

Current major event

Yellow fever in Sudan

On 29 October 2013, the Federal Ministry of Health (FMOH) in Sudan has notified WHO of a possible yellow fever outbreak in West Kordofan state. As of 05 November 2013, a total of 22 suspected cases including 8 deaths were reported. The Central Public Health Laboratory (CPHL) in Khartoum has found 9 out of 15 serum samples positive for YF by serology test. The positive samples were sent to a WHO reference laboratory for re-confirmation and further analysis.

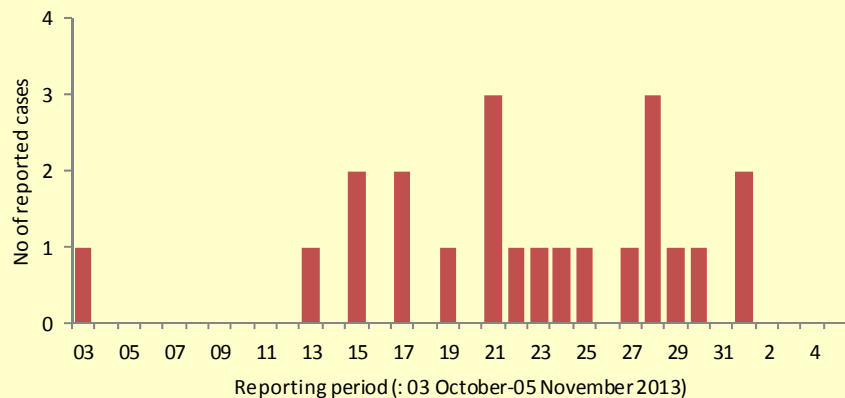
Editorial note

If the laboratory test currently being conducted now, in one of the WHO reference laboratories, turn out to be positive, this would be the second outbreak from YF in Sudan in last 2 years. This follows last year's outbreak reported from Darfur, Sudan around the same time period. The last year's outbreak was one of the worst in Africa in last two decades with 849 cases including 171 deaths reported from this YF outbreak in Sudan.

The preliminary investigation conducted by the FMOH indicate that the index case(s) were from the eastern states of Sudan who went to the West Kordofan state as seasonal workers for the gum Arabic plantation and might have acquired the infection there. Subsequently cases have also been reported amongst the local community of West Kordofan state. The entomological survey conducted in the affected areas found moderately high densities of *Ae. aegypti* mosquitoes signifying the presence of competent vectors for sustained transmission.

The current epidemiological situation, by looking at the epidemic curve, needs to be interpreted with caution. The sporadic occurrence of cases mean that the outbreak may just be evolving and owing to limitations in the surveillance system and in-accessibility, it is possible that many cases were also not detected. Active surveillance and case detection need

Suspected YF cases reported from West Kordofan state, Sudan, 03 October-05 November 2013,



Yellow fever outbreaks in Sudan

Year	Cases	Deaths	CFR (%)
1959	120	88	73.3
2003 *	178	27	15
2005	615	183	30
2012	849	171	20

* The area is currently under South Sudan

to be strengthened and enhanced in the affected areas. As the areas remain in close proximity to South Sudan, cross-border surveillance also needs to be improved between the bordering areas of these two countries. It is also important to monitor the movement of the seasonal workers who are or would be going back to the eastern states of Sudan. Surveillance in these states need to be strengthened to early detect any sign of spread of YF in these states. The eastern states of Sudan are traditionally endemic to dengue fever. It is the same vectors of YF which also transmit dengue fever. Therefore, the presence of same vectors in these states may increase the likelihood of spread of YF in these areas following movement of these seasonal workers.

Currently in addition to strengthening the surveillance system, the country should immediately plan for a mass vaccination campaign against YF with possible different scenarios in order to contain the outbreak and prevent its further spread.

Update on outbreaks

in the Eastern Mediterranean Region

Novel Coronavirus in Qatar, Oman and Saudi Arabia; **Wild poliovirus** in Somalia and Syria.

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	[12,660 (251), 1.9%]#
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Novel Coronavirus (MERS-CoV)

Saudi Arabia	[127 (53), 42%]
Oman	[1 (1), 100%]
Qatar	[8 (2), 25%]
Tunisia	[3 (1), 33%]

Influenza A (H7N9) virus

China	[139 (45), 32%]
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Crimen-Congo haemorrhagic fever

Pakistan	[86 (18), 21%]
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Wild poliovirus

Syria	[13 (0)]
Somalia	[180 (0)]

CFR=Case-Fatality Rate; # Suspected cases