Influenza season 2016/17
Portugal

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**Figure 1.** Portugal, weekly influenza-like illness incidence rate (/10^5) during 2015/16 (—) and 2016/17 (—) seasons (sentinel surveillance)

**Early season**

Week 49/2016 to week 2/2017 (6 weeks)

A(H3) dominance

**Moderate intensity**

Peaked at week 1/2017 (82,4ILI cases /10^5)

Higher incidence above 65 years (ILI medical appointments at primary health care)
Influenza-like illness: medical appointments at primary health care

Figure 2. Portugal, weekly ILI medical appointments registered on primary health care during 2015/16 (—) and 2016/17 (—) seasons, all ages and 65 years and more.
### Table 1. Portugal, genetic characterization of Influenza viruses, season 2016/17

<table>
<thead>
<tr>
<th>Influenza</th>
<th>Phylogenetic group</th>
<th>Nr. Viruses</th>
</tr>
</thead>
<tbody>
<tr>
<td>A(H1)pdm09</td>
<td>A/South Africa/3626/2013 (6B)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>A/New York/61/2015 (6B.1)</td>
<td>1</td>
</tr>
<tr>
<td>A(H3)</td>
<td>A/Hong Kong/4801/2014 (3C.2a)</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>A/Bolzano/7/2016 (3C.2a1)</td>
<td>171</td>
</tr>
<tr>
<td></td>
<td>A/Switzerland/9715293/2013 (3C.3a)</td>
<td>1</td>
</tr>
<tr>
<td>B/Yamagata</td>
<td>B/Massachusetts/2/2012 (2)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>B/Phuket/3073/2013 (3)</td>
<td>1</td>
</tr>
<tr>
<td>B/Victoria</td>
<td>B/Brisbane/60/2008 (1A)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>B/Hong Kong/514/2009 (1B)</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>242</strong></td>
</tr>
</tbody>
</table>

**Figure 3.** Portugal, ILI cases positive to Influenza and other respiratory viruses

- **99,6 % A(H3)**
- **71 % A(H3) belonged to 3C.2a1 clade**

**Figure 3.** Portugal, ILI cases positive to Influenza and other respiratory viruses

Of the positive cases, 473 (51%) were Influenza, 292 (32%) were negatives, and 156 (17%) were other respiratory viruses.

**Laboratorial surveillance**

- **n=921**

- **99,6 % A(H3)**

- **71 % A(H3) belonged to 3C.2a1 clade**
Figure 4. Portugal, geographical and phylogenetic distribution of Influenza viruses in 2016/17 season (whole genomic sequencing)
**Figure 5.** Portugal, weekly proportion of ICU admissions due to Influenza, 2012/13 until 2016/17 (sentinel surveillance)

**Table 2.** Portugal, age group distribution and intrahospital deaths of Influenza cases admitted in ICU each season (sentinel surveillance)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2012/13</th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16</th>
<th>2016/17*</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 44 years (%)</td>
<td>18,9</td>
<td>25,0</td>
<td>17,2</td>
<td>22,8</td>
<td></td>
</tr>
<tr>
<td>45- 64 years (%)</td>
<td>51,6</td>
<td>50,0</td>
<td>26,9</td>
<td>49,7</td>
<td></td>
</tr>
<tr>
<td>≥ 65 years (%)</td>
<td>29,5</td>
<td>25,0</td>
<td>55,9</td>
<td>27,4</td>
<td>75,2</td>
</tr>
<tr>
<td>Death during hospitalization (%)</td>
<td>29,5</td>
<td>12,1</td>
<td>23,7</td>
<td>29,3</td>
<td><strong>12,6 %</strong> (underestimated)</td>
</tr>
</tbody>
</table>

*provisional data
Figure 6. Portugal, weekly all cause mortality (---) in 2016/17 season.

- expected all cause mortality;
- upper limit of the 95% confidence interval;
- upper limit of the 99% confidence interval

**All cause mortality above expected between week 51/2016 and week 5/2017**

- ≥ 65 years (specially ≥ 75 years)
- similar to previous seasons with AH3 dominance or co-dominance
To note:

In Portugal, Influenza epidemic had **moderate intensity** but:

- **Elderly people** were most affected;
- High positive rate **A(H3)**.

**High impact on all cause mortality**

- Besides severity indicators (ICU admissions and intrahospital deaths) were moderate;
- **Elderly people** were most affected
Thank you for your attention!