

Highlights

- ❖ The reporting timeliness of Early Warning and Alert Response System, (EWARS) of Darfur for the current week was 71%
- ❖ ARI, Malaria and Bloody Diarrhoea continue to be the leading causes of morbidity in Darfur.
- ❖ There has been increase in the number of acute watery diarrhea (AWD) cases in Yei, Tambura, Juba and Wau Counties, in South Sudan.
- ❖ Cases of suspected meningitis continue to be reported from Western Equatoria State
- ❖ Suspected cases of Dengue fever were reported from Kassala and Red Sea state.
- ❖ A state of alert is being assumed in Southern Sudan after confirmation of Yellow fever and Ebola in Uganda.

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This weekly epidemiological bulletin is published jointly by the FMOH of the Government of Sudan and WHO. This bulletin is built upon surveillance data that are reported, every week, by the health services providers to the Disease Early Warning System of Darfur which presently cover over 90% of IDP settlements in the region. The Weekly Morbidity and Mortality Bulletin (WMMB) provides a snapshot of weekly trend of epidemic prone diseases that are registered in the health facilities serving the IDPs in Darfur and other parts of Sudan as well. The bulletin does not, however, cover health information from areas where no health services are currently offered to the IDPs in Darfur.

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I. Darfur

I.I Reporting timeliness

For the week 1 of the year 2008 (30th of December 2007 to 5th of January 2008), 90 of 126 reporting units (71%) of the **Early Warning and Alert Response System (EWARS)** of Darfur have sent their surveillance data on time. The “benchmark” for reporting timeliness of EWARS, in order to periodically monitor the quality of the surveillance performance of EWARS, has been set at 85%. Due to various challenges including security, accessibility and communication problems, the target still remains to be achieved. However, reported decrease in last two weeks is being attributed to festival and holidays.

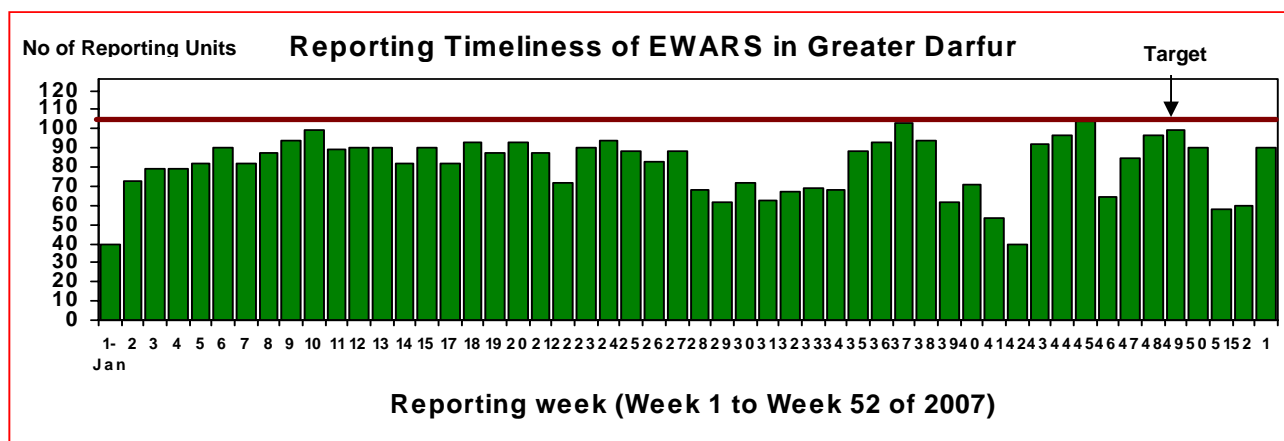


Figure 1. Reporting units, Greater Darfur, Sudan, week 1, 2007 - 1 of 2008

I.II Population under surveillance and consultations

The total number of **consultations** reported throughout Greater Darfur this week was 8341 (Figure-2) which shows a decrease of 70% compared to the total consultations reported in the previous week 52 (27,234). The number of **population under surveillance** for the current reporting week was 864,604 which shows decrease of 30% compared with the last week (1,219,661 reported in week 52). The health service utilization rate for week 52 was 0.5 visits/person/year.

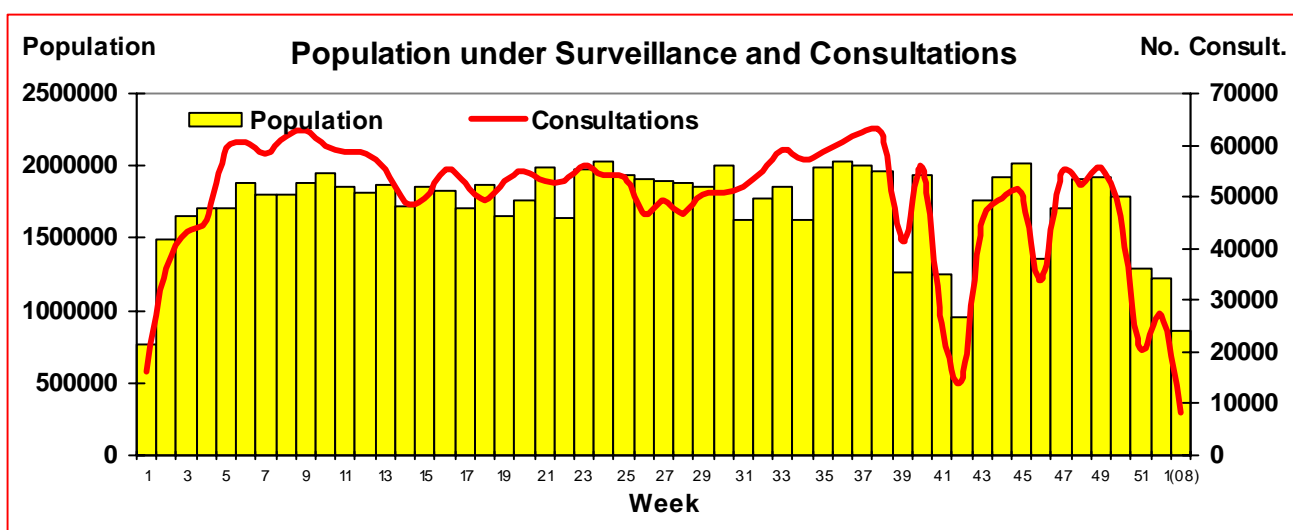


Figure 2. Weekly distribution of population under surveillance and consultations, Greater Darfur, Sudan, Week 1 of 2007 to Week 1 of 2008

I.III Proportionate morbidity and mortality of reported health events

During this week, a total of 8341 health events under surveillance were reported from Darfur. Of these 2,911 health events (35%) were reported in less than 5 year age group while the remaining 5,430 health events (65%) were reported in the above 5 year age group (Fig. 3). In the above 5 year age group, 18% of reported cases were attributed to **Acute Respiratory Tract Infection (ARI)** while **Clinically Diagnosed Malaria** contributed 6% of all reported cases. By comparison, 26% of reported cases in the under 5 year age group were attributed to **Acute Respiratory Tract Infection (ARI)** followed by **Clinically Diagnosed Malaria** and **Bloody Diarrhoea** (7% each).

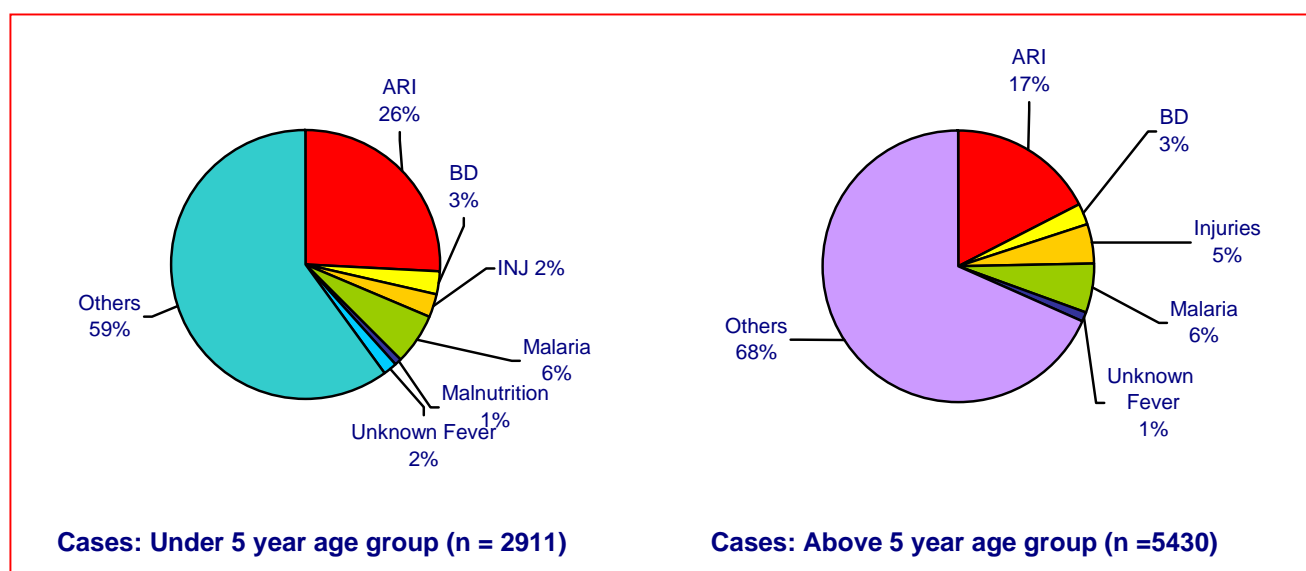


Figure 3: Proportional morbidity of all reported cases, Greater Darfur, Sudan, week no 1, 2008.

During the same period, there were **7 reported deaths** in all age groups, **2 of them** were reported in the **below 5 year age group**. In less than 5 year age group, 1 death was attributed each to malaria and 1 was due to other cause. In above 5 years age group, 1 death was attributed to malaria and 4 due to other causes.

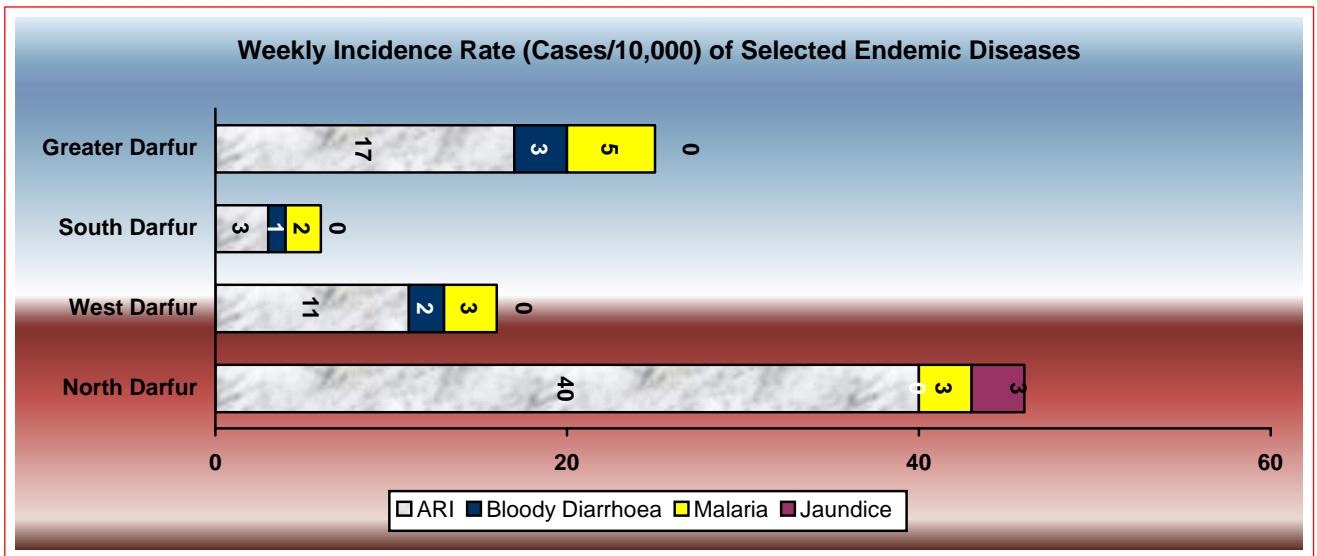
I.IV Weekly incidence rate of selected endemic diseases

During this week, the case load of selected endemic diseases was usual given the seasonality of these diseases reported earlier from Greater Darfur. West Darfur reported highest incidence rate of ARI, bloody diarrhoea and malaria. South Darfur reported 2 cases of Acute Jaundice Syndrome, while West Darfur reported 3 cases, compared with 15 and 6 cases respectively in week 52 (2007).

Table-1: Cases and weekly incidence rate of selected endemic diseases reported from Darfur (Epidemiological week 52, 22-28 December 2007)

Diseases	North Darfur		West Darfur		South Darfur	
	Cases	IR (cases/10,000)	Cases	IR (cases/10,000)	Cases	IR (cases/10,000)
Acute Respiratory Infection	357	40	1071	11	265	3
Bloody Diarrhea	3	0	168	2	54	1
Clinically Diagnosed Malaria	40	1	288	3	169	2
Acute Jaundice Syndrome	3	0	4	0	2	0

Figure 4. Reported weekly incidence rate of selected communicable diseases, Greater Darfur, Sudan 22-28 December 2007



I.V Surveillance for Measles

From 1 January 2005 to date, the EWARS has notified 652 clinically diagnosed measles cases from Greater Darfur with 4 deaths. During the current week zero case was reported. Since week 33 of 2007 up to date, only 2 cases have been reported.

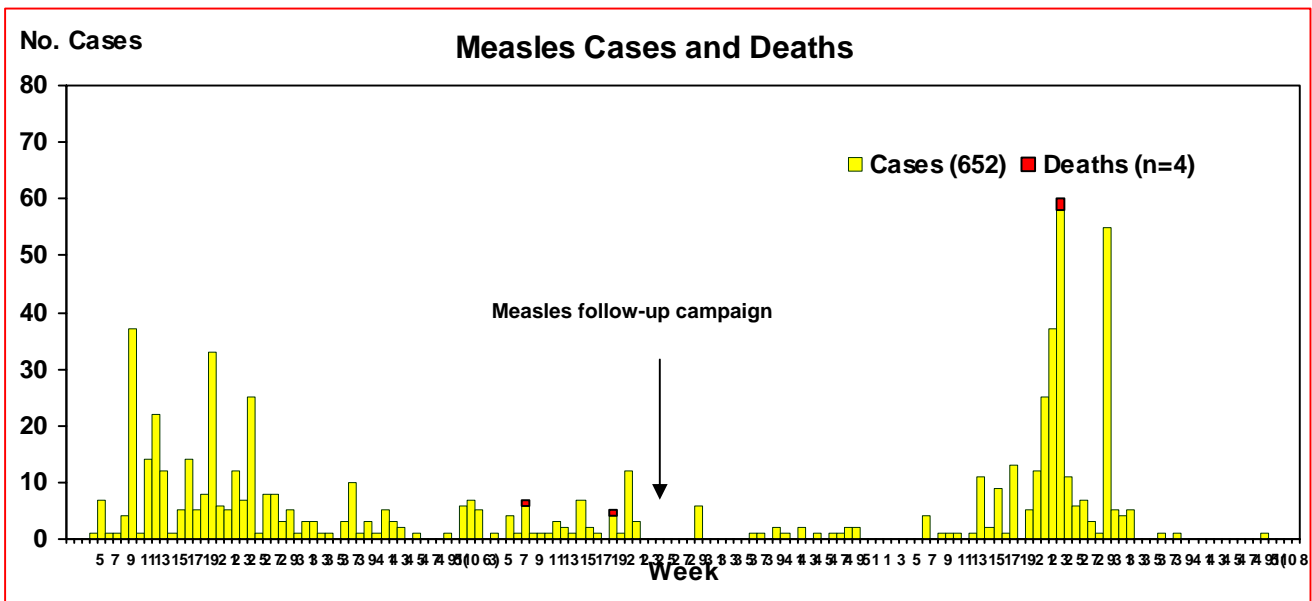


Figure 5. Weekly reporting of measles cases and death, Greater Darfur, 1 January 2005 to 28 December 2007

I.VI Surveillance for Malaria

With the preparedness of high risk season for malaria in Darfur, epidemiological surveillance for malaria has been enhanced throughout Greater Darfur. The weekly attack rate of malaria for the current epidemiological week was observed to be 0.50 cases per 1000 (Figure 6) which is well below the mean attack rate (2 cases per 1000) of malaria observed during 2006. The same for 2007 has been 1.7 per 1000.

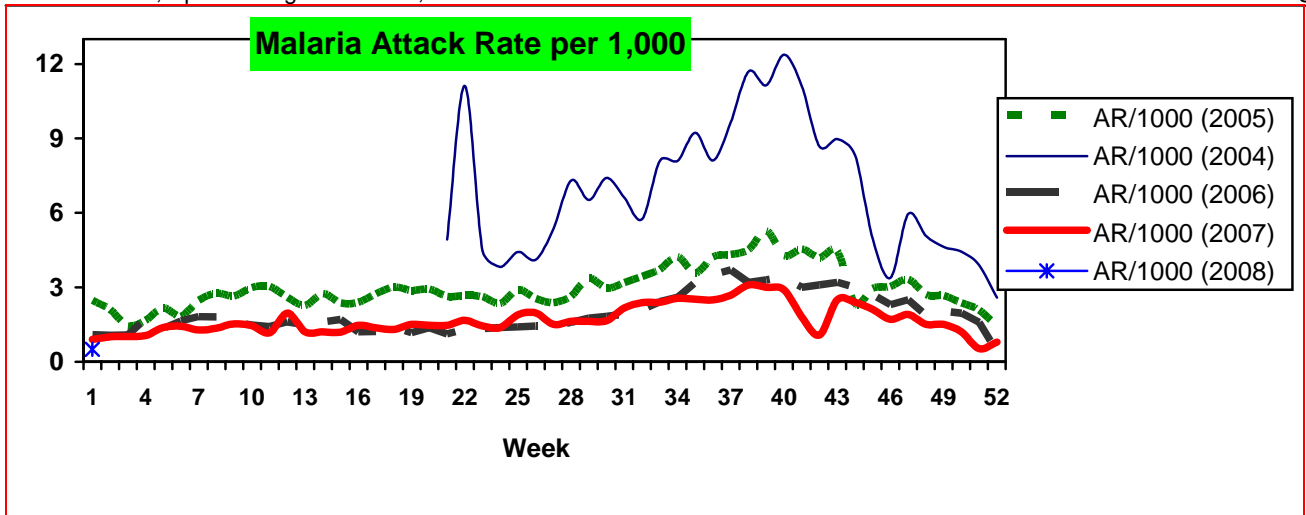


Figure 6: Comparison of current attack rate of Malaria with historical value, Greater Darfur, Sudan

I.VII Surveillance for Bloody Diarrhoea

The attack rate of bloody diarrhoea, observed during the current week, was **3 cases per 10,000** which is a lower than the mean attack rate (**8 cases per 10,000**) for 2007. observed during the same period in 2006 (Figure-7). West and South Darfur have been reporting higher rates as compared to North Darfur. The mean attack rate for 2005 and 2006 was respectively 13.73 and 9.37 per 10,000.

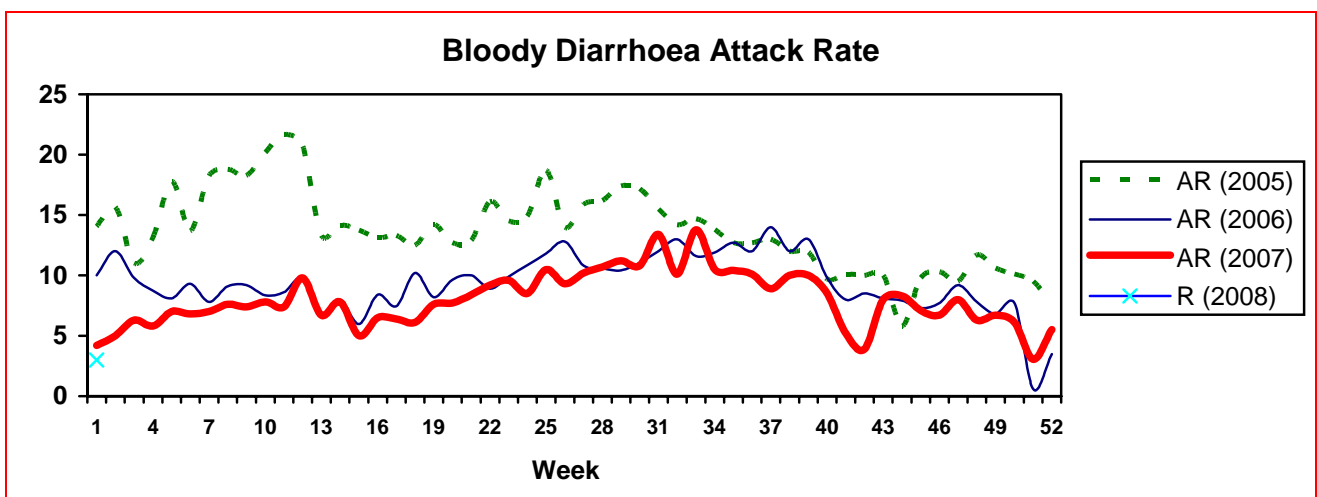


Figure 7: Comparison of current attack rate of Bloody Diarrhoea with historical value, Greater Darfur, Sudan

II. South Sudan:

Following reports of suspected cases of Rift Valley Fever from the Upper Nile state last year, WHO team of Epidemiologists and Public Health Specialists conducted training programs for health workers in Upper Nile State. The training focused on Early Warning and Response Systems. A total number of 44 health workers were trained. In addition, State based Rapid Response Teams were established and trained in all ten states.

- The number of counties sending in weekly epidemiological report is still very low.
- There has been increase in the number of acute watery diarrhea (AWD) cases especially amongst under fives in Yei, Tambura, Juba and Wau Counties. A total of 250 cases have been reported in this week mostly from the latter three counties. Samples are being collected for culture. Cumulative total from 31st Dec 2007 to 6th Jan 2008 is 250 cases and

2 deaths with an overall CFR (Case Fatality Rate) of 0.08%¹

- Cases of suspected meningitis continue to be reported from Western Equatoria State but no laboratory results have been received so far. 4 suspected cases of meningitis were admitted in Yambio Hospital during this week and 10 (under five years of age) in Yei. Samples have been collected from Yambio and transport media have been sent to Yei for the same purpose. A crisis committee in Yambio and Yei are meeting to follow up the situation in these two counties. Cumulative total from 31st of December 2007 to 6th of January 2008 is 11 cases and 2 deaths with an overall CFR of 18.2%
- Yellow fever and Ebola have been confirmed in Uganda and given the high traffic exchange between these² two countries, a state of alert is being assumed in Southern Sudan. Awareness and surveillance activities are being boosted in the Counties bordering Northern Uganda.

South Sudan plans for January 2008:

- TOT training on IDSR in lakes state.
- Adaptation of international health regulations (IHR) guidelines for Southern Sudan.
- Continue surveillance activities and conduction of any outbreak investigation and response.
- Establish weekly epidemiological bulletin for Southern Sudan.

III. East Sudan³

- This week, one case of whooping cough was reported from Port Sudan Paediatrics Hospital.
- Red Sea state had reported 6 suspected cases of Dengue fever from Sinkat area, 2 out of them were expired, and blood samples have been collected and sent to NPHL, all were negative.
- In Gedarif State there is no new case of AWD reported last week, last case of AWD was reported on 29/10/07. Since beginning of out break total number of AWD cases up to the end of reporting period are 1418 cases and death toll is 72, with CFR=5.1% Epidemiology department has sent 22 samples from Cholera affected areas to NPH last week, reports are awaited. According to Epidemiology department and Environmental officer 36 water samples have been collected from the Cholera affected areas for analysis of water, results are awaited.
- 50 Medical Doctors and Medical Assistants were trained by WHO in Gedarif State on Dengue fever. In another training of Malaria case management 39 medical doctors and medical assistants took place.
- In this reporting period Kassala reported 1 new suspected case of Dengue fever, blood samples have been collected and sent to NPHL, out of 72 samples sent 6 were positive for Dengue Fever from NPHL and waiting for result of samples.
- In Kassala, morbidity due to viral hepatitis has decreased this week to (0.0006)/1000 of population, compared with (0.002) last week & (0.01) at the same week last year. Cases were reported from River Atbara.

East Sudan plans for January 2008:

WHO is planning for training on meningitis for medical doctors, medical assistants, and laboratory technician for the three Eastern states.

¹ EHA, South Sudan Sitrep, W1- 2008.

² Southern Sudan Health Update, November-December 2007.

³ EHA, East Sudan Sitrep, W1- 2008.