

# Emergency Department Syndromic Surveillance System Bulletin (England) 2023 Week 2

### Key messages

Data reported to: 15 January 2023

During week 2, ED attendances for acute respiratory infections and influenza-like illness continued to decrease across all age groups, remaining elevated but approaching seasonally expected levels. There was also a decrease observed in COVID-19-like attendances. ED attendances for scarlet fever were stable during week 2 but levels remain above those expected for the time of year.

### 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 ( <b>Figure 2</b> )	Decreasing	No baseline
Acute respiratory infections (Figure 3)	Decreasing	Above baseline
Acute bronchiolitis or bronchitis (Figure 4)	Decreasing	Below baseline
Influenza-like illness (Figure 5)	Decreasing	Above baseline
Pneumonia (Figure 6)	Decreasing	Similar to baseline
Asthma (Figure 7)	Decreasing	Below baseline
Gastroenteritis (Figure 8)	Decreasing	Above baseline
Cardiac (Figure 9)	Increasing	Below baseline
Myocardial ischaemia (Figure 10)	Increasing	Below baseline
Acute alcohol intoxication (Figure 11)	Increasing	Similar to baseline
Mental health (Figure 12)	Increasing	No baseline
Scarlet fever (Figure 13)	No trend	No 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 may be based on signs/symptoms and may not be 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 the **Notes and caveats** section.

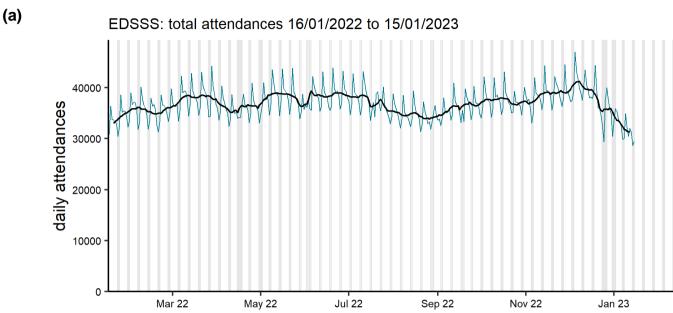
Previous weekly bulletins from this system are available <u>here</u>.

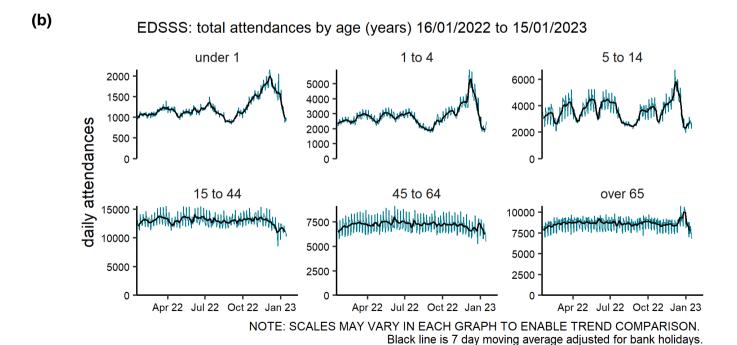
#### Data quality issues of note this week

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.





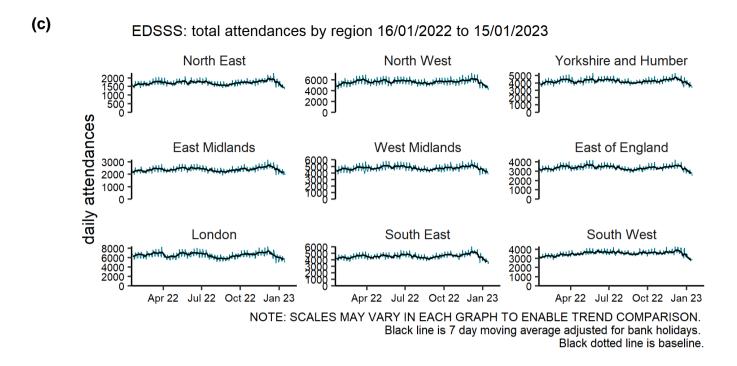


Table 2: The number of emergency department (ED) attendances and number with a diagnosis code included in surveillance each day during the most recent week.

Date	Total attendances <sup>2</sup>	Diagnoses included <sup>2</sup>
09 January 2023	34,876	22,464
10 January 2023	32,198	20,827
11 January 2023	30,409	20,629
12 January 2023	32,015	21,197
13 January 2023	31,240	20,601
14 January 2023	28,684	18,894
15 January 2023	29,425	19,637

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	26
Yorkshire and Humber	17
West Midlands	18
East Midlands	9
East of England	13
London	24
South West	18
South East	18
Total	149

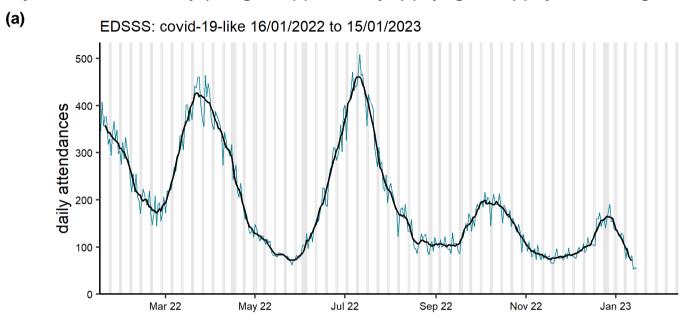
<sup>&</sup>lt;sup>2</sup> only attendances from Type 01 EDs meeting the weekly reporting criteria are included in this report, see Notes and caveats

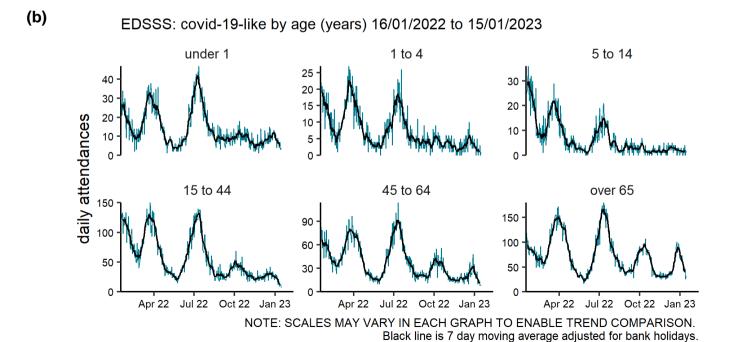
for further details

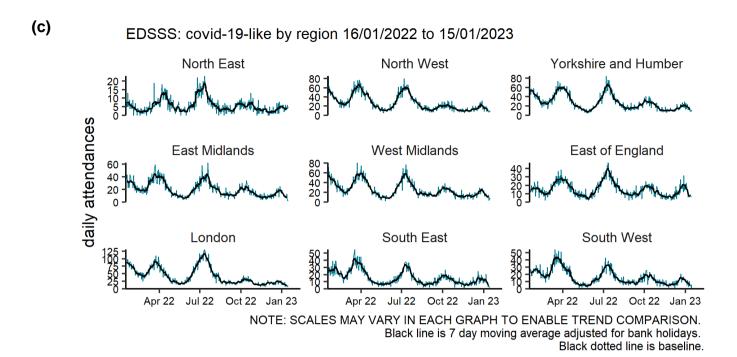
## **Respiratory conditions**

#### 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.

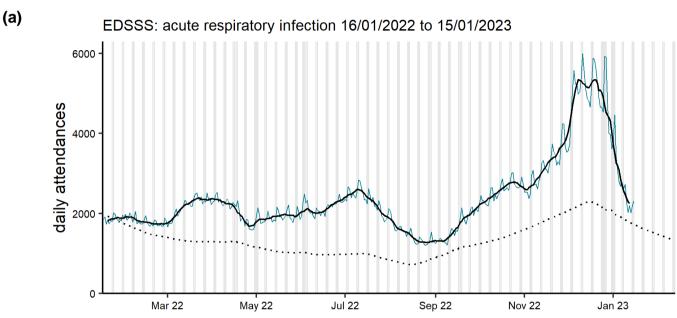


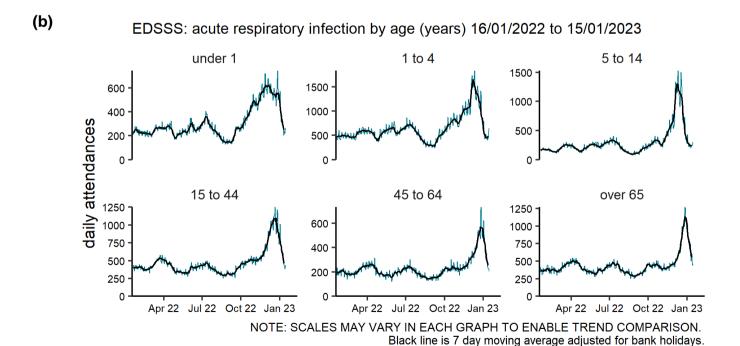


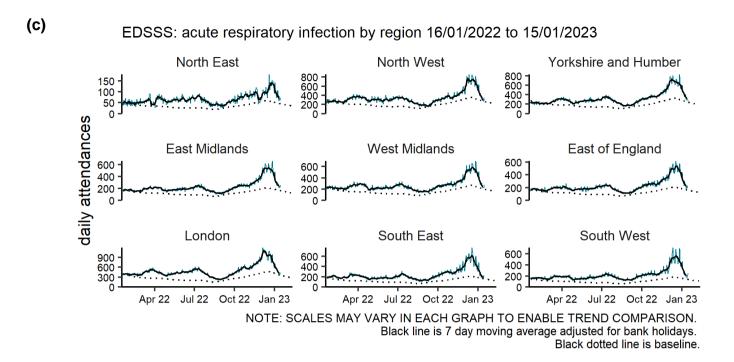


### Acute respiratory infections

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.







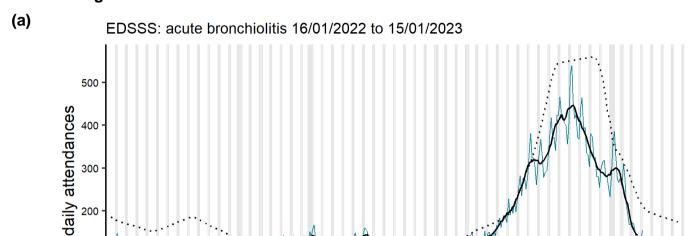
### Acute bronchiolitis/bronchitis

100

Mar 22

May 22

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.



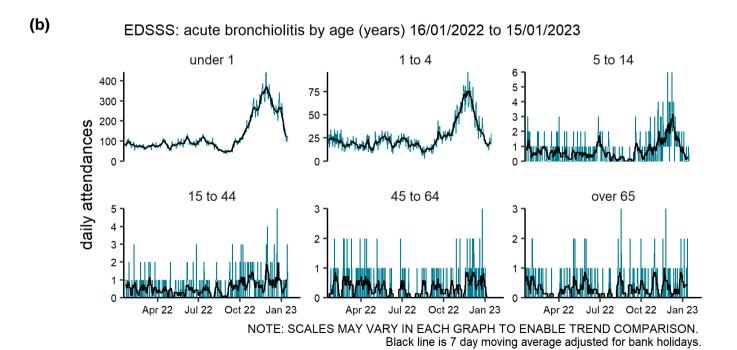
Jul 22

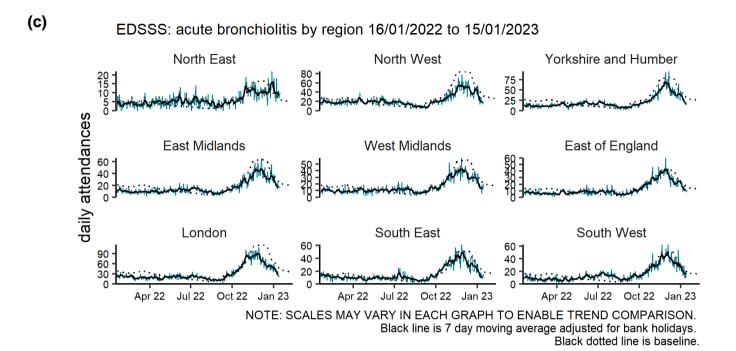
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

Sep 22

Nov 22

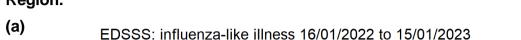
Jan 23

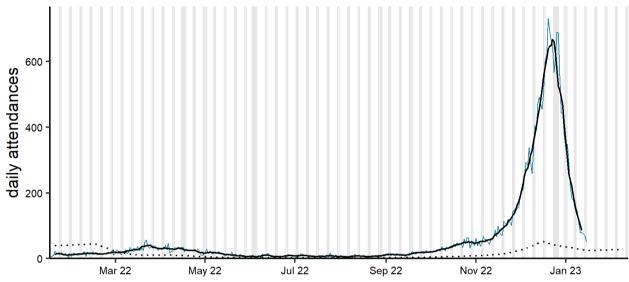




### Influenza-like illness

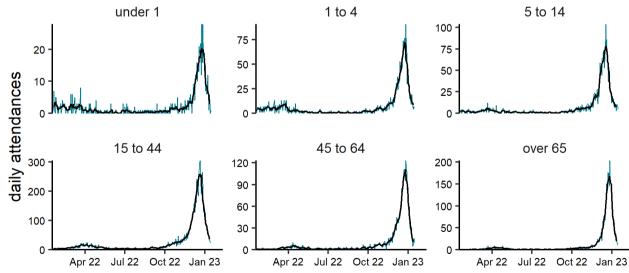
Figure 5: Daily number of influenza-like illness ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

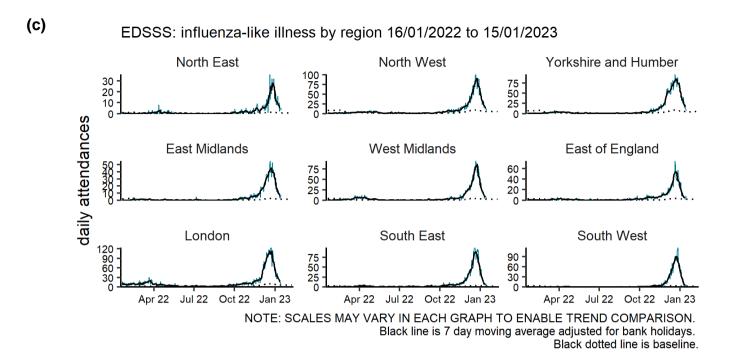




Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

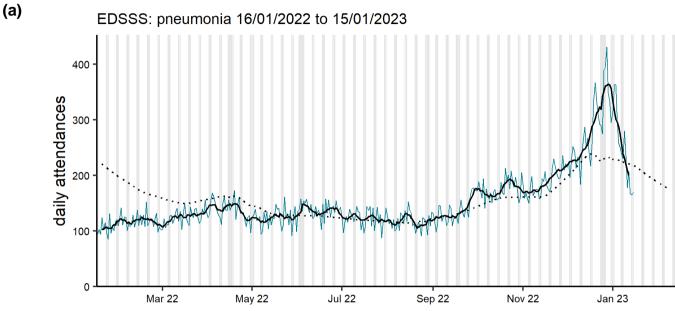


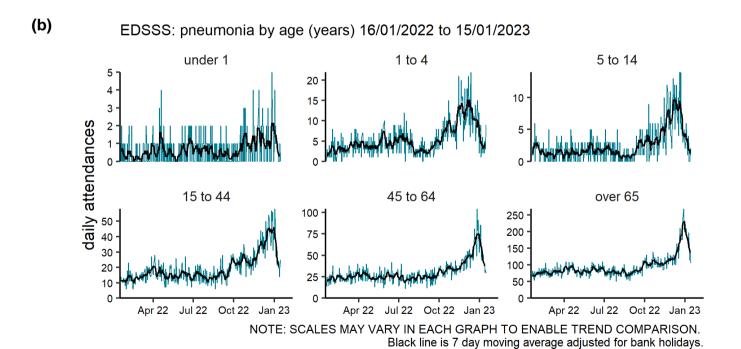


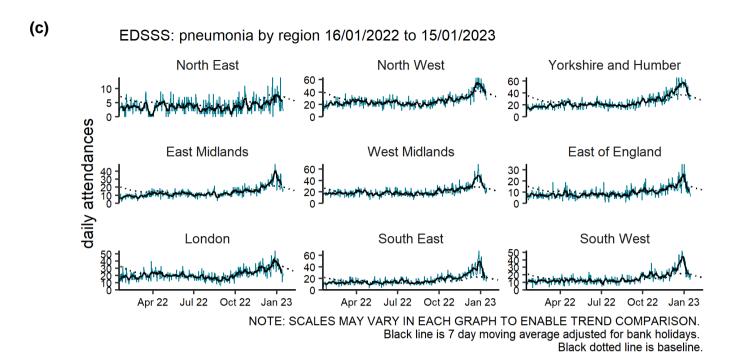


#### Pneumonia

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.

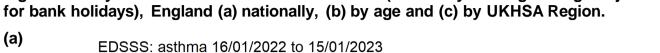


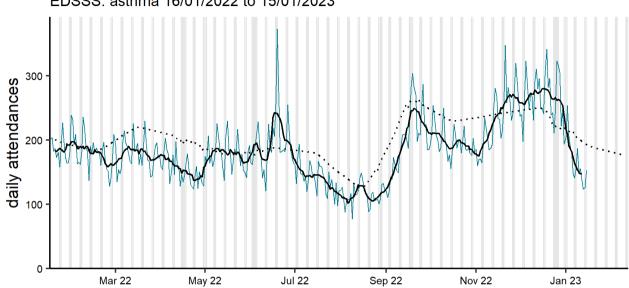


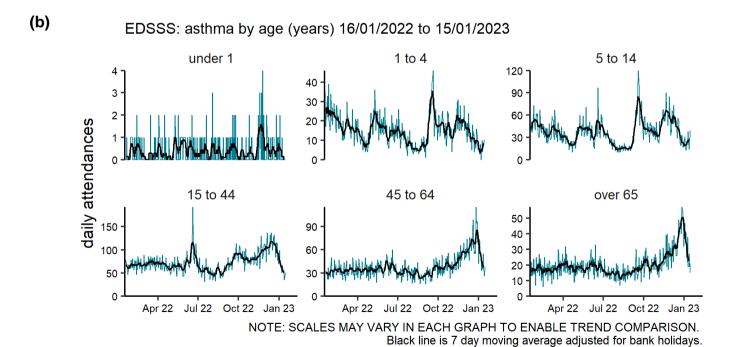


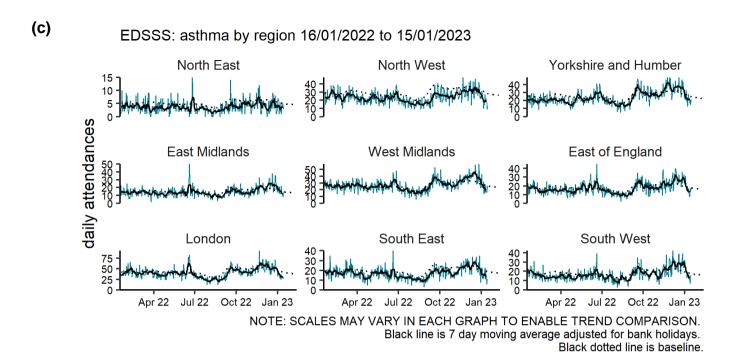
### **Asthma**

Figure 7: Daily number of asthma ED attendances (and 7-day moving average adjusted





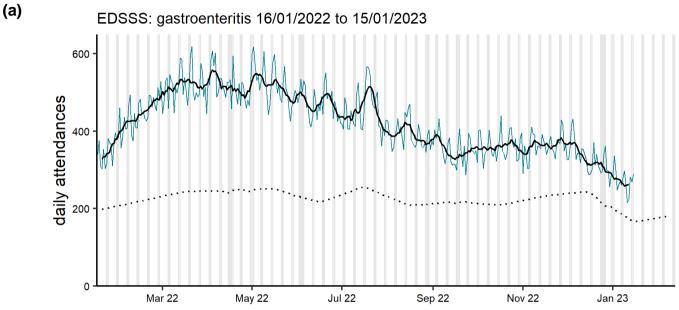


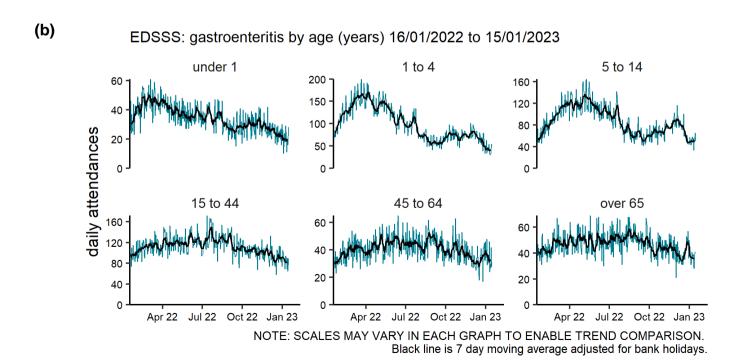


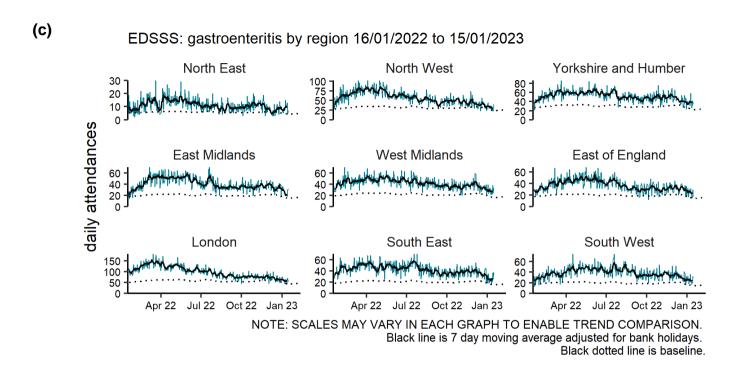
### **Gastrointestinal conditions**

#### 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.



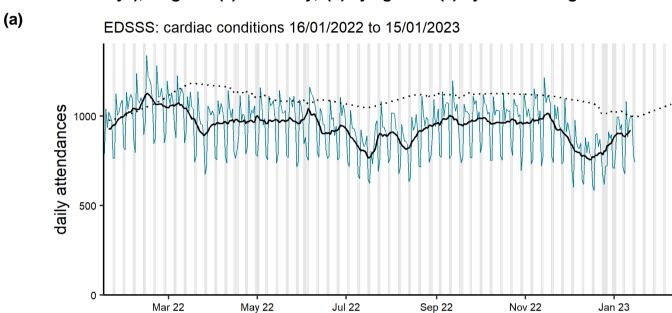


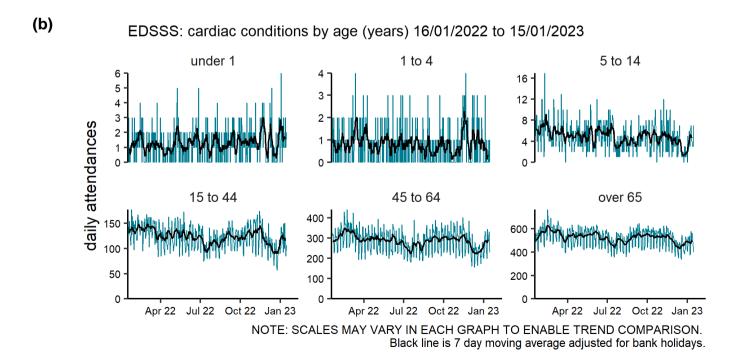


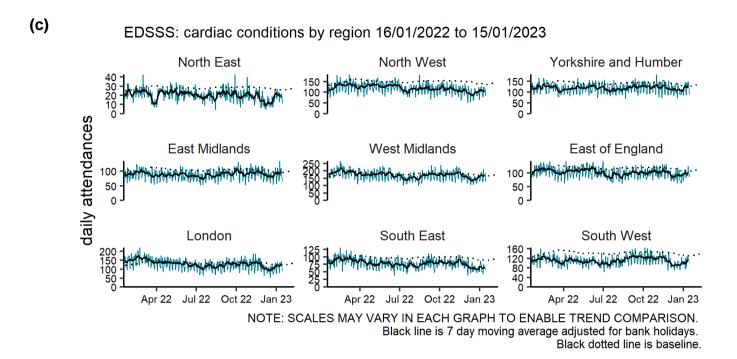
### **Cardiac conditions**

#### 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.

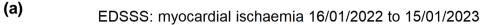


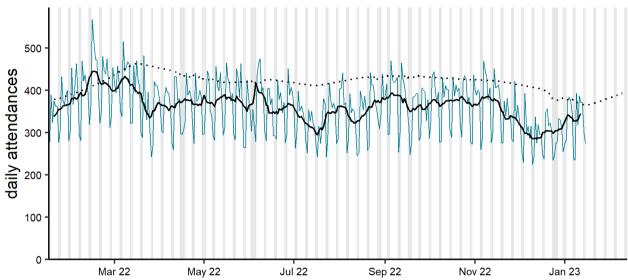




### Myocardial ischaemia

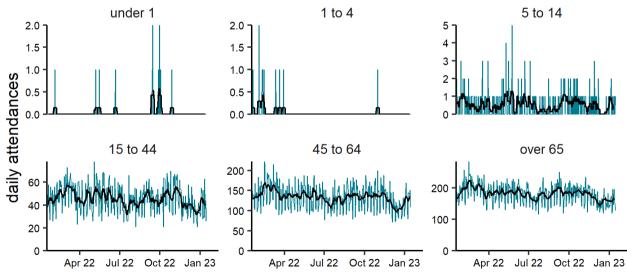
Figure 10: Daily number of myocardial ischaemia ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

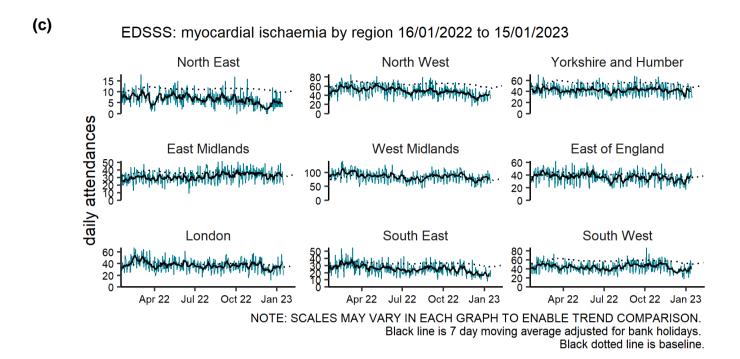




Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.



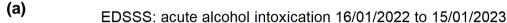


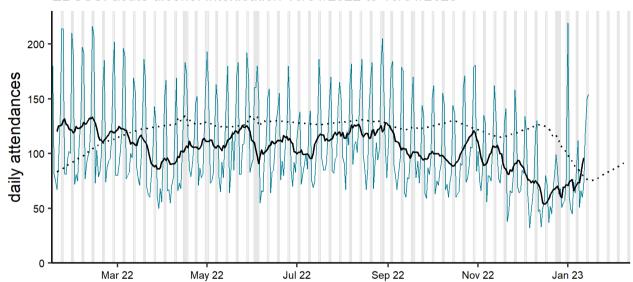


### Other conditions

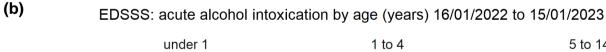
### Acute alcohol intoxication

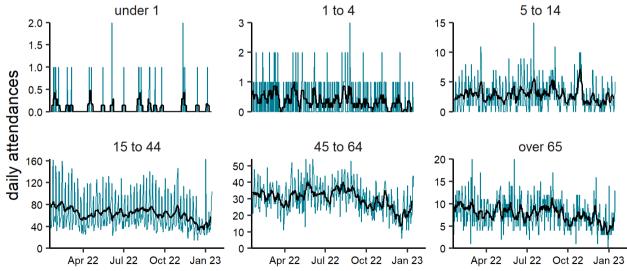
Figure 11: Daily number of acute alcohol intoxication ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

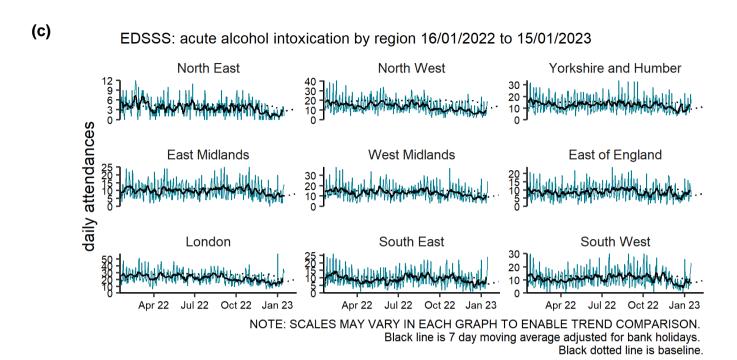




Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.



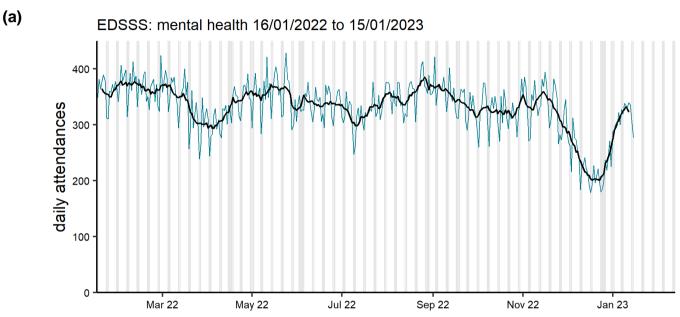




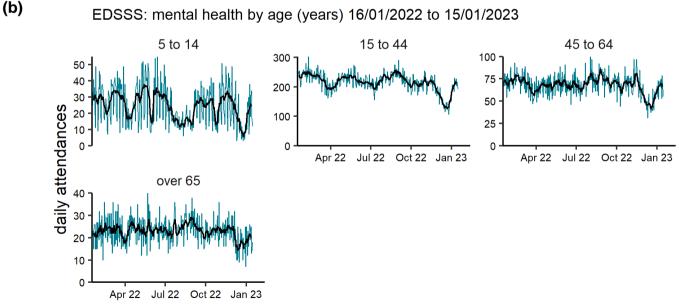
#### Mental health

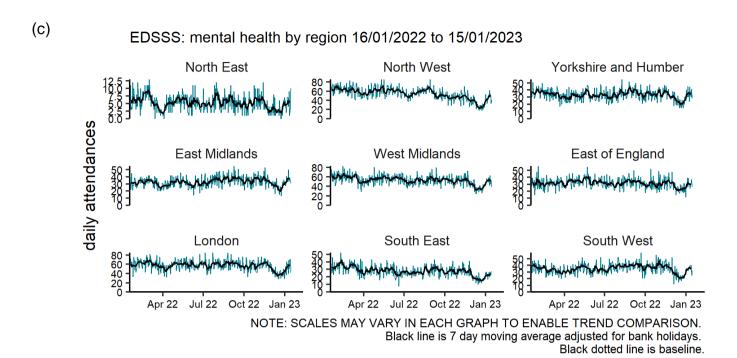
## Figure 12: Daily number of mental health<sup>3</sup> ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

<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.



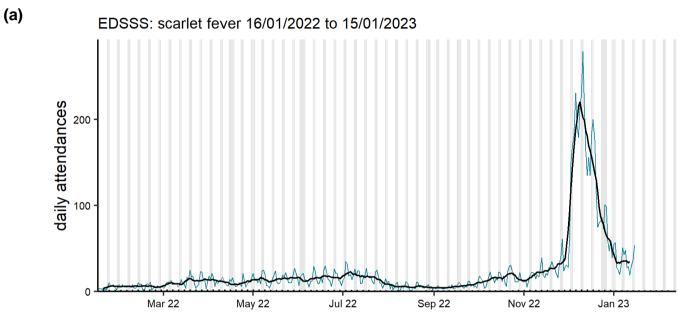
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and bank holidays.

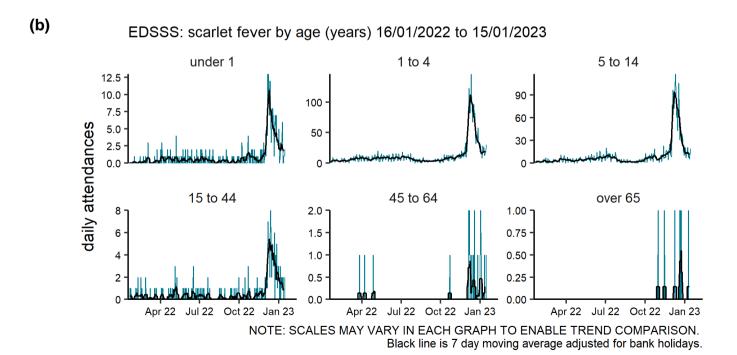


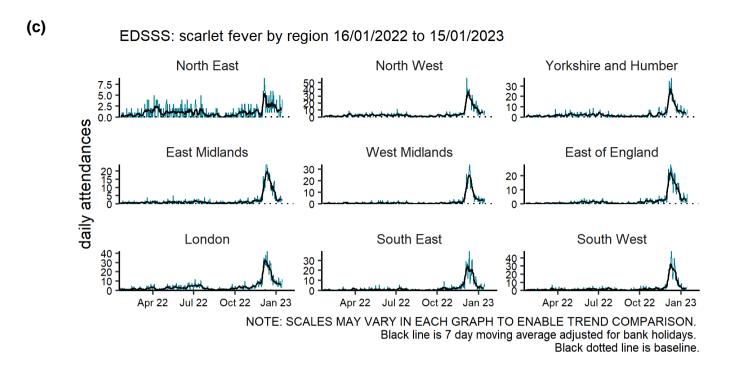


### Scarlet fever

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

During set periods of the year the Met Office operates both heat and cold weather watch systems, in association with UKHSA. 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 15 September

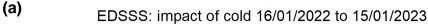
Highest weather alert level during the current reporting week:

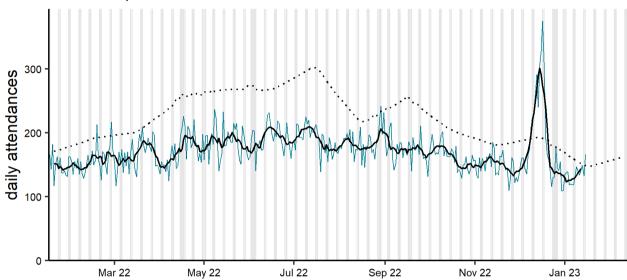
Level 2 - Alert and readiness

### Impact of cold

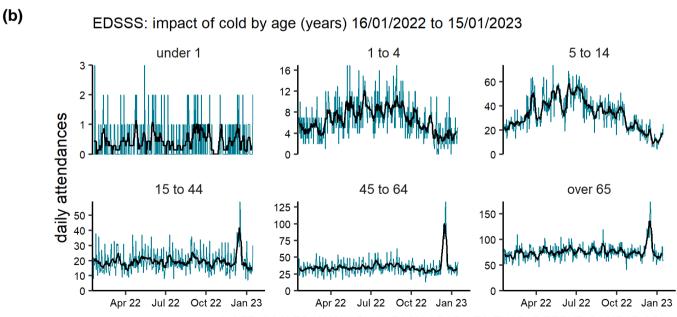
Figure 14: Daily number of impact of cold<sup>4</sup> ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

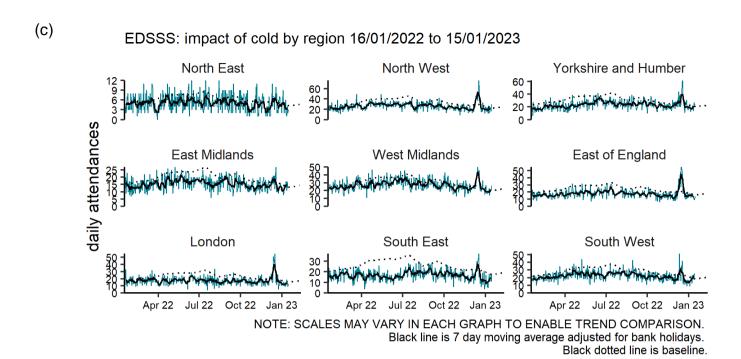
<sup>&</sup>lt;sup>4</sup> impact of cold attendances reported here are restricted to female attendances, with a primary diagnosis of fracture of the femur/wrist/forearm plus cold specific diagnoses of hypothermia, or cold injuries.





Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Grey columns show weekends and 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 April 2021
  - 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.

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

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