

Emergency Department Syndromic Surveillance System Bulletin (England) 2024 Week 16

Key messages

Data reported to: 21 April 2024

During week 16 there were further decreases in ED attendances for acute respiratory infections, particularly in children, and attendances are currently at seasonally expected levels. Pneumonia attendances decreased overall, but remain higher than expected for the time of year. Pneumonia attendances in children aged 5-14 years also decreased, but again attendances remain higher than those levels expected.

Syndromic indicators at a glance

Table 1: The current trend (based on previous weeks, not only the current week) and the level (compared to the expected baseline), of each indicator included in this bulletin.

Indicator	Trend ¹	Level
Total attendances (Figure 1)	No trend	No baseline
COVID-19-like (Figure 2)	No trend	No baseline
Acute respiratory infections (Figure 3)	Decreasing	Similar to baseline
Acute bronchiolitis or bronchitis (Figure 4)	Decreasing	Similar to baseline
Influenza-like illness (Figure 5)	Decreasing	Similar to baseline
Pneumonia (Figure 6)	Decreasing	Above baseline
Asthma (Figure 7)	Decreasing	Similar to baseline
Gastroenteritis (Figure 8)	No trend	Below baseline
Cardiac (Figure 9)	Decreasing	Similar baseline
Myocardial ischaemia (Figure 10)	Decreasing	Similar to baseline
Acute alcohol intoxication (Figure 11)	No trend	Above baseline
Mental health (Figure 12)	No trend	No baseline
Scarlet fever (Figure 13)	No trend	Above 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 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
 - 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 <u>here</u>.

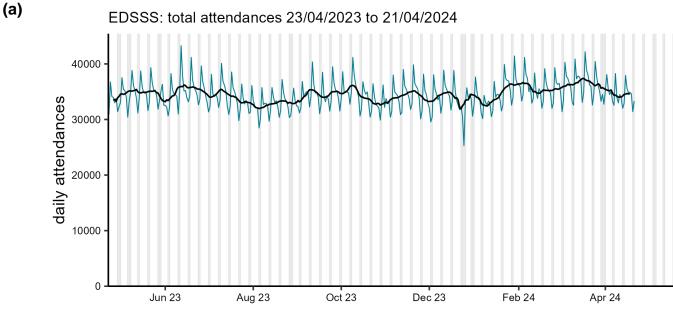
Data quality issues of note this week

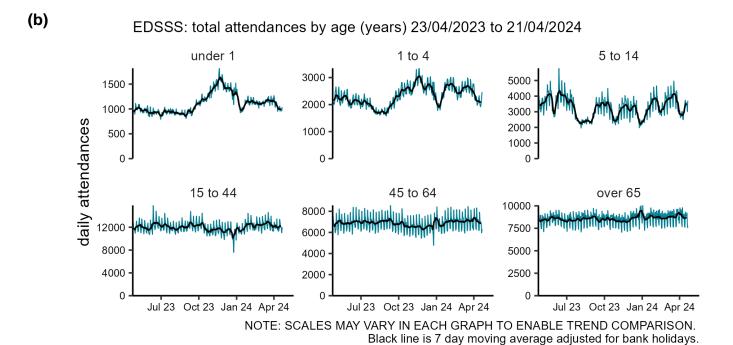
No issues identified.

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.





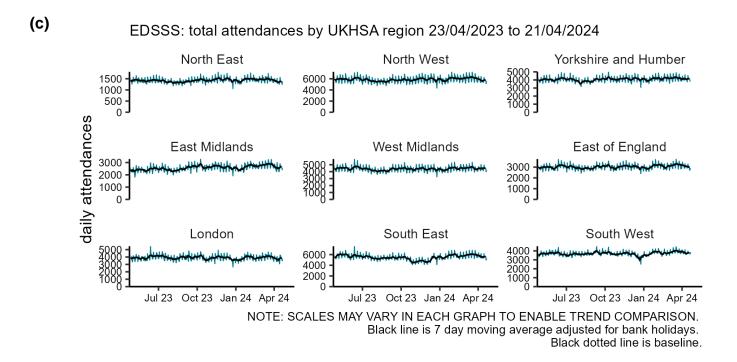


Table 2: The number of emergency department (ED) attendances and number with a diagnosis code included in surveillance each day during the most recent week.

Date	Total attendances ²	Diagnoses included ²
15 April 2024	38,276	23,497
16 April 2024	35,979	22,282
17 April 2024	35,121	21,737
18 April 2024	34,980	22,153
19 April 2024	34,727	21,702
20 April 2024	31,485	20,094
21 April 2024	33,424	21,495

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	25
Yorkshire and Humber	16
West Midlands	16
East Midlands	9
East of England	12
London	15
South West	18
South East	23
Total	139

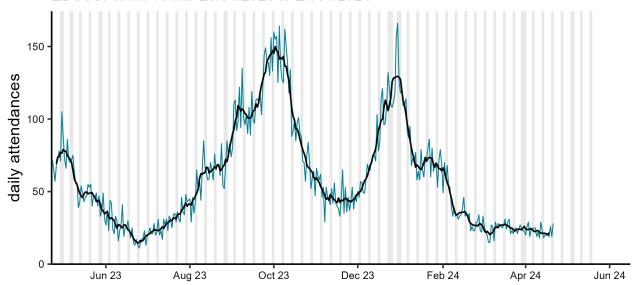
² only attendances from Type 01 EDs meeting the weekly reporting criteria are included in this report, for further details see **Notes and caveats**

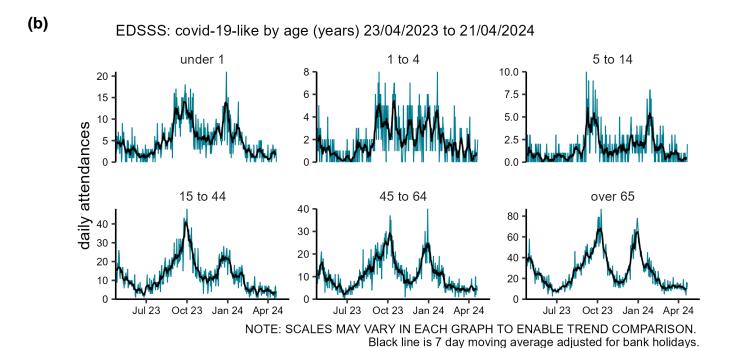
Respiratory conditions

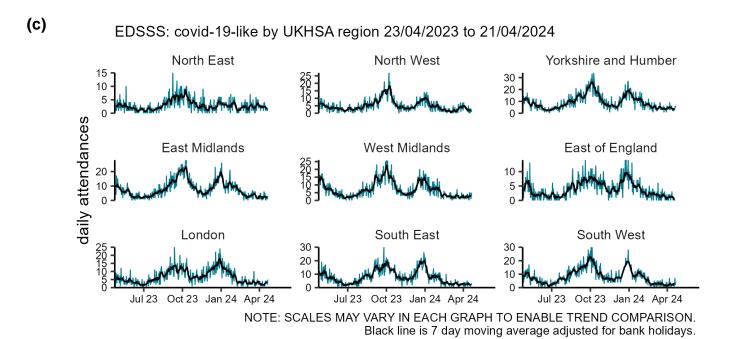
COVID-19-like

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) EDSSS: covid-19-like 23/04/2023 to 21/04/2024





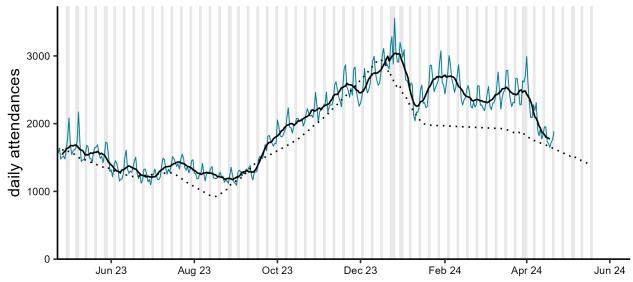


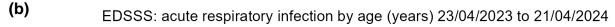
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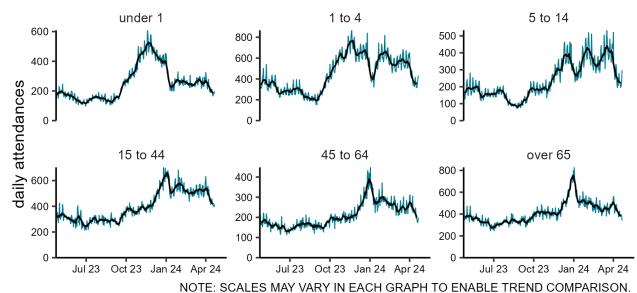
Acute respiratory infections

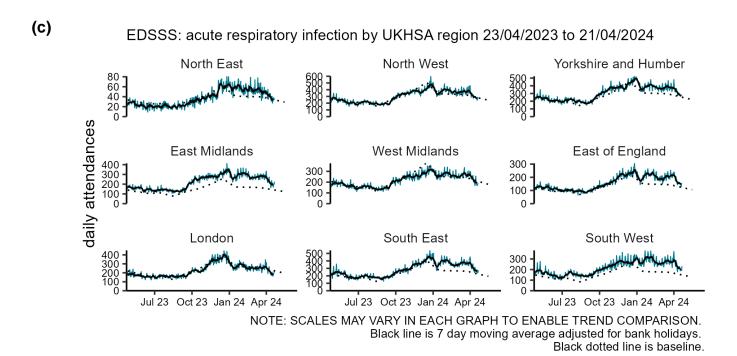
Figure 3: Daily number of acute respiratory infection ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.







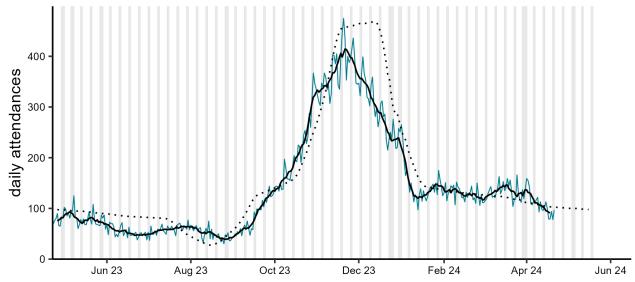




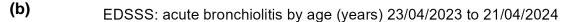
Acute bronchiolitis/bronchitis

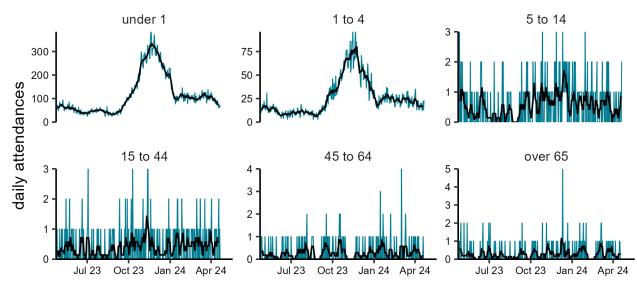
Figure 4: Daily number of acute bronchiolitis/bronchitis ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.





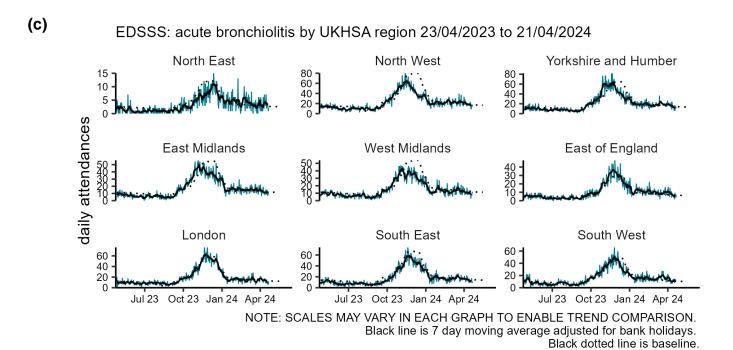
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.





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

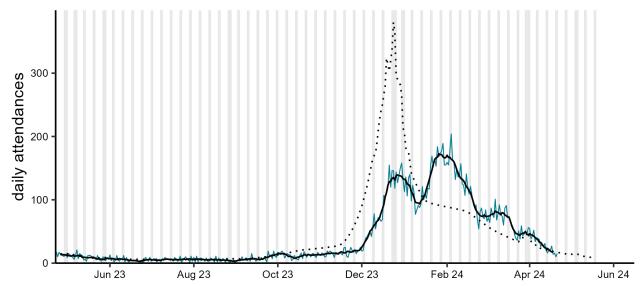
Black line is 7 day moving average adjusted for bank holidays.



Influenza-like illness

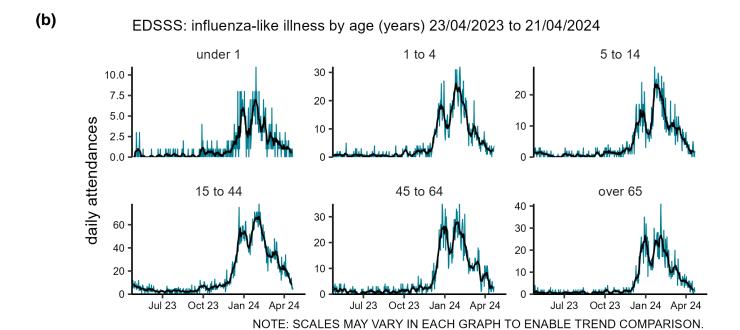
Figure 5: Daily number of influenza-like illness ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

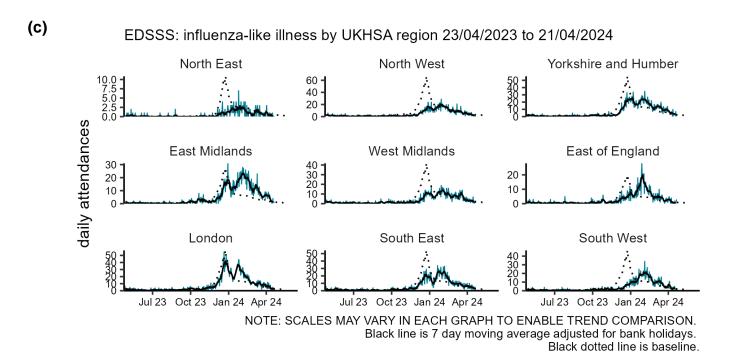




Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

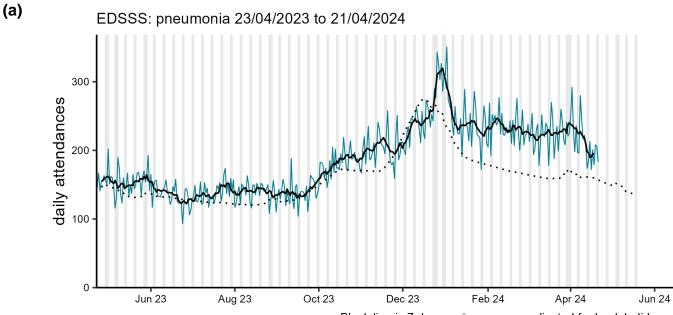
Black line is 7 day moving average adjusted for bank holidays.

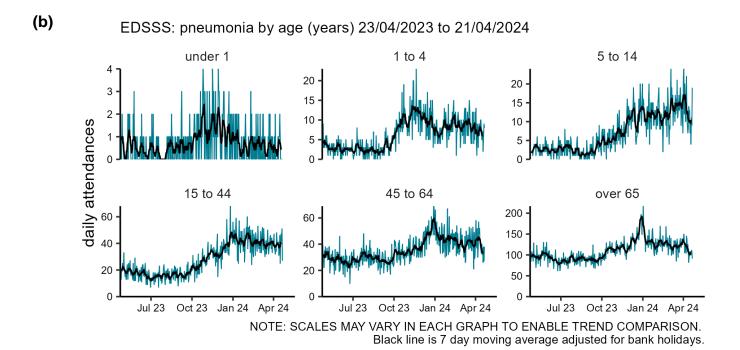


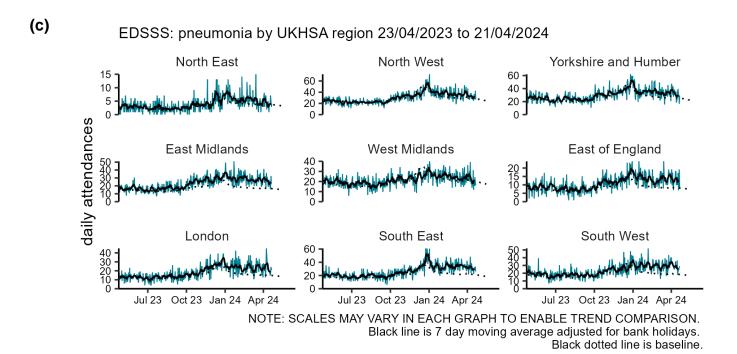


Pneumonia

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.

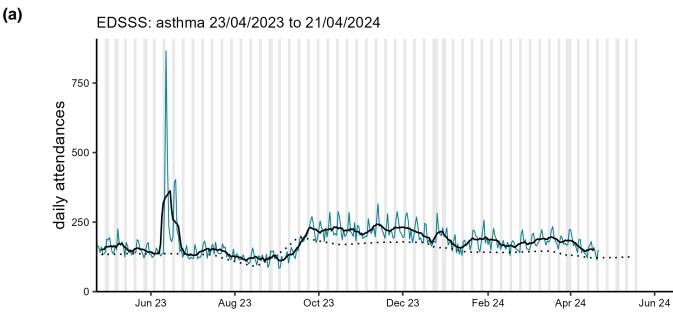


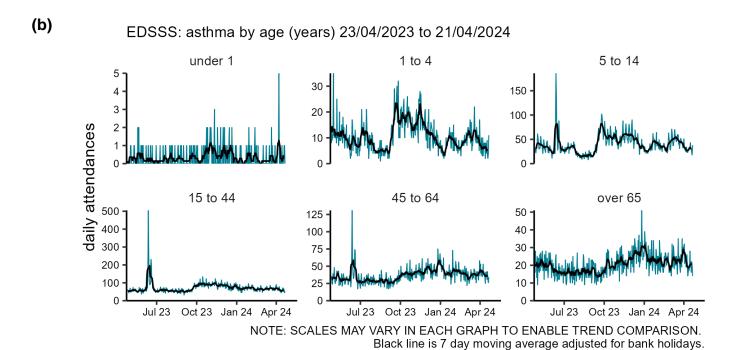


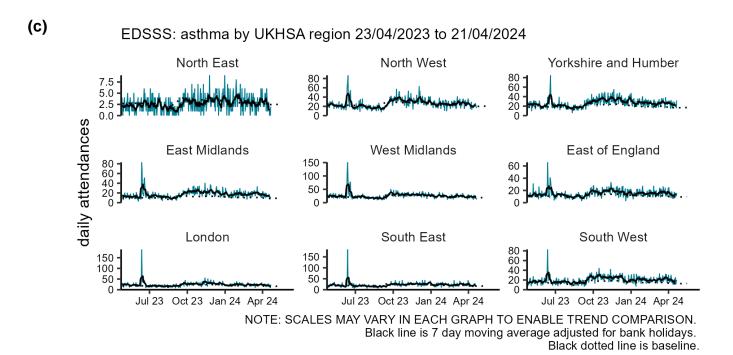


Asthma

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.



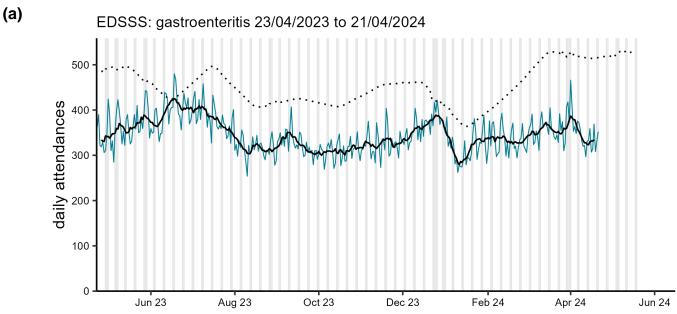


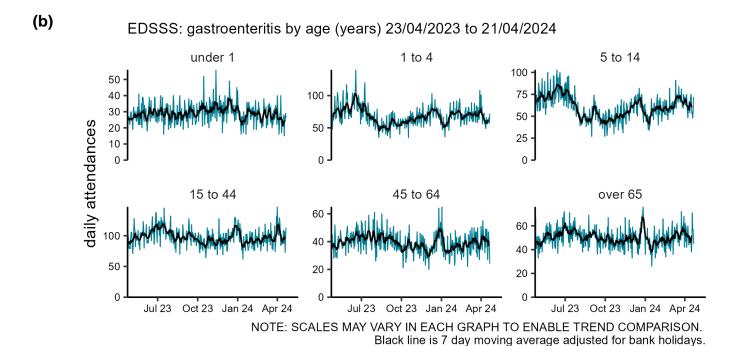


Gastrointestinal conditions

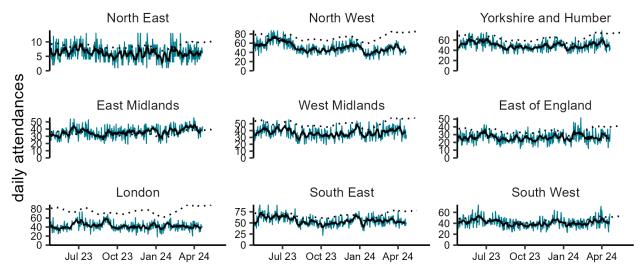
Gastroenteritis

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.









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

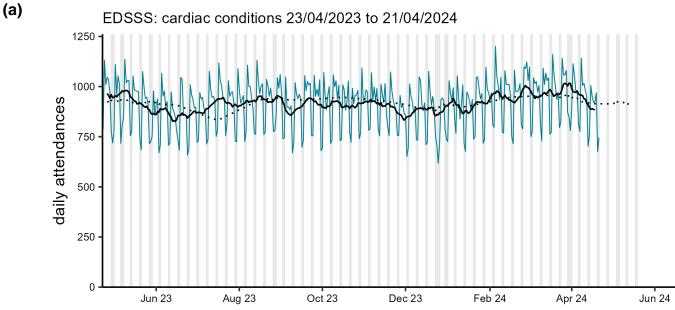
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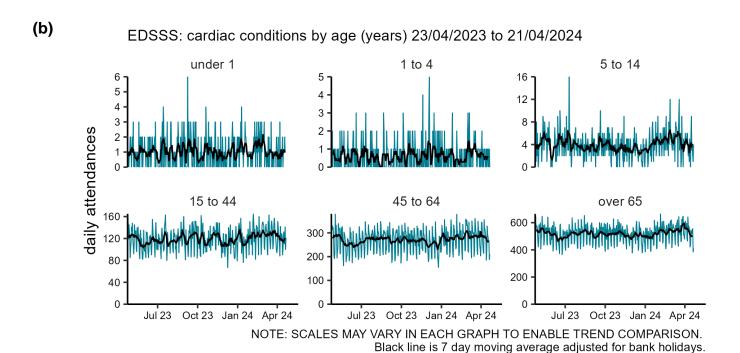
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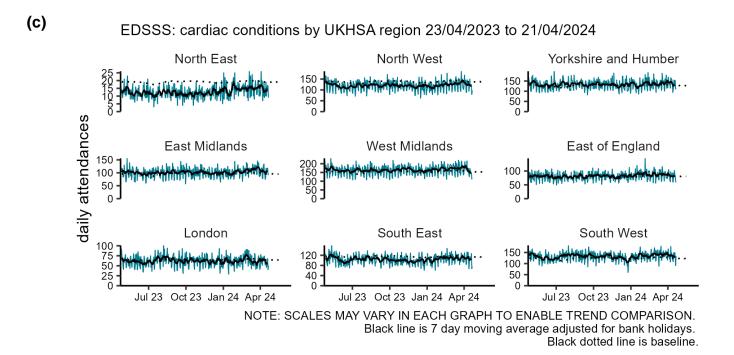
Cardiac conditions

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.



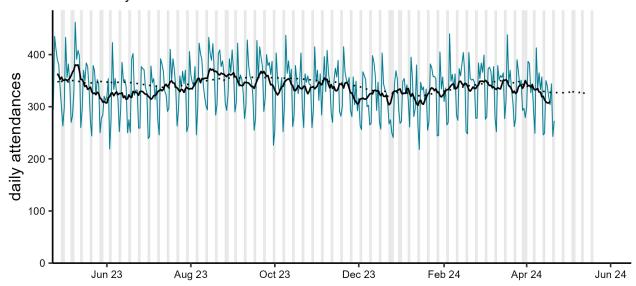




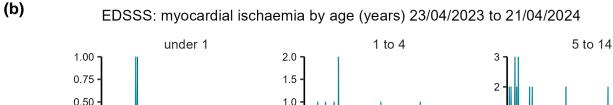
Myocardial ischaemia

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.





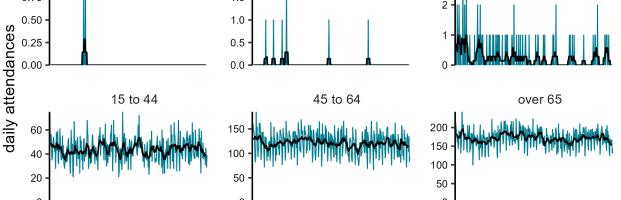
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.



Oct 23

Jan 24

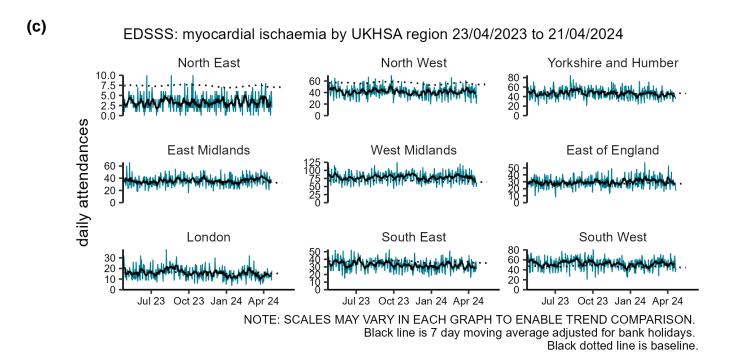
Apr 24



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

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

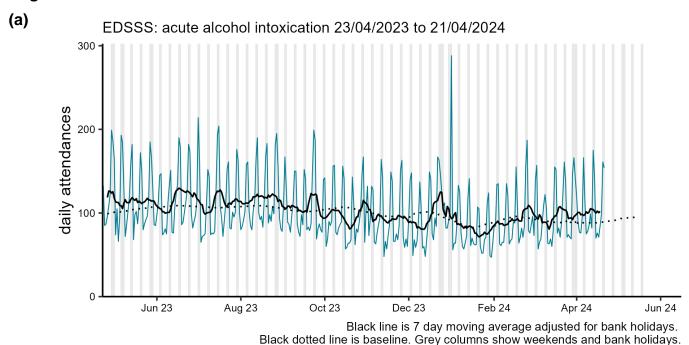
Jul 23



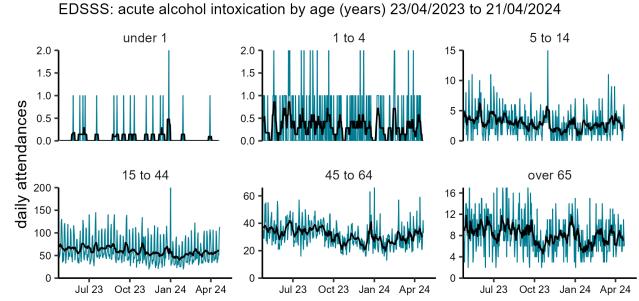
Other conditions

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.

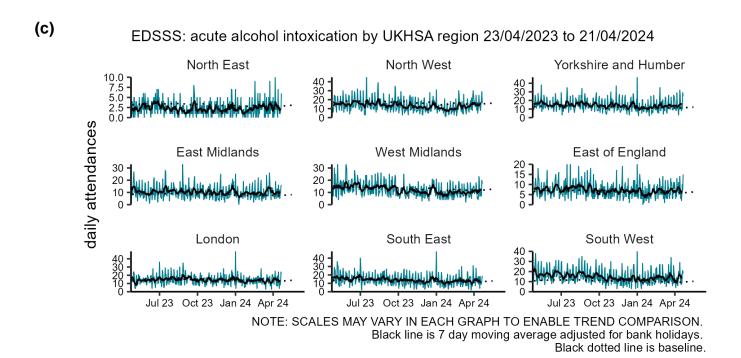


(b) EDSSS: acute alcohol intoxication by age (years) 23/04/2023 to 21/04/2024



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

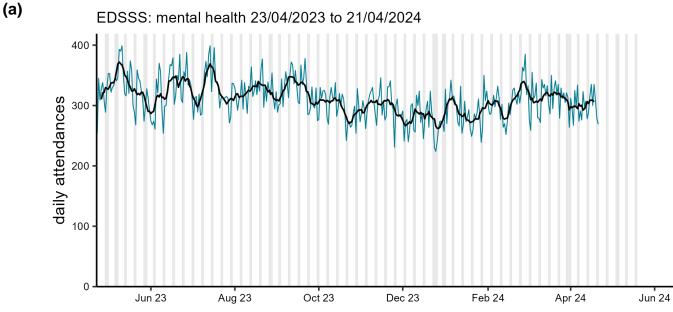
Black line is 7 day moving average adjusted for bank holidays.



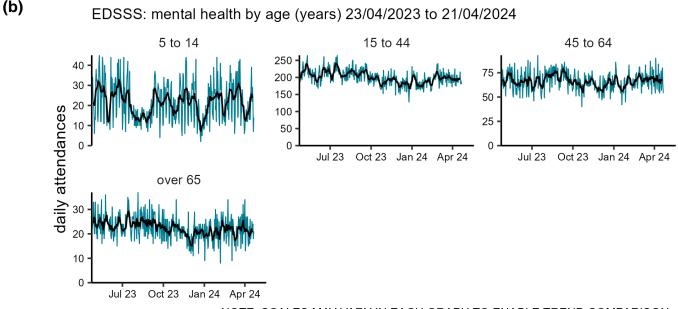
Mental health

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.

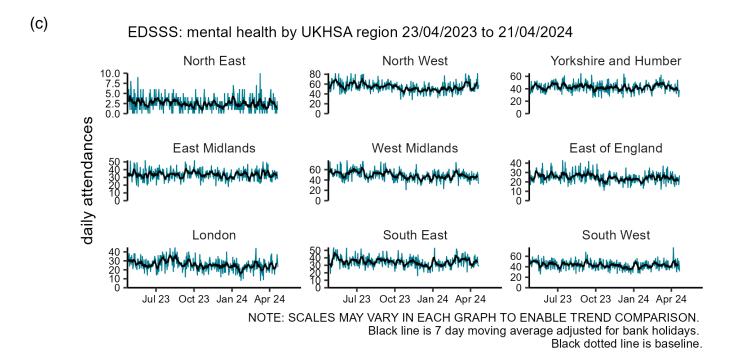


Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.



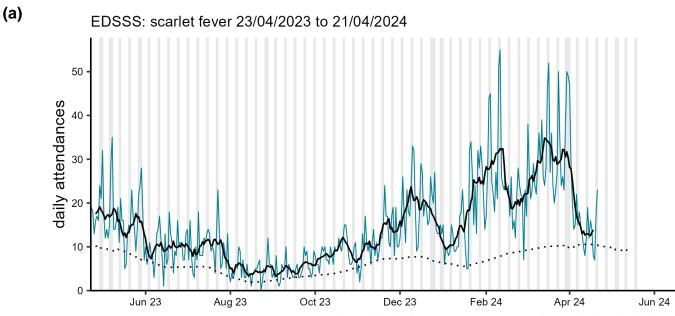
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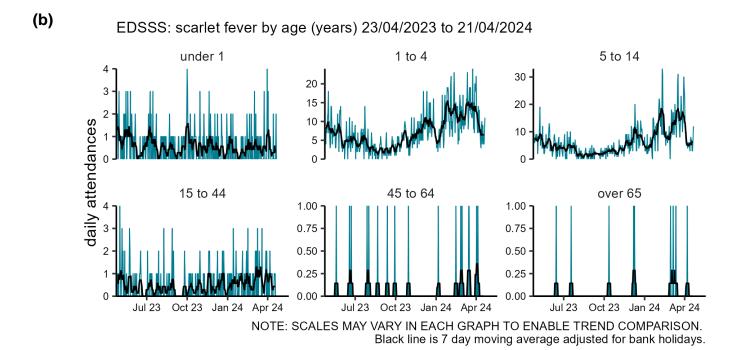
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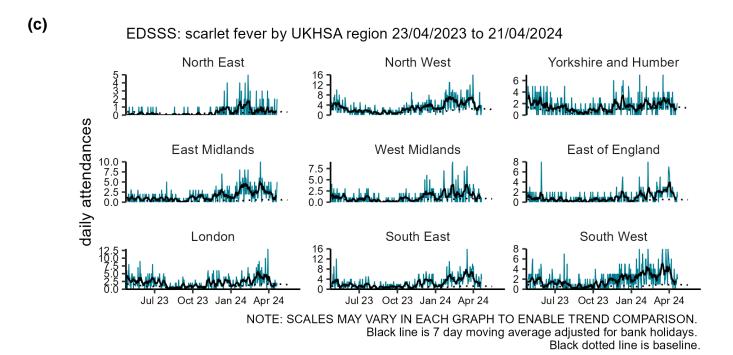


Scarlet fever

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.

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:
 - 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:
 - 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)
 - 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.

<u>UKHSA</u> is an executive agency, sponsored by the <u>Department of Health and Social Care</u>.

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Version: ED-2

Prepared by: Real-time Syndromic Surveillance Team

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Published: April 2024



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