

Current major event

Sporadic cases of meningitis. No outbreak reported from Sudan

The current high risk season for epidemic meningitis is phasing out in Sudan without any outbreak reported from the country. From 01 January to 22 May 2011, only 573 suspected cases of meningococcal disease including 18 deaths (CFR: 3.1%) were reported from 12 of the 15 states in northern Sudan.

Laboratory samples of cerebral spinal fluid analyzed at the National Public Health Laboratory were tested positive for both *Neisseria meningitidis* serogroup A and serogroup W135.

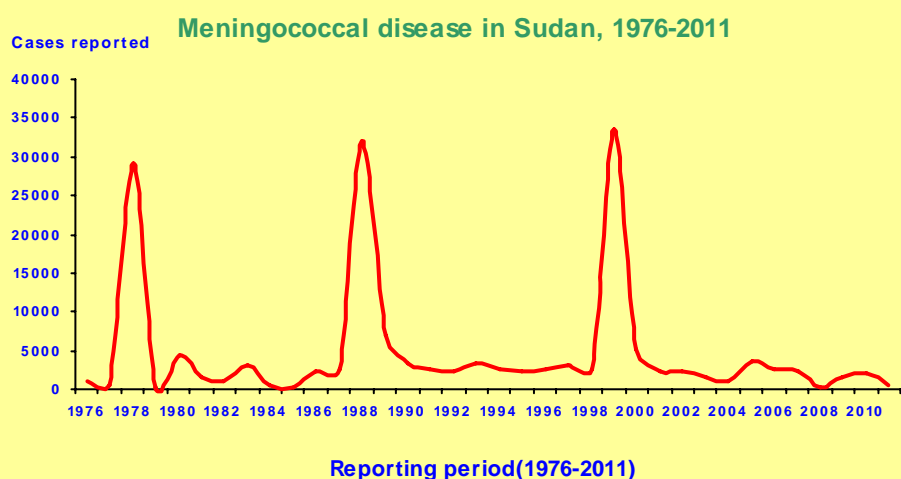
Editorial note

In the “African meningitis belt”, an area that stretches from Senegal in the West to Ethiopia in the East, epidemics of meningococcal disease occur periodically although unpredictably every 2-10 years. The hot, dry climate in this ‘belt’ appears to favour airborne transmission of bacteria with epidemics abating during rainy seasons. Sudan is the only country in the region which falls within this meningitis belt.

Since 1976, Sudan has been experiencing major cyclical outbreak of meningococcal disease with an interval of every 10-12 years (*Please see the graph*). The last of these major outbreaks in Sudan was recorded in 1999/2000. In last six years, the cases of meningococcal disease have recorded a gradual decline in the country (*Please see the table*), but the threat of epidemic meningitis can never be undermined.

The established approach to control epidemic meningitis is early detection of disease and emergency mass immunization of the at-risk population with polysaccharide vaccine once an outbreak has been confirmed. Such reactive vaccination campaigns can not, however, prevent recurrent epidemics.

This year, Sudan conducted preventive vaccination campaigns in two states covering 125,914 at-risk population. Further campaigns with bivalent vaccines are also planned later this year for three



Meningitis cases reported from Sudan in last 6 years (2006– May 2011)

Year	Cases	Deaths	CFR (%)
2006	2617	91	3.4
2007	2297	115	5
2008	294	12	4
2009	1476	53	3.8
2010	2010	84	4.2
2011	573	18	3.1

more states covering another 1,369,281 at risk populations. These bivalent vaccines may not provide long-term protection but could prevent periodic outbreaks in these areas in the coming year or so.

At the end of 2010, a new meningococcal A conjugate vaccine has been introduced into routine vaccination programme in three hyperendemic African countries with a promise to offer long term protection against meningococcal A meningitis. The vaccine is yet to be rolled out in Sudan.

Given these facts, the end of epidemic meningitis that frequently sweeps Sudan is not in sight, at-least not in next few years. Therefore, the current priority should be to maintain enhanced surveillance during the high-risk seasons. Early detection of outbreak will be critical to institute standardized case management and organize reactive mass immunization campaign with appropriate type of polysaccharide vaccine once the outbreak is confirmed.

Update on outbreaks

in the Eastern Mediterranean Region

Measles in Afghanistan; A(H5N1) in Egypt; Cholera in Afghanistan.

Current public health events of international concern

[cumulative N° of cases (deaths), CFR %]

Avian influenza

Egypt	[144 (487), 33.3%]
Indonesia	[177 (146), 82.4 %]
Viet Nam	[119(59), 49.6%
China	[40(26), 65%]
Global total	[554 (324), 58.4%]

Cholera

Haiti	[302401*(5234), 1.7 %]
Chad	[1893 (83), 4.4%]

Ebola Haemorrhagic fever

Uganda	[1(1), 100%]
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Meningococcal disease

Chad	[5536 (249), 4.4 %]#
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Haemolytic uraemic syndrome

Germany	[276(3), 1%]#
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Yellow fever

Uganda	[226(53), 23.4 %]
Sierra Leone	[2(0),]

CFR=Case-Fatality Rate; * Number of hospital visits; # Suspected cases only