

# Emergency Department Syndromic Surveillance System Bulletin (England) 2024 Week 44

# Key messages

#### Data reported to: 03 November 2024

During week 44, ED attendances for acute respiratory infections continued to increase in children aged under 5 years. There was also a further increase in 'acute bronchiolitis or bronchitis' attendances particularly in children aged under 1 year, in line with expected seasonal trends. There was a small increase in attendances for influenza-like illness, but activity remained in line with seasonally expected levels. COVID-19-like attendances continued to decrease during week 44.

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

<sup>1</sup> trend reports on the trend seen over most recent and earlier weeks

# Contents

Key messages
Syndromic indicators at a glance2
Contents
About this syndromic surveillance system4
Total attendances
Respiratory conditions
COVID-19-like
Acute respiratory infections9
Acute bronchiolitis/bronchitis11
Influenza-like illness
Pneumonia15
Asthma17
Gastrointestinal conditions
Gastroenteritis
Cardiac conditions
Cardiac21
Myocardial ischaemia23
Other conditions
Acute alcohol intoxication25
Mental health27
Scarlet fever
Seasonal environmental conditions
Impact of cold
Notes and caveats
Acknowledgements
About the UK Health Security Agency

# 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

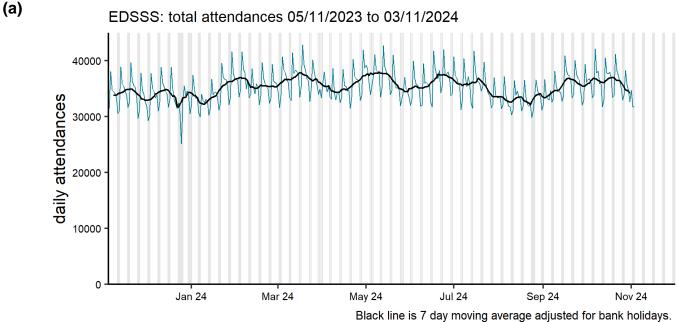
Previous weekly bulletins from this system are available here.

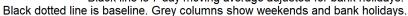
#### Data quality issues of note this week

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

## **Total attendances**

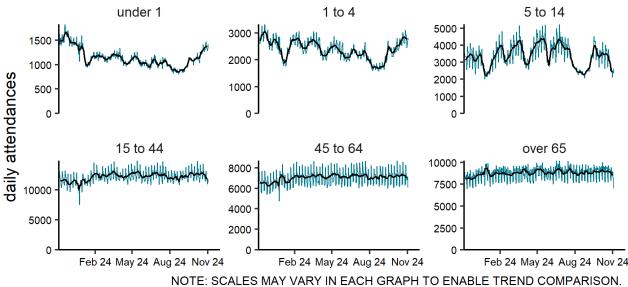
Figure 1: Daily number of ED attendances (and 7-day moving average adjusted for bank holidays) recorded in this sentinel syndromic surveillance system in England (a) nationally, (b) by age and (c) by UKHSA Region.





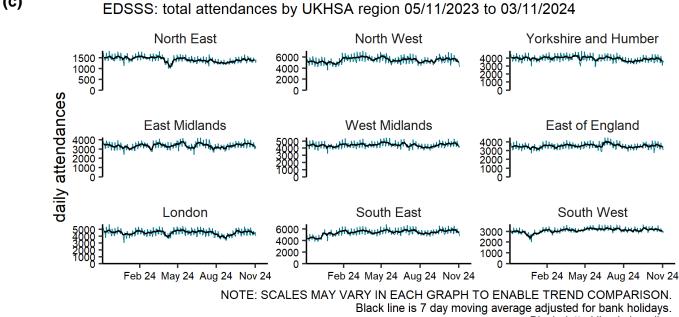


#### EDSSS: total attendances by age (years) 05/11/2023 to 03/11/2024



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 <sup>2</sup>	Diagnoses included <sup>2</sup>
28 October 2024	38,286	24,299
29 October 2024	35,722	22,988
30 October 2024	34,674	22,875
31 October 2024	32,664	20,910
01 November 2024	34,738	22,475
02 November 2024	31,806	21,155
03 November 2024	31,649	20,841

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

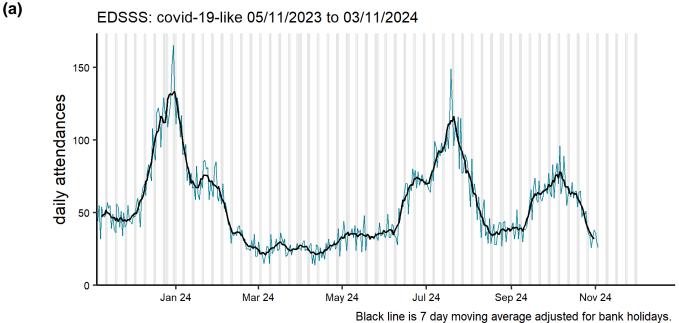
UKHSA Region	Number of EDs <sup>2</sup>
North East	6
North West	24
Yorkshire and Humber	15
West Midlands	10
East Midlands	16
East of England	13
London	17
South West	20
South East	14
Total	135

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

# **Respiratory conditions**

### COVID-19-like

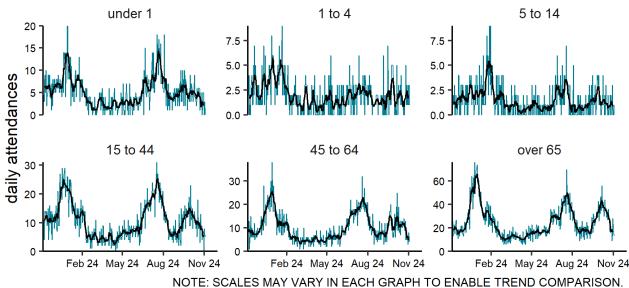
Figure 2: Daily number of COVID-19-like ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



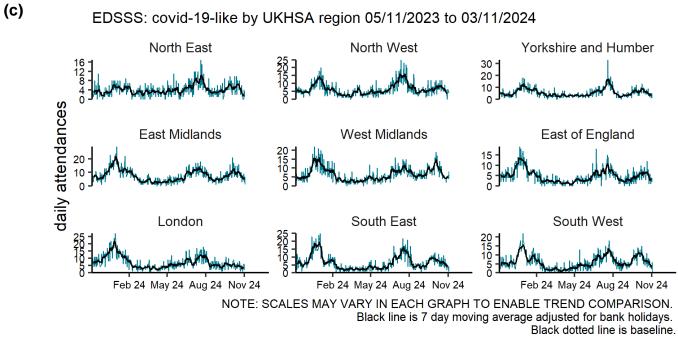
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

EDSSS: covid-19-like by age (years) 05/11/2023 to 03/11/2024

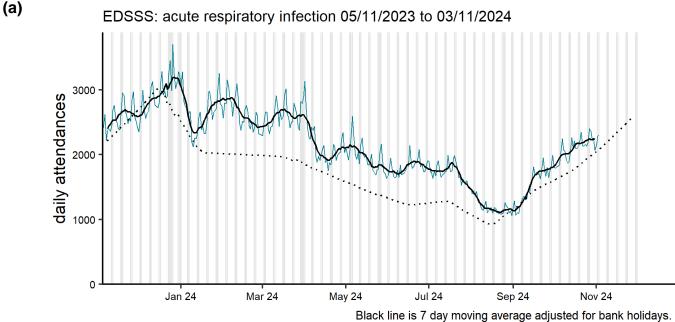


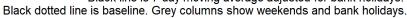
Black line is 7 day moving average adjusted for bank holidays.



## Acute respiratory infections

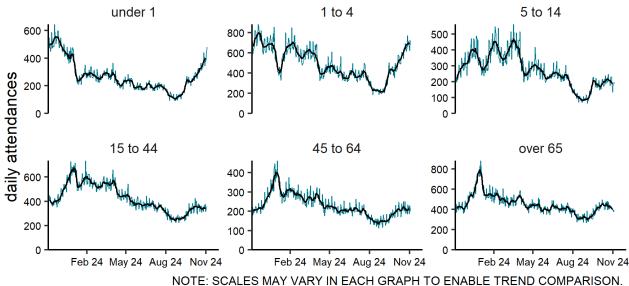
Figure 3: Daily number of acute respiratory infection ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

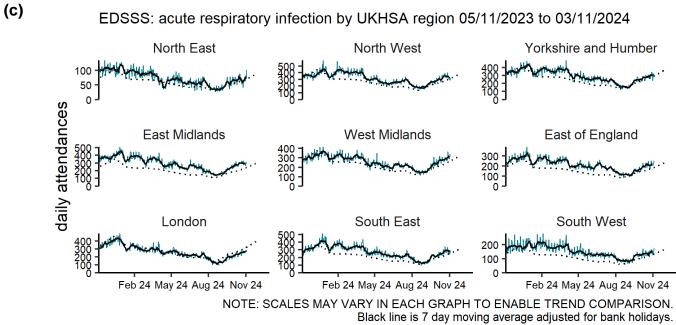






EDSSS: acute respiratory infection by age (years) 05/11/2023 to 03/11/2024

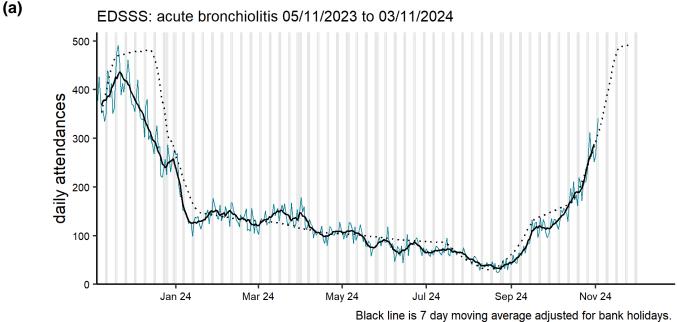


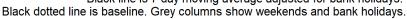


Black dotted line is baseline.

## Acute bronchiolitis/bronchitis

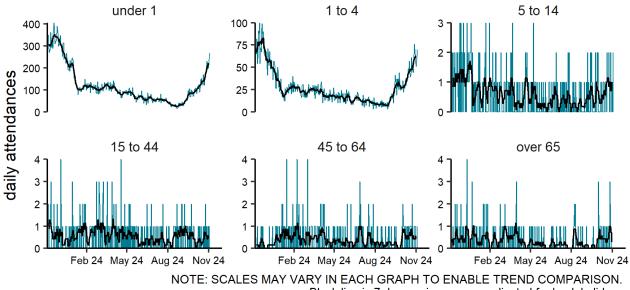
Figure 4: Daily number of acute bronchiolitis/bronchitis ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

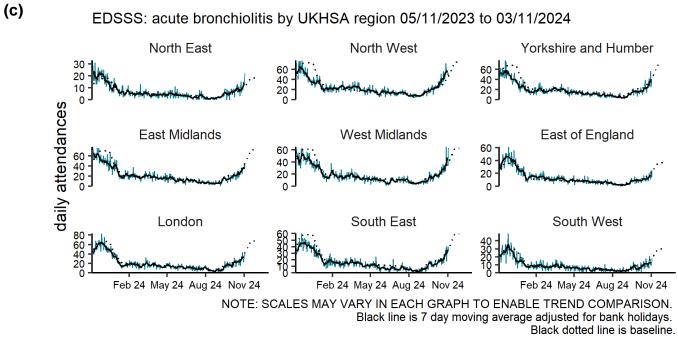




(b)

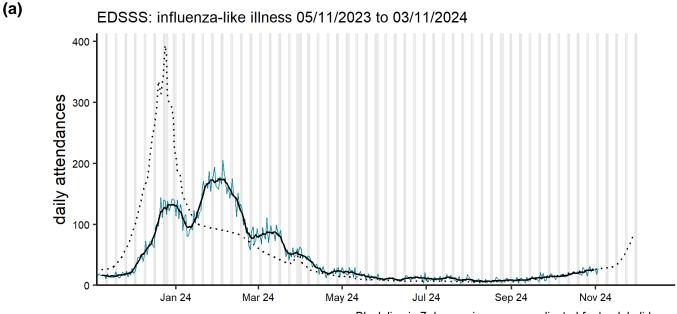
EDSSS: acute bronchiolitis by age (years) 05/11/2023 to 03/11/2024

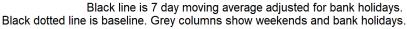




## Influenza-like illness

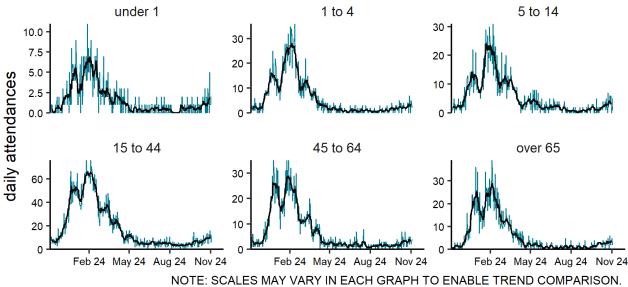
Figure 5: Daily number of influenza-like illness ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

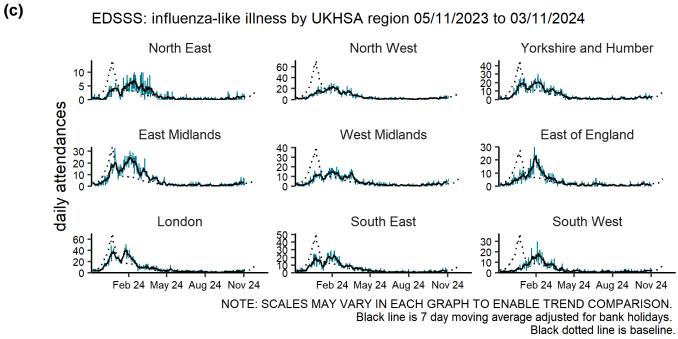






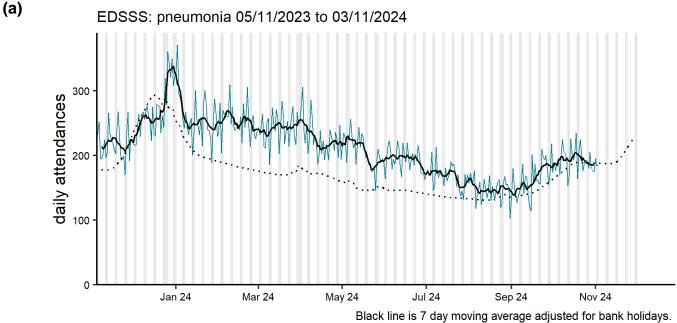
EDSSS: influenza-like illness by age (years) 05/11/2023 to 03/11/2024



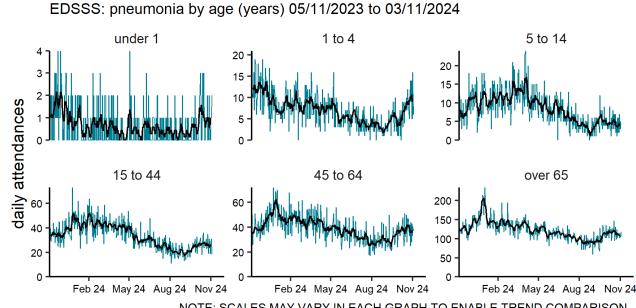


## Pneumonia

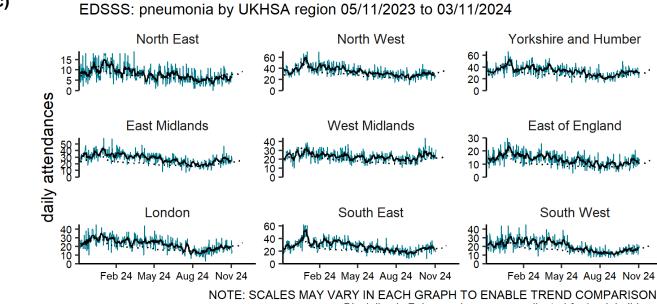
Figure 6: Daily number of pneumonia ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



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



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

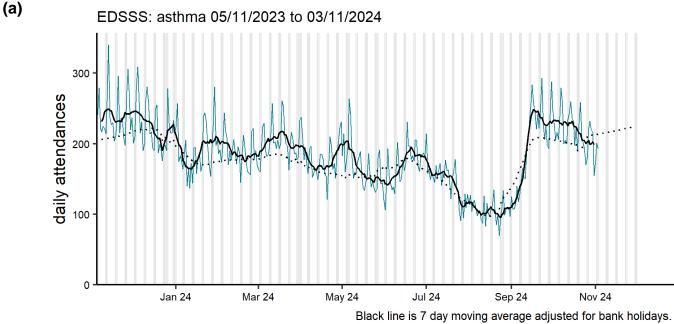


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON. Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline.

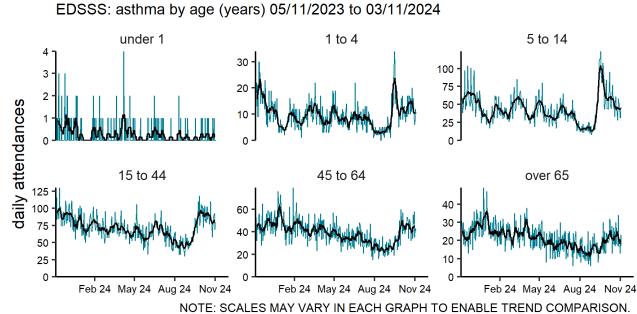
## Asthma

(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.

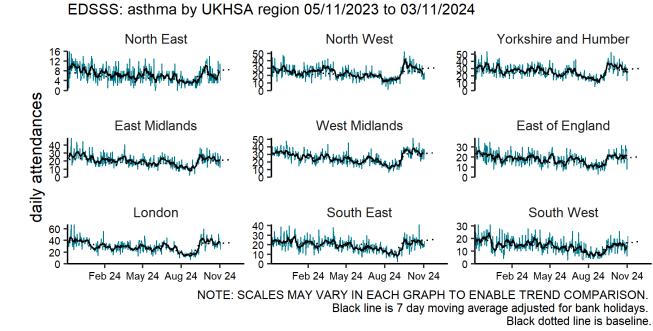


Black dotted line is baseline. Grey columns show weekends and bank holidays.



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

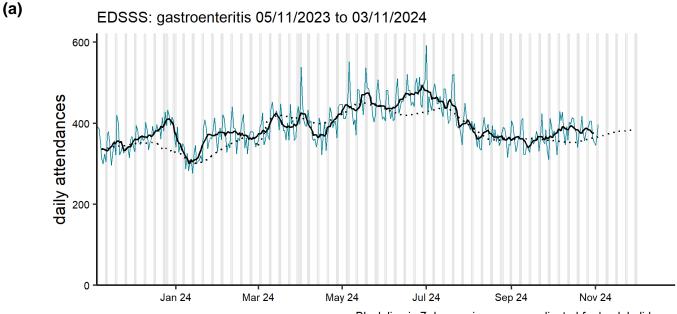
(c)



# **Gastrointestinal conditions**

### Gastroenteritis

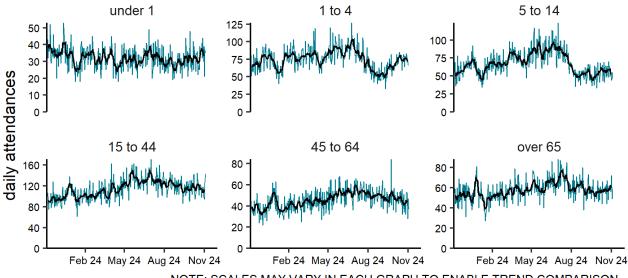
Figure 8: Daily number of gastroenteritis ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



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

(b)

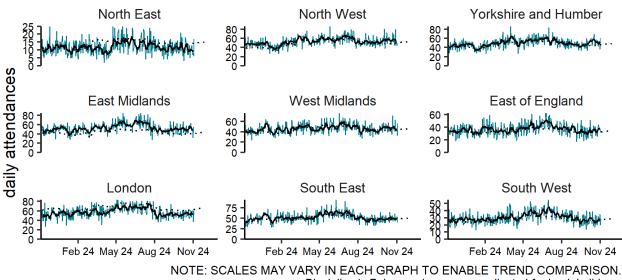
EDSSS: gastroenteritis by age (years) 05/11/2023 to 03/11/2024



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

(C)



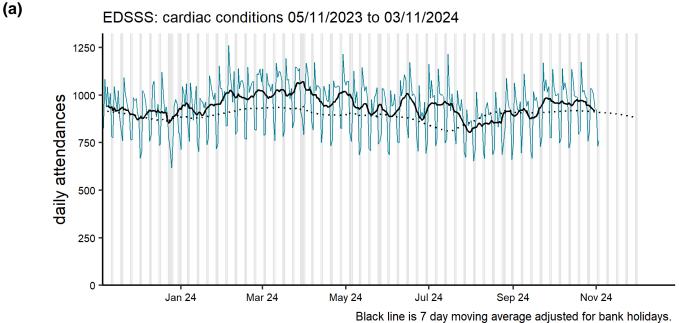


Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline.

# **Cardiac conditions**

## Cardiac

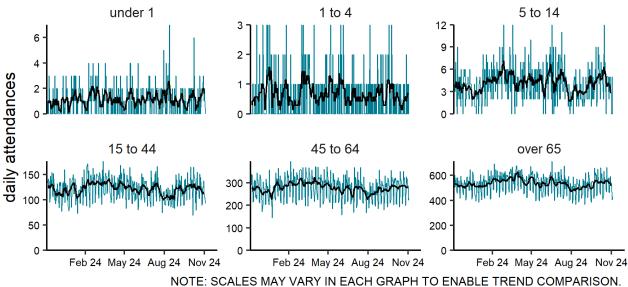
Figure 9: Daily number of cardiac ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



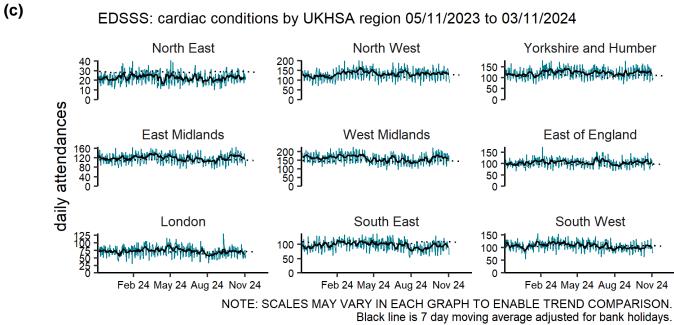
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

EDSSS: cardiac conditions by age (years) 05/11/2023 to 03/11/2024



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

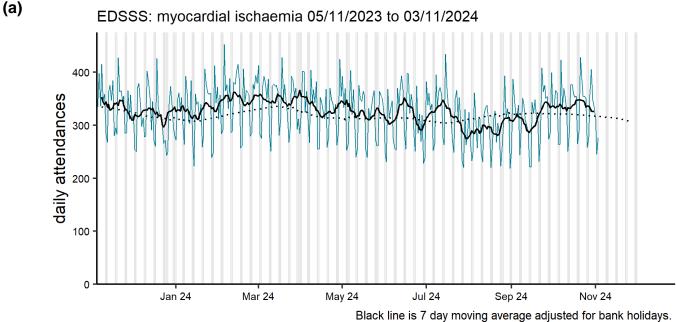


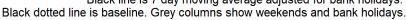
Black dotted line is baseline.

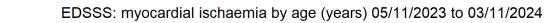
## Myocardial ischaemia

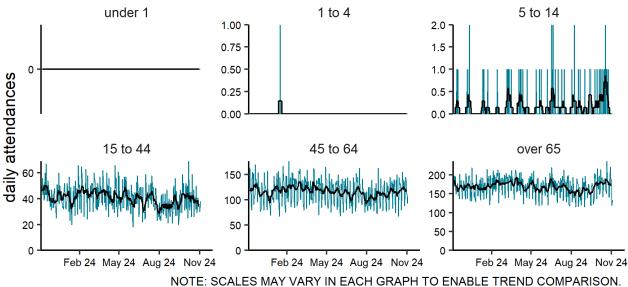
(b)

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

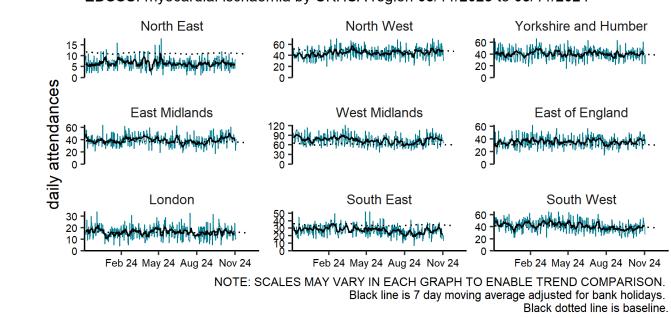








(c)

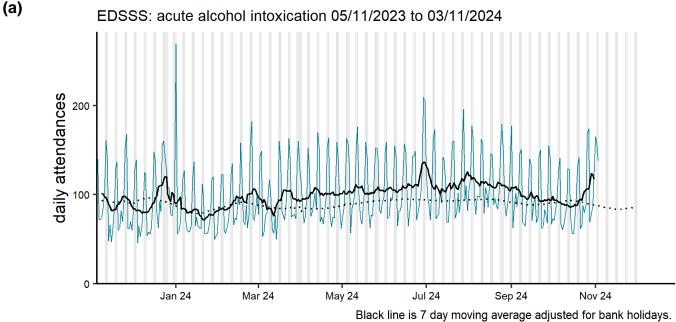


EDSSS: myocardial ischaemia by UKHSA region 05/11/2023 to 03/11/2024

# **Other conditions**

### Acute alcohol intoxication

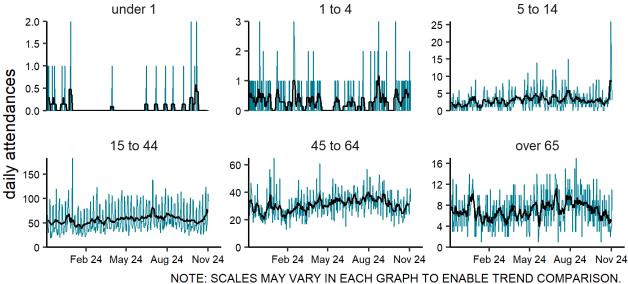
Figure 11: Daily number of acute alcohol intoxication ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



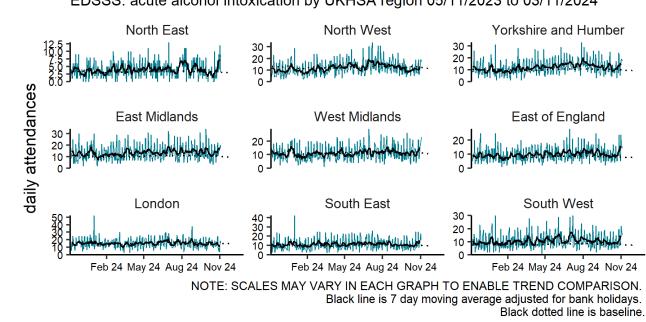
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

EDSSS: acute alcohol intoxication by age (years) 05/11/2023 to 03/11/2024



(C)



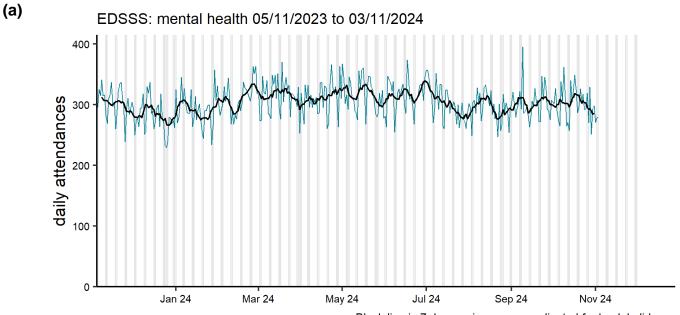
#### EDSSS: acute alcohol intoxication by UKHSA region 05/11/2023 to 03/11/2024

26

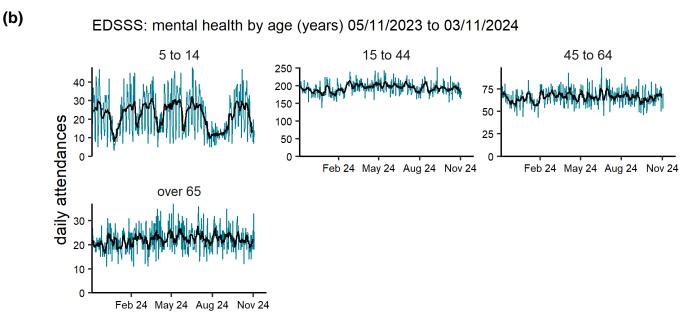
## Mental health

# 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.



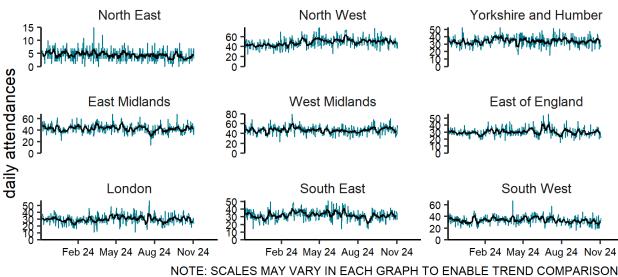
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.



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

(C)

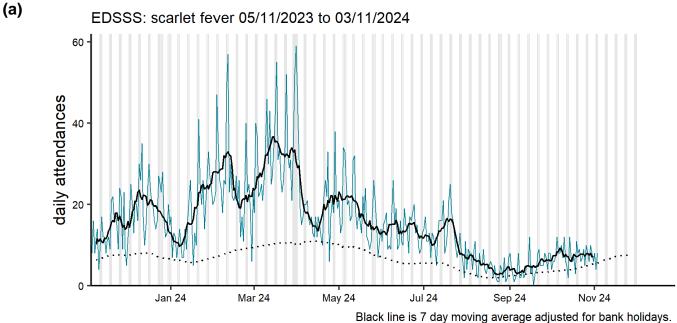
#### EDSSS: mental health by UKHSA region 05/11/2023 to 03/11/2024

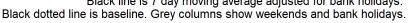


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON. Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline.

## Scarlet fever

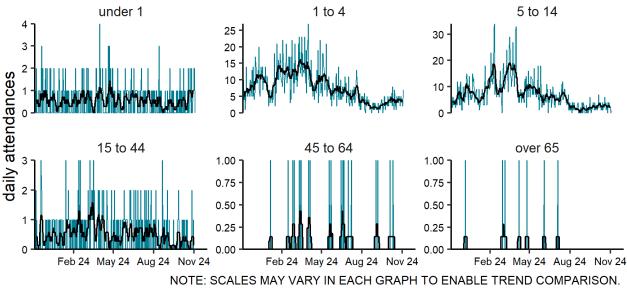
Figure 13: Daily number of scarlet fever ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



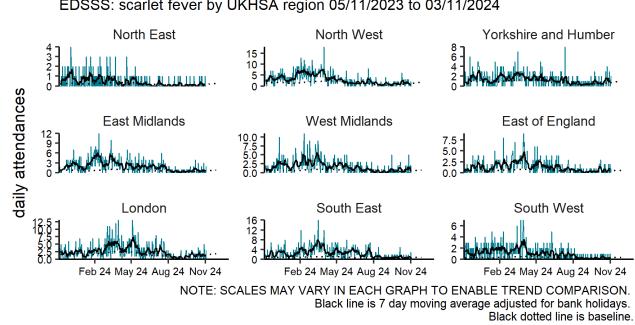


(b)

EDSSS: scarlet fever by age (years) 05/11/2023 to 03/11/2024



(C)



EDSSS: scarlet fever by UKHSA region 05/11/2023 to 03/11/2024

# **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

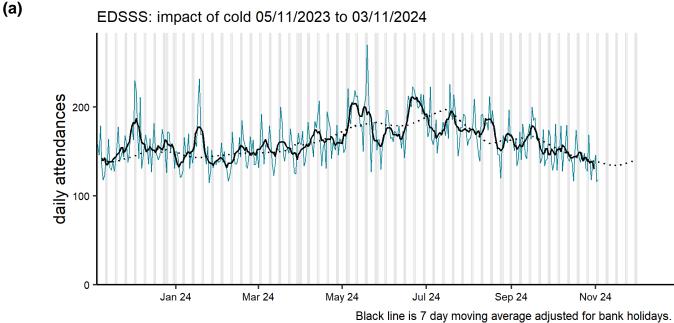
Highest weather alert level during the current reporting week:

No alerts issued

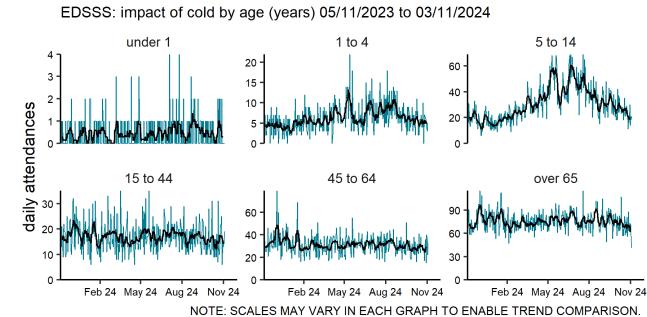
## Impact of cold

(b)

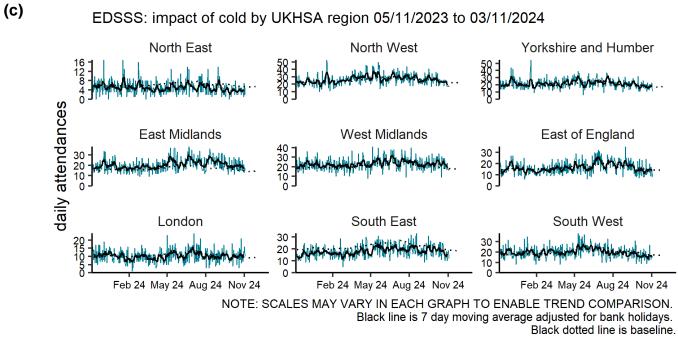
Figure 14: Daily number of impact of cold ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



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



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



# **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:
  - $\circ$  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

© Crown copyright 2024 Version: ED-2

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

Published: November 2024



You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v3.0. To view this licence, visit <u>OGL</u>. Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.



UKHSA supports the UN Sustainable Development Goals

