

Northwest of Syria Cholera Outbreak

Situation Report No.21

Epidemiological Week - 07 (12 Feb – 18 Feb 2023)

Suspected Cases: 48586

Confirmed Cases: 567

Cholera Deaths : 21

Case Fatality Rate: 0.04%

NWS Attack Rate: 1.05%

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 **48586 suspected** cases (**19707** in Aleppo governorate, **28879** in Idleb governorate) including **567 confirmed** have been reported by EWARN team since 16 September, including **21 deaths** case.

- The highest number of cases were reported in Harim district (15155) and Idleb district (8322) in Idleb governorate, then Jebel Saman district (4747), Azaz district (4667), and Jarablus district (4146) in Aleppo governorate.
- 8468 total suspected cases (including 356 new cases in Epi week 07 - 2023) were reported from camps.
- 44.36 % 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

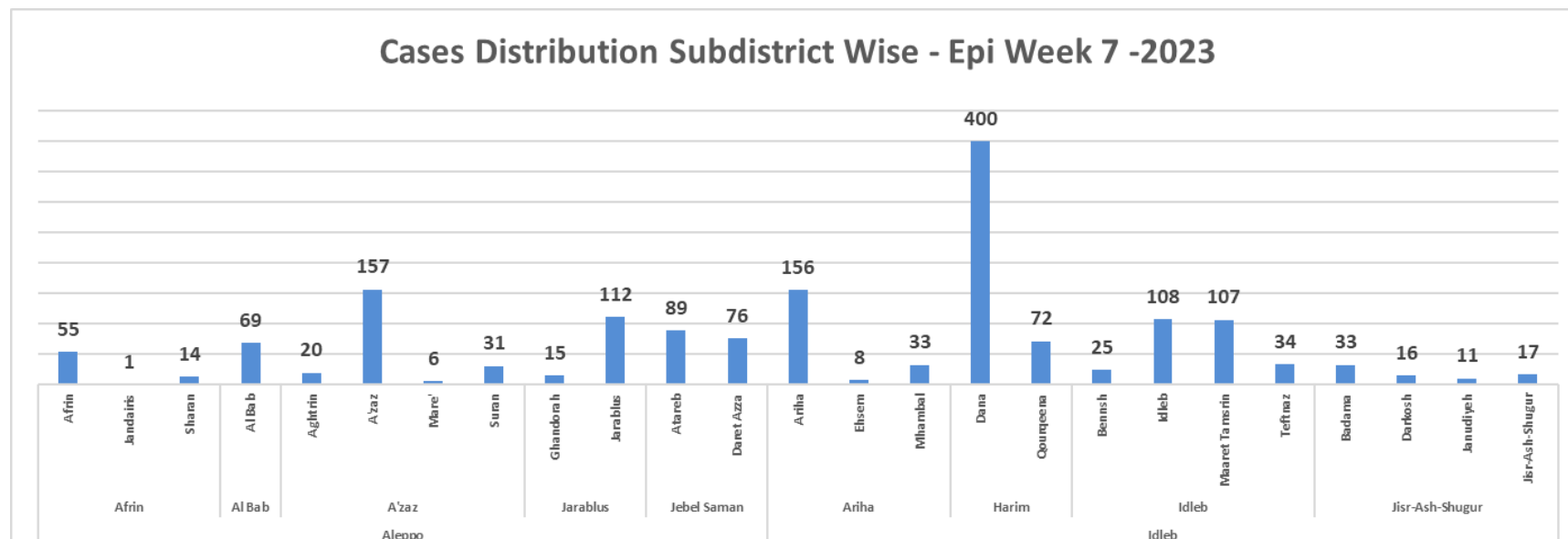
1. Epidemiology

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

In Epi week 07 - 2023, **1665 suspected cases of cholera were reported, there are no positive cases by stool culture**. The affected governorates are Aleppo (645 suspected cases), and Idleb (1020 suspected cases).

The age group less than 5 reported 44.8 %, while the age group more than 60 reported 23.24 % of the total

Dana subdistrict in Idled governorate reported the highest number of cases (400), and Azaz subdistrict in Aleppo governorate (157).



In epi week 07 - 2023, one new death was reported (a total of 21 deaths).

70-year-old women

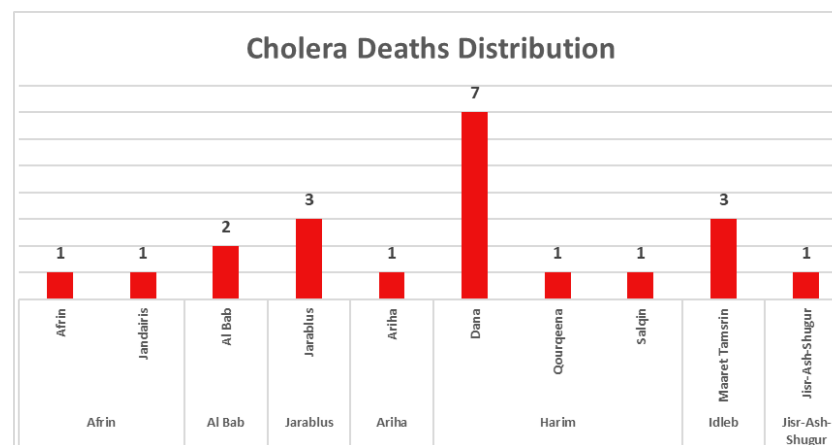
Zoghra camp, Jarablus subdistrict, Jarablus district, Aleppo governorate.

Date of onset: 15-Feb-2023

Date of death: 16-Feb-2023

A stool sample was not collected

[For more details click here](#)

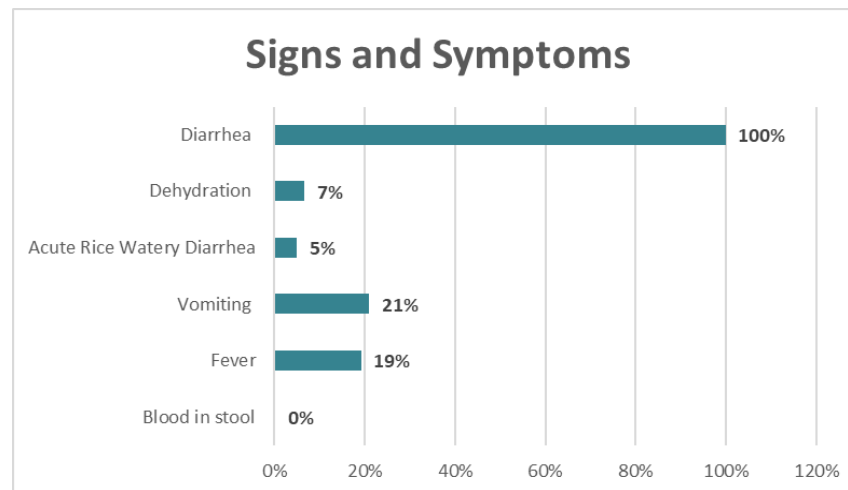
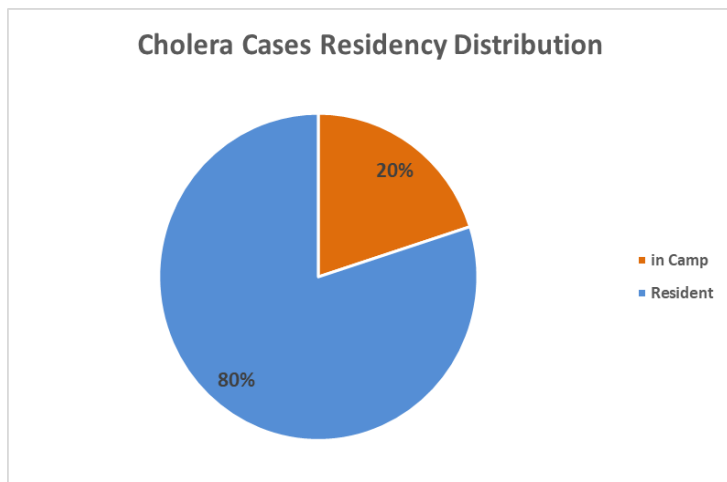
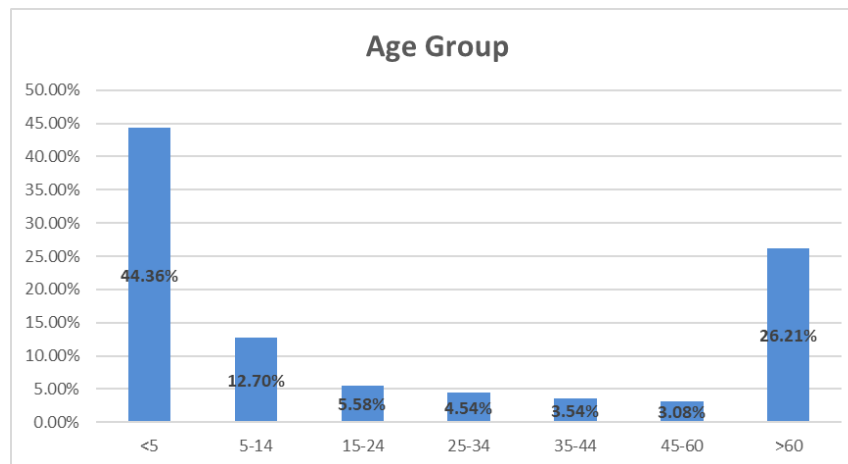
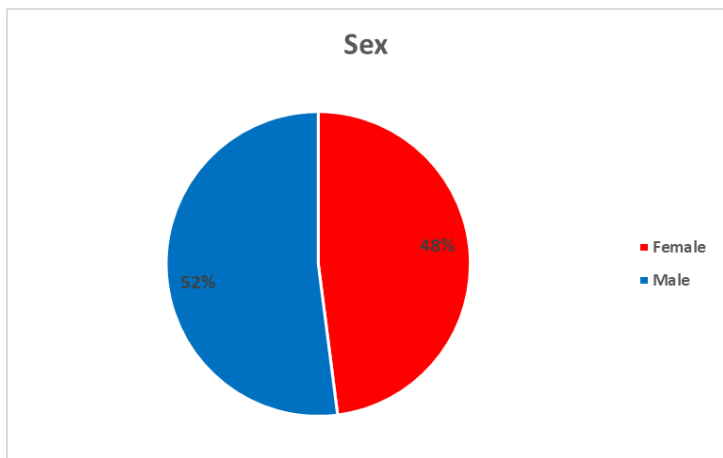


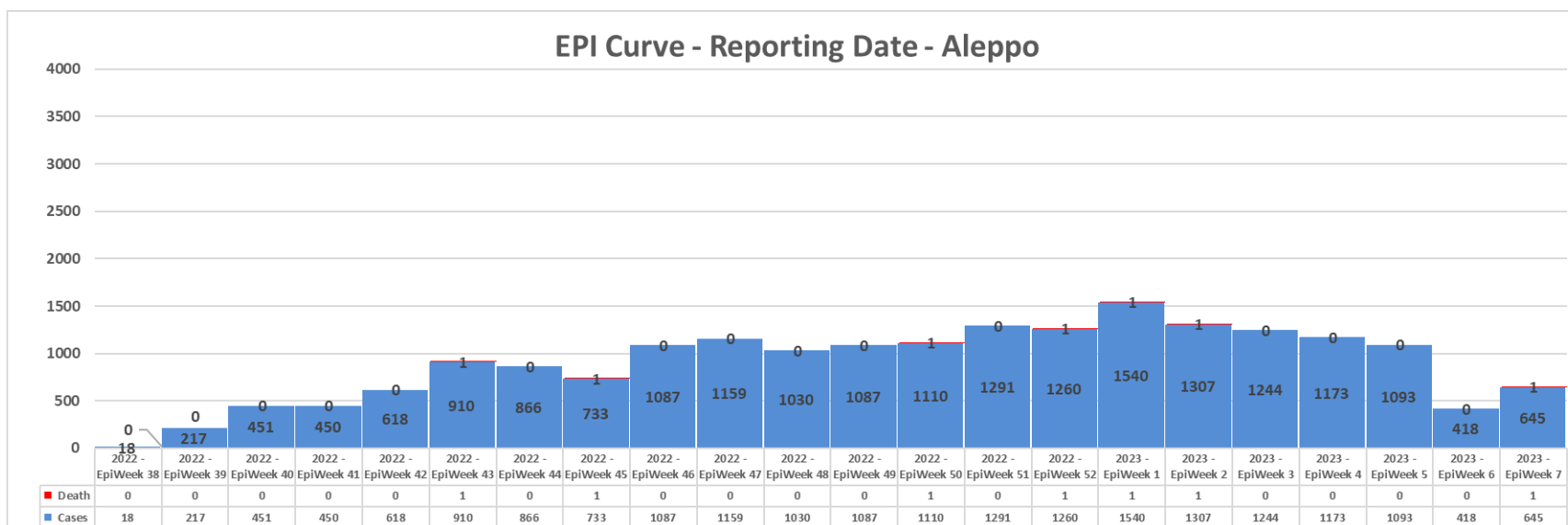
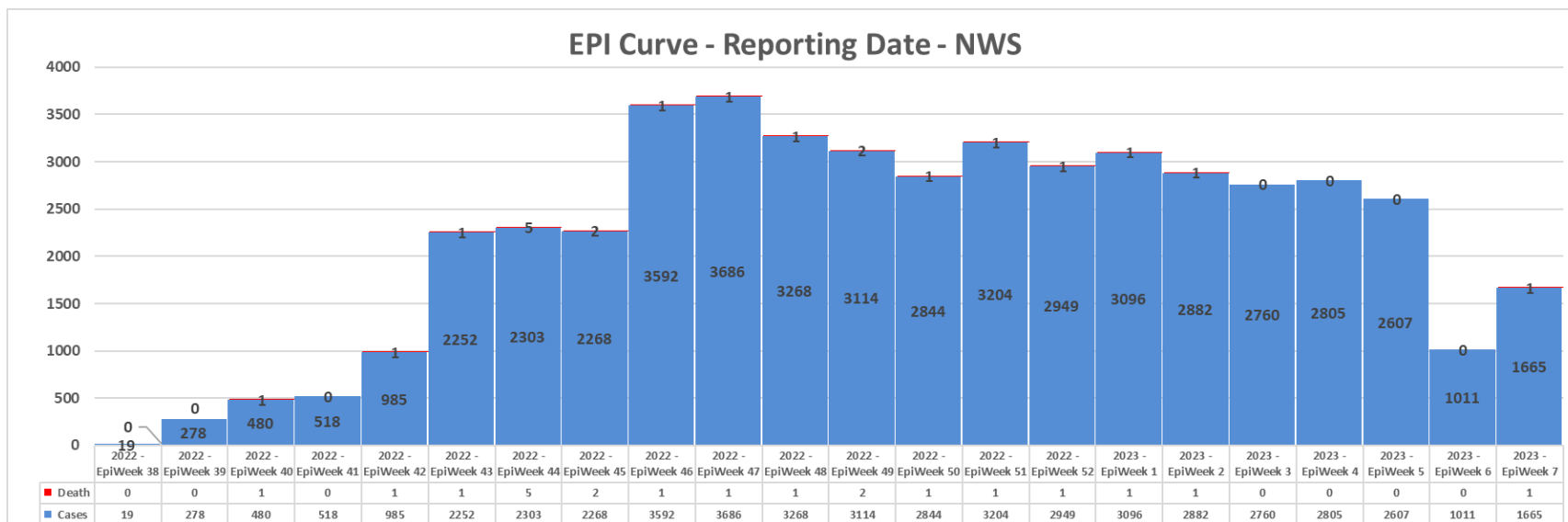
The overall sex distribution of the suspected_cases is 52% Male, and 48% Female.

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

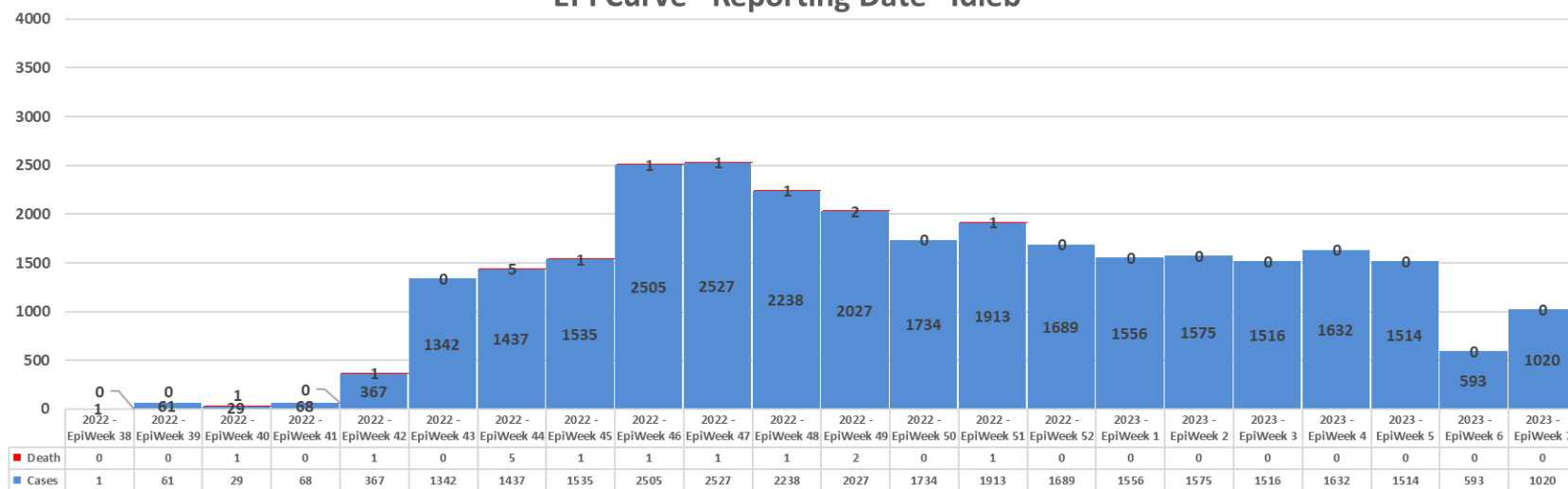
20% of the total cases live in camps (8468), and 80% out of camps (33793). (6320 of the total line listed cases are unknown)

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 44.8%.

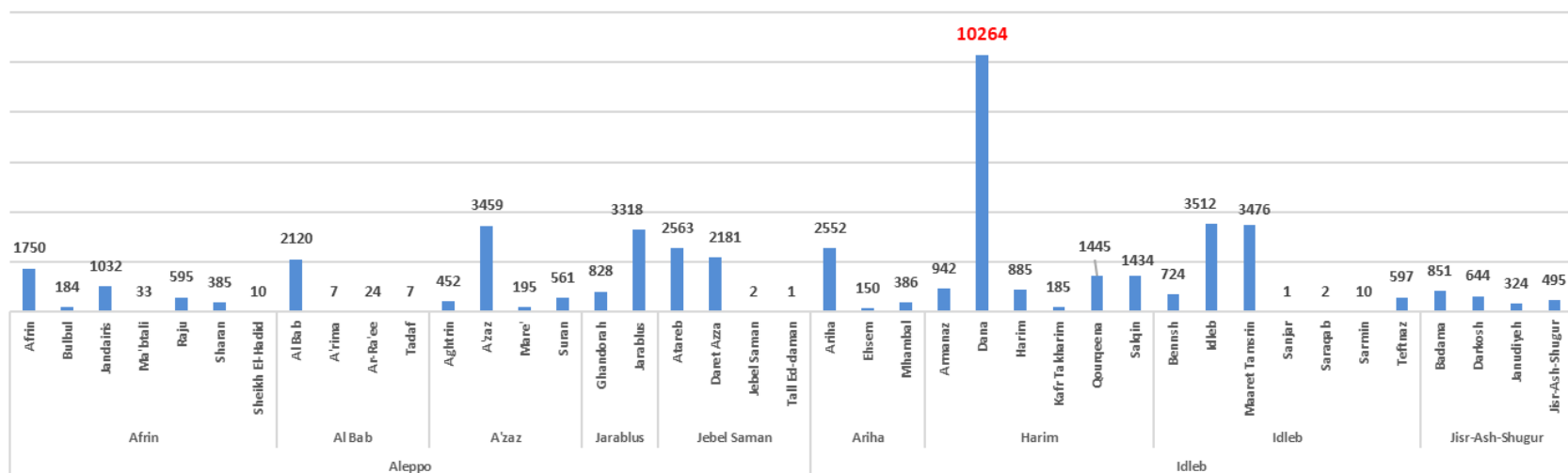




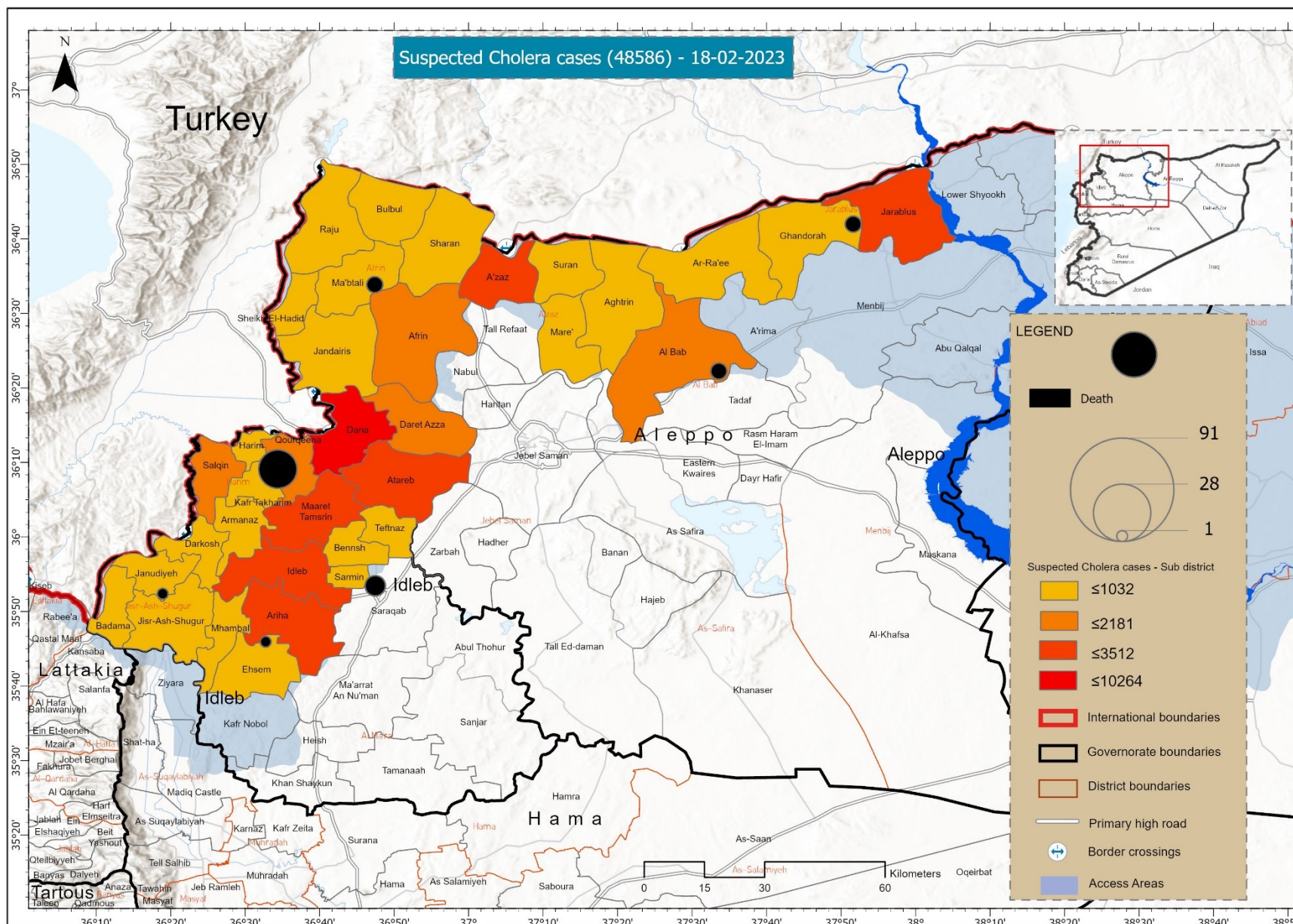
EPI Curve - Reporting Date - Idleb



Cases Distribution Subdistrict Wise

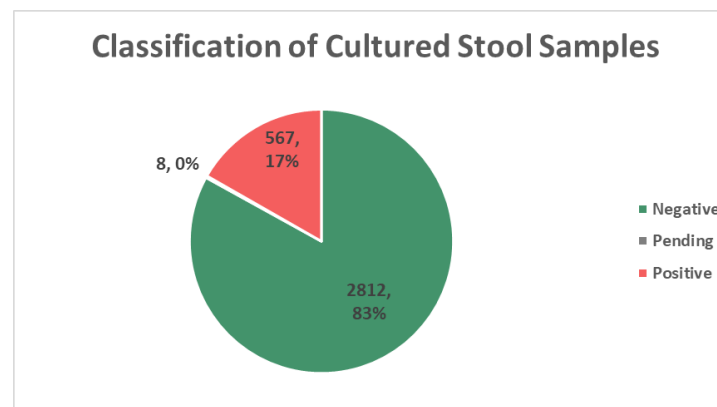
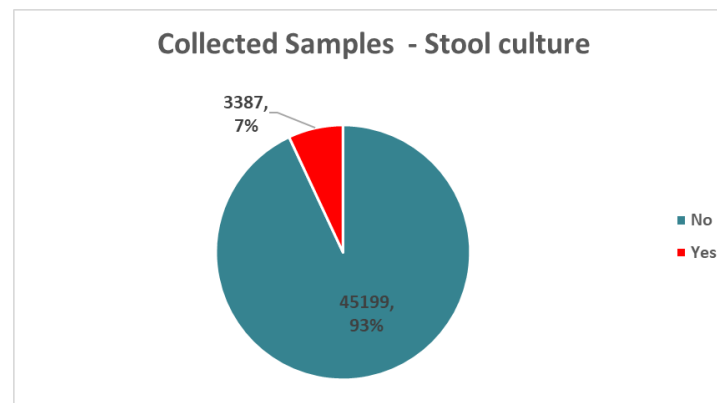


Governorate	District	Date of Onset	Population	New cases	Cumulative Cases	New Death	Cumulative Deaths	Case Fatality Rate	Incidence Rate	Attack Rate
Idleb	Ariha	20-Sep	185,668	197	3088	0	1	0.03%	106.1	1.66%
	Harim	6-Sep	1,586,820	472	15155	0	9	0.06%	29.7	0.96%
	Idleb	14-Sep	713,933	274	8322	0	3	0.04%	38.4	1.17%
	Jisr-Ash-Shugur	25-Sep	310,973	77	2314	0	1	0.04%	24.8	0.74%
Aleppo	A'zaz	9-Sep	648,600	214	4667	0	0	0.00%	33.0	0.72%
	Afrin	21-Sep	467,090	70	3989	0	2	0.05%	15.0	0.85%
	Al Bab	17-Sep	339,812	69	2158	0	2	0.09%	20.3	0.64%
	Jarablus	12-Sep	121,938	127	4146	1	3	0.07%	104.2	3.40%
	Jebel Saman	10-Sep	251,785	165	4747	0	0	0.00%	65.5	1.89%
Total			4,626,619	1665	48586	1	21	0.04%	36.0	1.05%

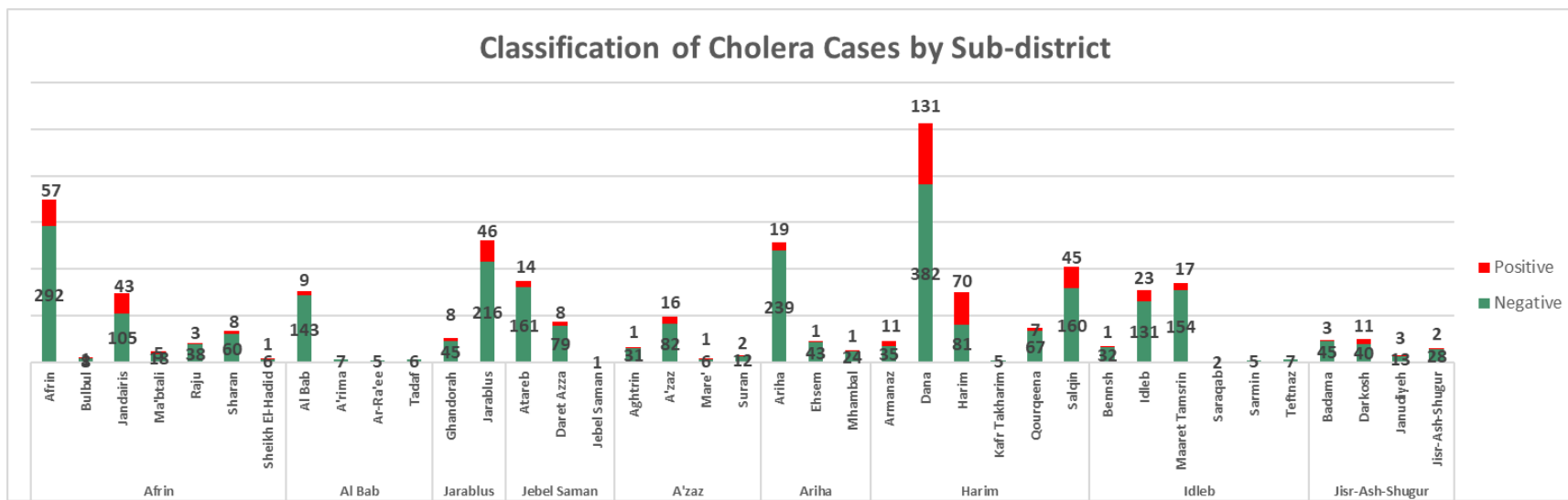


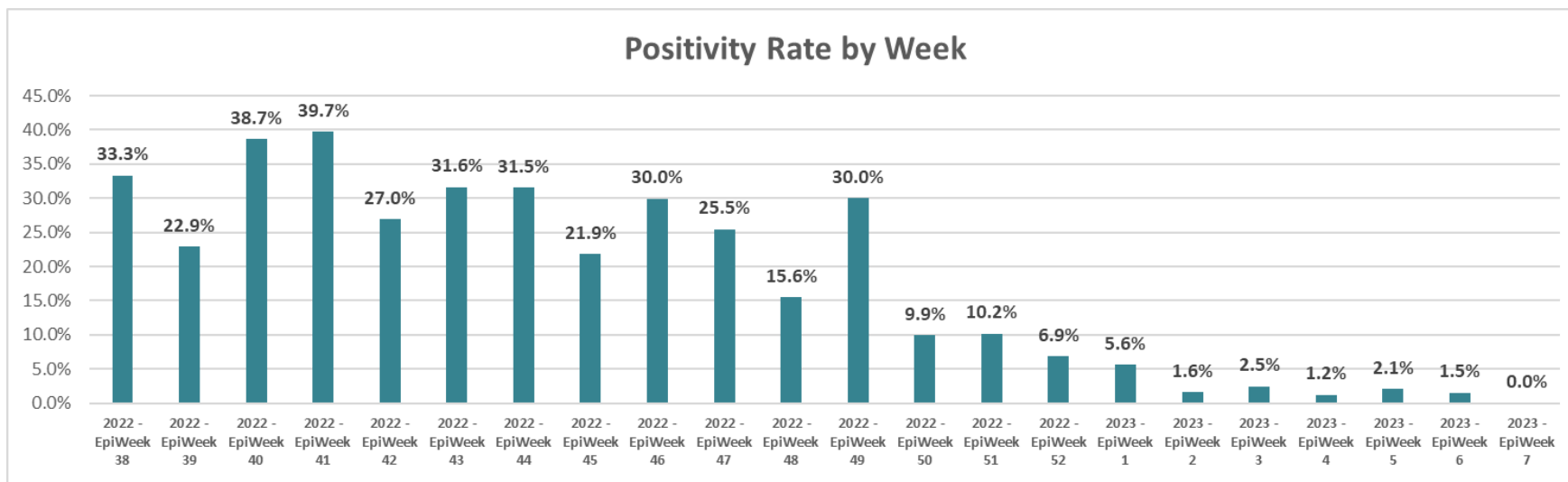
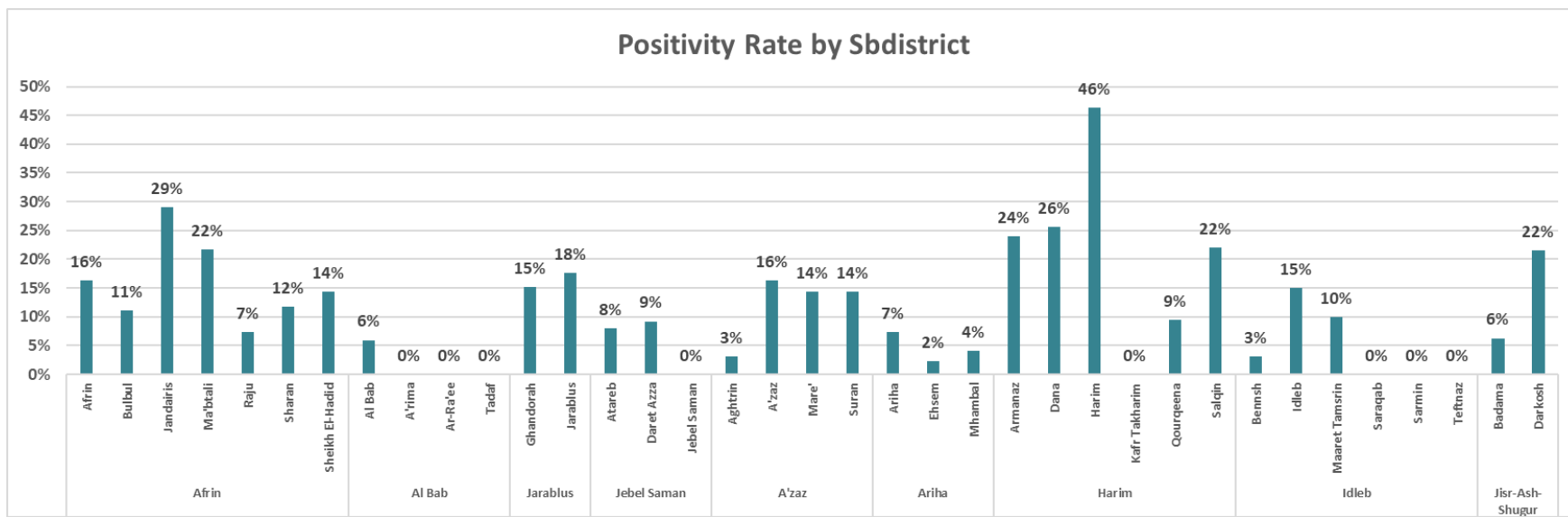
Laboratory:

- In Epi week 07- 2023, the total number of stool specimens or rectal swabs is **47, all of them were negative for Vibrio Cholera by stool culture.**
- A cumulative of 3387 samples were collected since the start of the outbreak (7 % of overall line listed cases), of which 567 have tested positive by stool culture. The total positivity rate in NWS is 17 %.
- The Total number of negative cases by stool culture is 2812, and the remaining 8 are still pending.
- During epi week 7, the EWARN lab conducted RDTs for 34 cases, all of them were negative for Cholera, and the total of tests during the last three weeks 5,6, and 7 reached 149.
- For children under 5 years of age with a stool culture negative for cholera, 5 tests were carried out to detect Rotavirus and Adenovirus (only one case was positive for Rotavirus).
- 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, 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.



Week	Governorate	District	Samples Collected on current week	Stool Culture Positive	Stool Culture Negative	Positivity Rate
Up to W07 - 2023	Idleb	Ariha	14	21	304	6%
		Harim	7	264	730	27%
		Idleb	6	40	331	11%
		Jisr-Ash-Shugur	0	19	126	13%
	Aleppo	Al Bab	0	9	161	5%
		Jarablus	5	54	261	17%
		Jebel Saman	8	22	241	8%
		A'zaz	0	20	131	13%
	Afrin	7	118	527	18%	
	Total		47	567	2812	17%





2. WASH:

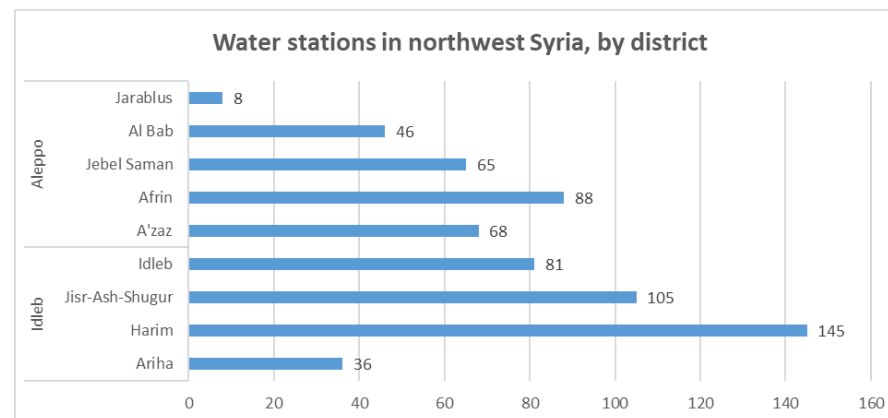
ACU's WASH field team continued assessing the water stations across NWS, to evaluate the impact of the earthquake that hit south of Turkey and Northern Syria. The number of assessed stations is **642** stations.

According to the evaluation of stations, the following results were obtained, not limited to:

1. About 29 stations were suspended due to the earthquake.
2. Most damaged part of the station is the ground tank (50 stations affected).

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 60 water resources.

The result showed there was an increase in turbidity of some water resources for 2 days after the earthquake.



Actions taken

- The EWARN team is currently conducting active surveillance in the most important health facilities in northwest Syria (25 HFs). In Epi week 7- 2023, **16** 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.