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

28 March 2019
Community influenza surveillance
## Number of acute respiratory outbreaks by PHE Centre

<table>
<thead>
<tr>
<th>PHE Centre</th>
<th>Outbreaks reported in week 12</th>
<th>Cumulative number of outbreaks since week 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHE North East</td>
<td>0</td>
<td>36</td>
</tr>
<tr>
<td>PHE North West</td>
<td>5</td>
<td>172</td>
</tr>
<tr>
<td>PHE Yorkshire and Humber</td>
<td>2</td>
<td>86</td>
</tr>
<tr>
<td>PHE East Midlands</td>
<td>7</td>
<td>116</td>
</tr>
<tr>
<td>PHE West Midlands</td>
<td>4</td>
<td>122</td>
</tr>
<tr>
<td>PHE East of England</td>
<td>3</td>
<td>181</td>
</tr>
<tr>
<td>PHE London</td>
<td>0</td>
<td>56</td>
</tr>
<tr>
<td>PHE South East</td>
<td>8</td>
<td>171</td>
</tr>
<tr>
<td>PHE South West</td>
<td>9</td>
<td>180</td>
</tr>
</tbody>
</table>
Influenza-like illness GP consultation rates
RCGP ILI consultation rate, England

ILI rate per 100,000

Week number

- Baseline threshold
- Low
- Medium
- High
- Very high

28 March 2019
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 41 42 43 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7 8 9 10 11 12</td>
</tr>
<tr>
<td>England (RCGP)</td>
<td>4.2 3.9 4.5 3.6 3.6 5.3 5.2 6.4 6.2 7.6 8.1 9.4 8.4 14.8 19.2 19.6 17.5 19.7 23.1 21.1 15.7 12.1 9.1 6.2 7.2</td>
</tr>
<tr>
<td>Wales</td>
<td>7.0 3.6 4.2 6.6 6.3 6.4 4.5 4.7 6.5 3.2 4.5 9.0 9.5 14.6 20.3 22.8 15.6 20.3 21.3 17.1 17.3 8.2 8.7 7.4 4.5</td>
</tr>
<tr>
<td>Scotland</td>
<td>7.1 5.8 4.0 3.8 2.8 7.6 4.0 4.7 5.6 4.0 6.5 10.1 6.9 17.7 26.7 18.0 28.4 32.7 32.3 27.2 20.8 10.2 10.2 6.6 7.6</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>3.8 3.5 3.8 3.6 3.8 5.0 6.3 4.5 5.6 6.0 8.4 8.9 9.0 13.5 18.9 14.4 12.4 14.5 16.2 14.5 11.1 9.0 5.9 5.6 4.1</td>
</tr>
</tbody>
</table>

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

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

Number

Age group (years)

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

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
Influenza confirmed hospital admissions (USISS sentinel) by age and influenza subtype, since week 40 2018

![Bar chart showing the number of confirmed hospital admissions by age group and influenza subtype for the weeks 40 to 51 in 2018.](chart.png)
All-cause mortality
Excess mortality (all causes) by week of death through the EuroMOMO algorithm in 65+ year olds, England.
Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, PHE North 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)

Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, PHE Midlands and East of England.
Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, PHE London

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

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

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

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

Number of positive samples

Proportion positive (%)

Week number (of sample)

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) vs. Proportion positive (%) vs. Number of positive samples

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

![Graph showing number and proportion of positive samples for FluA (n) and FluB (n) by week number.](image)
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)
- FluB (n)
- Influenza A (%)
- Influenza B(%)
DataMart: Proportion of samples positive for influenza, by age group
DataMart: Proportion of samples positive for other viruses

Proportion positive

- Rhinovirus
- Parainfluenza
- hMPV
- Adenovirus

Week number

Proportion positive

0 5 10 15 20 25 30 35 40

40 43 46 49 52 3 6 9 12 15 18 21 24 27 30 33 36 39
Influenza vaccination
Seasonal influenza vaccine uptake in targeted groups, 2018/19, England

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