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

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28 February 2019
Community influenza surveillance
Number of acute respiratory outbreaks by institution, UK

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>Centre</th>
<th>Outbreaks reported in week 08</th>
<th>Cumulative number of outbreaks since week 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHE North East</td>
<td>3</td>
<td>31</td>
</tr>
<tr>
<td>PHE North West</td>
<td>12</td>
<td>154</td>
</tr>
<tr>
<td>PHE Yorkshire and Humber</td>
<td>7</td>
<td>73</td>
</tr>
<tr>
<td>PHE East Midlands</td>
<td>8</td>
<td>98</td>
</tr>
<tr>
<td>PHE West Midlands</td>
<td>7</td>
<td>109</td>
</tr>
<tr>
<td>PHE East of England</td>
<td>8</td>
<td>148</td>
</tr>
<tr>
<td>PHE London</td>
<td>2</td>
<td>51</td>
</tr>
<tr>
<td>PHE South East</td>
<td>7</td>
<td>150</td>
</tr>
<tr>
<td>PHE South West</td>
<td>13</td>
<td>155</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 February 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>England (RCGP)</td>
<td>40 41 42 43 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7 8</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 14.7 20.5 22.9 15.7 20.5 21.5 17.2 17.5</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 21.0</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</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.
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

![Bar chart showing the number of ICU admissions by age group and influenza subtype.](image-url)
Weekly hospitalised influenza case rate per 100,000 trust catchment population, England, since week 40 2018

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

![Bar chart showing influenza confirmed hospital admissions by age and influenza subtype from week 40 2018 to 28 February 2019.](image-url)
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

- 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

2014/15 A(H3N2)
2015/16 A(H1N1)pdm09
2016/17 A(H3N2)
2017/18 B and A(H3N2)

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

Year week
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)

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

Number of deaths

Year week
Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, PHE South of England

Number of deaths

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

Year week


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, England

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

Week number (of sample)

Proportion positive

Number of positive specimens

28 February 2019
DataMart: Number and proportion of samples positive for influenza, by type, PHE North East 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 North West of England

Number of positive samples

Proportion positive (%)

Week number (of sample)

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

28 February 2019
DataMart: Number and proportion of samples positive for influenza, by type, PHE Yorkshire and Humber

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 Midlands of England

Number of positive samples

Week number (of sample)

Proportion positive (%)

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

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

![Graph showing the number of positive samples and proportion positive for influenza A and B over weeks. The graph includes bars for each week and curves for the proportion positive.]
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(%)
DataMart: Proportion of samples positive for influenza, by age group

Proportion positive

Week number

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

- Rhinovirus
- Parainfluenza
- hMPV
- Adenovirus

Week number

Proportion positive
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
Seasonal influenza vaccine uptake in targeted groups, 2018/19, England

- 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