

# Remote Health Advice Syndromic Surveillance System Bulletin (England) 2023 Week 23

### Key messages

Data reported to: 11 June 2023

During week 23, NHS 111 calls and online assessments for 'heat exposure or sunburn' and insect bites increased in line with the current Heat-Health Alert issued by UKHSA and the Met Office. On Sunday 11 June there was also a large spike in calls and online assessments for difficulty breathing in the 5-14 and 15-44 years age groups. This spike coincided with Met Office weather warnings for thunderstorms across parts of England. Calls and assessments for eye problems also increased during week 23, particularly in children aged 5-14, in line with seasonal grass pollen activity.

### 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 <sup>1</sup>	Level
Total NHS 111 calls (Figure 1)	No trend	No baseline
Total NHS 111 online (Figure 2)	No trend	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)	Decreasing	Similar to baseline
Cough NHS 111 online (Figure 8)	No trend	Below baseline
Difficulty breathing NHS 111 calls (Figure 9)	No trend	Below baseline
Difficulty breathing NHS 111 online (Figure 10)	No trend	Below baseline
Sore throat NHS 111 calls (Figure 11)	Decreasing	Below baseline
Sore throat NHS 111 online (Figure 12)	No trend	Below baseline
Potential COVID-19 NHS 111 calls (Figure 13)	No trend	No baseline
Potential COVID-19 NHS 111 online (Figure 14)	No trend	No baseline
Diarrhoea NHS 111 calls (Figure 15)	No trend	Above baseline
Diarrhoea NHS 111 online (Figure 16)	No trend	Above baseline
Vomiting NHS 111 calls (Figure 17)	No trend	Similar to baseline
Vomiting NHS 111 online (Figure 18)	No trend	Below baseline
Eye problems NHS 111 calls (Figure 19)	Increasing	Above baseline
Eye problems NHS 111 online (Figure 20)	Increasing	Similar to baseline
Insect bites NHS 111 calls (Figure 21)	Increasing	Above 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

<sup>&</sup>lt;sup>1</sup> trend reports on the trend seen over most recent and earlier weeks

## **Contents**

Key messages	2
Syndromic indicators at a glance	2
Contents	3
About this syndromic surveillance system	5
Total contacts	6
NHS 111 calls	6
NHS 111 online	8
Respiratory conditions	10
Cold/flu NHS 111 calls	10
Cold/flu NHS 111 online	12
Fever NHS 111 calls	14
Fever NHS 111 online	16
Cough NHS 111 calls	18
Cough NHS 111 online	20
Difficulty breathing NHS 111 calls	22
Difficulty breathing NHS 111 online	24
Sore throat NHS 111 calls	26
Sore throat NHS 111 online	28
Potential COVID-19 NHS 111 calls	30
Potential COVID-19 NHS 111 online	32
Gastrointestinal conditions	34
Diarrhoea NHS 111 calls	34
Diarrhoea NHS 111 online	36
Vomiting NHS 111 calls	38
Vomiting NHS 111 online	40
Seasonal environmental conditions	42
Heat-Health Alerts in place	42
Eye problems NHS 111 calls	43
Eye problems NHS 111 online	45

#### Remote health advice syndromic surveillance system (England) bulletin

Insect bites NHS 111 calls	47
Insect bites NHS 111 online	49
Heat exposure or sunburn NHS 111 calls	51
Heat exposure or sunburn NHS 111 online	53
Notes and caveats	55
COVID-19 syndromic surveillance	56
Acknowledgements	57
About the UK Health Security Agency	58

### 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.

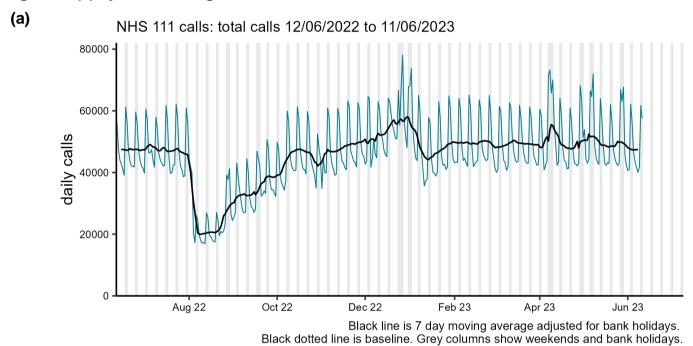
#### Data quality issues of note this week

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 from week 20 2023 are different due to a changeover to a different data source for NHS 111 call data, however trends remain similar.

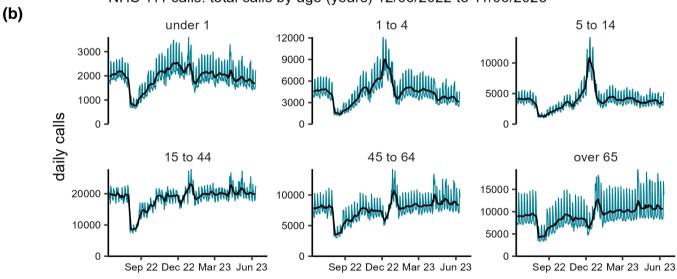
### **Total contacts**

#### NHS 111 calls

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.



NHS 111 calls: total calls by age (years) 12/06/2022 to 11/06/2023



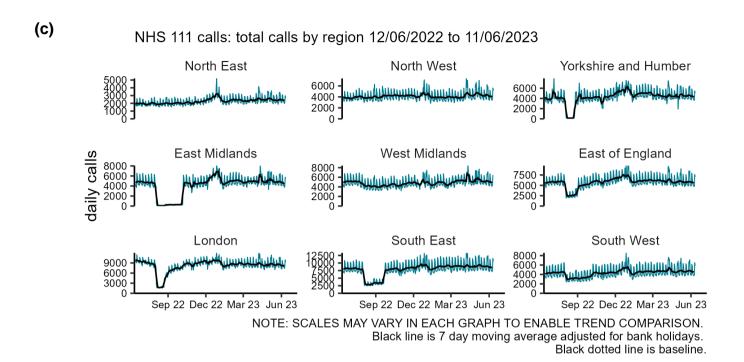
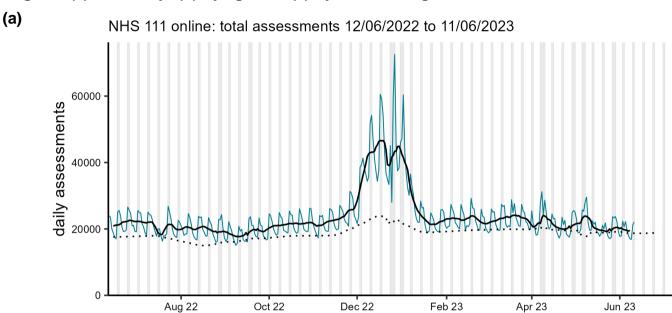


Table 2: The number of NHS 111 calls in England recorded each day in the most recent week.

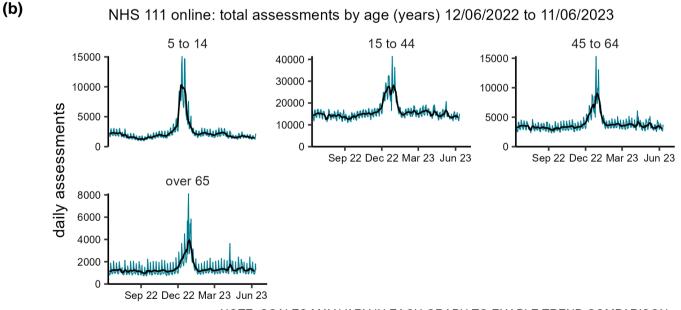
Date	Number of calls
05 June 2023	46,915
06 June 2023	44,148
07 June 2023	42,070
08 June 2023	40,514
09 June 2023	42,143
10 June 2023	62,257
11 June 2023	57,955

#### 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.



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



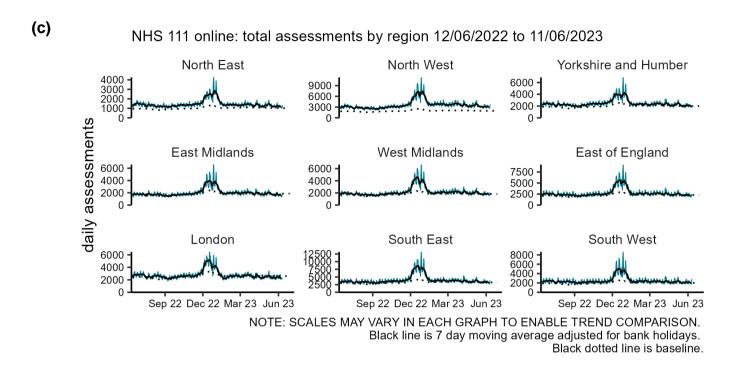


Table 3: The number of completed NHS 111 online assessments in England recorded each day in the most recent week.

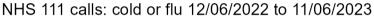
Date	Number of completed assessments
05 June 2023	22,275
06 June 2023	19,545
07 June 2023	18,063
08 June 2023	17,064
09 June 2023	16,900
10 June 2023	21,270
11 June 2023	22,134

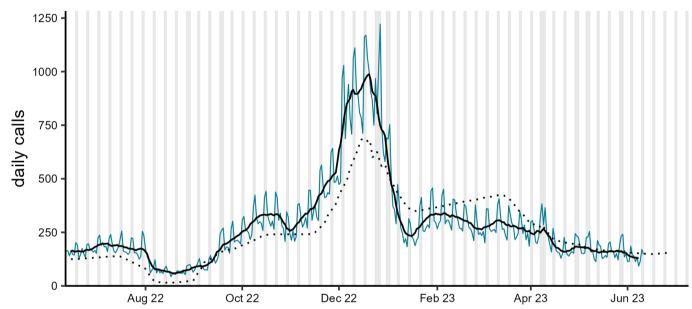
### **Respiratory conditions**

### Cold/flu NHS 111 calls

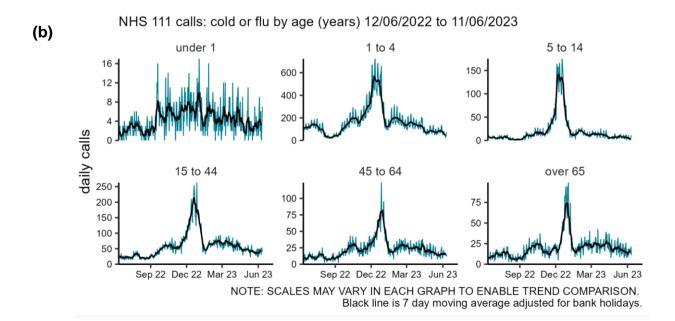
Figure 3: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for cold/flu, England (a) nationally, (b) by age and (c) by UKHSA Region.

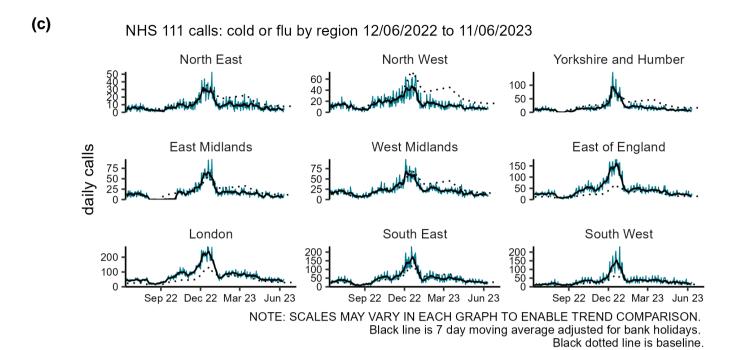
(a)





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



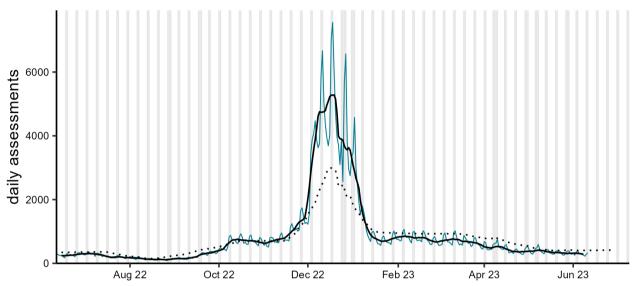


### Cold/flu NHS 111 online

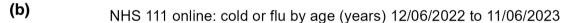
Figure 4: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for cold/flu, England (a) nationally, (b) by age and (c) by UKHSA Region.

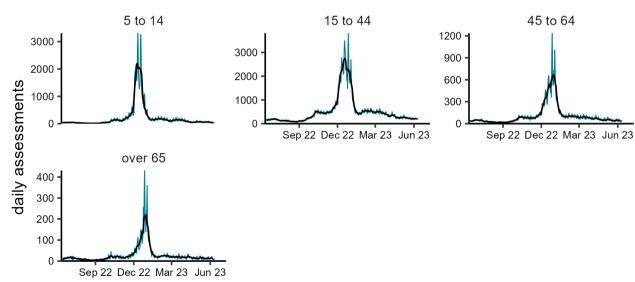
by UKHSA Region.

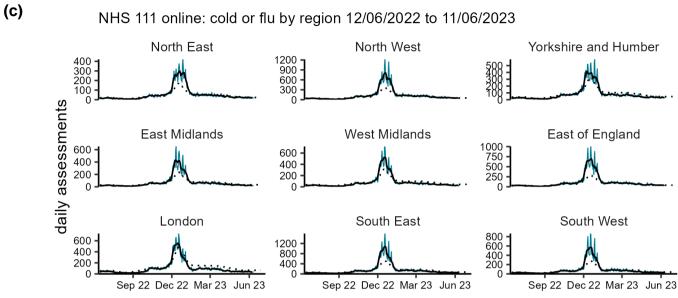
(a) NHS 111 online: cold or flu 12/06/2022 to 11/06/2023



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







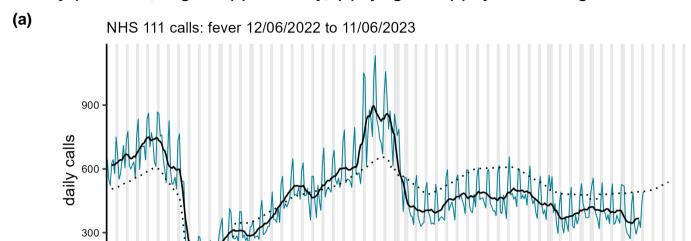
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.

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

Black dotted line is baseline.

### Fever NHS 111 calls

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.

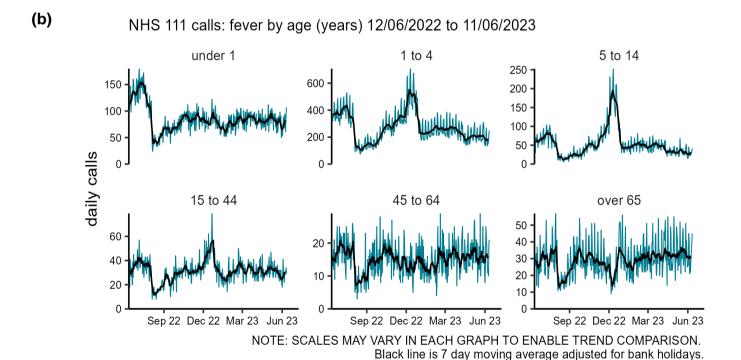


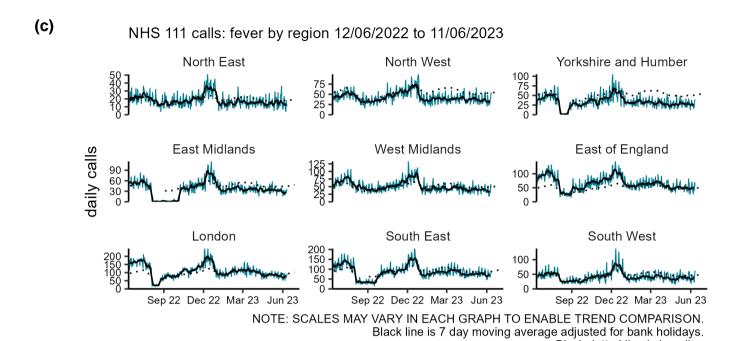
Oct 22

Aug 22

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

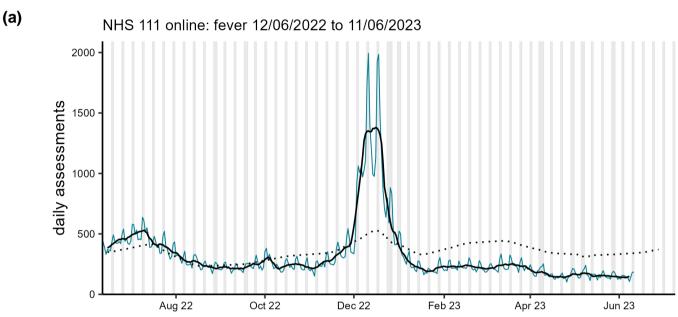
Feb 23



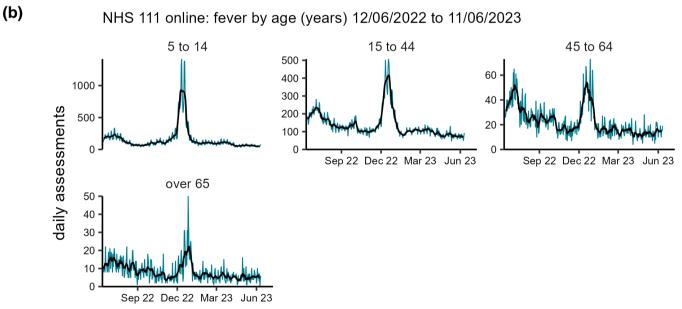


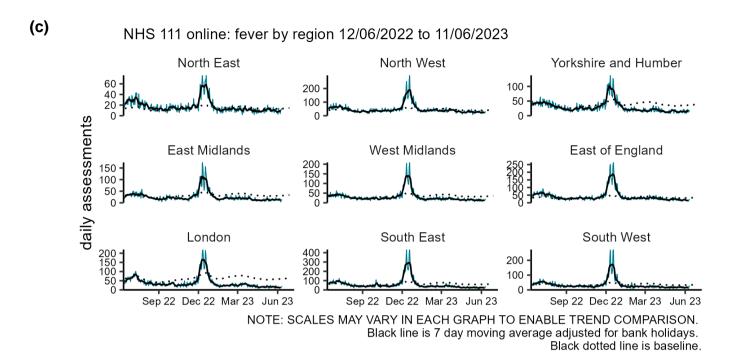
### Fever NHS 111 online

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.



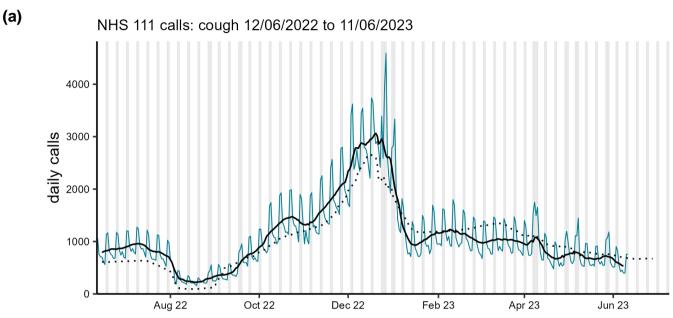
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.



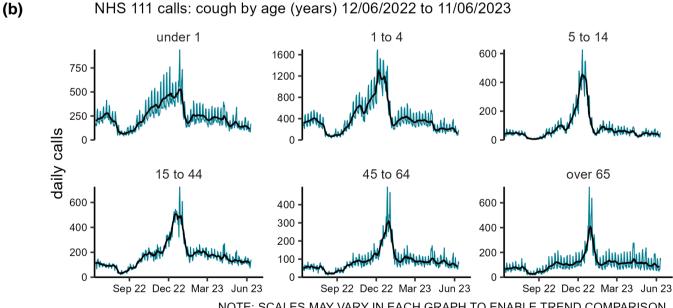


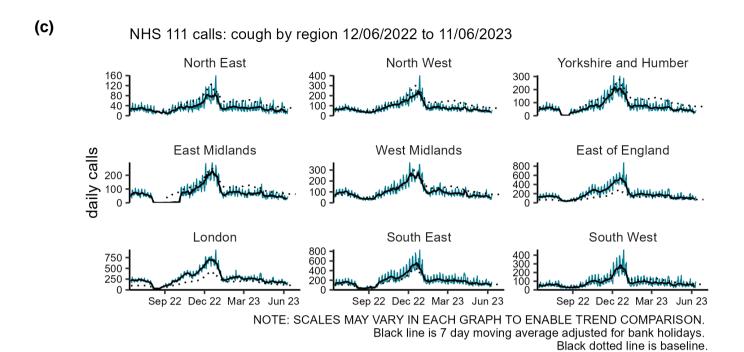
### Cough NHS 111 calls

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.



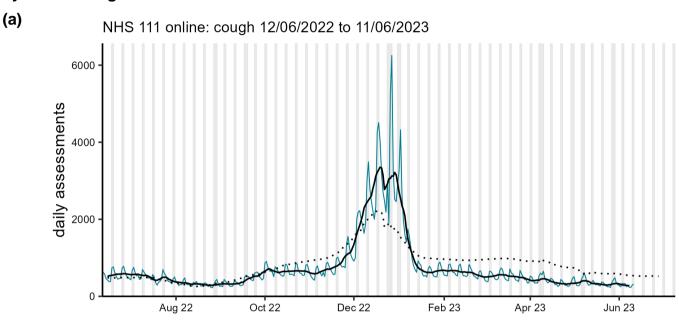
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.



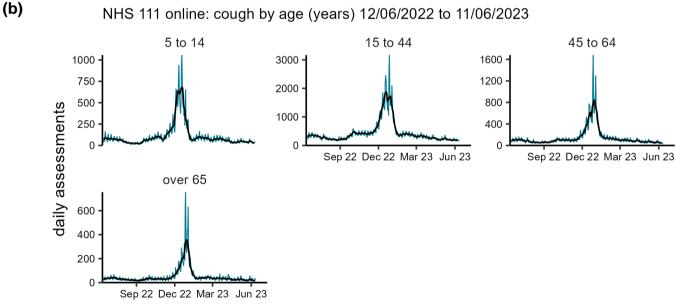


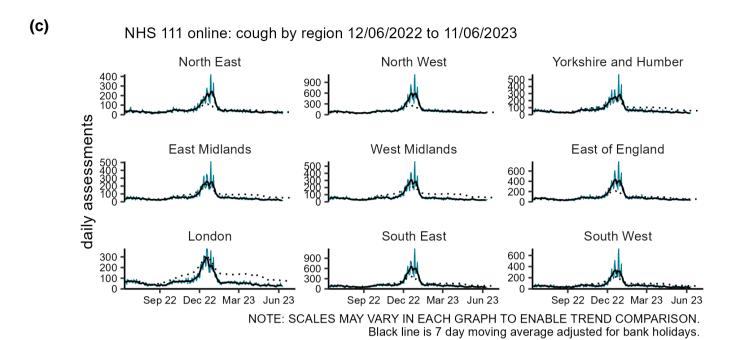
### Cough NHS 111 online

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.



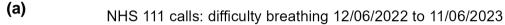
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

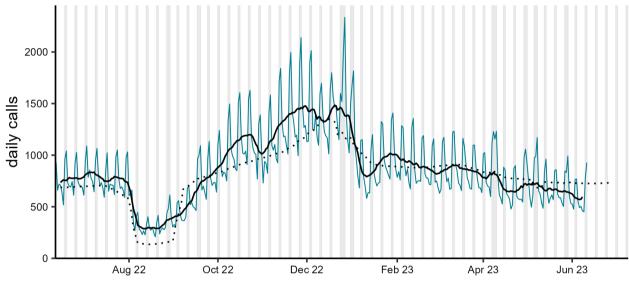




### Difficulty breathing NHS 111 calls

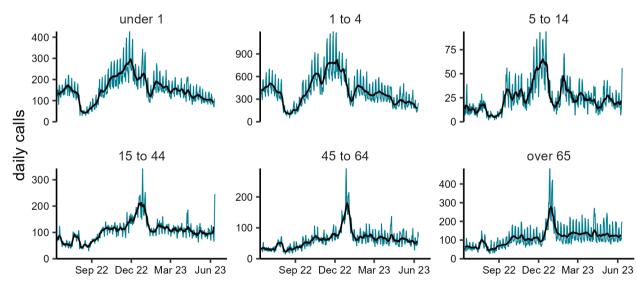
Figure 9: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for difficulty breathing, England (a) nationally, (b) by age and (c) by UKHSA Region.

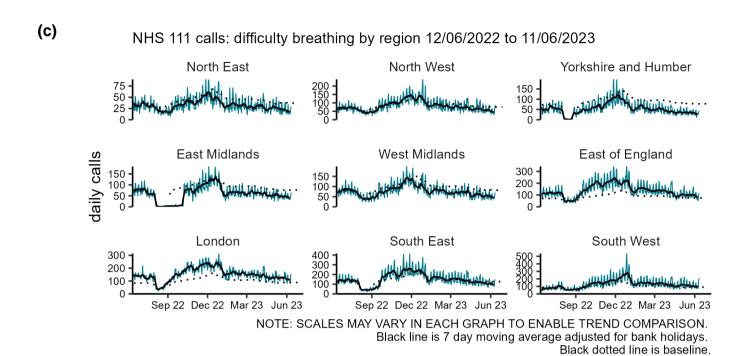




Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.



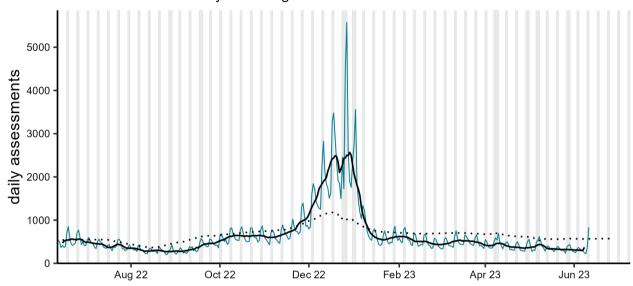




## Difficulty breathing NHS 111 online

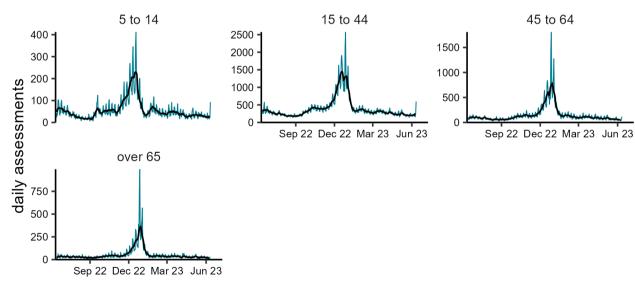
Figure 10: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for difficulty breathing, England (a) nationally, (b) by age and (c) by UKHSA Region.

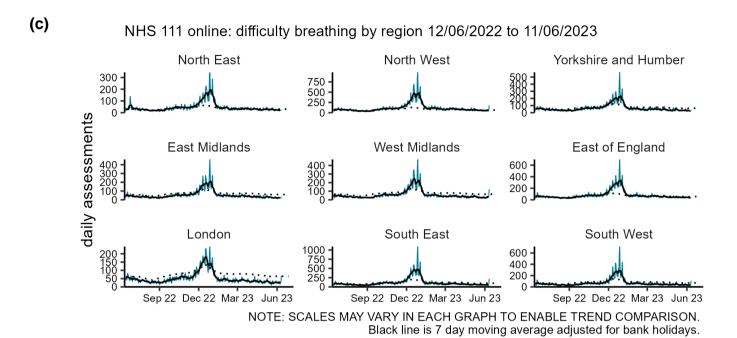
(a) NHS 111 online: difficulty breathing 12/06/2022 to 11/06/2023



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

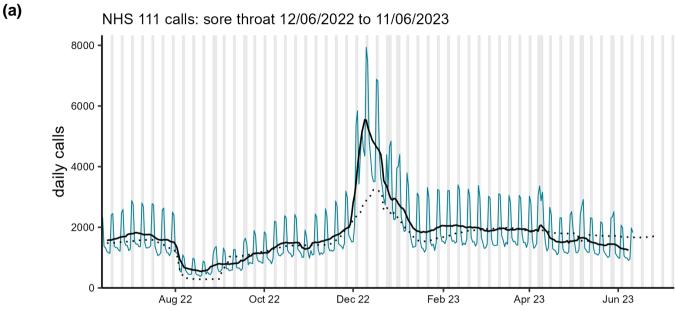
(b) NHS 111 online: difficulty breathing by age (years) 12/06/2022 to 11/06/2023



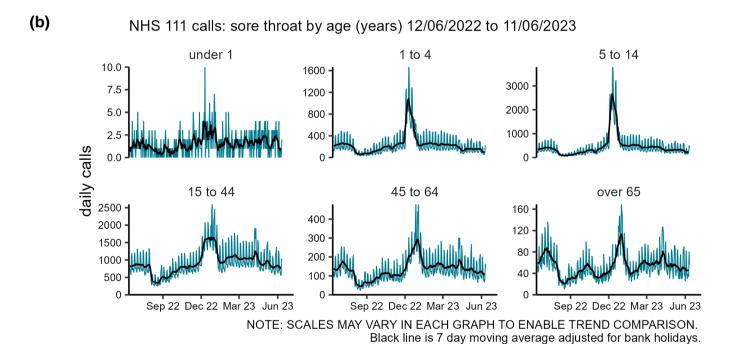


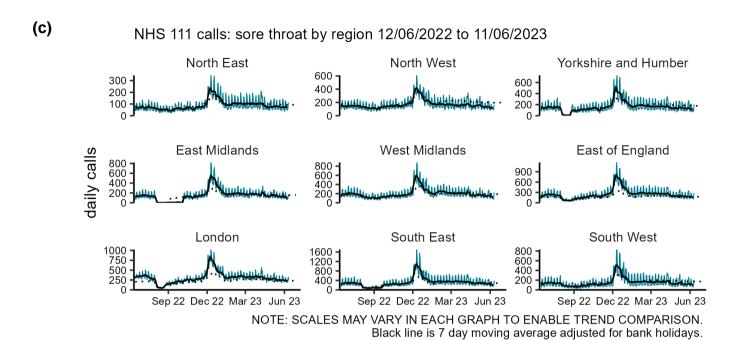
### Sore throat NHS 111 calls

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

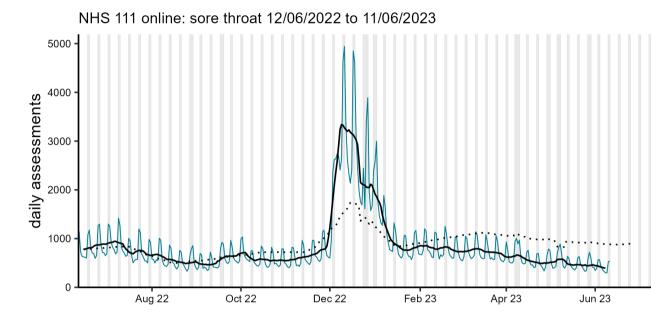




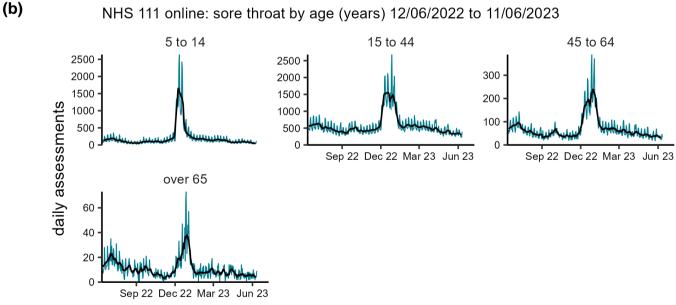
### Sore throat NHS 111 online

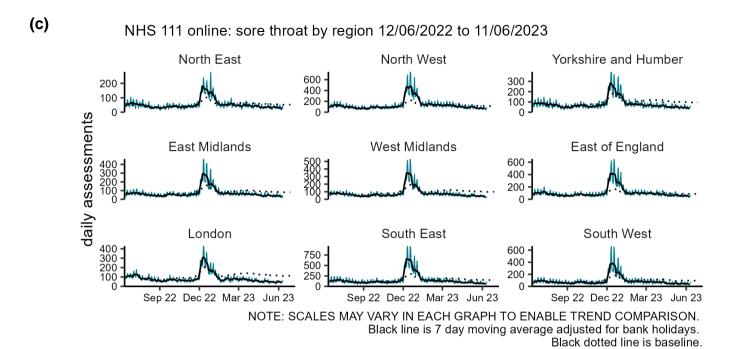
(a)

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.



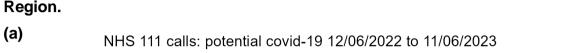
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

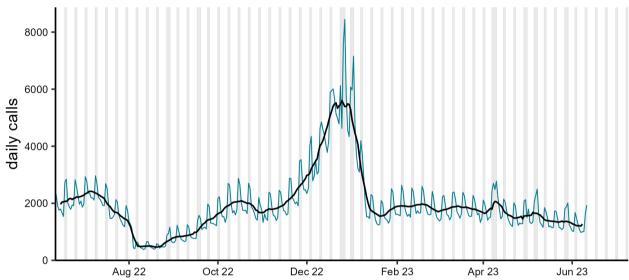




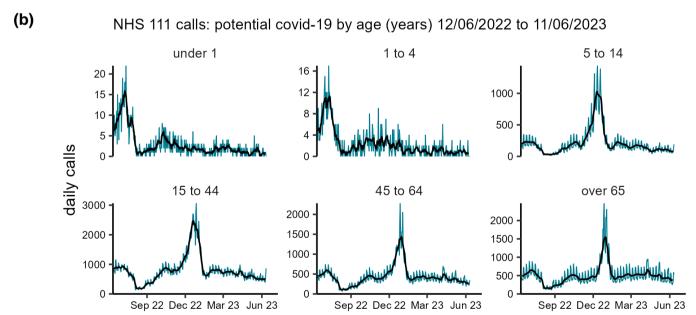
### Potential COVID-19 NHS 111 calls

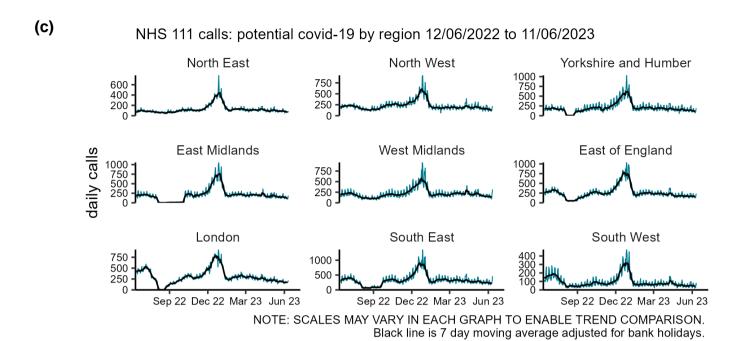
Figure 13: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for potential COVID-19, England (a) nationally, (b) by age and (c) by UKHSA Region.





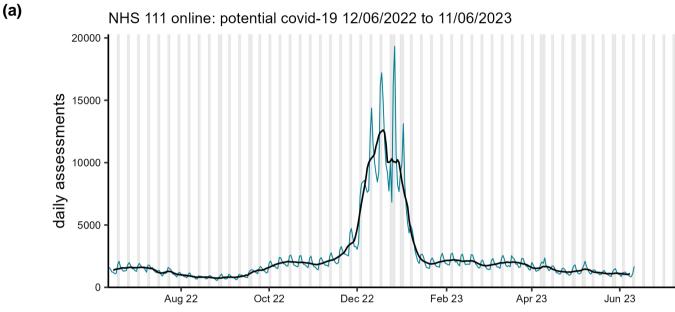
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.



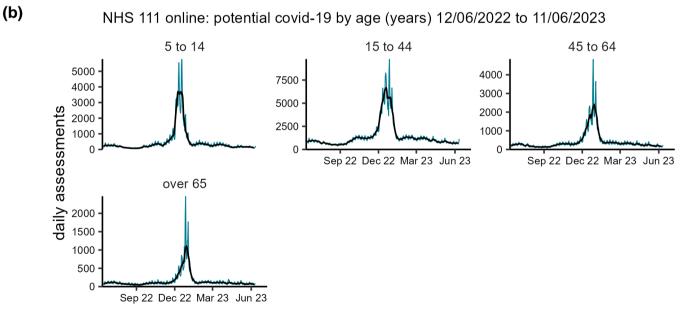


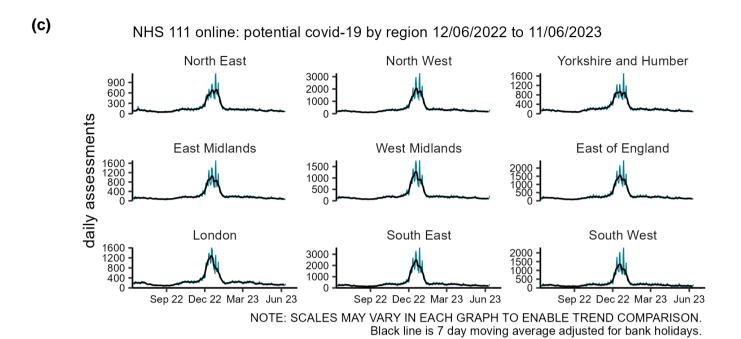
### Potential COVID-19 NHS 111 online

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.



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





### **Gastrointestinal conditions**

### Diarrhoea NHS 111 calls

Aug 22

Oct 22

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.

NHS 111 calls: diarrhoea 12/06/2022 to 11/06/2023

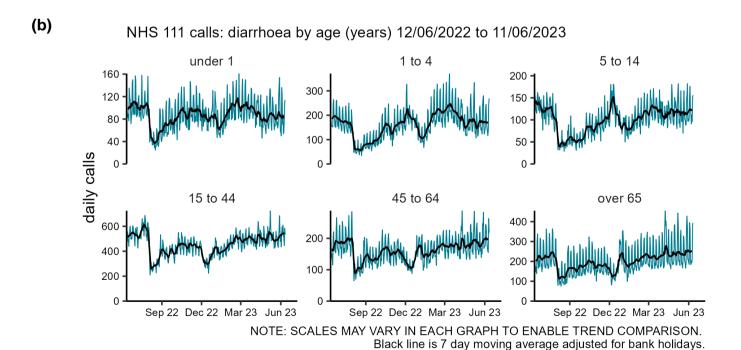
Dec 22

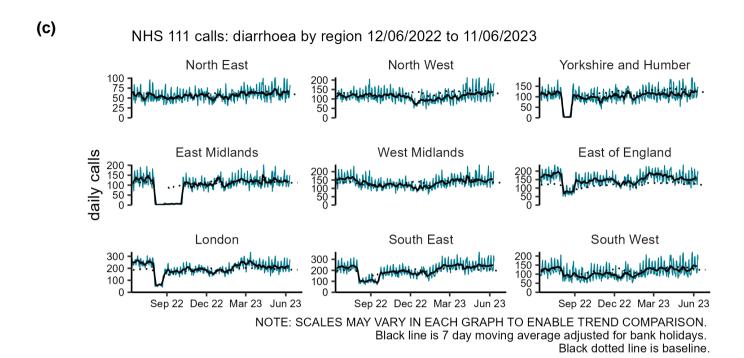
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

Apr 23

Jun 23

Feb 23





### Diarrhoea NHS 111 online

Aug 22

Oct 22

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 12/06/2022 to 11/06/2023

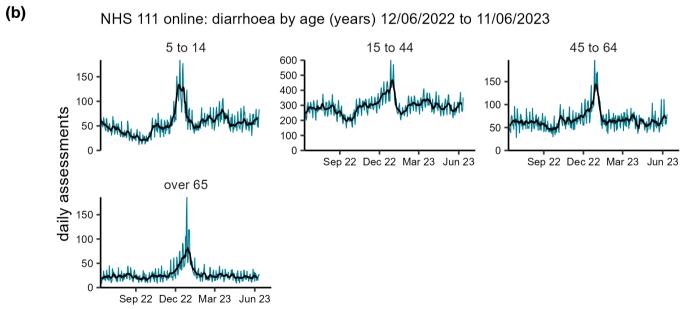
Dec 22

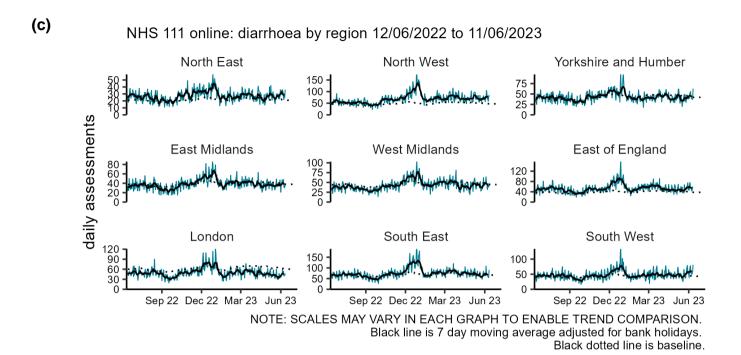
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

Apr 23

Jun 23

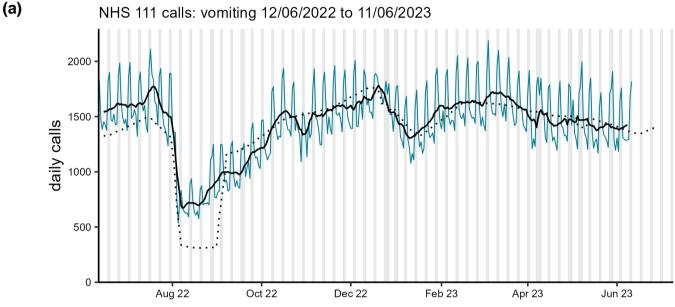
Feb 23



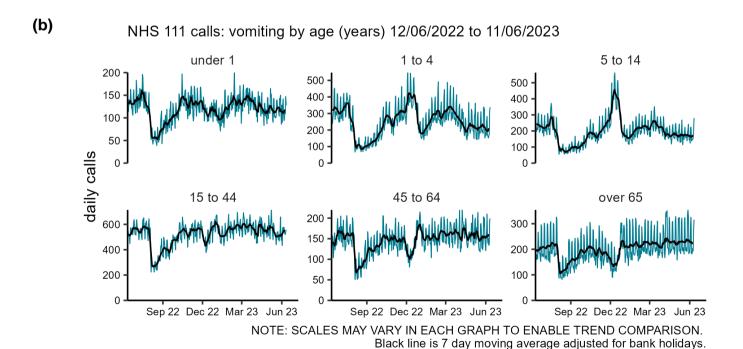


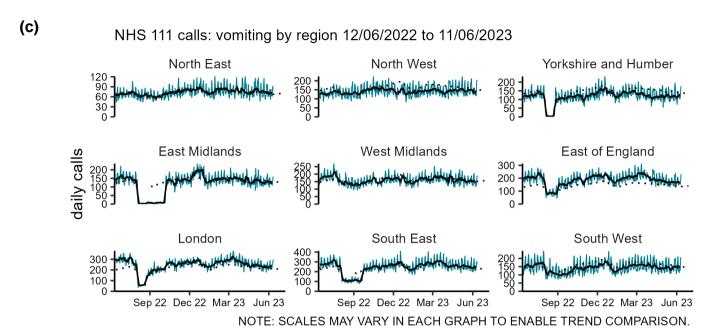
## Vomiting NHS 111 calls

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

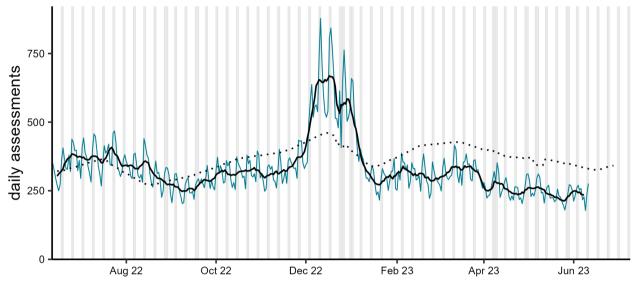




# Vomiting NHS 111 online

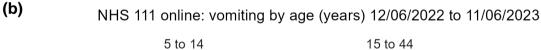
Figure 18: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for vomiting, England (a) nationally, (b) by age and (c) by UKHSA Region.

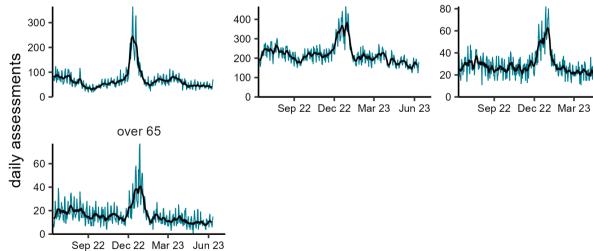
(a) NHS 111 online: vomiting 12/06/2022 to 11/06/2023



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

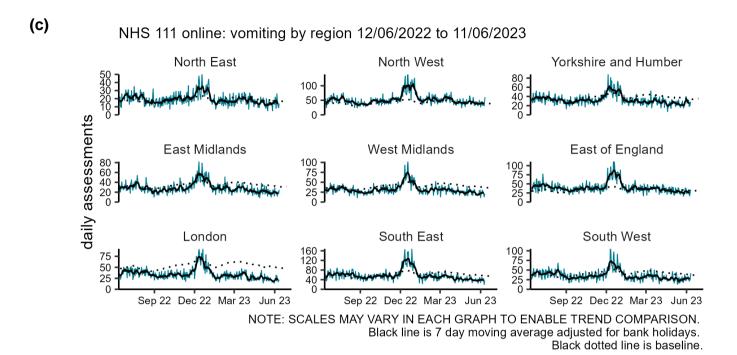
45 to 64





NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.

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



#### Seasonal environmental conditions

UKHSA and the Met Office operate a weather-health alert system that includes both heat and cold weather alert periods. 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 30 September

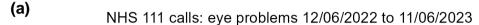
Highest weather alert level during the current reporting week:

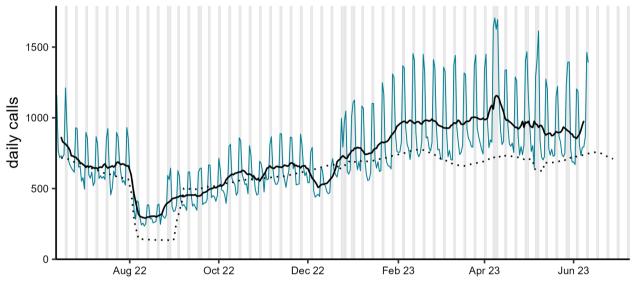
Level Amber - Enhanced hot weather response.

#### Heat-Health Alerts in place

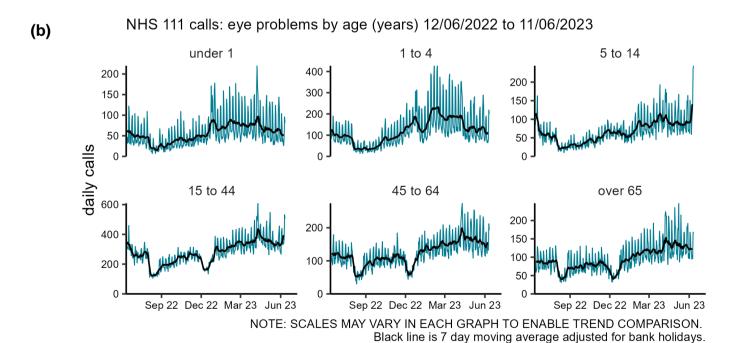
# Eye problems NHS 111 calls

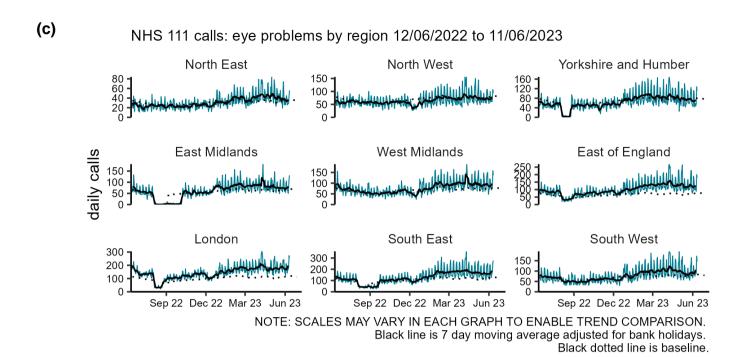
Figure 19: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for eye problems, England (a) nationally, (b) by age and (c) by UKHSA Region.sd





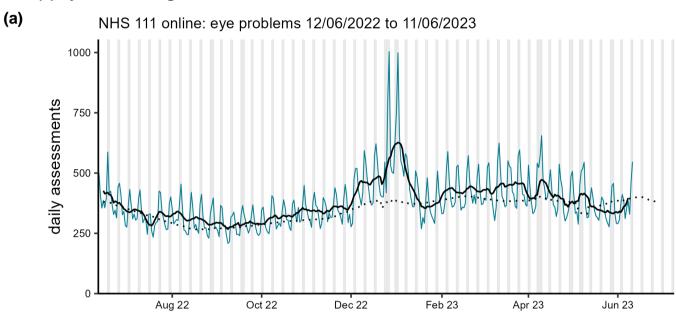
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.



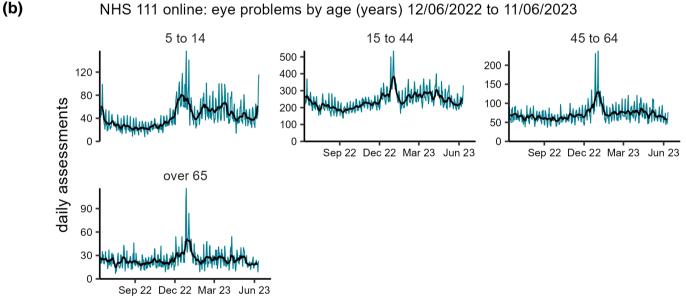


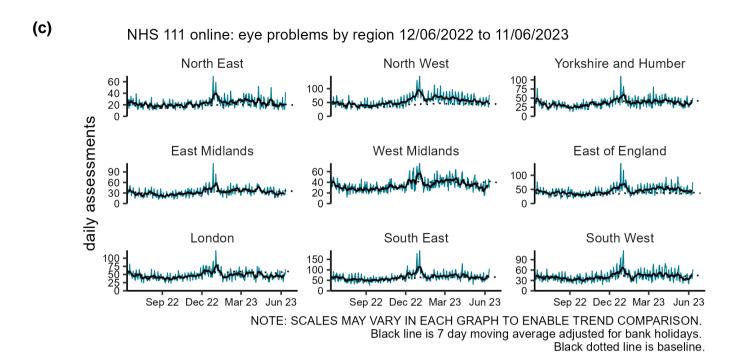
# Eye problems NHS 111 online

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.



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

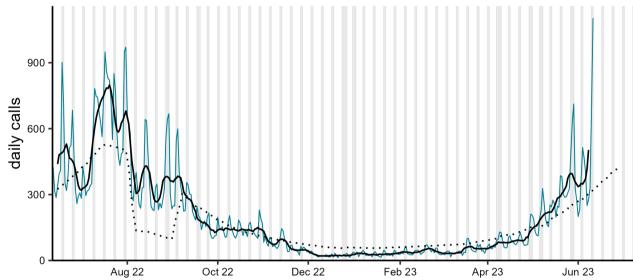




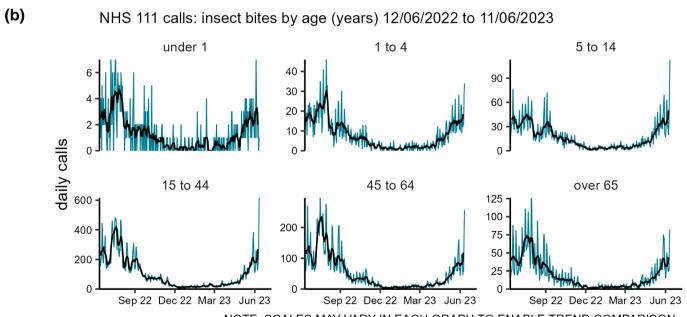
#### Insect bites NHS 111 calls

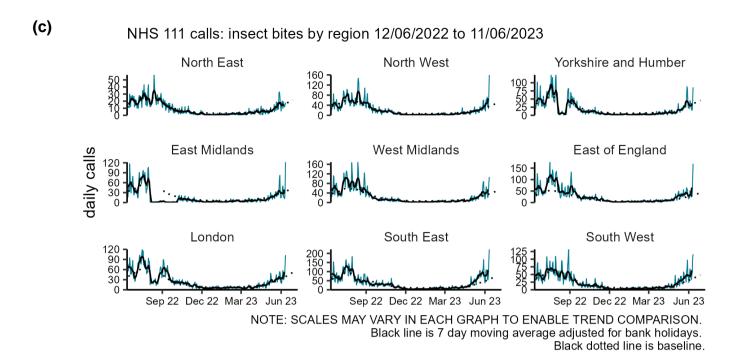
Figure 21: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for insect bites, England (a) nationally, (b) by age and (c) by UKHSA Region.





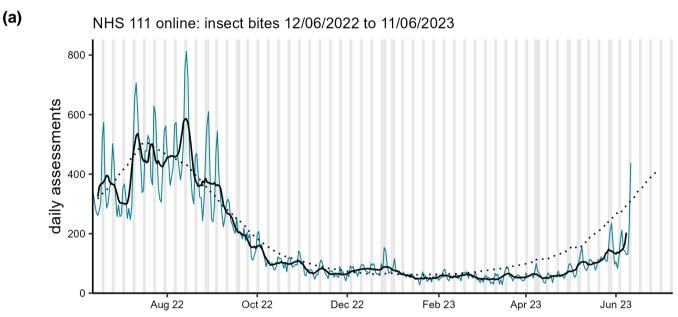
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.



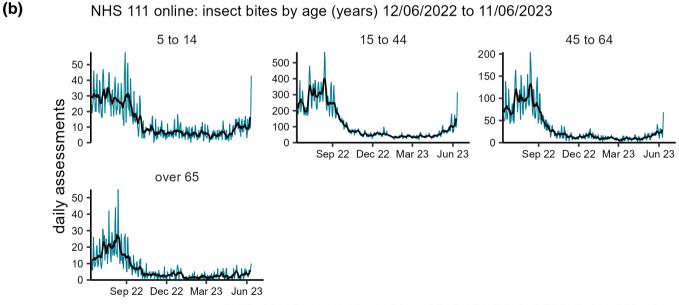


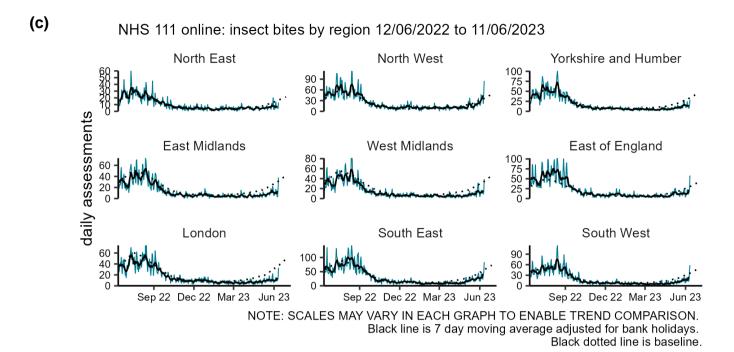
#### Insect bites NHS 111 online

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.



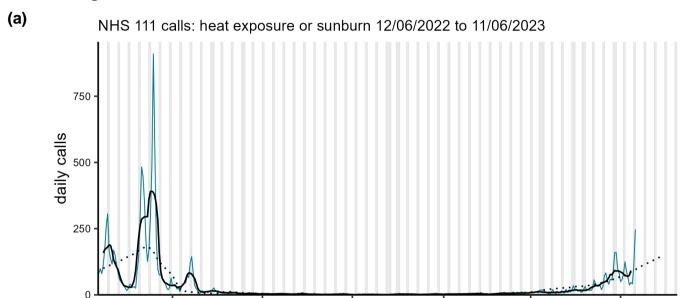


Aug 22

#### Heat exposure or sunburn NHS 111 calls

Oct 22

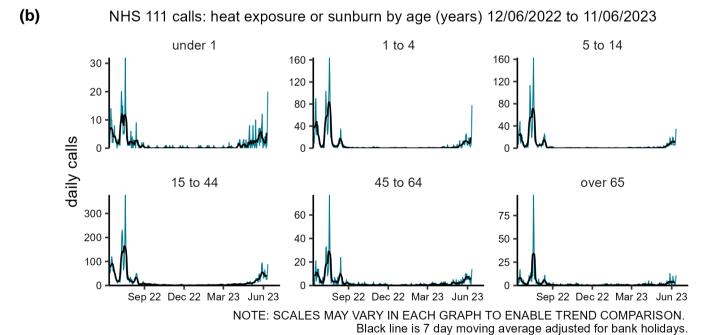
Figure 23: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for heat exposure or sunburn, England (a) nationally, (b) by age and (c) by UKHSA Region.

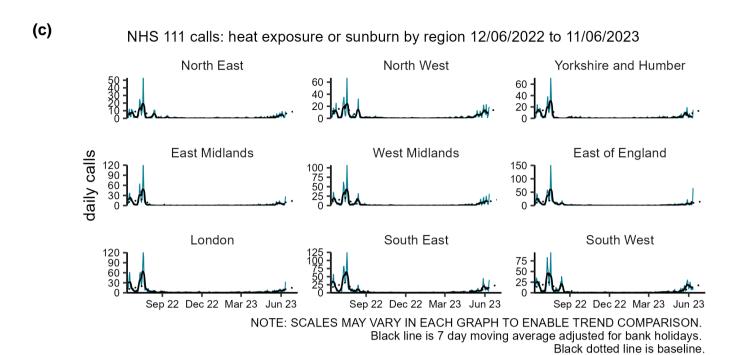


Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

Apr 23

Feb 23





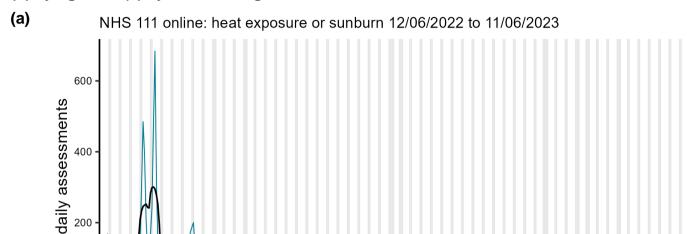
200

## Heat exposure or sunburn NHS 111 online

Oct 22

Aug 22

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.

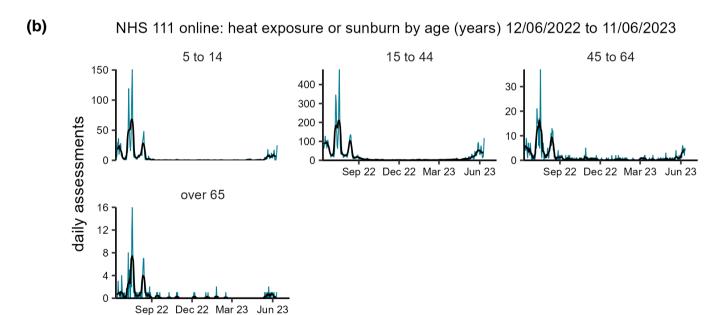


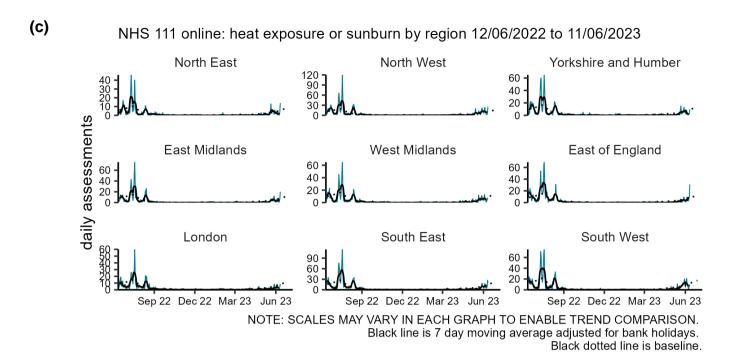
Dec 22

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

Feb 23

Apr 23





#### **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:

- were last remodelled May 2023
- 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.

www.gov.uk/government/organisations/uk-health-security-agency

© Crown copyright 2023

Version: RHA-2

Prepared by: Real-time Syndromic Surveillance Team

For queries relating to this document, please contact: syndromic.surveillan@ukhsa.gov.uk

Published: June 2023



You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v3.0. To view this licence, visit <u>OGL</u>. Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.



UKHSA supports the UN Sustainable Development Goals

