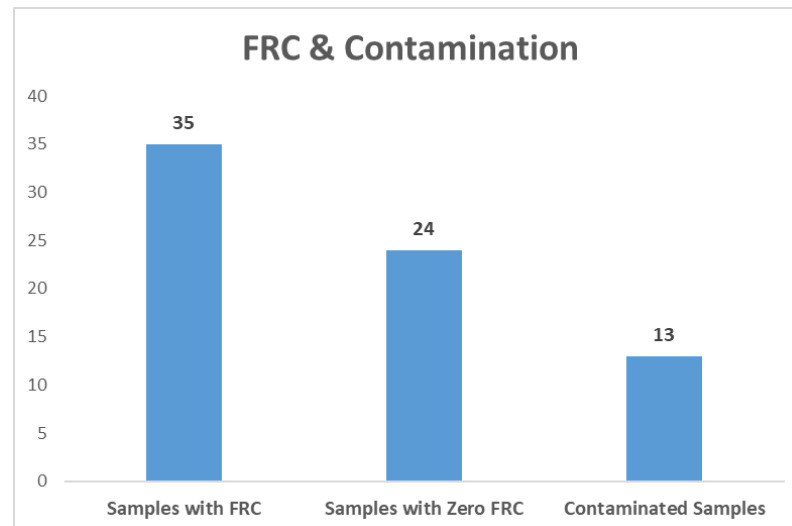
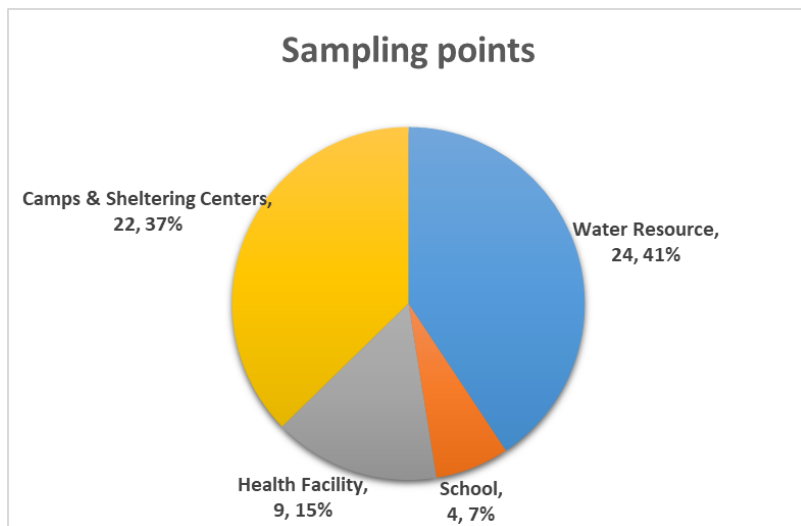
The investigation includes:

1. Taking samples from drinking water resources (main stations, wells, water trucks, water taps.... etc.).
2. Investigate sewage networks and septic tanks' locations and other sanitation services.
3. Identify Hygienic practices.... etc.
4. Assessing agriculture markets (Identify irrigation water and resource of agricultural products if applicable).

ACU team conducted 7 investigations included taking 59 samples from different points:

- **Jandairis community** / Jandairis sub-district / Afrin District / Aleppo governorate:
15 samples were taken; no sample was contaminated.
- **Mare' community** / Mare' sub-district / A'zaz district / Aleppo governorate:
6 samples were taken; one sample was contaminated (taken from Mosque Omar Ibn Al-Khattab's tank).
- **Bazagha Community** / Al Bab sub-district / Al Bab district / Aleppo governorate:
7 samples were taken; 4 samples were contaminated (Taken from a tap connected to a water network, water truck, and private wells).
- **Zoghra community** / Jarablus sub-district / Jarablus district / Aleppo governorate:
11 samples were taken; no sample was contaminated.
- **Jisr-Ash-Shugur community** / Jisr-Ash-Shugur sub-district / Jisr-Ash-Shugur District / Idleb governorate:
6 samples were taken; 4 ones were contaminated (taken from private/public wells, Ice cube).
- **Shekh Bahr community** / Maaret Tamsrin sub-district / Idleb District / Idleb governorate:
9 samples were taken; 3 ones were contaminated (one taken from school, Shiek AL Bahar Health Facility, Random House).
- **Atma community (Reef Aleppo Al Janobi camp)** / Atam sub-district / Harim District / Idleb governorate:
5 samples were taken; one sample was contaminated (Ice Cube).

[Full Investigation Reports](#)



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 and Adenovirus 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.