

SUDAN
CORONA VIRUS - COVID-19
COUNTRY PREPAREDNESS AND RESPONSE PLAN CPRP

Prepared by the Sudan Humanitarian Country Team
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1. BACKGROUND

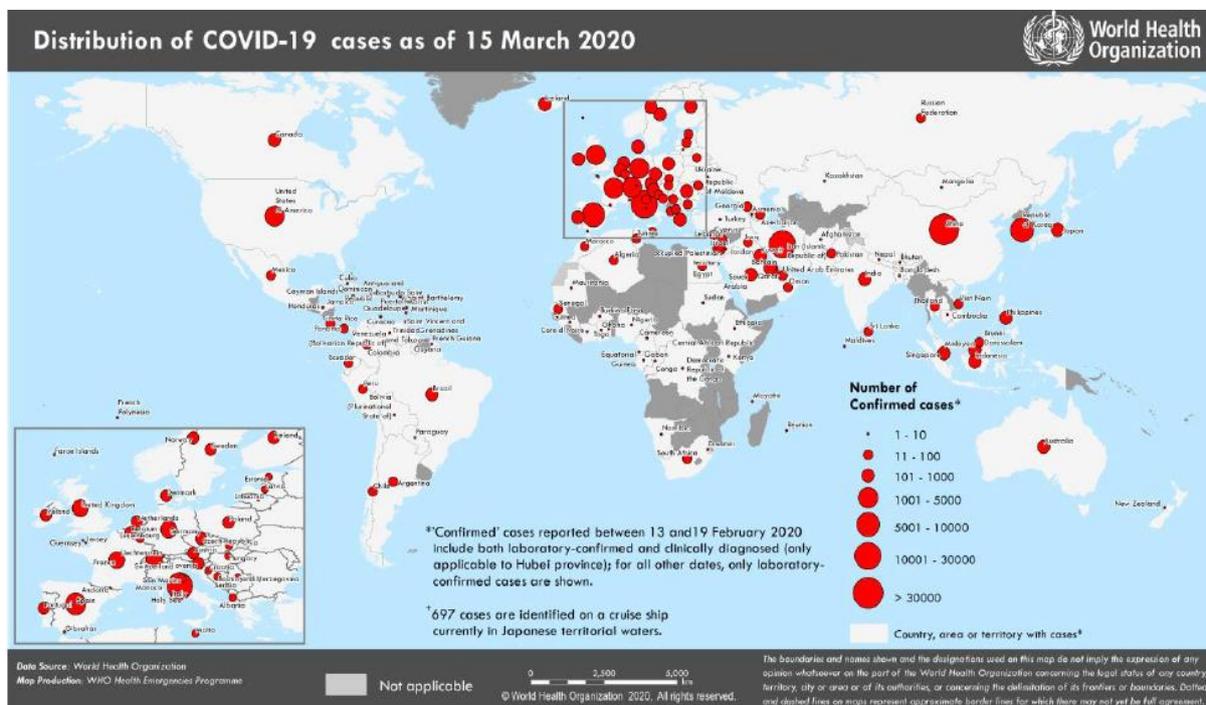
Coronaviruses (CoV) are of zoonotic origin, meaning they are transmitted between animals and people. The novel (new) Coronavirus (now named COVID-19) is a new strain that has not been previously identified in humans. The index cases detected in Wuhan City, Hubei Province, China on 31 December 2019. Early on, many of the patients in Wuhan, China had some link to a large seafood and live animal market, suggesting animal-to-person spread. Later, a growing number of patients reportedly did not have exposure to animal markets, indicating person-to-person spread. Chinese officials and other countries reported that sustained person-to-person spread in the community is occurring.

On January 30, 2020, the International Health Regulations Emergency Committee of the World Health Organization declared the 2019-nCoV outbreak a “Public Health Emergency of International Concern (PHEIC)”. This decision was made mainly to prevent spread of the virus in countries with weakest health systems so that all countries could be prepared for active surveillance, early detection, isolation and case management, contact tracing and mitigation of onward spread of COVID-19 infection.

On 6 February 2020 UN Development Coordination Office (UNDCO) hosted a call with WHO to brief all Resident Coordinators and UN Country Teams (UNCTs) to provide updates on the COVID-19 epidemiological situation and introduce the COVID-19 Strategic Preparedness and Response Plan (SPRP).

By 11 March 2020, the number of cases of COVID-19 outside China has increased 13-fold, and the number of affected countries has tripled affecting 118 countries, areas and territories globally. On the same day, the World Health Organization announced that the outbreak of COVID-19 “can be characterized a pandemic”.

As of 15 March 2020, a total of 153,517 confirmed COVID-19 cases with 5,735 associated deaths were reported globally. On 13 March 2020, Sudan reported the first fatal case of COVID-19 with travel history to UAE. Daily COVID-19 updates can be followed on WHO official website at this [link](#).



2. RISK TO AND IN SUDAN

The World Health Organization (WHO) rated Sudan as at risk for CoVID-19 spread based on risk profile and capacity of the country to respond to a potential outbreak. Sudan's health system is marked by decades of limited to no investment, underfunding, and lack of qualified staff, infrastructure, equipment medicines and supplies. The surveillance system doesn't cover the entire country and is structurally weak with long delays between alert and confirmation of an outbreak.

The points of entry (PoE) in the country are only rudimentarily equipped and insufficiently staffed. Widely spreading outbreaks of infectious diseases occur across the country each year. There is a lack of isolation units, intensive care units, infection control material, medicines and medical supplies and adequately trained staff to address quickly spreading outbreaks including the corona virus (covid-19) in all states across the country.

3. CURRENT SITUATION

A total of 935 passengers arrived in Sudan between 25 January and 10 March 2020 and were screened for COVID-19 at Khartoum International Airport. All arrivals are monitored on daily basis through phone calls to check if they develop symptoms for up to two weeks. However, only 59.3 % of the passengers adhere to the preventative measures and can be followed for 14 days.

WHO supported the Federal Ministry of Health (FMOH) to elaborate a countrywide preparedness and response plan including management of arrivals at the points of entry, isolation, patient care, infection prevention and control, supplies, risks communication, surveillance and capacity building. WHO Country office shares regularly with FMOH all information, guidelines, recommendations, protocols and risk communication materials provided by WHO HQ. Additionally, WHO field teams in the states support the State Ministries of Health (SMOH) in their respective efforts.

Since beginning of February, WHO has supported a number of key activities including (i) the setup of the intensive care unit (ICU) unit in Khartoum; (ii) provided medicines and medical supplies (iii) procured and supplied infection, prevention and control (IPC) materials and printed and distributed information, education and communication (IEC) materials for the risk communication activities of FMOH; (iv) trained about 65 staff at point of entry (PoE), trained 10 rapid response team (RRT) in Khartoum including orientation sessions in PoE for staff at Egyptian border; (v) performed Joint assessments of PoE in Khartoum and Red Sea State and supplied 156 test kits.

UNICEF has been supporting the FMOH, during the preparedness phase through (i) risk communication including reviewing and updating the risk communications strategy, developing the key messages for dissemination through print outs and digital forms and (ii) provision of the infection prevention and control supplies at some points of entry both in Khartoum and states and will continue to deliver additional supplies.

4. OBJECTIVES

The overall goal of the international response to the COVID-19 outbreak remains stopping the human-to-human transmission of the virus and caring for those affected. WHO is calling all partners to use this unique window of opportunity to act immediately to assist all countries to rapidly detect, diagnose, and prevent the further spread of the virus.

The main objective of this HCT COVID-19 Sudan Preparedness and Response Plan is to support the Government of Sudan's efforts in preparing and responding to COVID-19. This Country Preparedness and Response Plan (CPRP) outlines the measures to be taken at country level to contain the virus and will be updated with further guidance if the epidemiological situation changes. In line with the 2020 Sudan Humanitarian Response Plan – strategic objective 1 - through this plan, partners will respond to address to the pandemic focusing on high risk areas and adjust as needed. The plan also conforms with "operational planning guidelines to support country preparedness and response" by WHO HQ issued on 12 February 2020.

The costs outlined in the CPRP cover public health measures taken in support of national preparedness and response and do not include the broader measures required to mitigate the social and economic

consequences of COVID-19 or ensure business continuity of partner organizations. This guide outlines the priority steps and actions to be included in the CPRP across the major areas of the public health preparedness and response:

1. Country-level coordination.
2. Points of entry.
3. Surveillance, rapid-response teams, and case investigation.
4. National laboratories.
5. Case management.
6. Risk communication and community engagement.
7. Infection prevention and control IPC
8. Operational support and Logistics

5. POINTS OF ENTRY PRIORITIZED FOR PREPAREDNESS ACTION

The plan will prioritize nine high risk states bordering other countries and with international points of entry (land crossings, airports, and seaports) namely, Gadaref, Kassala, Khartoum, Red Sea, Northern, South Darfur, South Kordofan, West Darfur, White Nile, and.

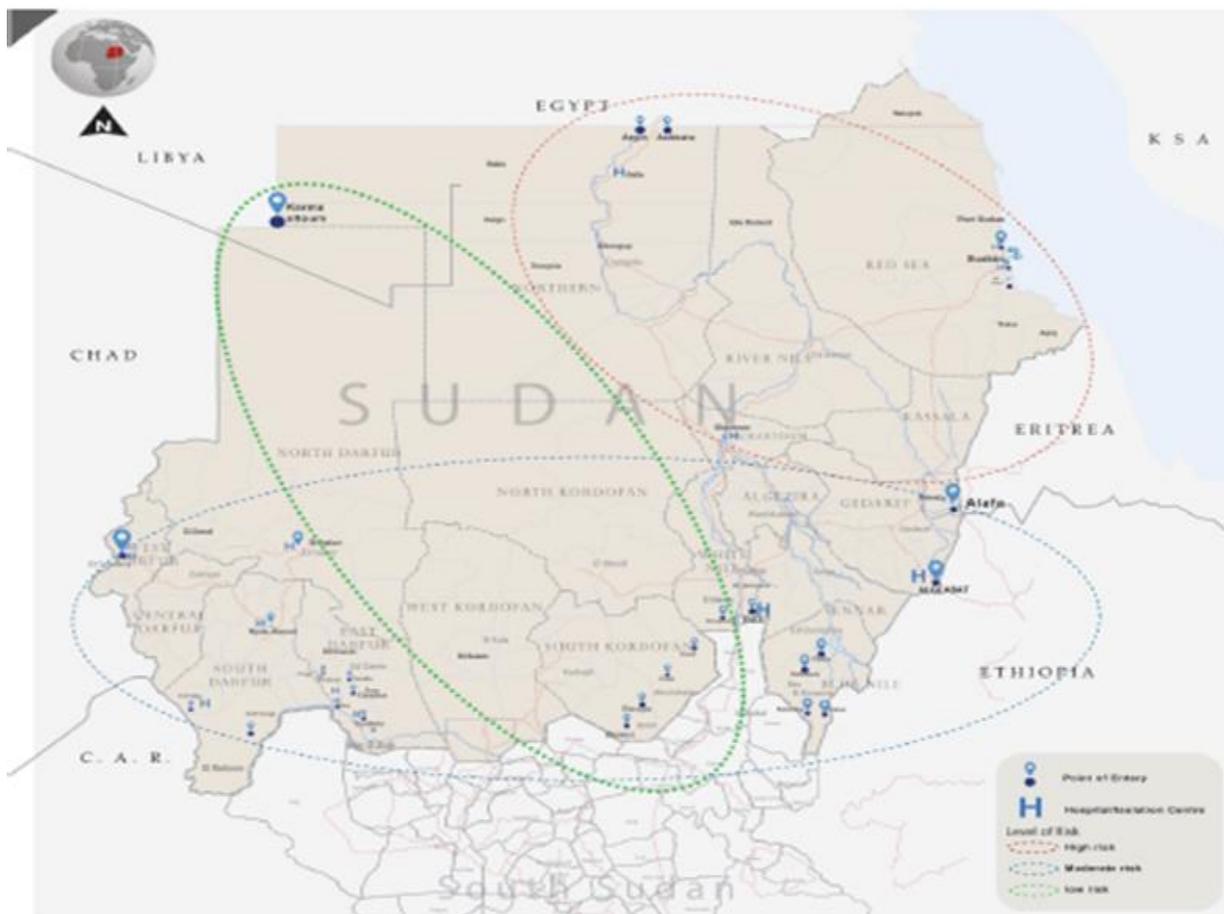


Figure 1: Prioritized Point of Entries in Sudan for Preparedness Actions against 2019-CoV

6. PREPAREDNESS AND RESPONSE PILLARS AND KEY ACTIVITIES

At the current stage of the response (given only one confirmed case as of 16 March), priority and funding should focus on limiting the spread of the virus through supporting risk management and infection prevention and control IPC measures both in the community and at facility level. In addition, surveillance, rapid response teams, and laboratory testing should be supported to enable quick identification, diagnosis and tracing of all suspected cases.

Preparedness and Response Pillars	Target	Cost (US\$)	Implementer	Remarks
1. Country-level coordination				
1.1 Establish Command and Control/IMS system	1 national level		WHO	
1.2 Establish and operate EOC at state level.	8 states	45,000	WHO	identify support needs and fill gaps to establish and run EOC in 8 States EOCs
1.3 Activate multi-sectorial coordination mechanism	N/A		OCHA	
1.4 Support emergency operations in high risk states	8 states	440,000	WHO /UNICEF	WHO - 240,000 Equip 8 priority States EOC UNICEF - 200,000
Sub total	0	485,000		
2. Points of Entry PoE				
2.1 Risk assessment for PoEs and prioritize the intervention	16 POEs	64,800	WHO / IOM	WHO/FMOH - risk assessment mission 50\$ per pers per day*3 day *16 PoE*2 pers IOM - 60,000 for 4 PoE
2.2 Training for PoE staff on surveillance and case definition/ referral protocols	500	12,000	WHO/ IOM	WHO - 120 staff from 16 PoE for 2 day \$50 per pers per day
2.3 Establish/ rehabilitate Isolation room in selected PoEs	16	240,000	WHO /IOM	WHO - rehabilitate 16 PoEs for isolation/quarantine * 15,000\$/PoE
2.4 Provide PPEs and IPC supplies in PoEs and their attached isolation rooms staff	16 POEs	132,800	WHO /IOM	WHO - Heavy Duty PPE 16 PPEs per PoE*50\$ per PPE* 4 staff in 16 PoE = 12,800 \$ WHO - Provides IPC supplies for PoEs staff for 3 months = \$2500/PoE*16PoE* 3 month =120,000\$
2.5 Provide Referral/Ambulance	16	67,500	WHO	WHO - Running cost for Ambulance at 15 PoEs (\$50 per day per Ambulance*15POEs for 90 days)
2.7 Print and distribute IEC materials to travelers.		308,000	WHO/UNICEF/ IOM	WHO- 288,000 IOM 20,000
Sub total		825,100		
3. Surveillance, rapid-response teams, and case investigation.				
3.1 Train and equip rapid response teams on case definition, contact tracing formats	160	16,000	WHO	WHO - 160RRT* @ 50\$/pers/day for 2 days
3.2 Production and distribution of guidelines, contact tracing, and case definition formats	13,500	64,800	WHO	WHO - 300 copies per day for each 16 PoEs@.15\$ for 90 days
3.3 Enhance existing surveillance system to enable monitoring and reporting of COVID-19 transmission.	15 RRTs	36,000	WHO	WHO - Support incentives for RRT to do contact tracing @ RRTs per PoEs * 15 PoEs*8\$ per person per day * 60 days *5 members per RRT
3.4 Produce weekly epidemiological reports and disseminate to all levels and international partners.	12	9,450	WHO	
Sub total		126,250		
4. National Laboratories				
4.1 Train staff on testing protocols and sample collection	36	3,600	WHO	WHO - 36 staff *50\$*2day
4.2 Provide PPEs	36 persons	7,200	WHO	WHO - 7,200 \$50/PPE* 4PPE/pers*36 pers
4.3 Samples transport	From 15 POE	337,500	WHO	WHO - \$50*15 PoEs*3day*150 samples
4.4 Build capacity for collection, storage and transportation of samples	9	22,500	WHO	WHO - Provision of lab supplies, reagents
4.5 Shipment of specimens to international reference laboratories	10	40,000	WHO	
Subtotal		410,800		

5. Infection prevention and control				
5.1 Prepare local messages and pre-test through a participatory process, specifically targeting key stakeholders and at-risk groups	3 million	500,000	UNICEF	UNICEF - 500,000
5.2 Disseminate IPC guidance and messages for home and community care providers in local languages and adopt relevant communication channels	4,800	320,500	UNICEF/WHO/ IOM/ UNHCR/WFP/ UNFPA	WHO - 30,000 to produce and distribute IPC messages through IEC materials UNICEF - 100,000 UNHCR - 80,500 for 30 refugee locations for 3 months and outreach volunteers UNFPA - 60,000 targeted to midwives IOM - 60,000 targeting migrant communities and some IDPs and returnees
5.3 Carry out training to address any skills and performance deficits and Engage trained staff with technical expertise to implement IPC activities, prioritizing based on risk assessment and local care-seeking patterns	1,500	400,000	WHO/UNICEF	WHO - train health workers on COVID-19 risk communication 1500 HWs*50*2day UNICEF - 250,000
5.4 Support access to water and sanitation for health (WASH) services in public places and community spaces most at risk.		1,590,000	UNICEF/IOM	UNICEF - 1,500,000 IOM - 90,000
5.5 Improve WASH facilities in designated health facilities for COVID isolation centres	9	540,000	WHO	WHO - 9 health facilities* 60,000\$
5.6 Provision of PPE to the health centre workers at state level		500,000	UNICEF	UNICEF - 500,000
Subtotal		3,850,500		
6. Case Management				
6.1 Identify Intensive Care Unit capacity in terms of equipment and supplies and renovation	9	2,520,000	WHO	WHO - Support 9 isolation centers with ICU equipments@280,000\$/ICU WHO: support rehabilitation of isolation centres@ 80000\$ * 9 isolation centres
6.2 Ensure that guidance is made available and disseminated for the self-care of patients with mild COVID-19 symptoms, including guidance on when referral to healthcare facilities is recommended	9	202,500	WHO	WHO - produce and distribute guidelines and IPC supplies to improve case management at isolation centres @7500\$*9 ICU*3 months
6.3 Ensure comprehensive medical, nutritional, and psycho-social care for those with COVID-19.	9	1,144,000	WHO/UNICEF	WHO - train health workers on case management @ 90 health workers from 9 Isolation centres*50\$/day*2 days UNICEF - 1,000,000
6.4 Establish dedicated and equipped teams and ambulances to transport suspected and confirmed cases, and referral mechanisms for severe cases with co morbidity.	9	224,640	WHO	WHO - support incentives for health workers at isolation centres: 3 chest physician \$20/day for 60 days*9 ICU= \$32,400; 2 GPs*3 shifts*\$10/shift*9 ICUs for 60 days= \$32,400; 7 nurses per shift X 4 shift *8 USD* 9 ICU*60 days= 120,960; 3 cleaner/shift*3shift*8\$/shift*9 isolation for 60 d = \$38,880
Subtotal		4,091,140		
7. Risk communication and community engagement				
7.1 Prepare local messages specifically targeting key stakeholders and at-risk groups			UNICEF	
7.2 Disseminate IPC guidance for home and community care providers	1800	463,500	UNICEF/IOM/ UNHCR/WFP	UNICEF - 300,000 UNHCR 103,500 for 30 refugee locations IOM 60,000
7.3 Dissemination of messages and materials in local languages and adopt relevant Communication channels.	3 million	2,100,000	UNICEF/IOM/ UNHCR/WFP/ UNFPA	UNICEF - 2,000,000 UNHCR 40,000 includes translation for 3 refugee population languages UNFPA - 50,000 IOM - 10,000
7.4 Engage with existing community-based networks, media, local NGOs, schools, local governments and other sectors such, education sector, business using a consistent mechanism of communication	300	583,739	UNICEF /WHO	WHO/FMOH - establish and run a call centre/hot line for COVID-19 as per FMOH request UNICEF - 500,000
Subtotal		3,147,239		
8. Operational support and Logistics				

8.1 Review supply chain control and management system (stockpiling, storage, security, transportation and distribution arrangements) for medical and other essential supplies, including COVID-19 DCP and patient kit reserve in-country	500,000	WHO/UNICEF/ WFP	WHO - 300,000 to Transport and storage of medical supplies UNICEF - 200,000
8.2 Review procurement processes (including importation and customs) for medical and other essential supplies, and encourage local sourcing to ensure sustainability	30,000	WHO/UNICEF/ WFP	UNICEF - 30,000
8.3 Assess the capacity of local market to meet increased demand for medical and other essential supplies, and coordinate international request of supplies through regional and global procurement mechanisms spaces most at risk		WFP	This will be based on requirements from partners. WFP has storage capacity on a cost recovery basis in Kosti, El Geneina, Kadugli, Nyala, El Obeid, Zalingei, El Fasher, Kassala and Ed Daein and can also provide estimates for transportation.
8.4 Identify and support critical functions that must continue during a widespread outbreak of COVID-19	75,000	All	WHO - To support WHO BCP
Subtotal	605,000		
Grand Total	13,541,029		

REQUIREMENTS BY AGENCY

Agency	Requirements (US\$)
IOM	300,000
UNICEF	7,080,000
UNHCR	224,000
UNFPA	100,000
WHO	5,837,029
Grand Total	13,541,029

7. KEY ACTIVITIES BY SECTOR TO SUPPORT PREPAREDNESS AND RESPONSE TO COVID-19

All the below activities are guided the pillars outlined in the CPRP. However, it is critical that all partners (UN and NGOs) through their regular programmes contribute and support community engagement through distribution of IEC material and hygiene promotions/awareness as they implement the regular programmes/activities.

Sector Partners	Key Activities
Education	<ul style="list-style-type: none"> • Risk communication and community engagement especially through schools and media • Infection prevention and control • Psycho-social support for affected populations
Emergency Shelter and Non-Food Items	<ul style="list-style-type: none"> • Support risk communication and community engagement. • Support infection, prevention and control through distribution of IEC material and community awareness
Health	<ul style="list-style-type: none"> • Country-level coordination, planning, and monitoring. • Surveillance, rapid response teams, and case investigation. • Support points of entry. • National laboratories. • Infection prevention and control • Case management. • Psycho-social support for affected populations
Logistics	<ul style="list-style-type: none"> • Operational support and logistics
Nutrition	<ul style="list-style-type: none"> • Support case management through providing nutritional requirements for patients
WASH	<ul style="list-style-type: none"> • Risk communication and community engagement. • Support the setup of WASH facilities and hygiene campaigns at Points of entry. Support to WASH interventions at treatment or health centers identified for referral/treatment. • Infection prevention and control through distribution of materials and hygiene campaigns

8. COORDINATION AND MONITORING

The HC/HCT will oversee overall coordination and implementation of the COVID-19 plan through the sector lead agencies and OCHA will support inter-sectoral coordination. Activity coordination will be through the designated sectors that include NGOs and UN Agencies. WHO will support coordination with FMOH and also facilitate inter-state communication and reporting through the designated emergency operation centers Emergency Operation Centres (EOC).

The plan will be monitored against a set of key performance indicators in the SPRP, track progress, and review performance to adjust the plan as needed. The indicators will monitor:

- i. Percentage of Funding of the plan.
- ii. Percentage of utilization of funded activities.
- iii. Achievements per activity against the proposed target.

An after-action review AAR will be conducted within three months of completion of the plan with the implementation period being subject to ending the status of global endemic and COVID-19 epidemiological situation in Sudan.