Current major event

World Health Organization Regional Office for Eastern Mediterranean Region (WHO EMR) organized two days meeting of the directors of national influenza centers (NICs) and other national influenza laboratories in the EMR, aims to bring together NIC Directors from the region and representatives from the WHO Collaborating Centres ((WHO-CCs) and other experts to discuss issues, challenges and solutions for the laboratory surveillance.

Editorial note

As of November 2019, Eastern Mediterranean Region has 17 NICs in 16 member states and globally there are 146 NICs in 123 member states, with 6 WHO-CCs world-wide.

NICs are institutions responsible for the laboratory surveillance of influenza. They are designated by national ministries of health and formally recognized by WHO for the purpose of participating in the work of the WHO Global Influenza Surveillance and Response System (GISRS) (See above). Since adoption of the World Health Assembly Resolution 64.5 in May 2011, the Terms of Reference (TOR) for NICs comprises the handling of seasonal influenza viruses and other non-pandemic influenza preparedness (PIP) biological materials; and PIP biological materials described in the "Pandemic influenza preparedness framework for the sharing of influenza viruses and access to vaccines and other benefits" (the PIP Framework). In October 2017, the TORs have been updated to align with international Public health mandates like International Health (2005) and Pandemic Influenza Preparedness Framework requirements and also to align with contemporary laboratory practices and standards in terms of biosafety and quality and specific requirements for three influenza virus groups; seasonal influenza, influenza viruses with pandemic potential (PIP BM) and other influenza viruses from animal or environmental specimens that are not classified as human seasonal or PIP BM.

An NIC recognized by WHO will maintain direct working relations with the WHO Global Influenza Programme and the WHO CCs and will comply with the NIC TOR. WHO/EMRO monitors compliance with the TOR and reassesses the performance of each recognized institution every year to determine whether it can retain its NIC status.

The meeting was held in Casablanca, 16-17 November 2019 and was attended by the directors of the NICs and others National laboratories from 22 member states. The Objectives of the meeting were to: 1) discuss current challenges in detection and characterization of influenza viruses and share new laboratory techniques and methodologies for influenza virus detection and characterization, 2) critically analyse and evaluate current knowledge on influenza virology; WHO Tools; detection and characterization methods of influenza virus; approaches to implement antigenic and genetic characterization as well as anti-viral resistance surveillance; and external quality assessments and 3) collectively identify methods to strengthen biosafety and biosecurity, reporting, virus sharing and data utilization in the EMR.

This regional meeting gave opportunity to review status of functioning NICs in the region and provide the required support to strengthen collaboration and information sharing skills among Member States and serve as a forum for identifying current needs, creative solutions and sharing best practices to strengthen/maintain laboratory capacity for the detection of influenza viruses. Based on the discussions, the recommendations of the meeting were drafted, presented to the participants at the last session actively discussed and finalized.

WHO Global Influenza Surveillance and Response System (GISRS)

<table>
<thead>
<tr>
<th>Years</th>
<th># of NICs sharing viruses/ influenza positive samples</th>
<th>Number of shipment per year</th>
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<tbody>
<tr>
<td>2012</td>
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<td>2019</td>
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Update on outbreaks in the Eastern Mediterranean Region

MERS in Saudi Arabia; cholera in Sudan; cholera in Somalia; cholera in Yemen; multidrug-resistant typhoid fever in Pakistan.

Current public health events of concern

[cumulative N° of cases (deaths), CFR %]

- Avian influenza: 2006-2017
  - Egypt (A/H5N1) [359 (122), 33.98%]
  - Egypt (A/H9N2) [4 (0)]
  - Democratic Republic of Congo (DRC) [3 358 (2 224), 66.23%]
- Cholera: 2017-2019
  - Somalia [9 735 (50), 0.51%]
  - Yemen [2 188 503 (3 750), 0.17%]
  - Sudan [3 46 (11), 3.18%]
- Diphtheria: 2018-2019
  - Yemen [4 788 (281), 5.87%]
  - Bangladesh [8 942 (46), 0.51%]
  - Sudan [96 (13), 13.54%]
- MERS: 2012-2019
  - Saudi Arabia [2 108 (784), 37.19%]
  - Multidrug-resistant typhoid fever: 2016-2019
  - Pakistan [15 199 (0)]