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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14 November 2019
Community influenza surveillance
# Number of acute respiratory outbreaks by PHE Centre

<table>
<thead>
<tr>
<th>Centre</th>
<th>Outbreaks reported in week 45</th>
<th>Cumulative number of outbreaks since week 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHE North East</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>PHE North West</td>
<td>4</td>
<td>29</td>
</tr>
<tr>
<td>PHE Yorkshire and Humber</td>
<td>6</td>
<td>12</td>
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<tr>
<td>PHE East Midlands</td>
<td>8</td>
<td>24</td>
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<tr>
<td>PHE West Midlands</td>
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<td>PHE East of England</td>
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<td>52</td>
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<tr>
<td>PHE London</td>
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<td>4</td>
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<tr>
<td>PHE South East</td>
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<td>21</td>
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<tr>
<td>PHE South West</td>
<td>7</td>
<td>31</td>
</tr>
</tbody>
</table>
Influenza-like illness GP consultation rates
RCGP ILI consultation rate, England

ILI rate per 100,000

Week number

2010-11
2018-19
2019-20

<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

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GP ILI consultations in the UK for all ages with MEM thresholds applied

Influenza-confirmed hospitalisations
Weekly ICU/HDU influenza admission rate per 100,000 trust catchment population, England, since week 40 2019


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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

Week number

2019/20 - North East
2019/20 - North West
2019/20 - Yorkshire and Humber
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

Week number

Rate of ICU/HDU admissions per 100,000 trust catchment population

- 2019/20 - East Midlands
- 2019/20 - West Midlands
- 2019/20 - East of England

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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
Influenza confirmed ICU admissions (USISS mandatory) by age and influenza subtype, since week 40 2019

![Graph showing the number of ICU admissions by age and influenza subtype from week 40 2019.](image)

- **A(H1N1)pdm09**
- **A(H3N2)**
- **A unknown subtype**
- **A not subtyped**
- **B**

**Age groups**:
- <1
- 1-4
- 5-14
- 15-44
- 45-64
- 65-74
- 75+
Weekly hospitalised influenza case 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 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

Number

Age group (years)

A(H1N1)pdm09
A(H3N2)
A unknown subtype
B

0
50
100
150
200
250
300
350
400
450
500
550
600
All-cause mortality
Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, England
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
Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, PHE London
Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, PHE South of England

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Microbiological surveillance
DataMart: Number and proportion of samples positive for influenza, by type, England
DataMart: Number and proportion of samples positive for influenza, by type, PHE North East of England

Week number (of sample)

- FluB (n)
- FluA (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.](chart.png)
DataMart: Number and proportion of samples positive for influenza, by type, PHE East Midlands of England
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

Graph showing the number of positive samples and the proportion positive (%) for Influenza A and Influenza B, by week number of sample.
DataMart: Number and proportion of samples positive for influenza, by type, PHE London

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

FluB (n) vs. FluA (n)

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

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

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

Number of positive samples
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

Week number

Proportion positive

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

Week number vs. Proportion positive for:
- RSV
- Rhinovirus
- Parainfluenza
- hMPV
- Adenovirus

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Influenza vaccination
Seasonal influenza vaccine uptake in targeted groups, 2019/20, England

Vaccine uptake (%)

Week number

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

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

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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.
• Sources of UK flu surveillance data:

• Weekly flu report