Influenza

Weekly Surveillance Bulletin
Weeks 19 - 20 (10 May 2021—23 May 2021)

Community Activity

<table>
<thead>
<tr>
<th>Flu Intensity:</th>
<th>Baseline</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Very High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week</td>
<td>October</td>
<td>November</td>
<td>December</td>
<td>January</td>
<td>February</td>
</tr>
<tr>
<td>2020/21</td>
<td>40</td>
<td>41</td>
<td>42</td>
<td>43</td>
<td>44</td>
</tr>
<tr>
<td>2019/20</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
</tbody>
</table>

GP consultation rates for ‘flu/flu-like-illness’ (‘flu/FLI’)
(Wk 19: 10 May - 16 May 2021)
(Wk 20: 17 May - 23 May 2021)

Circulating strains this season to date

Number of hospital cases with confirmed flu
(10 May – 23 May 2021)

Summary information on cases will be reported in the bulletin only if the numbers do not risk data confidentiality

Respiratory Outbreaks
(10 May – 23rd May 2021)

To date there have been no flu outbreaks reported

Vaccine Uptake (to 31 March 2021)

- **All 2 to 4 year olds**: 55.2%
- **All primary school children (4 to 11 year olds)**: 72.9%
- **All Year 8 school children (12-13 year olds)**: 66.6%
- **All pregnant women**: 42.1%
- **Individuals under 65 years with a chronic medical condition**: 67.8%
- **All individuals 65 years and over**: 79.1%
- **Frontline health care workers employed by a Trust**: 52.4%
- **Frontline social care workers employed by a Trust**: 40.8%

Flu/FLI consultation rate per 100,000 population

Flu/FLI consultation rate per 100,000 population

To date there has been 1 admission to ICU with confirmed influenza
**GP consultation rates for ‘flu/flu-like-illness’ (‘flu/FLI’)**

**Figure 1. Northern Ireland GP consultation rates for ‘flu/FLI’ 2019/20 – 2020/21, 2010/11 for comparison**

*The baseline MEM threshold for Northern Ireland is 11.3 per 100,000 population for 2020-21. Low activity is 11.3 to <21.8, moderate activity 21.8 to <57.0, high activity 57.0 to <87.1 and very high activity is >87.1*

**Comment**

GP flu/FLI consultation rates were 0.5 per 100,000 population in Week 19 and Week 20, which is on average lower than the same time last year (0.5 vs 1.2 per 100,000). Activity remains below the baseline threshold for Northern Ireland (<11.3 per 100,000) (Figure 1).

Flu/FLI consultation rates were highest in 15-44 year olds in Week 19 and Week 20 (0.8 per 100,000). Rates are lower or unchanged in all age groups compared to the same time last year (Week 20, 2019-20).

*Surveillance systems should be interpreted with caution due to the impact of the COVID-19 pandemic.*

*Please note that there was no epidemiological week 53 in the 2019-20 seasonal influenza season.*
Flu/FLI consultation rates in Primary Care Out-of-Hours (OOH) Centres were 1.1 per 100,000 population in Week 19 and 0.8 per 100,000 population in Week 20. This is lower than the same time last year (2.2 per 100,000 in Week 20, 2019-20) (Figure 2).

In Weeks 19 and 20 the percentage of calls to an OOH Centre due to flu/FLI was 0.2% and 0.1%, respectively. This is lower than the same period last year (0.5% in Week 20, 2019-20).

Rates were highest in those aged 15-44 years in Week 19 and Week 20 (1.8 and 1.3 per 100,000 population, respectively). In comparison to Week 20, 2019-20, consultation rates were lower in all age groups, except 0-4 year olds.

Surveillance systems should be interpreted with caution due to the impact of the COVID-19 pandemic.

* Please note that there was no epidemiological week 53 in the 2019-20 seasonal influenza season.
Virology

Figure 3. Weekly number of flu laboratory reports from week 40, 2019 with weekly GP consultation rates for ‘flu/FLI’
Table 1. Virus activity in Northern Ireland by source, Weeks 19-20, 2020-21

<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>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Non-sentinel</td>
<td>4136</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>4143</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 2. Cumulative virus activity from all sources by age group, Week 40 - 20, 2020-21

<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</th>
<th>RSV</th>
<th>All ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>5-14</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>15-64</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>65+</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</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>4</td>
<td>1</td>
<td>5</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 3. Cumulative virus activity by age group and source, Week 40 - 20, 2020-21

<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</th>
<th>RSV</th>
<th>Sentinel</th>
<th>Flu AH3</th>
<th>Flu A(H1N1) 2009</th>
<th>Flu A (Untyped)</th>
<th>Flu B</th>
<th>Total Influenza</th>
<th>RSV</th>
<th>Non-sentinel</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5-14</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>14</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>15-64</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>65+</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</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>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>0</td>
</tr>
</tbody>
</table>

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 respiratory syncytial virus. Cumulative reports of influenza A (untyped) may vary from week to week as these may be subsequently typed in later reports.
In Weeks 19 and 20, no samples were positive for flu from 4143 submitted for testing in laboratories across Northern Ireland. Positivity for Weeks 19 and 20 combined (0%) is unchanged from this time last year (0%).

The GP based sentinel programme is being redeveloped due to the impact of the COVID-19 pandemic. Therefore, preliminary sentinel testing needs to be interpreted with caution (Figures 3 and 4; Tables 1, 2 and 3)).

Surveillance systems should be interpreted with caution due to the impact of the COVID-19 pandemic.

*Please note that a new testing platform at the regional Virology Laboratory includes both flu and COVID-19 from Week 46, therefore an increase in flu testing should be expected. Please note that there was no epidemiological week 53 in the 2019-20 seasonal influenza season.
Respiratory Syncytial Virus (RSV)

Figure 5. Number of samples tested for RSV and proportion positive, 2019/20 – 2020/21, all sources*

Comment

In Weeks 19 and 20, no samples were positive for RSV, with positivity in Week 20 (0%) unchanged from the same time last season (0%). (Table 2 and Figure 5).

* Please note that there was no epidemiological week 53 in the 2019-20 seasonal influenza season.
Hospital Surveillance (Non-ICU/HDU)

![Histogram showing weekly number of hospitalisations testing positive for influenza by week of specimen, 2019/20 – 2020/21*](image)

**Figure 6.** Weekly number of hospitalisations testing positive for influenza by week of specimen, 2019/20 – 2020/21*

**Comment**

In Weeks 19 and 20, no hospitalisations tested positive for flu. This is a decrease compared to the same time last year (Figure 6).

Of note, not all positive specimens may have been reported as this point.

_Surveillance systems should be interpreted with caution due to the impact of the COVID-19 pandemic._
ICU/HDU Surveillance

Figure 7. Confirmed ICU/HDU influenza cases by week of specimen, 2019/20 – 2020/21*

Comment

Data are collected on laboratory confirmed influenza patients and deaths in critical care (level 2 and level 3). There were no new admissions to ICU with confirmed influenza reported to the Public Health Agency (PHA) in Weeks 19 and 20. To date this season there has been one admission to ICU with confirmed influenza reported to the PHA (week 46) (Figure 7).

Summary information on cases will be reported in the bulletin only if the numbers do not risk data confidentiality.

Surveillance systems should be interpreted with caution due to the impact of the COVID-19 pandemic.
Outbreaks

Comment

During Weeks 19 and 20 there were no confirmed influenza outbreaks reported to the PHA Health Protection acute response duty room.
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.

Please note, NISRA mortality data is not the same as the actual number of deaths during the reporting period.

![Figure 8. Weekly registered deaths and proportion of all deaths with keywords, by week of registration from week 40, 2019*](image)

Comment

In Week 20, 68 respiratory associated deaths out of 319 all-cause deaths were reported (21%). The number of respiratory associated deaths and the number of total deaths are lower than the same period in 2019/20 (Figure 8).
EuroMOMO

There was no excess all-cause mortality reported in Northern Ireland in Weeks 19 and 20. Excess all-cause mortality was reported for one week in Northern Ireland to date this season (week 2). This excess mortality was mostly reported in those aged 15-64 and 65+ years.

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
Influenza Vaccine Uptake

The 2020-21 seasonal flu vaccine programme officially commenced on 1st October 2020.

Figures below represent the first figures collected up to 31st March and so only reflect six months or less of data depending on the eligible group.

### Table 4. Influenza vaccine uptake rates (Public Programme), 2020-21 and 2019-20

<table>
<thead>
<tr>
<th>Category</th>
<th>Delivered by</th>
<th>2020/21 (to 31 Mar)</th>
<th>2019/20 (to 31 Mar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All 2 to 4 year olds</td>
<td>GP</td>
<td>55.2%</td>
<td>48.5%</td>
</tr>
<tr>
<td>All pregnant women</td>
<td>GP</td>
<td>42.1%</td>
<td>46.3%</td>
</tr>
<tr>
<td>All Individuals under 65 years with a chronic medical condition</td>
<td>GP</td>
<td>67.8%</td>
<td>58.9%</td>
</tr>
<tr>
<td>All individuals 65 years and over</td>
<td>GP</td>
<td>79.1%</td>
<td>74.8%</td>
</tr>
<tr>
<td>% of all primary school children vaccinated to date</td>
<td>Trust School Nurse Service*</td>
<td>72.9%</td>
<td>72.1%</td>
</tr>
<tr>
<td>% of all year 8 school children vaccinated to date</td>
<td>Trust School Nurse Service</td>
<td>66.6%</td>
<td>n/a</td>
</tr>
</tbody>
</table>

* This figure includes nasal and injected vaccines delivered by the school, as well as a small number of nasal vaccines delivered by their GP

### Table 5. Influenza vaccine uptake rates (Frontline), 2020-21 and 2019-20

<table>
<thead>
<tr>
<th>Category</th>
<th>2020/21 (to 31 Mar)</th>
<th>2019/20 (to 31 Mar)</th>
<th>% of all frontline health care workers employed by a Trust</th>
<th>% of all frontline social care workers employed by a Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belfast HSCT*</td>
<td>50.0%</td>
<td>43.4%</td>
<td>41.8%</td>
<td>24.4%</td>
</tr>
<tr>
<td>South Eastern HSCT</td>
<td>59.1%</td>
<td>43.6%</td>
<td>48.5%</td>
<td>22.9%</td>
</tr>
<tr>
<td>Northern HSCT**</td>
<td>54.8%</td>
<td>43.5%</td>
<td>40.1%</td>
<td>27.9%</td>
</tr>
<tr>
<td>Southern HSCT***</td>
<td>50.9%</td>
<td>39.6%</td>
<td>36.4%</td>
<td>23.5%</td>
</tr>
<tr>
<td>Western HSCT</td>
<td>46.2%</td>
<td>29.1%</td>
<td>38.8%</td>
<td>12.1%</td>
</tr>
<tr>
<td>NIAS****</td>
<td>77.3%</td>
<td>62.4%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>52.4%</td>
<td>41.2%</td>
<td>40.8%</td>
<td>22.8%</td>
</tr>
</tbody>
</table>

* Belfast HSCT figures were reported up to 31st January 2021
** Northern HSCT figures were not reported for January or March 2021
*** Southern HSCT figures were reported up to 28th February 2021
**** NIAS figures were reported up to 31st December 2020
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
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.

For further information on the Enhanced Surveillance of Influenza in Northern Ireland scheme or to be added to the circulation list for this bulletin please contact:

Mrs Emma Dickson  
Senior Epidemiological Scientist  
Public Health Agency

Dr Katie Binley  
Epidemiological Scientist  
Public Health Agency

Mrs Suzanne Wilton  
Surveillance Information Analyst  
Public Health Agency

Dr David Irwin  
Consultant in Health Protection  
Public Health Agency

Email: flusurveillance@hscni.net