Public Health England

Remote Health Advice

Syndromic Surveillance System: England

Key messages

Data to: 11 August 2019

NHS 111 calls for eye problems increased during week 32, mainly in the <1 and 5-14 years age groups (figures 9 & 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 Summer preparedness**

http://www.metoffice.gov.uk/weather/uk/heathealth/

Syndromic indicators at a glance:

| Indicator	Trend	Level
Cold/flu	no trend	pre-epidemic threshold*
Fever	no trend	below baseline levels
Cough	no trend	similar to baseline levels
Difficulty breathing	decreasing	similar to baseline levels
Sore throat	decreasing	similar to baseline levels
Diarrhoea	no trend	below baseline levels
Vomiting	no trend	below baseline levels
Eye problems	increasing	above baselines levels
Heat/sun impact	decreasing	below baseline levels
Insect bites	decreasing	above baselines levels

* Moving Epidemic Method (MEM) influenza activity threshold (see notes)

Data summary:

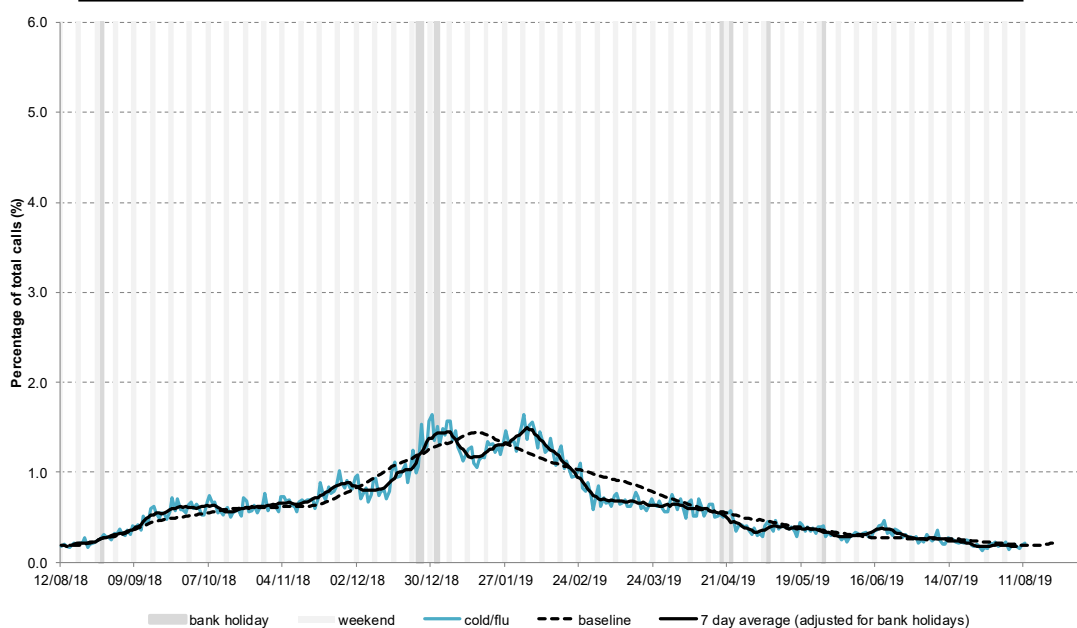| Year	Week	Total calls
2019	32	244,061

1: Total calls.

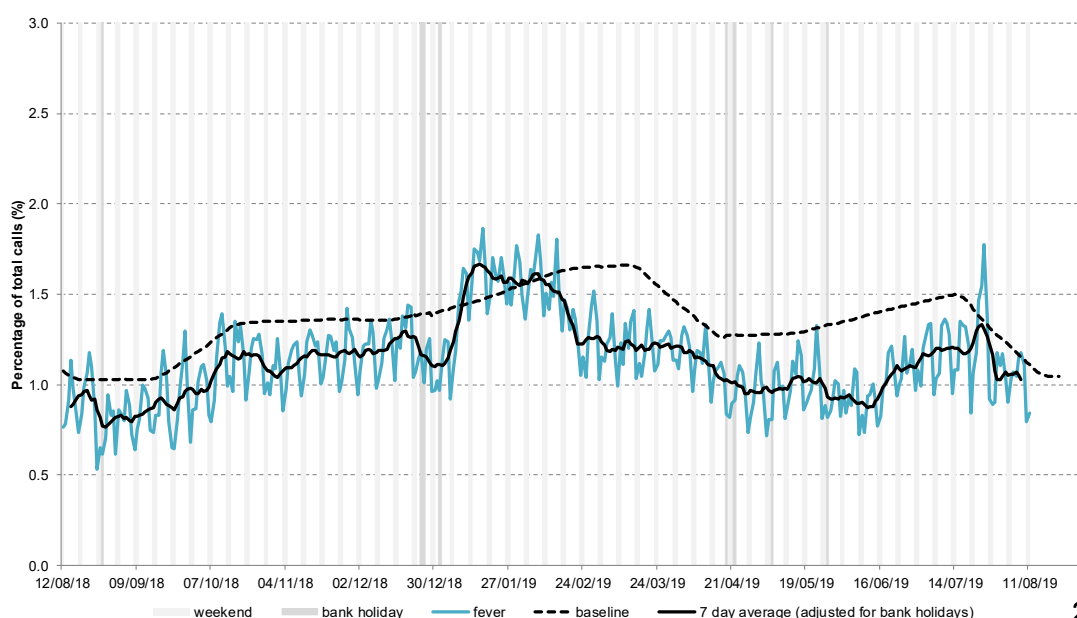The total number of syndromic calls recorded each day by NHS 111.
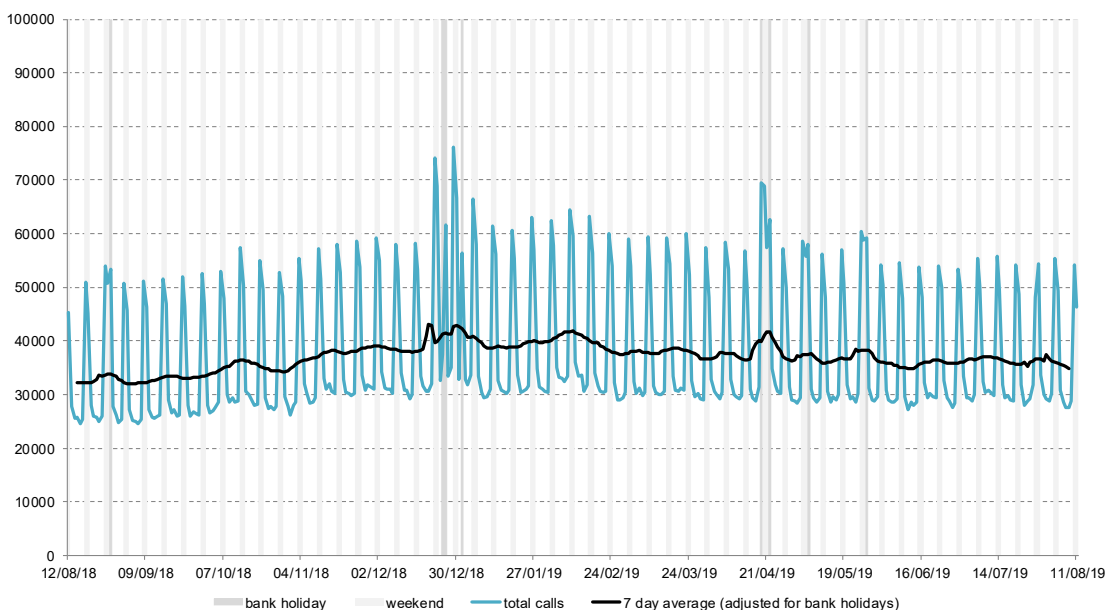
2: Cold/flu

Daily 'cold/flu' calls as a percentage of total calls. Baselines are constructed from historical data since 2013.
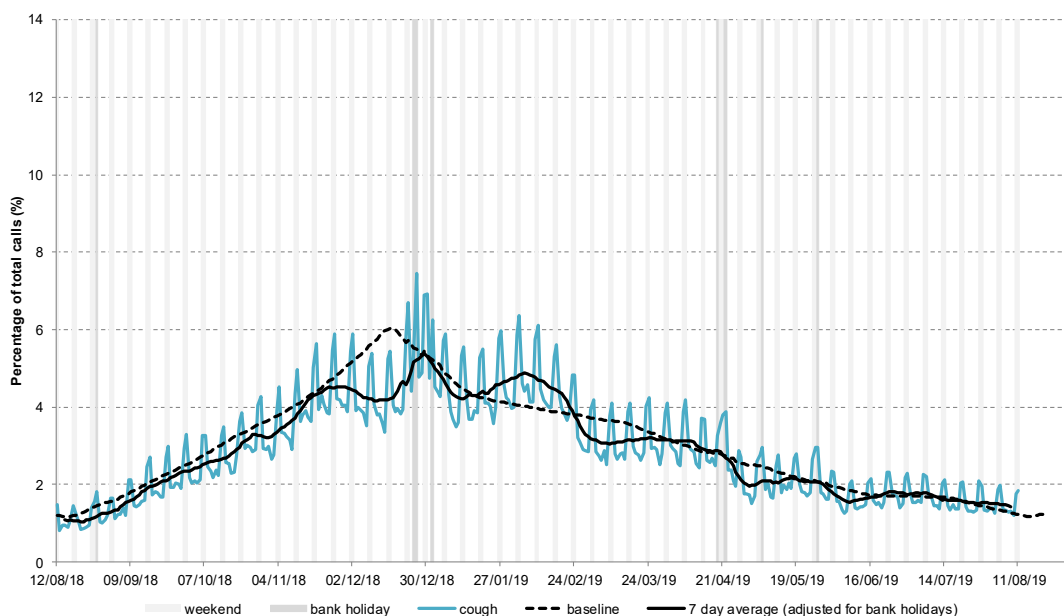

3: Fever

Daily 'fever' calls as a percentage of total calls. Baselines are constructed from historical data since 2013.
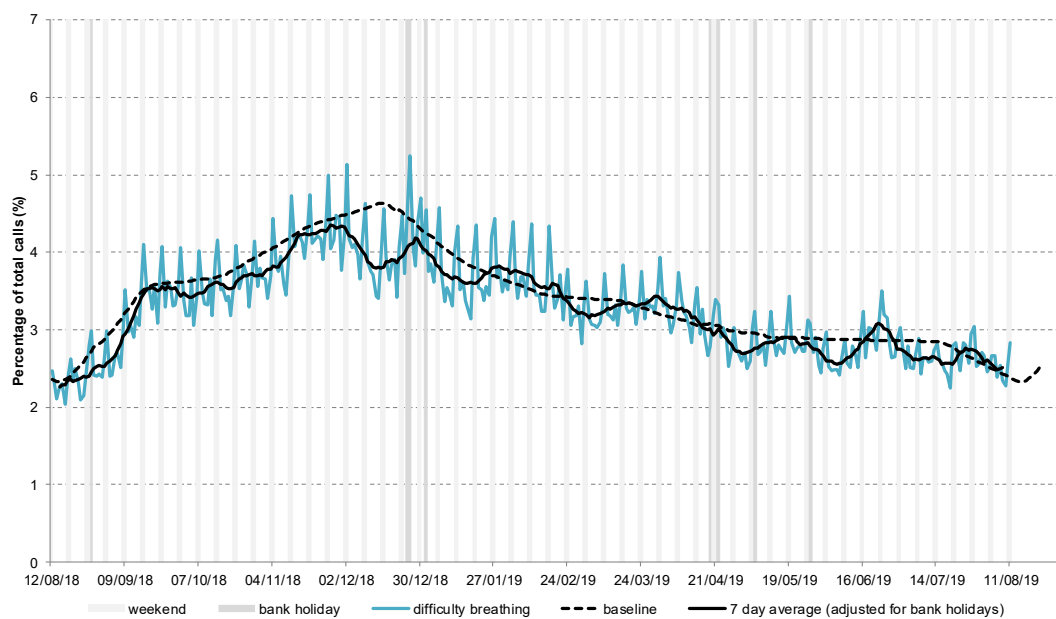
4: Cough

Daily 'cough' calls as a percentage of total calls. Baselines are constructed from historical data since 2013.
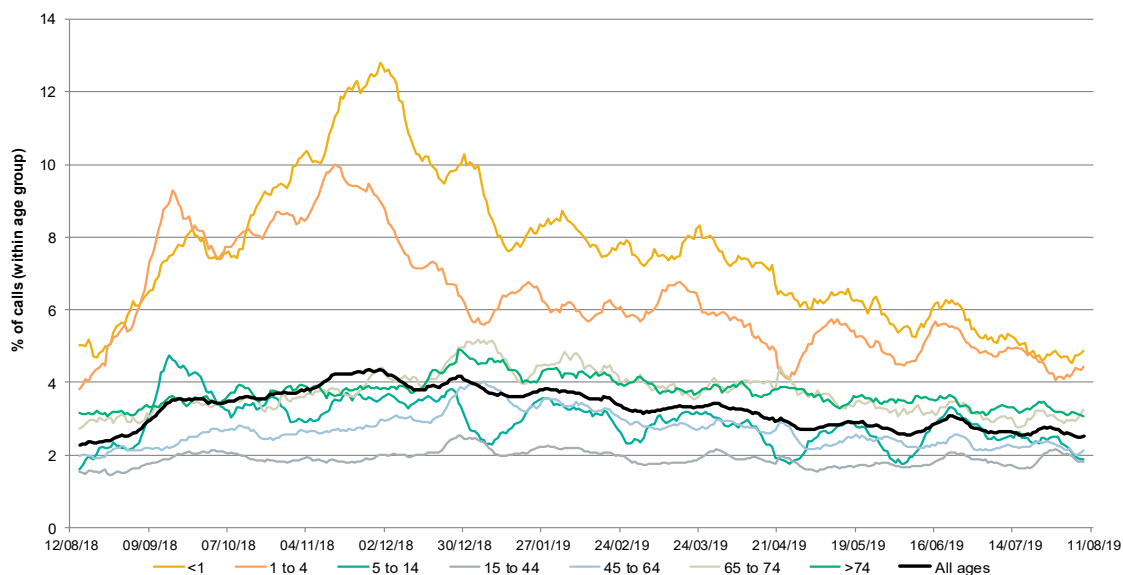

5: Difficulty breathing

Daily 'difficulty breathing' calls as a percentage of total calls. Baselines are constructed from historical data since 2013.

5a: Difficulty breathing calls by age group

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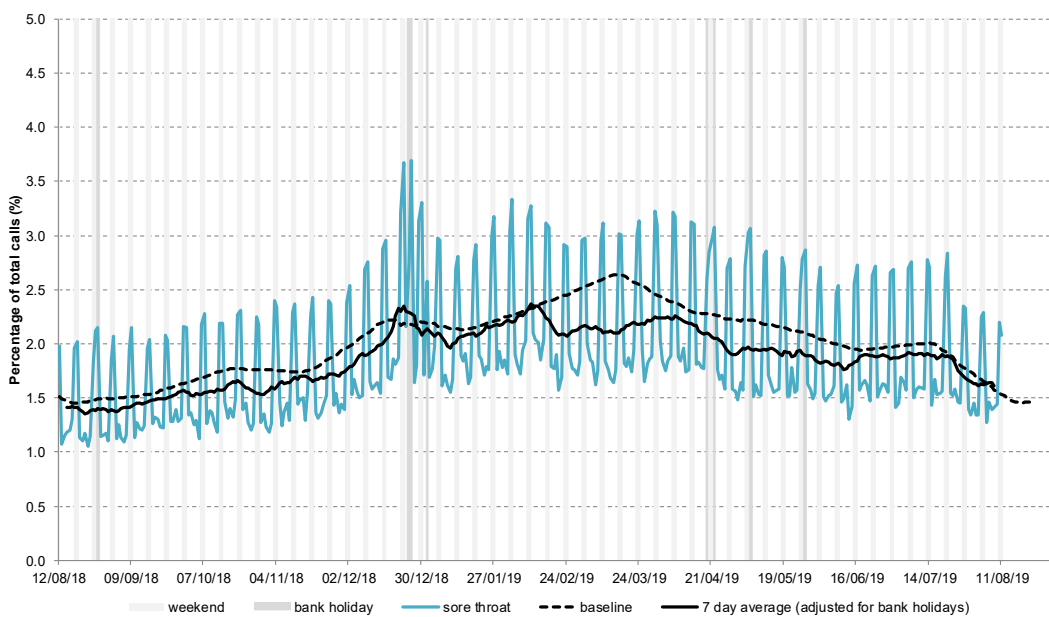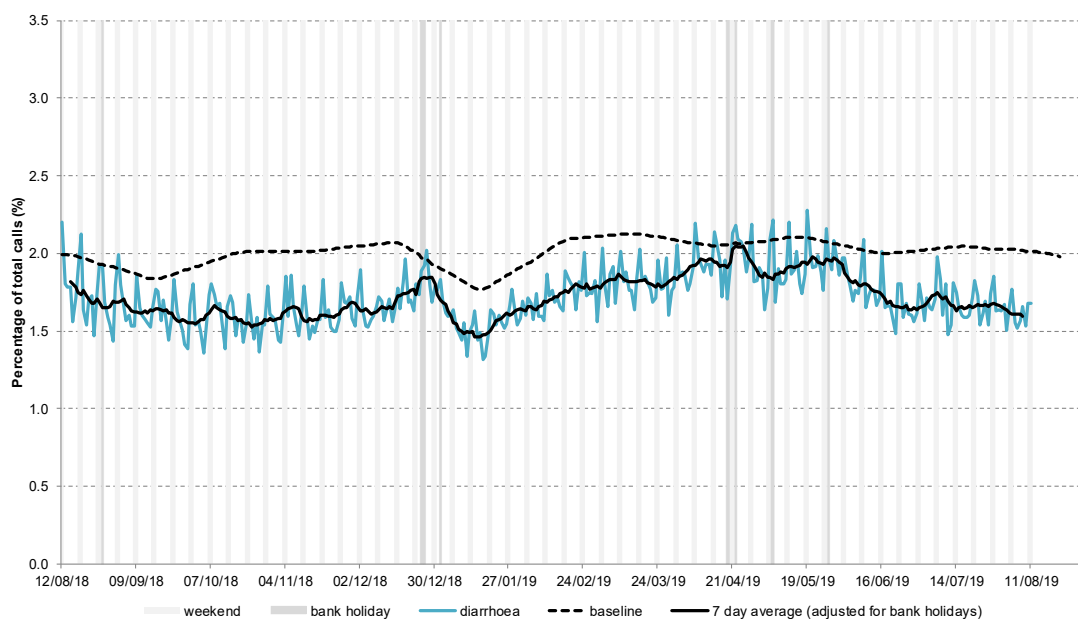

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6: Sore throat

Daily 'sore throat' calls as a percentage of total calls. Baselines are constructed from historical data since 2013.
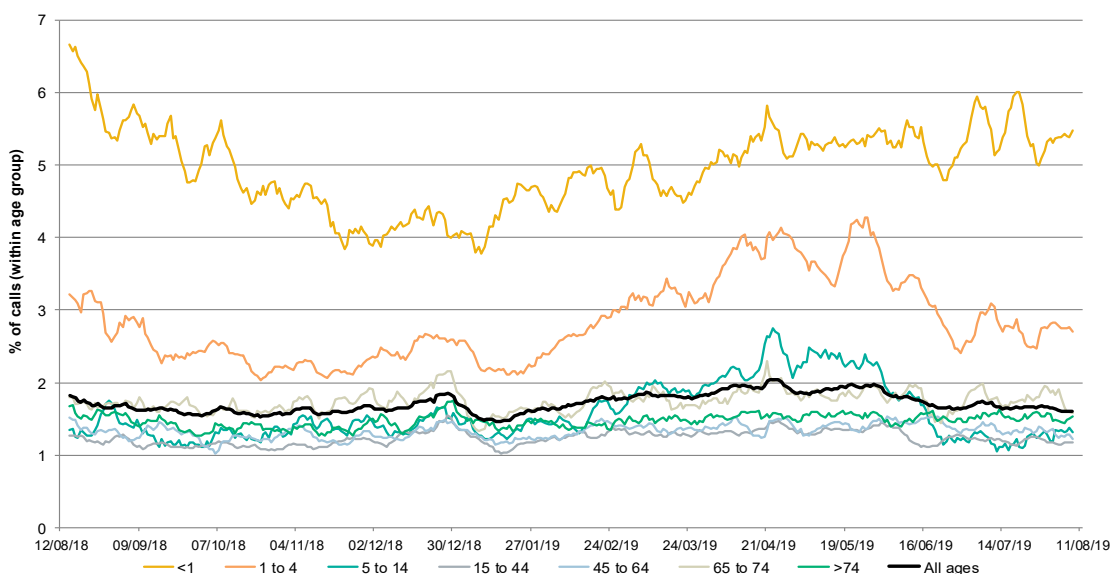

7. Diarrhoea

Daily 'diarrhoea' calls as a percentage of total calls. Baselines are constructed from historical data since 2013.

7a: Diarrhoea calls by age group

Daily 'diarrhoea' calls as a percentage of total calls. Baselines are constructed from historical data since 2013.
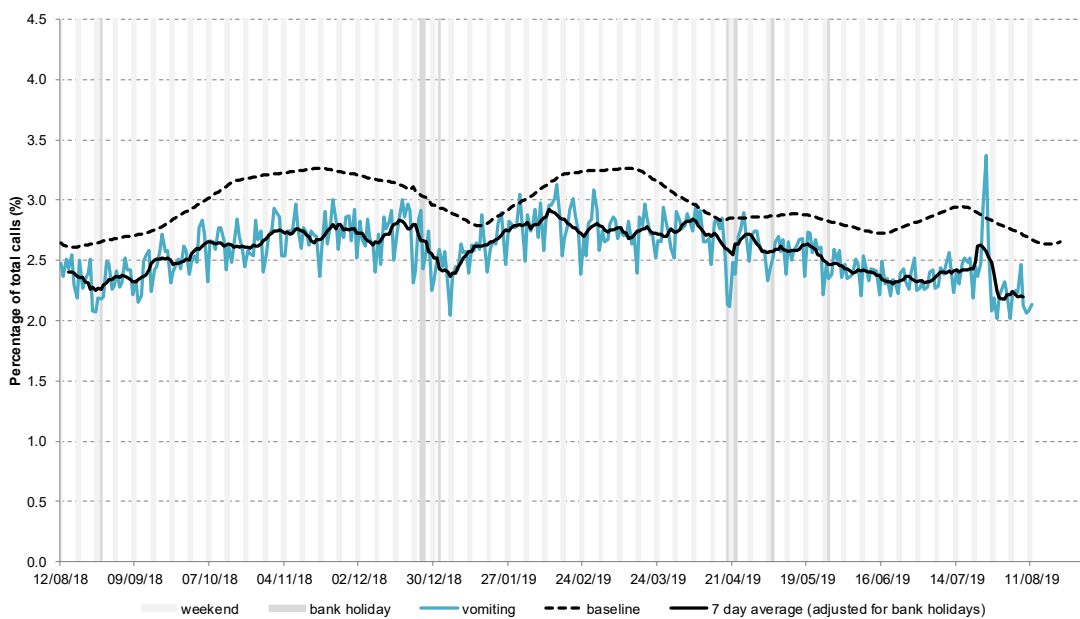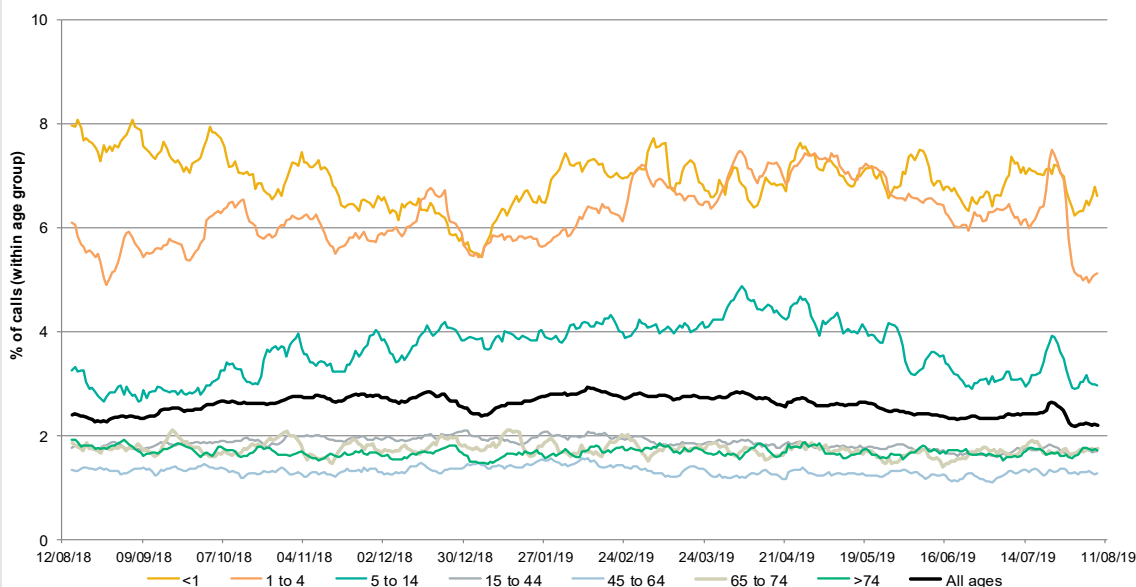
8: Vomiting calls

Daily 'vomiting' calls as a percentage of total calls. Baselines are constructed from historical data since 2013.
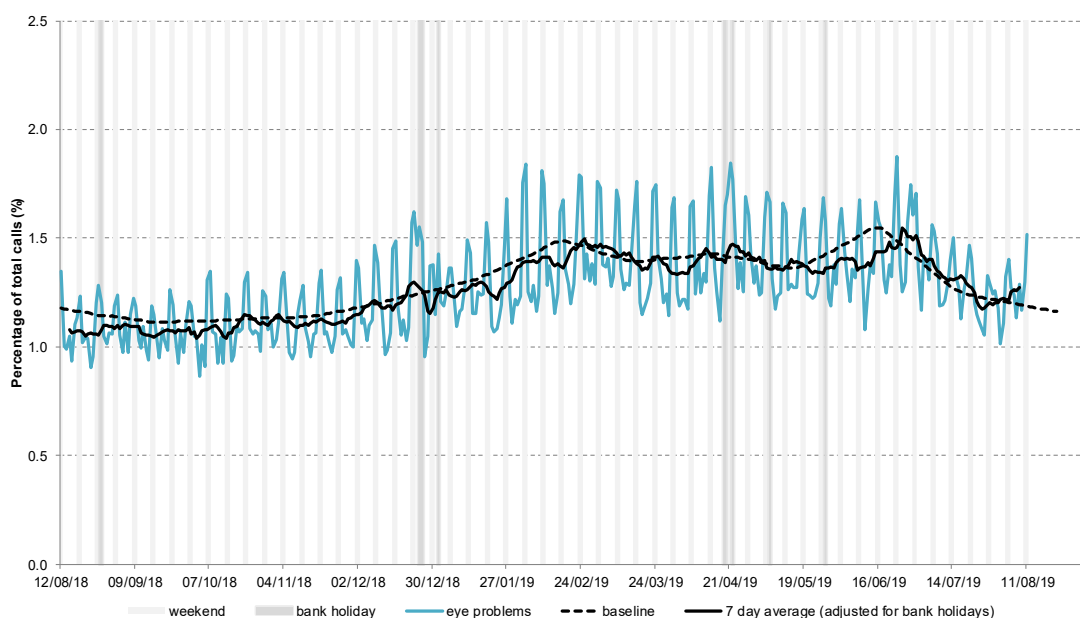

8a: Vomiting calls by age group

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

9: Eye problems

Daily 'eye problems' calls as a percentage of total calls. Baselines are constructed from historical data since 2013.
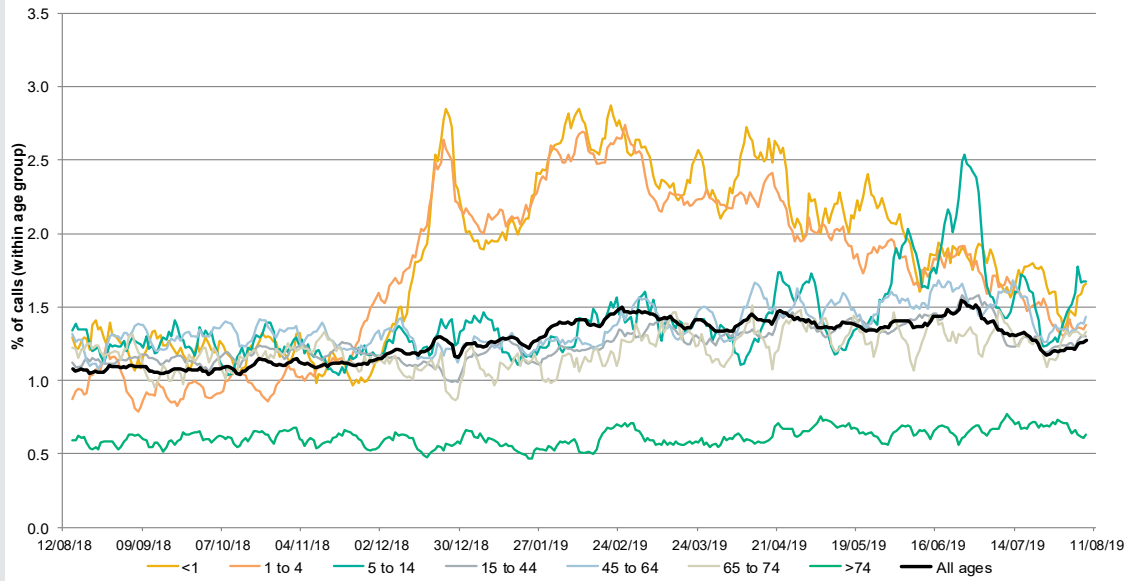
9a: Eye problems calls by age group

'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 impact calls

Daily 'heat/sun impact' calls as a percentage of total calls. Baselines are constructed from historical data since 2013.

11: Insect bites calls

Daily 'eye problems' calls as a percentage of total calls. Baselines are constructed from historical data since 2013.
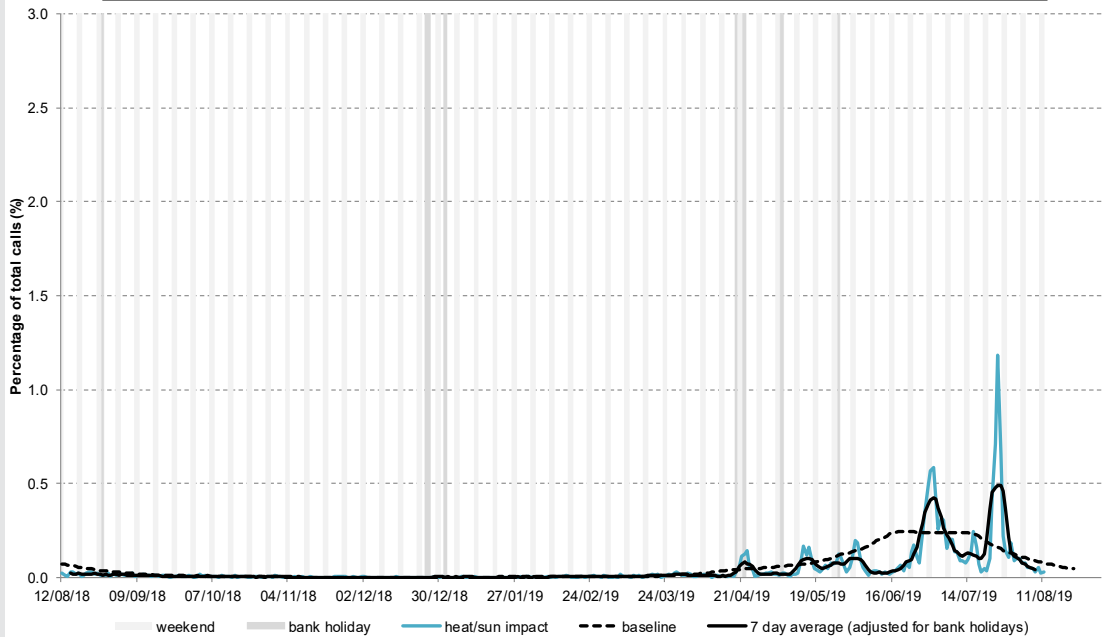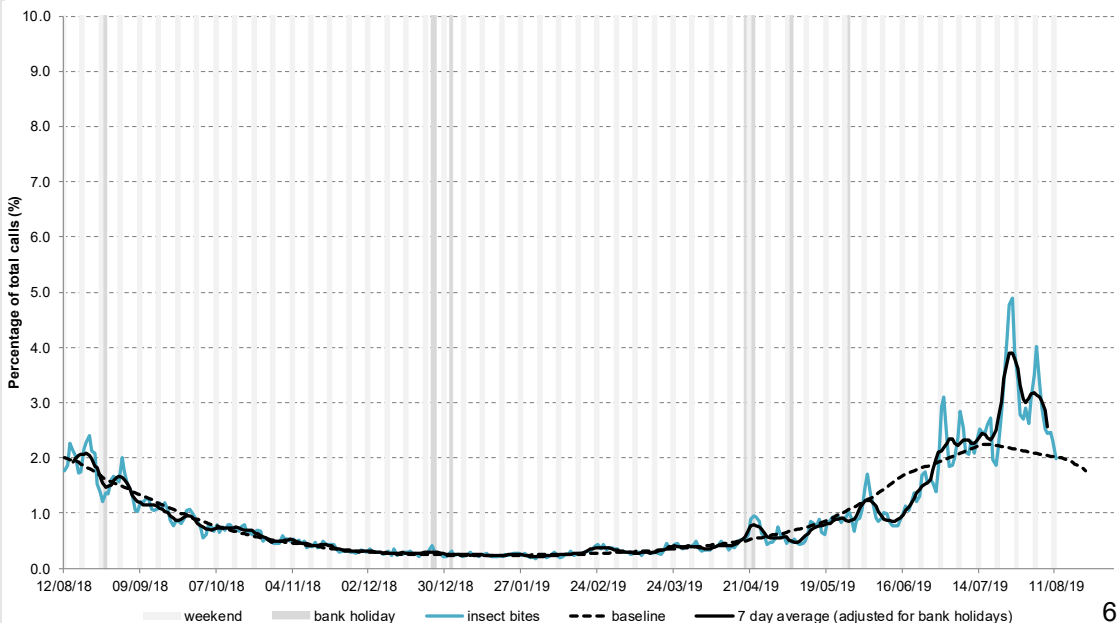
| 13 August 2019 | Year: 2019 | Week: 32 |

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 since September 2013. 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.

Moving Epidemic Method (MEM):

- During each winter we present Moving Epidemic Method (MEM) influenza thresholds on selected indicators.
- The moving epidemic method or MEM is a standard methodology used for setting influenza thresholds across many European nations.[1]
- MEM is used for NHS 111 cold/flu thresholds at a national level.
- **MEM thresholds should be interpreted using 7 day moving averages rather than daily data.**
- MEM thresholds currently use five years of historic data. The thresholds are re-calculated every year.
- 'Pre-epidemic thresholds' are used alongside other surveillance systems to identify the start of influenza circulating in the community.
- 40%, 95% and 97.5% intensity thresholds are used to identify when influenza activity moves from low to medium, high or very high.

[1]Vega T et al. Influenza Other Respir Viruses. 2013;7(4):546-58.

Notes and further information:

- Further information about NHS 111 can be found at:

https://www.nhs.uk/using-the-nhs/nhs-services/urgent-and-emergency-care/nhs-111/

- 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:

https://www.gov.uk/government/collections/syndromic-surveillance-systems-and-analyses

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