

WHOLE OF SYRIA

CHOLERA OUTBREAK SITUATION REPORT NO. 7

Issued 14 November 2022

Epidemiological Overview

Since the last situation report, the number of confirmed and suspected cases has risen. Suspected cholera cases/acute watery diarrhea (AWD) cases have been reported from all 14 governorates.

Between 25th August and 5th November, 35,569 suspected cases have been reported, including 92 attributed deaths to date at a case fatality rate of 0.3%.

Of the 2,729 samples tested with rapid diagnostic tests (RDTs), 1,491 have tested positive. To date, 1,524 stool samples have been cultured, of which 511 have tested positive for *Vibrio Cholera*. The overall proportion of RDT-positive cases is 54.6%.

86 suspected cases and zero deaths have been reported from IDP camps in Northeast Syria (NES) and rural Aleppo, while in Northwest Syria (NWS), 2035 suspected cases (out of 7934 suspected cases) and 2 deaths (out of 7) were reported from IDP camps.

Suspected Cases

35,569

Positive Cases

1,491

Cholera Sus. Deaths

92

Case Fatality (CFR)

0.3%

Overall Attack Rate

0.17%

Affected Governorates

14

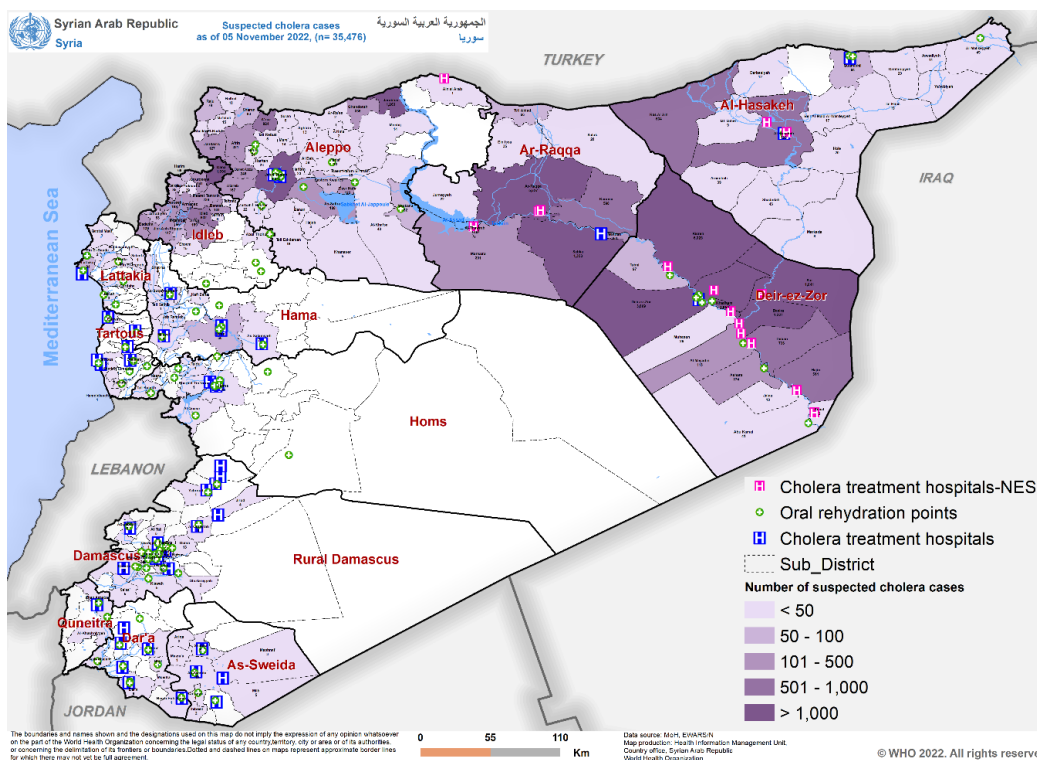
Grade

2

Table 1 Top five affected governorates trend last two epidemiological weeks.

Governorate	W43	W44	Change
Aleppo	1,088	1,026	-5.70%
Deir-ez-Zoir	1,748	1,318	-24.60%
Hassakeh	148	139	-6.10%
Idleb	1,137	1,026	-9.80%
Raqqa	1,168	834	-28.60%

Figure 1 Distribution of suspected cholera cases and response centers as of 5th November 2022



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Epidemiological Data

Figure 2: Distribution of suspected cholera cases by date of onset, as of 5th November 2022

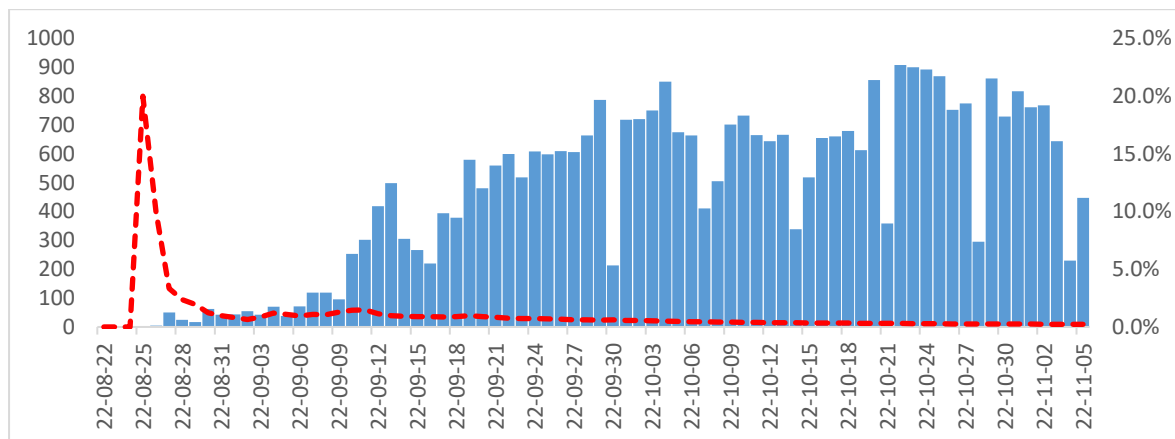


Table 2: Epidemiological data, as of 5th November 2022

Governorate	Suspected Cases (AWD)	Population	Attack Rate (%)	RDTs	Positive RDTs	Culture + Tests	Attributed Deaths	CFR%
Deir-Ez-Zor	15,885	779,283	2.04	658	385	98	28	0.2%
Ar-Raqqa	8,420	767,956	1.10	253	70	79	10	0.1%
Aleppo	5,996	4,170,826	0.14	850	783	160	41 ¹	0.7%
Al-Hasakeh	1,501	1,160,335	0.13	405	97	23	5	0.3%
Idleb	3,305	2,826,874	0.12	149	8	118	5	0.2%
Lattakia	109	1,274,118	0.01	87	59	3	0	0.0%
Damascus	79	1,829,796	0.00	75	16	7	1	1.3%
Hama	83	1,344,853	0.01	83	17	11	1	1.2%
As-Sweida	70	380,118	0.02	70	25	2	0	0.0%
Rural Damascus	37	3,032,345	0.00	37	6	2	0	0.0%
Homs	33	1,520,283	0.00	32	17	6	1	3.0%
Dara'a	18	1,037,690	0.00	18	5	0	0	0.0%
Quneitra	12	113,254	0.01	12	3	0	0	0.0%
Tartous	21	943,399	0.00	21	8	2	0	0.0%
Total	35,569	21,181,130	0.17	2,729	1,491	511	92	0.3%

¹ Almost half of all deaths (43%) are reported from Aleppo

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Table 3: Distribution of communities with highest cumulative attack rate as of 5th November 2022 (Priority districts were identified with attack rate more than 0.5)

Community	Sub-district	District	PreWeek	LastWeek	Total	Deaths	Weekly Trend	AR SD
Khasham	Deir-ez-Zor	Deir-ez-Zor	185	145	1,661	4	-22%	9.0
Kisreh	Deir-ez-Zor	Deir-ez-Zor	579	506	6,362	17	-13%	5.6
Sabka	Ar-Raqqa	Ar-Raqqa	233	200	1,353	2	-14%	4.6
Basira	Deir-ez-Zor	Deir-ez-Zor	175	93	1,232	1	-47%	2.8
Sur	Deir-ez-Zor	Deir-ez-Zor	201	159	1,041	1	-21%	2.6
Maadan	Ar-Raqqa	Ar-Raqqa	57	29	350	-	-49%	2.4
Khanaser	As-Safira	Aleppo	-	-	5	-	0%	2.3
Deir-ez-Zor	Deir-ez-Zor	Deir-ez-Zor	272	117	3,652	5	-57%	2.2
Zarbah	Jebel Saman	Aleppo	4	1	22	-	-75%	1.9
Jarablus	Jarablus	Aleppo	202	176	1,263	-	-13%	1.5
Thiban	Al Mayadin	Deir-ez-Zor	69	102	737	-	48%	1.4
Ar-Raqqa	Ar-Raqqa	Ar-Raqqa	694	489	5,531	3	-30%	1.4
Ghandorah	Jarablus	Aleppo	49	40	336	-	-18%	1.1
Karama	Ar-Raqqa	Ar-Raqqa	68	1	598	1	-99%	1.1
Ashara	Al Mayadin	Deir-ez-Zor	51	7	306	-	-86%	1.0
Haritan	Jebel Saman	Aleppo	2	1	23	-	-50%	0.9
Ras Al Ain	Ras Al Ain	Al-Hasakeh	105	103	534	-	-2%	0.8
Hajeb	As-Safira	Aleppo	-	-	4	-	0%	0.7
Mansura	Ath-Thawrah	Ar-Raqqa	88	97	301	1	10%	0.6
Dayr Hafir	Al Bab	Aleppo	6	6	122	3	0%	0.6
Hadher	Jebel Saman	Aleppo	1	-	19	-	0%	0.5

Cholera Outbreak Response

Health

Leadership and Coordination

- Close coordination with partners at the three hubs with guidance from the joint AWD/Cholera Response Plan.
- Last week, WHO regional director met with UNICEF MENA regional director to ensure close coordination of the health, WASH and Risk Communication and Community Engagement (RCCE) cholera response activities for Syria and Lebanon.
- The bi-weekly donor briefing was provided for donors last week.
- A framework of Monitoring and Evaluation indicators has been finalized and data collection will start for October retrospectively.

Surveillance and Laboratory

- Through WHO support, surveillance and active case-finding continue to intensify in high-risk areas, including Aleppo, Deir-ez-Zor, Ar-Raqqa, and Al-Hasakeh. Operational support, including sample transport, also continues to 101 rapid response teams (RRTs) at central and governorate levels.
- A second training on cholera diagnostic protocols was conducted in Central Public Health Laboratory (CPHL) for the technicians from Homs and Rura Damascus governorates.

Case Management

- In Government of Syria (GoS) areas, WHO supported 50 training courses in 14 governorates (Al-Hasakeh - 7 sessions, Ar-Raqqa - 5 sessions, Homs - 1 Session, Hama - 4 sessions, Sweida - 3 sessions, Dara'a - 6 sessions, Quneitra 4 sessions, Damascus 5 sessions, and Rural Damascus - 5 sessions, Aleppo - 2 sessions, Idleb - 1 session, Lattakia - 1 session, Deir-ez-Zor 3 sessions, Tartous - 2 sessions). More than 1,100 health professional in MoH health facilities were trained on cholera standard case definition, case management and infection prevention and control (IPC).
- In GoS, there are 51 hospitals designated for cholera treatment and 96 health centers designated for oral rehydration.
- In Northwest Syria, 6 Cholera Treatment Centers (CTCs)/Cholera Treatment Units (CTUs) are fully functional with 126 bed capacity and 3 functional Oral Rehydration Points (ORPs). another 11 CTCs/CTUs are to be ready.
- In NES, health partners continue to support 10 CTUs are currently functional with 263.

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- In NWS, the culture sensitivity results done were 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.
- In Aleppo, UNHCR will receive 2,000 ORS sachets for distribution to UNHCR's partners and 34 rehydration corners will be set up in the UNHCR-supported community and satellite centers.

Water Sanitation and Hygiene (WASH)

WASH Rapid Response:

- NES NGOs have used RRTs to investigate 5,741 cases in 307 communities, and 2,176 of these cases have received assistance. While the ratio of investigated cases that are being assisted is increasing, the number of RRTs is still insufficient and expansion is required to improve coverage and timeliness.
- In NWS, UNICEF, WVI, ACU and WHH continue to support WASH Cluster agencies who do not have chlorine with soap, chlorine, and pool testers to monitor free residual chlorine (FRC) levels of water at points of collection and consumption.
- In NWS, the WASH cluster field facilitators assessed sites and facilities of the new planned CTCs and CTUs in coordination with WHO and the health directorate at the field level. To date, 10 CTCs and CTUs have been assessed by the WASH cluster field facilitators for appropriateness for WASH installations.

Access to Safe Water:

- WHO provided 3.5 million Aquatabs to the Directorates of Health (DoH) for wider distribution within their respective governorates.
- NES NGOs have continued providing chlorination support for water trucks entering Al-Hasakeh city. The intervention covers 557 trucks per day, and 347,000 cubic meters of water have been chlorinated since 12th September. NES NGOs are also undertaking chlorination support at private trucks filling points pumping from the Euphrates River. The intervention covers 53 filling points, and 27,600 cubic meters of water have been chlorinated and checked.
- NES NGOs have continued operating a water quality surveillance system. 45 key treatment/pumping stations and connected piping systems are currently being tested.
- The number of suspected cases in camps remains low, indicating that existing sanitation processes are working. However, some gaps in sanitation facilities in camps remain.
- In NES, while Alouk water station resumed partial operations on 19th October after a prolonged gap, it has again shut down. The station has not been operational since 2nd November. The Euphrates River level is critically low also threatening water sources.
- In NES, additional expertise is needed to support the RRTs and Case Area Targeted Interventions approach.
- In NWS, Between 6th and 14th of November, the WASH cluster field facilitators conducted 1,949 FRC tests covering 186 camps and 36 communities located in 8 sub-districts in Aleppo and Idleb governorates. Below are the results of the water quality surveillance:
 - Out of all tests conducted 1,949 samples (approximately 27%) were at 0 FRC level
 - 44% were between 0.1 – 0.3 mg/l FRC
 - 7% indicated a sign of over chlorination with a ratio of over 0.7 mg/l FRC
 - The WASH cluster field facilitators treated water in 485 water storage tanks and jerry cans where the FRC was found to be 0 mg/l
- In NWS, the WASH activities continued to take place, including provision of safe drinking water, chlorination of water storage tanks at point of use and water stations, provision of hygiene kits, WASH cholera kit, soap and IEC materials. Additionally, the team continues to identify open sewage lines and open defecation.
- UNICEF continues the provision of an average of 200 m³ of water daily through water trucking to cholera-affected locations in southern rural Aleppo.
- UNICEF delivered 30 tons of sodium hypochlorite to support Aleppo Water Establishment with the continuation of water disinfection for drinking water in the municipal network reaching a total quantity of 103.7 tons of sodium hypochlorite delivered since September 2022.
- Partners including UNICEF, SARC, and WWGCV continue to support the rehabilitation of water pumping stations and water monitoring to ensure safe and consistent supply in Aleppo and Rural Damascus.
- Through UNICEF's agreement with SARC, awareness sessions about the cholera epidemic and methods of prevention and protection were conducted in 53 schools in Aleppo benefitting about 35,700 children in Aleppo city.

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- UNICEF is supporting the roll out of Water Safety Plan (WSP) in Salhab water system in Hama governorate, starting with regular water quality monitoring for water source and distribution system. This will be expanded to As-Sweida, Dara'a, and Quneitra governorates.
- UNICEF continues to support provision of safe water through water trucking to 47 schools and 60,000 people in East Ghouta communities in Rural Damascus.
- UNICEF completed the rehabilitation of Rima water pumping station in Qatana, and safe water from the station is pumped to several communities in Rural Damascus, benefitting more than 200,000 people.
- UNICEF provided 25 tons of sodium hypochlorite for all water pumping stations in Dara'a governorate, this quantity is envisaged to be sufficient for one month. 45 tons of sodium hypochlorite was also distributed to Damascus Water Authority.
- UNICEF procured six chlorine dosing pumps to support the water chlorination process in major water supply stations in Derbaseyyeh and Tel Tamer benefitting around 14,000 beneficiaries. The dosing pumps are being delivered to the designated locations to improve the chlorination process in Al-Hasakeh governorate.
In addition to the water testing and providing of 55 kg of chlorine, WHO prioritized hot spot areas and distributed 73,305 water purification tablets for household tanks, together with awareness raisings campaigns in the following subdistrict areas Ashara, Deir-ez-Zor, Khasham, Tabni, Al Mayadin, Aboukamal in Deir-ez-Zor governorate.

Hygiene Promotion:

- UNICEF procured / availed 254 cleaning kits, 100,000 soap bars, 10,000 jerrycans, and 1,650,000 aqua tabs and plans for delivery / distribution are being finalized for Deir-ez-Zor.
- UNICEF conducted awareness raising sessions on cholera prevention for one school club in one school in Tartous city. Around 300 school children from 1st to 6th grades were targeted during these sessions. Separately, around 99 youth in three villages in Mashta Al Helo sub district in Tartous were targeted through hygiene promotion awareness sessions and cholera related awareness and prevention information. In addition, 99 personal hygiene kits were distributed to the 99 youth. All these activities were conducted under UNICEF - WASH hygiene promotion agreement with GOPA.
- UNICEF conducted (through GOPA) awareness sessions targeting two schools in Lattakia. The awareness sessions targeted around 661 school children from 1st to 6th grade.
- In Aleppo (Jebel Salman) and Deir ez Zor (Al Mayadin) Oxfam conducted hygiene promotion sessions on topics such as cholera prevention measures, ORS preparation, use of Aqua tabs in case distributed by other actors, and complemented with distribution of cholera hygiene kits for 954 households (Jebel Salman) and 1050 households (Al Mayadin).
- In Aleppo, WeWorld - Gruppo Volontariato Civile Onlus (WWGVC) conducted hygiene promotion campaign and awareness raising on cholera and complemented with distribution of hygiene kits. A total of 2,359 households (HH) have been reached in the following districts: Eastern Kwairees – 826 HH, Al Khafsa – 211HH, Hajeb – 105HH, As Safira – 1,117HH and Haritan – 100HH .
- UNHCR conducted awareness sessions in Deir-ez-Zor, Homs, Hama, Damascus and Rural Damascus, As-Sweida and Dara'a for 2183 individuals, through the community centers and outreach volunteers. While 4,000 persons of concern received awareness messages on cholera outbreak and preventive measures, in addition to the general home management of the symptoms, ORS preparation and use, in Areesha camp, Al-Hasakeh city, Mahmoodli camp and Malkia.
- UNHCR cascaded training to 20 teachers in schools and 37 outreach volunteers in Homs and Hama and Qamishli.

Risk Communication and Community Engagement (RCCE)

- Through NES NGO efforts, 58,344 individuals in NES camps received awareness on Cholera, and 3,517 information, education, and communication (IEC) materials were distributed. NES NGOs also provided 10,818 individuals in informal settlements in Deir-ez-Zor and Ar-Raqqa with awareness sessions about cholera outbreak and prevention methods.
- NES NGOs provided 73,018 individuals in communities with full awareness session about cholera outbreak and prevention and distributed 7,348 IEC materials.
- In NWS, 18 partners continue to conduct RCCE activities reaching 152,437 beneficiaries through cholera prevention awareness sessions targeting individuals at household level, mothers and caregivers of children, awareness-raising groups, schools, and community and religious leaders. Additionally, social media was also used to reach to 35,083 views.
- UNICEF has 258 outreach teams and 411 community leaders trained in interpersonal communication skills. Social and behaviour change teams equipped with key lifesaving messages and calls to action reached 80,965 people through 6,791 community dialogues and 26,896 people were reached through

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16,316 door-to-door visits, while 7,221 teachers and 152,216 school children have been equipped with information on cholera prevention in schools. Cholera prevention messages have been disseminated through existing UNICEF partnership agreements and through WASH, education and health sector partners (UN agencies, INGOs and National NGOs) in most affected communities.

- UNICEF has launched the data collection to assess the process and progress on risk communication and community engagement interventions, while UNICEF generated a social listening report which revealed that social media users' engagement were predominantly driven by epidemiological updates in October. Social media users projected strong reactions to the news that the Ministry of Education had partnered with UNICEF to launch a health awareness and education campaign in schools. Commenters believed that there is a need to address the lack of water and poor hygiene and cleaning conditions in schools while targeting students through an awareness campaign.
- MEDAIR, started the planning to train 100 community health workers (80 in Deir-ez-Zor, 20 in Ar-Raqqa) in December.
- WHO has conducted several RCCE activities within the weekly Incident Management team meetings with UNICEF.
- UNFPA, has reached 6654 women and girls and 234 men and boys through 12 Implementing partners in 440 awareness-raising sessions. In addition to the social media reach
- A summary of the RCCE interventions, 30th October to 5th November appears in the table below:

	#Workshops conducted	#People trained	#EC material printed and distributed	#People reached through:			#People reached thru mass media	#CW engaged
				Focus group discussions	Household visits	Community sessions		
NES	5	113	345	483			11	
Deir-ez-Zor	3	82	22,419		17,559	21,210	132	
Homs/Hama	1	25	2,000			9,871	69	
Lattakia	1	32	8,600			20,072	100	
Dara'a	4	100			7,181	26,702	55,000	
TOTAL	14	352	33,364	483	24,740	77,855	55,000	312

Logistics, Equipment, and Supplies

- NES NGO health partners continue to face shortages of medical supplies for the treatment of cholera, including intravenous fluids.
- In NWS, 10 cholera kits were distributed to functional CTCs/CTUs. 55,000 ORS Sachets were distributed to 19 partners.
- In NWS, UNICEF supply shipment was delivered in Mersin and awaiting shipment cross-border into Syria while World Vision International's shipment of cholera supplies arrived and was distributed to ambulances and 3 newly set up cholera treatment facilities.

Challenges / Gaps

- Partners identified funding as their main challenge to scale up response operations and continue their activities.
- Access to safe water and deteriorated sanitation and waste disposal methods remain challenging and are the main risk factors for the cholera cases spread. Contaminated areas still being reported all over the country.
- Shortages in supplies are still a major across all response areas
- Limitations in health worker capacities for treatment of complex cholera cases.
- Random use of antibiotics remains a challenge for the cholera case management.
- Limited global supply of oral cholera vaccines due to multiple ongoing outbreaks, potentially limiting the number of doses and supplies available to Syria.
- Armed conflict continues to be a challenge in some areas that poses difficulties in operational response capacity.
- Hesitancy for admission in CTCs and CTUs, especially among female patients.
- Constrained electricity / energy supply for household level use and for water and sanitation systems.

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Key Priorities

- Roll-out of four Syria Humanitarian Fund (SHF)-supported projects under the first reserved allocation of USD 3.5 million.
- Advocate for increased resource mobilization to adequately fund response plan activities and provide opportunities for scale-up, particularly regarding rehabilitation, construction, and maintenance of water structures and procurement of medical supplies for cholera management.
- Continue increasing cholera treatment capacity within all response locations, especially in Northeast Syria, to address critical gaps.
- In Northwest Syria, prioritize support and expand capacity for WASH and IPC, particularly at CTCs, CTUs and ORPs.
- At camps/IDP sites, focus on establishing CTC/CTUs, improved water quality control and sanitation interventions, stronger referral systems, and enhanced risk communication and community engagement.

Funding

- An estimated total of USD 35.2 million is required for 6 months under the AWD/Cholera Response Plan.
- First standard allocation from SHF for AWD/cholera is under finalization.
- Gaziantep WHO office has received a total of 670,000 USD through WHO Contingency Fund for Emergencies (CFE) and Syria Cross-border Humanitarian Fund (SCHF). Funds were utilized towards supplies (320,000 USD); capacity-building activities for case management, RCCE, and IPC (75,000 USD); case management through direct support to 3 CTCs/CTUs in hotspots (91,000 USD) and RCCE and IEC material provision (25,000 USD), with two more CTCs/CTUs being planned and area expected to utilize the remaining 159,000 USD.

For inquiries, please contact

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