



Abunowr Health Facility UM Ramata, White Nile State

**HEALTH CLUSTER BULLETIN
1 August – 09 September 2019**

Sudan
Emergency type: floods and Cholera outbreak



346,300
AFFECTED



78
KILLED



41,514
HOMES DESTROYED



27,742
HOMES DAMAGED

HIGHLIGHTS

- On 9 September 2019, his excellency the federal minister of health publicly announced the outbreak of Cholera in Blue Nile State. FMOH/WHO established the isolation and treatment measures were initiated across the state.
- By the end of August, 16 states across Sudan were affected by heavy rains and flash floods. The worst since 2013.
- Malaria cases are still on the raise, constantly breaching the epidemic threshold and accounting for 12.4% of all cases reported of surveyed diseases with mortality rate of 13/10,000. And increase by 30% compared to the same reported period of last year (week 34). Most affected states are White Nile, Blue Nile, West Kordofan, and North Darfur.
- Reported Typhoid cases showed an increase by 17% compared to last year. Most affected states are White Nile, Blue Nile, River Nile, and Jazeera states.



6

HEALTH FACILITIES DESTROYED

MATERANL CARE



39 CASES

OF AWD REPORTED

1 M

MALARIA CASES REPORTED IN 2019

MEDICAL SUPPLIES



716

RAPID RESPONSE KITS

22

AWD KITS PREPOSITIONED

MOBILE CLINICS SUPPORTED



17

MOBILE CLINICS SUPPORTED IN KHARTOUM STATE

FUNDING \$US



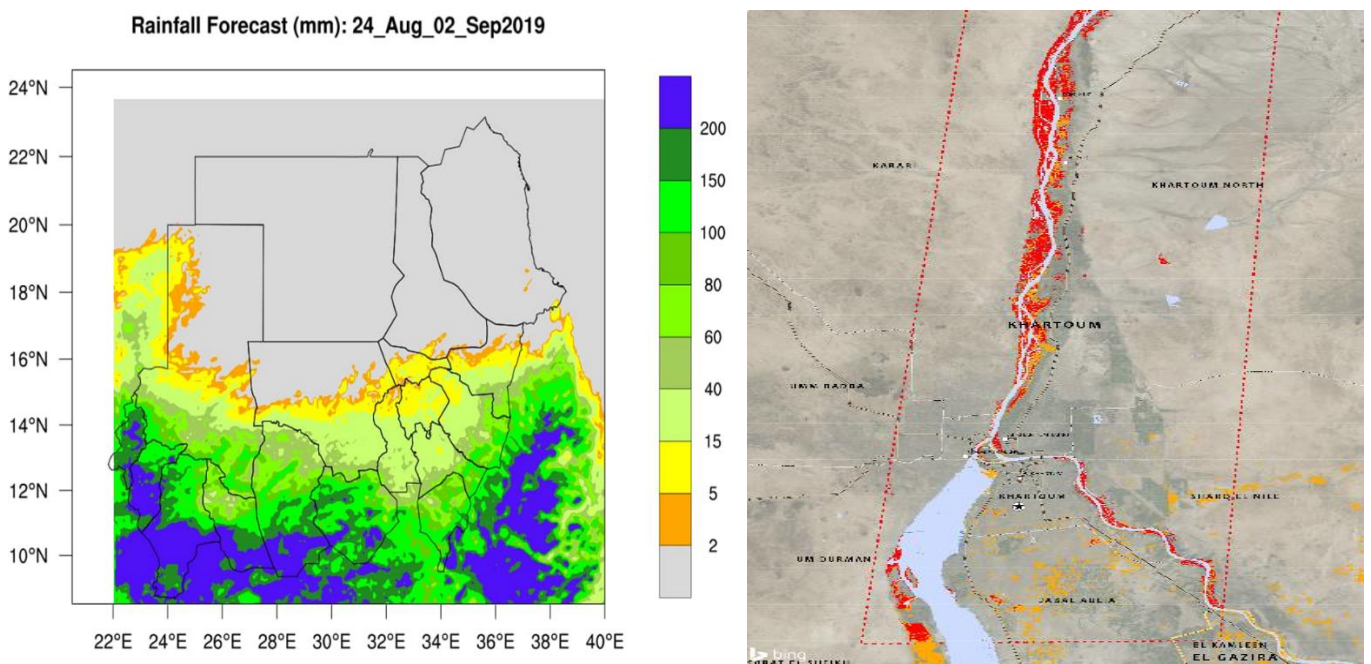
13 M

NEEDED FOR THE FLOOD RESPONSE

Situation update

During the month of August, the Sudan was affected by heavy rains, mainly across the southern parts of the country, exceeding 200 mm of rain in some parts and resulting in significant increase of river Nile water levels impacting the states along the river path specifically Khartoum state. Flash floods resulted in the destruction of 41,514 homes, damaging another 27,242, and displacing around 350,000, main affected states were, White Nile, Kassala, Khartoum, Gazeera, and North Kordofan.

51 areas in the states of Jazeera, Sennar, and White Nile were completely surrounded with water and rendered inaccessible and hindering the humanitarian effort. According to the Sudanese meteorological authority, by the end of August the Inter Tropical Convergence Zone ITCZ has moved south sparing the central region of Sudan including Khartoum from further heavy rains, however Southern parts and neighbouring countries are still subject to high rain fall and raise in the river Nile water levels until the end of October.



Source: Sudanese meteorological authority

Around 11,000 latrines were destroyed by the floods resulting in contamination of drinking water sources. In addition the turbidity of drinking water increased something rendered standard chlorination measured of drinking water ineffective across several areas and exposing the population to high risk of waterborne diseases while stagnate water offered a breeding grounds for mosquitoes increasing the incident rate of Malaria cases and posing a risk for resurgent of vector borne diseases such as yellow fever and Dengue. Concentrations of mosquito larva reached its highest in White Nile, Khartoum, Northern, and South Kordofan states.

On the 9th of September the federal ministry of health confirmed the presence of cholera vibrio in four out of six samples taken from patients with acute watery Diarrhoea in Blue Nile state. Accordingly, His Excellency the federal minister of health and per the international health regulations shared all necessary notifications with WHO. Senior WHO leadership commended the transparency excreted during the process. on Wednesday the 4th of September and On the backdrop of increased AWD cases in Blue Nile, tension among civilians increased and evolved into demonstrations threatening the peace in the area, WHO representative communicated with the parties involved and advocated for health to be a ground for peace and conflict solving.

Public health risks

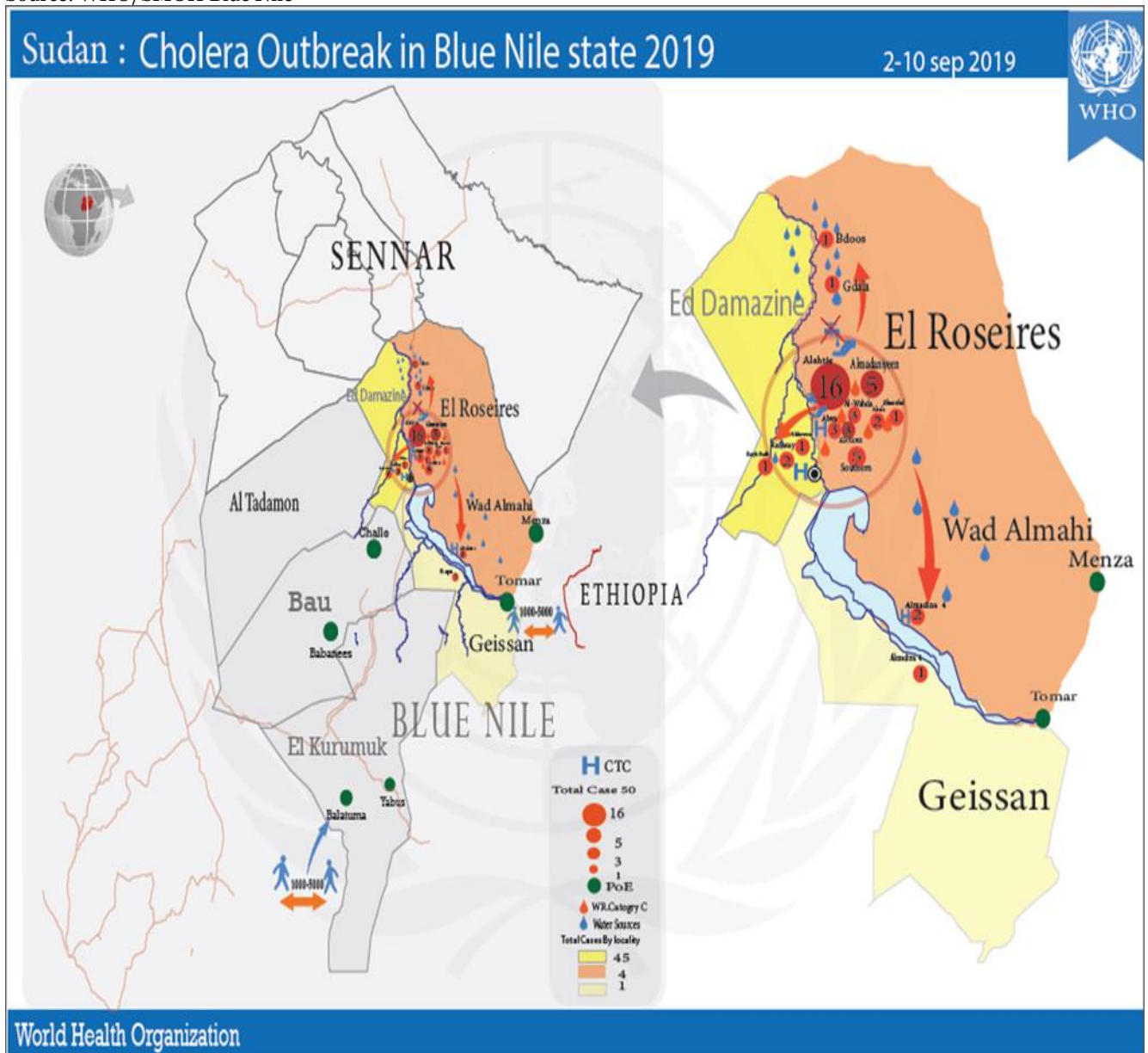
Communicable diseases¹

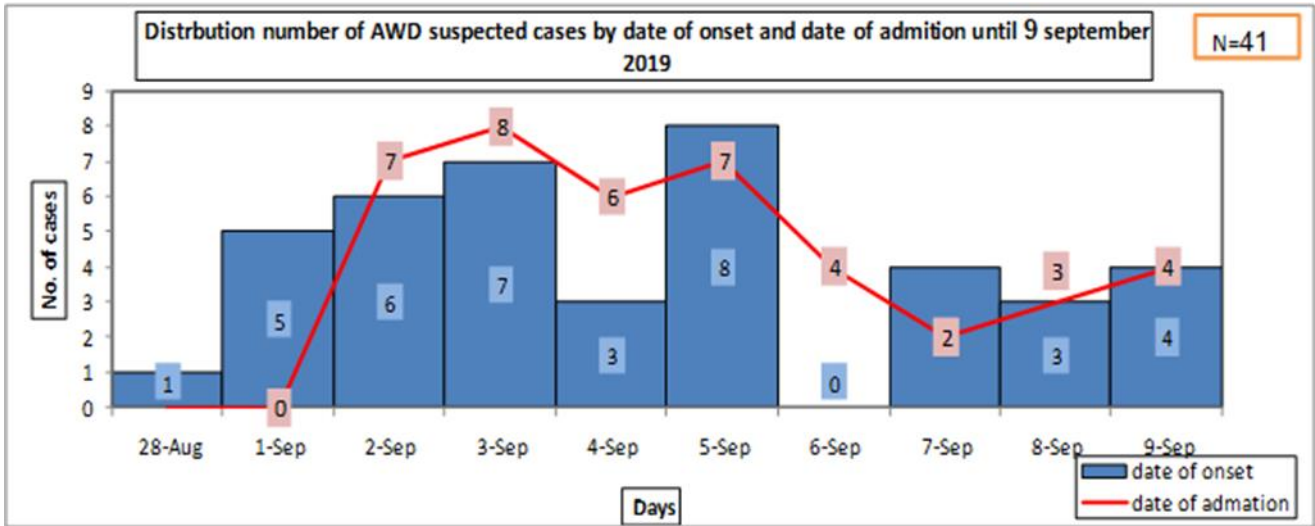
Acute watery Diarrhoea

By the 9th of September 39 cases of AWD were reported in Blue Nile state with two resulting fatalities. Attack rate AR was 0.3/10,000 and case fatality rate CFR 5.7%. Isolation measures were taken immediately by the state ministry of health with support of health actors, with active surveillance (community based) across areas of origin. Few patients had to travel 60-90 minutes to reach health facilities using public mean of transportation, increasing the risk of disease transmission among the population.

WHO advocated for the public announcement of the Cholera outbreak by the FMOH in accordance with International Health Regulations to raise public awareness and garner support for response.

Source: WHO/SMOH Blue Nile





Source: WHO Blue Nile State office

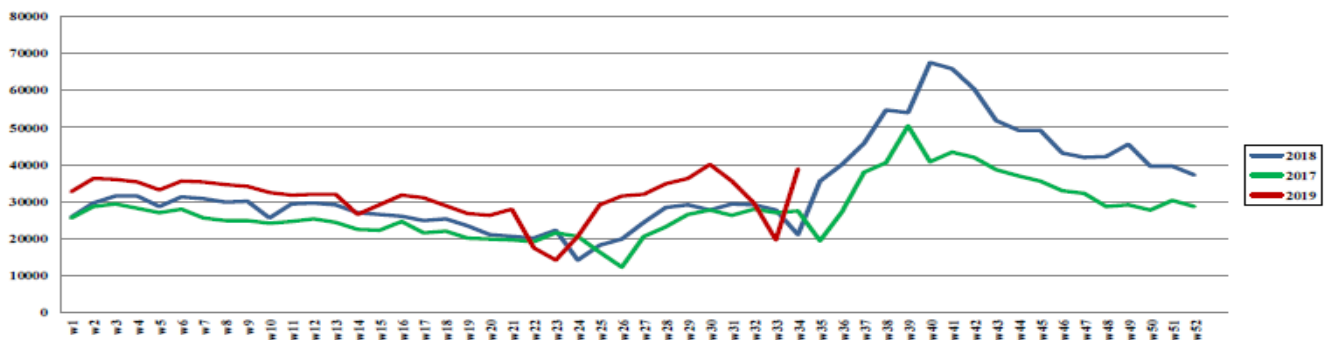
localities	Number of suspected cases in 8/ september 2019				Number of cumulative suspected cases from 29/August-8/September 2019					
	No. of suspected cases	death	AR/10000	CFR	No. of sus	death	AR/10000	CFR	First report	Last report
Damazin	0	0	0	0	3	0	0.11	0	4-Sep-19	6-Sep-19
El Roseires	2	0	0.04	0	30	2	0.7	6.7	2-Sep-19	8-Sep-19
Wad Elmah	1	0	0.06	0	1	0	0.06	0	8-Sep-19	8-Sep-19
Geissan	1	0	0.08	0	1	0	0.08	0	8-Sep-19	8-Sep-19
Bau	0	0	0	0	0	0	0	0		
Kumuk	0	0	0	0	0	0	0	0		
Tadamon	0	0	0	0	0	0	0	0		

Malaria

Reported malaria cases continued to raise with 38,757 cases reported in week 34 and breaching the epidemic threshold in several states for a consecutive second month, Mainly in White Nile, Blue Nile, West Kordofan, and North Darfur.

By the end of reporting week 34, Total reported cases across Sudan were 1,056,194 cases. According to the surveillance team of the FMOH and WHO, the annualized / projected number of cases till W52 might reach 2,034,575 cases (100% increase compared to last year) if no intervention took place.

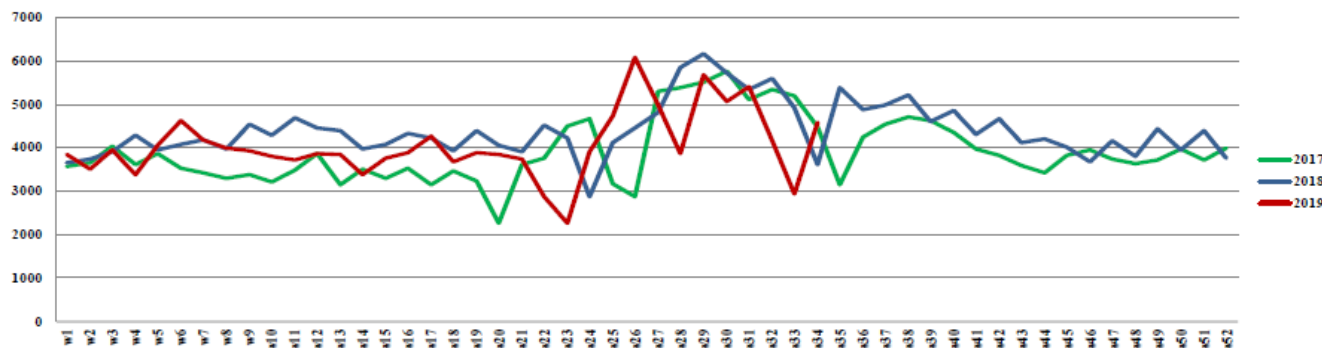
Reported measles cases until week 34



Dysentery

Reported dysentery cases until week 34 reached 137,630 cases, surveillance team projected figures can reach 211,874 cases by the end of 2019. An increase by 40% compared to last year if no intervention took place.

Reported dysentery cases until week 34

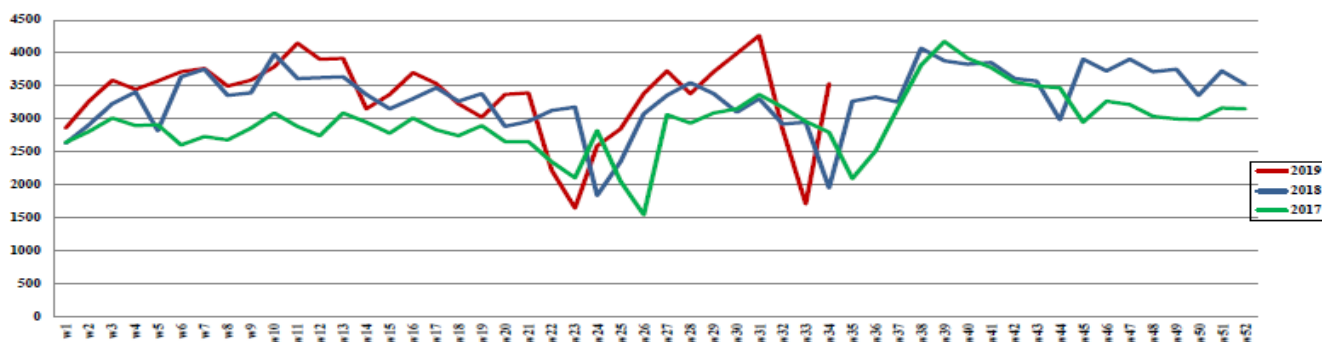


Typhoid fever

Reported typhoid cases until week 34 reached 113,551 cases, surveillance team projected figures can reach 176,017 cases by the end of 2019 and increase by 40% compared to last year if no intervention took place.

Reported typhoid cases breached the epidemic threshold in Gadaref, West Kordofan, South Kordofan, and constantly breaching the threshold since week 1 of 2019 in White Nile state. The latter is one of the most affected by floods among all states with limited access in many areas hindering the humanitarian effort even further.

Reported dysentery cases until week 34



Health response:

WHO

On August 14, at the start of the flooding in Khartoum State, the FMOH and WHO advocated for the Rapid Assessment and Response Plan for Khartoum State.

Supporting 11 mobile clinics across affected areas of Khartoum and 6 in White Nile, with Provision of 10 IEHK and 5 RRKs, and Miscellaneous medical Items covering around 70,000 affected people. In addition, WHO prepositioned 5 surgical and trauma kits in 5 Hospitals Khartoum hospitals and provided surgical supplies for 200 major interventions (including caesarean sections) to Al Bashair hospital. Additional 716 rapid response kits RRK arrived to Port Sudan ready for distribution enough to cover 2 million people.

WHO supported the Blue Nile ministry of health with two Cholera kits enough to treat 200 cases and in partnership with ADD international case reporting and health awareness campaigns are being conducted in all reported cases areas of resident. The FMOH, with WHO support, has activated the daily Early Warning Alert and Response System (EWARS) in all health facilities in areas affected by floods.

WHO in collaboration with FMOH and Global Aid Hand conducted training of 70 youth, community volunteers, and nurse students on basic health messages for prevention of flood related diseases and health promotion skills. In addition, printed 2,500 health messages on prevention of flood related diseases and used by the trained health volunteers during the health awareness campaigns conducted in affected areas in Khartoum.

EPI & Polio activities up to December 2019

Activity	Sep	OCT	Nov	Dec	Target
Yellow fever Campaign		6-15			Khartoum-River Nile and Northern states
Routine acceleration campaigns	22-27	20-25	18-23	16-21	All low performing localities in all states with all (all antigens)
OPV -sNID			4-6		Targeting 127 high risk localities in 17 states
IPV				1-6	For the missed cohort of children not vaccinated due to the global stock out (June 2016-Dec 2017)
MNT			10-16		South Darfur and South Kordofan
MNT				24-30	Blue Nile and Central Darfur

Source: FMOH/WHO Sudan

UNFPA

In White Nile state, UNFPA supported CAFA (a local NGO) to establish mobile clinics providing SRH and GBV services in Alsalam locality & Aljabalain localities. In addition, UNFPA supported the provision of ANC services to 170 pregnant women, clean delivery kits distribution to 1173 women and Family planning services provision to 193 women.

In North Kordofan, prepositioned Emergency RH kits in SMOH warehouse (2 RH kit 8, 2 RH kit 5) and provided one emergency RH kit type 12 (blood transfusion kit) to Obayed hospital.

UNICEF

UNICEF already prepositioned following medical items at the states levels as part of immediate response to an Emergency at:

UNICEF Rainy Season Medical Items Buffer Stock in the Field as 1st August 2019												
Material Description	ED	SD	BN	WN	ND	WD	WK	SK	Kassala	Red Sea	CD	Total
Erythromycin 250mg tabs/PAC-100	5	15	10	10	10	10	5	10	10	5	10	100
ORS low osm. 20.5g/1L CAR/10x100	15	10	15	5	10	20	5	5	10	5	10	110
Erythro.pdr/oral sus 125mg/5ml/BOT-100ml	150	200	100	200	150	100	30	35	0	0	35	1,000
Tent,light weight,rectangular,24m ²	0	1	0	0	0	0	0	0	0	0	0	1
Doxycycline 100mg tabs PAC/10x10	40	25	30	30	50	20	20	30	20	15	20	300
LLIN,100d,w/b/g,190x180x150cm LxWxH	0	0	200	200	250	250	0	0	100	0	0	1,000
AWD Periphery kit Drug	2	2	1	1	1	1	0	1	1	0	1	11
AWD, Periphery kit, Renewable	1	2	1	1	1	1	0	1	1	0	1	10

UNICEF delivered following IMCI kits & some medical items to the states during 1st week of Sept 2019:

Release of IMCI Kits and Some medical items during 1st week of September 2019

Material Description	Distributed Per State													Total
	Khartoum FMOH	ED	SD	BN	WN	ND	WD	CD	WK	SK	Red Sea	Kassala	Gedarif	
Sudan, IMCI Medicine kit, 2016	14	15	15	15	15	23	15	15	28	10	10	12	11	198
Zinc 20mg tablets/PAC-100	0	250	250	0	250	250	250	0	250	0	246	0	0	1,746
ORS low osm. 20.5g/1L CAR/10x100	0	20	26	10	24	25	10	0	21	10	10	10	0	166
LLIN,100d,w/b/g,190x180x150cm LxWxH	0	0	0	0	0	0	0	0	0	0	3,000	0	0	3,000

UNICEF delivered following MNH Kits & medical items to the states during 1st week of Sept 2019:

Maternal and Newborn Health Supply Released as 1st week of Sept 2019

Description	ND	SD	ED	WD	CD	BN	WK	FMOH	WN	Total Supply
Obstetric, surgical kit, supplementary 2, equipment.	10	9	3	9	4	7	9	5	2	58
Obstetric, surgical kit, supplementary 3, renewable	10	9	3	9	4	7	9	0	5	56
Midwifery kit, 3-renewable	10	9	3	9	3	6	9	5	0	54
Hand-operated, neonatal Resuscitator	30	25	20	25	20	20	20	0	20	180
Reusable suction bulb	65	55	40	55	45	45	45	0	45	395
Umbilical cord Clamp	3,000	2,000	1,000	2,000	1,000	1,000	2,000	0	1,000	13,000

UNICEF Ordered Medical Supplies for Flooding Response in August 2019

	Medical Item Description	Quantity to Order
1	Sudan, Primary health care kit, 2016	30
2	Sudan, IMCI Medicine kit, 2016	30
3	ORS, New Formula, ct/100	300
4	Compound Sodium Lactate, box/20 bottles	150
5	Zinc 20 mg tabs (pack)	750
6	LLIN, 190x180x150cm LxWxH Polyester	50008
7	ACT,20mg + 120mg tab-1X18/PAC-30	3000
8	ACT,80mg +480mg tab. - 1X6	3000
9	Quinine sulfate 300mg tabs/PAC-10x10 gp	750
10	Malaria rapid test pack/25 kits (RDTs)-SD Bioline Malaria Pf/Pv, kit/25	7500
11	Midwifery kit, 3-renewable	20
12	Resuscitator, hand-operated, neonate	20
13	Reusable suction bulb	40
14	Umbilical clamp	3000
15	Light weight tent frame type rectangular, size 24 square metres	5
16	Tent,light weight,rectangular,72m ²	5
17	Nebulizer	43
18	AWD Periphery kit Drug	40
19	AWD Community Kit Drug	40
20	AWD, Periphery kit, Equipment	40

WASH response

WHO

41 Fogging machines and 20 entomological surveillance kits were procured and distributed to the affected states including Khartoum state covering 180,000 people

Integrated vector control campaigns in the 7 states in KH, White Nile, North Darfur, Kassala, Red Sea and Gadaref States covering 500,000 Population. In addition, 230 water testing kit to cover 1.5 M population procured and distributed in Khartoum, Eastern Sudan and North Darfur.

WHO supported the water sampling (around 1,480 samples were collected and analysed, this covered 360,000 population, 60% of the samples fitting the human consumption).

Items	Kassala	Gadaref	Khartoum	West Darfur	Central Darfur	East Darfur	South Darfur	North Darfur	Port Sudan
Water Testing Kit	10	10	25	10	10	10	10	10	10
Fogging machines	5	5	10	3	0	2	1	1	1
Hudson Pump	2	2	2	2	2	2	2	2	2
Personal Protective Equipment			100						
Larvae Collection Kit	3	3	3	3	3	3	3	3	3
Water Filters			2000						

Water testing results in Blue Nile state

S.N	Site	FRC level (Free Residual Chlorine)*	E.coli	Remarks
1)	Soba water station	1.6	Zero	Acceptable Chlorine level and no contamination
2)	Alroerse water station	0.1	Zero	Low chlorine
3)	Nearest house to Alwouhda well (Alnir Idriess)	0.1	3	Low chlorine with contamination
4)	Nearest house to Alimtidad Janoob well (Mohammed Ibrahim)	0.01	19	Low chlorine with contamination
5)	Gogish water station (Ademazine locality)	0.64	On process	Low chlorine
6)	Water samples from household and government facilities in Adamazine localities (summary result)	0.01	On process	Low chlorine. Feed back provided to the responsible agencies for action. Bacteriology result will be availed after 24 hrs

* Standard FRC level is 0.2 – 0.5 Mg/Lt. During outbreaks high level of FRC at discharge point is recommended.

Source: Water samples results from WHO Blue Nile State on 8 September 2019

UNICEF delivered following WASH Supplies the states as end of August 2019:

State Name	Supplies provided for reponse											Supply Cost in USD	CASH Transfer				Total Cost of Supplies & Cash (USD)
	Water flocc. & disinfectant	Water purif.(NaDCC) 33mg	Water purif.(NaDCC) 1.67g	Bacteriological H2S	Chlorine, 45-50kg (10000 Per Month)	Plastic Jerrycan 20 L (2 per	Soap,toilet	Squatting plate)	(Plastic Tarpaulin	WATER TANK 5000LITRES	WATER TANK 10000LITRES		Emergency Latrines construction	Hygiene Reponse	Chlorination	Water tracking	
	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY						
N Darfur			70				100					3,776	20,000			23,776	
S Darfur												0		4,200		4,200	
W Kordofan		1	1		1			30				1,436				1,436	
N Kordofan	28					500	7	50	75			5,473				5,473	
Sennar												0				0	
W Darfur		10	7		5		10	300				13,413				13,413	
S Kordofan					3	3,000		250				21,653				21,653	
White Nile		100				2,150	50					13,620	60,000	37,000	10,000	120,620	
Khartoum		75	115			3,000	11				5	27,395	45,000	19,360		91,755	
Blue Nile												0	105,000			105,000	
Red Sea		13	50	100	5	352		92	295	7		23,818				23,818	
Total	28	199	243	100	14	9,002	178	722	370	7	5	110,583	230,000	56,360	4,200	406,943	

UNICEF also supported CASH interventions (\$ 296,360) that included water trucking, chlorination, construction of emergency latrines and hygiene promotion. Nearly 146,000 flood affected people were reached through WASH supplies and cash interventions.

UNICEF’s Communication for Development C4D Section in partnership with the SMOH/ Health Promotion Unit organized a training for 200 youth volunteers form Khartoum state on flood response, In addition to above UNICEF is training 200 volunteers for 6 states and Kassala will have refreshment sessions for 250 Volunteers who were trained last year during the AWD outbreak. The training is focusing on the integrated strategy for the Water Related Diseases and long-term impact on behavioural change.

Funding

14 million USD were allocated for Sudan under the central emergency reserve fund CERF with 3.5 million USD for health. All proposals by UN will be finalized and submitted by the 4th of September. IN Addition, the second allocation of Sudan humanitarian fund SHF has been launched in support to projects implemented mainly by NGOs. Funds allocated for health under the SHF are 4 million USD, with proposals to be submitted by the 22nd of September.

CERF allocation per agency, per sector

Requesting Agency	Cluster/Sector	Total Project Requirement (US\$)	Amount requested from CERF (US\$)
FAO	Food Security and Livelihood	19,035,260	2,000,000
IOM	WASH	5,800,000	700,000
UNFPA	Protection	18,700,000	500,000
	Health		840,000

UNHCR	Protection	44,768,120	500,000
UNICEF	Education	134,420,513	500,000
	Protection		500,000
	Health		900,000
	Nutrition		2,025,000
	WASH*		1,000,000
WFP	Nutrition	39,060,033	1,800,000
WHO	Health	40,570,779	1,760,000
	Nutrition		675,000
	WASH		300,000
Total			14,000,000

Follow health cluster updates, meeting minutes, and surveillance reports on:
<https://www.humanitarianresponse.info/en/operations/sudan/health>.

For updates on humanitarian presence and action across Sudan follow:
[https://reliefweb.int/updates?search=\(primary_country.iso3:%22sdn%22\)%20AND%20ocha_product:%22Thematic%20Map%22%20AND%20source:%22UN%20Office%20for%20the%20Coordination%20of%20Humanitarian%20Affairs%22](https://reliefweb.int/updates?search=(primary_country.iso3:%22sdn%22)%20AND%20ocha_product:%22Thematic%20Map%22%20AND%20source:%22UN%20Office%20for%20the%20Coordination%20of%20Humanitarian%20Affairs%22).

Contacts:

Dr. Kais AL Dairi
 Health Cluster Coordinator
aldairik@who.int

Dr. Babiker Ahmed Ali
 Magboul.
 Federal Ministry of Health
babkerali@yahoo.com

Mr. SALIH, Muhyeldeem
 Abdalla Mohammadi
 IMO
msalih@who.int

Don't you just wish we all stayed kids

