Remote Health Advice
Syndromic Surveillance System: England

20 June 2017

Key messages

There was a sharp increase in NHS 111 ‘heat/sun impact’ and insect bite calls on Sunday 18 June in line with the warm weather (figure 10 & 11).

Eye problem calls continued to increase in week 24 most notably in the 5-14 years age group, in line with seasonal grass pollen activity (figures 9 and 9a).

A Heat-Health Watch system operates in England from 1 June to 15 September each year. As part of the Heatwave Plan for England, the PHE Real-time Syndromic Surveillance team will be routinely monitoring the public health impact of hot weather using syndromic surveillance data during this period.

Heat-health watch level (current reporting week): Level 1-3 Summer preparedness - Heatwave action
http://www.metoffice.gov.uk/weather/uk/heathealth/

Syndromic indicators at a glance:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Trend</th>
<th>Level *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold/flu</td>
<td>decreasing</td>
<td>below baseline levels</td>
</tr>
<tr>
<td>Fever</td>
<td>increasing</td>
<td>similar to baseline levels</td>
</tr>
<tr>
<td>Cough</td>
<td>no trend</td>
<td>below baseline levels</td>
</tr>
<tr>
<td>Difficulty breathing</td>
<td>increasing</td>
<td>below baseline levels</td>
</tr>
<tr>
<td>Sore throat</td>
<td>no trend</td>
<td>similar to baseline levels</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>decreasing</td>
<td>below baseline levels</td>
</tr>
<tr>
<td>Vomiting</td>
<td>increasing</td>
<td>below baseline levels</td>
</tr>
<tr>
<td>Eye problems</td>
<td>increasing</td>
<td>above baseline levels</td>
</tr>
<tr>
<td>Heat/sun stroke</td>
<td>increasing</td>
<td>above baseline levels</td>
</tr>
<tr>
<td>Insect bites</td>
<td>increasing</td>
<td>above baseline levels</td>
</tr>
</tbody>
</table>

*Since week 47 2014 new baselines have been introduced for comparison with previous years. Baselines use historical data from the NHS Direct surveillance system to estimate seasonal trend but with levels adjusted to reflect changes since the switch to using NHS 111 data in September 2013.

Data summary:

<table>
<thead>
<tr>
<th>Year</th>
<th>Week</th>
<th>Total calls</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>24</td>
<td>210,050</td>
</tr>
</tbody>
</table>
1: Total calls.
The total number of syndromic calls recorded each day by NHS 111.

2: Cold/flu
Daily ‘cold/flu’ calls as a percentage of total calls. Baselines are constructed from historical data since 2010, including data from NHS 111 and NHS Direct.

3: Fever
Daily ‘fever’ calls as a percentage of total calls. Baselines are constructed from historical data since 2010, including data from NHS 111 and NHS Direct.
4: Cough

Daily ‘cough’ calls as a percentage of total calls. Baselines are constructed from historical data since 2010, including data from NHS 111 and NHS Direct.

5: Difficulty breathing

Daily ‘difficulty breathing’ calls as a percentage of total calls. Baselines are constructed from historical data since 2010, including data from NHS 111 and NHS Direct.

6: Sore throat

Daily ‘sore throat’ calls as a percentage of total calls. Baselines are constructed from historical data since 2010, including data from NHS 111 and NHS Direct.
7. Diarrhoea

Daily ‘diarrhoea’ calls as a percentage of total calls. Baselines are constructed from historical data since 2010, including data from NHS 111 and NHS Direct.

8: Vomiting

Daily ‘vomiting’ calls as a percentage of total calls. Baselines are constructed from historical data since 2010, including data from NHS 111 and NHS Direct.

9: Eye problems

Daily ‘eye problems’ calls as a percentage of total calls. Baselines are constructed from historical data since 2010, including data from NHS 111 and NHS Direct.
9a: Eye problems by age group

Eye problems calls as a percentage of total calls within each age group, shown as a 7 day moving average adjusted for bank holidays.

10. Heat/sun stroke

Daily 'heat/sun stroke' calls as a percentage of total calls. Baselines are constructed from historical data since 2010, including data from NHS 111 and NHS Direct.

10a: Heat/sun stroke by age group

Heat/sun stroke calls as a percentage of total calls within each age group, shown as a 7 day moving average adjusted for bank holidays.
11: Insect bites

Daily ‘insect bites’ calls as a percentage of total calls. Baselines are constructed from historical data since 2010, including data from NHS 111 and NHS Direct.

11a: Insect bites by age group

Insect bites calls as a percentage of total calls within each age group, shown as a 7 day moving average adjusted for bank holidays.
Introduction to charts:

- Weekends and bank holidays are marked by vertical grey lines (bank holidays darker grey).
- A 7-day moving average (adjusted for bank holidays) is overlaid on the daily data reported in each chart, unless specified.
- 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.
- NHS 111 call 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.

Notes and further information:

Further information about NHS 111 can be found at:

http://www.nhs.uk/NHSEngland/AboutNHSservices/Emergencyandurgentcareservices/Pages/NHS-111.aspx

The Remote Health Advice Syndromic Surveillance bulletin can also be downloaded from the PHE Real-time Syndromic Surveillance website which also contains more information about syndromic surveillance:


Acknowledgements:

We are grateful to NHS 111 and to NHS Digital for their assistance and support in providing the anonymised call data that underpin the Remote Health Advice Syndromic Surveillance System.