

Remote Health Advice Syndromic Surveillance System Bulletin (England) 2023 Week 20

Key messages

Data reported to: 21 May 2023

During week 20 there were increases observed in NHS 111 calls and online assessments for 'heat exposure or sunburn' and insect bites, both in line with seasonally expected levels.

Please note that from week 20, NHS 111 syndromic calls presented in this report are from a different data source, the NHS 111 Intelligent Data Tool. This data source provides increased resilience and improved data coverage for syndromic surveillance. It should be noted that call volumes are different to those reported previously for most syndromic indicators, but their trends are similar. During week 20, baselines for NHS 111 Online indicators have been re-fitted and are presented in this report.

Syndromic indicators at a glance

Table 1: The current trend (based on previous weeks, not only the current week) and the level (compared to the expected baseline), of each indicator included in this bulletin.

Indicator	Trend ¹	Level
Total NHS 111 calls (Figure 1)	Decreasing	Similar to baseline
Total NHS 111 online (Figure 2)	Decreasing	Similar to baseline
Cold/flu NHS 111 calls (Figure 3)	No trend	Similar to baseline
Cold/flu NHS 111 online (Figure 4)	No trend	Similar to baseline
Fever NHS 111 calls (Figure 5)	No trend	Below baseline
Fever NHS 111 online (Figure 6)	No trend	Below baseline
Cough NHS 111 calls (Figure 7)	No trend	Similar to baseline
Cough NHS 111 online (Figure 8)	No trend	Below baseline
Difficulty breathing NHS 111 calls (Figure 9)	No trend	Similar to baseline
Difficulty breathing NHS 111 online (Figure 10)	No trend	Below baseline
Sore throat NHS 111 calls (Figure 11)	No trend	Below baseline
Sore throat NHS 111 online (Figure 12)	No trend	Below baseline
Potential COVID-19 NHS 111 calls (Figure 13)	No trend	Below baseline
Potential COVID-19 NHS 111 online (Figure 14)	No trend	Below baseline
Diarrhoea NHS 111 calls (Figure 15)	Decreasing	Similar to baseline
Diarrhoea NHS 111 online (Figure 16)	No trend	Similar to baseline
Vomiting NHS 111 calls (Figure 17)	Decreasing	Below baseline
Vomiting NHS 111 online (Figure 18)	Decreasing	Below baseline
Eye problems NHS 111 calls (Figure 19)	Decreasing	Above baseline
Eye problems NHS 111 online (Figure 20)	Decreasing	Similar to baseline
Insect bites NHS 111 calls (Figure 21)	Increasing	Similar to baseline
Insect bites NHS 111 online (Figure 22)	Increasing	Below baseline
Heat exposure or sunburn NHS 111 calls (Figure 23)	Increasing	Similar to baseline
Heat exposure or sunburn NHS 111 online (Figure 24)	Increasing	Similar to baseline

¹ trend reports on the trend seen over most recent and earlier weeks

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About this syndromic surveillance system

This bulletin presents data from the UK Health Security Agency (UKHSA) remote health advice syndromic surveillance system.

Syndromic surveillance can be used to:

- assess current trends
- assess current trends and levels compared to historical baselines
- compare trends between age groups/areas

Syndromic surveillance should not be used to:

- estimate total burden or number of 'cases' of a condition (see Notes and caveats)
- compare levels between age groups/areas

Fully anonymised, daily NHS 111 call and NHS 111 online assessment data are analysed and reported here, to identify and describe trends for a variety of syndromic indicators:

- syndromic indicators include groupings such as cold/flu, fever and diarrhoea
- syndromic indicators are based on:
 - symptoms (known as the Pathway) identified from both NHS 111 calls and NHS 111 online assessments
 - the potential COVID-19 syndromic indicator is based on the outcome (known as the Disposition), rather than the Pathway
- **Key messages** describes any notable trends nationally (England), by age group and/or by geographical area (based on UKHSA Regions)
- the full list of syndromic indicators reported here, along with their current level and trend, are summarised in **Table 1**
- charts are provided for each syndromic indicator, on a national basis, by age group and by geographical area (UKHSA Region). Each chart includes a year of data with:
 - 7-day moving averages (adjusted for weekends and bank holidays) to aid in the identification of trend
 - statistical baselines (where available) to aid in the assessment of level compared to historical expectations

For further information please see the Notes and caveats section.

Previous weekly bulletins from this system are available here.

Data quality issues of note this week

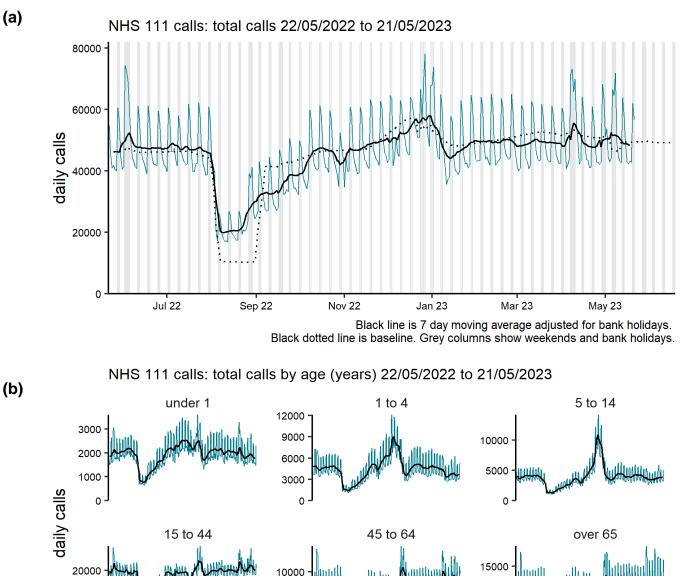
Syndromic NHS 111 calls presented in this report for August and September 2022 were low due to a widely publicised cybersecurity incident on 4 August, caused by ransomware that affected a NHS 111 clinical software system provider that is used in certain parts of the country. Please note that NHS 111 call volumes presented in reports for week 20 of 2023 onwards will be different due to a planned changeover to a different data source for NHS 111 call data, however trends will remain similar.

Total contacts

NHS 111 calls

10000

Figure 1: Daily number of NHS 111 calls (with 7-day moving average adjusted for bank holidays) recorded in this syndromic surveillance system in England (a) nationally, (b) by age and (c) by UKHSA Region.





Black line is 7 day moving average adjusted for bank holidays.

10000

5000

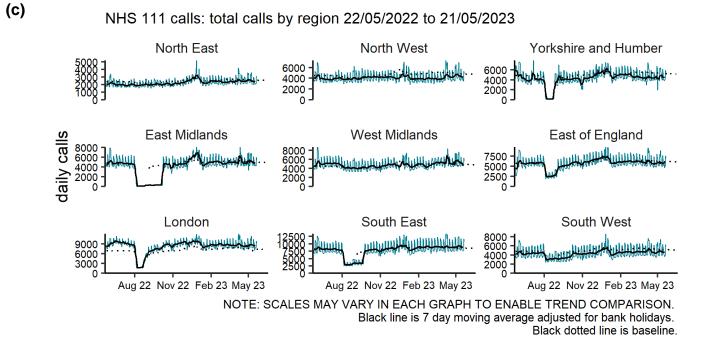
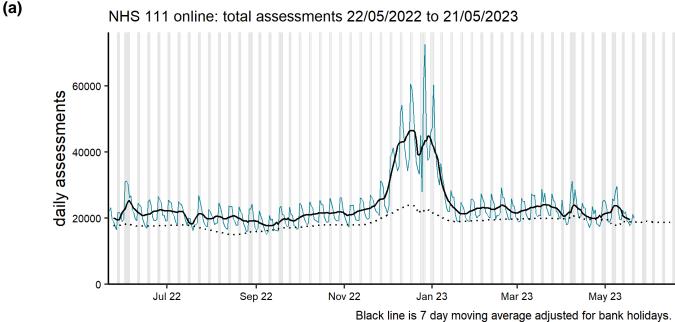


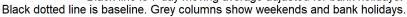
Table 2: The number of NHS 111 calls in England recorded each day in the most recent week.

Date	Number of calls
15 May 2023	49,065
16 May 2023	43,587
17 May 2023	42,691
18 May 2023	43,678
19 May 2023	43,358
20 May 2023	62,583
21 May 2023	57,025

NHS 111 online

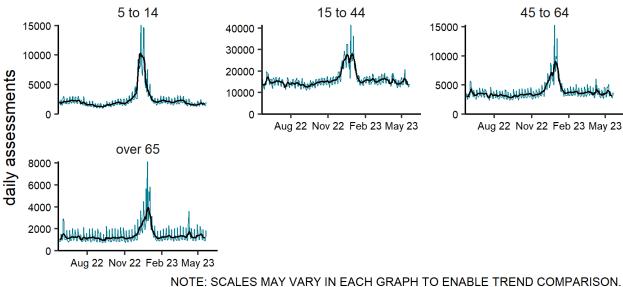
Figure 2: Daily number of completed NHS 111 online assessments (with 7-day moving average adjusted for bank holidays) recorded in this syndromic surveillance system in England (a) nationally, (b) by age and (c) by UKHSA Region.







NHS 111 online: total assessments by age (years) 22/05/2022 to 21/05/2023



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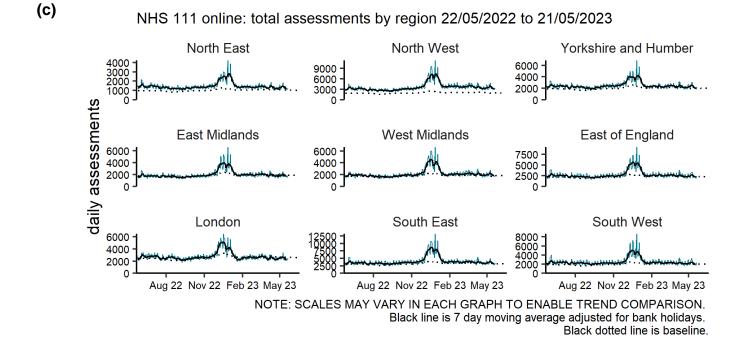


Table 3: The number of completed NHS 111 online assessments in England recorded each day in the most recent week.

Date	Number of completed assessments
15 May 2023	22,105
16 May 2023	19,257
17 May 2023	18,823
18 May 2023	17,816
19 May 2023	18,596
20 May 2023	21,235
21 May 2023	20,101

9

Respiratory conditions

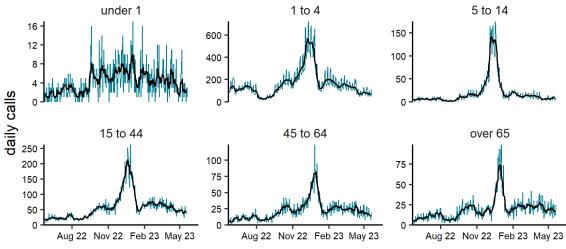
Cold/flu NHS 111 calls

Figure 3: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for cold/flu, England (a) nationally, (b) by age and (c) by UKHSA Region.

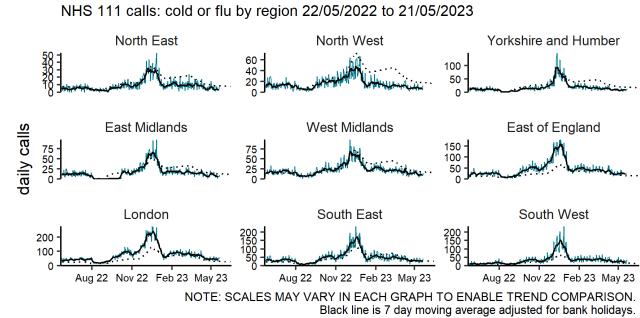
(a) NHS 111 calls: cold or flu 22/05/2022 to 21/05/2023 1250 1000 daily calls 750 500 250 0 Jul 22 Sep 22 Nov 22 Jan 23 Mar 23 May 23 Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

NHS 111 calls: cold or flu by age (years) 22/05/2022 to 21/05/2023



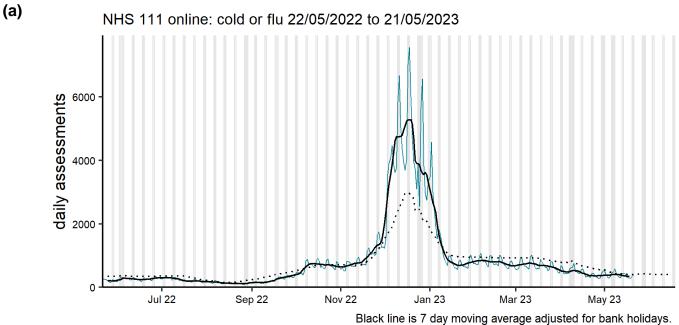
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON. Black line is 7 day moving average adjusted for bank holidays.

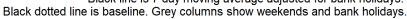


Black dotted line is baseline.

Cold/flu NHS 111 online

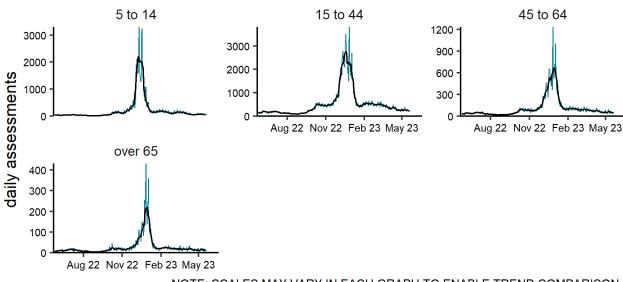
Figure 4: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for cold/flu, England (a) nationally, (b) by age and (c) by UKHSA Region.



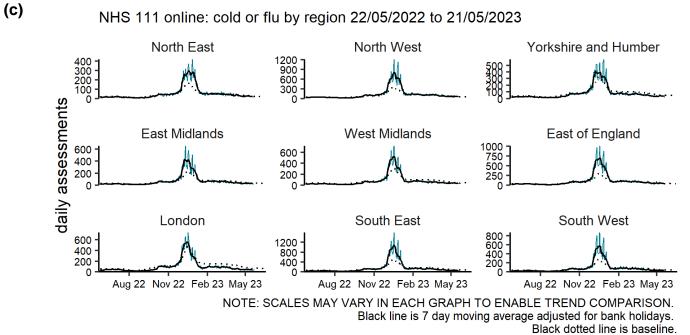


(b)

NHS 111 online: cold or flu by age (years) 22/05/2022 to 21/05/2023



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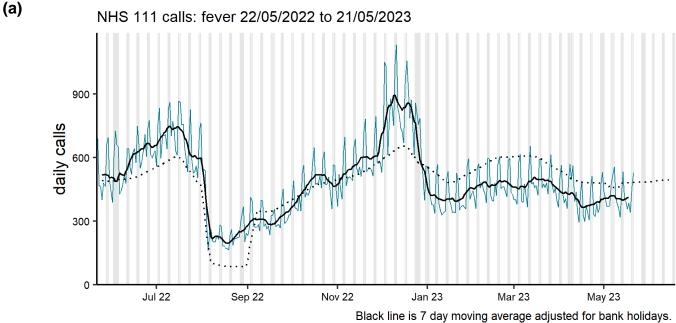


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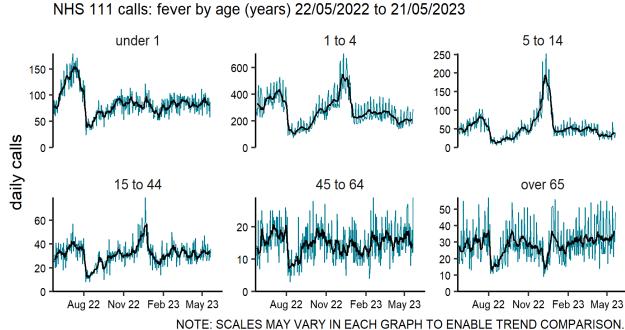
Fever NHS 111 calls

(b)

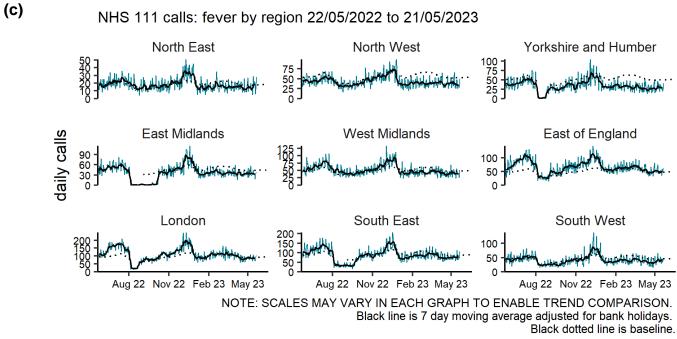
Figure 5: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for fever, England (a) nationally, (b) by age and (c) by UKHSA Region.



Black dotted line is baseline. Grey columns show weekends and bank holidays.

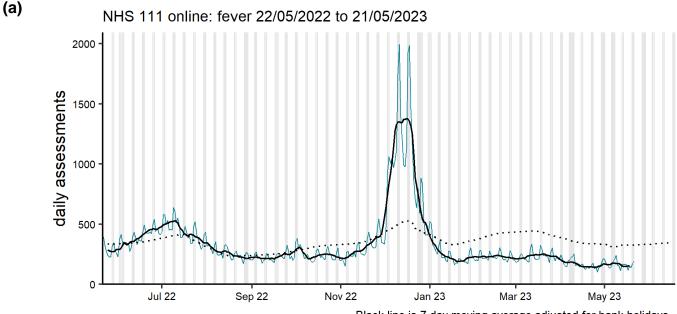


Black line is 7 day moving average adjusted for bank holidays.



Fever NHS 111 online

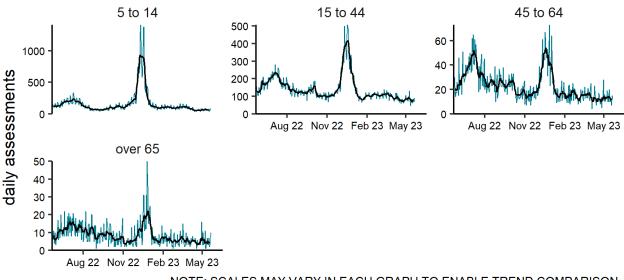
Figure 6: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for fever, England (a) nationally, (b) by age and (c) by UKHSA Region.



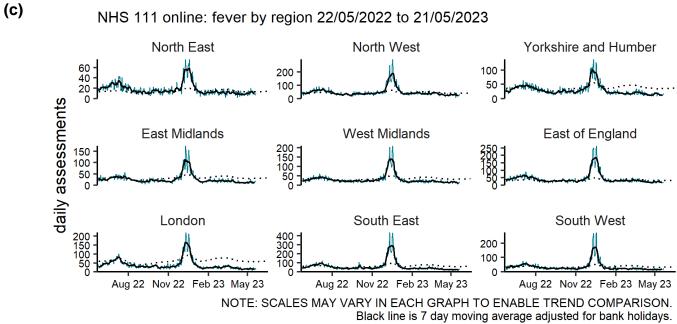
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

NHS 111 online: fever by age (years) 22/05/2022 to 21/05/2023



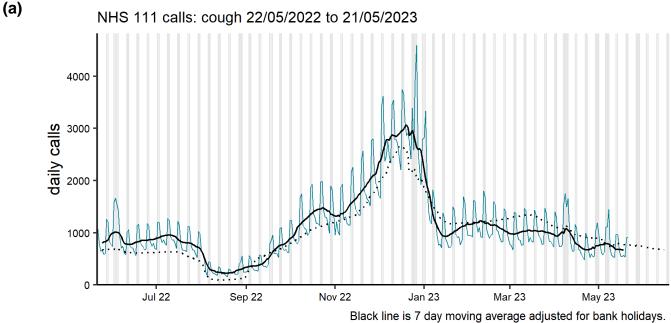
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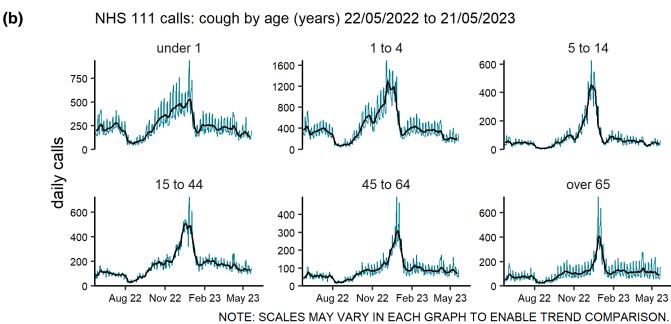
Black dotted line is baseline.

Cough NHS 111 calls

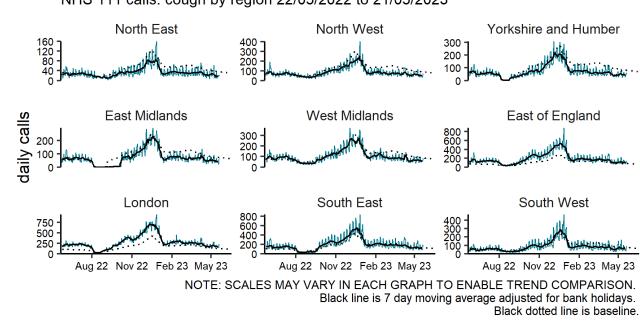
Figure 7: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for cough, England (a) nationally, (b) by age and (c) by UKHSA Region.



Black dotted line is baseline. Grey columns show weekends and bank holidays.



Black line is 7 day moving average adjusted for bank holidays.

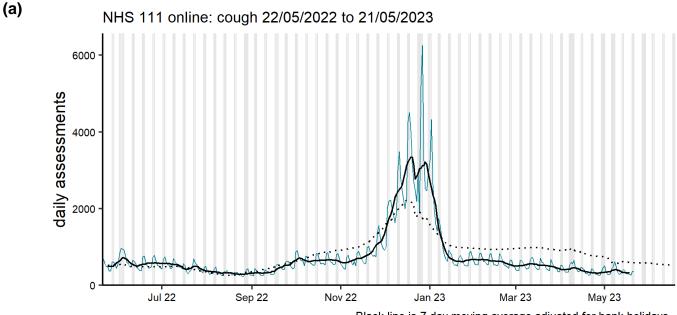


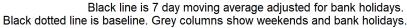
NHS 111 calls: cough by region 22/05/2022 to 21/05/2023

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Cough NHS 111 online

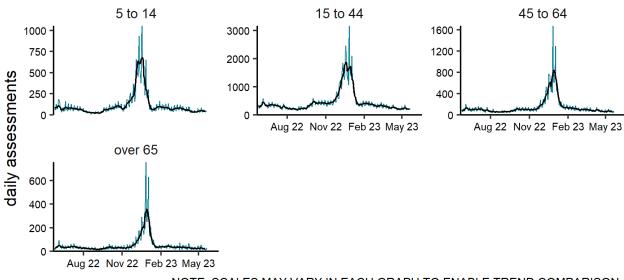
Figure 8: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for cough, England (a) nationally, (b) by age and (c) by UKHSA Region.



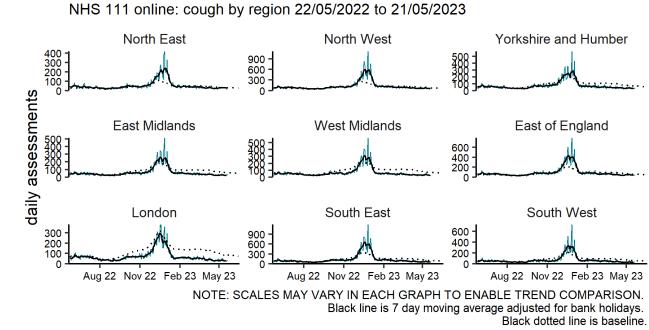


(b)

NHS 111 online: cough by age (years) 22/05/2022 to 21/05/2023

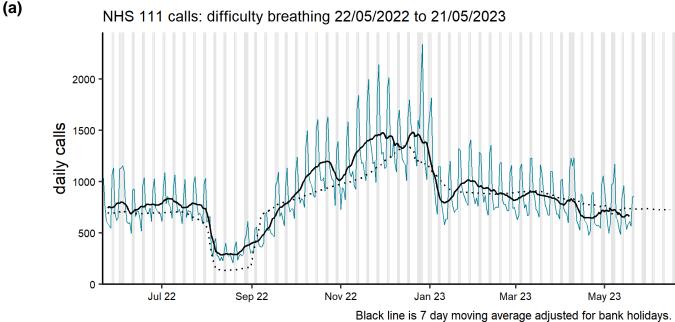


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Difficulty breathing NHS 111 calls

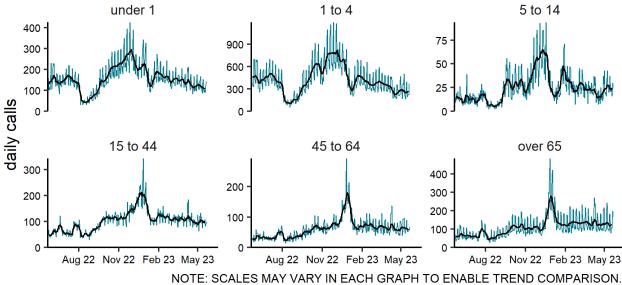
Figure 9: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for difficulty breathing, England (a) nationally, (b) by age and (c) by UKHSA Region.



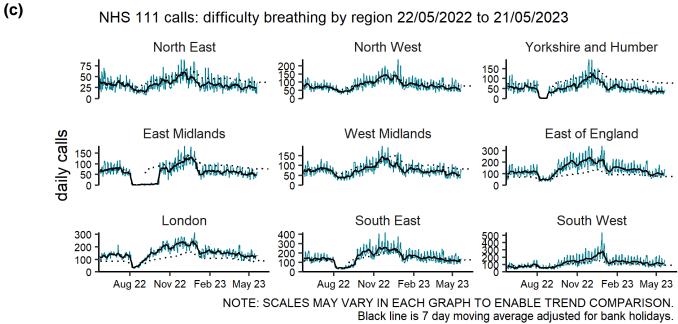
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

NHS 111 calls: difficulty breathing by age (years) 22/05/2022 to 21/05/2023



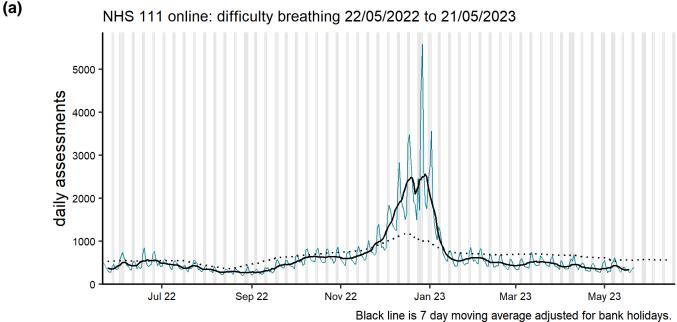
Black line is 7 day moving average adjusted for bank holidays.

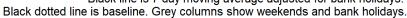


Black dotted line is baseline.

Difficulty breathing NHS 111 online

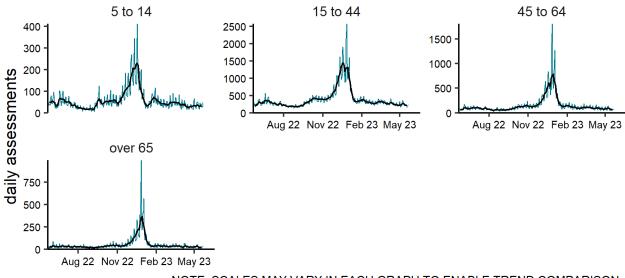
Figure 10: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for difficulty breathing, England (a) nationally, (b) by age and (c) by UKHSA Region.



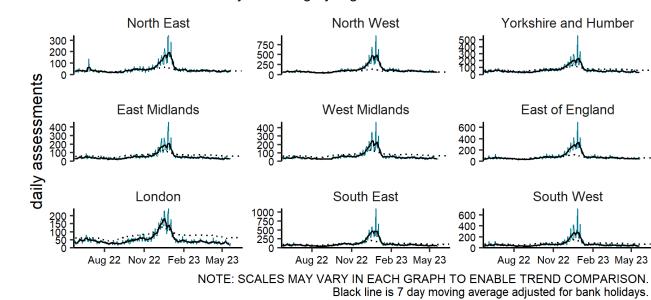




NHS 111 online: difficulty breathing by age (years) 22/05/2022 to 21/05/2023



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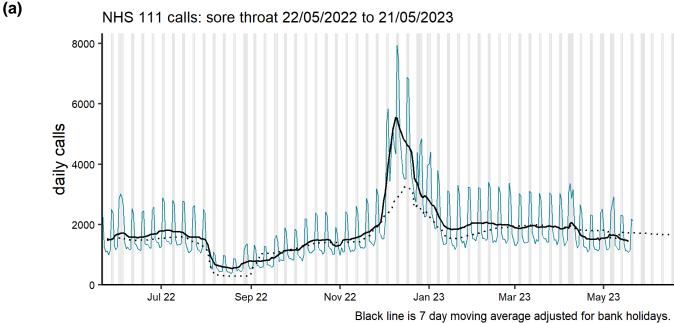


NHS 111 online: difficulty breathing by region 22/05/2022 to 21/05/2023

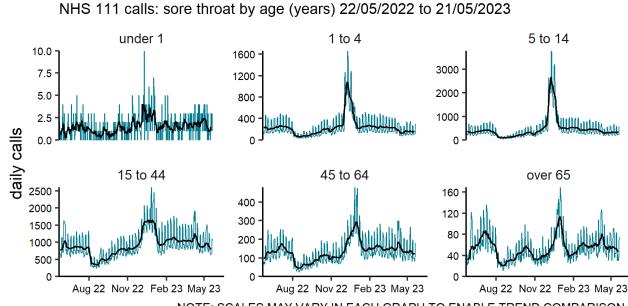
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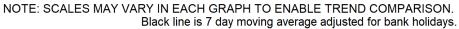
Sore throat NHS 111 calls

Figure 11: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for sore throat, England (a) nationally, (b) by age and (c) by UKHSA Region.

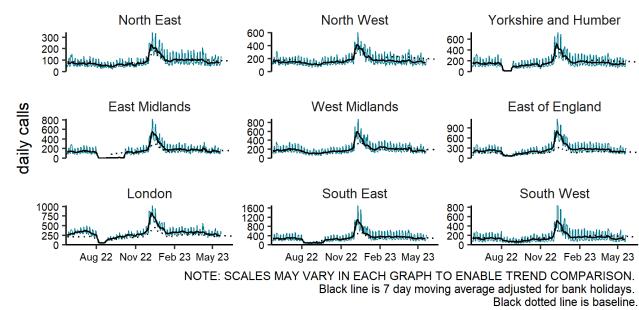


Black dotted line is baseline. Grey columns show weekends and bank holidays.





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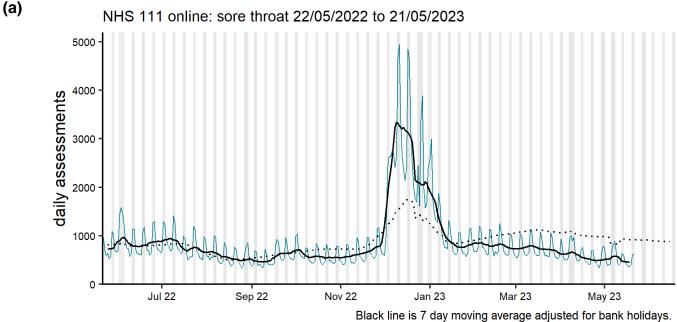


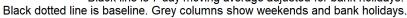
NHS 111 calls: sore throat by region 22/05/2022 to 21/05/2023

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Sore throat NHS 111 online

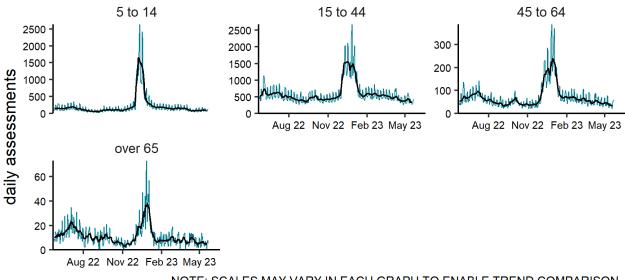
Figure 12: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for sore throat, England (a) nationally, (b) by age and (c) by UKHSA Region.



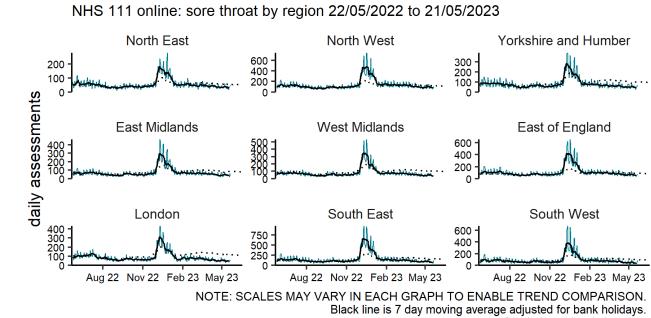


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NHS 111 online: sore throat by age (years) 22/05/2022 to 21/05/2023



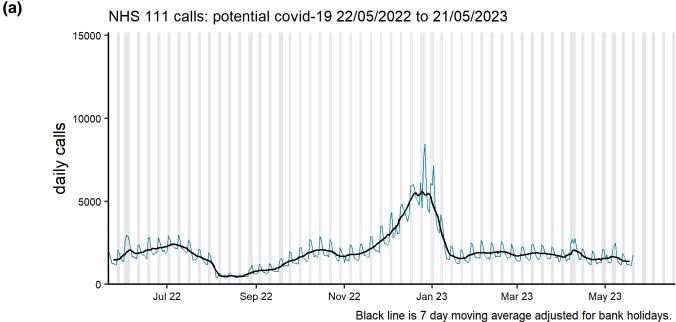
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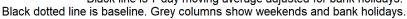


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Potential COVID-19 NHS 111 calls

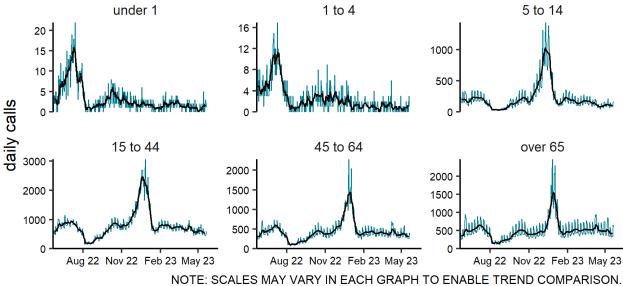
Figure 13: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for potential COVID-19, England (a) nationally, (b) by age and (c) by UKHSA Region.





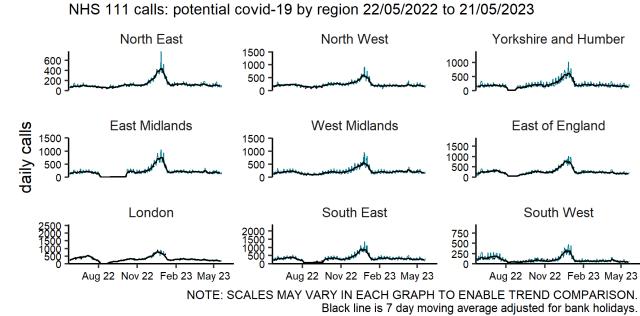


NHS 111 calls: potential covid-19 by age (years) 22/05/2022 to 21/05/2023



Black line is 7 day moving average adjusted for bank holidays.

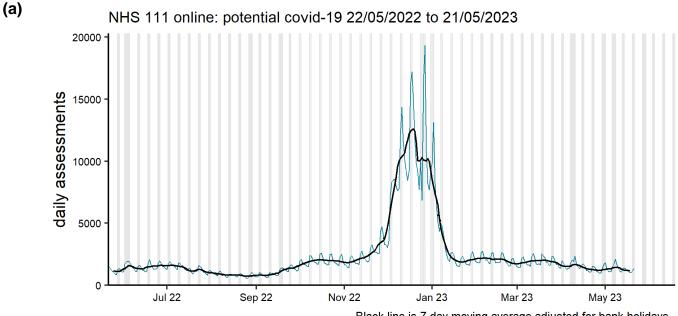
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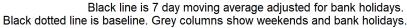


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Potential COVID-19 NHS 111 online

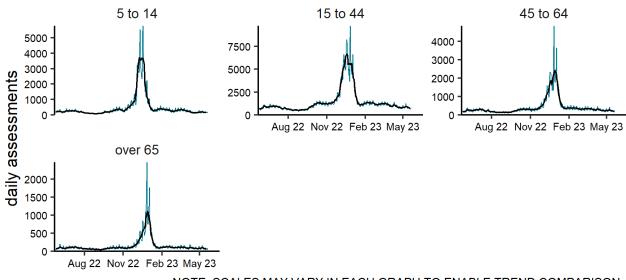
Figure 14: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for potential COVID-19, England (a) nationally, (b) by age and (c) by UKHSA Region.





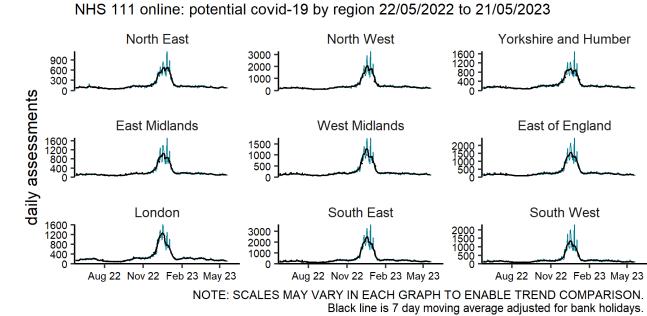


NHS 111 online: potential covid-19 by age (years) 22/05/2022 to 21/05/2023



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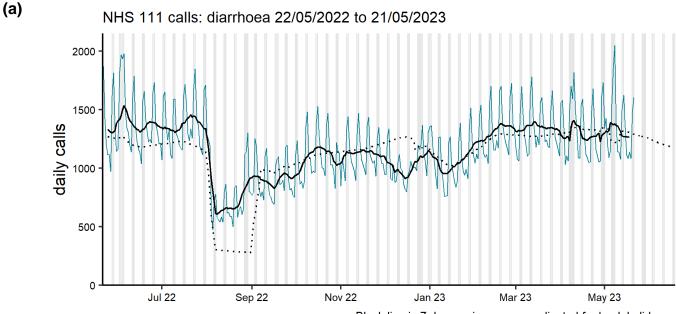


Black dotted line is baseline.

Gastrointestinal conditions

Diarrhoea NHS 111 calls

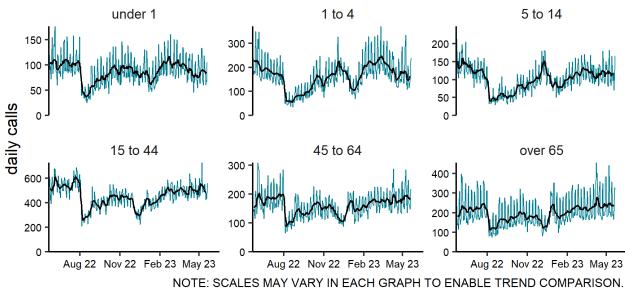
Figure 15: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for diarrhoea, England (a) nationally, (b) by age and (c) by UKHSA Region.



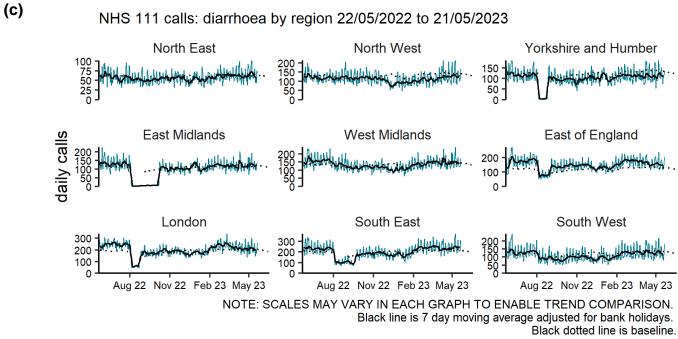
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.



NHS 111 calls: diarrhoea by age (years) 22/05/2022 to 21/05/2023

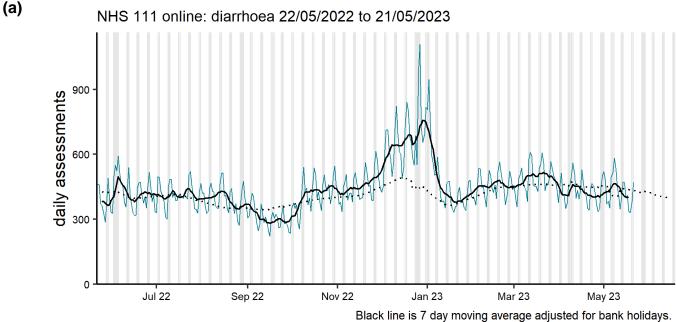


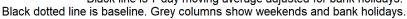
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Diarrhoea NHS 111 online

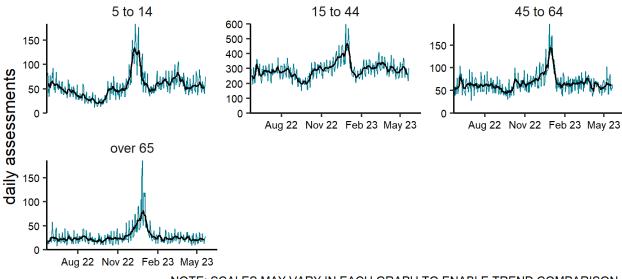
Figure 16: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for diarrhoea, England (a) nationally, (b) by age and (c) by UKHSA Region.



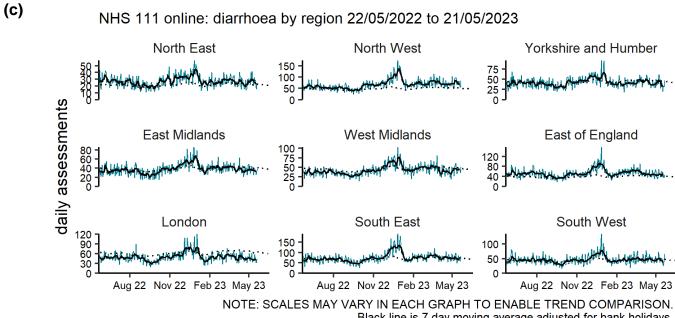




NHS 111 online: diarrhoea by age (years) 22/05/2022 to 21/05/2023



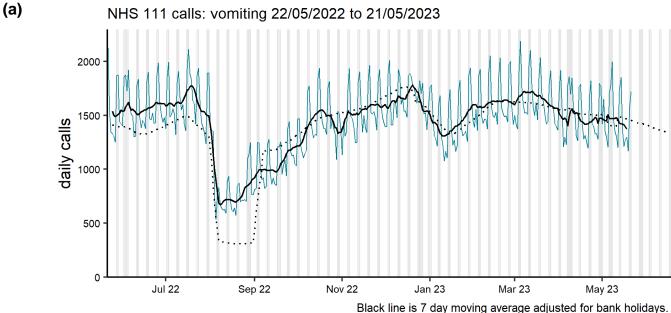
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Vomiting NHS 111 calls

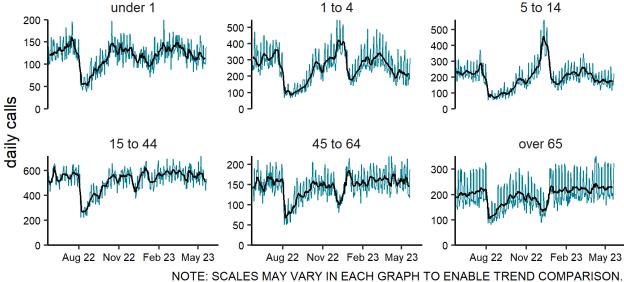
Figure 17: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for vomiting, England (a) nationally, (b) by age and (c) by UKHSA Region.



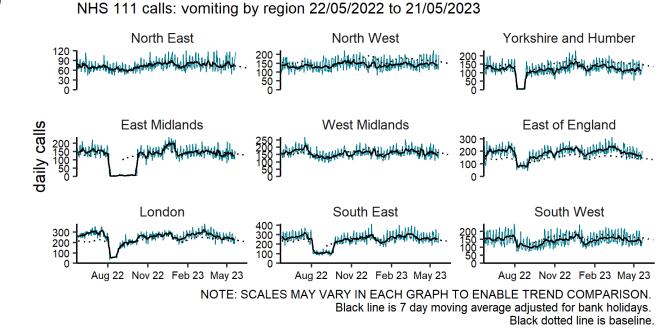
Black dotted line is baseline. Grey columns show weekends and bank holidays.



NHS 111 calls: vomiting by age (years) 22/05/2022 to 21/05/2023

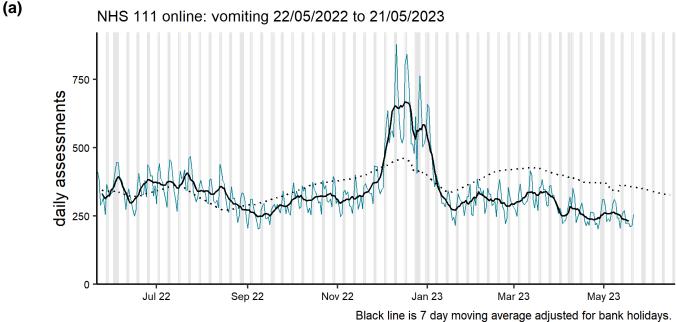


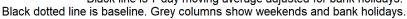
Black line is 7 day moving average adjusted for bank holidays.



Vomiting NHS 111 online

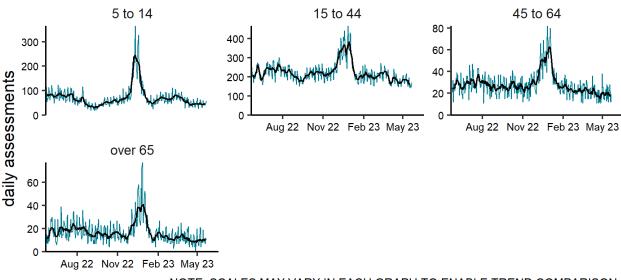
Figure 18: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for vomiting, England (a) nationally, (b) by age and (c) by UKHSA Region.



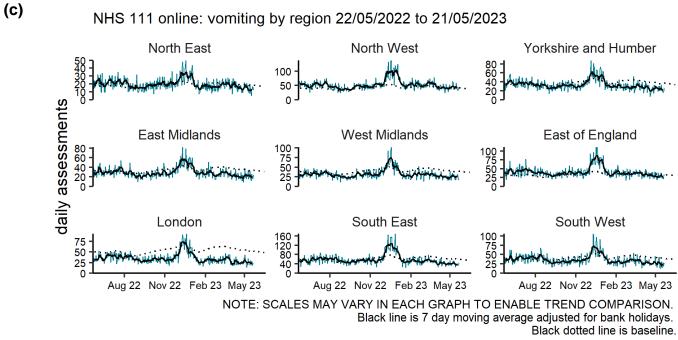




NHS 111 online: vomiting by age (years) 22/05/2022 to 21/05/2023



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON. Black line is 7 day moving average adjusted for bank holidays.



NHS 111 online: vomiting by region 22/05/2022 to 21/05/2023

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Seasonal environmental conditions

During set periods of the year the Met Office operates both heat and cold weather watch systems, in association with UKHSA. Syndromic indicators are used to monitor the impact of both extreme hot and cold weather in England during these periods and will be included below (where an appropriate syndromic indicator is available).

Cold weather alert period: 1 November to 31 March

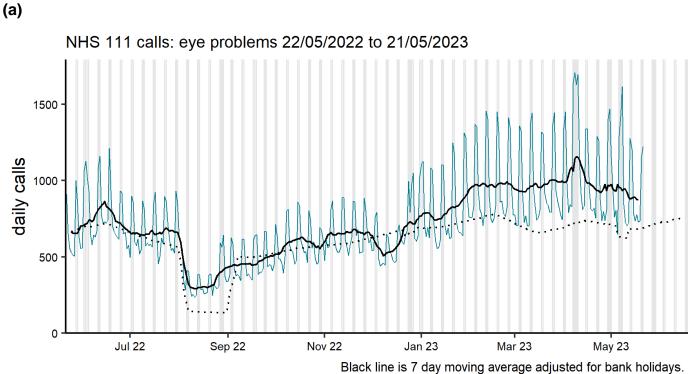
Heat-Health Alert period:1 June to 15 September

Highest weather alert level during the current reporting week: *Level 0 – Long-term planning.*

No weather watch in place

Eye problems NHS 111 calls

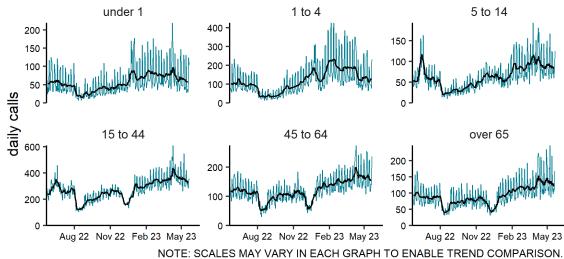
Figure 19: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for eye problems, England (a) nationally, (b) by age and (c) by UKHSA Region.



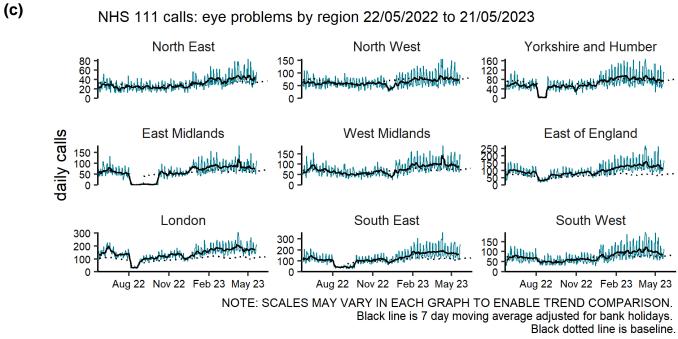
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

NHS 111 calls: eye problems by age (years) 22/05/2022 to 21/05/2023

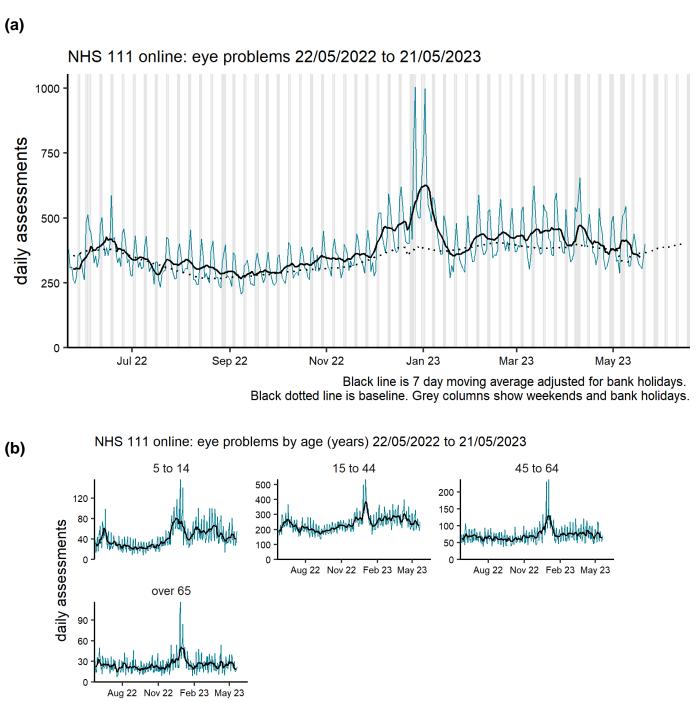


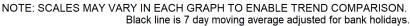
Black line is 7 day moving average adjusted for bank holidays.

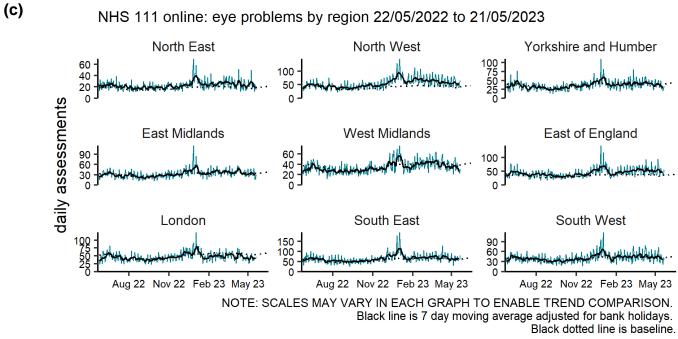


Eye problems NHS 111 online

Figure 20: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for eye problems, England (a) nationally, (b) by age and (c) by UKHSA Region.

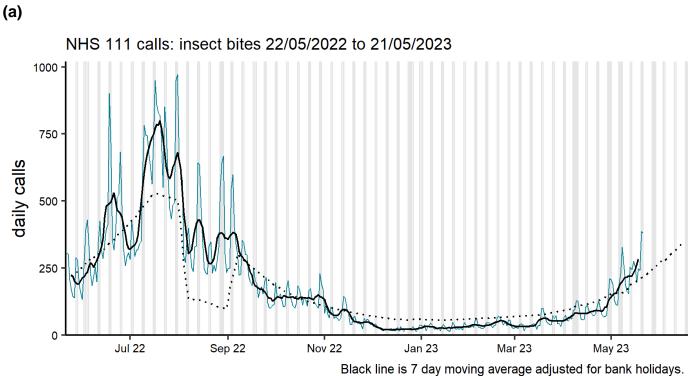




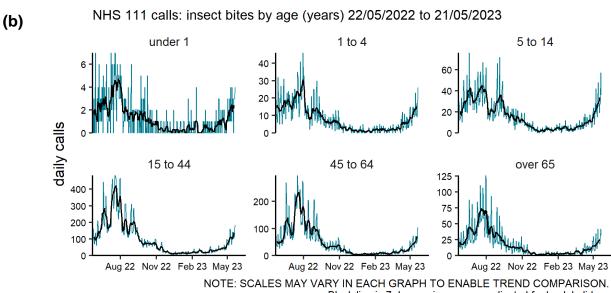


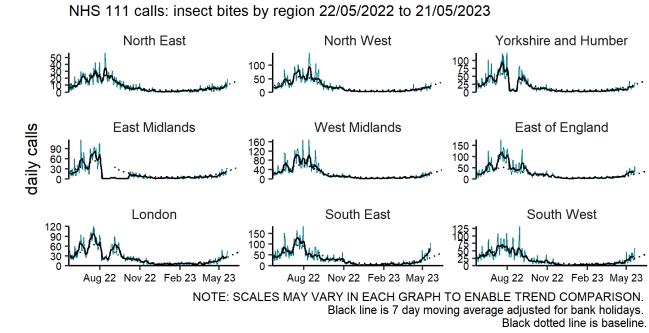
Insect bites NHS 111 calls

Figure 21: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for insect bites, England (a) nationally, (b) by age and (c) by UKHSA Region.



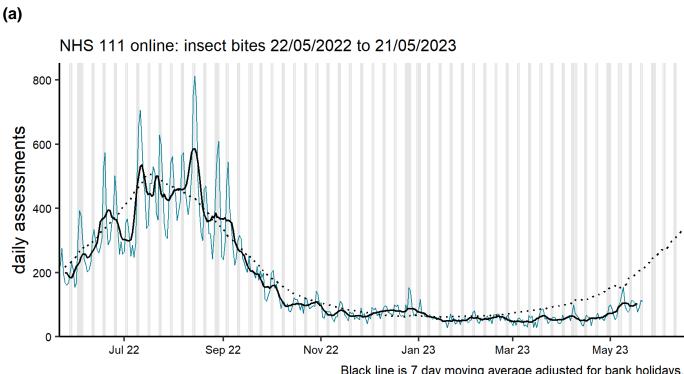
Black dotted line is baseline. Grey columns show weekends and bank holidays.





Insect bites NHS 111 online

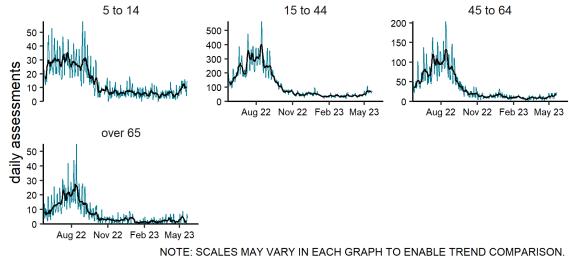
Figure 22: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for insect bites, England (a) nationally, (b) by age and (c) by UKHSA Region.

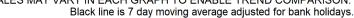


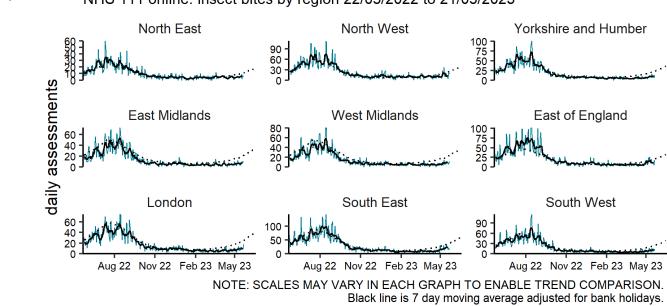
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

NHS 111 online: insect bites by age (years) 22/05/2022 to 21/05/2023





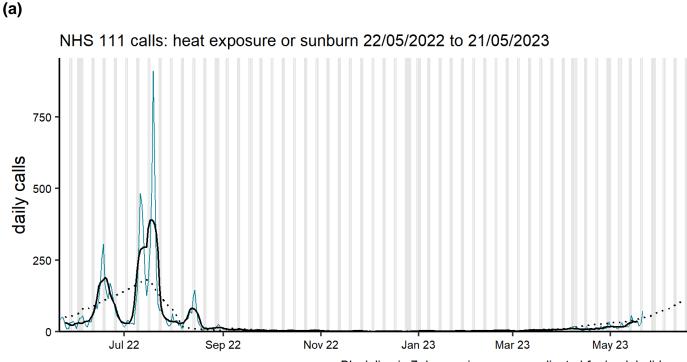


NHS 111 online: insect bites by region 22/05/2022 to 21/05/2023

Black dotted line is baseline.

Heat exposure or sunburn NHS 111 calls

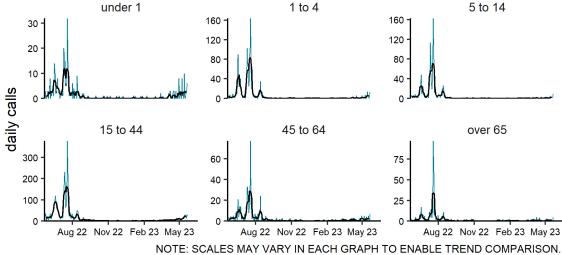
Figure 23: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for heat exposure or sunburn, England (a) nationally, (b) by age and (c) by UKHSA Region.



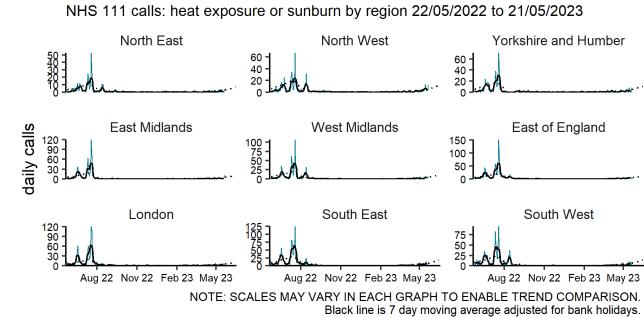
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

NHS 111 calls: heat exposure or sunburn by age (years) 22/05/2022 to 21/05/2023



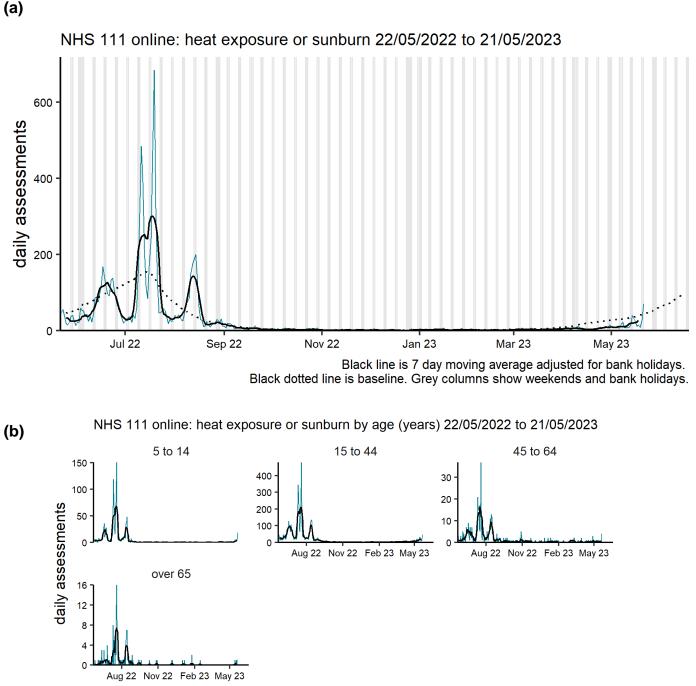
Black line is 7 day moving average adjusted for bank holidays.

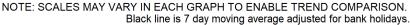


Black dotted line is baseline.

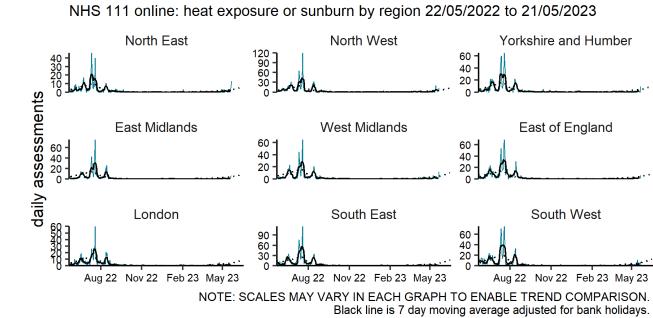
Heat exposure or sunburn NHS 111 online

Figure 24: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for heat exposure or sunburn, England (a) nationally, (b) by age and (c) by UKHSA Region.





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Black dotted line is baseline.

Notes and caveats

The following additional caveats apply to the UKHSA remote health advice syndromic surveillance system:

- all NHS 111 syndromic trends should be interpreted with caution due to changes in national advice and guidance regarding access to health care services as well as updates and changes to service provision during the COVID-19 pandemic
- data presented should be used to monitor trends rather than numbers of 'cases':
 - commencing week 20 of 2023, NHS 111 calls are monitored using the NHS 111 Intelligent Data Tool, a repository of data on NHS 111 calls used by NHS England, UKHSA and service commissioners. The volume of calls for each syndromic indicator may be different to the call volumes presented in previous syndromic reports. This is because the Intelligent Data Tool records the Symptom Group allocated to each call following triage rather than the NHS Pathway. However, trends remain similar to those previously reported
 - NHS 111 calls data may not include the most urgent calls which are rapidly redirected to ambulance services
 - any user that launches an online assessment may access the service multiple times and can change their answers and follow multiple journeys through the online system: only complete assessments are included here
 - an individual may use both the NHS 111 online and NHS 111 telephony services; counts from the two services cannot be considered as distinct counts of individuals
 - NHS 111 online assessment data does not include children under 5 years of age
- baselines:
 - o were last remodelled May 2023
 - o are constructed from historical data since January 2018
 - represent seasonally expected levels of activity
 - take account of any known substantial changes in data collection, population coverage or reporting practices and consequently may vary slightly from week to week (and will rescale) if there are substantial changes in call/online activity
 - the COVID-19 pandemic period is excluded, to show seasonally expected levels if COVID-19 had not occurred
 - may be remodelled to include the impacts seen during periods of the COVID-19 pandemic if/when appropriate due to introduction of large scale public health interventions which affect NHS 111 usage
- as NHS 111 systems evolve to meet service needs, we continue to work with NHS 111 and NHS England to ensure that:

- changes impacting on syndromic indicators reported in this bulletin are identified and accounted for as far as possible
- o changes are described in: Data quality issues of note this week
- further information about NHS 111 can be found here

COVID-19 syndromic surveillance

The 'potential COVID-19' syndromic indicator reported here for all NHS 111 data is based on the outcome of each call or online assessment (known as the disposition), not the symptom (Pathway) selected:

- potential COVID-19 is the only syndromic indicator which is based on disposition
- potential COVID-19 calls and online assessments may therefore also appear in other syndromic indicators based on the Pathway of each call or online assessment
- these data are based on potential COVID-19 symptoms reported and are not based on outcomes of tests for coronavirus

Acknowledgements

We are grateful to NHS 111 and to NHS Digital for their assistance and support in providing the anonymised data that underpin this system.

About the UK Health Security Agency

UKHSA is responsible for protecting every member of every community from the impact of infectious diseases, chemical, biological, radiological and nuclear incidents and other health threats. We provide intellectual, scientific and operational leadership at national and local level, as well as on the global stage, to make the nation heath secure.

UKHSA is an executive agency, sponsored by the Department of Health and Social Care.

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