

Northwest of Syria Cholera Outbreak

Situation Report No.7

Epidemiological Week 45 (6 Nov - 12 Nov 2022)

Suspected Cases: 9108

Confirmed Cases: 292

Cholera Deaths : 8

Case Fatality Rate: 0.09%

NWS Attack Rate: 0.2%

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 **9108 suspected** cases (4267 in Aleppo governorate, 4841 in Idleb governorate) including **292 confirmed** have been reported by EWARN team since 16 September, including **8 deaths** case.
- The highest number of cases were reported in Harim district (2289), then Jarablus district (1806), Idleb district (1484), and Azaz district (1084).
- 2716 total suspected cases (including 680 new cases in Epi week 45) were reported from **camps**.
- 53.44% 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 45, **2270 suspected cases of cholera were reported, including 29 positive cases**. The affected governorates are Aleppo (734 suspected, 7 confirmed), and Idleb (1536 suspected, 22 confirmed).

Dana subdistrict in Idleb governorate reported the highest number of cases (455), then Idleb subdistrict (322), and Azaz subdistrict in Aleppo governorate (214).

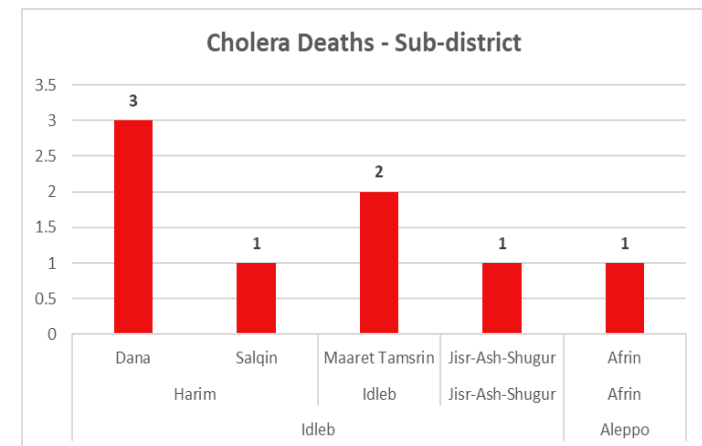
Two Cholera deaths were reported in Epi week 45 (total 8 deaths)

80-year-old woman

- Allani community, Salqin subdistrict, Harim district, Idleb governorate
- On 5/Nov/2022, the patient visited Salqin Central Hospital with severe dehydration following diarrhea that started a week ago
- Stool culture: Neg
- Date of Death: 6/Nov/2022

4 -month -old baby

- Deir Hassan community (Camp), Dana subdistrict, Harim district, Idleb governorate
- Stool culture: Pos (3-Nov-2022)
- Date of Death: 12 Nov

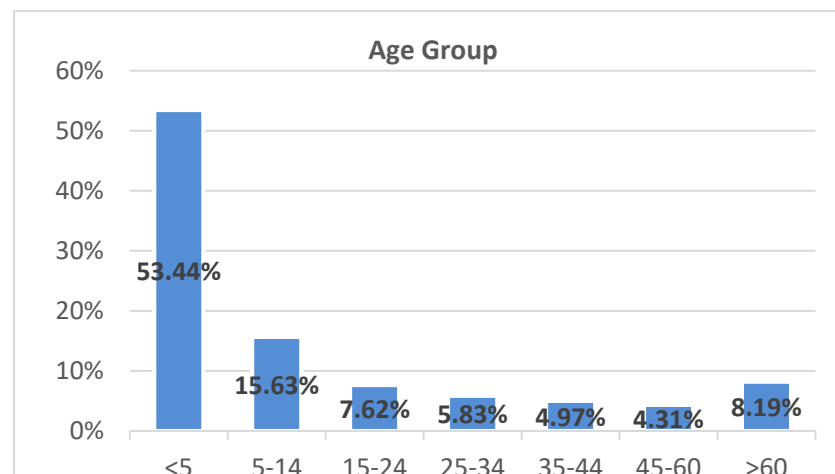
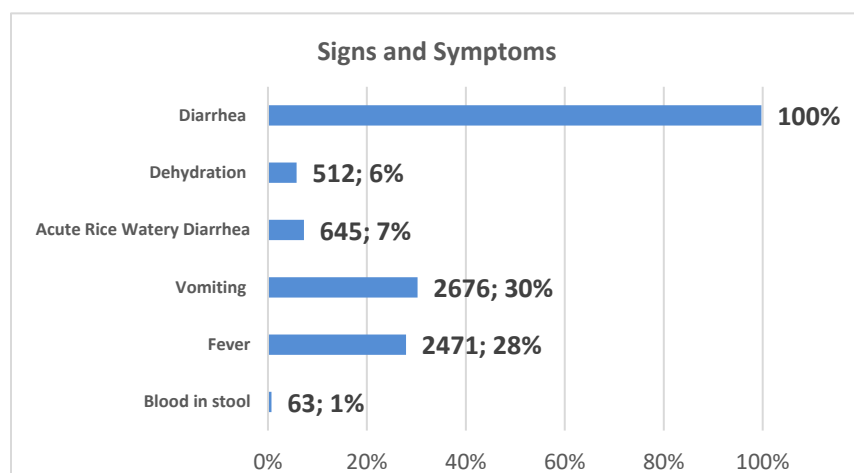
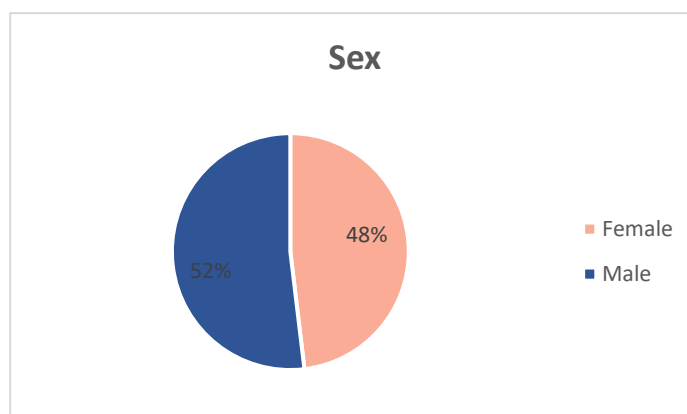


¹ [who-surveillancevaccinepreventable-02-cholera](#)

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, 30% with vomiting, 7% as rice watery diarrhea, and 6% were dehydrated.

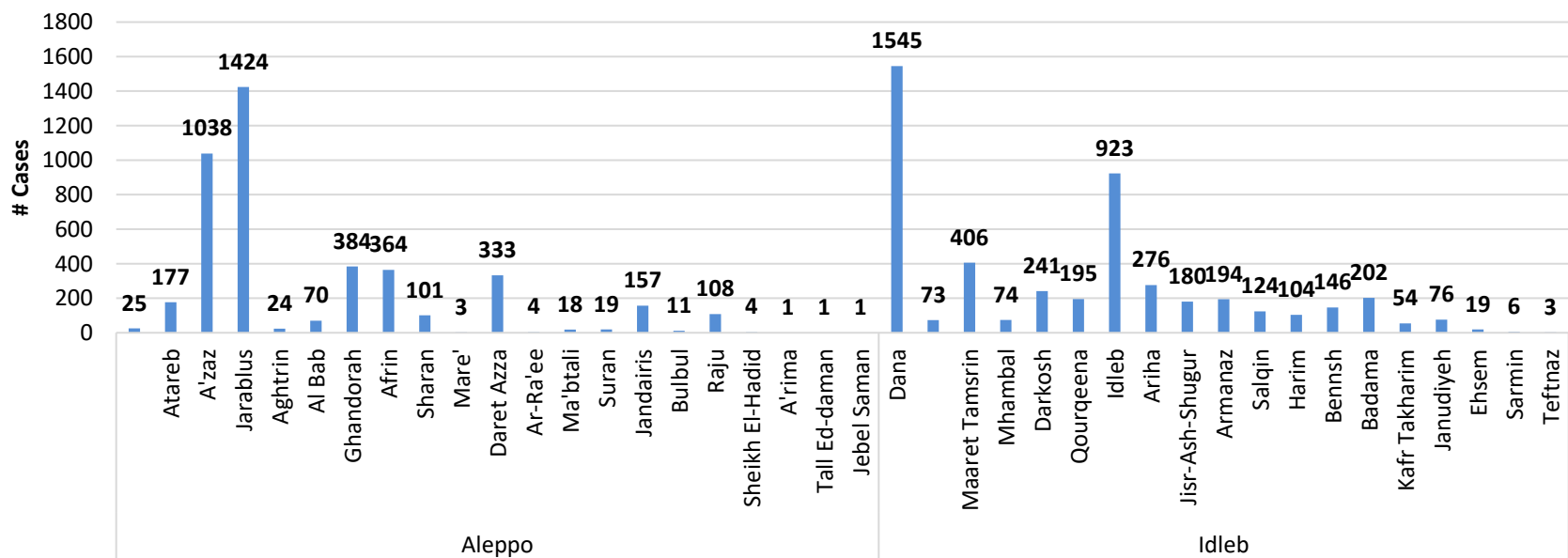
As the outbreak progresses, sensitivity should be increased by including smaller age groups and mild/moderate symptoms groups in order to estimate the burden of the outbreak. According to WHO, in areas where a cholera outbreak has been confirmed, any person presenting with or dying from acute watery diarrhea is considered as a suspected cholera case.² The age group more than 5 year was 53.6%.



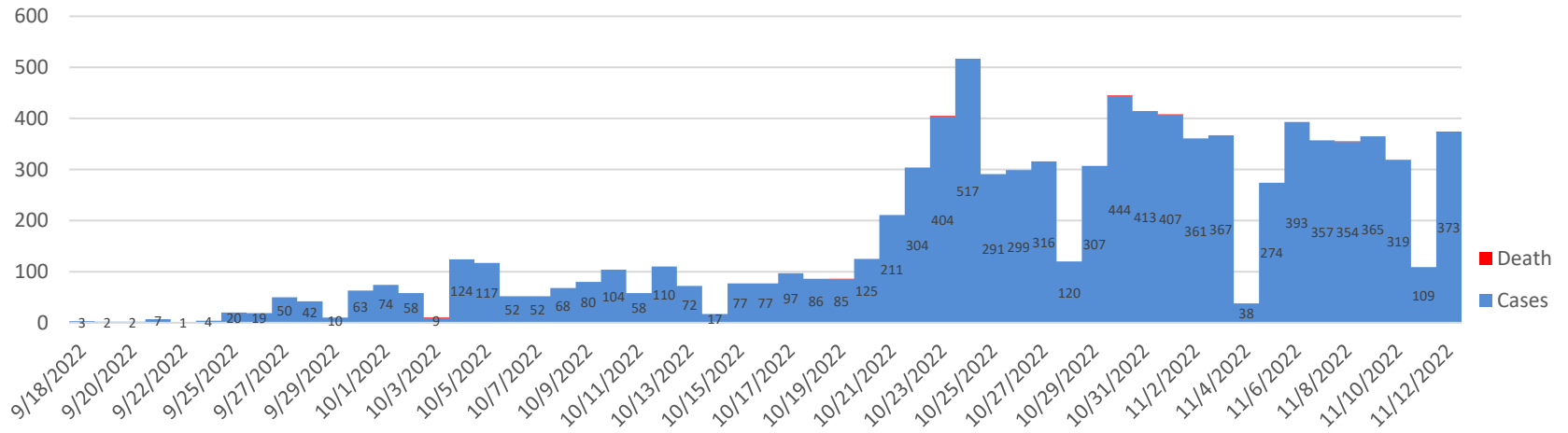
² who-surveillancevaccinepreventable-02-cholera

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 W45	Idleb	Ariha	20-Sep	185,668	110	369	0	0	0.00%	59.24553504	0.20%
		Harim	6-Sep	1,586,820	729	2289	2	4	0.17%	45.94093848	0.14%
		Idleb	14-Sep	713,933	535	1484	0	2	0.13%	74.93700389	0.21%
		Jisr-Ash-Shugur	25-Sep	310,973	162	699	0	1	0.14%	52.09455483	0.22%
	Aleppo	A'zaz	9-Sep	648,600	236	1084	0	0	0.00%	36.38606229	0.17%
		Afrin	21-Sep	467,090	125	765	0	1	0.13%	26.76143784	0.16%
		Al Bab	17-Sep	339,812	55	94	0	0	0.00%	16.18542017	0.03%
		Jarablus	12-Sep	121,938	207	1806	0	0	0.00%	169.7584018	1.48%
		Jebel Saman	10-Sep	251,785	111	518	0	0	0.00%	44.08523145	0.21%
		Total			4,626,619	2270	9108	2	8	0.09%	49.06390606

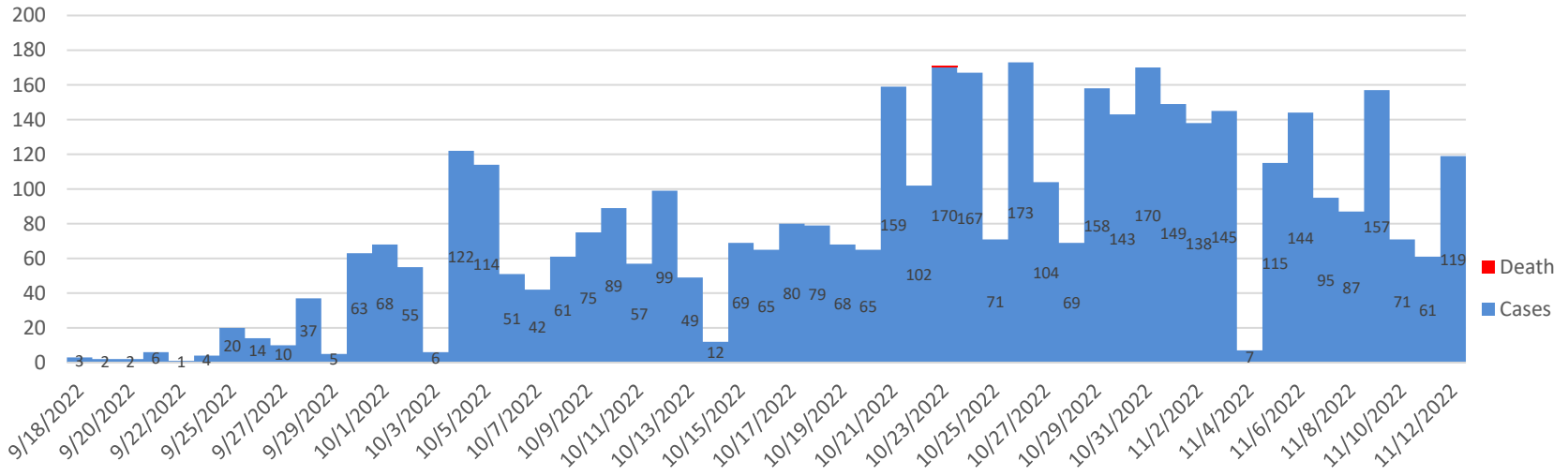
Cases Distribution Subdistrict Wise



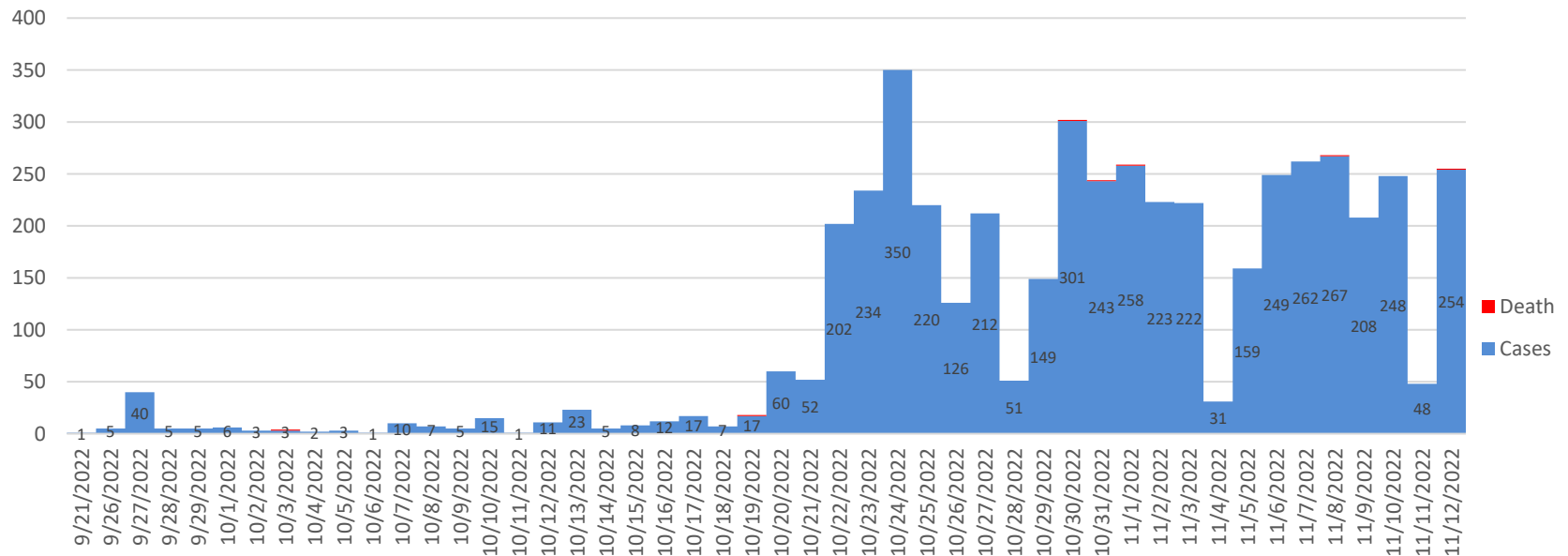
Epi Curve – Reporting Date / NWS



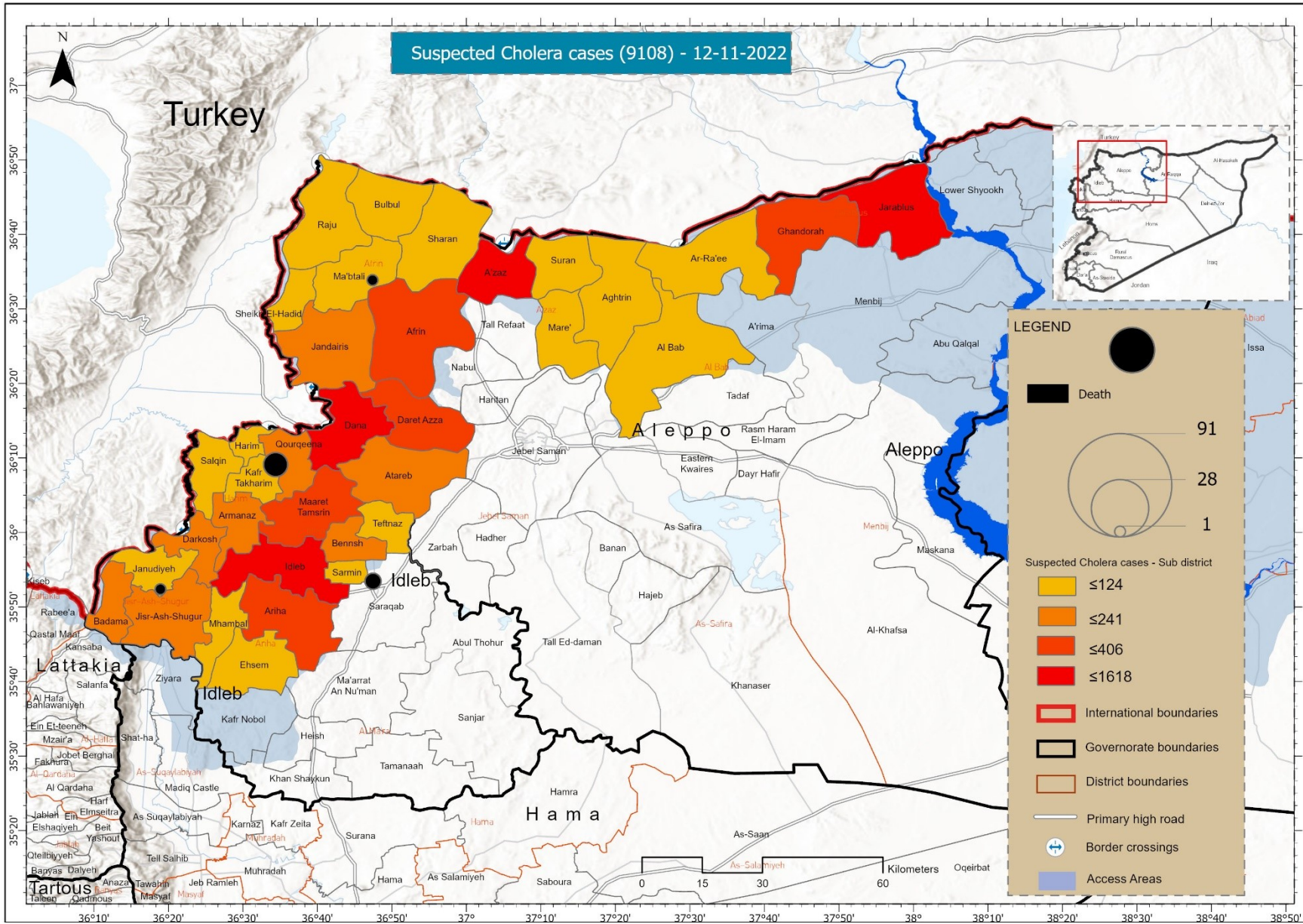
Epi Curve – Reporting Date / Aleppo



Epi Curve – Reporting Date / Idleb

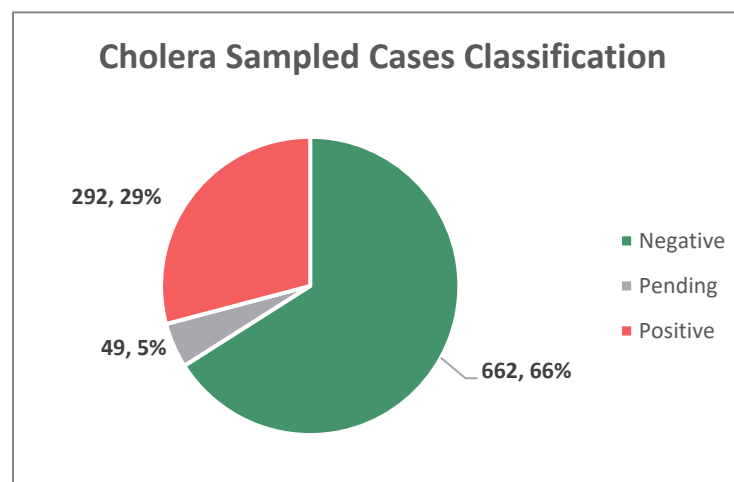
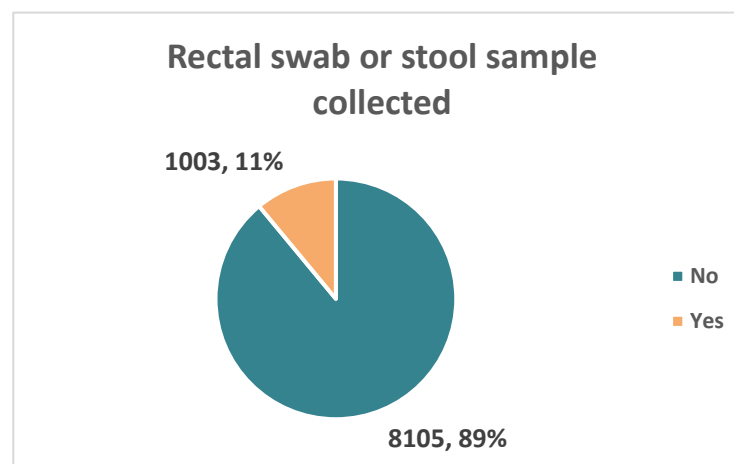


Suspected Cholera cases (9108) - 12-11-2022



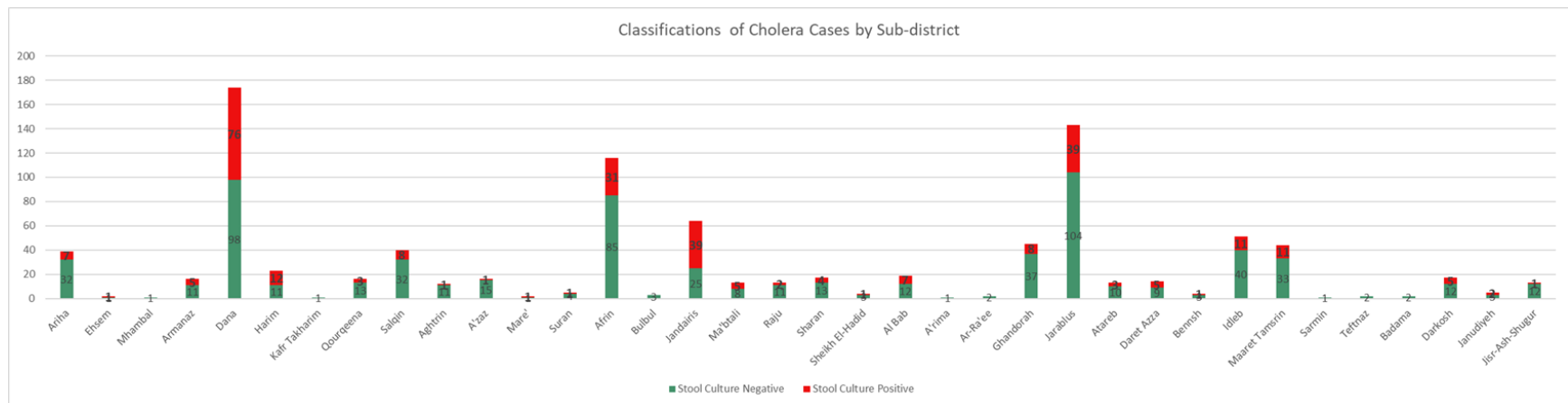
2. Laboratory:

- In Epi week 45, the total number of collected stool specimens or rectal swabs is 167, of which 41 have tested positive for Vibrio Cholera.
- A cumulative of 1003 samples were collected since the start of the outbreak (11% of overall line listed cases), of which 292 have tested positive by stool culture. The positivity rate in NWS is 31%
- The Total number of negative cases by stool culture is 662, and the remaining 49 are still pending.
- Once the outbreak is declared, there is no need to confirm all suspected cases. The clinical case definition is sufficient to monitor epidemiologic trends³.
- All samples examined by the RDT in NWS tested positive for O1.
- All samples are being cultured on selective media like TCBS and Oxidase test, sometimes Gram stain and sensibility test.
- 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 Lab's teams keep monitoring the stool culture sensitivity, and resistance to antibiotics.
- The laboratory team is handling the specimens and waste management according to infection control standards.

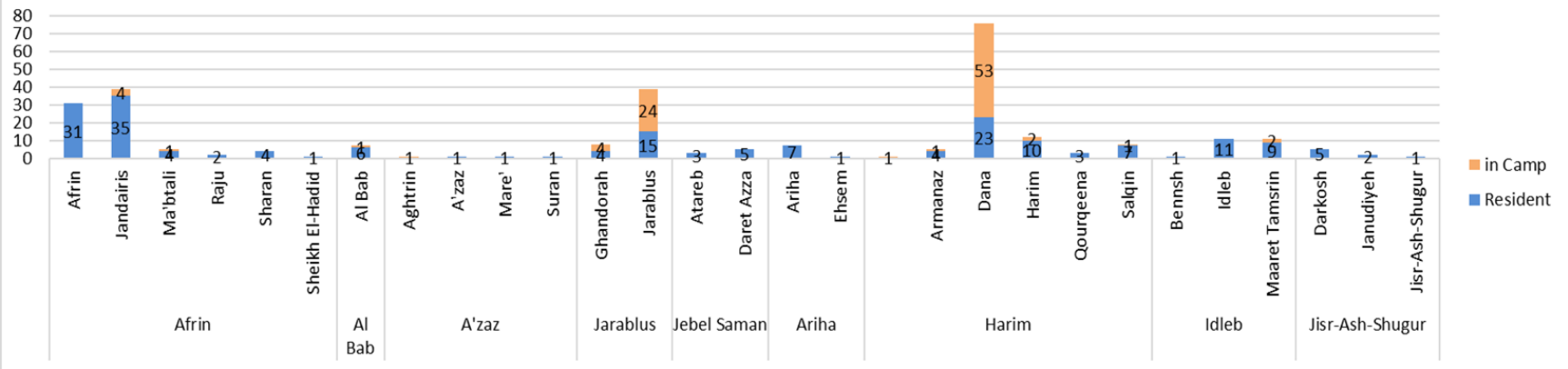


³ [gtfcc-cholera-outbreak-response-field-manual](#)

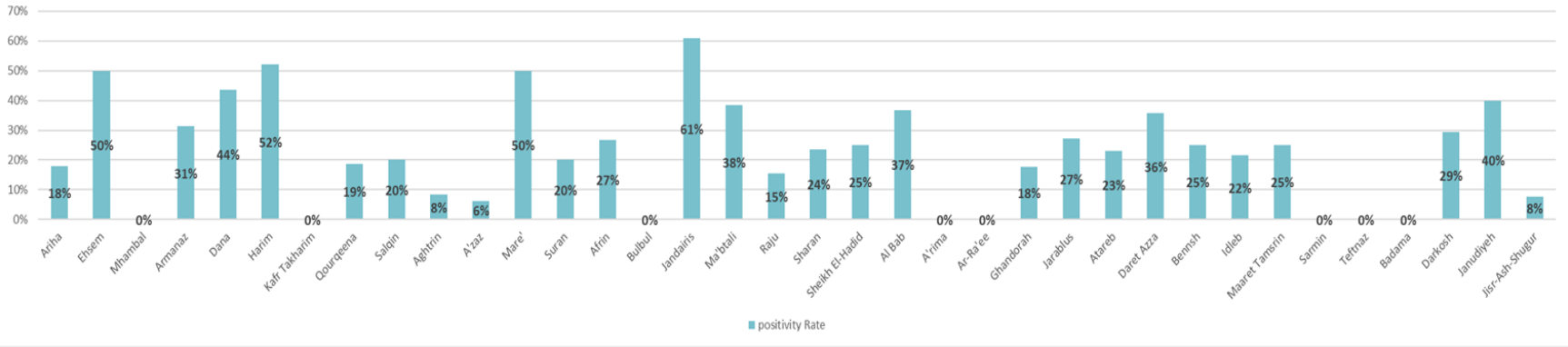
Epi Week	Governorate	District	Samples Collected on current week	Stool Culture Positive	Stool Culture Negative	Positivity Rate
Up to W45	Idleb	Ariha	4	8	34	19%
		Harim	64	105	166	39%
		Idleb	29	23	79	23%
		Jisr-Ash-Shugur	14	8	29	22%
	Aleppo	A'zaz	5	4	31	11%
		Afrin	36	82	148	36%
		Al Bab	8	7	15	32%
		Jarablus	6	47	141	25%
		Jebel Saman	1	8	19	30%
	Total		167	292	662	31%



Confirmed Cholera Cases Recidency Distribution by Sub-district



positivity Rate - Subdistrict



3. WASH:

Targeted response including water quality testing at the household level being conducted for identified cases.

Total number of investigations: 8, distributed as follows:

- **Afrin District: Number of Investigations: 2**

Raju (Sub-district)/ Tholathiyeh (Community): Water resources in the community are private wells and water trucking. The water resource that supplies the house of the patient (case) was tested; the result showed the water isn't contaminated.

Sharan/ Deir Siwan: Water resources in the community are private wells and water trucking. The water supplied to the case's house was safe and not contaminated.

- **Idleb district: Number of Investigations: 1**

Idleb/ Falyun: The water resources are private wells that supply this community. The water resources are safe to drink and not contaminated at the level of the well and house.

- **Ariha district: Number of Investigations: 1**

Ariha/ Ariha: There are two types of water supplying in the community, water stations and water trucking.

The stations are supported by NGOs and have active chlorination pumping. The water sample was tested, and the result showed that the water are safe to drink.

- **Harim district: Number of Investigation: 2**

Harim / Kafr Hum: The community is supplied with water through the water station which is supported by an active chlorination pump and operation costs. Many samples were tested (Free Residual Chlorine) and the result the FRC value ranged with acceptable values.

Harim / Harim: A preliminary investigation was made, and the final result will be shared and detailed in the upcoming report

*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 (8 deaths), where some possible causes were identified, and the teams made appropriate recommendations.
- The WASH team Conducted awareness sessions during conducting investigations about Cholera prevention and control practices
Strengthening referral procedures for CTC/CTU.
- Strengthening surveillance to collect cases from all HFs

Challenges

- Continuous random use of antibiotics will increase bacterial resistance.
- Continuing movements of population.
- **No Vibrio Cholera O139, O1 Antisera so far to identify the vibrio serotype.**

Recommendations

- Initiate reporting from functioning treatment centers (CTCs, CTUs, and ORPs).
- Laboratory support with consumables and supplies, especially for **O139, 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