

Emergency Department Syndromic Surveillance System Bulletin (England) 2024 Week 52

Key messages

Data reported to: 29 December 2024

During week 52 influenza-like illness (ILI) attendances continued to increase nationally, with increases in the under 1 year and all adult age groups (15 years and over). Attendance levels for ILI remain above baseline levels in all regions, with increases continuing in North West, East of England, London, South East and South West regions. Acute respiratory infections also continued to increase nationally, particularly in age groups 15 years and over and in the East of England, South East and South West regions. COVID-19-like attendances increased slightly during week 52, but remain at relatively low levels.

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

Key messages	2
Syndromic indicators at a glance	2
Contents	3
About this syndromic surveillance system	1
Total attendances	5
Respiratory conditions	7
COVID-19-like	7
Acute respiratory infections	9
Acute bronchiolitis/bronchitis11	1
Influenza-like illness	3
Pneumonia18	5
Asthma17	7
Gastrointestinal conditions	9
Gastroenteritis	9
Cardiac conditions21	1
Cardiac2	1
Myocardial ischaemia23	3
Other conditions	5
Acute alcohol intoxication28	5
Mental health27	7
Scarlet fever	9
Seasonal environmental conditions	1
Impact of cold	2
Notes and caveats	1
Acknowledgements	5
About the UK Health Security Agency	3

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 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
 - o 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.

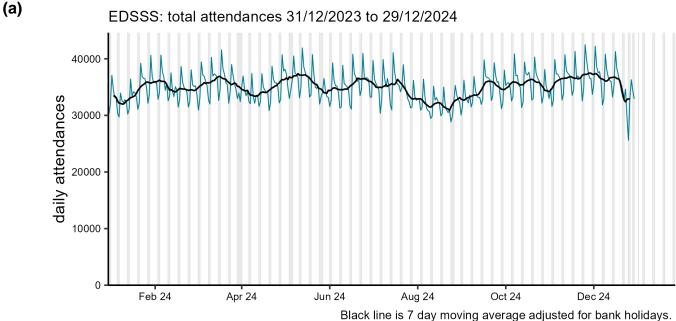
Data quality issues of note this week

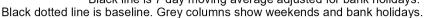
See Table 2 and Table 3 for the numbers of EDs included this week.

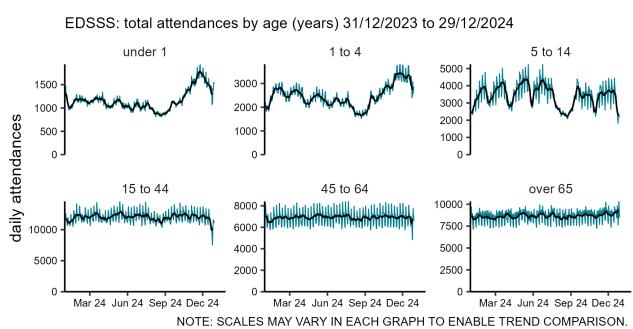
Total attendances

(b)

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.

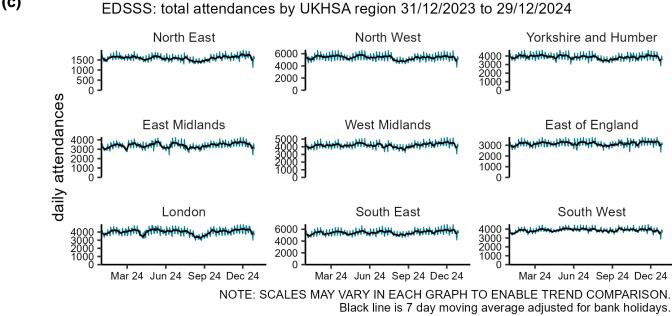






Black line is 7 day moving average adjusted for bank holidays.

(c)



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
23 December 2024	34,767	21,562
24 December 2024	29,662	18,711
25 December 2024	25,680	16,391
26 December 2024	33,045	20,906
27 December 2024	36,424	22,532
28 December 2024	34,378	20,760
29 December 2024	33,011	20,223

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

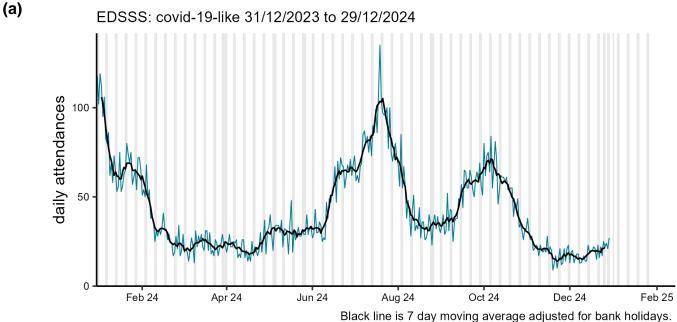
UKHSA Region	Number of EDs ²
North East	6
North West	25
Yorkshire and Humber	15
West Midlands	15
East Midlands	10
East of England	12
London	15
South West	18
South East	19
Total	135

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

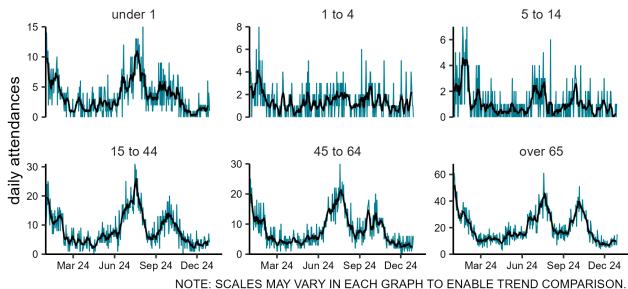
Figure 2: Daily number of COVID-19-like ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



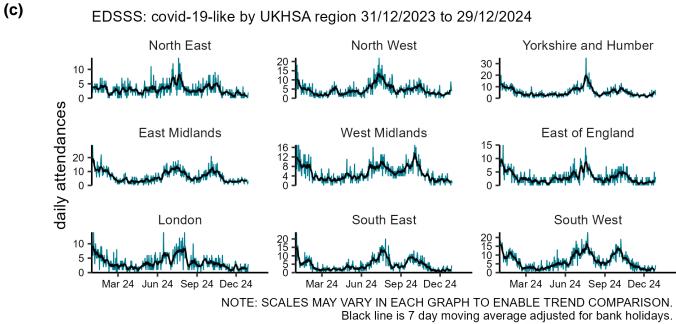
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

EDSSS: covid-19-like by age (years) 31/12/2023 to 29/12/2024



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



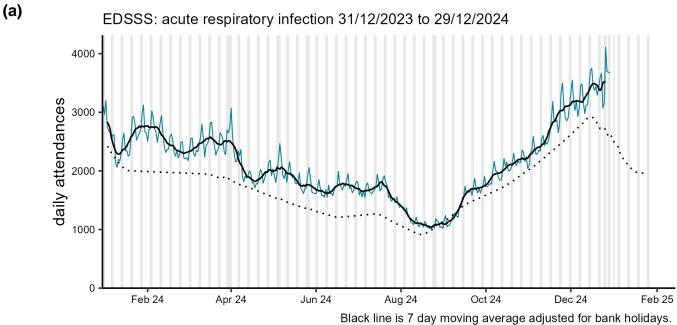
Black dotted line is baseline.

EDSSS: covid-19-like by UKHSA region 31/12/2023 to 29/12/2024

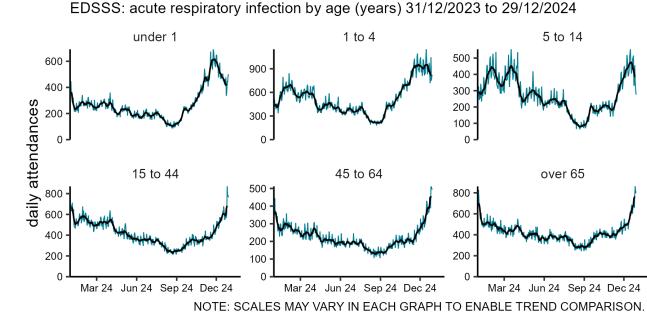
Acute respiratory infections

(b)

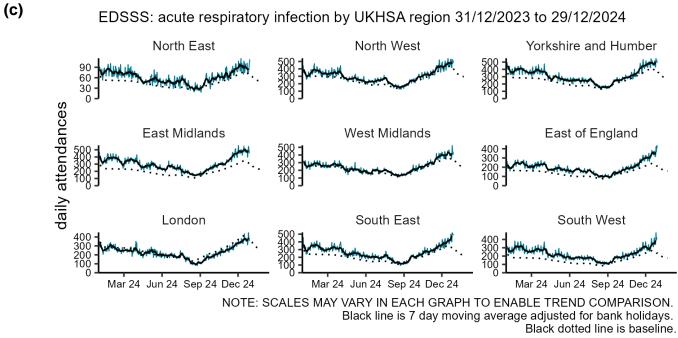
Figure 3: Daily number of acute respiratory infection ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



Black dotted line is baseline. Grey columns show weekends and bank holidays.



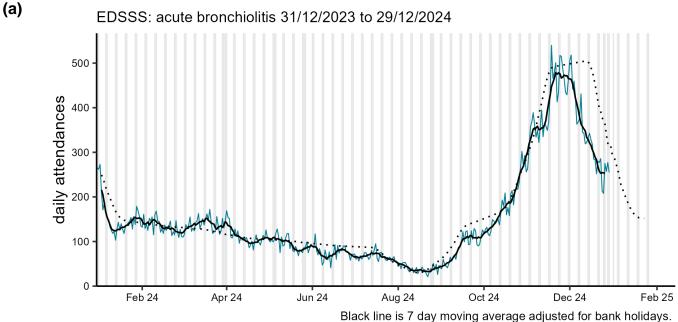
Black line is 7 day moving average adjusted for bank holidays.



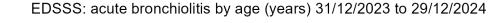
Acute bronchiolitis/bronchitis

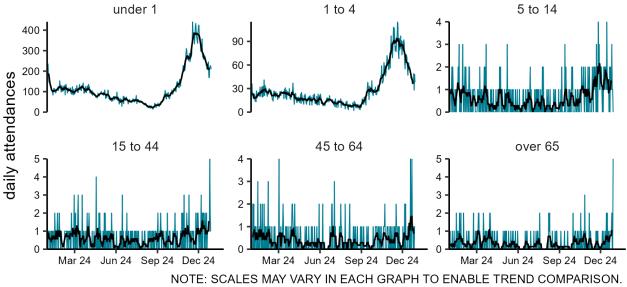
(b)

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.

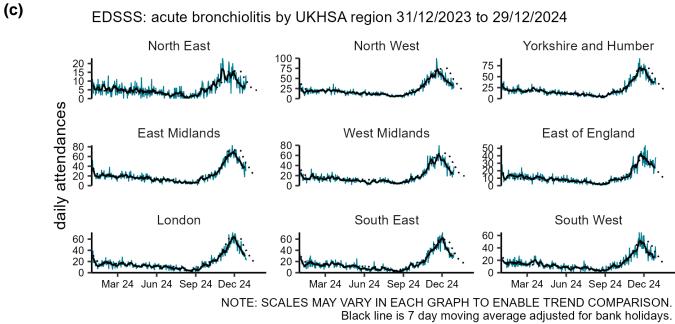


Black dotted line is baseline. Grey columns show weekends and bank holidays.





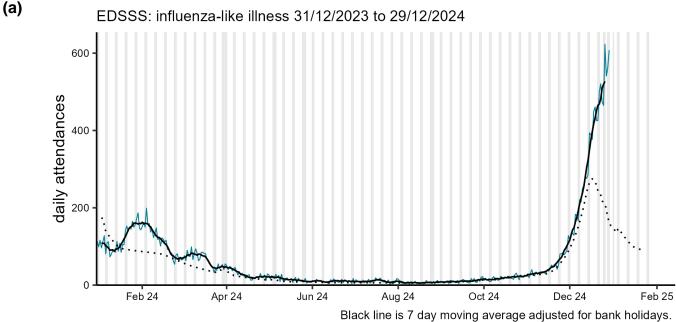
Black line is 7 day moving average adjusted for bank holidays.

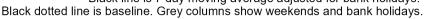


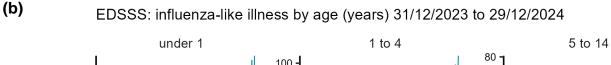
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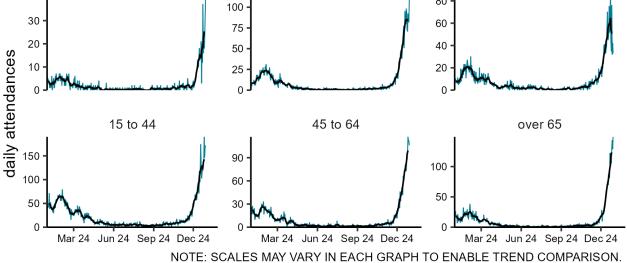
Influenza-like illness

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.



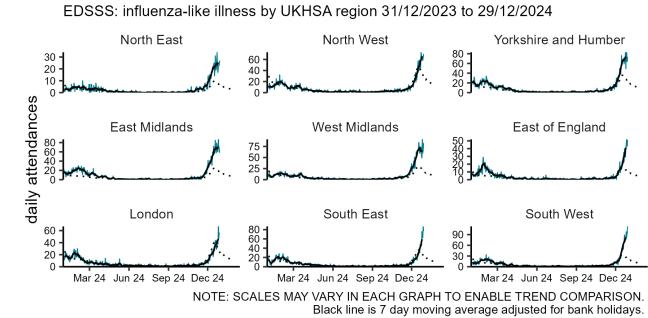






Black line is 7 day moving average adjusted for bank holidays.

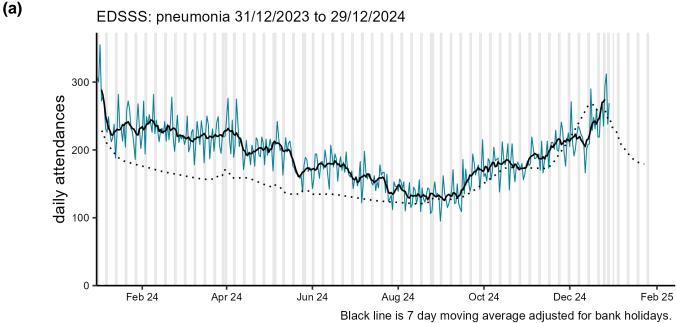
(C)



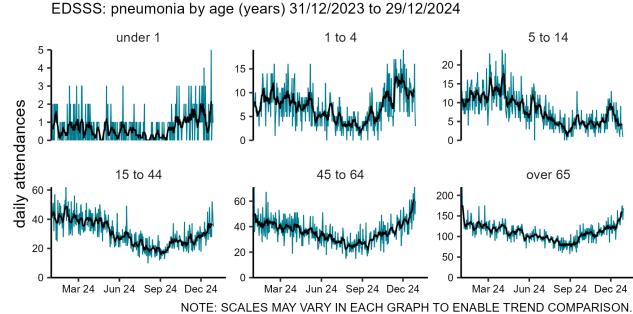
Black dotted line is baseline.

Pneumonia

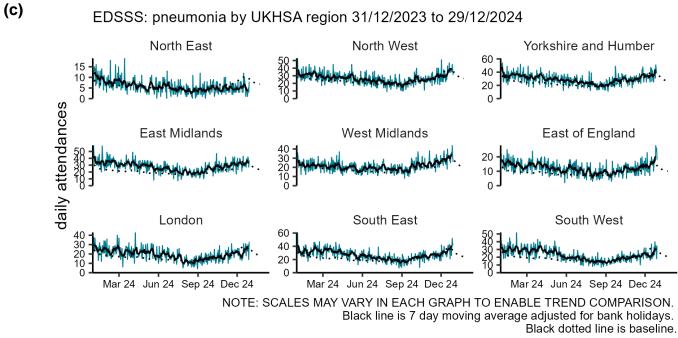
Figure 6: Daily number of pneumonia ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



Black dotted line is baseline. Grey columns show weekends and bank holidays.



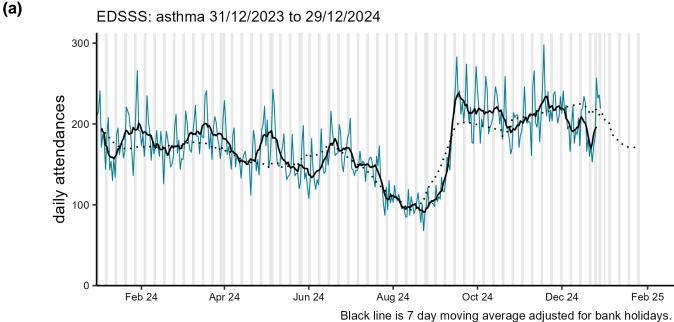
Black line is 7 day moving average adjusted for bank holidays.



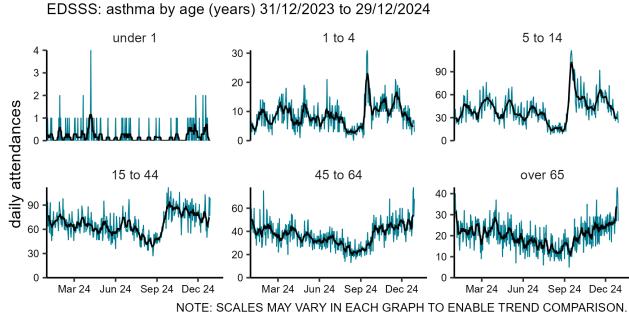
Asthma

(b)

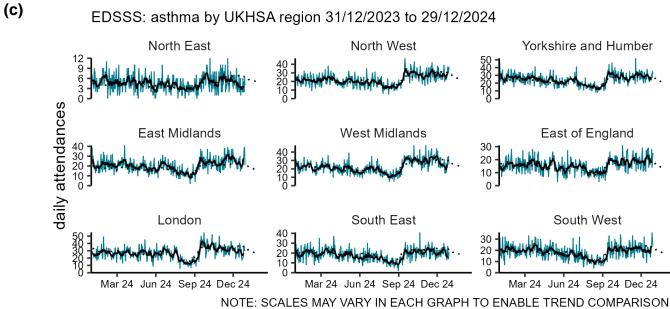
Figure 7: Daily number of asthma ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



Black dotted line is baseline. Grey columns show weekends and bank holidays.



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

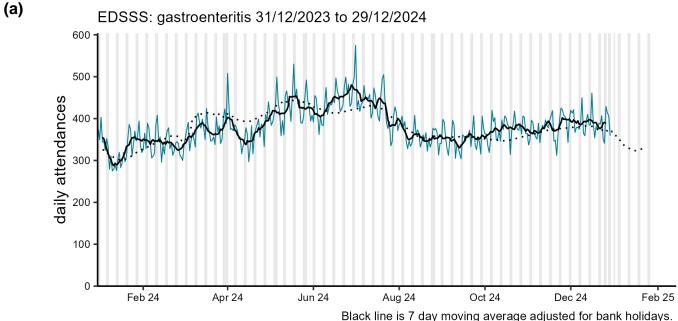


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON. Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline.

Gastrointestinal conditions

Gastroenteritis

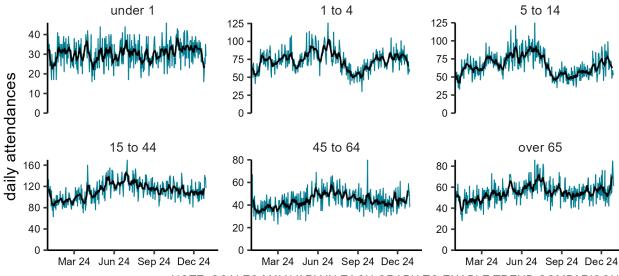
Figure 8: Daily number of gastroenteritis ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

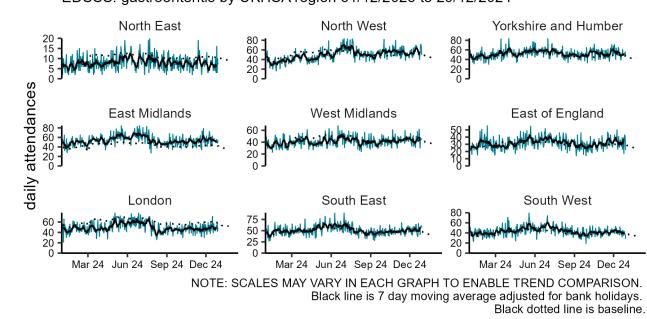
EDSSS: gastroenteritis by age (years) 31/12/2023 to 29/12/2024



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

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

(C)

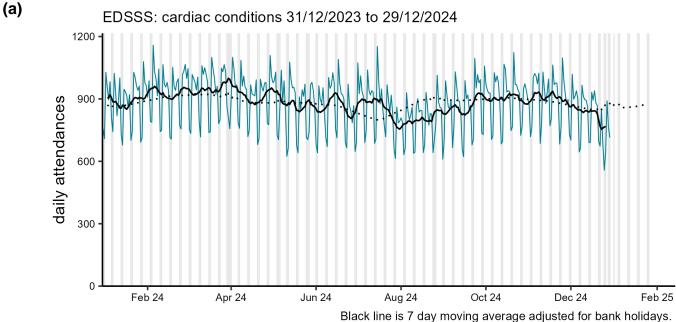


EDSSS: gastroenteritis by UKHSA region 31/12/2023 to 29/12/2024

Cardiac conditions

Cardiac

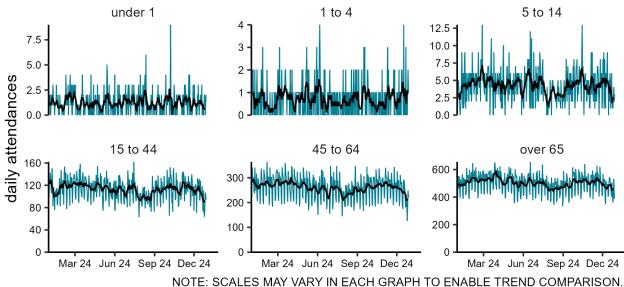
Figure 9: Daily number of cardiac ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



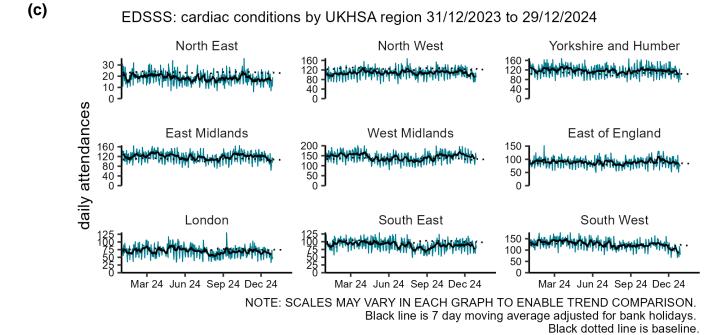
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

EDSSS: cardiac conditions by age (years) 31/12/2023 to 29/12/2024



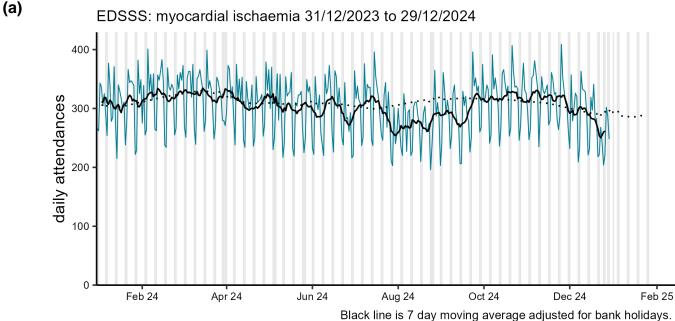
Black line is 7 day moving average adjusted for bank holidays.



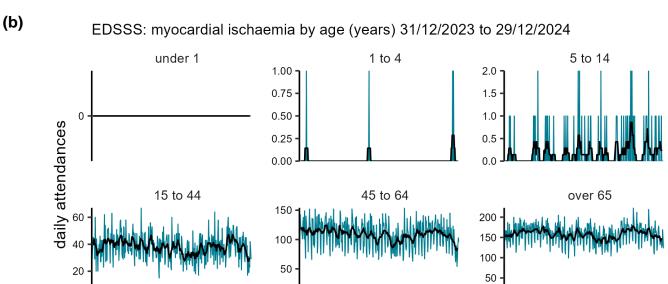
22

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.



Black dotted line is baseline. Grey columns show weekends and bank holidays.



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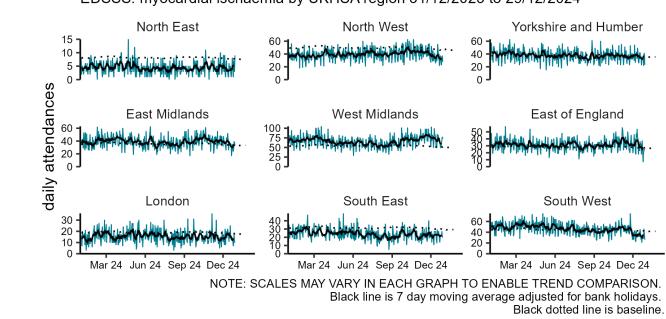
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Mar 24

Jun 24 Sep 24

Dec 24 Mar 24 Jun 24 Sep 24 Dec 24 Mar 24 Jun 24 Sep 24 Dec 24 NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON. Black line is 7 day moving average adjusted for bank holidays.

(c)



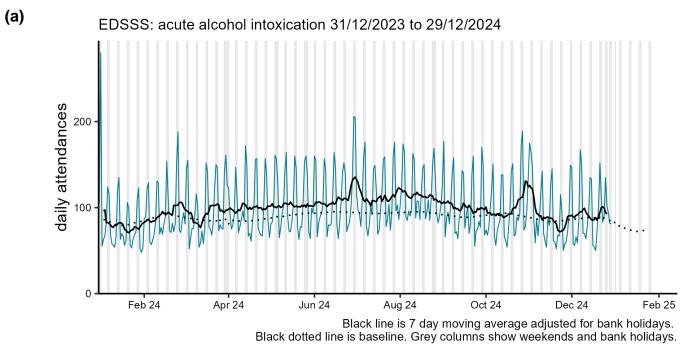
EDSSS: myocardial ischaemia by UKHSA region 31/12/2023 to 29/12/2024

24

Other conditions

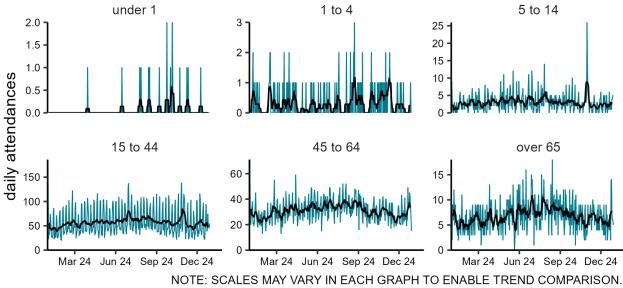
Acute alcohol intoxication

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.



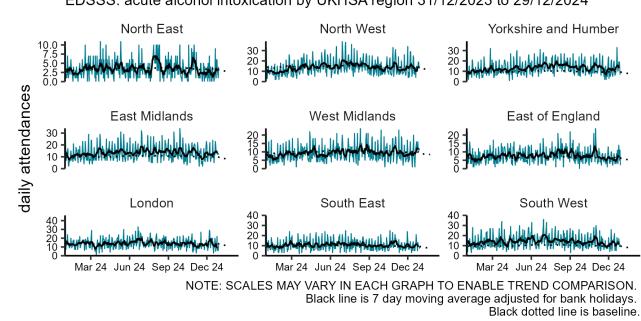
(b)

EDSSS: acute alcohol intoxication by age (years) 31/12/2023 to 29/12/2024



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

(C)



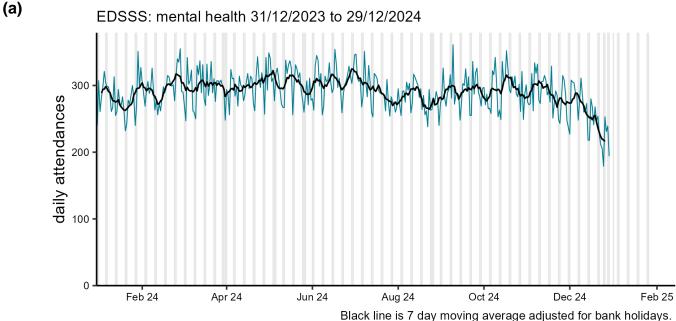
EDSSS: acute alcohol intoxication by UKHSA region 31/12/2023 to 29/12/2024

26

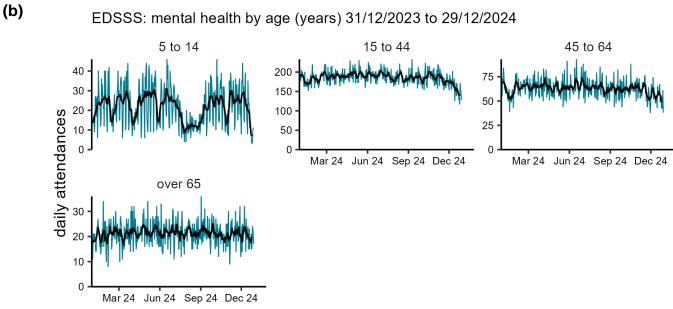
Mental health

Figure 12: Daily number of mental health³ 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.

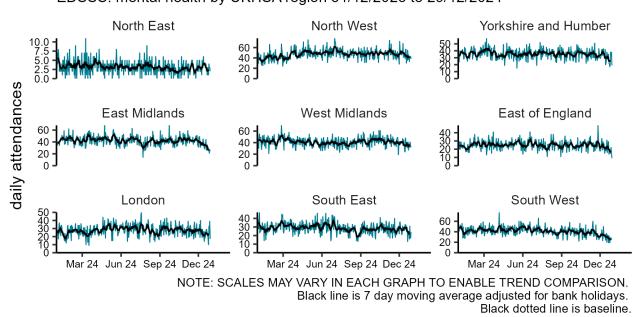


Black dotted line is baseline. Grey columns show weekends and bank holidays.



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

(C)

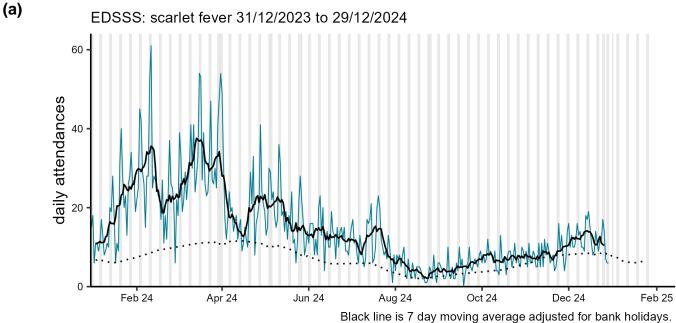


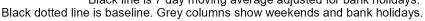
EDSSS: mental health by UKHSA region 31/12/2023 to 29/12/2024

28

Scarlet fever

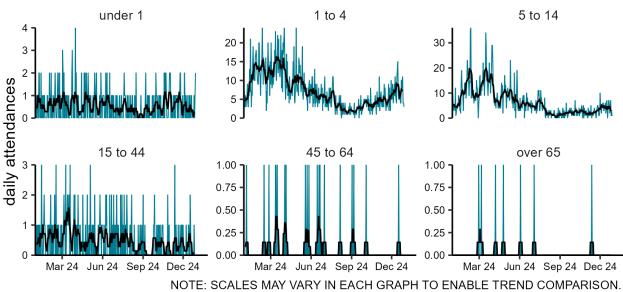
Figure 13: Daily number of scarlet fever ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.





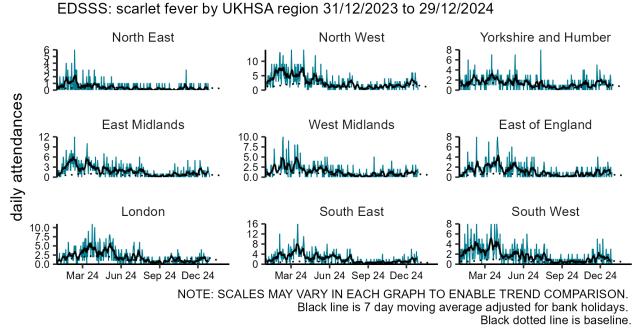
(b)

EDSSS: scarlet fever by age (years) 31/12/2023 to 29/12/2024



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

(c)



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 routinely 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

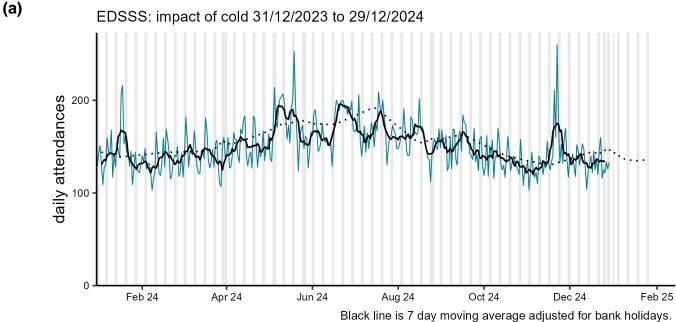
Highest weather alert level during the current reporting week:

No alerts issued.

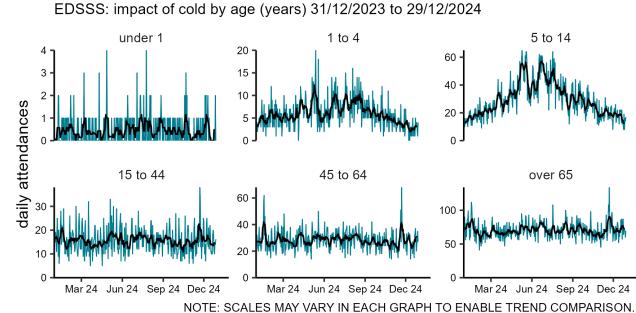
Impact of cold

(b)

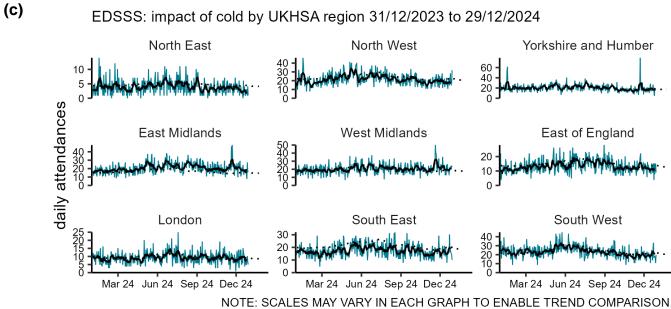
Figure 14: Daily number of impact of cold ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



Black dotted line is baseline. Grey columns show weekends and bank holidays.



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



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:
 - o 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 <u>Emergency Care Data Set</u> (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
 - o 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:
 - o acute respiratory infections includes:

acute bronchitis or bronchiolitis

COVID-19-like

- influenza-like illness
- pneumonia
- other and non-specific acute respiratory infections
- cardiac conditions includes:
 - myocardial ischaemia
 - other and non-specific cardiac conditions
- baselines:
 - were last remodelled January 2023 (influenza-like illness baselines were refitted to influenza-like illness surveillance data during December 2023 to account for post-COVID-19 changes in health care seeking behaviour)
 - o for asthma were last remodelled October 2024
 - o are constructed from historical data since April 2018
 - o 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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UKHSA supports the UN Sustainable Development Goals

