

# Emergency Department Syndromic Surveillance System Bulletin (England) 2024 Week 07

## Key messages

Data reported to: 18 February 2024

During week 7, ED attendances for acute respiratory infections and influenza-like illness decreased but they remain above seasonally expected levels. Pneumonia attendances were stable however they remain above seasonally expected levels. Attendances for scarlet fever decreased during week 7 but they remain above baseline 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 <sup>1</sup> | Level               |
|--|--------------------|---------------------|
| Total attendances (Figure 1)                 | Decreasing         | No baseline         |
| COVID-19-like (Figure 2)                     | No trend           | No baseline         |
| Acute respiratory infections (Figure 3)      | Decreasing         | Above baseline      |
| Acute bronchiolitis or bronchitis (Figure 4) | Decreasing         | Similar to baseline |
| Influenza-like illness (Figure 5)            | Decreasing         | Above baseline      |
| Pneumonia (Figure 6)                         | Decreasing         | Above baseline      |
| Asthma (Figure 7)                            | Decreasing         | Above baseline      |
| Gastroenteritis (Figure 8)                   | No trend           | Below baseline      |
| Cardiac (Figure 9)                           | Decreasing         | Similar to baseline |
| Myocardial ischaemia (Figure 10)             | No trend           | Similar to baseline |
| Acute alcohol intoxication (Figure 11)       | Increasing         | Similar to baseline |
| Mental health (Figure 12)                    | Decreasing         | No baseline         |
| Scarlet fever (Figure 13)                    | Decreasing         | Above baseline      |
| Impact of cold (Figure 14)                   | Increasing         | Similar to baseline |

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

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# About this syndromic surveillance system

This bulletin presents data from the UK Health Security Agency (UKHSA) emergency department syndromic surveillance system.

Syndromic surveillance can be used to:

- assess current trends
- assess current trends and levels compared to historical baselines
- compare trends between age groups/areas

Syndromic surveillance should not be used to:

- estimate total burden or number of 'cases' of a condition (see Notes and caveats)
- compare levels between age groups/areas

Fully anonymised, daily ED data are analysed and reported here, to identify and describe trends for a variety of syndromic indicators:

- syndromic indicators include groupings such as acute respiratory tract infections, gastroenteritis and myocardial ischaemia
- syndromic indicators are based on:
  - 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 here.

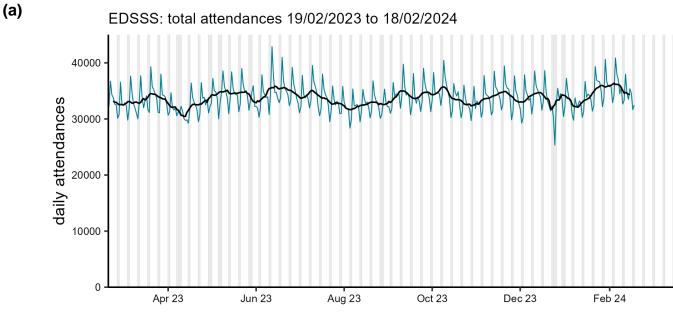
#### Data quality issues of note this week

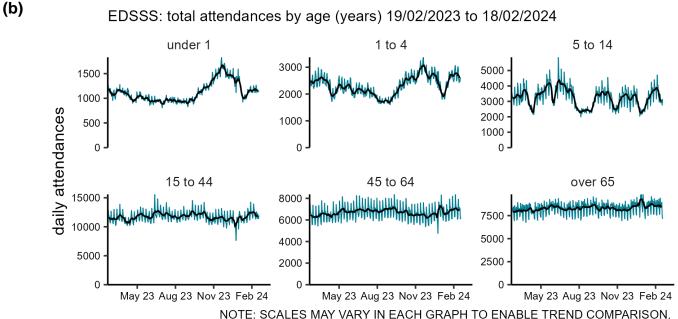
No issues identified. See **Table 2** and **Table 3** for the numbers of EDs included this week.

Please note that remodelled EDSSS influenza-like illness baselines have been refitted to influenza-like illness surveillance data during week 50 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.





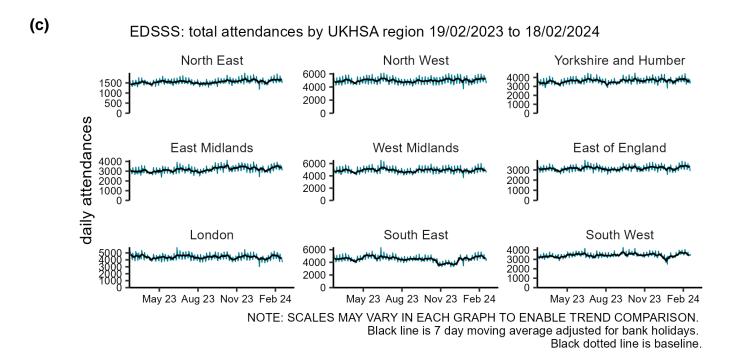


Table 2: The number of emergency department (ED) attendances and number with a diagnosis code included in surveillance each day during the most recent week.

| Date             | Total attendances <sup>2</sup> | Diagnoses included <sup>2</sup> |
|------------------|--------------------------------|---------------------------------|
| 12 February 2024 | 37,983                         | 23,630                          |
| 13 February 2024 | 34,574                         | 22,156                          |
| 14 February 2024 | 33,500                         | 21,288                          |
| 15 February 2024 | 35,393                         | 22,448                          |
| 16 February 2024 | 34,590                         | 22,050                          |
| 17 February 2024 | 31,657                         | 20,533                          |
| 18 February 2024 | 32,470                         | 21,219                          |

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           | 22                         |
| Yorkshire and Humber | 15                         |
| West Midlands        | 19                         |
| East Midlands        | 10                         |
| East of England      | 12                         |
| London               | 18                         |
| South West           | 17                         |
| South East           | 18                         |
| Total                | 137                        |

<sup>&</sup>lt;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** 

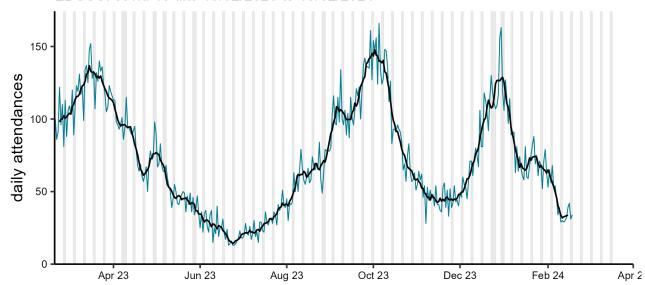
# **Respiratory conditions**

May 23 Aug 23 Nov 23

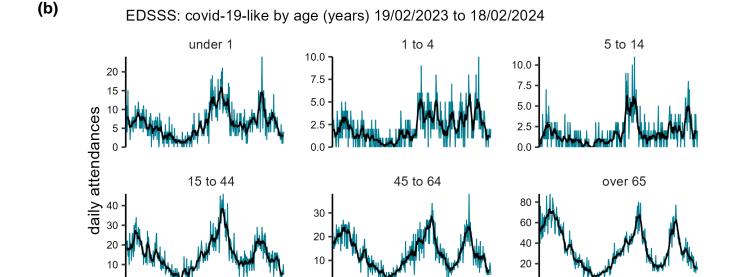
#### COVID-19-like

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 19/02/2023 to 18/02/2024



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

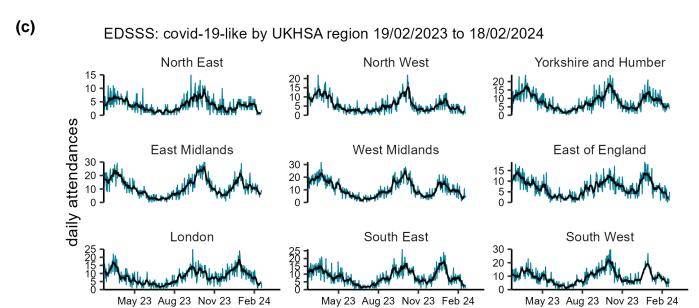


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.

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

May 23 Aug 23 Nov 23

May 23 Aug 23 Nov 23 Feb 24



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

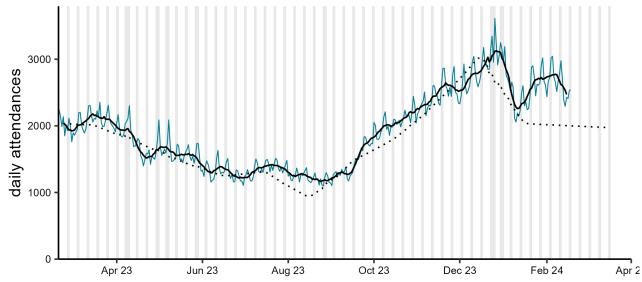
Black line is 7 day moving average adjusted for bank holidays.

Black dotted line is baseline.

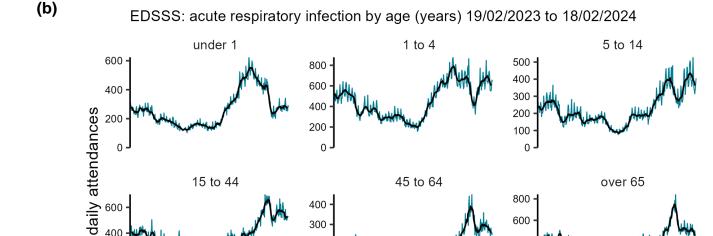
### Acute respiratory infections

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.





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



400

300

200

100

600

400

200

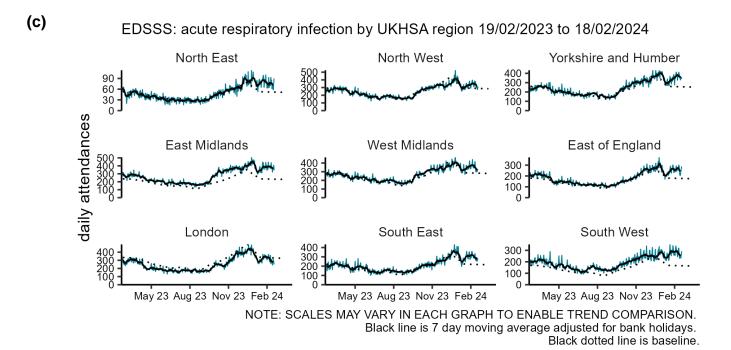
May 23 Aug 23 Nov 23 Feb 24 May 23 Aug 23 Nov 23 Feb 24 May 23 Aug 23 Nov 23 Feb 24 NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON. Black line is 7 day moving average adjusted for bank holidays.

800

600

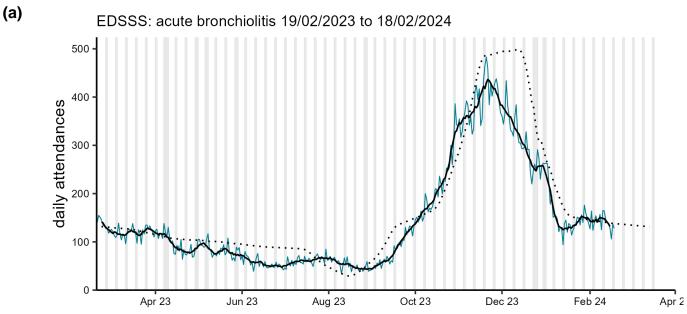
400

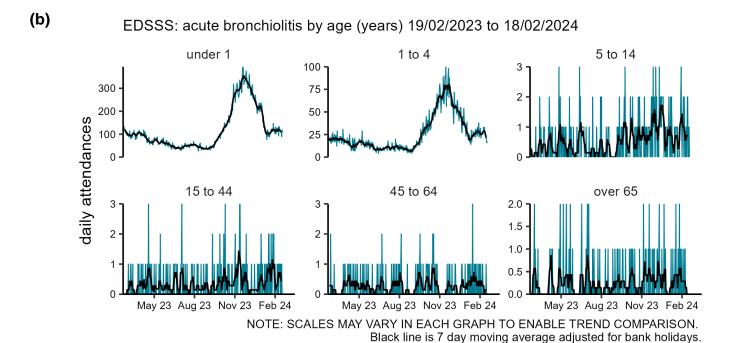
200



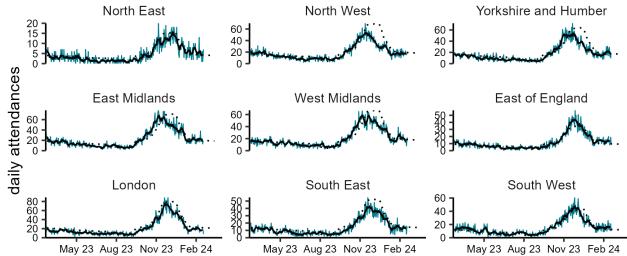
#### Acute bronchiolitis/bronchitis

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.





# (c) EDSSS: acute bronchiolitis by UKHSA region 19/02/2023 to 18/02/2024



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

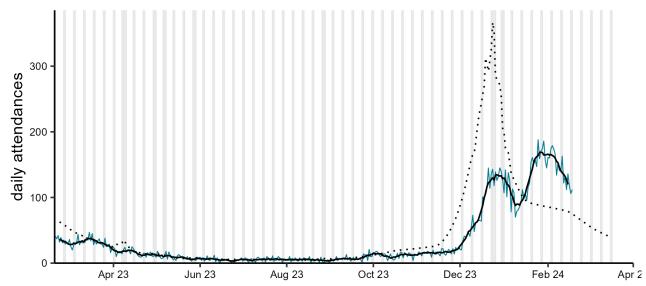
Black line is 7 day moving average adjusted for bank holidays.

Black dotted line is baseline.

### Influenza-like illness

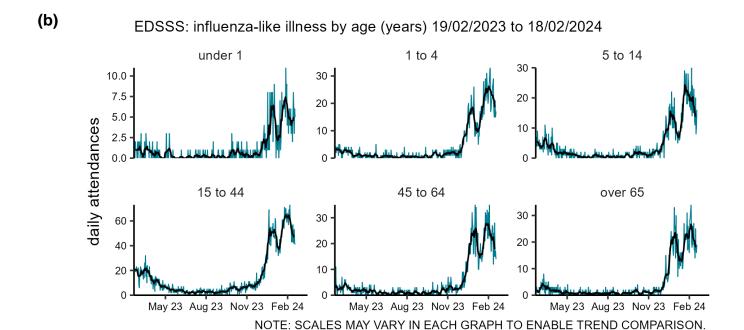
Figure 5: Daily number of influenza-like illness ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

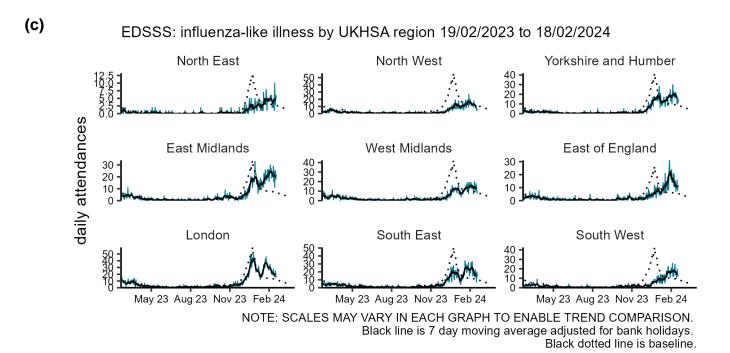




Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

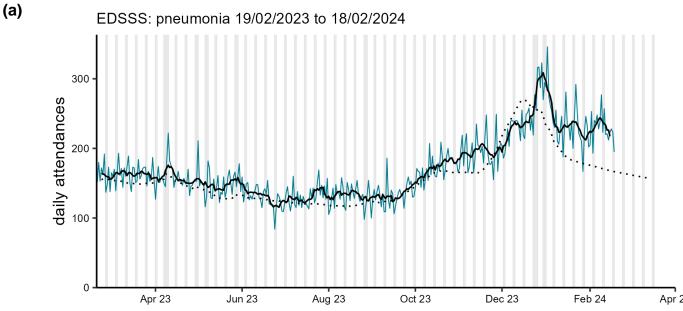
Black line is 7 day moving average adjusted for bank holidays.

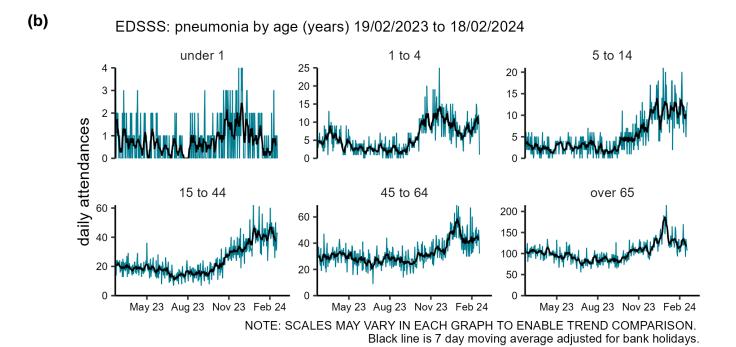


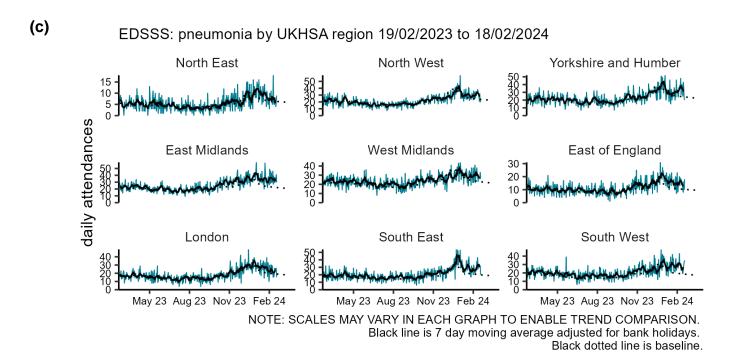


#### Pneumonia

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.







Apr 23

Jun 23

#### **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.

Aug 23

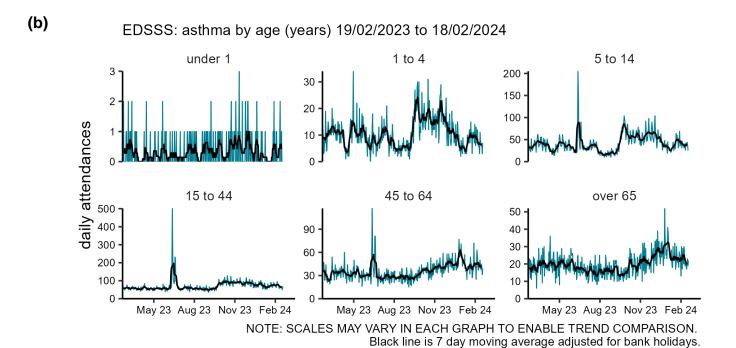
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

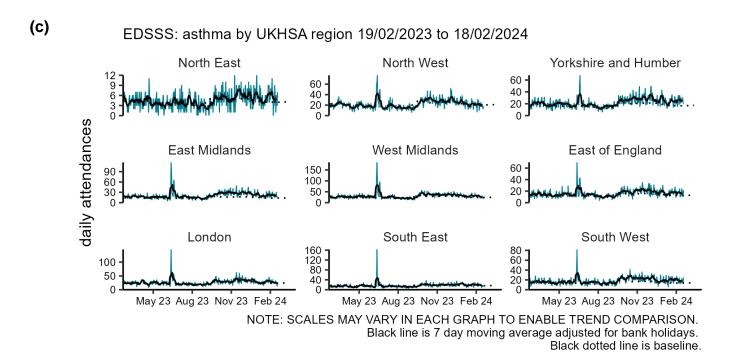
Dec 23

Feb 24

Apr 2

Oct 23

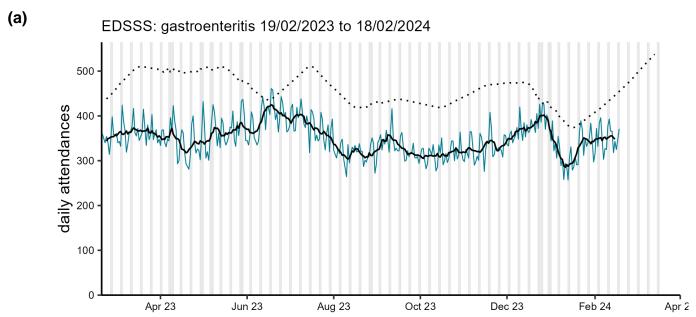


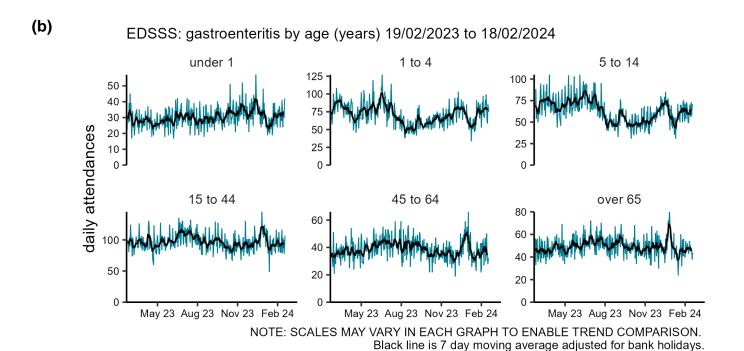


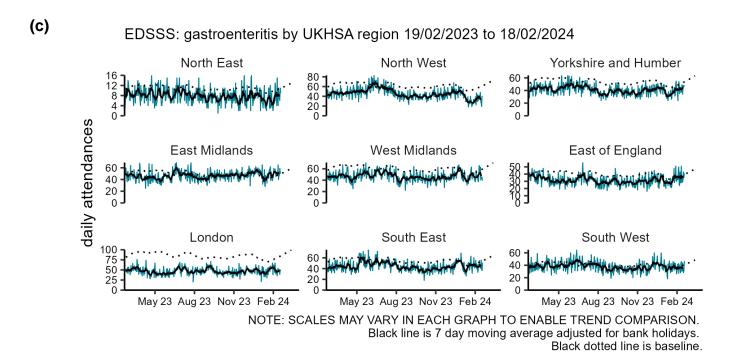
### **Gastrointestinal conditions**

#### 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.



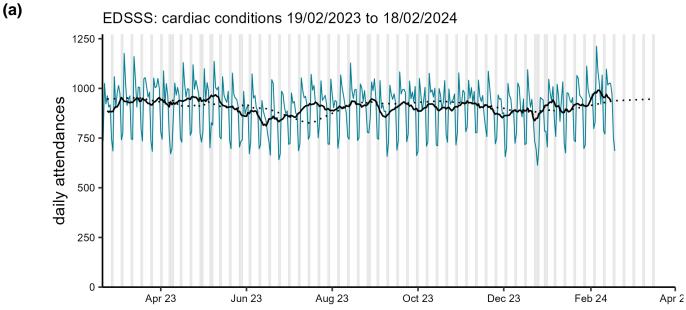


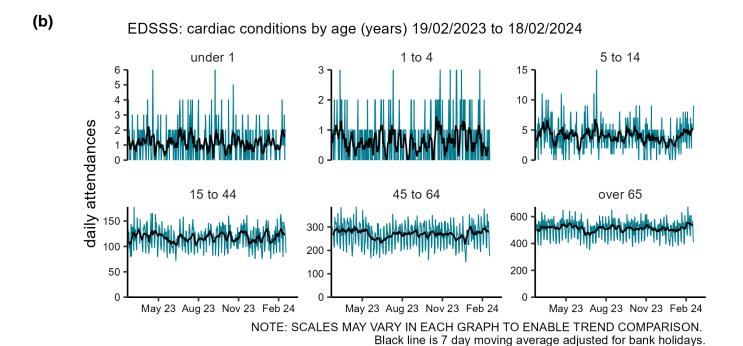


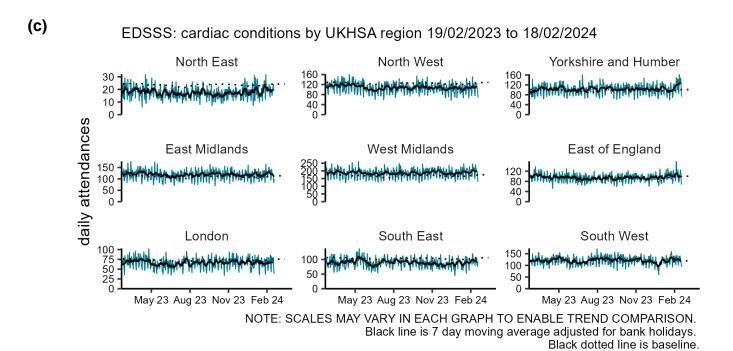
### **Cardiac conditions**

#### 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.



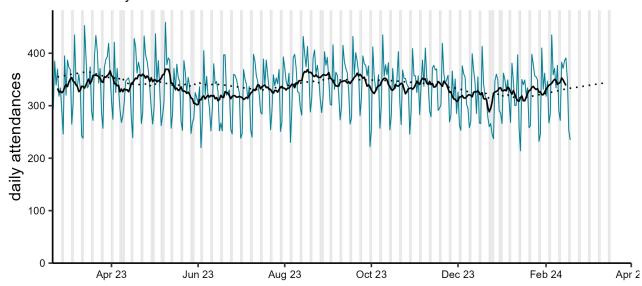




### Myocardial ischaemia

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.

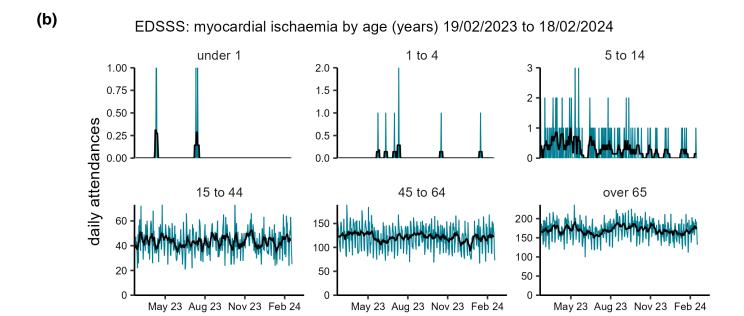


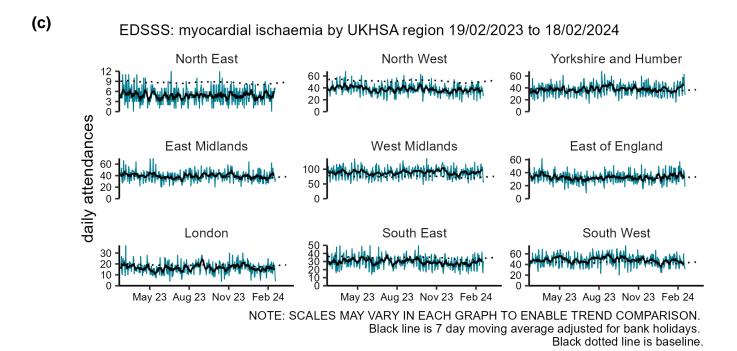


Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

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

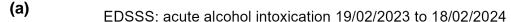


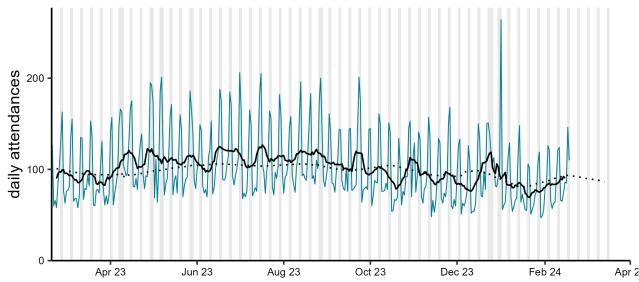


#### Other conditions

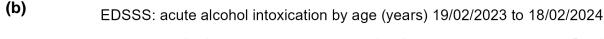
#### Acute alcohol intoxication

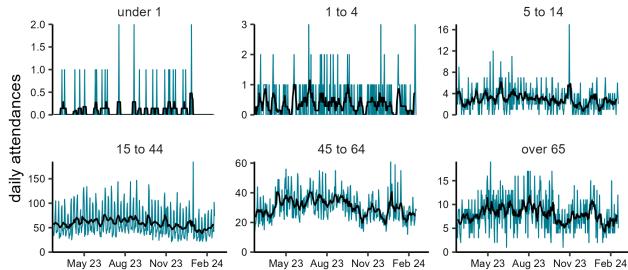
Figure 11: Daily number of acute alcohol intoxication ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.





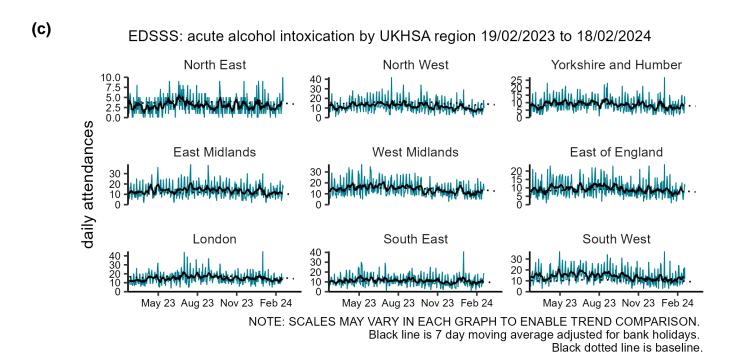
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.





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

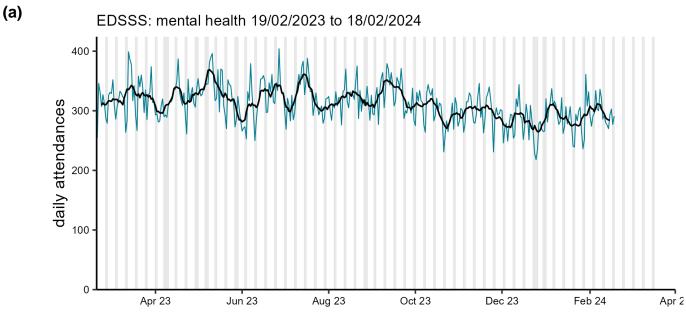
Black line is 7 day moving average adjusted for bank holidays.



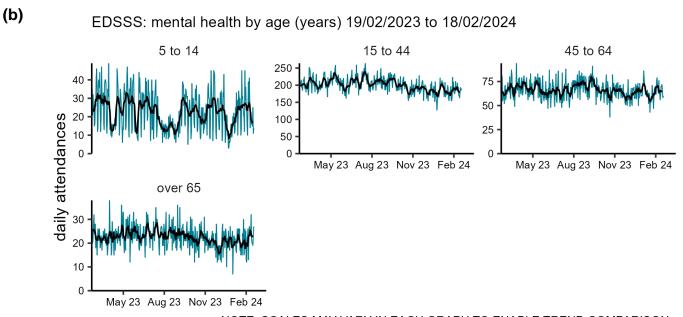
#### Mental health

# 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.

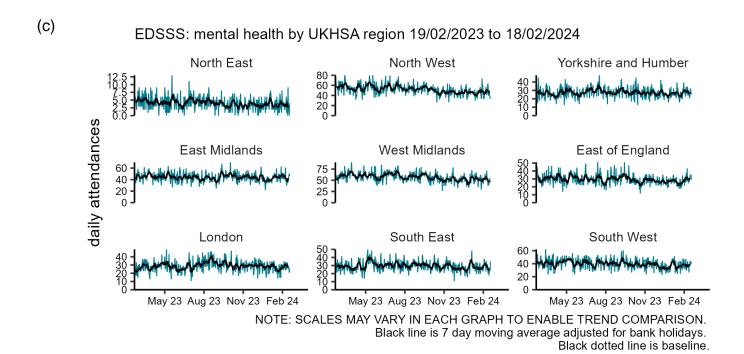


Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.



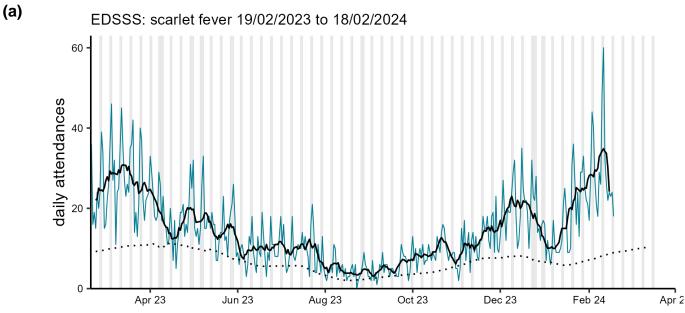
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.

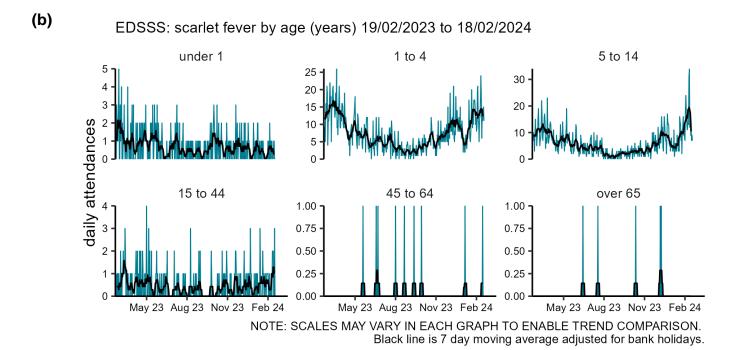
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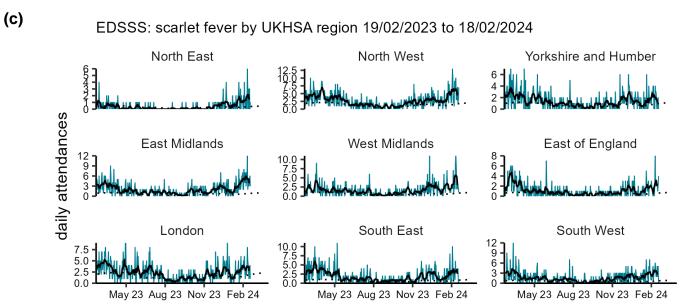


#### Scarlet fever

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.







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

### Seasonal environmental conditions

UKHSA and the Met Office operate a weather-health alert system that includes both heat and cold weather alert periods. Syndromic indicators are used to monitor the impact of both extreme hot and cold weather in England during these periods and will be included below (where an appropriate syndromic indicator is available).

Cold weather alert period: 1 November to 31 March

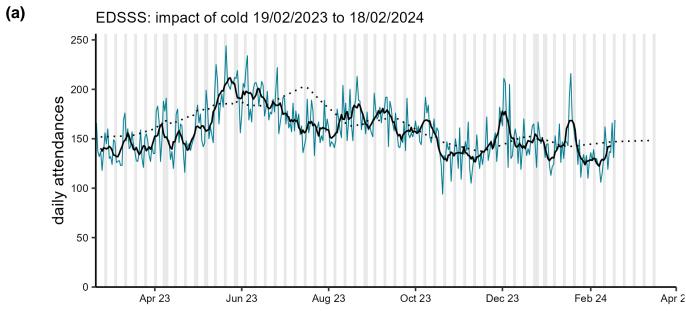
Heat-Health Alert period: 1 June to 30 September

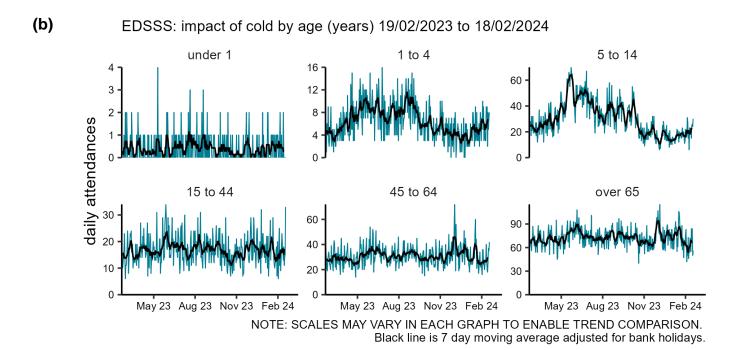
Highest weather alert level during the current reporting week:

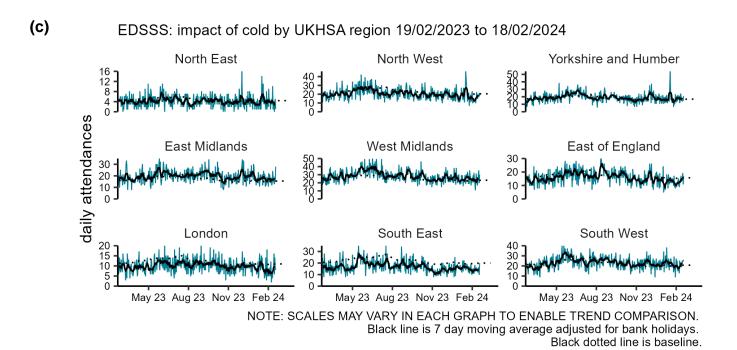
No alerts issued.

### 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.







#### **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:
  - were last remodelled January 2023
  - are constructed from historical data since April 2018
  - represent seasonally expected levels of activity
  - take account of any known substantial changes in data collection, population coverage or reporting practices:
    - the COVID-19 pandemic period is excluded, to show seasonally expected levels if COVID-19 had not occurred
  - may be remodelled to include the impacts seen during periods of the COVID-19 pandemic if/when appropriate due to introduction of large scale public health interventions which may affect ED attendance levels

# **Acknowledgements**

We are grateful to the clinicians in each ED and other staff within each Trust for their continued involvement in the EDSSS.

We thank the Royal College of Emergency Medicine, NHS Digital and NHS England for their support in the development of national EDSSS, using anonymised data collection from ECDS.

# About the UK Health Security Agency

UKHSA is responsible for protecting every member of every community from the impact of infectious diseases, chemical, biological, radiological and nuclear incidents and other health threats. We provide intellectual, scientific and operational leadership at national and local level, as well as on the global stage, to make the nation heath secure.

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

www.gov.uk/government/organisations/uk-health-security-agency

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Prepared by: Real-time Syndromic Surveillance Team

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