



UK Health  
Security  
Agency

# **Emergency Department Syndromic Surveillance System Bulletin (England) 2022 Week 49**

# Key messages

**Data reported to: 11 December 2022**

During week 49, acute respiratory infection attendances increased, observed across all age groups except for <1 yrs. There were further increases in attendances for influenza-like illness across all age groups, however acute bronchiolitis attendances decreased in the <1 and 1-4 year age groups. There were sharp increases seen in attendances for scarlet fever, particularly in children. During week 49 there were increases in 'impact of cold' attendances nationally, particularly in the 45-64 and >65 year age groups.

## 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> )	Increasing	No baseline
COVID-19-like ( <b>Figure 2</b> )	No trend	No baseline
Acute respiratory infections ( <b>Figure 3</b> )	Increasing	Above baseline
Acute bronchiolitis or bronchitis ( <b>Figure 4</b> )	Decreasing	Below baseline
Influenza-like illness ( <b>Figure 5</b> )	Increasing	Above baseline
Pneumonia ( <b>Figure 6</b> )	Increasing	Similar to baseline
Asthma ( <b>Figure 7</b> )	No trend	Above baseline
Gastroenteritis ( <b>Figure 8</b> )	No trend	Above baseline
Cardiac ( <b>Figure 9</b> )	Decreasing	Below baseline
Myocardial ischaemia ( <b>Figure 10</b> )	Decreasing	Below baseline
Acute alcohol intoxication ( <b>Figure 11</b> )	Decreasing	Below baseline
Mental health ( <b>Figure 12</b> )	Decreasing	No baseline
Scarlet fever ( <b>Figure 13</b> )	Increasing	No baseline
Impact of cold ( <b>Figure 14</b> )	Increasing	Similar to 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 may be based on signs/symptoms and may not be 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 the Notes and caveats section.

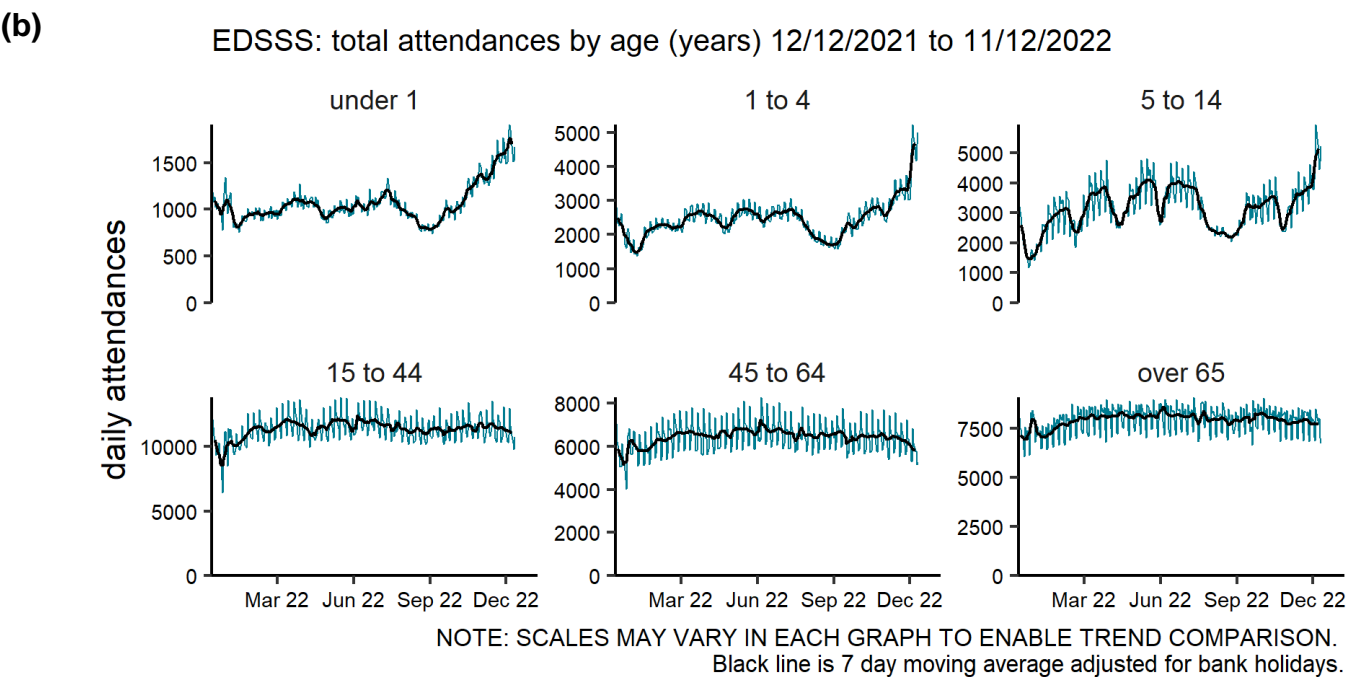
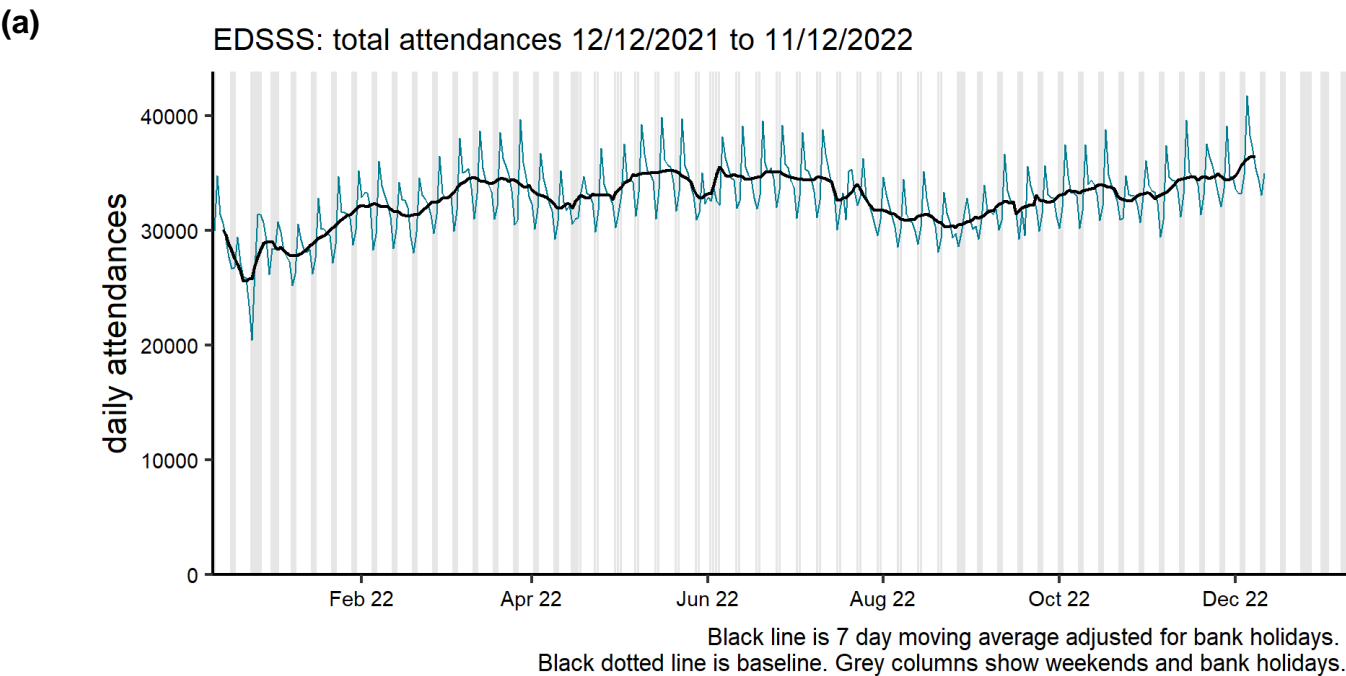
Previous weekly bulletins from this system are available [here](#).

## Data quality issues of note this week

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

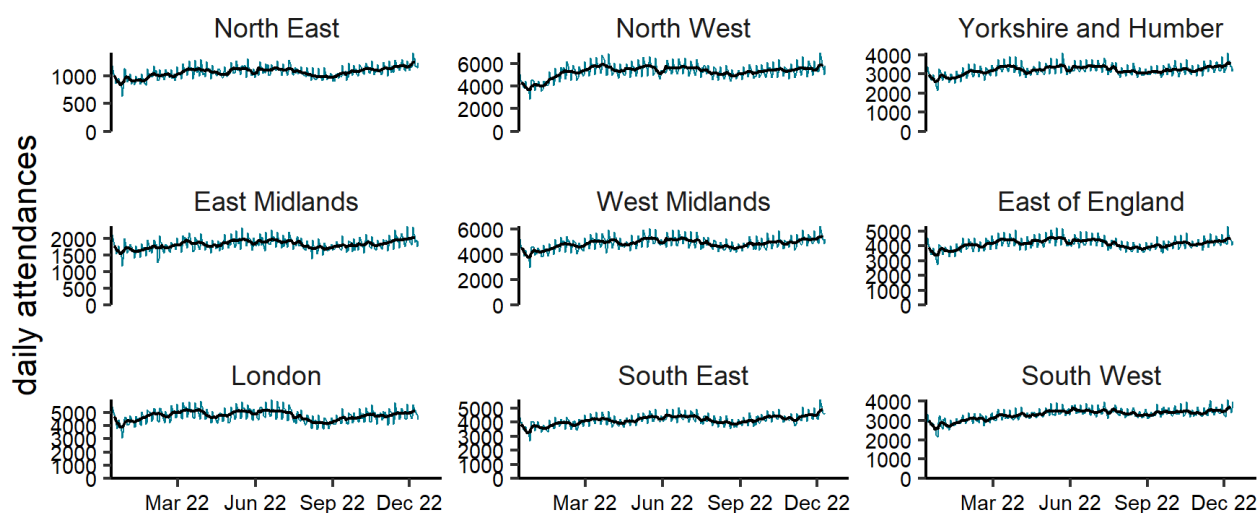
# Total attendances

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 region 12/12/2021 to 11/12/2022



**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>
05 December 2022	41743	25774
06 December 2022	38310	23748
07 December 2022	36994	23259
08 December 2022	35396	22192
09 December 2022	34483	21208
10 December 2022	33103	19535
11 December 2022	34946	20938

**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	4
North West	25
Yorkshire and Humber	14
West Midlands	19
East Midlands	9
East of England	15
London	17
South West	17
South East	17
Total	137

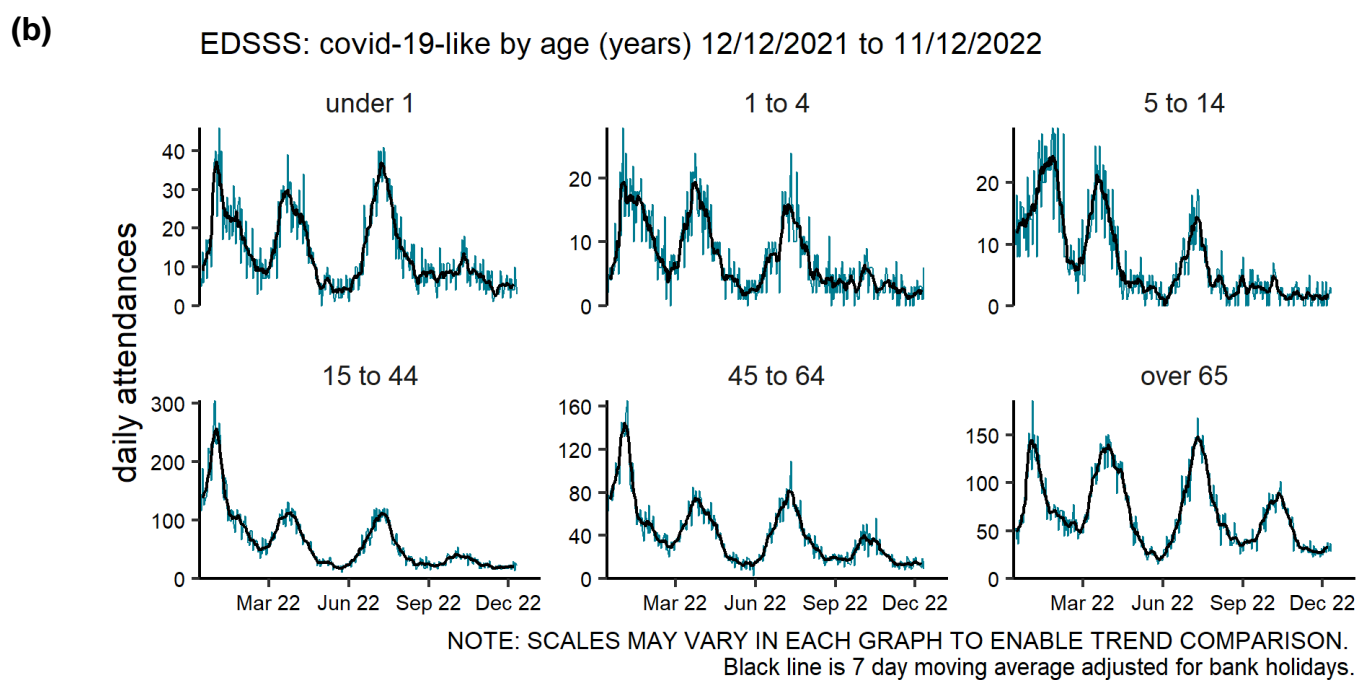
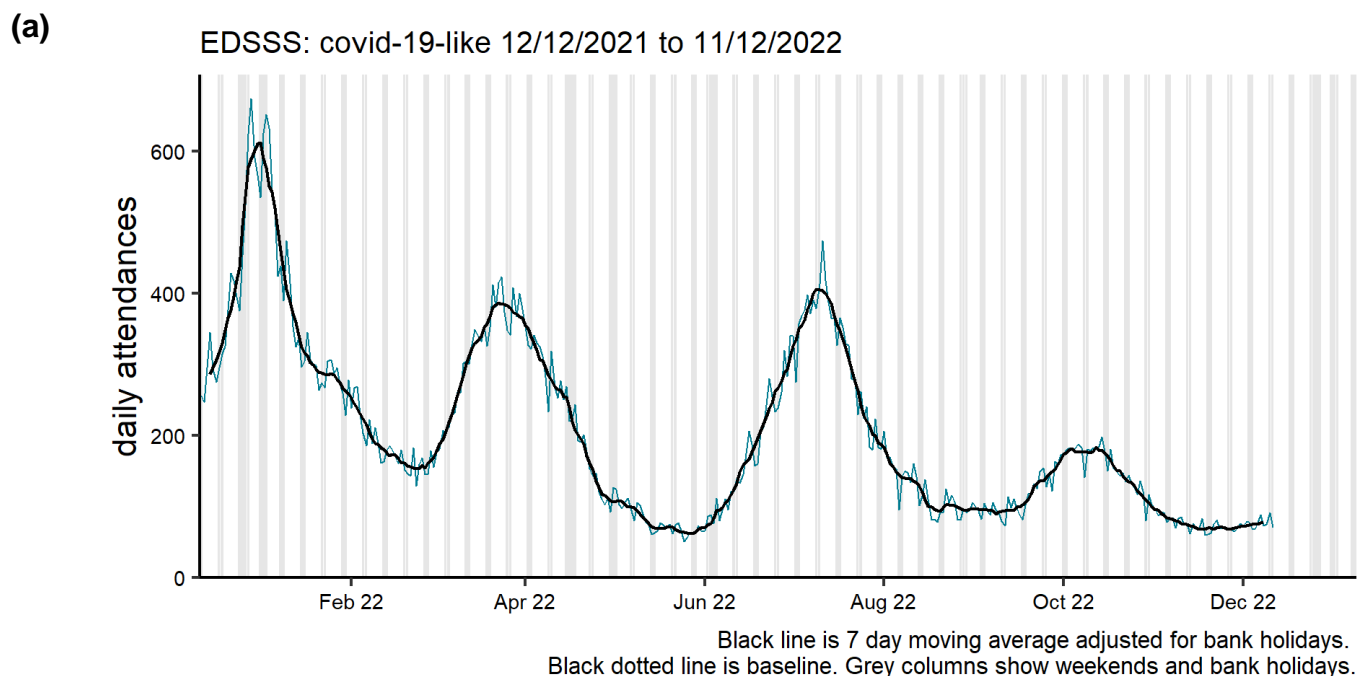
<sup>2</sup> only attendances from Type 01 EDs meeting the weekly reporting criteria are included in this report, see Notes and caveats

for further details

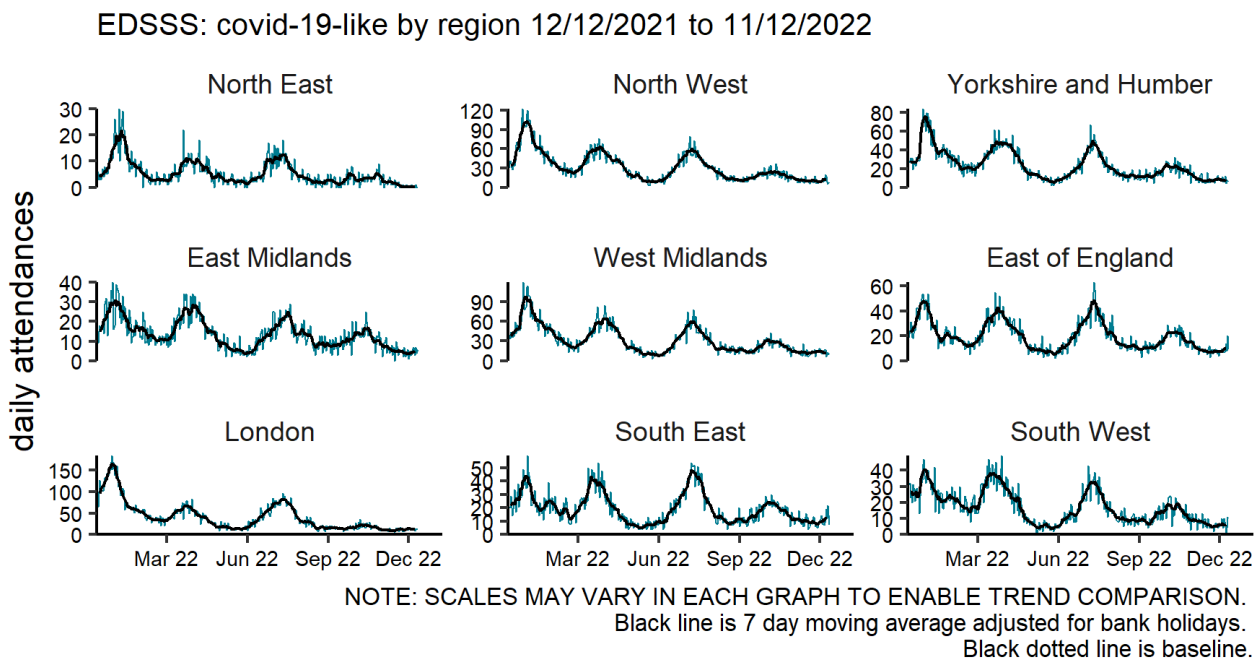
## Respiratory conditions

### 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.**



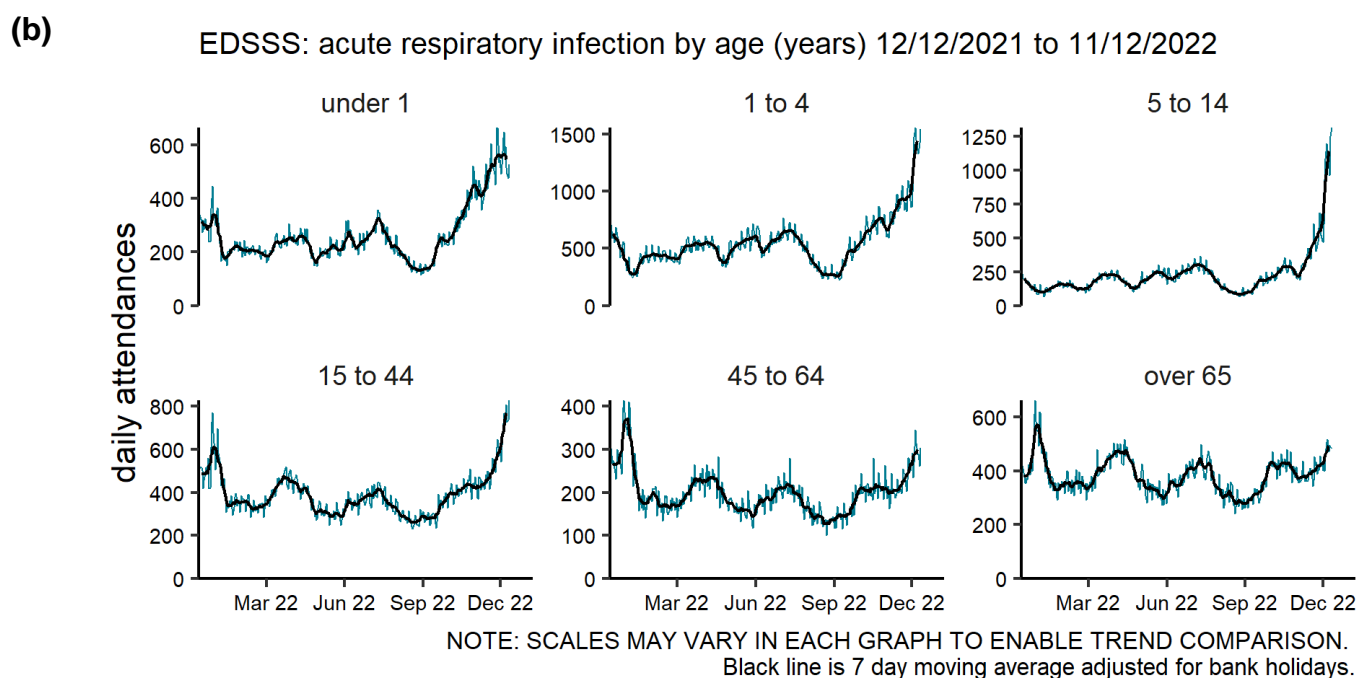
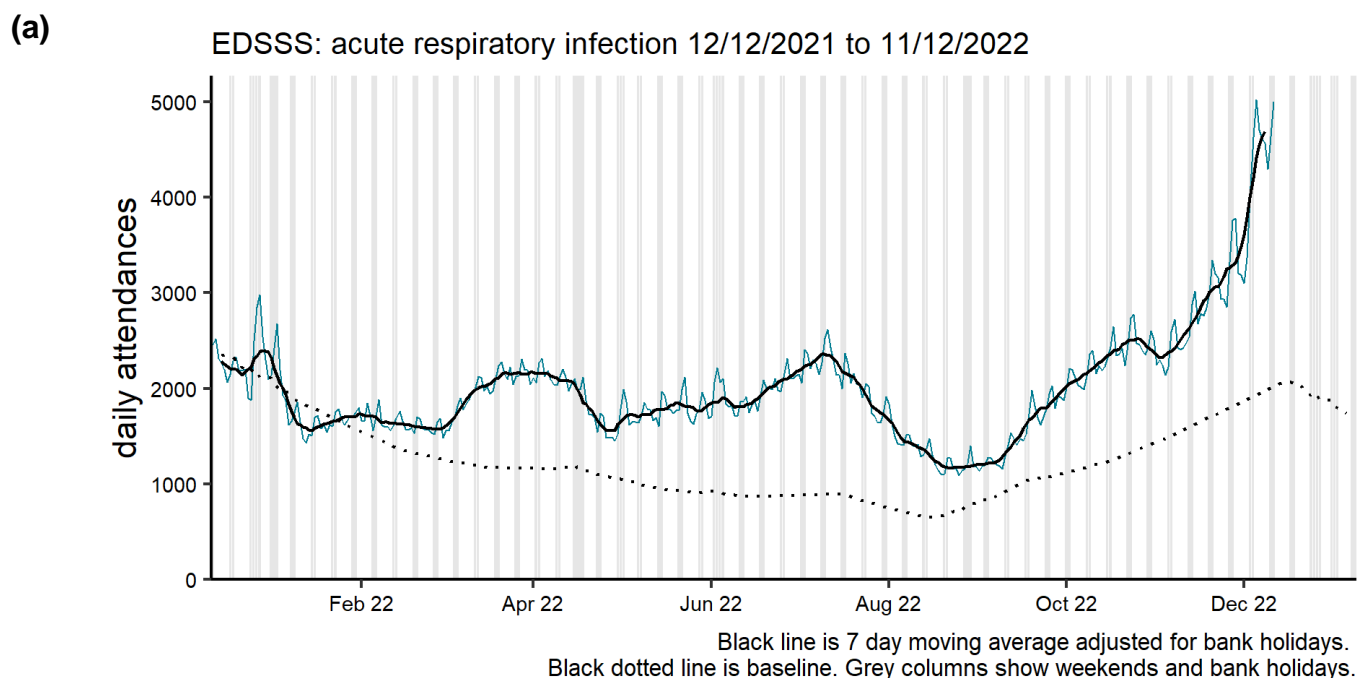
(c)



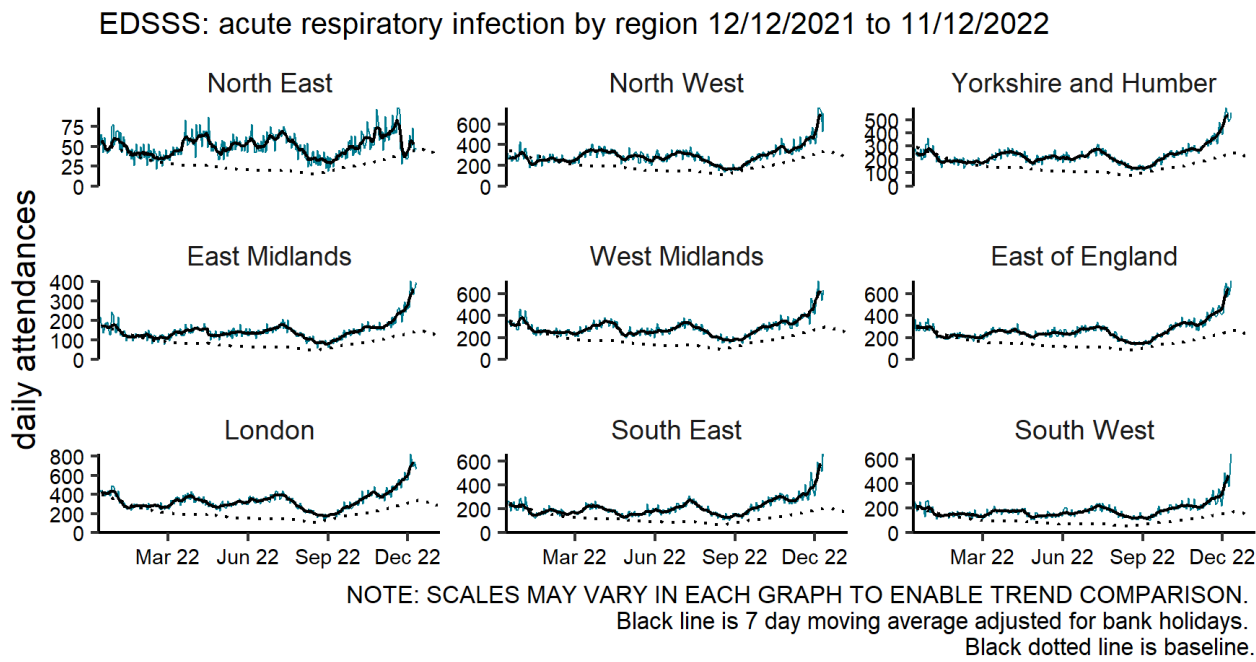


## Acute respiratory infections

**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.**

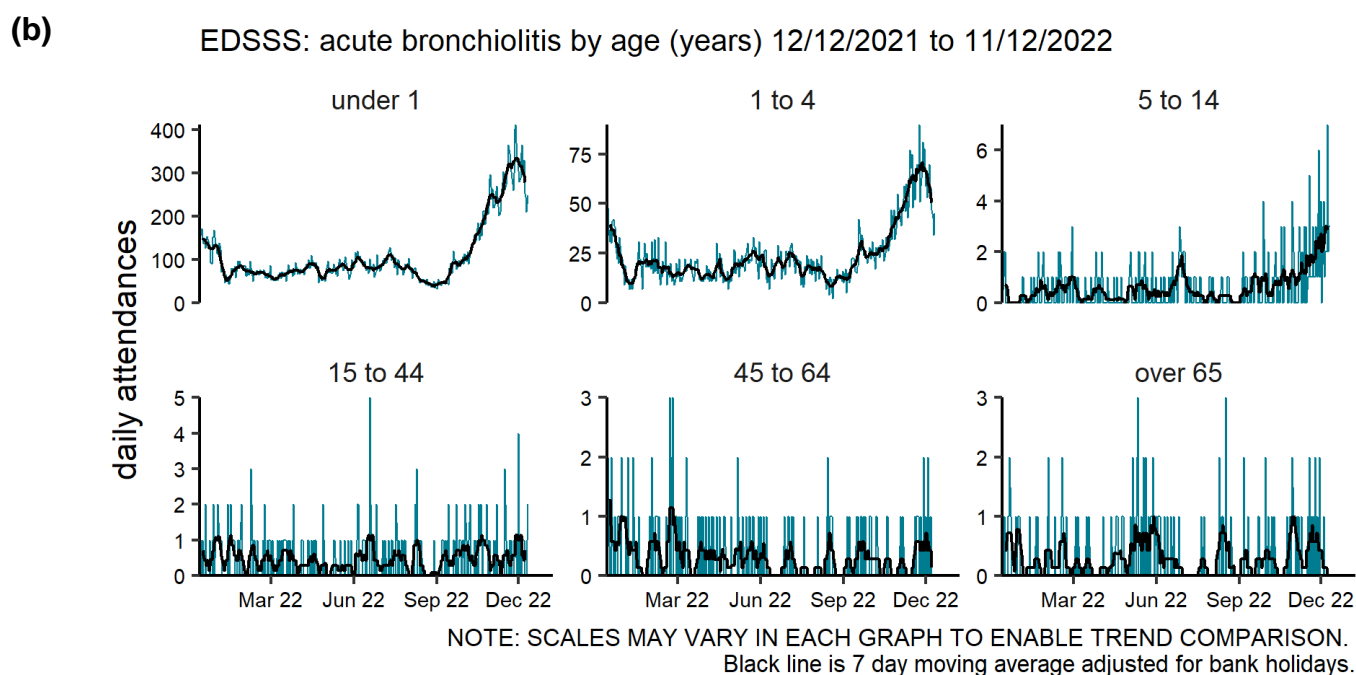
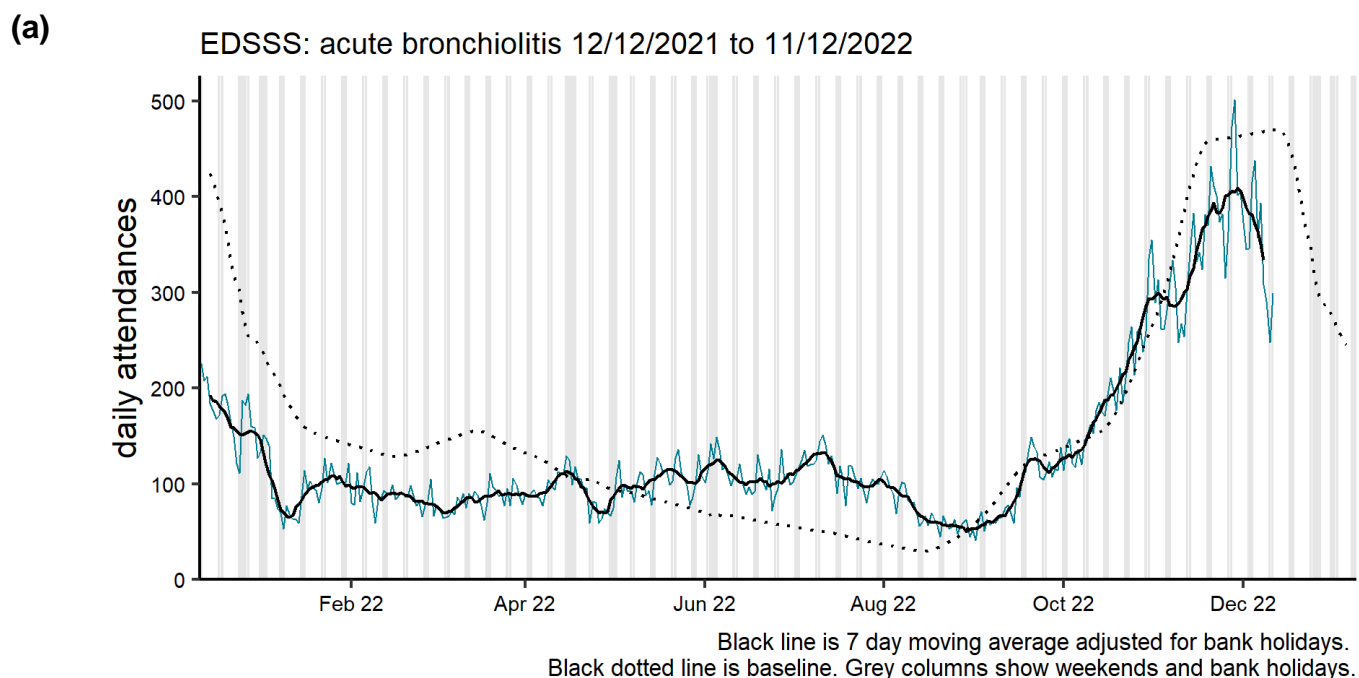


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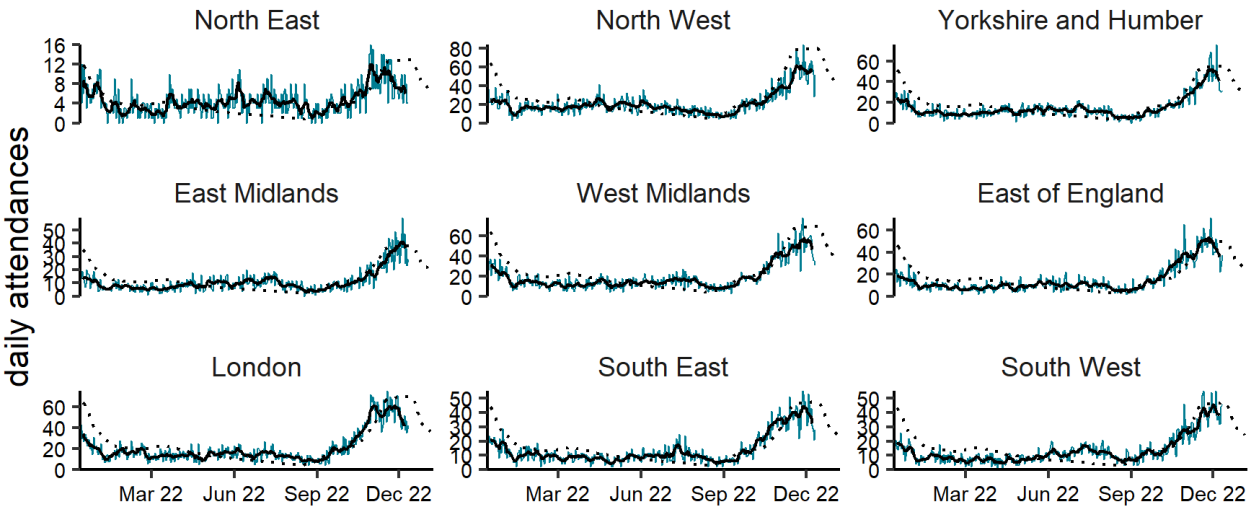
## Acute bronchiolitis/bronchitis

**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)

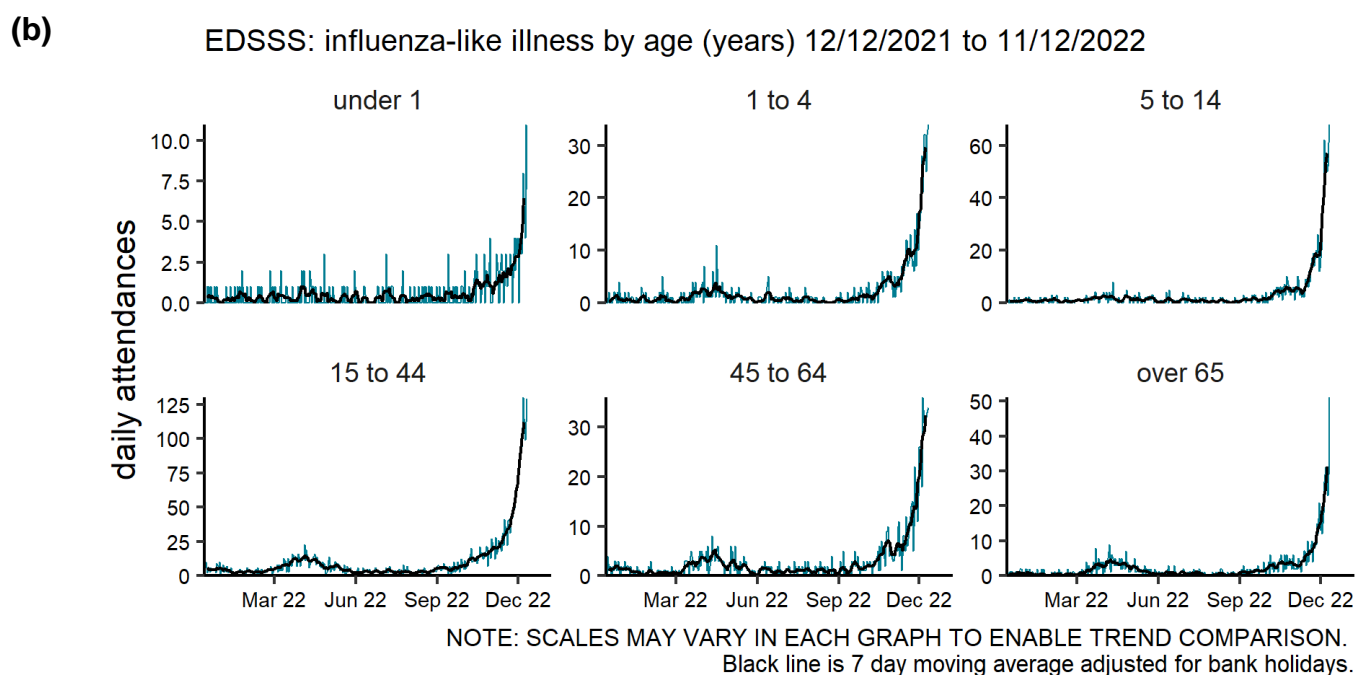
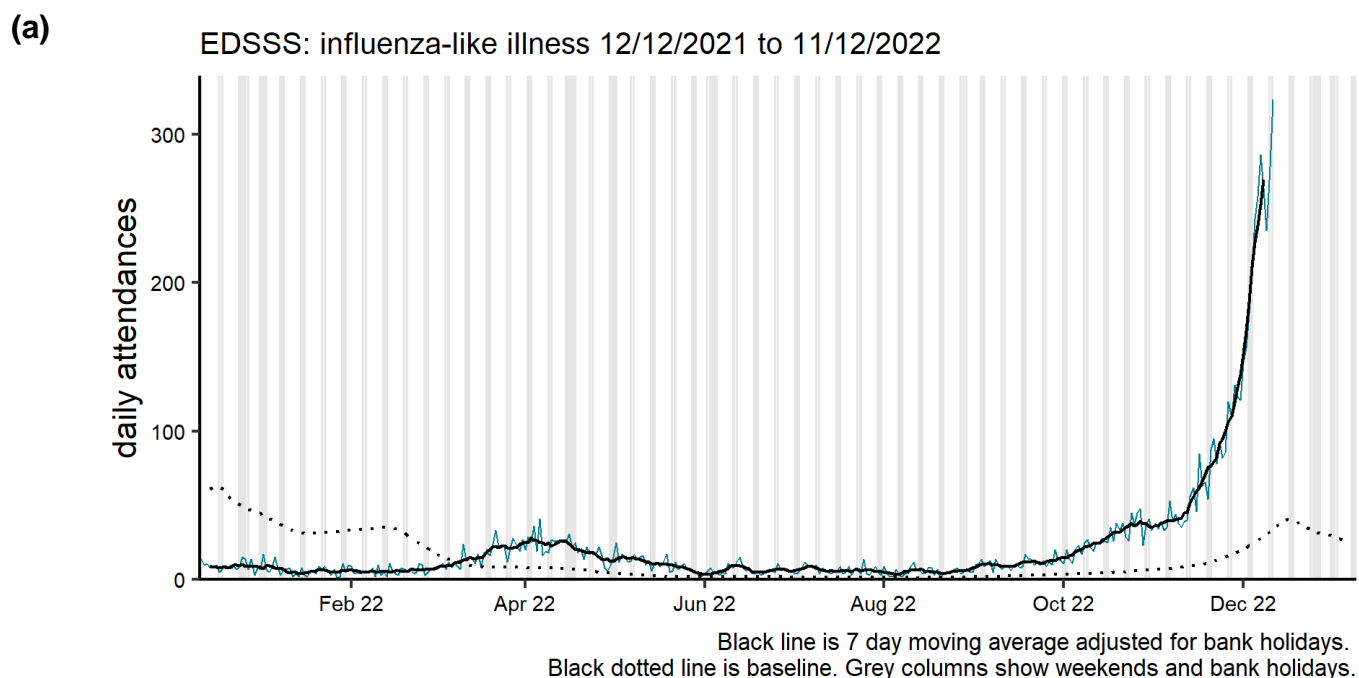
EDSSS: acute bronchiolitis by region 12/12/2021 to 11/12/2022



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.

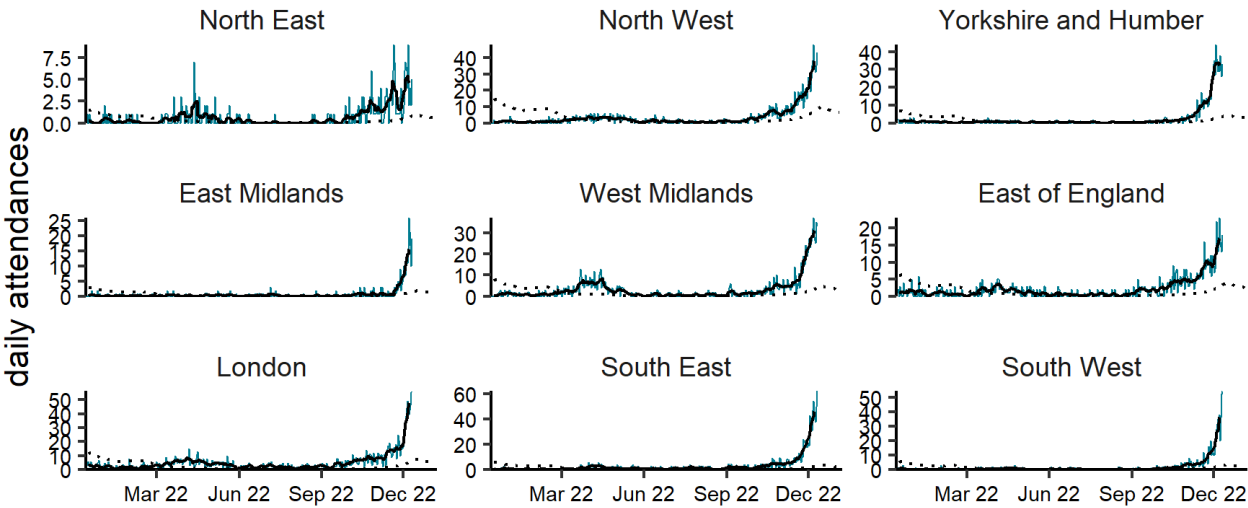
## Influenza-like illness

**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 region 12/12/2021 to 11/12/2022



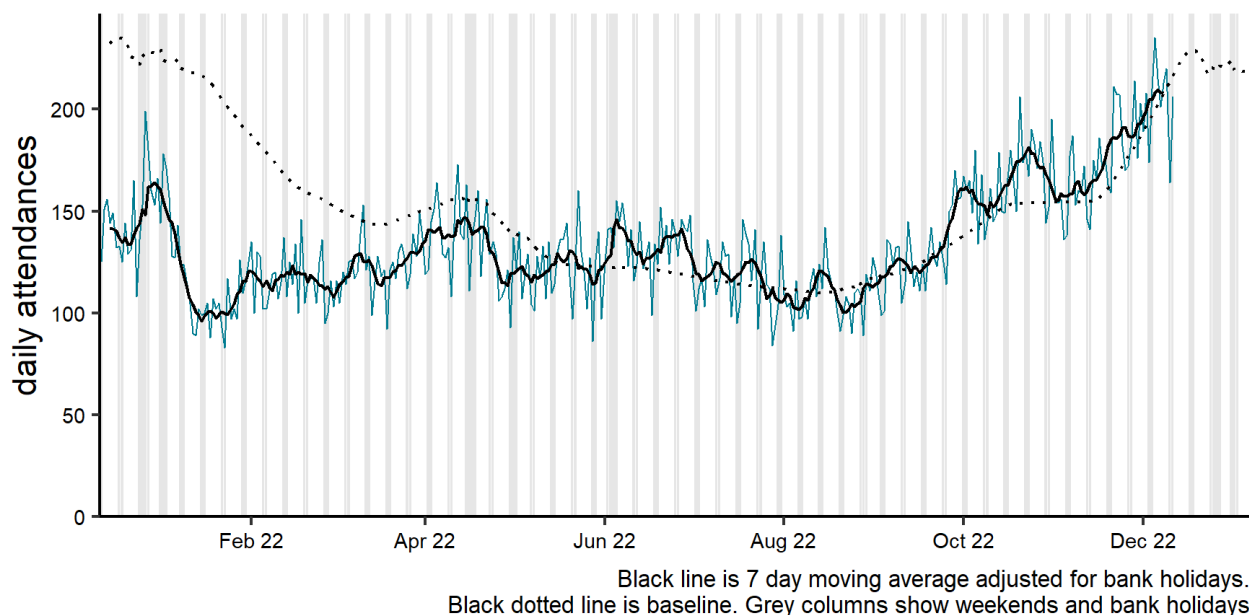
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.  
Black line is 7 day moving average adjusted for bank holidays.  
Black dotted line is baseline.

## 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.**

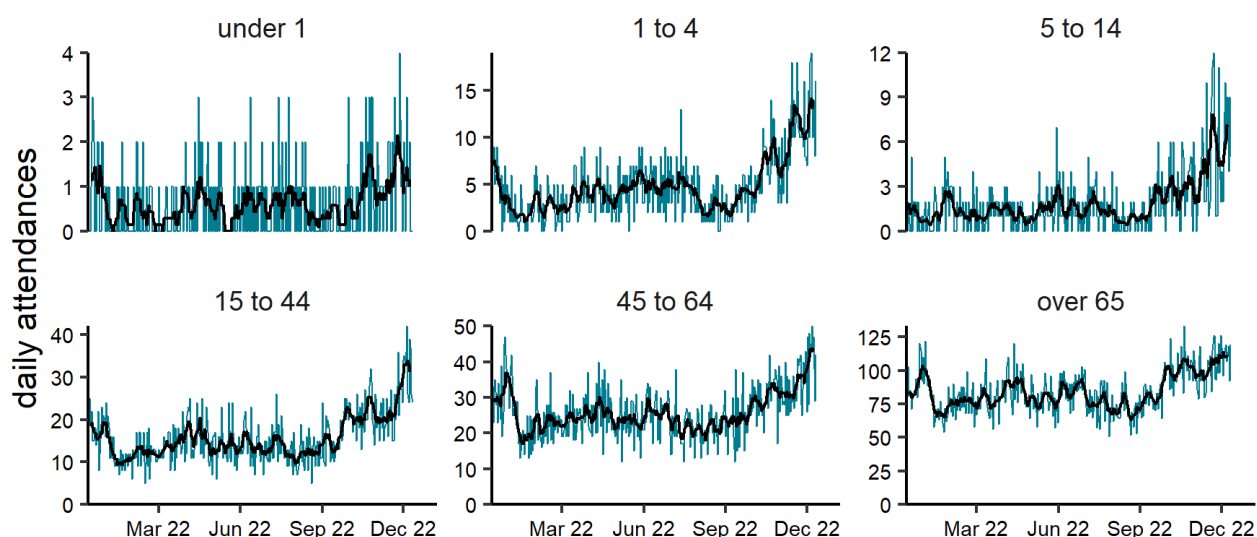
(a)

EDSSS: pneumonia 12/12/2021 to 11/12/2022



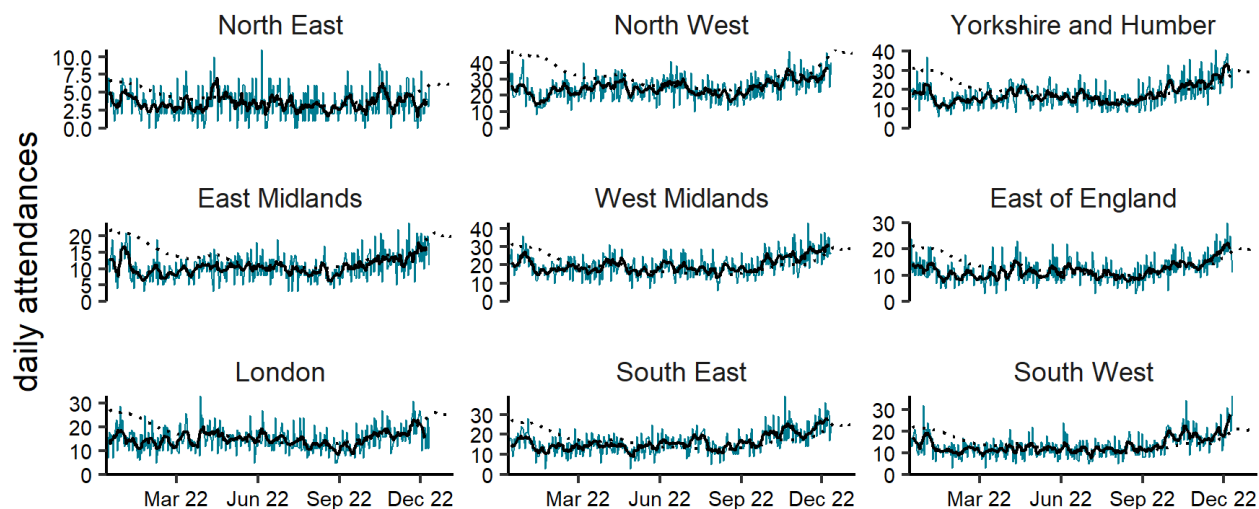
(b)

EDSSS: pneumonia by age (years) 12/12/2021 to 11/12/2022



(c)

EDSSS: pneumonia by region 12/12/2021 to 11/12/2022



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

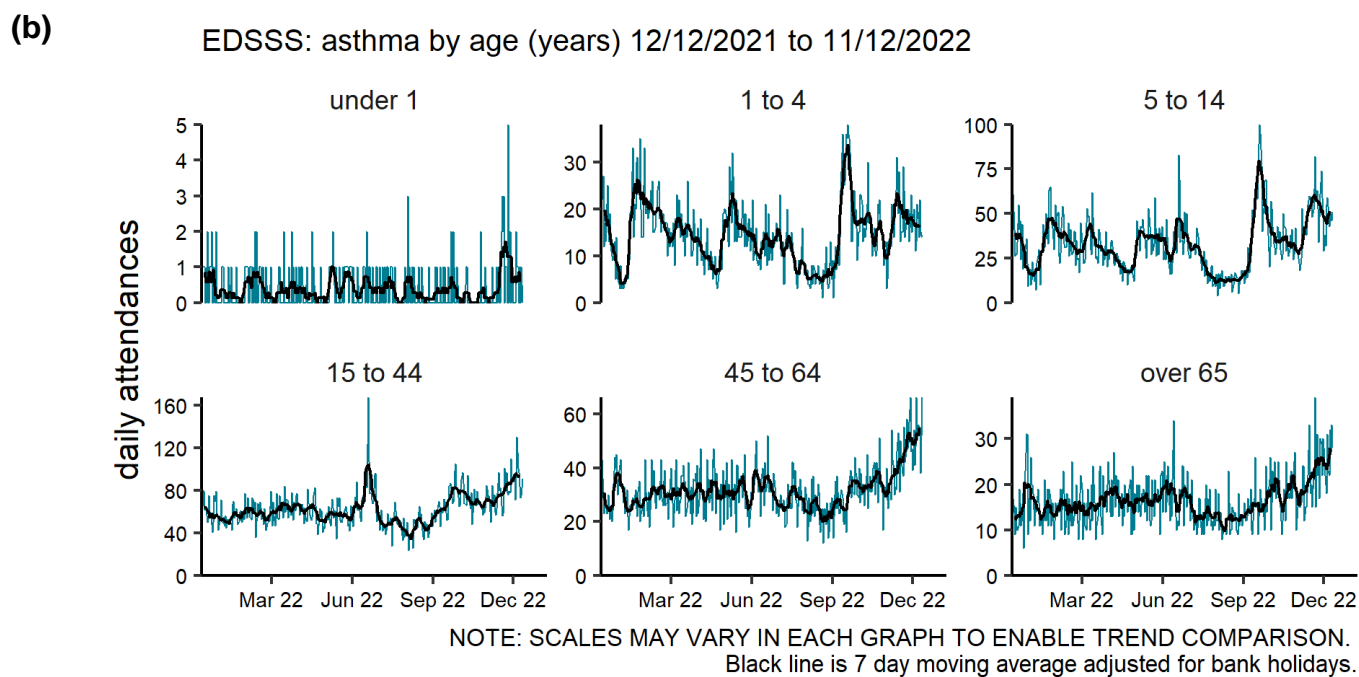
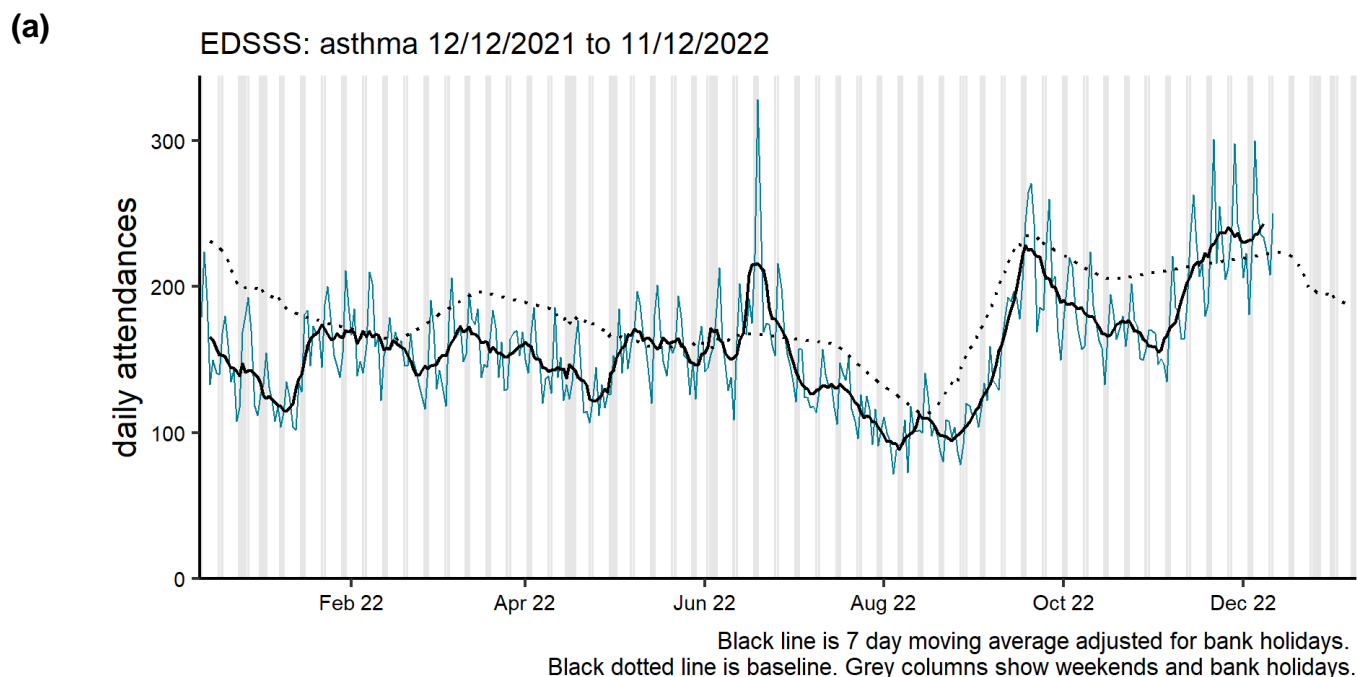
Black line is 7 day moving average adjusted for bank holidays.

Black dotted line is baseline.

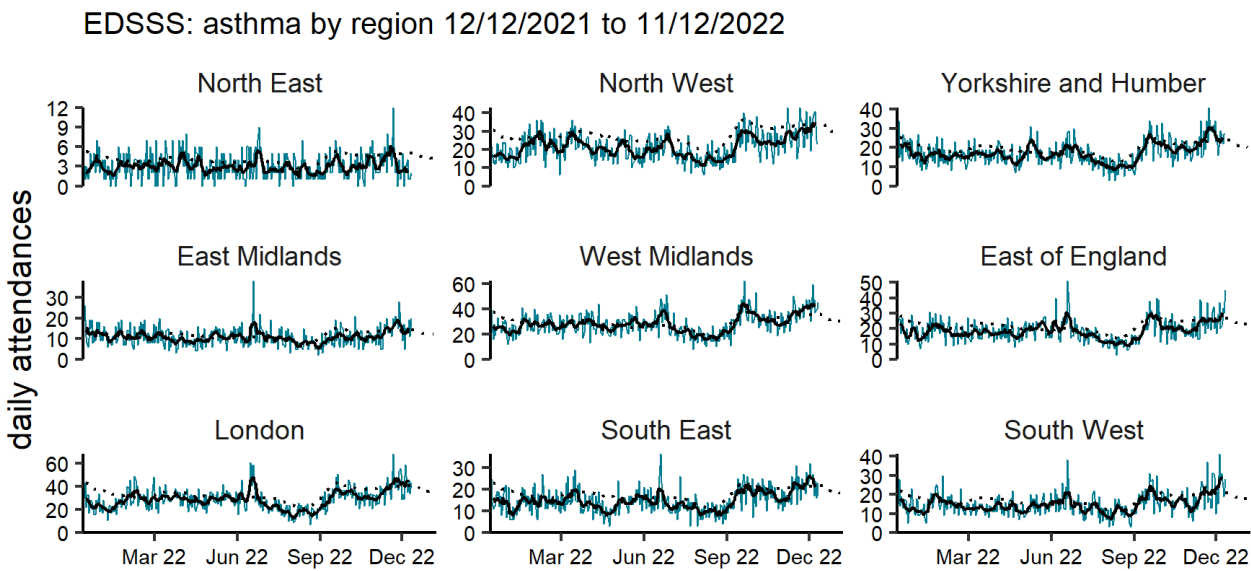


## Asthma

**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)

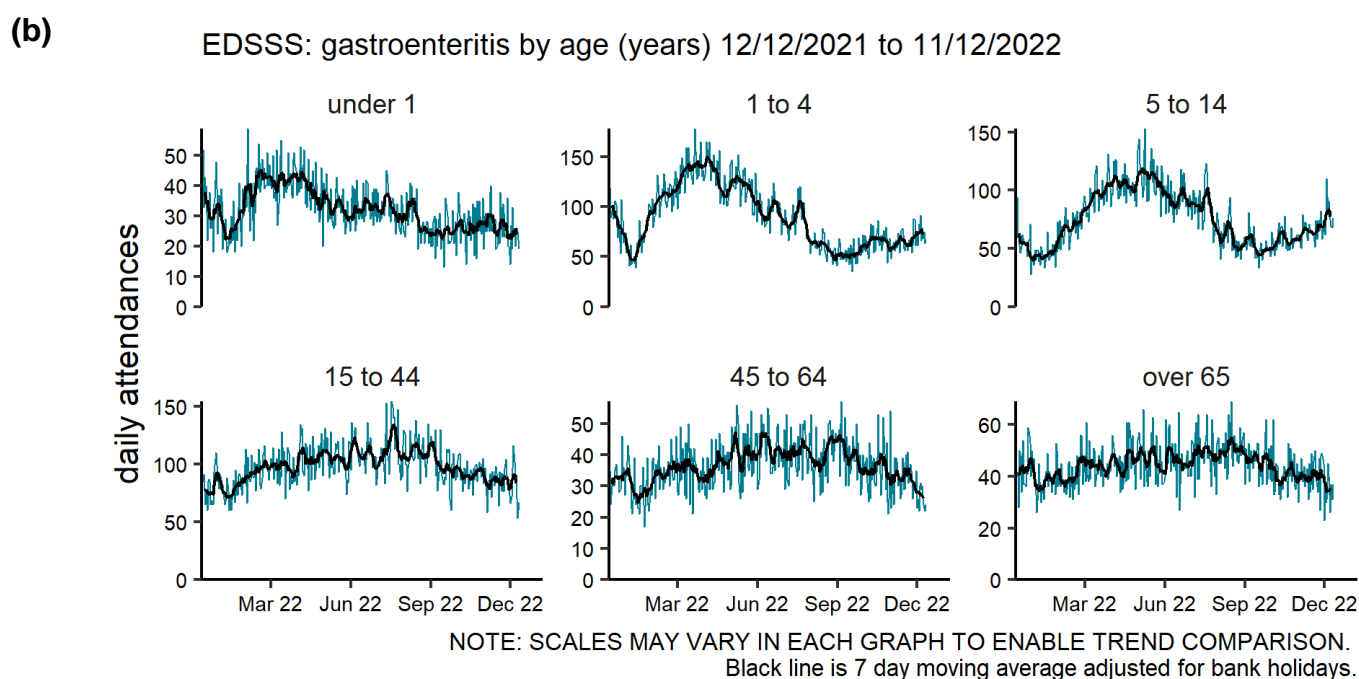
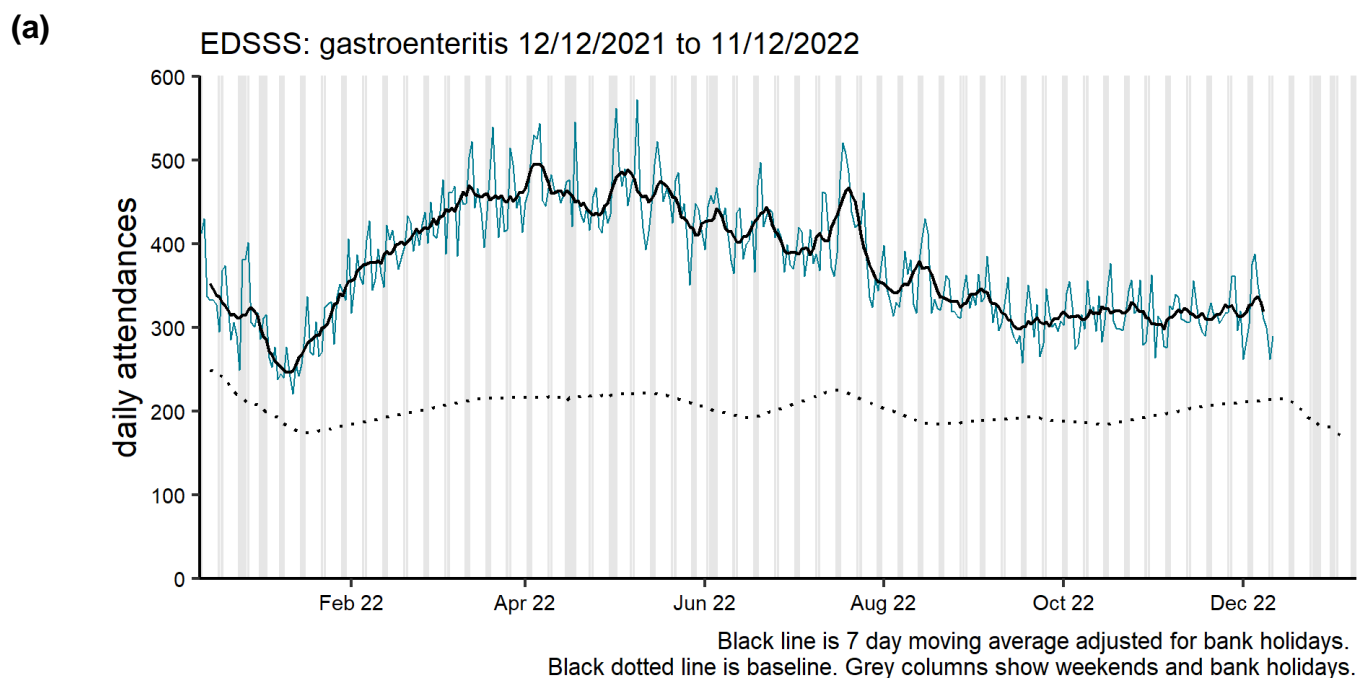


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.  
Black line is 7 day moving average adjusted for bank holidays.  
Black dotted line is baseline.

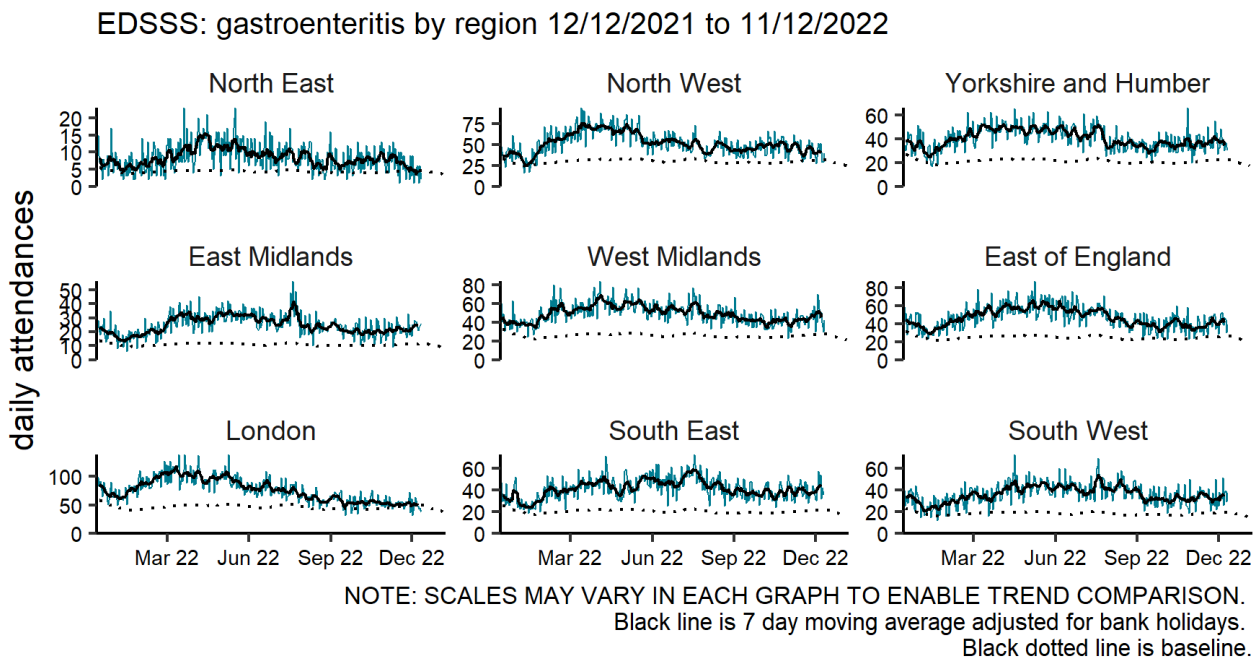
# Gastrointestinal conditions

## 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.**



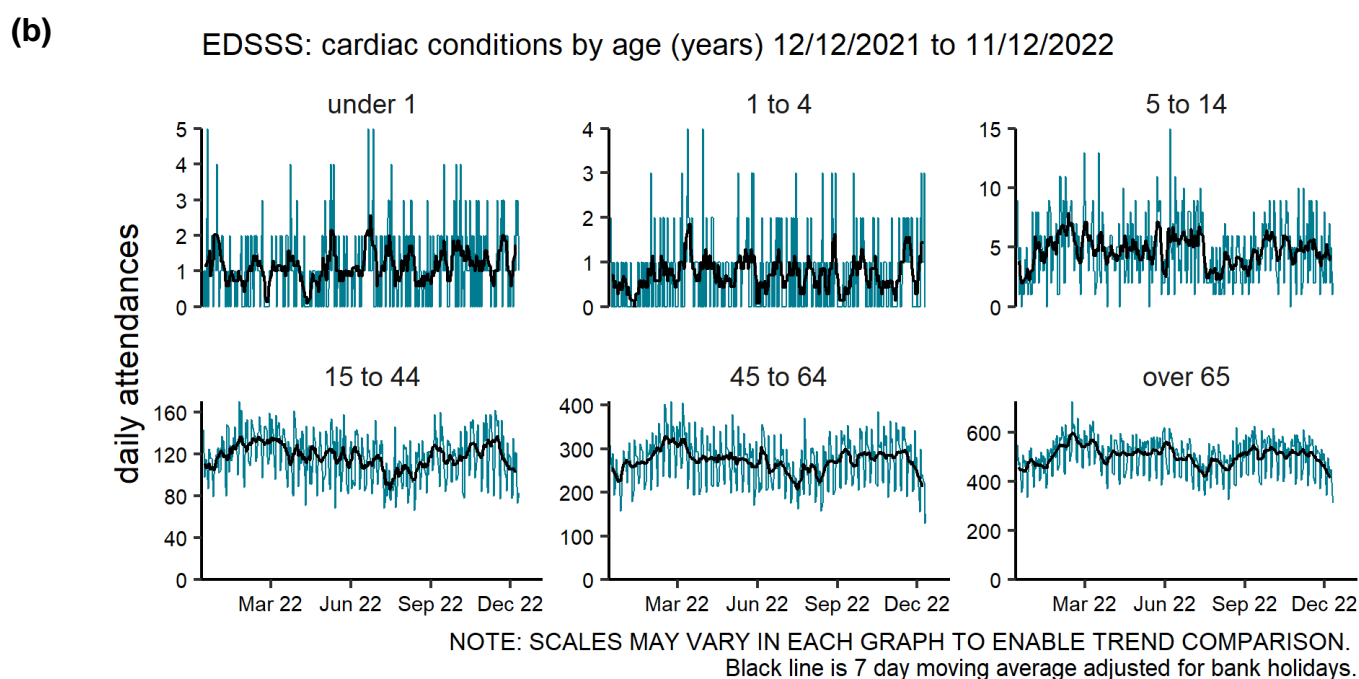
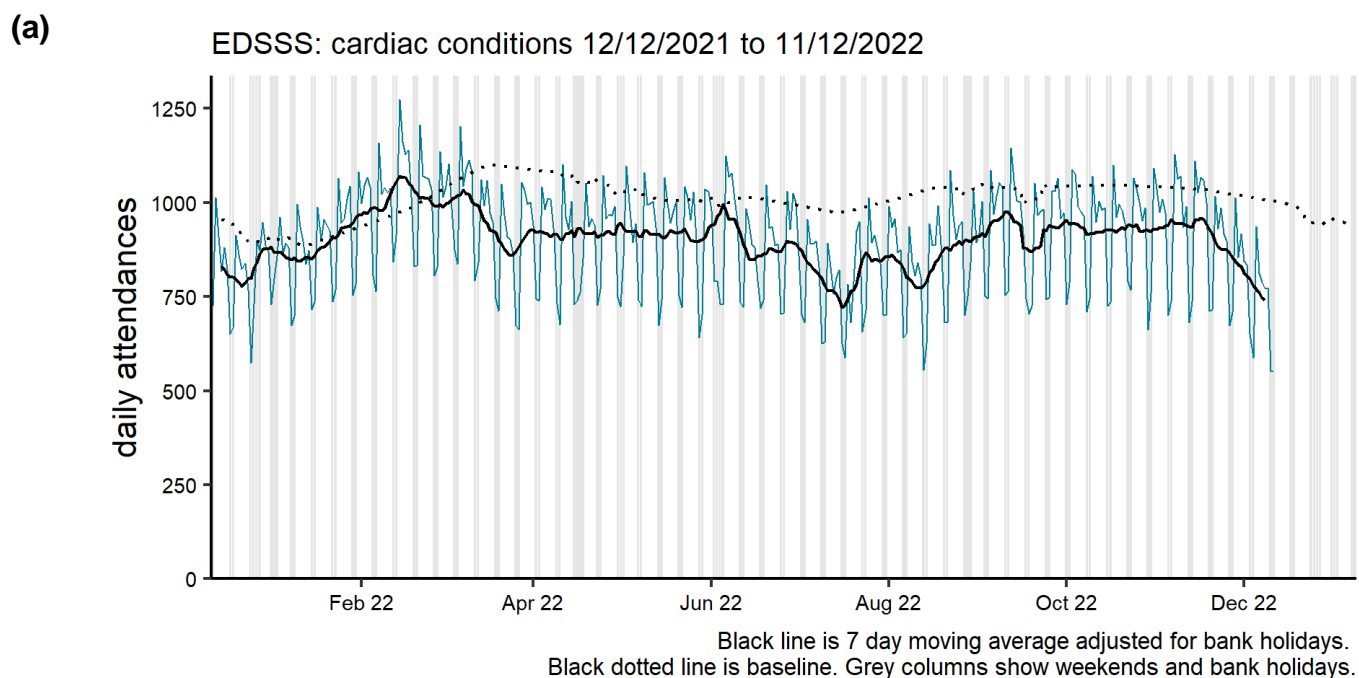
(c)



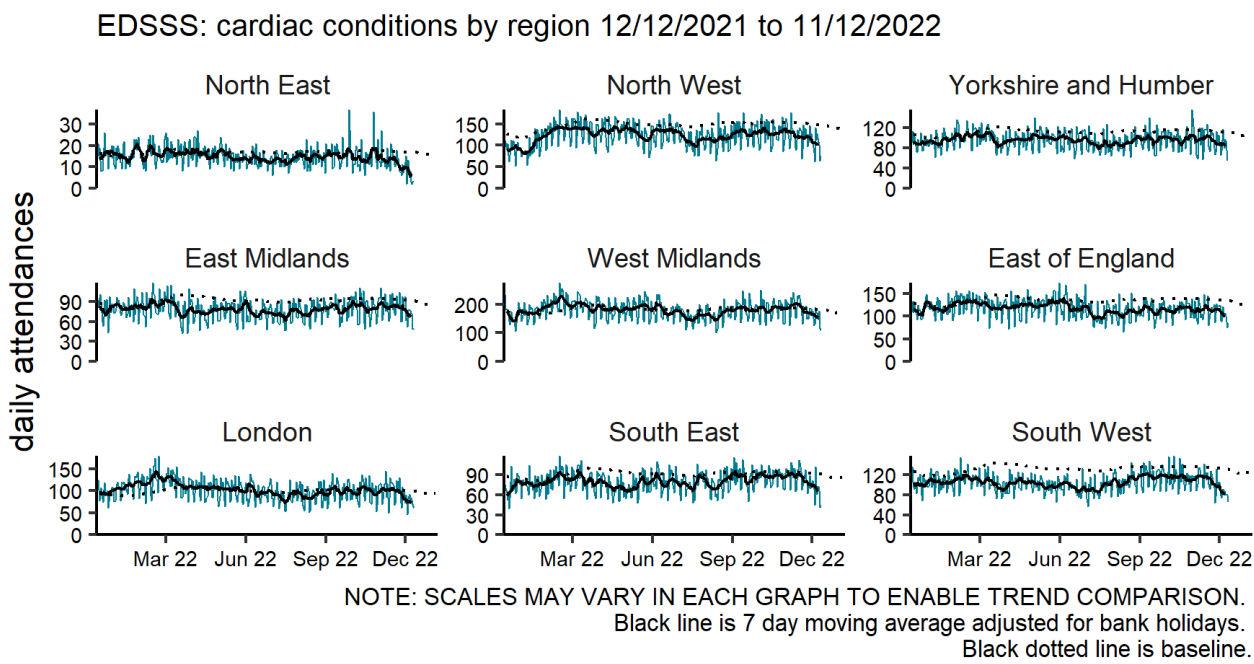
# Cardiac conditions

## 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.**

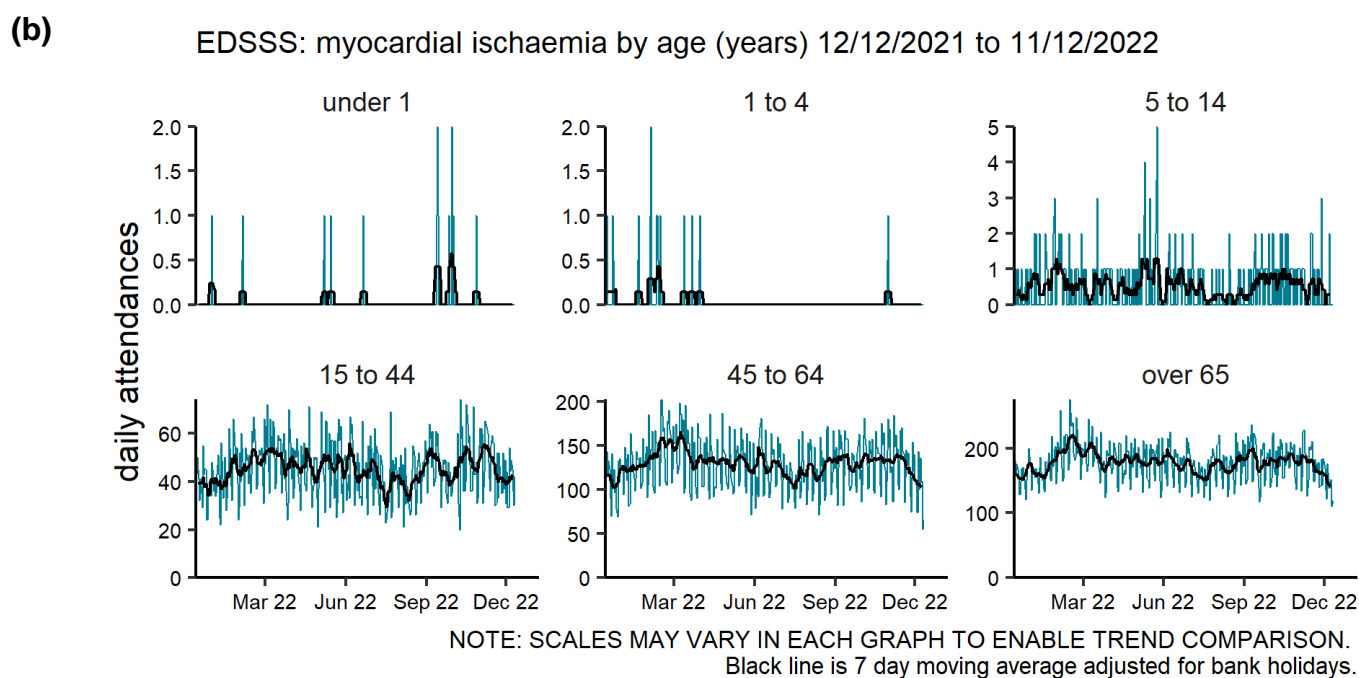
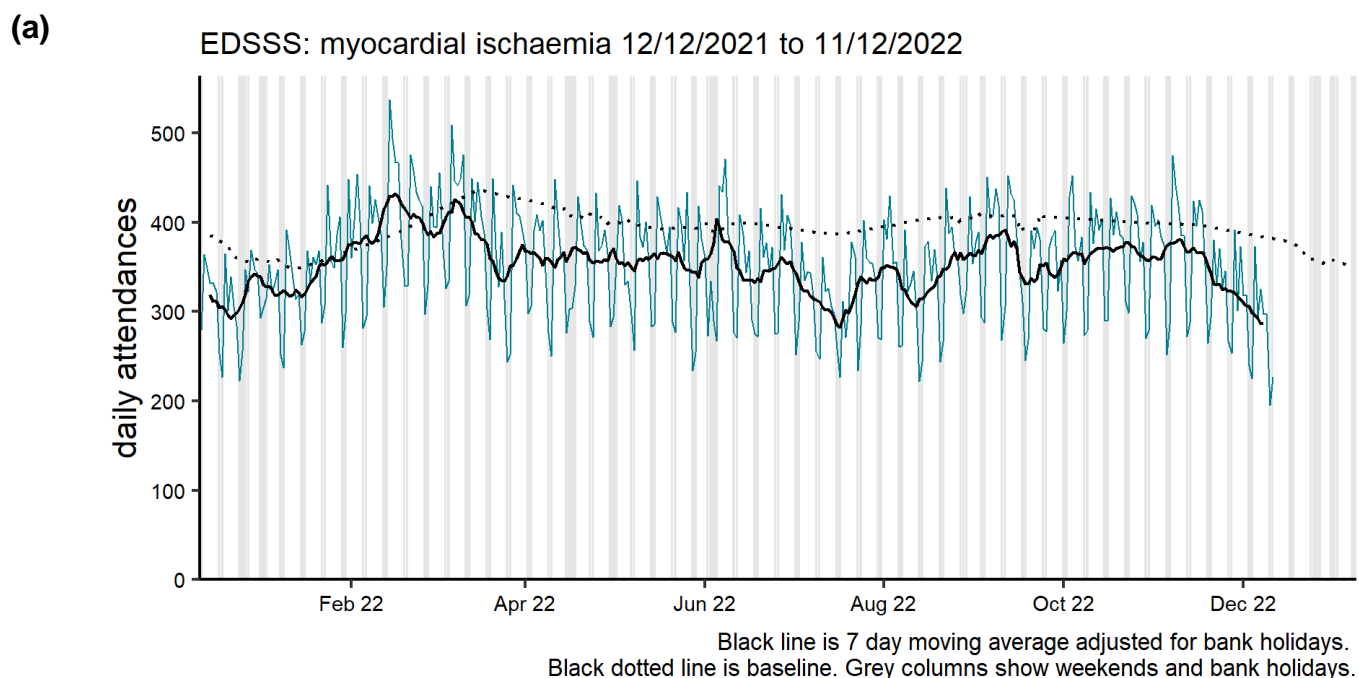


(c)



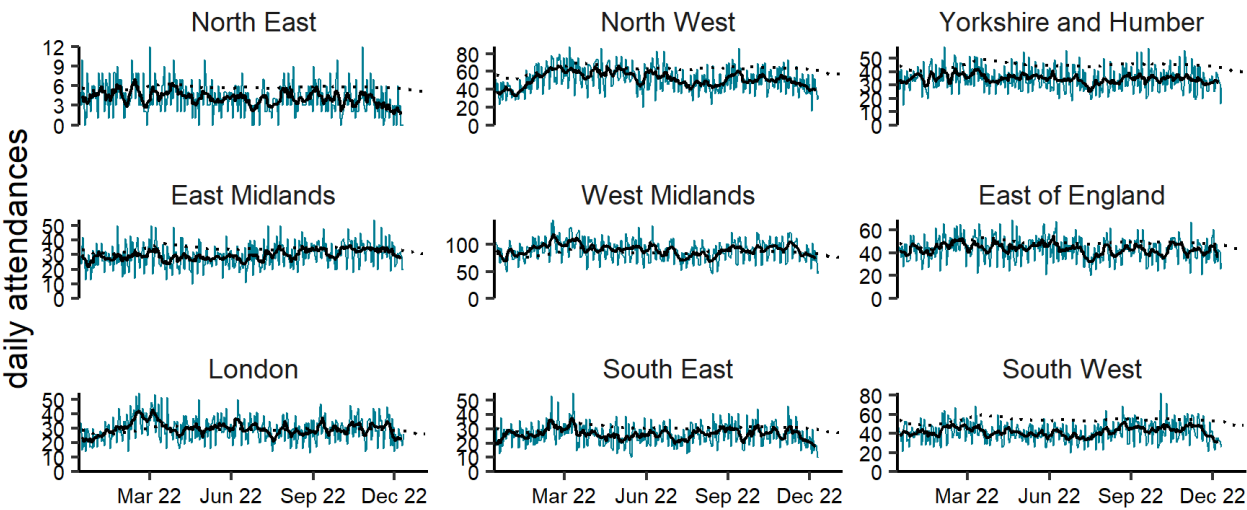
## Myocardial ischaemia

**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 region 12/12/2021 to 11/12/2022



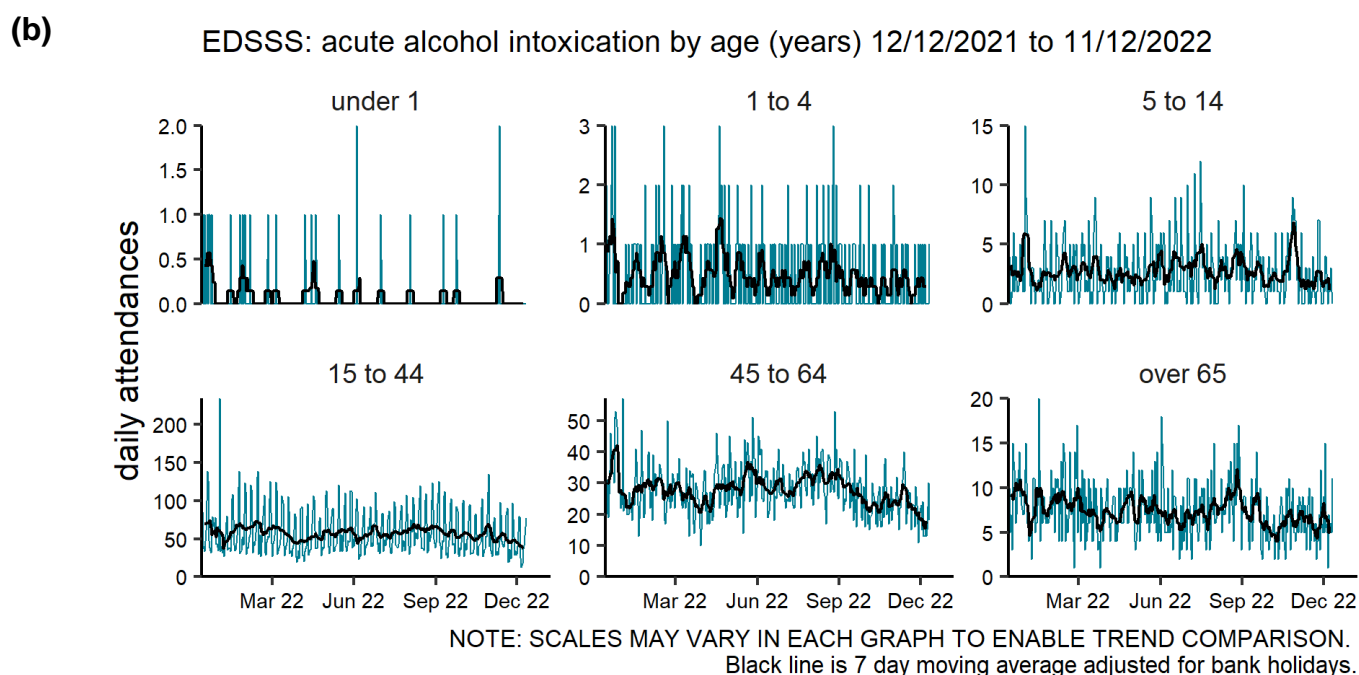
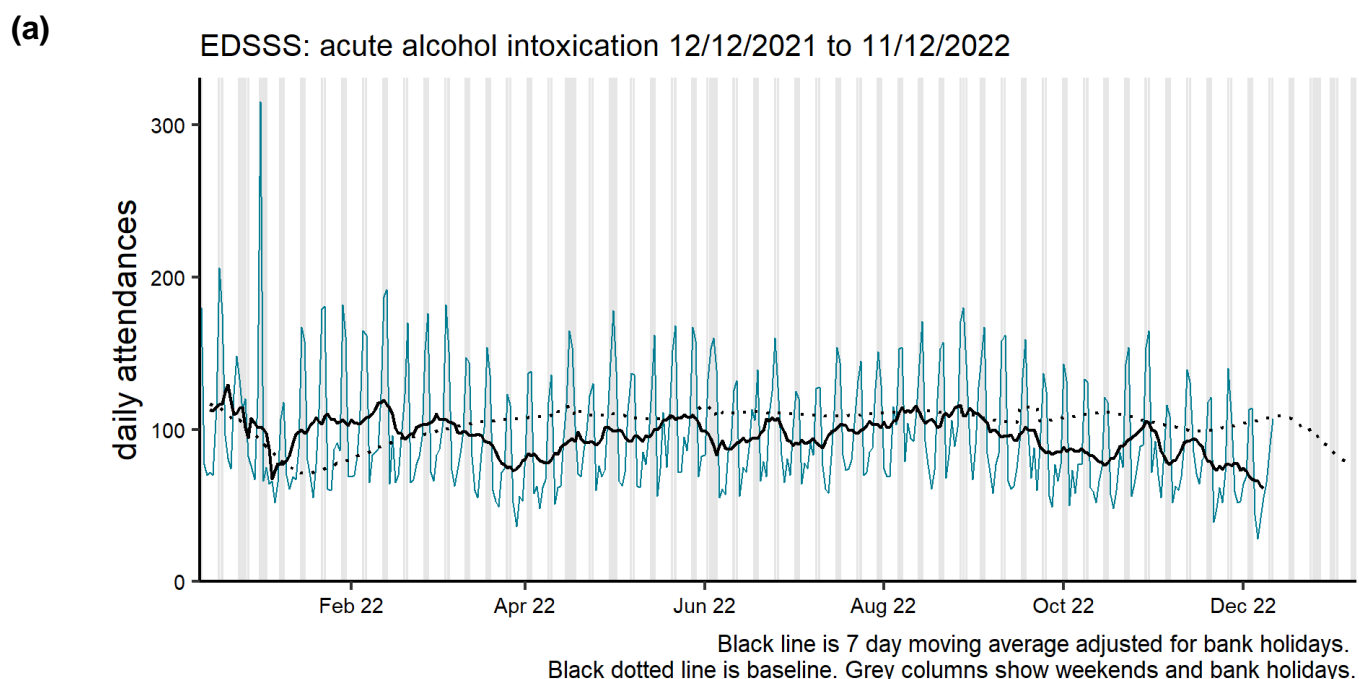
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.  
Black line is 7 day moving average adjusted for bank holidays.  
Black dotted line is baseline.



# Other conditions

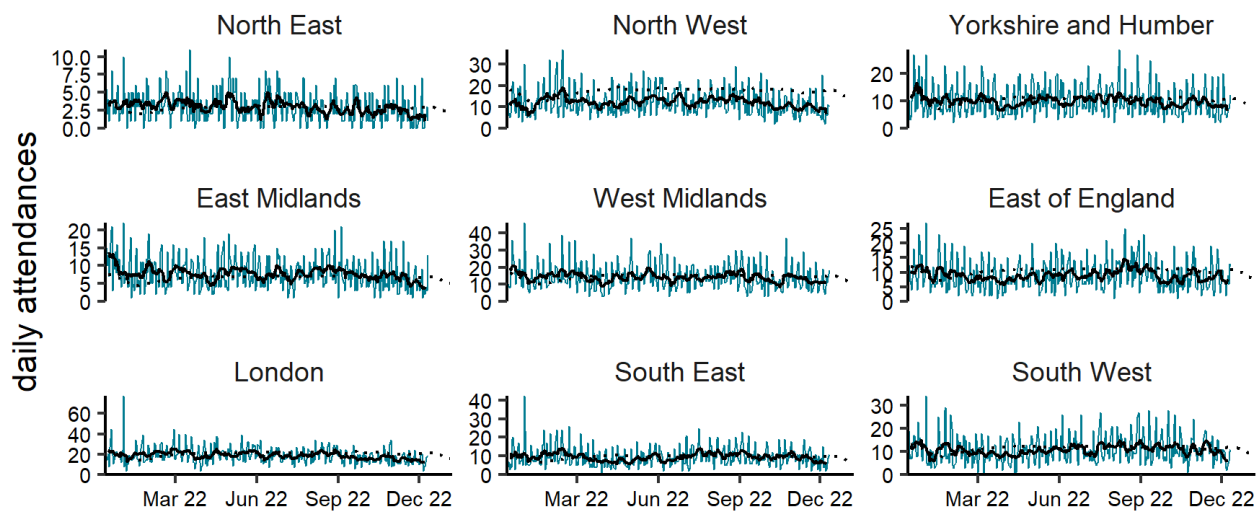
## Acute alcohol intoxication

**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 region 12/12/2021 to 11/12/2022

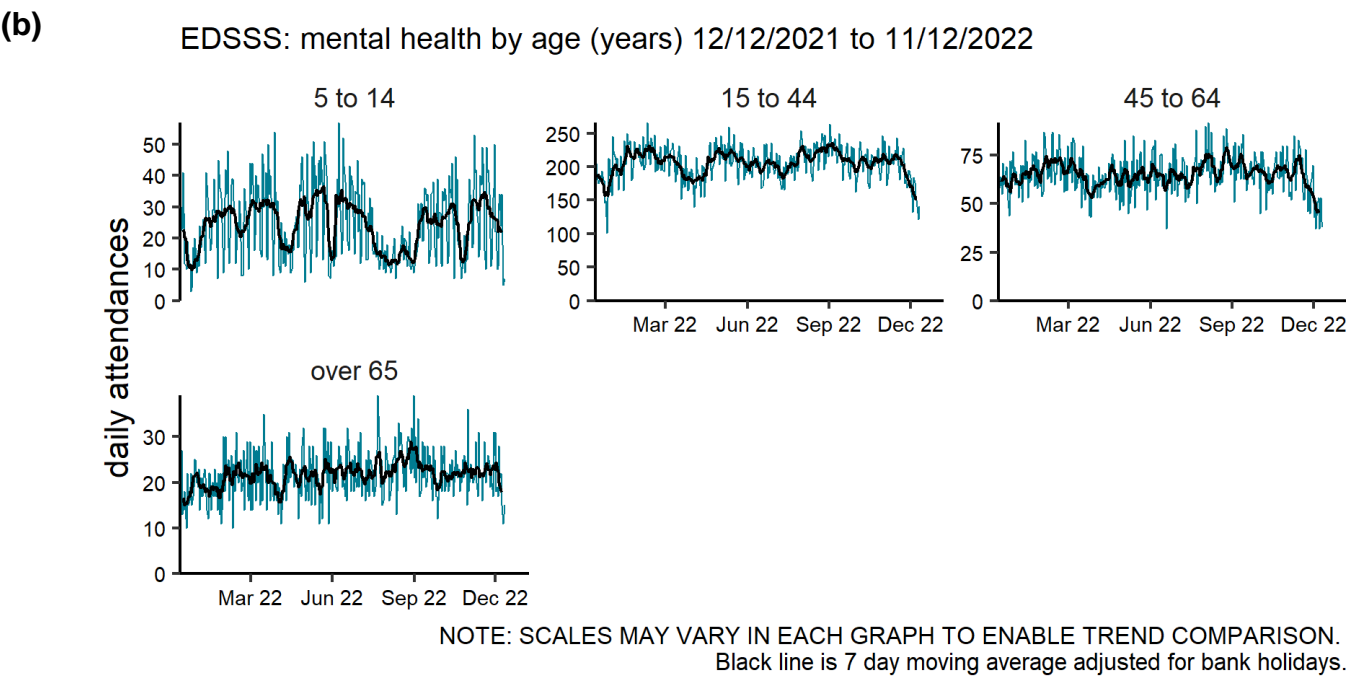
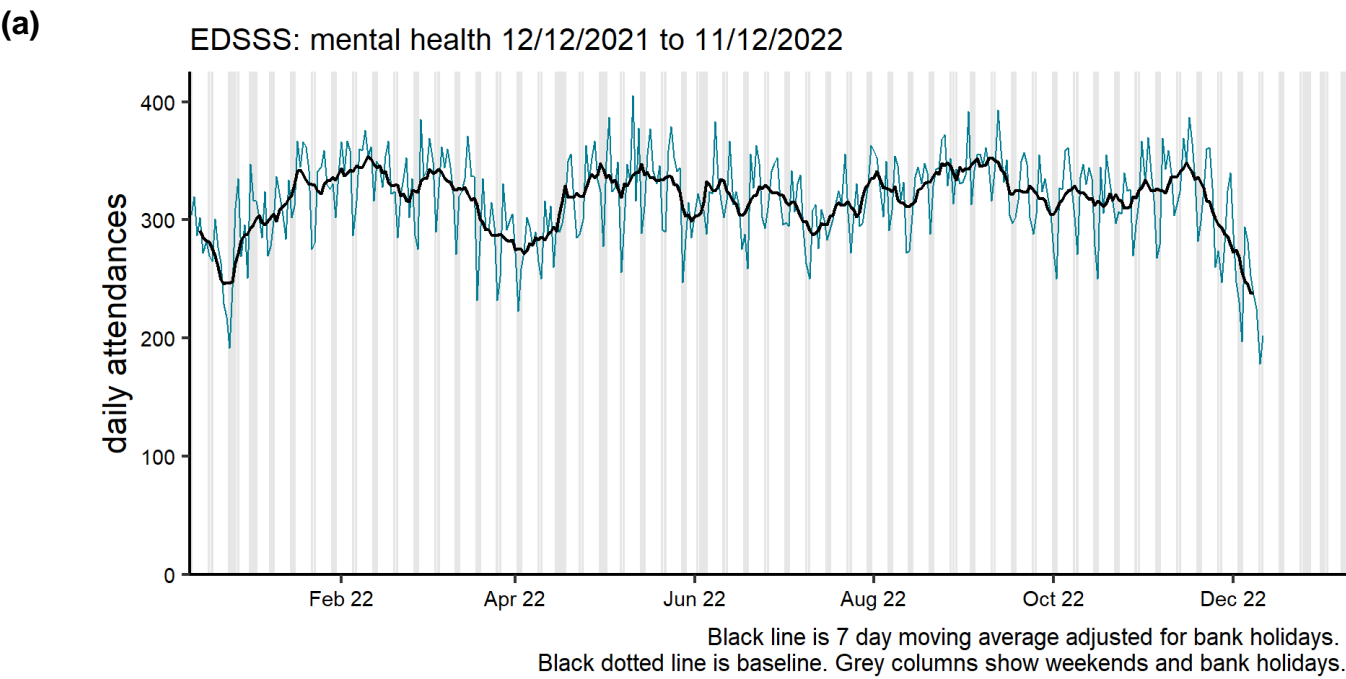


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.  
Black line is 7 day moving average adjusted for bank holidays.  
Black dotted line is baseline.

# Mental health

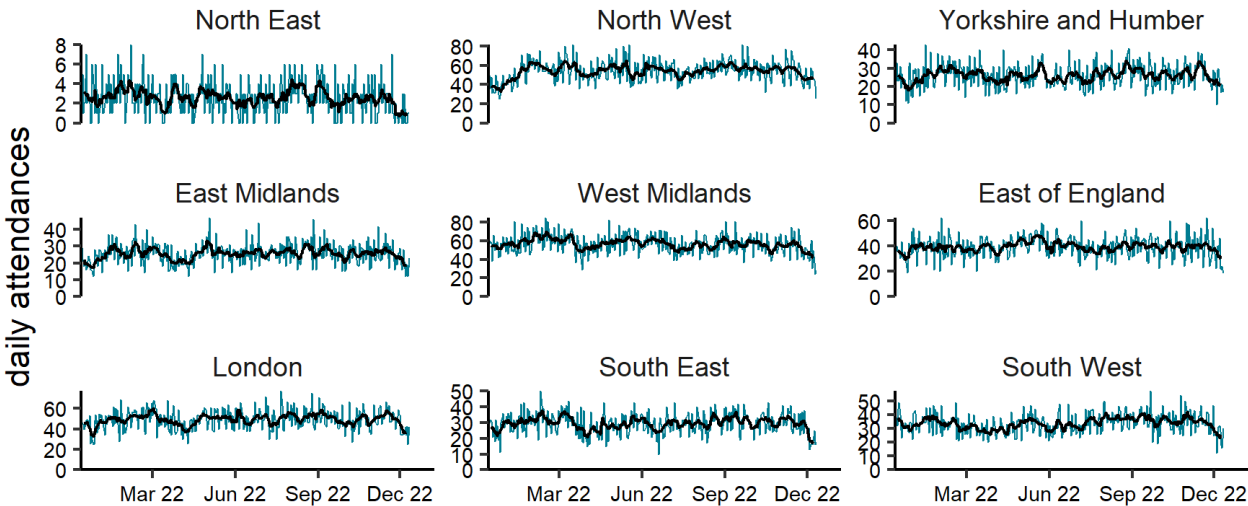
**Figure 12: Daily number of mental health<sup>3</sup> ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.**

<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)

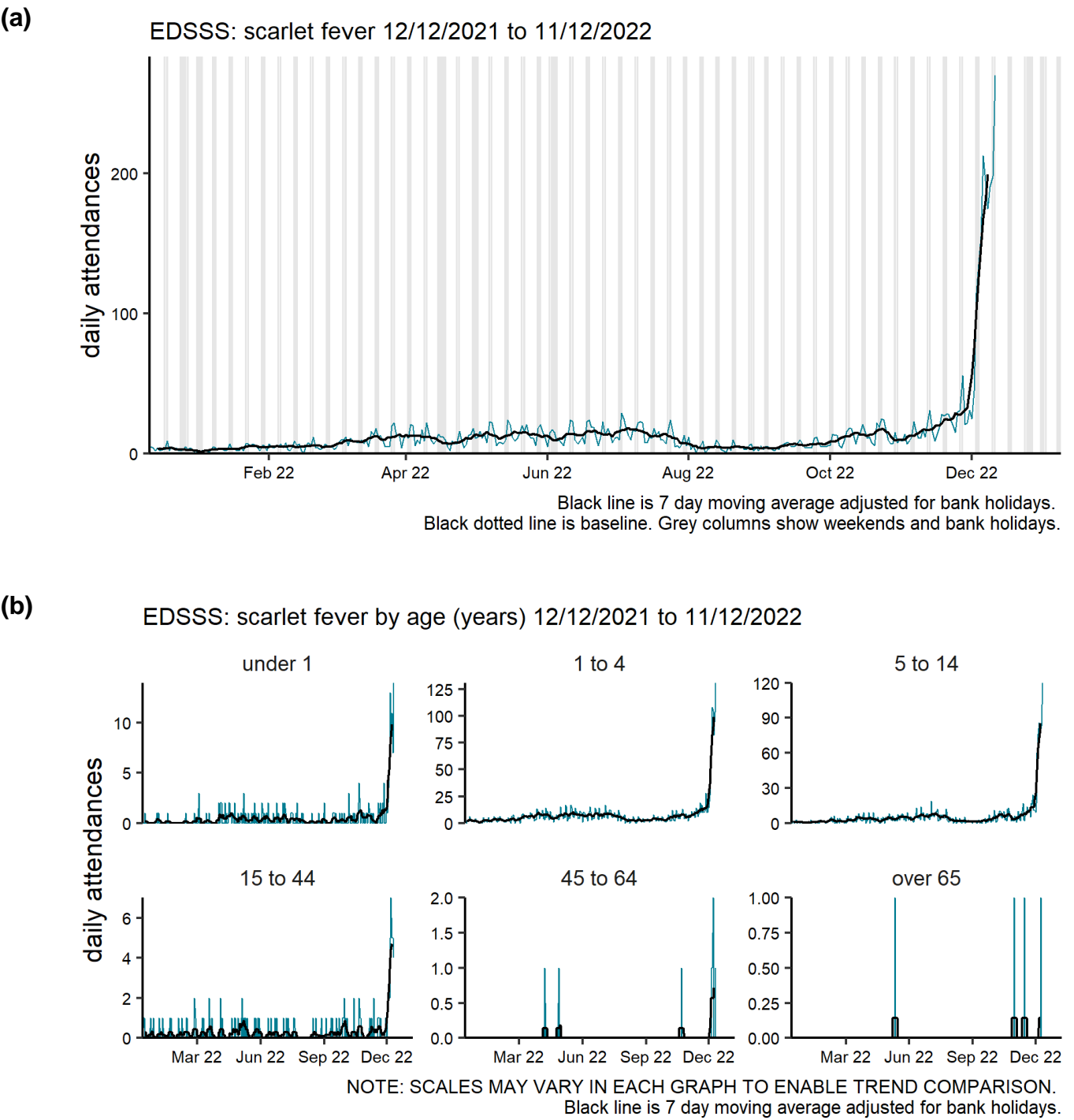
EDSSS: mental health by region 12/12/2021 to 11/12/2022



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.

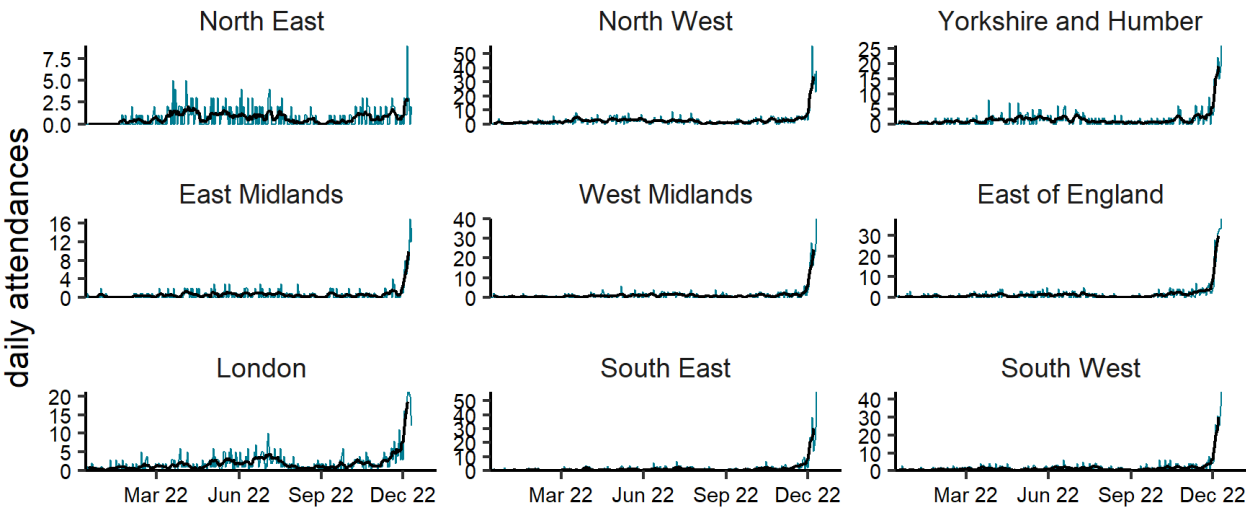
# Scarlet fever

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 region 12/12/2021 to 11/12/2022



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

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

[Cold weather alert](#) period: 1 November to 31 March

[Heat-Health Alert](#) period: 1 June to 15 September

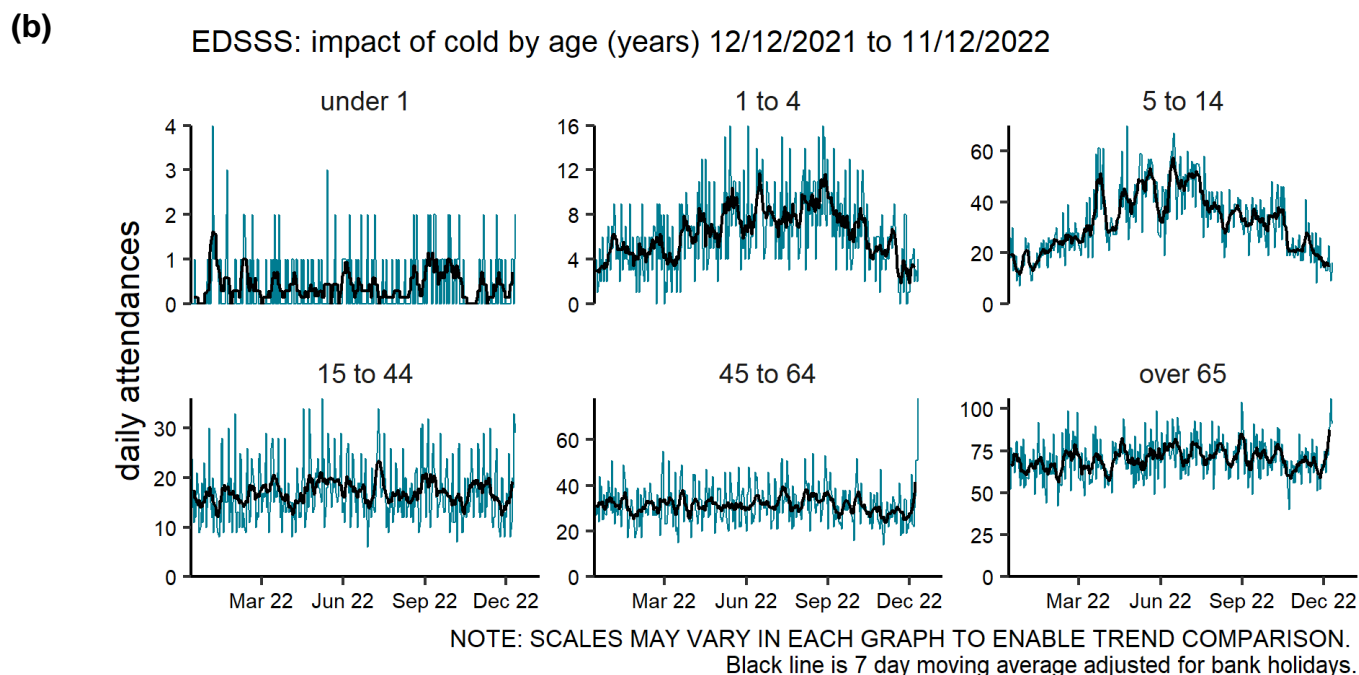
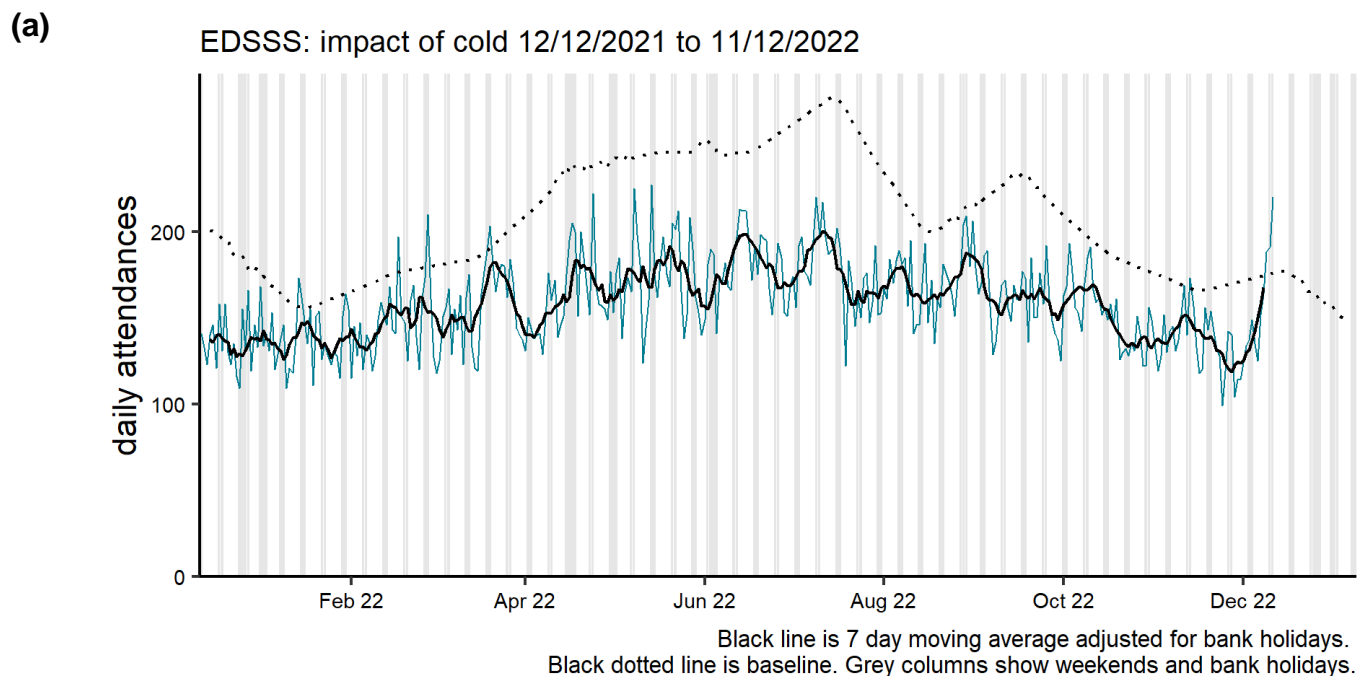
Highest weather alert level during the current reporting week:

**Level 3 – Severe weather action**

## Impact of cold

**Figure 14: Daily number of impact of cold<sup>4</sup> ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.**

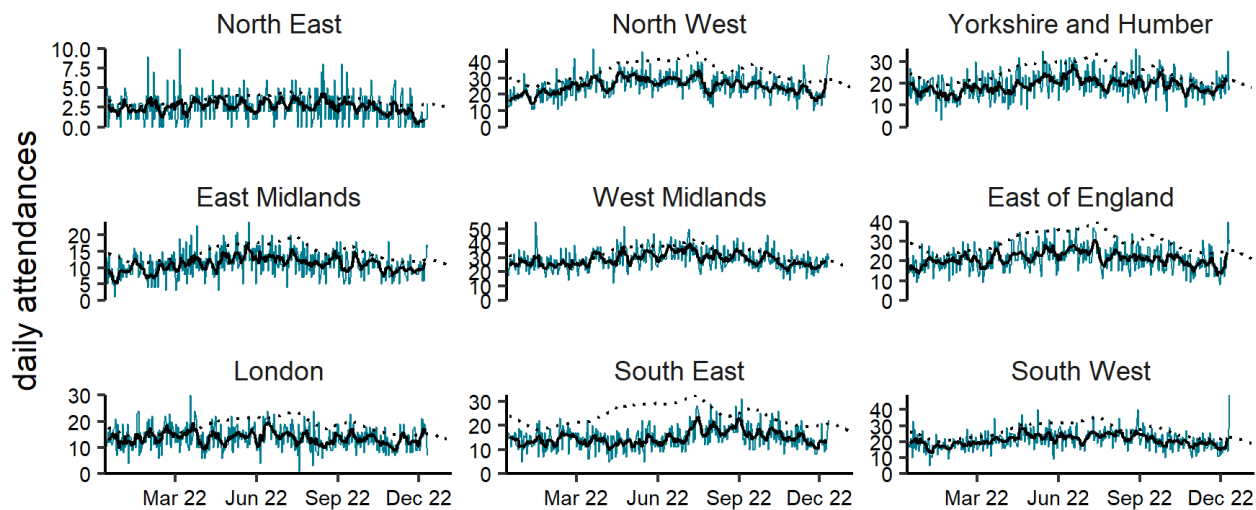
<sup>4</sup> impact of cold attendances reported here are restricted to female attendances, with a primary diagnosis of fracture of the femur/wrist/forearm plus cold specific diagnoses of hypothermia, or cold injuries.





(c)

EDSSS: impact of cold by region 12/12/2021 to 11/12/2022



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 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 April 2021
  - 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](https://www.gov.uk/government/organisations/uk-health-security-agency)

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UKHSA supports the UN  
Sustainable Development Goals

