Results of season 2016-2017 Moscow, Russia

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2. Emergency Hospital #1 for Infectious Diseases

Site presentation
- Hospital #1 for Infectious Diseases is an emergency reference clinic in the city.
- Speciality – respiratory, intestinal, neuro-, hemorrhagic infections, hepatitis.
- It serves Moscow citizens and guests from 0 to 90 y.o.
- Moscow’s population is about 12.3 million.
- Influenza seasonality is usually registered from December to May.

Capacity of the hospital

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults</td>
<td>485</td>
</tr>
<tr>
<td>Children</td>
<td>221</td>
</tr>
<tr>
<td>Total</td>
<td>706</td>
</tr>
</tbody>
</table>

Methods

Laboratory activity.

Influenza Etiology and Epidemiology laboratory
- PCR diagnostic
- Virus isolates
- Serum diagnostics
- Computer GIS/GIS analysis

Specific antibodies (HI test) to influenza viruses in sera taking during hospitalization of patients with acute respiratory disease in 2016-2017

Influenza viruses

<table>
<thead>
<tr>
<th>Flu Vaccine</th>
<th>Vaccinated (6)</th>
<th>Unvaccinated (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GMT±20 (lg)</td>
<td>ARVI (18) / SARI (11) ±20 (%)</td>
</tr>
<tr>
<td>A/California/07/2009 (H1N1)pdm09 – V*</td>
<td>4,3±0,9 / 3,7±0,7</td>
<td>39,0 / 27,0</td>
</tr>
<tr>
<td>A/Michigan/45/2015 (H1N1)pdm09</td>
<td>4,2±0,9 / 3,9±1,1</td>
<td>33,0 / 27,0</td>
</tr>
<tr>
<td>A/Switzerland/97253/2013 (H3N2)</td>
<td>4,7±0,9 / 4,0±1,0</td>
<td>50,0 / 36,0</td>
</tr>
<tr>
<td>B/Hong Kong/5738/14 (H3N2) – V*</td>
<td>4,8±1,1 / 3,7±0,9</td>
<td>14,0 / 18,0</td>
</tr>
<tr>
<td>B/Phuket/2037/13 (Yam)</td>
<td>5,9±0,9 / 6,1±1,3</td>
<td>33,0 / 27,0</td>
</tr>
<tr>
<td>B/Brisbane/60/2008 (Vic) – V*</td>
<td>4,9±0,9 / 6,3±1,0</td>
<td>39,0 / 27,0</td>
</tr>
</tbody>
</table>

Key aspects & challenges

Key aspects from the season
- Sharp start of influenza season on 49-50 wks of December 2016
- Dominant influenza virus – A(H3N2)
- No one case of influenza A(H1N1)pdm09 and B/Yamagata-lineage
- Bronchitis are commonly registered during influenza infection
- CVD, renal and autoimmune diseases are most common and contribute to influenza infection
- Prevalence of pregnant women among female admissions
- A large number of pregnant women with influenza (more 50%)
- No deaths and 1 case of ICU

Challenges
- A lot of exclusions (27%)
- Few vaccinated patients
- Some challenges in data gathering from vaccinated patients
- Challenge in patients needed ICU

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