

Malaria and VHF Outbreak in Darfur, Sudan Situation Report No 06, 16th November 2015 Federal Ministry of Health | World Health Organization

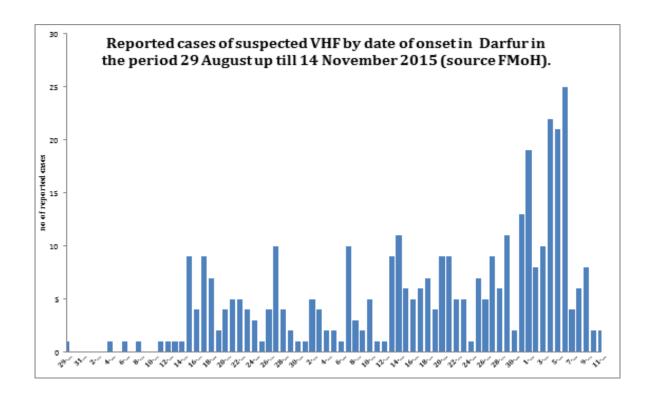


Highlights

- In the period of 29th August to 14th of November, 2015 a total of 392 suspected VHF including 113 deaths were reported in South, East, Central, West and North Darfur. This includes the 98 re-classified suspected cases based on the recommendation of the WHO expert who conducted last week the retroactive analysis of health facilities records in West Darfur.
- 148 new cases, with 3 deaths, have been reported since 9 November, 2015 (last reporting period). This significant increase could be mainly the result of improved surveillance, reporting and active case finding by staff trained on WHO case-definition
- Laboratory analysis of 84 samples collected from cases, revealed 6 positives for Dengue fever in Central Darfur, 10 positive in West Darfur and 1 positive in North Darfur using ELISA IgM. 8 positive for West Nile virus and 1 positive for Chikungunya. All the samples tested negative for Yellow fever, Crimean Congo Hemorrhagic Fever (CCHF), and Rift Valley Fever.
- Analysis of 81 samples collected from contacts revealed 23 Dengue positive (2 in Central Darfur, 20 in West Darfur, and 1 positive in North Darfur) using ELISA IgM. Laboratory analysis also revealed 1 positive for West Nile, and 3 positive for Chikungunya. All the samples tested also negative for Yellow fever, CCHF, and Rift Valley Fever.
- Positive blood samples and part of negative samples were well received at Institute Pasteur in Dakar for reconfirmation and further laboratory analysis (sero-typing of Dengue virus currently involved in this outbreak).
- No human to human transmission reported nor large sickness in animals.

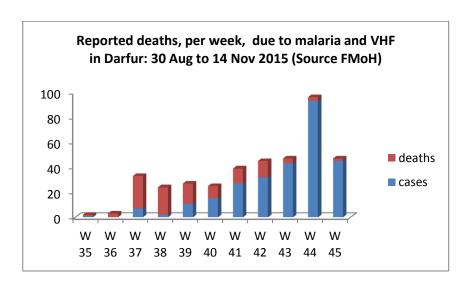
Epidemiology

- 21 localities in Greater Darfur are currently affected by the outbreak (Zalingei, Azoom, Mukjer, Nertity, Wadi Salih, Bendecy, Keraink, Genaina, Habila, Beida, Sirba, Alseraif, Saraf Omra, Aliaat, Elfashir, Kubum, Belail, Kass, Eddaein, Asslaya and Adeela).
- Additional 4 localities (as compared with previous report) are now affected by the outbreak: Sirba (in West Darfur), Elfashir (in North Darfur), Belail and Kass (in South Darfur).
- About 70.7% of the reported cases are from West Darfur, 13.5% from Central Darfur, 11% from North Darfur, 3.3% from East Darfur and 1.5% are from South Darfur.
- 53% of all reported cases are males. Age distribution of the cases: 5.2% in the age group 0-1.9 years, 14% in the age group 2-4.9 years, 45.4% in the age group 5-14.9 years, 20.4% in the age group 15-29.9 years, 8.2% in the age group 30-44.9 years and 6.8% in the age group ≥45 years.
- So far, no evidence of person to person transmission, as well as no reported cases among medical staff
- Ongoing veterinary surveys show no evidence of infection and no reports of perished animals or abortions.
- No neurological or ocular signs were reported among affected cases.



WHO Khartoum/Regional Technical mission deployed to West Darfur concluded that the initial investigation reports of the state RRT from the epicenter (Keraink) of the outbreak reported the deaths recalled by family members; the retrospective analysis points out that some of reported death were misclassified and could be caused by malaria (no hemorrhagic symptoms) or other causes (especially the ones without fever). The findings suggest the standard case definition for VHF was not systematically applied during initial investigations.

The graph below show reported suspected Malaria and VHF cases and deaths per week in Greater Darfur.



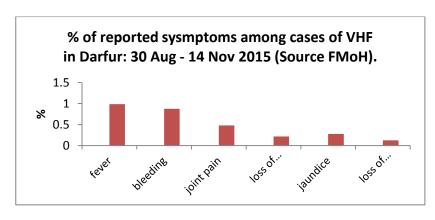
There is a significant and consistent reduction in the number of death due to better access to appropriate care, and active case finding and consequent early treatment. Re-classification of missed cases and , as well more accurate surveillance based on WHO case-definition and lab results

resulted in increased denominator, and decreased Case Fatality Rate of the outbreak.

Table below: attack rate (AR), case fatality rate (CFR) and date of last reported case per affected locality in Darfur: 29th Aug- 14 November 2015.

State	Locality	No. of Cases	No. of Death	CFR	AR/ 10000	Date of Last Case Admitted	Date of Last Case Reported
Central Darfur	Zalingei	32	3	10	1.21	11-Nov-15	12-Nov-15
	Azoom	4	4	100	0.66	11-0ct-15	12-0ct-15
	Mukjer	8	1	13	1.17	12-Nov-15	14-Nov-15
	Nertity	5	1	20	0.30	1-Nov-15	4-Nov-15
	Wadi Salih	3	0	0	0.13	2-Nov-15	3-Nov-15
	Bendecy	1	0	0	0.15	31-0ct-15	1-Nov-15
	Total	53	9	17	0.62		
West Darfur	Keraink	119	77	35	6.71	13-Nov-15	15-Nov-15
	Genaina	55	9	16	1.82	14-Nov-15	15-Nov-15
	Habela	1	1	100	0.12	31-0ct-15	31-0ct-15
	Beida	1	0	0	0.07	1-Nov-15	4-Nov-15
	Sirba	1	0	0	0.09	5-Nov-15	6-Nov-15
	Total	277	87	31.4	2.85		
North Darfur	Alseraif	39	13	33	5.90	1-Nov-15	5-Nov-15
	Saraf Omra	1	1	100	0.12	7-0ct-15	8-0ct-15
	Aliaat	2	1	50	0.24	20-0ct-15	24-0ct-15
	El Fashir	1	0	0	0.01	10-Nov-15	11-Nov-15
	Total	43	15	34.9	0.45		
South Darfur	Kubum	2	0	0	0.06	5-Nov-15	8-Nov-15
	Belail	1	0	0	0.05	4-Nov-15	8-Nov-15
	Kass	3	0	0	0.03	13-Nov-15	14-Nov-15
	Total	6	0	0	0.04		
East Darfur	Eddaein	7	2	29	0.43	13-Nov-15	15-Nov-15
	Asalaya	5	0	0	0.35	14-Nov-15	15-Nov-15
	Adeela	1	0	0	0.08	1-Nov-15	1-Nov-15
	Total	13	2	15.4	0.30		
Total		392	113	28.8	0.84		

The most frequent reported symptoms are fever (98.5%), bleeding (87.5%), joint pain (48.2%) and jaundice (27.8%), please see below.



Actions taken

- Positive and negative blood samples were well received at Institute Pasteur in Dakar for reconfirmation and further laboratory analysis (sero-typing of virus).
- WHO supported training in case management of 115 medical staff; Keraink and Geneina hospitals (65 people) in West Darfur, targeted medical doctors, training of 50 health staff in East Darfur (Eddaein, Adeela, Assalaya, and Bahr El Arab),
- Additional 44 surveillance sites across West Darfur (the most affected) state have been activated; at present 89 sites are reporting on DF and malaria on daily basis.
- The CDC guidance and protocol for Dengue fever translated by WHO into Arabic language.
- Vector control in Keraink and Geneina towns supported by WHO; house to house larvicide covered more than 1200 households and fogging 9000 households (5000 people). In East Darfur vector control activities supported by WHO and jointly implemented with MOH covered 45% of the target (around 3,000 HHs). So far around 30% of the necessary vector control activities have been implemented in affected localities.
- UNICEF provided financial support to SMoH to operate one mobile clinic and to conduct health education campaigns in 3 IDP camps in Kerindag, Keraink, and Um Tajouck (1700 House Holds covered).
- The treatment centre at Geneina teaching hospital is jointly supported by MSF (management and staff) and WHO (medicines, equipment, tools and small repairs) and there are 18 new admissions since last reporting period.
- IMC conducted health education campaign in Ardamata and Dorti IDP camps targeted 800 HHs, conducted training for 26 health care providers on case management using WHO guidelines in its operational areas. On the other hand IMC supported vector control by 3 vehicles in Geneina, Keraink, and Beida.
- Save the Children conducted training on case management at Keraink hospital target 21 health care providers, and orientation session was conducted for other 17 health staff and health promotion in Morni camp (1000 HH).
- World Relief has sent additional drug supply to WR clinics in Keraink in addition to continue on health education at community level.
- Concern conducted health awareness in Aryab and Abuzer camps, so far covering 600 HHs.

Recommendations

- Continue to expand zero case surveillance and improve the accuracy of reporting by integrating into the existing surveillance of all Health Facilities functional across all affected Darfur states.
- Increase the number of mobile teams engaged in active case finding (from present 4 to at least 10)
- Establish sustainable vector surveillance to include all viral hemorrhagic fever indices across all Darfur states to facilitate and guide response action as well as preparedness for next season.
- Faster implementation/expansion of integrated vector control activities with engagement of families
 and communities in prevention activities including: kill adult mosquitoes by indoor spraying, search for
 and destroy larva breeding sites in and surrounding household, cover water containers to prevent
 mosquito egg-laying, sleep under bed nets, wear protective clothing and use mosquito repellents. A
 revision of the target necessary to include the newly affected districts and surounding
- Sustain the free-of-charge treatment in all affected localities, while improving the quality of care and adherence to universal precaution and infection prevention.
- Advocacy and resources mobilization to support the response and containment of the outbreak

