

# Emergency Department Syndromic Surveillance System Bulletin (England) 2022 Week 19

# Key messages

#### Data reported to: 15 May 2022

During week 19, COVID-19-like ED attendances continued to decrease across all age groups and regions. Whilst overall attendances remained stable, there were further increases in acute respiratory infection attendances in children aged 5-14 years. Attendances for gastroenteritis remain at elevated levels in children aged 5-14 years.

## 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)	Increasing	No baseline
COVID-19-like (Figure 2)	Decreasing	No baseline
Acute respiratory infections (Figure 3)	No trend	Above baseline
Acute bronchiolitis or bronchitis (Figure 4)	Decreasing	Similar to baseline
Influenza-like illness (Figure 5)	Decreasing	Above baseline
Pneumonia (Figure 6)	No trend	Below baseline
Asthma (Figure 7)	No trend	Similar to baseline
Gastroenteritis (Figure 8)	No trend	Above baseline
Cardiac (Figure 9)	No trend	Below baseline
Myocardial ischaemia (Figure 10)	No trend	Below baseline
Acute alcohol intoxication (Figure 11)	No trend	Below baseline
Mental health (Figure 12)	No trend	No baseline

<sup>1</sup> 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
Seasonal environmental conditions	. 29
No weather watch in place	. 29
Notes and caveats	. 30
Acknowledgements	. 31
About the UK Health Security Agency	. 32

## 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:
  - the primary diagnosis for each attendance
  - $\circ$  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 here.

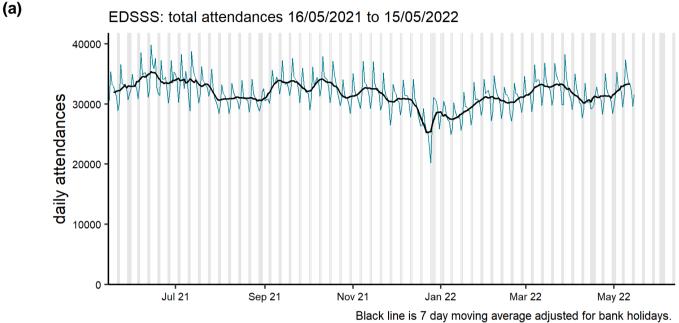
#### Data quality issues of note this week

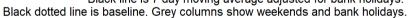
No issues identified.

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

## **Total attendances**

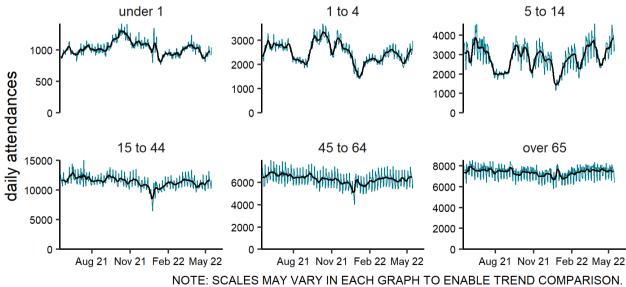
Figure 1: Daily number of ED attendances (and 7-day moving average adjusted for bank holidays) recorded in this sentinel syndromic surveillance system in England (a) nationally, (b) by age and (c) by UKHSA Region.



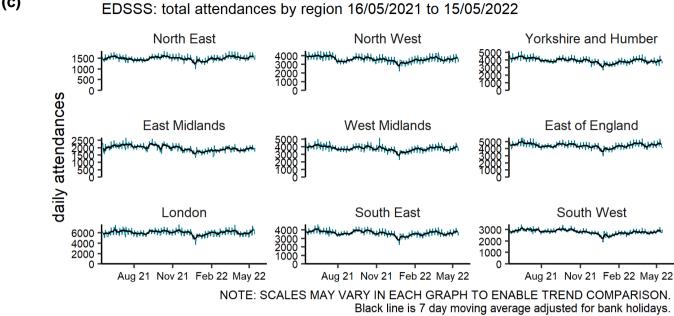




#### EDSSS: total attendances by age (years) 16/05/2021 to 15/05/2022



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



Black dotted line is baseline.

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

Date	Total attendances <sup>2</sup>	Diagnoses included <sup>2</sup>
09 May 2022	37,358	23,229
10 May 2022	35,162	21,434
11 May 2022	33,563	20,735
12 May 2022	33,390	20,541
13 May 2022	32,266	19,611
14 May 2022	29,622	17,987
15 May 2022	31,558	18,961

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

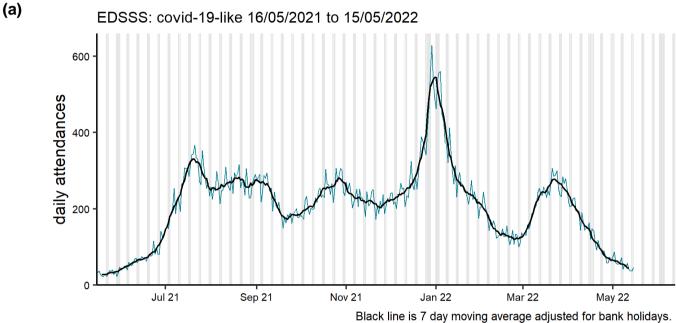
UKHSA Region	Number of EDs <sup>2</sup>
North East	7
North West	16
Yorkshire and Humber	16
West Midlands	14
East Midlands	8
East of England	16
London	22
South West	13
South East	13
Total	125

<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

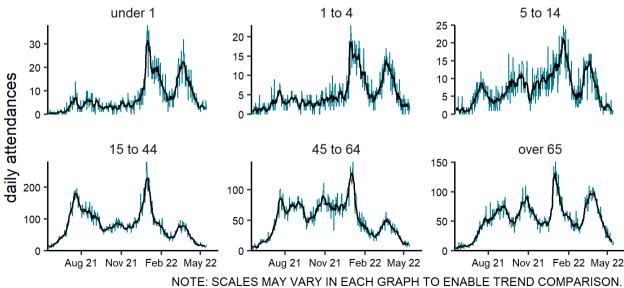
Figure 2: Daily number of COVID-19-like ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



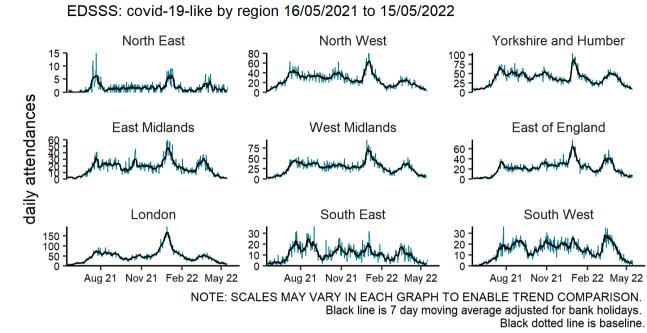
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

EDSSS: covid-19-like by age (years) 16/05/2021 to 15/05/2022

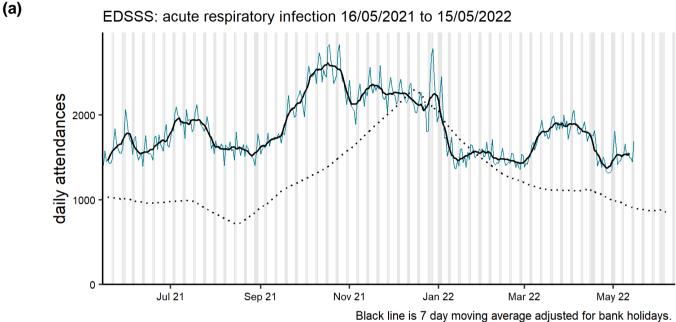


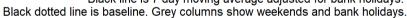
Black line is 7 day moving average adjusted for bank holidays.



### Acute respiratory infections

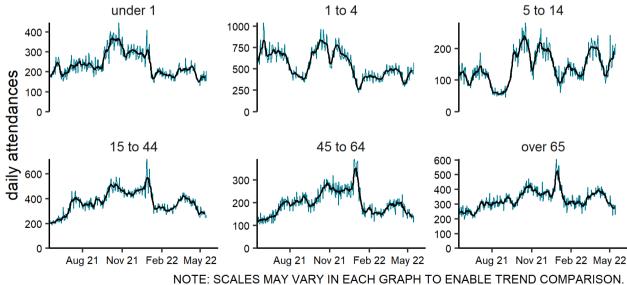
Figure 3: Daily number of acute respiratory infection ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



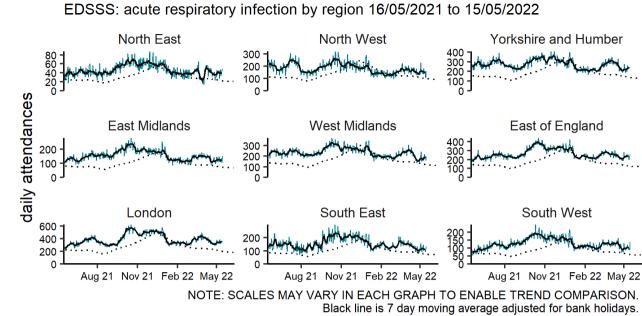




EDSSS: acute respiratory infection by age (years) 16/05/2021 to 15/05/2022



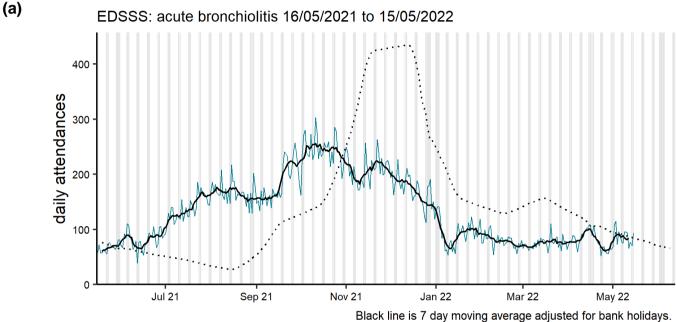
Black line is 7 day moving average adjusted for bank holidays.

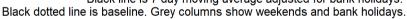


Black dotted line is baseline.

## Acute bronchiolitis/ bronchitis

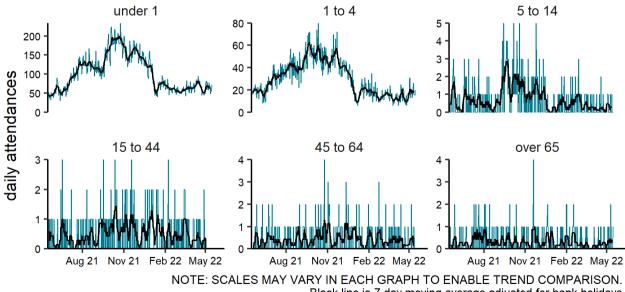
Figure 4: Daily number of acute bronchiolitis/bronchitis ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.

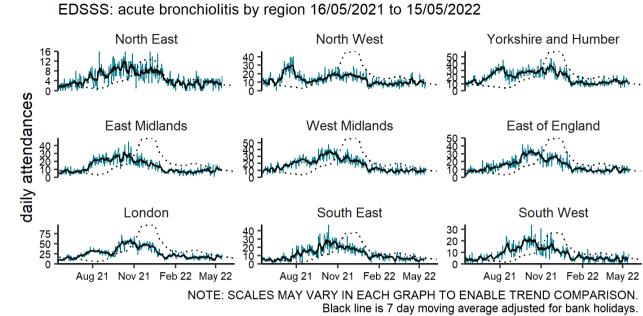




(b)

EDSSS: acute bronchiolitis by age (years) 16/05/2021 to 15/05/2022

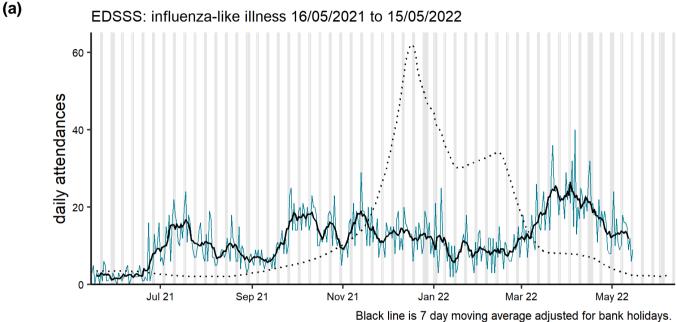


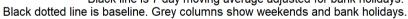


Black dotted line is baseline.

### Influenza-like illness

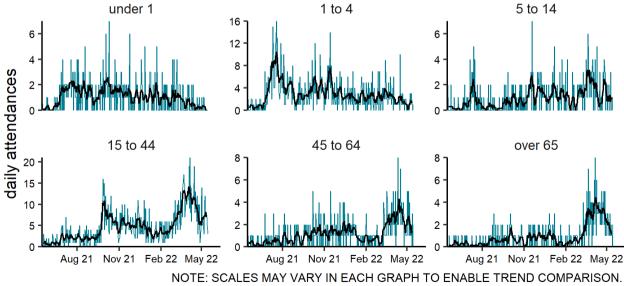
Figure 5: Daily number of influenza-like illness ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



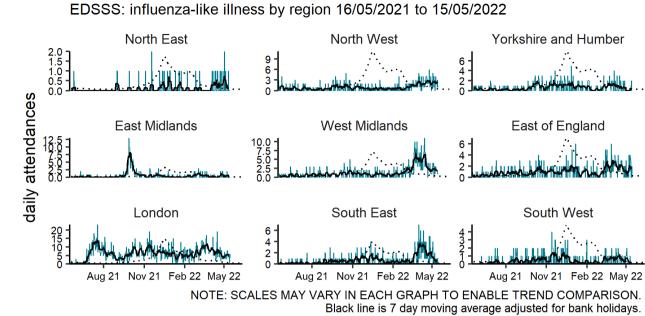


(b)

EDSSS: influenza-like illness by age (years) 16/05/2021 to 15/05/2022



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

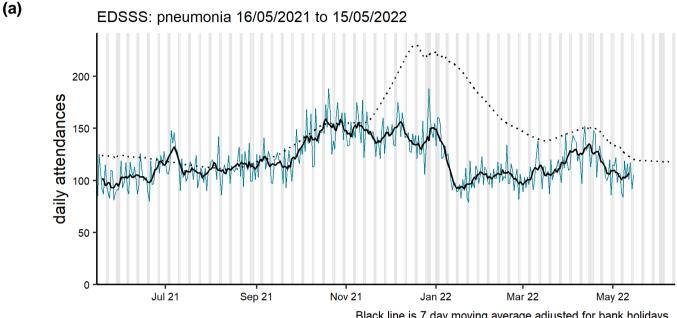


Black dotted line is baseline.

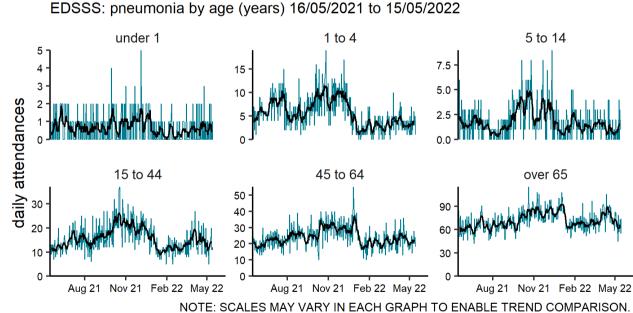
#### Pneumonia

(b)

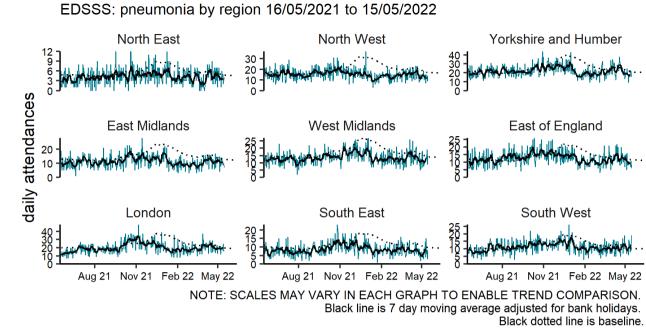
Figure 6: Daily number of pneumonia ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



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



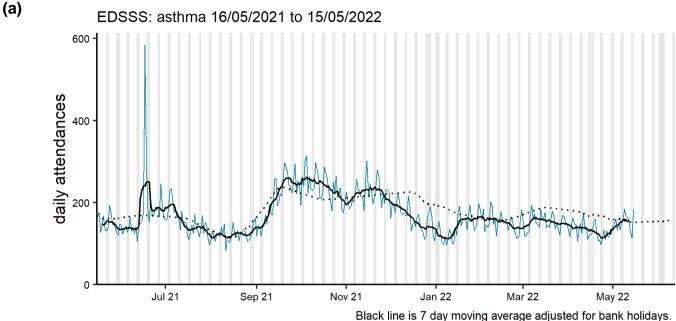
Black line is 7 day moving average adjusted for bank holidays.



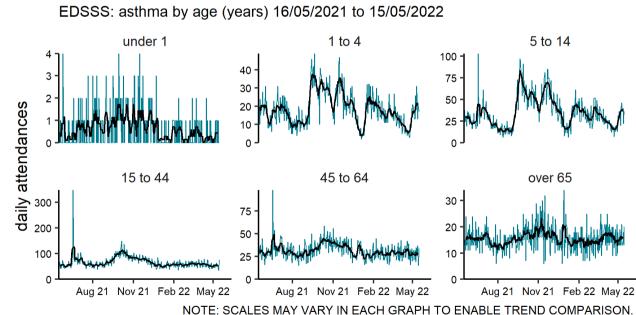
### Asthma

(b)

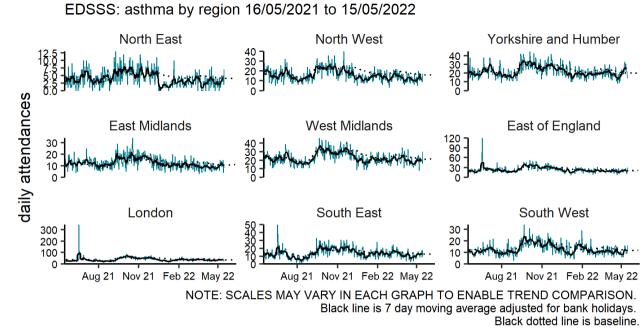
Figure 7: Daily number of asthma ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



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



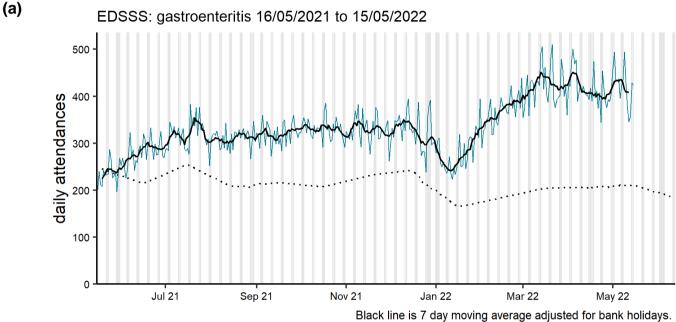
Black line is 7 day moving average adjusted for bank holidays.



# **Gastrointestinal conditions**

#### Gastroenteritis

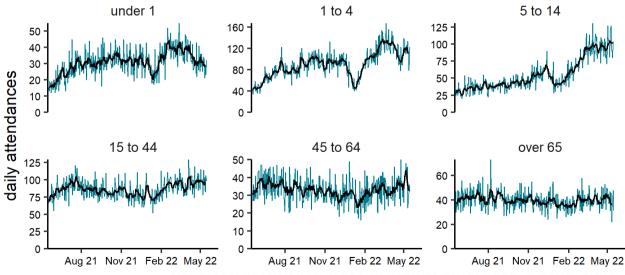
Figure 8: Daily number of gastroenteritis ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



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

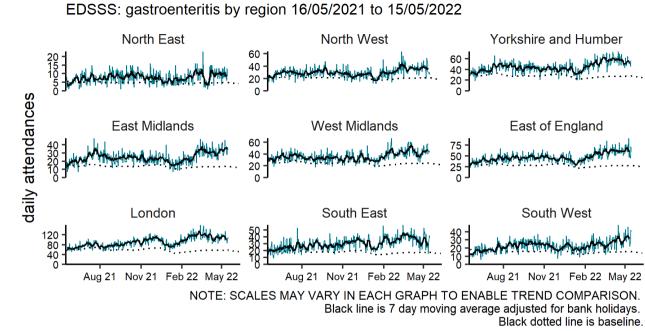
(b)

EDSSS: gastroenteritis by age (years) 16/05/2021 to 15/05/2022



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

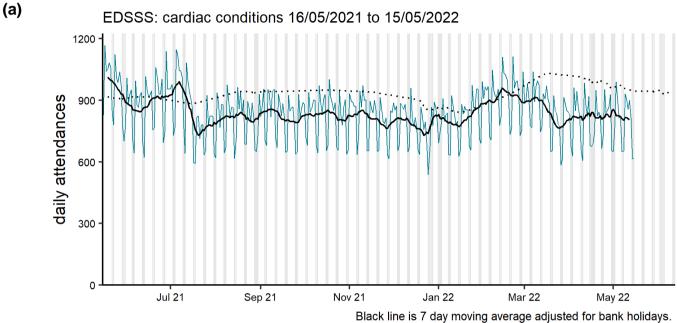
Black line is 7 day moving average adjusted for bank holidays.



# **Cardiac conditions**

## Cardiac

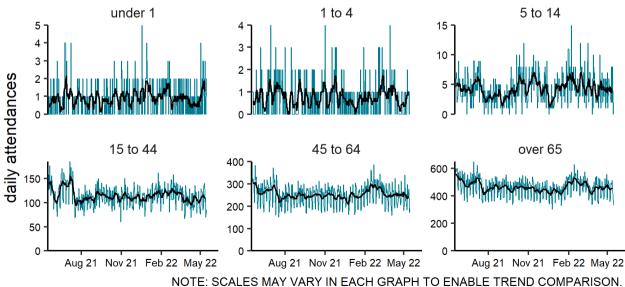
Figure 9: Daily number of cardiac ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.



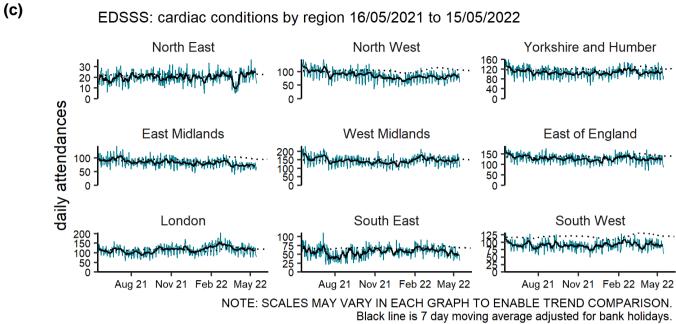
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

EDSSS: cardiac conditions by age (years) 16/05/2021 to 15/05/2022



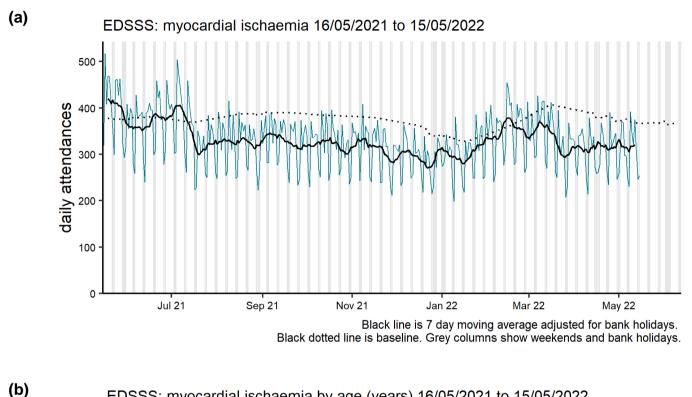
Black line is 7 day moving average adjusted for bank holidays.

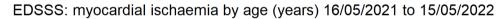


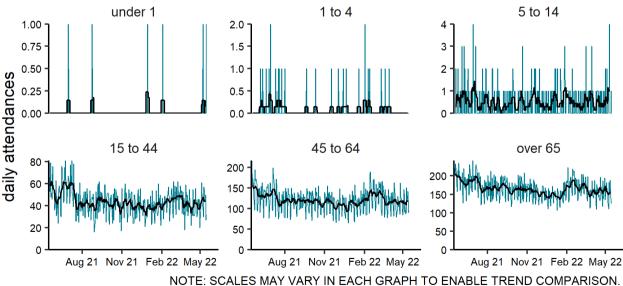
Black dotted line is baseline.

## Myocardial ischaemia

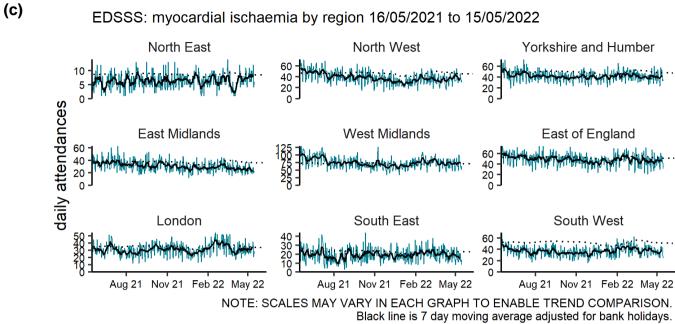
Figure 10: Daily number of myocardial ischaemia ED attendances (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by age and (c) by UKHSA Region.







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



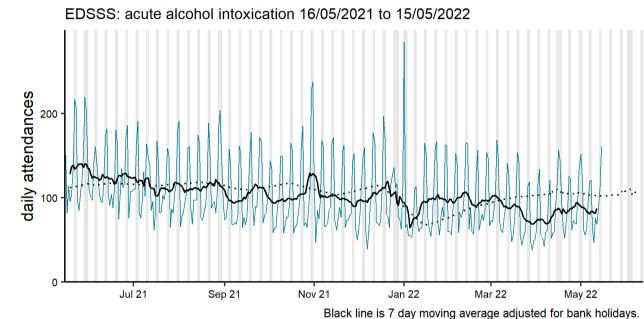
24

Black dotted line is baseline.

# **Other conditions**

### Acute alcohol intoxication

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

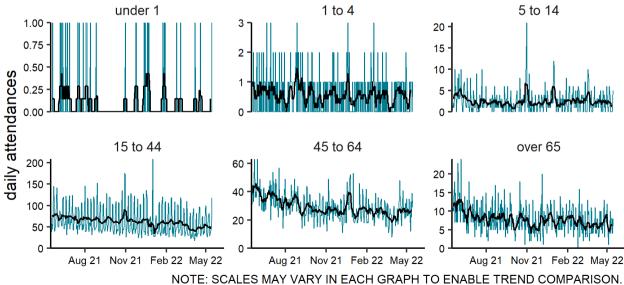


Black dotted line is baseline. Grey columns show weekends and bank holidays.

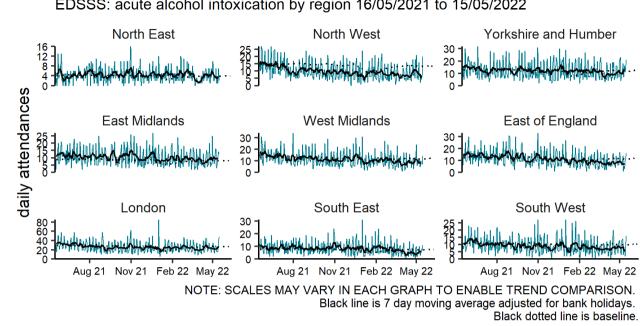
(b)

(a)

EDSSS: acute alcohol intoxication by age (years) 16/05/2021 to 15/05/2022



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

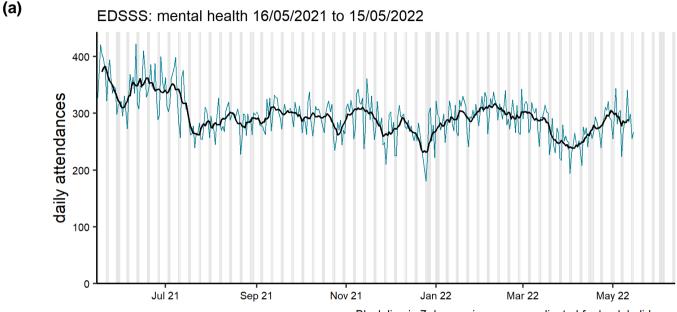


EDSSS: acute alcohol intoxication by region 16/05/2021 to 15/05/2022

## 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.

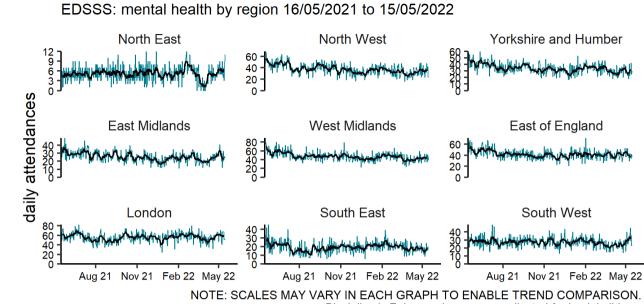
<sup>3</sup> mental health attendances reported here are those with a primary diagnosis in the ECDS mental health diagnosis grouping. Attendances where the primary diagnosis relates to overdose, alcohol use or self harm are not included.



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

(b) EDSSS: mental health by age (years) 16/05/2021 to 15/05/2022 5 to 14 15 to 44 45 to 64 60 100 50 75 200 40 30 50 daily attendances 100 20 25 10 0 0 0 Aug 21 Nov 21 Feb 22 May 22 Aug 21 Nov 21 Feb 22 May 22 over 65 30 20 10 0 Aug 21 Nov 21 Feb 22 May 22

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



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**

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 0 – Long-term planning

#### No weather watch in place

## **Notes and caveats**

The following additional caveats apply to the UKHSA emergency department syndromic surveillance system:

- the data presented are based on a national syndromic surveillance system:
  - $\circ$  should be used to monitor trends not to estimate numbers of 'cases'
  - an automated daily transfer of anonymised ED data is received from NHS Digital, from the <u>Emergency Care Data Set</u> (ECDS)
  - not all EDs currently provide data on a daily basis, EDs are eligible for inclusion in this report only where:
    - data relates to attendances at a type 01 ED
    - data for 7 of the 7 most recent days was received
    - data for those days was received within 2 calendar days of the patient arrival
  - when an ED meets these criteria, all historical data from that ED is included
  - EDs included each week is likely to change, which will affect the historical data inclusion
  - o national coverage each week is included in Table 2,
  - $\circ~$  the number of EDs in each region area is described in Table 3
- individual EDs will not be identified in these bulletins
- some syndromic indicators are hierarchical:
  - o acute respiratory infections includes:
    - COVID-19-like
    - acute bronchitis or bronchiolitis
- influenza-like illness
- 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
  - o represent seasonally expected levels of activity
  - take account of any known substantial changes in data collection, population coverage or reporting practices:
    - the COVID-19 pandemic period is excluded, to show seasonally expected levels if COVID-19 had not occurred
  - may be remodelled to include the impacts seen during periods of the COVID-19 pandemic if/when appropriate due to introduction of large scale public health interventions which may affect ED attendance levels

# Acknowledgements

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

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

# About the UK Health Security Agency

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

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

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

© Crown copyright 2022 Version: ED-2

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

Published: May 2022



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



UKHSA supports the UN Sustainable Development Goals

