Key messages

During week 4 there were small decreases in GP consultations for influenza-like illness (all ages; figure 2). Rates in adults decreased, however there were slight increases in children, most notably in the 1 to 4 and 5 to 14 years age group (figure 2a).

Diagnostic indicators at a glance:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Trend</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper respiratory tract infection</td>
<td>no trend</td>
<td>above baseline levels</td>
</tr>
<tr>
<td>Influenza-like illness</td>
<td>decreasing</td>
<td>above baseline levels</td>
</tr>
<tr>
<td>Pharyngitis</td>
<td>increasing</td>
<td>similar to baseline levels</td>
</tr>
<tr>
<td>Scarlet fever</td>
<td>increasing</td>
<td>above baseline levels</td>
</tr>
<tr>
<td>Lower respiratory tract infection</td>
<td>decreasing</td>
<td>similar to baseline levels</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>decreasing</td>
<td>below baseline levels</td>
</tr>
<tr>
<td>Gastroenteritis</td>
<td>decreasing</td>
<td>below baseline levels</td>
</tr>
<tr>
<td>Vomiting</td>
<td>no trend</td>
<td>below baseline levels</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>no trend</td>
<td>below baseline levels</td>
</tr>
<tr>
<td>Asthma</td>
<td>decreasing</td>
<td>above baseline levels</td>
</tr>
<tr>
<td>Wheeze</td>
<td>no trend</td>
<td>above baseline levels</td>
</tr>
<tr>
<td>Conjunctivitis</td>
<td>no trend</td>
<td>below baseline levels</td>
</tr>
<tr>
<td>Mumps</td>
<td>no trend</td>
<td>similar to baseline levels</td>
</tr>
<tr>
<td>Measles</td>
<td>no trend</td>
<td>similar to baseline levels</td>
</tr>
<tr>
<td>Rubella</td>
<td>decreasing</td>
<td>similar to baseline levels</td>
</tr>
<tr>
<td>Pertussis</td>
<td>no trend</td>
<td>similar to baseline levels</td>
</tr>
<tr>
<td>Chickenpox</td>
<td>no trend</td>
<td>below baseline levels</td>
</tr>
<tr>
<td>Herpes zoster</td>
<td>no trend</td>
<td>below baseline levels</td>
</tr>
<tr>
<td>Cellulitis</td>
<td>no trend</td>
<td>below baseline levels</td>
</tr>
<tr>
<td>Impetigo</td>
<td>no trend</td>
<td>similar to baseline levels</td>
</tr>
</tbody>
</table>

GP practices and denominator population:

<table>
<thead>
<tr>
<th>Year</th>
<th>Week</th>
<th>GP Practices Reporting**</th>
<th>Population size**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>4</td>
<td>2,829</td>
<td>23.1 million</td>
</tr>
</tbody>
</table>

**based on the average number of practices and denominator population in the reporting working week.
1: Upper respiratory tract infection (URTI)

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

* 7-day moving average adjusted for bank holidays.

2: Influenza-like illness

Daily incidence rates (and 7-day moving average*) per 100,000 population (all England, all ages).
2a: Influenza-like illness by age
Average daily incidence rate by week per 100,000 population (all England).

3: Pharyngitis or scarlet fever
Daily incidence rates (and 7-day moving average*) per 100,000 population (all England, all ages).

3a: Pharyngitis/scarlet fever by age
Average daily incidence rate by week per 100,000 population (all England).

* 7-day moving average
4: Scarlet fever

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, based on a denominator population of approximately 5.5 million patients).

5: Lower respiratory tract infection (LRTI)

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

6: Pneumonia

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

* 7-day moving average adjusted for bank holidays.
7: Gastroenteritis

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

7a: Gastroenteritis by age

Average daily incidence rate by week per 100,000 population (all England).

8: Vomiting

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

* 7-day moving average adjusted for bank holidays.
8a: Vomiting by age

Average daily incidence rate by week per 100,000 population (all England).

9: Diarrhoea

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

9a. Diarrhoea by age

Average daily incidence rate by week per 100,000 population (all England).

* 7-day moving average adjusted for bank holidays.
10: Asthma

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

10a: Asthma by age

Average daily incidence rate by week per 100,000 population (all England).

11: Wheeze

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

* 7-day moving average adjusted for bank holidays.
12: Conjunctivitis

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

13: Mumps

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

14: Measles

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

* 7-day moving average
15: Rubella

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

16: Pertussis

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

17: Chickenpox

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

* 7-day moving average
18: Herpes zoster
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

* 7-day moving average adjusted for bank holidays.

19: Cellulitis
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

20: Impetigo
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).
Notes and further information

- The Public Health England GP in hours surveillance system is a syndromic surveillance system monitoring community-based morbidity recorded by GP practices.
- GP consultation data are analysed on a daily basis to identify national and regional trends. A statistical algorithm underpins each system, routinely identifying activity that has increased significantly or is statistically significantly high for the time of year. Results from these daily analyses are assessed by the ReSST, along with analysis by age group, and anything deemed of public health importance is alerted by the team.
- This system captures anonymised GP morbidity data from two GP clinical software systems, EMIS, from version 1 of the QSurveillance® database, and TPP SystmOne.
- Baselines represent seasonally expected levels of activity and are constructed from historical data. Furthermore, they take into account any known substantial changes in data collection, population coverage or reporting practices. Baselines are refreshed using the latest data on a regular basis.

Maps:

- From week 40 2017 the levels of influenza-like illness (ILI) rates are illustrated in the bulletin appendix maps. The ILI intensity levels are calculated using the “Moving Epidemic Method” (MEM).\(^1\) MEM is used as a standard methodology for setting influenza surveillance thresholds across Europe.\(^2\)
- The current ILI thresholds are based upon previous influenza seasons from 2012/13 onwards and therefore illustrate activity levels in relation to previous ILI activity recorded in the GPIH system. **ILI thresholds presented in the maps should be interpreted with caution and reference made to other GP surveillance systems incorporating more historical data, which are available in the PHE National Influenza Report.**
- The ILI thresholds have been calculated separately for each of the nine PHE Centres to allow for differences between areas e.g. background ILI rates are historically higher in London than other areas of England. However, upper tier Local Authority (utLA) ILI consultation rates are compared to Centre-level thresholds only and therefore utLAs with higher background rates than the Centre may appear to have higher ILI activity.
- ILI consultation rates presented for each utLA in the maps should be interpreted in context of regional and national ILI activity. The small numbers reported at this local level can often result in short-lived fluctuations in rates causing threshold exceedances that are out of context with national and regional activity. **utLA ILI data should therefore be interpreted with caution and interpreted in context with the national influenza report which can be found here:**

Acknowledgements:

We thank and acknowledge the University of Nottingham, ClinRisk\(^\circ\) and the contribution of EMIS and EMIS practices. Data source: version 1 of the QSurveillance® database.

We thank TPP, ResearchOne and the SystmOne GP practices contributing to this surveillance system.
Influenza-like illness GP consultations by LA (England)

Week 1

Week 2

Week 3

Week 4

PLEASE NOTE: The current ILI thresholds are based upon previous influenza seasons from 2012/13 onwards and therefore illustrate activity levels in relation to previous ILI activity recorded in the GPIH system. ILI thresholds presented in the maps should be interpreted with caution and reference made to other GP surveillance systems incorporating more historical data, which are available in the PHE National Influenza Report.

Please read the notes section (page 11) to understand the caveats and limitations on the use and interpretation of local ILI consultation data.

North East

Influenza-like illness GP consultations by LA (North East PHE Centre)

Week 1

Week 2

Week 3

Week 4

PLEASE NOTE: The current ILI thresholds are based upon previous influenza seasons from 2012/13 onwards and therefore illustrate activity levels in relation to previous ILI activity recorded in the GPIH system. ILI thresholds presented in the maps should be interpreted with caution and reference made to other GP surveillance systems incorporating more historical data, which are available in the PHE National Influenza Report.

Please read the notes section (page 11) to understand the caveats and limitations on the use and interpretation of local ILI consultation data.

PLEASE NOTE: The current ILI thresholds are based upon previous influenza seasons from 2012/13 onwards and therefore illustrate activity levels in relation to previous ILI activity recorded in the GPIH system. **ILI thresholds presented in the maps should be interpreted with caution and reference made to other GP surveillance systems incorporating more historical data, which are available in the PHE National Influenza Report.**

Please read the notes section (page 11) to understand the caveats and limitations on the use and interpretation of local ILI consultation data.

North West

Influenza-like illness GP consultations by LA (North West PHE Centre)

PLEASE NOTE: The current ILI thresholds are based upon previous influenza seasons from 2012/13 onwards and therefore illustrate activity levels in relation to previous ILI activity recorded in the GPIH system. ILI thresholds presented in the maps should be interpreted with caution and reference made to other GP surveillance systems incorporating more historical data, which are available in the PHE National Influenza Report.

Please read the notes section (page 11) to understand the caveats and limitations on the use and interpretation of local ILI consultation data.

PLEASE NOTE: The current ILI thresholds are based upon previous influenza seasons from 2012/13 onwards and therefore illustrate activity levels in relation to previous ILI activity recorded in the GPIH system. ILI thresholds presented in the maps should be interpreted with caution and reference made to other GP surveillance systems incorporating more historical data, which are available in the PHE National Influenza Report.

Please read the notes section (page 11) to understand the caveats and limitations on the use and interpretation of local ILI consultation data.

PLEASE NOTE: The current ILI thresholds are based upon previous influenza seasons from 2012/13 onwards and therefore illustrate activity levels in relation to previous ILI activity recorded in the GPIH system. **ILI thresholds presented in the maps should be interpreted with caution and reference made to other GP surveillance systems incorporating more historical data, which are available in the PHE National Influenza Report.**

Please read the notes section (page 11) to understand the caveats and limitations on the use and interpretation of local ILI consultation data.

PLEASE NOTE: The current ILI thresholds are based upon previous influenza seasons from 2012/13 onwards and therefore illustrate activity levels in relation to previous ILI activity recorded in the GPIH system. ILI thresholds presented in the maps should be interpreted with caution and reference made to other GP surveillance systems incorporating more historical data, which are available in the PHE National Influenza Report.

Please read the notes section (page 11) to understand the caveats and limitations on the use and interpretation of local ILI consultation data.

PLEASE NOTE: The current ILI thresholds are based upon previous influenza seasons from 2012/13 onwards and therefore illustrate activity levels in relation to previous ILI activity recorded in the GPIH system. ILI thresholds presented in the maps should be interpreted with caution and reference made to other GP surveillance systems incorporating more historical data, which are available in the PHE National Influenza Report.

Please read the notes section (page 11) to understand the caveats and limitations on the use and interpretation of local ILI consultation data.
PLEASE NOTE: The current ILI thresholds are based upon previous influenza seasons from 2012/13 onwards and therefore illustrate activity levels in relation to previous ILI activity recorded in the GPIH system. ILI thresholds presented in the maps should be interpreted with caution and reference made to other GP surveillance systems incorporating more historical data, which are available in the PHE National Influenza Report.

Please read the notes section (page 11) to understand the caveats and limitations on the use and interpretation of local ILI consultation data.

PLEASE NOTE: The current ILI thresholds are based upon previous influenza seasons from 2012/13 onwards and therefore illustrate activity levels in relation to previous ILI activity recorded in the GPIH system. **ILI thresholds presented in the maps should be interpreted with caution and reference made to other GP surveillance systems incorporating more historical data, which are available in the PHE National Influenza Report.**

Please read the notes section (page 11) to understand the caveats and limitations on the use and interpretation of local ILI consultation data.