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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Immunisations and Countermeasures Division
Centre for Infectious Disease Surveillance and Control
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7 November 2019
Community influenza surveillance
Number of acute respiratory outbreaks by institution, UK

- Care home
- Hospital
- School
- Other

2018/19 - total no. of outbreaks

Week of report

Number

7 November 2019
### Number of acute respiratory outbreaks by PHE Centre

<table>
<thead>
<tr>
<th>Centre</th>
<th>Outbreaks reported in week 44</th>
<th>Cumulative number of outbreaks since week 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHE North East</td>
<td>1</td>
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<tr>
<td>PHE North West</td>
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<tr>
<td>PHE Yorkshire and Humber</td>
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<td>PHE East Midlands</td>
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<tr>
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<td>PHE East of England</td>
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<td>44</td>
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<tr>
<td>PHE London</td>
<td>0</td>
<td>4</td>
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<td>PHE South East</td>
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<tr>
<td>PHE South West</td>
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</table>
Influenza-like illness GP consultation rates
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>
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<tbody>
<tr>
<td></td>
<td>40</td>
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<tr>
<td>England (RCGP)</td>
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<tr>
<td>Wales</td>
<td>1.7</td>
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<tr>
<td>Scotland</td>
<td>5.5</td>
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<tr>
<td>Northern Ireland</td>
<td>3.9</td>
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</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

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

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

Week number

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

0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8

40 42 44 46 48 50 52 2 4 6 8 10 12 14 16 18 20

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

- 2019/20 - North
- 2018/19 - Midlands + East
- 2018/19 - London
- 2018/19 - South East
- 2018/19 - South West
Influenza confirmed hospital admissions (USISS sentinel) by age and influenza subtype, since week 40 2019
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

7 November 2019
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

- 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

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

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

Number of positive samples

0 50 100 150 200 250 300 350 400 450 500

0 5 10 20 30 40 50

39 43 47 51 3 7 11 15 19
DataMart: Number and proportion of samples positive for influenza, by type, PHE East Midlands of England

Week number (of sample)

Proportion positive (%)

Number of positive samples

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

0  50  100  150  200  250  300  350  400  450

0  10  20  30  40  50

39  43  47  51  3  7  11  15  19

7 November 2019
DataMart: Number and proportion of samples positive for influenza, by type, PHE West Midlands of England

- **FluA (n):** Number of positive samples for FluA
- **FluB (n):** Number of positive samples for FluB
- **Influenza A (%):** Proportion positive for FluA
- **Influenza B(%):** Proportion positive for FluB

Week number (of sample): 39, 43, 47, 51, 3, 7, 11, 15, 19
Proportion positive (%): 0, 50, 10, 20, 30, 40, 50
DataMart: Number and proportion of samples positive for influenza, by type, PHE East of England
DataMart: Number and proportion of samples positive for influenza, by type, PHE London
DataMart: Number and proportion of samples positive for influenza, by type, PHE South East of England

![Graph showing number of positive samples and proportion positive for influenza A and B over weeks 39 to 43.](image-url)
DataMart: Number and proportion of samples positive for influenza, by type, PHE South West of England

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

- FluB (n) in blue
- FluA (n) in red
- Influenza A (%) in red
- Influenza B(%) in blue

Number of positive samples vs.

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

7 November 2019
DataMart: Proportion of samples positive for RSV, by age group
DataMart: Proportion of samples positive for other viruses

Proportion positive

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<th>Week number</th>
<th>RSV</th>
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<th>Parainfluenza</th>
<th>hMPV</th>
<th>Adenovirus</th>
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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

7 November 2019
Seasonal influenza vaccine uptake in targeted groups, 2019/20, England

Vaccine uptake (%) vs. Week number

- 2 years
- 3 years

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

• Sources of UK flu surveillance data:

• Weekly flu report