



UK Health  
Security  
Agency

# **Emergency Department Syndromic Surveillance System Bulletin (England) 2023 Week 48**

# Key messages

## Data reported to: 3 December 2023

During week 48, ED attendances for acute bronchiolitis decreased in children aged <1 and 1-4 years indicating that seasonal activity has now peaked. Acute respiratory infection attendances decreased and are now at seasonally expected levels. There was an increase in 'impact of cold' attendances during week 48 with attendances currently above seasonally expected levels. Increases were particularly seen in adults aged 65 years and over. These increases are in line with the recent 'amber' Cold Weather Health Alert in place over parts of England.

**Please note:** remodelled EDSSS pneumonia baselines have been refitted to pneumonia surveillance data during week 48 2023 to account for post-COVID-19 changes in health care seeking behaviour.

## 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 attendances ( <b>Figure 1</b> )	Decreasing	No baseline
COVID-19-like ( <b>Figure 2</b> )	Increasing	No baseline
Acute respiratory infections ( <b>Figure 3</b> )	Decreasing	Similar to baseline
Acute bronchiolitis or bronchitis ( <b>Figure 4</b> )	Decreasing	Below baseline
Influenza-like illness ( <b>Figure 5</b> )	No trend	Similar to baseline
Pneumonia ( <b>Figure 6</b> )	No trend	Similar to baseline
Asthma ( <b>Figure 7</b> )	No trend	Above baseline
Gastroenteritis ( <b>Figure 8</b> )	No trend	Below baseline
Cardiac ( <b>Figure 9</b> )	Decreasing	Similar to baseline
Myocardial ischaemia ( <b>Figure 10</b> )	Decreasing	Similar to baseline
Acute alcohol intoxication ( <b>Figure 11</b> )	No trend	Similar to baseline
Mental health ( <b>Figure 12</b> )	Decreasing	No baseline
Scarlet fever ( <b>Figure 13</b> )	Increasing	Similar to baseline
Impact of cold ( <b>Figure 14</b> )	Increasing	Above baseline

<sup>1</sup> 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) emergency department 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 ED data are analysed and reported here, to identify and describe trends for a variety of syndromic indicators:

- syndromic indicators include groupings such as acute respiratory tract infections, gastroenteritis and myocardial ischaemia
- syndromic indicators are based on:
  - the primary diagnosis for each attendance
  - other diagnoses may be recorded, but are not used for indicator grouping
  - diagnoses are based on signs/symptoms (not laboratory confirmed)
- **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 **Notes and caveats**

Previous weekly bulletins from this system are available [here](#).

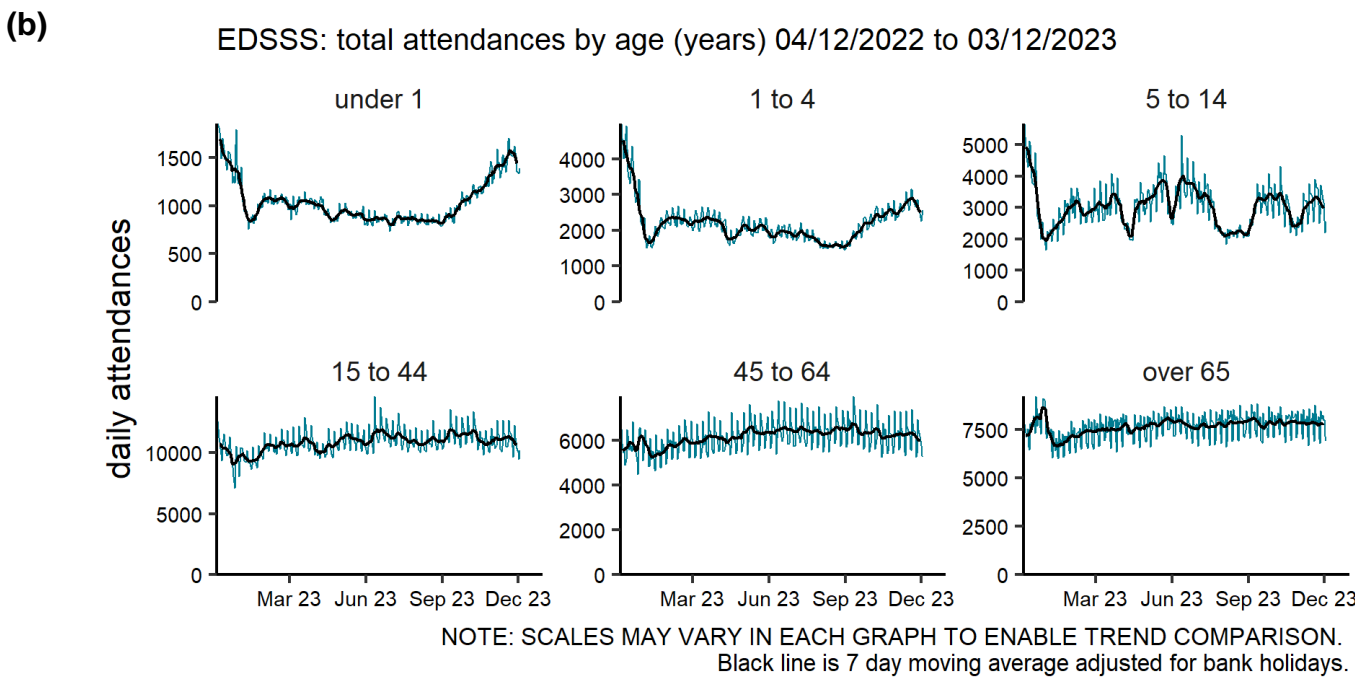
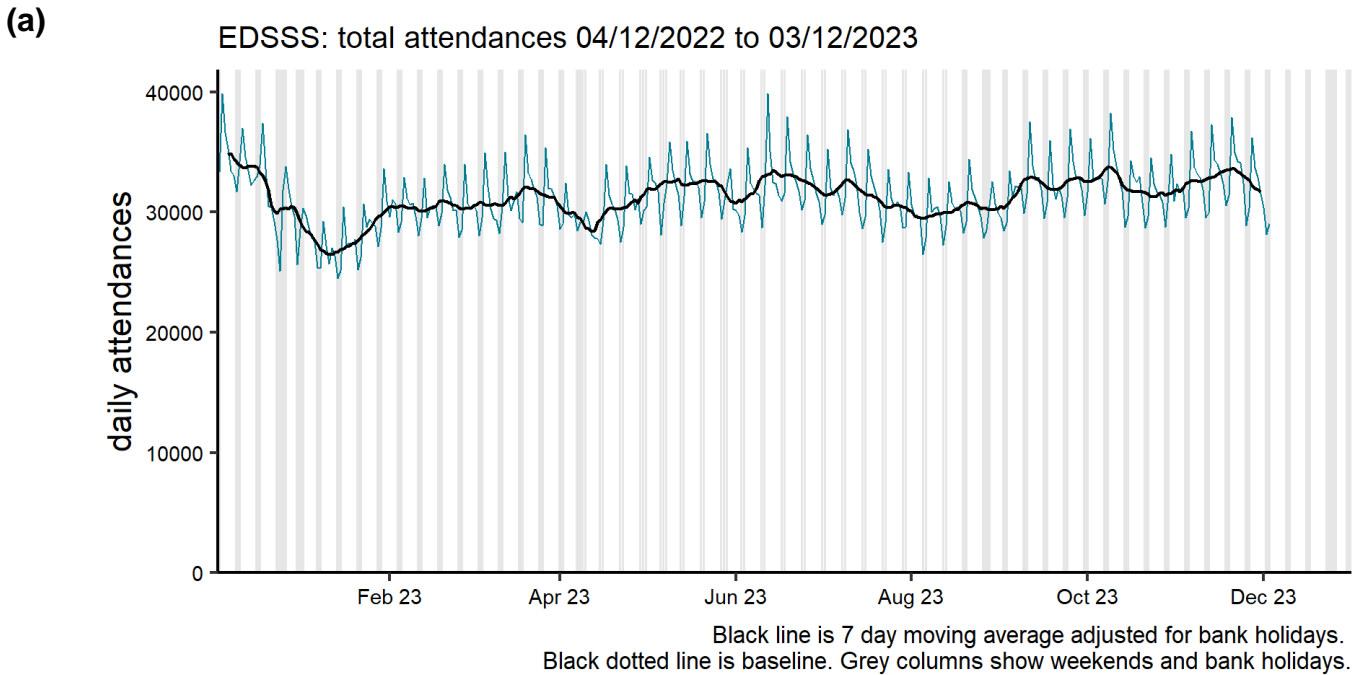
## Data quality issues of note this week

No issues identified. See **Table 2** and **Table 3** for the numbers of EDs included this week.

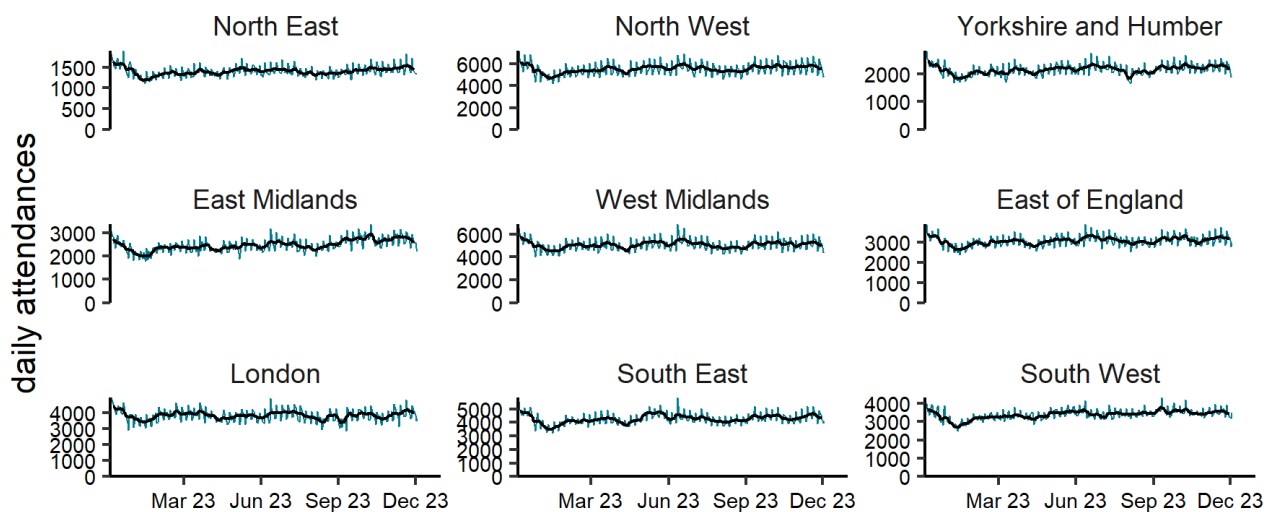
Please note that remodelled EDSSS pneumonia baselines have been refitted to pneumonia surveillance data during week 48 2023 to account for post-COVID-19 changes in health care seeking behaviour.

# Total attendances

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



(c) EDSSS: total attendances by UKHSA region 04/12/2022 to 03/12/2023



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 emergency department (ED) attendances and number with a diagnosis code included in surveillance each day during the most recent week.**

Date	Total attendances <sup>2</sup>	Diagnoses included <sup>2</sup>
27 November 2023	36,191	22,607
28 November 2023	33,650	20,959
29 November 2023	32,878	20,686
30 November 2023	31,495	19,896
01 December 2023	30,388	19,372
02 December 2023	28,181	17,823
03 December 2023	29,054	18,664

**Table 3: The number of EDs in total and in each UKHSA Region included in surveillance each day during the most recent week.**

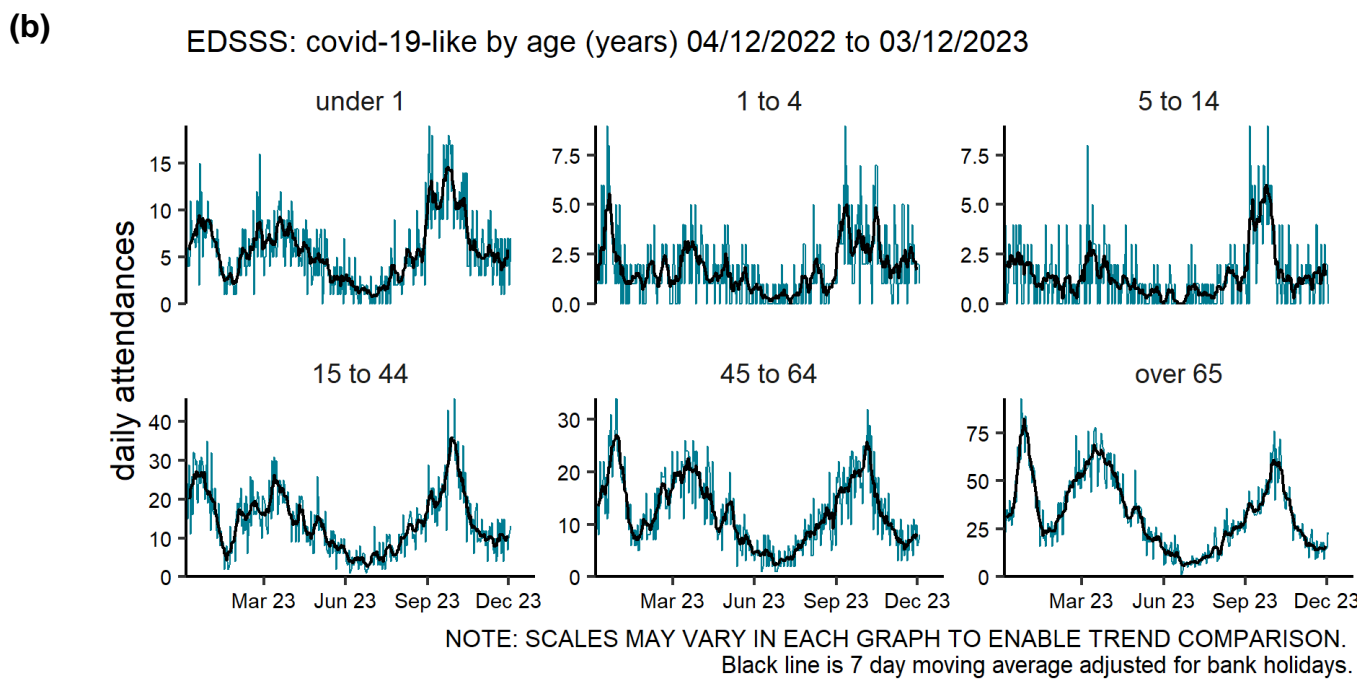
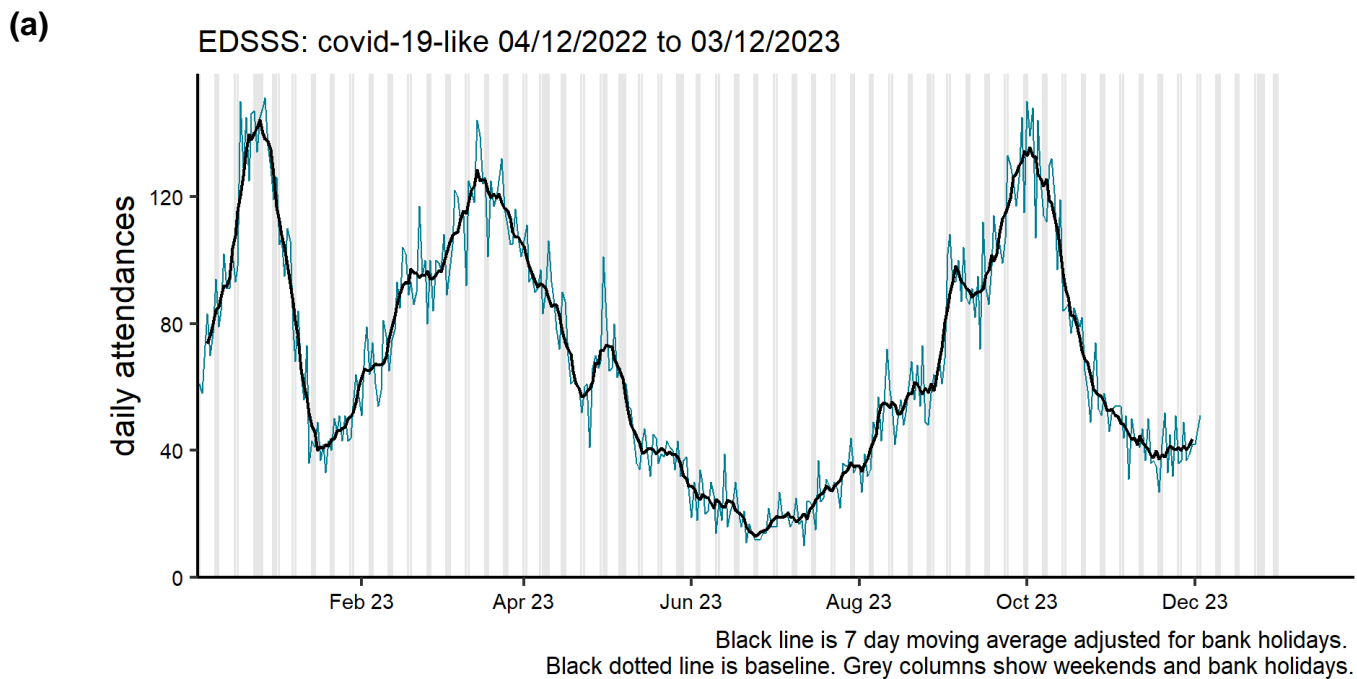
UKHSA Region	Number of EDs <sup>2</sup>
North East	5
North West	24
Yorkshire and Humber	10
West Midlands	20
East Midlands	7
East of England	12
London	14
South West	17
South East	17
Total	126

<sup>2</sup> only attendances from Type 01 EDs meeting the weekly reporting criteria are included in this report, for further details see **Notes and caveats**

# Respiratory conditions

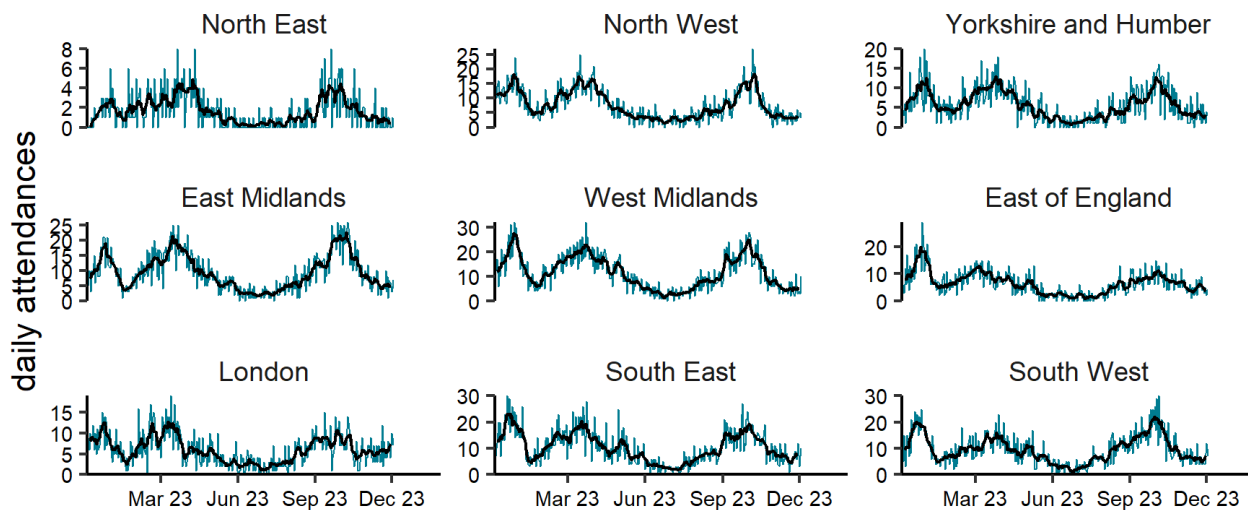
## COVID-19-like

**Figure 2: Daily number of COVID-19-like ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.**



(c)

EDSSS: covid-19-like by UKHSA region 04/12/2022 to 03/12/2023

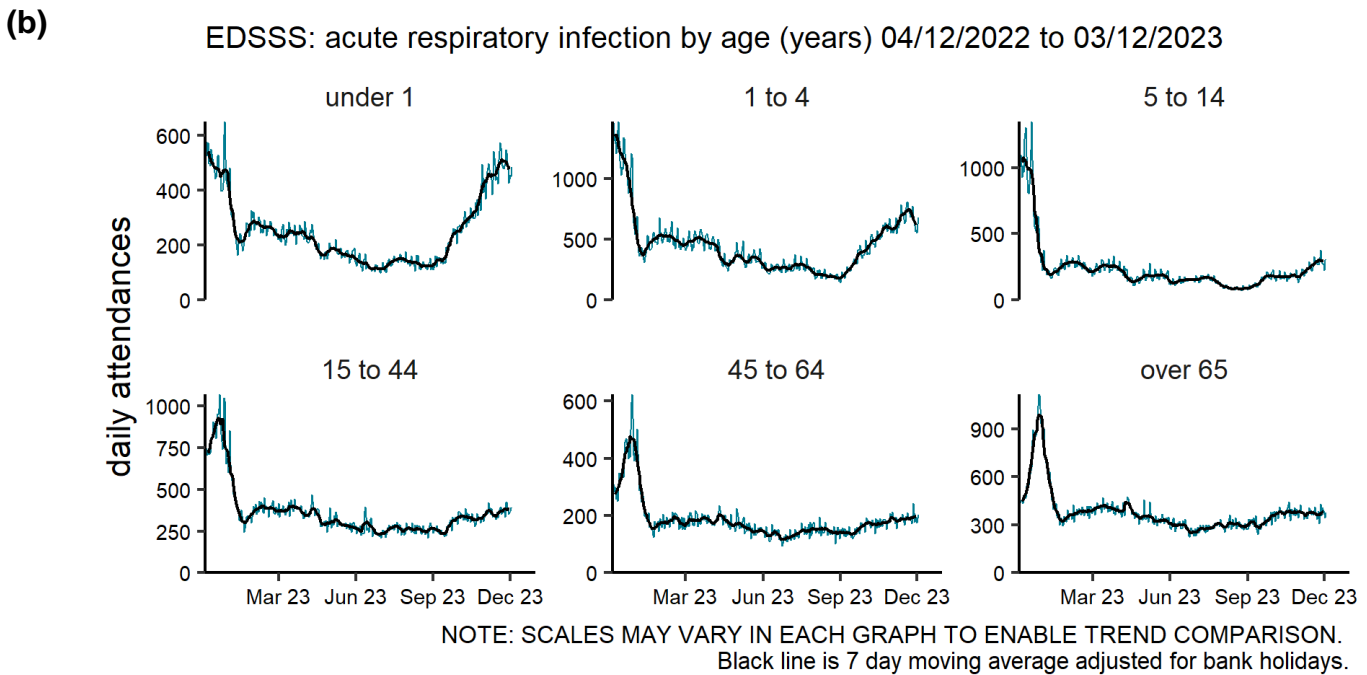
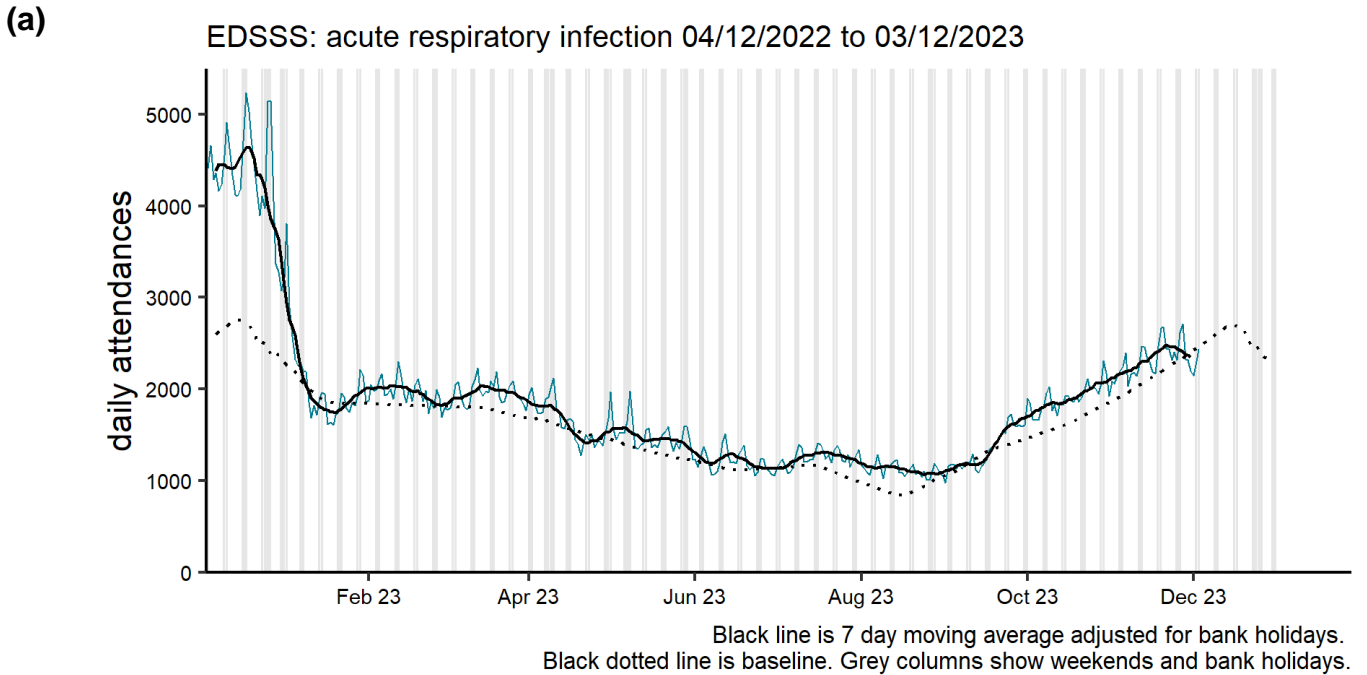


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.  
Black line is 7 day moving average adjusted for bank holidays.  
Black dotted line is baseline.



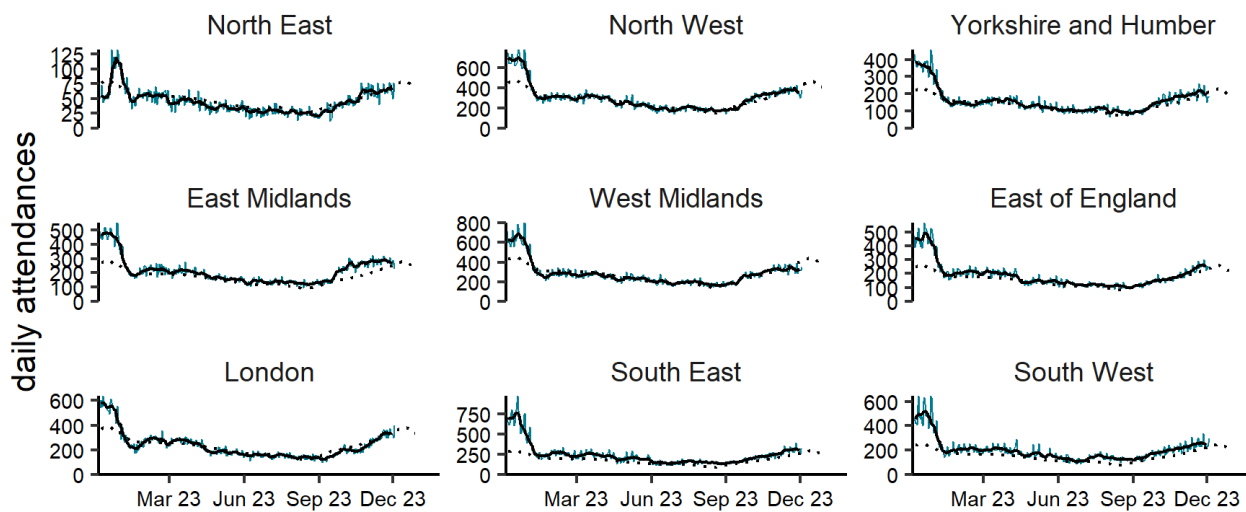
# Acute respiratory infections

**Figure 3: Daily number of acute respiratory infection ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.**



(c)

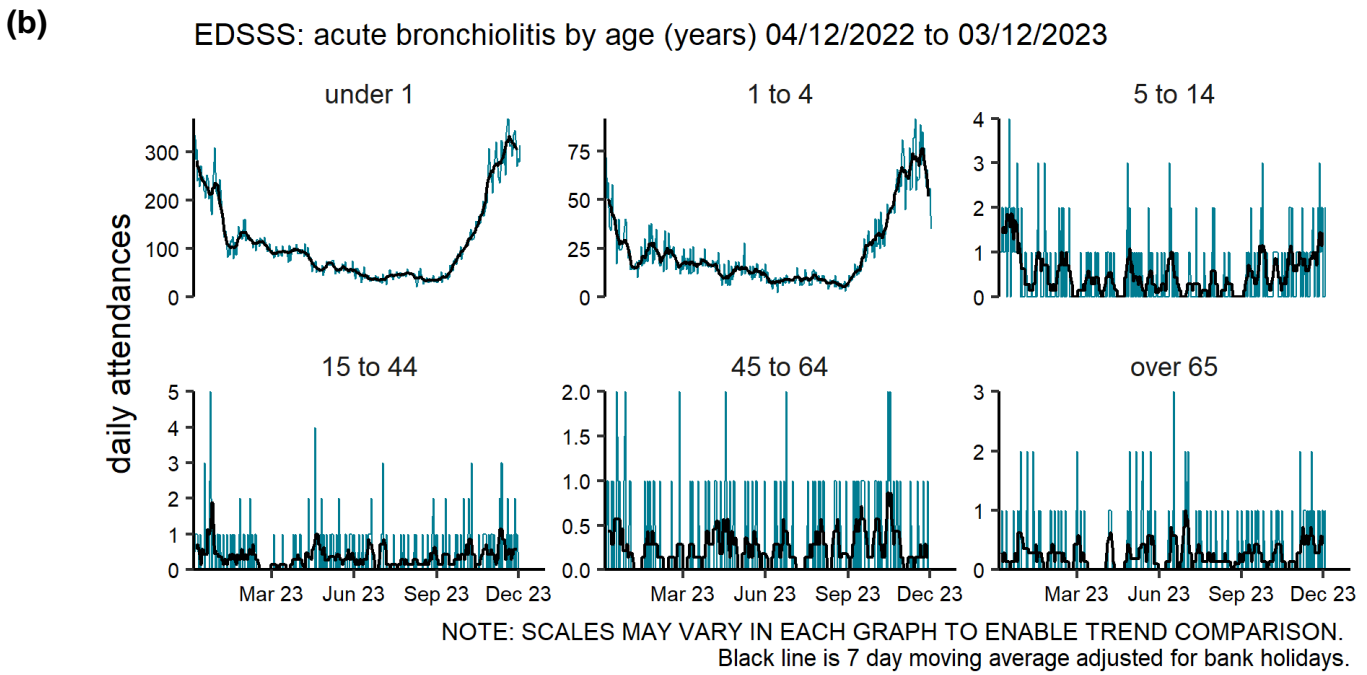
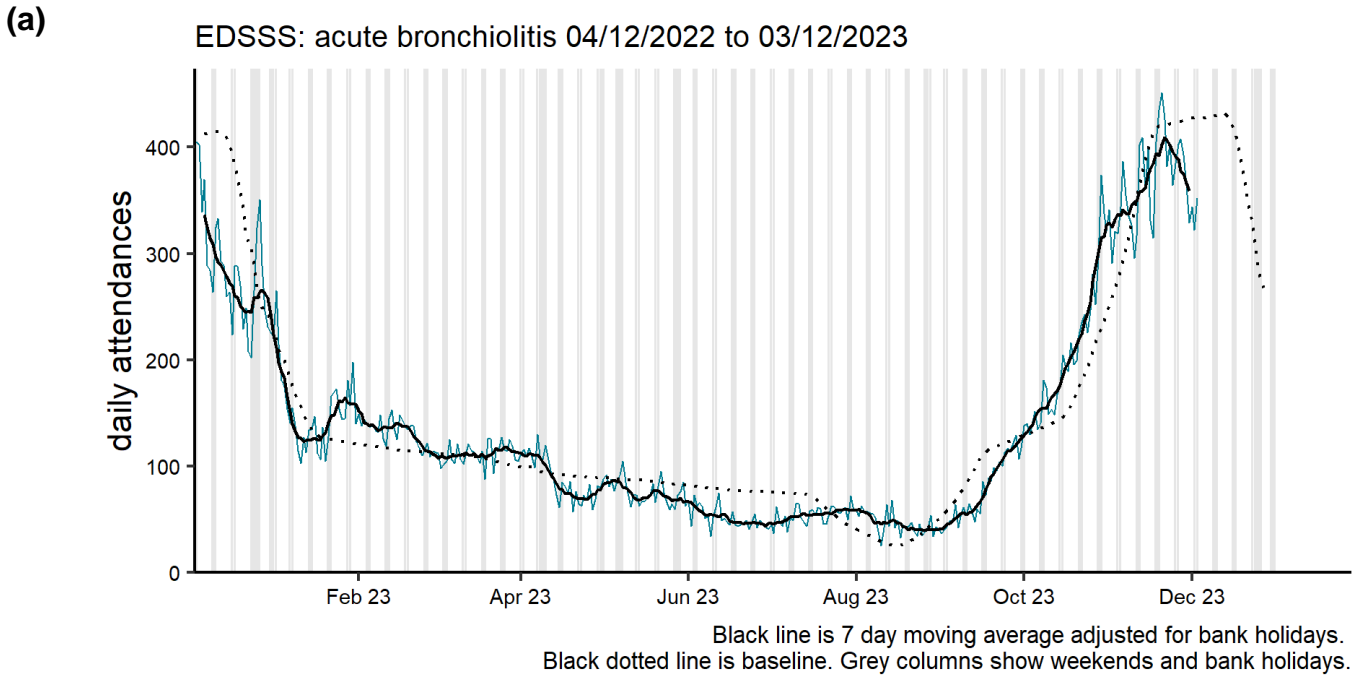
EDSSS: acute respiratory infection by UKHSA region 04/12/2022 to 03/12/2023



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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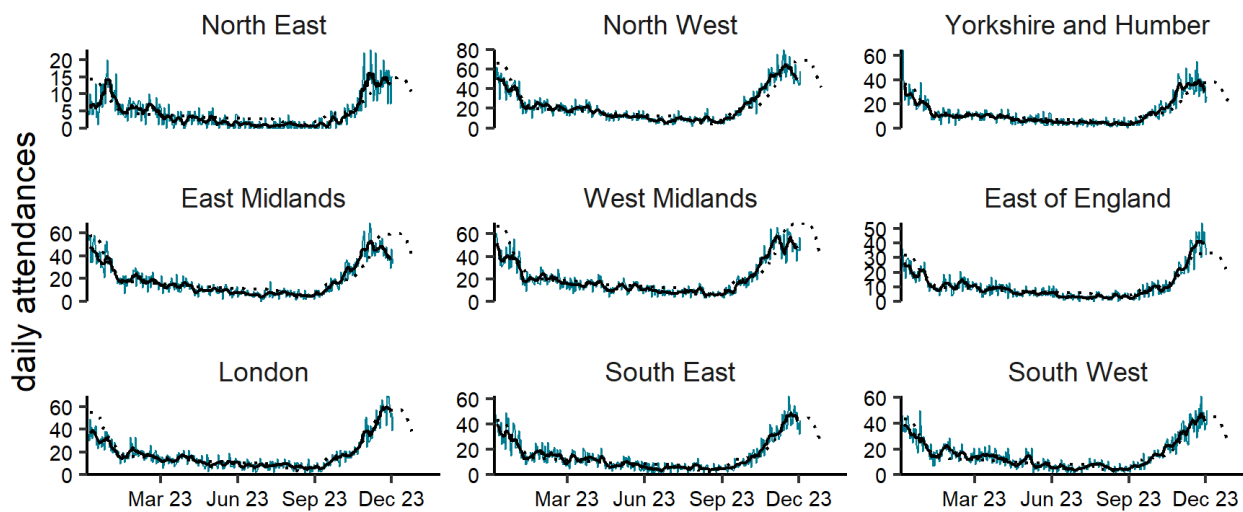
# Acute bronchiolitis/bronchitis

**Figure 4: Daily number of acute bronchiolitis/bronchitis ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.**



(c)

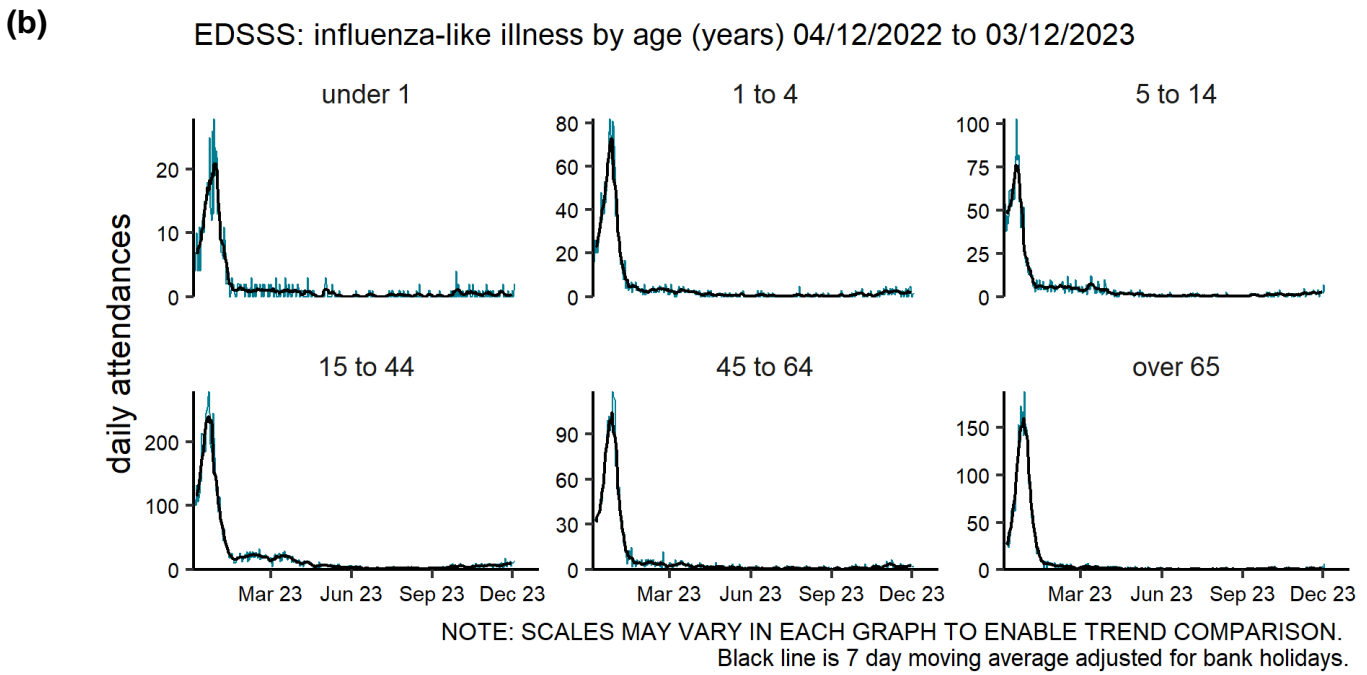
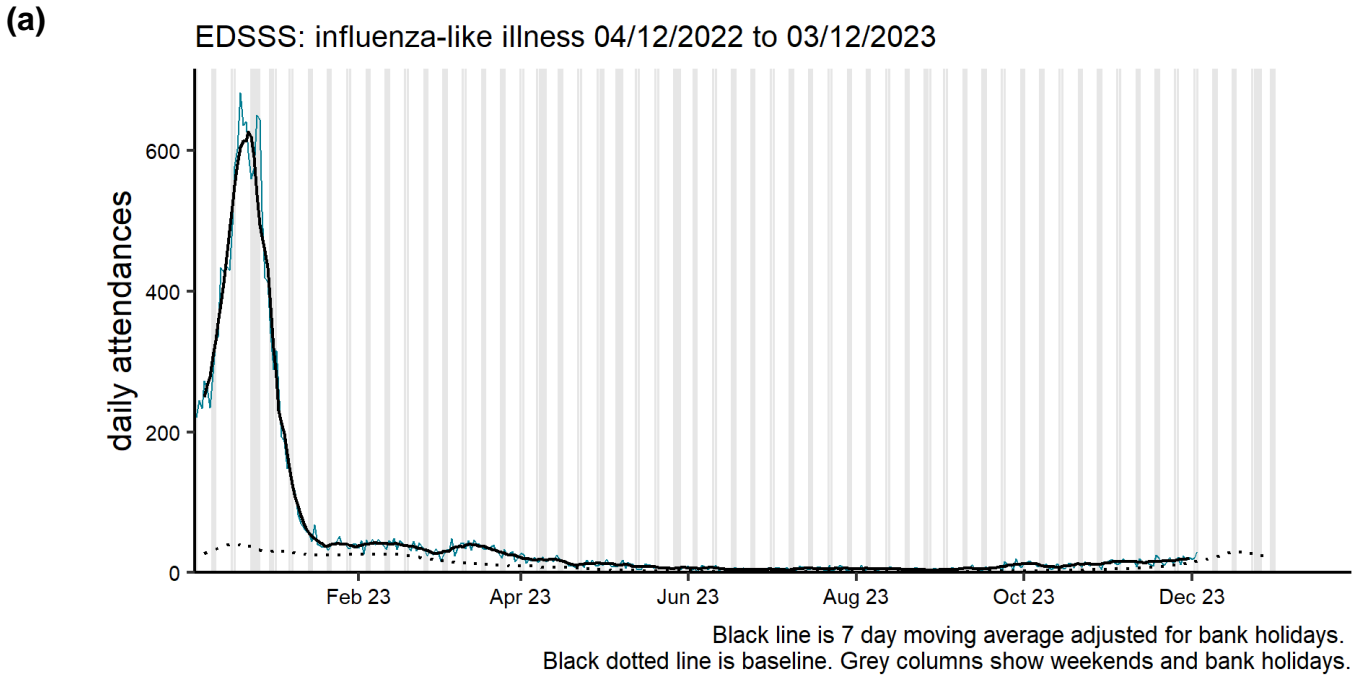
EDSSS: acute bronchiolitis by UKHSA region 04/12/2022 to 03/12/2023



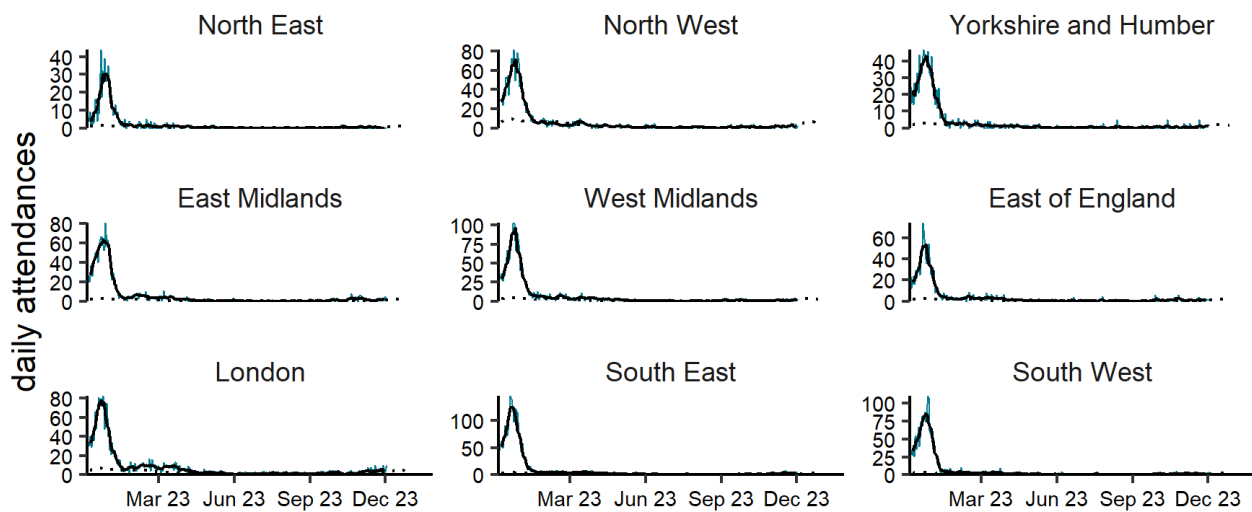
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.  
Black line is 7 day moving average adjusted for bank holidays.  
Black dotted line is baseline.

# Influenza-like illness

**Figure 5: Daily number of influenza-like illness ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.**



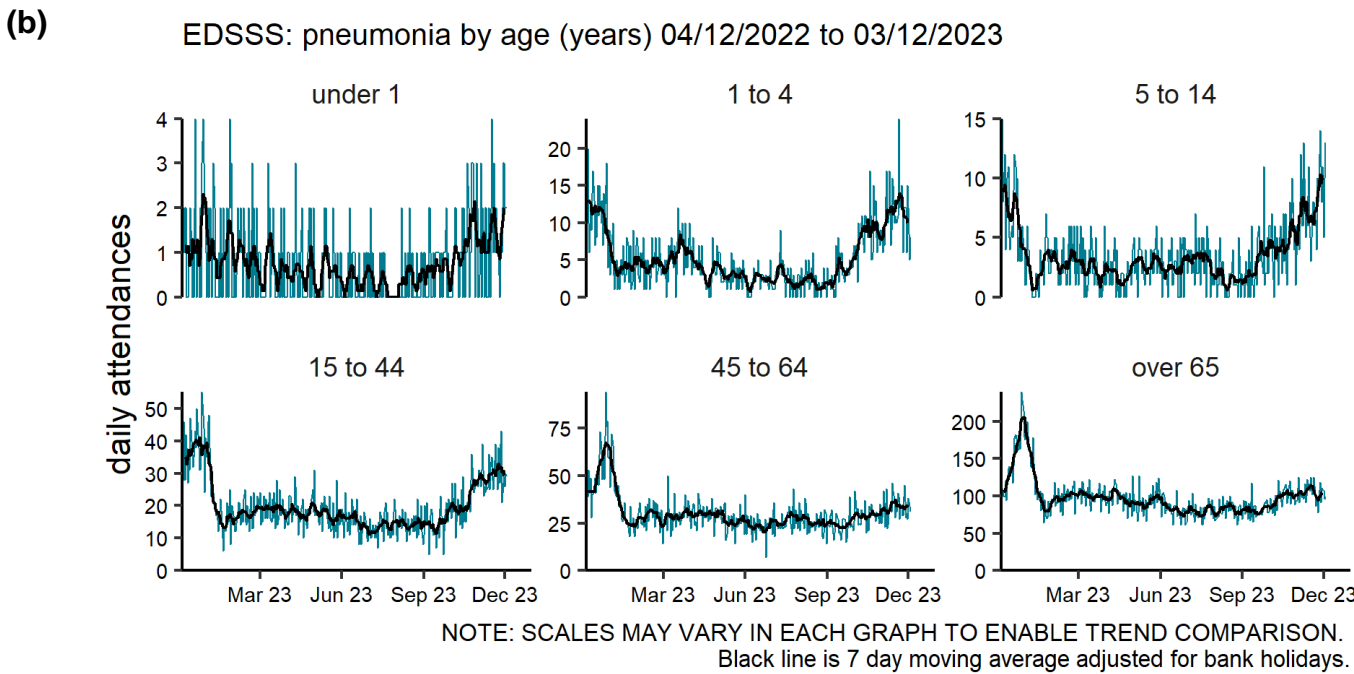
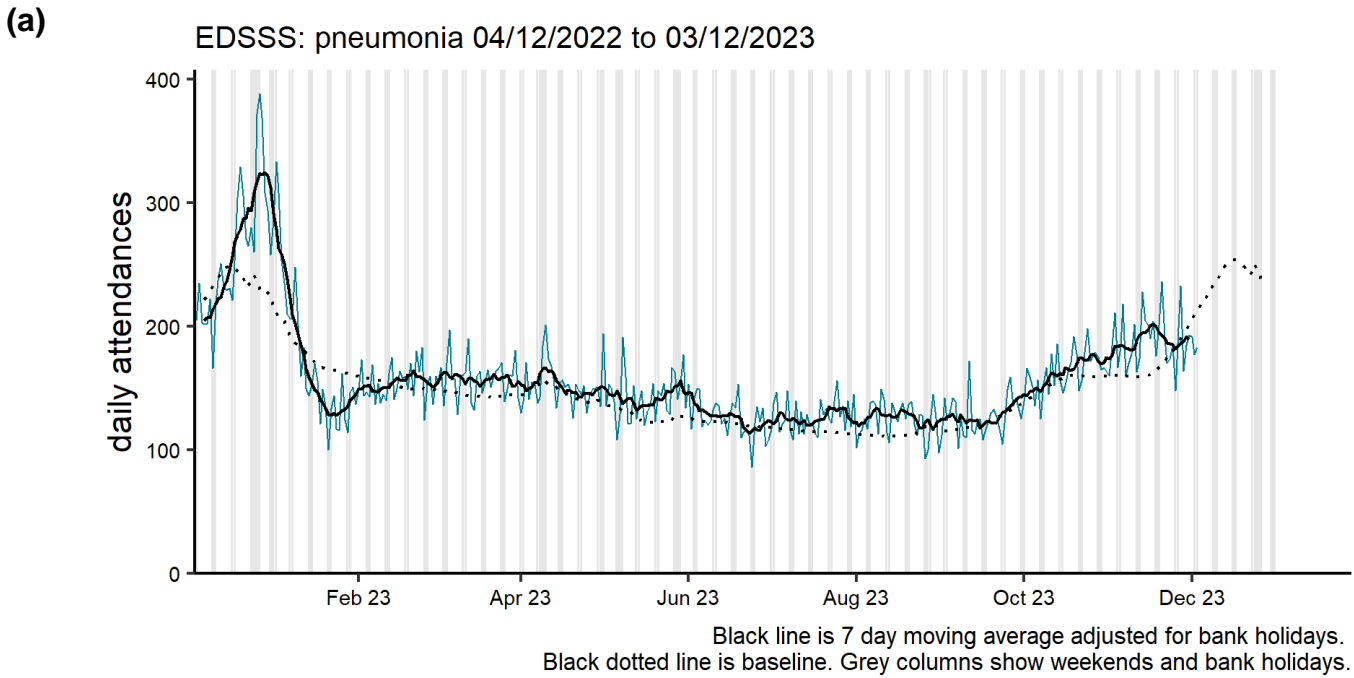
(c) EDSSS: influenza-like illness by UKHSA region 04/12/2022 to 03/12/2023



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.

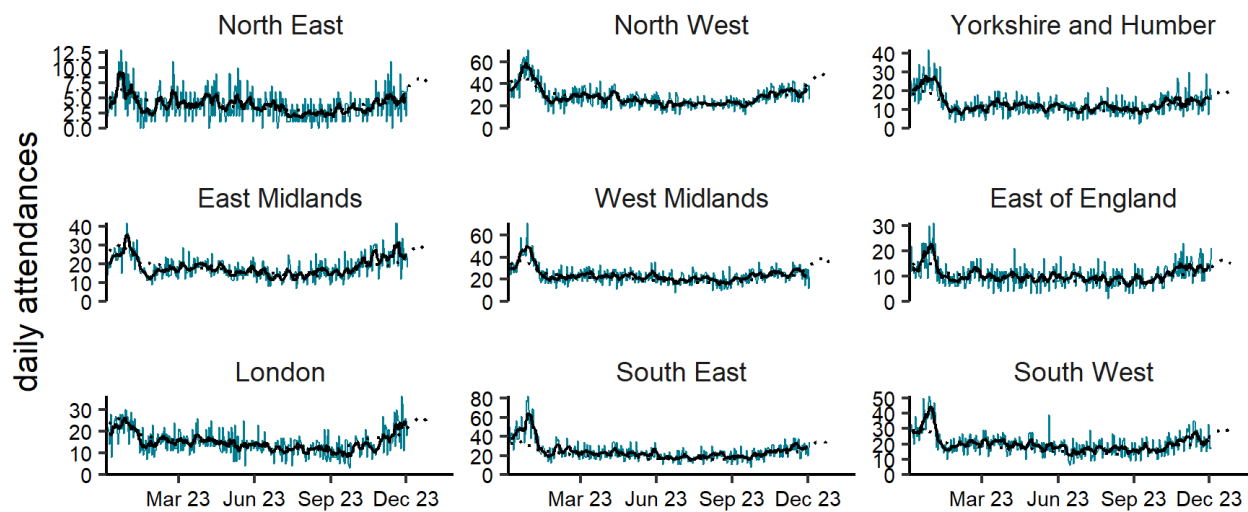
# Pneumonia

**Figure 6: Daily number of pneumonia ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.**



(c)

EDSSS: pneumonia by UKHSA region 04/12/2022 to 03/12/2023

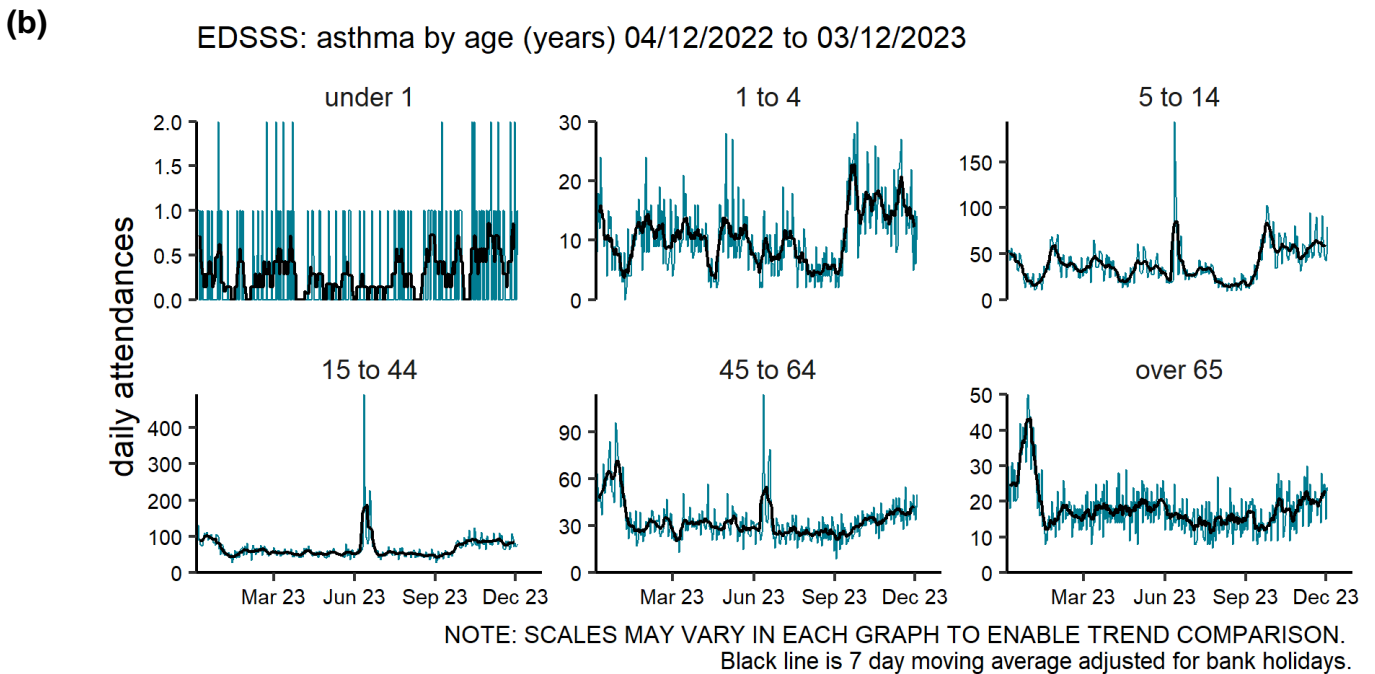
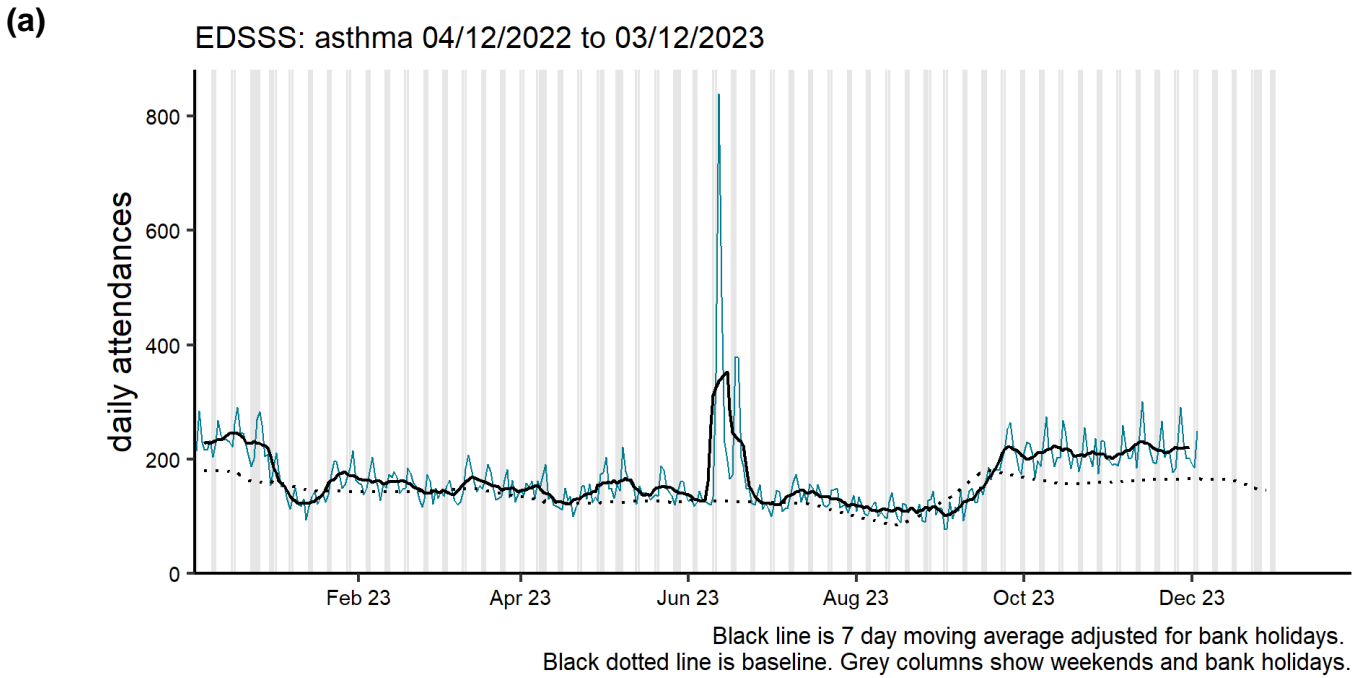


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.  
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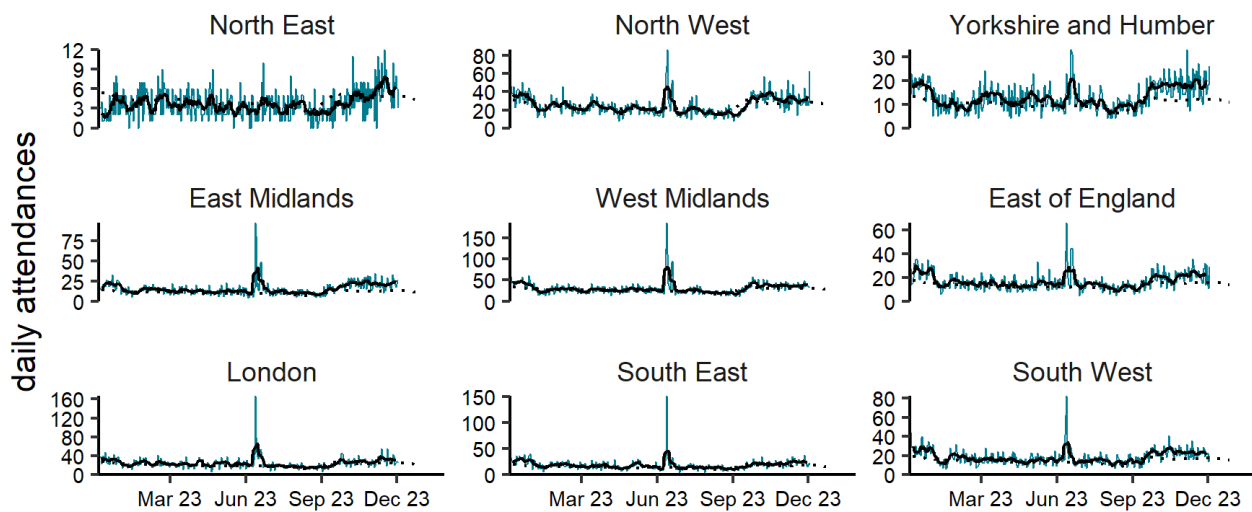
# Asthma

**Figure 7: Daily number of asthma ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.**



(c)

EDSSS: asthma by UKHSA region 04/12/2022 to 03/12/2023

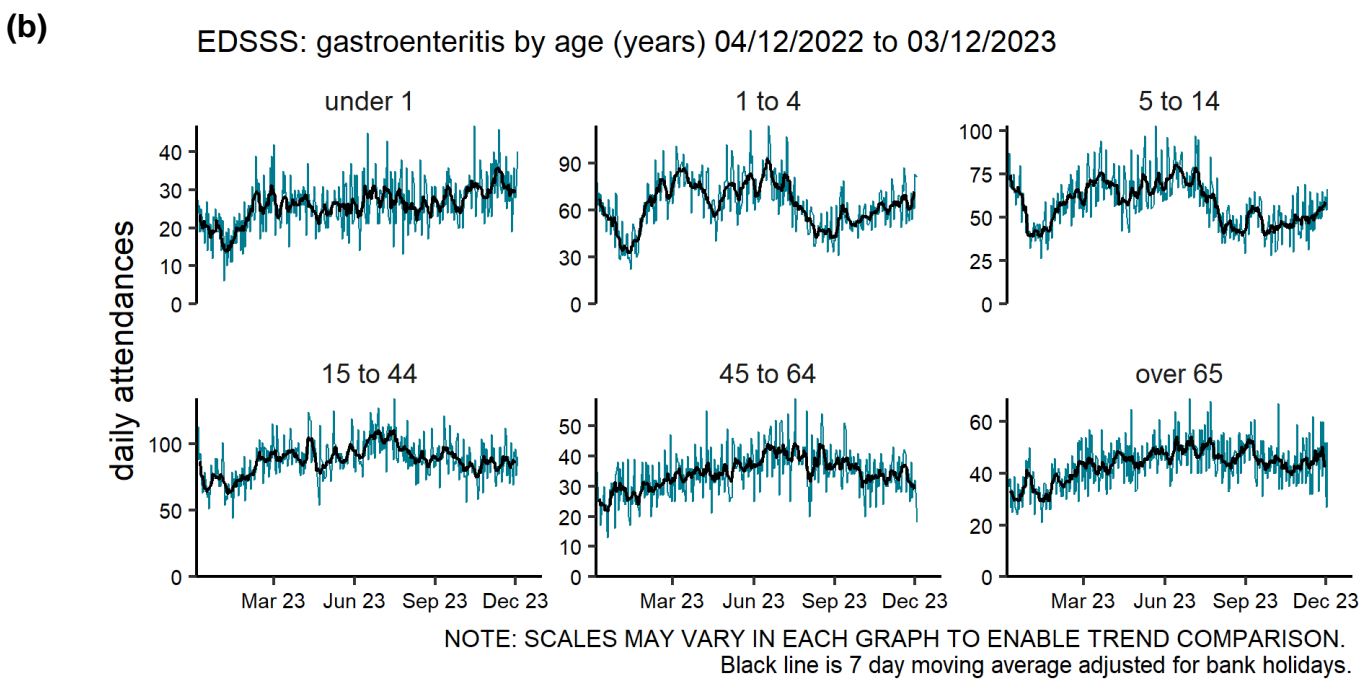
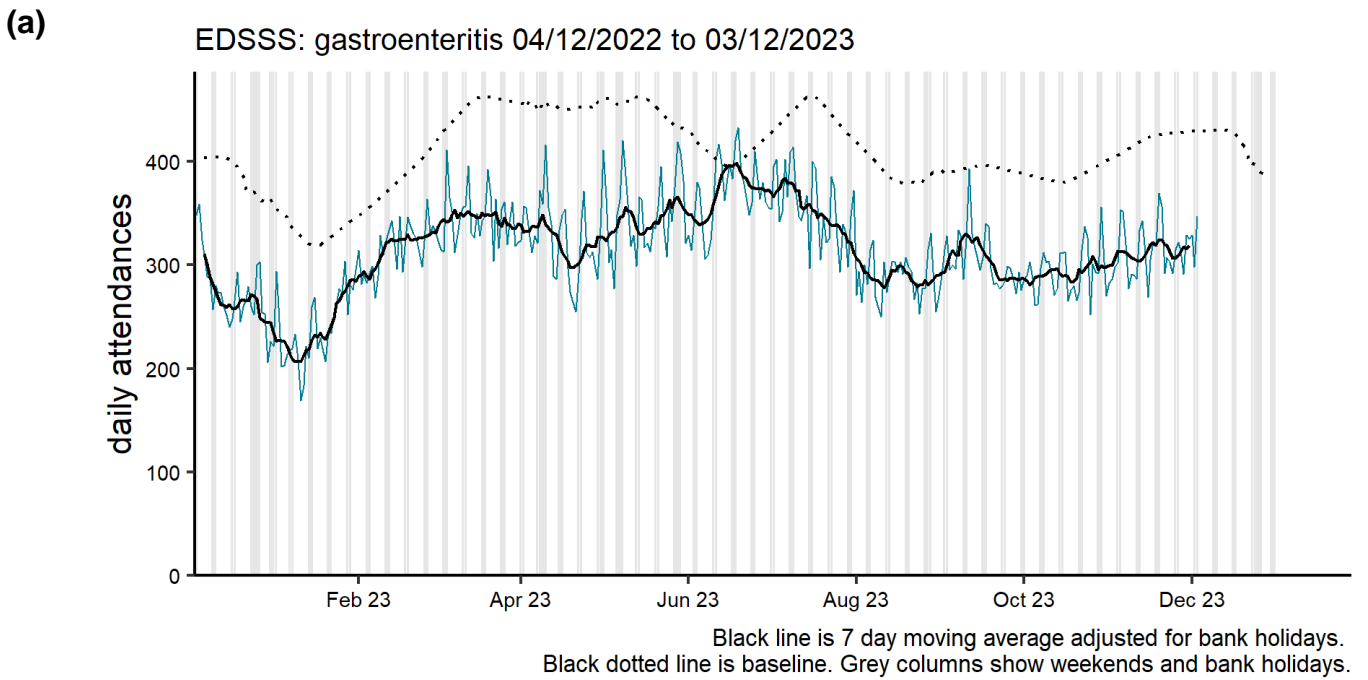


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.  
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Black dotted line is baseline.

# Gastrointestinal conditions

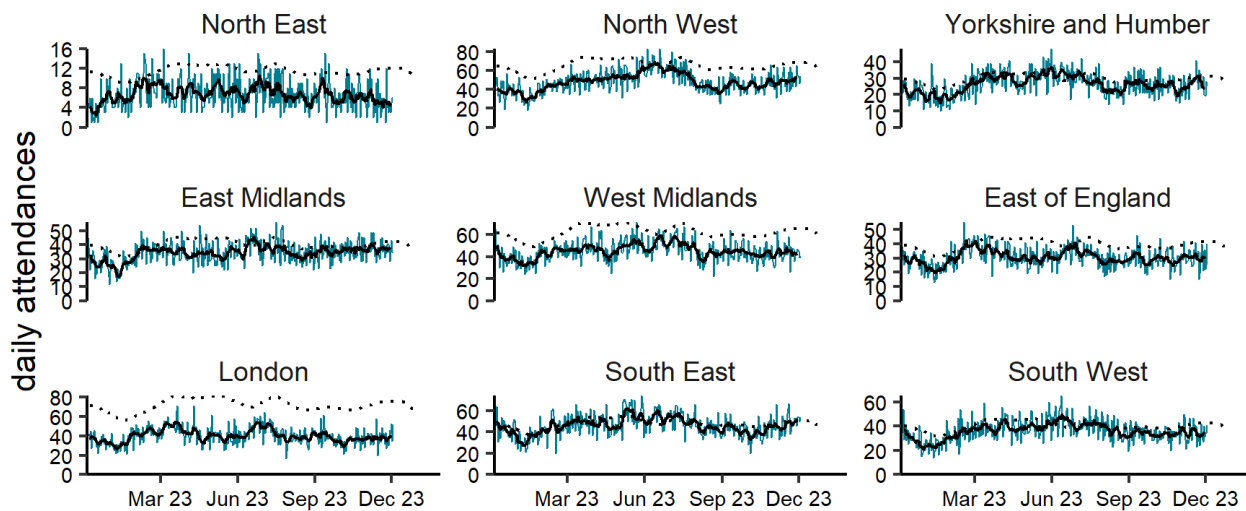
## Gastroenteritis

**Figure 8: Daily number of gastroenteritis ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.**



(c)

EDSSS: gastroenteritis by UKHSA region 04/12/2022 to 03/12/2023

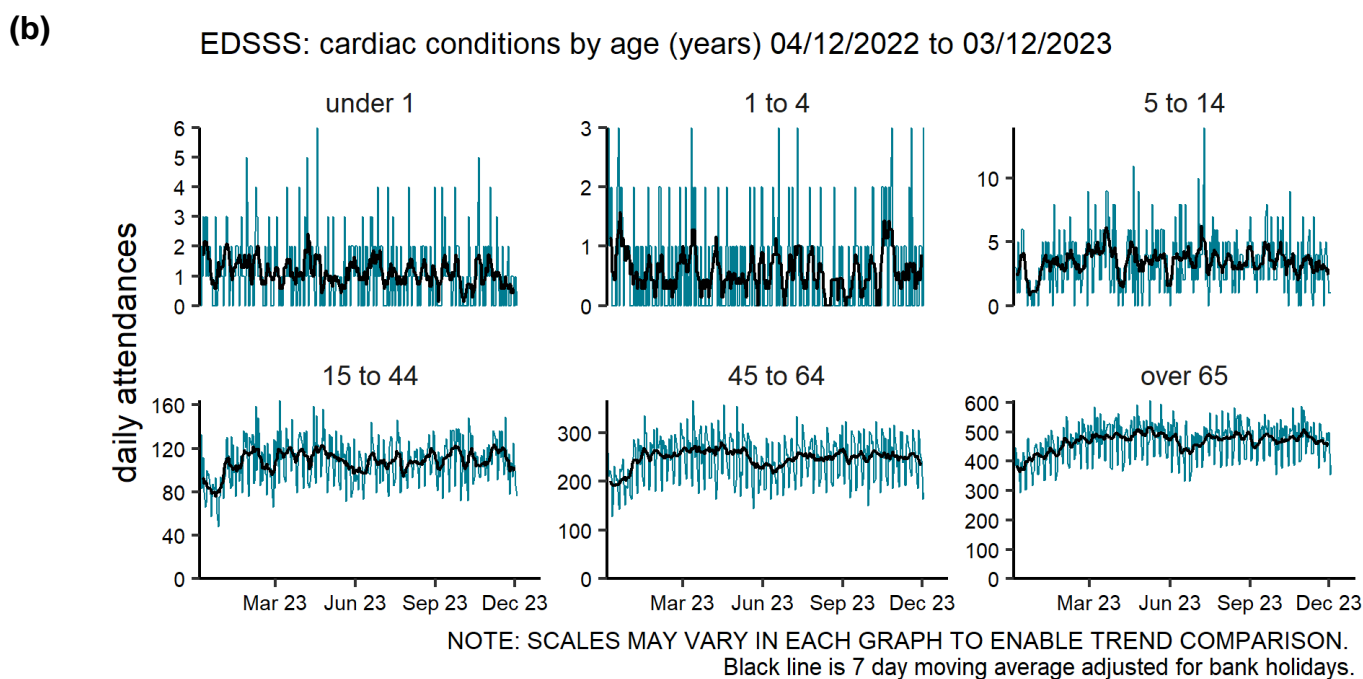
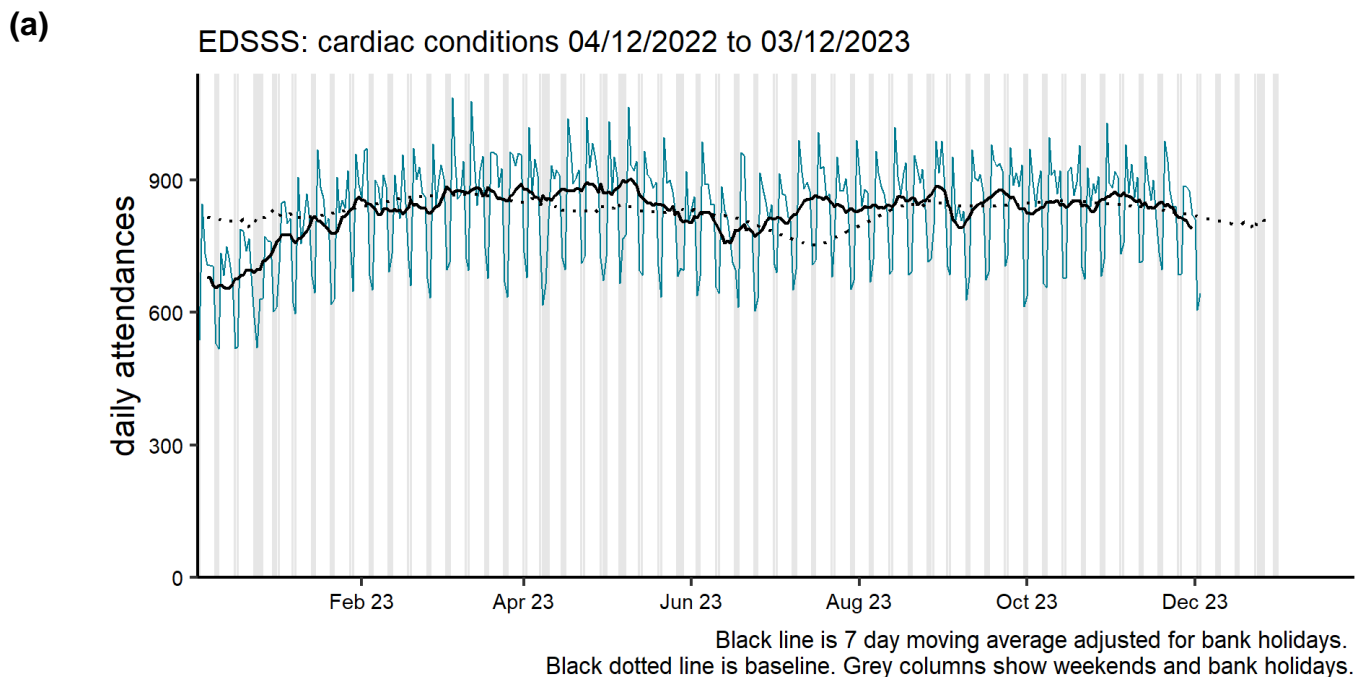


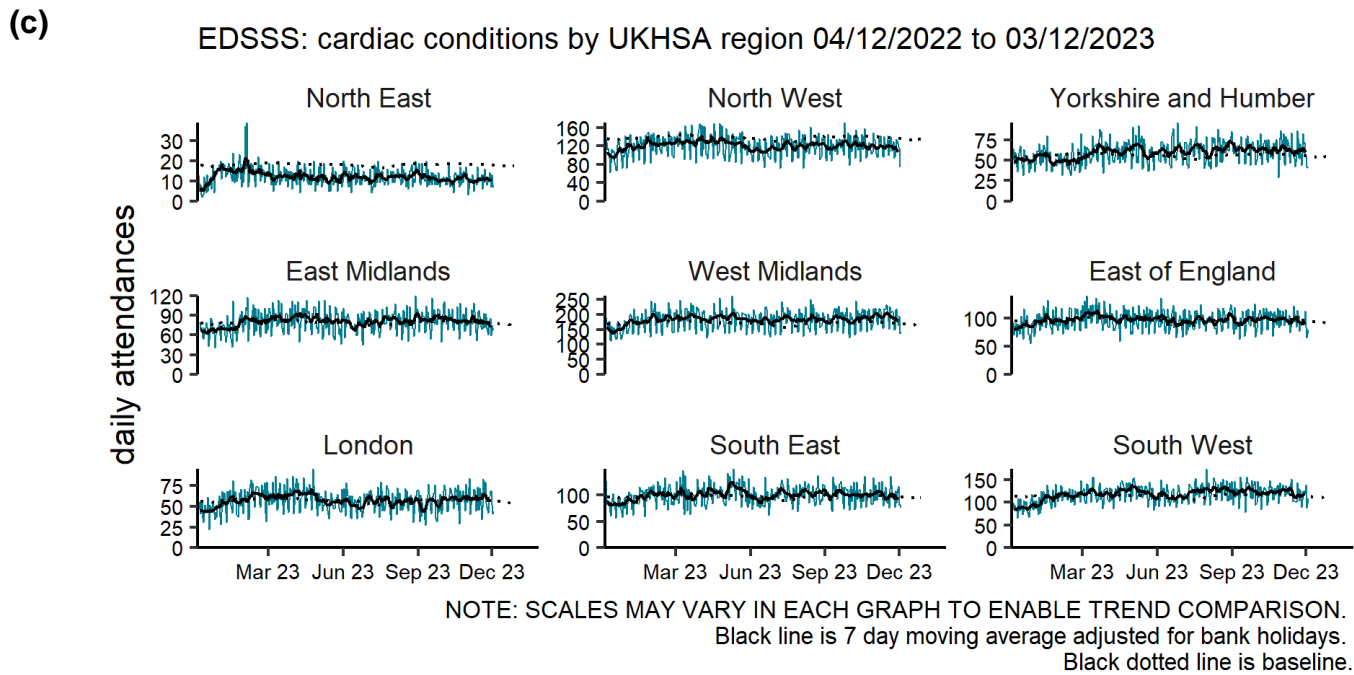
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.  
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# Cardiac conditions

## Cardiac

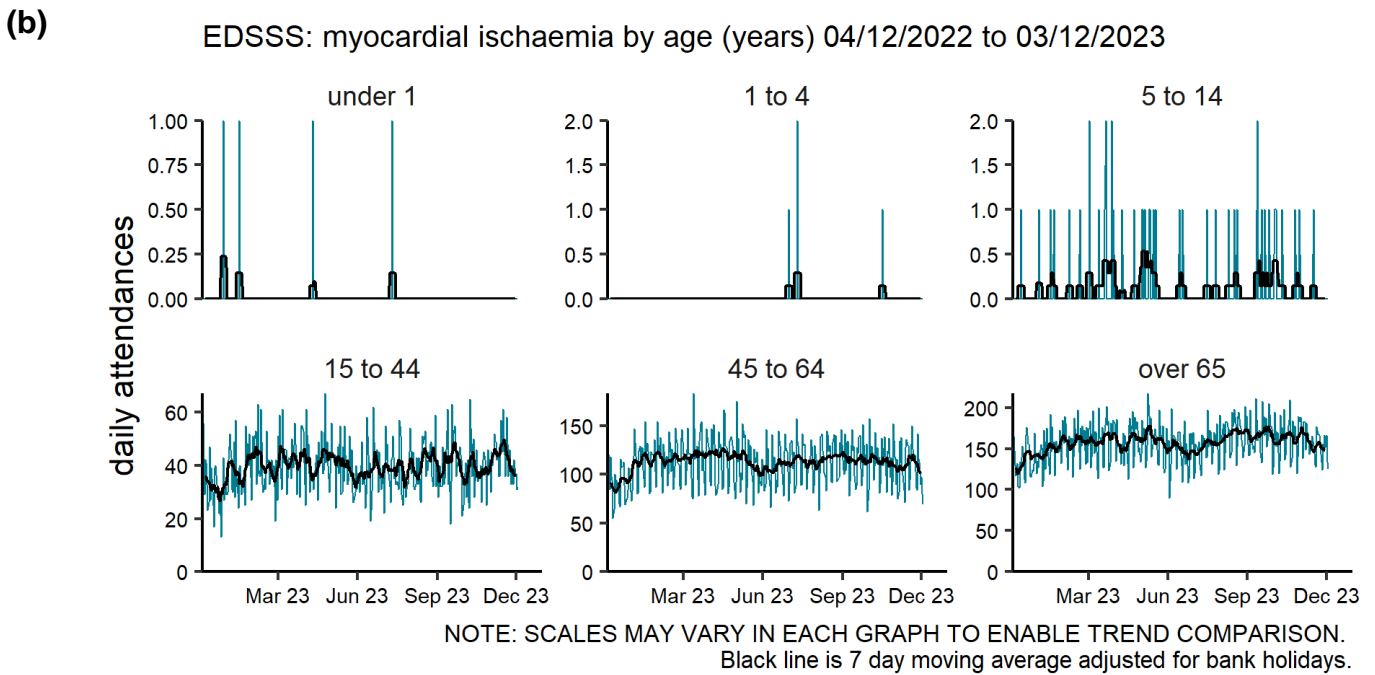
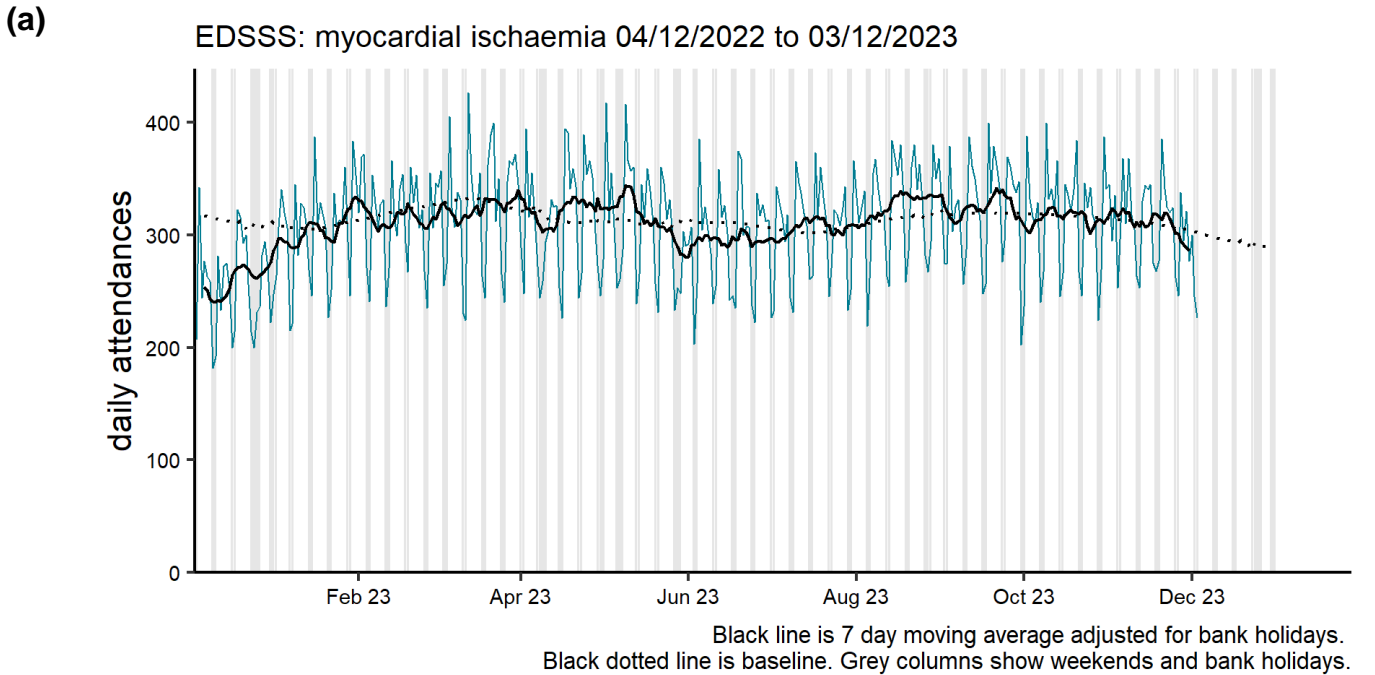
**Figure 9: Daily number of cardiac ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.**



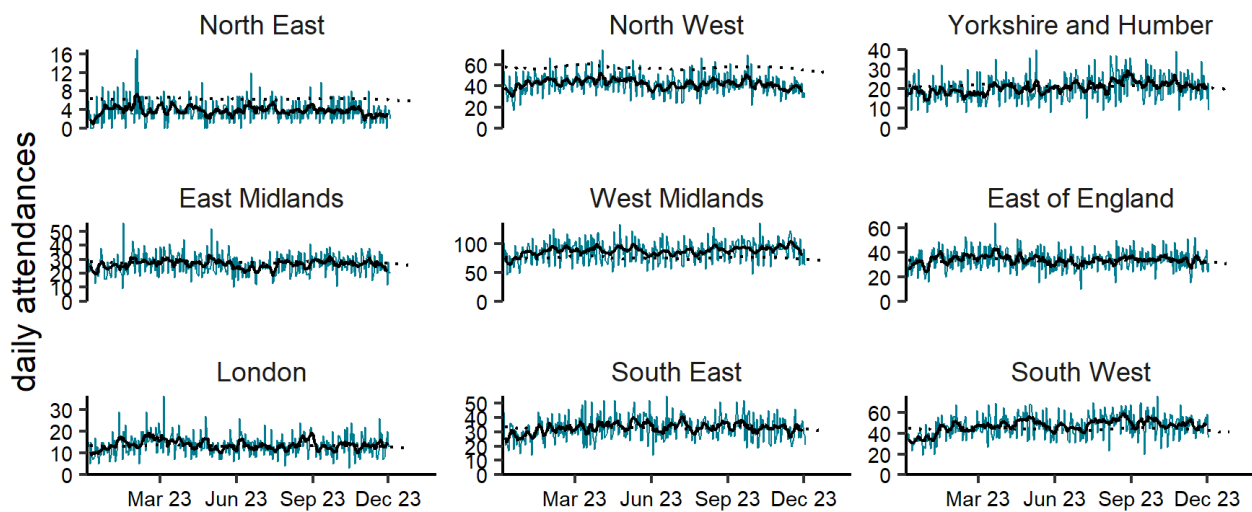


# Myocardial ischaemia

**Figure 10: Daily number of myocardial ischaemia ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.**



(c) EDSSS: myocardial ischaemia by UKHSA region 04/12/2022 to 03/12/2023



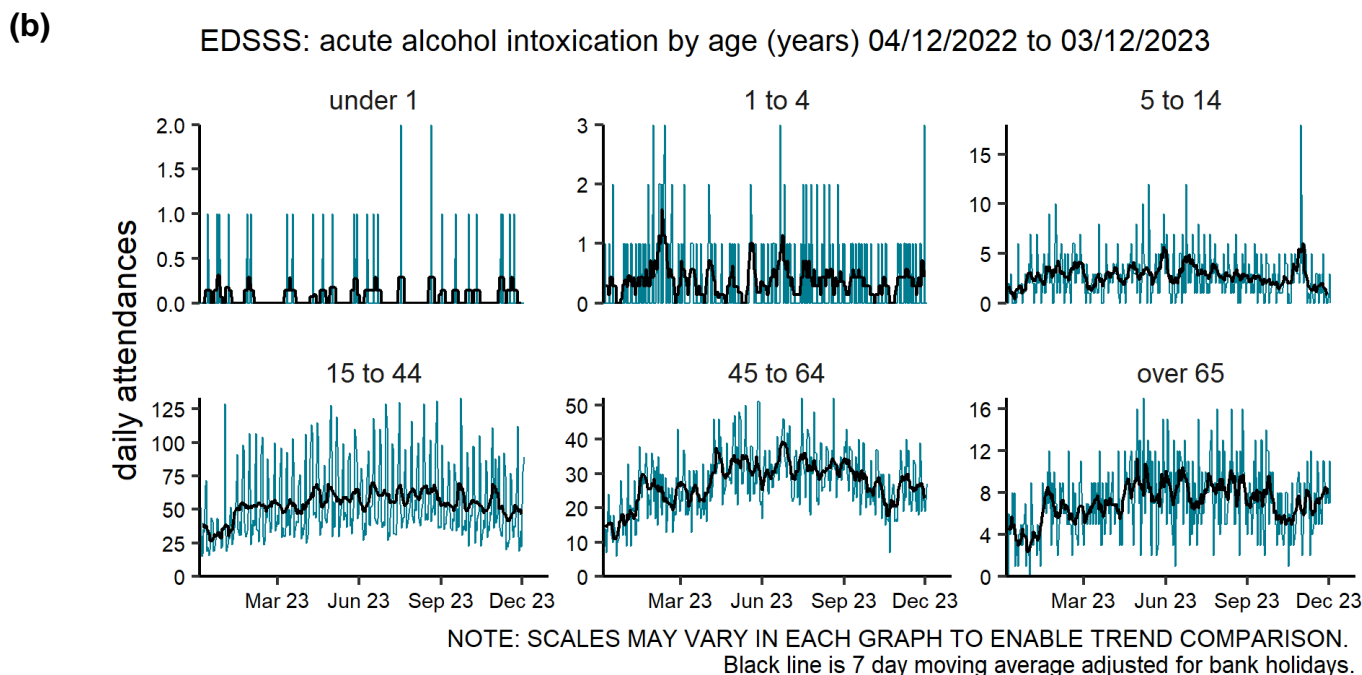
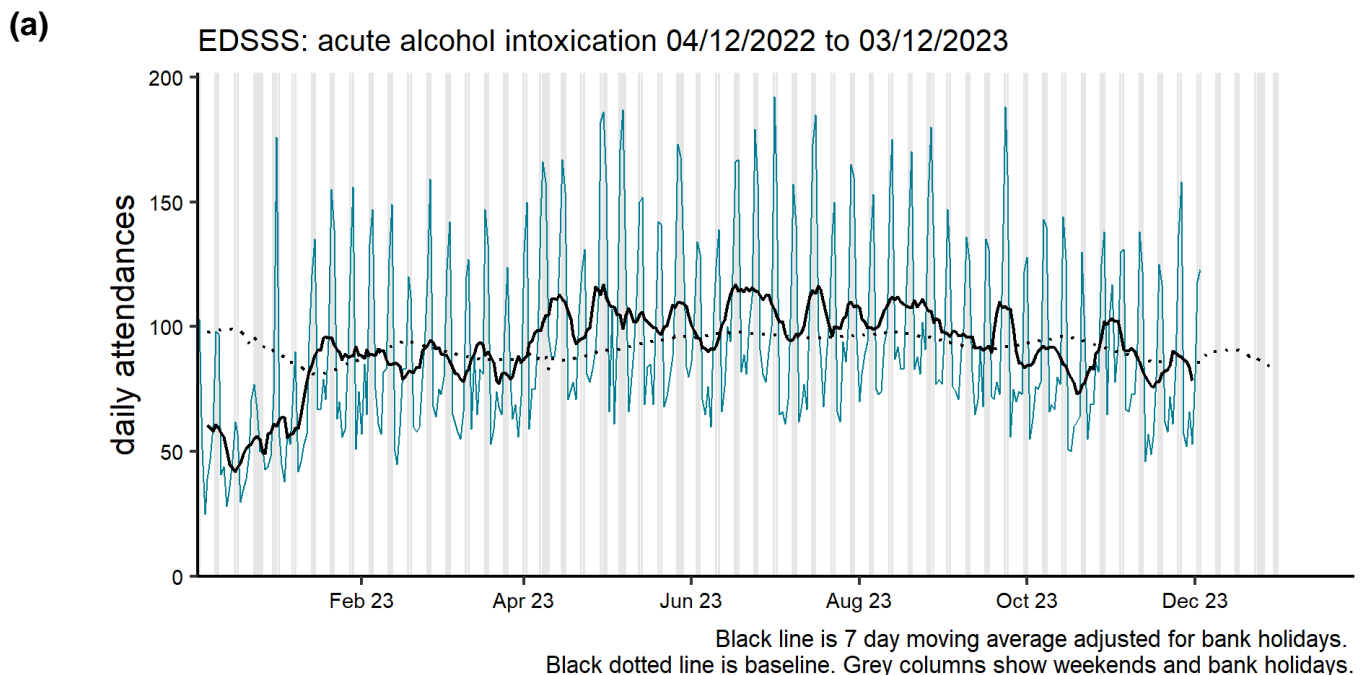
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.  
Black line is 7 day moving average adjusted for bank holidays.  
Black dotted line is baseline.



# Other conditions

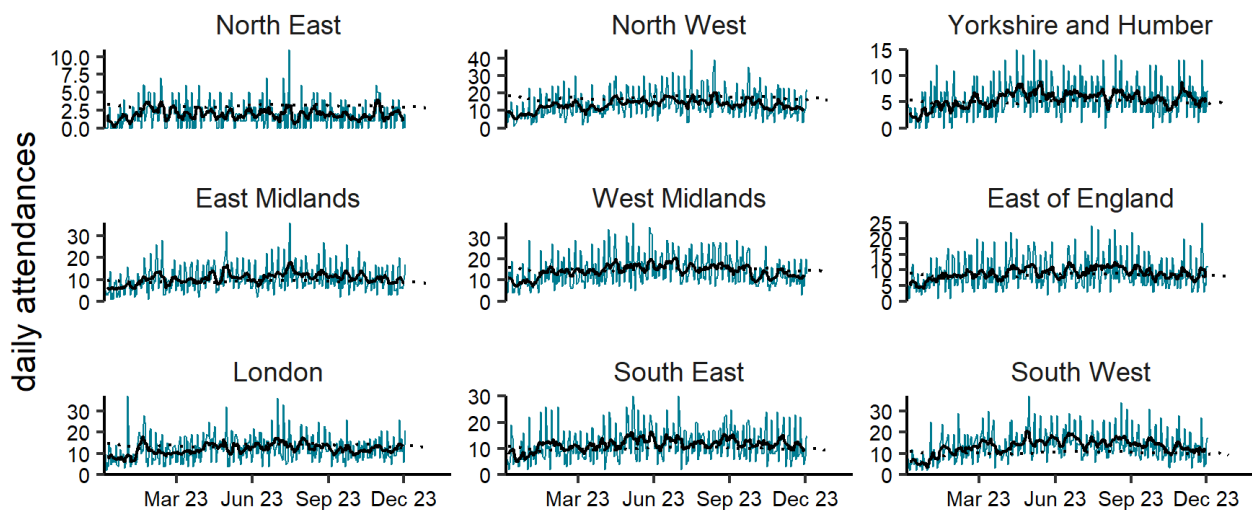
## Acute alcohol intoxication

**Figure 11: Daily number of acute alcohol intoxication ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.**



(c)

EDSSS: acute alcohol intoxication by UKHSA region 04/12/2022 to 03/12/2023

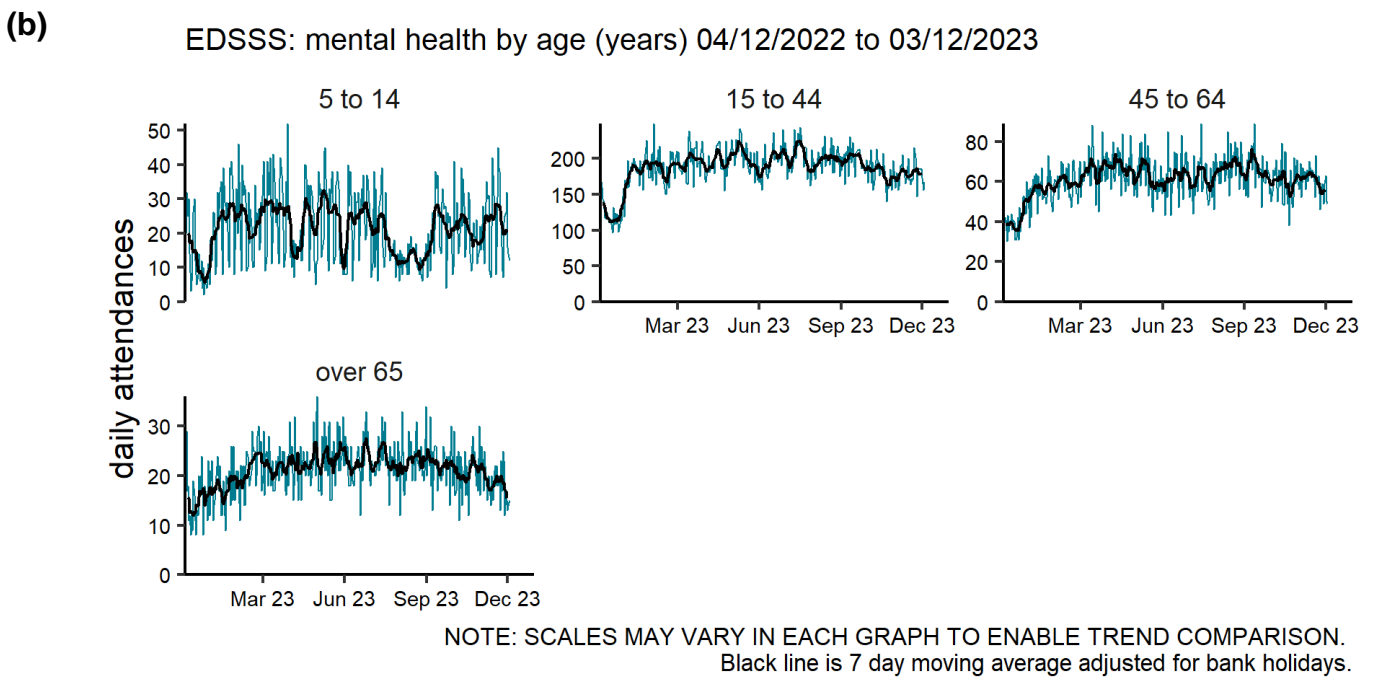
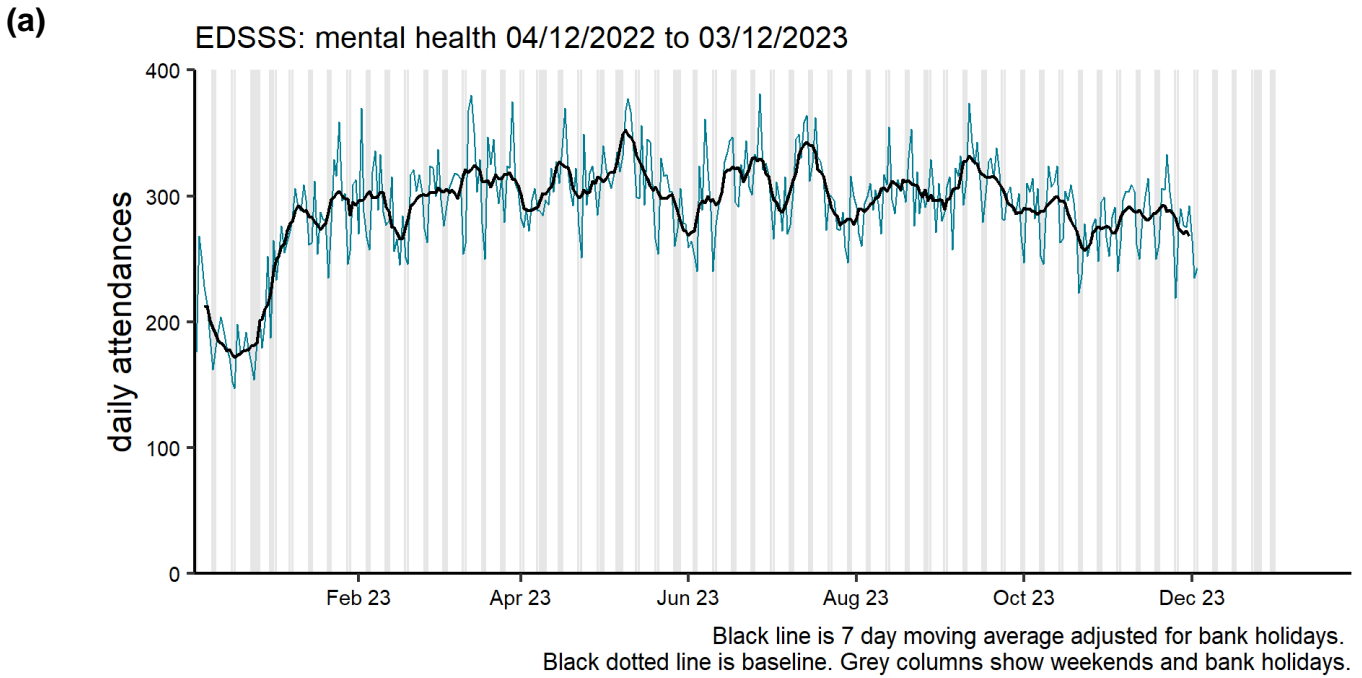


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.  
Black line is 7 day moving average adjusted for bank holidays.  
Black dotted line is baseline.

# Mental health

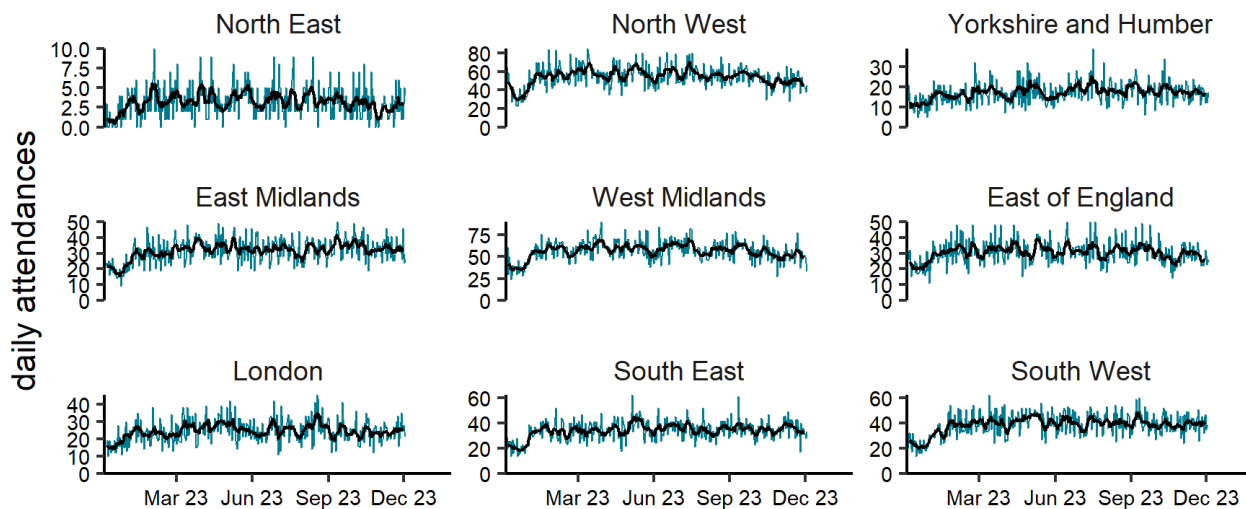
**Figure 12: Daily number of mental health<sup>3</sup> ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.**

<sup>3</sup> mental health attendances reported here are those with a primary diagnosis in the ECDS mental health diagnosis grouping. Attendances where the primary diagnosis relates to overdose, alcohol use or self harm are not included.



(c)

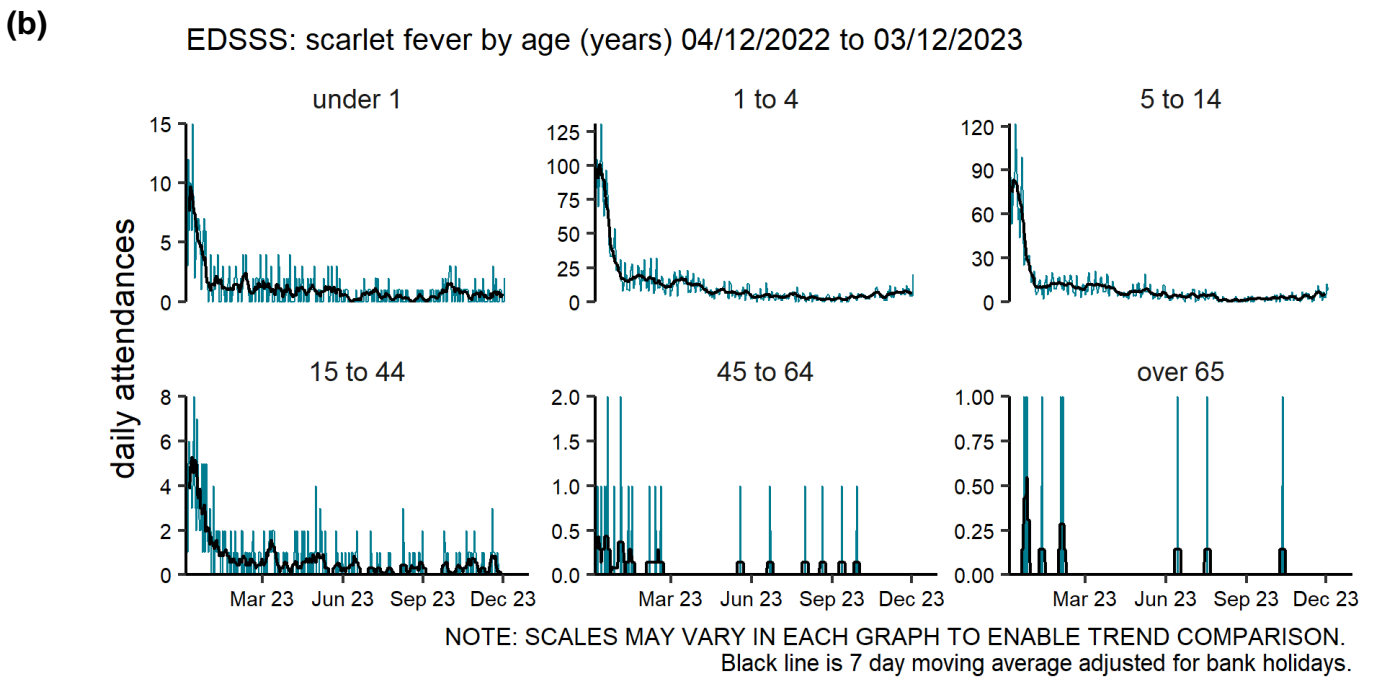
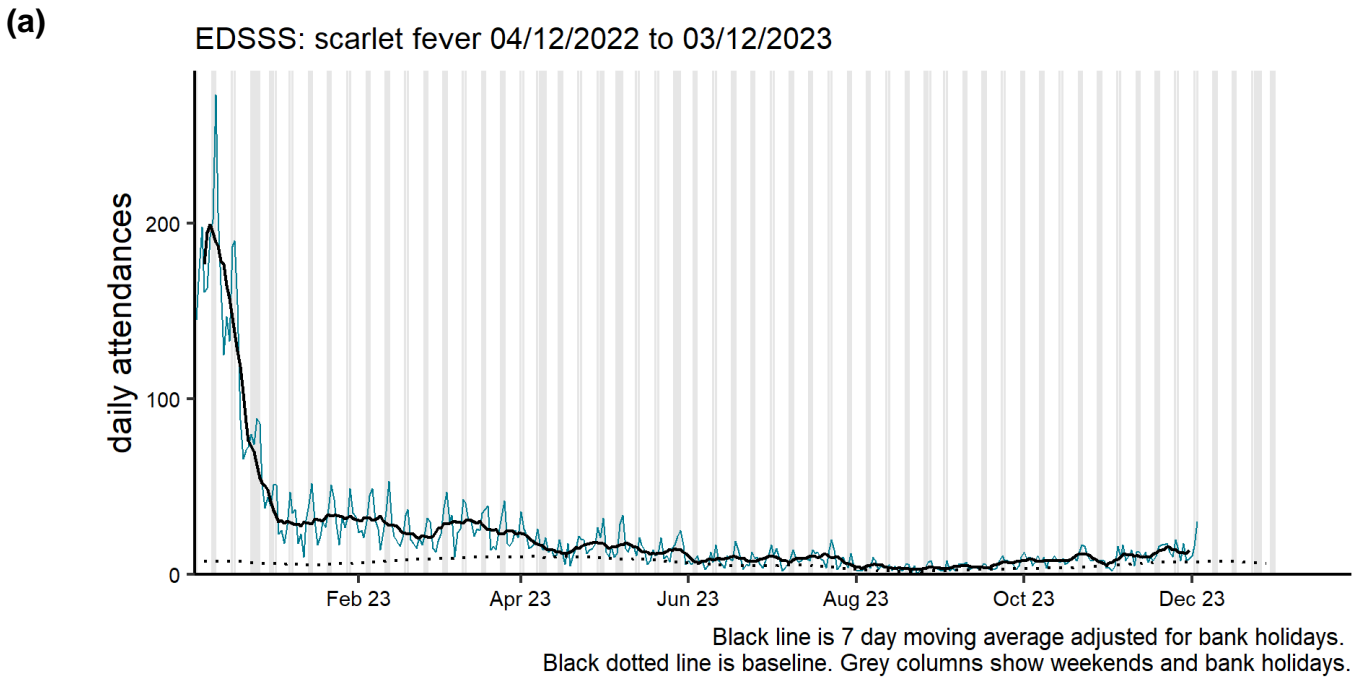
EDSSS: mental health by UKHSA region 04/12/2022 to 03/12/2023



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.

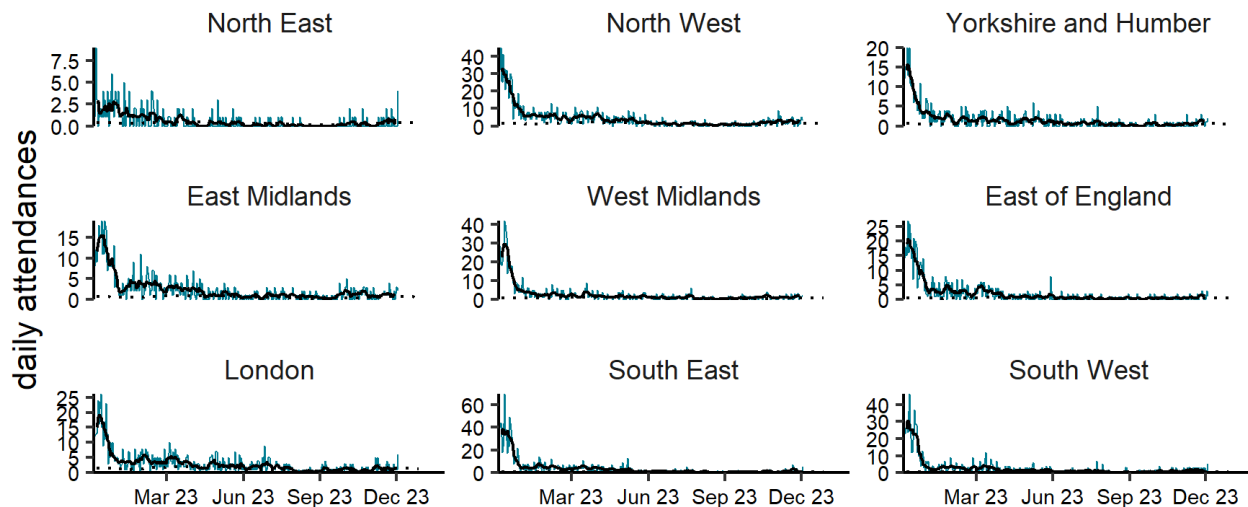
# Scarlet fever

**Figure 13: Daily number of scarlet fever ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.**



(c)

EDSSS: scarlet fever by UKHSA region 04/12/2022 to 03/12/2023



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

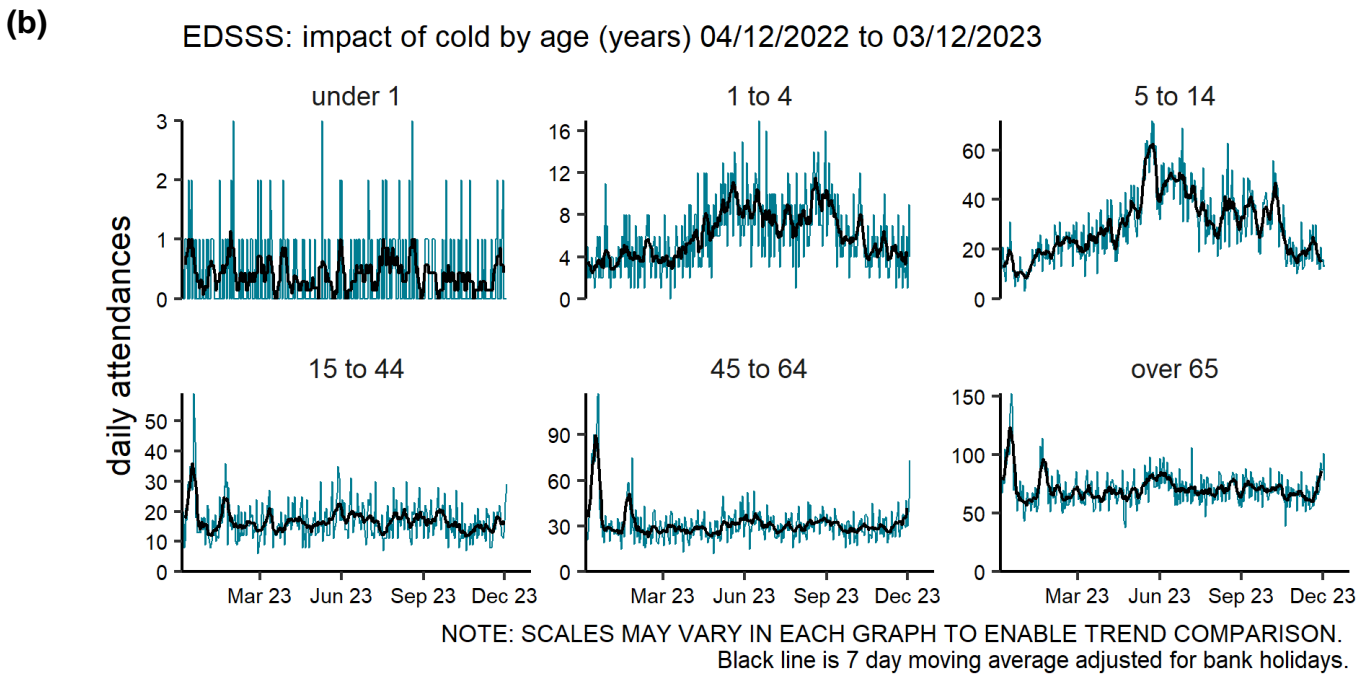
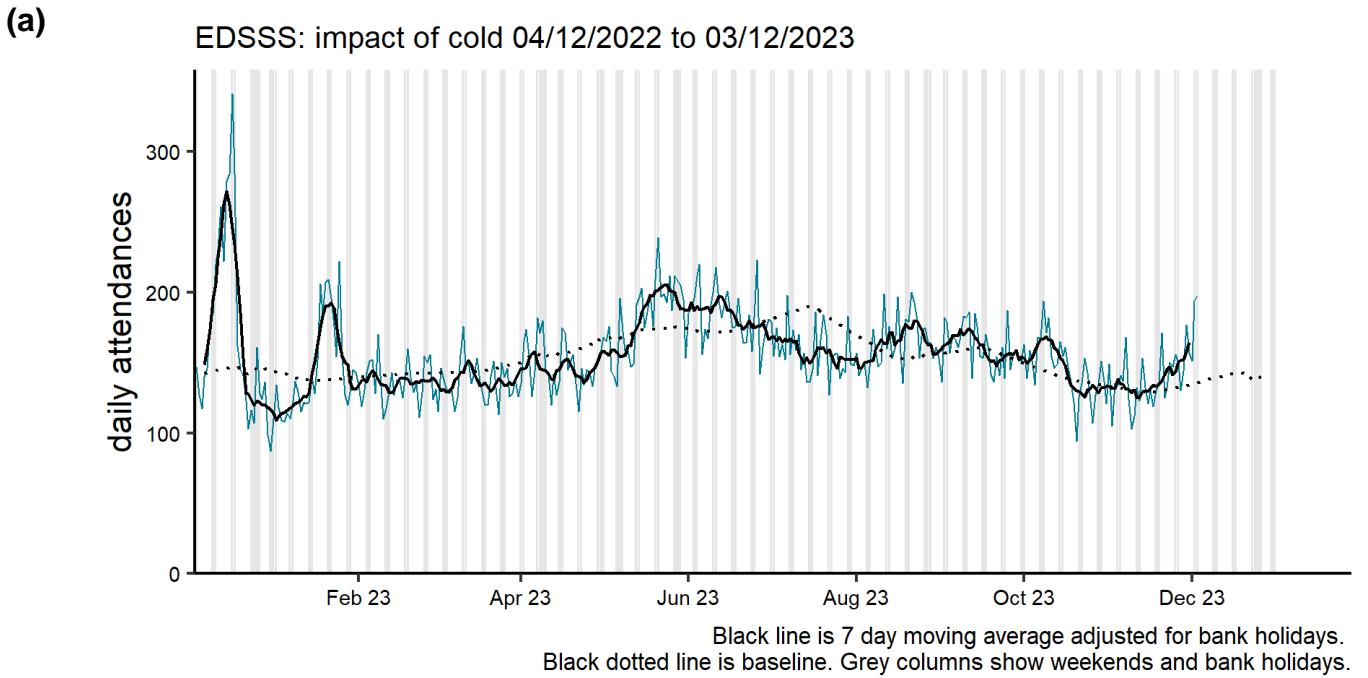
[Heat-Health Alert](#) period: 1 June to 30 September

Highest weather alert level during the current reporting week:

***Amber alert (Enhanced cold weather response)***

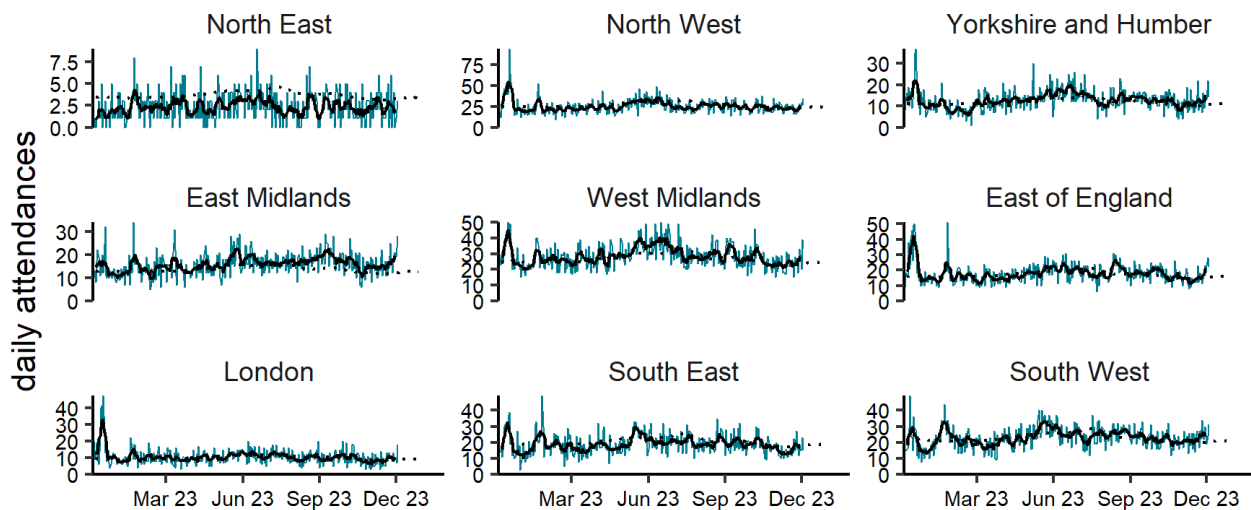
## Impact of cold

**Figure 14: Daily number of impact of cold ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.**





(c) EDSSS: impact of cold by UKHSA region 04/12/2022 to 03/12/2023



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

## Notes and caveats

The following additional caveats apply to the UKHSA emergency department syndromic surveillance system:

- the data presented are based on a national syndromic surveillance system:
  - should be used to monitor trends not to estimate numbers of ‘cases’
  - an automated daily transfer of anonymised ED data is received from NHS Digital, from the [Emergency Care Data Set](#) (ECDS)
  - not all EDs currently provide data on a daily basis, EDs are eligible for inclusion in this report only where:
    - data relates to attendances at a type 01 ED
    - data for 7 of the 7 most recent days was received
    - data for those days was received within 2 calendar days of the patient arrival
  - when an ED meets these criteria, all historical data from that ED is included
  - EDs included each week is likely to change, which will affect the historical data inclusion
  - national coverage each week is included in **Table 2**,
  - the number of EDs in each region area is described in **Table 3**
- individual EDs will not be identified in these bulletins
- some syndromic indicators are hierarchical:
  - acute respiratory infections includes:
    - COVID-19-like
    - acute bronchitis or bronchiolitis
    - other and non-specific acute respiratory infections
    - influenza-like illness
    - pneumonia
  - cardiac conditions includes:
    - myocardial ischaemia
    - other and non-specific cardiac conditions
- baselines:
  - were last remodelled January 2023
  - are constructed from historical data since April 2018
  - represent seasonally expected levels of activity
  - take account of any known substantial changes in data collection, population coverage or reporting practices:
    - 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 may affect ED attendance levels

## Acknowledgements

We are grateful to the clinicians in each ED and other staff within each Trust for their continued involvement in the EDSSS.

We thank the Royal College of Emergency Medicine, NHS Digital and NHS England for their support in the development of national EDSSS, using anonymised data collection from ECDS.

# 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](http://www.gov.uk/government/organisations/uk-health-security-agency)

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Prepared by: Real-time Syndromic Surveillance Team  
For queries relating to this document, please contact: [syndromic.surveillan@ukhsa.gov.uk](mailto:syndromic.surveillan@ukhsa.gov.uk)

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Sustainable Development Goals

