

Northwest of Syria Cholera Outbreak

Situation Report No.11

Epidemiological Week 49 (4 Dec - 10 Dec 2022)

Suspected Cases: 22763

Confirmed Cases: 484

Cholera Deaths : 14

Case Fatality Rate: 0.06%

NWS Attack Rate: 0.49%

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 **22763 suspected** cases (**8626** in Aleppo governorate, **14137** in Idleb governorate) including **484 confirmed** have been reported by EWARN team since 16 September, including **14 deaths** case.

- The highest number of cases were reported in Harim district (7071), Idleb district (4476), Jarablus district (2673), and Azaz district (2166).
- 4643 total suspected cases (including 439 new cases in Epi week 49) were reported from **camps**.
- 45 % 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.
- 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

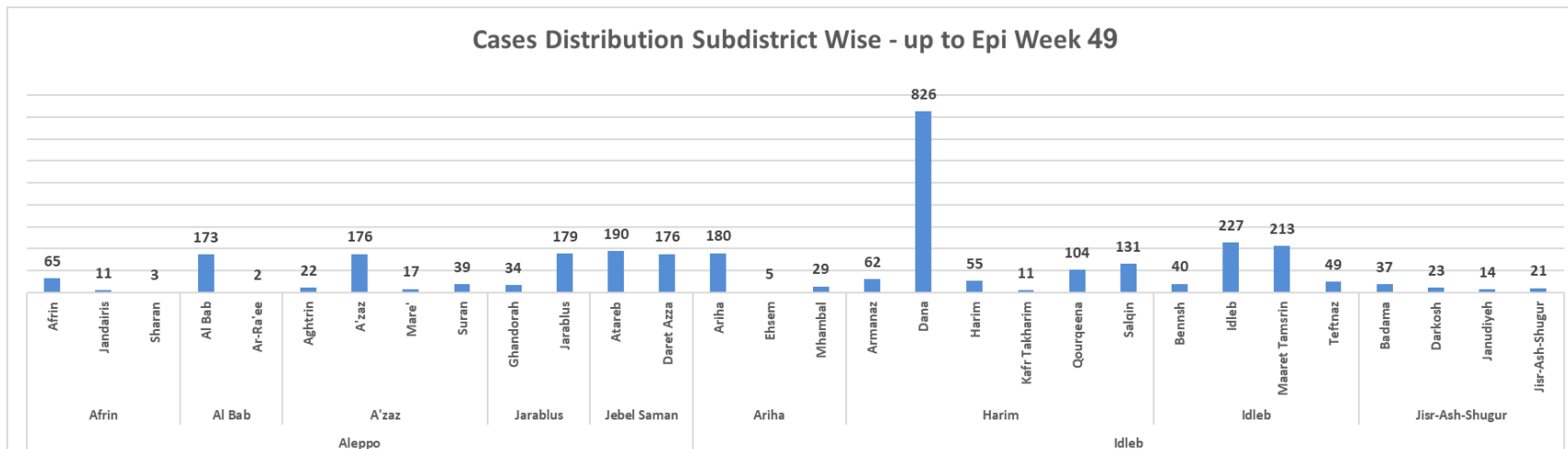
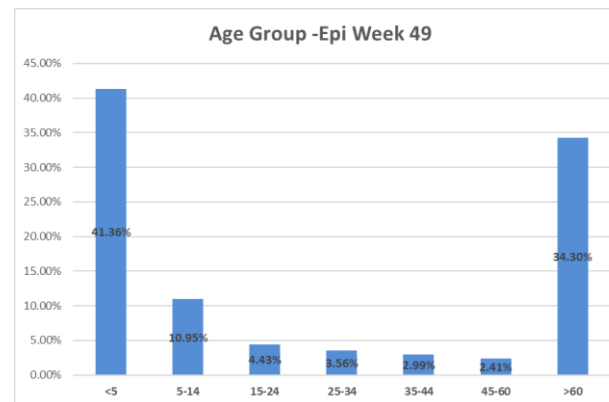
1. Epidemiology

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

In Epi week 49, **3114 suspected cases of cholera were reported, including 44 positive cases**. The affected governorates are Aleppo (1087 suspected, 14 confirmed), and Idleb (2027 suspected, 30 confirmed).

The age group less than 5 reported 41.36 %, while the age group more than 60 reported 34.3 % of the total

Dana subdistrict in Idled governorate reported the highest number of cases (826), Idled subdistrict (227), and Maaret Tamsrin subdistrict (213). In Aleppo governorate, Atareb subdistrict reported the highest number of cases (190).



Two new Cholera deaths were reported in Epi week 49 (total 14 deaths)

A 30-year-old female

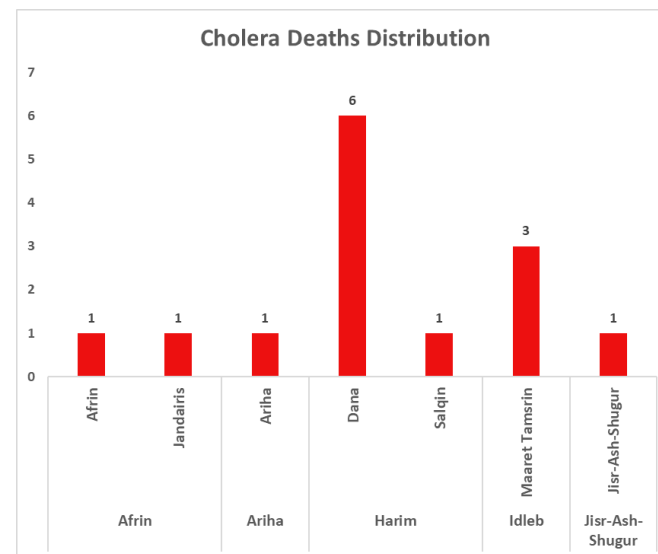
Ataa camp, Kelly community, Maaret Tamsrin subdistrict, Idleb district, Idleb governorate.

- Date of onset: 28-Nov-2022
- Date of visit at a health facility: 1-Dec-2022
- Date of death: 4-Dec-2022
- Stool culture: Neg

A six-month-old infant female

Ariha city, Ariha district, Idleb governorate.

- Date of visit at a health facility: 5-Dec-2022
- Date of death: 5-Dec-2022



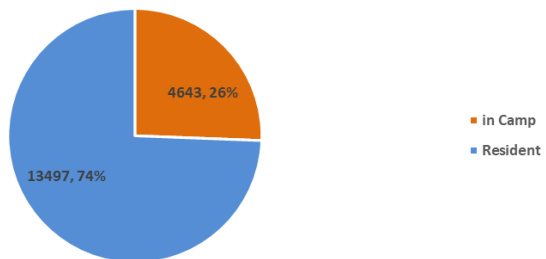
[For more details on these deaths click here](#)

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

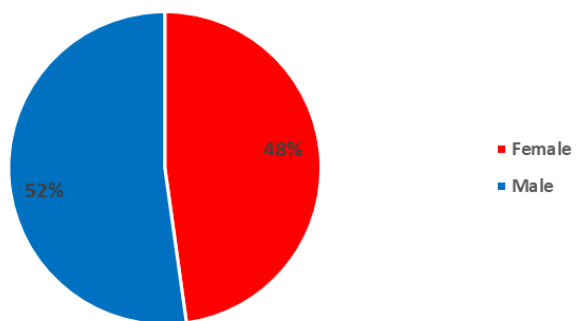
100% of the line listed cases were presented as Acute Diarrhea, 23% with vomiting, 6% as rice watery diarrhea, and 6% were dehydrated.

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 45.48%.

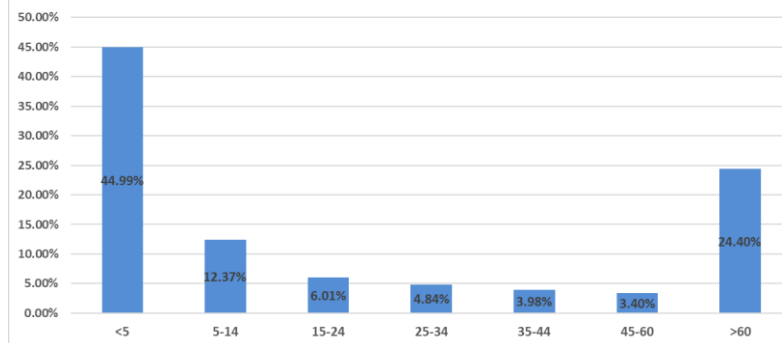
Cholera Cases Residency Distribution



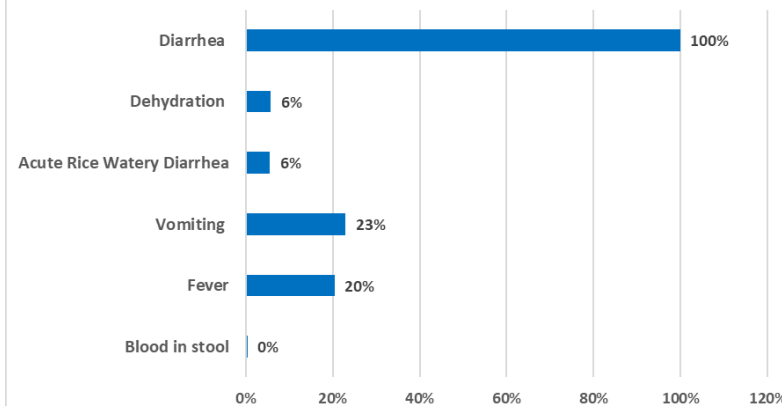
Sex



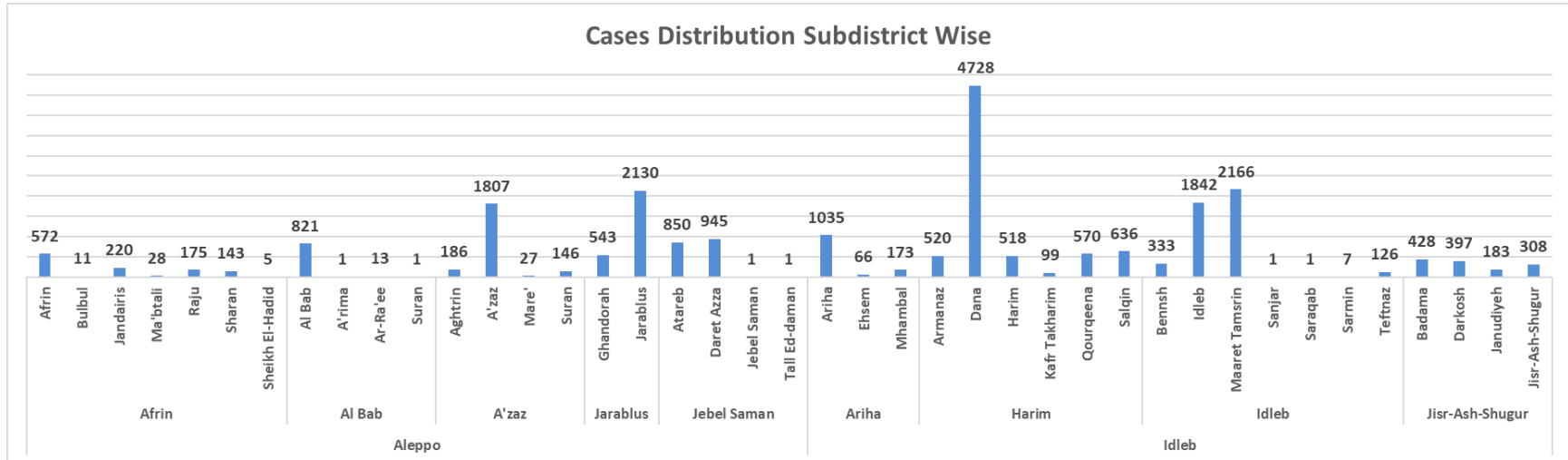
Age Group



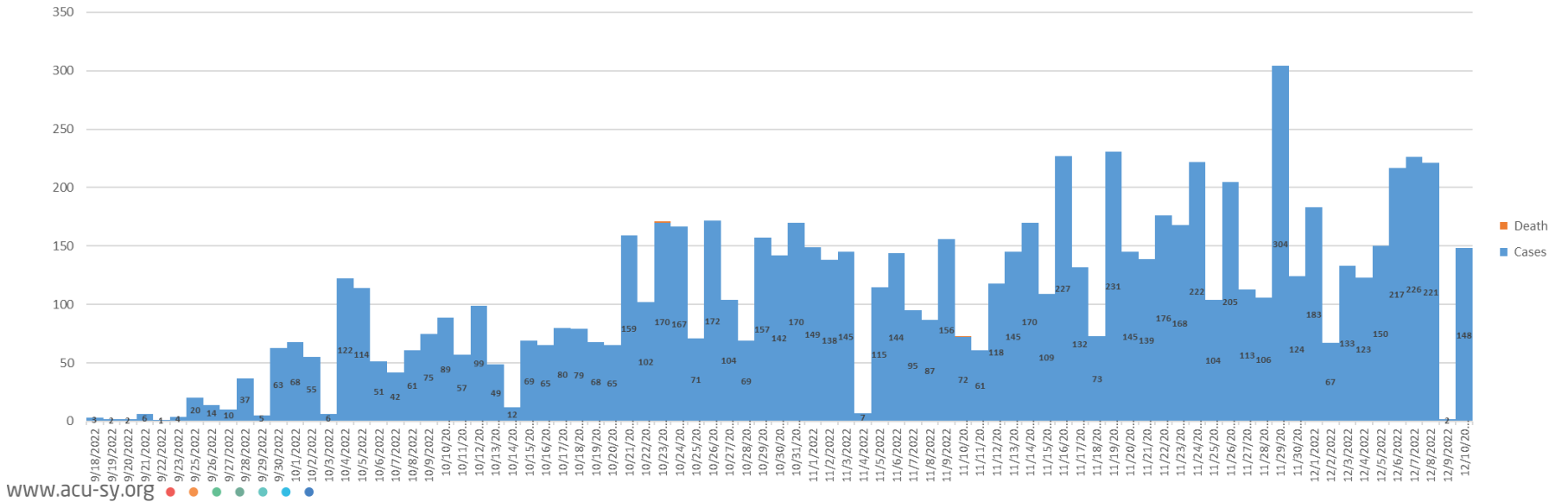
Signs and Symptoms



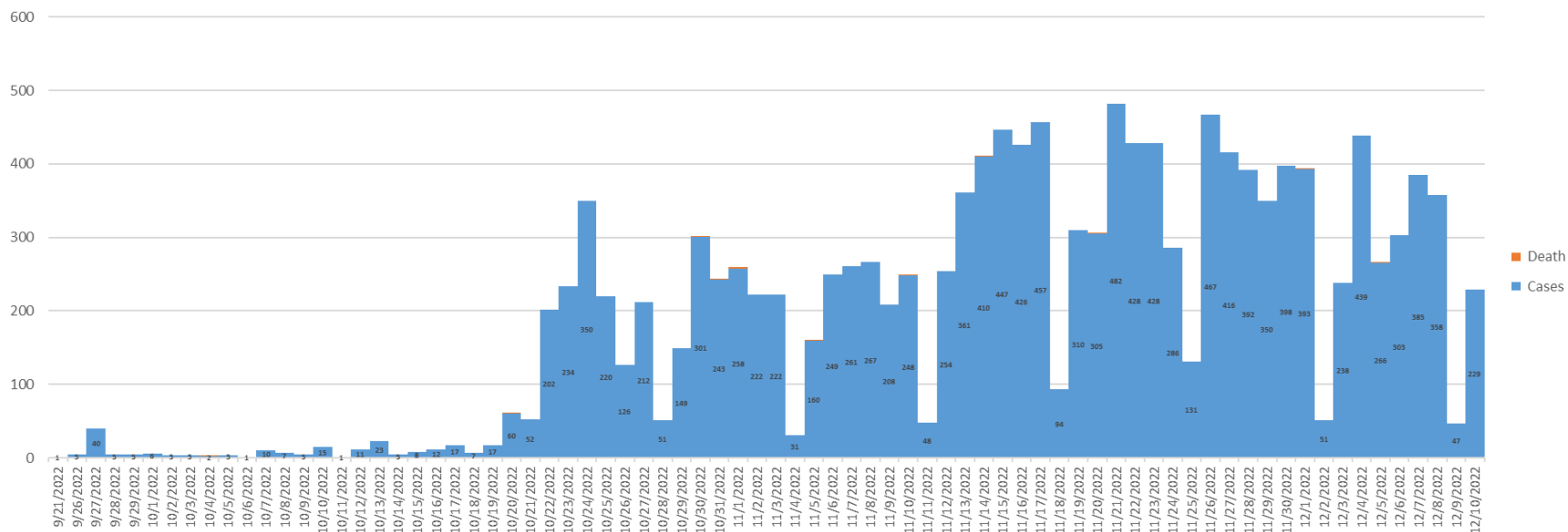
Cases Distribution Subdistrict Wise



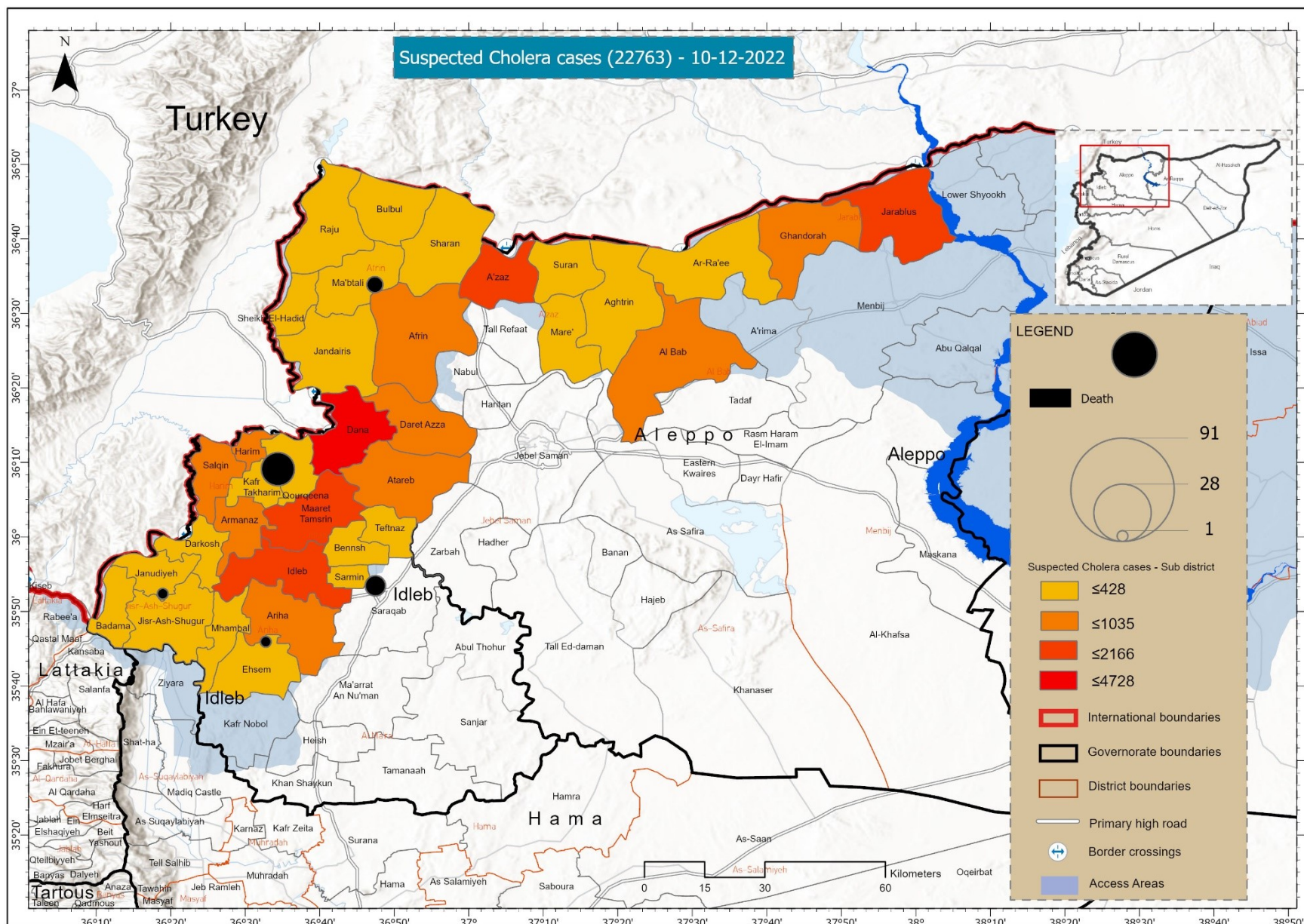
EPI Curve - Reporting Date - Aleppo



EPI Curve - Reporting Date - Idleb

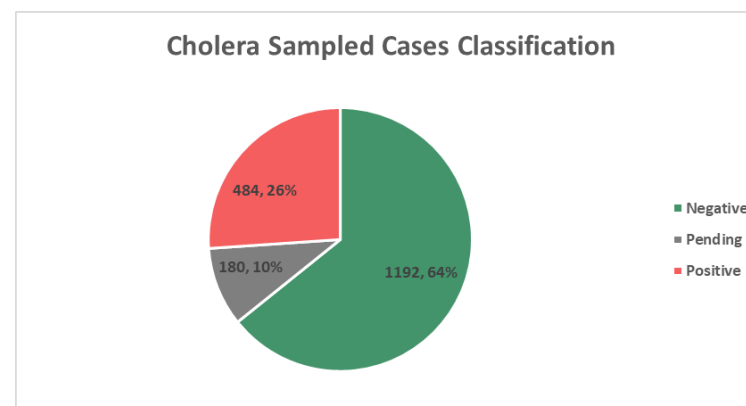
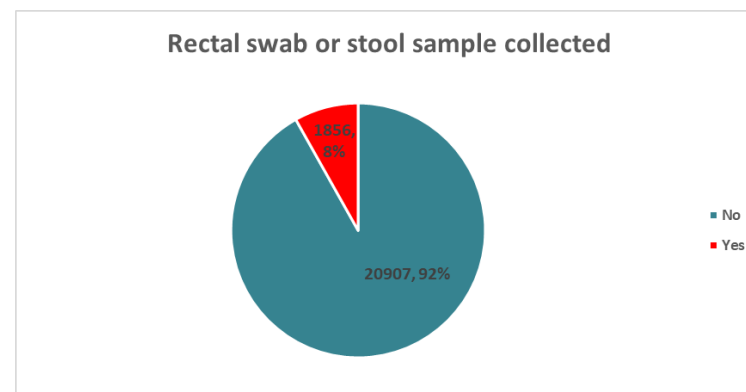


Epi Week	Governorate	District	Date of Onset	Population	New cases	Cumulative Cases	New Death	Cumulative Deaths	Case Fatality Rate	Incidence Rate	Attack Rate
Up to W49	Idleb	Ariha	20-Sep	185,668	214	1274	1	1	0.08%	115.26	0.69%
		Harim	6-Sep	1,586,820	1194	7076	0	7	0.10%	75.24	0.45%
		Idleb	14-Sep	713,933	525	4472	1	3	0.07%	73.54	0.63%
		Jisr-Ash-Shugur	25-Sep	310,973	95	1316	0	1	0.08%	30.55	0.42%
	Aleppo	A'zaz	9-Sep	648,600	254	2167	0	0	0.00%	39.16	0.33%
		Afrin	21-Sep	467,090	79	1154	0	2	0.17%	16.91	0.25%
		Al Bab	17-Sep	339,812	175	836	0	0	0.00%	51.50	0.25%
		Jarablus	12-Sep	121,938	213	2672	0	0	0.00%	174.68	2.19%
	Jebel Saman	10-Sep	251,785	365	1796	0	0	0.00%	144.96	0.71%	
	Total			4,626,619	3114	22763	2	14	0.06%	67.31	0.49%

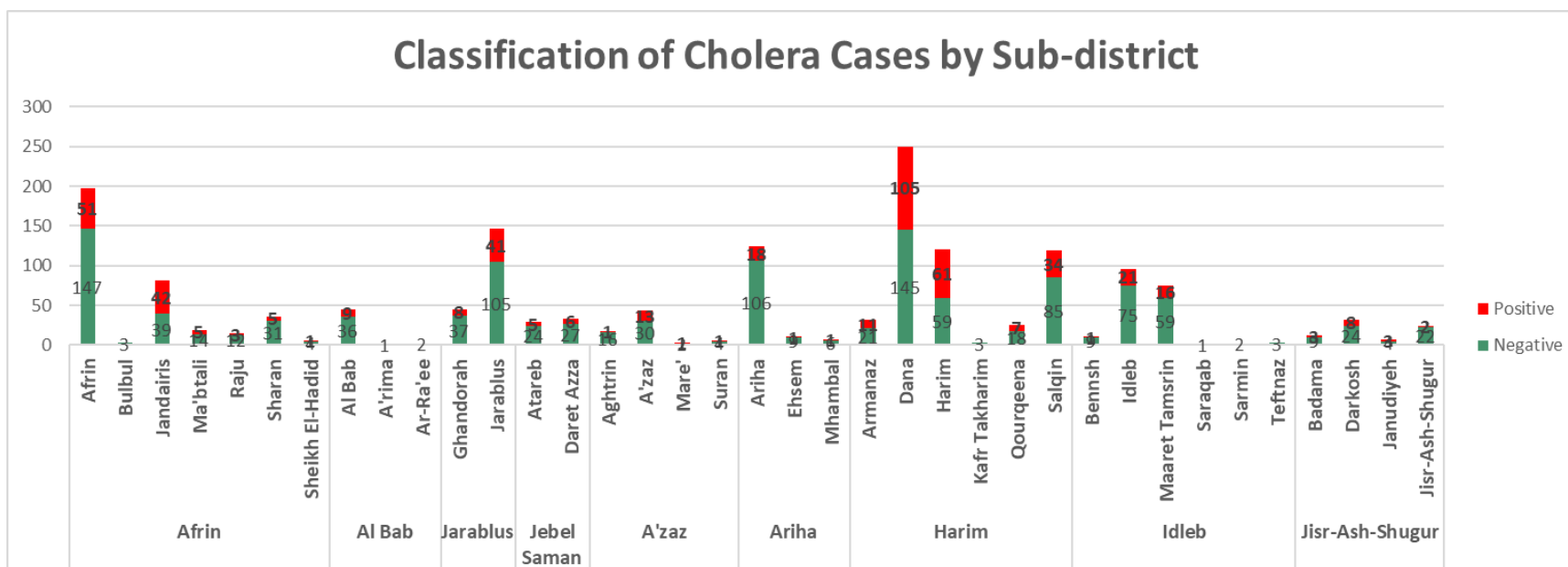


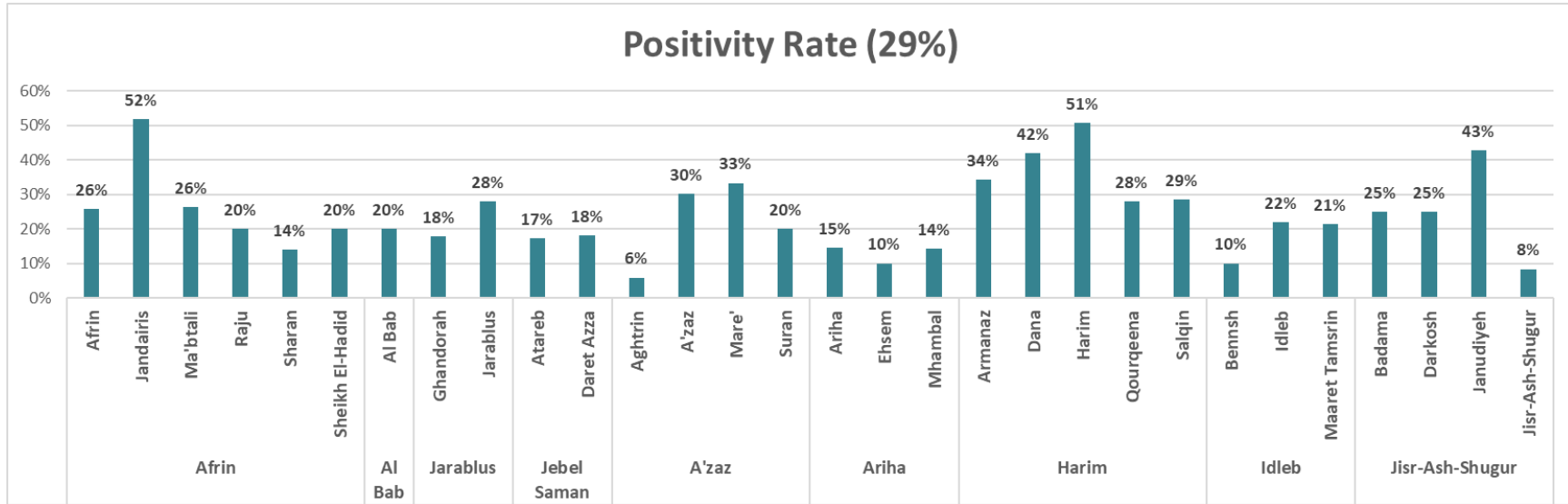
2. Laboratory:

- In Epi week 49, the total number of stool specimens or rectal swabs is 123, of which 44 have tested positive for Vibrio Cholera.
- A cumulative of 1856 samples were collected since the start of the outbreak (8 % of overall line listed cases), of which 484 have tested positive by stool culture. The positivity rate in NWS is 29 %.
- The Total number of negative cases by stool culture is 1192, and the remaining 180 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.
- The samples collection protocol is 5-10 stool samples per subdistrict, and 5 samples from the admitted cholera suspected cases in the CTC /CTU.



Epi Week	Governorate	District	Samples Collected on current week	Stool Culture Positive	Stool Culture Negative	Positivity Rate
Up to W49	Idleb	Ariha	20	20	119	14%
		Harim	38	218	331	40%
		Idleb	15	38	149	20%
		Jisr-Ash-Shugur	6	16	59	21%
	Aleppo	Al Bab	8	9	39	19%
		Jarablus	1	49	142	26%
		Jebel Saman	9	11	51	18%
		A'zaz	10	16	52	24%
		Afrin	16	107	250	30%
	Total		123	484	1192	29%





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: 3, distributed as follows:

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

Afrin subdistrict: The community has been investigated many times earlier— WASH services, particularly water quality—where water was safe to drink and not contaminated. The new cases that have been reported were in contact with the previous case.

- **A'zaz district:** The number of Investigations is 1

A'zaz subdistrict / Salama community: one confirmed and 3 suspected cases living in Yazibag camp, coded CP000291. This camp is supported by an organization with WASH services. The water is supplied from 3 wells through tankers. However, the household of patients procures water from private vendors—private wells and tankers— as well. 6 samples were taken and tested. The result showed that the water is safe to drink and not contaminated, except that the sample of the private tanker was contaminated and not safe to drink.

- **Harim district:** The number of Investigation is 1

Dana subdistrict / Atma community: The primary investigation showed that water supplied to this community is safe to drink. A full investigation will be conducted later, and the result will be reported later.

Actions taken

- The response teams conducted an extensive investigation of the deaths that occurred since the beginning of the outbreak (14 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.
- ACU teams distributed 20 strips of Aquatabs for households whose water tests showed that water isn't safe to drink and was contaminated as urgent action.
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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