

Regional Office for the Eastern Mediterranean

Current major event

Meningitis epidemic risk assessment in South Sudan

South Sudan has recently conducted an epidemic risk assessment for meningitis with technical support from WHO/ EMRO and the Intercountry Support Team, WHO/AFRO based in Ouagadougou, Burkina Faso.

Editorial note

South Sudan has faced epidemic meningitis in cyclical pattern in the past decades with an interval of every 7 to 8 years. The largest burden of meningococcal disease occurs in the African meningitis belt: an area of sub-Saharan Africa, which stretches from Senegal in the west to Ethiopia in the east. Sudan and South Sudan are the two countries in the Eastern Mediterranean Region (EMR) which fall within this African meningitis belt.

Meningitis kills thousands in the belt every year and is particularly devastating to children and young adults. Patients typically die within 24 to 48 hours of the onset of symptoms. Of those who survive, 10 to 20 percent suffer brain damage, hearing loss or a learning disability. Most of the large epidemics that occur in the belt are caused by group A. Vaccines against different forms of meningococcal disease have been available for over 30 years. These vaccines gives protection for a maximum of 2-3 years and do not protect young children, who are particularly vulnerable to the disease. The vaccines do not prevent epidemics.

In 2010, WHO pre-qualified a new conjugate vaccine called the "MenAfriVac" which offered promises for long-term (over 10 years), low cost protection. The vaccines are also effective in saving lives of the children. So the risk assessment was conducted as a prerequisite of introducing the new conjugate vaccines in South Sudan.

The assessment consisted of applying epidemiological surveillance data and past epidemic information to characterize areas at epidemic risk of meningitis (please see map) but the final decision for prioritization of order of immunization

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Suggested phases of vaccination

Phases	Target popula- tion	No of doses needed
Phase 1	1 419 080	1 560 988
Phase 2	1 947 831	2 142 614
Phase 3	2 327 134	2 559 847
Total	5,694,045	6,263,450

campaign will be made by the national health authorities in consideration of local factors including operational and logistic capacity of the country to launch large scale immunization campaign.

Using surveillance data from 1999 to 2005 and also from 2010 to 2012 and epidemic meningitis data from 2006 to 2009, the risk assessment identified over 5.6 million people living in 10 states of South Sudan at considerable risk of epidemic meningitis.

Following this risk assessment, South Sudan will, now, file an application to GAVI for support in procuring meningitis conjugate vaccines to protect its vulnerable people for life from the recurrent threats of epidemic meningitis.

It is expected that starting in October 2013, South Sudan may complete vaccinating its 5.6 million at risk population with meningitis conjugate vaccines in three phases by the year 2015 (See table above). It is hoped that, this will lead to eliminating meningococcal meningitis as a public health risk in South Sudan and the region at large.

Update on outbreaks

in the Eastern Mediterranean Region

Novel Coronavirus in Saudi Arabia; Yellow fever in Sudan; Hepatitis E: in South Sudan; WNV in Tunisia.

Current public health events of international concern [cumulative N° of cases (deaths), CFR %]

Avian influenza			
Egypt	[170 (61), 35.88]		
Indonesia	[192 (160), 83.3 %]		
Viet Nam	[123(61), 49.5%]		
Cambodia	[26(23), 88.4%]		
Global total	[620(367), 59.1%]		
Hepatitis E			
S. Sudan	[8031 (135),1.7%]#		
Novel coronavirus			
Saudi Arabia	[7 (5), 71.4 %]		
Qatar	[2 (0)]		
Jordan	[2 (2), 100%]		
UK	[3 (1) , 33 %]		
West Nile Virus			
Tunisia	[81 (12) 14.8.%]#		
Yellow fever			
Sudan	[849 (171), 20.2%] #		
Chad	[139 (9), 6.4%]		

CFR=Case-Fatality Rate; # Suspected cases