

Syndromic Surveillance System: England

Data to: 19 April 2020

21 April 2020 Year: 2020 Week: 16

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Key messages

During week 16 there was an increase in NHS 111 calls for eye problems in line with the tree pollen season and the recent warm weather (figure 9).

Please note: during the current COVID-19 incident, NHS 111 are triaging 'potential COVID-19' patients using new telephone and online triaging systems. PHE are currently working with NHS 111 to develop syndromic surveillance indicators to monitor trends in these calls. Meanwhile, we continue to present our routine NHS 111 syndromic indicators in this report however these should be interpreted with caution as they currently do not represent a true indication of activity.

Syndromic indicators at a glance:

Indicator	Trend*	Level
Cold/flu	no trend	below baseline levels
Fever	no trend	below baseline levels
Cough	no trend	below baseline levels
Difficulty breathing	no trend	below baseline levels
Sore throat	no trend	below baseline levels
Diarrhoea	no trend	below baseline levels
Vomiting	increasing	below baseline levels
Eye problems	increasing	below baseline levels

Data summary:

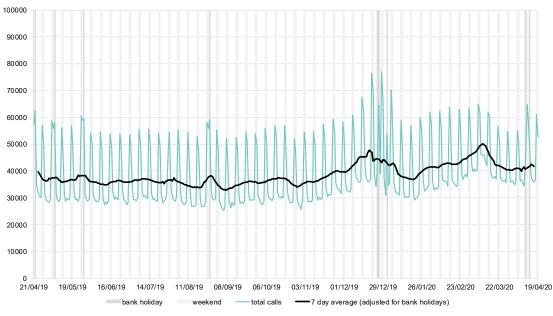
Year	Week	Total calls
2020	16	308,298

^{*} Due to changes in data processing since 13th March, trends should be interpreted with caution.

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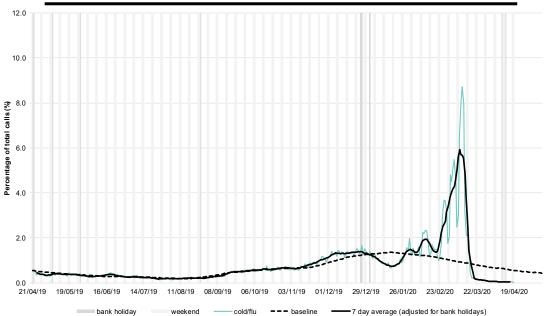
1: Total calls

The total number of syndromic calls recorded each day by NHS 111.



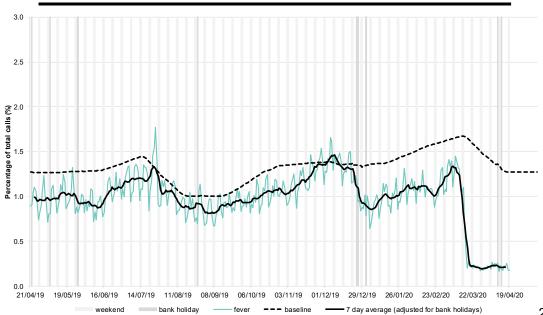
2: Cold/flu

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



3: Fever

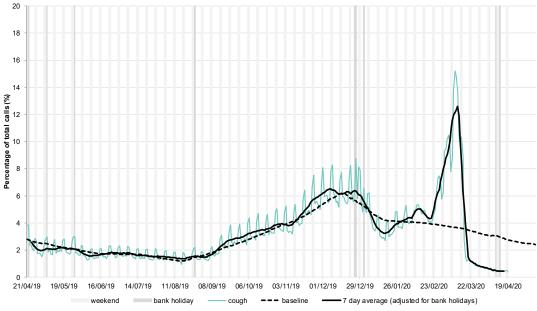
Daily 'fever' calls as a percentage of total calls. Baselines are constructed from historical data since 2013.



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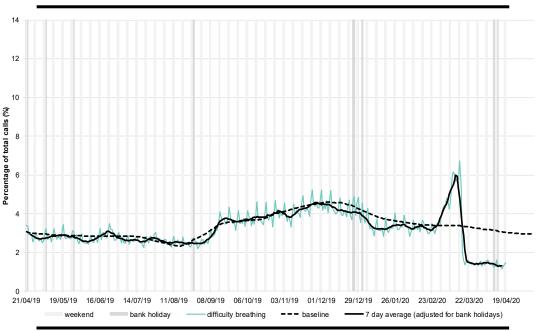
4: Cough

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



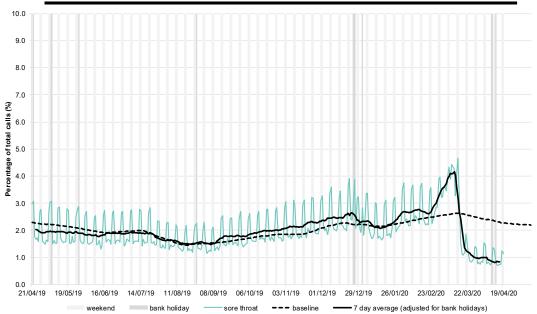
5: Difficulty breathing

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



6: Sore throat

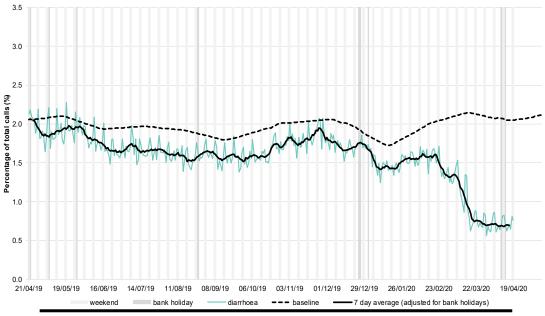
Daily 'sore throat' calls as a percentage of total calls. Baselines are constructed from historical data since 2013.



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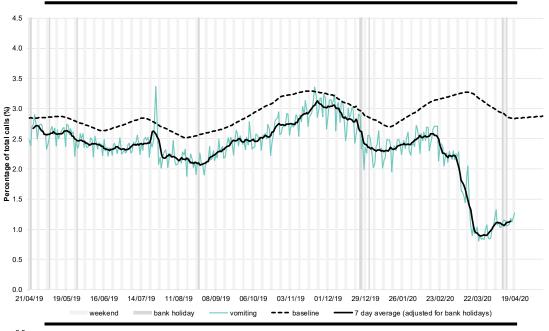
7. Diarrhoea

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



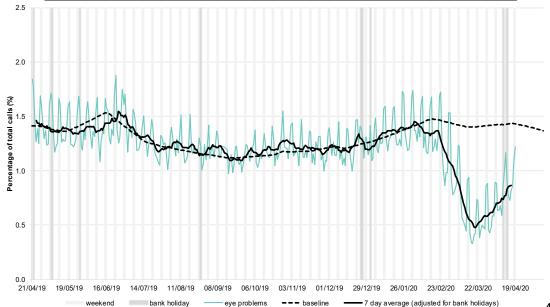
8: Vomiting calls

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



9: Eye problems

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



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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 six years of historic data (2013-2019). The thresholds are re-calculated every year.
- Baseline ('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.

¹Vega 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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Remote Health Advice Syndromic Surveillance System Bulletin.

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