

# Weekly Epidemiological Monitor

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#### **Current major events**

## Preparedness for Meningococcal Meningitis, Sudan, 2008

Since the beginning of this year, no outbreak of meningitis has been confirmed in Sudan. There were rumors of meningitis outbreaks reported from three counties in southern Sudan, but epidemiological and laboratory findings following investigations ruled out meningococcal disease (MCD). In the 15 states of northern Sudan, enhanced weekly surveillance for MCD has not identified a district that has exceeded alert or outbreak threshold. *N. meningitidis* sero-group A have been isolated from specimens tested in two locations in

#### **Editorial note**

In the "meningitis belt" of Africa, an area stretching from Senegal on the west to Ethiopia on the east, epidemics of meningococcal disease occur in periodic waves during dry season (Dec to Jun). Large epidemics have occurred in the African meningitis belt in cycles of 5-12 years. It remains one of the major public health problems in the region with thousands of cases and deaths being reported from the disease every year from the countries in the belt.

Sudan is the only country in the Eastern Mediterranean Region that falls within the African Meningitis Belt. With exception of two States in northern Sudan, the whole country falls within the belt. The last major epidemic in the Eastern Mediterranean Region was in the Sudan in 1999 when more that 30,000 cases of meningococcal disease were reported across the country. Sudan reported 12,876 cases including 778 deaths of meningitis during the 2007 meningitis season. Most of the cases were reported from Southern Sudan.

During the current epidemic season, low levels of epidemic meningitis activities have been observed, so far, from the countries of African Meningitis Belt. Meningococcal disease in Sudan, 1986-2007

40000
35000
25000
20000
15000
1976 1'978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006
Reporting year (1976-2007)

western Darfur State. Currently, the Federal Ministry of Health (FMOH), Sudan with the support from WHO has pre-positioned MCD diagnostic kits and oily chloramphenicol to all the states at high risk of MCD outbreak ready for deployment to any state that exceeds outbreak threshold.

The strategy for outbreak control relies on reactive mass immunization using either bivalent or trivalent polysaccharide vaccines as well as standardized case management with a single dose of oily chloramphenicol or ceftriaxone. Enhanced surveillance for meningococcal disease and maintaining emergency stockpile of vaccines and first-line drugs are, therefore, critical, to improve preparedness in countries entering epidemic cycle. A new vaccine-Meningitis A conjugate vaccine offers new prospects for controlling meningococcal disease in the meningitis belt because of its promises for long-term, low cost protection.

#### Meningitis A conjugate vaccine:

- Produced by Serum Institute of India in collaboration with PATH/ WHO; price will be \$0.40 a dose
- Safe and more immunogenic than polysaccharide vaccines
- Licensing dossier will be submitted to Indian NRA in July 2008. WHO pre-qualification will be by 2009
- 9 M doses will be used for a demonstration study in Burkina Faso while
   10 M doses would be available for the market in January 2009

#### Stockpiles at country level (Sudan):

- About 15,000 vials of oily chloramphenicol and reasonable quantities of cephtriaxone
- 500,000 doses of polysaccharide (bivalent) and 60,000 doses of trivalent vaccine
- Some supplies are pre-positioned in Juba

#### **Update on outbreaks**

in the Eastern Mediterranean Region

Avian Influenza: Two new human cases in Egypt; Cholera: Somalia (see next issue)

### Current public health emergencies of international concern [cumulative N° of cases/deaths, CFR %]

#### Avian influenza Egypt [45/19, **42.2%**] Indonesia [129/105, **81.4%**] Viet Nam [105/51, **48.6%**] China [30/20, **66.7%**] Cholera D.R. Congo [4136/126, **3.1%**] Somalia [561/12, **2.1%**] [4,697/24, **0.5%**] **Meningococcal Meningitis** C. African Republic [45/5, **11.1%**] D. R. Congo [167/17, **10.2%**] Uganda [380/17, 4.5%] Monkey pox DR Congo [173/4, **2.3%**] **Yellow Fever** Paraguay [16/3, **18.8%**] Argentina [21/0, **0.0%**]

(\*=Unofficial figures)

CFR=Case-Fatality Rate