



Highlights

- The weekly reporting timeliness of EWARS, achieved this week, was 66% against a set weekly target of over 85%.
- The total number of population under surveillance for the current week was over 1.5 million representing a coverage of over 89% of IDPs currently living in Greater Darfur by this weekly surveillance system.
- ARI remains the major cause of reported morbidity and mortality in Greater Darfur.
- All major communicable diseases with epidemic potentials have shown a downward trend this week which is consistent with the seasonality of these diseases.
- Seven 'alerts' were raised by the EWRAS in last 4 weeks but confirmation of the presence of any outbreak was ruled out following rapid field investigation.
- Continuous public health risk assessment is ongoing in view of the anticipated strong seasonal transmission of meningitis in Darfur

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This document is built on surveillance data that service providers transmit every week to MoH and to WHO from the IDP camps, settlements and hospitals in Darfur. The Bulletin is a snapshot of conditions in those facilities where events are registered and data collected; and where, it can be argued; standards of access, security and assistance are higher than in the rest of Darfur. The bulletin does not reflect information from areas where no health services are offered.

Further information:

FMoH, Dr Magdi Salih: mgdosman@yahoo.com

WHO, Sudan, Dr. Mamunur Rahman Malik : malikm@sud.emro.who.int

WHO, Sudan, darfurcrisis@sud.emro.who.int

Reporting timeliness

The number of reporting units for **Early Warning and Alert Response Surveillance (EWARS)** system in IDP camps and settlements across Greater Darfur has now reached to 126. However, only 85 of these reporting units (66%) have sent their surveillance data on time this week. The “quality benchmark”, for timeliness of weekly reporting, set for monitoring the surveillance performance of EWARS in Greater Darfur is 85% but during the last 15 weeks (Figure-1) this target was far from being achieved. The trend shows that from the 48th reporting weeks of 2005 onwards, there has been a significant drop in reporting timeliness of the EWARS mostly due to worsening security situations in Greater Darfur. The new year of 2006 started with long holidays for Eid and that also resulted in low reporting coverage from the surveillance sites. Strengthened efforts have been put into place in all three Darfur states for achieving the target set for timeliness of weekly reporting from the EWRS surveillance sites.

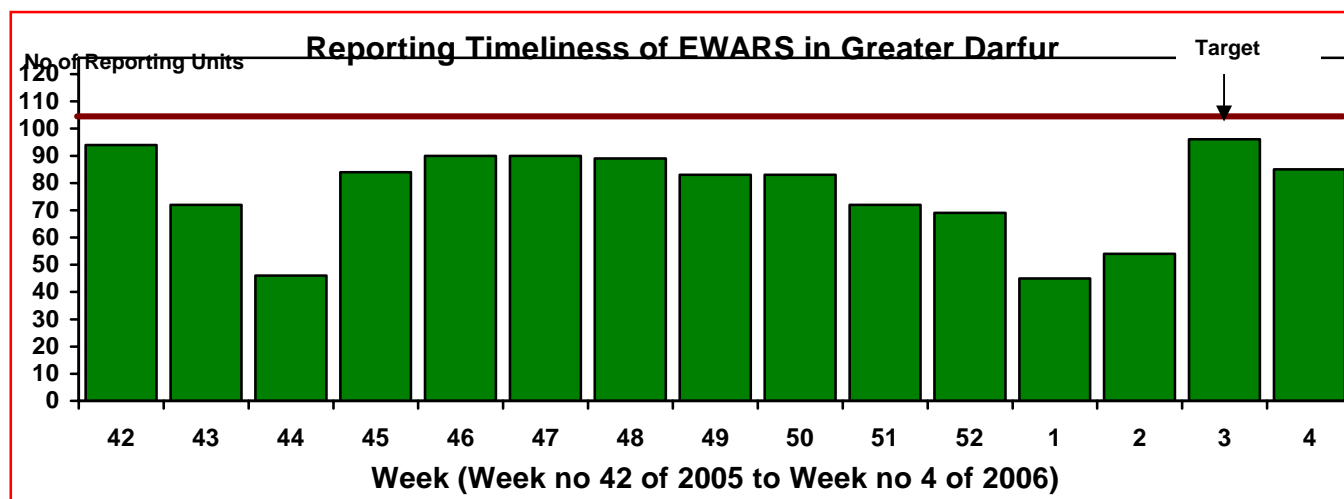


Figure 1. Reporting units, Greater Darfur, Sudan, October 2005 to January 2006

Population under surveillance and consultations

The number of population under surveillance, reported for the current week, is **1,568,540** which shows an increase by over 15% reported (Figure-2) in the previous week (From **1,354,152** reported last week to **1,568,540** reported this week). The total number of consultations reported throughout Greater Darfur has, however, decreased this week owing to less number reporting units sending its surveillance data to the EWARS compared to the previous week (96 vs.85). This has resulted in **low health facility utilization rate (1.7 visits/person/year)** reported across Greater Darfur this week..

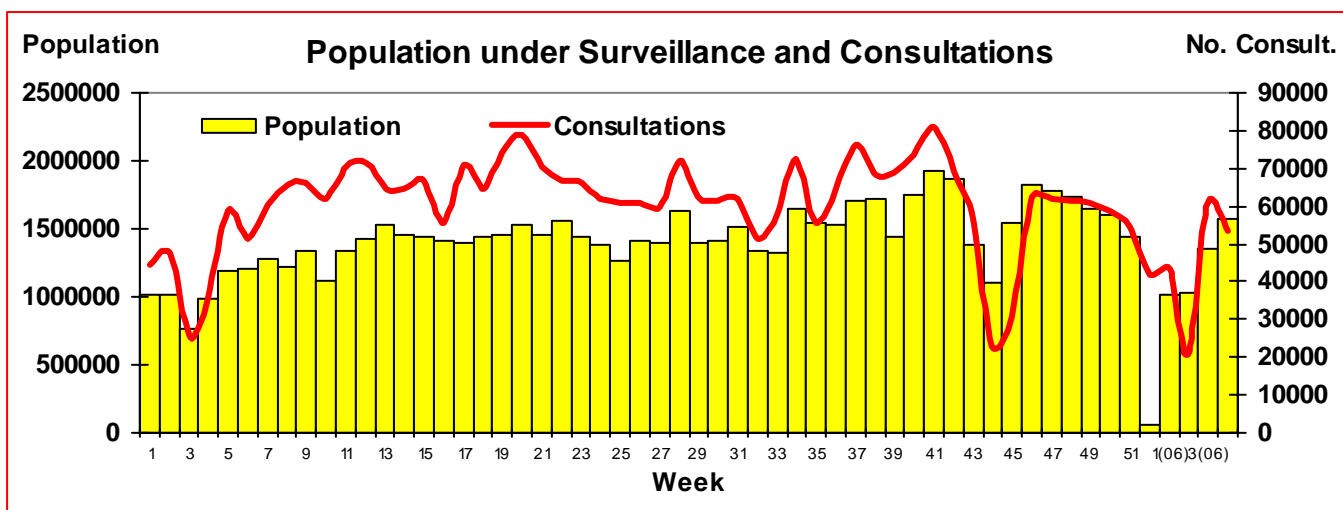


Figure 2. Weekly distribution of population under surveillance and consultations, Greater Darfur, Sudan, 1 Jan 2005-27 January 2006.

Proportional morbidity and mortality reported during the week

From 21 to 27 January 2006, a total of **53,364 cases** of health events under surveillance were reported from all age groups (Figure-3). Of these, 19% (10,229) were due to **Acute Respiratory Tract Infection (ARI)**, 5% (2,733) to **Clinically Diagnosed Malaria**, and 3%, each, to Injuries (1,587), **Bloody Diarrhoea** (1,372) and **Unexplained Fever** (1453). By comparison, a total of **18,059 cases** of health events under surveillance were reported from the under 5 year age group during the current week. These constitute **33%** of the total consultations reported during the same period. **26%** (4734) of these reported cases were due to **Acute Respiratory Tract Infection** while **5%** (916) were due to **Clinically Diagnosed Malaria**

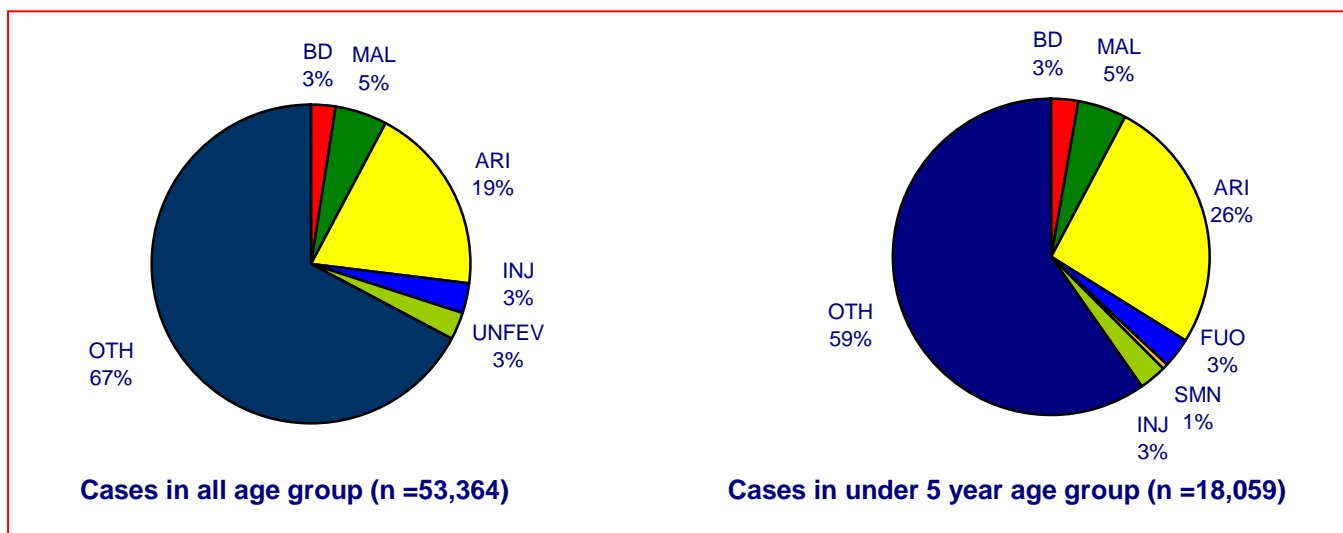


Figure 3: Proportion of all reported cases, Greater Darfur, Sudan, 21-27 January 2006

During the same period, there were **26 reported deaths** in all age groups. Except the category “Others”, 19% of these deaths (Figure-4) were due to **Clinically Diagnosed Malaria** (5), 4% to **ARI** (2), and 4% to **Injury** (1). There were 11 reported deaths in the under-5 year age group this week representing 42% of total deaths reported from Greater Darfur during the same week. Of these, 2 deaths (**18%**) were due to **Acute Respiratory Tract Infection** and 1 death (**17%**) was attributed to **Clinically Diagnosed Malaria**. The overall Case Fatality Rate (CFR) for children under 5 years for the current epidemiological week was 0.06%.

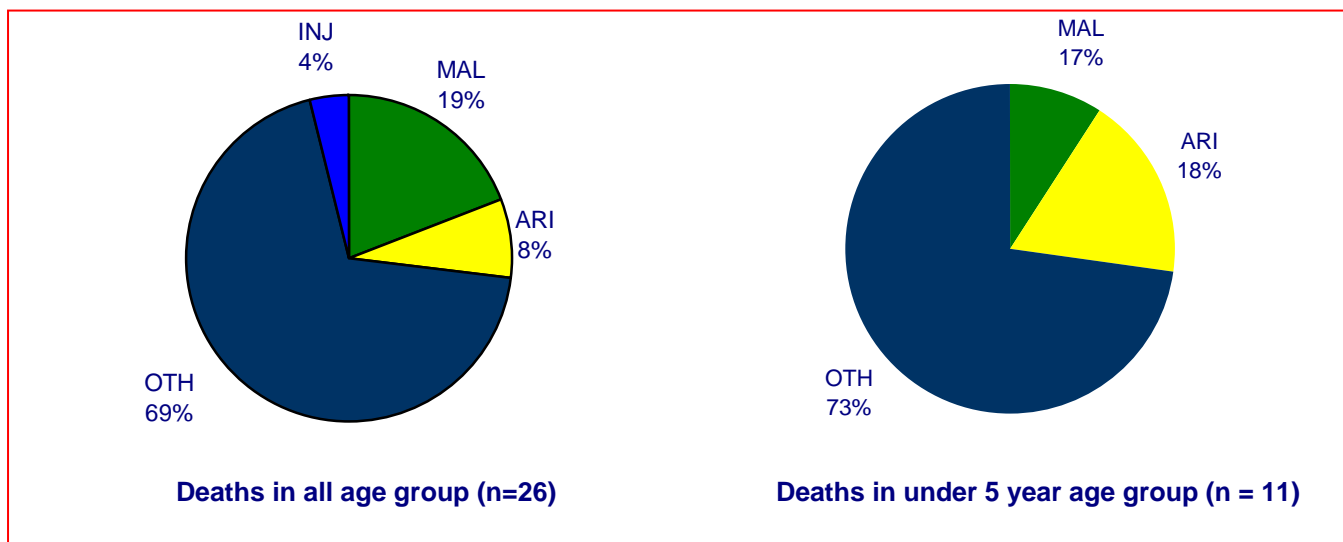


Figure 4: Proportion of all reported deaths, Greater Darfur, Sudan, 21-27 January 2006

Distribution of reported cases and CFR in Greater Darfur

During the current reporting week, **Clinically Diagnosed Malaria (0.18%)**, amongst all other reported health events (Figure-5), had the highest **Case Fatality Rate (CFR)** followed by **Injury (0.06%)**.

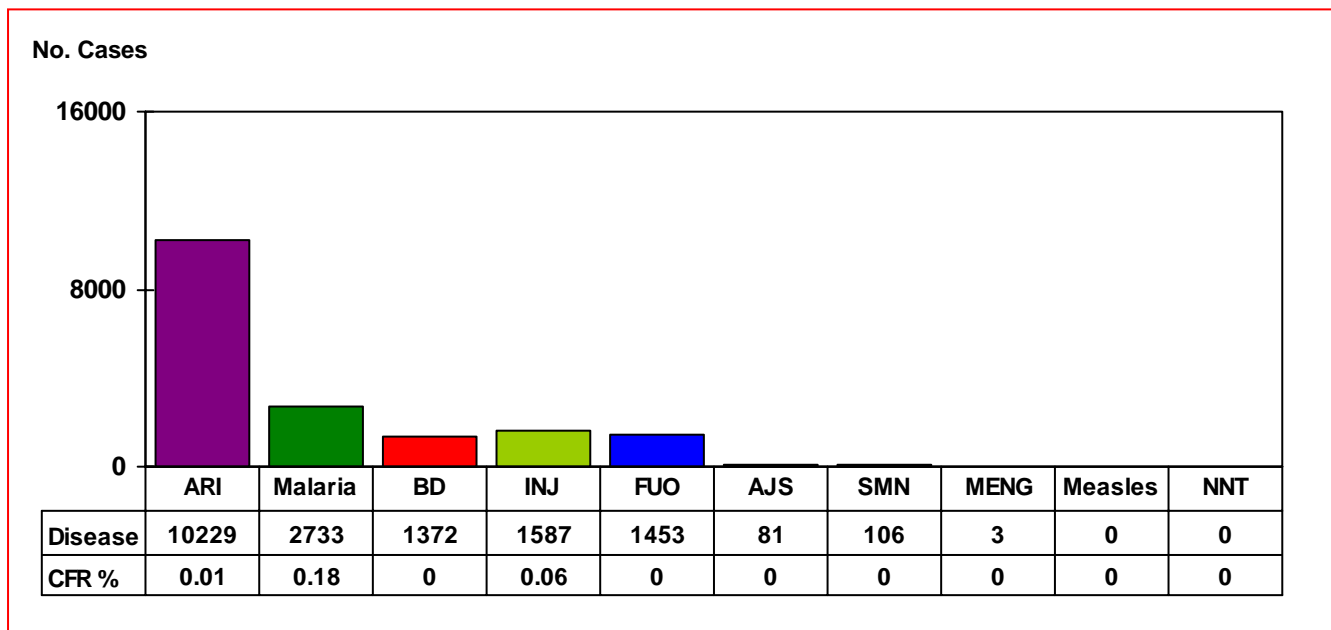


Figure 5. Distribution of reported cases and CFR, Greater Darfur, Sudan, 21-27 January 2006

Although **ARI** was the most common morbidity reported in the under-5 year age group, the CFR for **Clinically Diagnosed Malaria** was the highest (**0.1%**) compared with any other health event in the under-5 year age group (Figure-6), followed by **Acute Respiratory Tract Infection (0.04%)**.

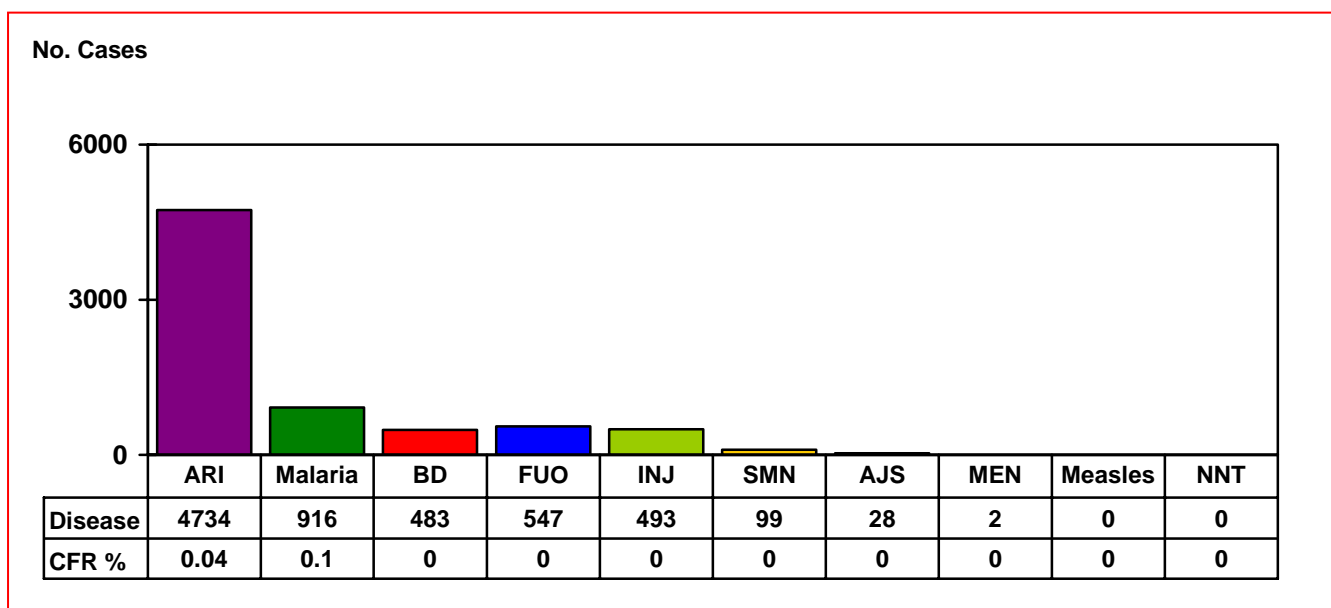


Figure 6. Distribution of reported cases and CFR in the under-5 year age group, Greater Darfur, Sudan, 21-27 January 2006.

Reported weekly incidence rate of selected communicable diseases

During the current week (21-27 January 2006), the weekly incidence rate of major communicable diseases with epidemic potentials have shown a downward trend which is consistent with the seasonal trend of these diseases in Greater Darfur.

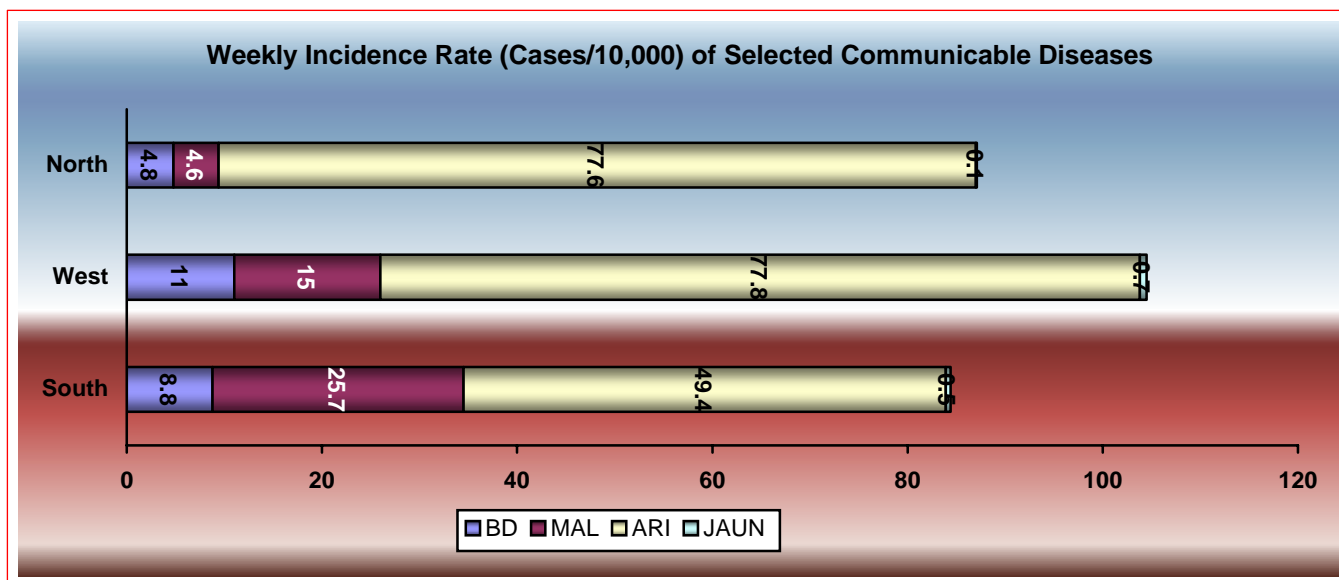


Figure 7. Reported weekly incidence rate of selected communicable diseases, Greater Darfur, Sudan, 21-27 January 2006

Although, the weekly incidence rate of Bloody Diarrhea for Greater Darfur, reported during the current week, was 8.74 cases per 10,000, the state of West Darfur (Figure-7) has recorded a slightly higher incidence rate of Bloody Diarrhoea than the cumulative average recorded from Greater Darfur (11 cases/10,000). Comparative higher incidence rate of malaria has also been reported from South Darfur (25.7 cases per 10,000 against Greater Darfur's cumulative average of 17.42 cases per 10,000 reported this week for malaria). The weekly incidence rate of Acute Respiratory Infection reported this week for Darfur was 65.21 cases/10,000 whereas both the states of North and West Darfur has reported higher incidence rate (77 cases/10,000) than the average rate reported from Greater Darfur this week for Acute Respiratory Infection. The weekly incidence rate of Acute Jaundice Syndrome in none of the three Darfur sates has shown any perceptible increase compared to the weekly average rate of Greater Darfur which was 0.5 cases/10,000 this week.

Surveillance for Measles

The surveillance data of EWARS notified **417 clinically diagnosed measles** cases from Greater Darfur between 01 January 2005 to 31 December 2005 and during the month of January 2006, 6 more new cases were notified bringing the current total number of reported cases of measles, so far, to 423 since the beginning of 2005.

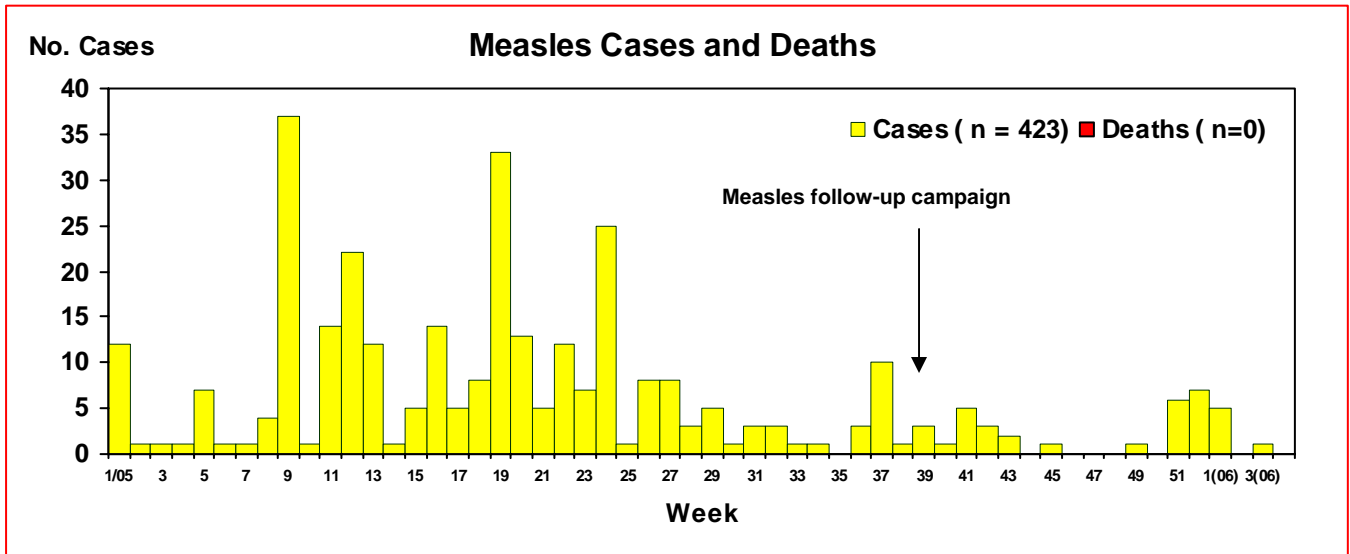


Figure 8. Weekly reporting of measles cases and death, Greater Darfur, 1 January 2005 to 27 January 2006.

Although, no death from measles was reported from Greater Darfur in 2005, but cases were observed to have piled up from the 9th epidemiological week onwards (Figure-8). This resulted in organizing a follow-up immunization campaign through out Greater Darfur during July-August 2005 in order to interrupt transmission of circulating measles virus. Following the campaign, number of reported cases dropped but suspected measles cases are being reported again this year from Greater Darfur, mostly, from the South. The situation points to the fact that routine immunization services are still not accessible to a large number of children living in the IDP camps and settlements owing to protracted conflict and heightened security situations prevailing in the region.

Surveillance for Malaria

With the onset of winter, the attack rate as well as proportionate morbidity attributed to malaria dropped across Greater Darfur. The current weekly attack rate of malaria, observed throughout Greater Darfur, is 1.74/1000 cases which is not above the historical value (past attack rates observed during the same period in 2005) and well below the mean attack rate (4.63 cases/1000) observed in 2005 across Greater Darfur (Figure-9). However, in South Darfur, the weekly attack rate of malaria for the current week has been observed to be 2.57 which is higher than the average observed for the whole Greater Darfur this week

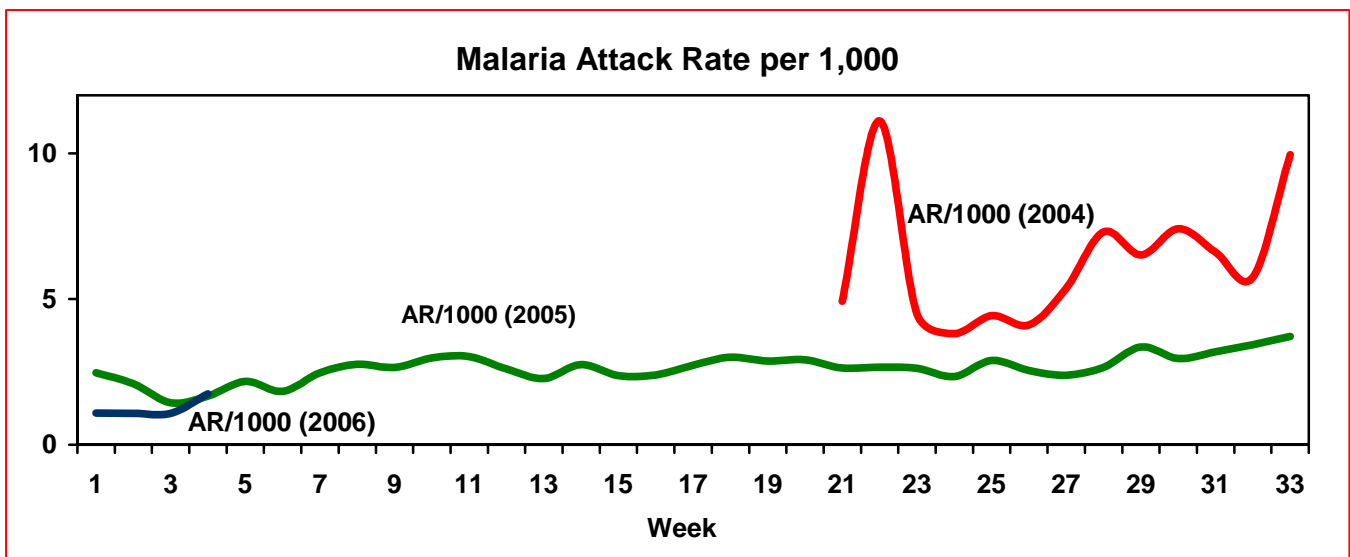


Figure-9: Comparison of current attack rate of malaria with historical value

Surveillance for Bloody Diarrhoea

There has been a perceptible change in the attack rate of Bloody Diarrhoea, through out Greater Darfur, as has been observed in recent time. The attack rate of bloody diarrhoea observed during the current week is 8.74 cases /10,000 which is below the attack rate observed during the same period in 2005 (Figure-10). Slightly higher attack rate is observed in West Darfur compared to either North or South Darfur.

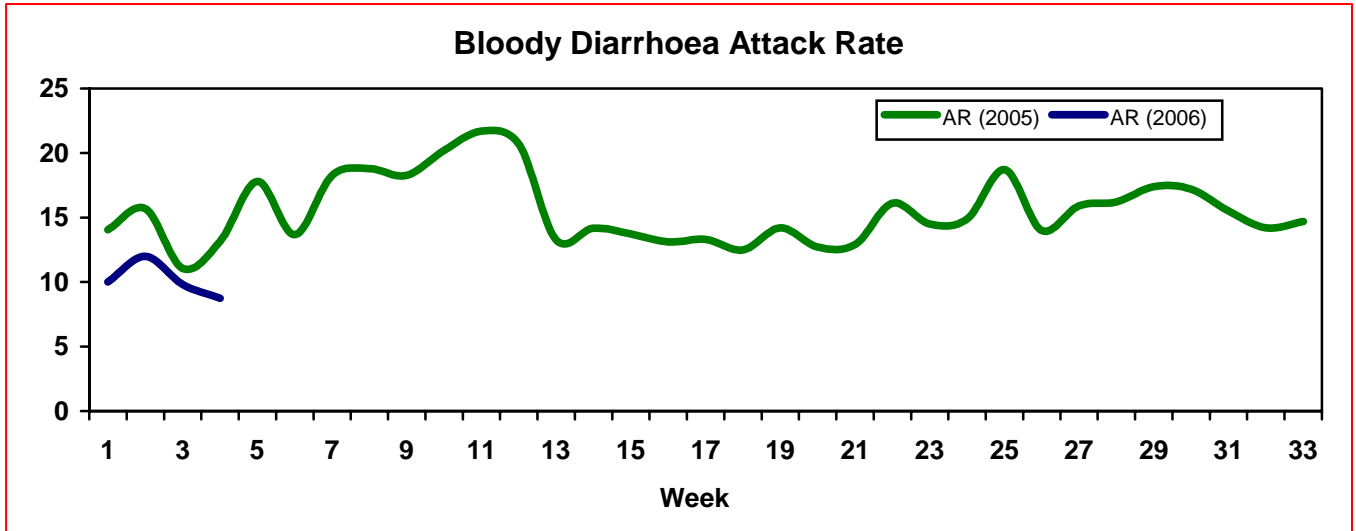


Figure-10: Comparison of current attack rate of Bloody Diarrhoea with historical value

Comparison of current case load of Bloody Diarrhoea with historical value also shows that the most recent case load (1372 cases) is far below the statistical cut-off (mean averaged over past 52 weeks \pm 2 Standard Deviations) set for the early detection of bloody diarrhoea in Darfur (Figure-11)

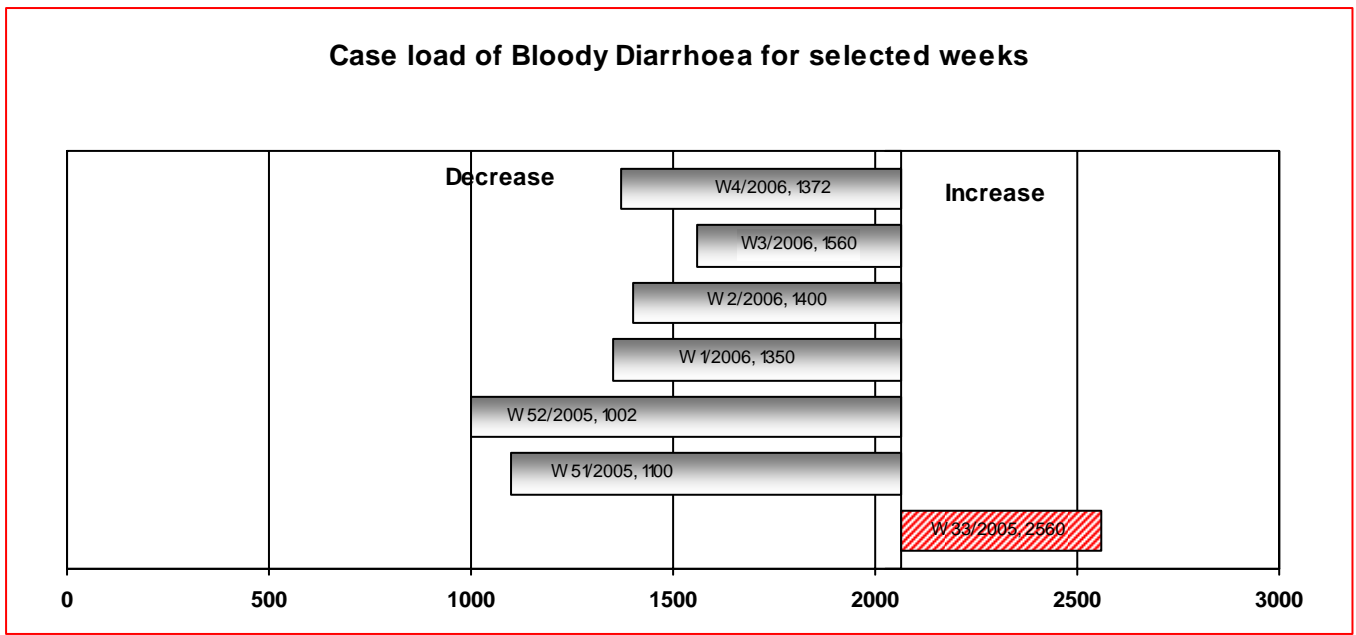


Figure-11: Comparison of most recent case load of Bloody Diarrhoea with historical value

Outbreak Alert and Response

During the past 4 weeks, a total of seven (7) outbreak “alerts” were raised (Figure-11) by the EWARS in Greater Darfur. Highest number of alerts was flagged during the week no 3 (Reporting period: 14-20 January, 2006).

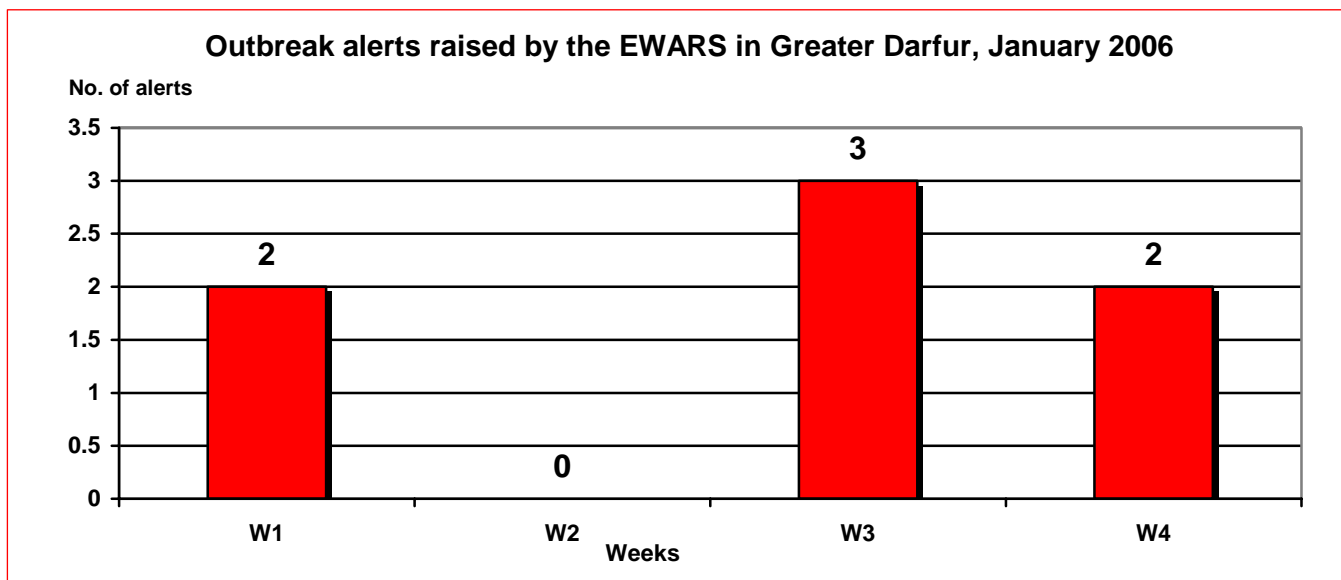


Figure-12: Outbreak alerts by week, Greater Darfur, Sudan, January 2006

There were two (2) alerts in week no 1- one for measles and one for suspected meningitis followed by three (3) alerts in week no 3 for measles, suspected meningitis and neonatal tetanus and two (2) alerts again in week no 4 for suspected meningitis and Acute Watery Diarrhoea. All these alerts were investigated jointly by WHO and the rapid response teams of the SMOH in Greater Darfur. The investigation consisted of collection of laboratory samples from the suspected cases as well as detection of cases with epidemiological linkage. The existence or confirmation of the presence of any outbreak from these “alerts” was, eventually, ruled out following no positive laboratory result of the collected samples as well as detection of no epidemiological clustering of cases.

Enhanced epidemiological surveillance for meningococcal meningitis

Considering the present high risk season for meningitis in Sudan, and also owing to the fact that two outbreaks of meningococcal meningitis caused by NM W135 strains were detected in Darfur between March to May in 2005, an enhanced epidemiological surveillance system for meningococcal meningitis has been put into place across all three states of Darfur in order to rapidly detect and identify any evolving outbreak of meningococcal meningitis in the region. As a part of this effort, a case-based surveillance system for all reported cases of suspected meningococcal meningitis has been introduced and collection of cerebrospinal fluid samples from the suspected cases have been scaled up for timely laboratory isolation of circulating strains. Continuous public health risk assessment in view of anticipated strong seasonal transmission of the disease is undergoing as part of this enhanced epidemiological surveillance for meningococcal meningitis.