



**Malaria and VHF Outbreak in Darfur, Sudan**  
**Situation Report No 02, 27 October 2015**  
**Federal Ministry of Health | World Health Organization**



## Highlights

- In the period of 29<sup>th</sup> August to 25<sup>th</sup> of October, 2015 a total of **182** suspected VHF including **103** deaths were reported in South, East, Central, West and North Darfur (Case fatality rate of 56.6%)-more than 50 cases were added on backdated basis to the line list.
- 36 blood samples were collected (from cases and contacts) and analysed at the Central Public Health Laboratory in Khartoum. 3 cases were found positive for West Nile virus infection in Central and North Darfur. 4 positive were identified as Chikungunya in West and Central Darfur. The rest of the samples were found negative for Yellow fever, Crimean Congo Haemorrhagic Fever (CCHF), Dengue Fever and Rift Valley fever.

## Epidemiology

- 12 localities in Darfur are currently affected by the outbreak (Zalingei, Azom, Mukjer, Nertity, Keraink, Genaina, Alseraif, Saraf Omra, Aliaat, Kubum, Eddaein and **Asslaya**).
- About 18.1% of the reported cases are from Central Darfur, 60.4% are from West Darfur and 18.1% are from North Darfur, 0.5% South and 2.7% from East Darfur.
- 53% of all reported cases are males. 2.2% of the reported cases are in the age group 0-1.9, 13.7% is in the age group 2-4.9, 31.3% are in the age group 5-14.9, 9.9% are in the age 15-29.9 and 5.5% are 30-44.9 years.

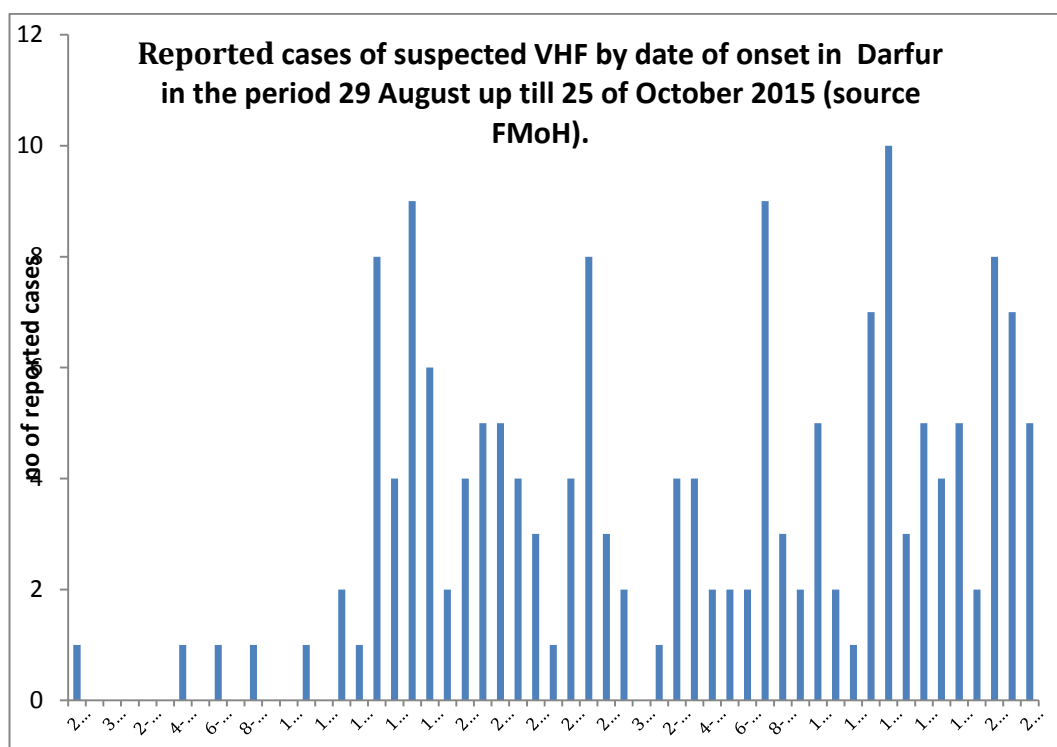
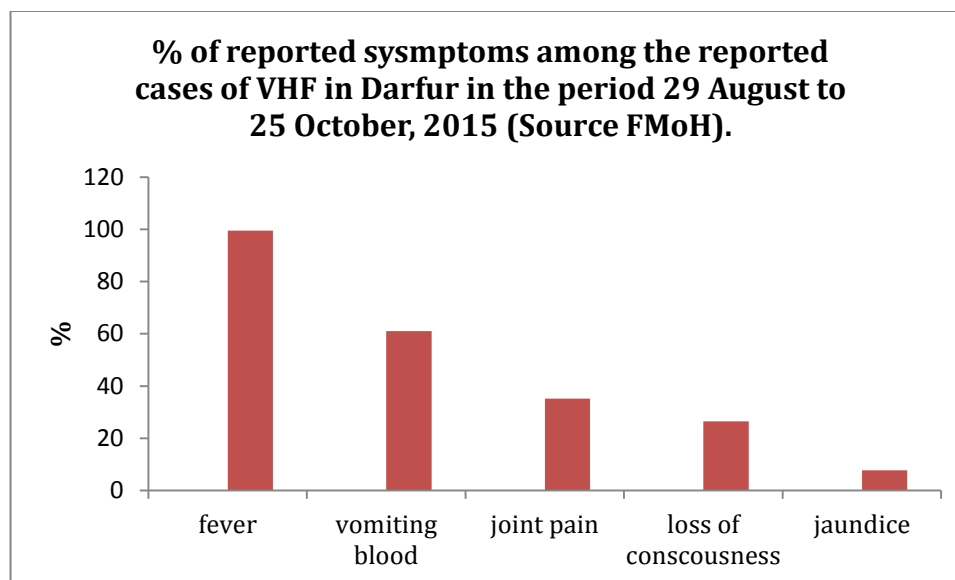


Table below shows attack rate (AR), case fatality rate (CFR), history of Yellow Fever vaccination and date of last reported case per locality in affected localities in Darfur in the period 29<sup>th</sup> August up to 25<sup>th</sup> of October 2015.

State	Locality	No of cases	Attack rate/10000 population	Deaths	CFR	History of Yellow fever Vaccination status (%)			Date of last reported case
						Yes	no	unknown	
Central Darfur	Zalingei	26	0.98	3	12%				23 Oct
	Azoom	3	0.49	3	100%				6 Oct
	Mukjer	2	0.29	0	0%				22 Oct
	Nertity	2	0.12	0	0%				23 Oct
	<b>Sub Total</b>	<b>33</b>	<b>0.59</b>	<b>6</b>	<b>18.2%</b>	<b>57.6%</b>	<b>42.4%</b>	<b>0%</b>	
North Darfur	Alseraif	31	4.69	13	42%				26 Oct
	Saraf Omra	1	0.12	1	100%				6 Oct
	Aliaat	1	0.12	1	100%				24 Oct
	<b>Sub Total</b>	<b>333</b>	<b>1.42</b>	<b>15</b>	<b>45.5%</b>	<b>39.4%</b>	<b>57.6%</b>	<b>3%</b>	
West Darfur	Kerink	98	3	75	77%				25 Oct
	Genaina	12	0.4	6	50%				23 Oct
	<b>Sub Total</b>	<b>110</b>	<b>1.75</b>	<b>81</b>	<b>73.6%</b>	<b>7.3%</b>	<b>46.4%</b>	<b>46.4%</b>	
South Darfur	Kubum	1	0.03	0	0%				22 Sept
	<b>Sub Total</b>	<b>1</b>	<b>0.03</b>	<b>0</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	
East Darfur	Eddaein	3	0.18	1	33.3%				25 Oct
	Assalaya	2	0.14	0	0%				24 Oct
	<b>Sub Total</b>	<b>5</b>	<b>0.16</b>	<b>1</b>	<b>20%</b>	<b>0%</b>	<b>20%</b>	<b>80%</b>	
<b>Grand Total</b>		<b>182</b>	<b>0.87</b>	<b>103</b>	<b>56.6%</b>				

The most frequent symptoms are fever (99.5%), bleeding (vomiting) (61%), joint pain (35.2%) and jaundice (7.7%), please refer to fig below.



#### **Actions taken**

- To support case management on the ground FMOH deployed medical and nursing teams to the affected states (please provide numbers).
- Additional Personal Protective Equipment will be sent as 400 sets for North Darfur, 600 to East Darfur and 500 to each of West, South and Central Darfur
- Vector control activities (entomological surveillance, outdoor and indoor spraying, treatment of the breeding sites and community awareness) started in West Darfur on 26 October 2015. The rest of the states planned to start within the coming 2 days. Additional pumps and fogging machines will be

transported to the Darfur states as detailed below:

Item	Amount	Destination
Fogging Machines	12	4 in CD, 5 in WD and 3 in ED
Hudson Pumps	60	20 in WD, 20 in CD, 10 in ED and 10 in SD
Abate	400 L	100 L for each state ( WD, SD, ED, CD)
Cypermthrine	400 L	100 L for each state ( WD, SD, ED, CD)

## Recommendations

- WHO recommends that National Task Force to be activated at the federal level in order to follow up and guide response plan.
- WHO recommends shipping the collected blood sample to WHO Collaborating Centre for re-confirmation.

