

## Current major event

### Preparedness and readiness enhanced for ZIKV

In view of the current threats of introduction of Zika Virus (ZIKV) infection, preparedness and readiness has been enhanced across the countries of the Eastern Mediterranean Region.

### Editorial note

The World Health Organization Regional Office for the Eastern Mediterranean recently conducted two rounds of emergency meetings with a view to enhancing preparedness and readiness for Zika virus (ZIKV) infection and associated conditions. The first of these two meetings was held on 22–23 February in the Regional Office in Cairo which was attended by representatives from the ministries of health from 12 countries – Bahrain, Djibouti, Egypt, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Sudan and United Arab Emirates. The second round of this meeting was held in Casablanca from 28–29 February and was attended by representatives from the ministries of health of Afghanistan, Islamic Republic of Iran, Iraq, Libya, Morocco, Pakistan, Somalia, Syria, Tunisia and Yemen. The objectives of the meetings were to update the member states of Eastern Mediterranean Region about the ZIKV infection and associated conditions and agree on a set of priority activities to enhance preparedness and readiness for prevention, detection and response to the threat of introduction of ZIKV infection in the region.

Vector-borne diseases (VBD) pose a particular challenge to national public health authorities because of their complex nature requiring multidisciplinary competencies and strong rapid interaction among committed sectors. The *Aedes* mosquitoes have been found in at least eight countries of the Eastern Mediterranean Region (EMR) while their presence or absence in other countries are yet to be assessed. Since as of now, there is no known evidence of circulation ZIKV in any country in the region, entomological surveillance needs to be enhanced in the countries where the

### Summary of recommendations of the meeting to enhance preparedness and readiness

- Identify hot spots for distribution of *Aedes* mosquitoes
- Establish sentinel surveillance system for *Aedes* mosquitoes in areas with high density
- Develop/update Integrated Vector Management (IVM) strategy with strong focus on entomological surveillance and control measures,
- Establish an early warning system for detection of clusters of ZIKV infection and other vector-borne diseases through syndromic and event-based surveillance system
- Improve appropriate laboratory diagnosis and testing capacities
- Consider disinsecting conveyances arriving from a country with active ZIKV transmission using risk assessment approach
- Establish a sentinel based surveillance system for congenital birth defects
- Conduct regular public awareness campaigns to proactively inform the public of the risk
- Develop/update epidemic and pandemic contingency plans for ZIKV infection as well as standard operating procedures for incident command system and for strengthening coordination;

### Current knowledge gaps in relation to the threat of ZIKV in the Region

- Spatial and geo-referenced data on the *Aedes* vector distribution in the region
- Past evidence of occurrence of microcephaly and/or other neurological disorders or Guillain-Barré syndromes (GBS) in the endemic belt of *Aedes* mosquitoes during an active circulation of arboviral infection
- Past evidence of overt or silent circulation of ZIKV in the region

*Aedes* mosquitoes are known to exist. The risk of local transmission following introduction of ZIKV through a viremic patient returning from one of the countries with active ZIKV circulation is higher in the countries with known presence of vectors. Therefore, a strong entomological surveillance system must be strengthened/established in these countries on a priority basis. Also both syndromic and event-based surveillance system need to be established in these countries for detecting cluster of acute febrile syndrome cases which should then be properly assessed and investigated.

Despite a number of knowledge gaps (*please see the table above*) that currently exist in the region with regards to past evidence of ZIKV circulation, the meeting concluded with a set of recommendations to be implemented on a priority basis (*Please see above*). It is expected that these activities will be implemented urgently in order to prevent and early detect the threat of introduction of ZIKV in the region.

## 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              | [7 (3), 42.8%]      |
| UAE               | [78 (11), 14.1%]    |
| Kuwait            | [3 (1), 33.3%]      |
| Republic of Korea | [186 (36), 19.3%]   |
| Qatar             | [14 (5), 35%]       |
| Iran              | [6 (2), 33.3%]      |

#### Ebola Virus Disease: 2014-2016

|              |                      |
|--------------|----------------------|
| Guinea       | [3804 (2536), 66.6%] |
| Liberia      | [10675 (4809), 45%]  |
| Sierra Leone | [14124 (3956), 28%]  |

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

|       |                    |
|-------|--------------------|
| Sudan | [558 (101), 18.1%] |
|-------|--------------------|

#### Wild poliovirus: 2014-2016

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

#### Lassa fever: 2015-2016

|         |                  |
|---------|------------------|
| Nigeria | [159(82), 51.5%] |
| Benin   | [71 (23), 32.3%] |