Community Activity

<table>
<thead>
<tr>
<th>October</th>
<th>November</th>
<th>December</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2019/20</td>
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<td></td>
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<tr>
<td>2018/19</td>
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</tbody>
</table>

GP consultation rates for ‘flu/flu-like-illness’ (‘flu/FLI’)

(Wk 46: 11 Nov — 17 Nov 2019)

<table>
<thead>
<tr>
<th>Flu/FLI consultation rate per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Ages</td>
</tr>
<tr>
<td>0-4</td>
</tr>
<tr>
<td>5-14</td>
</tr>
<tr>
<td>15-44</td>
</tr>
<tr>
<td>45-64</td>
</tr>
<tr>
<td>65+</td>
</tr>
</tbody>
</table>

Circulating strains this season to date

Respiratory Outbreaks

(11 Nov — 24 Nov 2019)

Number of hospital cases with confirmed flu

(11 Nov — 24 Nov 2019)

To date there have been nine admissions to ICU with confirmed influenza

Vaccine Uptake (to 31 October 2019)

8.3%  23.6%  22.7%  41.0%  76.0%  31.7%  16.3%

All 2 to 4 year olds (started mid-late October 2019)
All pregnant women
All individuals under 65 years with a chronic medical condition
All individuals 65 years and over
Primary school children offered the vaccine and were vaccinated (4 to 11 year olds)
Frontline health care workers employed by a Trust
Frontline social care workers employed by a Trust

Summary information on cases will be reported in the bulletin only if the numbers do not risk data confidentiality
GP consultation rates for ‘flu/flu-like-illness’ (‘flu/FLI’)  

Figure 1. Northern Ireland GP consultation rates for ‘flu/FLI’ 2018/19 – 2019/20, 2010/11 for comparison  

The baseline MEM threshold for Northern Ireland is 14.7 per 100,000 population for 2019-20. Low activity is 14.7 to <23.9, moderate activity 23.9 to <73.9, high activity 73.9 to <121.7 and very high activity is >121.7

Comment  

GP flu/FLI consultation rates were 6.9 per 100,000 population in week 46 and 14.2 per 100,000 in week 47, which is higher than the same time last year (6.3 and 4.5 per 100,000, respectively). Activity remains just below the baseline threshold for Northern Ireland (<14.7 per 100,000) (Figure 1).

Flu/FLI consultation rates were highest in 15-44 year olds in week 46 (7.8 per 100,000 population) and highest in 5-14 year olds in week 47 (22.4 per 100,000). Rates are higher in all age groups compared to the same period last year (week 47, 2018-19).
Flu/FLI consultation rates in Primary Care Out-of-Hours (OOH) Centres were 5.7 per 100,000 population in week 46 and 12.2 per 100,000 in week 47. This is higher than the same time last year (2.5 and 3.6 per 100,000, respectively) (Figure 2).

In weeks 46 and 47 the percentage of calls to an OOH Centre due to flu/FLI was 1.0% and 1.7%, respectively. This has increased from the same period last year (0.6%).

Rates were highest in those aged 5-14 years in both weeks 46 and 47, 12.9 and 31.2 per 100,000 population, respectively. In comparison to week 47, 2018-19, consultation rates were higher in all age groups.
Virology

Figure 3. Weekly number of flu laboratory reports from week 40, 2018 with weekly GP consultation rates for ‘flu/FLI’
Influenza Weekly Surveillance Bulletin

Weeks 46 - 47 (11 Nov — 24 Nov 2019)

Note
All virology data are provisional. The virology figures for previous weeks included in this or future bulletins are updated with data from laboratory returns received after the production of the last bulletin. The current bulletin reflects the most up-to-date information available. Sentinel and non-sentinel samples are tested for influenza and for RSV. Cumulative reports of influenza A (untyped) may vary from week to week as these may be subsequently typed in later reports.

### Table 1. Virus activity in Northern Ireland by source, Weeks 46-47, 2019-20

<table>
<thead>
<tr>
<th>Source</th>
<th>Specimens tested</th>
<th>Flu AH3</th>
<th>Flu A(H1N1) 2009</th>
<th>Flu A (Untyped)</th>
<th>Flu B</th>
<th>RSV</th>
<th>Total Influenza Positive</th>
<th>% Influenza Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sentinel</td>
<td>36</td>
<td>16</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>17</td>
<td>47%</td>
</tr>
<tr>
<td>Non-sentinel</td>
<td>860</td>
<td>139</td>
<td>5</td>
<td>63</td>
<td>2</td>
<td>152</td>
<td>209</td>
<td>24%</td>
</tr>
<tr>
<td>Total</td>
<td>896</td>
<td>155</td>
<td>6</td>
<td>63</td>
<td>2</td>
<td>153</td>
<td>226</td>
<td>25%</td>
</tr>
</tbody>
</table>

### Table 2. Cumulative virus activity from all sources by age group, Week 40 - 47, 2019-20

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Flu AH3</th>
<th>Flu A(H1N1) 2009</th>
<th>Flu A (Untyped)</th>
<th>Flu B</th>
<th>Total Influenza Positive</th>
<th>RSV</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>19</td>
<td>3</td>
<td>9</td>
<td>2</td>
<td>33</td>
<td>263</td>
</tr>
<tr>
<td>5-14</td>
<td>38</td>
<td>1</td>
<td>14</td>
<td>1</td>
<td>54</td>
<td>11</td>
</tr>
<tr>
<td>15-64</td>
<td>111</td>
<td>8</td>
<td>27</td>
<td>3</td>
<td>149</td>
<td>52</td>
</tr>
<tr>
<td>65+</td>
<td>71</td>
<td>2</td>
<td>17</td>
<td>1</td>
<td>91</td>
<td>59</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>All ages</td>
<td>239</td>
<td>14</td>
<td>67</td>
<td>7</td>
<td>327</td>
<td>385</td>
</tr>
</tbody>
</table>

### Table 3. Cumulative virus activity by age group and source, Week 40 - Week 47, 2019-20

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Sentinel</th>
<th>Non-sentinel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flu AH3</td>
<td>Flu A(H1N1) 2009</td>
</tr>
<tr>
<td>0-4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>5-14</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>15-64</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>65+</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>All ages</td>
<td>27</td>
<td>2</td>
</tr>
</tbody>
</table>
Figure 4. Number of samples tested for influenza and proportion positive, 2018/19 – 2019/20, all sources

Comment

In weeks 46 and 47, 226 samples were positive for flu (155 Flu A(H3), six Flu A(H1N1), 63 Flu A( Untyped) and two Flu B) from 896 submitted for testing in laboratories across Northern Ireland.

Positivity for weeks 46 and 47 combined (25%) is higher than this time last year (3%).

17 of the 36 samples submitted by the GP based sentinel scheme were positive for flu (16 Flu A(H3) and one Flu A(H1N1)) (Figures 3 and 4; Tables 1, 2 and 3).
Respiratory Syncytial Virus (RSV)

Figure 5. Number of samples tested for RSV and proportion positive, 2018/19 – 2019/20, all sources

Comment

In weeks 46 and 47, 153 samples were positive for RSV, with positivity in week 47 (16%) higher than the same period last season (14%).

The majority (68%) of cases since week 40 have occurred in children aged 0-4 years (Table 2 and Figure 5).
Hospital Surveillance (Non-ICU/HDU)

Figure 6. Weekly number of hospitalisations testing positive for influenza by week of specimen, 2018/19 – 2019/20

Comment

In weeks 46 and 47, 193 hospitalisations tested positive for flu (126 Flu A(H3), five Flu A(H1N1), 60 Flu A(Untyped) and two Flu B). This is an increase compared to the same time last year (Figure 6).

Of note, not all positive specimens may have been reported as this point.
During weeks 46 and 47 there were two confirmed respiratory outbreaks reported to the PHA Health Protection acute response duty room, both in a Care Home setting (two Flu A(untyped)). To date, there has been a total of two confirmed respiratory outbreaks reported.
Mortality

The Northern Ireland Statistics and Research Agency (NISRA) provide the weekly number of respiratory associated deaths and its proportion of all-cause registered deaths.

Respiratory associated deaths include those that are attributable to influenza, other respiratory infections or their complications. This includes “bronchiolitis, bronchitis, influenza or pneumonia” keywords recorded on the death certificate.

Figure 8. Weekly registered deaths and proportion of all deaths with keywords, by week of registration from week 40, 2018

Comment

In week 46, 97 respiratory associated deaths out of 336 all-cause deaths were reported (29%). These trends are broadly the same as the same period in 2018/19 (Figure 8).

Mortality data for week 47 was unavailable at the time of publication.
**EuroMOMO**

There was no excess all-cause mortality reported in Northern Ireland for week 46. Mortality data for week 47 was unavailable at the time of publication.

Please note this data is provisional due to the time delay in registration; numbers may vary from week to week.

Information on mortality from all causes is provided for management purpose from Public Health England. Excess mortality is defined as a statistically significant increase in the number of deaths reported over the expected number for a given point in time. This calculation allows for a weekly variation in the number of deaths registered and takes account of deaths registered retrospectively. Information is used to provide an early warning to the health service of any seasonal increases in mortality to allow further investigation of excess detections.

There is no single cause of 'additional' deaths in the winter months but they are often attributed in part to cold weather (e.g. directly from falls, fractures, road traffic accidents), through worsening of chronic medical conditions e.g. heart and respiratory complaints and through respiratory infections including influenza.

For more information on EuroMOMO and interactive maps of reporting across the season please see [http://www.euromomo.eu/index.html](http://www.euromomo.eu/index.html)

**Influenza Vaccine Uptake**

The 2019-20 seasonal flu vaccine programme officially commenced on 1\(^\text{st}\) October 2019.

This year the children’s flu vaccine programme delivered in primary care started in mid to late October.

Figures overleaf represent the first figures collected up to 31\(^\text{st}\) October and so only reflect one month or less of data depending on the eligible group.
### Table 4. Influenza vaccine uptake rates, 2018-19 and 2019-20*

<table>
<thead>
<tr>
<th>Category</th>
<th>2019/20 (to 31 Oct)</th>
<th>2018/19 (to 31 Oct)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All 2 to 4 year olds</td>
<td>8.3%</td>
<td>32.9%</td>
</tr>
<tr>
<td>All pregnant women</td>
<td>23.6%</td>
<td>35.2%</td>
</tr>
<tr>
<td>All individuals under 65 years with a chronic medical condition</td>
<td>22.7%</td>
<td>29.6%</td>
</tr>
<tr>
<td>All individuals 65 years and over</td>
<td>41.0%</td>
<td>28.3%</td>
</tr>
<tr>
<td>Primary school children (4 to 11 year olds)**</td>
<td>76.0%</td>
<td>75.5%</td>
</tr>
<tr>
<td>Frontline health care workers employed by a Trust***</td>
<td>31.7%</td>
<td>31.6%</td>
</tr>
<tr>
<td>Frontline social care workers employed by a Trust</td>
<td>16.3%</td>
<td>16.5%</td>
</tr>
</tbody>
</table>

* Public vaccination figures are based on GP practice returns which are lower for the reporting period but will be more representative of the public uptake figures in the next update later in the season.

** Proportion of primary school children who were offered the vaccine and were vaccinated (up to 31 October 2019).

*** Uptake data was not available for NIAS therefore figures for Northern Ireland (up to 31 October 2019) are based on the five HSC Trusts only.

### Further Information and International/National Updates

#### Further information
Further information on influenza is available at the following websites:

- PHA Seasonal Influenza
- nidirect Flu Vaccination
- PHE Seasonal Influenza Guidance - Data and Analysis
- WHO Influenza
- ECDC Seasonal Influenza

#### National updates
Detailed influenza weekly reports can be found at the following websites:

- England PHE Weekly National Flu Report
- Scotland HPS Weekly National Seasonal Respiratory Report
- Wales Public Health Wales Influenza Surveillance Report
- Republic of Ireland HPSC Seasonal Influenza Surveillance Reports

#### International updates
Europe (ECDC and WHO) Flu News Europe
Worldwide (WHO) WHO Influenza Surveillance Monitoring
USA (CDC) Weekly U.S. Influenza Surveillance Report
Acknowledgements

We would like to extend our thanks to all those who assist us in the surveillance of influenza in particular the sentinel GPs, Out-of-Hours Centres, Apollo Medical, Regional Virus Laboratory, Critical Care Network for Northern Ireland and Public Health England. Their work is greatly appreciated and their support vital in the production of this bulletin.

The author also acknowledges the Northern Ireland Statistics and Research Agency (NISRA) and the General Register Office Northern Ireland (GRONI) for the supply of data used in this publication. NISRA and GRONI do not accept responsibility for any alteration or manipulation of data once it has been provided.

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