UK Health Security Agency

Emergency Department Syndromic Surveillance System Bulletin (England)

2023 Week 35

Key messages

Data reported to: 3 September 2023

During week 35, ED COVID-19-like attendances increased sharply, across most age groups and regions. ED attendances for other respiratory indicators remained stable and at seasonally expected levels. Over the weekend of 2/3 September there was an increase in ED attendances for 'heat or sunstroke', in line with the recent warm weather.

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**)	Increasing	No baseline
Acute respiratory infections (**Figure 3**)	Decreasing	Similar to baseline
Acute bronchiolitis or bronchitis (**Figure 4**)	No trend	Similar to baseline
Influenza-like illness (**Figure 5**)	No trend	Similar to baseline
Pneumonia (**Figure 6**)	No trend	Above baseline
Asthma (**Figure 7**)	No trend	Similar to baseline
Gastroenteritis (**Figure 8**)	Increasing	Below baseline
Cardiac (**Figure 9**)	No trend	Similar to baseline
Myocardial ischaemia (**Figure 10**)	No trend	Above baseline
Acute alcohol intoxication (**Figure 11**)	Decreasing	Above baseline
Mental health (**Figure 12**)	Decreasing	No baseline
Scarlet fever **(Figure 13)**	No trend	Similar to baseline
Heat or sunstroke (**Figure 14**)	No trend	Similar to 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) 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

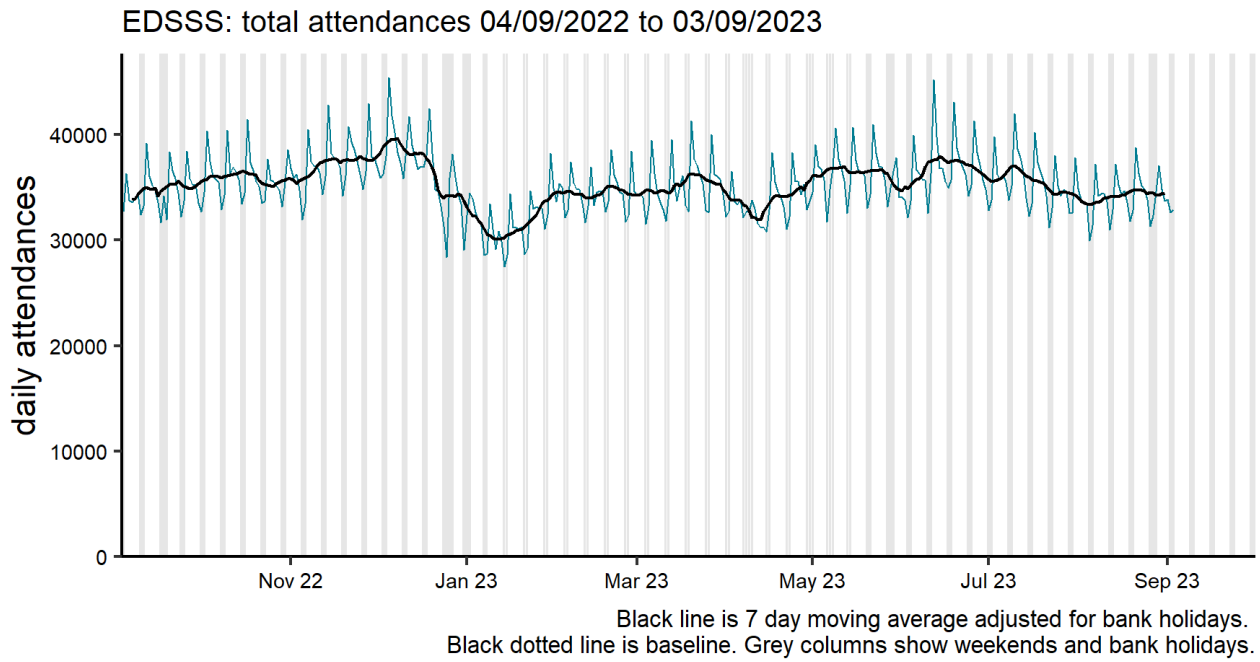
No issues identified. See **Table 2** and **Table 3** for the numbers of EDs included this week.

Remodelled EDSSS baselines have been refitted to surveillance data during week 6 2023 to account for post-COVID-19 changes in health care seeking behaviour.

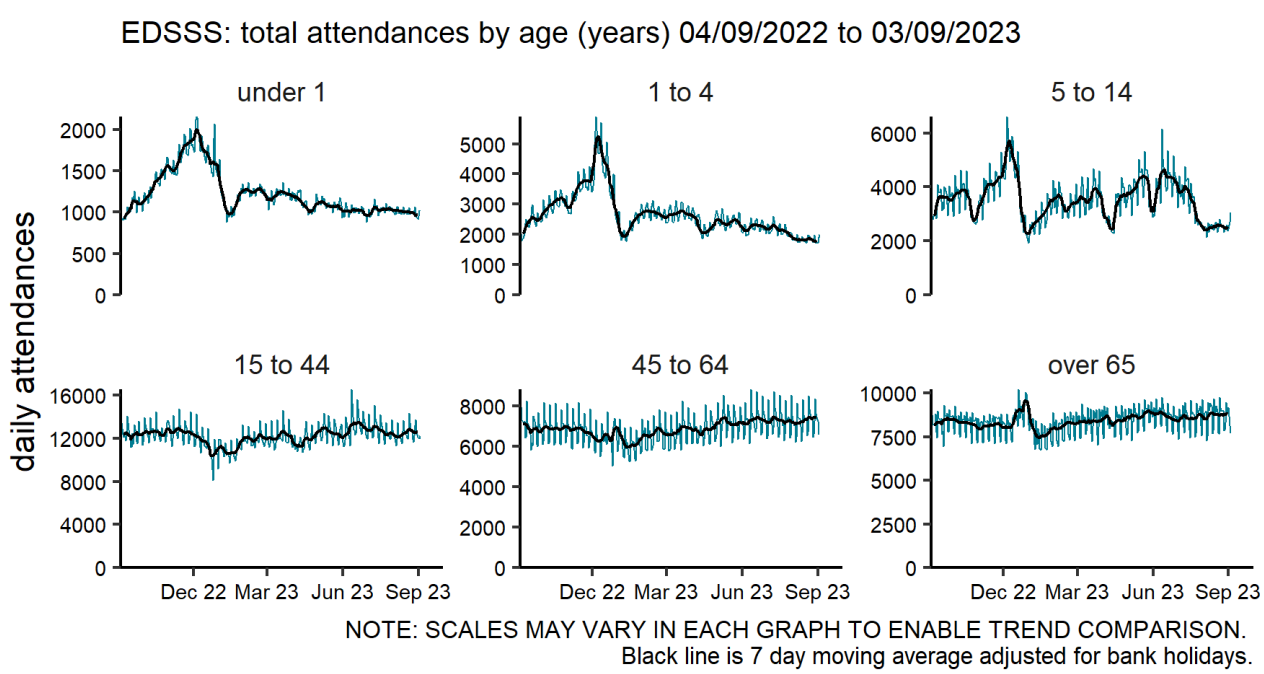
Total attendances

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.

(a)



(b)



(c)

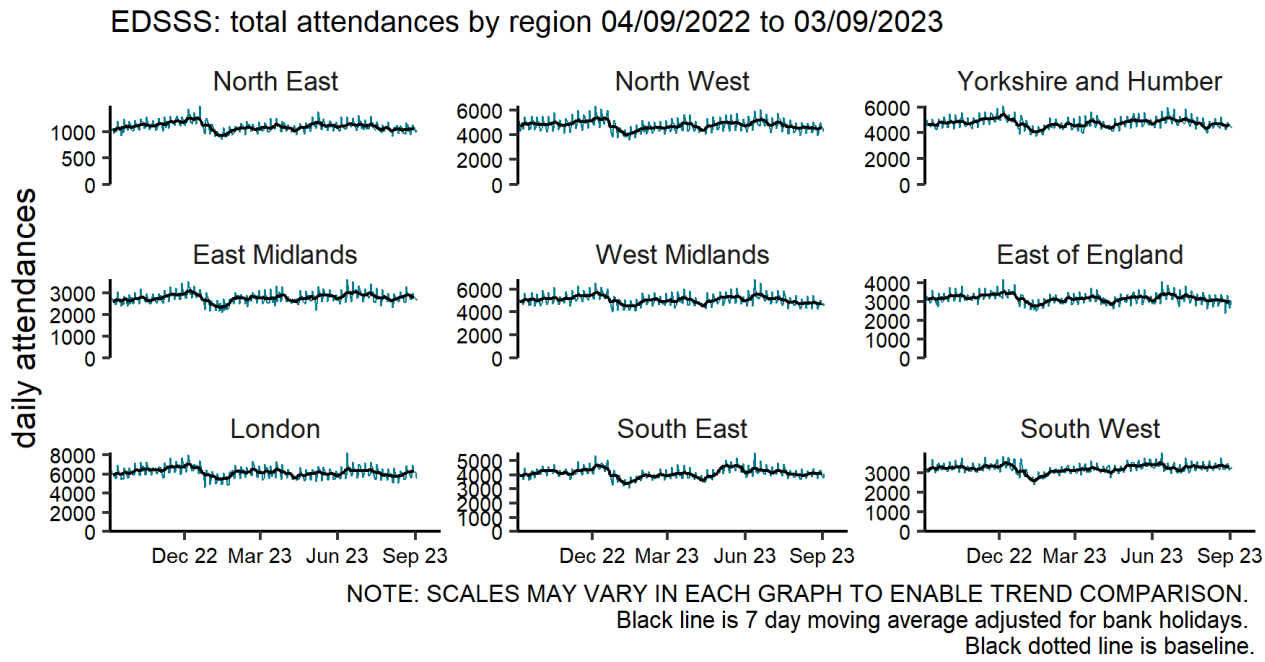


Table 2: The number of emergency department (ED) attendances and number with a diagnosis code included in surveillance each day during the most recent week.

Date	Total attendances[2]	Diagnoses included[2]
28 August 2023	34,588	23,880
29 August 2023	37,096	24,511
30 August 2023	34,813	23,179
31 August 2023	33,715	22,529
01 September 2023	33,837	22,568
02 September 2023	32,644	21,809
03 September 2023	32,923	22,320

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	22
Yorkshire and Humber	19
West Midlands	20
East Midlands	10
East of England	13
London	24
South West	16
South East	17
Total	145

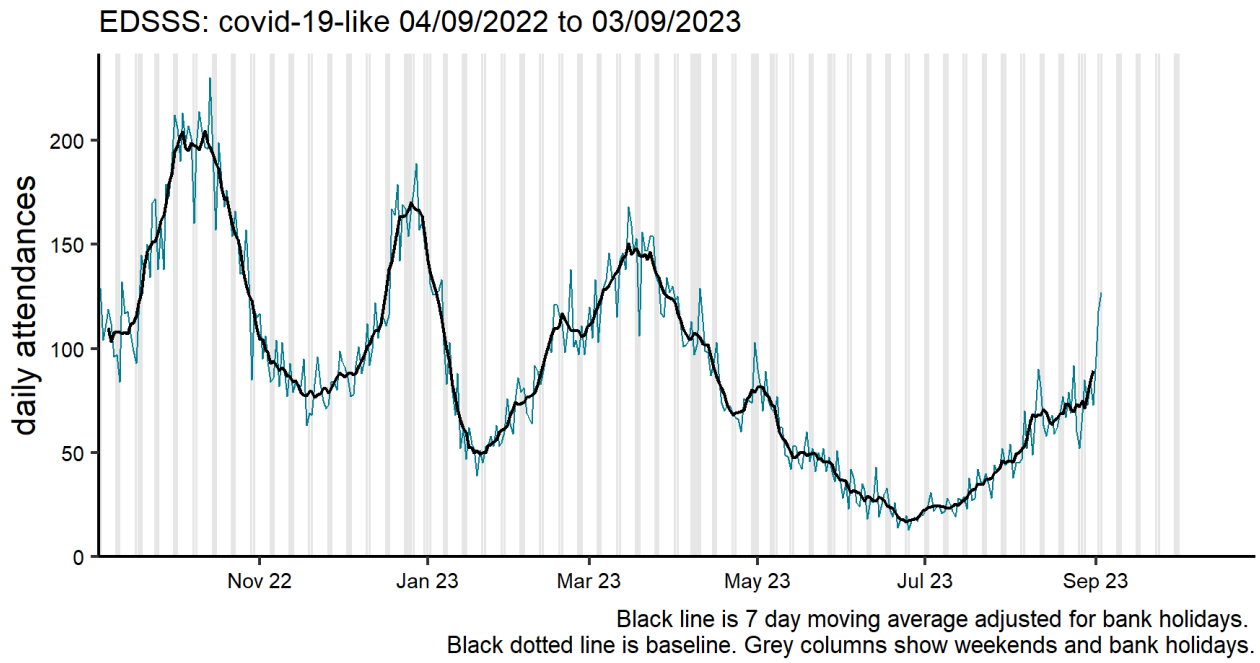
[2] only attendances from Type 01 EDs meeting the weekly reporting criteria are included in this report, for further details see **Notes and caveats**

Respiratory conditions

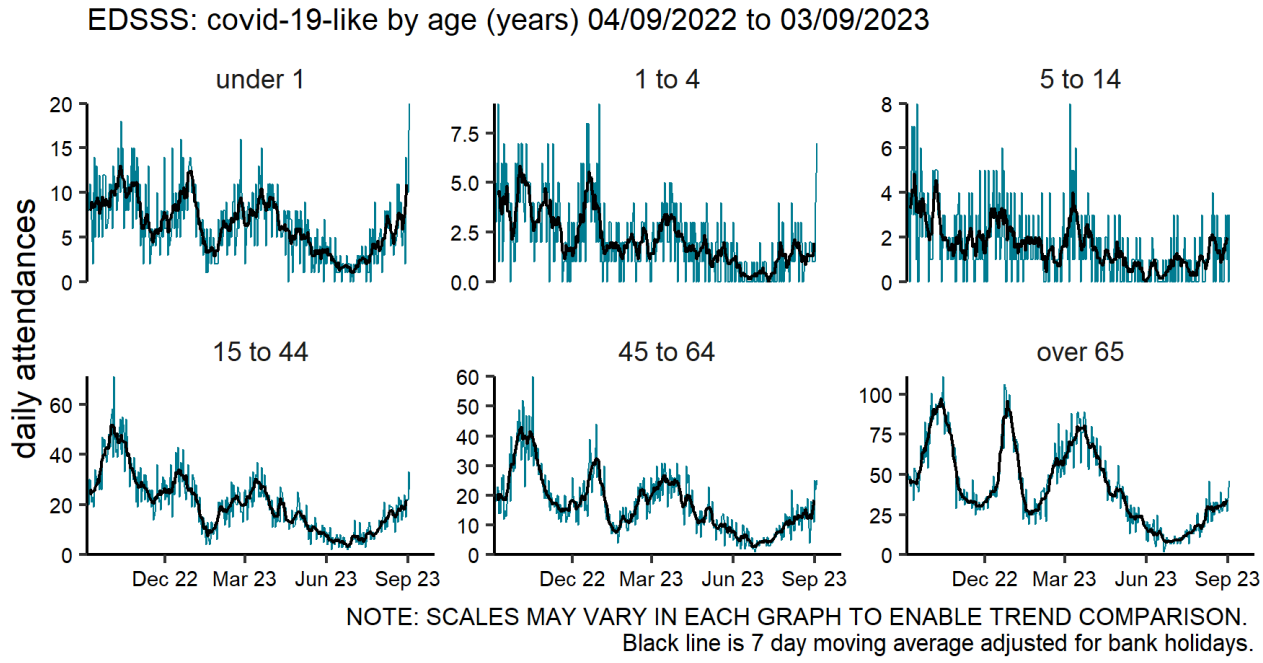
COVID-19-like

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.

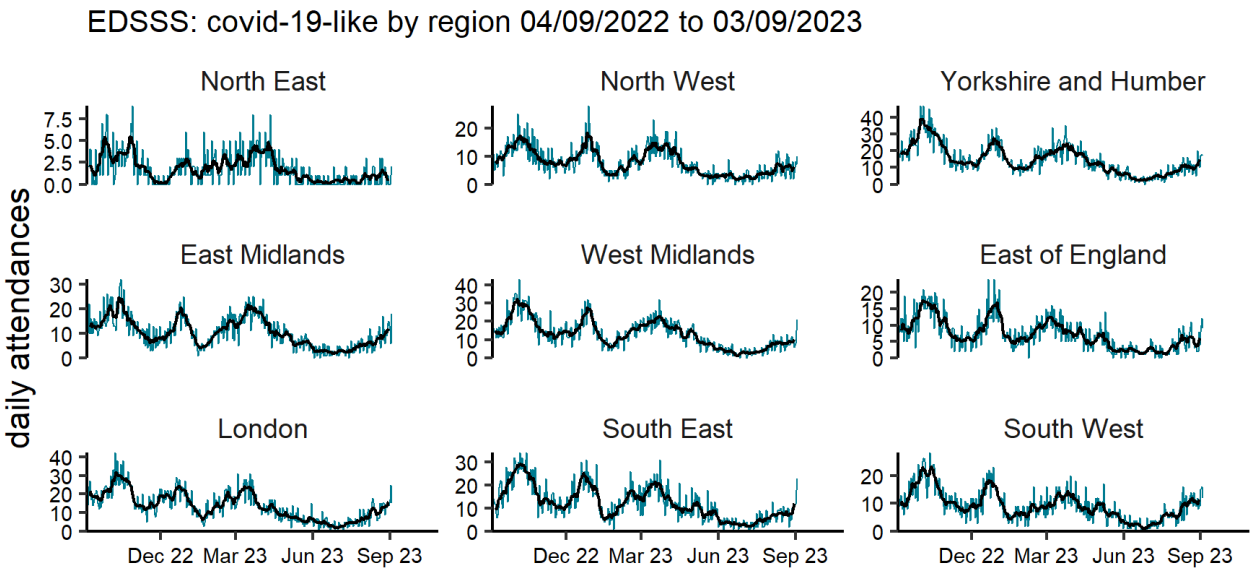
(a)



(b)



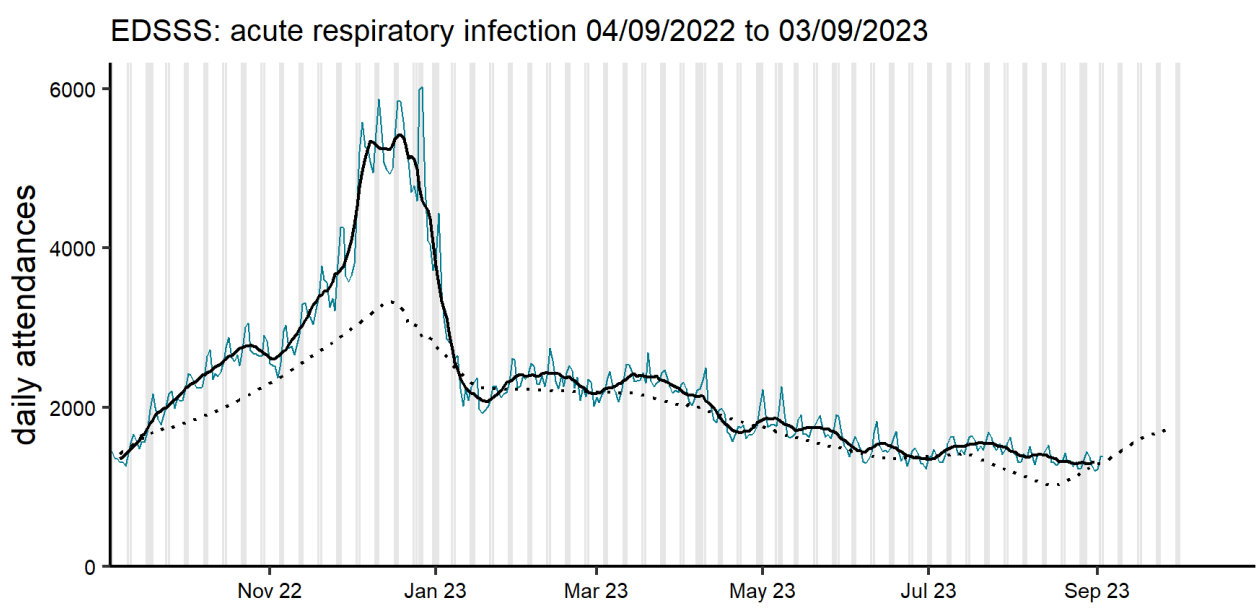
(c)


EDSSS: covid-19-like by region 04/09/2022 to 03/09/2023
North East
North West
Yorkshire and Humber
East Midlands
West Midlands
East of England
London
South East
South West
daily attendances
Dec 22
Mar 23
Jun 23
Sep 23
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

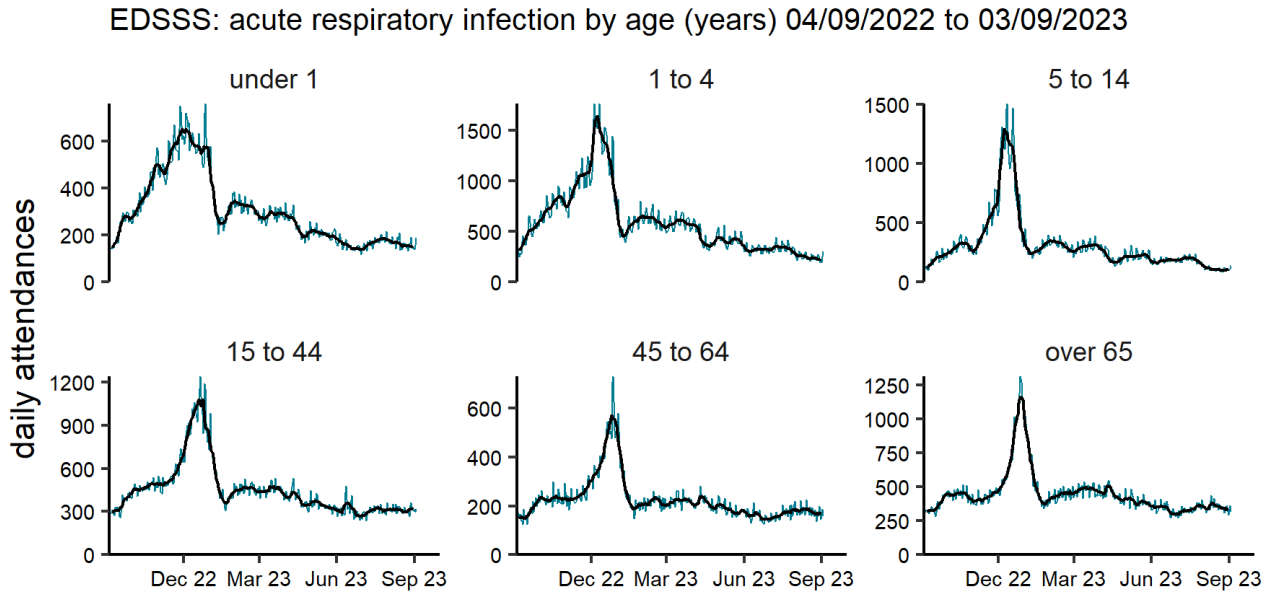
Figure 3: Daily number of acute respiratory infection ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

(a)



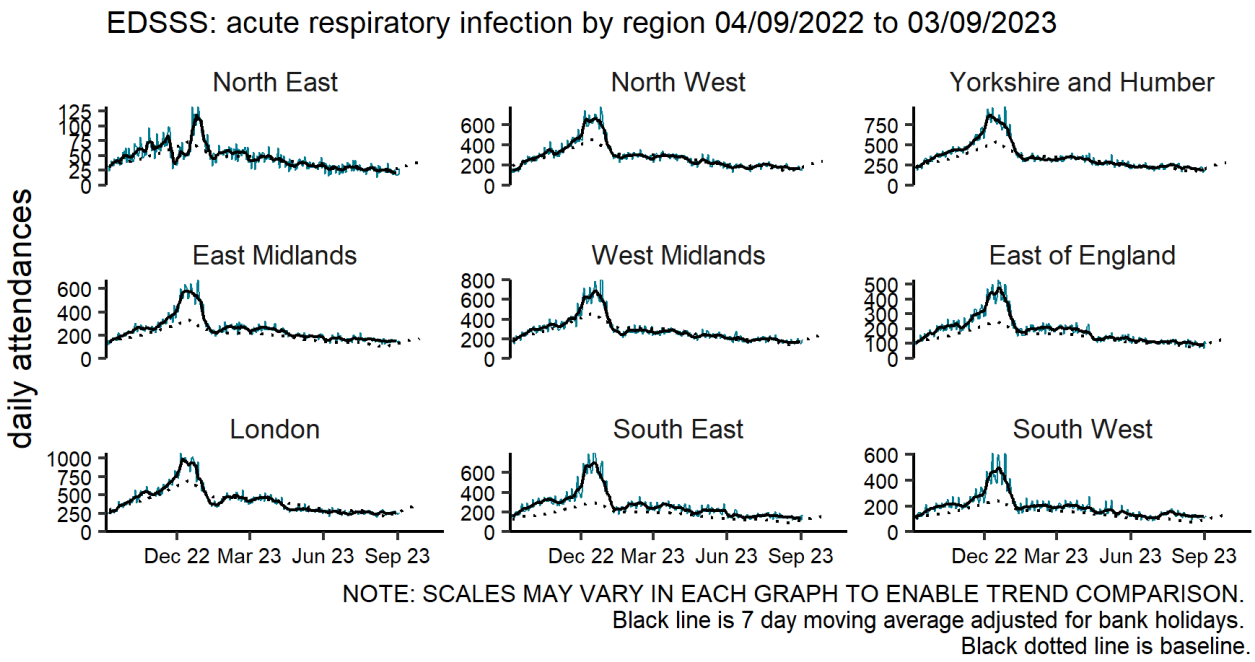
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)



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

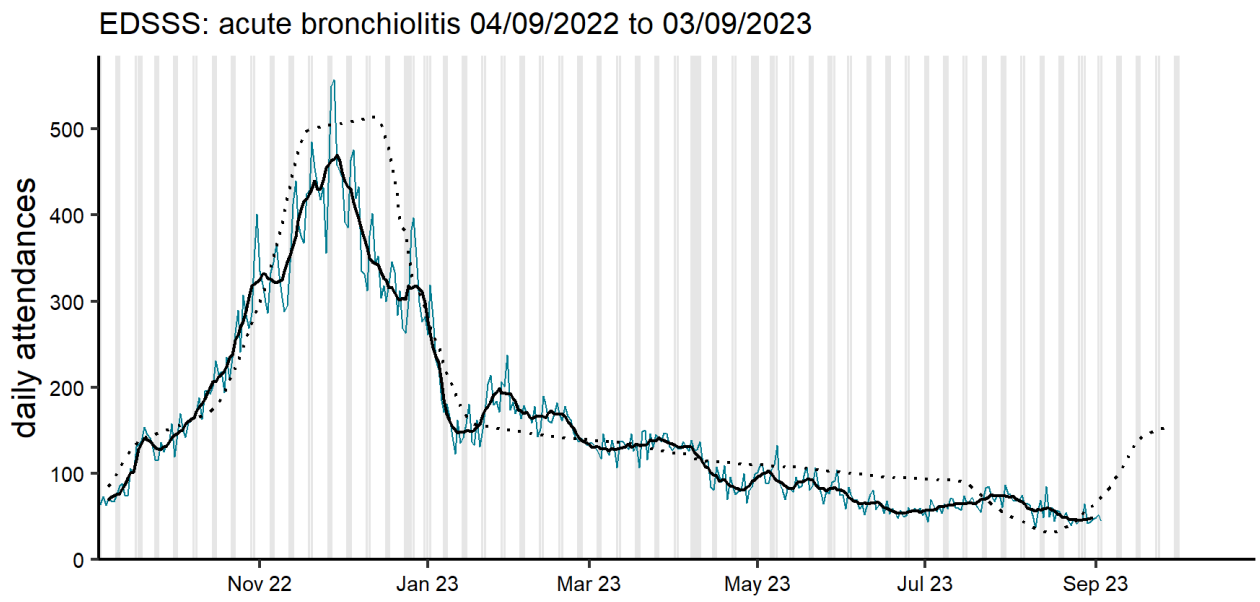
(c)


EDSSS: acute respiratory infection by region 04/09/2022 to 03/09/2023
North East
North West
Yorkshire and Humber
East Midlands
West Midlands
East of England
London
South East
South West
daily attendances
Dec 22 Mar 23 Jun 23 Sep 23
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

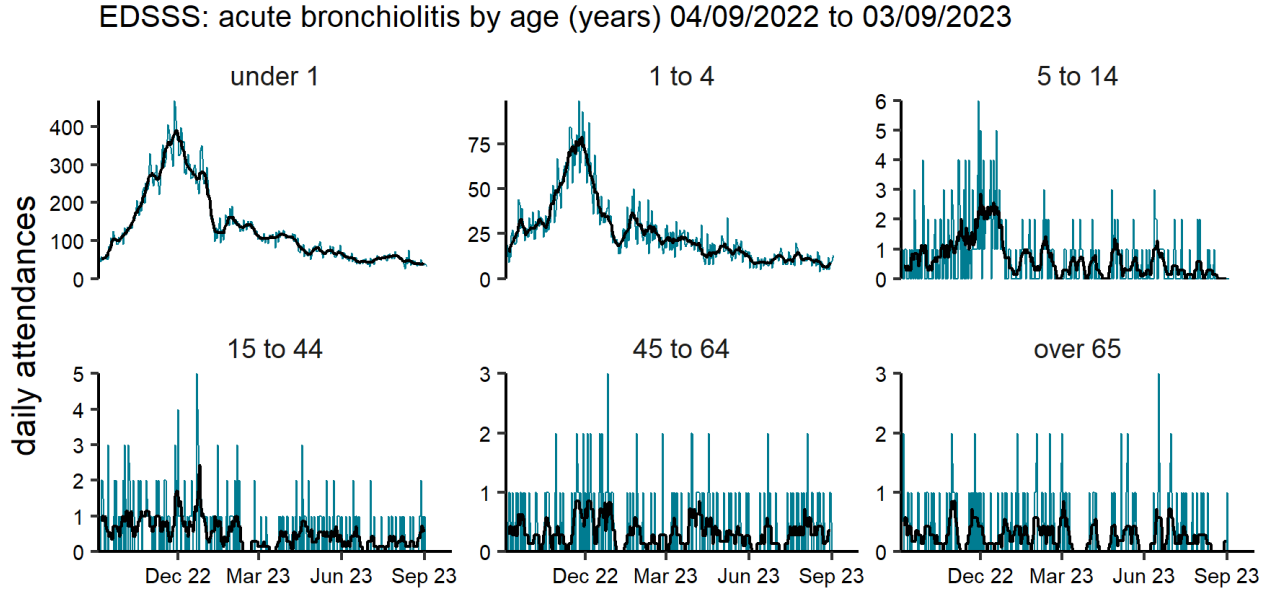
Figure 4: Daily number of acute bronchiolitis/bronchitis ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

(a)



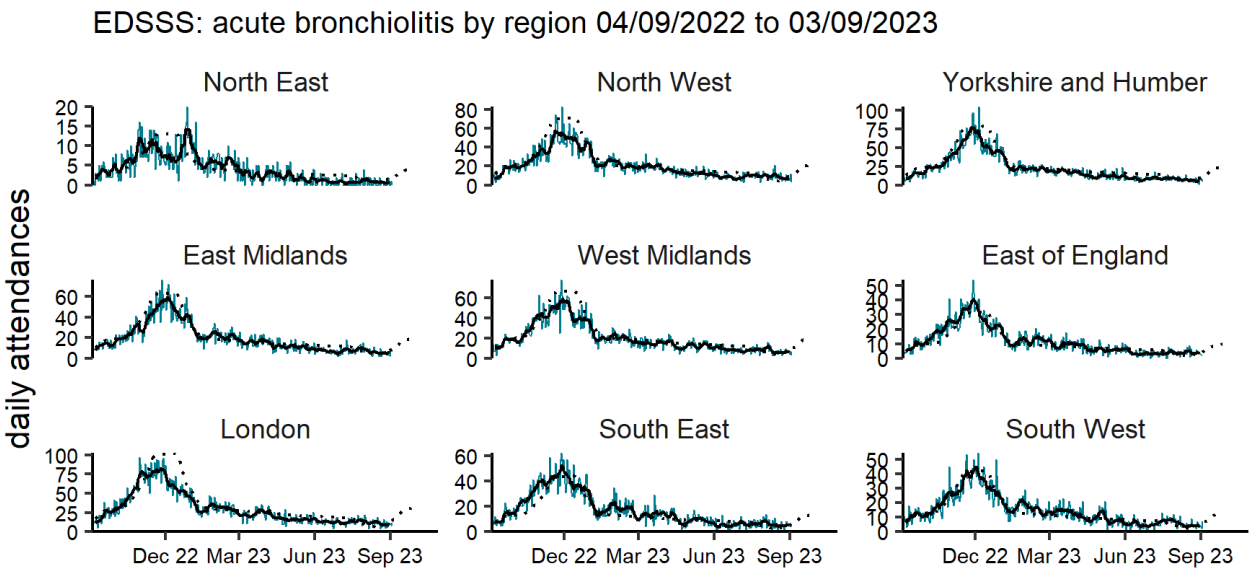
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)



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

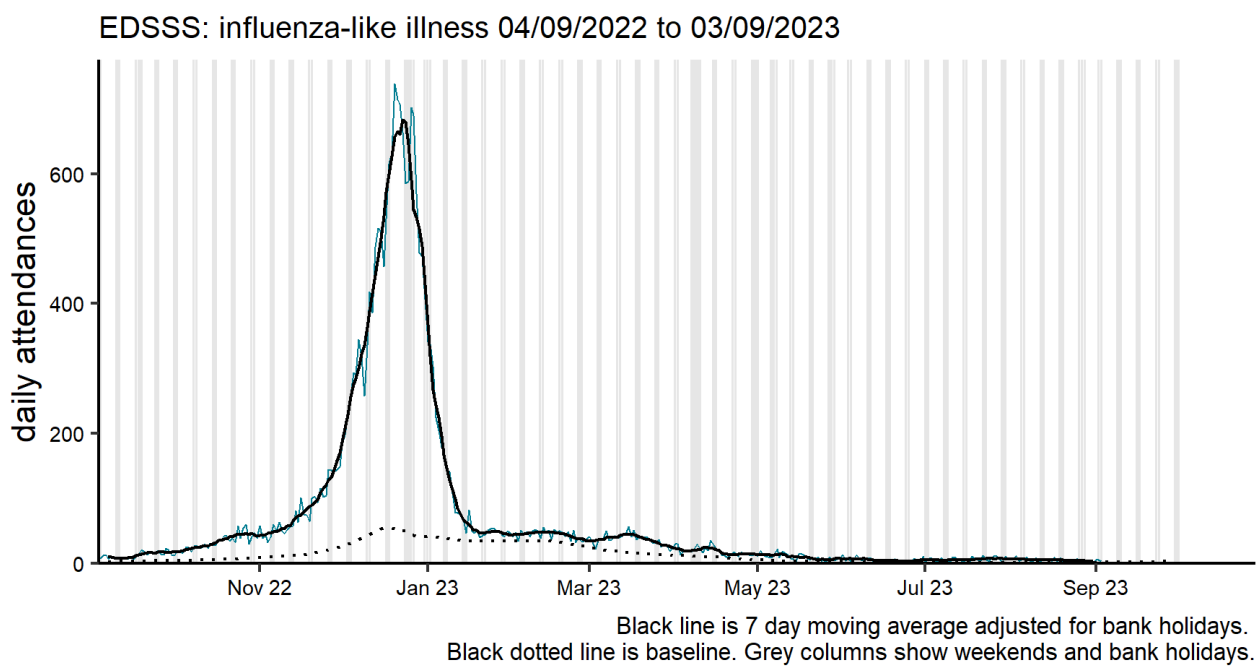
(c)


EDSSS: acute bronchiolitis by region 04/09/2022 to 03/09/2023
North East
North West
Yorkshire and Humber
East Midlands
West Midlands
East of England
London
South East
South West
daily attendances
Dec 22
Mar 23
Jun 23
Sep 23
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.

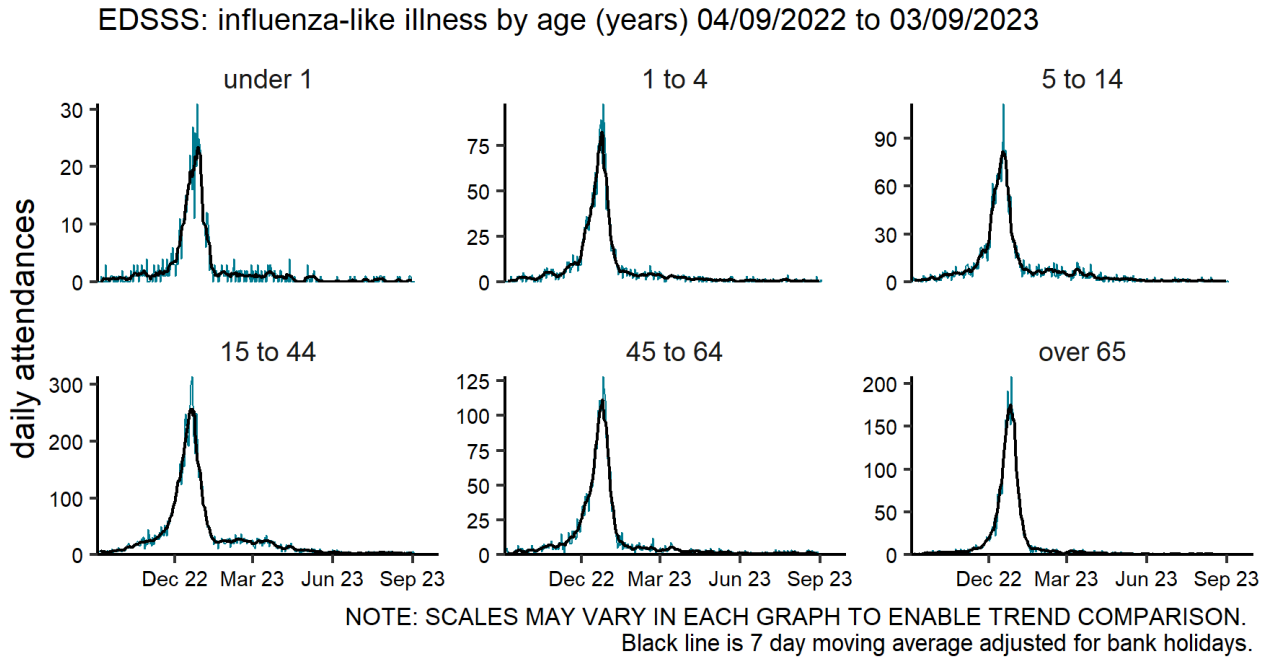
Influenza-like illness

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.

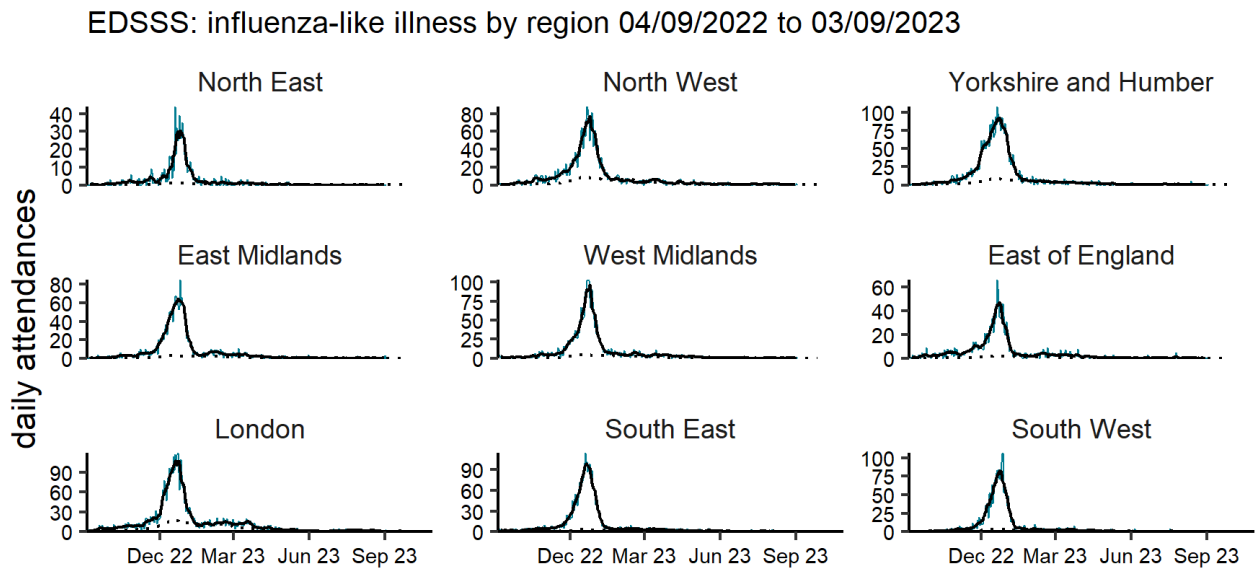
(a)



(b)



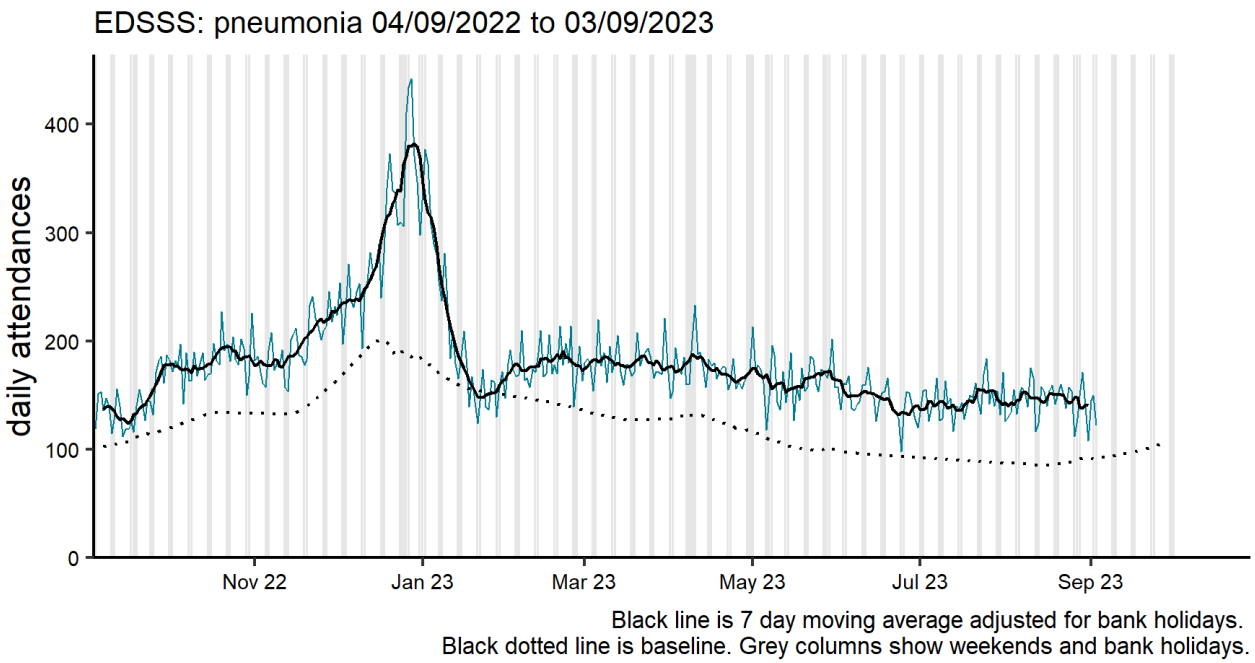
(c)


EDSSS: influenza-like illness by region 04/09/2022 to 03/09/2023
North East
North West
Yorkshire and Humber
East Midlands
West Midlands
East of England
London
South East
South West
daily attendances
Dec 22
Mar 23
Jun 23
Sep 23
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

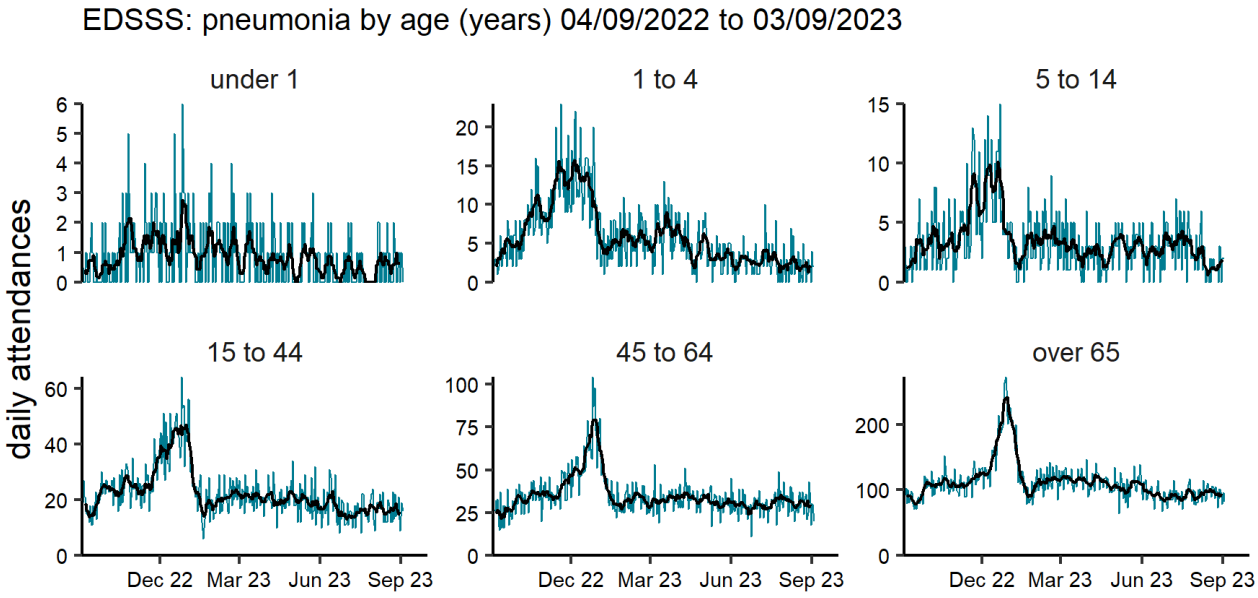
Figure 6: Daily number of pneumonia ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

(a)



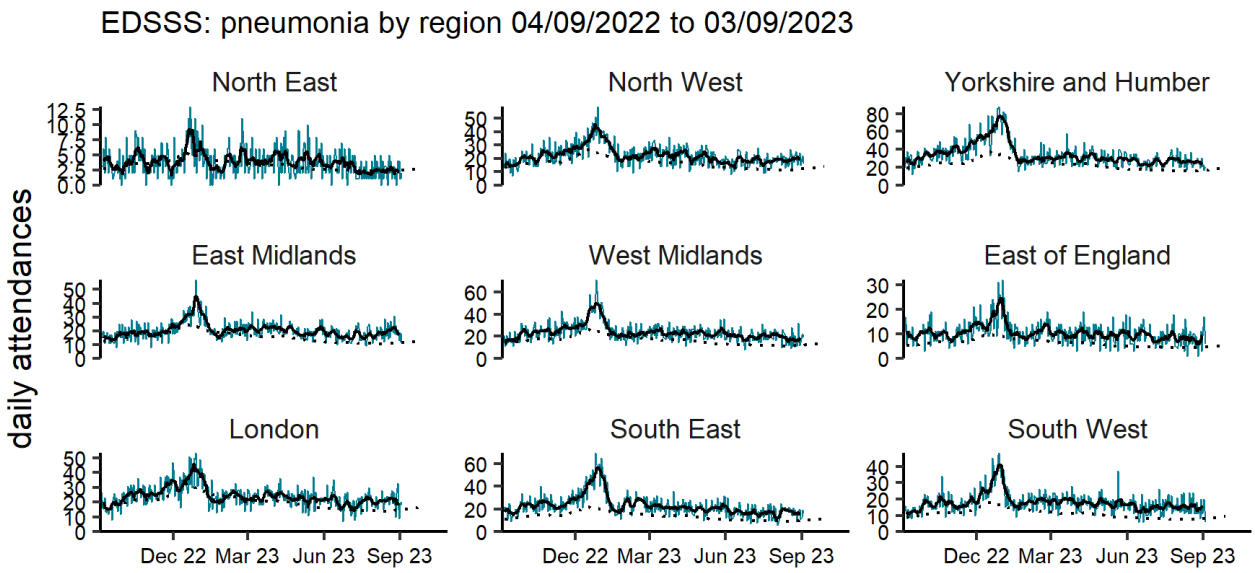
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)



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

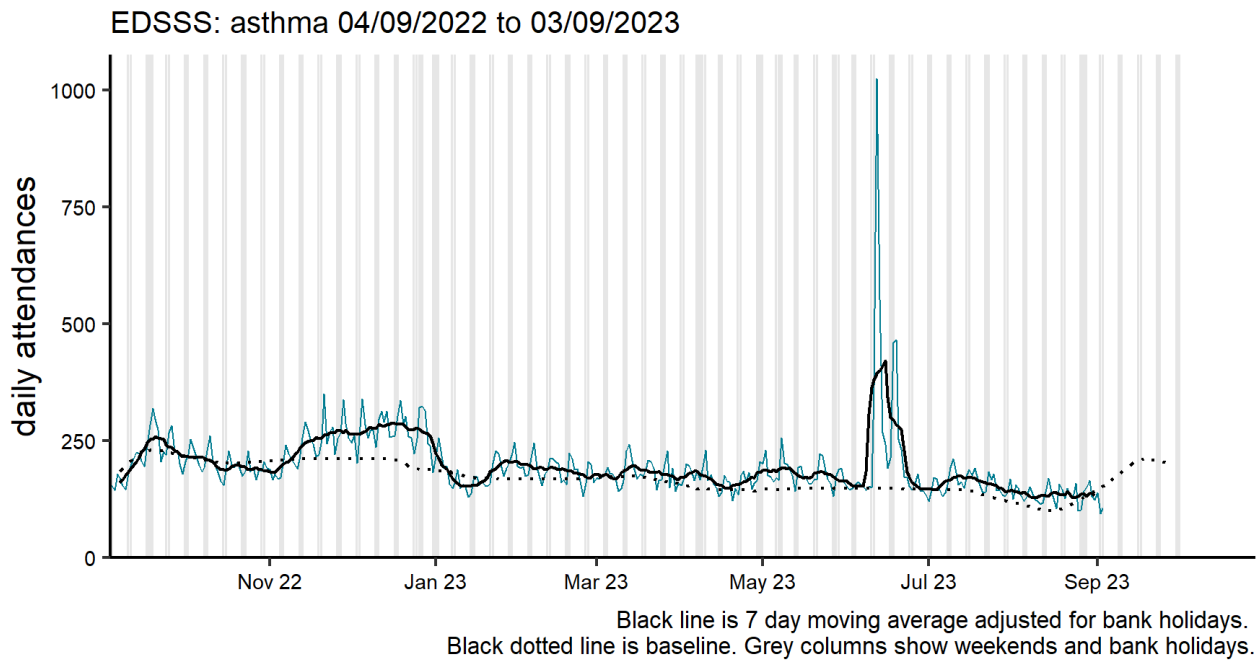
(c)


EDSSS: pneumonia by region 04/09/2022 to 03/09/2023
North East
North West
Yorkshire and Humber
East Midlands
West Midlands
East of England
London
South East
South West
daily attendances
Dec 22 Mar 23 Jun 23 Sep 23
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.

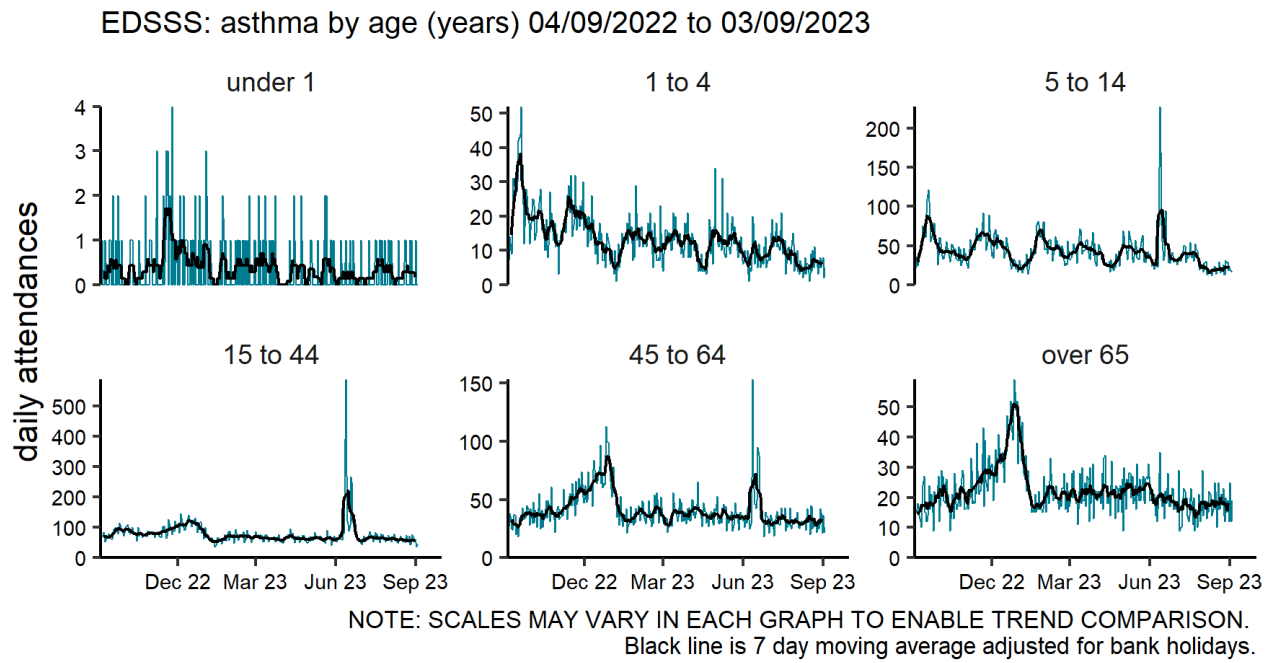
Asthma

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.

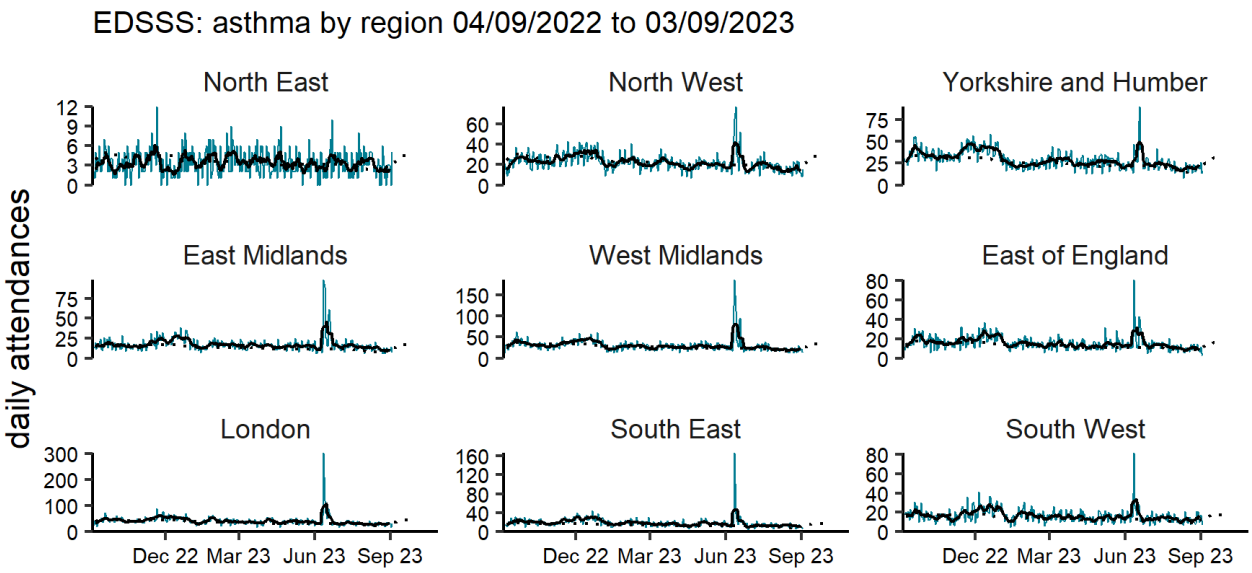
(a)



(b)



(c)

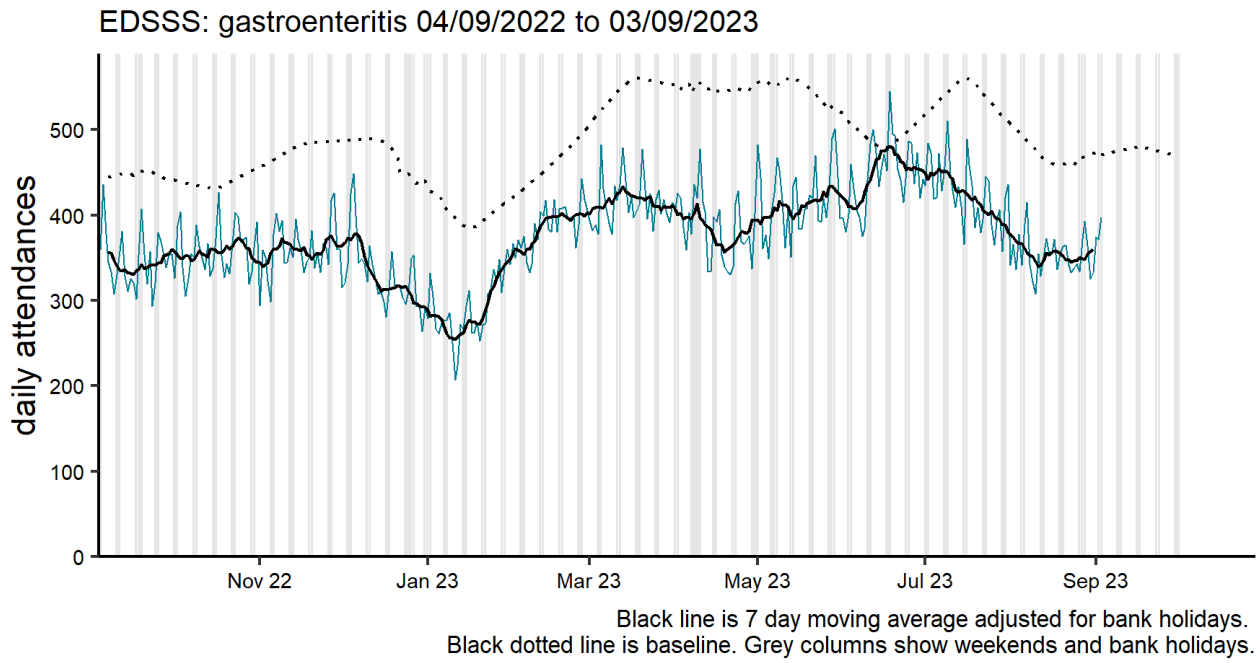

EDSSS: asthma by region 04/09/2022 to 03/09/2023
North East
North West
Yorkshire and Humber
East Midlands
West Midlands
East of England
London
South East
South West
daily attendances
Dec 22
Mar 23
Jun 23
Sep 23
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

Gastrointestinal conditions

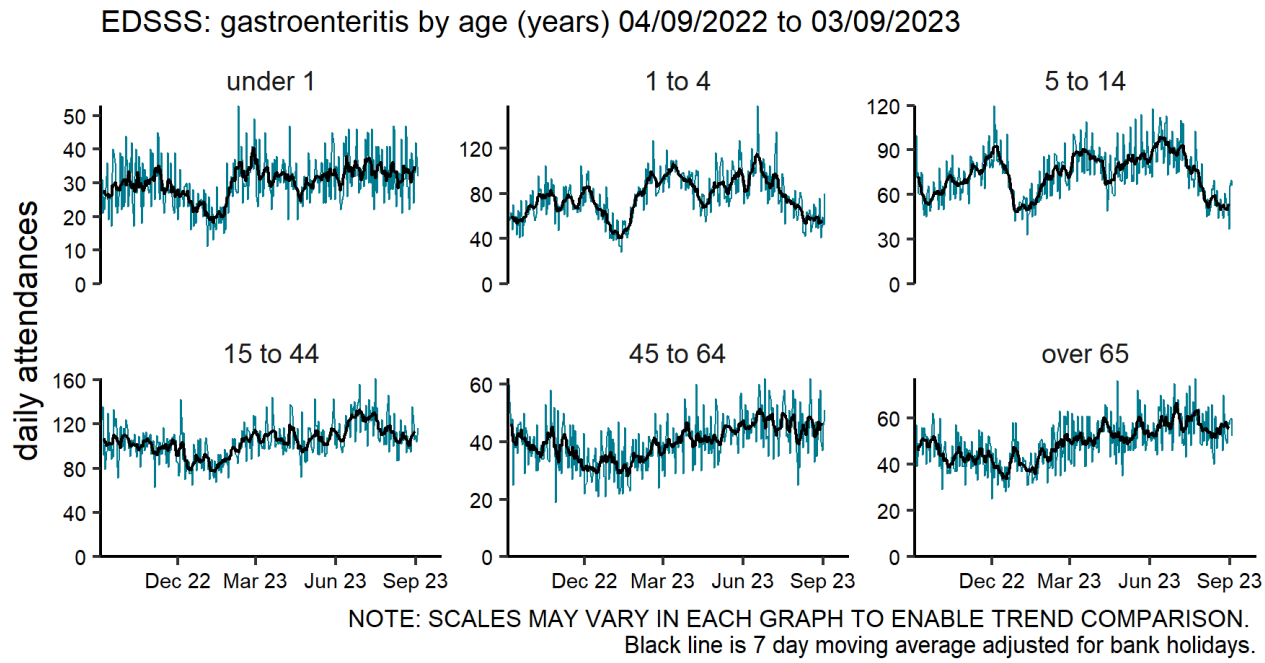
Gastroenteritis

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.

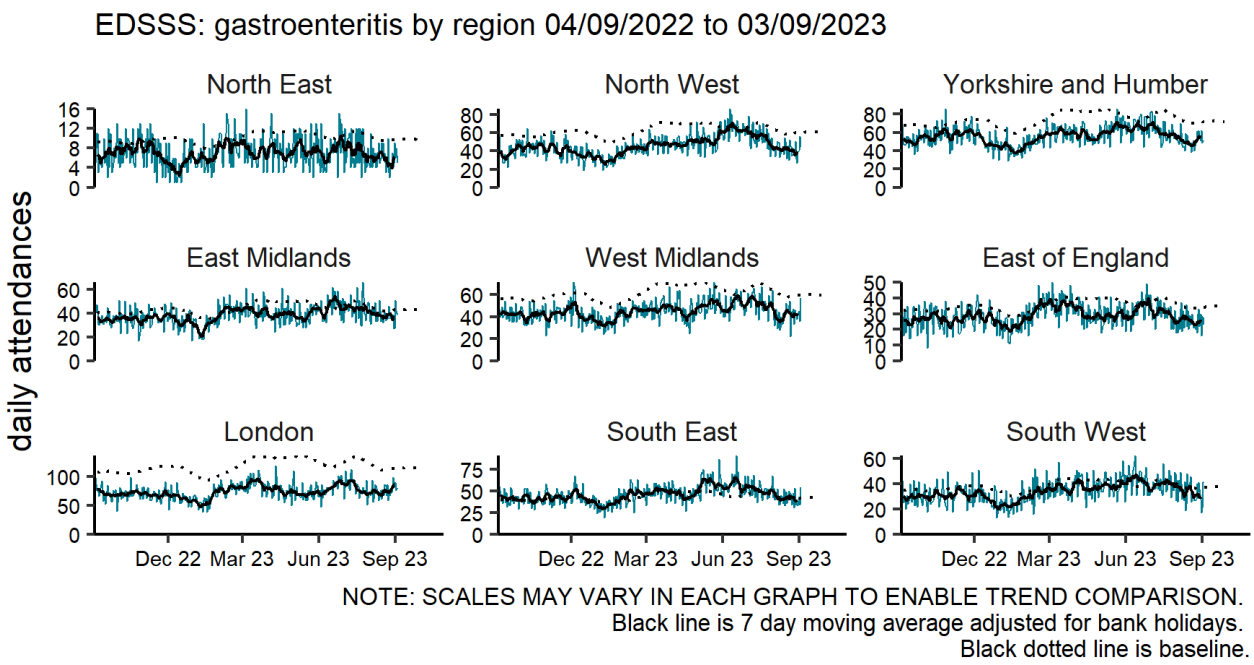
(a)



(b)



(c)

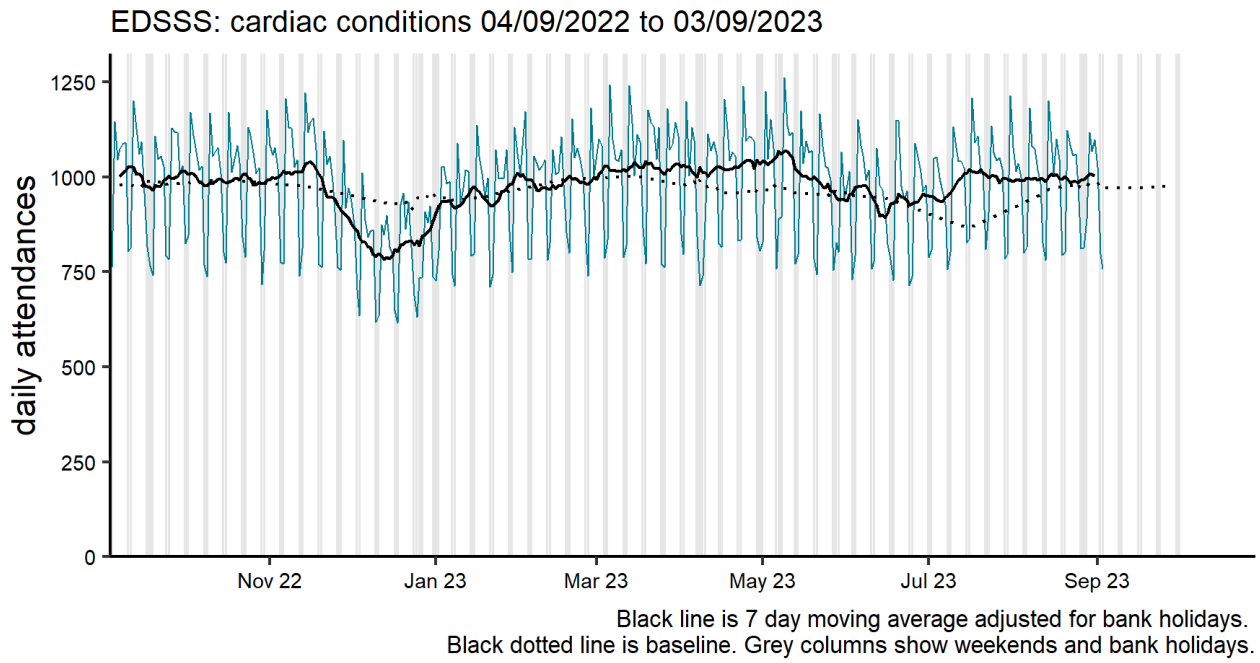

EDSSS: gastroenteritis by region 04/09/2022 to 03/09/2023
North East
North West
Yorkshire and Humber
East Midlands
West Midlands
East of England
London
South East
South West
daily attendances
Dec 22
Mar 23
Jun 23
Sep 23
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

Cardiac conditions

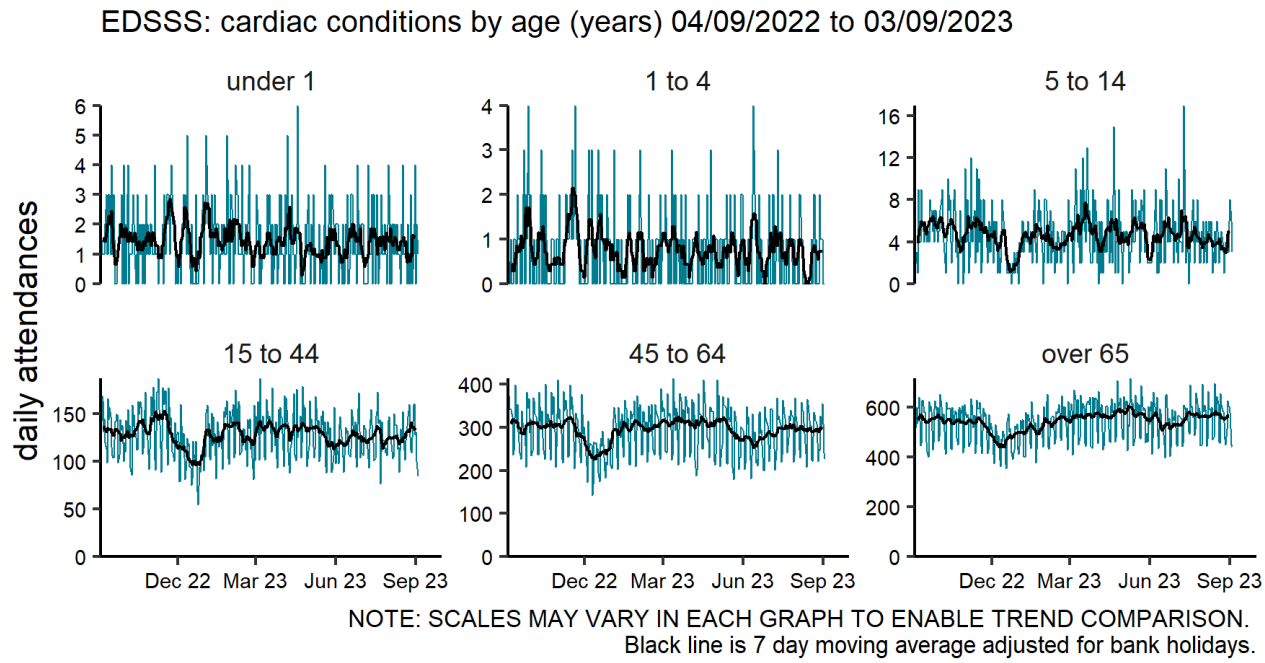
Cardiac

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.

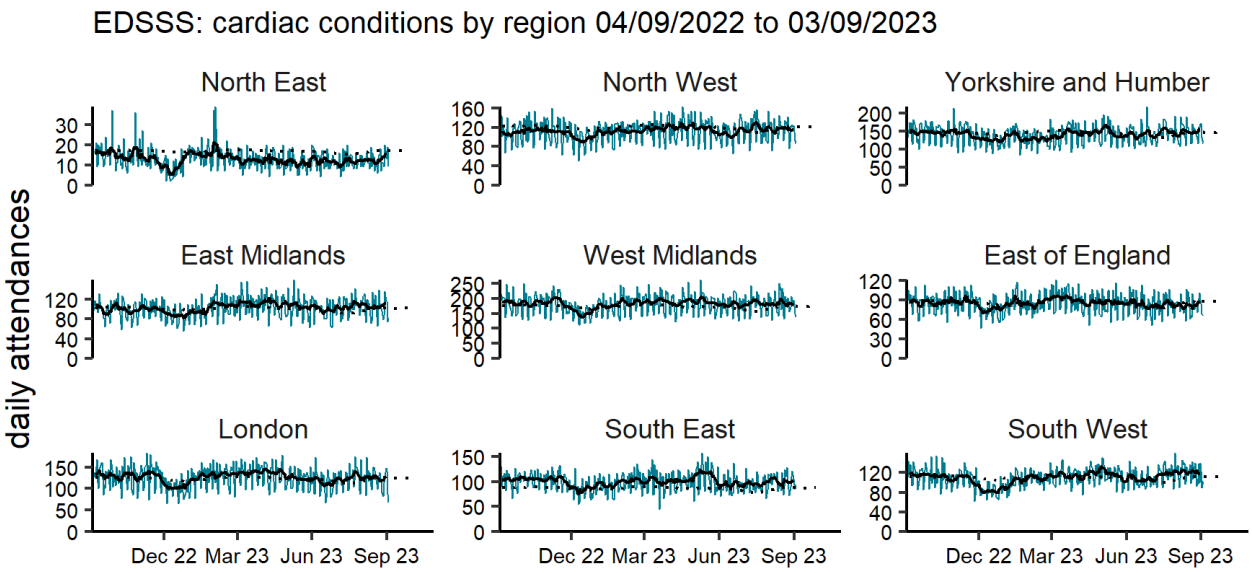
(a)



(b)



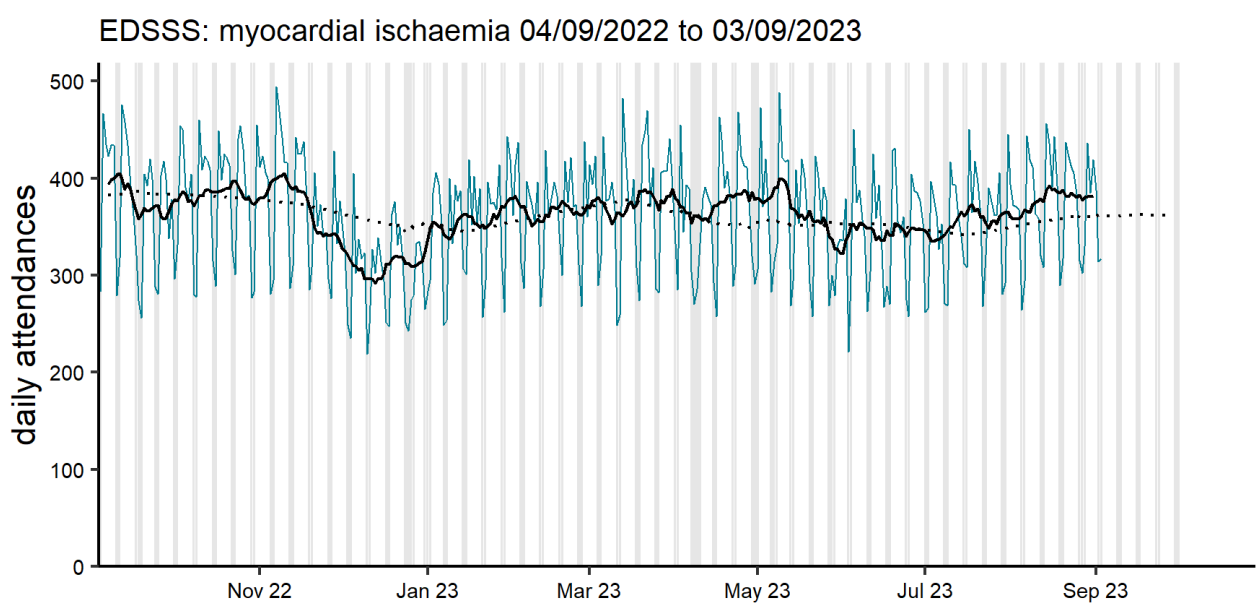
(c)


EDSSS: cardiac conditions by region 04/09/2022 to 03/09/2023
North East
North West
Yorkshire and Humber
East Midlands
West Midlands
East of England
London
South East
South West
daily attendances
Dec 22 Mar 23 Jun 23 Sep 23
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.

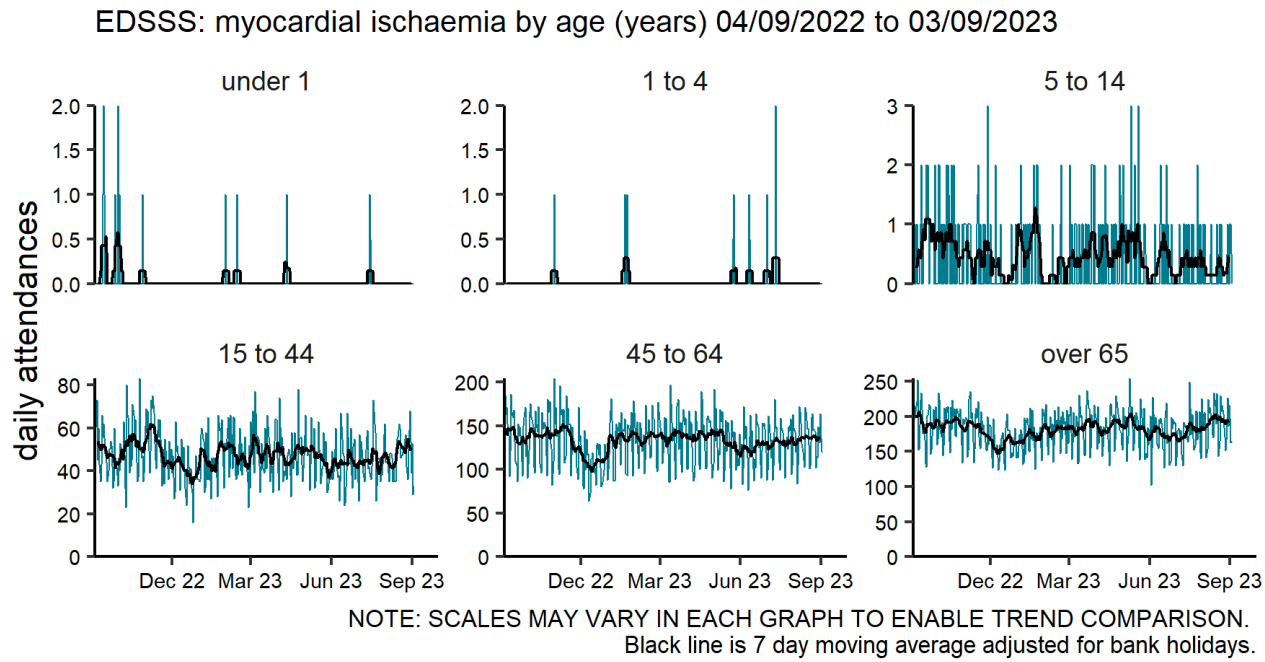
Myocardial ischaemia

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.

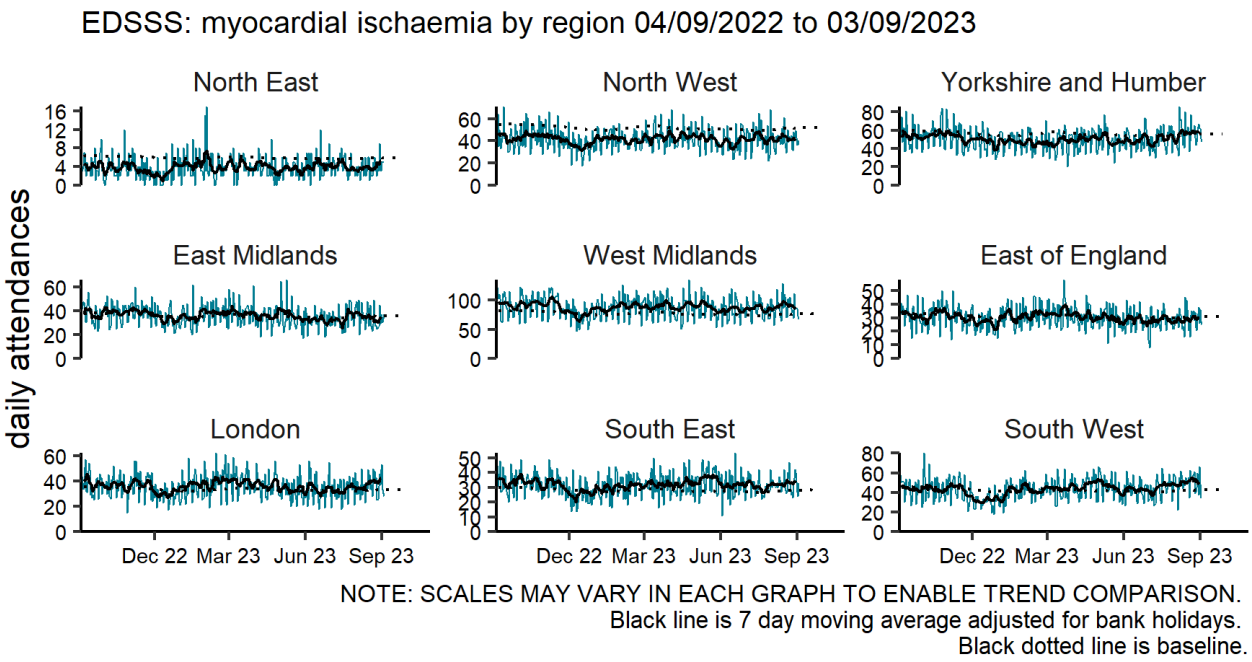
(a)



(b)



(c)

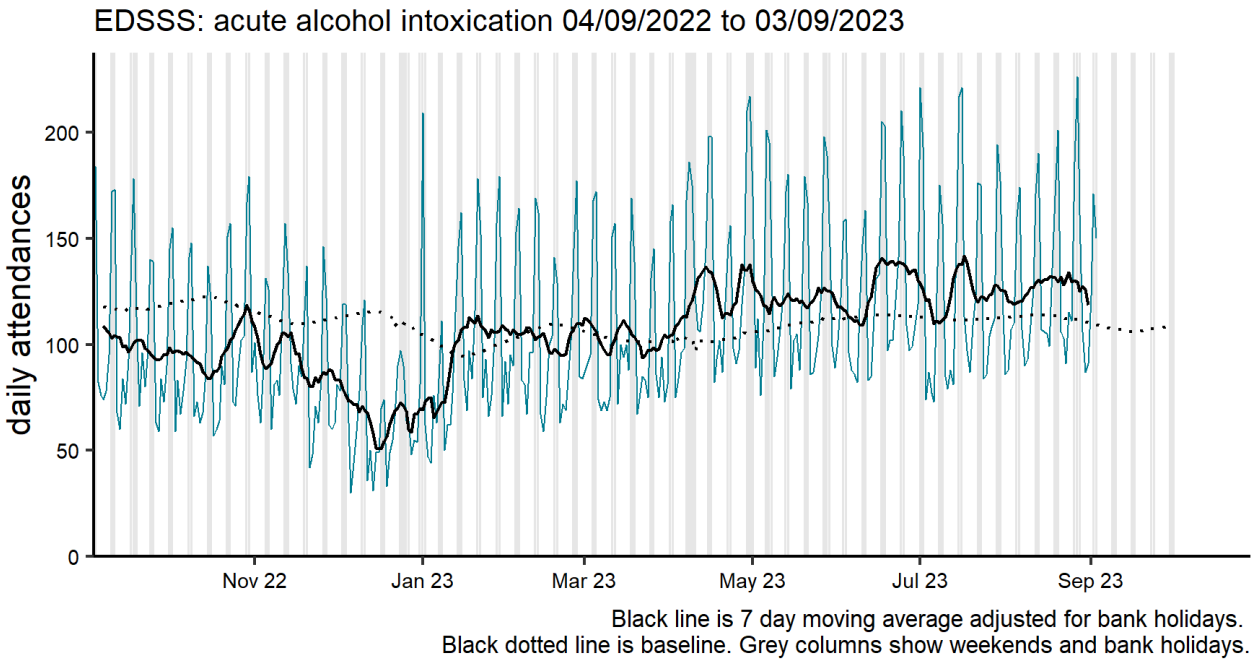

EDSSS: myocardial ischaemia by region 04/09/2022 to 03/09/2023
North East
North West
Yorkshire and Humber
East Midlands
West Midlands
East of England
London
South East
South West
daily attendances
Dec 22
Mar 23
Jun 23
Sep 23
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

Other conditions

Acute alcohol intoxication

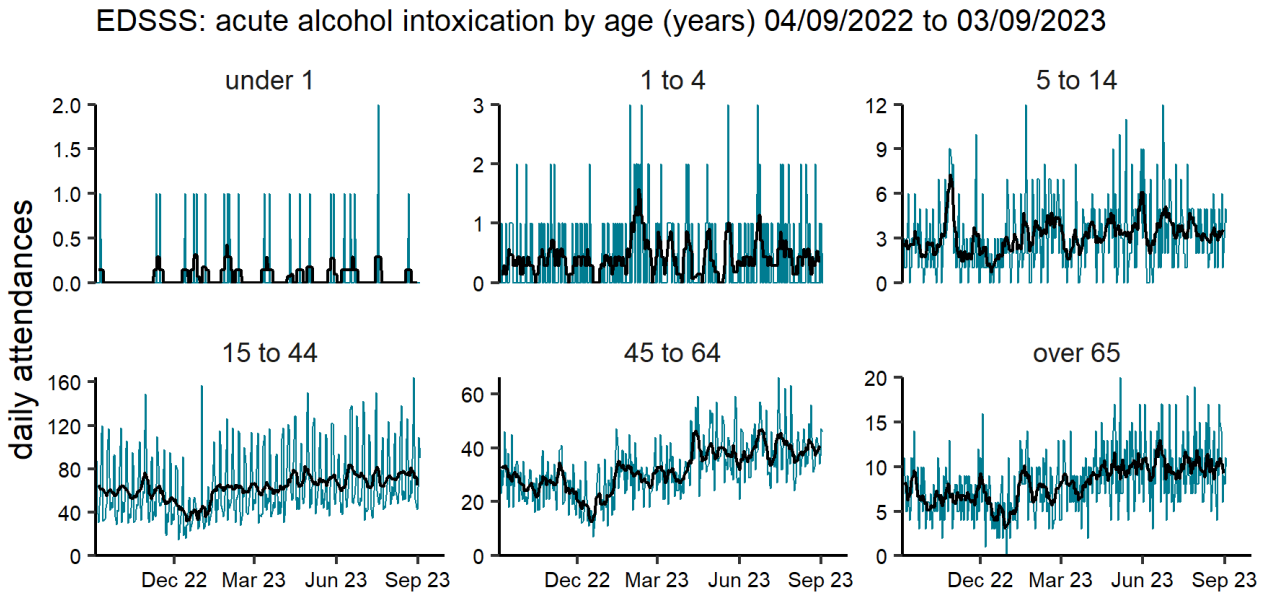
Figure 11: Daily number of acute alcohol intoxication ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

(a)



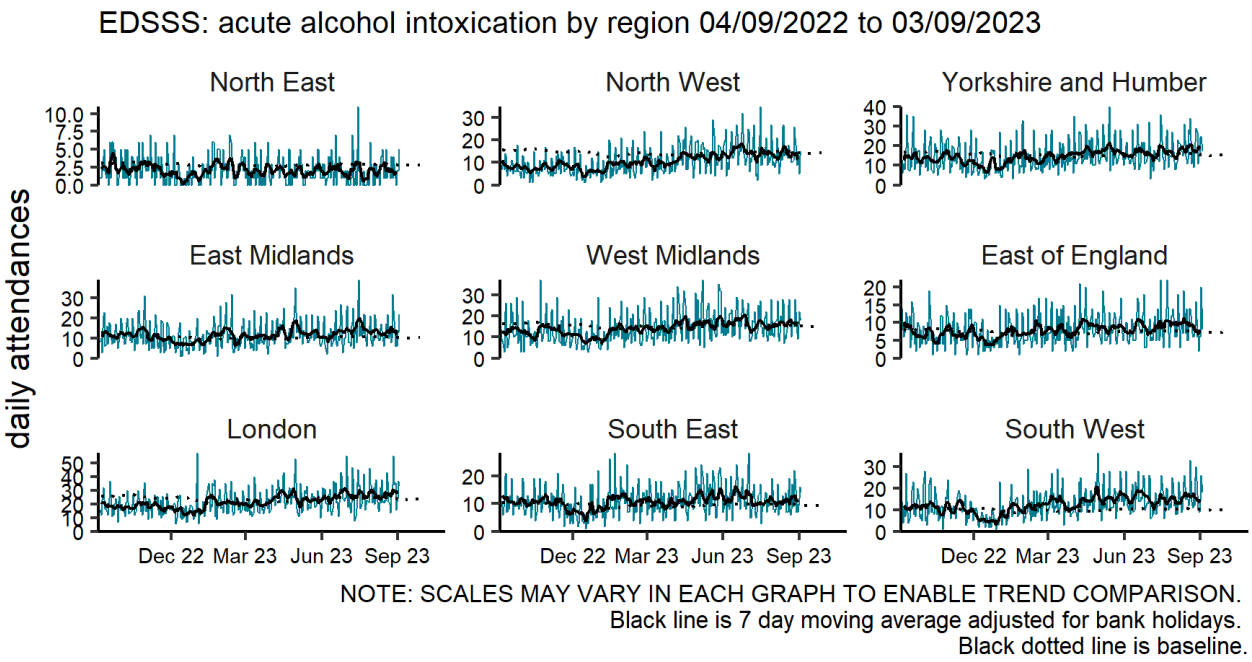
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)



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

(c)

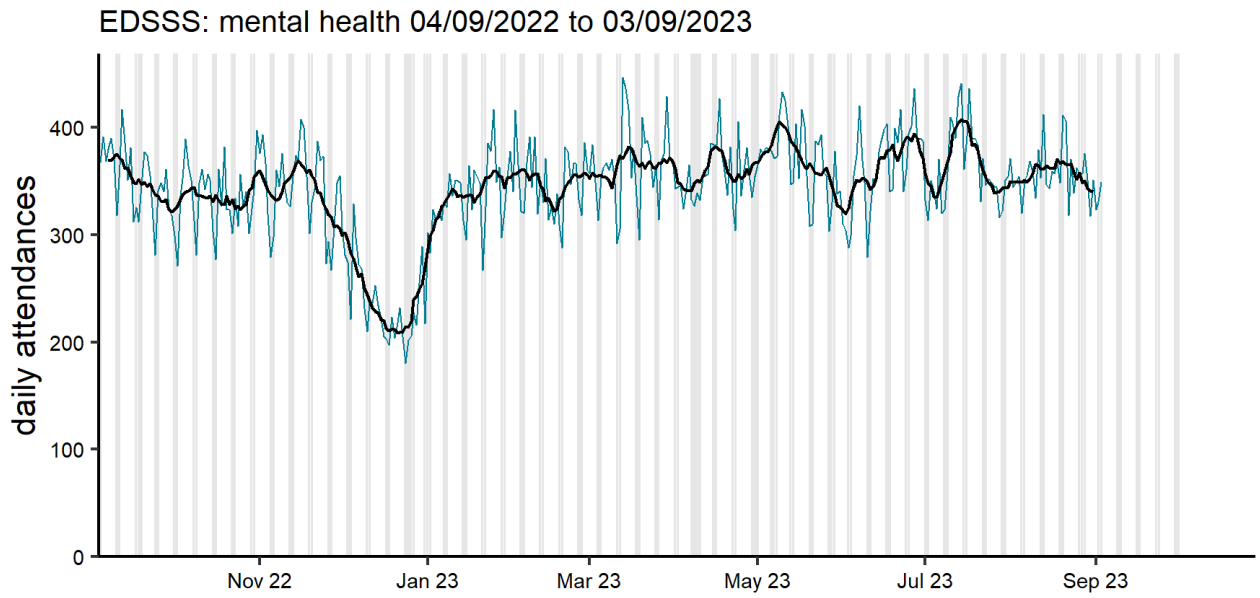

EDSSS: acute alcohol intoxication by region 04/09/2022 to 03/09/2023
North East
North West
Yorkshire and Humber
East Midlands
West Midlands
East of England
London
South East
South West
daily attendances
Dec 22
Mar 23
Jun 23
Sep 23
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black 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.

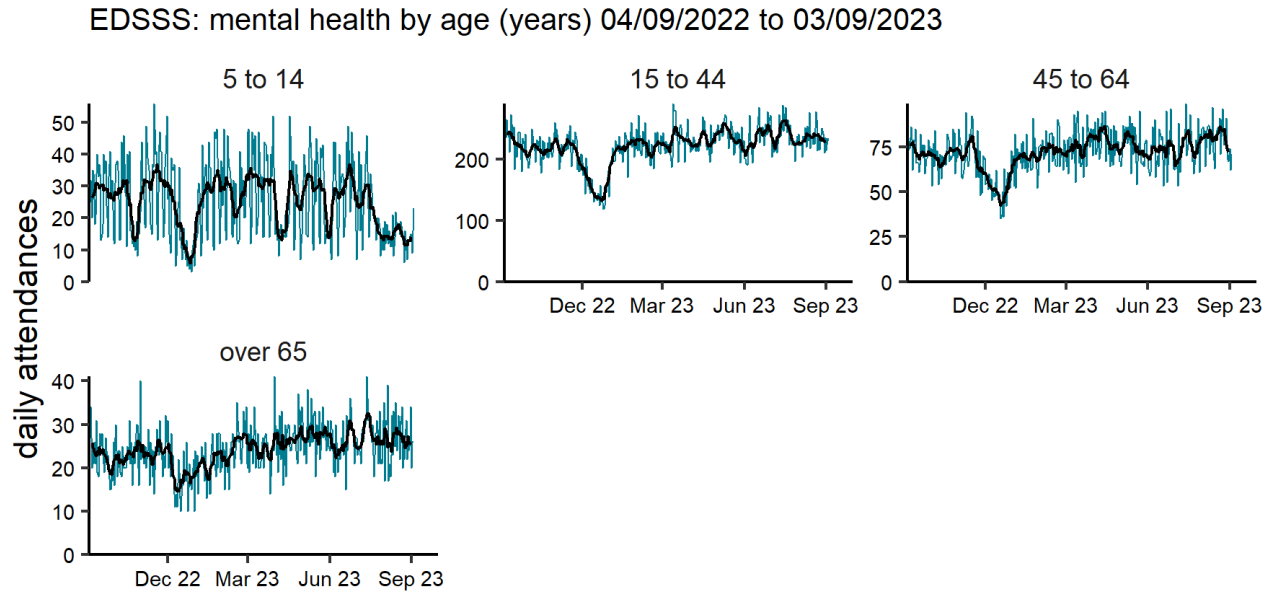
[3] mental health attendances reported here are those with a primary diagnosis in the ECDS mental health diagnosis grouping. Attendances where the primary diagnosis relates to overdose, alcohol use or self harm are not included.

(a)



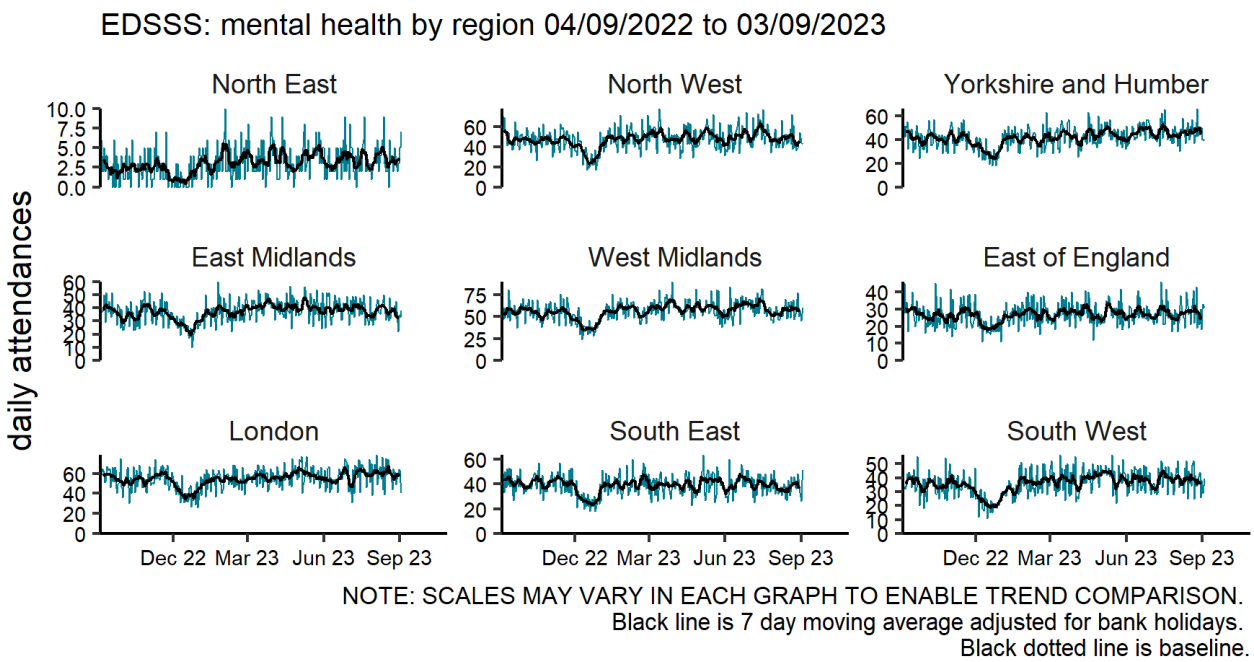
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)



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

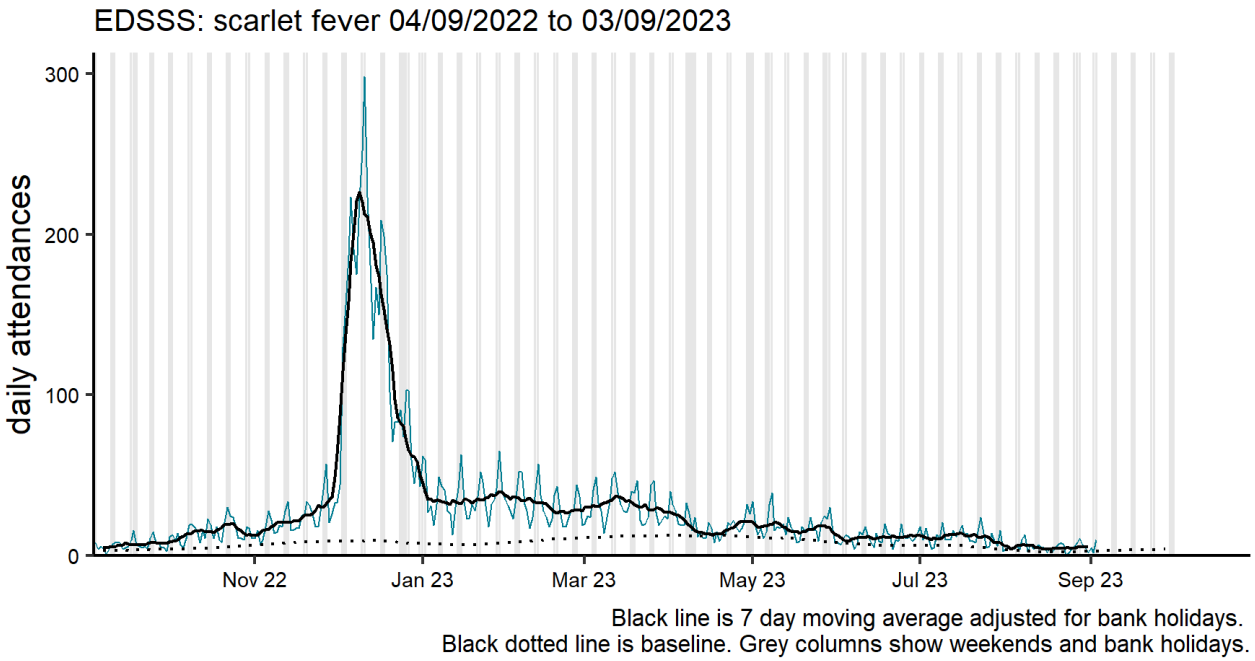
(c)


EDSSS: mental health by region 04/09/2022 to 03/09/2023
North East
North West
Yorkshire and Humber
East Midlands
West Midlands
East of England
London
South East
South West
daily attendances
Dec 22
Mar 23
Jun 23
Sep 23
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

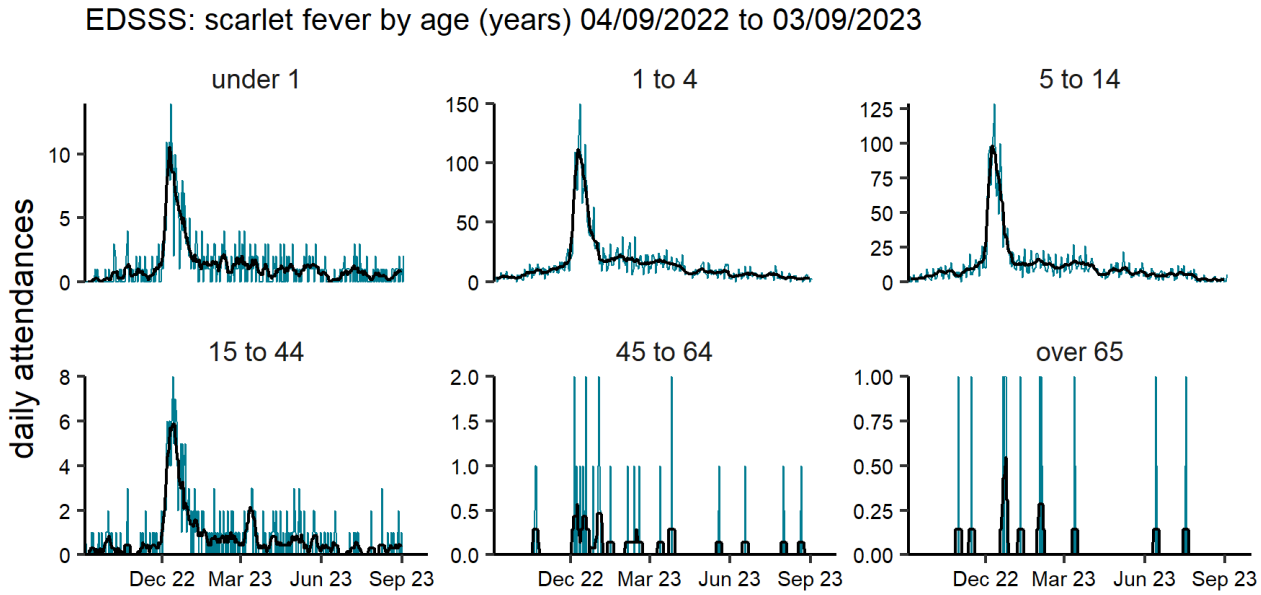
Figure 13: Daily number of scarlet fever ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

(a)



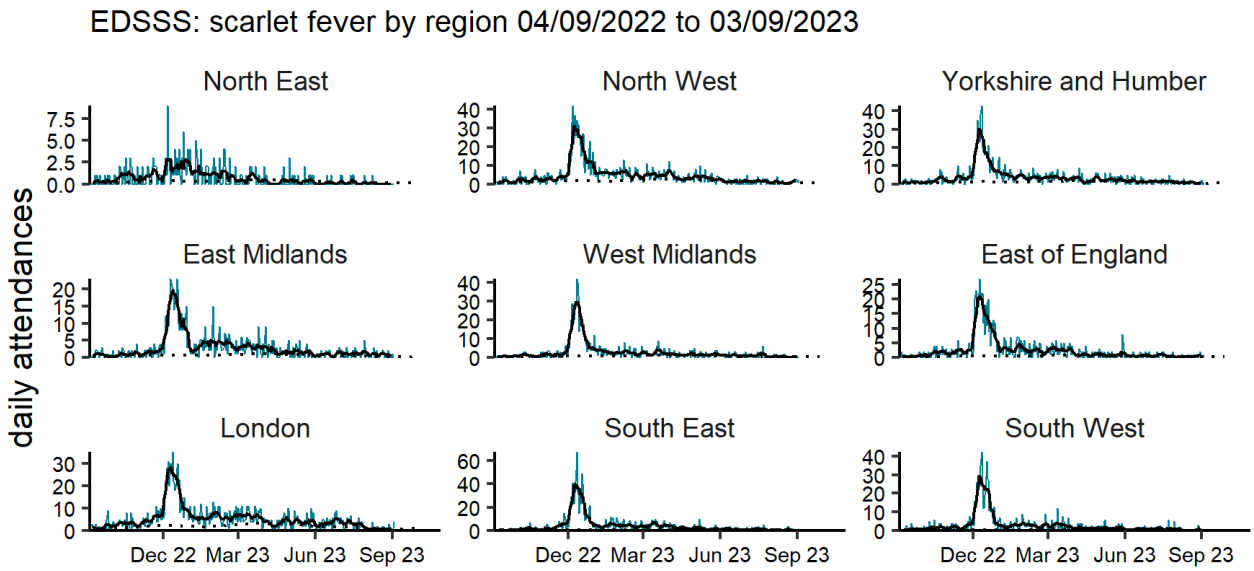
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(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: scarlet fever by region 04/09/2022 to 03/09/2023
North East
North West
Yorkshire and Humber
East Midlands
West Midlands
East of England
London
South East
South West
daily attendances
Dec 22
Mar 23
Jun 23
Sep 23
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

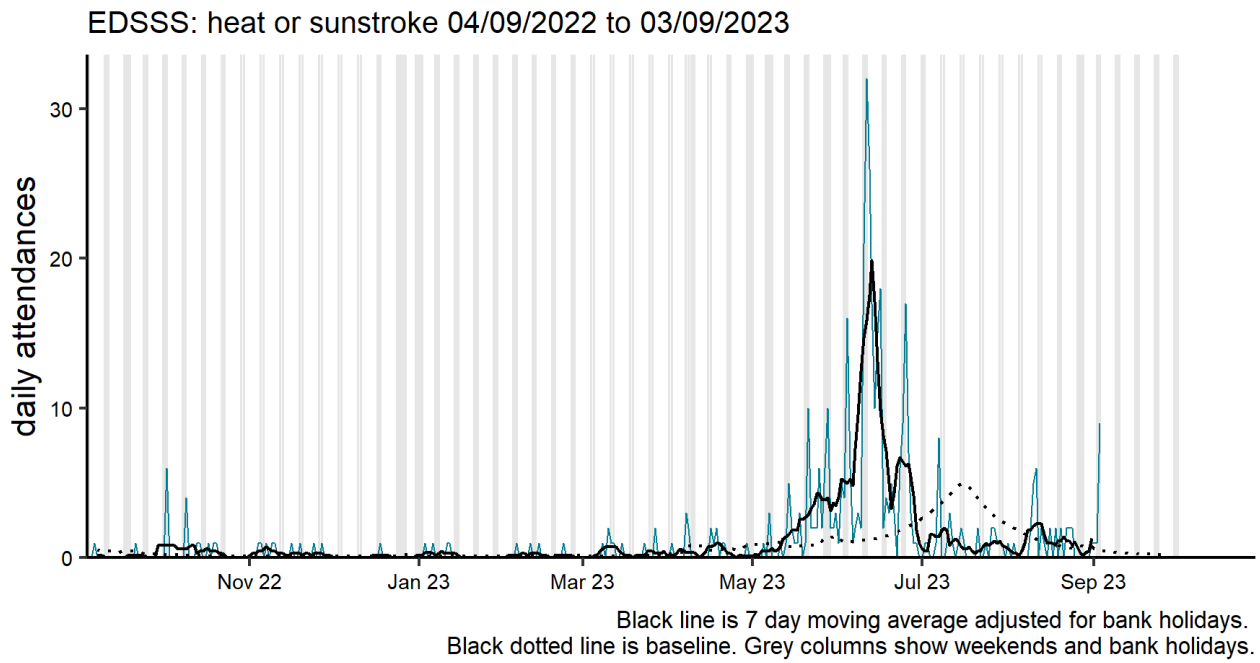
Highest weather alert level during the current reporting week:
Level Green – Summer preparedness.

Heat-health alerts in place

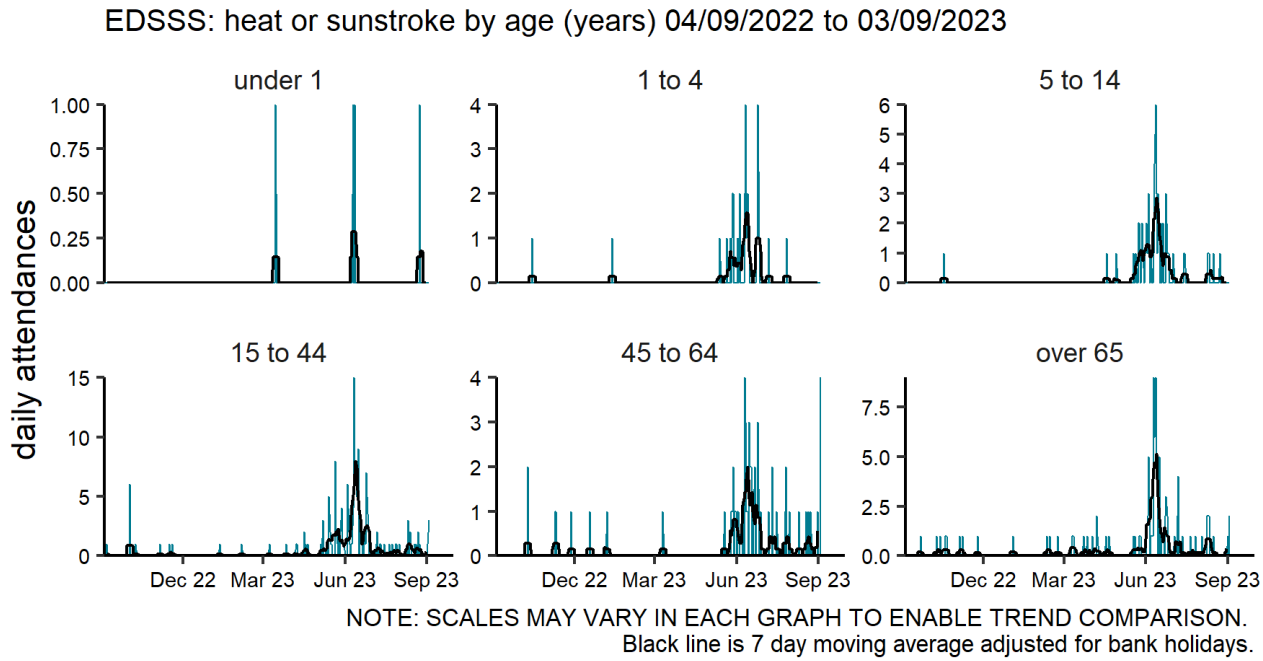
Heat or sunstroke

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

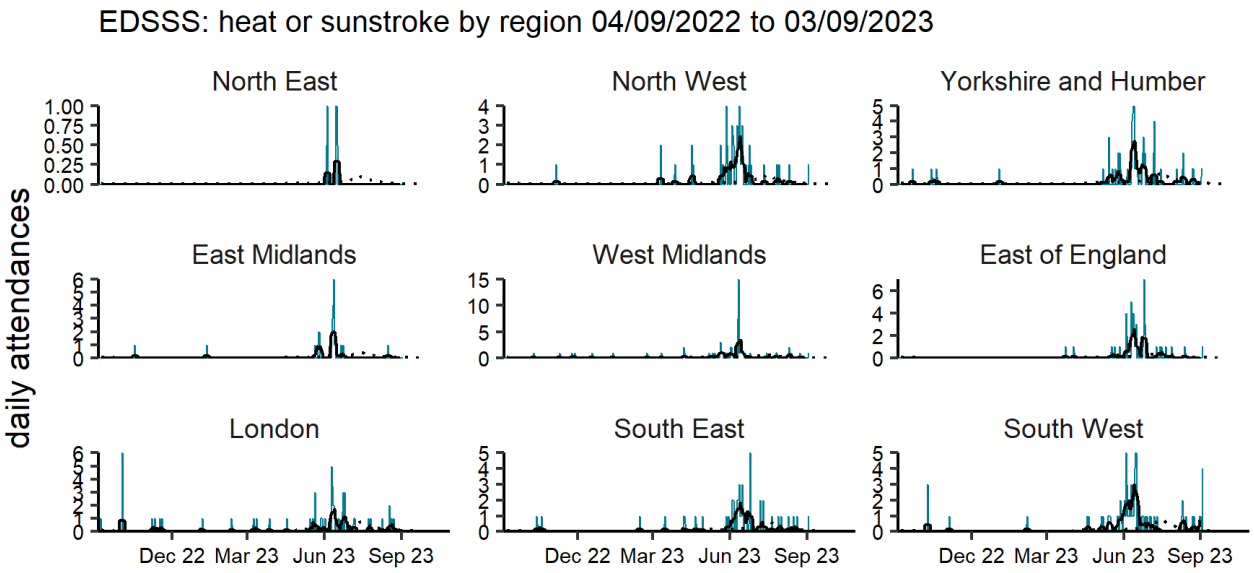
(a)



(b)



(c)


EDSSS: heat or sunstroke by region 04/09/2022 to 03/09/2023
North East
North West
Yorkshire and Humber
East Midlands
West Midlands
East of England
London
South East
South West
daily attendances
Dec 22
Mar 23
Jun 23
Sep 23
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

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 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

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