

# Weekly Epidemiological Monitor ISSN 2224-4220

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## **Current major event**

#### **Dengue fever in Oman**

The Ministry of Health, Sultanate of Oman reported an outbreak of dengue fever, which started during second week of December 2018, and till 12<sup>th</sup> January 2019, a total of 48 dengue fever cases were reported and these cases are probably the first locally-acquired dengue fever cases ever reported from Oman.

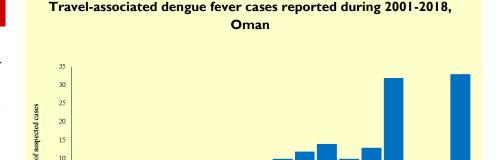
#### **Editorial note**

The country reported its first imported dengue fever cases in 2001. Since 2001, the number of travel-associated dengue fever cases were reported in the country on a regular basis (See graph). During 2018 and till 12th of January 2019, the country reported 48 dengue fever cases, most of them were in travelers returning from dengue endemic countries. On 15<sup>th</sup> December 2018, the IHR national focal point for Oman notified WHO of three confirmed, locally acquired/ indigenous dengue fever cases (with no travel history to dengue endemic or dengue fever reporting countries), in Al-Seeb district, Muscat governorate. The circulation of dengue serotype- DEN-2 has been confirmed at the Central Public Health Laboratory (CPHL) in the country.

The main vector of dengue virus transmission- Ae. aegypti, is well established in south of Oman but no local transmission of dengue fever was previously reported from the country. Owing the fact that the vector is well established and the country is reporting travel-associated case of dengue fever and now indigenous cases as well, the current situation needs to be responded with a sense of urgency.

The Ministry of Health is conducting interventions to control and mitigate this outbreak, including enhancing human and entomological surveillance, vector control activities such as door to door visit, fogging, as well as health education campaigns to raise awareness of the risk of dengue fever and eliminate breeding sites of *Ae. Aegypti*.

Vector control is the key intervention to prevent dengue fever by controlling mosquitoes and interrupting human-vector contact. A global vector control response (GVCR) 2017-2030 was developed in 2017 as a new strategy to strengthen vector controls worldwide by increasing capacity and enhancing surveillance and



2008

Years

\* Data is not available for 2016 and 2017

2002

#### Four pillars of action of GVCR 2017-2030

2003 2004 2005 2006 2007

- Strengthen inter- and intra-sector action and collaboration;
- Engage and mobilize communities;
- Enhance vector surveillance and monitoring and evaluation of interventions; and
- Scale up and integrate tools and approaches.

coordination across different sectors. (*See table*). The member states are encouraged to adapt this useful tool in the local context for appropriate vector control.

In view to strengthen clinical case management, it is important to adapt the dengue case management guidelines to the country context emphasizing on triaging, having clear clinical and laboratory criteria for hospital admission and discharge and also having proper flow diagram for IV fluid management, monitoring parameters, etc.

There is now an urgent need to scale up the ongoing response measures to prevent geographic spread of cases. Surveillance needs to be strengthened in all the districts of the Muscat governorate as well as in the neighbouring districts using a standard epidemiological case definition. Surveillance data should be used to monitor the progression of the outbreak, the size and nature of this outbreak. At the same time, surveillance data should be used to map out cases and enhance targeted interventions for vector control. Entomological surveillance also needs to be scaled up in the affected areas as well as in the adjoining areas of the Muscat governorate to guide interventions as well as to early detect any sign of outbreak spread.

### **Update on outbreaks**

2009 2010 2011 2012 2013 2014 2015 2016\* 2017\* 2018

in the Eastern Mediterranean Region

MERS in Saudi Arabia; cholera in Somalia; cholera in Yemen; Multidrugresistant typhoid fever in Pakistan.

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

Avian influenza: 2006-2017

Egypt (A/H5N1) [359 (122), 33.98%]

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

Ebola virus disease (EVD): 2018-2019

Democratic Re-

public of Congo [685 (416), 60.72%]

(DRC)

Yellow fever: 2018-2019

Nigeria [4 004 (33), 0.82 %]

Cholera: 2017-2019

Somalia [6 761 (46), 0.68%]

Yemen [1 401 634 (2 755), 0.19%]

Diphtheria: 2018-2019

Yemen [3 153 (182), 5.77%]

Bangladesh [8 387 (45), 0.53%]

MERS: 2012-2019

Saudi Arabia [1 907 (733), 38.43%]

Multidrug-resistant typhoid fever: 2016-2019

Pakistan [5 544 (0)]