



## Northwest of Syria Cholera Outbreak

Situation Report No.44

# Epidemiological Week - 31 (30 July – 5 Aug 2023)

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 **120980 suspected** cases (**53611** in Aleppo governorate, **67369** in Idleb governorate) including **905 confirmed** have been reported by EWARN team since 16 September, including **24 deaths** case.

- The highest number of cases were reported in Harim district (34083) and Idleb district (22251) in Idleb governorate, then Azaz district (14974), Jebel Saman district (11900) in Aleppo governorate.
- 22800 total suspected cases (including 720 new cases in Epi week 31 2023) were reported from camps.
- 57.11 % Of the suspected cases are in the age group <5 years. Males are 51% of the total and females are 49%.
- Since the outbreak started, surveillance and reporting from facilities are being supported and strengthened. For better understanding of the background and context, <u>please read pervious sitreps</u>.
- Line list is shared with WHO and WASH team to aid Targeted response at a household level being conducted for identified cases.
- Active case search is ongoing, especially in the camps.

Suspected Cases: 120980
Confirmed Cases: 905
Cholera Deaths : 24
Case Fatality Rate: 0.02%
NWS Attack Rate: 2.61%





## Situation Updates

### 1. Epidemiology

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

In Epi week 31 - 2023, **3778 suspected cases of cholera were reported.** The affected governorates are Aleppo (1663 suspected cases, 24 confirmed), and Idleb (2115 suspected cases, 1 confirmed). 19% of the total were in the camps

The age group less than 5 reported 52.23 %. Sex distribution of the suspected cases is 50% Male, and 50% Female

There is no death in epi week 31

Dana subdistrict in Idled governorate reported the highest number of cases (566), then Maaret Tamsrin subdistrict (470) in contract Azaz subdistrict reported the highest number in Aleppo governorate (293).







The overall sex distribution of the suspected cases is 51% Male, and 49% Female.

100% of the line listed cases were presented as Acute watery Diarrhea, 20% with vomiting, 4% as rice watery diarrhea, and 8% were dehydrated.

20% of the total cases live in camps (22800), and 80% out of camps (89092). (9087 of the total line listed cases are unknown)

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. The age group less than 5 years was 57.11%.





















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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 W31 - 2023	Idleb	Ariha	20-Sep	185,668	198	7378	0	1	0.01%	106.6	3.97%
		Harim	6-Sep	1,586,820	871	34083	0	10	0.03%	54.9	2.15%
		Idleb	14-Sep	713,933	1032	22251	0	3	0.01%	144.6	3.12%
		Jisr-Ash-Shugur	25-Sep	310,973	14	3657	0	1	0.03%	4.5	1.18%
	Aleppo	A'zaz	9-Sep	648,600	490	14974	0	0	0.00%	75.5	2.31%
		Afrin	21-Sep	467,090	465	10811	0	3	0.03%	99.6	2.31%
		Al Bab	17-Sep	339,812	166	5288	0	2	0.04%	48.9	1.56%
		Jarablus	12-Sep	121,938	294	10638	0	4	0.04%	241.1	8.72%
		Jebel Saman	10-Sep	251,785	248	11900	0	0	0.00%	98.5	4.73%
	Total			4,626,619	3778	120980	0	24	0.02%	81.7	<b>2.6</b> 1%







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### Laboratory:

- In Epi week 31- 2023, the total number of stool specimens or rectal swabs is 182, (93 in Aleppo –24 confirmed), (89 in Idleb 1 confirmed).
- A cumulative of 7095 samples were collected since the start of the outbreak (6 % of overall line listed cases), of which 905 have tested positive by stool culture. The total positivity rate in NWS is 12.9 %.
- The Total number of negative cases by stool culture is 6132, and the remaining 58 are still pending.
- Isolation and identification of V. cholera 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, and Tal-Abiad) Fecal specimens are subcultured onto selective and nonselective media, including Nutrient agar and TCBS agar, for detection of V. cholera O1.
- Suspicious, oxidase-positive isolates are serotyped in polyvalent antisera raised against the O1 Antigen.
- Antimicrobial-sensitivity testing is performed to detect resistance.
- <u>The culture sensitivity results came sensitive for the following antibiotics:</u> Azithromycin, Imipenem, Ciprofloxacin, and Norfloxacin.
- <u>The resistance is to Tetracycline, Doxycycline, Chloramphenicol, and</u> <u>Sulfamethoxazole</u> <u>Trimethoprim.</u>
- The laboratory team handles the specimens and waste management according to infection control standards.
- <u>The sample collection protocol is to collect stool samples in 5-6 % of the total suspected cholera cases per subdistrict and 5 samples from the admitted cholera suspected cases in the CTC /CTU per week.</u>









During epi week 31, EWARN received 255 RDT results from the CTC/CTUs and some HFs, 16 of them were positive for Cholera.

The total of RDT tests starting from epi week 5 reached 3060, and the total positive is 159.

The positivity rate of RDTs, from epi week 5 – 2023 up to epi week 31 – 2023 is 5.19 %. But the positivity rate since the beginning of cholera outbreak up to epi week 31 – 2023 is 5.8 %.



- For children under 5 years of age with a stool culture negative for cholera:
  In epi week 31, there are no tested samples to detect Rotavirus.
- The total samples collected for Rotavirus reached 835 (147 were positive), while the total samples for Adenovirus were 218 (one positive)









Epi Week	Governorate	District	RDT+	RDT-	Postivity Rate for RDT	Stool Culture Positive	Stool Culture Negative	Postivity Rate for Culture
Up to W31 - 2023	Aleppo	Afrin	58	377	13.3%	234	1088	17.7%
		Al Bab	7	130	5.1%	29	310	8.6%
		A'zaz	24	186	11.4%	47	265	15.1%
		Jarablus	9	190	4.5%	89	611	12.7%
		Jebel Saman	14	251	5.3%	76	779	8.9%
	Idleb	Ariha	4	177	2.2%	44	692	6.0%
		Harim	63	991	6.0%	290	1507	16.1%
		Idleb	12	640	1.8%	48	742	6.1%
		Jisr-Ash-Shugur	4	229	1.7%	48	140	25.5%
	Total		195	3171	5.8%	905	6134	12.9%











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## 2. <u>WASH:</u>

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

#### ACU team conducted 2 investigations included taking 28 samples from different points:

- Ghandorah community / Ghandorah sub-district / Jarablus district / Aleppo governorate:
  9 samples were taken; no sample was contaminated.
- Jisr-Ash-Shugur Community / Jisr-Ash-Shugur district / Jisr-Ash-Shugur district / Idleb governorate:
  7 samples were taken; 4 samples were contaminated (water truck, wells, HF).
- Ariha community / Ariha sub-district/ Ariha district/ Idleb governorate:
  5 samples were taken; no sample was contaminated.
- Ma'arrat Tamsrin community / Maaret Tamsrin sub-district / Idleb district / Idleb governorate:
  7 samples were taken; no sample was contaminated.

#### **Full Investigation Reports**











#### Actions taken

- The EWARN team is currently conducting active surveillance in the most important health facilities in northwest Syria (25 HFs). During the visit, the team reviews with the health facility staff the records to ensure the reported cases, also discusses the challenges, and recommendations, and collaborates to treat the problems.
- The EWARN team is receiving the RDT results from health facilities and CTC/CTUs and sharing them.
- To determine the causes of acute watery diarrhea in children under 5 years (the children have a negative cholera result), the EWARN lab is conducting Rotavirus rapid diagnostic tests (RDTs).
- The response teams conducted an expanded investigation of the deaths that occurred since the beginning of the outbreak (24 deaths), where some possible causes were identified, and the teams made appropriate recommendations.
- 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.