



UK Health
Security
Agency

Remote Health Advice Syndromic Surveillance System Bulletin (England) 2023 Week 49

Key messages

Data reported to: 11 December 2023

During week 49, NHS 111 calls and online assessments for 'potential COVID-19' increased, particularly in adults aged over 15 years and in the London and South East Regions. There were also increases noted in cough and sore throat indicators. Vomiting calls continued to increase in children aged 1-4 and 5-14 years however, calls overall remain in line with expected seasonal levels.

Please note: a new NHS Pathways Release has resulted in a change in the triage coding of 'difficulty breathing' calls. These changes are particularly in those regions where NHS 111 providers have adopted the first Pathways Releases (North East, East of England). The difficulty breathing call indicator charts have therefore been removed from this bulletin to avoid mis-interpretation of these surveillance data. Further national NHS Pathways releases are planned in December 2023 and January 2024.

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)	Increasing	No baseline
Total NHS 111 online (Figure 2)	Increasing	No baseline
Cold/flu NHS 111 calls (Figure 3)	No trend	Below baseline
Cold/flu NHS 111 online (Figure 4)	Increasing	Below baseline
Fever NHS 111 calls (Figure 5)	No trend	Below baseline
Fever NHS 111 online (Figure 6)	Increasing	Below baseline
Cough NHS 111 calls (Figure 7)	No trend	Below baseline
Cough NHS 111 online (Figure 8)	Increasing	Below baseline
Difficulty breathing NHS 111 online (Figure 9)	No trend	Below baseline
Sore throat NHS 111 calls (Figure 10)	Increasing	Below baseline
Sore throat NHS 111 online (Figure 11)	Increasing	Below baseline
Potential COVID-19 NHS 111 calls (Figure 12)	Increasing	No baseline
Potential COVID-19 NHS 111 online (Figure 13)	Increasing	No baseline
Diarrhoea NHS 111 calls (Figure 14)	No trend	Similar to baseline
Diarrhoea NHS 111 online (Figure 15)	No trend	Below baseline
Vomiting NHS 111 calls (Figure 16)	Increasing	Similar to baseline
Vomiting NHS 111 online (Figure 17)	Increasing	Below baseline
Eye problems NHS 111 calls (Figure 18)	No trend	Similar to baseline
Eye problems NHS 111 online (Figure 19)	Decreasing	Below 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](#).

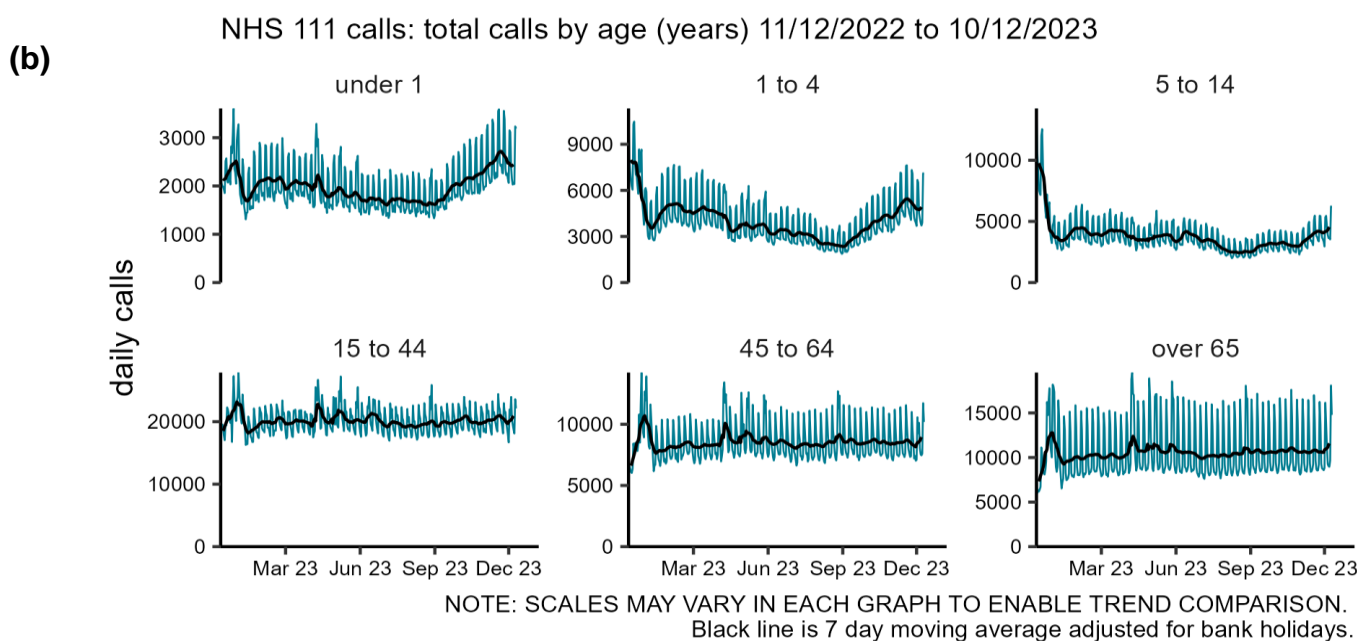
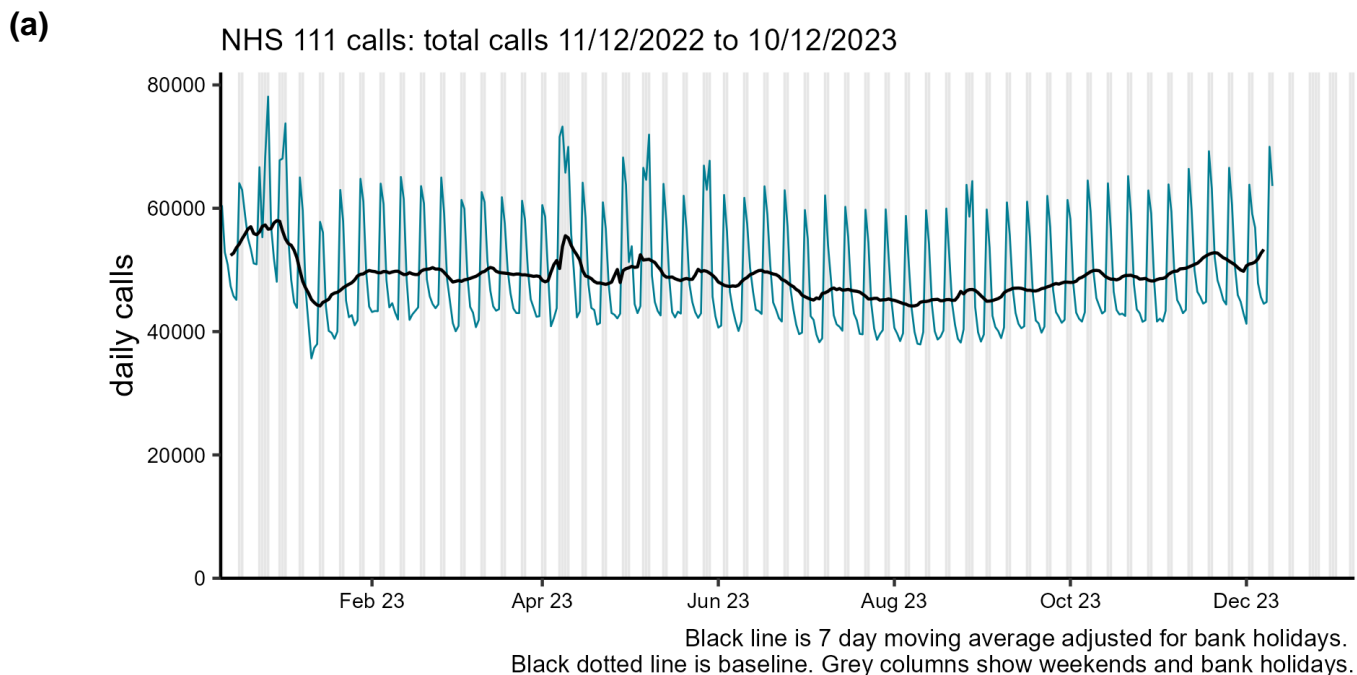
Data quality issues of note this week

A new NHS Pathways Release has resulted in a change in the triage coding of 'difficulty breathing' calls. These changes are particularly in those regions where NHS 111 providers have adopted the first Pathways Releases (North East, East of England) and in age groups over 5 years old. Further national Pathways releases are planned in December 2023 and January 2024. The difficulty breathing call indicator has therefore been removed from this bulletin.

Total contacts

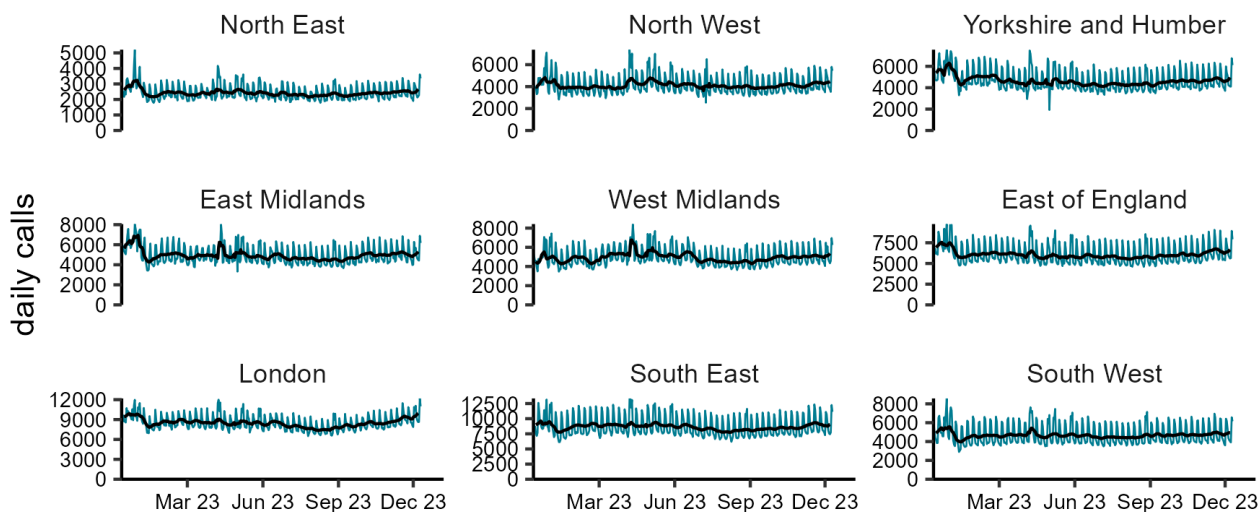
NHS 111 calls

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.



(c)

NHS 111 calls: total calls by UKHSA region 11/12/2022 to 10/12/2023



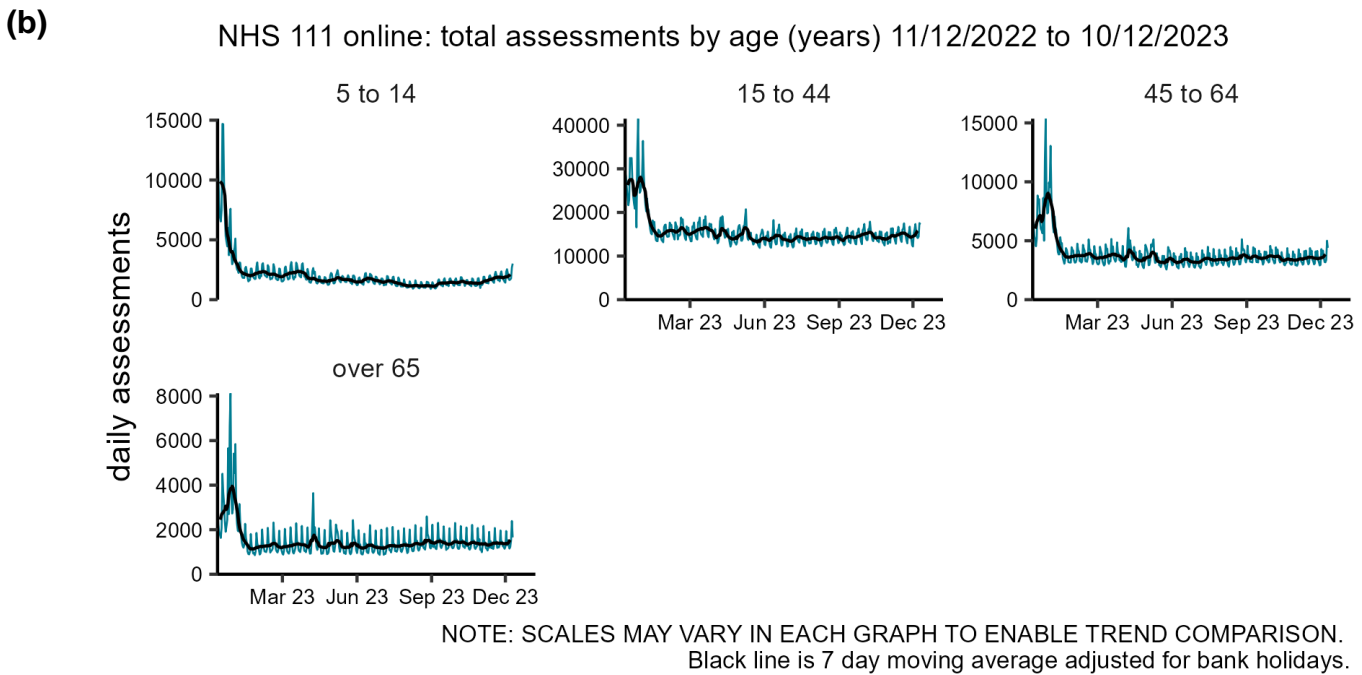
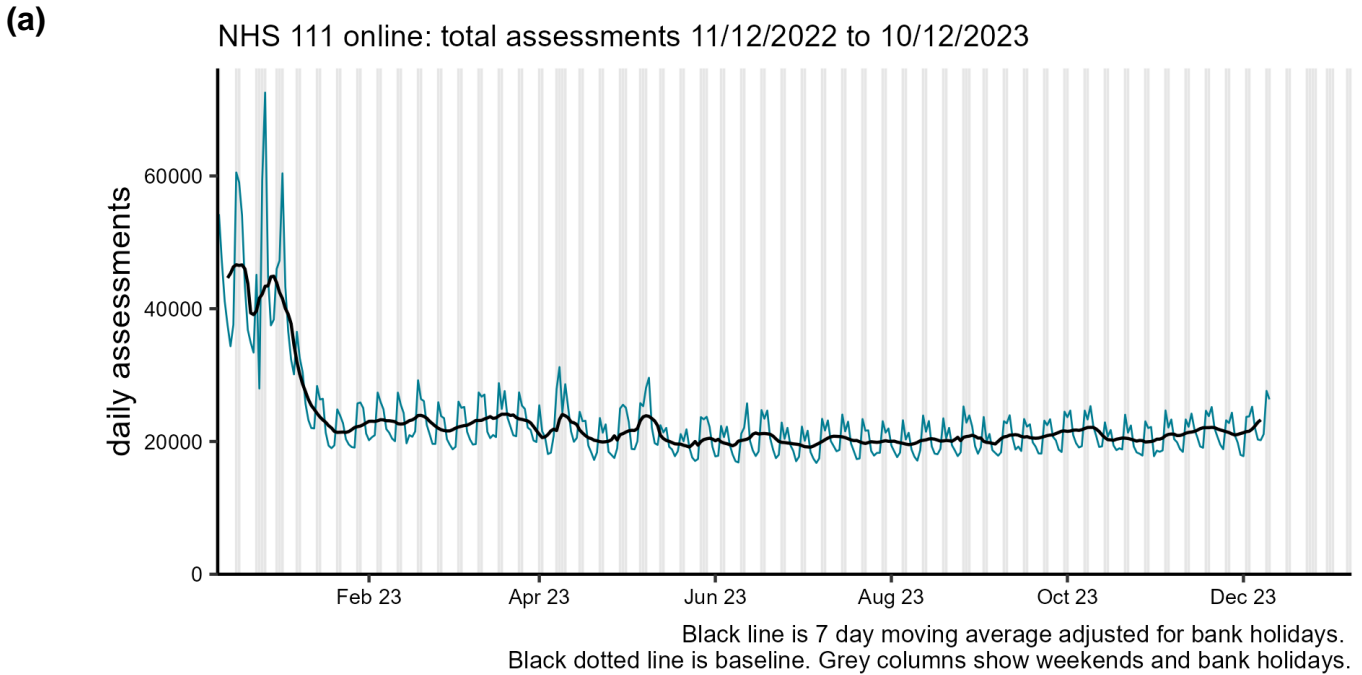
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
 Black line is 7 day moving average adjusted for bank holidays.
 Black dotted line is baseline.

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

Date	Number of calls
04 December 2023	49,916
05 December 2023	46,566
06 December 2023	44,086
07 December 2023	43,212
08 December 2023	43,420
09 December 2023	67,577
10 December 2023	61,408

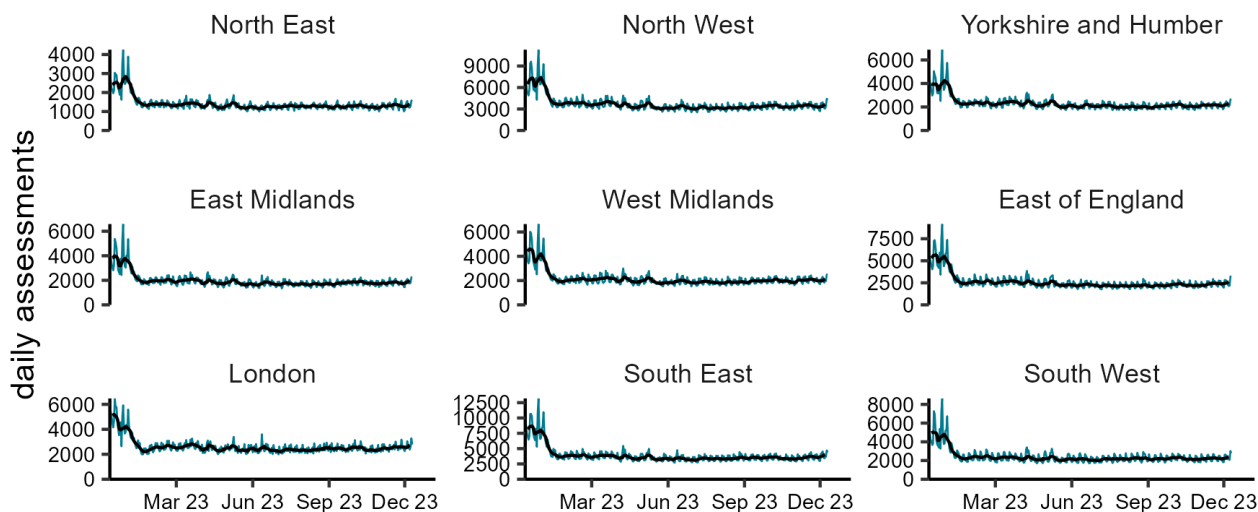
NHS 111 online

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.



(c)

NHS 111 online: total assessments by UKHSA region 11/12/2022 to 10/12/2023



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 Black line is 7 day moving average adjusted for bank holidays.
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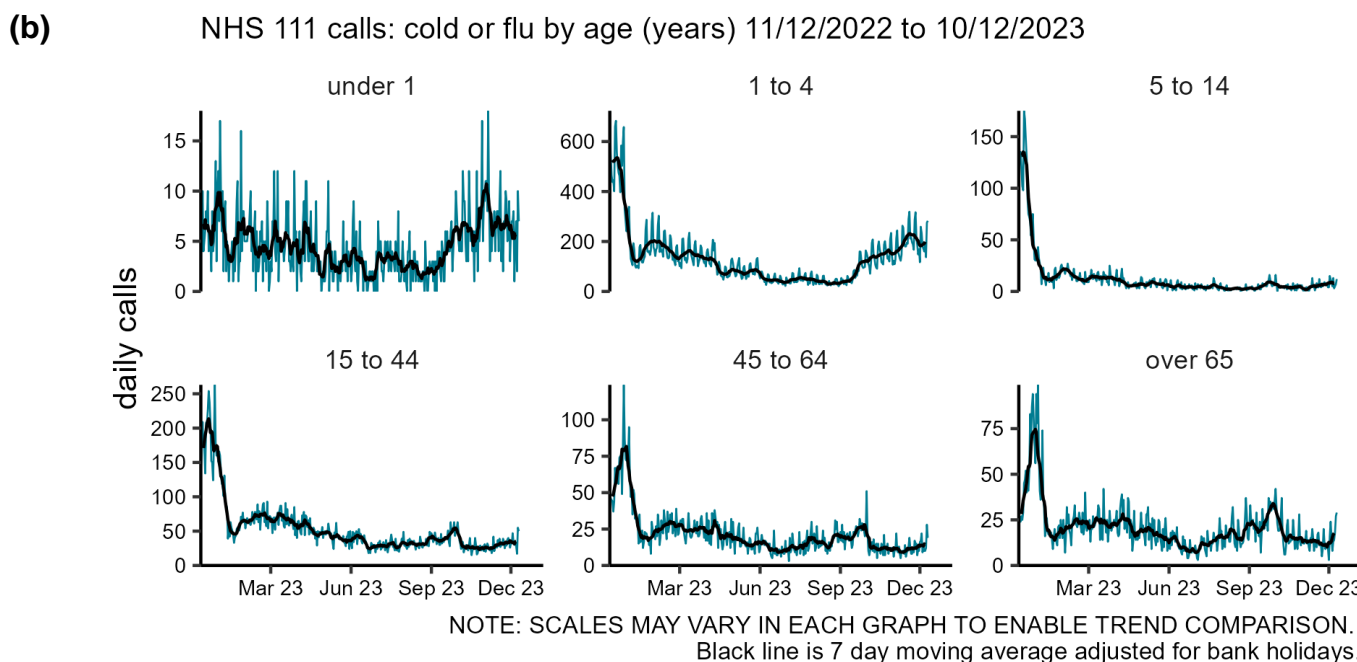
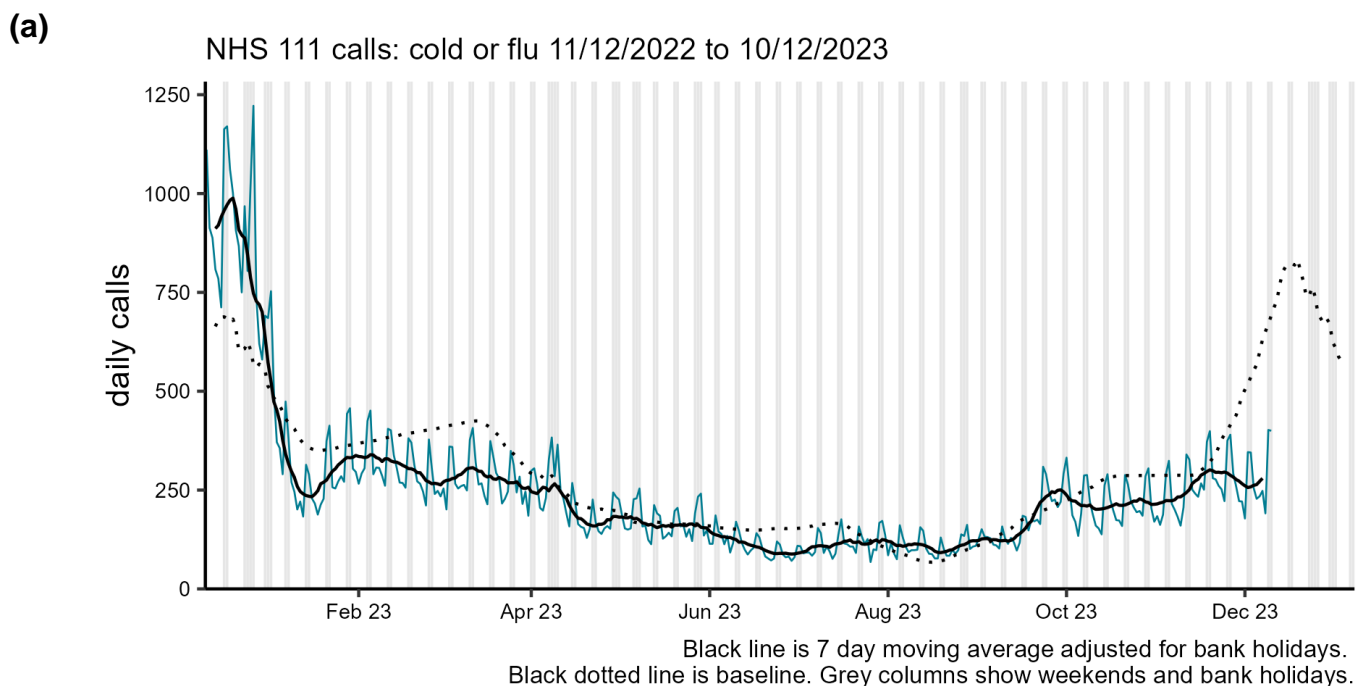
Table 3: The number of completed NHS 111 online assessments in England recorded each day in the most recent week.

Date	Number of completed assessments
04 December 2023	25,300
05 December 2023	22,088
06 December 2023	20,332
07 December 2023	20,229
08 December 2023	21,167
09 December 2023	27,753
10 December 2023	26,445

Respiratory conditions

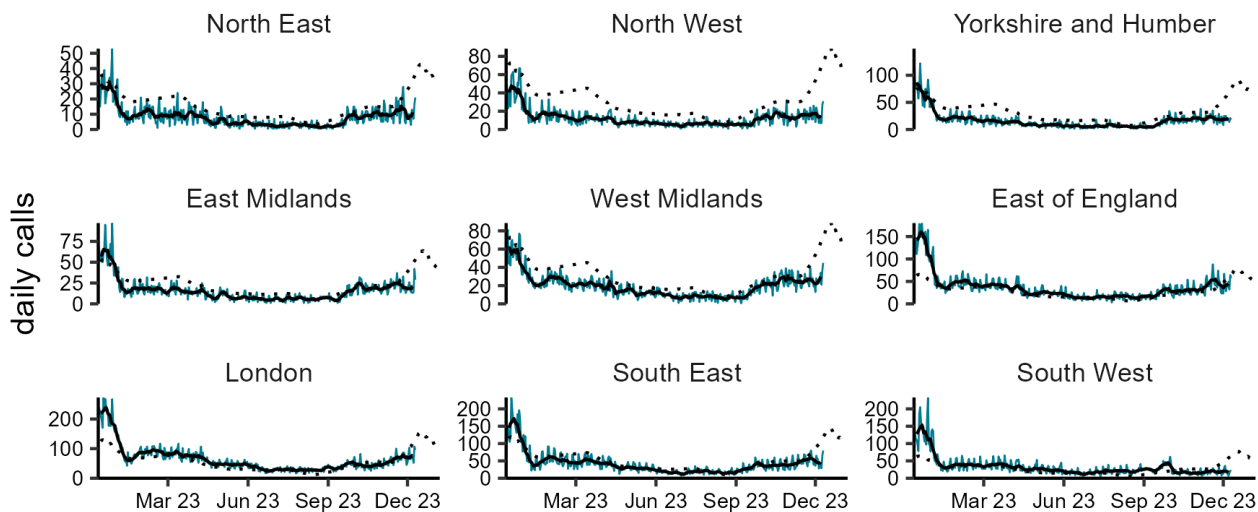
Cold/flu NHS 111 calls

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.



(c)

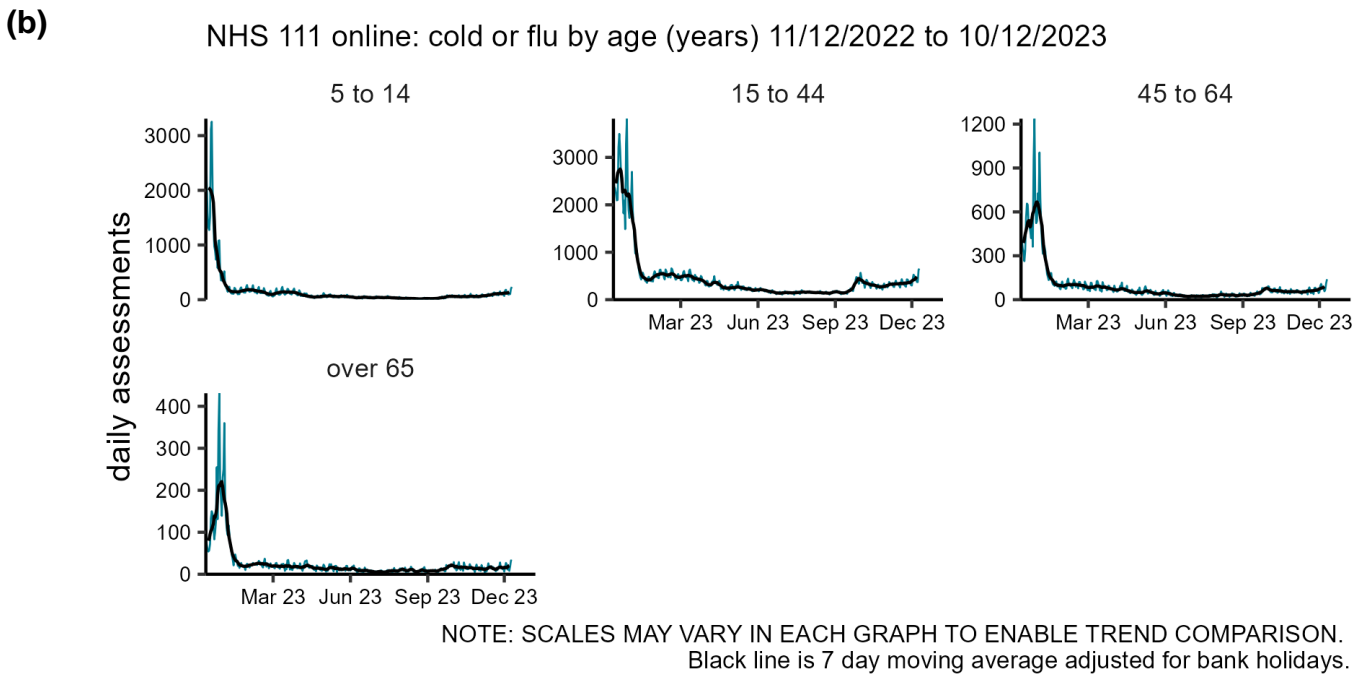
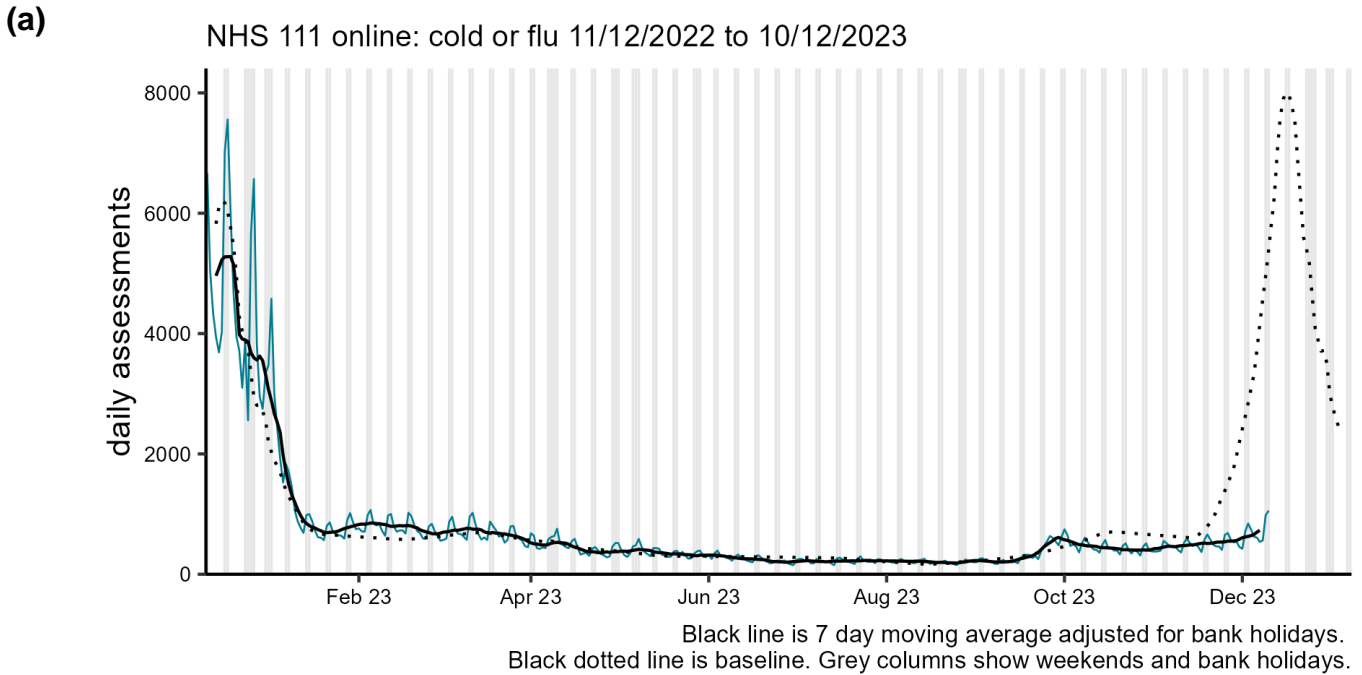
NHS 111 calls: cold or flu by UKHSA region 11/12/2022 to 10/12/2023



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.

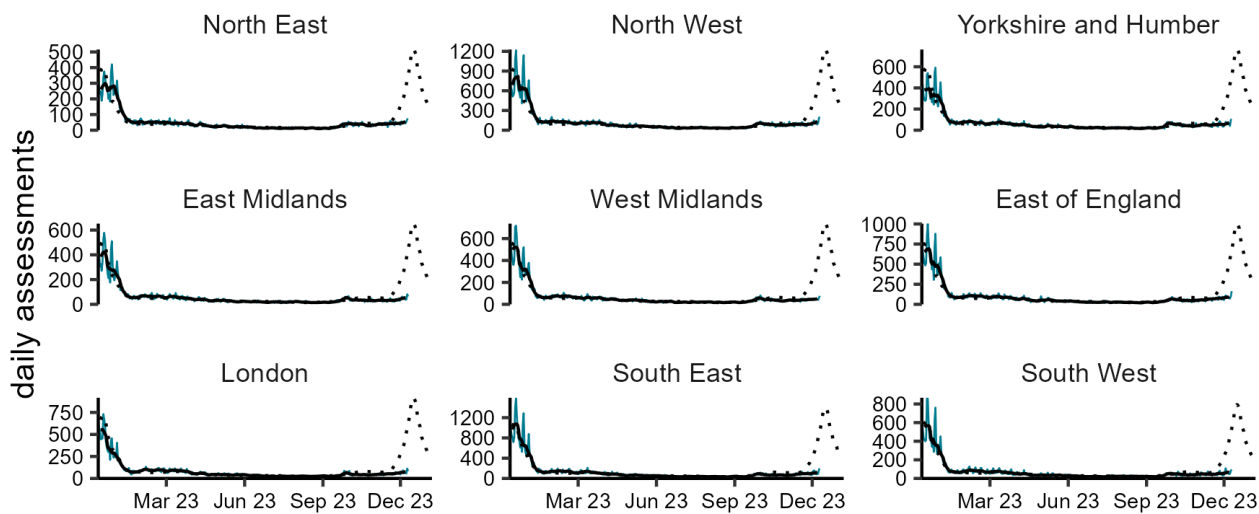
Cold/flu NHS 111 online

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.



(c)

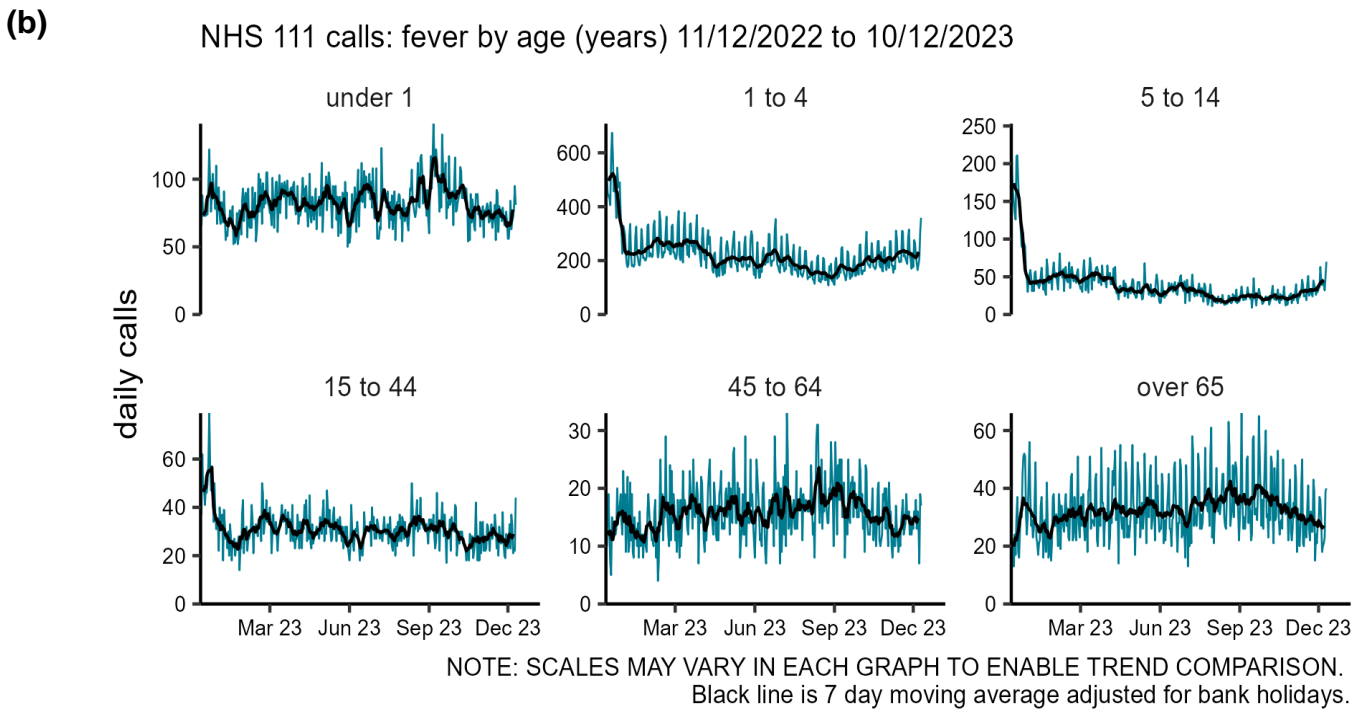
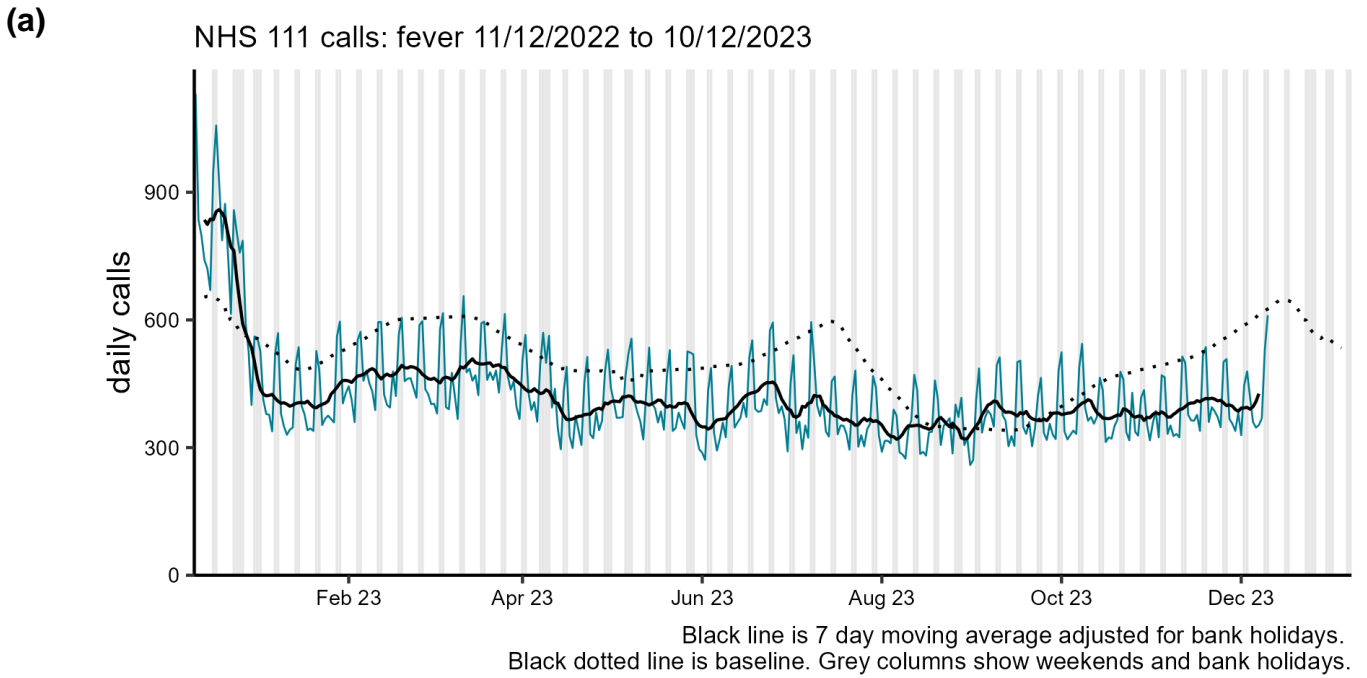
NHS 111 online: cold or flu by UKHSA region 11/12/2022 to 10/12/2023



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Black dotted line is baseline.

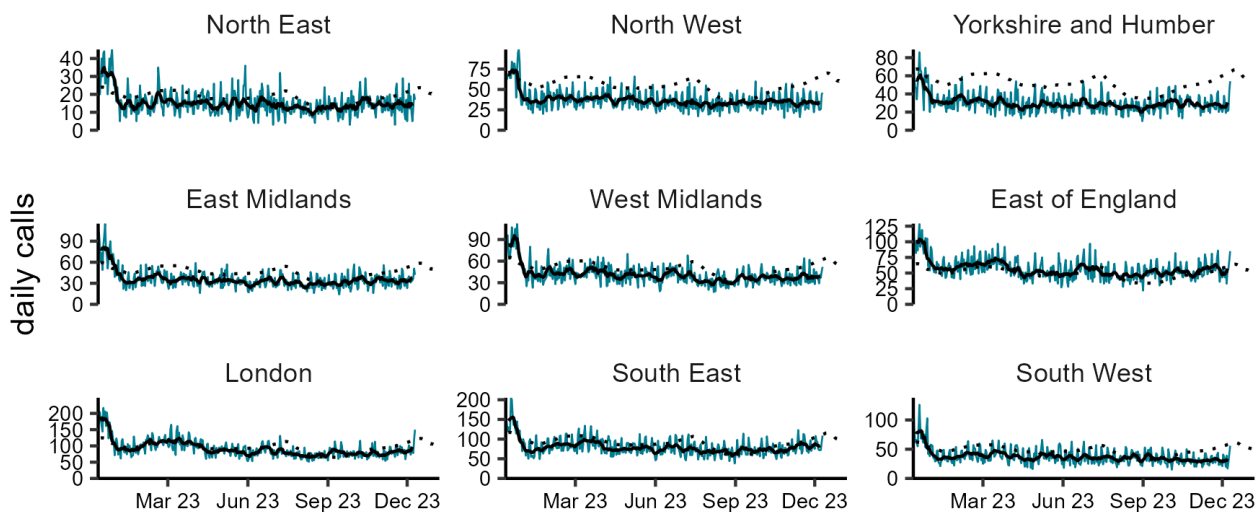
Fever NHS 111 calls

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.



(c)

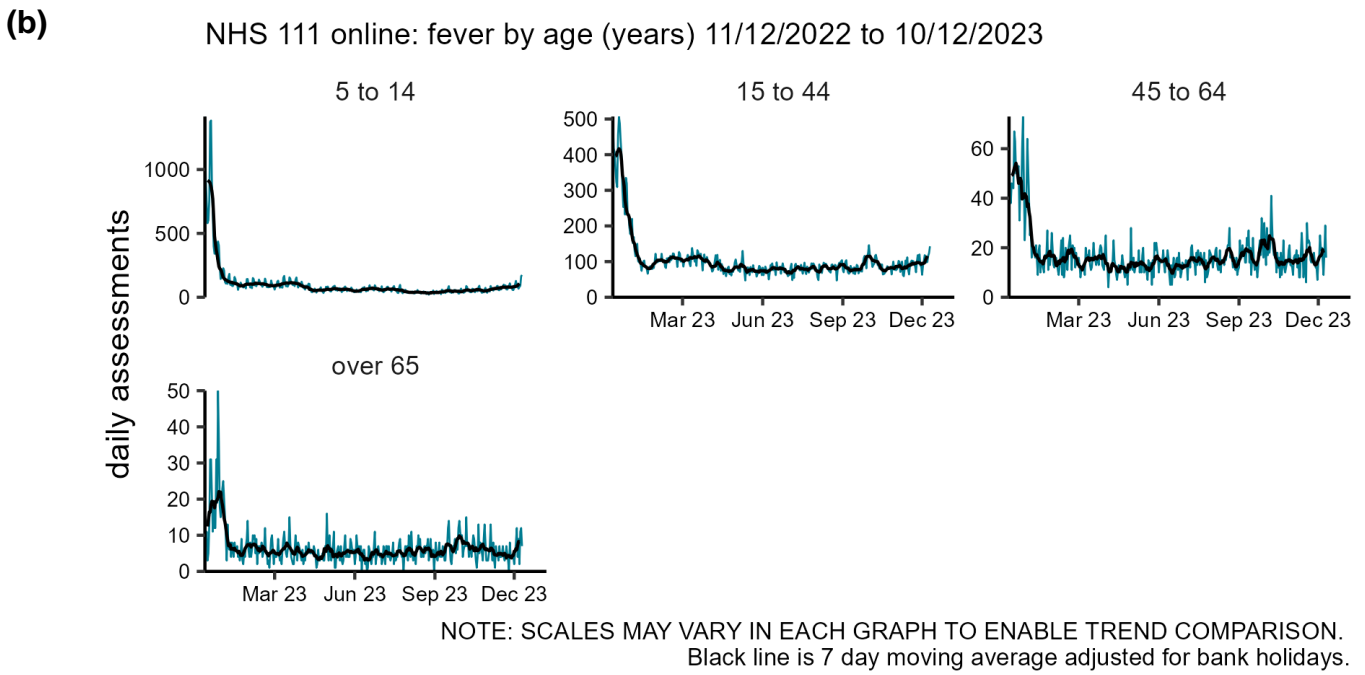
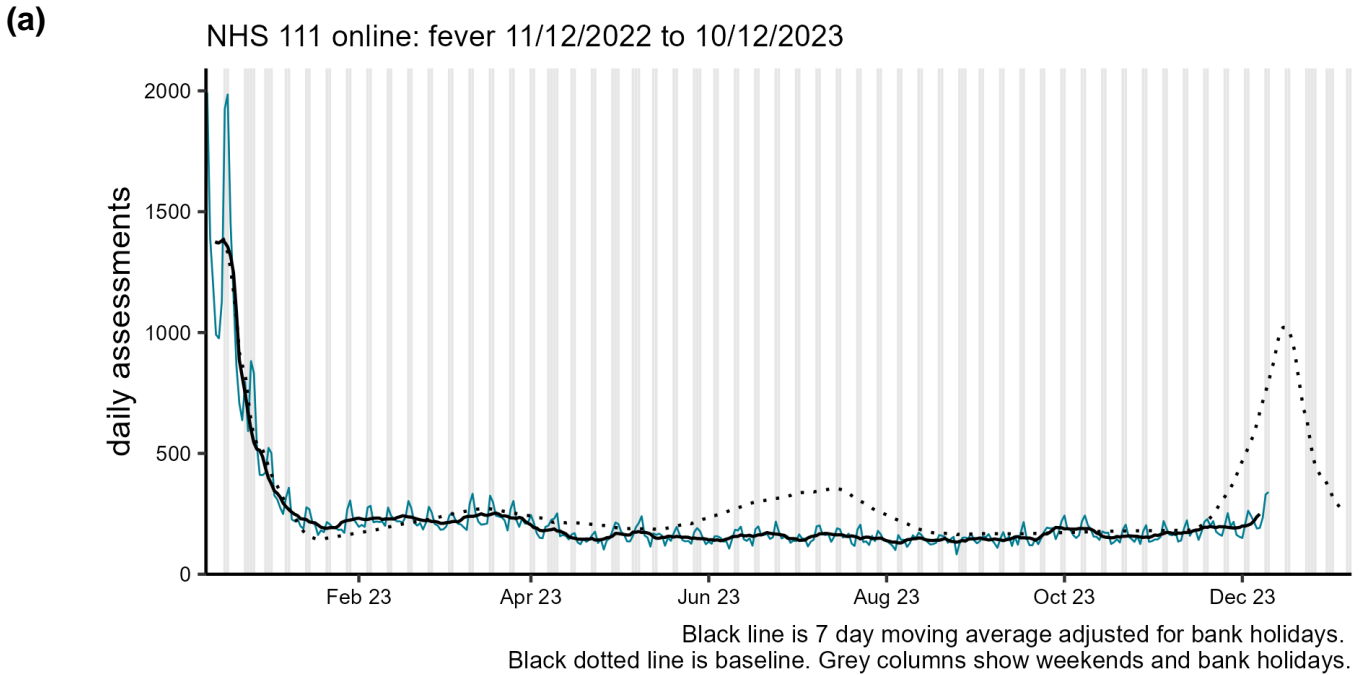
NHS 111 calls: fever by UKHSA region 11/12/2022 to 10/12/2023



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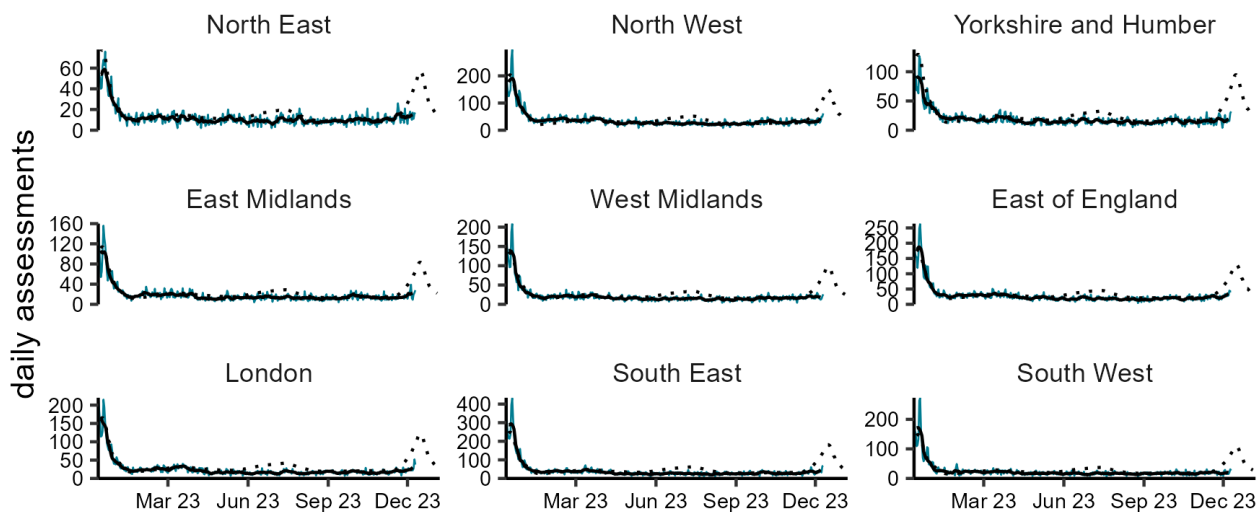
Fever NHS 111 online

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.



(c)

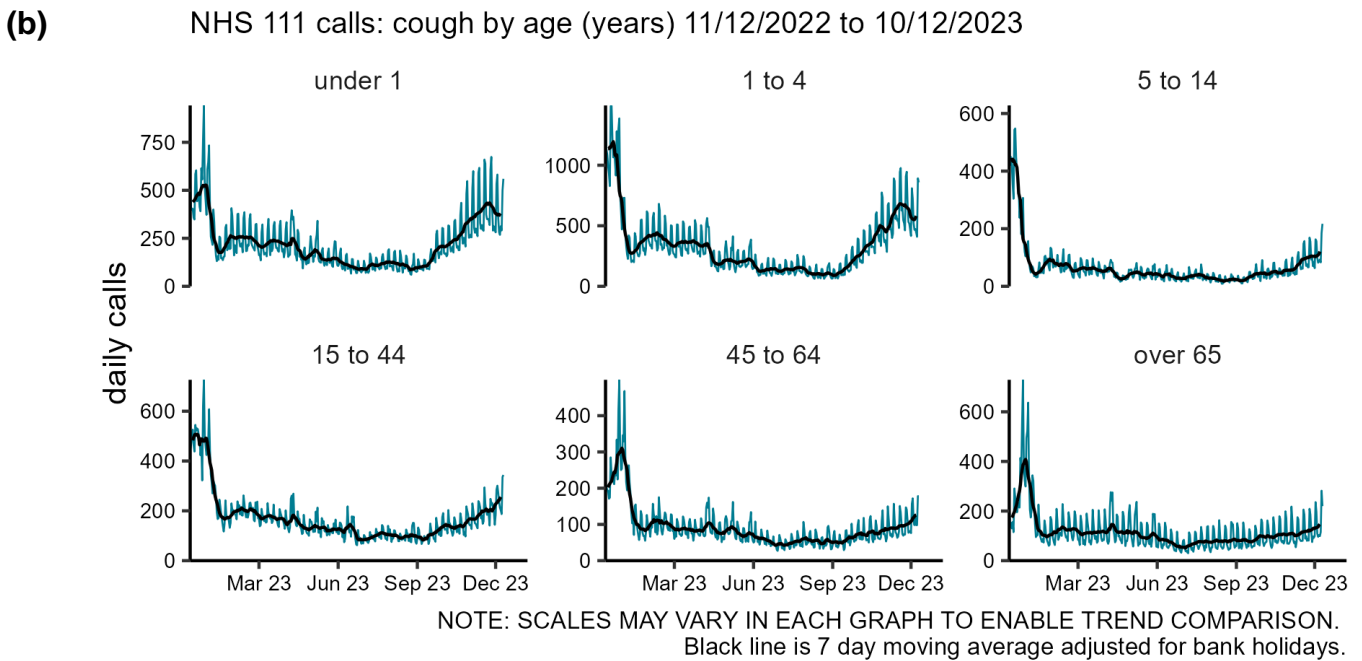
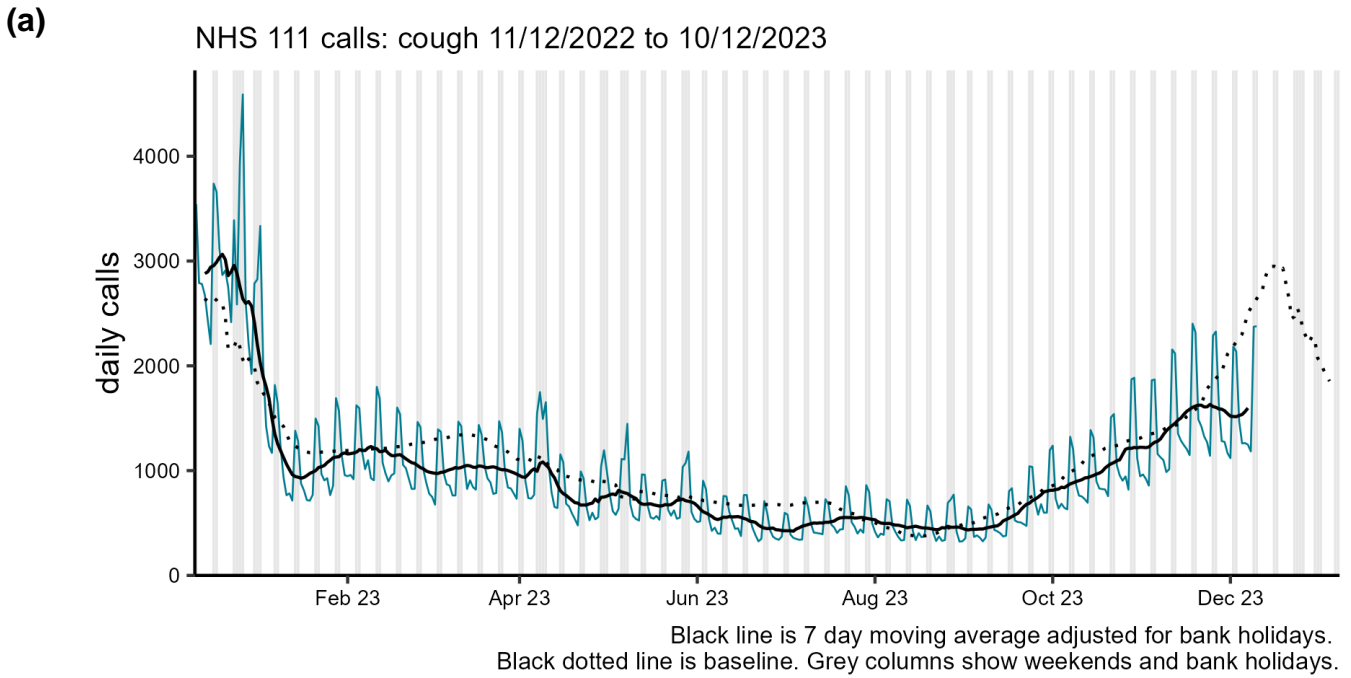
NHS 111 online: fever by UKHSA region 11/12/2022 to 10/12/2023



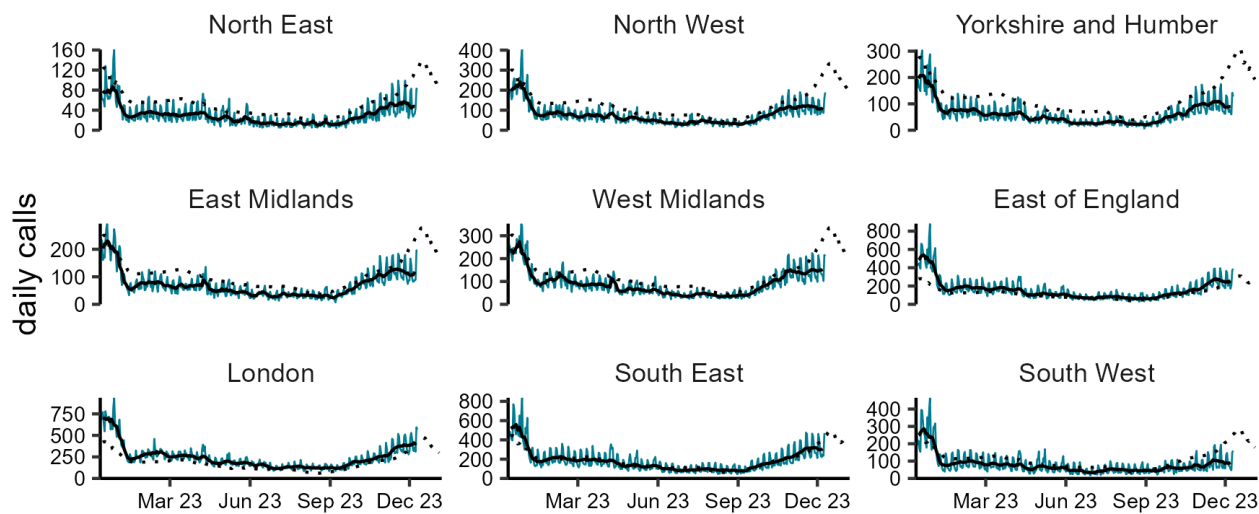
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
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Cough NHS 111 calls

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.



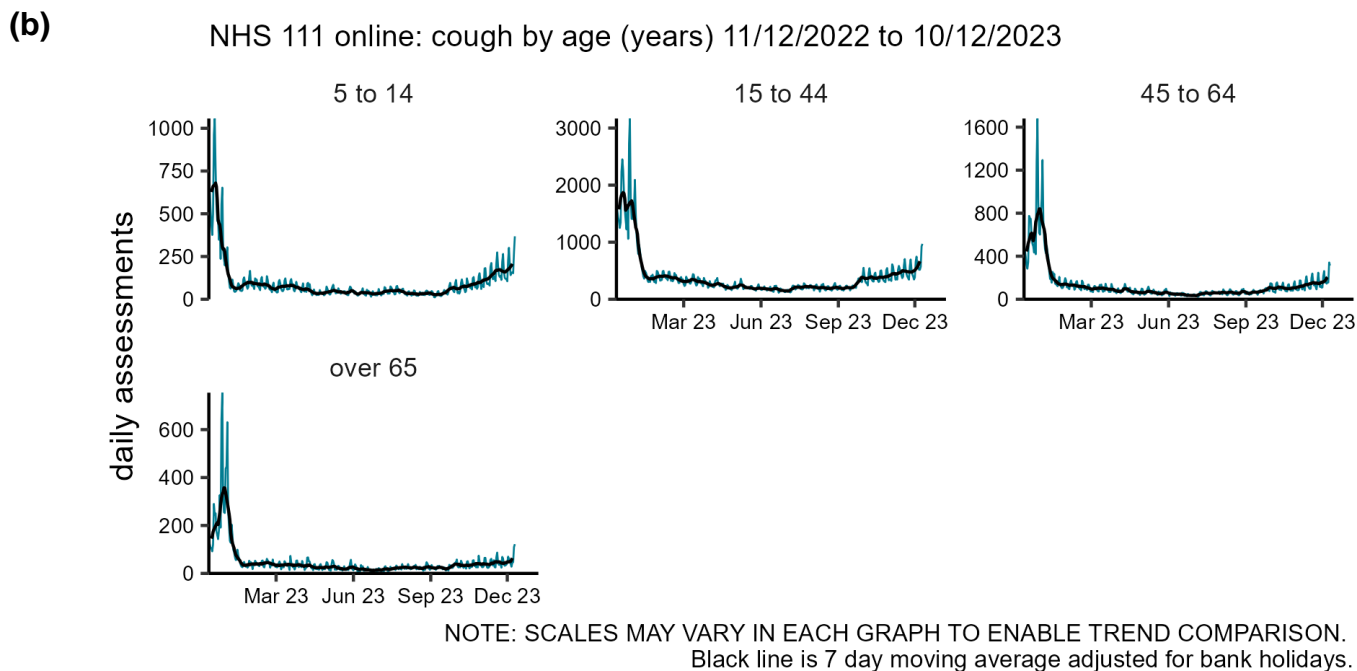
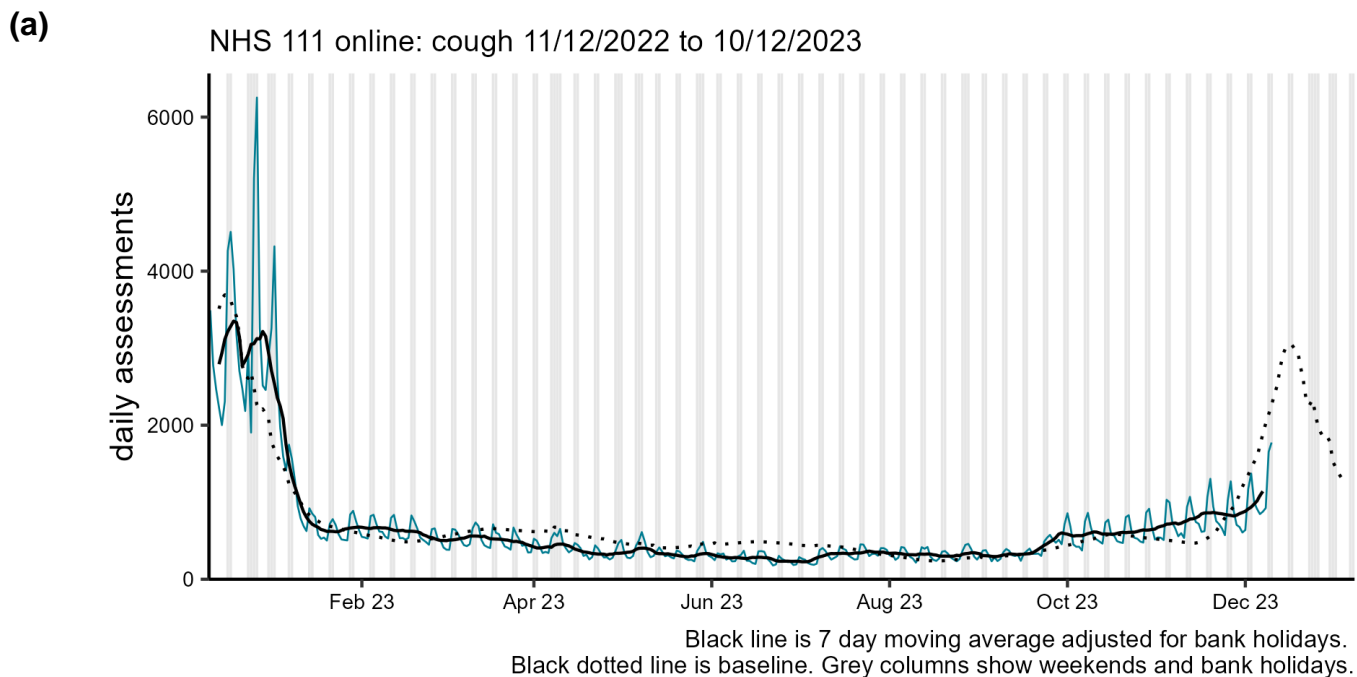
(c) NHS 111 calls: cough by UKHSA region 11/12/2022 to 10/12/2023



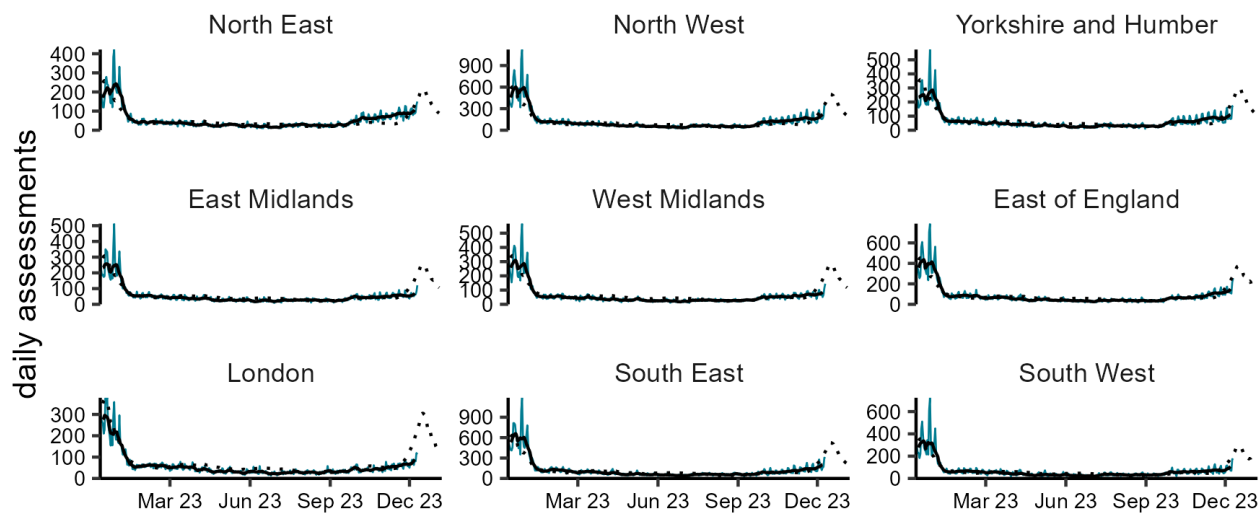
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
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Cough NHS 111 online

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.



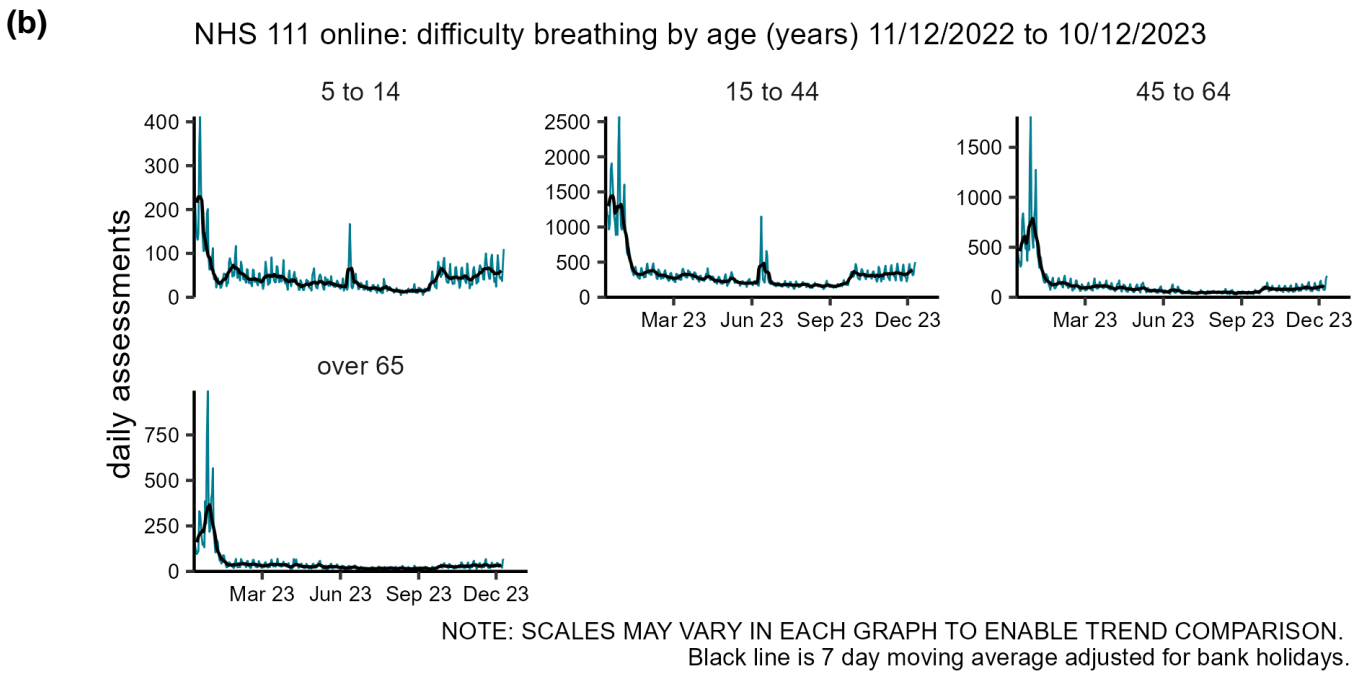
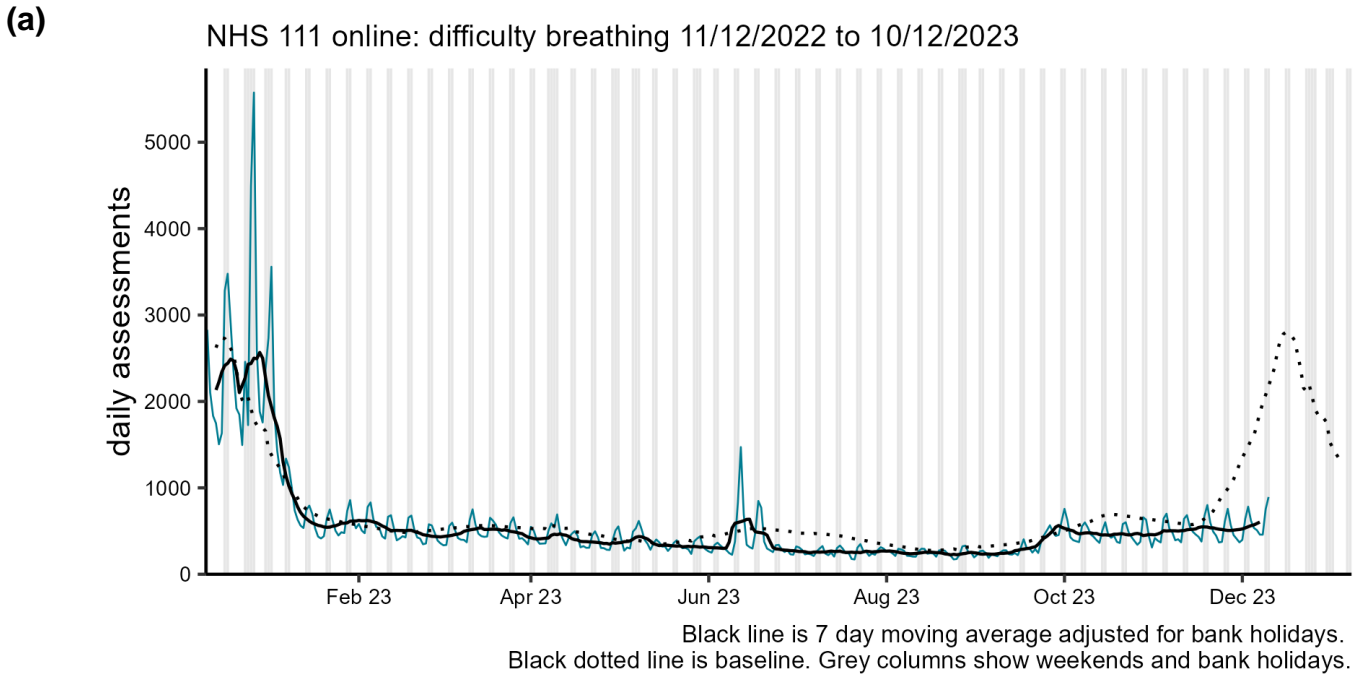
(c) NHS 111 online: cough by UKHSA region 11/12/2022 to 10/12/2023



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Black dotted line is baseline.

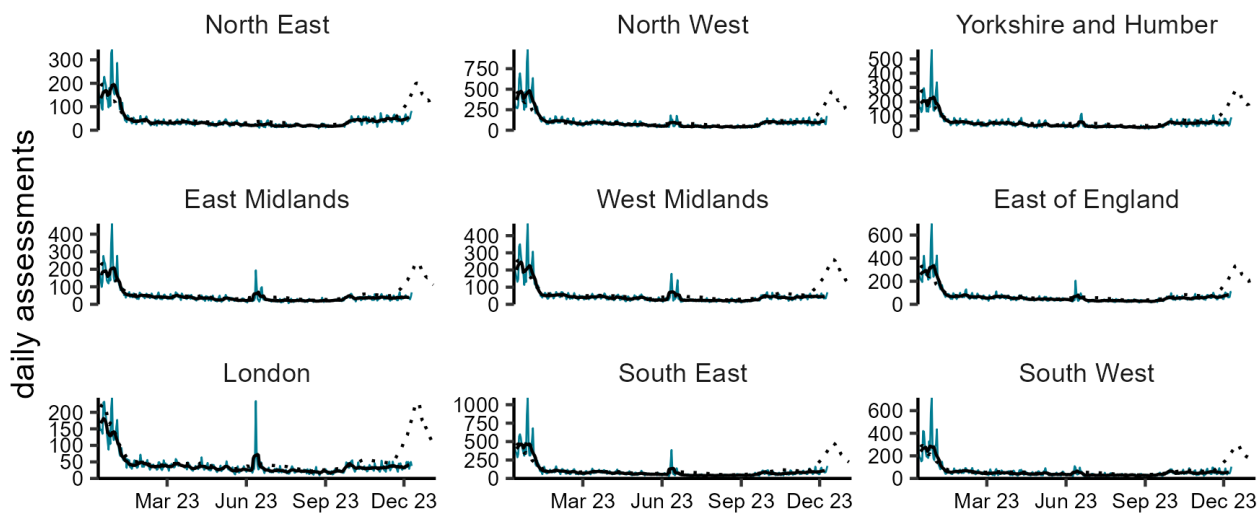
Difficulty breathing NHS 111 online

Figure 9: 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.



(c)

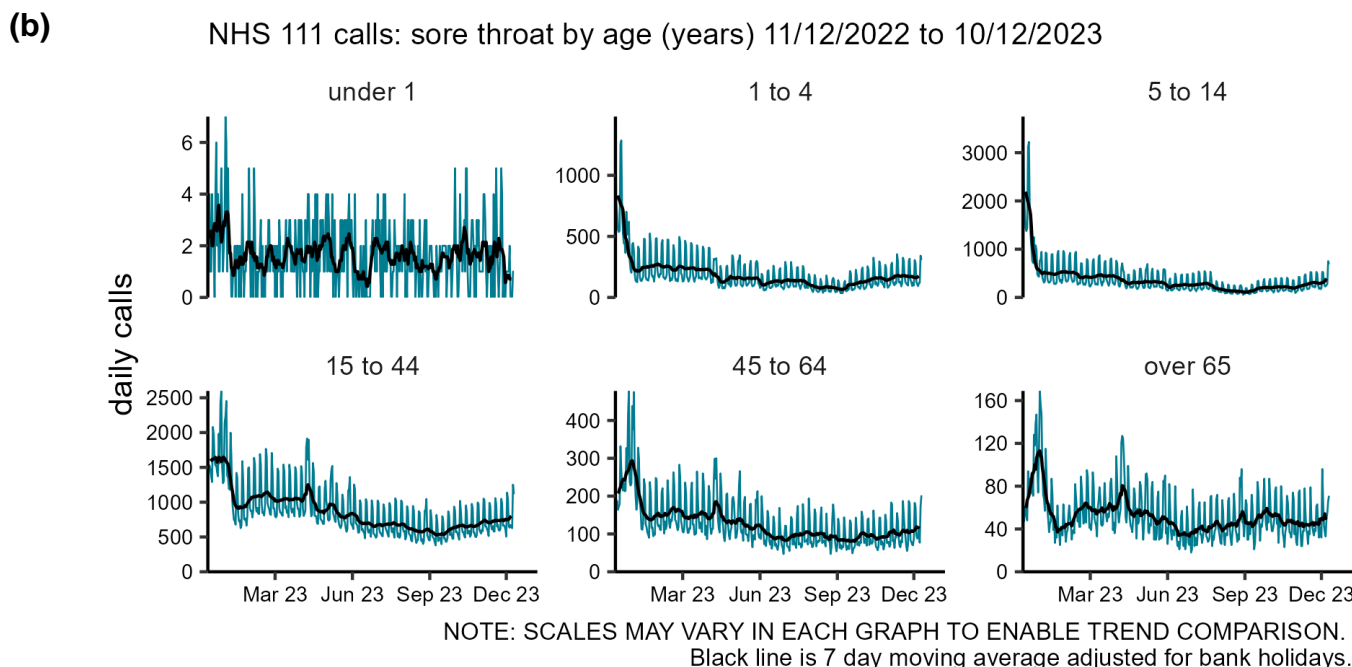
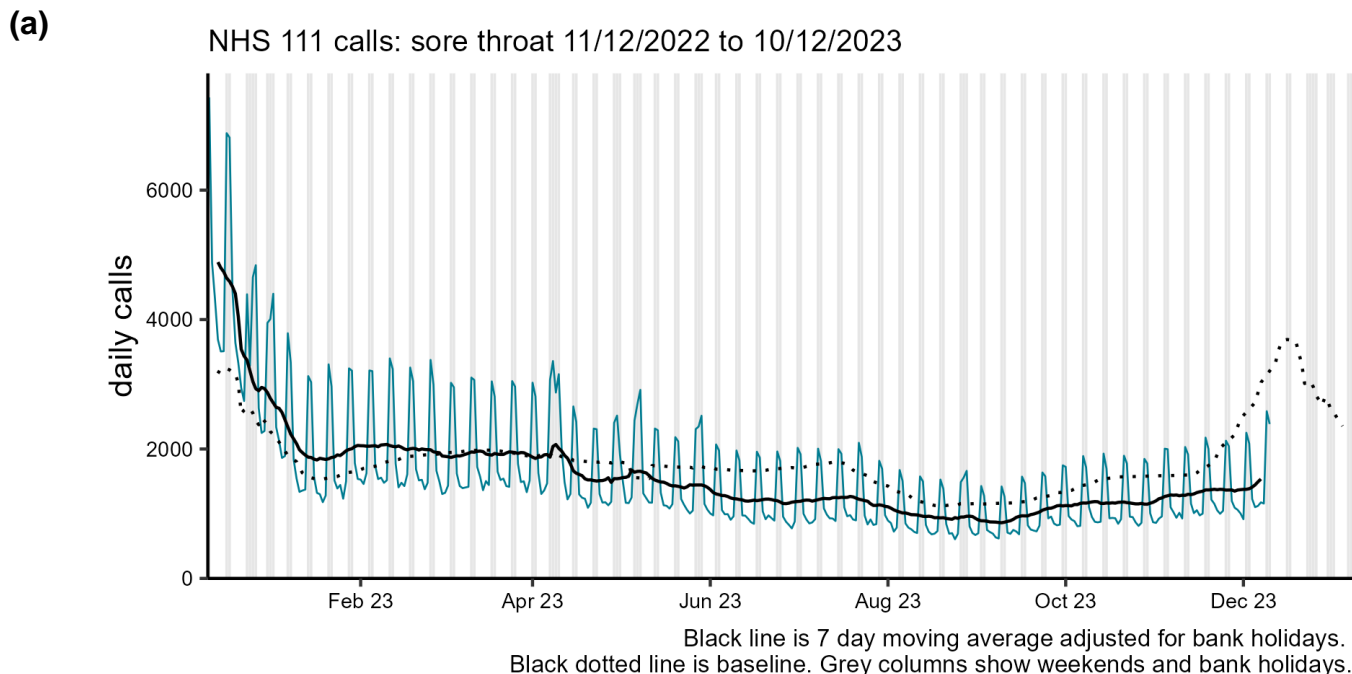
NHS 111 online: difficulty breathing by UKHSA region 11/12/2022 to 10/12/2023



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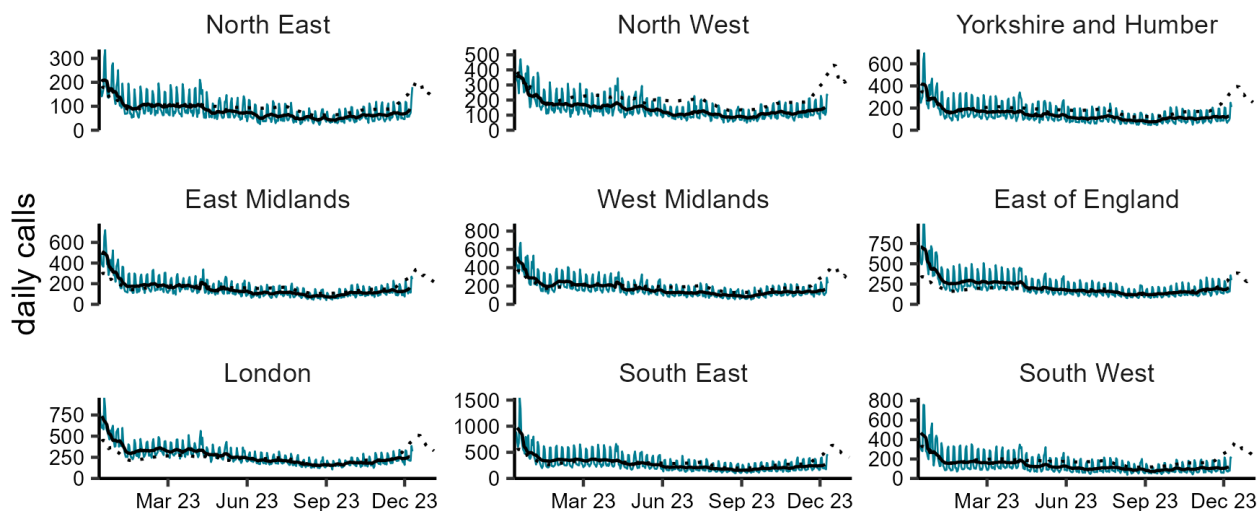
Sore throat NHS 111 calls

Figure 10: 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.



(c)

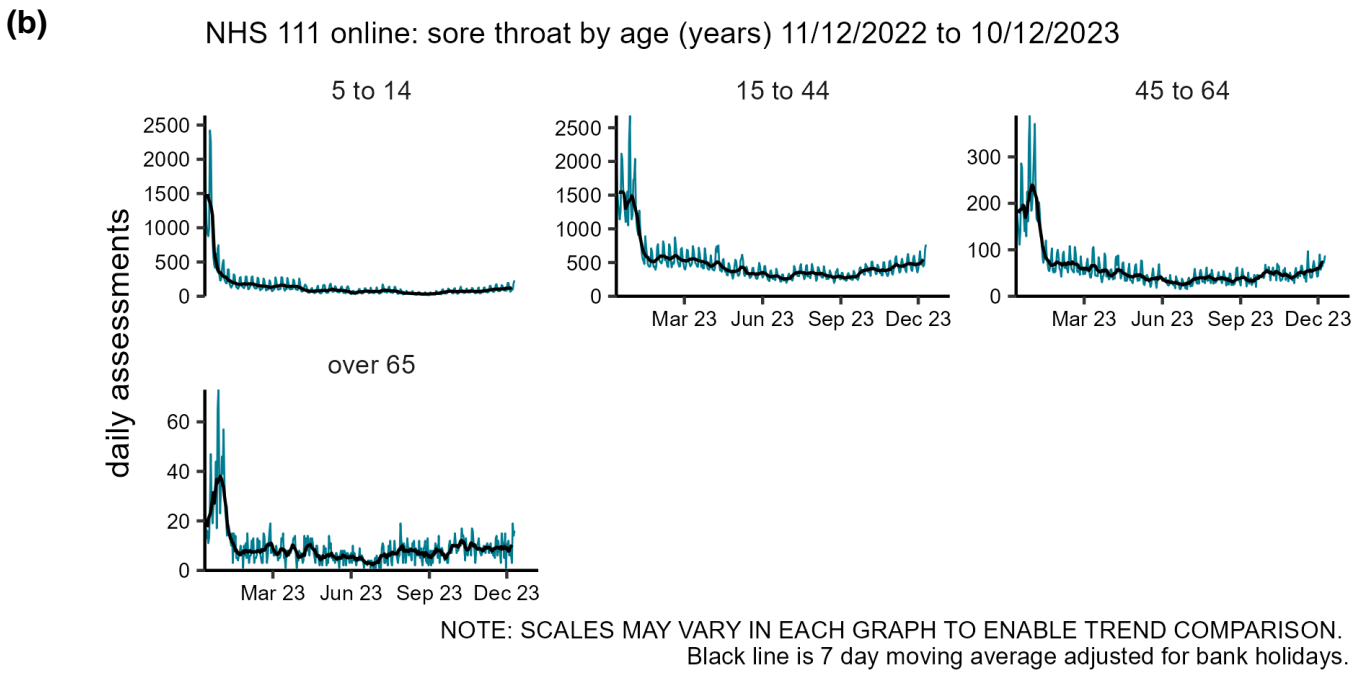
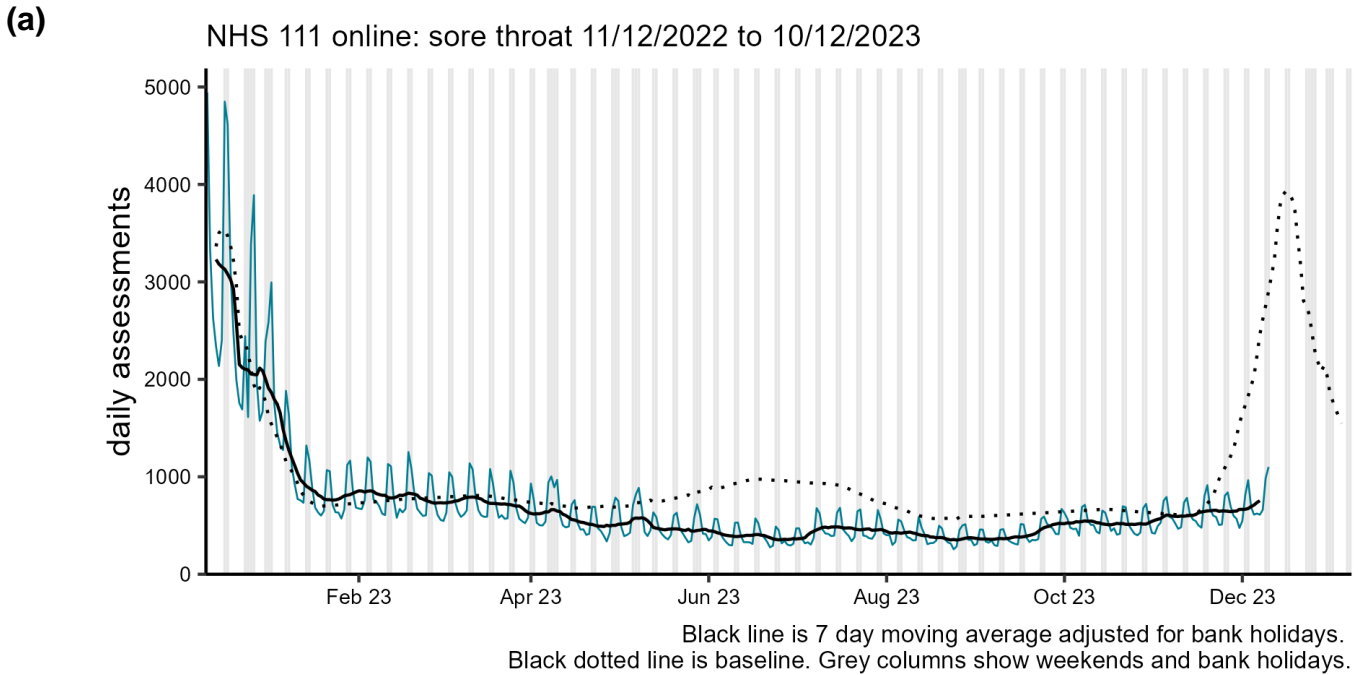
NHS 111 calls: sore throat by UKHSA region 11/12/2022 to 10/12/2023



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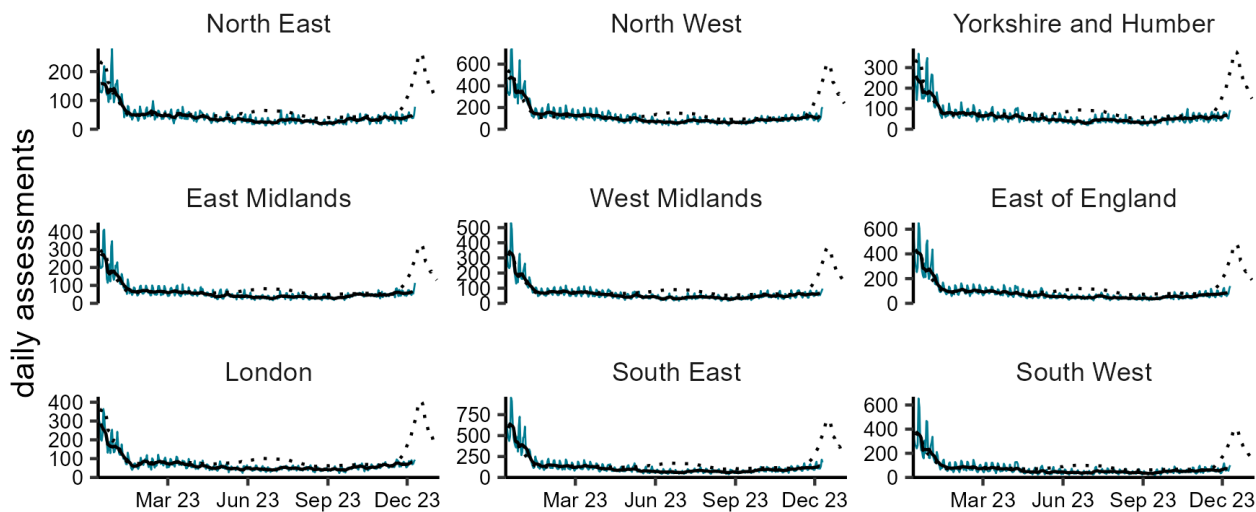
Sore throat NHS 111 online

Figure 11: 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.



(c)

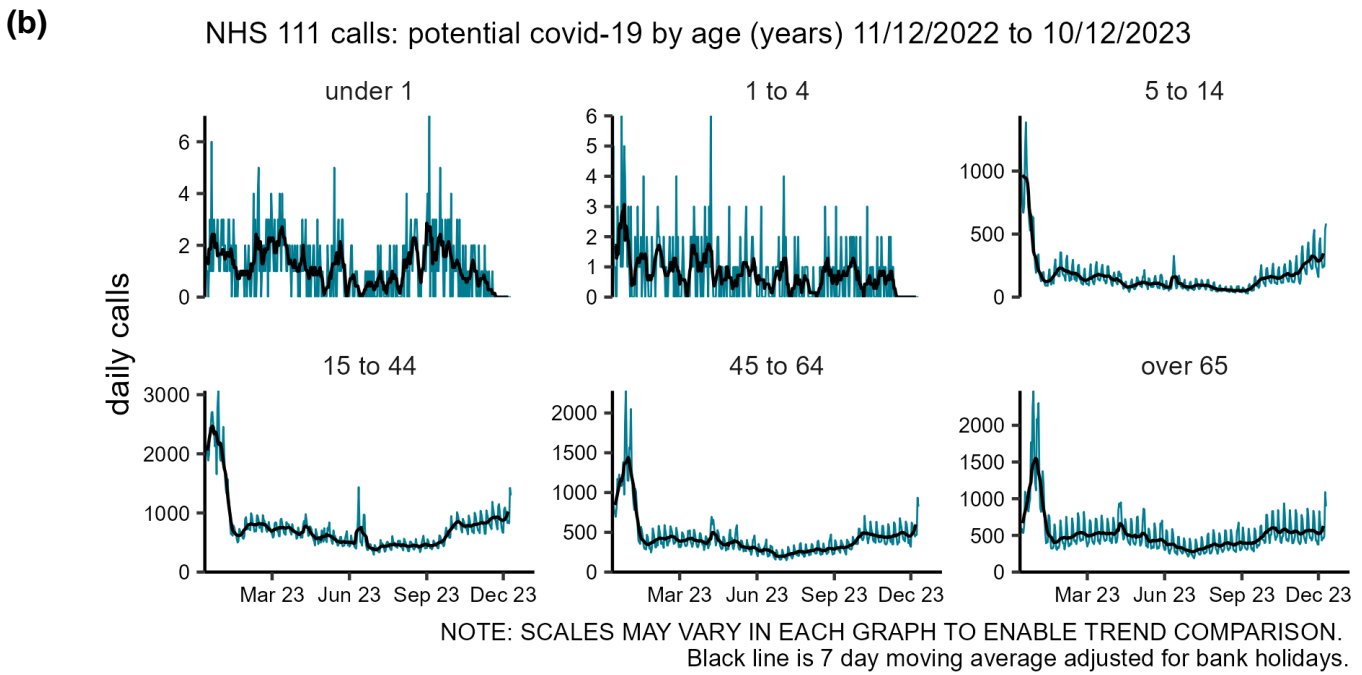
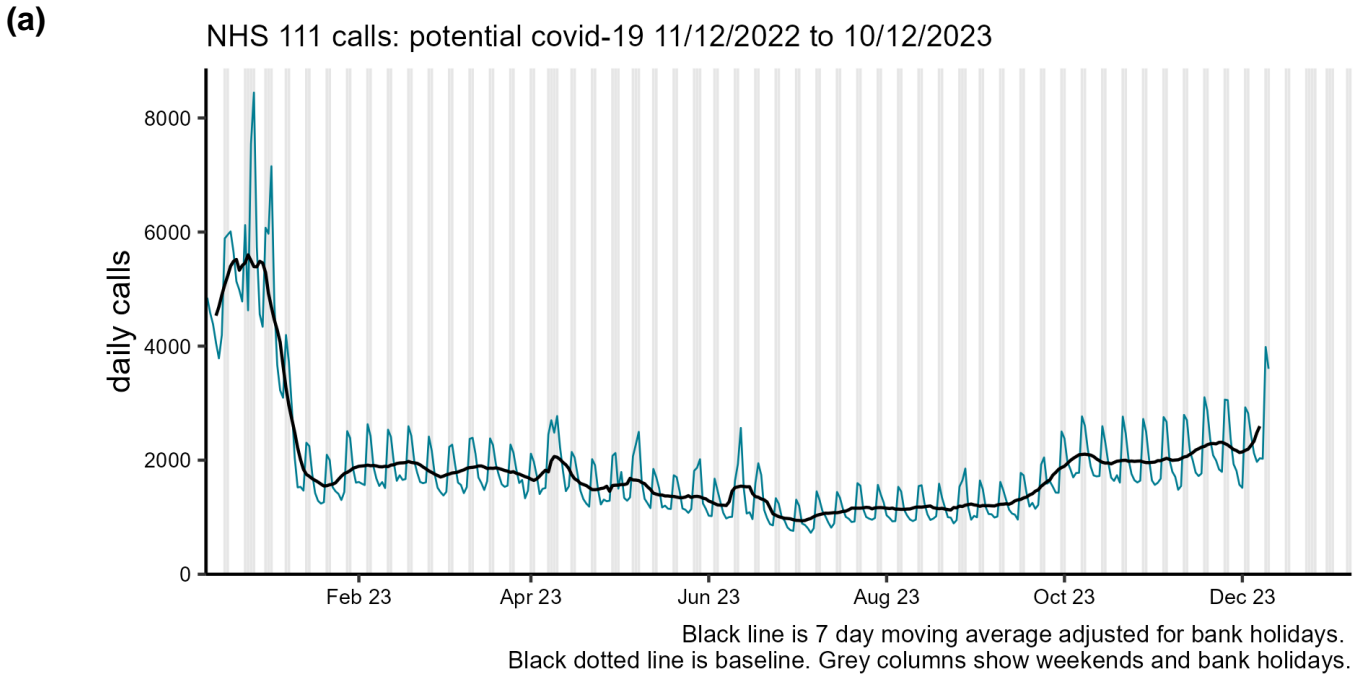
NHS 111 online: sore throat by UKHSA region 11/12/2022 to 10/12/2023



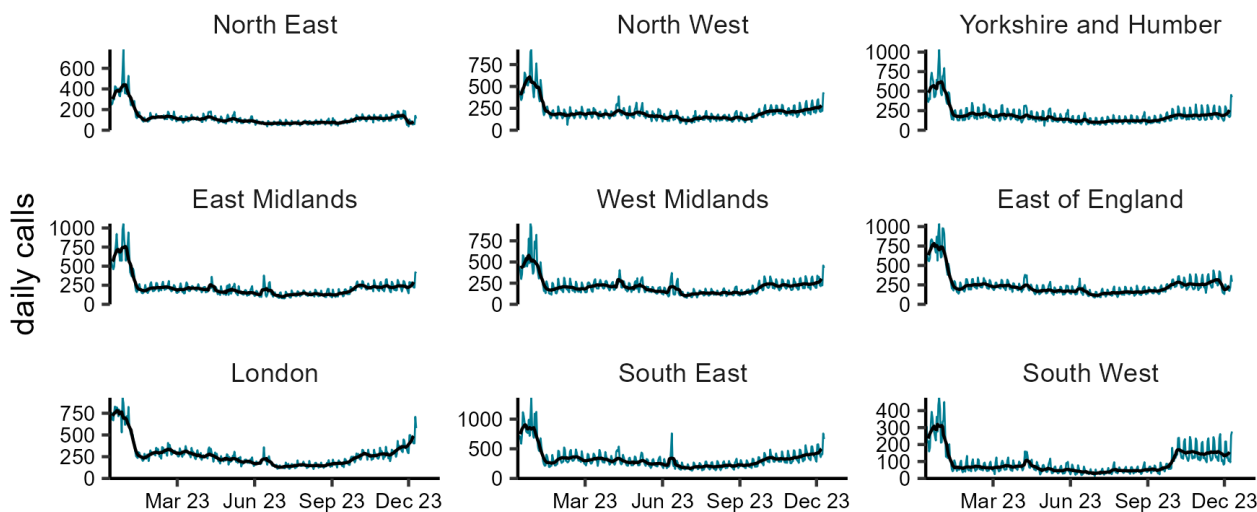
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
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Black dotted line is baseline.

Potential COVID-19 NHS 111 calls

Figure 12: 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.



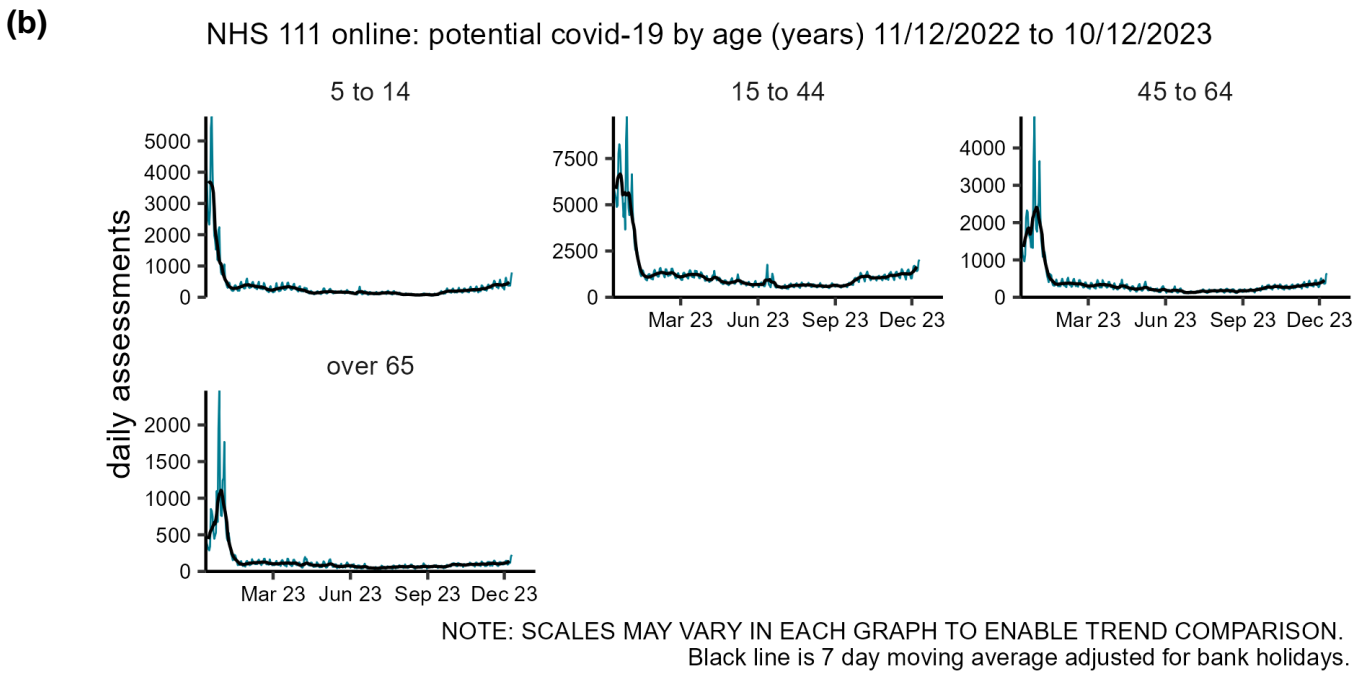
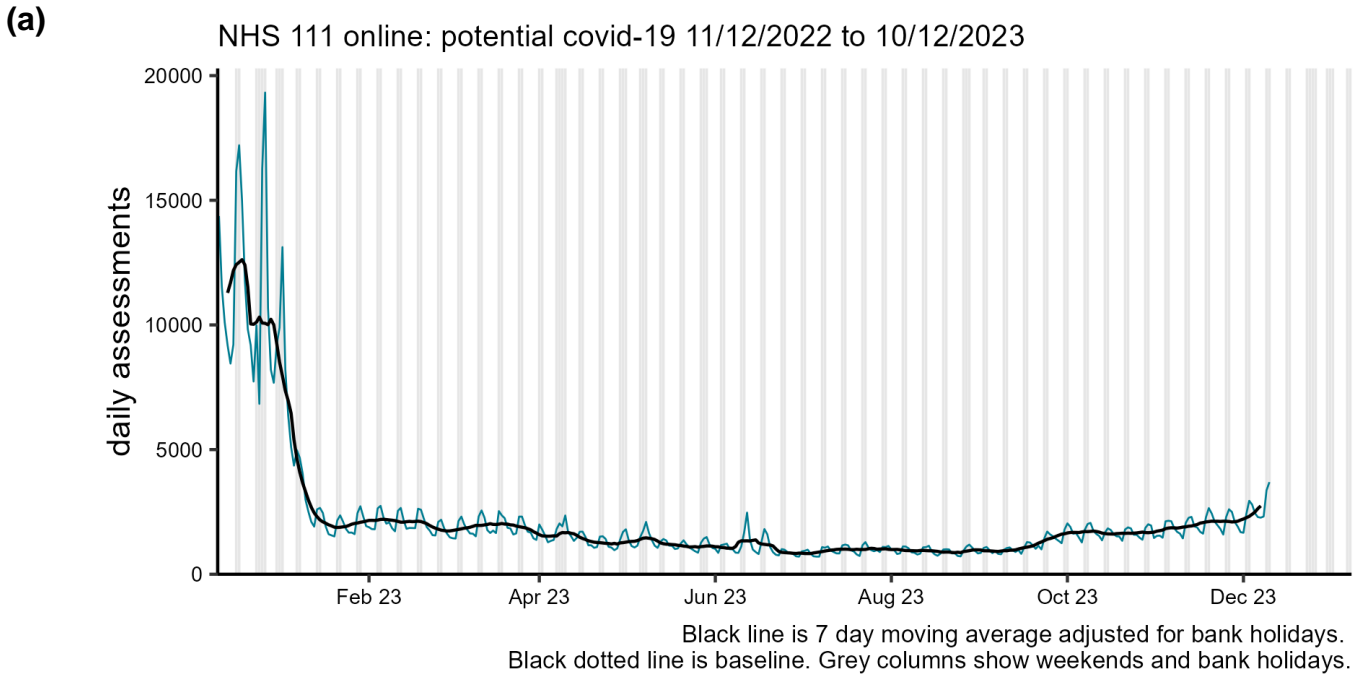
(c) NHS 111 calls: potential covid-19 by UKHSA region 11/12/2022 to 10/12/2023



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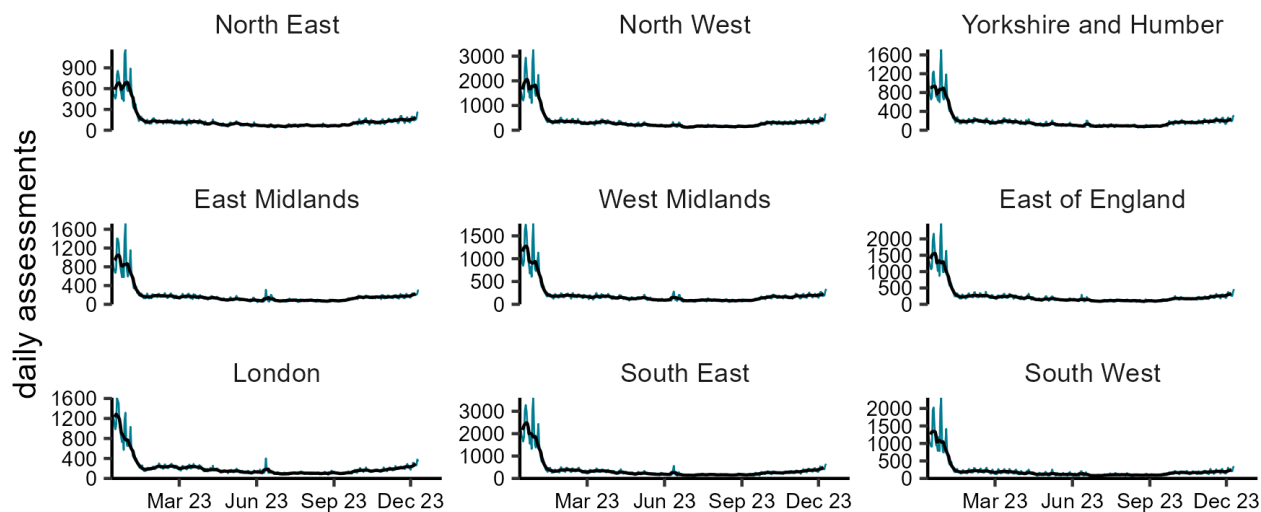
Potential COVID-19 NHS 111 online

Figure 13: 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.



(c)

NHS 111 online: potential covid-19 by UKHSA region 11/12/2022 to 10/12/2023

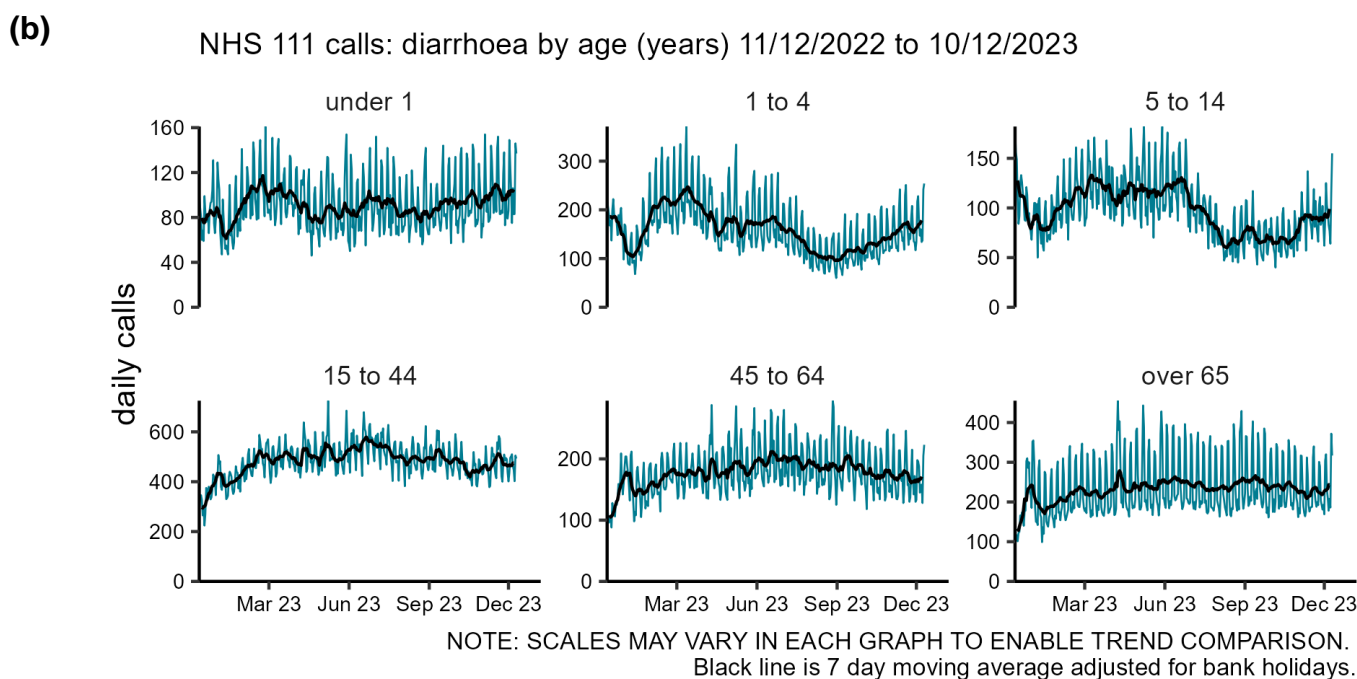
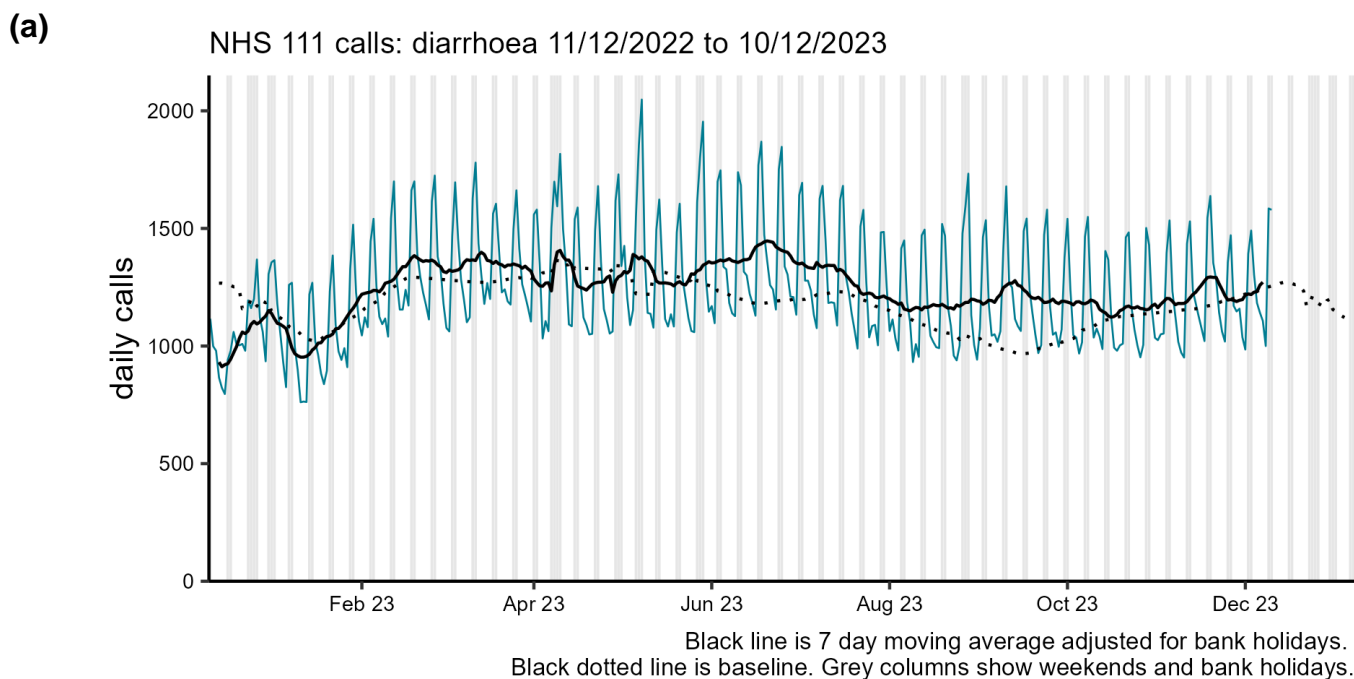


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Gastrointestinal conditions

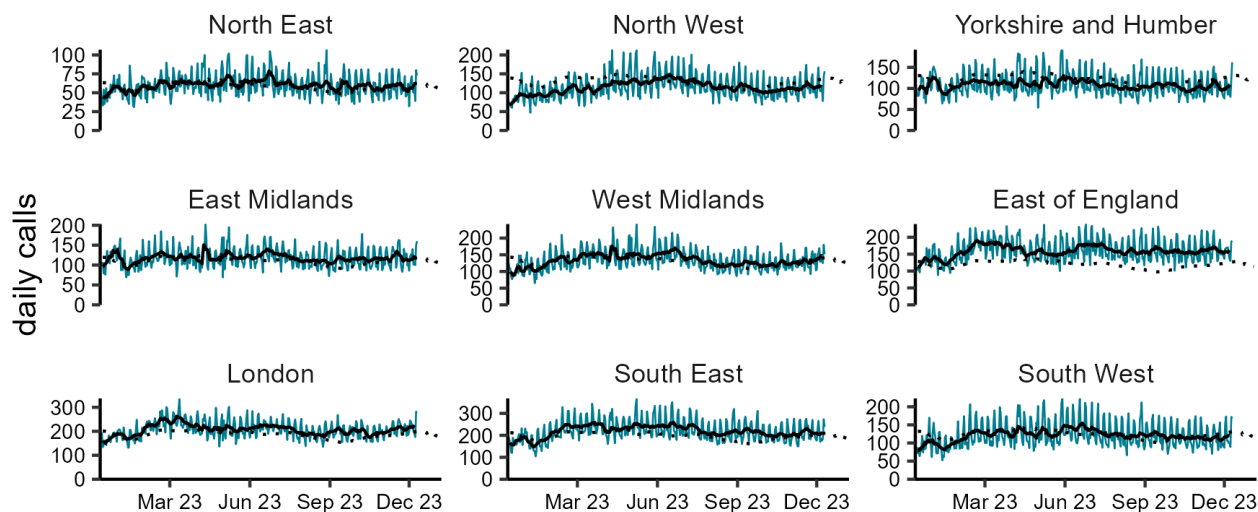
Diarrhoea NHS 111 calls

Figure 14: 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.



(c)

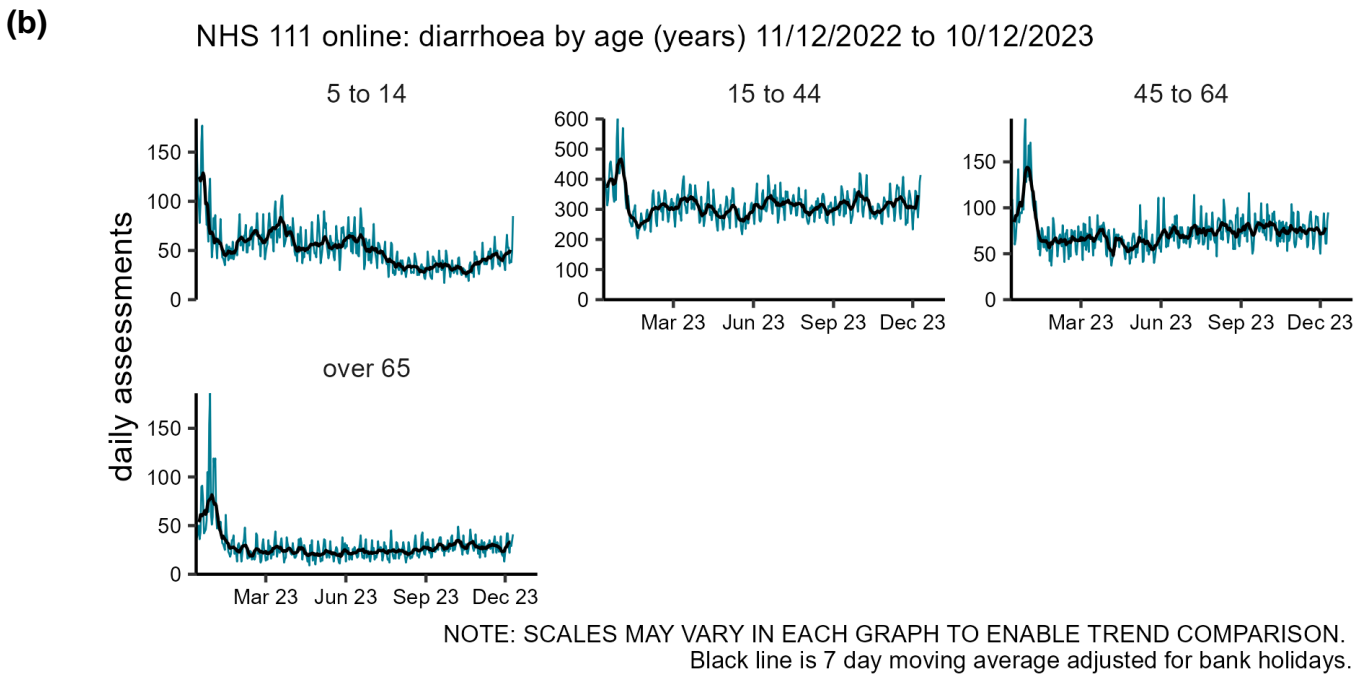
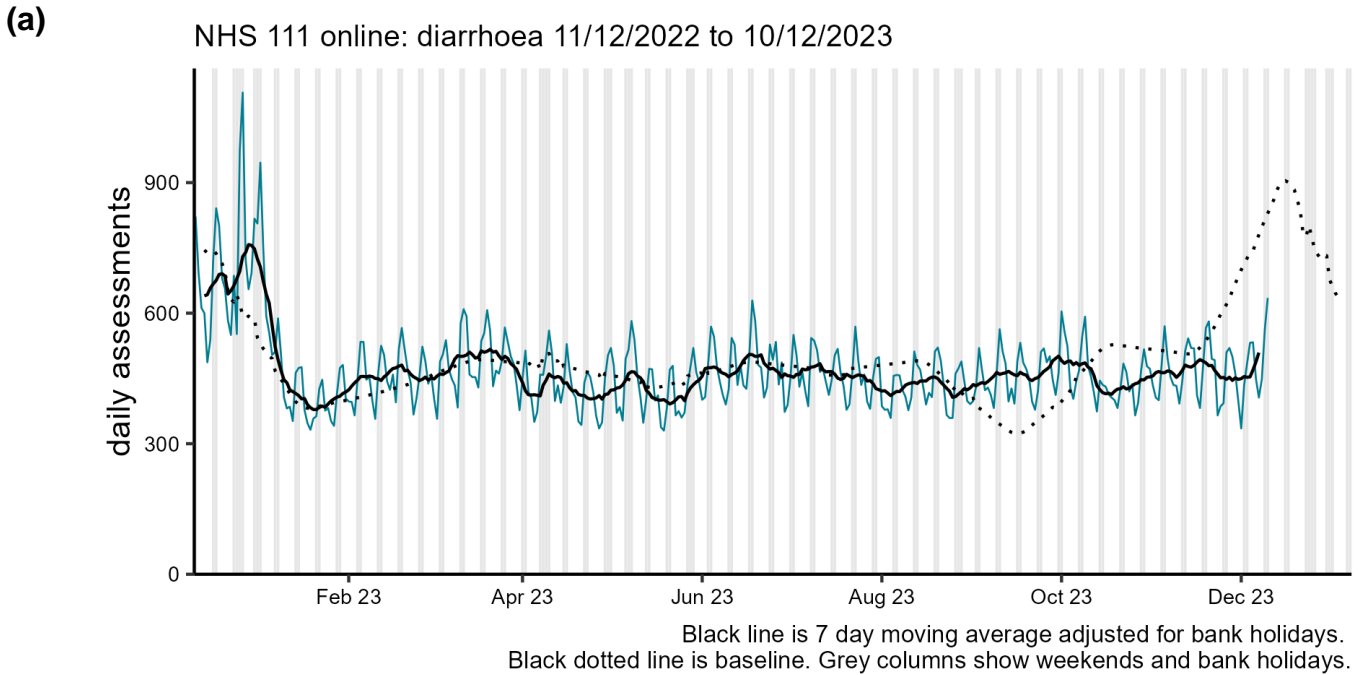
NHS 111 calls: diarrhoea by UKHSA region 11/12/2022 to 10/12/2023



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

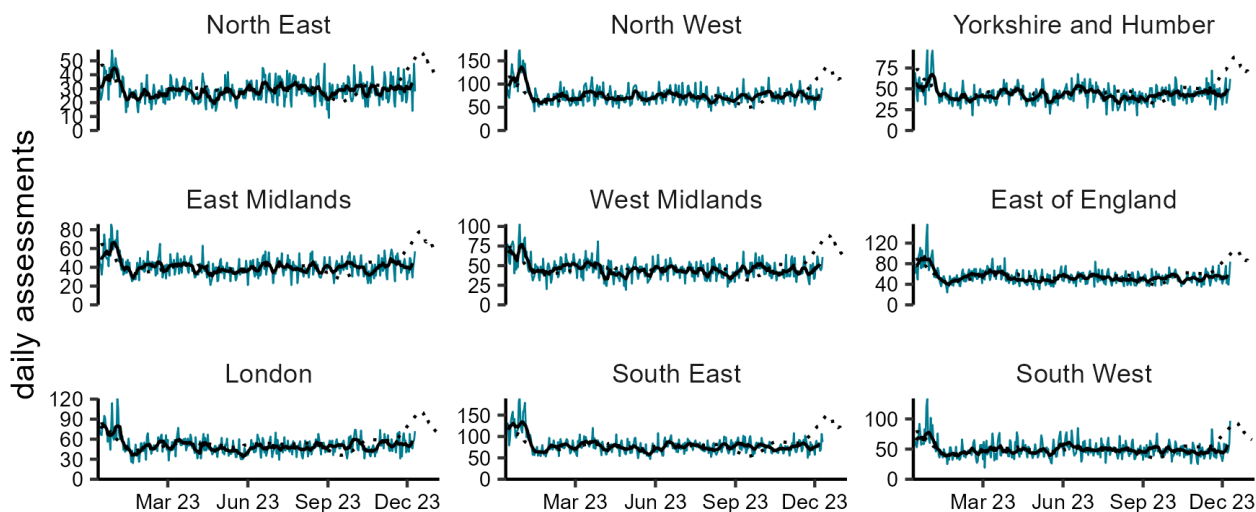
Diarrhoea NHS 111 online

Figure 15: 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.



(c)

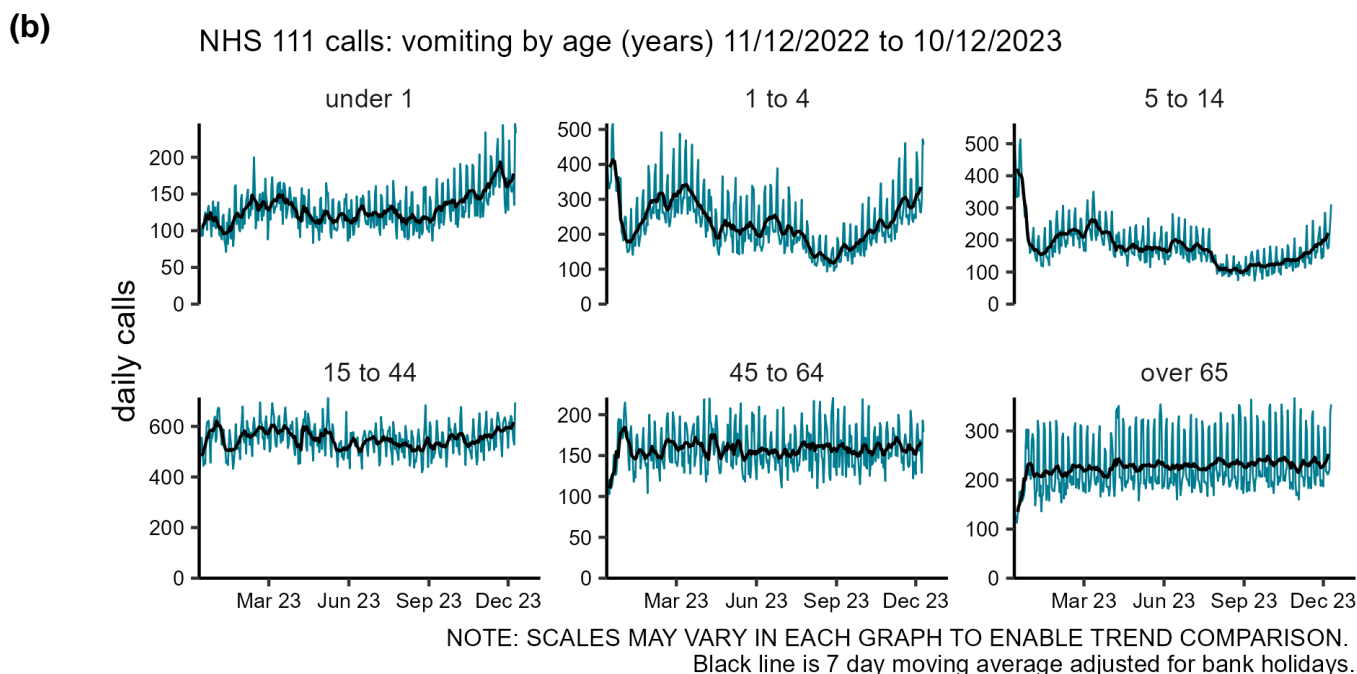
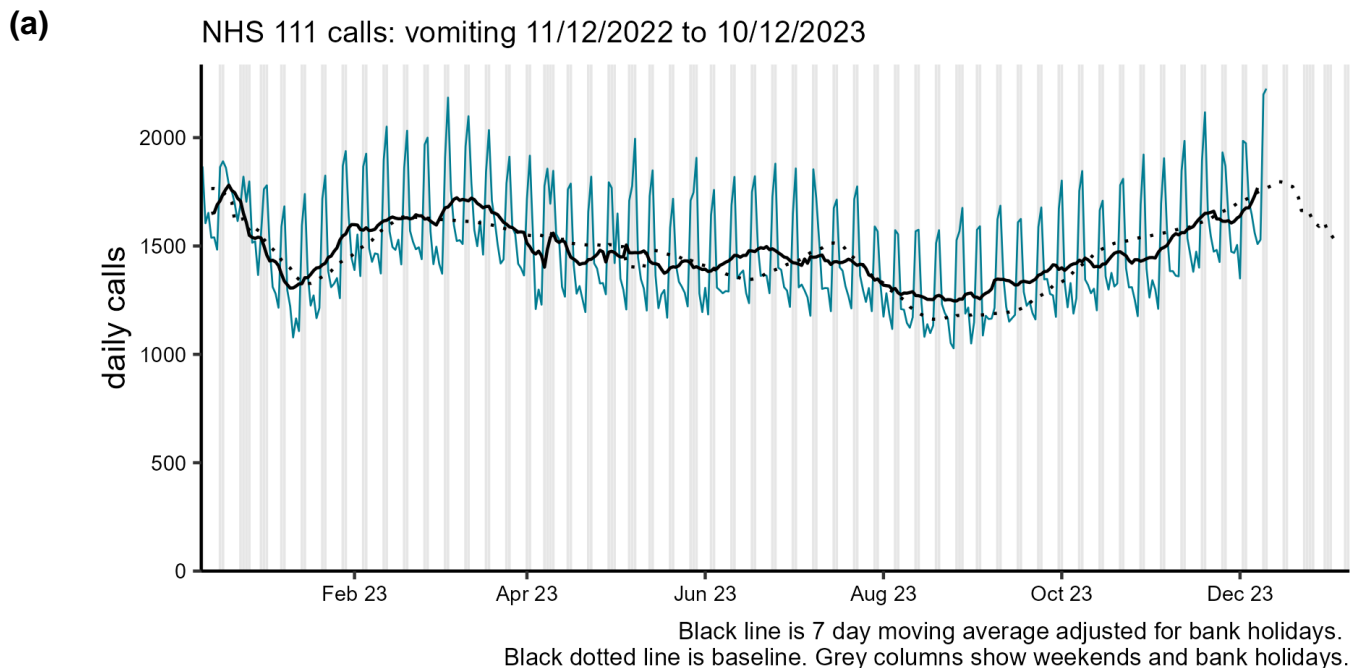
NHS 111 online: diarrhoea by UKHSA region 11/12/2022 to 10/12/2023



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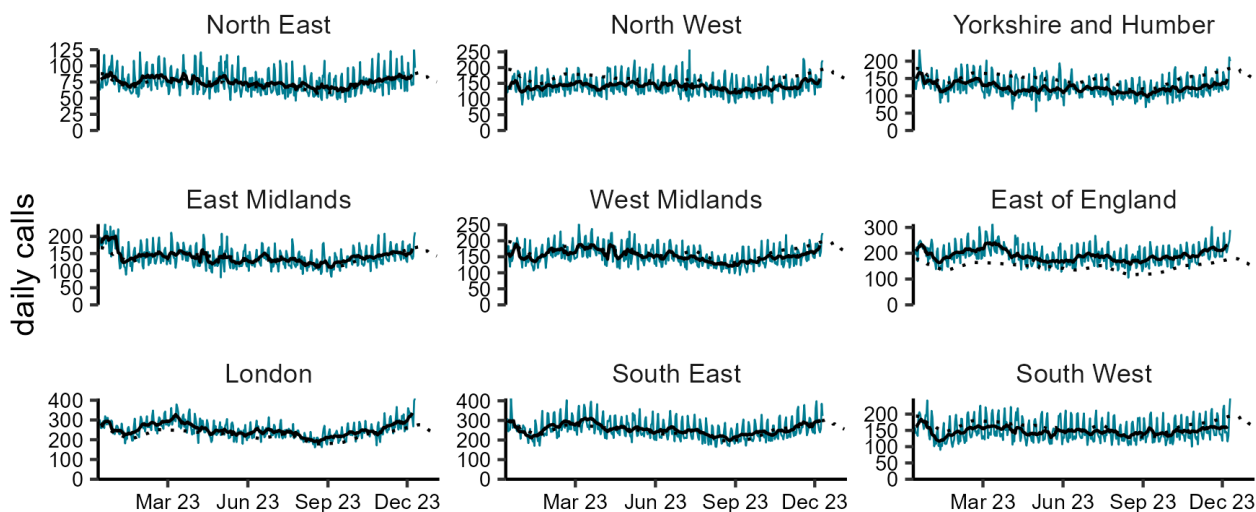
Vomiting NHS 111 calls

Figure 16: 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.



(c)

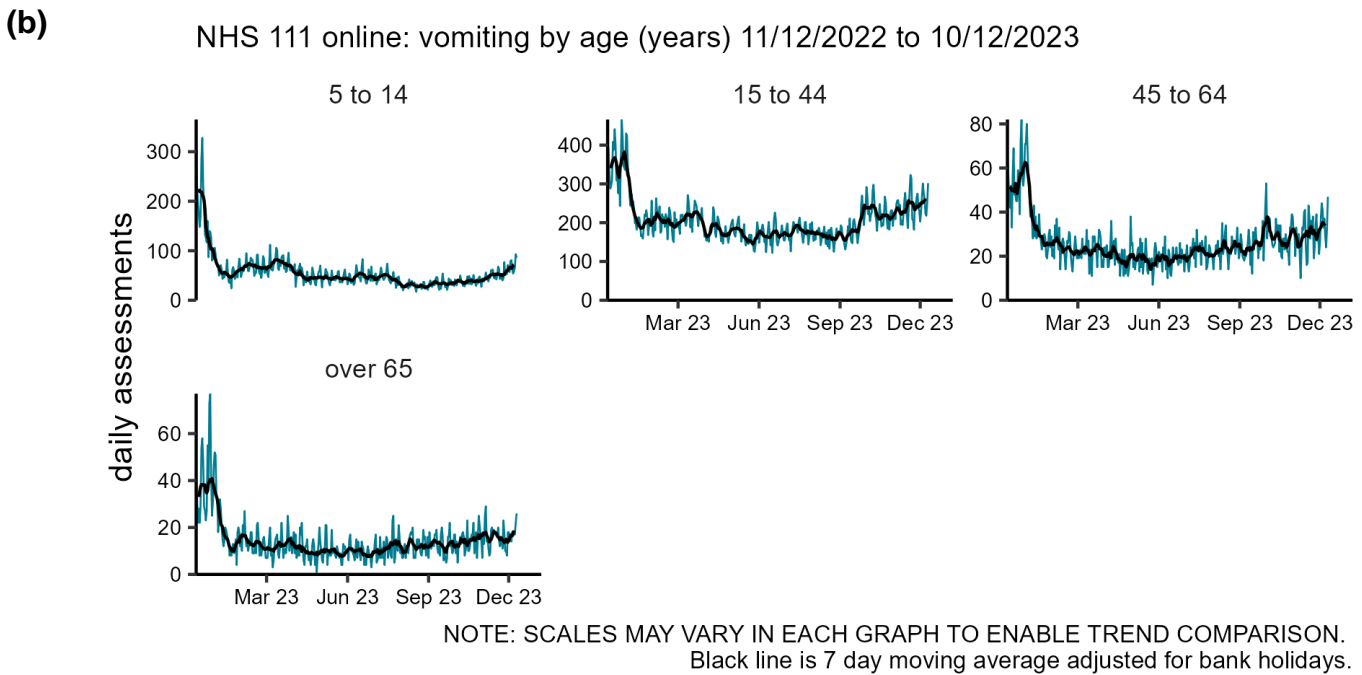
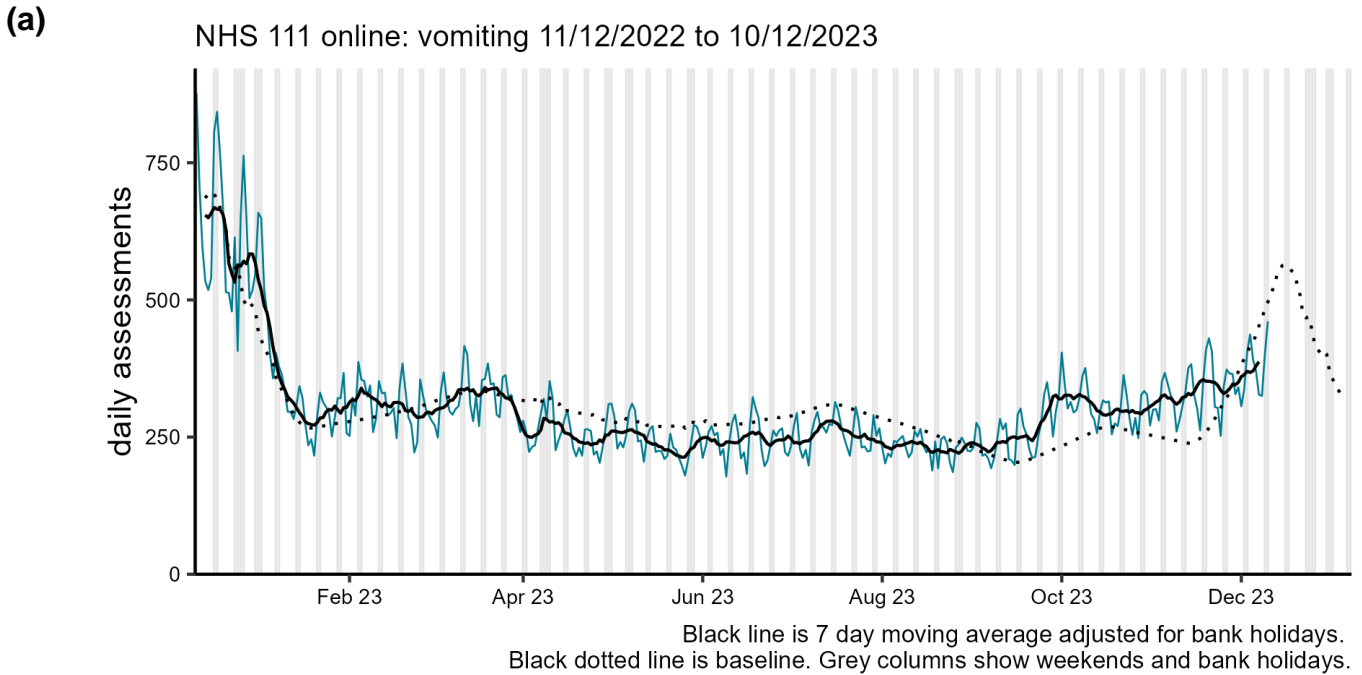
NHS 111 calls: vomiting by UKHSA region 11/12/2022 to 10/12/2023



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
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Black dotted line is baseline.

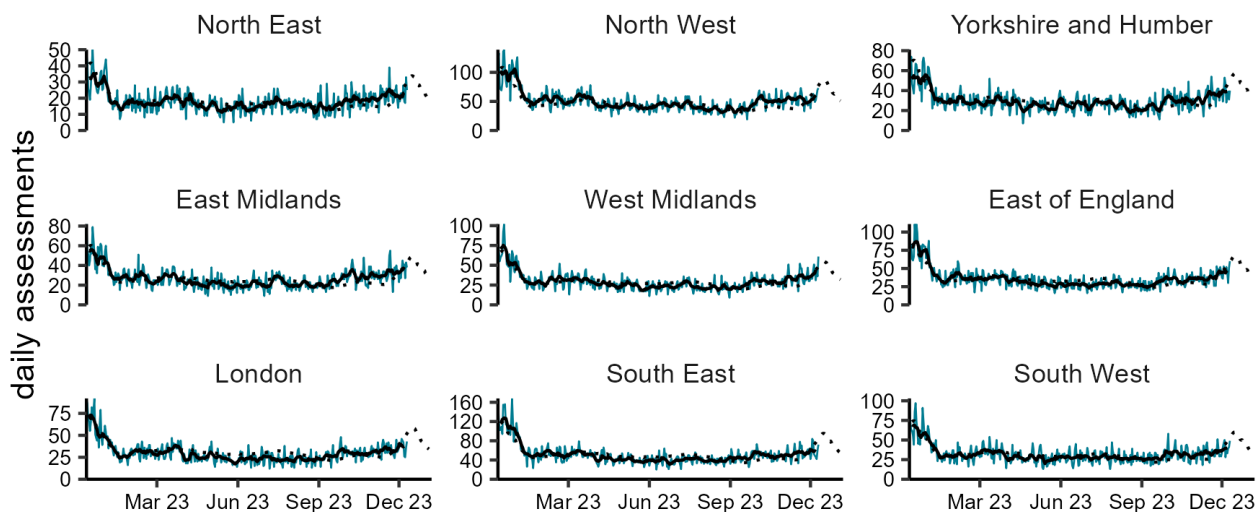
Vomiting NHS 111 online

Figure 17: 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.



(c)

NHS 111 online: vomiting by UKHSA region 11/12/2022 to 10/12/2023



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.

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

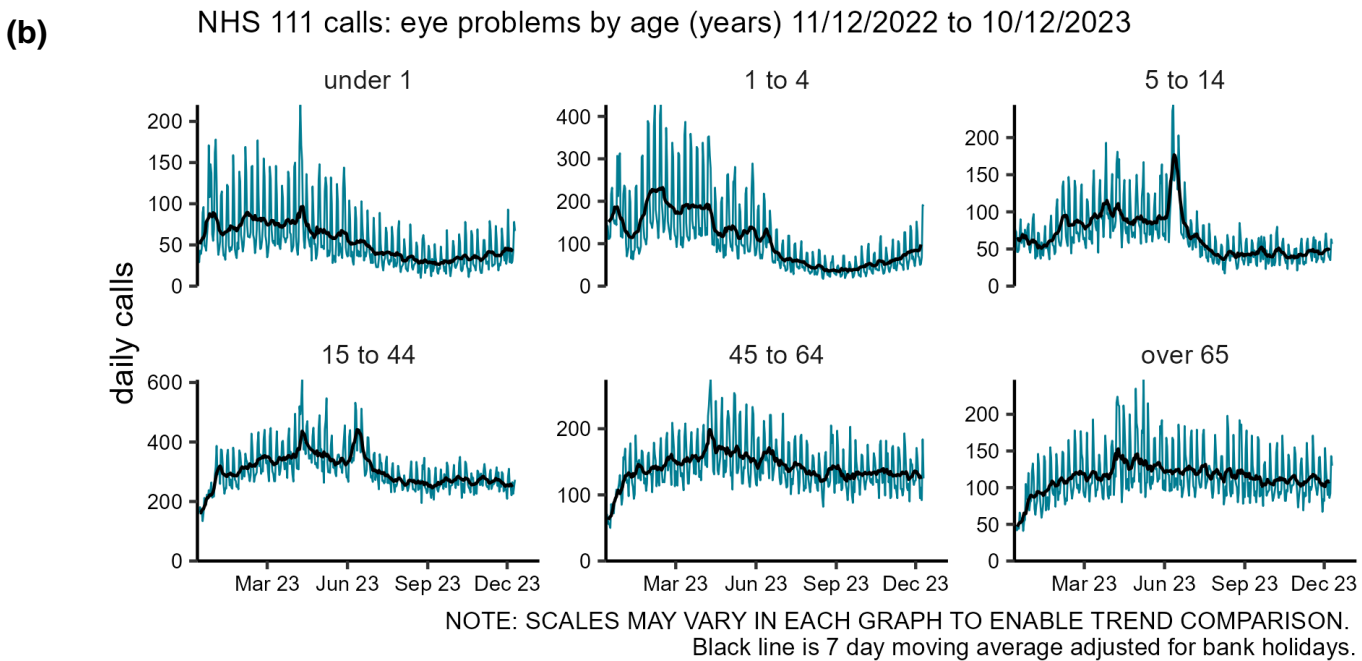
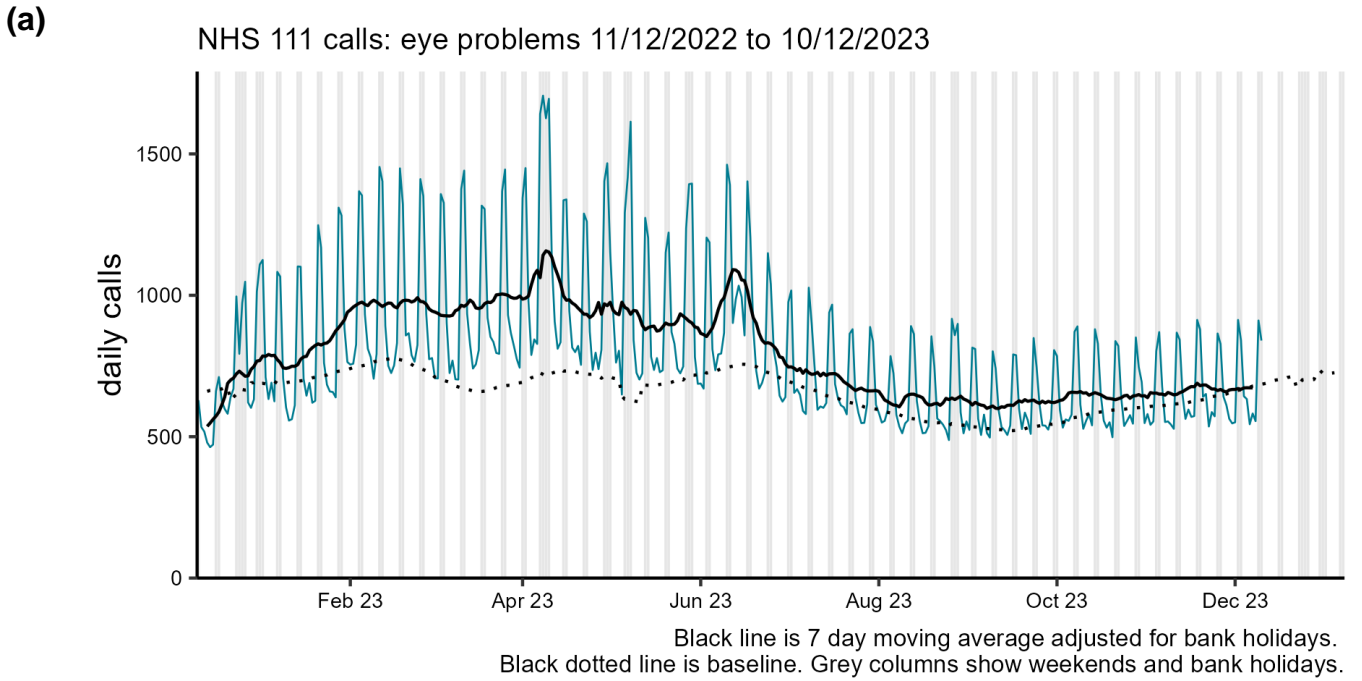
[Heat-Health Alert](#) period: 1 June to 30 September

Highest weather alert level during the current reporting week:

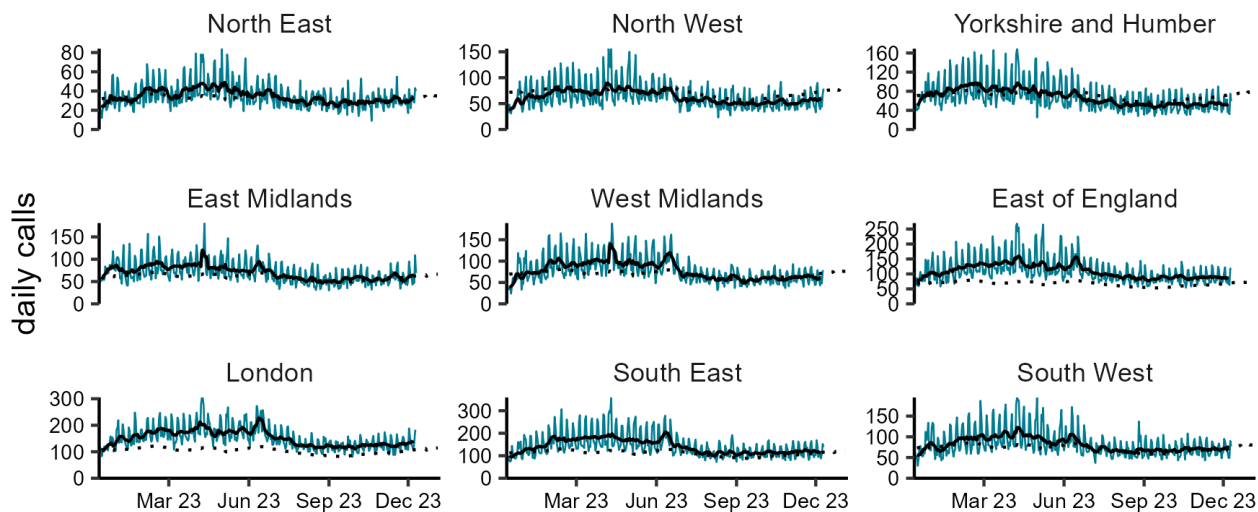
Amber alert (enhanced cold weather response)

Eye problems NHS 111 calls

Figure 18: 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



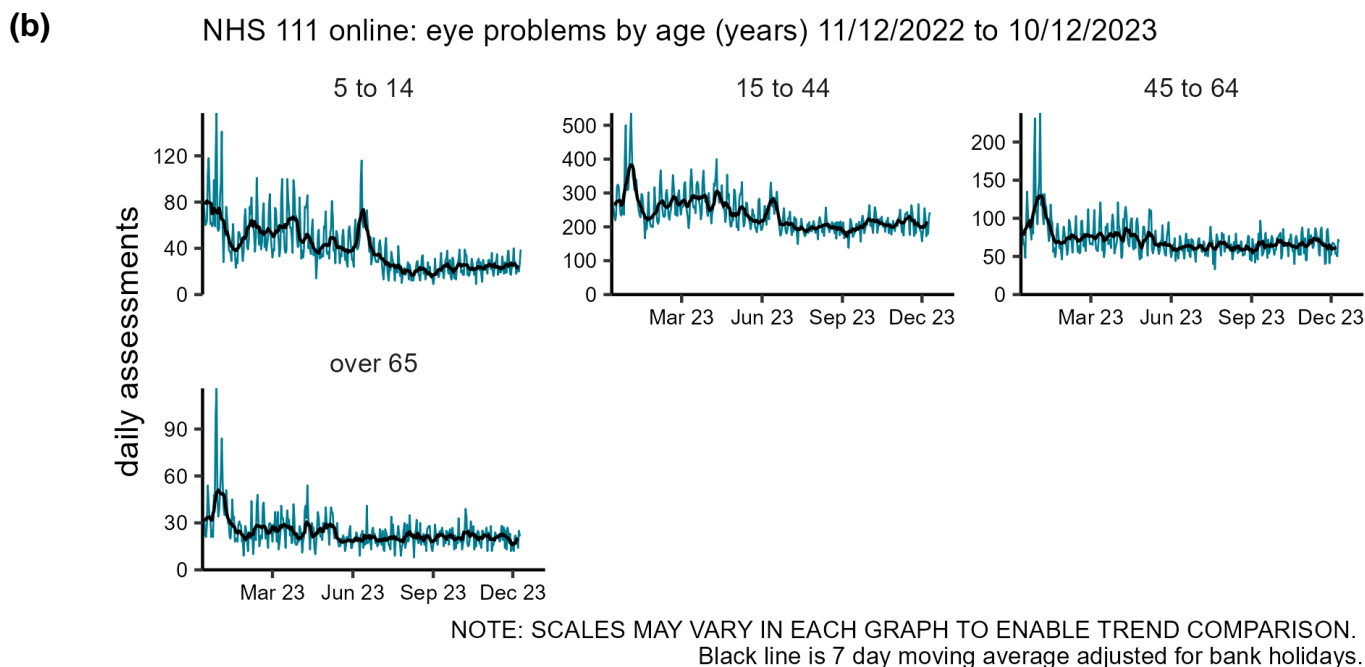
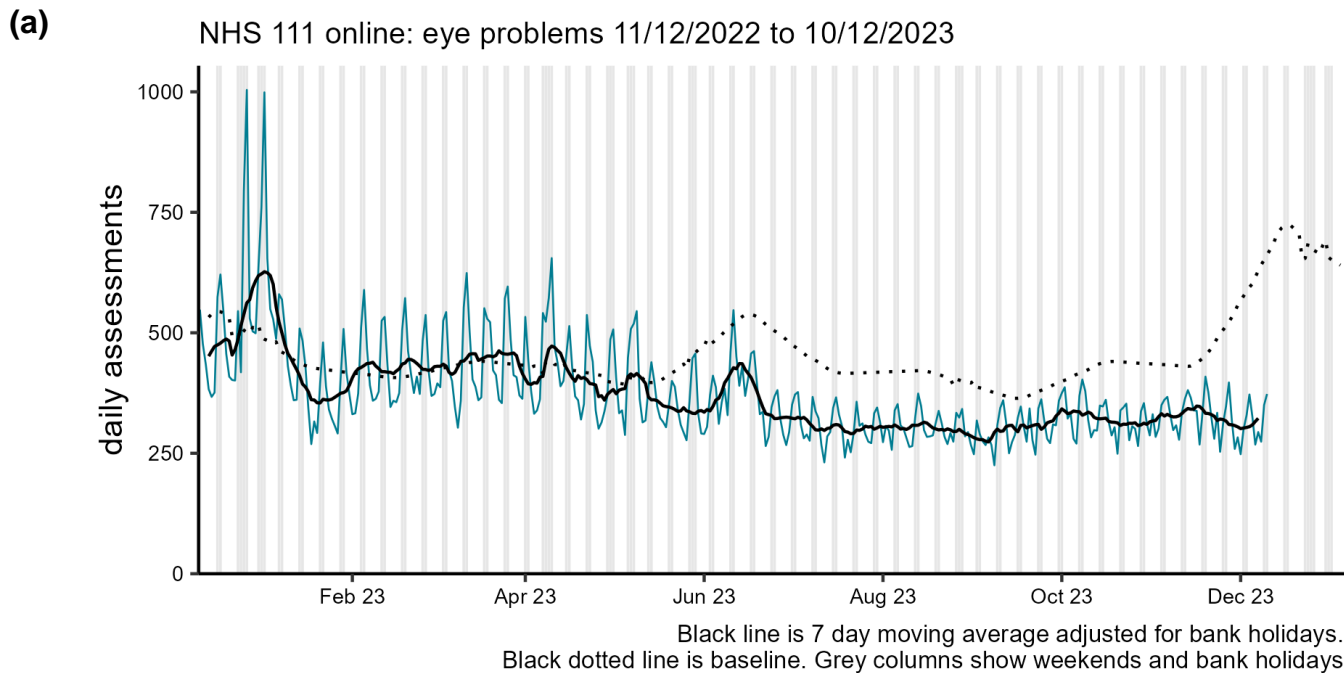
(c) NHS 111 calls: eye problems by UKHSA region 11/12/2022 to 10/12/2023



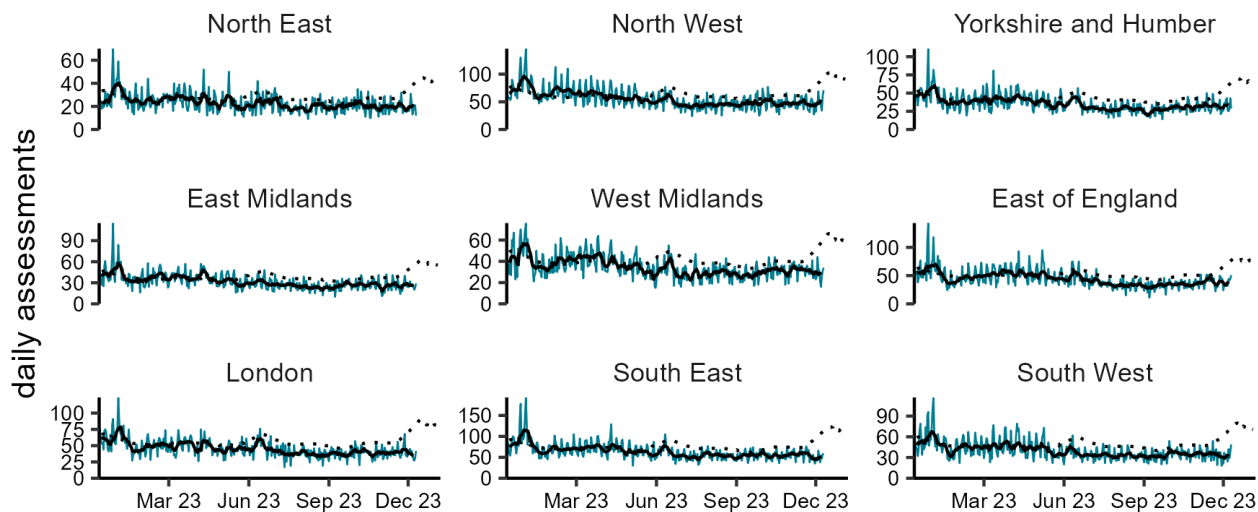
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

Eye problems NHS 111 online

Figure 19: 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.



(c) NHS 111 online: eye problems by UKHSA region 11/12/2022 to 10/12/2023



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.

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
- 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
 - 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 England 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 health secure.

[UKHSA](#) is an executive agency, sponsored by the [Department of Health and Social Care](#).

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

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