

Current major event

West Nile Virus in Tunisia

The Ministry of Health in Tunisia reported West Nile Virus (WNV) cases in humans to WHO. Since August, a total 32 human cases of WNV infection including 2 deaths were reported from eight governorates (*please see the table and the map*) in the country.

Editorial note

The reporting of what appears to be an outbreak of West Nile Virus (WNV) infection in humans in Tunisia is yet another ominous sign of geographic expansion of zoonosis in the Eastern Mediterranean Region of WHO.

In 1997, Tunisia reported its first epidemic of WNV infection. This was followed by another epidemic in 2003. Sporadic cases of WNV infections were also reported in humans in 2010 and again in 2011. Apart from Tunisia, sporadic human and equine cases of WNV has been reported from Morocco (1996), Jordan (suspected), Palestine (2010, 2009, 2008 & 2006).

The WNV is a member of the *flavivirus* genus and birds are the natural hosts of the virus. Human infection is most often the result of bites from infected mosquitoes. The WNV can cause a fatal neurological disease in humans. Although approximately 80% of people who are infected may not show any symptoms. The virus may also be transmitted through contact with other infected animals, their blood, or other tissues. A very small proportion of human infections have occurred through organ transplant, and blood transfusions. Although transmission of WNV to laboratory workers has been reported, no human-to-human transmission of WNV through casual contact has been documented, to date. No transmission of WNV to health care workers has also been reported when standard infection control precautions have been put in place.

The treatment of WNV infection is supportive. The way to reduce infection in humans is by educating people about the



West Nile Virus in Tunisia, August-October, 2012

Governorate	No of reported cases	Reported deaths
Mahdia	5	
Monastir	6	
Jendouba	3	1
Kebili	6	
Gabes	8	1
Sousee	1	
Bizerte	2	
Tunis	1	
Total	32	2

Prevention of WNV infection

- Personal and community protection against mosquito bites through the use of mosquito nets, personal insect repellent, by wearing light coloured clothing (long-sleeved shirts and trousers) and by avoiding outdoor activity at peak biting times;
- Protection against risk of animal-to-human transmission through wearing gloves and other protective clothing while handling sick animals or their tissues, and during slaughtering and culling procedures;
- Protection against transfusion of infected blood through proper screening at the time of outbreak in the affected areas.

measures they can take to reduce exposure to the virus (*Please see the box above*).

In an outbreak situation, effective control of WNV will very much depend on, integrated vector control management in areas where the virus occurs. Local mosquito species that play a role in WNV transmission, including those that might serve as a "bridge" from birds to human beings should be identified. Emphasis should be on integrated control measures including source reduction (with community participation), water management, chemicals, and biological control methods. Health-care workers caring for patients with suspected or confirmed WNV infection, or handling specimens from them, should implement standard infection control precautions.

Update on outbreaks

in the Eastern Mediterranean Region

Suspected YF: in Sudan; **WNV:** in Tunisia; **Hepatitis E:** in South Sudan; **Cholera:** in Iraq; and **CCHF:** in Pakistan;

Current public health events of international concern

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

Avian influenza

China	[43(28), 65.1%]
Egypt	[168 (60), 35.7%]
Indonesia	[190 (158), 83.1 %]
Viet Nam	[123(61), 49.5%]
Cambodia	[21(19), 90.4%]
Bangladesh	[6(0), 0%]
Global total	[607(358), 58.9%]

Suspected Yellow fever

Sudan	[84 (32), 38.1%]#
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West Nile Virus

Tunisia	[32 (2), 6.3 %]
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Crimean-congo haemorrhagic fever

Pakistan	[55 (14) 25.4.%]#
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Cholera

Iraq	[3392 (3), 0.08%] #
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Ebola Haemorrhagic Fever

D.R Congo	[77(36), 46.8%]
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CFR=Case-Fatality Rate; # Suspected cases