

Northwest of Syria Cholera Outbreak

Situation Report No.9

Epidemiological Week 47 (20 Nov - 26 Nov 2022)

Date of Onset of Outbreak: 16 September 2022

Reporting Date of outbreak: 17 September 2022

Confirmation Date: 19 September 2022

Suspected Cases: 16389

Confirmed Cases: 408

Cholera Deaths : 12

Case Fatality Rate: 0.07%

NWS Attack Rate: 0.35%

Key Highlights

- Cumulatively, a total of **16389 suspected** cases (6511 in Aleppo governorate, 9878 in Idleb governorate) including **408 confirmed** have been reported by EWARN team since 16 September, including **12 deaths** case.
- The highest number of cases were reported in Harim district (4722), Idleb district (3270), Jarablus district (2235), and Azaz district (1654).
- 3847 total suspected cases (including 484 new cases in Epi week 47) were reported from **camps**.
- 49.8 % 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](#).
- Suspected cholera cases are being investigated by the Rapid Response Team, either in areas of outbreak or in areas where new cases have been reported.
- 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

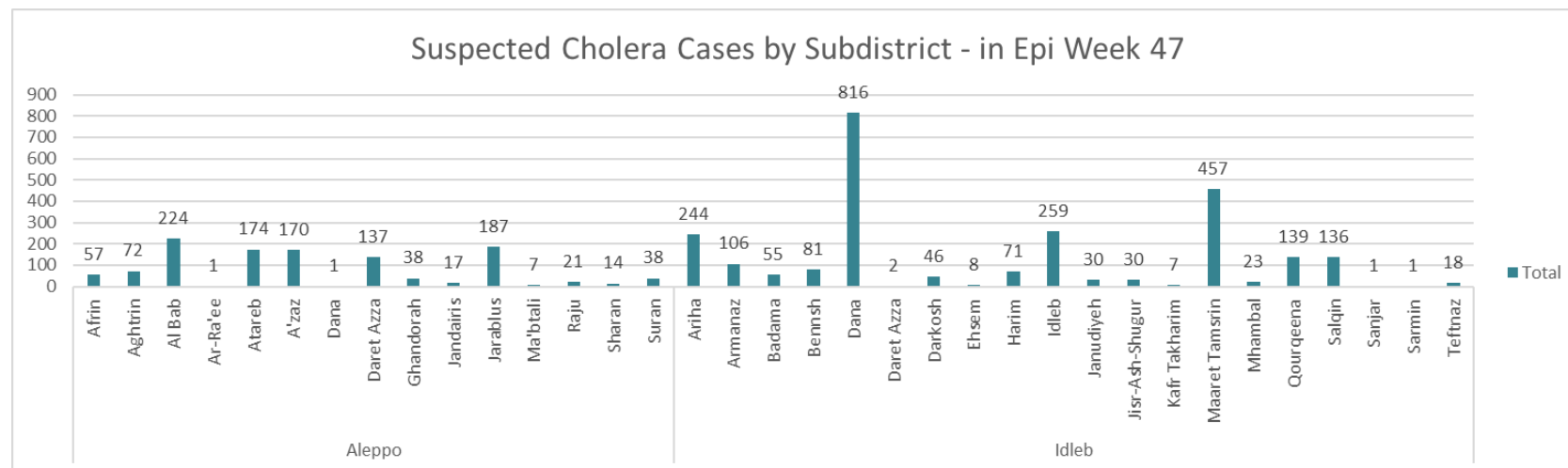
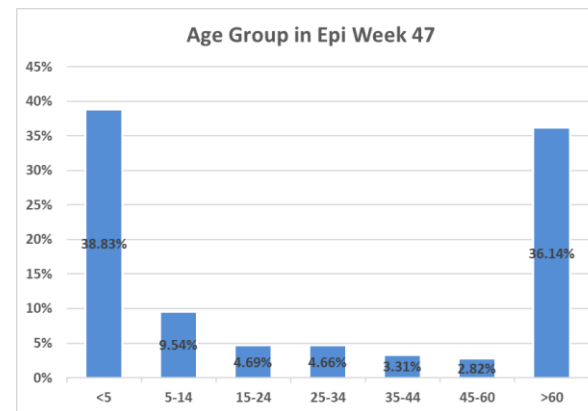
1. Epidemiology

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

In Epi week 47, **3688 suspected cases of cholera were reported, including 37 positive cases**. The affected governorates are Aleppo (1158 suspected, 7 confirmed), and Idleb (2530 suspected, 30 confirmed).

The age group more than 60, reported 36 % of the total, while the age group less than 5, reported 38.9%.

Dana subdistrict in Idleb governorate reported the highest number of cases (817), Maaret Tamsrin subdistrict (457), and Idleb subdistrict (259). In Aleppo governorate, Al-Baba subdistrict reported the highest number of cases (224).

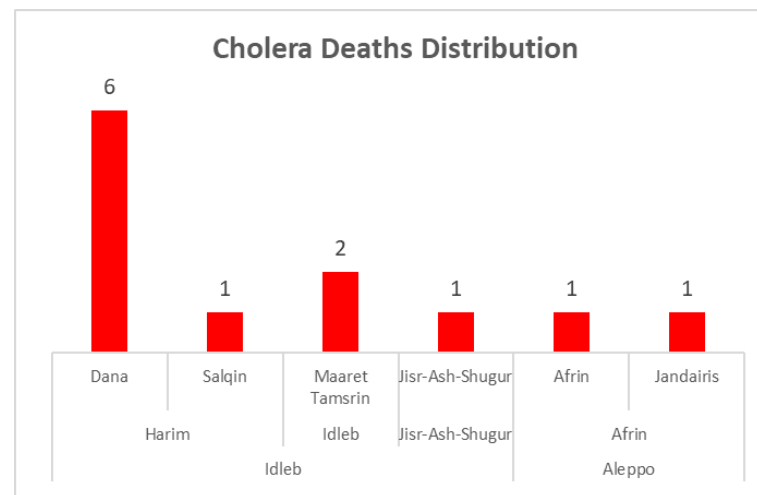


One Cholera death was reported in Epi week 47 (total 12 deaths)

A 40-year-old man

- Al Omer camp, Atmeh community, Dana subdistrict, Harim district, Idleb governorate.
- He had a history of epilepsy, asthma, and retardation.
- Date of onset: 19-Nov-2022, with acute watery diarrhea (15 times a day), without vomiting.
- Date of death: 21-Nov-2022

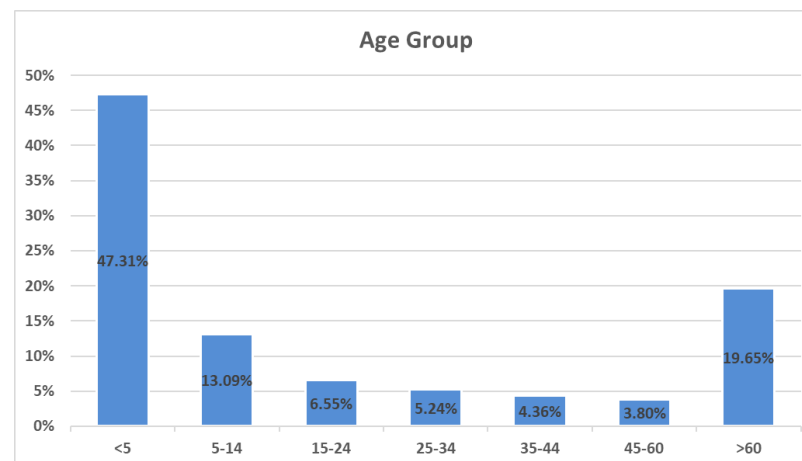
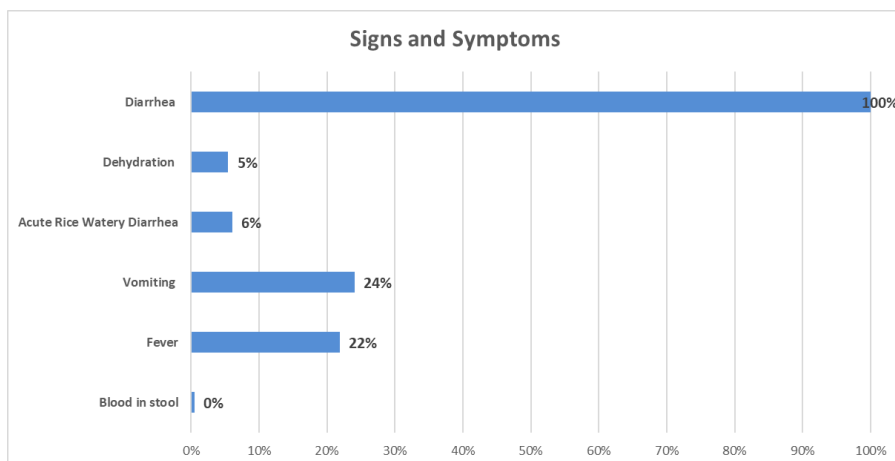
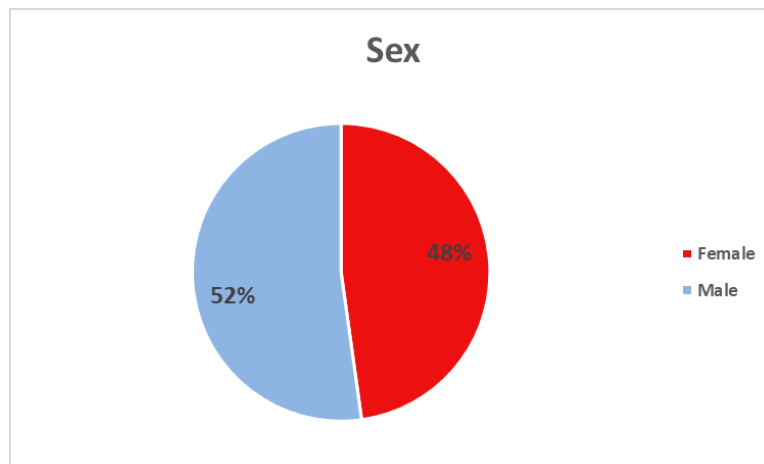
[Read NWS Deaths 3](#)

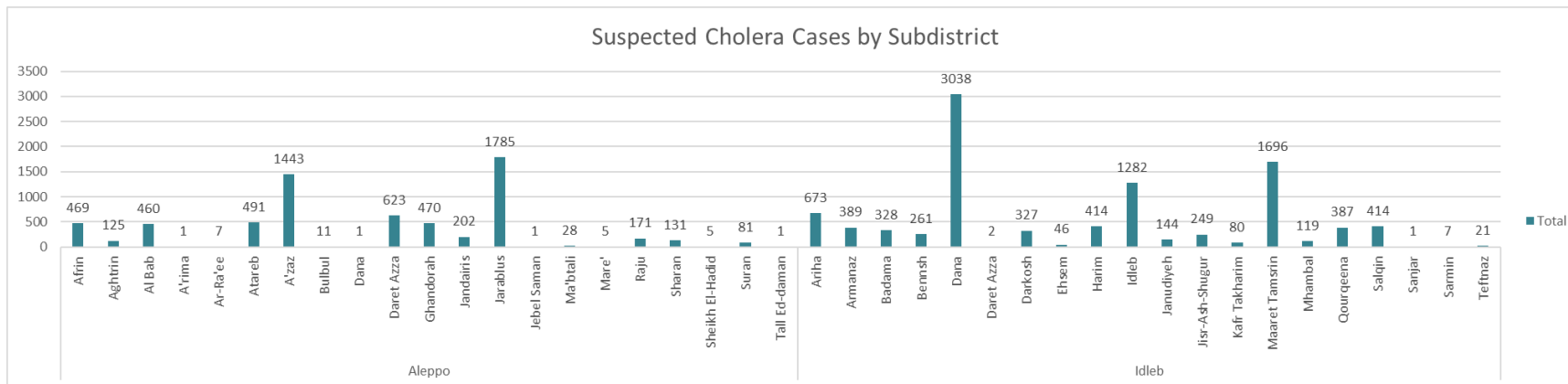


The overall sex distribution of the suspected cases is 52% Male, and 48% Female.

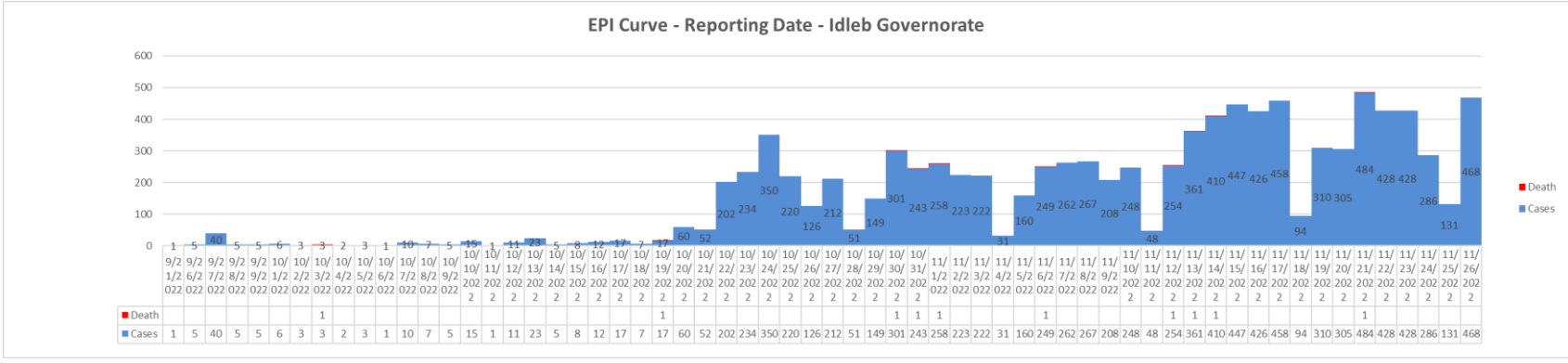
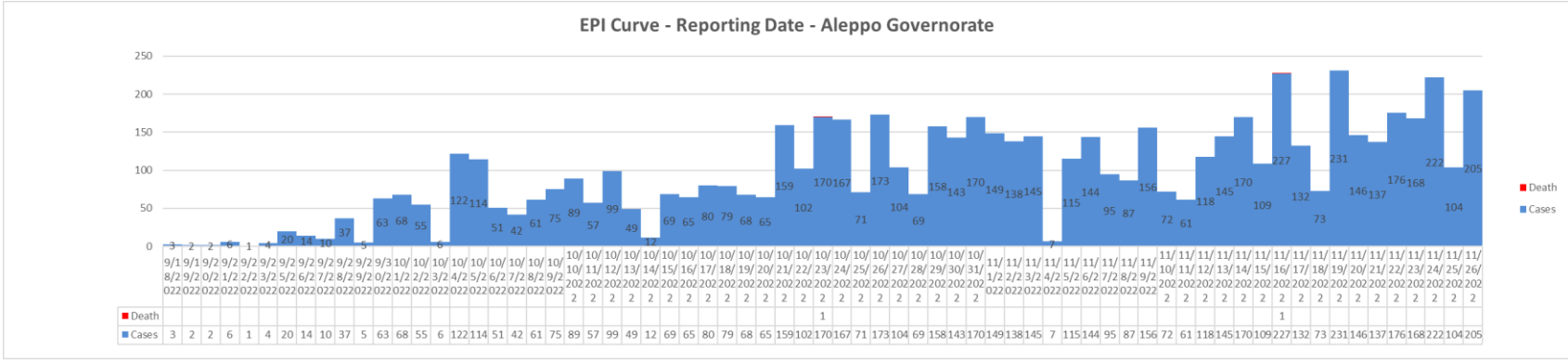
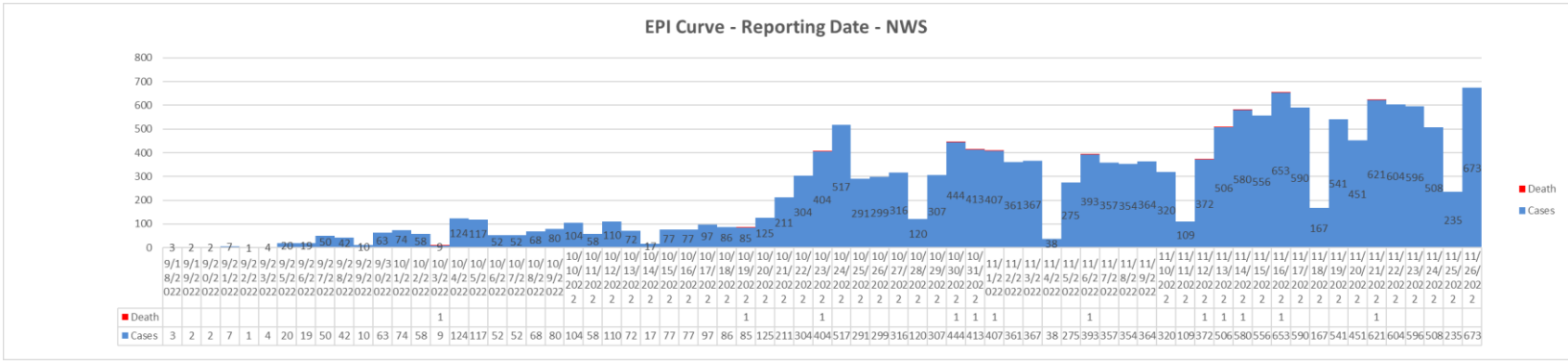
100% of the line listed cases were presented as Acute Diarrhea, 24% with vomiting, 6% as rice watery diarrhea, and 5% were dehydrated.

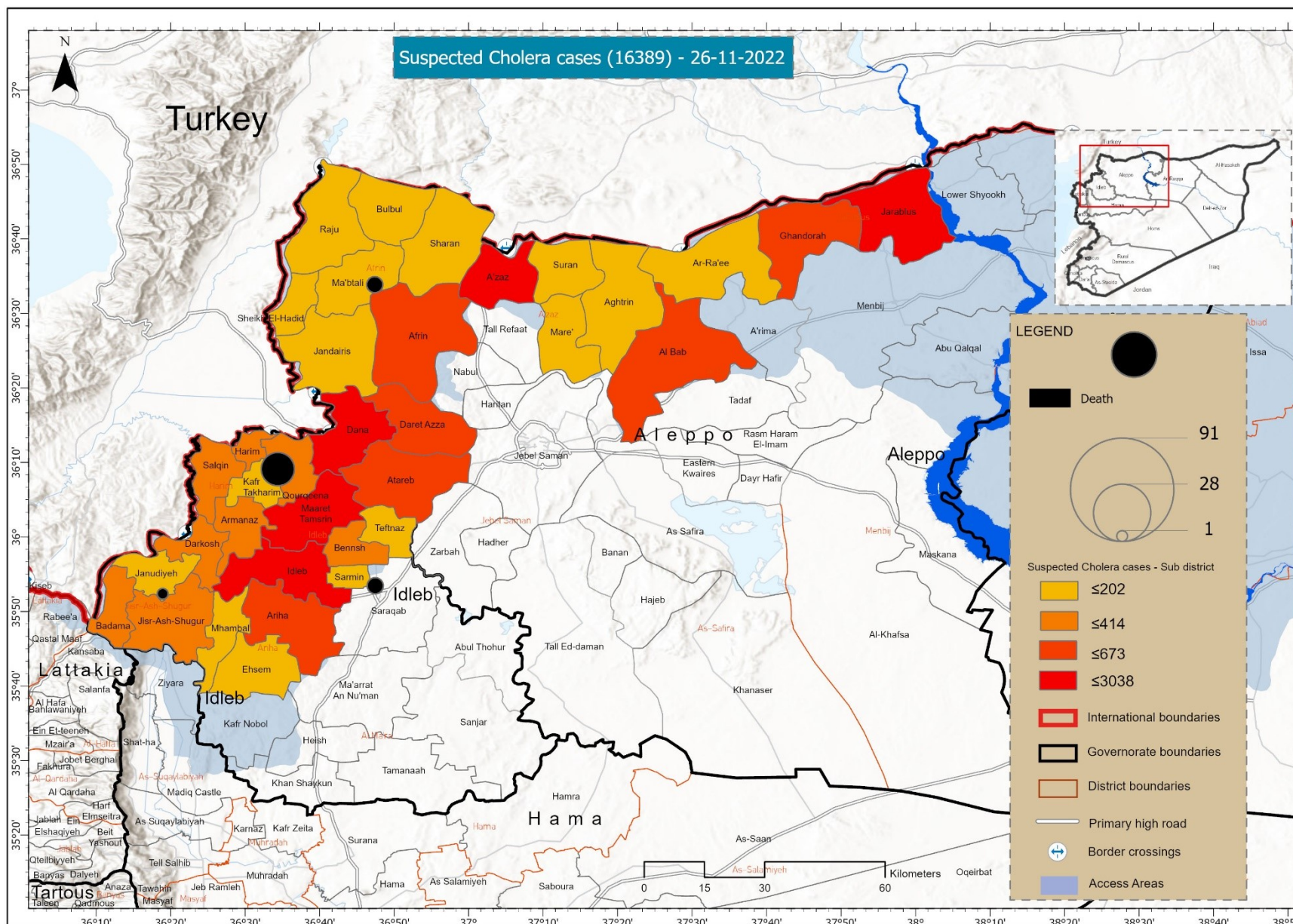
As the outbreak progresses, sensitivity should be increased by including smaller age groups and mild/moderate symptom groups in order to estimate the burden of the outbreak. According to WHO, in areas where a cholera outbreak has been confirmed, any person presenting with or dying from acute watery diarrhea is considered a suspected cholera case.² The age group less than 5 years was 47.3%.





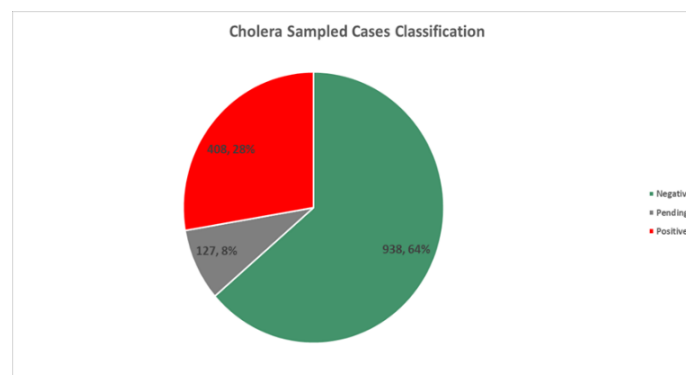
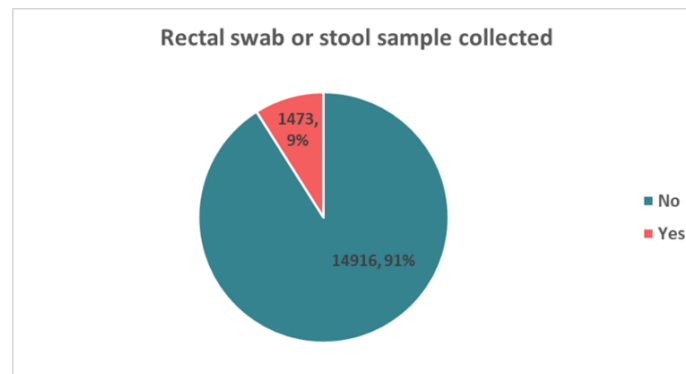
Epi Week	Governorate	District	Date of Onset	Population	New cases	Cumulative Cases	New Death	Cumulative Deaths	Case Fatality Rate	Incidence Rate	Attack Rate
Up to W47	Idleb	Ariha	20-Sep	185,668	275	838	0	0	0.00%	148.1138376	0.45%
		Harim	6-Sep	1,586,820	1276	4723	1	7	0.15%	80.41239712	0.30%
		Idlib	14-Sep	713,933	819	3270	0	2	0.06%	114.7166471	0.46%
		Jisr-Ash-Shugur	25-Sep	310,973	161	1048	0	1	0.10%	51.77298351	0.34%
	Aleppo	A'zaz	9-Sep	648,600	280	1654	0	0	0.00%	43.16990441	0.26%
		Afrin	21-Sep	467,090	116	1017	0	2	0.20%	24.83461431	0.22%
		Al Bab	17-Sep	339,812	225	470	0	0	0.00%	66.21308253	0.14%
		Jarablus	12-Sep	121,938	225	2253	0	0	0.00%	184.520002	1.85%
	Jebel Saman	10-Sep	251,785	311	1116	0	0	0.00%	123.5180809	0.44%	
	Total				4,626,619	3688	16389	1	12	0.07%	79.7



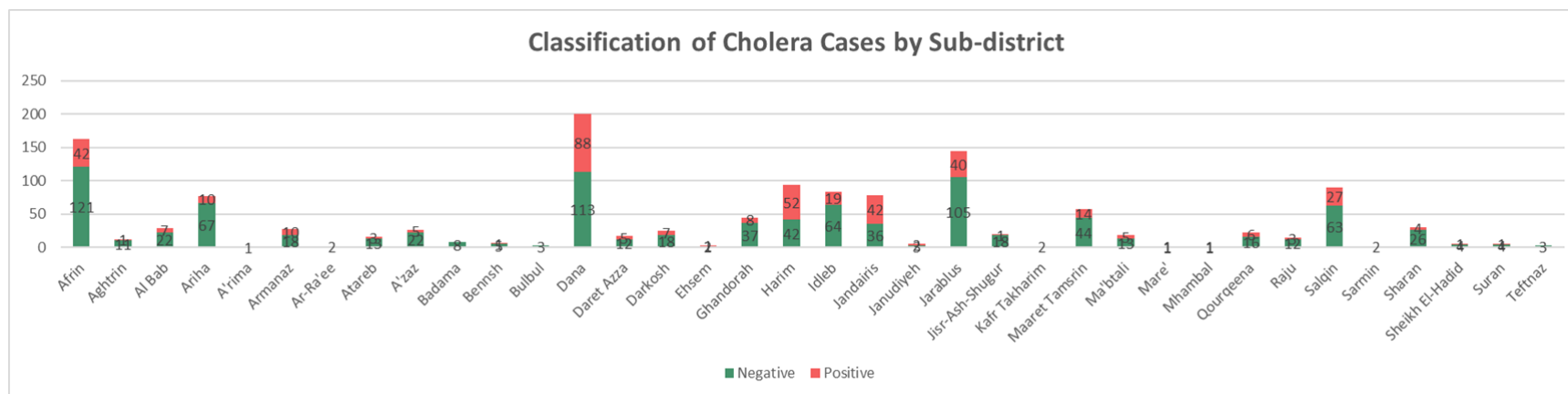


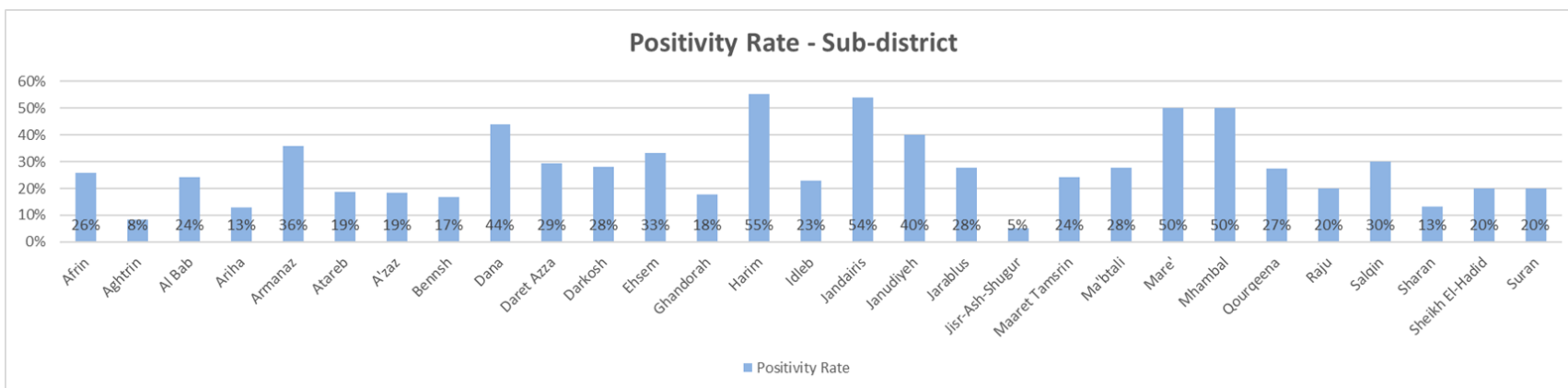
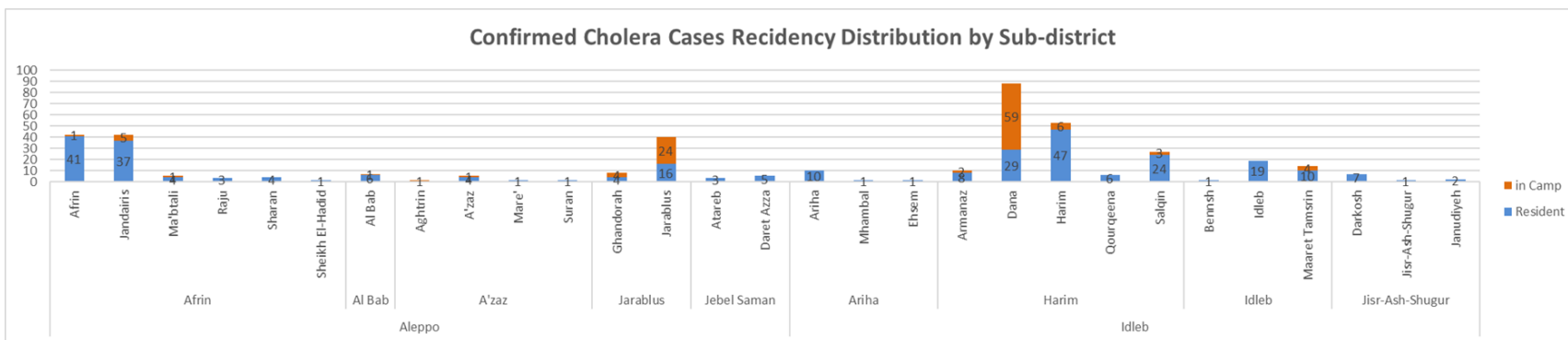
2. Laboratory:

- In Epi week 47, the total number of stool specimens or rectal swabs is **217**, of which **55** have tested positive for Vibrio Cholera.
- A cumulative of **1473** samples were collected since the start of the outbreak (9 % of overall line listed cases), of which **408** have tested positive by stool culture. The positivity rate in NWS is **30 %**
- The Total number of negative cases by stool culture is **938**, and the remaining **127** 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 culture of a stool specimen remains 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.



Epi Week	Governorate	District	Samples Collected on current week	Stool Culture Positive	Stool Culture Negative	Positivity Rate
Up to W47	Idleb	Ariha	18	12	70	15%
		Harim	98	184	258	42%
		Idleb	29	34	118	22%
		Jisr-Ash-Shugur	11	10	47	18%
	Aleppo	A'zaz	6	8	38	17%
		Afrin	44	97	215	31%
		Al Bab	5	7	25	22%
		Jarablus	1	48	142	25%
		Jebel Saman	5	8	25	24%
	Total		217	408	938	30%





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).

The total number of investigations is 3, distributed as follows:

- **Afrin (District):** The number of Investigations is **1**

Afrin/Afrin: 5 suspected cases were reported, who are from one family. Afrin community is supplied with water through a water station. However, a small part of the community depends on private and public wells.

The family takes their drinking water from private wells. The water sample was tested at different levels, houses, and wells. The results showed that water is safe to drink and not contaminated. The patients' house is located near to Afrin River, which is connected to sewage networks that flow into the river. The children usually play near the river.

- **Harim district:** the Number of Investigations is **2**

Salqin subdistrict / Salqin community: The number of confirmed cases reached 10 cases. The community is supplied with water through a water station, which is supported by an organization. Water samples were taken and tested at different houses. The results showed that water is safe to drink and not contaminated.

Salqin subdistrict / Kafr Hind community: The patient uses a private well for drinking purposes. The water of the well was tested, and the result showed that the water is safe to drink and not contaminated.

Most of the investigations showed that the water resources are safe, and the confirmed cases(patients) might contract the infection (disease) from other resources (For example: Eating vegetables irrigated by wastewater, visiting relatives and friends in other communities...).

Actions taken

- The response teams conducted an extensive investigation of the deaths that occurred since the beginning of the outbreak (12 deaths), where some possible causes were identified, and the teams made appropriate recommendations.
- Strengthening surveillance to collect cases from all HFs
- The WASH teams in ACU 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

- Difficulties in collecting samples within HFs, CTC, and CTU.
- 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