EMFLU and improved influenza data sharing

Eastern Mediterranean Flu (EMFLU) Network is a web-based platform that is used to enter and analyze the influenza surveillance data at country level in the WHO Eastern Mediterranean Region (EMR). It provides useful information for decision makers at country and regional levels regarding the trend of influenza and circulating viruses. Up to August 2018, 16 Member States in the EMR have shared their severe acute respiratory infections (SARI) data regularly through the platform. (Please see the table)

Editorial note

Following the adoption of Pandemic Influenza Preparedness (PIP) Framework by WHO Member States during the World Health Assembly of 2011, the WHO Regional Office for the Eastern Mediterranean (EMR) seized the opportunity to enhance the implementation of the PIP Framework, in 2014 and developed the regional electronic platform for influenza data collection and analysis, EMFLU Network; it was launched officially in May 2016.

EMFLU platform was developed to improve quality and performance of influenza surveillance in countries of the EMR. Sentinel sites for influenza surveillance use the tool to collect and analyze SARI data according to specified case definition.

Since the EMFLU platform was launched officially in 2016, the number of countries adopting the platform has increased exponentially. During the influenza season of 2016/2017 that followed the official launch, 9 countries shared 29,817 SARI cases through the regional platform. Subsequently in the following season of 2017/2018, the number of countries that had adopted the platform for SARI surveillance increased to 13 and shared 51,296 SARI cases.

As of August 2018, a total of 16 out of 19 countries in the EMR that have established influenza surveillance, have adopted the EMFLU platform. These 16 countries are from three different influenza transmission zones, out of four zones, in the EMR (Please see the table); they include three countries that have not previously shared their epidemiological or virological data, with any other global or regional influenza surveillance platform; these countries are occupied Palestinian territory, Saudi Arabia and Yemen. Efforts are ongoing to bring on board the 3 remaining countries with functioning influenza surveillance system that have not adopted the tool so far.

Training of countries with functioning influenza surveillance on the EMFLU platform has been an integral part of the regional strategy to enhance the influenza data management. These trainings are usually delivered through a combination of online training modules and face-to-face training workshops at country and regional levels. Individuals targeted for training have included health professionals from central Ministries of Health, NICs and health facility staff at the sentinel sites for influenza surveillance.

There is growing recognition among the countries in the EMR of the need for, and value of, rapid detection of any unusual influenza activity or new strain of influenza that may trigger a pandemic. The contribution of the EMFLU platform to the sustained improvement in the quality of influenza surveillance data has been recognized by the countries. This in turn has had a positive impact on identification of circulating virus types that are responsible for severe cases of influenza in the Region.

EMR countries reporting SARI data to EMFLU by influenza transmission zone

<table>
<thead>
<tr>
<th>Influenza transmission zone</th>
<th>No of countries</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Asia</td>
<td>10</td>
<td>Bahrain, Jordan, Kuwait, Lebanon, occupied Palestinian territory, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Yemen</td>
</tr>
<tr>
<td>South Asia</td>
<td>3</td>
<td>Afghanistan, Iran (Islamic Republic of), Pakistan</td>
</tr>
<tr>
<td>Northern Africa</td>
<td>3</td>
<td>Egypt, Morocco, Sudan</td>
</tr>
</tbody>
</table>

Influenza data shared by EMR countries, on EMFLU Network, since May 2016

Update on outbreaks in the Eastern Mediterranean Region

- **MERS** in Saudi Arabia; **cholera** in Somalia; **cholera** in Yemen; **Diphtheria** in Yemen.

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) [4 (0)]
  - **Ebola virus disease (EVD)**: 2018
    - Democratic Republic of Congo (DRC) [120 (78), 65.0%]
  - **Rift Valley fever**: 2018
    - Kenya [95 (11), 11.6%]
    - Uganda [23 (8), 34.8%]
  - **Cholera**: 2017-2018
    - Somalia [6 245 (42), 0.7%]
    - Yemen [1 125 189 (2 326), 0.2%]
    - Tanzania [3 549 (67), 1.9%]
  - **Diphtheria**: 2018
    - Yemen [1 904 (98), 5.1%]
    - Bangladesh [8 140 (44), 0.5%]
  - **MERS**: 2012-2018
    - Saudi Arabia [1 869 (722), 38.6%]
  - **Yellow Fever**: 2017-2018
    - Brazil [1 266 (415), 32.7%]