



Highlights

- In the period of 29th August to 8th of November, 2015 a total of **244** suspected VHF including **110** deaths were reported in South, East, Central, West and North Darfur. Overall the epidemiological situation seems to have slowed down. 17 new cases reported during the period between 4-8 November and only few cases reported from the most affected area Kereinik in West Darfur.
- Laboratory analysis in 50 samples collected from cases, revealed 9 positive for Dengue fever in West Darfur and one positive in North Darfur using ELISA IgM, 8 positive for West Nile virus and one positive for Chikungunya. All the samples tested negative for Yellow fever, Crimean Congo Hemorrhagic Fever (CCHF), and Rift Valley fever. No new samples from patients tested since 5th November



Zalengi treatment centre: WHO representative field visit

- Analysis of 66 samples collected from contacts revealed 17 Dengue positive in West Darfur and one positive in North Darfur using ELISA IgM. One positive for West Nile, and 3 positive for Chikungunya. All the samples tested negative for Yellow fever, CCHF, and Rift Valley fever.
- The retrospective analysis (by WHO regional expert and FMOH epidemiologist) of cases in Kereinik hospital identified more than 100 suspected cases were not reported due to oversight during the past 2-3 weeks. They will be re-classified and added to the reports in the respective weeks.
- Further confirmation through detailed epidemiological and clinical investigation including laboratory testing are conducted by the teams of WHO and FMOH experts together with partners in the field as the outbreak appears to be resulted from dengue fever complicated by malaria and other underlining conditions common amongst affected population.

Epidemiology

- 17 localities in Greater Darfur are currently affected by the outbreak (Zalengei, Azom, Mukjer, Nertity, Wadi Salih, Bendecy, Keraink, Genaina, Habila, Beida, Alseraif, Saraf Omra, Aliaat, Kubum, Eddaein, Asslaya and Adeela). One new affected locality is Beida.
- About 61.1% of the reported cases are from West Darfur, 19.2% from Central Darfur, 15.6% from North Darfur, 3.7% from East Darfur and 0.4% are from South Darfur.
- 53% of all reported cases are males. Age distribution of the cases: 3.9% in the age group 0-1.9 years, 15.7% in the age group 2-4.9 years, 46.9% in the age group 5-14.9 years, 20.1% in the

age group 15-29.9 years, 8.7% in the age group 30-44.9 years and 4.7% in the age group ≥45 years.

- 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 signs were reported among affected cases.

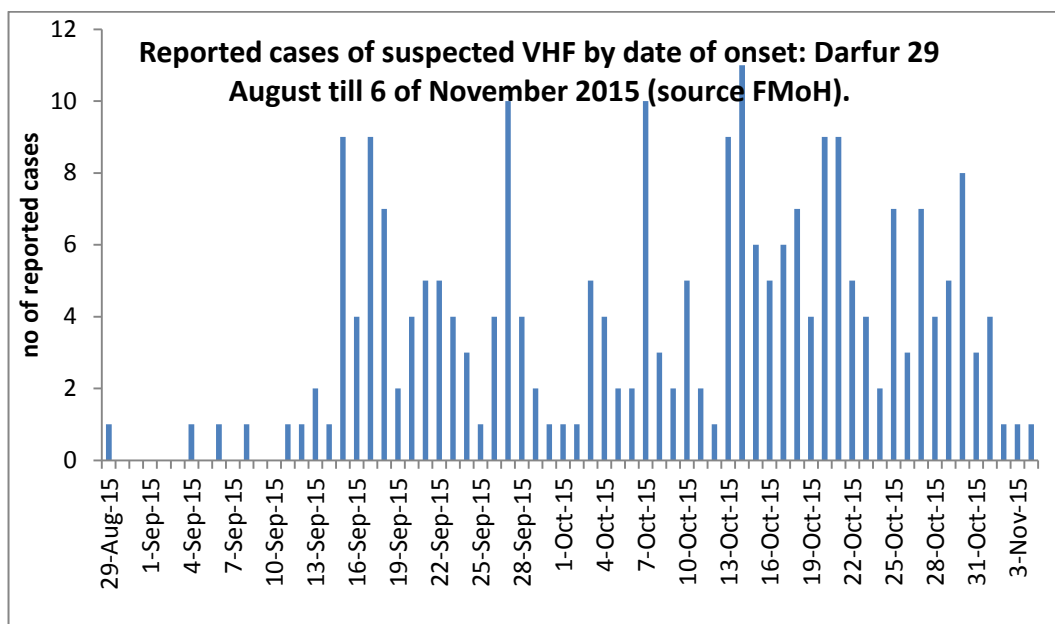
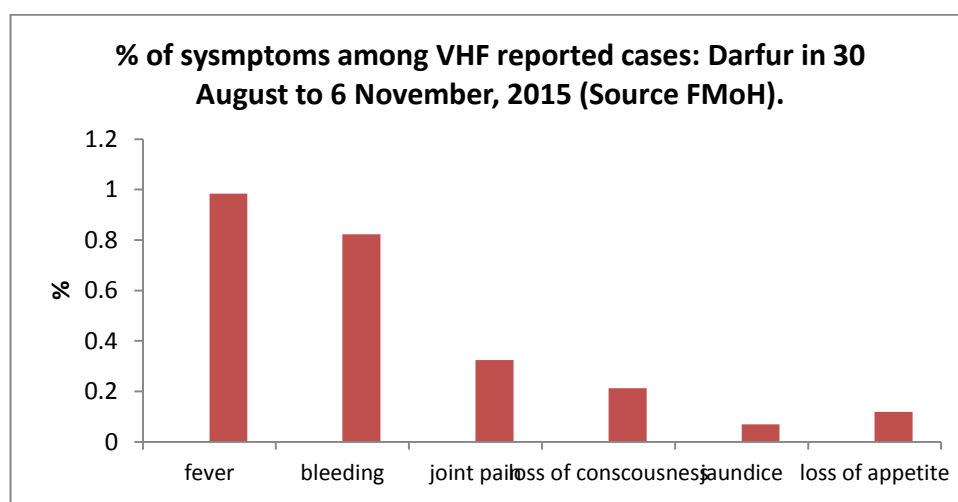


Table below: attack rate (AR), case fatality rate (CFR), history of Yellow Fever vaccination and date of last reported case per locality in Darfur; 29th August up to 6th of November 2015.

State	Locality	No. of Cases	No. of Deaths	CFR	AR/10000	Date of Last Case Admitted	Date of Last Case Reported
Central Darfur	Zalingei	29	3	10	1.09	4-Nov-15	4-Nov-15
	Azom	3	3	100	0.49	4-Oct-15	6-Oct-15
	Mukjer	6	0	0	0.88	3-Nov-15	4-Nov-15
	Nertity	5	1	20	0.30	29-Oct-15	31-Oct-15
	Wadi Salih	3	0	0	0.13	2-Nov-15	3-Nov-15
	Bendecy	1	0	0	0.01	31-Oct-15	1-Nov-15
	Total	47	7	14.9	0.55		
West Darfur	Kereinik	114	77	68	3.49	3-Nov-15	4-Nov-15
	Genaina	33	8	24	1.09	3-Nov-15	4-Nov-15
	Habela	1	1	100	0.12	31-Oct-15	31-Oct-15
	Beida	1	0	0	0.07	1-Nov-15	4-Nov-15
	Total	114	86	64	1.73		
North Darfur	Alseraif	36	13	36	5.45	1-Nov-15	5-Nov-15
	Saraf Omra	1	1	100	0.12	7-Oct-15	8-Oct-15

	Aliaat	1	1	100	0.12	20-Oct-15	24-Oct-15
	Total	38	15	39.5	1.64		
South Darfur	Kubum	1	0	0	0.03	21-Sep-15	22-Sep-15
	Total	1	0	0	0.03		
East Darfur	Eddaein	5	2	40	0.30	26-Oct-15	27-Oct-15
	Asalaya	3	0	0	0.21	24-Oct-15	2-Nov-15
	Adeela	1	0	0	0.08	1-Nov-15	1-Nov-15
	Total	9	2	22.2	0.21		
Total		244	110	45.1	0.89		

The most frequent symptoms are fever (98.4%), bleeding (82.8%), joint pain (32.4%) and jaundice (7.0%), please see below.



Actions taken

- Between 5th and 10th November a high level technical support team led by the WHO Country Representative and Head of Mission visited West and Central Darfur. The team, worked with partners on the retrospective reclassification of cases, epidemiological analysis, and assessment of the local capacities, needs and urgent gaps.
- The WHO representative had meetings with all health partners and local authorities to encourage a multi-sectorial coordinated response to the outbreak.
- The Sate Minister of Health and the Undersecretary for Health also visited West and Central Darfur with intensified field support and monitoring the situation closely.
- Health awareness activities initiated and are mainly conducted by NGOs (SC, IMC, MSF, Al Massar, NCA, IRW, WR, HI).
- Vector control activities have started in 12 out of 16 affected localities with support of WHO and FMOH and over 13 thousand houses would to be covered in the first three weeks. Fogging, spraying machines and insecticides reached all Darfur states, and this week the activities will be expanded to all affected areas
- An additional doctor had been deployed with WHO support in Kereinik hospital to cater increased caseload of patients (majority suffering from malaria)
- States joint MOH/WHO Rapid Response Teams continues to conduct alert investigations where necessary and samples from suspected cases are sent to Khartoum.
- The Federal and States Task Forces have been meeting on daily basis.

Recommendations

- The most deficient areas not yet addressed and that requires immediate improvement are; surveillance (disease and entomological surveillance), and case management especially at hospital level. This underlines the weakness of health system in Darfur that would need to be able addressed also in the long run.
- Blood banks functionality at hospital level is a major concern along with staff skills for case management.
- Urgent additional resources to be mobilised to support FMoH and WHO to intensify and expand integrated vector control activities to all affected localities and the neighboring ones.
- Increase NGO partners involvement in health awareness and education of communities for prevention and control of vector borne diseases.



World Health Organization

Suspected Cases of Viral Hemorrhagic Fever & Malaria in Darfur States as of 6 of November, 2015

