

Northwest of Syria Cholera Outbreak

Situation Report No.14

Epidemiological Week 52 (25 Dec - 31 Dec 2022)

Suspected Cases: 31760

Confirmed Cases: 544

Cholera Deaths : 17

Case Fatality Rate: 0.05%

NWS Attack Rate: 0.69%

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 **31760 suspected** cases (**12287** in Aleppo governorate, **19473** in Idleb governorate) including **544 confirmed** have been reported by EWARN team since 16 September, including **17 deaths** case.

- The highest number of cases were reported in Harim district (10017) and Idleb district (5857) in Idleb governorate, then Jarablus district (3135) and Azaz district (2906) in Aleppo governorate.
- 5844 total suspected cases (including 341 new cases in Epi week 52) were reported from **camps**.
- 45.9 % 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 household level being conducted for identified cases.
- Active case search is ongoing, especially in the camps.

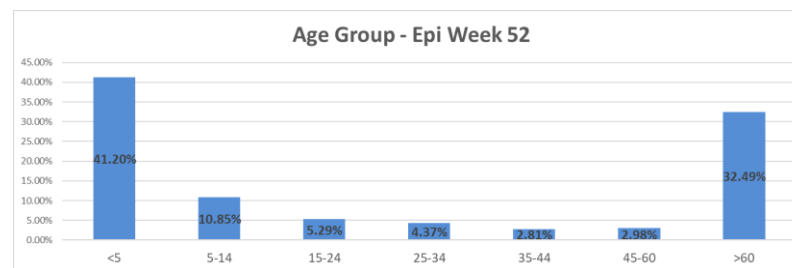
Situation Updates

1. Epidemiology

Updated case definition: A resident of outbreak areas with sudden onset of acute watery diarrhea with or without vomiting.¹

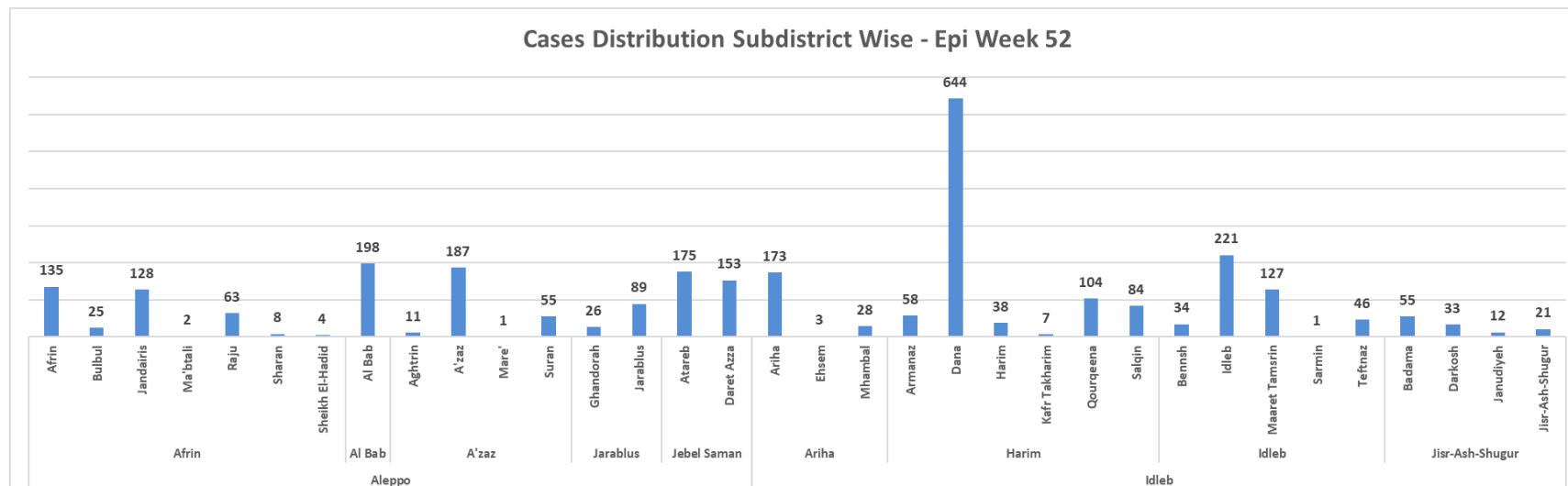
In Epi week 52, **2949 suspected cases of cholera were reported, including 11 positive cases**. The affected governorates are Aleppo (1260 suspected, 5 confirmed), and Idleb (1689 suspected, 6 confirmed).

The age group less than 5 reported 41.2 %, while the age group more than 60 reported 32.5 % of the total



Dana subdistrict in Idled governorate reported the highest number of cases (644), Idleb subdistrict (221), then Al-Bab subdistrict in Aleppo governorate (198).

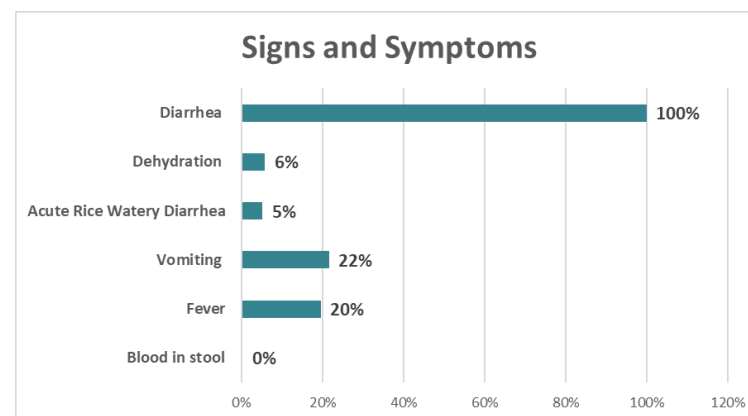
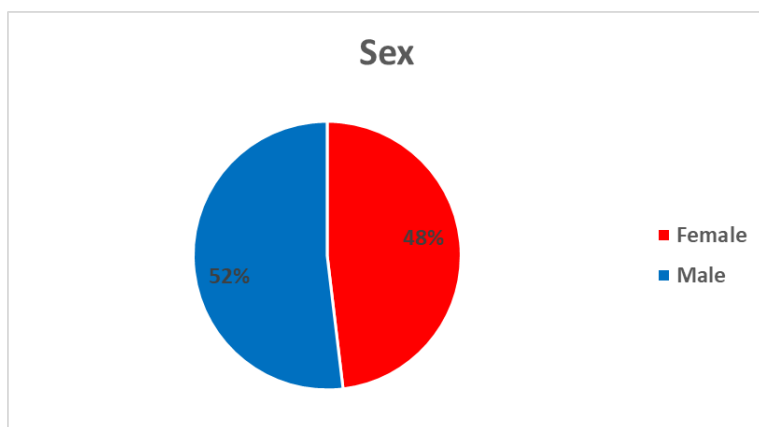
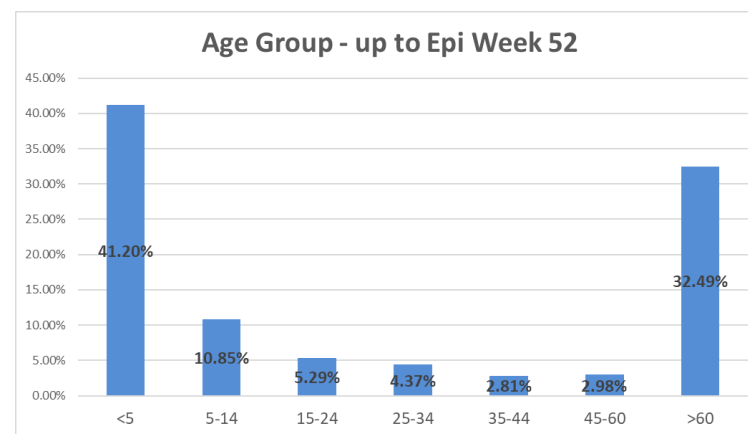
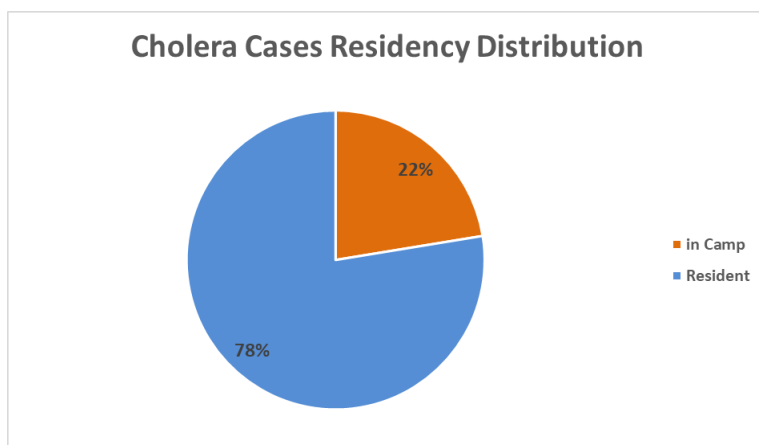
No new deaths in epi week 52 (total 17 deaths).

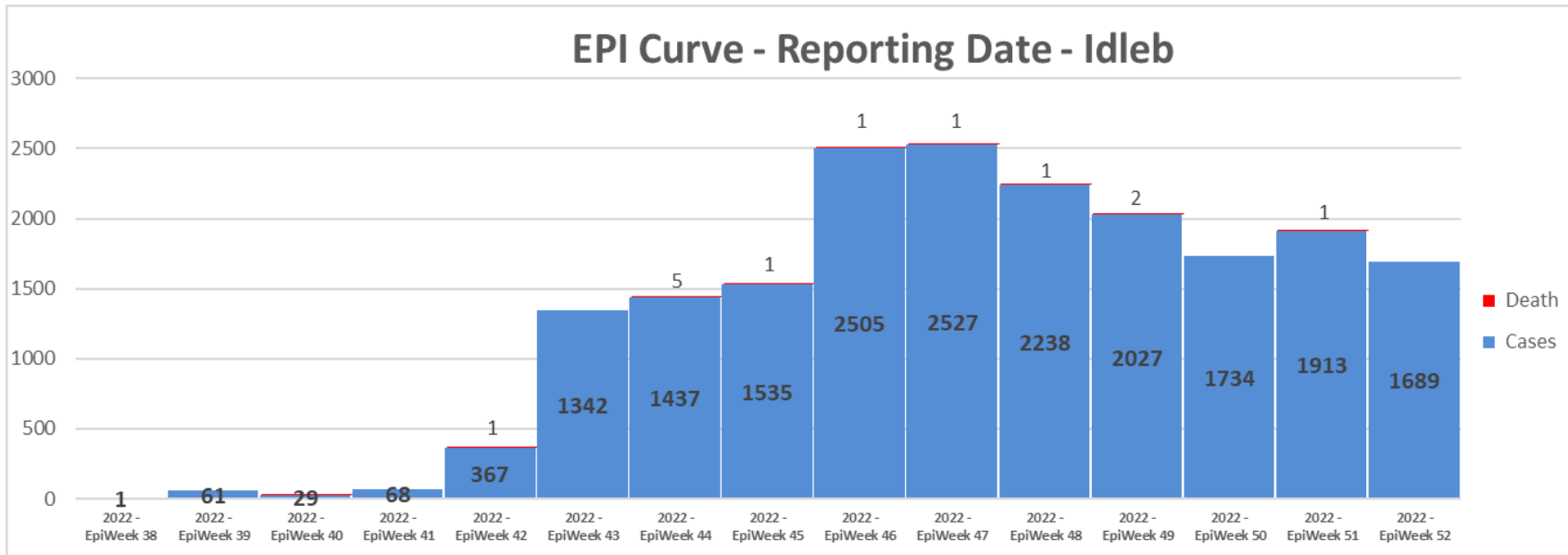
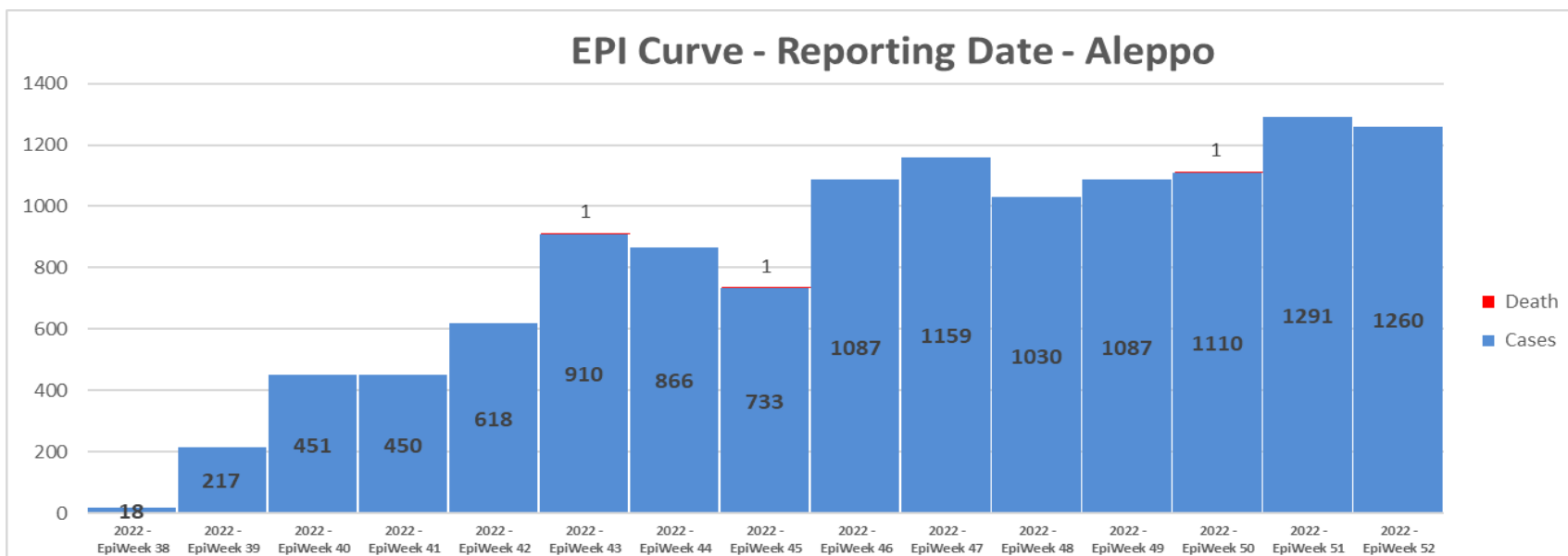


The overall sex distribution of the suspected cases is 52% Male, and 48% Female.

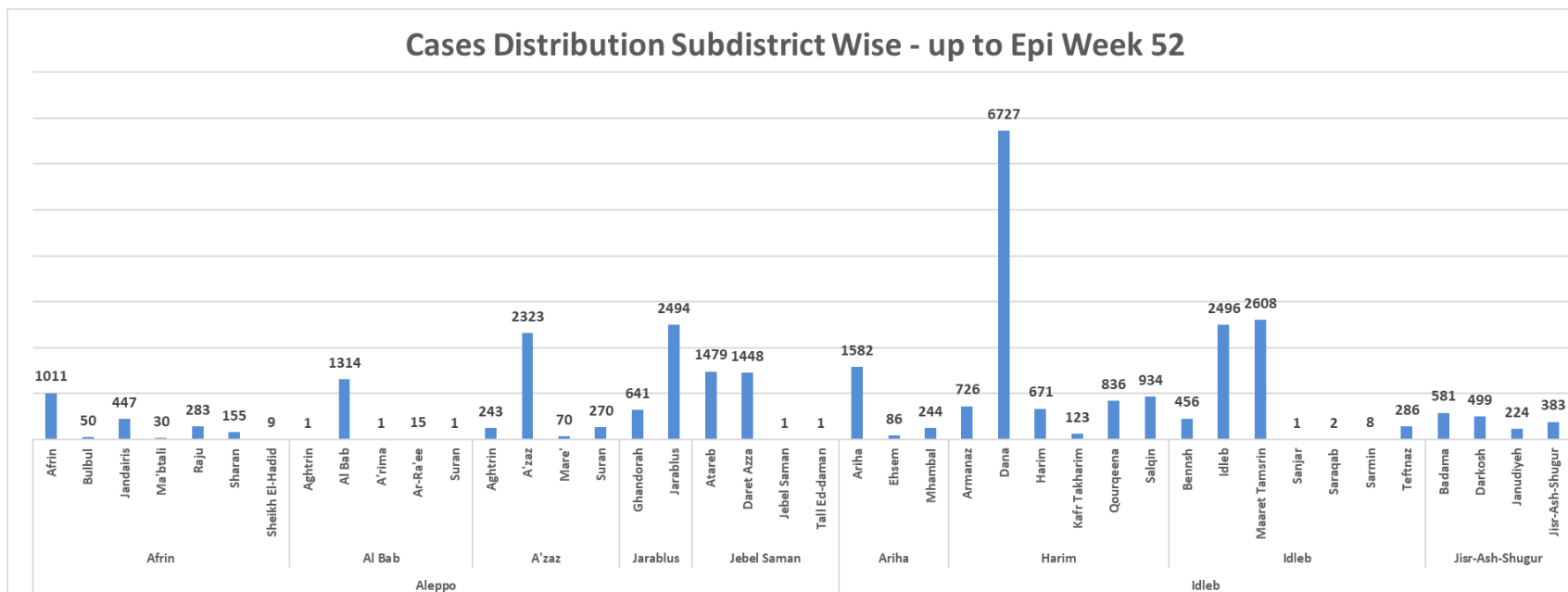
100% of the line listed cases were presented as Acute Diarrhea, 22% with vomiting, 5% as rice watery diarrhea, and 6% were dehydrated.

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.² The age group less than 5 years was 45.27%.





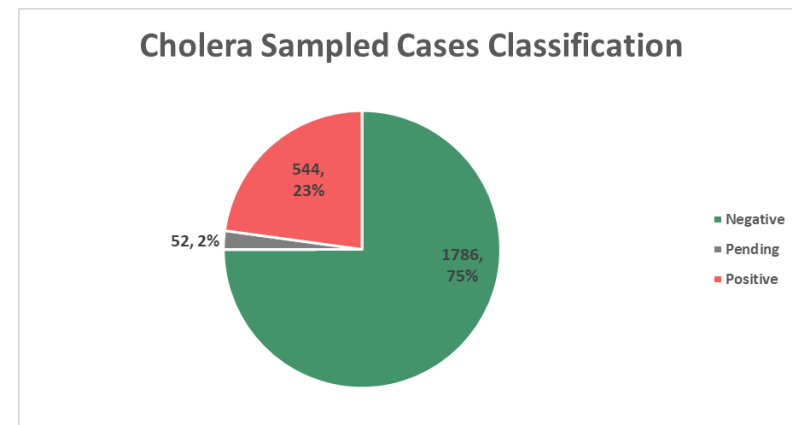
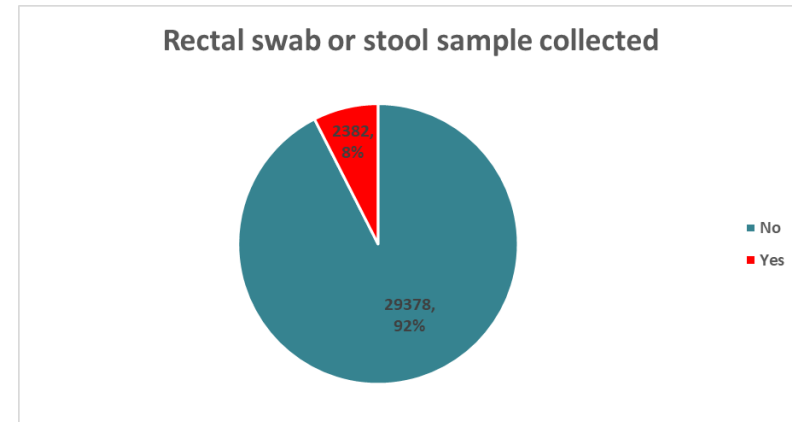
Cases Distribution Subdistrict Wise - up to Epi Week 52



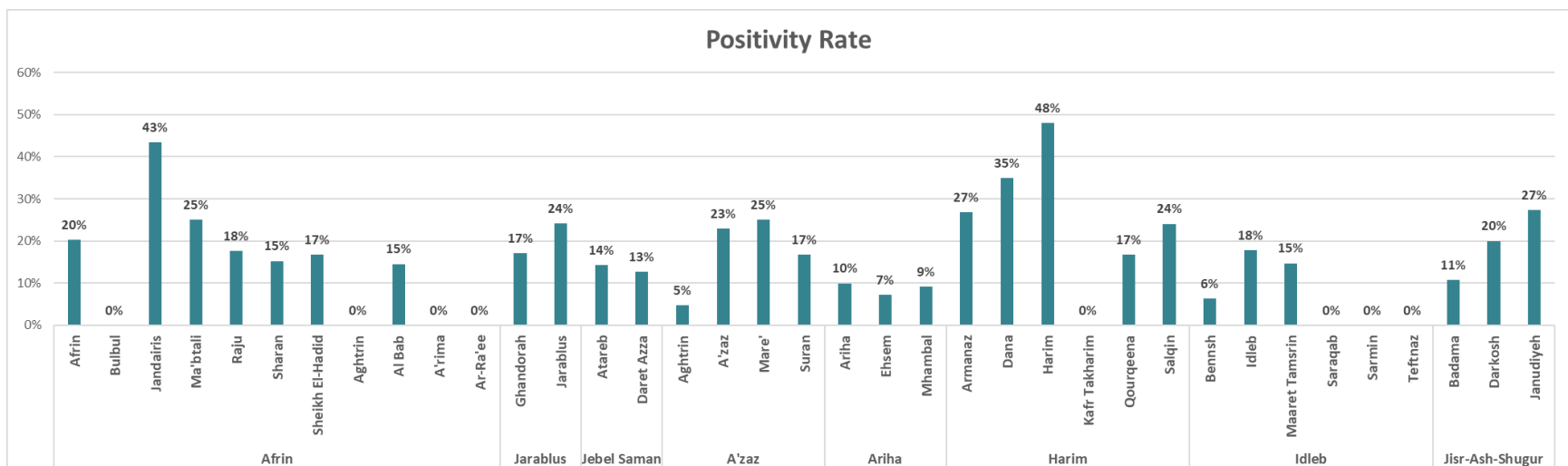
Epi Week	Governorate	District	Date of Onset	Population	New cases	Cumulative Cases	New Death	Cumulative Deaths	Case Fatality Rate	Incidence Rate	Attack Rate
Up to W52	Idleb	Ariha	20-Sep	185,668	204	1912	0	1	0.05%	109.87	1.03%
		Harim	6-Sep	1,586,820	935	10017	0	9	0.09%	58.92	0.63%
		Idleb	14-Sep	713,933	429	5857	0	3	0.05%	60.09	0.82%
		Jisr-Ash-Shugur	25-Sep	310,973	121	1687	0	1	0.06%	38.91	0.54%
	Aleppo	A'zaz	9-Sep	648,600	254	2906	0	0	0.00%	39.16	0.45%
		Afrin	21-Sep	467,090	365	1985	0	2	0.10%	78.14	0.42%
		Al Bab	17-Sep	339,812	198	1332	0	1	0.08%	58.27	0.39%
		Jarabulus	12-Sep	121,938	115	3135	0	0	0.00%	94.31	2.57%
	Jebel Saman	10-Sep	251,785	328	2929	0	0	0.00%	130.27	1.16%	
	Total				4,626,619	2949	31760	0	17	0.05%	63.74

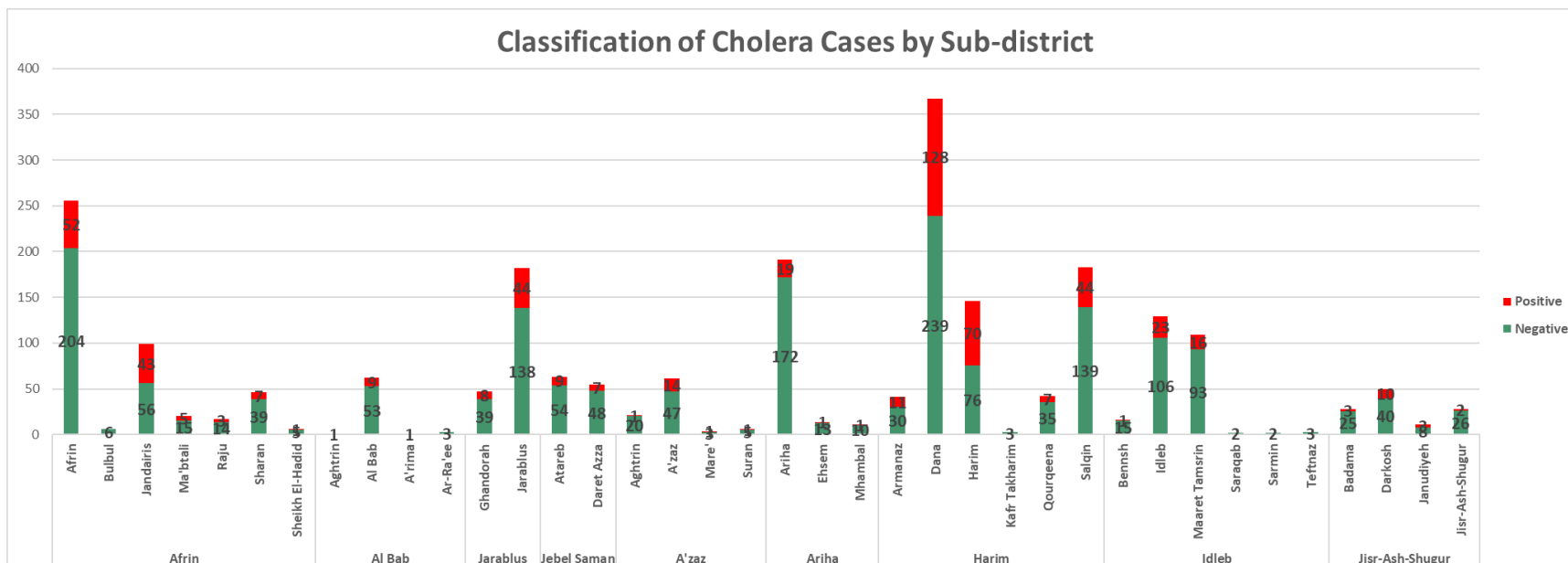
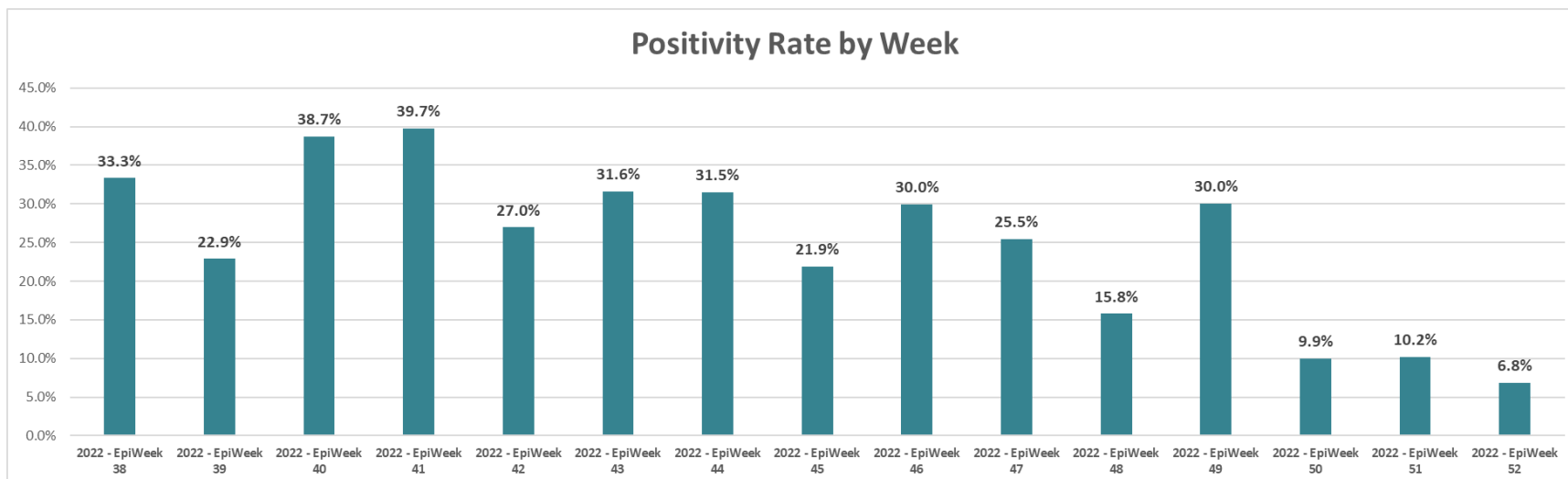
2. Laboratory:

- In Epi week 52, the total number of stool specimens or rectal swabs is 161, of which 11 have tested positive for Vibrio Cholera.
- A cumulative of 2382 samples were collected since the start of the outbreak (8 % of overall line listed cases), of which 544 have tested positive by stool culture. The positivity rate in NWS is 23 %.
- The Total number of negative cases by stool culture is 1786, and the remaining 52 are still pending.
- Diagnostic delays may result in higher case numbers and case fatality rates, without quick and effective diagnosis and treatment, case fatality maybe 50%.
- Isolation and identification of V. cholerae 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. cholerae O1.
- Suspicious, oxidase-positive isolates are serotyped in polyvalent antisera raised against the O1 Antigen.
- Antimicrobial-susceptibility 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 samples collection protocol is 5-10 stool samples per subdistrict, and 5 samples from the admitted cholera suspected cases in the CTC /CTU per week.



Epi Week	Governorate	District	Samples Collected on current week	Stool Culture Positive	Stool Culture Negative	Positivity Rate
Up to W52	Idleb	Ariha	19	21	193	10%
		Harim	53	260	522	33%
		Idleb	16	40	221	15%
		Jisr-Ash-Shugur	5	18	99	15%
	Aleppo	Al Bab	1	9	58	13%
		Jarablus	12	52	177	23%
		Jebel Saman	8	16	102	14%
		A'zaz	9	17	75	18%
		Afrin	38	111	339	25%
	Total		161	544	1786	23%





3. WASH:

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

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).

Total number of investigations: 2, distributed as follows:

- **Afrin district:** The number of Investigations is **1**

Afrin sub-district / Afrin community: The investigation covered two main neighborhoods in Afrin city (Community) where the number of cases (Confirmed/Suspected) is higher. The neighborhoods are:

1. **Alfilaat neighborhood**

It is supplied from the main public water network with an existing limited number of private wells that are used if needed (when there is a shortage in water supply).

2. **Old Afrin neighborhood**

90% of the neighborhood is connected to the public network, so 10% of houses secure their needs through procuring water from private suppliers— water trucking. The private suppliers fill their water truck from five main wells; these wells were tested previously, and the result showed that water was safe to drink. In addition, many private wells, which exist currently, were dug years ago; some of them were dug recently as well.

During the investigation, 10 samples were taken from private wells to be tested, since the other water resources were tested earlier, and the result showed that water was safe to drink.

The main water station—**coded A010601001**— that supplies Afrin community is supervised by local authorities and FRC values were tested at different points; the values ranged from 0.1 to 0.2 ppm at the level of houses. Afrin community was investigated many times earlier and the result showed the water resources were safe to drink and not contaminated.

Note: most of the confirmed cases were in contact with other positive cases.

- **Jebal Saman district: The number of Investigations is 2**

Dana sub-district) / Atma community: the investigation focused on the camps located near the community of Atma. The camps covered during the investigation were: Al Ataa, AL Jazeera, Al Bayan, Atfalona Tonashedokom, Al Majed and Ehsan which were coded CP000109, CP000751, CP000764, CP000766, CP000798, CP000813 respectively. These camps are supported by an organization with WASH services.

FRC values were measured at different points within the camps and the value ranged 0.1-0.67 ppm, which means that water is safe to drink and not contaminated.

Actions taken

- The response teams conducted an extensive investigation of the deaths that occurred since the beginning of the outbreak (17 deaths), where some possible causes were identified, and the teams made appropriate recommendations.
- Strengthening surveillance to collect cases from all HFs
- 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

- Continuing movements of population.
- Supplies of laboratory reagents and consumables are not enough for reliable testing services.
- The number of WASH officers is low and needs to be increased, particularly in Harim district, where the number of cases surges, and the number of camps and population is higher than in other locations.

Recommendations

- Initiate reporting from functioning treatment centers (CTCs, CTUs, and ORPs).
- Support the laboratory with more consumables and supplies, especially for O139 and O1 Antisera.
- Enhancement coordination mechanisms with WHO and Taskforce members.
- Strengthening the community's role in reporting cases
- Enhancing the potential sources of Cholera death reporting.
- Increase efforts to educate the population about cholera and encourage them to go to medical centers to receive medical services
- Emphasis on health centers to immediately notify any suspected case of cholera
- Training CTC and CTU personnel to prepare the different types of chlorine solutions and where to use them properly. Moreover, providing them with a pool tester to measure the FRC of the water supplied to these centers.