Key points – Wales

Surveillance indicators suggest that influenza is currently unlikely to be circulating in Wales.

Consultations with General Practices for Influenza-like illness (ILI) are at low levels. The numbers of Influenza viruses detected in samples from hospital patients and from outbreaks are also at low levels. There have been increases in confirmed cases of Respiratory Syncytial Virus (RSV) in recent weeks. It is likely that there will be further increases in the coming weeks as the RSV season begins.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 42 (week ending 22/10/2017) was 6.7 consultations per 100,000 practice population. The consultation rate was highest in patients aged 35-44 years (14.1 per 100,000 practice population) (Table 1).

- The ILI consultation rate increased compared to the previous week (6.5 consultations per 100,000) but remains below the Moving Epidemic Method (MEM) pre-epidemic threshold for seasonal activity (10.4 consultations per 100,000) (Figure 1).

- The total number of consultations with Out of Hours (OOH) doctors in Wales, reported to Public Health Wales during week 42 was 11,582. The proportion of respiratory-related consultations with OOH doctors increased to 18.0% compared to 17.7% in the previous week (Figure 5).

- During week 42, two surveillance samples from patients with influenza-like illness were submitted by sentinel GPs (Figure 3). Both were negative for all routinely tested respiratory pathogens.

- During week 42, 172 specimens were received and tested by Public Health Wales Microbiology from hospitalised and non-sentinel GP patients with respiratory symptoms. The following numbers of patients tested positive: three for influenza A(H3), two for influenza B, 42 for rhinovirus, 22 for RSV, 18 for parainfluenza, eight for enterovirus, eight for human metapneumovirus, four for adenovirus and two for mycoplasma (Figure 4).

- One outbreak of acute respiratory illness, in a residential home, was reported to the Public Health Wales Health Protection Team during week 42.
Influenza activity in Wales

Figure 1. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (as of 22/10/2017).

* The Moving Epidemic Method has been adopted by the European Centre for Disease Prevention and Control to calculate thresholds for GP ILI consultations for seasonally expected influenza activity in a standardised approach across Europe. The threshold calculated for Wales ILI consultation rates is 10.4 per 100,000. MEM thresholds used in this chart are based on influenza from 2010-11 to 2016-17 seasons.

Figure 2. Historical clinical consultation rate per 100,000 practice population in Welsh sentinel practices (week 47 1996 – week 42 2017).

* Reporting changed to Audit+ surveillance system
Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 37 - week 42 2017 (as of 22/10/2017).

<table>
<thead>
<tr>
<th>Age group</th>
<th>37</th>
<th>38</th>
<th>39</th>
<th>40</th>
<th>41</th>
<th>42</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>1 - 4</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>6.6</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>5 - 14</td>
<td>2.5</td>
<td>0.0</td>
<td>0.0</td>
<td>7.6</td>
<td>5.6</td>
<td>2.6</td>
</tr>
<tr>
<td>15 - 24</td>
<td>2.2</td>
<td>2.2</td>
<td>2.8</td>
<td>2.2</td>
<td>9.6</td>
<td>13.6</td>
</tr>
<tr>
<td>25 - 34</td>
<td>6.3</td>
<td>2.1</td>
<td>5.4</td>
<td>2.1</td>
<td>11.8</td>
<td>6.6</td>
</tr>
<tr>
<td>35 - 44</td>
<td>2.2</td>
<td>2.2</td>
<td>2.9</td>
<td>6.9</td>
<td>2.5</td>
<td>14.1</td>
</tr>
<tr>
<td>45 - 64</td>
<td>3.0</td>
<td>5.9</td>
<td>7.5</td>
<td>6.1</td>
<td>7.8</td>
<td>4.2</td>
</tr>
<tr>
<td>65 - 74</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>14.3</td>
<td>2.6</td>
<td>9.9</td>
</tr>
<tr>
<td>75+</td>
<td>0.0</td>
<td>2.7</td>
<td>3.5</td>
<td>0.0</td>
<td>6.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>2.4</td>
<td>2.6</td>
<td>3.7</td>
<td>5.7</td>
<td>6.5</td>
<td>6.7</td>
</tr>
</tbody>
</table>

* Tested negative for influenza, adenovirus, rhinovirus, RSV, parainfluenza, mycoplasma, human metapneumovirus, enterovirus, bocavirus and coronaviruses.

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 22/10/2017, by week of sample collection, week 42 2016 - week 42 2017.

* Tested negative for influenza, adenovirus, rhinovirus, RSV, parainfluenza, mycoplasma, human metapneumovirus, enterovirus, bocavirus and coronaviruses.
Combined data for tests carried out in Public Health Wales Microbiology: Cardiff laboratory, provided by Public Health Wales Microbiology Cardiff Specialist Virology Centre.

### Out of Hours consultations and calls to NHS Direct Wales

**Figure 4.** Specimens submitted for virological testing for hospital patients and non-sentinel GPs as of 22/10/2017, by week of sample collection, week 42 2016 – week 42 2017.

**Figure 5.** Weekly total consultations to Out of Hours services in Wales and numbers of respiratory-related diagnoses (as of 22/10/2017).

<table>
<thead>
<tr>
<th>Sample test results (n)</th>
<th>Total OOH consultations</th>
<th>Respiratory-related OOH consultations</th>
<th>% of consultations respiratory related</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza A positive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza B positive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RSV positive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhinovirus positive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adenovirus positive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parainfluenza positive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mycoplasma positive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human metapneumovirus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enterovirus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Consultations (n)

% of consultations
During week 41 (latest data available), the percentage of total calls to NHS Direct Wales which were influenza-related was 13.4% (Figure 6).

1 Data supplied by Health Statistics and Analysis Unit, Welsh Government.

Flu related calls are the sum of calls recorded as ‘cold/flu’, ‘cough’, ‘headache’, ‘fever’ and ‘sore throat’.

Influenza Vaccine Uptake in Wales

Table 2. Uptake of influenza immunisations in GP Practice patients, school children and NHS staff in Wales 2017/18 (as of 24/10/2017).

<table>
<thead>
<tr>
<th>Influenza immunisation uptake in the current season</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>People aged 65y and older</td>
<td>45.2%</td>
</tr>
<tr>
<td>People younger than 65y in a clinical risk group</td>
<td>25.9%</td>
</tr>
<tr>
<td>Children aged two &amp; three years</td>
<td>10.9%</td>
</tr>
<tr>
<td>Children aged four to seven years</td>
<td>*</td>
</tr>
<tr>
<td>NHS staff</td>
<td>*</td>
</tr>
<tr>
<td>NHS staff who have direct patient contact</td>
<td>*</td>
</tr>
</tbody>
</table>

* Immunisation uptake data for children aged four to seven and NHS staff currently unavailable.
Key points – Influenza activity in the UK and Europe

- In week 41, overall influenza GP consultations increased in Scotland (7.3 per 100,000) and Northern Ireland (3.9 per 100,000), but both were below baseline thresholds. In week 41, the weekly ILI GP consultation rate in England reported through the RCGP system decreased to 5.4 per 100,000 and remains below the baseline threshold (13.1 per 100,000). The weekly ILI consultation rate through the GP In Hours Syndromic Surveillance system (4.6 per 100,000) was low during week 41.
- During week 40, three samples tested positive for influenza (two influenza A (unknown subtype) and one influenza B) through the GP-based sentinel schemes across the UK. Of the 1,249 respiratory test results reported through Public Health England’s DataMart scheme, there were 24 influenza positives (eight influenza A (H3), five influenza A (unknown subtype), three influenza A (H1N1)pdm09 and eight influenza B). UK summary data are available from the Public Health England National Influenza Report.
- During weeks 41, the WHO and the European Centre for Disease Prevention and Control (ECDC) reported low influenza activity for all 39 reporting countries in the WHO European Region. During week 41, a total of 480 sentinel specimens were tested for influenza, 10 of which were positive (five influenza A (not subtyped) and five influenza B). For more information on European level influenza surveillance see Flu News Europe: http://www.flunewseurope.org/

World update

- The WHO reported that, as of 16/10/2017, influenza activity remained at low levels in the temperate zone of the northern hemisphere. Declining levels of influenza activity were reported in the temperate zone of the southern hemisphere and in some counties of South and South East Asia. In Central America and the Caribbean, low influenza activity was reported in a few countries. Worldwide, influenza A (H3N2) and B viruses accounted for the majority of influenza detections.
- In temperate South America, influenza and respiratory syncytial virus (RSV) activities continued to decrease throughout most of the sub-region.
- In Southern Africa, influenza activity continued to decrease in South Africa, with influenza B viruses most frequently detected.
- In Oceania, seasonal influenza activity started to decline, with influenza A (H3N2) predominant, followed by influenza B viruses.
- In tropical South America, influenza and RSV activity remained at low levels overall.
- In the Caribbean and Central American countries, respiratory illness indicators and influenza activity remained low in general but RSV activity remained high in several countries.
- In Southern Asia, decreasing levels of influenza activity were reported in India and Bhutan, with influenza A (H1N1)pdm09 most frequently detected.
- In South-East Asia, influenza activity appeared to decrease in general.
- In Western Asia, influenza activity continued to increase in Oman, with influenza A (H1N1)pdm09 and A (H3N2) viruses co-circulating. Increased influenza A detections were reported in Bahrain in recent weeks.
- In East Asia, influenza activity remained low in general.
- In Western Africa, influenza activity continued to be reported, with all seasonal subtypes present in the region.
- In Middle and Eastern Africa, increased influenza activity was reported in some countries.
- In Northern Africa, little to influenza virus detections was reported.
- In Europe, little to no influenza activity was reported.
- In North America, overall influenza activity remained low with detections of predominantly influenza A (H3N2) and B viruses in the past few weeks.
- Based on FluNet reporting (as of 13/10/2017), during the time period from 18/09/17 – 01/10/17, National Influenza Centres and other national influenza laboratories from 85 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 56,528 specimens, of which 3,496 were positive for influenza viruses. Of these, 2,566 were typed as influenza A (260 influenza A (H1N1)pdm09, 1,460 influenza A (H3N2) and 846 influenza A (not subtyped)) and 930
Influenza B (of the characterised influenza B viruses 192 belonged to the B-Yamagata lineage and 45 to the B-Victoria lineage).


Australia and New Zealand update

- In New Zealand, the weeklyILI incidence during week 39 (latest data available) was 19.5 consultations per 100,000, and is below the seasonal threshold. Since 1 May 2017, 2,310 ILI specimens were tested, of these 962 tested positive for influenza (468 influenza A(H3N2), 73 influenza A(H1N1)pdm09, 11 influenza A (not sub-typed) and 410 influenza B).

- In Australia, according to the latest available update (30/09/2017 to 13/10/2017), influenza activity continued to decline after reaching a peak in mid-August. With the exception of the Top End in the Northern Territory, influenza activity declined in all regions of the country.

Middle East respiratory syndrome coronavirus (MERS-CoV) – latest update from WHO and ECDC

- On 09/10/17 WHO reported nine additional cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV), including four deaths. Globally, 2,090 laboratory confirmed cases of human infection with MERS-CoV, including at least 730 related deaths, have officially been reported to WHO since September 2012.

- The majority of the MERS cases continue to be reported from the Middle East, and specifically from Saudi Arabia. Rapid risk assessments of the situation from ECDC, which contain epidemiological updates and advice for travellers and healthcare workers, are available from: http://ecdc.europa.eu/en/publications/Publications/MERS-rapid-risk-assessment-update-october-2015.pdf


Human infection with avian influenza A(H7N9), China – latest update from WHO

- The latest WHO Influenza at Human-Animal Interface summary (27/09/2017) reports a total of 1,564 laboratory-confirmed cases of human infection with avian influenza A(H7N9), including at least 612 deaths: http://www.who.int/influenza/human_animal_interface/HAI_Risk_Assessment/en/

- The risk of international spread of avian influenza A(H7N9) is considered to be low at present. However, it is important that clinicians are aware of the possibility of human infection with animal influenza, in persons presenting with severe acute respiratory disease, while travelling or soon after returning from an area where avian influenza is a concern. Updates are available from the WHO Global Alert and Response website: http://www.who.int/csr/don/archive/year/2017/en/
Links:

Public Health Wales influenza surveillance webpage:  
http://www.publichealthwales.org/flu-activity

GP Sentinel Surveillance of Infections Scheme:  

NICE Influenza antiviral usage guidance:  
http://www.nice.org.uk/Guidance/TA158

Wales influenza information:  
http://www.wales.nhs.uk/sitesplus/888/page/43745

England influenza surveillance:  

Scotland influenza surveillance:  
http://www.hps.scot.nhs.uk/resp/seasonalinfluenza.aspx

Northern Ireland influenza surveillance:  
http://www.fluawareni.info/

European Centre for Communicable Disease:  
http://ecdc.europa.eu/

European influenza information:  
http://flunewseurope.org/

Advice on influenza immunisation (for NHS Wales users)  
http://nww.immunisation.wales.nhs.uk/home

For further information on this report, please email Public Health Wales using:  
surveillance.requests@wales.nhs.uk