

**Regional Office for the Eastern Mediterranean** 

# Weekly Epidemiological Monitor ISSN 2224-4220

Volume 5 Issue 40 Sunday 30 September 2012

## **Current major event**

## No report of any new case from novel coronavirus

Since the last report of two laboratoryconfirmed case of novel human coronavirus (*Weekly Epidemiological Monitor, vol* -5; issue- 40, 23 September 2012), no further case of acute respiratory disease associated with this novel virus has been detected despite enhanced surveillance and vigilance around the region as well as in globe.

### **Editorial note**

The two cases of rapidly progressives acute respiratory infection associated with a novel strain of human coronavirus from the Eastern Mediterranean Region of WHO have generated a global alert and a rapid international public health response.

An interim case definition has been developed by WHO (Please see above), which has also been posted on the web for public domain. The purpose of publishing this case definition was to ensure that a systematic approach is followed for appropriate identification and investigation of patients who may be infected with the virus. WHO cautioned that since this case definition was developed based on epidemiological and clinical data available from these two confirmed cases, some degree of clinical judgment is required while identifying cases with suspected signs and symptoms of novel human coronavirus cases.

All eyes are now on these two laboratory -confirmed cases. The phylogenic analysis of the virus has clearly shown that the virus is not a SARS-like virus although the new virus comes from the same family of human coronaviruses. The two infections were acquired three months apart and there is currently no evidence of a direct epidemiological link between the two cases. There is currently no evidence of illness among contacts of the two patients including healthcare workers. The incubation period is currently considered to be up to seven days and many of these contacts

#### Case definitions of acute respiratory infection caused by novel human coronavirus Patient under investigation

- A person with an acute respiratory infection, which may include fever ( $\geq$  38°C, 100.4°F) and cough; **AND** suspicion of pulmonary parenchymal disease (e.g. pneumonia or Acute Respiratory Distress Syndrome (ARDS)) based on clinical or radiological evidence of consolidation; **AND**
- travel to or residence in an area where infection with novel coronavirus has recently been reported or where transmission could have occurred; AND not already explained by any other infection or aetiology, including all clinically indicated tests for community-acquired pneumonia according to local management guidelines.

#### Probable Case

• A person fitting the definition above of a "Patient Under Investigation" with clinical, radiological, or histopathological evidence of pulmonary parenchyma disease (e.g. pneumonia or ARDS) but no possibility of laboratory confirmation either because the patient or samples are not available or there is no testing available for other respiratory infections; **AND** close contact with a laboratory confirmed case; **AND** not already explained by any other infection or aetiology, including all clinically indicated tests for community-acquired pneumonia according to local management guidelines.

#### Confirmed Case

A person with laboratory confirmation of infection with the novel coronavirus.

#### Coronavirus: timeline

- **1960:** Two strains of human coronavirus were detected for the first time;
- 2003: A novel strain of human coronavirus (Third strain) emerged and caused SARS;
- 2004: Two new strains (fourth and fifth) of human coronavirus were discovered;
- 2012: Sixth strain of human coronavirus emerged and caused death to two patients

will already have passed the period when they could have contracted the virus. On the basis of the limited evidence currently available, the risk for person-toperson transmission, therefore, seems to be low.

The current priority is to identify the origin of this novel virus including possible source (s) of infection of the two confirmed cases. The link of this virus to animal also needs to be studied along with the clinical presentation to understand the natural history of the disease caused by this new virus. Investigation of all these "unknowns" will lead to better understanding of the severity and transmissibility of this new virus and its likely impact on global health.

Constant exchange of information between WHO and the Member States in an open environment on such public health event of international concern would be the key to safeguarding global health security. Global vigilance and enhanced surveillance for this novel virus will test how prepared we are for any future pandemic.

## Update on outbreaks

in the Eastern Mediterranean Region

Hepatitis E: in S. Sudan; Novel Coronavirus : in Qatar and Saudi Arabia; Cholera: in Iraq; Dengue and CCHF in Pakistan;

Current public health events of international concern [cumulative N° of cases (deaths), CFR %] Avian influenza China [43(28), 65.1%]

Ciiiia	[+3(20), 03.170]
Egypt	[168 (60), <b>35.7%</b> ]
Indonesia	[190 (158), <b>83.1 %</b> ]
Viet Nam	[123(61), <b>49.5%</b> ]
Cambodia	[21(19), <b>90.4%</b> ]
Bangladesh	[ 6(0), <b>0%</b> ]
Global total	[607(358), <b>58.9%</b> ]
Hepatitis E	
S. Sudan	[621 (21), <b>3.3%</b> ]#
Novel Coronavirus	
Saudi Arabia	[1 (1), <b>100%</b> ]
Qatar	[1 (0), ]
Crimean-congo haemorrhagic fever	
Pakistan	[39 (9) <b>21.1.%</b> ]#
Cholera	
Sierra Leone	[18508 (271), <b>1.5%</b> ]
Iraq	[200 (2), 1%] #
Ebola Haemorrhagic Fever	
D.R Congo	[51 (20), <b>39.2%</b> ]

CFR=Case-Fatality Rate; # Suspected cases

Published by the World Health Organization (WHO), Eastern Mediterranean Regional Office (EMRO), Cairo, Egypt. For Correspondence: Tel + 20-2-22765273, Fax + 20-2-2765456. E-mail: csr@emro.who.int