

Highlights

- The weekly reporting timeliness of EWARS, this week, was 73% against a set target of over 85%.
- The number of population under surveillance recorded for the current week was 1.7 million representing a coverage of about 85% of IDPs currently living in Greater Darfur, the health facility utilization rate dropped to 1.6 visits/person/year
- ARI is the major cause of reported morbidity with severe malnutrition, ARI and injuries as the major causes of mortality reported this week from Darfur.
- A vaccination campaign was completed for meningococcal meningitis caused by *Neisseria meningitidis sero group W135* in Zallingi of West Darfur with a coverage of over 60%. A mop up campaign is being planned with the MOH in IDP camps with low coverage.

Reporting timeliness.....	2
Population under surveillance.....	2
Proportional morbidity and mortality.....	3
Distribution of reported cases and CFR.....	4
Reported weekly incidence of selected endemic diseases.....	5
Surveillance for Measles.....	5
Surveillance for Malaria.....	6
Surveillance for Bloody Diarrhoea.....	6
Outbreak of meningococcal meningitis in West Darfur.....	7
Meningococcal disease in rest of Darfur.....	8

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 Early Warning and Alert Response Surveillance System (EWARS) which presently cover over 90% of IDPs currently living in camps and settlements across the three states of Darfur in Sudan. The Bulletin provides a snapshot of health events from the health facilities where these events are registered, and data collected and where, it can be argued, standards of access, care and assistance are comparatively better than the areas which are still inaccessible. The bulletin does not reflect information from areas where no health services are currently offered to the IDPs.

Further information:

FMOH, Sudan, Dr Magdi Salih: mgdosman@yahoo.com
 WHO, Sudan, Dr. Mamunur Rahman Malik : malikm@sud.emro.who.int
 WHO, Sudan, Dr Rajesh Sreedharan, sreedharanr@sud.emro.who.int
 WHO, Sudan, darfurcrisis@sud.emro.who.int
 URL: <http://www.emro.who.int/sudan>

Reporting timeliness

During the current week, 92 out of 126 reporting units (73%) 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, is set at 85% but notwithstanding the fact that there has been a decline of weekly reporting timeliness in recent time, the target still remains underachieved. The trend shows that from the 48th reporting weeks of 2005 onwards, there has been a drop in reporting timeliness of the EWARS mostly due to worsening security situation across Greater Darfur. However, from the 3rd epidemiological week of 2006 onwards, greater efforts have been undertaken in order to improve the reporting timeliness of the EWARS.

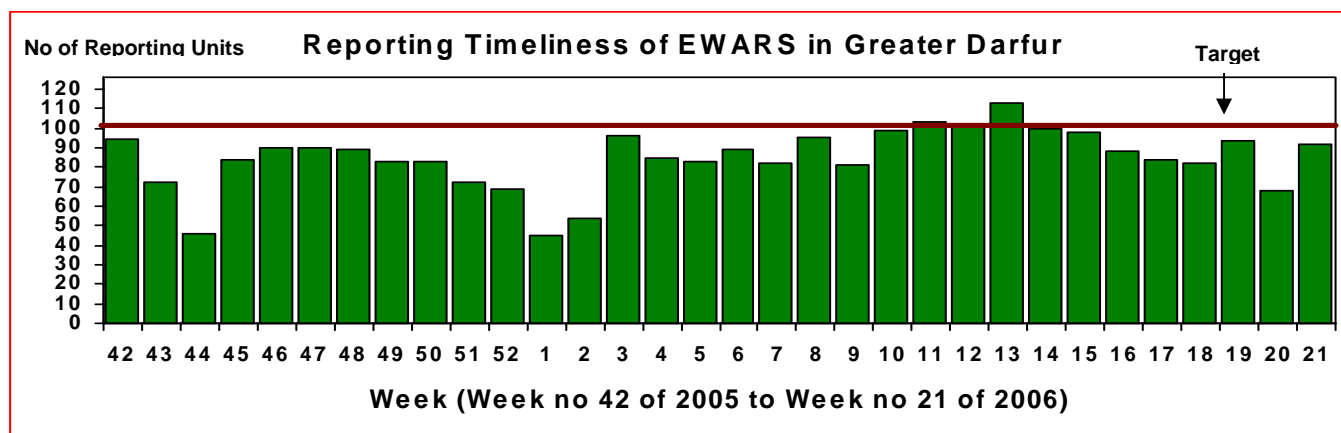


Figure 1. Reporting units, Greater Darfur, Sudan, October 2005 to 26 May 2006

Population under surveillance and consultations

The total number of **consultations** reported throughout Greater Darfur this week was **54,801** (Figure-2). The number of **population under surveillance**, reported for the current week, is **1,728,132** which show an increase by 5% over the previous week (From **1,637,832** reported last week to **1,728,132** reported this week). The **health facility utilization rate** increased, this week from 1.5 visits/person/year reported in the preceding week to 1.6 visits/person/year reported this week.

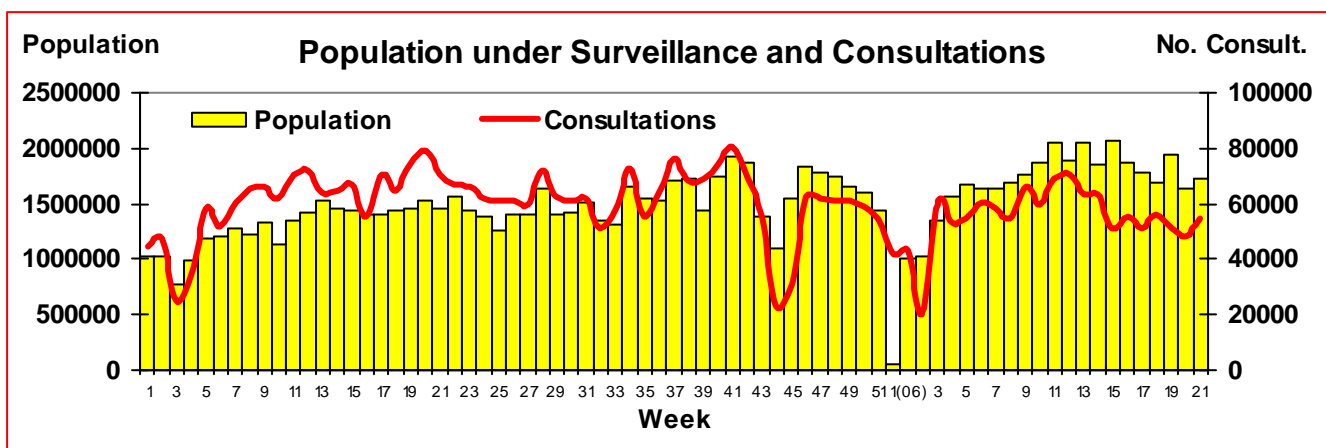


Figure 2. Weekly distribution of population under surveillance and consultations, Greater Darfur, Sudan, 1 Jan 2005 – 26 May 2006.

Proportional morbidity and mortality reported during the week

Between 20-26 May 2006, a total of 54,801 cases of health events under surveillance were reported from all age groups. Of these, 20,943 (38%) cases of health events were reported from under 5 year age group while the remaining 33,858 (62%) cases of health events were reported from above 5 year age group. In the above 5 year age group, excepting the category “others”, 15% (5,200) of reported cases were due to **Acute Respiratory Tract Infection (ARI)** followed by **Other Diarrhoea (5%)** and **Clinically Diagnosed Malaria (4%)**, and **Bloody Diarrhoea (3%)**. By comparison, 23% (4,712) of reported cases in the under 5 year age group was attributed to **Acute Respiratory Tract Infection (ARI)** followed by **Other Diarrhoea (11%)**, **Clinically Diagnosed Malaria** and **Bloody Diarrhoea (3%)**

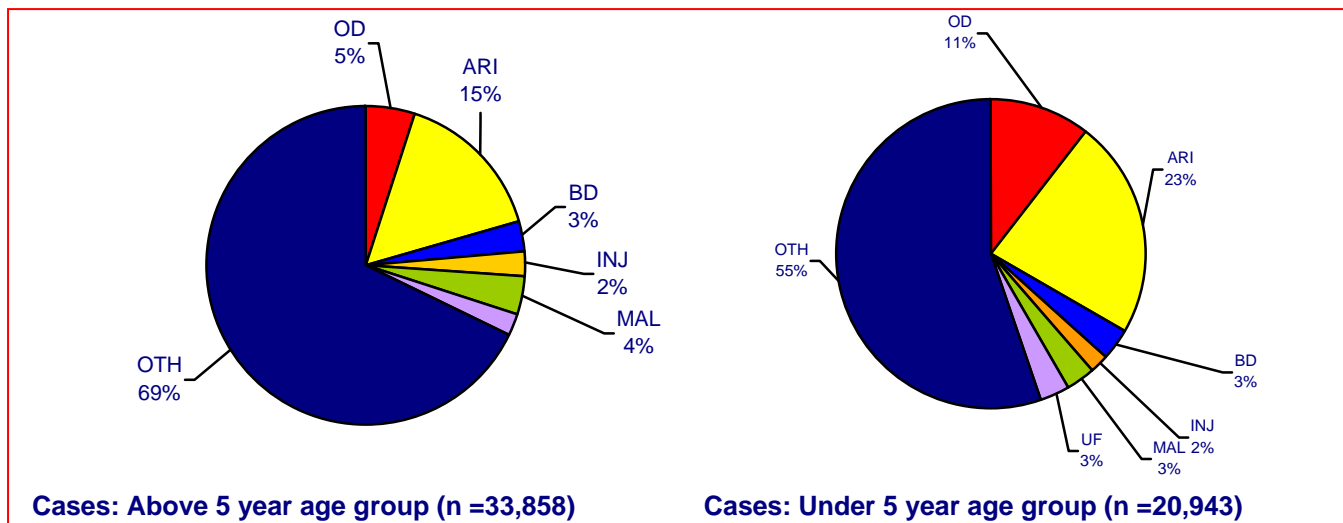


Figure 3: Proportion of all reported cases, Greater Darfur, Sudan, 20-26 May 2006

During the same period, there were **38 reported deaths** in all age groups (Figure-4). Of these, **17 deaths** were reported in the **less than 5 year age group** representing 45% of total deaths reported from Greater Darfur during this week. In the less than 5 year age group, 4 deaths (24%) were due to **severe malnutrition** 3 deaths (18%) due to **ARI** and 2 deaths each (12%) from **malaria** and **other diarrhoea**. The overall **Case Fatality Rate (CFR)** for children under 5 years for the current epidemiological week was **0.08%** In the above 5 year age group, excepting the category “others”, majority of deaths, 2 each (10%) were due to **ARI and Injuries**. The overall **Case Fatality Rate (CFR)** for cases above 5 year age group for the current epidemiological week was **0.05%**.

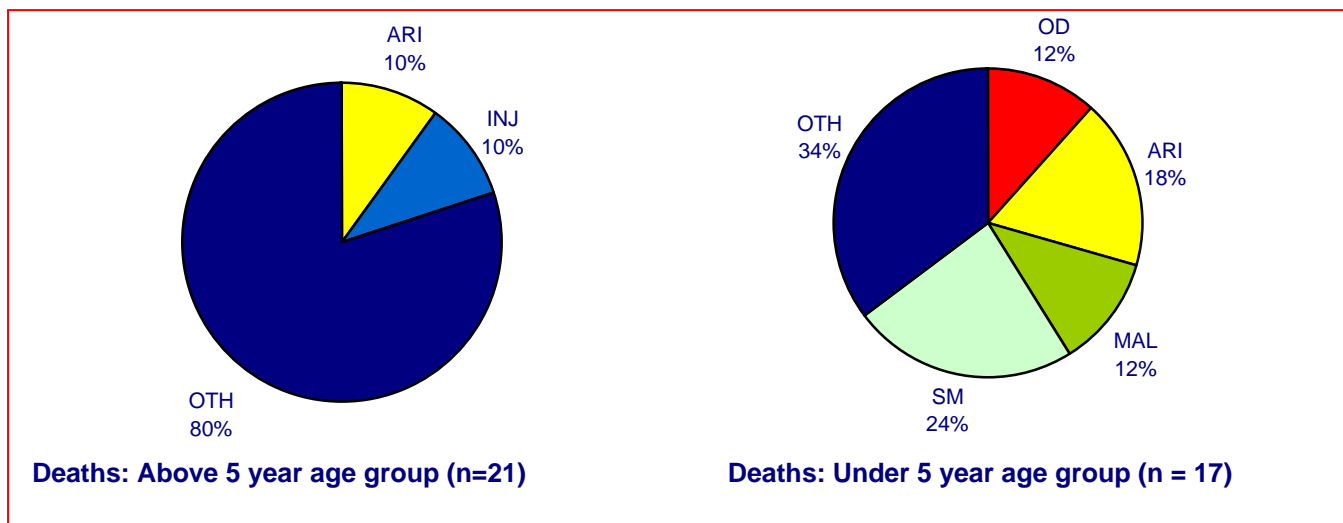


Figure 4: Proportion of all reported deaths, Greater Darfur, Sudan, 20-26 May 2006

Distribution of reported cases and CFR in Greater Darfur

During the current reporting week, ARI was the most commonly reported morbidity, in the **under 5 year age group** was. However, the CFR for **severe malnutrition** (Figure-2) was highest (**0.02%**).

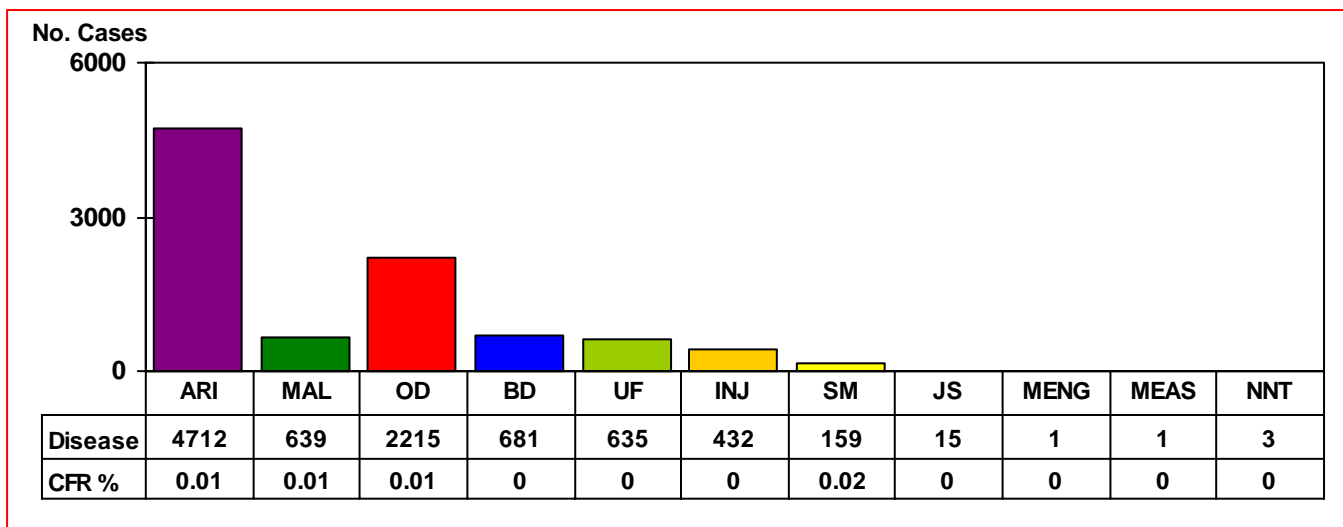


Figure 5. Distribution of reported cases and CFR in the under 5 year age group, Greater Darfur, 20-26 May 2006

On the other hand, in the above 5 year age group, **ARI** and **Injuries (0.01%)** had the highest **Case Fatality Rate** (Figure-6).

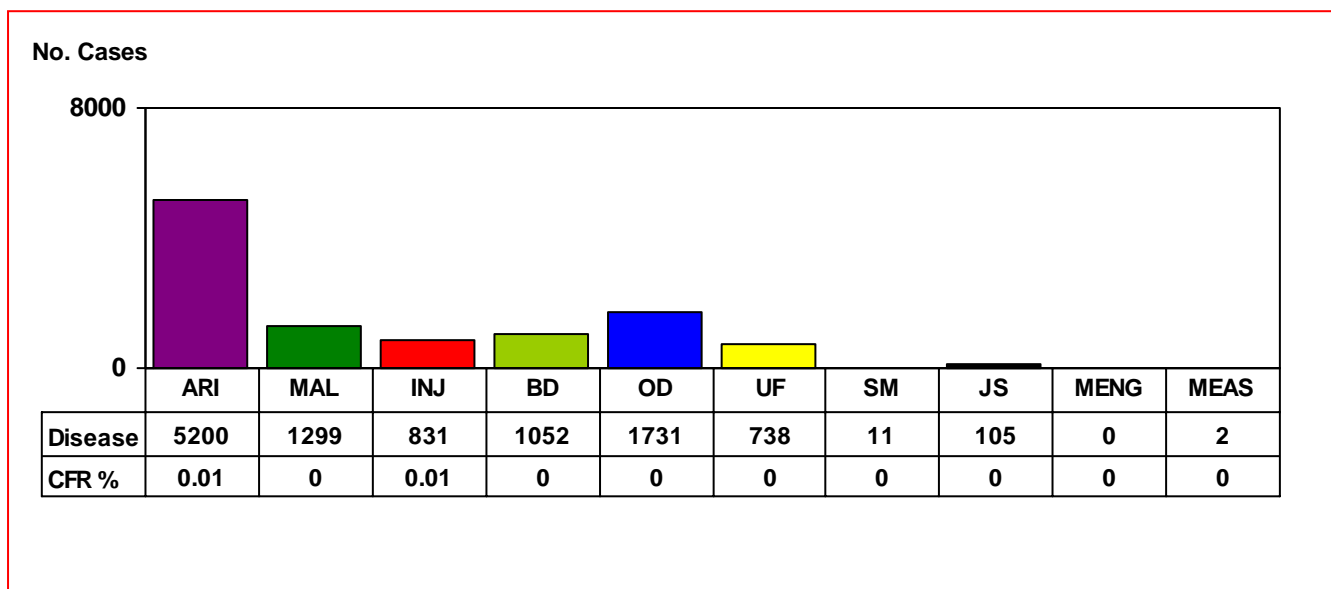


Figure 6. Distribution of reported cases and CFR in the above 5 year age group, Greater Darfur, 20-26 May 2006

Reported weekly incidence rate of selected endemic diseases

During the current week (20-26 May 2006), the case load of selected endemic diseases 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-21: 20-26 May 2006)

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	3685	86.4	2315	48.3	3912	48.2
Bloody Diarrhoea	352	8.3	538	11.2	843	10.3
Clinically Diagnosed Malaria	167	3.9	522	10.9	1249	15.3
Acute Jaundice Syndrome	12	0.3	25	0.5	83	1.0

No “unusual trend” was also observed for the weekly incidence rate of any of these diseases reported from Darfur this week. For Acute Respiratory Infection, the global average rate for whole of Darfur reported this week was 57 cases/10,000 populations. However, except for North Darfur, the weekly incidence rate of ARI reported from South and West Darfur (48 cases/10,000) was below the global average recorded for Greater Darfur. For Clinically Diagnosed Malaria, the highest weekly incidence rate was in South Darfur (15 cases/10,000) and the lowest was in North Darfur (4 cases/10,000) while the global average rate for Greater Darfur reported this week was 11 cases/10,000. The weekly incidence rate for Bloody Diarrhea was highest in West Darfur (11 cases/10,000) and lowest in North Darfur (8 cases/10,000) while the global average for Greater Darfur observed this week was 10 cases /10,000. The weekly incidence rate of acute jaundice syndrome was highest in South Darfur (1 case/10,000) while the global average of Greater Darfur which was reported to be 0.7 case/10,000 this week

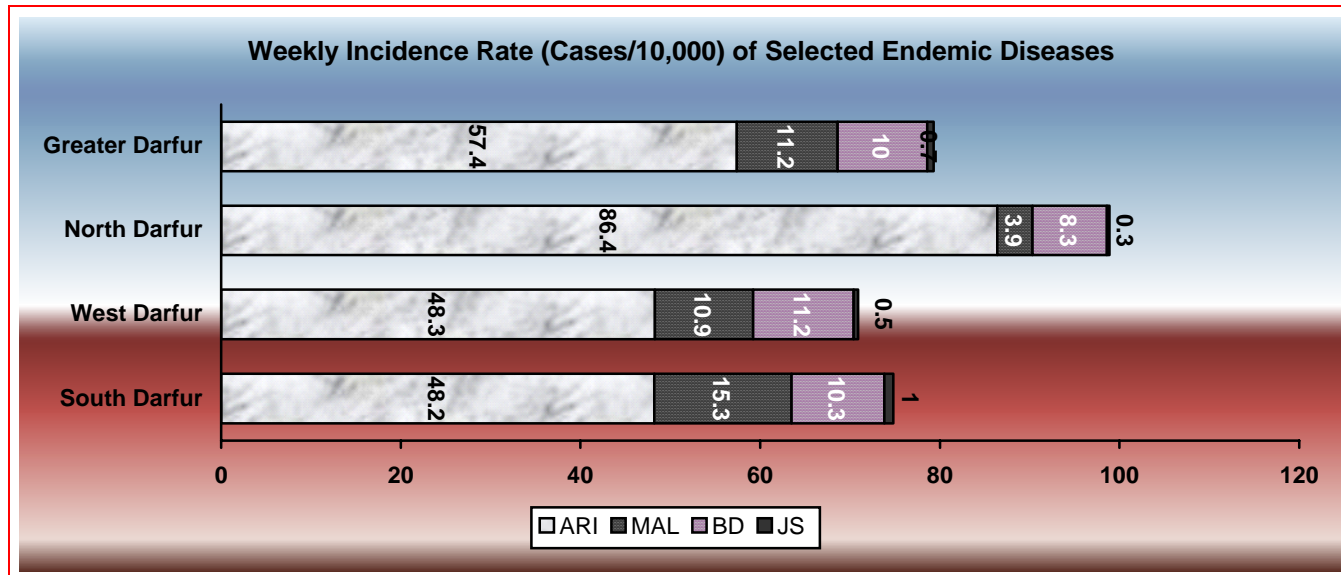


Figure 7. Reported weekly incidence rate of selected communicable diseases, Greater Darfur, Sudan, 20-26 May 2006

Surveillance for Measles

The surveillance data of EWARS has notified **475** clinically diagnosed measles cases from Greater Darfur, so far (from 1 January 2005 to date), with 2 death. During the current week, **1** case was reported from West Darfur and **2** cases from South Darfur.

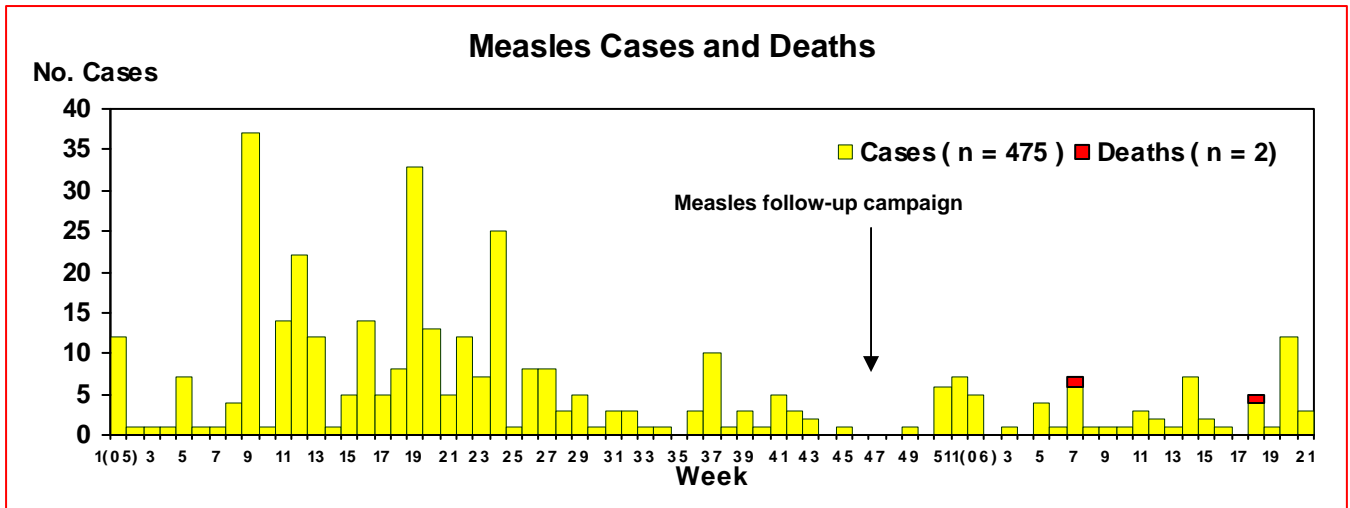


Figure 8. Weekly reporting of measles cases and death, Greater Darfur, 1 January 2005 to 26 May 2006.

Surveillance for Malaria

With the rainy season approaching, the attack rate as well as proportional morbidity attributed to malaria is beginning to increase across Greater Darfur. The current weekly attack rate of malaria, observed throughout Greater Darfur, is **1.1 cases /1000** which is not above the historical value (past attack rates observed during the same period in 2005) and well below the **mean attack rate** (3.01 cases/1000) observed in 2005 across Greater Darfur (Figure-9). During the current week, the weekly incidence rate of malaria (except for South Darfur) was well within the average rate recorded across Greater Darfur.

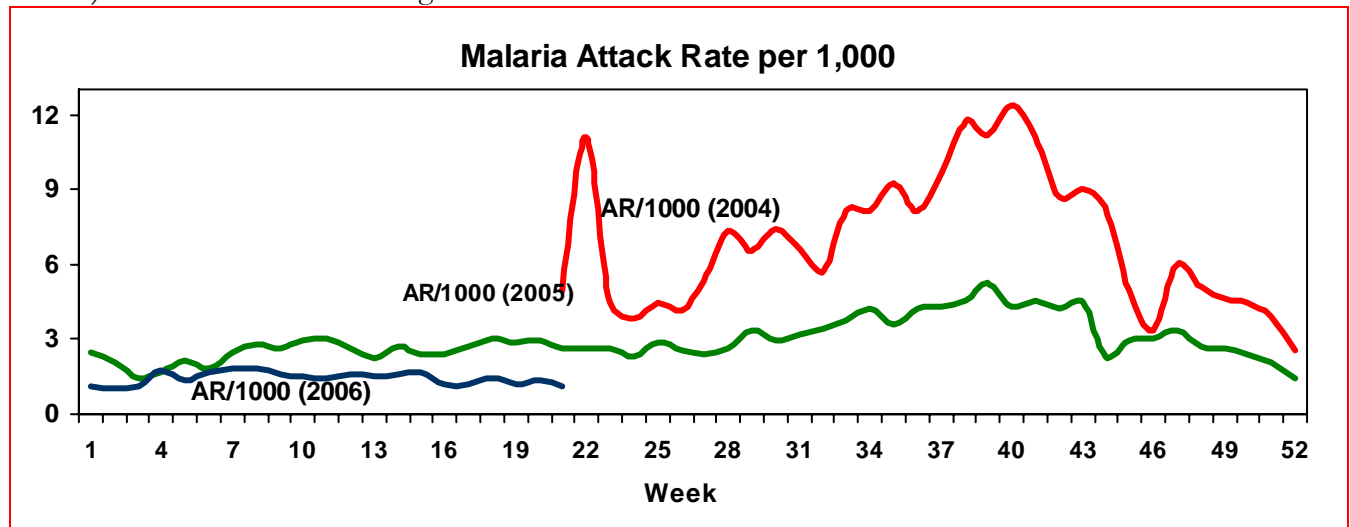


Figure-9: Comparison of current attack rate of malaria with historical value

Surveillance for Bloody Diarrhoea

The attack rate of bloody diarrhoea observed during the current week is **10.0 cases /10,000** which is below the attack rate observed during the same period (week no 21) in Outbreak Confirmed 2005 (Figure-10). Slightly higher attack rate is observed in West Darfur compared to either North or South Darfur

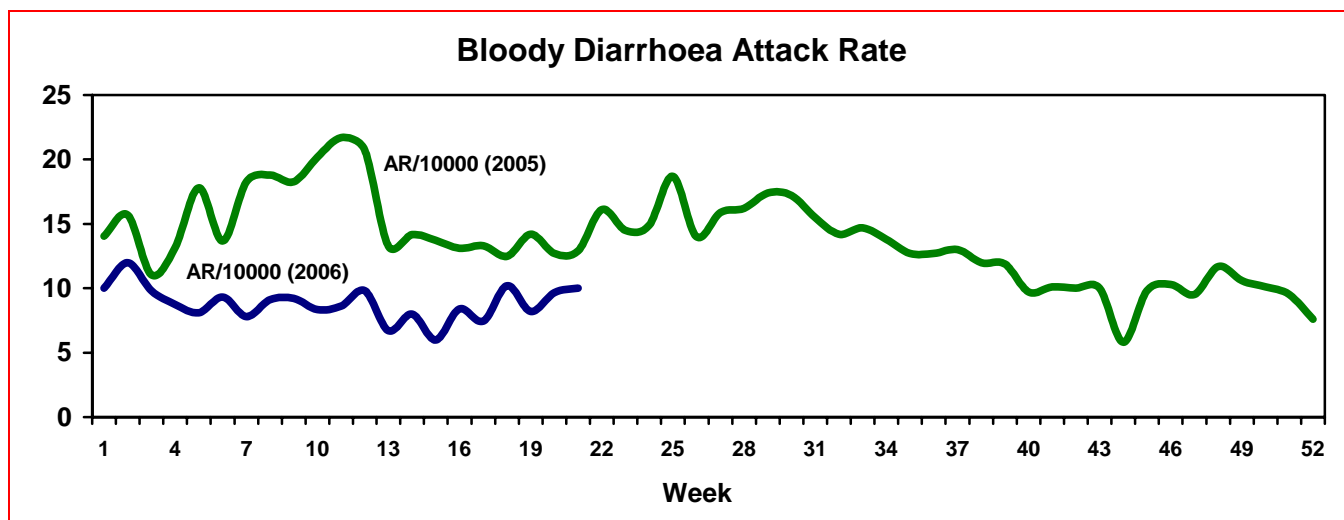


Figure-10: Comparison of current attack rate of Bloody Diarrhoea with historical value

Outbreak of meningococcal meningitis in West Darfur

An outbreak of meningococcal disease caused by *Neisseria meningitidis sero group W135* was confirmed at Hamidiya IDP Camp in Zallingi town of West Darfur during week no 8 when two laboratory samples were tested positive by culture in the same week and *Neisseria meningitidis sero group W135* was isolated as the causative strain. Up to week no 21 (20-26 May 2006), a total of 60 cases and 1 death (case fatality rate: 1.6%) have been reported

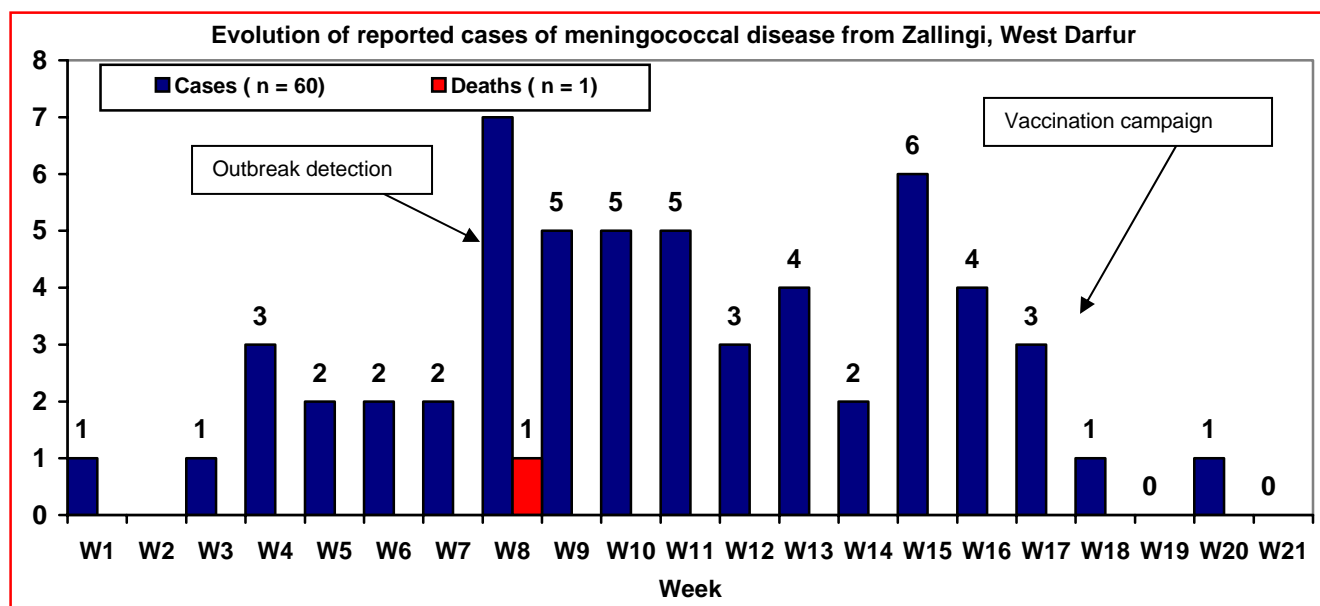


Figure-11. Reported cases of suspected meningitis, Zallingi, West Darfur, 1 January 2005 to 26 May 2006

Following the confirmation of this outbreak in Hamidyia camp of Zallingi, a reactive mass vaccination campaign kicked-off 27 April 2006. The campaign was implemented by the SMOH with support from FMOH, IFRC, WHO and UNICEF. All high risk population (between 2 to 30 years) living in the Hamidyia camp have been targeted for vaccination. However, considering the close proximity of the town to this IDP camp as well as owing to other environmental, climatic and epidemiological factors, all the high risk population (between 2 to 30 years) amongst the 30,000 host population living in Zallingi town were targeted for vaccination with trivalent ACW vaccines in order to completely stop the transmission of this virulent strain and prevent spreading of this outbreak into the host population. The public health interventions, currently ongoing in the area, to respond to this outbreak include reinforcement of surveillance for meningococcal diseases, active case findings, standardized case management of all suspected and probable cases with Inj. Oily Chloramphenicol. The vaccination campaign was completed in all the IDP camps and the town of Zallengei with 61% coverage. A mop up campaign is being planned by MoH, FMOH and WHO to cover IDP camps with low coverage. The age of the target population will be 2-15 years.

Meningococcal disease in rest of Darfur

Suspected cases of meningococcal diseases have also been reported from other parts of Darfur. As of date, 87 cases of suspected meningococcal diseases with 1 death (CFR: 1.14%) have been reported from the IDP camps across Darfur. This number includes cases reported from Zallingi of West Darfur. Of these, only 3 cases (10%) have been laboratory confirmed. Two cases have been laboratory confirmed during week no 8 from Hamidyia camp of Zallingi in West Darfur (In both these cases, the causative strain isolated was *Neisseria meningitidis sero group W135 strain*.) while one case was laboratory confirmed from Korma camp in North Darfur (In this cases, the causative strain isolated was *Neisseria meningitidis sero group A*). Enhanced surveillance for meningococcal meningitis has been reinforced through out Greater Darfur with active case finding, close monitoring of household contacts, collection of case based data as well as sampling of suspected cases.
