PHE National Influenza Report

Summary of UK surveillance of influenza and other seasonal respiratory illnesses

16 April 2020 – Week 16 report (up to week 15 data)

This report is published online. A summary report is being published once a fortnight while influenza activity is low. For further information on the surveillance schemes mentioned in this report, please see information available online.

Indicators for influenza are below baseline across all indicators.

**Primary care surveillance**

- GP consultation rates for influenza-like illness (ILI) have decreased and are below baseline intensity threshold in all UK schemes (Table 1 & Figure 1).

**Table 1: GP ILI consultations for all ages – week 14-15 2020, UK**

<table>
<thead>
<tr>
<th>GP ILI consultation rates (all ages)</th>
<th>Trend</th>
<th>Peak age group</th>
</tr>
</thead>
<tbody>
<tr>
<td>England (RCGP)</td>
<td></td>
<td>45-64</td>
</tr>
<tr>
<td>Wales</td>
<td></td>
<td>5-14</td>
</tr>
<tr>
<td>Scotland</td>
<td></td>
<td>75+</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td></td>
<td>45-64</td>
</tr>
</tbody>
</table>

![Figure 1: RCGP ILI consultation rates, England](image)


- Syndromic surveillance (data up to 12 March 2020)
  - GP in Hours (GPIH) consultation rates for all respiratory indicators decreased or remained stable.
  - GP Out of Hours (GPOOH) contacts for ILI and acute respiratory infection decreased further. Consultations for ILI increased in the under 1 year age group. Difficulty breathing consultations decreased, though remained raised in the 15+ years age groups.
  - Emergency Department attendances for respiratory conditions and acute respiratory infections were stable, though acute respiratory attendances in adults aged over 45 years increased. Attendances for influenza-like illness decreased but the 15+ years age groups remained high.
  - For further information, please see the Syndromic surveillance webpage.
Outbreak Reporting

- 824 acute respiratory outbreaks have been reported in week 15 (Figure 2).
  - 770 outbreaks were from care homes where 446 tested positive for SARS-CoV-2 and 1 tested positive for influenza A (not subtyped).
  - 31 outbreaks were from hospitals where 27 tested positive for SARS-CoV-2.
  - 23 outbreaks were from the Other Settings category where 12 tested positive for SARS-CoV-2.

- Outbreaks should be reported to the local Health Protection Teams and Respсидsc@phe.gov.uk.

Virological surveillance

- UK GP sentinel swabbing schemes
  In week 15 2020, 2 samples were tested for influenza with no samples testing positive through the UK GP sentinel swabbing schemes (Figure 3).

  Since week 40, a total of 1,196 samples (147 influenza A(H1N1)pdm09, 874 influenza A(H3N2), 37 influenza A (not subtyped), 138 influenza B, five co-infection of influenza A(H3) and B, three co-infections of influenza A(H1N1)pdm09 and B, three co-infections of influenza A(H1N1)pdm09, influenza A(H3) and influenza B and one co-infection of influenza A(H1N1)pdm09 and influenza A(H3)) tested positive for influenza through this scheme.

- Respiratory DataMart system (England)
  In week 15 2020, out of the 1,168 respiratory specimens reported through the Respiratory DataMart System, 1 sample influenza A (not subtyped) (Figure 4), with an overall positivity of 0.09%. This remains below the baseline threshold of 9.7% for this season.

  RSV positivity remained low at 0.1% in week 15. Rhinovirus positivity remained low at 4.8% in week 15. Parainfluenza and adenovirus positivity remained low at 0.9% and 1.1% respectively in week 15. Human metapneumovirus (hMPV) positivity remained low at 0.8% in week 15 2020.
Secondary care surveillance

• USISS mandatory scheme – new ICU/HCU admissions and fatal confirmed cases, UK (provisional)

In week 15, there were 3 new admissions to ICU/HDU with confirmed influenza (1 influenza A(H3N2), 1 influenza A(not subtyped) and 1 influenza B) reported across the UK (134/143 Trusts in England) through the USISS mandatory ICU scheme, with a rate of 0.01 per 100,000 (Figures 5 and 6) compared to 0.00 per 100,000 in week 14. This is below the baseline threshold of 0.10 per 100,000. No influenza laboratory confirmed deaths were reported to have occurred in ICU/HDU week 15 in the UK.

A total of 1,805 new admissions (162 influenza A(H1N1)pdm09), 359 influenza A(H3N2), 1,166 influenza A(not subtyped) and 118 influenza B) and 103 confirmed deaths have been reported in the UK 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 7 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

• USISS Severe Respiratory Failure Centre (SRF) confirmed influenza admissions, UK

No new admissions for laboratory confirmed influenza were reported in week 15 2020 among the six reporting Severe Respiratory Failure centres in the UK.

Since week 40 2019 a total of 37 confirmed influenza admissions (13 influenza A(H1N1)pdm09, 7 influenza A(H3N2), 14 influenza A(unknown subtype) and 3 influenza B) were reported among ECMO centres.

All-cause mortality surveillance

• In week 15 2020 in England, statistically significant excess mortality by week of death above the upper 2 z-score threshold was seen overall, by age group in the 15-64 and 65+ year olds and sub nationally (all ages) in all regions (North East, North West, Yorkshire & Humber, East & West Midlands, East of England, London and South East & West regions after correcting GRO disaggregate data for reporting delay with the standardised EuroMOMO algorithm (Figure 7). This data is provisional due to the time delay in registration; numbers may vary from week to week.

*Note: Delays in receiving all registered deaths from April 2018, following changes in IT systems at ONS, may result in some delays in the model to adjust for most recent deaths.*
International Surveillance

- **Influenza** updated on 15 April 2020 (based on data up to 29 March 2020)
  - In the temperate zone of the northern hemisphere, influenza activity decreased overall though influenza like illness (ILI) activity remained elevated in some countries. In the temperate zones of the southern hemisphere, influenza activity remained at inter-seasonal levels. Worldwide, seasonal influenza A viruses accounted for the majority of detections.
  - In North America, influenza activity decreased and the percent positivity for influenza was reported as low.
  - In Europe, influenza activity decreased overall.
  - In Central Asia, low influenza A(H3N2) virus detections were reported in Kazakhstan.
  - In Northern Africa, there were no influenza for this reporting period.
  - In Western Asia, influenza activity was low across reporting countries.
  - In East Asia, influenza illness indicators and influenza activity remained at inter-seasonal levels across all countries.
  - In the Caribbean and Central American countries, influenza activity was reported in some countries. Severe acute respiratory infection (SARI) activity increased in Costa Rica and Jamaica.
  - In tropical South American countries, influenza activity decreased from the previous reporting period.
  - In tropical Africa, there were no or low influenza detections reported.
  - In Southern Asia, ILI and SARI activity increased in Bhutan.
  - In South East Asia, influenza activity was reported in Lao People’s Democratic Republic.
  - The WHO GISRS laboratories tested more than 178,077 specimens between 16 March 2020 and 29 March 2020. 7,737 were positive for influenza viruses, of which 4,900 (63.3%) were typed as influenza A and 2,837 (36.7%) as influenza B. Of the sub-typed influenza A viruses, 1,531 (68.1%) were influenza A(H1N1)pdm09 and 716 (31.9%) were influenza A(H3N2). Of the characterized B viruses, 8 (3.3%) belonged to the B-Yamagata lineage and 236 (96.7%) to the B-Victoria lineage.

- **MERS-CoV** latest update on 15 April 2020
  - Up to 15 April 2020, a total of five cases of Middle East respiratory syndrome coronavirus, MERS-CoV, (three imported and two linked cases) have been confirmed in the UK. On-going surveillance has identified 1,815 suspected cases in the UK since September 2012 that have been investigated for MERS-CoV and tested negative.
  - From 1 through 29 February 2020, the National IHR Focal Point of Saudi Arabia reported 18 additional cases of MERS-CoV infection.
  - Globally, since September 2012, WHO has been notified of 2,538 laboratory-confirmed cases of MERS-CoV, including 871 associated deaths. Further guidance on the management of possible cases in the UK is available online. The latest ECDC MERS-CoV risk assessment can be found here, where it is highlighted that risk of widespread transmission of MERS-CoV remains very low.

- **Avian/Zoonotic influenza** latest update on 28 February 2020
  - Between 21 January to 28 February 2019, two new human infections with avian A(H9N2) viruses (reported in China and Senegal respectively) and one new laboratory-confirmed human case of influenza A(H1N1)v virus infection (swine variant) (reported in China) have been reported.
  - For further updates please see the WHO website and for advice on clinical management in the UK please see information available online.

- **Coronavirus Disease 2019 (COVID-19)** latest update 15 April 2020
  - Up to 15 April 2020, a total of 98,476 cases of COVID-19, have been confirmed in the UK.
  - Globally, up to 15 April 2020, WHO has been notified of 1,914,916 confirmed cases of COVID-19 infection, including 123,010 related deaths.