

Current major event

Diagnostic capacity for Zika Virus enhanced

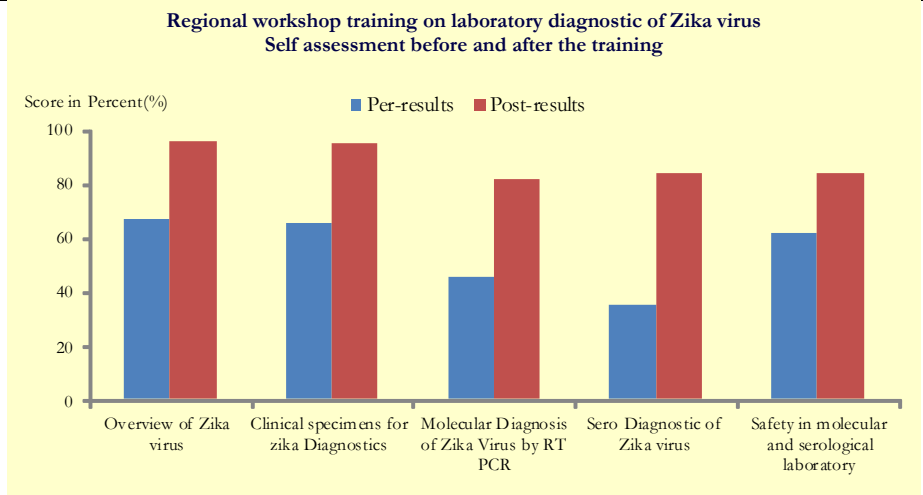
Recently, a regional training workshop on laboratory diagnostics of Zika virus infection was held at the Central Public Health Laboratory of Jordan from 8 to 11 May 2017. The training was part of the WHO Regional Office' plan to enhance preparedness and readiness measures for early detection of Zika Virus Infection in the Region. The training was attended by 23 laboratory specialists from Egypt, Jordan, Kuwait, Lebanon, Morocco, Oman, Qatar, Saudi Arabia, Sudan, Tunisia and United Arab Emirates.

Editorial note

As of June 2017, a total of 84 countries and territories around the world have reported transmission of Zika virus infection, of which 61 countries/areas have reported active transmission with either new introduction or reintroduction of the virus. In the Eastern Mediterranean Region (EMR) of WHO, eight countries have identified the presence of the *Aedes aegypti* mosquitos, but none of these countries have, so far, reported or documented any past or current transmission of Zika virus infection. These countries are Djibouti, Egypt, Oman, Pakistan, Saudi Arabia, Somalia, Sudan and Yemen.

The primary vector for transmission of Zika virus worldwide is *A. aegypti*, which is responsible for the current outbreak in the Americas. *A. albopictus* has also been shown to be able to transmit Zika virus in Africa (*Please see the table*). Given this transmission risk, there is a need to scale up surveillance, in order to promptly detect and control any local transmission of Zika virus infection. Therefore quality laboratory testing is needed in the region to ensure a timely and accurate response to emergence of Zika virus infection

During this training, through provision of background information and technical knowledge, including hands-on practice, participants got familiar with sample collection, preservation and transportation for Zika virus testing as well as biosafety measures of Zika virus. The trainees learned how to perform and troubleshoot the existing molecular and



Comparison of *A. aegypti* and *A. albopictus*

<i>Aedes aegypti</i>	<i>Aedes albopictus</i>
Bites primarily humans (anthropophilic)	Bites primarily wild and domestic animals (zoophilic) but also humans
Tends to bite indoors	Tends to bite indoors
Feeds multiple times per cycle of egg production	Feeds once per cycle of egg production
Adapts well to human urban settlements	Inhabits rural and urban areas

serological assays and how to interpret results critically for identification and detection of Zika, dengue and chikungunya virus diagnosis. The training course also ensured that the laboratory detection plays a major role in surveillance specially on selection of appropriate laboratory test (molecular or serology) based on timing and type of sample collected from suspected cases. It is also expected that the participants trained in this workshop would be able to train other appropriate laboratory staff in their countries and organizations on the use of the Zika, dengue and chikungunya diagnostic assays.

In order to strengthen the diagnosis of epidemic-borne arboviruses in the Region including Zika virus infection, WHO Regional Office continues to support the national laboratories and enhance their capacities in laboratory diagnosis using either molecular or serological assays. These laboratories will receive molecular diagnostic test kits for Zika and other arboviruses and will participate in external quality control programs of WHO. It is expected that these works would contribute to enhanced readiness in the Region.

Update on outbreaks

in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia; **Cholera** in Somalia; **Cholera** in Yemen; **Chikungunya** 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) [3 (0)]

Chikungunya: 2016-2017

Pakistan [6,387 (0)]

MERS-CoV: 2012-2017

Saudi Arabia [1,664 (650), 39.1%]

Cholera: 2016-2017

Somalia [52,141 (880), 1.7%]
Yemen [100,138 (734), 0.7%]

Meningococcal disease: 2017

Nigeria [14,513 (1,166), 8%]

Avian Influenza A (H7N9): 2013-2017

China [1,486 (571), 38.4%]

Ebola Virus Disease: 2017

DRC [8 (4), 50%]

Wild poliovirus: 2014-2017

Pakistan [382 (0)]
Afghanistan [65 (0)]

Zika Virus Infection: 2015-2017

84 countries and territories have reported transmission so far.