

Emergency Department Syndromic Surveillance System Bulletin (England) 2023 Week 46

Key messages

Data reported to: 19 November 2023

During week 46 there were further increases in ED attendances for acute respiratory infections; attendances remain elevated in children aged <1 and 1-4 years. Attendances for acute bronchiolitis/bronchitis continued to increase, with attendances increasing in the <1 year age group while decreasing slightly in 1-4 years. Pneumonia attendances increased and are at above seasonally expected levels; increases were most notable in adults aged 15-44 years. ED COVID-19-like attendances continued to decrease during week 46.

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)	Increasing	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)	No trend	Similar to baseline
Pneumonia (Figure 6)	Increasing	Above baseline
Asthma (Figure 7)	No trend	Above baseline
Gastroenteritis (Figure 8)	No trend	Below baseline
Cardiac (Figure 9)	No trend	Similar to baseline
Myocardial ischaemia (Figure 10)	No trend	Similar to baseline
Acute alcohol intoxication (Figure 11)	Decreasing	Similar to baseline
Mental health (Figure 12)	No trend	No baseline
Scarlet fever (Figure 13)	No trend	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	4
Total attendances	5
Respiratory conditions	7
COVID-19-like	7
Acute respiratory infections	9
Acute bronchiolitis/bronchitis	11
Influenza-like illness	13
Pneumonia	15
Asthma	17
Gastrointestinal conditions	19
Gastroenteritis	19
Cardiac conditions	21
Cardiac	21
Myocardial ischaemia	23
Other conditions	25
Acute alcohol intoxication	25
Mental health	27
Scarlet fever	29
Seasonal environmental conditions	31
Impact of cold	32
Notes and caveats	34
Acknowledgements	35
About the UK Health Security Agency	36

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:
 - o the primary diagnosis for each attendance
 - o other diagnoses may be recorded, but are not used for indicator grouping
 - o 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.

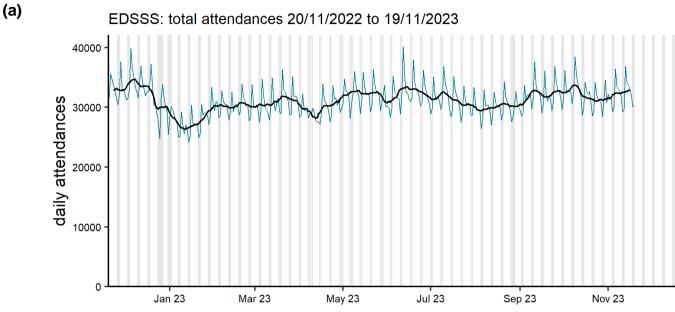
Data quality issues of note this week

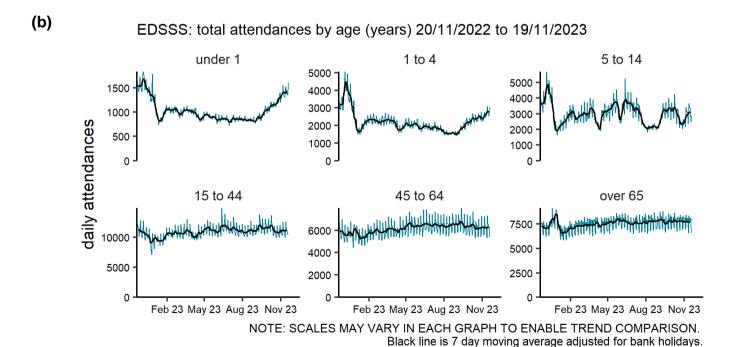
No issues identified. See Table 2 and Table 3 for the numbers of EDs included this week.

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.





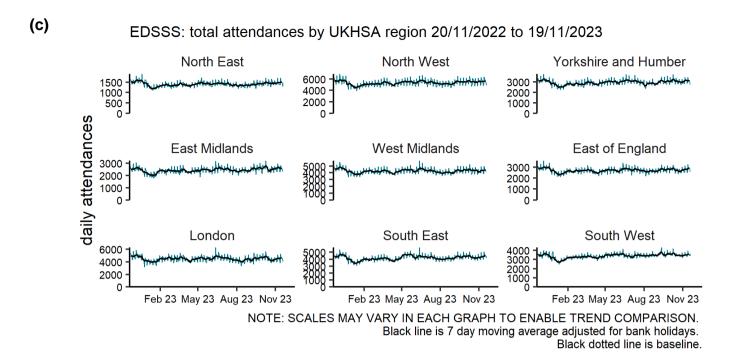


Table 2: The number of emergency department (ED) attendances and number with a diagnosis code included in surveillance each day during the most recent week.

Date	Total attendances ²	Diagnoses included ²
13 November 2023	36,865	23,293
14 November 2023	34,190	21,672
15 November 2023	33,653	21,313
16 November 2023	33,144	21,143
17 November 2023	32,002	20,503
18 November 2023	30,155	19,288
19 November 2023	30,326	19,574

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

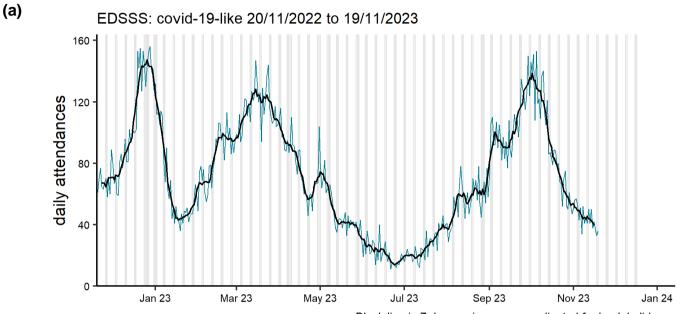
UKHSA Region	Number of EDs ²
North East	5
North West	23
Yorkshire and Humber	13
West Midlands	16
East Midlands	8
East of England	11
London	16
South West	17
South East	17
Total	126

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

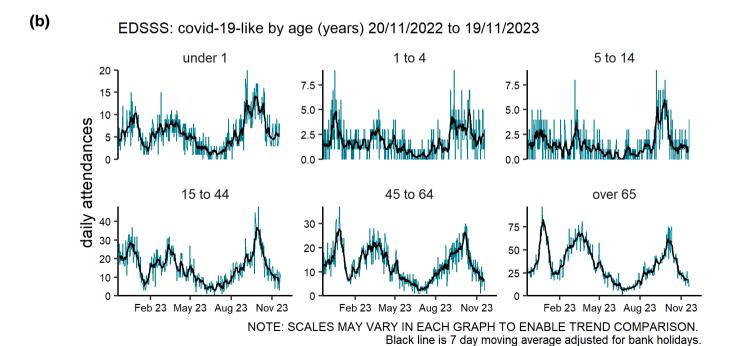
Respiratory conditions

COVID-19-like

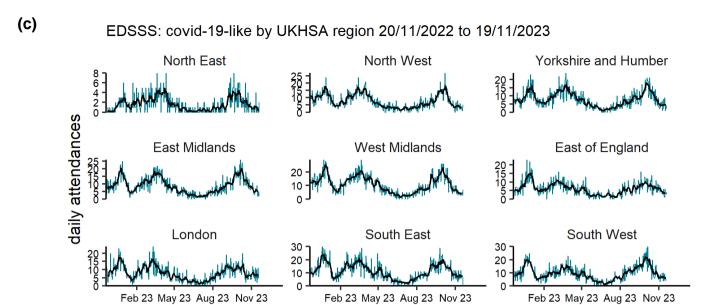
Figure 2: Daily number of COVID-19-like ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



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



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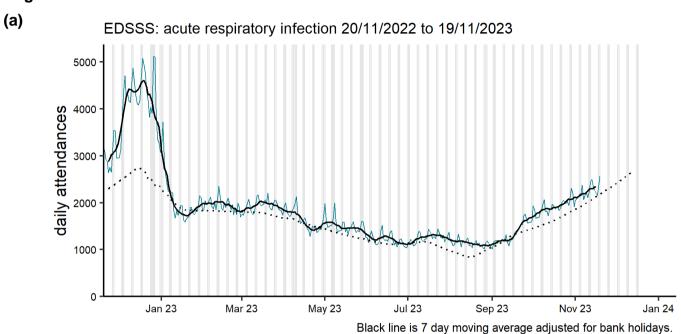
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.

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

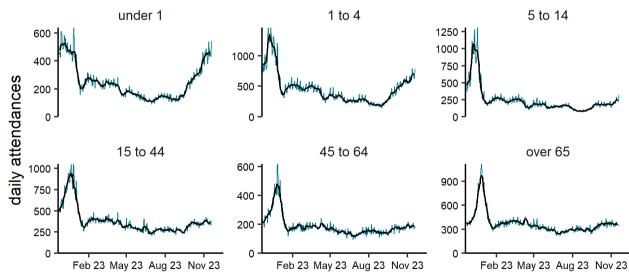
Black dotted line is baseline.

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.



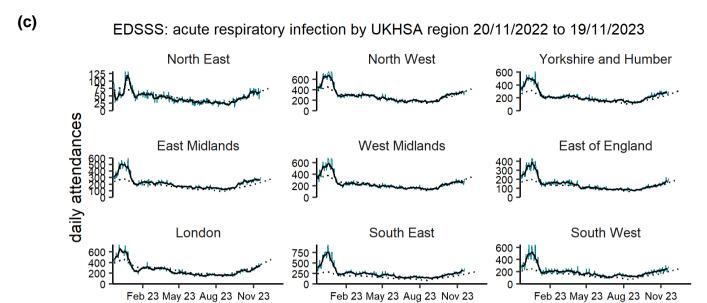
(b) EDSS: acute respiratory infection by age (years) 20/11/2022 to 19/11/2023



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

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

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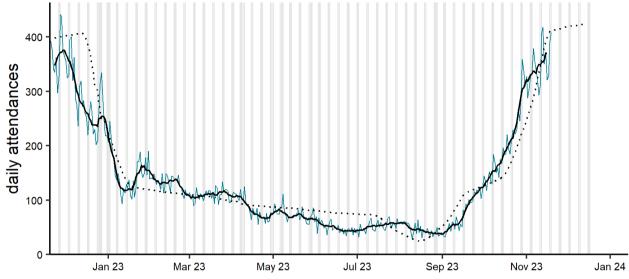
Black line is 7 day moving average adjusted for bank holidays.

Black dotted line is baseline.

Acute bronchiolitis/bronchitis

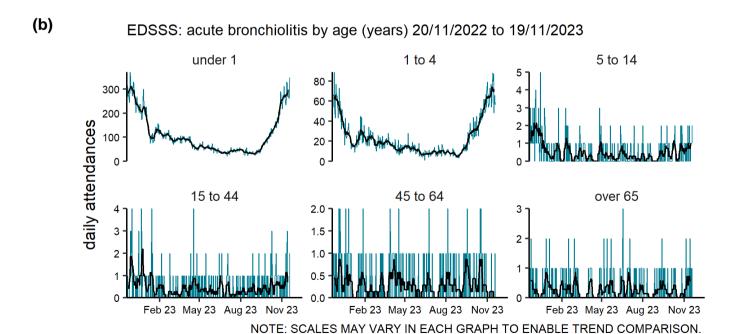
Figure 4: Daily number of acute bronchiolitis/bronchitis ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

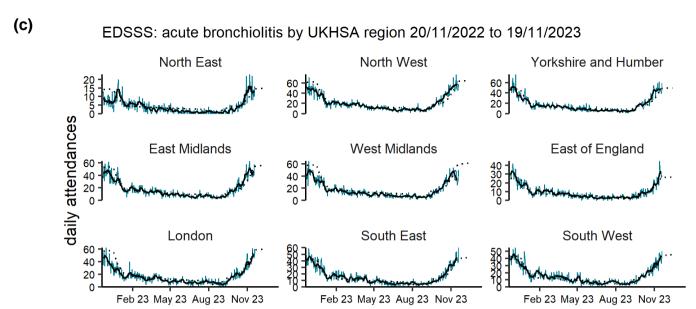




Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

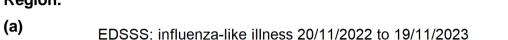
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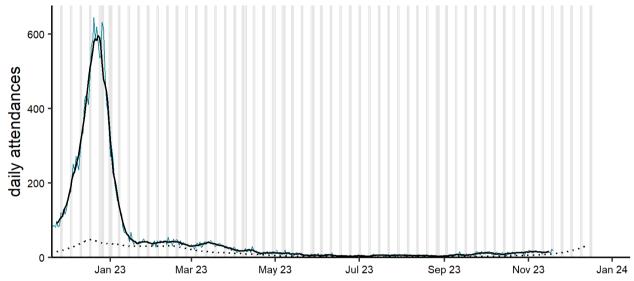




Influenza-like illness

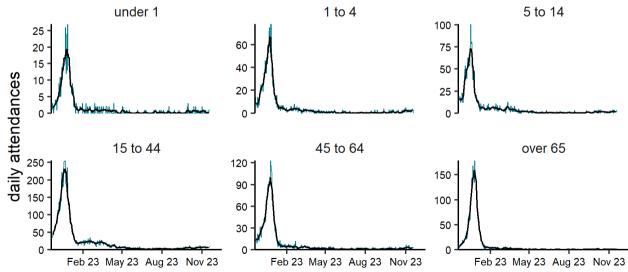
Figure 5: Daily number of influenza-like illness ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.





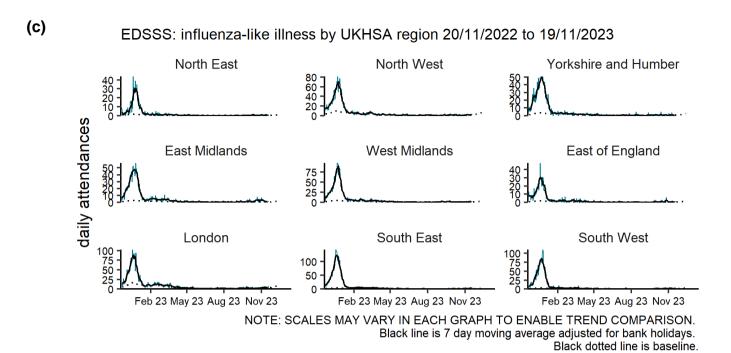
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b) EDSSS: influenza-like illness by age (years) 20/11/2022 to 19/11/2023



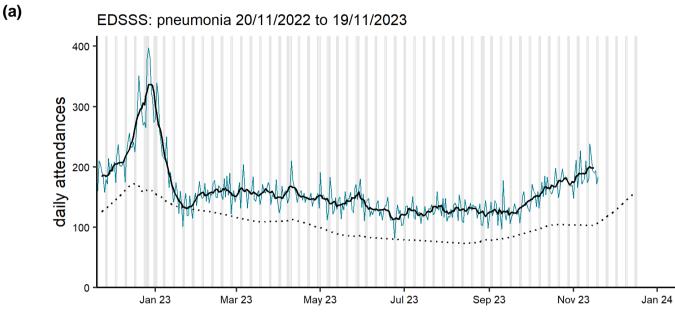
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.

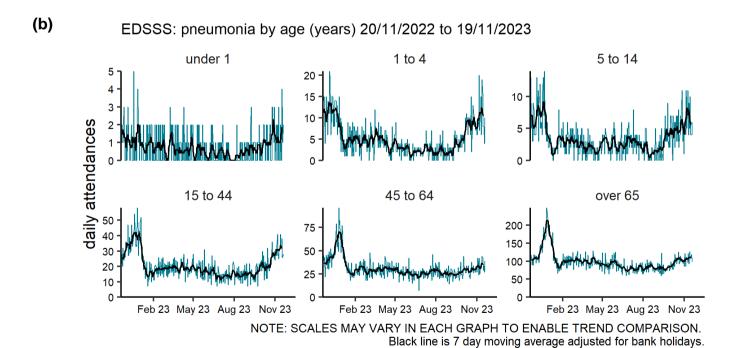
Black line is 7 day moving average adjusted for bank holidays.

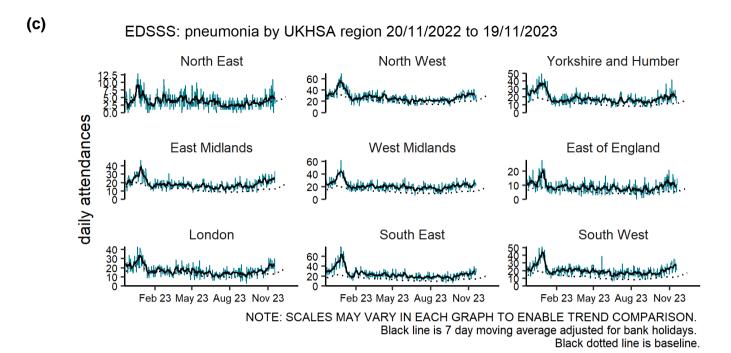


Pneumonia

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.

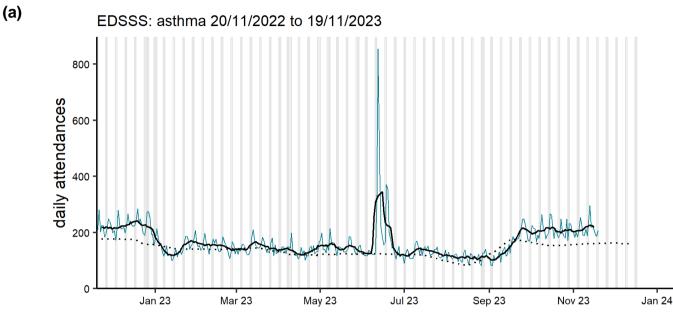


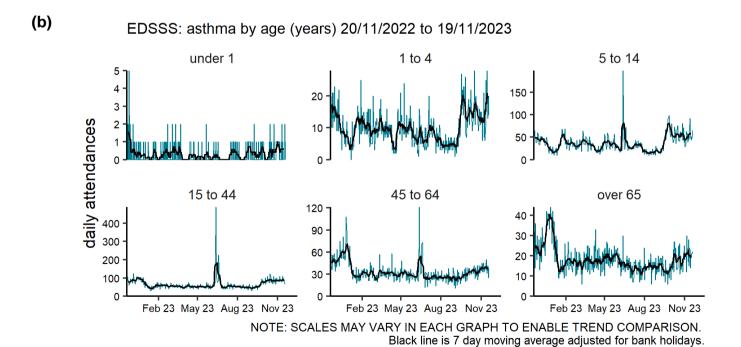


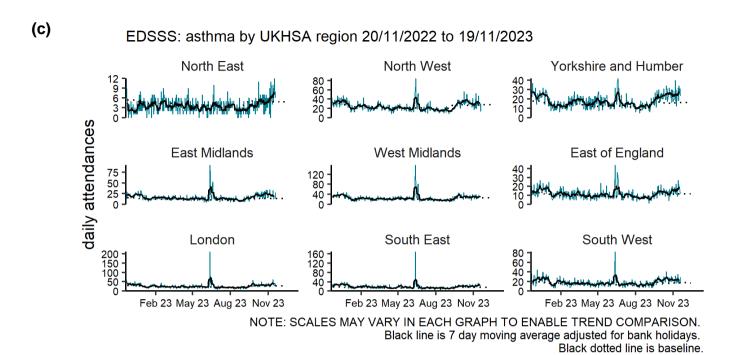


Asthma

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.



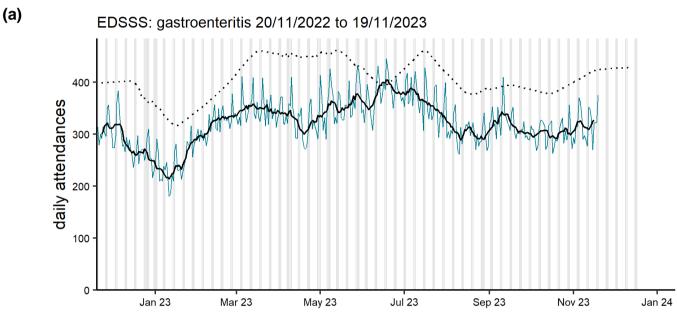


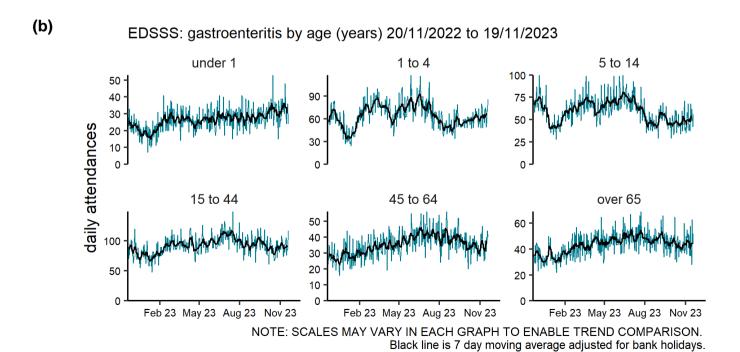


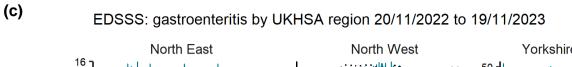
Gastrointestinal conditions

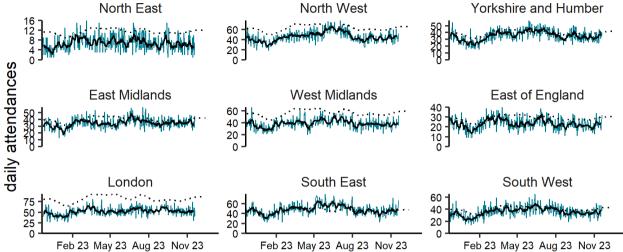
Gastroenteritis

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.









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

Black dotted line is baseline.

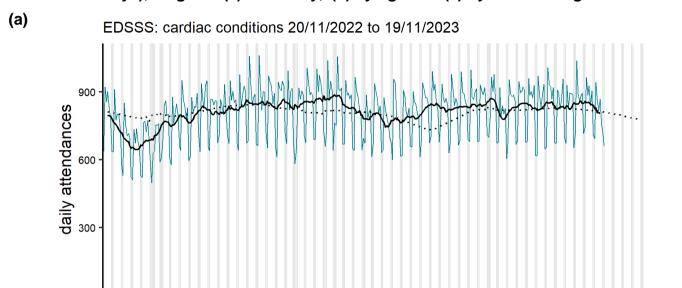
Cardiac conditions

Jan 23

Mar 23

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.



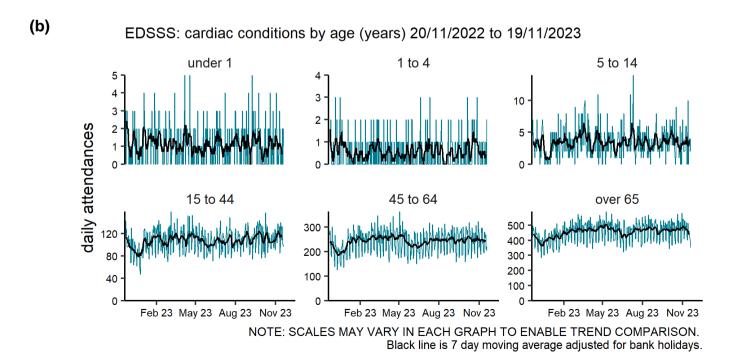
May 23

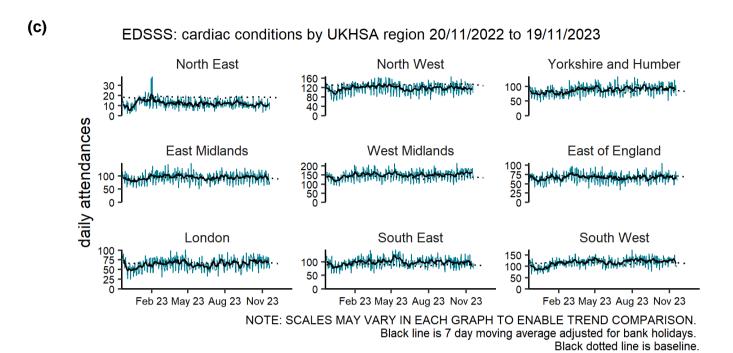
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Sep 23

Nov 23

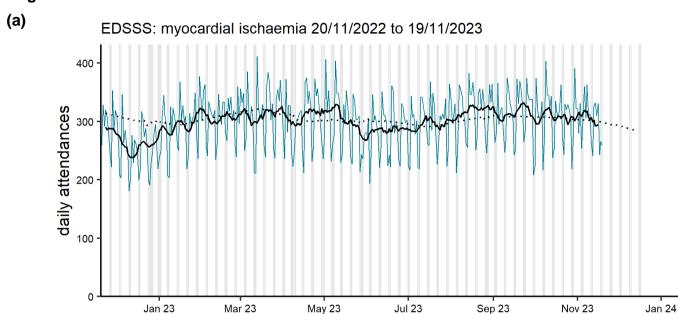
Jul 23



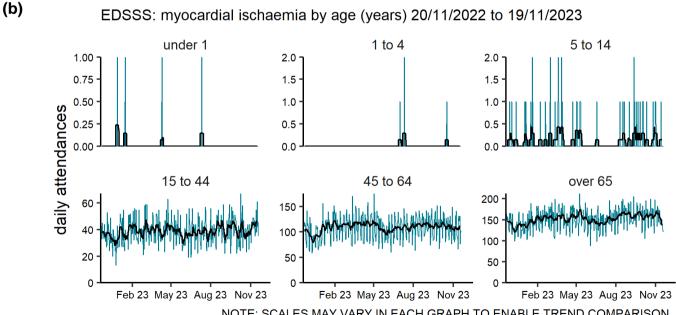


Myocardial ischaemia

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.

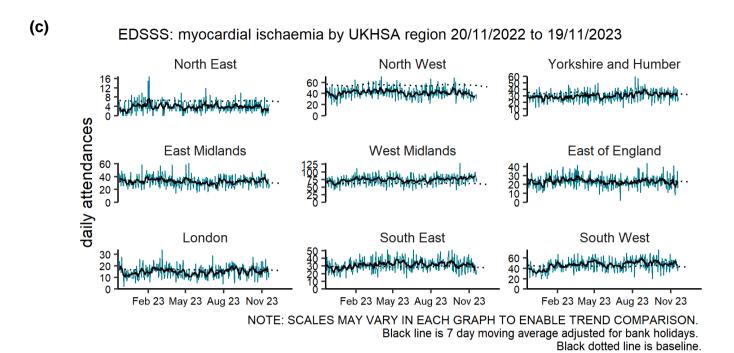


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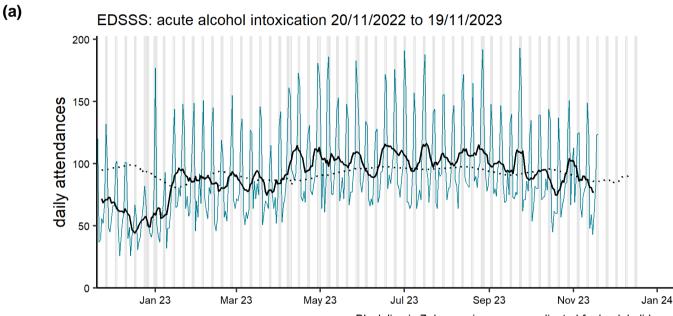
Black line is 7 day moving average adjusted for bank holidays.

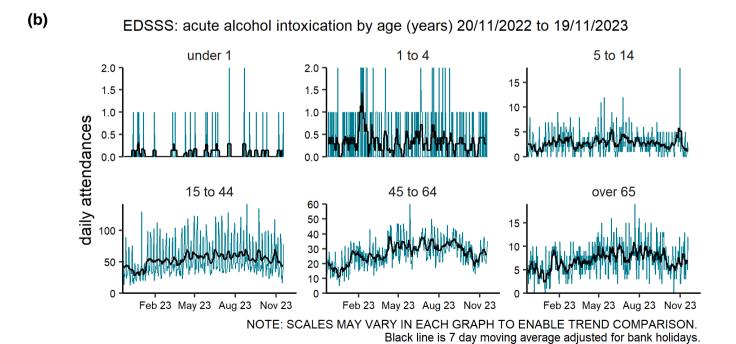


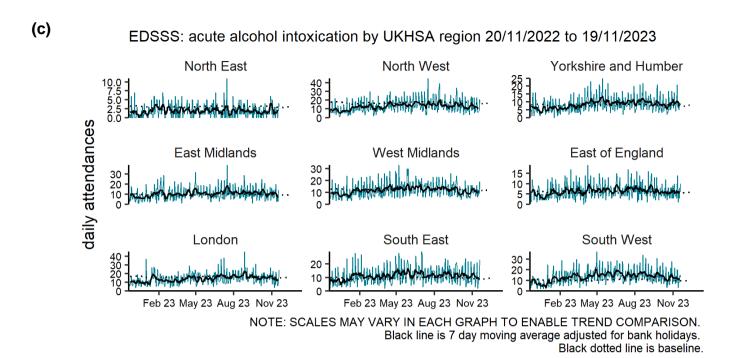
Other conditions

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.



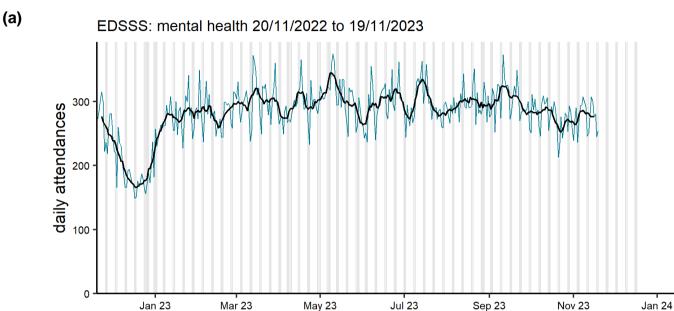




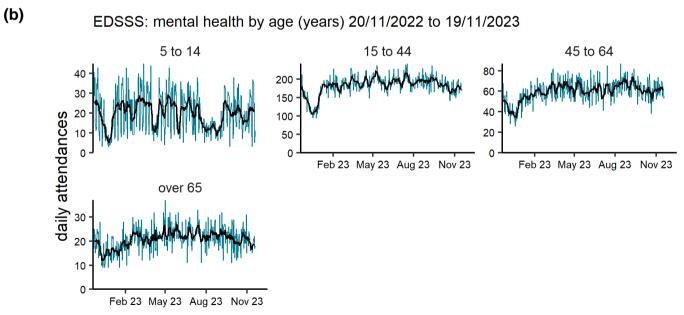
Mental health

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.

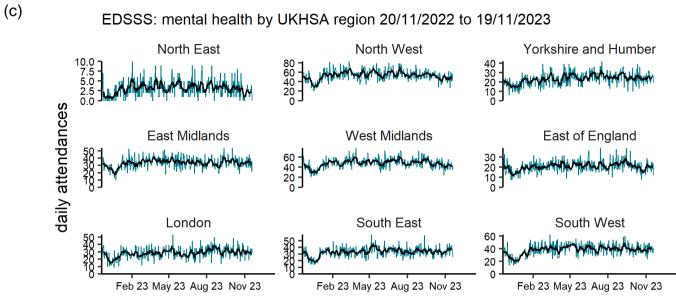


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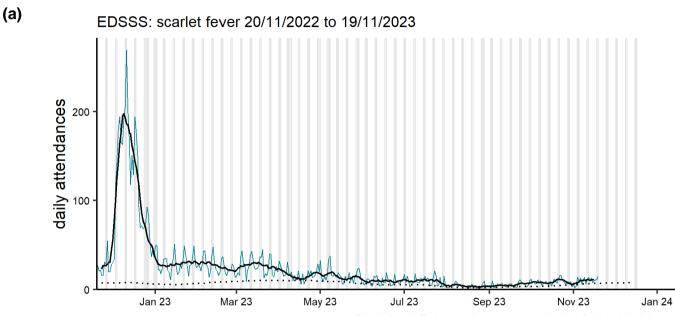
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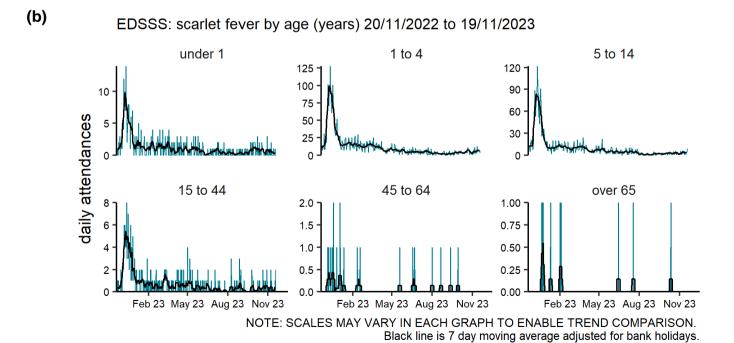
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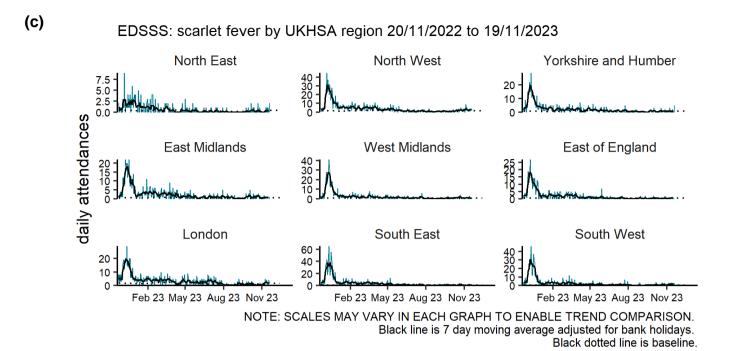
Black dotted line is baseline.

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.







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

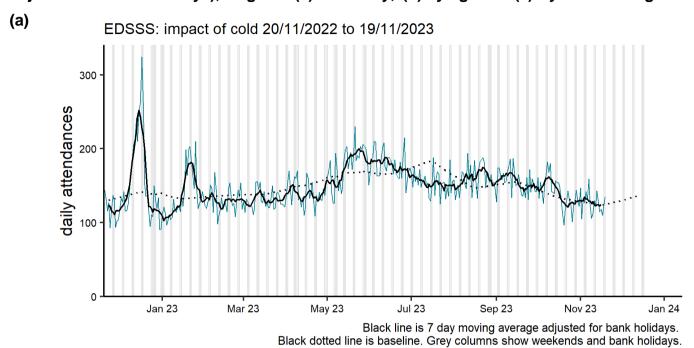
Heat-Health Alert period: 1 June to 30 September

Highest weather alert level during the current reporting week:

No alerts issued

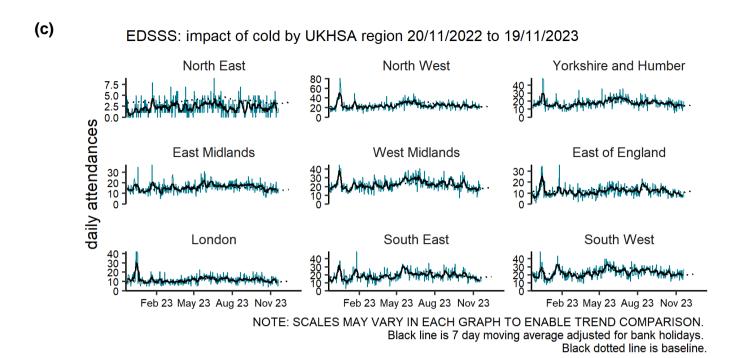
Impact of cold

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.



(b) EDSSS: impact of cold by age (years) 20/11/2022 to 19/11/2023 under 1 1 to 4 5 to 14 3 16 60 12 2 40 daily attendances 15 to 44 45 to 64 over 65 100 100 75 30 50 20 50 25 10 0 Feb 23 May 23 Aug 23 Nov 23 Feb 23 May 23 Aug 23 Nov 23 Feb 23 May 23 Aug 23 Nov 23 NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.

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:
 - 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,
 - o 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

- influenza-like illness
- acute bronchitis or bronchiolitis
- pneumonia
- other and non-specific acute respiratory infections
- o cardiac conditions includes:
 - myocardial ischaemia
 - other and non-specific cardiac conditions
- baselines:
 - o were last remodelled January 2023
 - o 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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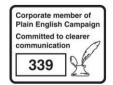
Prepared by: Real-time Syndromic Surveillance Team

For queries relating to this document, please contact: syndromic.surveillan@ukhsa.gov.uk

Published: November 2023



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