

Regional Office for the Eastern Mediterranean

# **Weekly Epidemiological Monitor**

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# Current major event

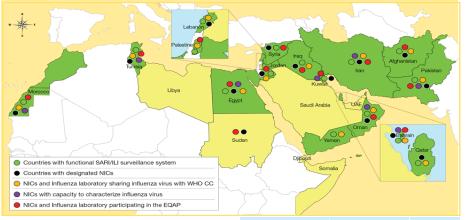
#### **Influenza Laboratory Capacity** Assessment in the EMR

In view of the need to enhance the functions of Influenza Laboratories in the Region, an assessment of the existing capacity and gaps have been conducted in the Eastern Mediterranean Region recently. Currently, 16 National Influenza Centres (NICs) in 15 Member States of the Region and Influenza Laboratories in seven countries, namely -Djibouti, Libya, Palestine, Saudi Arabia, Somalia, UAE and Yemen have been included in this assessment.

#### **Editorial note**

Since 1952, global influenza virological surveillance is conducted through WHO's Global Influenza Surveillance and Response System (GISRS). The WHO's GISRS conducts year-round surveillance of influenza and coordinate influenza virus sharing under the Pandemic Influenza Preparedness (PIP) Framework to provide recommendations in laboratory diagnostics, vaccines, antiviral susceptibility and pandemic risk assessment. It also serves as a global alert mechanism for the emergence of influenza viruses with pandemic potential. The GISRS network currently comprises of 143 National Influenza Centres (NICs) in 113 WHO Member States, 6 WHO Collaborating Centres (WHO CC), 4 WHO Essential Regulatory Laboratories, 13 WHO H5 reference laboratories, and ad hoc groups established to address specific emerging issues.

The NICs are national institutions designated by the ministries of heath of Member States and recognized by WHO upon meeting the requirements included in its terms of reference. Within each country, NIC collects specimens or virus isolates from subnational laboratories and conduct preliminary analysis. Representative virus isolates are then selected and shipped to the WHO Collaborating Centres (WHO CCs) for reference and research on influenza for advanced antigenic and genetic analysis. Based on the results, WHO puts an annual recommendation on influenza vaccine composition. The NICs also alert WHO of Countries with epidemiological and virological surveillance capacity for influenza in the Eastern Mediterranean Region



unusual outbreaks of influenza or influenza-like illness, and detection of nonsubtypable or low-reacting virus isolates using WHO diagnostic reagents provided through the GISRS.

In the EMR, 16 NICs in 15 countries are functioning with differing capacities During the recent assessment, using a standardized approach, some gaps such as NIC Criteria, Laboratory Management, Safety and Biosafety in Microbiological and Biomedical Laboratories, Quality Assurance & Quality Control, Molecular Biology, Virology, Specimen Handling, Collection and Reporting and Equipment Management were identified

The analysis generated from the assessment will be used to document the current capacities required of WHO NICs and for addressing the key gaps identified during the assessment. This is expected to help the countries to achieve or maintain the NIC designation of its public health laboratories at its optimal capacity as well as help them to improve laboratory diagnostics specially for the purpose of strengthening influenza virological surveillance.

The NICs are important elements in Pandemic Influenza Preparedness Plans of every country. Its capacity to detect novel and untypeable influenza and other respiratory viruses with epidemic and pandemic potentials remain critical in improving public health preparedness for pandemic influenza. It is expected that the current plan to enhance the capacities of NICs would contribute to enhanced preparedness for pandemic influenza 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) [358 (122), 34.08%] Egypt (A/H9N2) [3 (0)]

#### Chikungunya: 2016-2017

Pakistan [822 (0)]

#### MERS-CoV: 2012-2017

Saudi Arabia [1,570 (634), 40.4%] Cholera: 2016-2017

Somalia [25,504 (792), 3.1%] Yemen [22,181 (103), 0.5%]

## Rift Valley Fever: 2016-2017

[266 (32), 12%]

#### Avian Influenza A (H7N9): 2013-2017

China [1,223 (380), 31%]

#### Yellow fever

Brazil [1,336 (215), 16%]

#### Wild poliovirus: 2014-2017

Pakistan [381 (0)] Afghanistan [63 (0)]

#### Zika Virus Infection: 2015-2017

84 countries and territories have reported transmission so far.