

Highlights

- The reporting timeliness of Disease Early Warning System (DEWS) of Darfur for the current week was 62%.
- As the humanitarian access to IDP settlements and camps throughout Darfur plummets owing to increasing insecurity situation in the region, the surveillance coverage of DEWS decrease with only 50 to 60% of IDPs living in Darfur are currently covered by the DEWS. The health facility utilization rate for this week was 1.3 visits/person/year
- ARI remains the leading cause of morbidity in Darfur
- The transmission of Acute Watery Diarrhoea, caused by *Vibrio Cholera 01 Inaba*, has completely stopped in Darfur
- Enhanced surveillance for early event detection of malaria and meningococcal diseases have been set off throughout the accessible areas of Darfur
- Eighteen (18) cases of leprosy have been detected amongst few hundreds families who were recently displaced from Twanga village of Fur Buranga administration unit in West Darfur.

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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 only the IDPs in Darfur. 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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Reporting timeliness

During the current week, 79 of 126 reporting units (62%) of the **Early Warning and Alert Response Surveillance** (EWARS) system 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%. Despite the fact that there was an improvement of reporting timeliness of the EWARS at the beginning of 2006, the target remains far from being achieved. The trend shows that from the 14th epidemiological week of 2006 onwards, the reporting timeliness of the EWARS in Darfur has plummeted considerably as a result of increasing insecurity situation in Darfur resulting in diminished access of humanitarian agencies to IDP camps and settlements of conflict torn Darfur region.

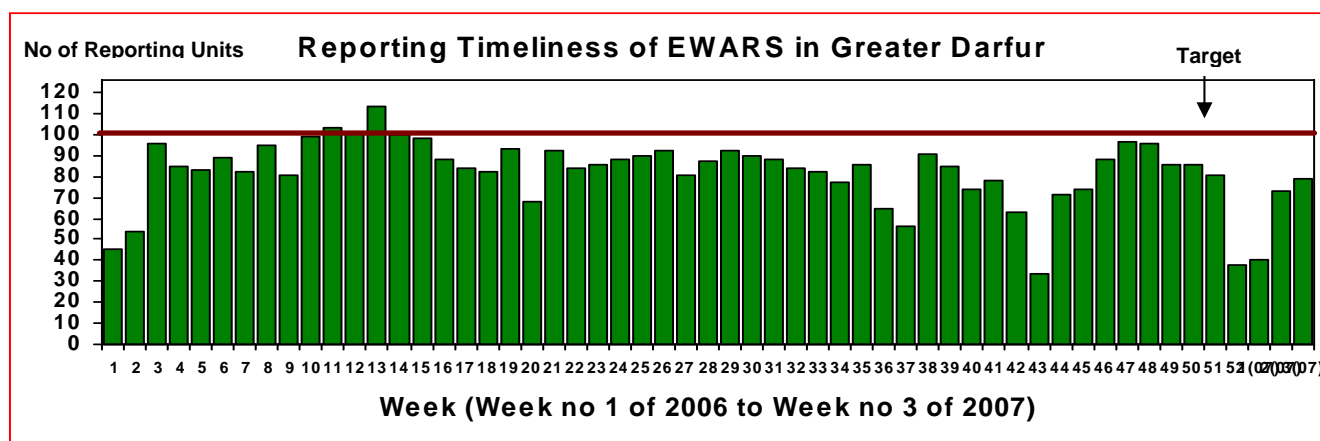


Figure 1. Reporting units, Greater Darfur, Sudan, January 2006 to January 2007

Population under surveillance and consultations

The total number of **consultations** reported throughout Greater Darfur this week was 43,439 (Figure-2). The number of **population under surveillance** for the current reporting week, was 1,651,871 which shows a decrease by 4 % over the previous week (From 1,723,026 reported last week to 1,651,871 reported this week). The **health facility utilization rate**, for the current week, was 1.3 visit/person/year..

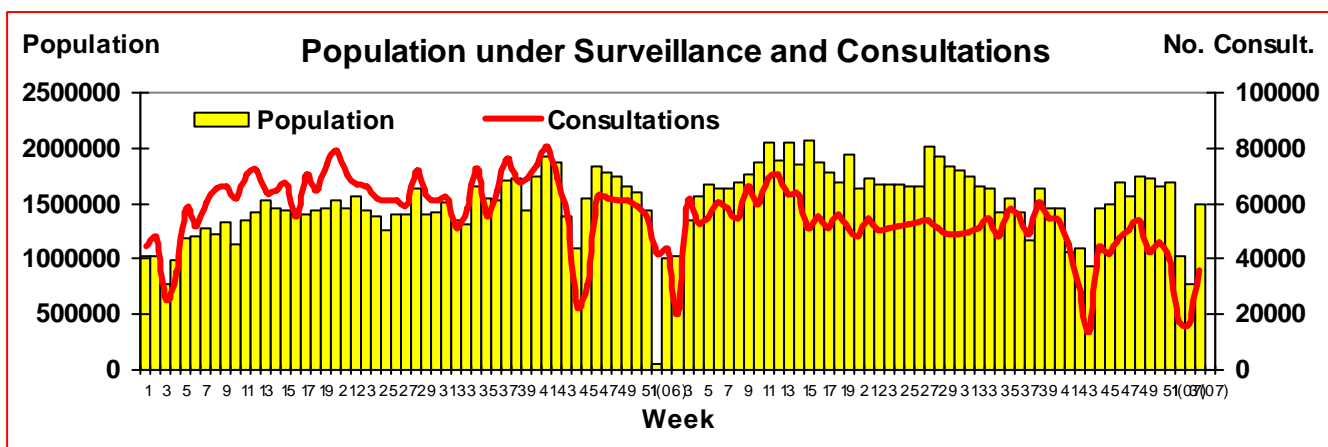


Figure 2. Weekly distribution of population under surveillance and consultations, Greater Darfur, Sudan, 1 Jan 2006 – 19 January 2007.

Proportionate morbidity and mortality reported health events

Between 13-19 January 2007, a total of 43,439 health events under surveillance were reported from Darfur. Of these, 14,795 health events (34%) were reported in the under 5 year age group while the remaining 28,644 health events (66%) were reported in the above 5 year age group. In the above 5 year age group, excepting the category “others”, 14 % (4018/28644) of reported cases were due to **Acute Respiratory Tract Infection (ARI)** while **Clinically Diagnosed Malaria** contributed to 4% (1100/28644) of all reported cases. By comparison, 26% (3805) of reported cases in the under 5 year age group was attributed to **Acute Respiratory Tract Infection (ARI)** followed by **Clinically Diagnosed Malaria** (4%; 577/14,795)

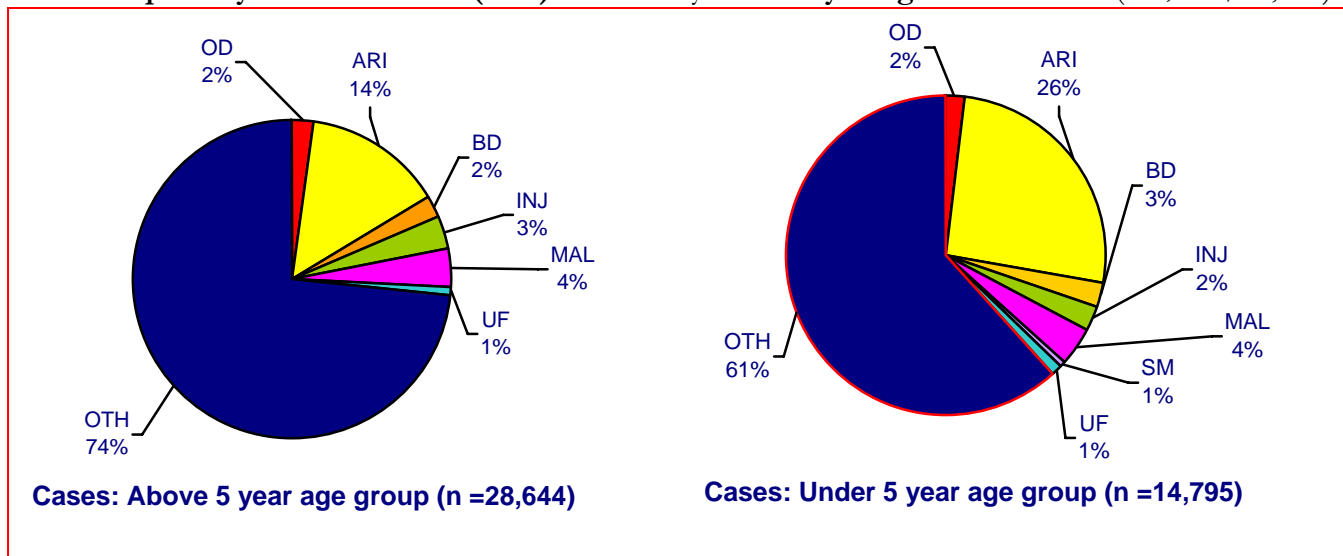


Figure 3: Proportion of all reported cases, Greater Darfur, Sudan, 13-19 January 2007

During the same period, there were **8 reported deaths** in all age groups (Figure-4). Of these, 7 deaths were reported in the **above 5 year age group** representing 88% of total deaths reported during the current week. In less than 5 year age group, only one death (100%) was attributed to Unexplained Fever. The overall **Case Fatality Rate (CFR)** for children under 5 years was **0.006%**. In the above 5 year age group, excepting the category “others”, one death (14%) was reported from Malaria. The overall **Case Fatality Rate (CFR)** for cases above 5 year age group was **0.02%**.

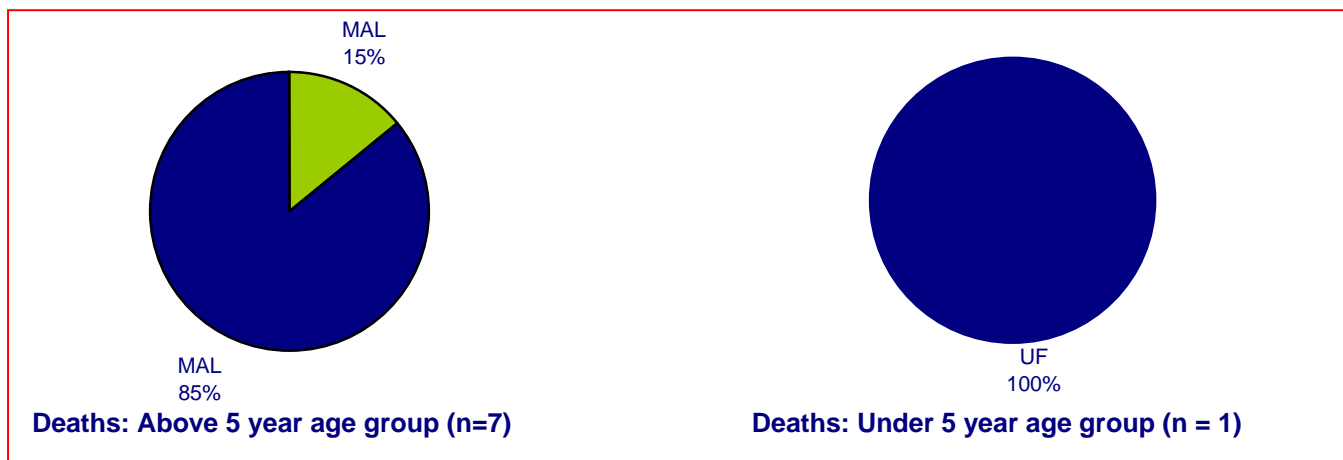


Figure 4: Proportion of all reported deaths, Greater Darfur, Sudan, 13-19 January 2007

Distribution of reported cases and case fatality rate

During the current reporting week, the CFR (Figure-5) for Unexplained Fever was highest (0.65%) in the less than 5 year age group..

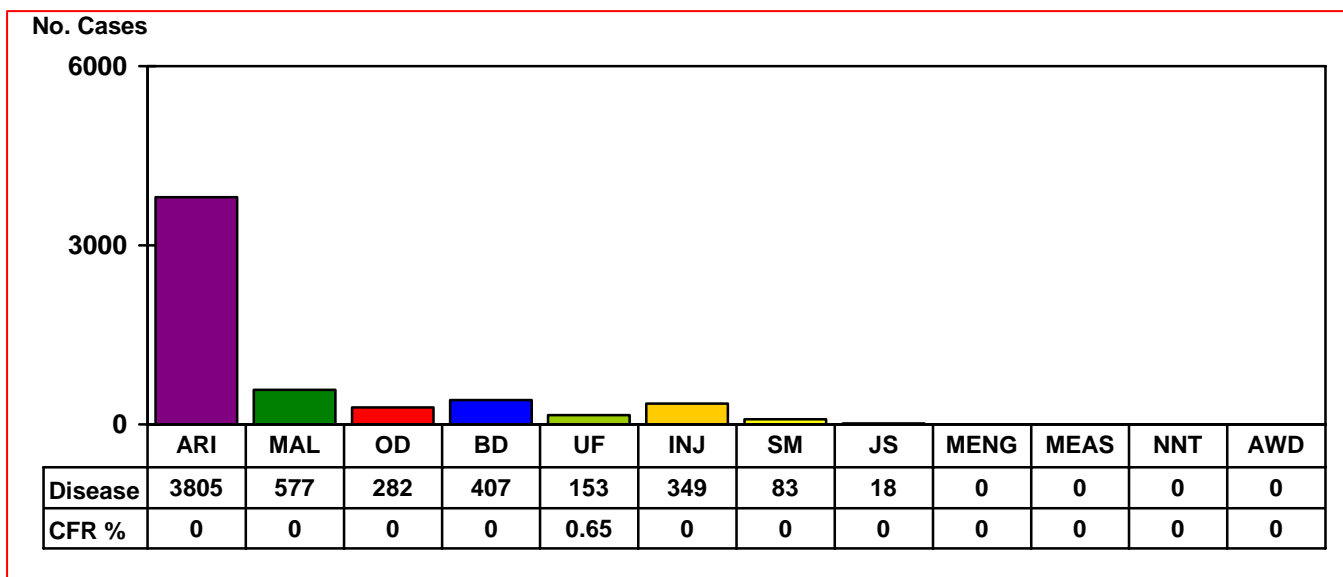


Fig.5: Distribution of reported cases and CFR in the under 5 year age group, Greater Darfur, 13-19 January 2007

On the other hand, in the above 5 year age group, only one death was reported from Clinically Diagnosed Malaria (CFR: 0.09%) amongst all the reportable health events. .

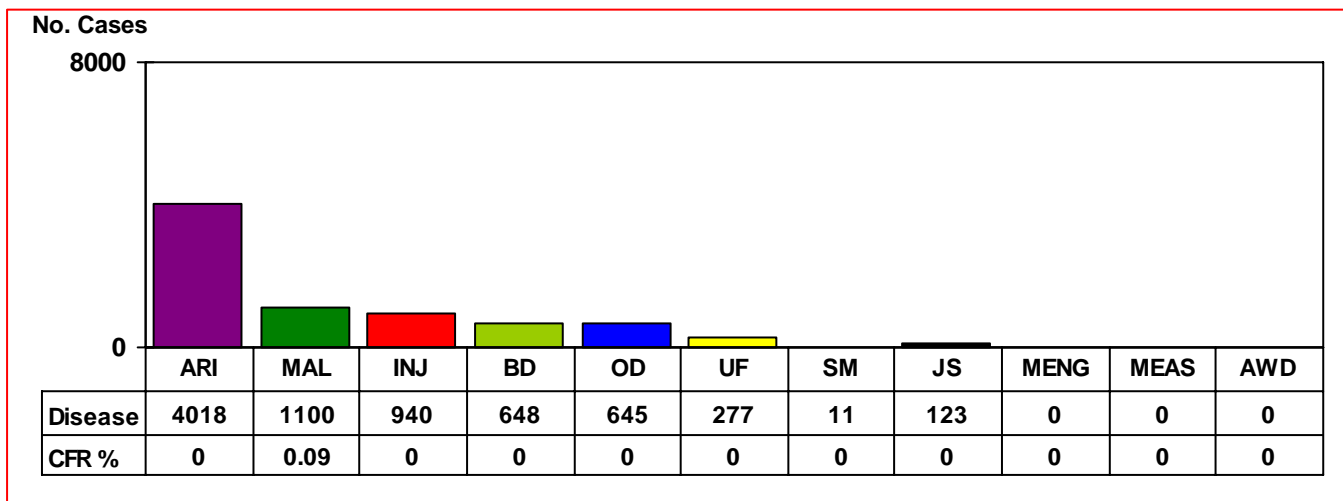


Fig.6: Distribution of reported cases and CFR in the above 5 year age group, Greater Darfur, 13-19 January 2007

Weekly incidence rate of selected endemic diseases

During the current week (13-19 January 2007), the case load of selected endemic diseases, barring Acute Jaundice Syndrome, were usual given the seasonality of these diseases reported earlier from Greater Darfur.

Table-1: Cases and weekly incidence rate of selected endemic diseases reported from Darfur.
(Epidemiological week-3: 13-19 January 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	3237	72.2	2363	47.7	2223	31.4
Bloody Diarrhea	147	3.3	529	10.7	379	5.4
Clinically Diagnosed Malaria	126	2.8	670	13.5	881	12.4
Acute Jaundice Syndrome	5	0.1	15	0.3	121	1.7

Excepting for the weekly incidence rate of AJS reported from South Darfur, no “unusual trend” was observed for other epidemic prone diseases this week. For Acute Respiratory Infection, the global average rate for whole of Darfur, reported this week, was 47 cases/10,000 populations. However, except North Darfur (72 cases/10,000), the weekly incidence rate of ARI reported from South (47 cases/10,000) and West (31 cases /10,000) were not unusual given the seasonal trend in Greater Darfur. For Clinically Diagnosed Malaria, the highest weekly incidence rate was in West Darfur (14 cases/10,000) and the lowest was in North Darfur (3 cases/10,000) while the global average rate for Greater Darfur, reported this week, was 10 cases per 10,000. The weekly incidence rate for Bloody Diarrhea was highest in West Darfur (11 cases/10,000) followed by South Darfur (5 cases /10,000) and North Darfur (3 cases/10,000). The global average rate for Bloody Diarrhoea reported from Greater Darfur this week was 6 cases per 10,000. The weekly incidence rate of acute jaundice syndrome was highest in South Darfur (1.7 case/10,000) while the global average rate for Acute Jaundice Syndrome reported from Greater Darfur, this week, was 0.85 case/10,000.

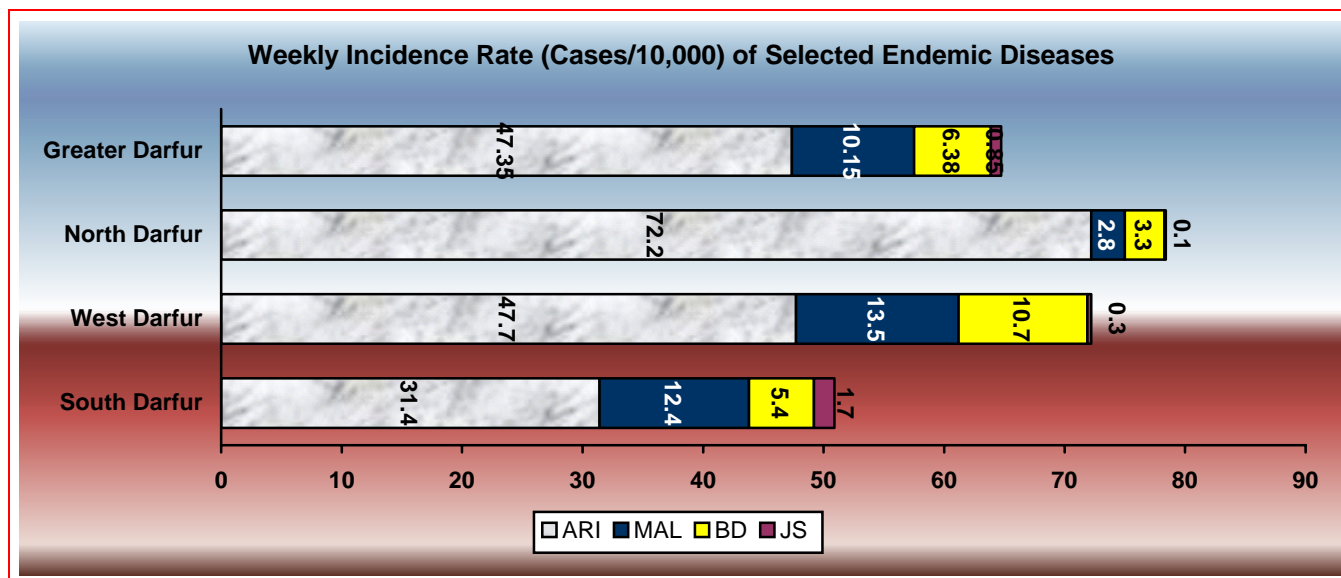


Figure 7. Reported weekly incidence rate of selected communicable diseases, Greater Darfur, Sudan, 13-19 January 2007

Surveillance for Measles

From 1 January 2005 to date, the EWARS has notified **491** clinically diagnosed measles cases from Greater Darfur with 2 deaths. During the current week, no case was reported from Darfur.

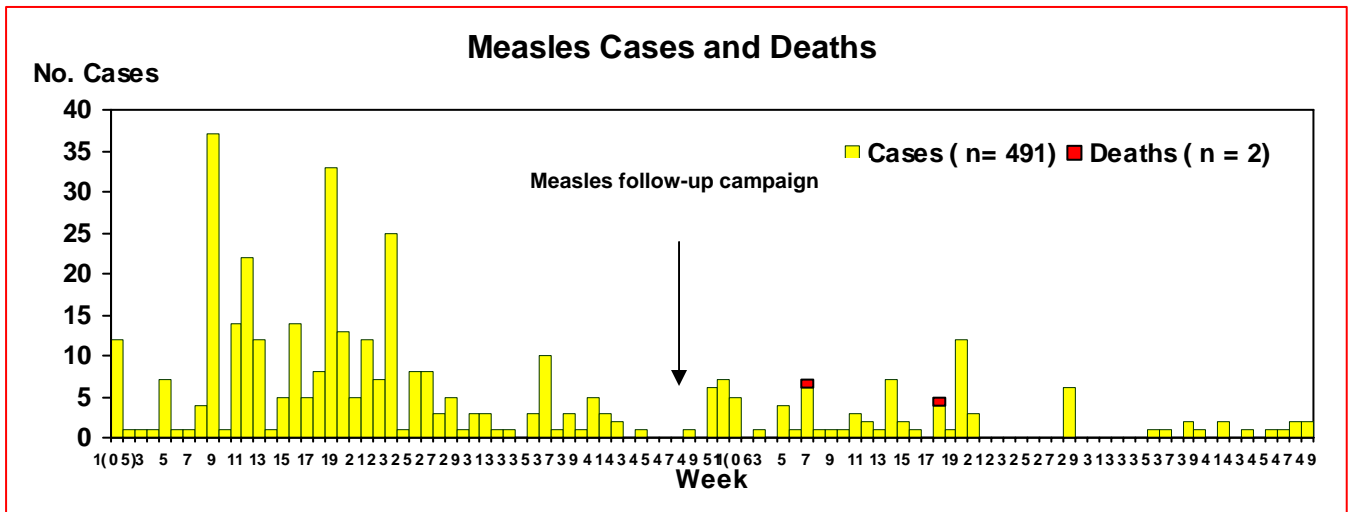


Figure 8. Weekly reporting of measles cases and death, Greater Darfur, 1 January 2005 to 19 January 2007.

Surveillance for Malaria

With the onset of high risk season for malaria in Darfur, epidemiological surveillance for malaria has been enhanced throughout Darfur. The weekly attack rate of malaria for the current epidemiological week was observed to be **1.03 cases per 1000** (Figure-9) which is below the mean attack rate (3 cases per 1000) of malaria observed during 2006 and not above its historical values (past attack rates observed during the same period in 2006 and in 2005).

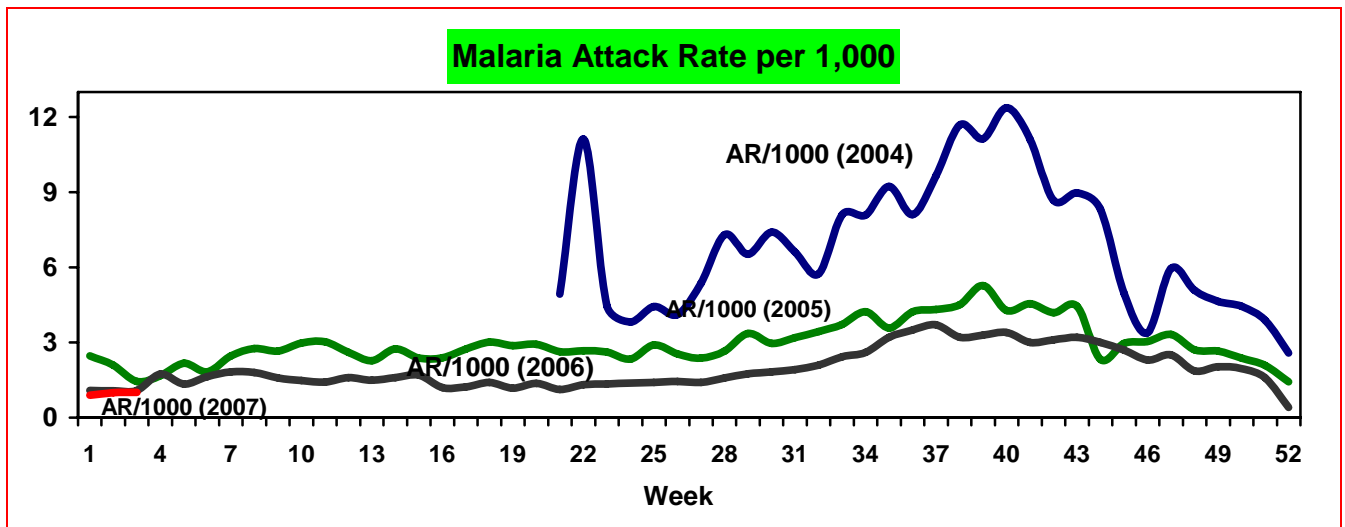


Figure-9: Comparison of current attack rate of malaria with historical value

Surveillance for Bloody Diarrhoea

The attack rate of bloody diarrhoea, observed during the current week, was **6.3 cases per 10,000** which is below the attack rate (9.8 cases per 10,000) observed during the same period in 2006 (Figure-10). Higher attack rate is observed in West Darfur this week compared to either North or South Darfur.

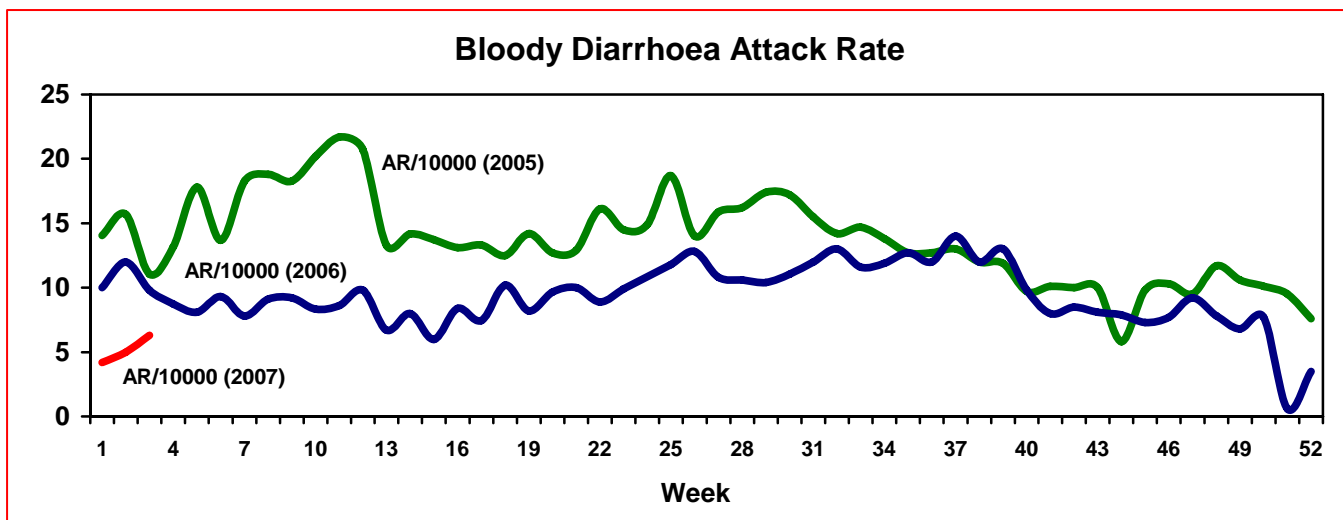


Figure-10: Comparison of current attack rate of Bloody Diarrhoea with historical value

Acute Watery Diarrhoea Outbreak

The transmission of acute watery diarrhoea (AWD) which swept through out Darfur mid last year has stopped completely with a total of 2,768 cases including 147 deaths (CFR: 5.3 %) reporting between 24 May to 09 December 2006. Of these cases, 61 % were reported from South Darfur state (CFR: 4.5%), 28% from West Darfur state (CFR: 7.4%) and 10% were reported from North Darfur state (CFR: 4.1 %). Since 09 December 2006, no case of AWD has been reported from any of the three states in Darfur.

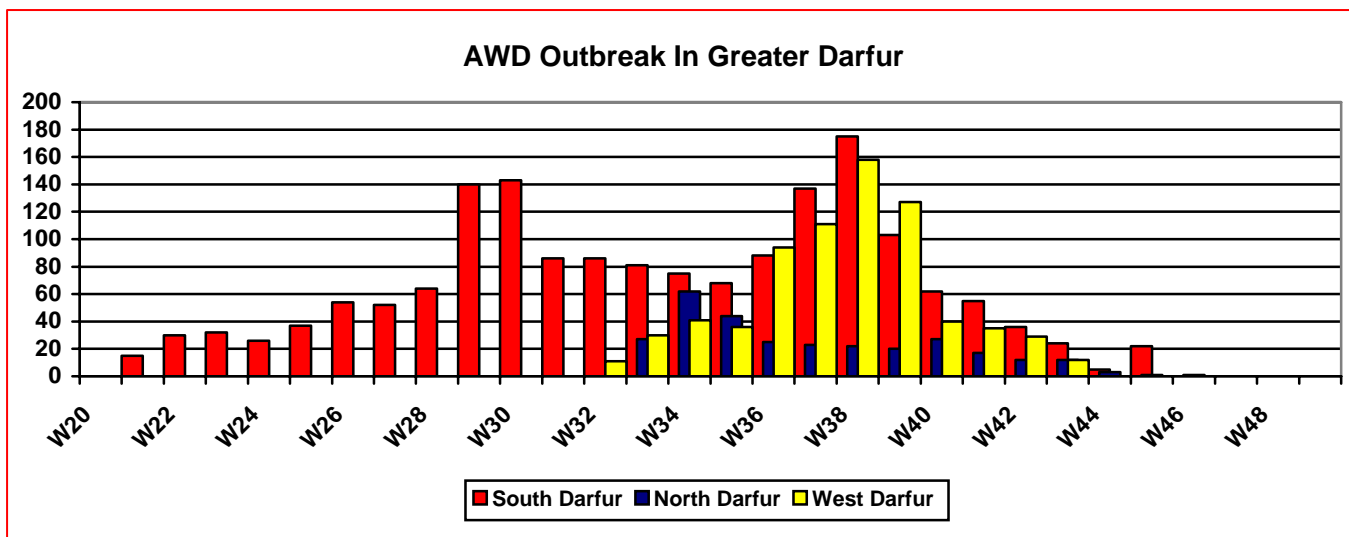


Figure-11: Weekly Incidence of Acute Watery Diarrhoea reported from Greater Darfur: Week no 21 to Week no 49 of 2006

Vibrio cholerae 01 serotype *Inaba* was laboratory confirmed by the National Public Health Laboratory (NPHL) of the FMOH from a number of stool samples collected from these reported cases of AWD. The outbreak, first, started in South Darfur on 24 May 2006 and the "index" case was imported from North Kordofan by a passenger train (where an epidemic from AWD was ongoing). Gradually more cases were reported from other localities in South Darfur. In North Darfur, the index case reported to the El Fasher teaching hospital on 17 August and was not epidemiologically linked to cases in South Darfur. In West Darfur, on the other hand, the outbreak started on 5 August 2006 in an IDP camp (Mornei) and then spread to Nertiti and Jabel Mera localities. The death rate, initially very high, came down in all the three states of Darfur as the outbreak tailed off. The public health control measures, jointly carried out throughout Greater Darfur by FMOH/SMOH, UNICEF and WHO, were successful in containing the outbreak within 28 weeks the outbreak started in South Darfur on 24 May 2006. .