

## Northwest of Syria Cholera Outbreak

### Situation Report No.6

#### Epidemiological Week 44 (30 Oct - 5 Nov 2022)

Suspected Cases: 6829

Confirmed Cases: 250

Cholera Deaths : 6

Case Fatality Rate: 0.09%

NWS Attack Rate: 0.15%

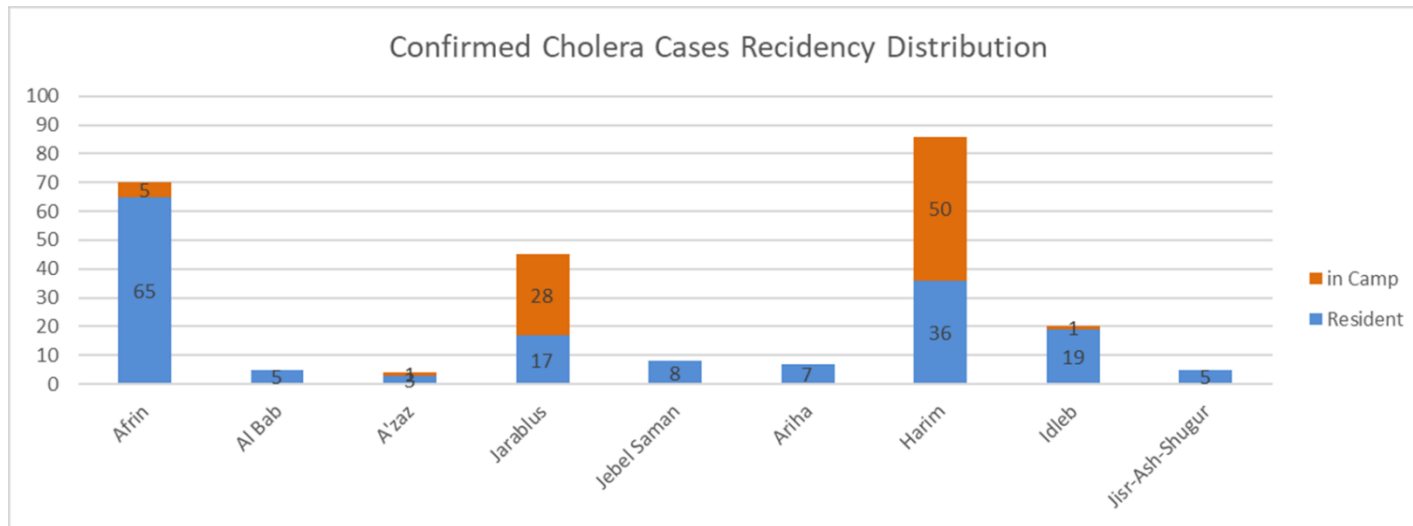
Date of Onset of Outbreak: 16 September 2022

Reporting Date of outbreak: 17 September 2022

Confirmation Date: 19 September 2022

#### Key Highlights

- Cumulatively, a total of **6829 suspected** cases including **250 confirmed** have been reported by EWARN team since 16 September, including **6 deaths** case.
- **Jarablus, Harim, Idleb** and **A'zaz** districts are the top reporting areas respectively.
- 2035 total suspected cases (including 527 new cases in Epi week 44) were reported from **camps**.
- 53.26% Of the suspected cases are in age group <5 years, versus 29% of the confirmed cases are in age group <5 years.
- 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

Case definition has been adapted (last week): A resident of outbreak areas with sudden onset of acute watery diarrhea with or without vomiting.<sup>1</sup>

In Epi week 44, **2303 suspected cases of cholera were reported, including 33 positive cases**. The affected governorates are Aleppo (866 suspected, 10 confirmed), and Idleb (1437 suspected, 23 confirmed).

Dana subdistrict in Idleb governorate reported the highest number of cases (351), then Azaz subdistrict in Aleppo governorate (322).

<sup>1</sup> [who-surveillancevaccinepreventable-02-cholera](#)

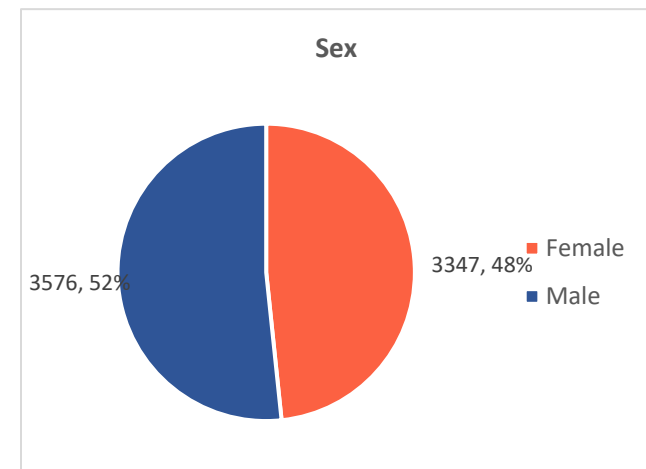
Three Cholera deaths were reported in Epi week 44

- **6-month-old male infant** (Kafarnbodeh camp in Atmeh community, Dana subdistrict, Harim district, Idleb governorate), On 30 – Oct – 2022, the infant suffered acute diarrhea, fever, vomiting, dry cough, (The infant was given the cough suppressant "Toplexil" by the mother without medical advice), On 31- Oct – 2022 at 10.00 AM, the infant arrived at the HIH hospital dead.
- **One-year male infant** (Watan camp in Kafar-Jalis community, Maaret-Tamsrin subdistrict, Idleb district, Idleb governorate), on 30 – Oct- 2022 at 2.00 AM, the infant suffered (acute diarrhea – vomiting), One 30 – Oct – 2022, at 10.30 AM (after 8 hours), the infant arrived Kafar-Jalis center dead.
- **1,2-year male infant** (Harbanosh community, Maaret Tamsrin subdistrict Idleb district, Idleb governorate), on 31– Oct- 2022 at 10.00 AM, the infant suffered (acute diarrhea – vomiting), On 1 – Nov – 2022 at 10.00 AM, the infant arrived at the hospital dead.

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

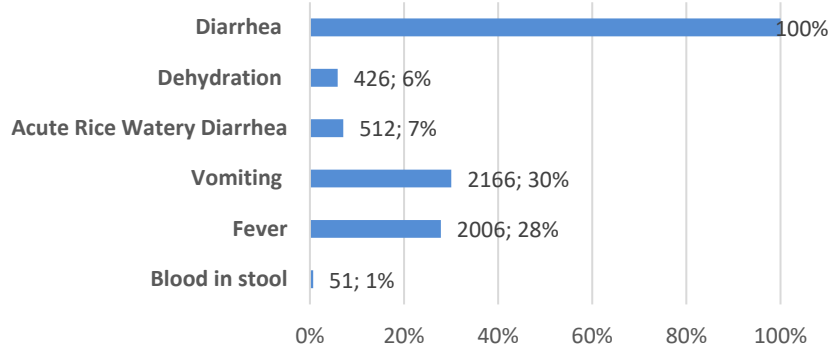
100% of the line listed cases were presented as Acute Diarrhea, 30% with vomiting, 7% as rice watery diarrhea, and 6% were dehydrated.

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.<sup>2</sup> The age group more than 5 year was 53.6%.

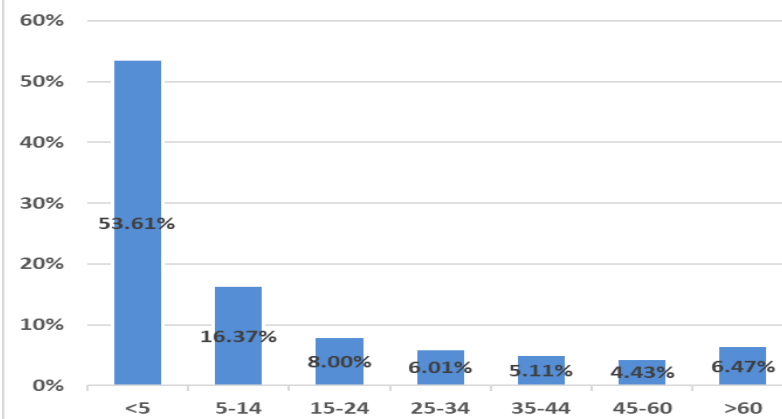


<sup>2</sup> [who-surveillancevaccinepreventable-02-cholera](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/surveillance/vaccine-preventable-02-cholera)

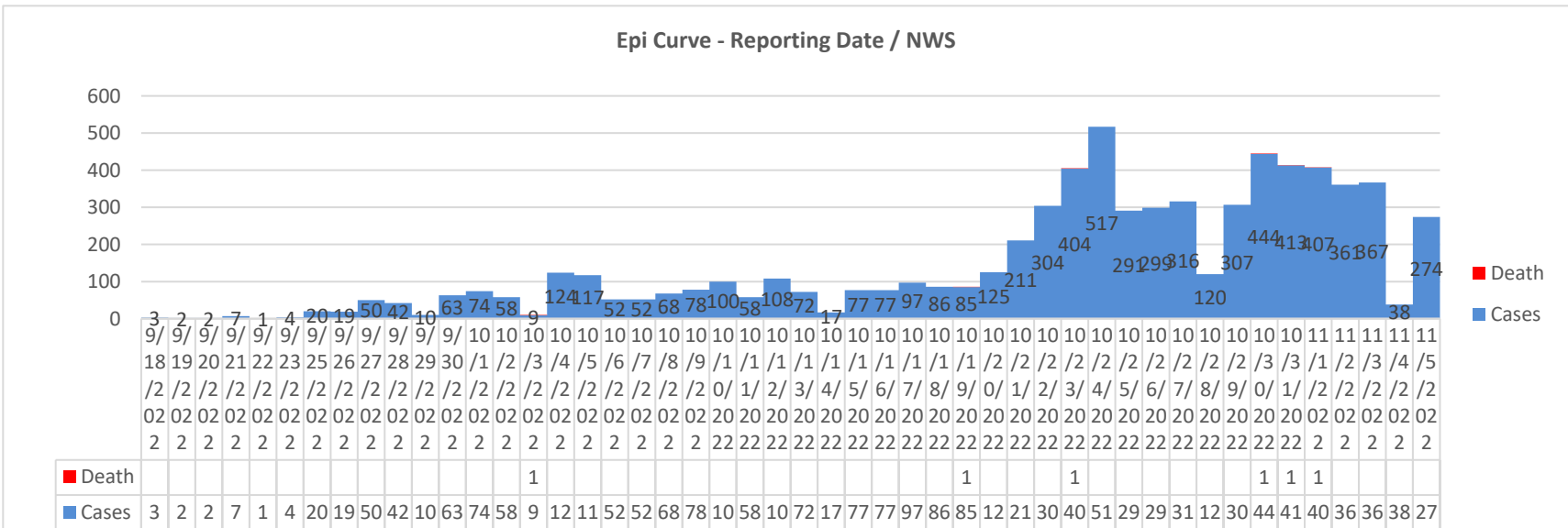
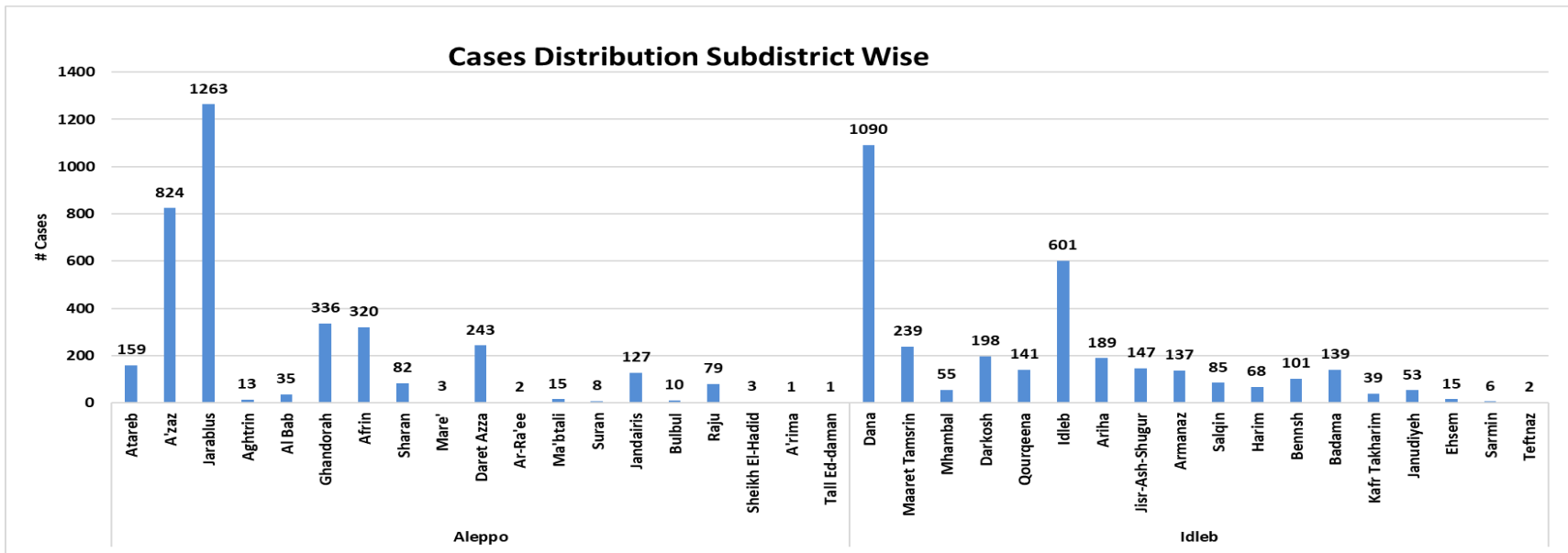
## Signs and Symptoms



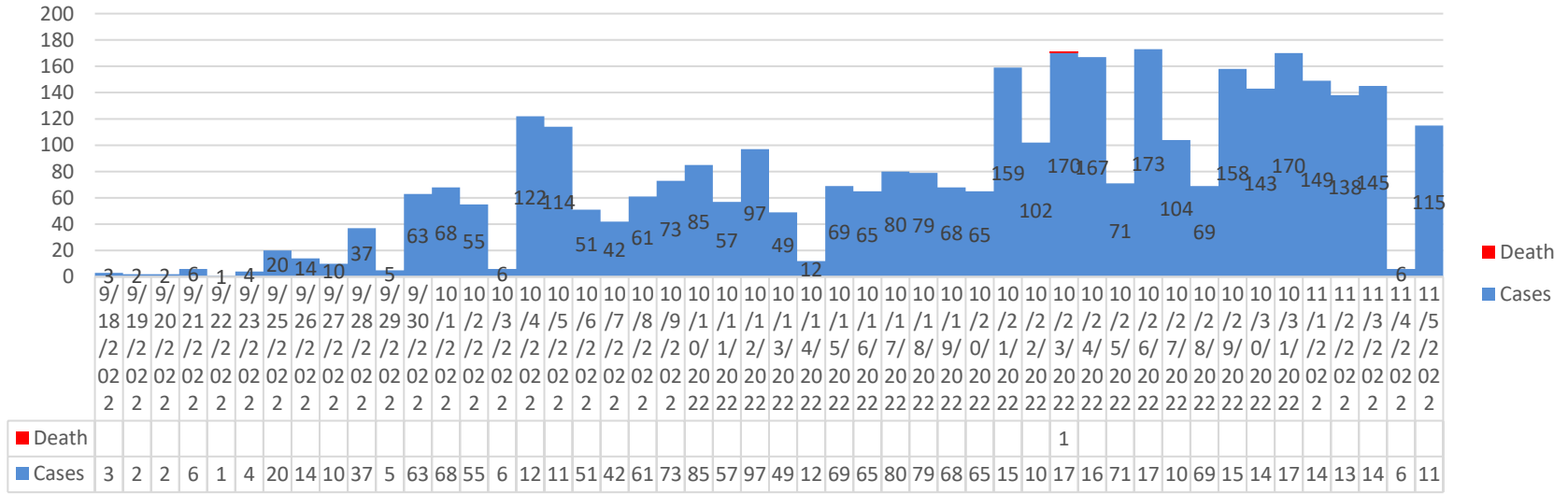
## Age groups



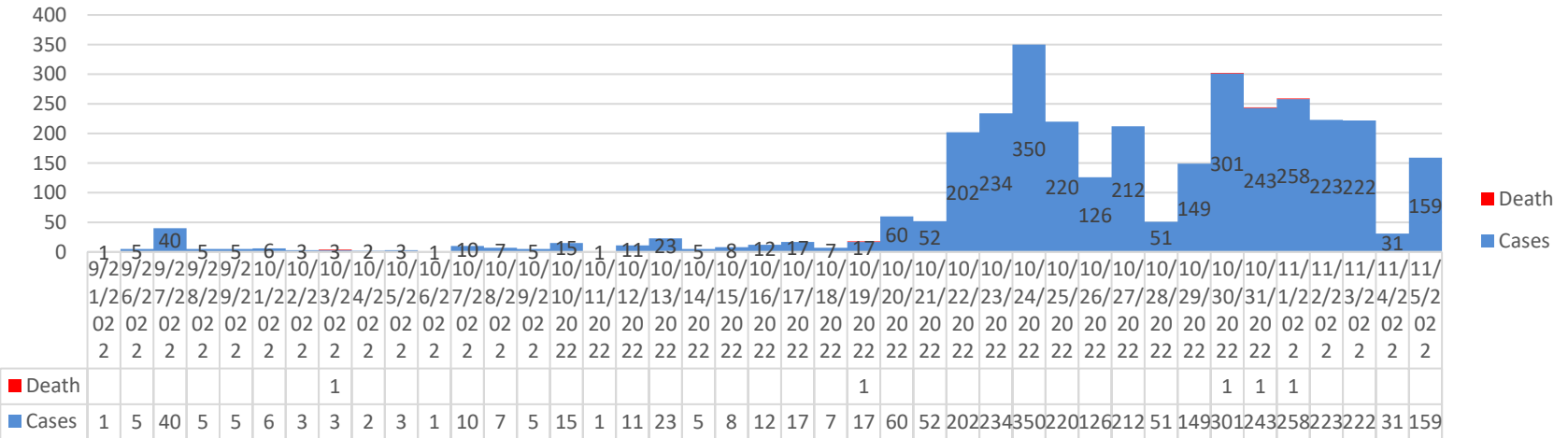
Epi Week	Governorate	District	Date of Onset	Population	New cases	Cumulative Cases	New Death	Cumulative Deaths	Case Fatality Rate	Incidence Rate	Attack Rate
Up to W44	Idleb	Ariha	20-Sep	185,668	158	259	0	0	0.00%	85.09813215	0.14%
		Harim	6-Sep	1,586,820	614	1560	1	2	0.13%	38.69373968	0.10%
		Idleb	14-Sep	713,933	477	949	2	2	0.21%	66.81299226	0.13%
		Jisr-Ash-Shugur	25-Sep	310,973	188	537	0	1	0.19%	60.45540931	0.17%
	Aleppo	A'zaz	9-Sep	648,600	322	848	0	0	0.00%	49.64539007	0.13%
		Afrin	21-Sep	467,090	181	636	0	1	0.16%	38.75056199	0.14%
		Al Bab	17-Sep	339,812	12	38	0	0	0.00%	3.531364401	0.01%
		Jarablus	12-Sep	121,938	216	1599	0	0	0.00%	177.1392019	1.31%
		Jebel Saman	10-Sep	251,785	135	403	0	0	0.00%	53.61717338	0.16%
		Total			4,626,619	2303	6829	3	6	<b>0.09%</b>	<b>49.7</b>

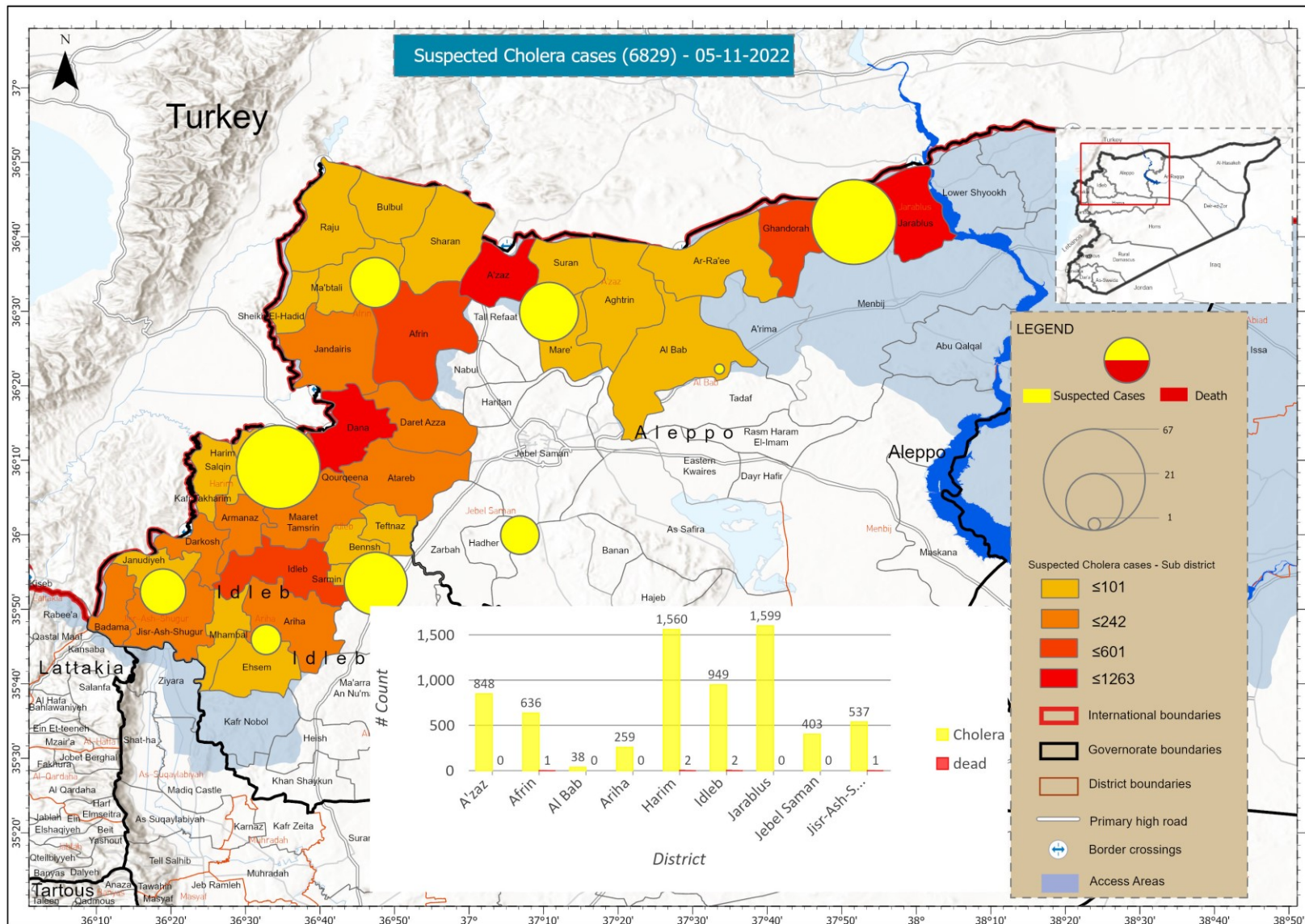


Epi Curve – Reporting Date / Aleppo Governorate



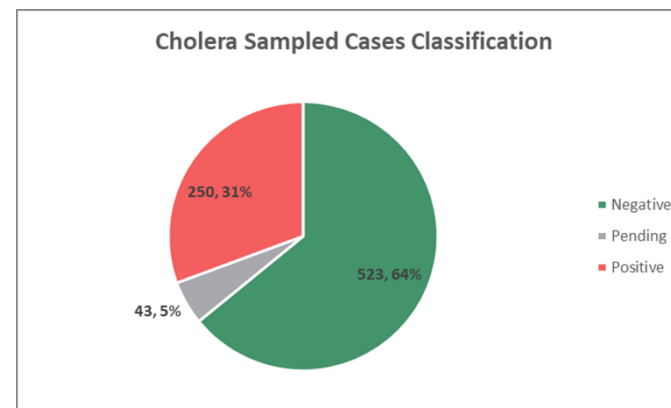
Epi Curve – Reporting Date / Idleb Governorate





## 2. Laboratory:

- In Epi week 44, the total number of collected stool specimens or rectal swabs is 153, of which 33 have tested positive for Vibrio Cholera.
- A cumulative of 816 samples were collected since the start of the outbreak (12% of overall line listed cases), of which 250 have tested positive by stool culture.
- The Total number of negative cases by stool culture is 523, and the remaining 43 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 trends<sup>3</sup>.
- 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.



Epi Week	Governorate	District	Samples Collected on current week	Stool Culture Positive	Stool Culture Negative	Positivity rate	
Up to W44	Idleb	Ariha	35	7	26	21%	
		Harim	225	86	123	41%	
		Idleb	77	20	52	28%	
		Jisr-Ash-Shugur	28	5	18	22%	
	Aleppo	A'zaz	30	4	25	14%	
		Afrin	199	70	120	37%	
		Al Bab	12	5	6	45%	
		Jarablus	182	45	136	25%	
			Jebel Saman	28	8	17	32%
		Total		816	250	523	32%

<sup>3</sup> [gtfcc-cholera-outbreak-response-field-manual](#)



### 3. WASH:

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

Total number of investigations: 10, distributed as follows:

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

Afrin (Sub-district)/ Afrin (Community): The water supplied to community is safe to drink.

Ma'btali/ Ma'btali: Salat Suliman camp, code CP001441, many cases were reported from this camp. The water supplied to this camp is safe to drink (this camp is supported by the local organization). However, there is open drainage passing through the camp and it might cause infection among residents of the camp.

- **Al Bab: Number of Investigations: 1**

Al Bab/ Qabasin: the patient is supplied with water through a water truck (private well). The result showed that the water tank located at the house and the private well are contaminated.

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

Ehsem/Ablin: The water resources are private wells that supply this community. The water resources are safe to drink and not contaminated.

- **Jisr-Ash-Shugur: Number of Investigations: 1**

Janudiyeh / Qaderiyeh: The patient takes his water from the private well. The result showed that the well and the water tank are contaminated.

- **Harim: Number of Investigation: 3**

Qourqeena / Qourqeena: The community is supplied with water through the station. The result showed that the water in the water station is safe to drink.

Dana / Sarmada: The community is supplied with water through the station. The result showed that the water in the water station is safe to drink.

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- **Idleb: Number of Investigation: 2**

Bennsh/ Foah: The community is supplied with water through the station and public wells. The result showed that the water of the station is safe to drink.

Maaret Tamsrin/ Kelly: Al Bir camp, camp is supplied with water through public wells. The result showed that the water supply is contaminated. (No organization is supporting this camp).

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

\*ACU team, during the investigation, provided Aquatabs—Chlorination tablets: 180 strips (Each strip: 10 tablets)— for households. In addition, an awareness session about the use of Aquatabs took place.

### Action taken

- The response teams conducted an extensive investigation of the deaths that occurred since the beginning of the outbreak (6 deaths), where some possible causes were identified, and the teams made appropriate recommendations.
- Strengthening referral procedures for CTC/CTU.

### Challenges

- Sometimes, the investigation team noticed poor coordination between the different health sectors
- Many patients are self-discharged from the hospital, especially women, because of the embarrassment of their frequent need to go to the toilet.

- There are difficulties in accessing some of the cases to treatment centers
- Many patients refuse to give samples and some of them escape from the hospitals.
- Continuous random use of antibiotics will increase bacterial resistance.
- Some doctors refuse to manage dehydrated children, which is still a challenge due to their belief that managing children requires a pediatrician, who may not be available in the health facility.
- 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.
- 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