PHE Influenza Surveillance graphs

• 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

10 October 2019
Community influenza surveillance
Number of acute respiratory outbreaks by institution, UK

Number

Week of report

Care home
Hospital
School
Other
2018/19 - total no. of outbreaks
### Number of acute respiratory outbreaks by PHE Centre

<table>
<thead>
<tr>
<th>Centre</th>
<th>Outbreaks reported in week 40</th>
<th>Cumulative number of outbreaks since week 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHE North East</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PHE North West</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>PHE Yorkshire and Humber</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PHE East Midlands</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PHE West Midlands</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>PHE East of England</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>PHE London</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PHE South East</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>PHE South West</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>
Influenza-like illness GP consultation rates
RCGP ILI consultation rate, England

ILI rate per 100,000

Week number

- <12.7 Baseline threshold
- 12.7 to <24.1 Low
- 24.1 to <70.6 Medium
- 70.6 to <113.6 High
- 113.6+ Very high

10 October 2019

Return to main menu
GP ILI consultations in the UK for all ages with MEM thresholds applied

*The Moving Epidemic Method (MEM) has been adopted by the European Centre for Disease Prevention and Control to calculate thresholds for GP ILI consultations for the start of influenza activity (based on 10 seasons excluding 2009/10), in a standardised approach across Europe. For MEM threshold values for each country, please visit: https://www.gov.uk/guidance/sources-of-uk-flu-data-influenza-surveillance-in-the-uk#clinical-surveillance-through-primary-care .

<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>4.3</td>
</tr>
<tr>
<td>Wales</td>
<td>1.7</td>
</tr>
<tr>
<td>Scotland</td>
<td>5.5</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>3.9</td>
</tr>
</tbody>
</table>
Influenza-confirmed hospitalisations
Weekly ICU/HDU influenza admission rate per 100,000 trust catchment population, England, since week 40 2019

*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 2019.
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 2019
Weekly ICU/HDU influenza admission rate per 100,000 trust catchment population by PHE Centre, South East, South West and London, since week 40 2019.

- 2019/20 - South East
- 2019/20 - South West
- 2019/20 - London

Rate of ICU/HDU admissions per 100,000 trust catchment population vs. Week number.
Influenza confirmed ICU admissions (USISS mandatory) by age and influenza subtype, since week 40 2019

![Graph showing influenza confirmed ICU admissions by age and subtype.](chart.png)
Weekly hospitalised influenza case rate per 100,000 trust catchment population, England, since week 40 2019

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

- A(H1N1)pdm09
- A(H3N2)
- A unknown subtype
- B
All-cause mortality
Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, England

![Graph showing excess mortality trends from 2015/16 to 2018/19 with various influenza strains labeled.](image)
Microbiological surveillance
DataMart: Number and proportion of samples positive for influenza, by type, England

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

![Graph showing number and proportion of samples positive for influenza, by type, England.](image)
DataMart: Number and proportion of samples positive for influenza, by type, PHE North East of England

Week number (of sample) vs. Proportion positive (%)

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

Week number (of sample) vs. Proportion positive (%)

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

10 October 2019

Return to main menu
DataMart: Number and proportion of samples positive for influenza, by type, PHE London

Week number (of sample) vs. Proportion positive (%)

- FluB (n)
- FluA (n)
- Influenza A (%)
- 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
DataMart: Proportion of samples positive for RSV, by age group

Proportion positive

Week number

0 10 20 30 40 50 60

40 43 46 49 52 5 6 9 12 15 18 21 24 27 30 33 36 39

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

- RSV
- Rhinovirus
- Parainfluenza
- hMPV
- Adenovirus

Week number: 40 43 46 49 52 3 6 9 12 15 18 21 24 27 30 33 36 39
Proportion positive: 0 5 10 15 20 25 30 35 40
Influenza vaccination
Seasonal influenza vaccine uptake in targeted groups, 2019/20, England
Seasonal influenza vaccine uptake in targeted groups, 2019/20, England

2019/20 season indicated by bold lines, 2018/19 season indicated by fainter dashed lines

Vaccine uptake (%)

Week number

0 10 20 30 40 50 60 70 80
0 10 20 30 40 50

2 years

3 years
Links

• Sources of UK flu surveillance data: https://www.gov.uk/sources-of-uk-flu-data-influenza-surveillance-in-the-uk