

## Current major event

### Meningococcal disease in Sudan: Sporadic cases reported so far

During the current high risk season for meningococcal disease, a total of 509 suspected cases including 24 deaths (CFR: 4.2%) were reported from Sudan. These cases were reported from 01 January to end of June 2013. One of the samples collected from South Darfur state was tested positive for *Neisseria meningitidis* (Nm) serogroup W 135. As of now, there is no report that any of the districts in Sudan reached either alert and epidemic threshold for meningococcal meningitis outbreak during the current high risk season in Sudan.

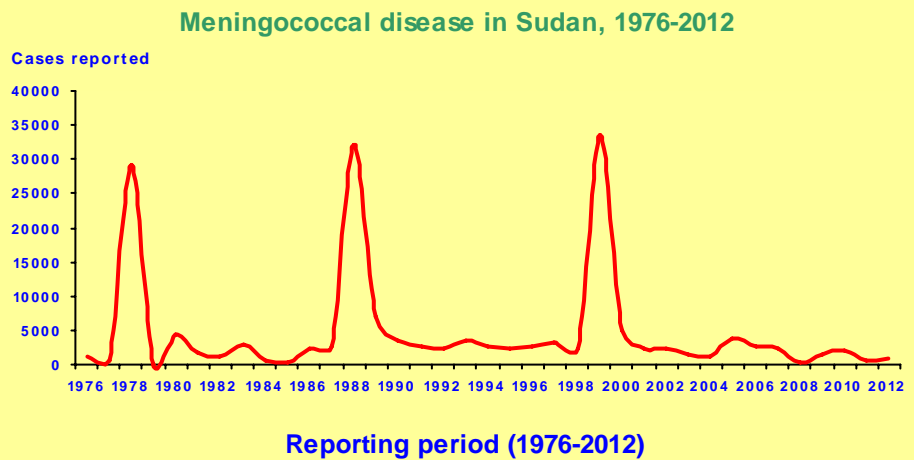
### Editorial note

Epidemic meningitis remains a major public health challenge in the African “meningitis belt”. Stretching from Senegal in the West to Ethiopia in the East, the belt is characterized by intensity of recurring meningitis epidemics. Close to 450 million people in 21 countries of the continent are presumed to be at-risk. 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 EMR which falls within this meningitis belt.

Since 1976, Sudan has been experiencing major cyclical outbreak of meningococcal meningitis with an interval of 10-12 years in between (Please see the graph). The last of these major outbreaks in Sudan was recorded in 1999/2000. During the last seven years (Please see the table), the cases have recorded a gradual decline.

The established approach to control epidemic meningitis is based on early detection of disease outbreak and emergency mass immunization of the at-risk population with polysaccharide vaccine.

In October 2012, Sudan introduced the new meningococcal A conjugate vaccine into routine vaccination programme in some of its hyper-endemic states. However, it will take until the end of this year before the whole target population (Between 0 to 29 year age group) in the 17 states of the country are vaccinated with this conjugate vaccine. In 2012,



Meningitis cases reported from Sudan in last 5 years (2006-2012)

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	633	19	3
2012	911	26	2.8

Sudan experienced a small scale localized outbreak of meningococcal meningitis in West Darfur state caused by *Neisseria meningitidis* (Nm) serogroup-A. A mass reactive vaccination campaign was organized (Please see WEM, Vol-5; Issue-17, 22 April 2012) contain the outbreak.

The meningococcal A conjugate vaccine, however, will not offer any protection to the epidemic caused by serogroup W135, a strain that has also caused outbreaks repeatedly in parts of Sudan in the recent past (in Darfur and South Kordofan and Kassala in particular). As it is seen this year, the same serogroup is still circulating in Darfur. As conjugate vaccine, even after it is rolled out completely, will not offer protection against serogroup W 135, the country should strengthen its surveillance system to early detect any epidemic caused by this particular strain and laboratory confirm it as soon as possible so that the outbreak can be contained with appropriate interventions.

## Update on outbreaks

in the Eastern Mediterranean Region

Novel Coronavirus in Saudi Arabia, UAE & Tunisia; Hepatitis E in South Sudan; Meningococcal meningitis in South Sudan; Wild poliovirus in Somalia.

### Current public health events of international concern

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

#### Avian influenza

Egypt	[173 (63), 36.4%]
Indonesia	[192 (160), 83.3 %]
Viet Nam	[125 (62), 49.6%]
Cambodia	[31 (27), 87.1%]
Global total	[629 (375), 59.6%]

#### Hepatitis E

South Sudan	[111 22 (202), 1.8%]#
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#### Novel Coronavirus (MERS-CoV)

Saudi Arabia	[63 (35), 55% ]
Italy	[3 (0)]
Jordan	[2 (2), 100%]
France	[2 (1), 50%]
UAE	[1 (0) ]
Tunisia	[2 (0)]

#### Influenza A (H7N9) virus

China	[132 (37), 28%]
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#### Meningococcal meningitis

South Sudan	[196 (13), 6.6%]#
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#### Wild poliovirus

Somalia	[1 (0)]
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CFR=Case-Fatality Rate; # Suspected cases