Emergency Department Syndromic Surveillance System Bulletin (England)
2023 Week 9

Key messages

Data reported to: 5 March 2023

'COVID-19-like' ED attendances remained stable nationally during week 9 however there was a further small increase in the over 65 years age group and attendances increased in the West Midlands and East of England. Gastroenteritis attendances increased overall but there was a small decrease observed in the over 65 years age group. During week 9, ED attendances for scarlet fever were stable but remained above seasonally expected levels.

Please note: Remodelled EDSSS baselines were refitted during week 6 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[1]	Level
Total attendances (**Figure 1**)	No trend	No baseline
COVID-19-like (**Figure 2**)	No trend	No baseline
Acute respiratory infections (**Figure 3**)	Decreasing	Similar to baseline
Acute bronchiolitis or bronchitis (**Figure 4**)	Decreasing	Similar to baseline
Influenza-like illness (**Figure 5**)	No trend	Similar to baseline
Pneumonia (**Figure 6**)	Decreasing	Above baseline
Asthma (**Figure 7**)	Decreasing	Similar to baseline
Gastroenteritis (**Figure 8**)	Increasing	Below baseline
Cardiac (**Figure 9**)	No trend	Similar to baseline
Myocardial ischaemia (**Figure 10**)	No trend	Similar to baseline
Acute alcohol intoxication (**Figure 11**)	No trend	Similar to baseline
Mental health (**Figure 12**)	No trend	No baseline
Scarlet fever (**Figure 13**)	No trend	Above baseline
Impact of cold (**Figure 14**)	No trend	Similar to baseline

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

Contents

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**

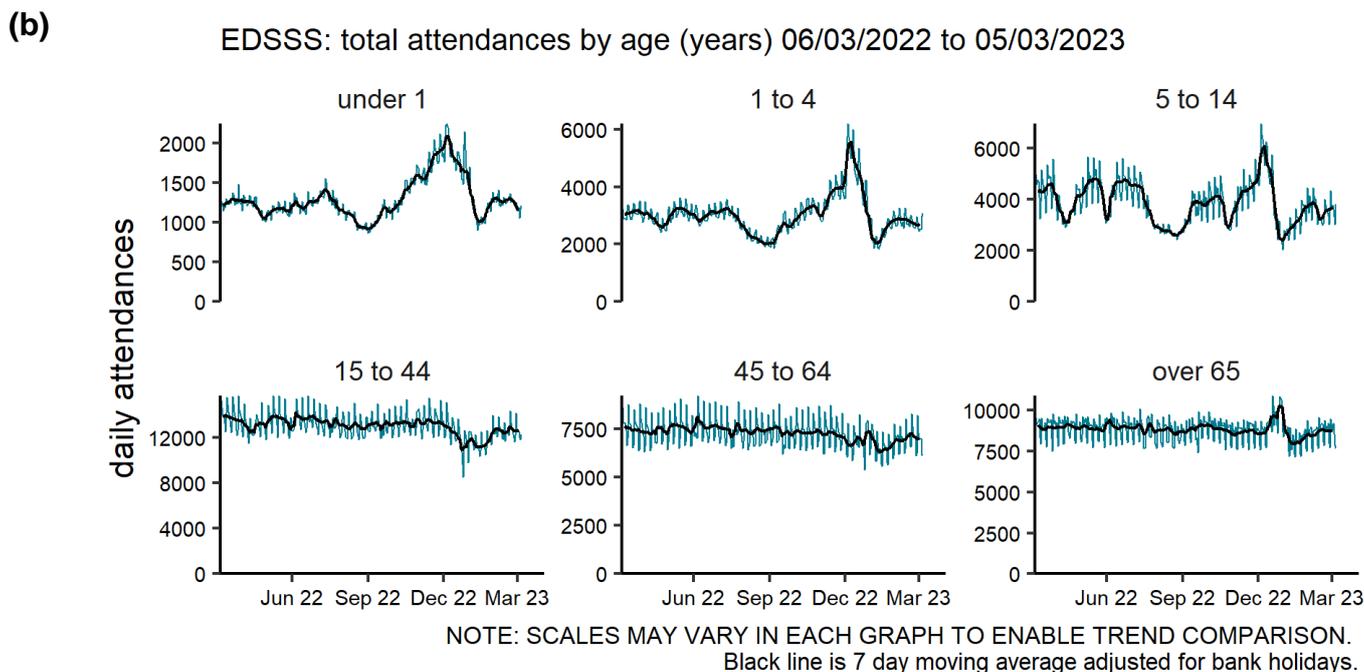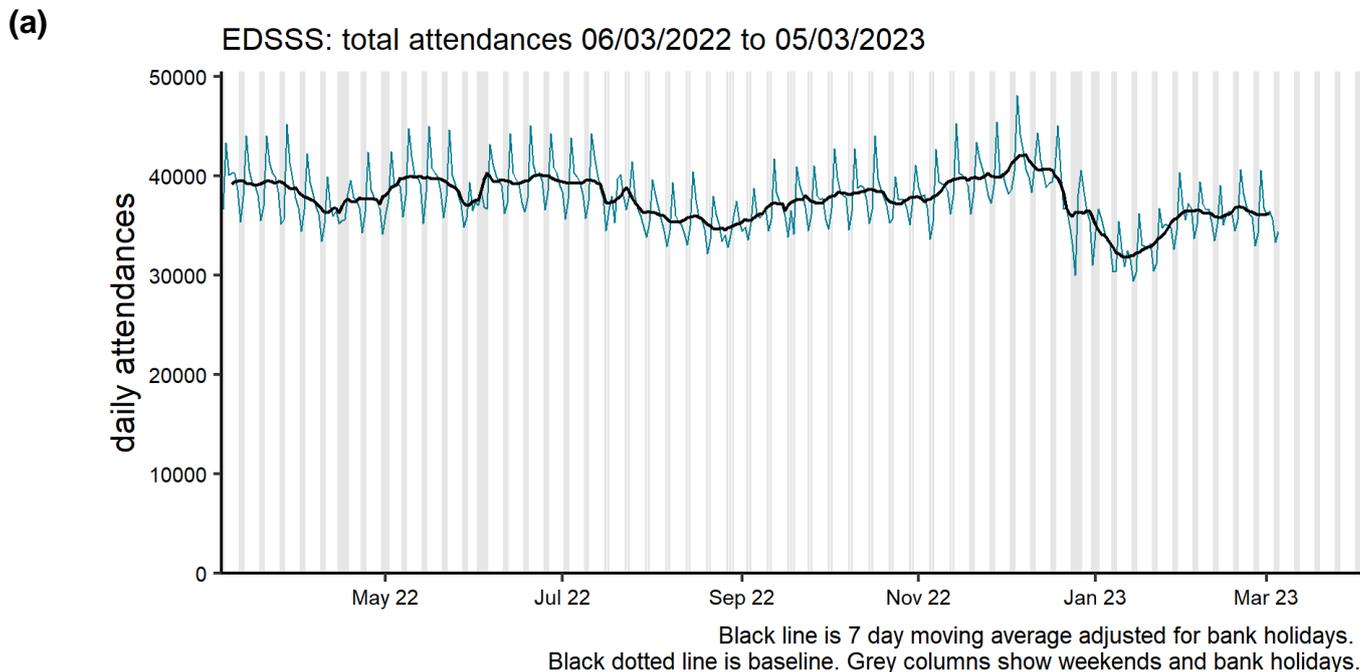Previous weekly bulletins from this system are available [here](#).

Data quality issues of note this week

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

Remodelled EDSSS baselines have been refitted to surveillance data during week 6 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.

(a)

EDSSS: total attendances 06/03/2022 to 05/03/2023

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

(b)

EDSSS: total attendances by age (years) 06/03/2022 to 05/03/2023

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

5

(c)

EDSSS: total attendances by region 06/03/2022 to 05/03/2023
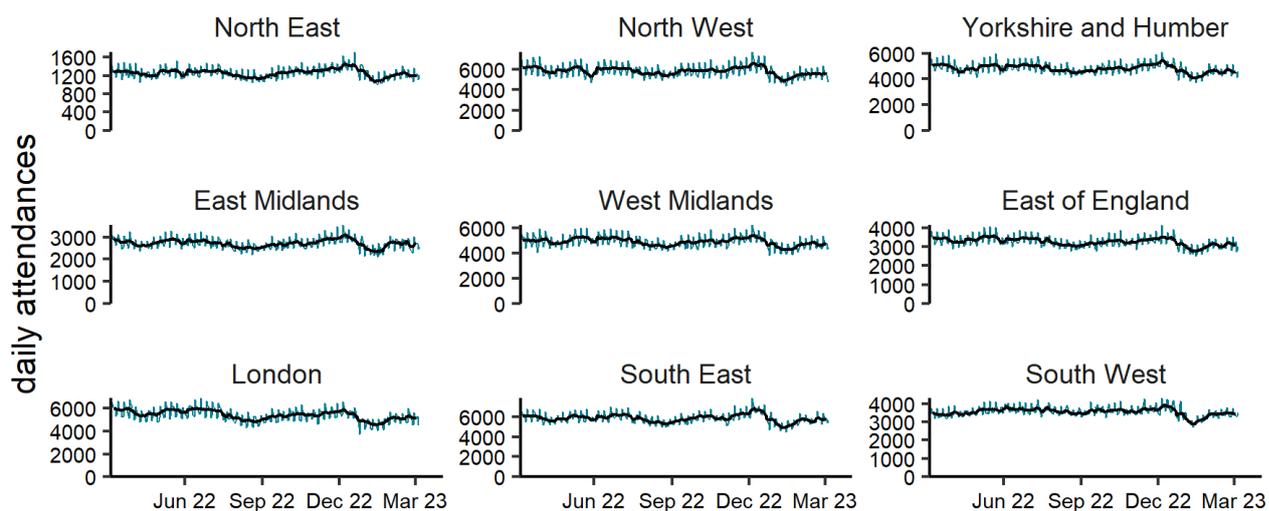
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

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[2]	Diagnoses included[2]
27 February 2023	40,561	25,978
28 February 2023	36,802	23,528
1 March 2023	36,123	23,654
2 March 2023	36,463	23,631
3 March 2023	35,697	23,169
4 March 2023	33,317	21,906
5 March 2023	34,456	22,712

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

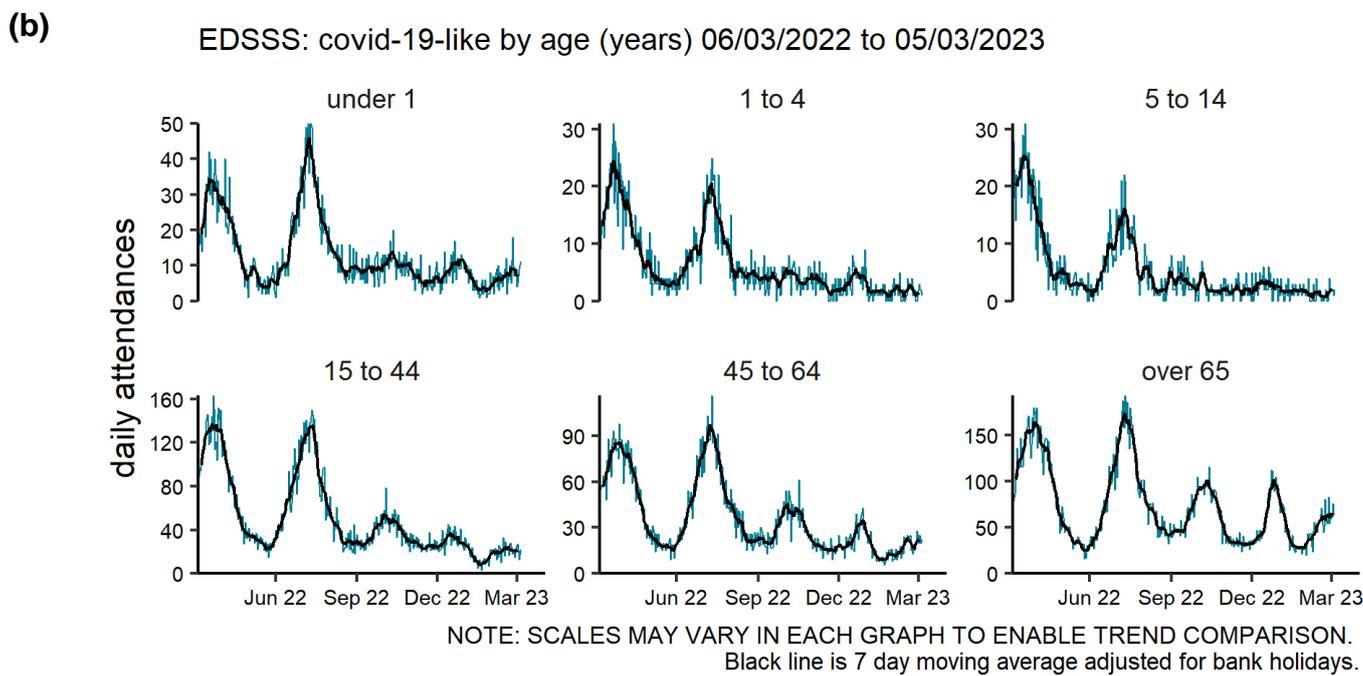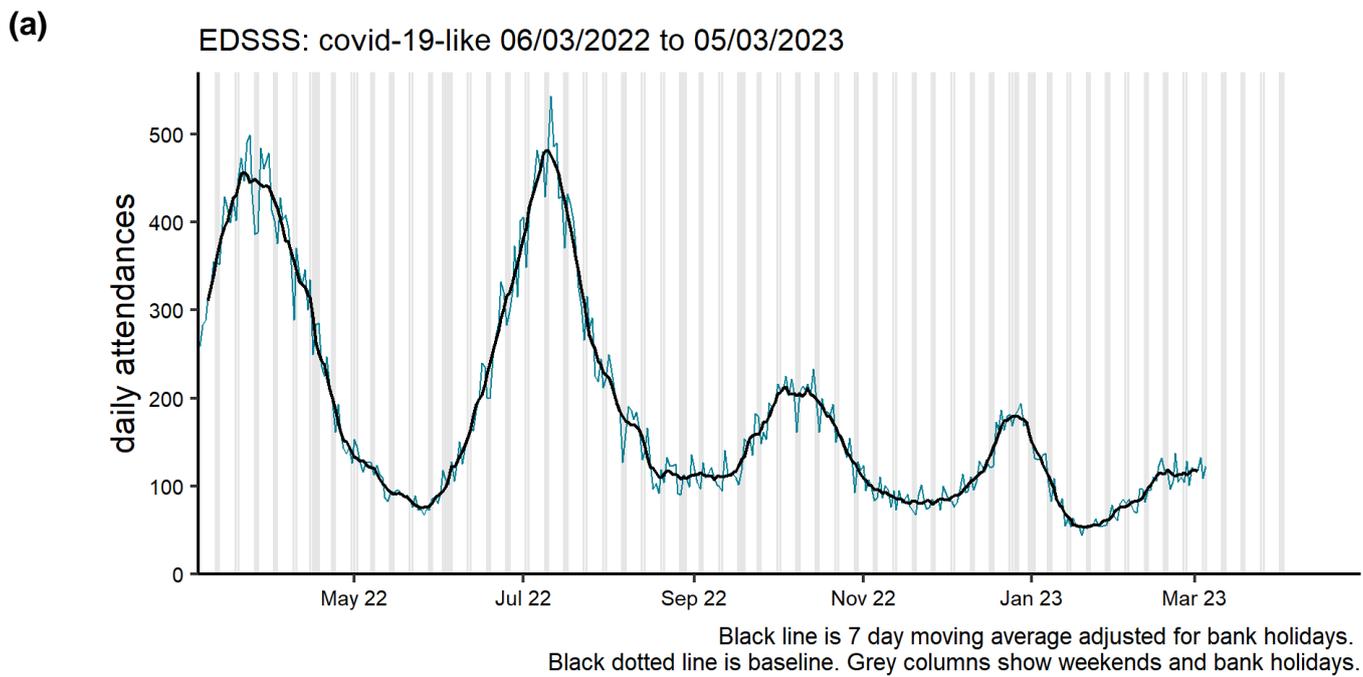| UKHSA Region	Number of EDs[2]
North East	4
North West	28
Yorkshire and Humber	19
West Midlands	19
East Midlands	10
East of England	13
London	19
South West	18
South East	24
Total	154

[2] only attendances from Type 01 EDs meeting the weekly reporting criteria are included in this report, see Notes and caveats
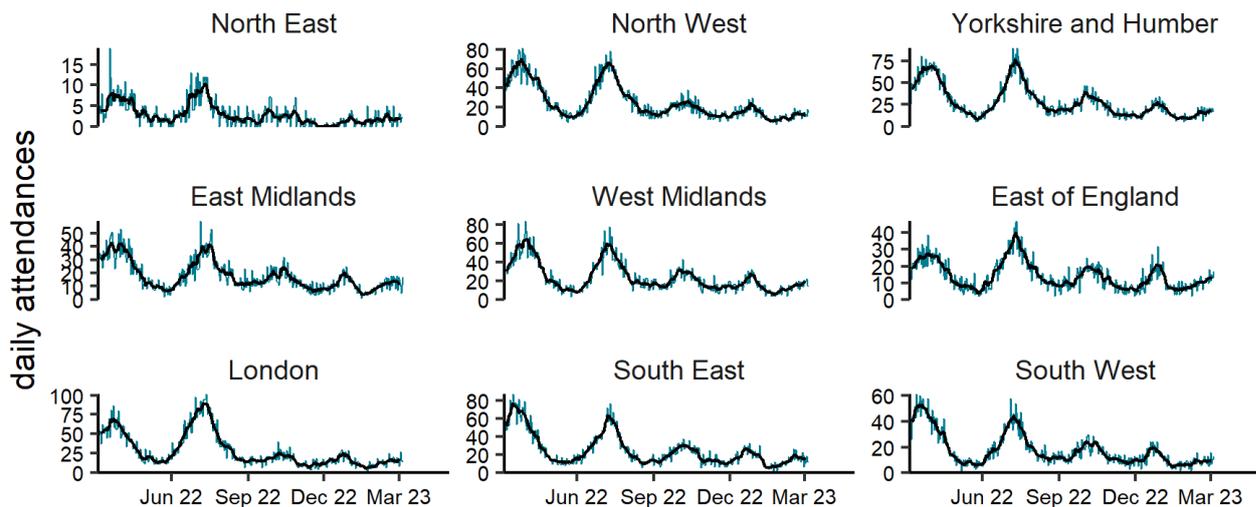
for further details

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.

(a)

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

(b)

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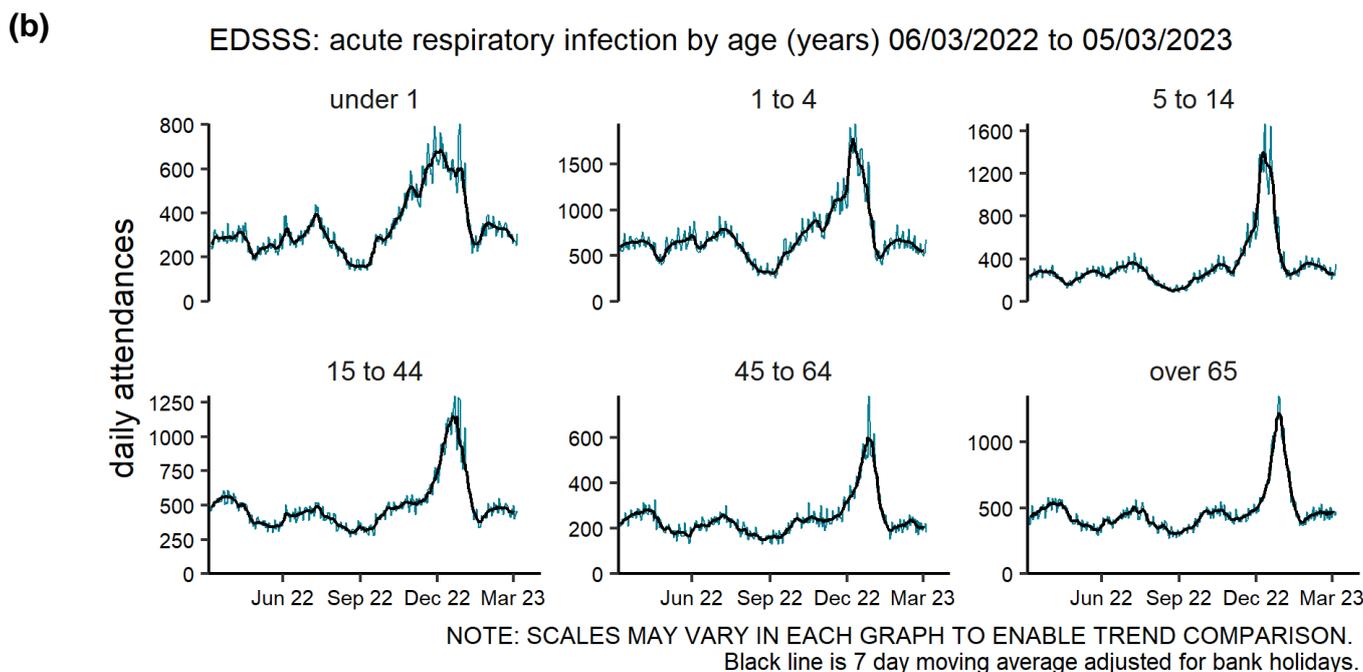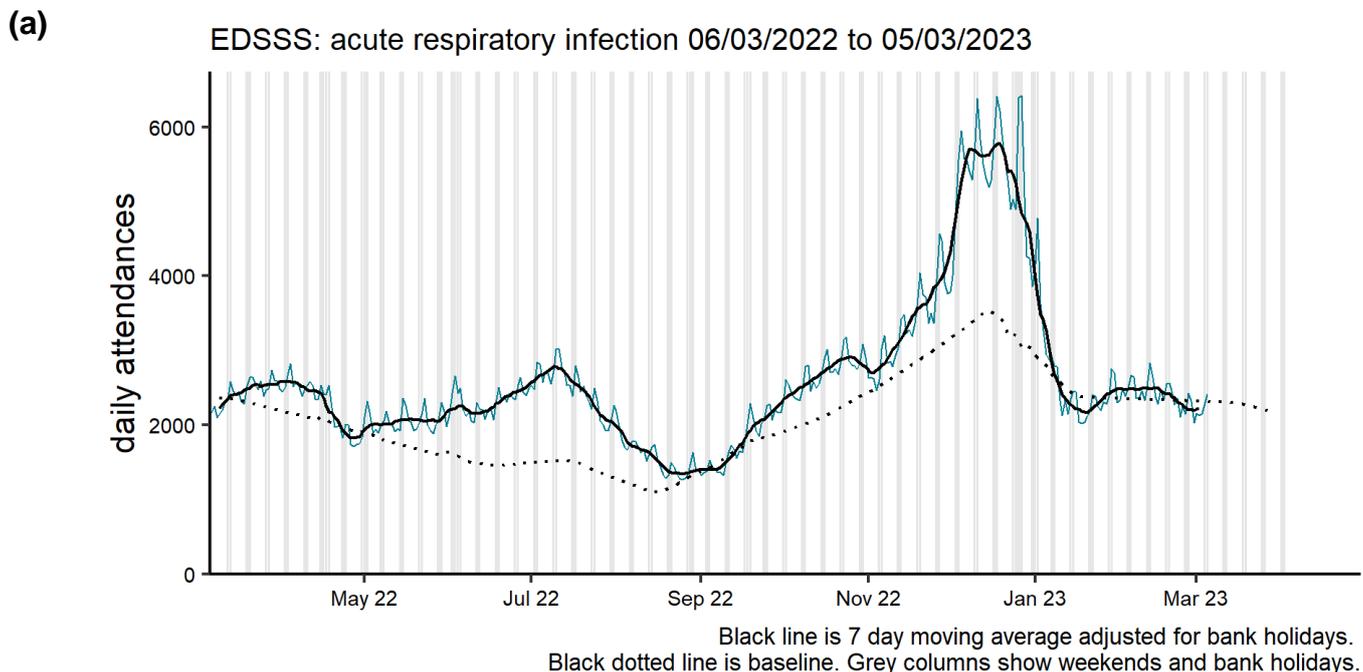Black line is 7 day moving average adjusted for bank holidays.

(c)

EDSSS: covid-19-like by region 06/03/2022 to 05/03/2023

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.

(a)

EDSSS: acute respiratory infection 06/03/2022 to 05/03/2023

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

(b)

EDSSS: acute respiratory infection by age (years) 06/03/2022 to 05/03/2023

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

(c)

EDSSS: acute respiratory infection by region 06/03/2022 to 05/03/2023

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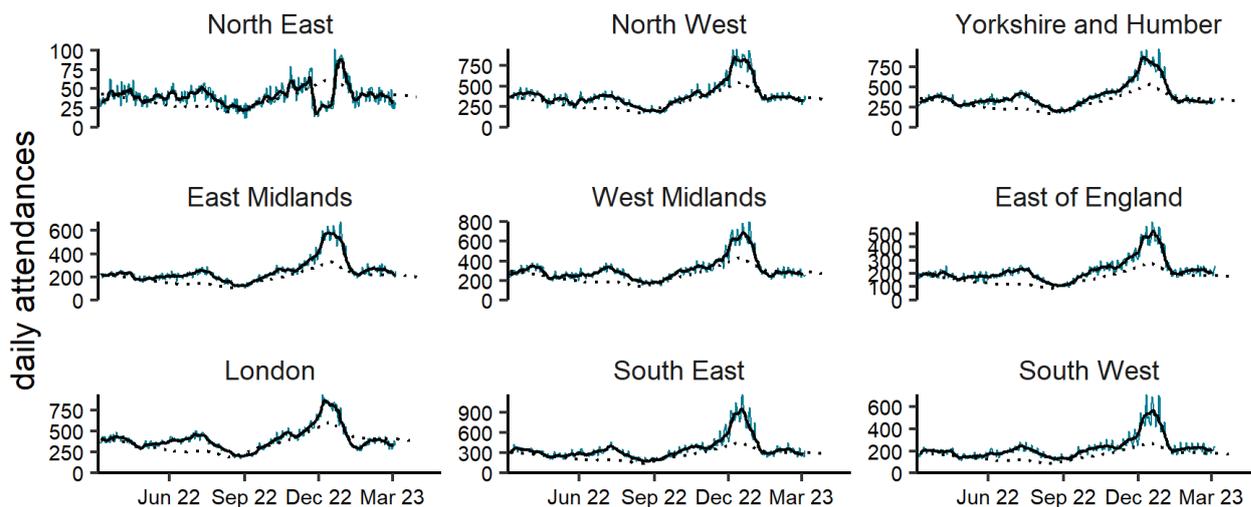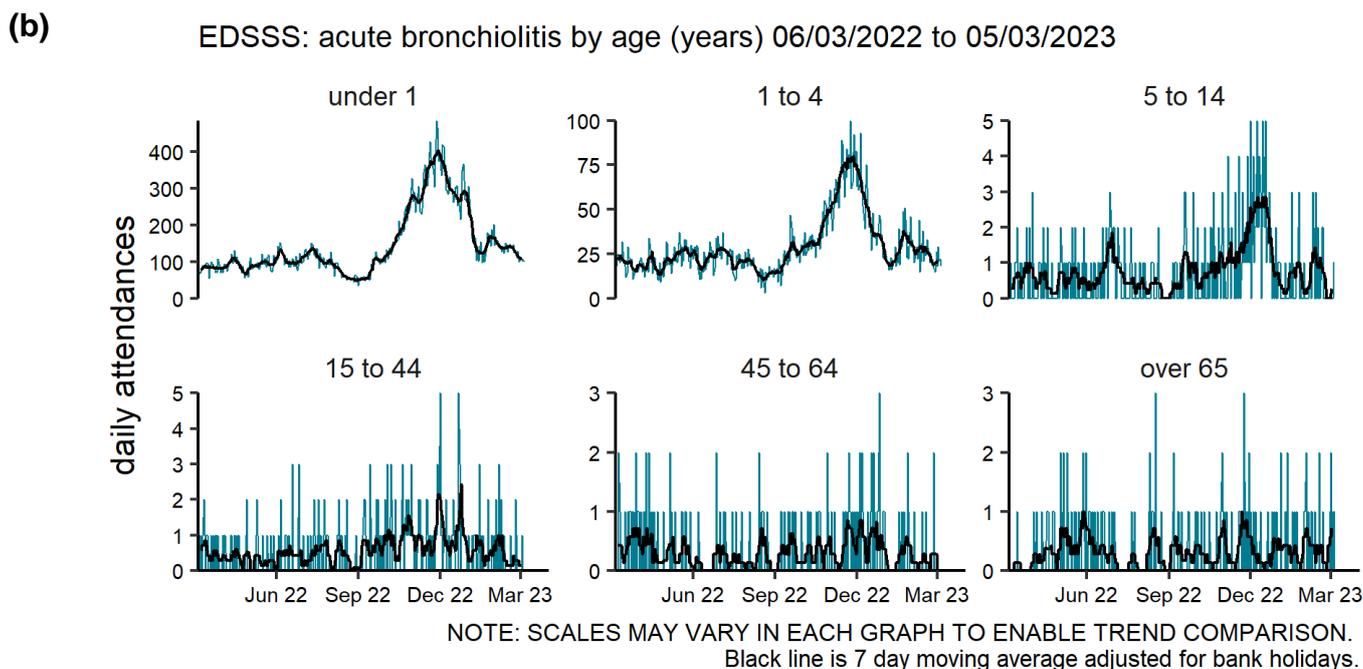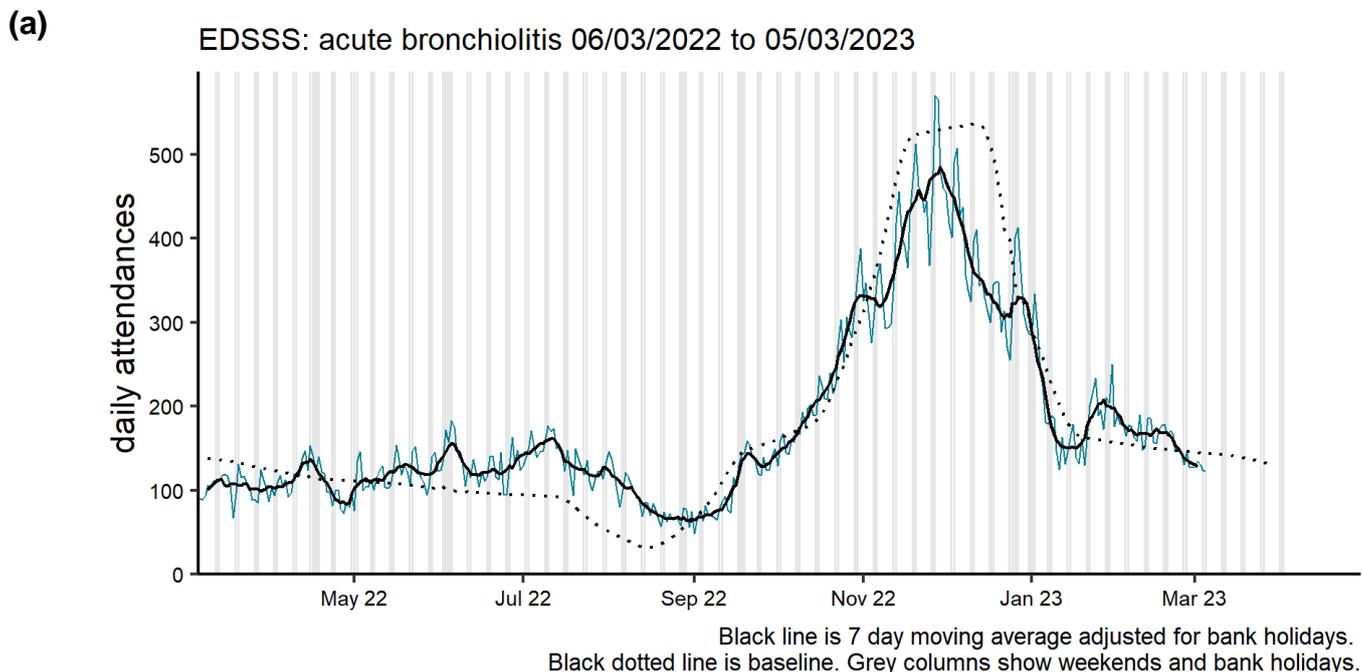Black dotted line is baseline.

Acute 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.

(a)

EDSSS: acute bronchiolitis 06/03/2022 to 05/03/2023

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

(b)

EDSSS: acute bronchiolitis by age (years) 06/03/2022 to 05/03/2023

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

11

(c)

EDSSS: acute bronchiolitis by region 06/03/2022 to 05/03/2023

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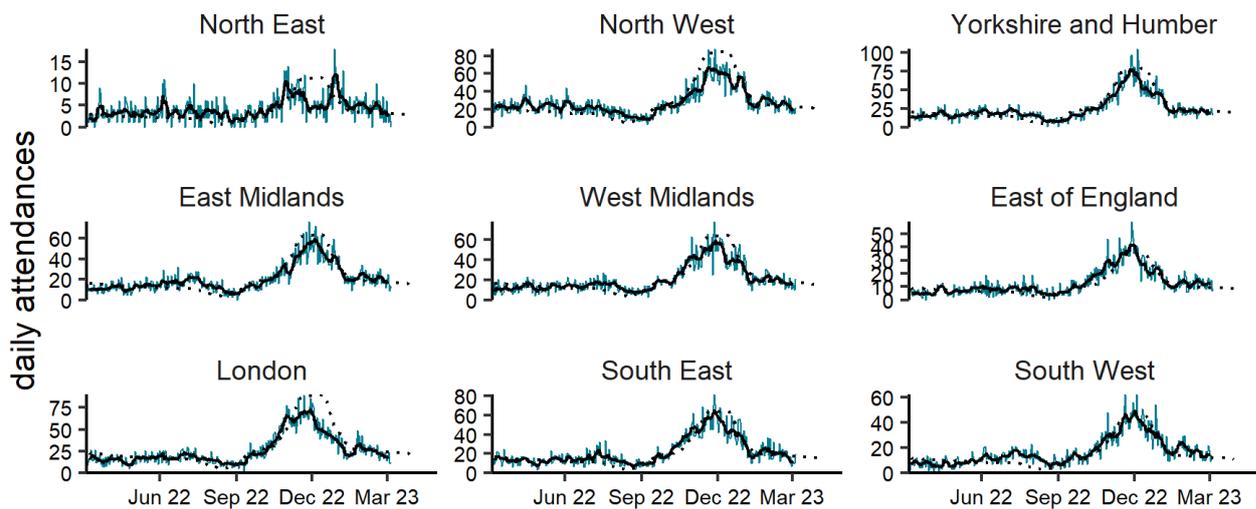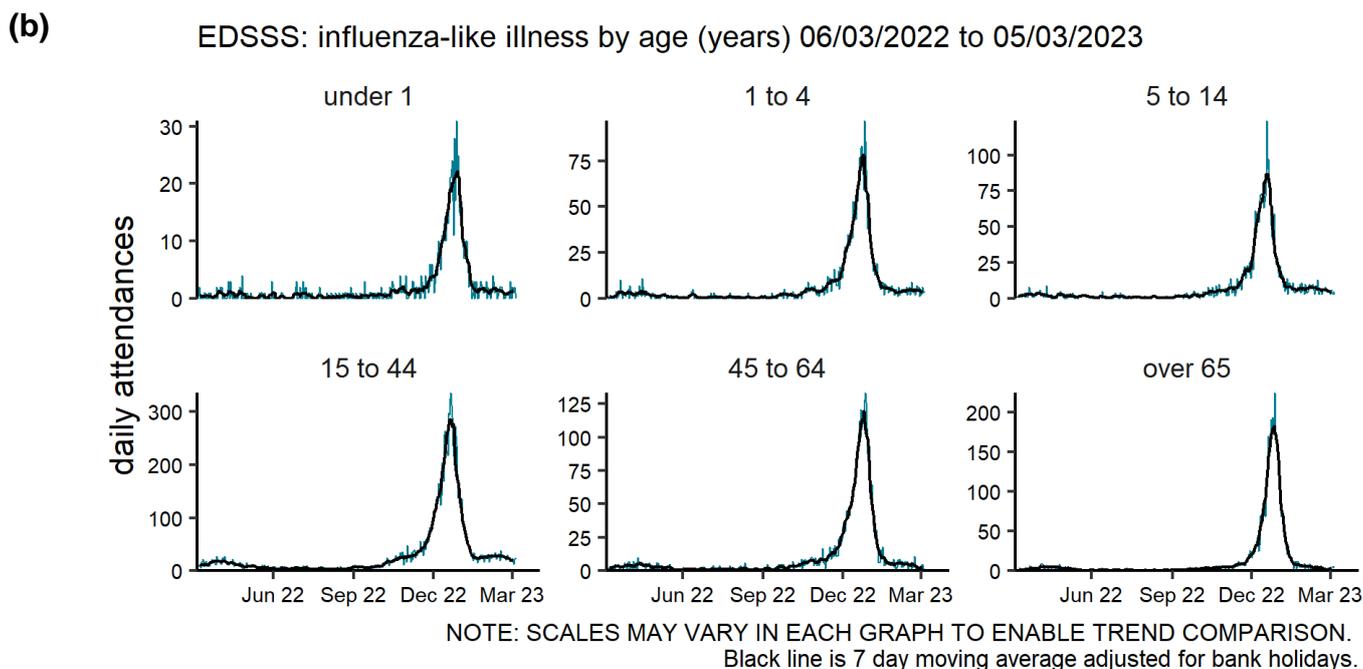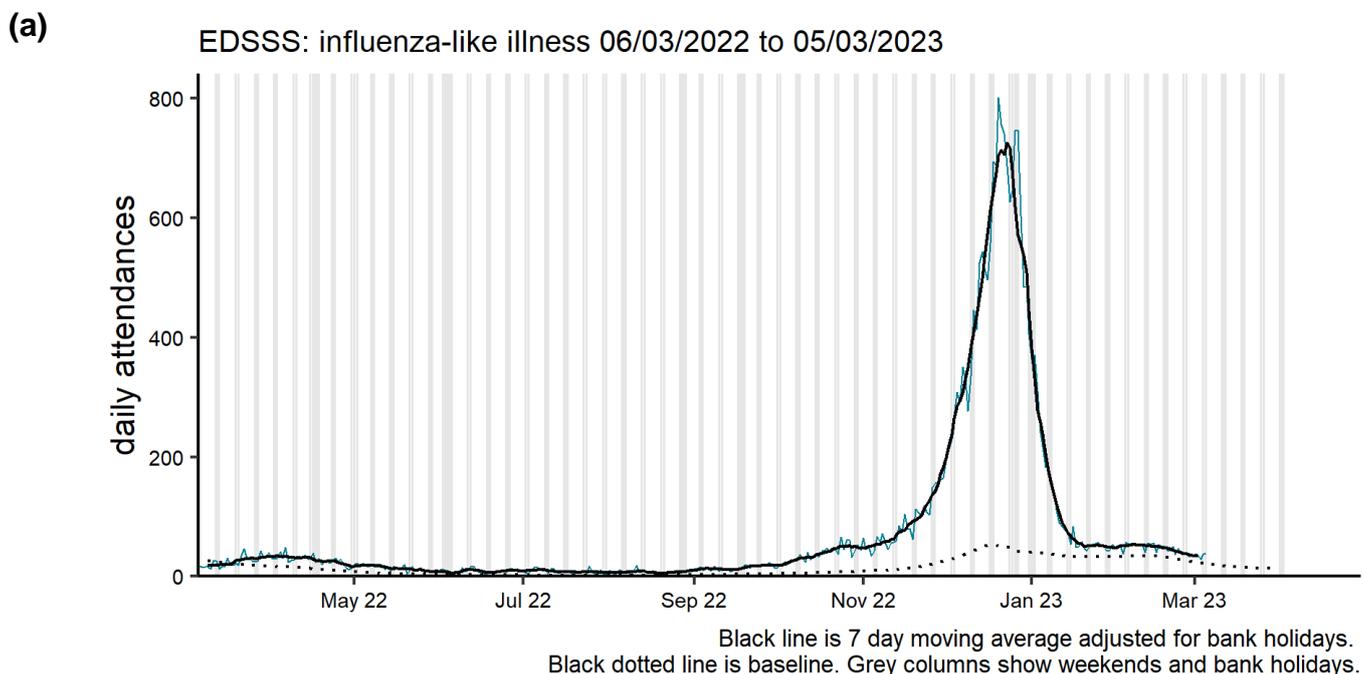Black dotted line is baseline.

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.

(a)

EDSSS: influenza-like illness 06/03/2022 to 05/03/2023

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

(b)

EDSSS: influenza-like illness by age (years) 06/03/2022 to 05/03/2023

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

(c)

EDSSS: influenza-like illness by region 06/03/2022 to 05/03/2023

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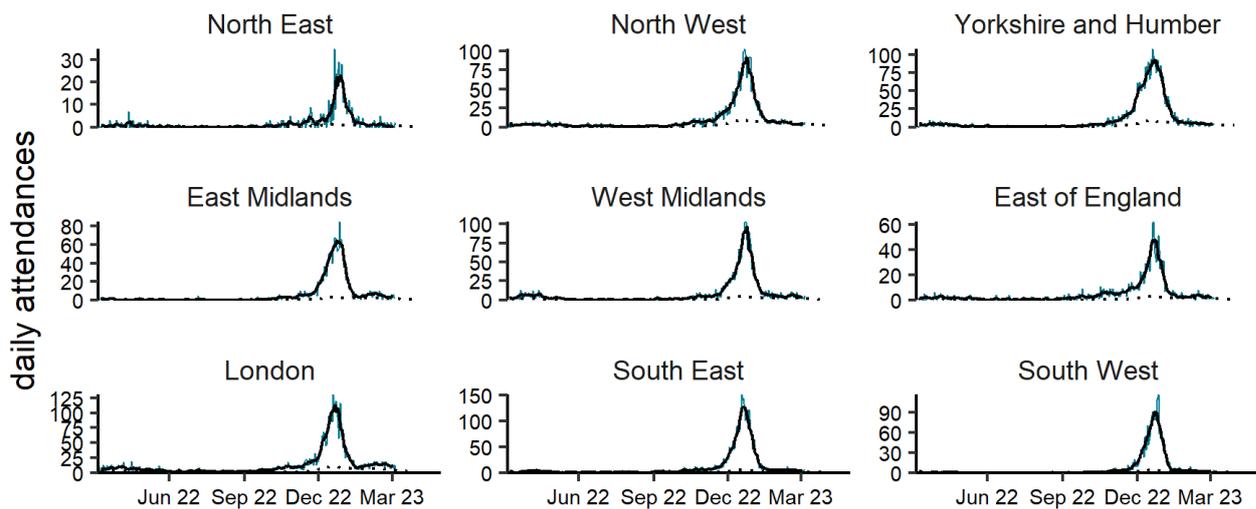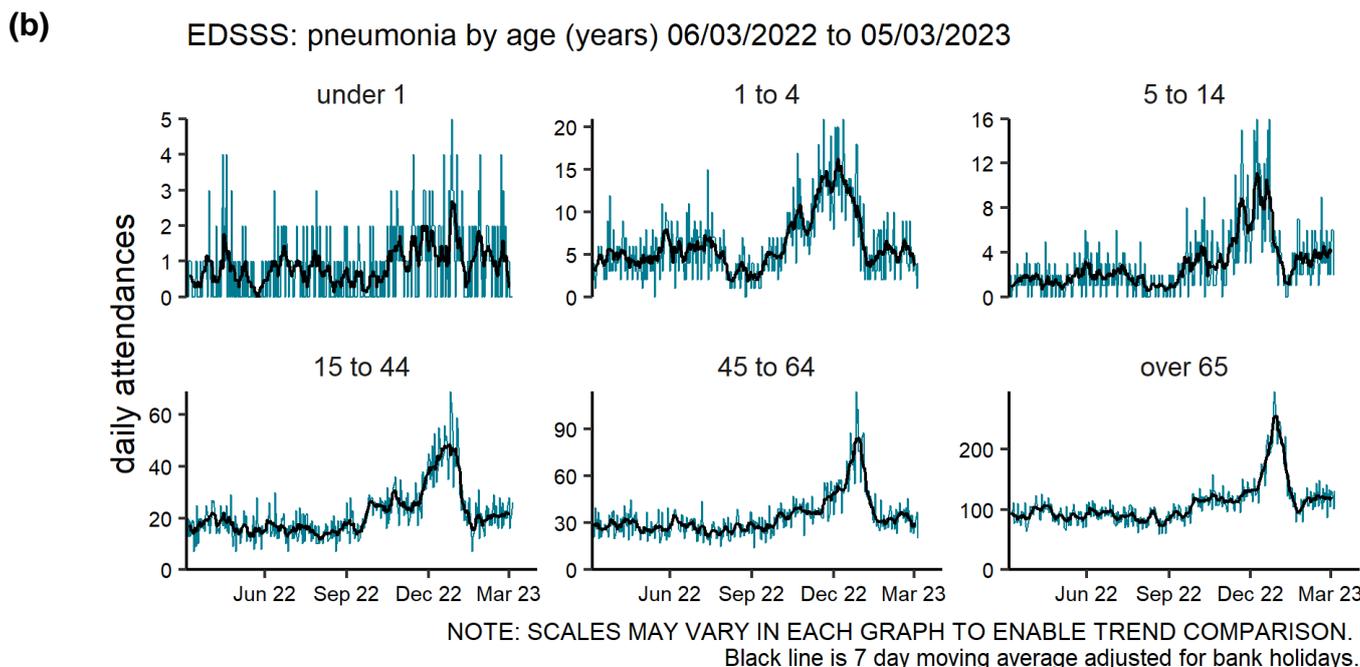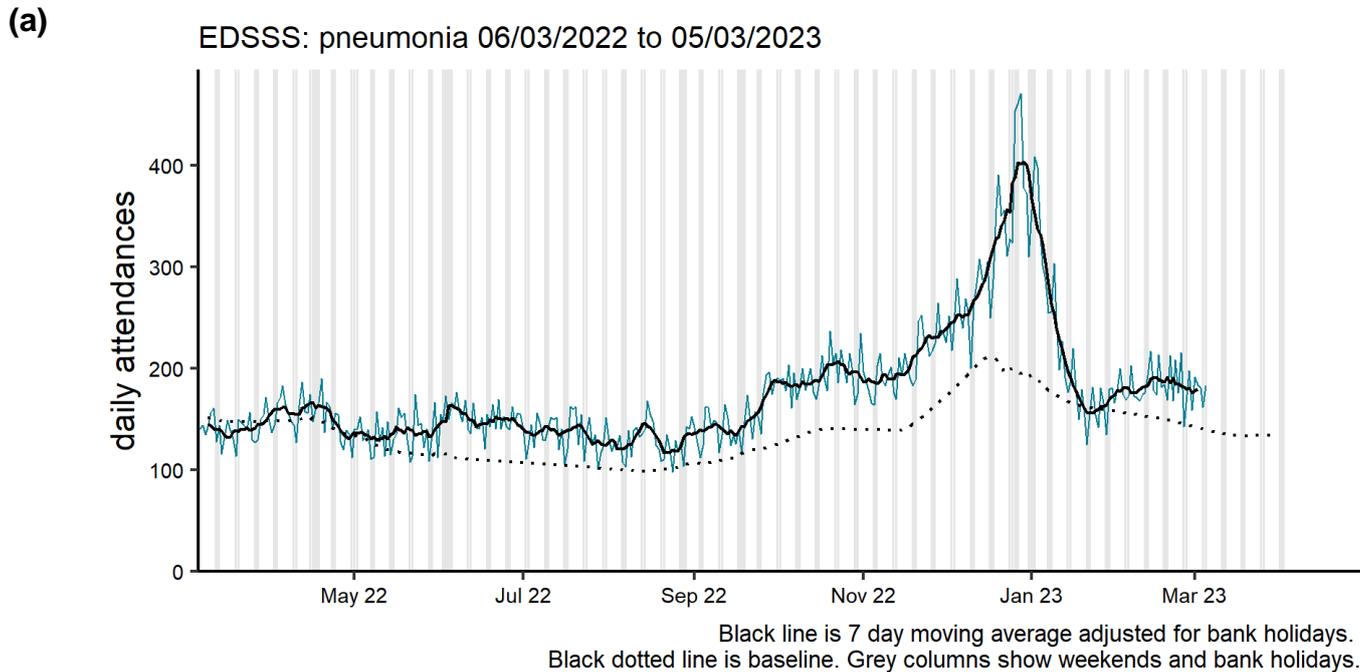Black dotted line is baseline.

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.

(a)

EDSSS: pneumonia 06/03/2022 to 05/03/2023

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

(b)

EDSSS: pneumonia by age (years) 06/03/2022 to 05/03/2023

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

(c)

EDSSS: pneumonia by region 06/03/2022 to 05/03/2023

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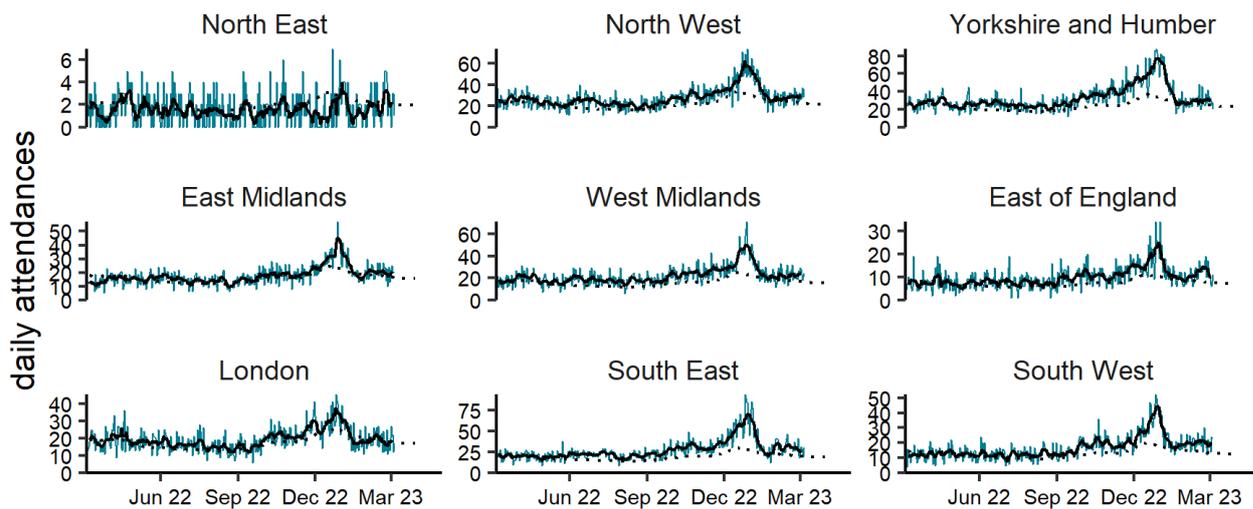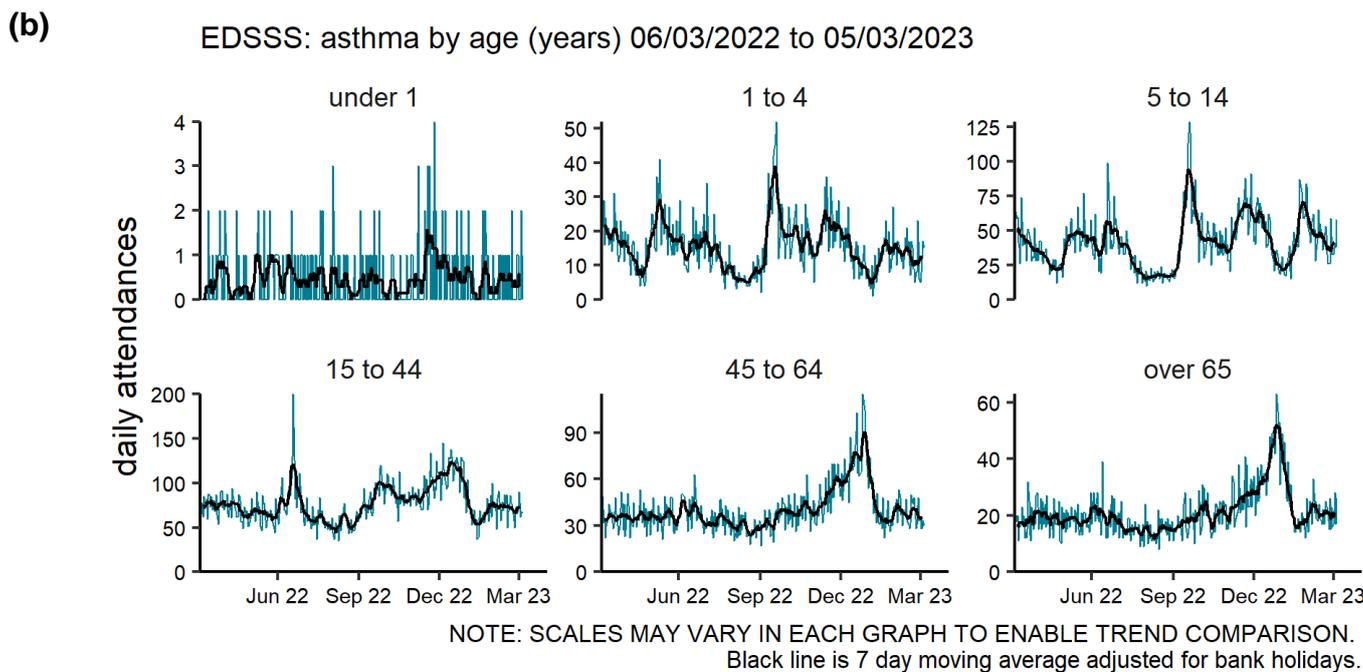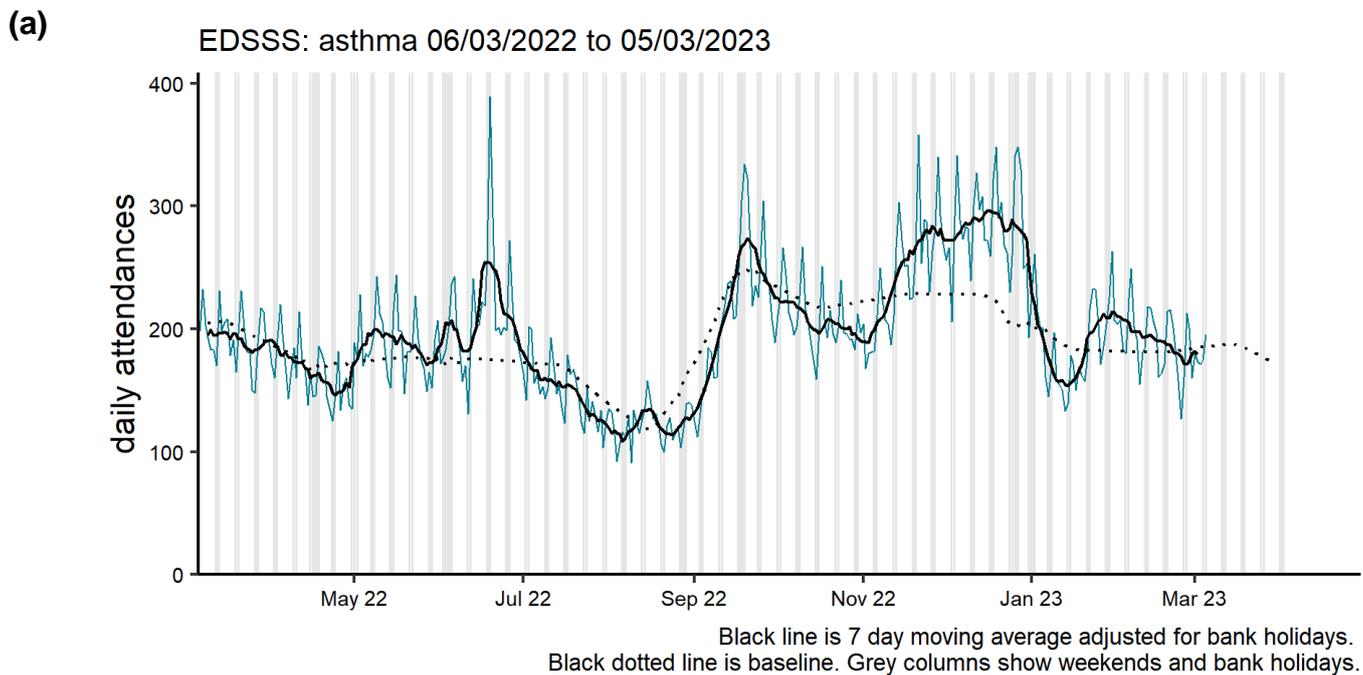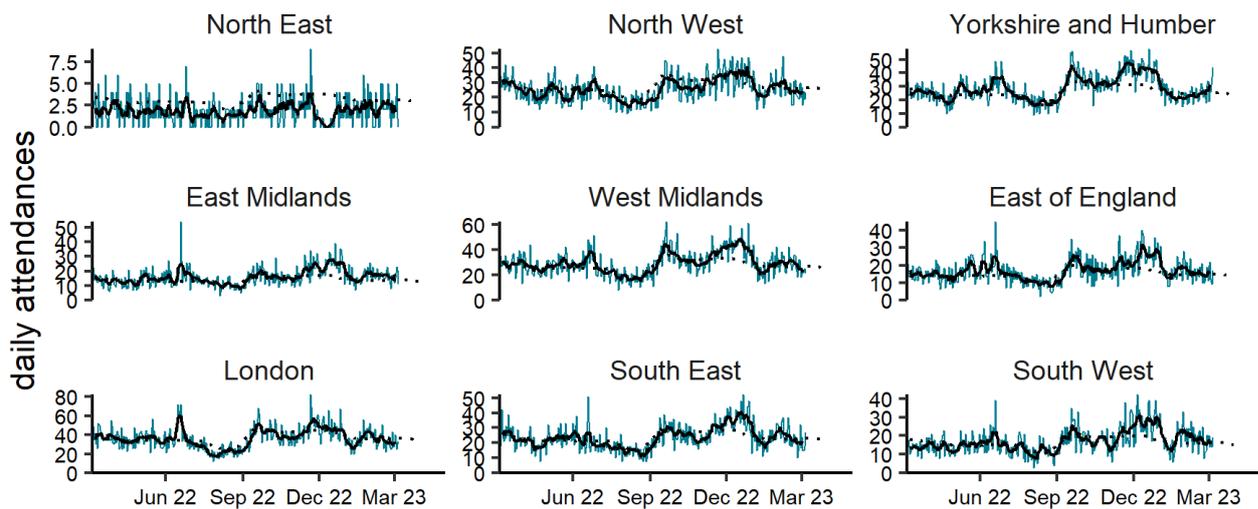Black dotted line is baseline.

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.

(a)

EDSSS: asthma 06/03/2022 to 05/03/2023

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

(b)

EDSSS: asthma by age (years) 06/03/2022 to 05/03/2023

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

17

(c)

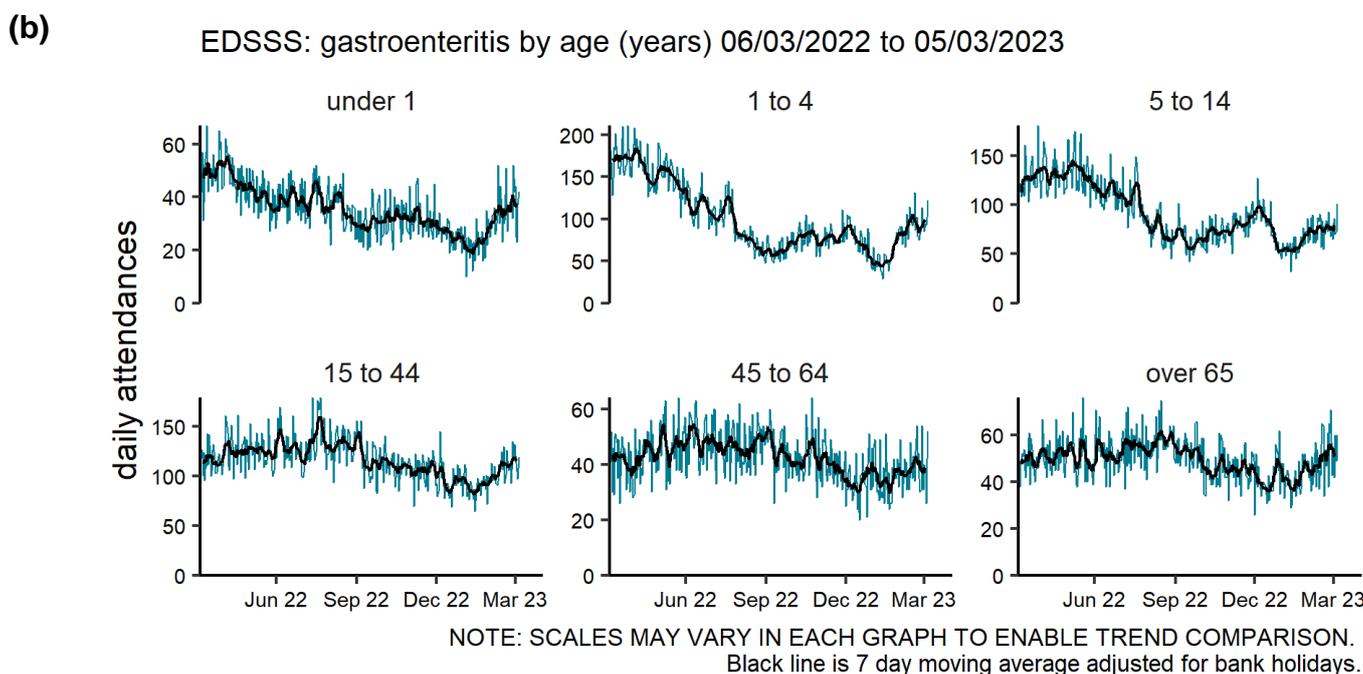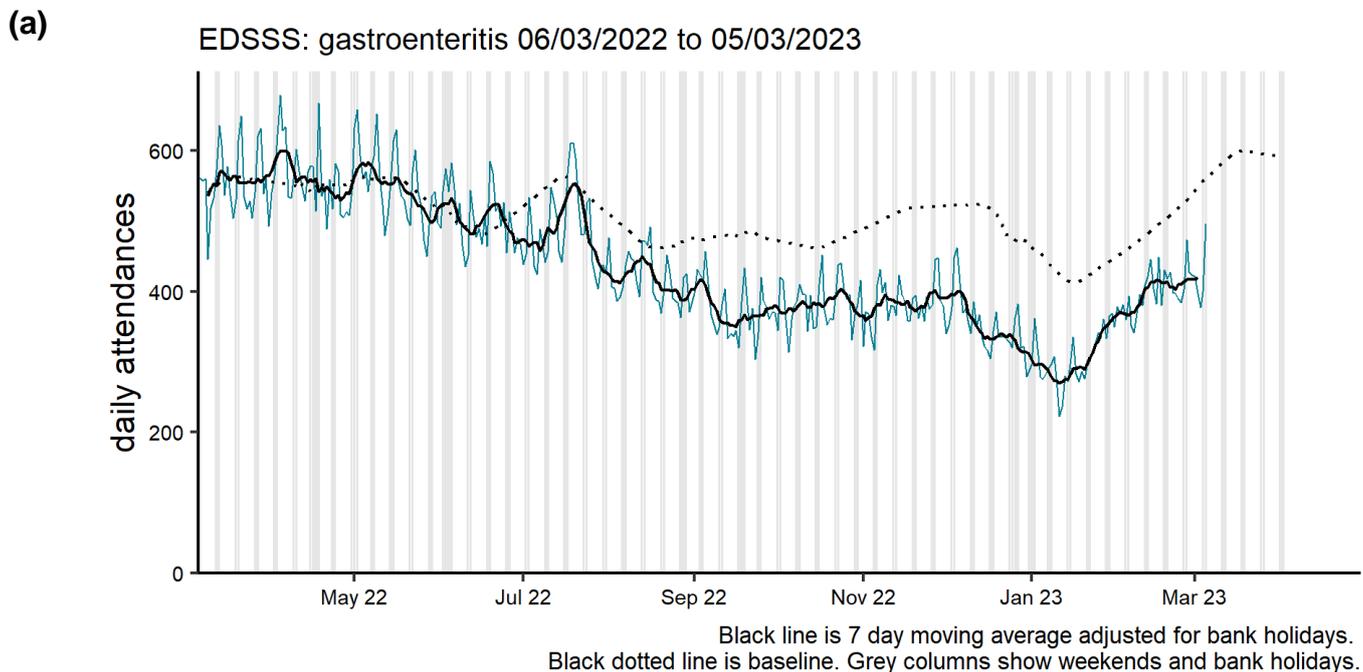EDSSS: asthma by region 06/03/2022 to 05/03/2023

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.
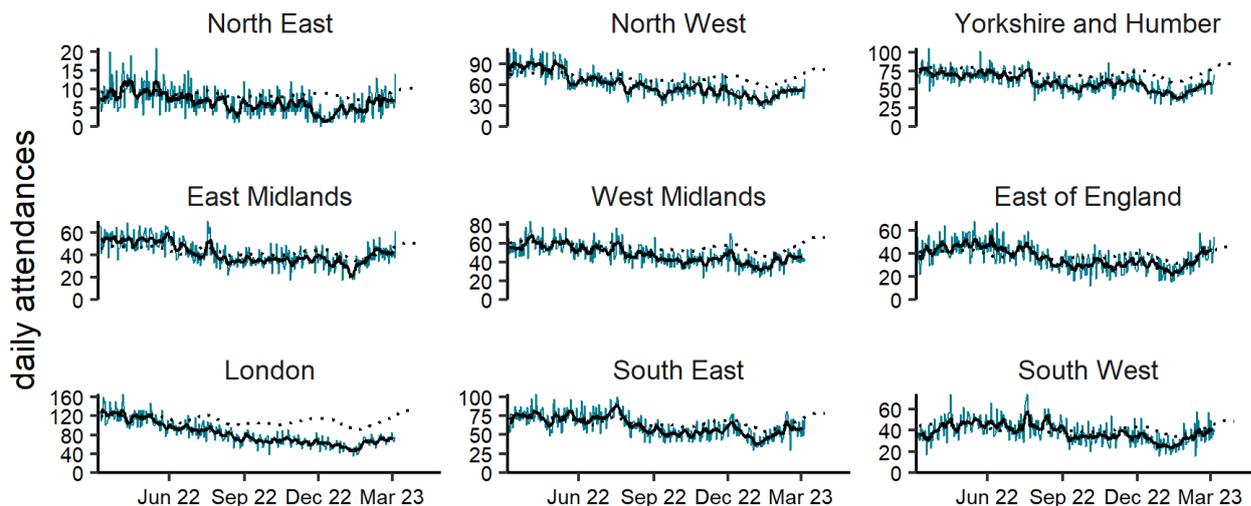
Gastrointestinal conditions

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.

(a)

EDSSS: gastroenteritis 06/03/2022 to 05/03/2023

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

(b)

EDSSS: gastroenteritis by age (years) 06/03/2022 to 05/03/2023

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

(c)

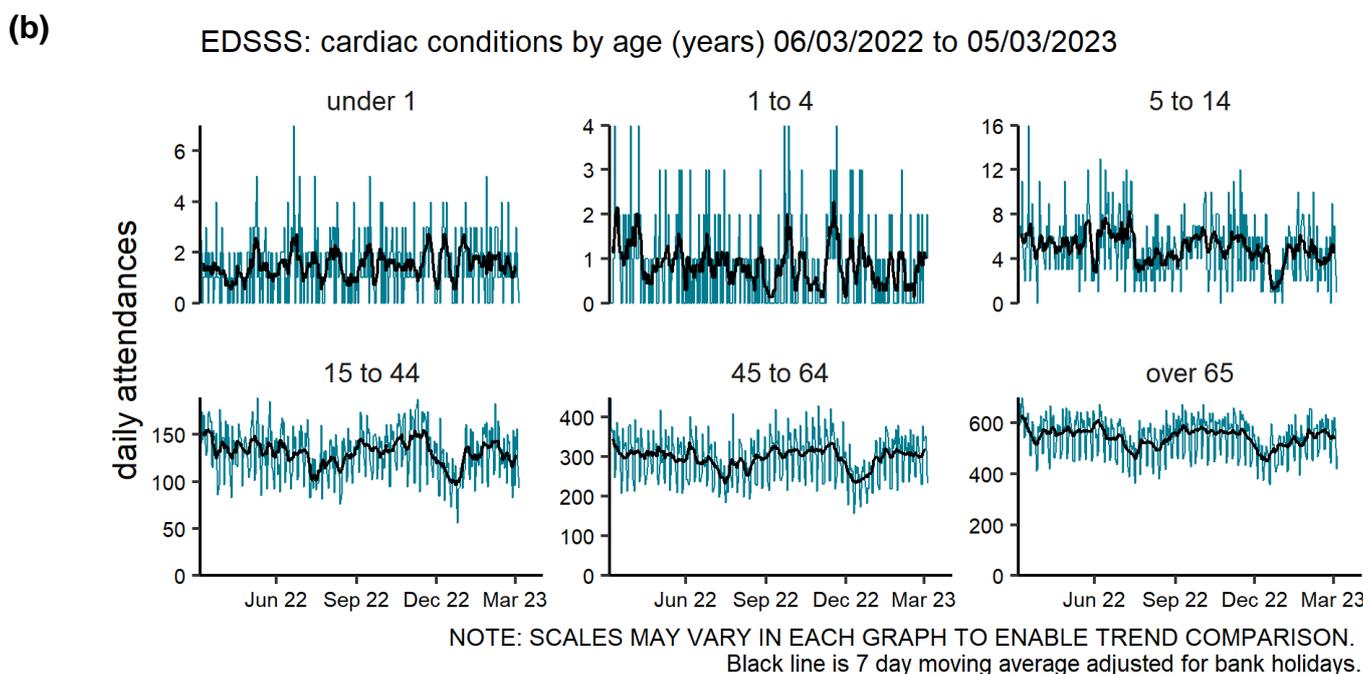EDSSS: gastroenteritis by region 06/03/2022 to 05/03/2023
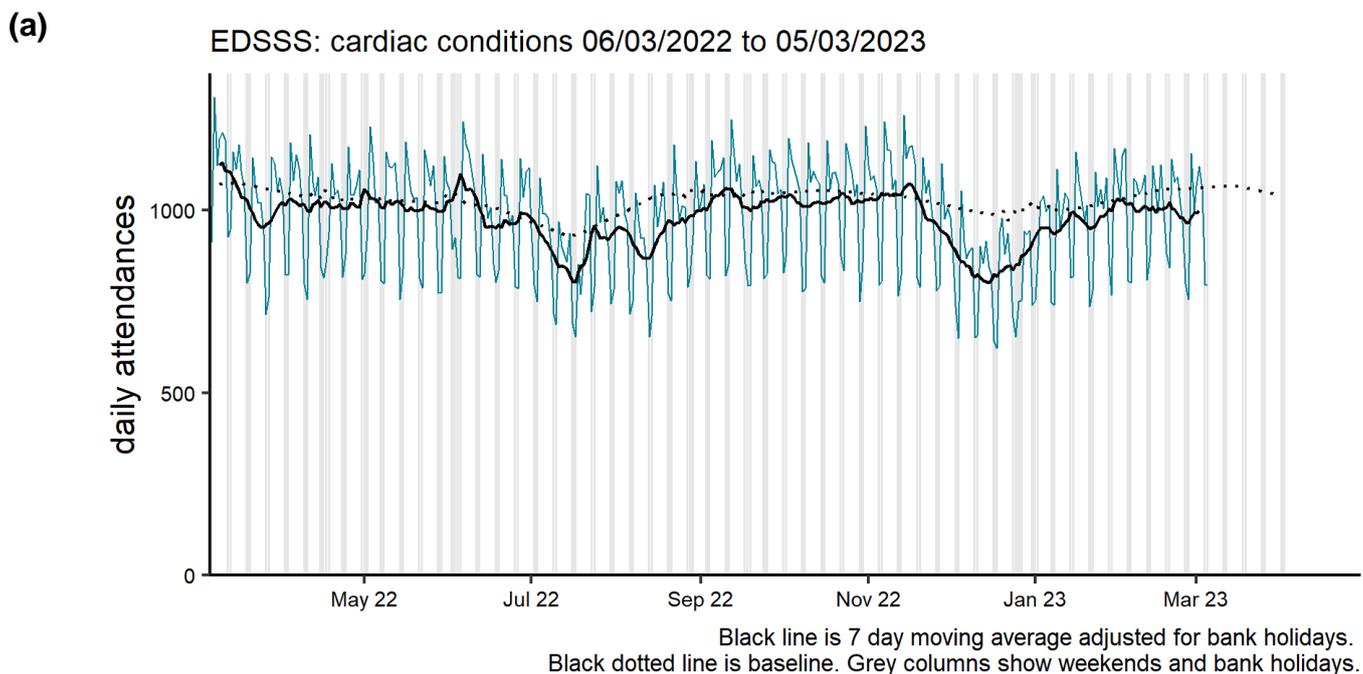

NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.
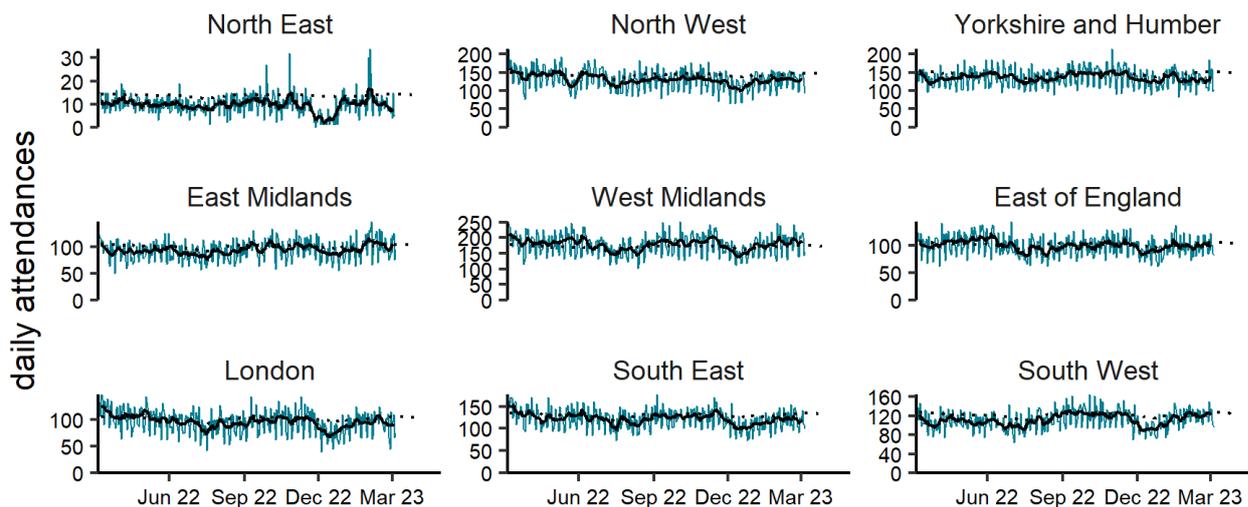
Cardiac conditions

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.

(a)

EDSSS: cardiac conditions 06/03/2022 to 05/03/2023

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

(b)

EDSSS: cardiac conditions by age (years) 06/03/2022 to 05/03/2023

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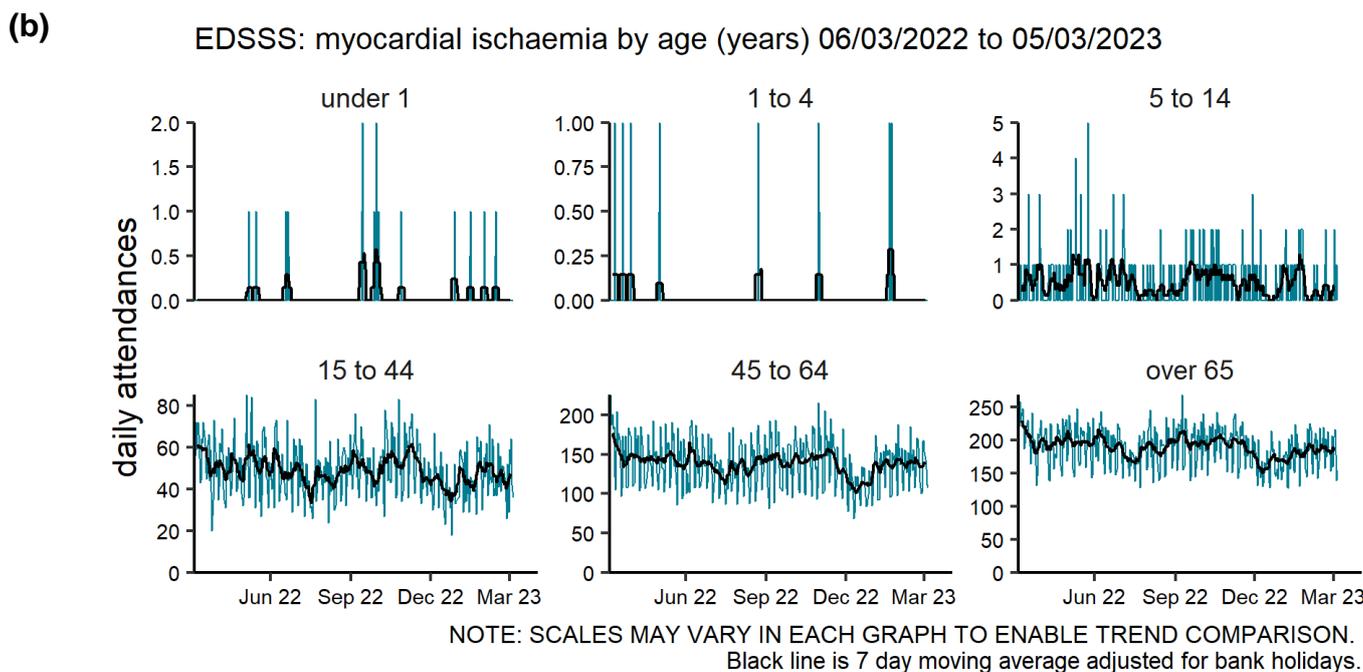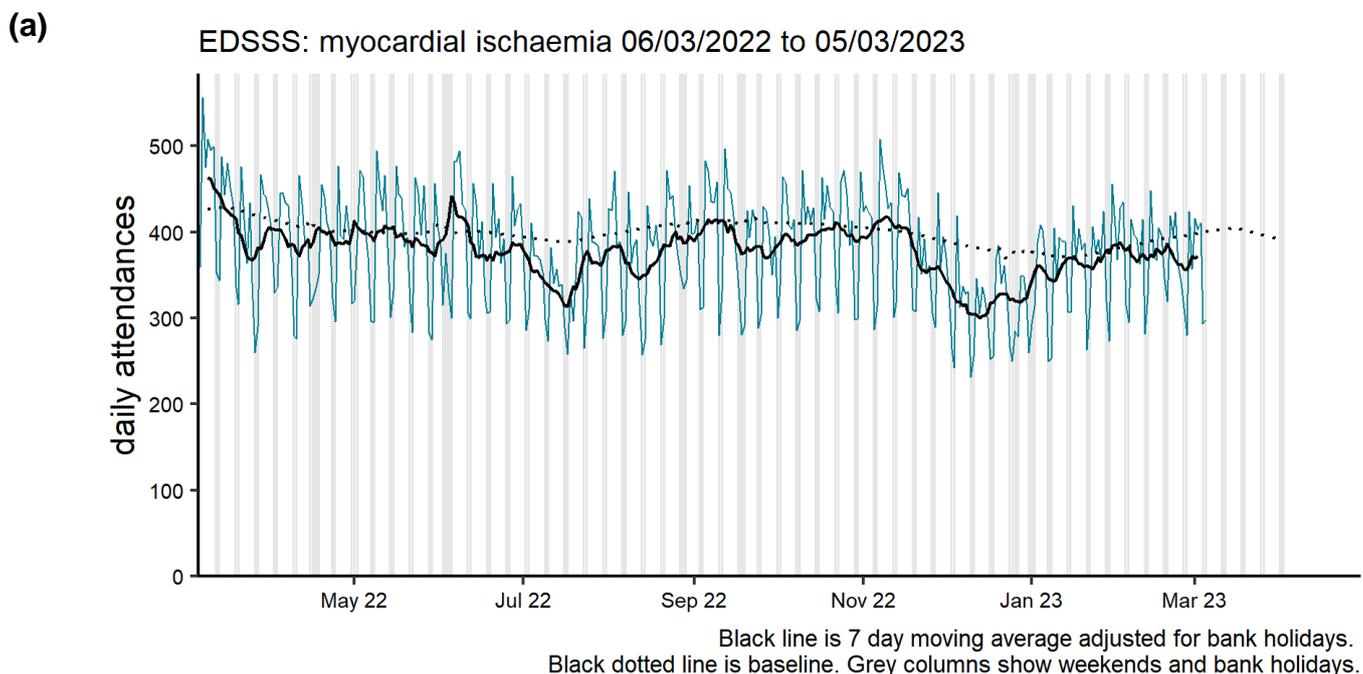Black line is 7 day moving average adjusted for bank holidays.

(c)

EDSSS: cardiac conditions by region 06/03/2022 to 05/03/2023

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.

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.

(a)

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

(b)

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

(c)

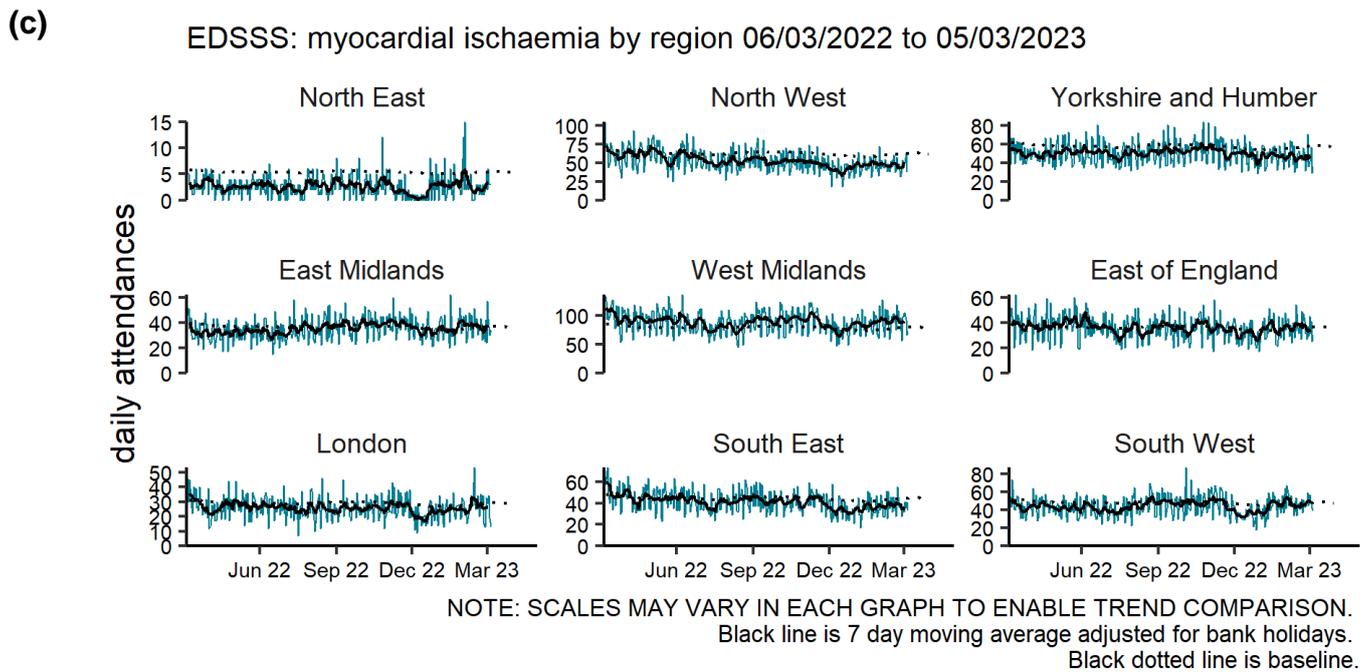EDSSS: myocardial ischaemia by region 06/03/2022 to 05/03/2023

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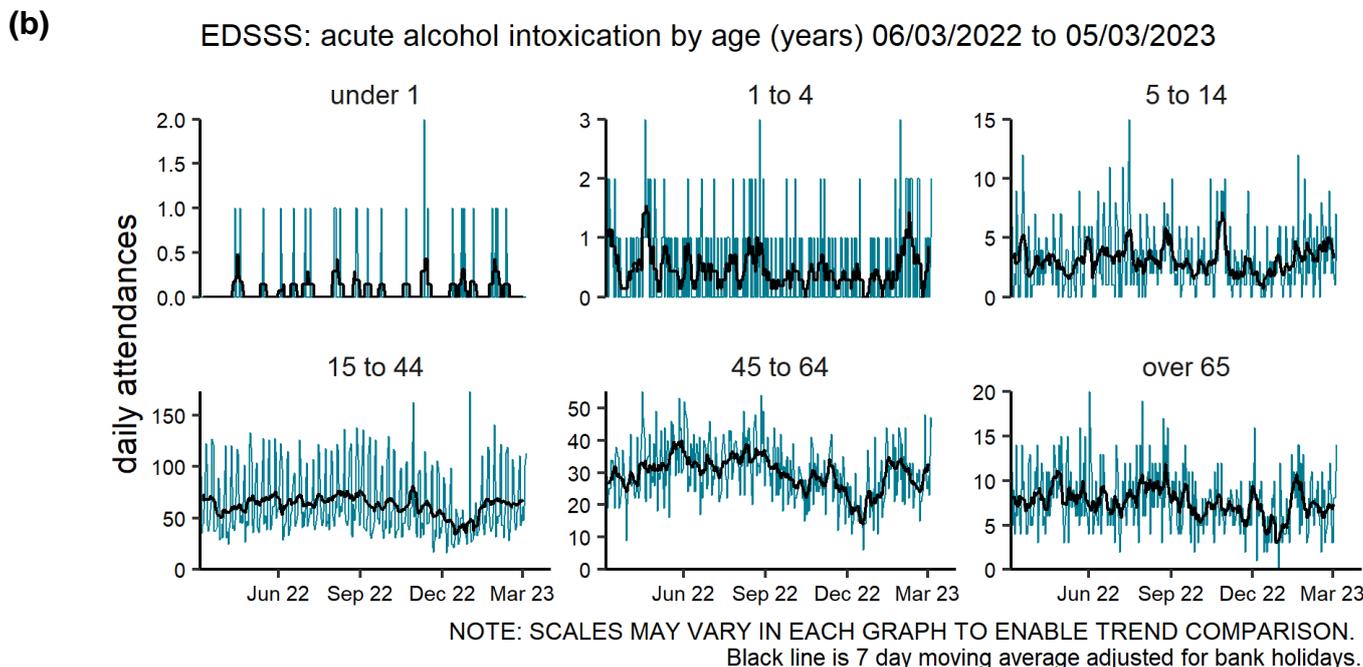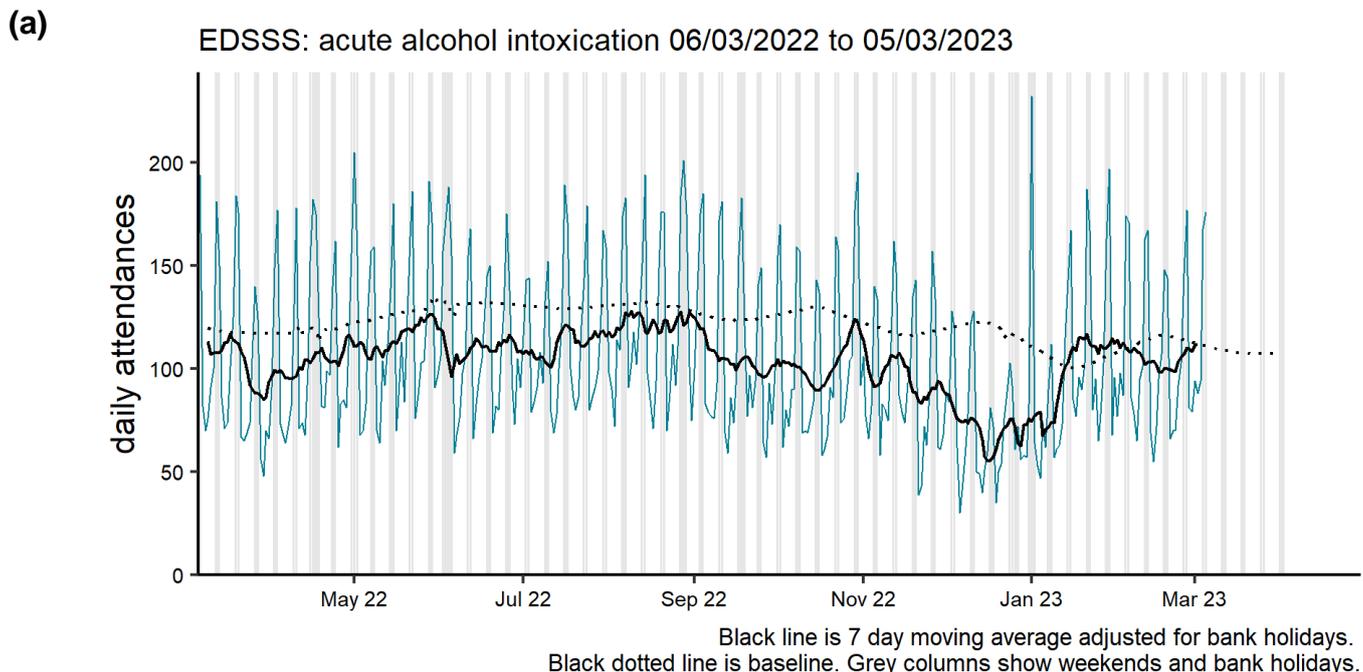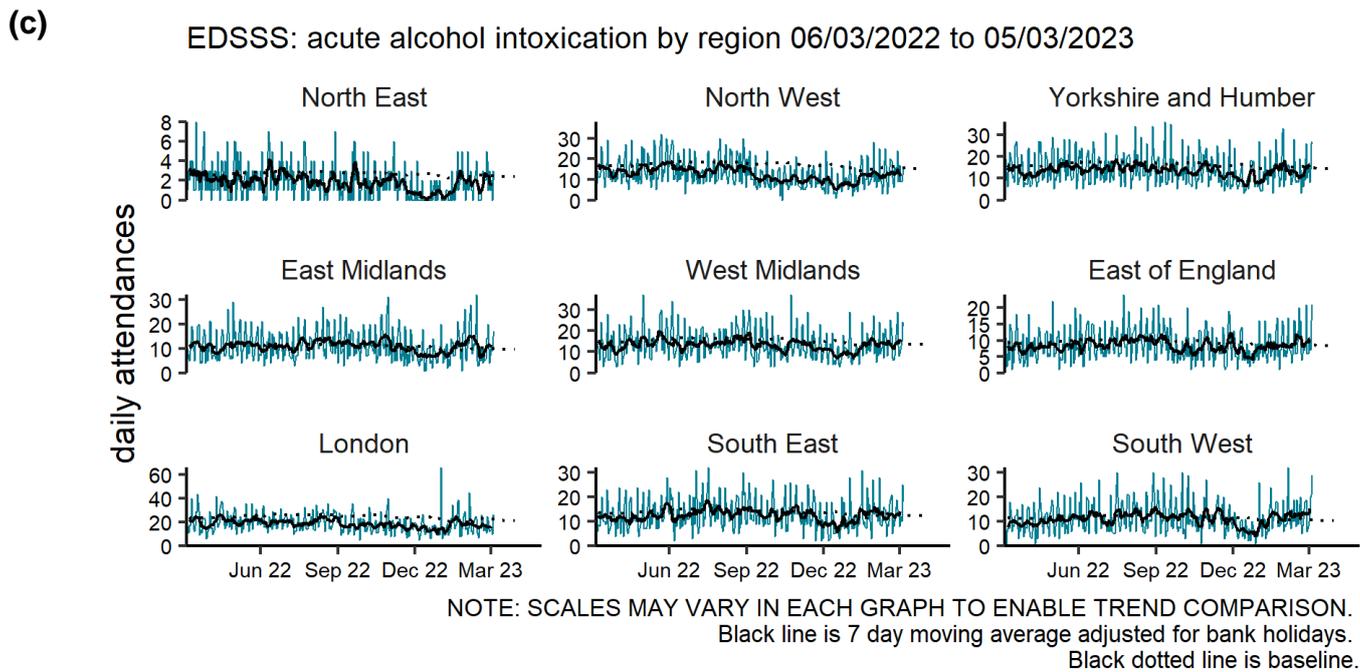Black dotted line is baseline.

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.

(a)

EDSSS: acute alcohol intoxication 06/03/2022 to 05/03/2023

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

(b)

EDSSS: acute alcohol intoxication by age (years) 06/03/2022 to 05/03/2023

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

(c)

EDSSS: acute alcohol intoxication by region 06/03/2022 to 05/03/2023

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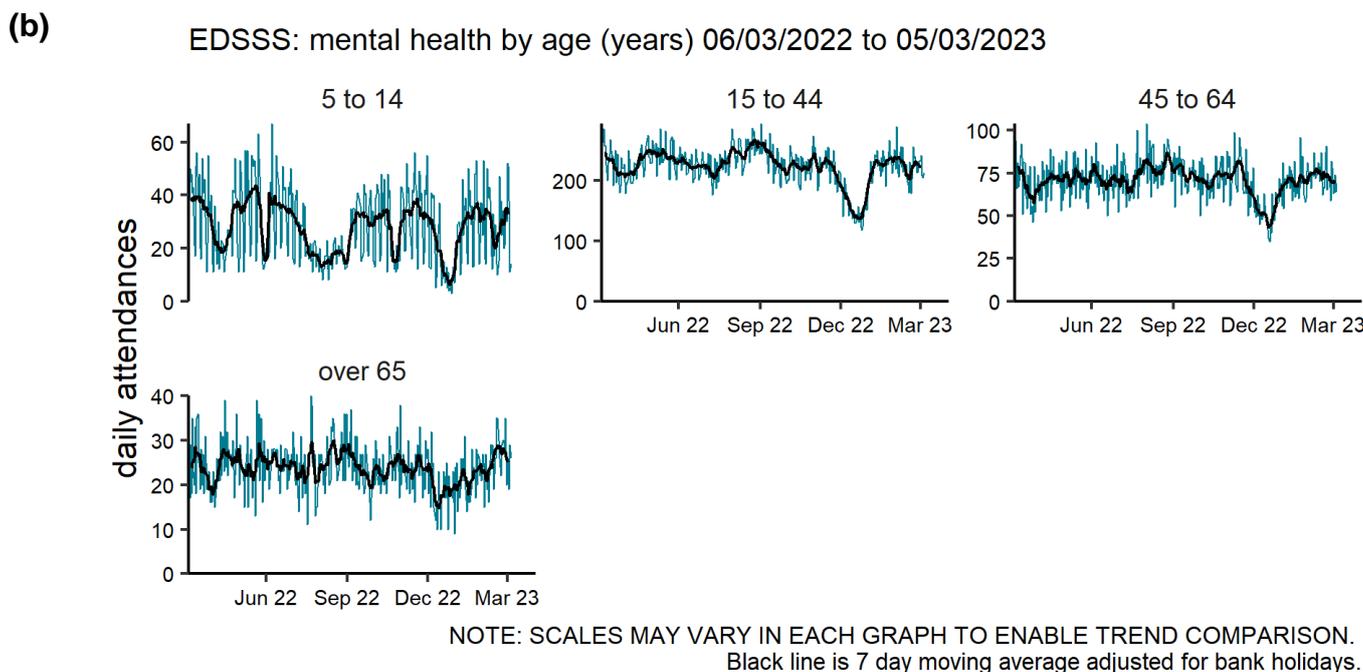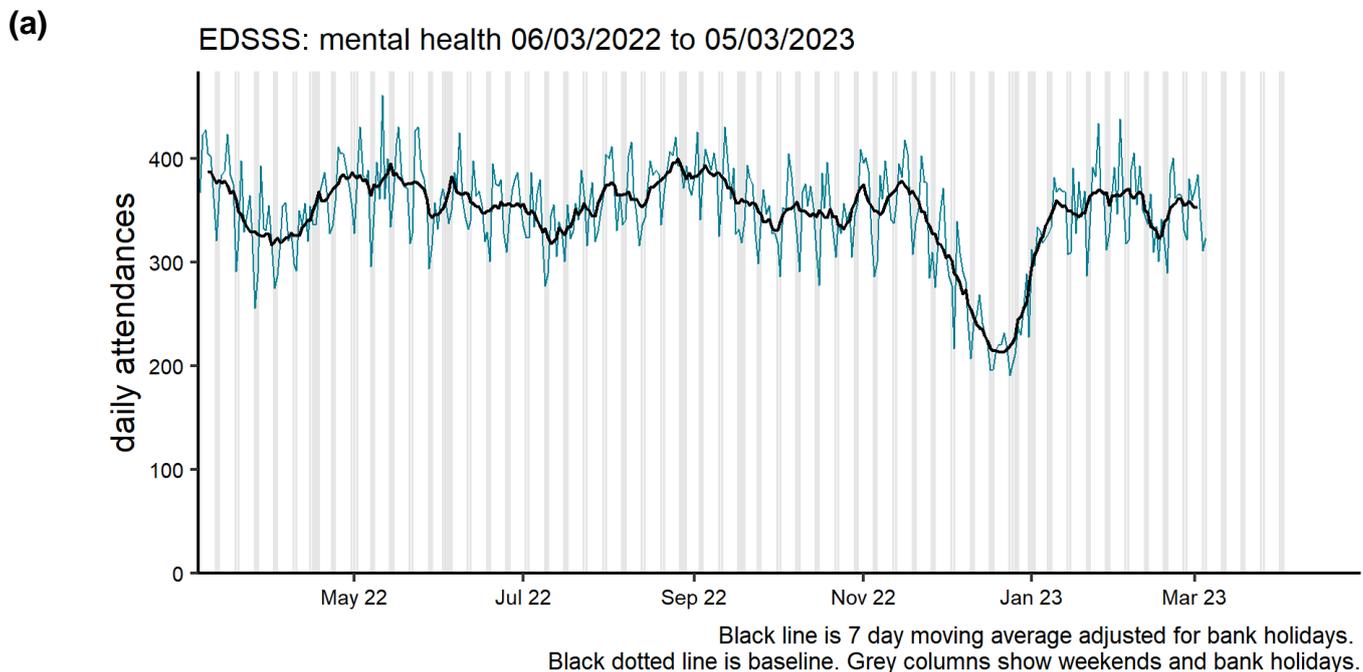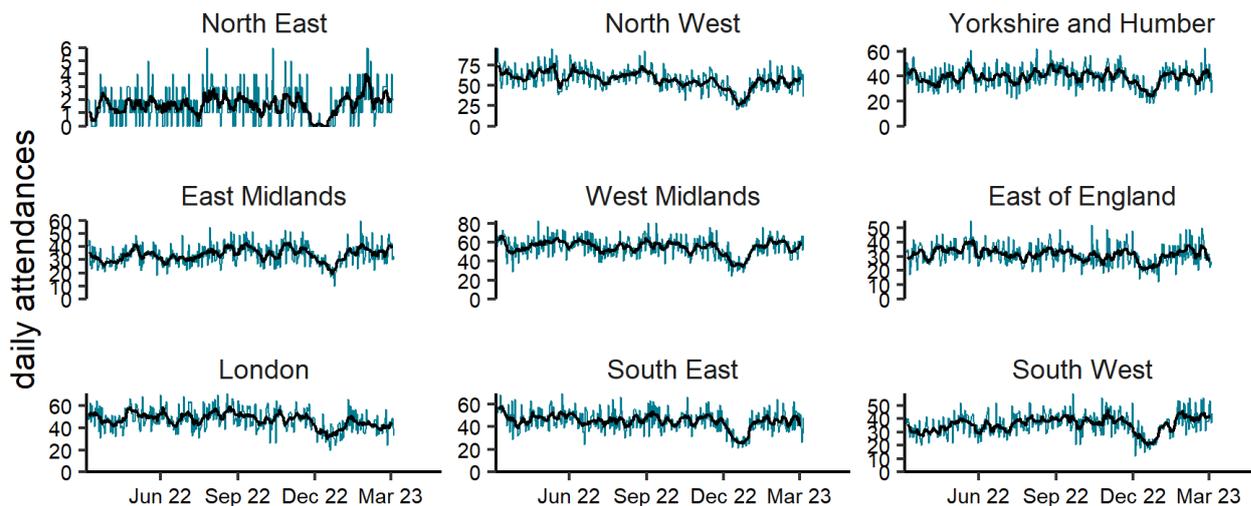Black dotted line is baseline.

Mental health

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

[3] 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.

(a)

EDSSS: mental health 06/03/2022 to 05/03/2023

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

(b)

EDSSS: mental health by age (years) 06/03/2022 to 05/03/2023

NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
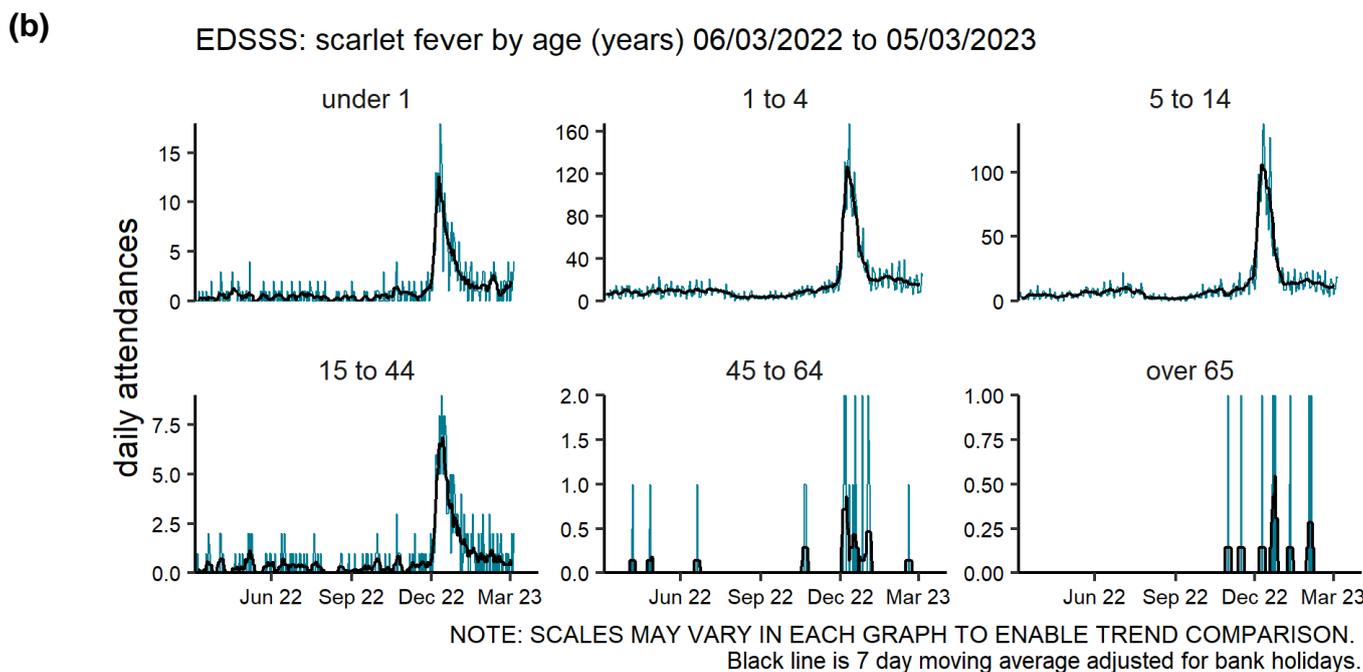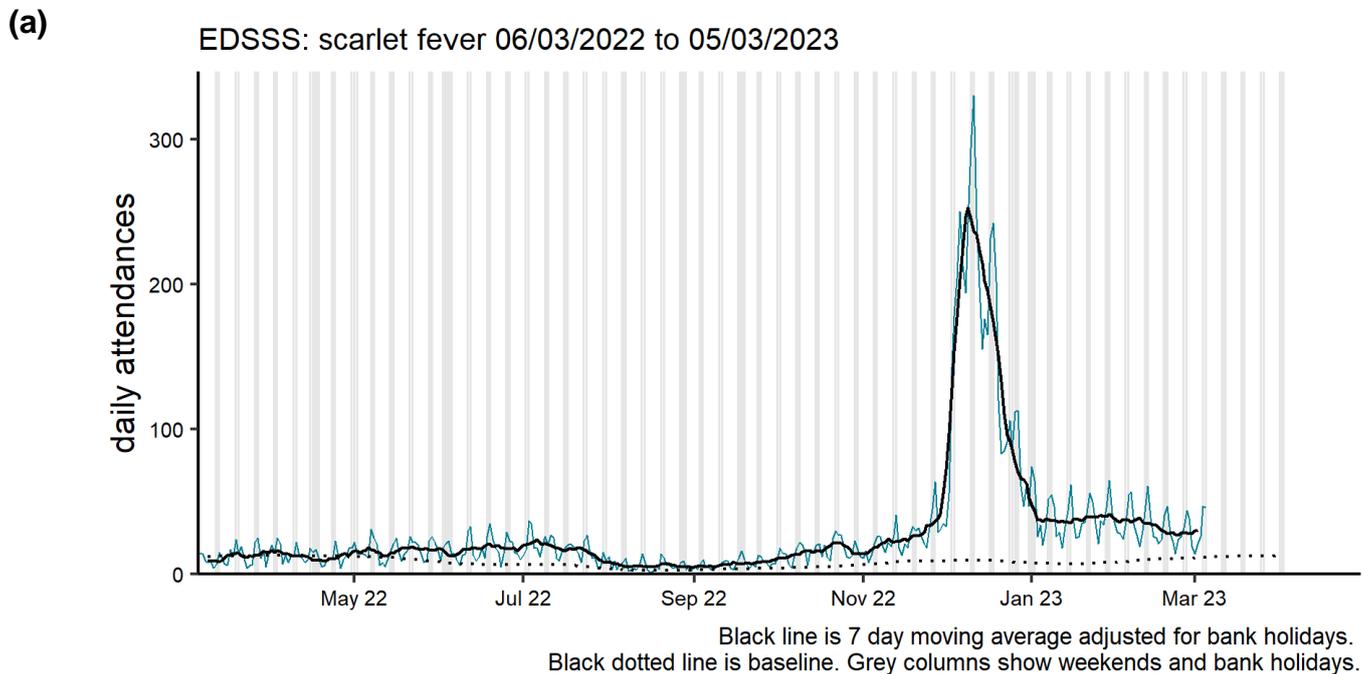
27

(c)

EDSSS: mental health by region 06/03/2022 to 05/03/2023

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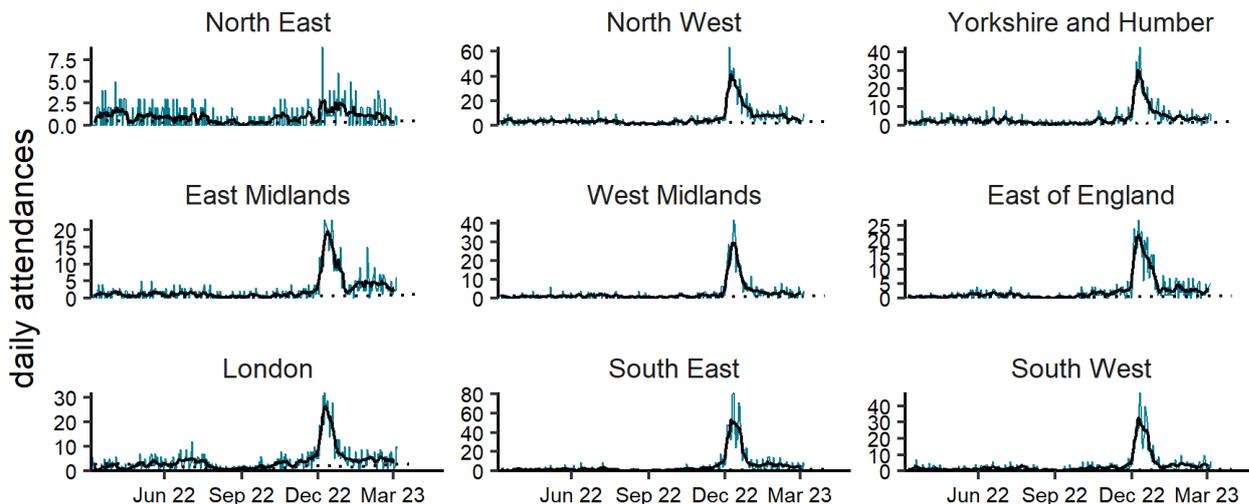Black dotted line is baseline.

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.

(a)

EDSSS: scarlet fever 06/03/2022 to 05/03/2023

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

(b)

EDSSS: scarlet fever by age (years) 06/03/2022 to 05/03/2023

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

(c)

EDSSS: scarlet fever by region 06/03/2022 to 05/03/2023

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

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
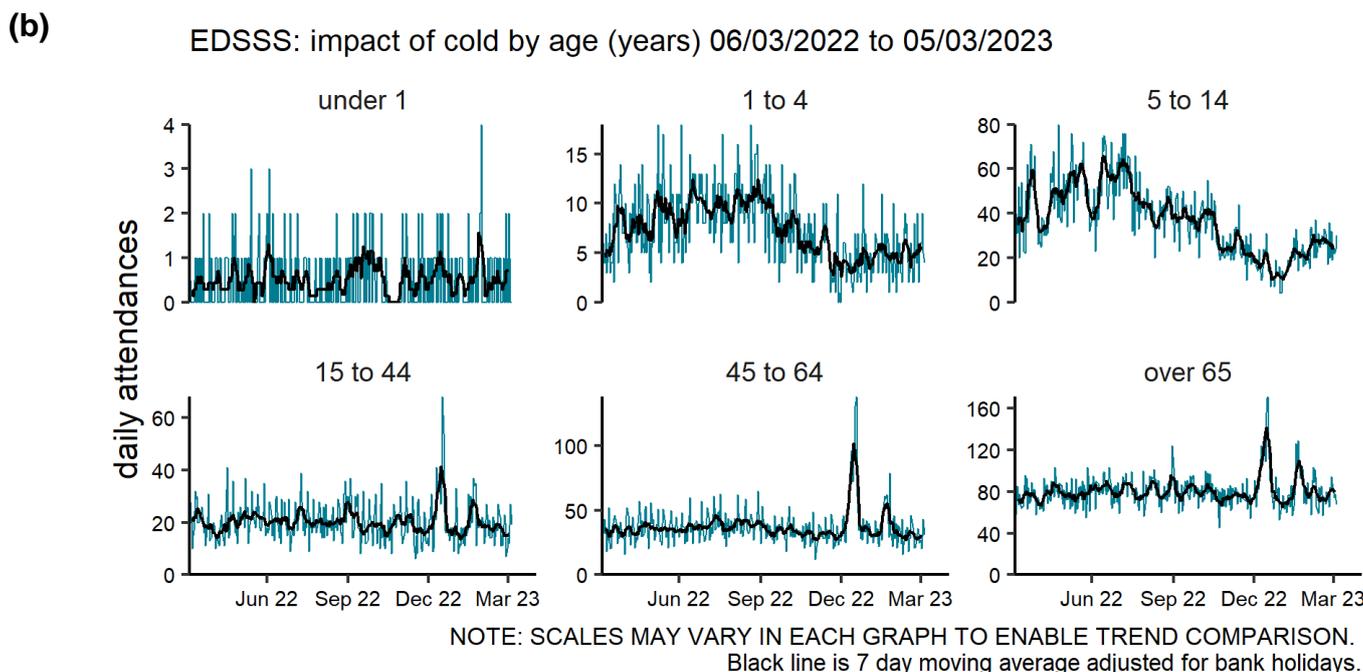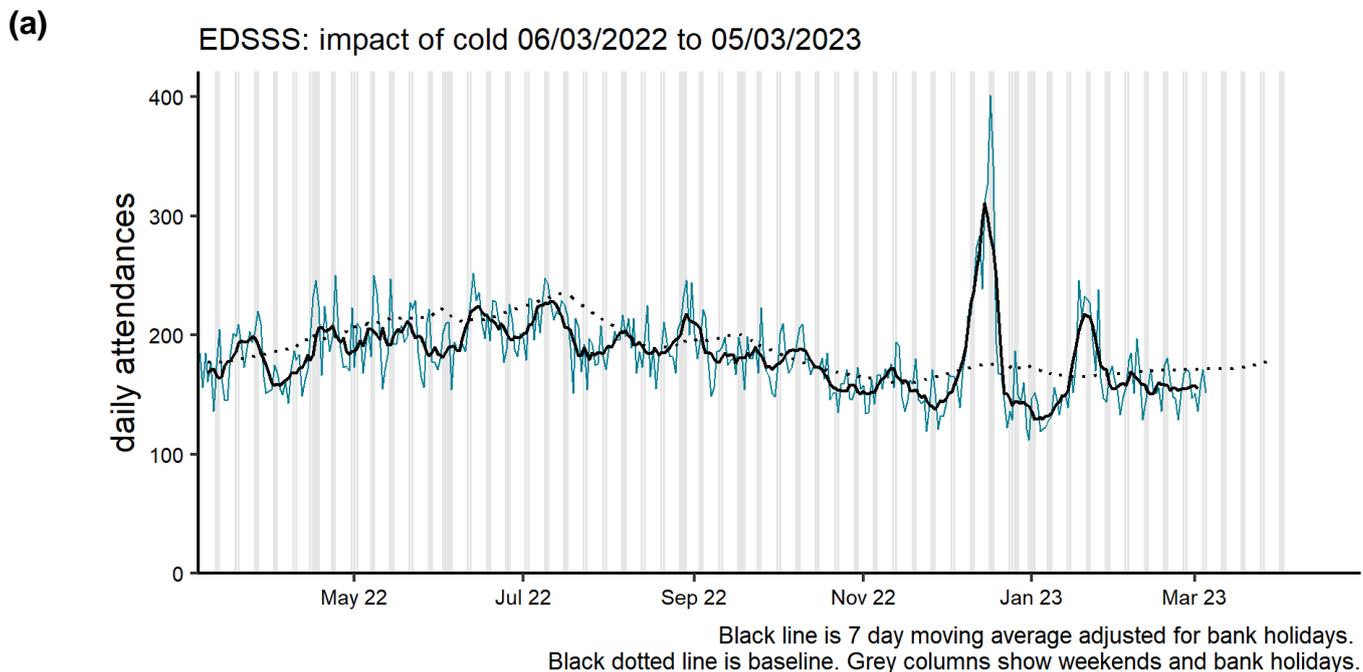
Heat-Health Alert period:1 June to 15 September

Highest weather alert level during the current reporting week:
Level 1 – Winter preparedness and action
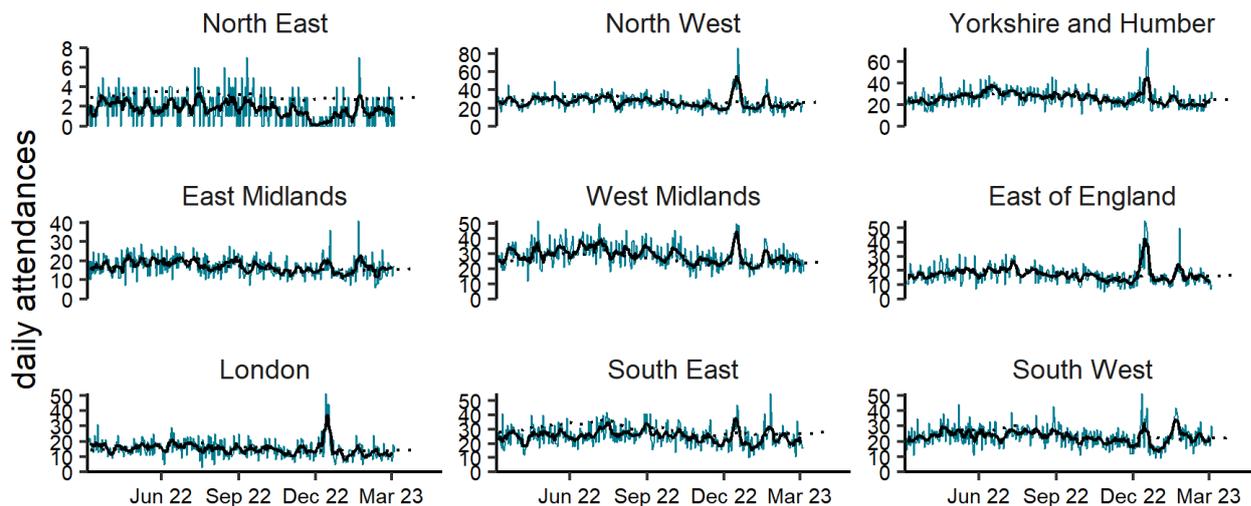
Impact of cold

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

[4] 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.

(a)

EDSSS: impact of cold 06/03/2022 to 05/03/2023

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

(b)

EDSSS: impact of cold by age (years) 06/03/2022 to 05/03/2023

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

(c)

EDSSS: impact of cold by region 06/03/2022 to 05/03/2023

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 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

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: ED-2

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

Published: March 2023

Corporate member of
Plain English Campaign
Committed to clearer
communication
339

UKHSA supports the UN
Sustainable Development Goals

SUSTAINABLE
DEVELOPMENT GOALS