Influenza activity in the United Kingdom is monitored using a variety of surveillance systems. The National Influenza Report which interprets the data is published weekly.

National and subnational outputs from the various surveillance systems are grouped according to the following categories:

- Community influenza surveillance
- Influenza-like illness GP consultation rates
- Influenza-confirmed hospitalisations
- All-cause mortality
- Microbiological surveillance
- Influenza vaccination

Influenza Section
Immunisations and Countermeasures Division
Centre for Infectious Disease Surveillance and Control
Public Health England
respscidsc@phe.gov.uk

9 May 2019
Community influenza surveillance
Number of acute respiratory outbreaks by institution, UK

Number

Week of report

Care home
Hospital
School
Other

2017/18 - total no. of outbreaks
## Number of acute respiratory outbreaks by PHE Centre

<table>
<thead>
<tr>
<th>PHE Centre</th>
<th>Outbreaks reported in week 18</th>
<th>Cumulative number of outbreaks since week 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHE North East</td>
<td>0</td>
<td>39</td>
</tr>
<tr>
<td>PHE North West</td>
<td>1</td>
<td>184</td>
</tr>
<tr>
<td>PHE Yorkshire and Humber</td>
<td>0</td>
<td>96</td>
</tr>
<tr>
<td>PHE East Midlands</td>
<td>4</td>
<td>155</td>
</tr>
<tr>
<td>PHE West Midlands</td>
<td>4</td>
<td>154</td>
</tr>
<tr>
<td>PHE East of England</td>
<td>0</td>
<td>182</td>
</tr>
<tr>
<td>PHE London</td>
<td>1</td>
<td>59</td>
</tr>
<tr>
<td>PHE South East</td>
<td>4</td>
<td>198</td>
</tr>
<tr>
<td>PHE South West</td>
<td>0</td>
<td>205</td>
</tr>
</tbody>
</table>
Influenza-like illness GP consultation rates
RCGP ILI consultation rate, England

ILI rate per 100,000

Week number

<13.1 Baseline threshold 13.1 to <24.7 Low 24.7 to <72.1 Medium
72.1 to <115.6 High 115.6+ Very high

2010-11 2017-18 2018-19
GP ILI consultations in the UK for all ages with MEM thresholds applied

<table>
<thead>
<tr>
<th>GP ILI consultation rates (all ages)</th>
<th>Week number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40</td>
</tr>
<tr>
<td>England (RCGP)</td>
<td>4.2</td>
</tr>
<tr>
<td>Wales</td>
<td>7.0</td>
</tr>
<tr>
<td>Scotland</td>
<td>7.1</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Influenza-confirmed hospitalisations
Weekly ICU/HDU influenza admission rate per 100,000 trust catchment population, England, since week 40 2018

*The Moving Epidemic Method (MEM) has been adopted by the European Centre for Disease Prevention and Control to calculate thresholds for ICU/HDU admission rates for the start of influenza activity (based on 6 seasons) in a standardised approach across Europe. For MEM threshold values, please visit: https://www.gov.uk/guidance/sources-of-uk-flu-data-influenza-surveillance-in-the-uk#disease-severity-and-mortality-data
Weekly ICU/HDU influenza admission rate per 100,000 trust catchment population by PHE Centre, North East, North West and Yorkshire and Humber, since week 40 2018
Weekly ICU/HDU influenza admission rate per 100,000 trust catchment population by PHE Centre, East Midlands, West Midlands and East of England since week 40 2018

- 2018/19 - East Midlands
- 2018/19 - West Midlands
- 2018/19 - East of England
Weekly ICU/HDU influenza admission rate per 100,000 trust catchment population by PHE Centre, South East, South West and London, since week 40 2018
Influenza confirmed ICU admissions (USISS mandatory) by age and influenza subtype, since week 40 2018

Age group (years)  
- <1  
- 1-4  
- 5-14  
- 15-44  
- 45-64  
- 65-74  
- 75+

Number

A(H1N1)pdm09  
A(H3N2)  
A unknown subtype  
A not subtyped  
B
Weekly hospitalised influenza case rate per 100,000 trust catchment population, England, since week 40 2018

Number of cases
- Rate of hospital admission/100,000 (2018/19)
- Rate of hospital admission/100,000 (2017/18)

*The Moving Epidemic Method (MEM) has been adopted by the European Centre for Disease Prevention and Control to calculate thresholds for ICU/HDU admission rates for the start of influenza activity (based on 6 seasons) in a standardised approach across Europe. For MEM threshold values, please visit: https://www.gov.uk/guidance/sources-of-uk-flu-data-influenza-surveillance-in-the-uk#disease-severity-and-mortality-data

9 May 2019
Weekly hospitalised influenza admission rate per 100,000 trust catchment population by PHE region, since week 40 2018
Influenza confirmed hospital admissions (USISS sentinel) by age and influenza subtype, since week 40 2018

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>A(H1N1)pdm09</th>
<th>A(H3N2)</th>
<th>A unknown subtype</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1</td>
<td>200</td>
<td>50</td>
<td>150</td>
<td>0</td>
</tr>
<tr>
<td>1-4</td>
<td>400</td>
<td>70</td>
<td>300</td>
<td>0</td>
</tr>
<tr>
<td>5-14</td>
<td>600</td>
<td>100</td>
<td>500</td>
<td>0</td>
</tr>
<tr>
<td>15-44</td>
<td>1200</td>
<td>200</td>
<td>1000</td>
<td>0</td>
</tr>
<tr>
<td>45-64</td>
<td>1600</td>
<td>300</td>
<td>1300</td>
<td>0</td>
</tr>
<tr>
<td>65+</td>
<td>2000</td>
<td>400</td>
<td>1600</td>
<td>0</td>
</tr>
</tbody>
</table>
All-cause mortality
Excess mortality (all causes) by week of death through the EuroMOMO algorithm in 65+ year olds, England

[Graph showing excess mortality trends over years and strains]
Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, PHE North of England
Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, PHE Midlands and East of England

- **2014/15**: A(H3N2)
- **2015/16**: A(H1N1)pdm09
- **2016/17**: A(H3N2)
- **2017/18**: B and A(H3N2)
- **2018/19**: A(H1N1)pdm09/A(H3N2)
Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, PHE London

Deaths (corrected)  
Baseline  
Upper 2 z-score limit  
Upper 6 z-score limit

Year week


2014/15  A(H3N2)  
2015/16  A(H1N1)pdm09  
2016/17  A(H3N2)  
2017/18  B and A(H3N2)  
2018/19  A(H1N1)pdm09/A(H3N2)
Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, PHE South of England

Number of deaths

Year week


Deaths (corrected)
Baseline
Upper 2 z-score limit
Upper 6 z-score limit
Upper 8 z-score limit

2014/15 A(H3N2)
2015/16 A(H1N1)pdm09
2016/17 A(H3N2)
2017/18 B and A(H3N2)
2018/19 A(H1N1)pdm09/A(H3N2)
Microbiological surveillance
DataMart: Number and proportion of samples positive for influenza, by type, England

Number of positive specimens

Proportion positive

Influenza A (n)
Influenza B (n)
Total influenza (%)
2017/18 total influenza (%)

Week number (of sample)
DataMart: Number and proportion of samples positive for influenza, by type, PHE North East of England

- FluA (n)
- FluB (n)
- Influenza A (%)
- Influenza B (%)
DataMart: Number and proportion of samples positive for influenza, by type, PHE North West of England
DataMart: Number and proportion of samples positive for influenza, by type, PHE Yorkshire and Humber

![Graph showing number of positive samples and proportion positive for influenza A and B over weeks.]

- **FluA (n)**
- **FluB (n)**
- **Influenza A (%)**
- **Influenza B(%)**

**Week number (of sample)**

- 0
- 10
- 20
- 30
- 40

**Proportion positive (%)**

- 0
- 10
- 20
- 30
- 40
- 50

**Number of positive samples**

- 0
- 50
- 100
- 150
- 200
- 250
- 300
- 350
- 400
- 450
- 500

9 May 2019
DataMart: Number and proportion of samples positive for influenza, by type, PHE East Midlands of England

- FluA (n)
- FluB (n)
- Influenza A (%)
- Influenza B(%)
DataMart: Number and proportion of samples positive for influenza, by type, PHE West Midlands of England

Week number (of sample)

Proportion positive (%)

Number of positive samples

FluA (n)

FluB (n)

Influenza A (%)

Influenza B(%)
DataMart: Number and proportion of samples positive for influenza, by type, PHE East of England

Week number (of sample)

Proportion positive (%)

Number of positive samples

FluA (n)
Influenza A (%)

FluB (n)
Influenza B(%)
DataMart: Number and proportion of samples positive for influenza, by type, PHE London

- FluA (n)
- Influenza A (%)
- FluB (n)
- Influenza B(%)
DataMart: Number and proportion of samples positive for influenza, by type, PHE South East of England
DataMart: Number and proportion of samples positive for influenza, by type, PHE South West of England

Week number (of sample)

Proportion positive (%)

Number of positive samples

FluA (n)  Influenza A (%)  FluB (n)  Influenza B(%)

9 May 2019
DataMart: Proportion of samples positive for influenza, by age group

Week number

Proportion positive

65+yrs
45-64yrs
15-44yrs
5-14yrs
<5yrs
DataMart: Proportion of samples positive for other viruses

Week number

Rhinovirus
Parainfluenza
hMPV
Adenovirus

Proportion positive

40 43 46 49 52 3 6 9 12 15 18 21 24 27 30 33 36 39

0 5 10 15 20 25 30 35 40

9 May 2019
Influenza vaccination
Seasonal influenza vaccine uptake in targeted groups, 2018/19, England

Week number

Vaccine uptake (%)

- 65+yrs
- <65yrs at risk
- All pregnant women

2018/19 season indicated by bold lines, 2017/18 season indicated by fainter dashed lines
Seasonal influenza vaccine uptake in targeted groups, 2018/19, England

Vaccine uptake (%) vs. Week number

- 2 years
- 3 years

2018/19 season indicated by bold lines, 2017/18 season indicated by fainter dashed lines
Links

• Sources of UK flu surveillance data:

• Weekly flu report