

## Current major event

### Dengue fever contained in Egypt

Dengue fever which was reported in Assuit governorate of Egypt during October-December 2015 has been successfully contained. A total of 309 suspected cases were reported from this event from 01 October to 31 December 2015 with no death. Dengue virus type 1 (DEN-1) was detected by ELISA and PCR at the Central Public Health Laboratory as the causative strain responsible for this outbreak.

### Editorial note

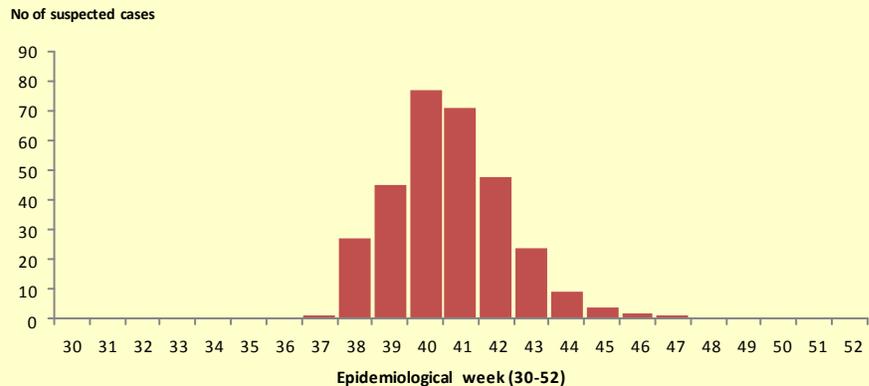
Egypt has remained free from outbreaks of dengue fever for quite a long time. After the last outbreak reported in 1937 (Please see the table), there has been a decline in transmission of dengue fever cases which was ascribed to rapid decrease of *Aedes* mosquitoes populations following introduction of DDT during and after the second World War in the country. After a long break, in 2010, first time in many years, dengue fever was reported amongst European travelers returning from Egypt.

The reporting of two travel-associated cases of dengue fever from Egypt at that time carried significant public health importance. It raised the fear of re-infestation of parts of Egypt with the vector-*Aedes* mosquitoes or, in worst case, introduction of a new dengue serotype in the area. Either of these two situations were clear harbingers of increased transmission. Such concern was raised in one of past issues of weekly epidemiological monitor (Please see *Weekly Epidemiological Monitor*, volume-3, issue-24, dated 13 June 2014).

The current situation confirmed that the country has been re-infested with *Aedes* mosquitoes until a genetic sequencing data on the DEN-1 serotype responsible for the current outbreak confirms the new introduction of the virus in the country.

From the epi curve (please see above), it clearly reveals that the event has been successfully contained and no more suspected case has been reported from Assuit governorate since 31 December

### Dengue fever cases reported from Assuit, Egypt, 01 October-31 December 2015



#### History of dengue fever in Egypt

- 1799 : First documented outbreak in Cairo and Alexandria governorate
- 1871: Outbreak reported from Port Said
- 1880: Outbreak reported from Cairo
- 1889: Outbreak reported from Nile delta
- 1906: Outbreak in Port Said and Suez canal
- 1927: Outbreak reported from whole of Egypt (including Upper Egypt)
- 1937: Outbreak in Egypt (Area unknown)
- 2010: Travel-associated cases reported in Italy in two returnee traveler from red sea resort
- 2015: Assuit governorate

Source: Berger SA. *Infectious Disease of Egypt 2010*, Gidon Informatics, Inc, 367pp

2015. It is also reassuring that the dengue has not spread from Assuit to any other governorate.

Dengue fever is one of the most important mosquito-borne diseases in the Eastern Mediterranean Region. Countries, specially those on the red-sea rim frequently report sporadic cases to explosive outbreaks of dengue fever during high transmission season. Considering the current situation as well as public health risk of becoming the disease endemic in Egypt, it is important that the country does a detailed risk assessment of the situation including an entomological survey to determine the existence and possible geographic expansion of the mosquito vectors in the country. At the same time, there is a need to establish and enhance syndromic based epidemiological surveillance for acute febrile syndrome in all the neighbouring governorates of Assuit to early detect, prevent and respond to any sign of spread of dengue fever.

### Update on outbreaks

#### in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia; undiagnosed viral haemorrhagic fever in Sudan

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

##### Avian Influenza : 2006-2016

Egypt (A/H5N1)	[346 (117), 33.8%]
Egypt (A/H9N2)	[3 (0) ]

##### MERS-CoV: 2012-2016

Saudi Arabia	[1277 (549), 42.9%]
Jordan	[39(12), 31%]
Oman	[6 (3), 50% ]
UAE	[75 (10), 13.3% ]
Kuwait	[3 (1), 33.3% ]
Qatar	[12 (4), 33.3%]
Iran	[6 (2), 33.3%]

##### Cholera : 2015-16

Iraq	[4995 (2)]
Tanzania	[9871 (150), 1.5%]

##### Ebola Virus Disease: 2014-2016

Guinea	[3804 (2536),66.6%]
Liberia	[10666 (4806),45%]
Sierra Leone	[14122 (3955),28%]

##### Viral Haemorrhagic Fever ( of unknown aetiology)

Sudan	[535 (99),18.5%]
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##### Wild poliovirus: 2015-2016

Pakistan	[360 (0) ]
Afghanistan	[47(0)]

##### Dengue

Egypt	[309(0)]
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