Current major event

Avian Influenza A (H5N1) In Egypt

The Ministry of Health and Population (MoHP) of Egypt reported 116 new human cases of avian influenza A (H5N1) to WHO in 2015 including 36 deaths (CFR 31%). Since the first reported case in 2006, Egypt has so far reported 318 laboratory-confirmed cases of avian influenza A (H5N1) including 112 deaths (CFR 35.2%).

Editorial note

In recent time, Egypt has seen an upsurge of human infections from avian influenza A (H5N1) never seen before since the first human infection was reported in the country in March 2006. Beginning November last year, human cases started to spike.

It is unclear at this stage the reasons behind this spike in human infections. On the request of the Ministry of Health and Population of Egypt, a joint technical mission of Word Health Organization (WHO), Food and Agriculture Organization (FAO), the organization of Animal Health (OIE), United Nation’s Children’s Fund (UNICEF), Centers for Disease Control and Prevention of USA (US-CDC) and the US Naval Medical Research Unit-3 (US-NAMRU-3) was conducted in Egypt from 08-12 March 2015. The main purpose of the mission was to assess the global public health risk associated with the circulation of this zoonotic influenza virus at the animal –human interface as well as to advise on measures that can prevent human infections and stop outbreaks in the poultry.

While the joint mission did not find any definitive evidence that the currently circulating avian influenza virus in Egypt which has pandemic potentials has changed in terms of its virulence or pathogenicity through analysis of the epidemiological, demographic and virological characteristics of the virus, nevertheless, a number of knowledge gaps were flagged by the joint mission that needed to be addressed to better understand the transmission dynamics and virus evolution. In addition, the mission recommended a number of structural and policy related measures for both the animal and human health sectors that can improve collaboration between these two sectors, joint surveillance, investigation as well as effective control measures at the animal-human interface.

Since the emergence of this zoonotic influenza virus, global alert for an impending pandemic has not waded off. Though till now human infections from this virus have occurred only sporadically and no sustained human-to-human transmission has occurred so far either in Egypt or any other country reporting human infections of avian influenza A (H5N1), enhanced vigilance, surveillance and preparedness need to be stepped up in country like Egypt where the virus has been observed to be entrenched. Though some more in-depth work is needed to understand fully the recent spike in human infections and the entrenched circulation of the virus in poultry, it is also important not to let off the present guard and level of alert.

Update on outbreaks

in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia, Avian Influenza A (H5N1) in Egypt

Current public health events of international concern
[cumulative N of cases (deaths), CFR %]

Avian Influenza: 2006-2015

<table>
<thead>
<tr>
<th>Age group</th>
<th>Cases</th>
<th>Deaths</th>
<th>CFR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5 yrs</td>
<td>91</td>
<td>4</td>
<td>4.4</td>
</tr>
<tr>
<td>5 to &lt; 15 yrs</td>
<td>48</td>
<td>8</td>
<td>16.7</td>
</tr>
<tr>
<td>15 to &lt; 30 yrs</td>
<td>73</td>
<td>45</td>
<td>61.6</td>
</tr>
<tr>
<td>30 to &lt; 45 yrs</td>
<td>76</td>
<td>35</td>
<td>46.1</td>
</tr>
<tr>
<td>45 yrs &amp; &gt;</td>
<td>30</td>
<td>12</td>
<td>40.0</td>
</tr>
<tr>
<td>Total</td>
<td>318</td>
<td>104*</td>
<td>32.7</td>
</tr>
</tbody>
</table>

* as per MoHP data (8 deaths not updated)

Update on outbreaks

in the Eastern Mediterranean Region

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Current public health events of international concern
[cumulative N of cases (deaths), CFR %]

Avian Influenza: 2006-2015

<table>
<thead>
<tr>
<th>Country</th>
<th>N of cases (deaths), CFR %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt (A/H5N1)</td>
<td>[318 (112), 35.2%]</td>
</tr>
<tr>
<td>Egypt (A/H9N2)</td>
<td>[1(0), 0%]</td>
</tr>
</tbody>
</table>

MERS-CoV: 2012-2015

<table>
<thead>
<tr>
<th>Country</th>
<th>N of cases (deaths)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>[961 (378), 39%]</td>
</tr>
<tr>
<td>Jordan</td>
<td>[12 (6), 50%]</td>
</tr>
<tr>
<td>Oman</td>
<td>[5 (3), 60%]</td>
</tr>
<tr>
<td>UAE</td>
<td>[71 (9), 12.7%]</td>
</tr>
<tr>
<td>Kuwait</td>
<td>[3 (1), 33.3%]</td>
</tr>
<tr>
<td>Tunisia</td>
<td>[3 (1), 33.3%]</td>
</tr>
<tr>
<td>Qatar</td>
<td>[11 (4), 36.4%]</td>
</tr>
<tr>
<td>Yemen</td>
<td>[1 (1), 100%]</td>
</tr>
<tr>
<td>Egypt</td>
<td>[1 (0), 0%]</td>
</tr>
<tr>
<td>Lebanon</td>
<td>[1 (0), 0%]</td>
</tr>
<tr>
<td>Iran</td>
<td>[5 (2), 40%]</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Country</th>
<th>N of cases (deaths)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guinea</td>
<td>[3429 (2263), 66%]</td>
</tr>
<tr>
<td>Liberia</td>
<td>[9602 (4301), 44.8%]</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>[11841 (3747), 31.6%]</td>
</tr>
<tr>
<td>UK</td>
<td>[10 (0), 0%]</td>
</tr>
<tr>
<td>Nigeria</td>
<td>[20 (0), 0%]</td>
</tr>
<tr>
<td>Senegal</td>
<td>[100 (0), 0%]</td>
</tr>
<tr>
<td>Spain</td>
<td>[100 (0), 0%]</td>
</tr>
<tr>
<td>USA</td>
<td>[4125 (0), 0%]</td>
</tr>
<tr>
<td>Mali</td>
<td>[860 (0), 0%]</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Country</th>
<th>N of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>[326 (0), 0%]</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>[29 (0), 0%]</td>
</tr>
</tbody>
</table>