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Current major event

Nipah virus: Risk of importation to the countries of EMR

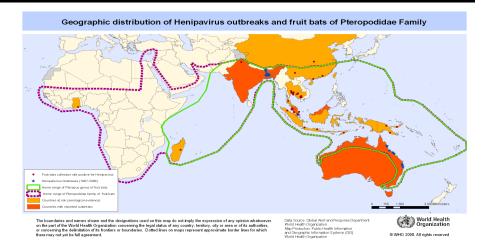
On 19 May 2018, a Nipah virus disease (NiV) outbreak was reported from Kozhikode district of Kerala, India. This is the first NiV outbreak in South India. There have been 17 deaths and 18 confirmed cases as of 1 June 2018. At-least three deaths occurred in a family cluster and a fourth death was subsequently reported in a health care worker who was involved in treatment of the family in the local hospital.

Editorial note

NiV is an RNA virus in the paramyxovirus family and the genus Henipavirus. Natural reservoir for NiV is the large fruit bats of the genus Pteropus, which are found in Asia, Australia, the Pacific islands, and sub-Saharan Africa (See map). NiV was first identified as the aetiologic agent causing outbreaks of encephalitis in humans and pigs in Malaysia and Singapore during the outbreak of 1998-1999. Subsequently NiV has been associated with outbreaks almost every year in Bangladesh with occasional outbreaks in neighboring India (see table).

NiV is highly pathogenic emerging zoonotic virus; 40-70% of those infected die. The main modes of NiV transmission are drinking raw date palm sap contaminated with excretions from fruit bats. Human-to -human transmission from NiV has been reported through close contact with infected persons such as close family care givers and health care workers. Exposure to respiratory secretions is thought to be the likely route of NiV transmission from patient to caregiver. Other modes of transmission include contact with contaminated surfaces and fomites. Typical initial clinical presentation, following incubation period of 4-30 days, include abrupt onset of fever, headache, dizziness, and vomiting. Neurological signs follow within a week; these include reduced levels of consciousness, segmental myoclonus, areflexia, hypotonia, and abnormal doll's eye-reflex.

So far there is no vaccine against NiV infection even though a number of preclinical vaccine candidates have shown promise in animal models. Furthermore intensive supportive care is the mainstay of case management; there is no definitive treatment for the disease.



Morbidity and mortality from NiV in the WHO South East Asia Region, 2001-2018

Years	Bangladesh		India	
	Cases	Deaths	Cases	Deaths
2001	13	9	66	45
2003	12	8	-	-
2004	67	50	-	-
2005	12	11	-	-
2007	18	9	5	5
2008	11	9	-	-
2009	4	1	-	-
2010	17	15	-	-
2011	44	40	-	-
2012	12	10	-	-
2013	24	21	-	-
2014	18	9	-	-
2015	9	6	-	-
2018	-	-	18	17

Documented instances of travel associated NiV infection are uncommon. During the outbreak of NiV in Malaysia during 1998-1999, two Indonesian migrant workers working in the infected pig farms, where the outbreak was reported, succumbed to the infection upon their return to Indonesia. However, none of these cases led to clusters of local transmission in Indonesia.

While the outbreak of NiV continues in Kerala, India, possibility of introduction of the disease to any of the Member State of WHO Eastern Mediterranean Region through any travel-associated case can not be ruled out. Countries should be adequately prepared based on careful risk assessment of exposure to travelers returning from the affected area. At the same time, vigilance should be enhanced. Surveillance for early detecting any case presenting to health facility with unusual types of encephalitis following their return from Kerala should be considered. In addition, optimal capacity for laboratory diagnosis of NiV and other high threat pathogen should also be ensured.

Update on outbreaks in the

MERS in Saudi Arabia; cholera in Somalia; cholera in Yemen; Polio in Pakistan.

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

Avian influenza: 2006-2017

Egypt (A/H5N1) [359 (122), 34%]

Egypt (A/H9N2) [4(0)]

Ebola virus disease (EVD): 2018

Democratic Re-[66 (28), 42.4%] public of Congo (DRC)

Lassa fever: 2018

[10 (5), 50.0%] Kenya

Cholera: 2017-2018

Somalia [4 300 (28), 0.6%] Yemen [1 100 720 (2 291), 0.2%]

Tanzania [2 442 (54), 2.0%]

Diphtheria: 2018

Yemen [1 838 (97), 5.2%]

Bangladesh [7 682 (42), 0.5%]

MERS: 2012-2018

Saudi Arabia [1 847 (716), 38.7%]

Yellow Fever: 2017-2018

[1,261 (409), 32.4%]