

Current major event

Yellow fever in Sudan: No cases reported since Week 51 of 2012

The Yellow fever (YF) outbreak in Darfur region of Sudan which appeared in late September 2012, is coming to an end. No suspected cases were reported since week no 52 of 2012. A total of 849 suspected cases including 171 deaths were reported from this outbreak in Sudan spanning over 3 months period.

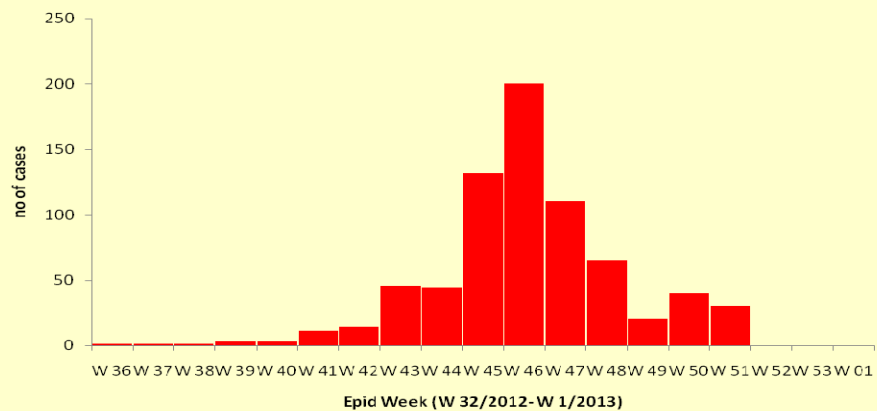
Editorial note

The current YF outbreak in Sudan has already gone down as one of the most severe and largest YF epidemic ever seen in Africa over the last three decades. Over 3.5 million people have also been vaccinated against YF in some of the most challenging areas. A further 2 million at risk people are expected to be vaccinated in Darfur to ensure complete halt of transmission of YF virus in the region.

The epidemic spread to 35 out of 64 localities (districts) in Darfur. Although, a total of 849 suspected cases were, so far, reported from this outbreak, there are strong reasons to believe that the number of cases reported from this outbreak may not truly represent the size and severity of this epidemic. As the surveillance system only picked up the severe cases that were admitted in the health care institutions, it was difficult to ascertain how many mild cases were reported from this outbreak and as such the true size of this epidemic will remain anybody's guesswork. It now also appears that due to inaccessibility and insecurity in the areas, many patients were unable to travel and therefore report to the hospitals. As such, it is plausible that the surveillance system missed out many suspected and probable cases at the peak of the epidemic when the vaccination campaigns did not start.

Despite the delay in detection of the outbreak, significant reduction in the number of YF cases were observed from epidemiological week no 47 onwards. This might have been due to the rapid

An epidemic curve showing number of suspected cases of Yellow fever reported from Sudan, 01 September—09 January 2013



Some major YF outbreaks in Africa

Year	Country	Cases	Deaths	CFR (%)
2012	Sudan	849	171	20.2
2011	Uganda	226	53	23.4
2005	Sudan	615	183	29.7
2003	South Sudan	178	27	15.1
2001	Cote d'ivoire	169	20	11.8
2000	Guinea	512	190	37.1

* on going outbreak

Source: Disease Outbreak News, WHO : <http://www.who.int/csr/don/en/index.html>

start of the vaccination campaign as soon as the outbreak was laboratory-confirmed. The campaign started from week no 46 in phases and gradually covered all the affected areas of Darfur. The high vaccination coverage (over 94% in first phase and 86% in second phase) also contributed to gradual reduction of cases. The resultant herd immunity amongst the at risk population might have also played an important role.

The current challenge would be to scale and gear up the surveillance system for YF and other arboviral diseases in Darfur for monitoring the halt of the epidemic. In other areas, the focus should be to detect any suspected case as the population movement may well contribute to the spread of the virus from Darfur to other non-established foci.

Update on outbreaks

in the Eastern Mediterranean Region

Novel Coronavirus in Saudi Arabia, Qatar and Jordan; **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	[169 (60), 35.75]
Indonesia	[190 (158), 83.1 %]
Viet Nam	[123(61), 49.5%]
Cambodia	[21(19), 90.4%]
Global total	[610(360), 59%]

Hepatitis E

S. Sudan	[2484 (29),1.1%]#
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Novel coronavirus

Saudi Arabia	[5 (3), 60 %]
Qatar	[2 (0)]
Jordan	[2 (2), 100%]

West Nile Virus

Tunisia	[81 (12) 14.8.%]#
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Yellow fever

Sudan	[849 (171), 20.2%] #
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Ebola Haemorrhagic Fever

D.R Congo	[77(36), 46.7%]
Uganda	[7 (4), 57%]

CFR=Case-Fatality Rate; # Suspected cases