

# **Emergency Department**

Syndromic Surveillance System: England

Data to: 20 September 2020

22 September 2020

Year: 2020 Week: 38

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## Key messages

Emergency department COVID-19-like attendances decreased during week 38 (figure 3). There were also decreases in other respiratory indicators including acute respiratory infection (ARI) and asthma; decreases were observed particularly in children aged 1-4 and 5-14 years (figures 5, 5a, 9 & 9a). However, attendances for bronchitis/bronchiolitis continue to increase in children aged under 5 years, in line with seasonally expected levels (figure 6 & 6a).

Please note that the level of diagnosis coding included in the data received has increased from around 70% of attendances prior to April 2020, to around 75% since. This may cause overall attendances of individual indicators to have increased above baseline levels.

Please see '<u>notes and caveats</u>' for information about the ED syndromic indicators including important caveats around the interpretation.

A Heat-Health Watch system operates in England from 1 June to 15 September each year. As part of the Heatwave Plan for England, the PHE Real-time Syndromic Surveillance team will be routinely monitoring the public health impact of hot weather using syndromic surveillance data during this period. http://www.metoffice.gov.uk/weather/uk/heathealth/

Heat-health watch level (current reporting week): Level 1/2: Summer preparedness/Alert & Readiness

### Diagnostic indicators at a glance:

Further details on the syndromic indicators reported can be found on page 11.

Indicator	Current trend	Level
COVID-19-like	decreasing	-
Respiratory	decreasing	above baseline
Acute Respiratory Infection	decreasing	above baseline
Bronchiolitis	increasing	similar to baseline
Influenza-like Illness	no trend	similar to baseline
Pneumonia	no trend	similar to baseline
Asthma	decreasing	above baseline
Gastrointestinal	no trend	above baseline
Gastroenteritis	no trend	below baseline
Cardiac	no trend	above baseline
Myocardial Ischaemia	decreasing	above baseline
Alcohol intoxication	no trend	similar to baseline
Heat/Sun stroke	no trend	-

# EDSSS weekly report statistics

Only Type 1 EDs meeting the weekly reporting criteria are included (see page 6 for details).

\*max EDs included across full time period reported in charts, individual days may include fewer EDs.

Date	Total	Diagnoses Coded		Type 1 EDs
Date	Attendances	Number	%	Included
14/09/2020	17,771	12,539	70.6%	70
15/09/2020	16,455	11,728	71.3%	70
16/09/2020	16,087	11,427	71.0%	70
17/09/2020	15,302	11,164	73.0%	70
18/09/2020	15,211	10,786	70.9%	70
19/09/2020	14,242	10,202	71.6%	70
20/09/2020	14,804	10,651	71.9%	70
Total	109,872	78,497	71.4%	(max)* 70

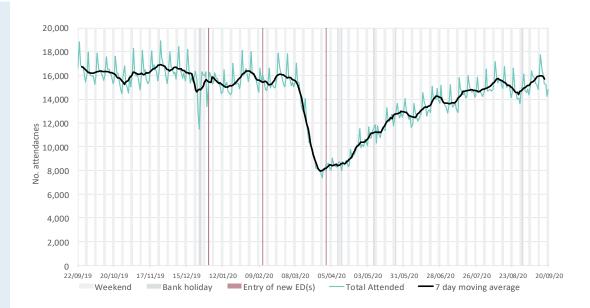


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#### 1: Total attendances.

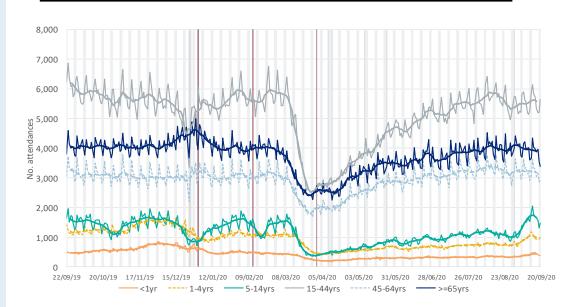
Daily number of total attendances recorded, across the EDSSS network.

The entry of new ED(s) is marked by a vertical **red** line (see page 6 for inclusion criteria).



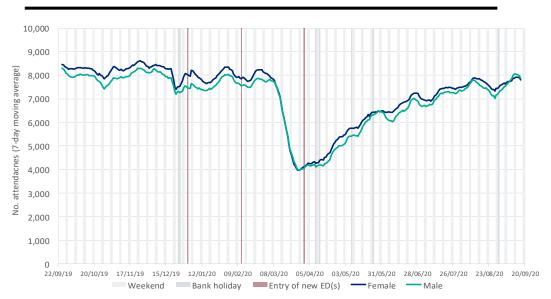
# 2a: Daily attendances by age: numbers.

Daily number of total attendances, by age group, recorded across the EDSSS network.



# 2b: Daily attendances by gender: numbers

Daily number of total attendances by gender, recorded across the EDSSS network (shown as a 7-day moving average). Please note: indeterminate gender is not shown due to small numbers

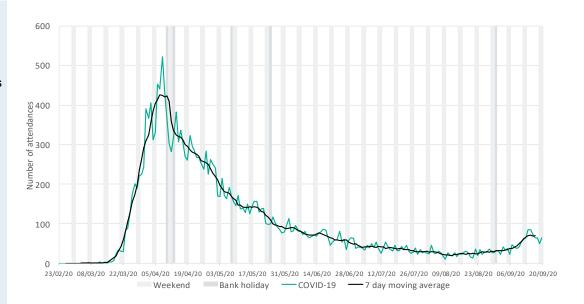




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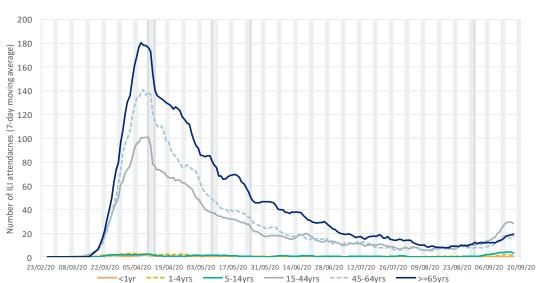
#### 3: COVID-19-like.

Daily number of attendances recorded as COVID-19-like attendances across the EDSSS network.



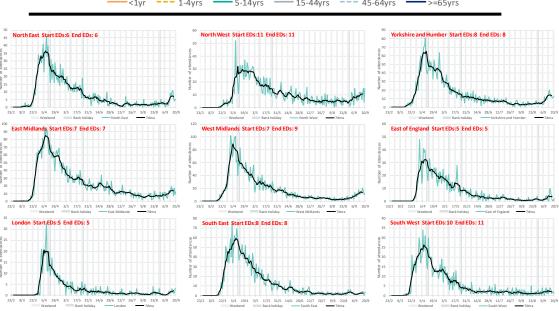
# 3a: COVID-19-like by age group.

7 day moving average of COVID-19-like attendances within each age group.



# 3b: COVID-19-like by PHE Centre

Daily attendances and 7 day moving average of COVID-19-like attendances within each PHE Centre (with the number of EDs included at the start and end of each time series). Please see 'notes and caveats' for information on how EDs are selected for inclusion each week.

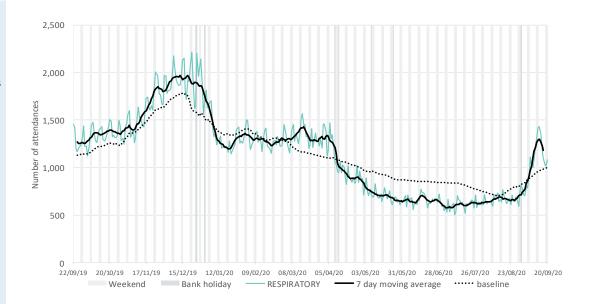




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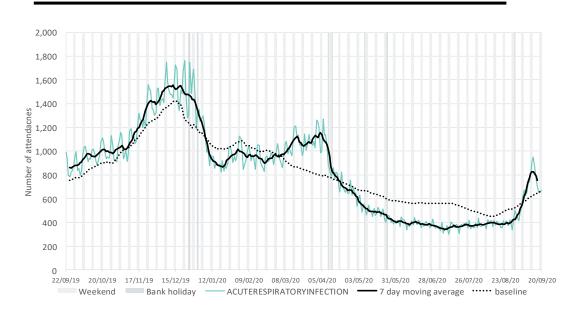
#### 4: Respiratory.

Daily number of attendances recorded as respiratory attendances across the EDSSS network.



# 5: Acute Respiratory Infection.

Daily number of all attendances recorded as acute respiratory infection attendances across the EDSSS network.



5a: Acute Respiratory Infection by age group.

7 day moving average of ARI attendances within each age group.

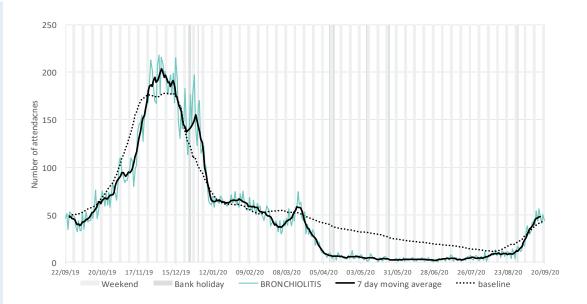




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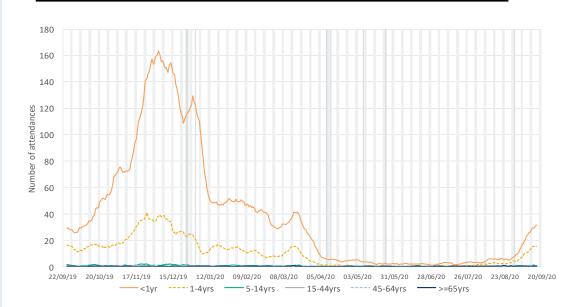
# 6: Bronchiolitis/bronchitis.

Daily number of attendances recorded as bronchiolitis/ acute bronchitis attendances across the EDSSS network.



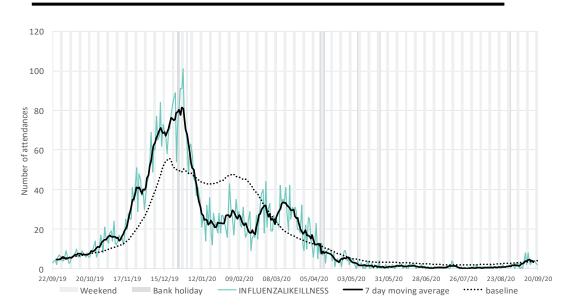
#### 6a: Bronchiolitis/ bronchitis by age group

7 day moving average of bronchiolitis/ bronchitis attendances within each age group.



## 7: Influenza-like Illness.

Daily number of attendances recorded as influenza-like illness attendances across the EDSSS network.

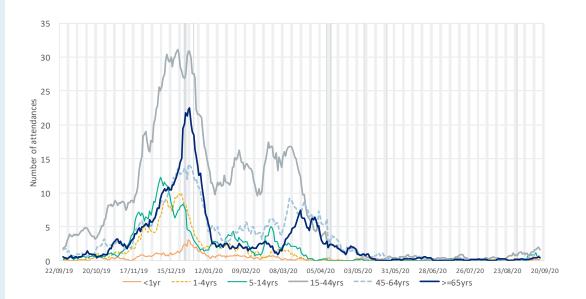




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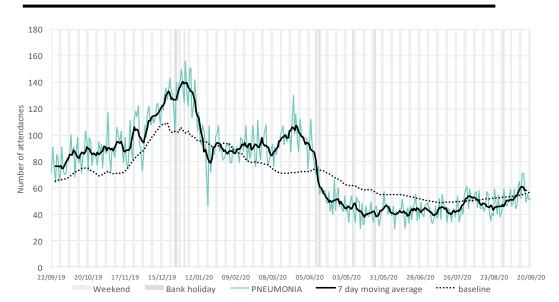
# 7a: Influenza-like illness by age group

7 day moving average of ILI attendances within each age group.



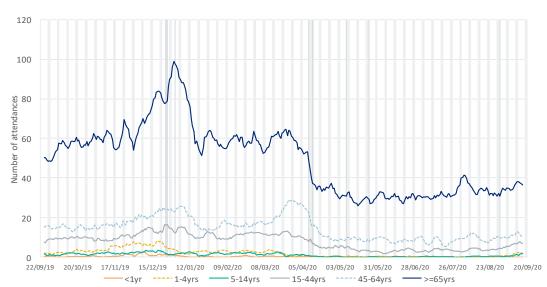
#### 8: Pneumonia.

Daily number of attendances recorded as pneumonia attendances across the EDSSS network.



# 8a: Pneumonia by age group.

7 day moving average of pneumonia attendances within each age group.

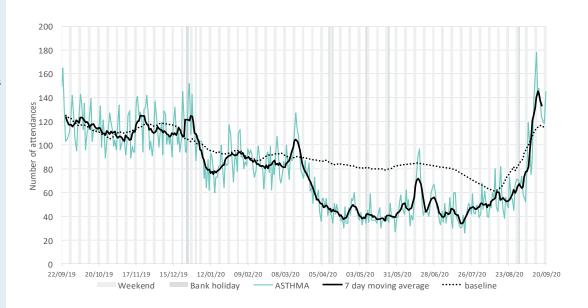




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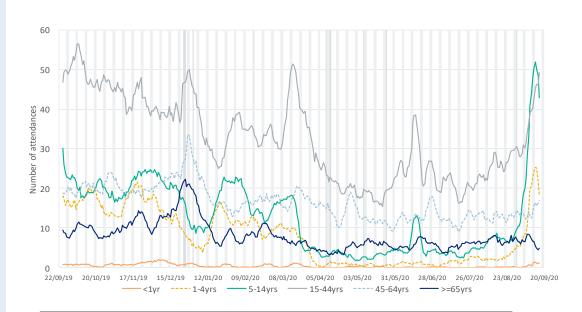
#### 9: Asthma.

Daily number of attendances recorded as asthma/wheeze/ difficulty breathing attendances across the EDSSS network.



# 9a: Asthma by age group.

7 day moving average of asthma attendances within each age group.



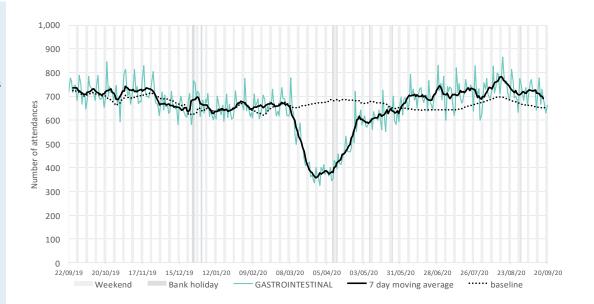
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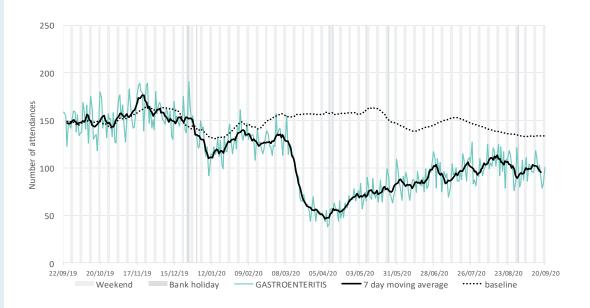
#### 10: Gastrointestinal.

Daily number of attendances recorded as gastrointestinal attendances across the EDSSS network.



#### 11: Gastroenteritis

Daily number of attendances recorded as gastroenteritis attendances across the EDSSS network.



# 11a: Gastroenteritis by age group.

7 day moving average of gastroenteritis attendances within each age group.

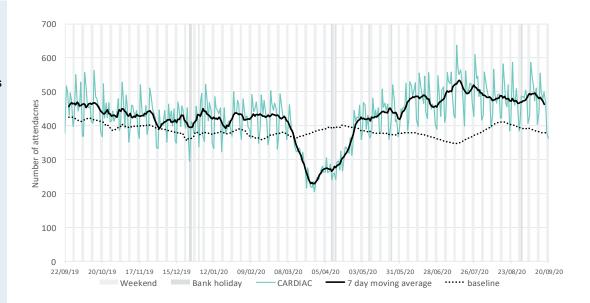




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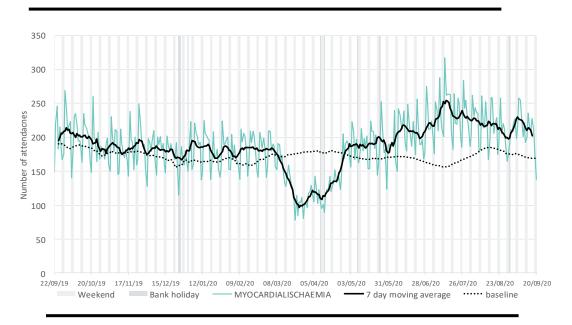
#### 12: Cardiac.

Daily number of attendances recorded as cardiac attendances across the EDSSS network.



# 13: Myocardial Ischaemia.

Daily number of attendances recorded as myocardial ischaemia attendances across the EDSSS network.



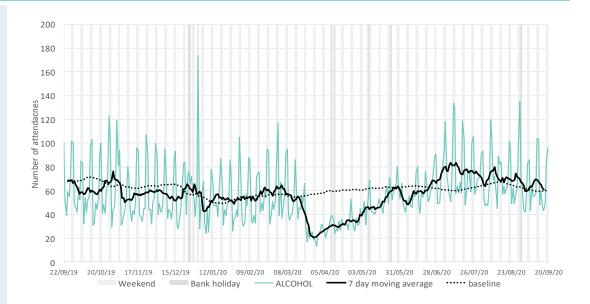
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Year: 2020 Week: 38

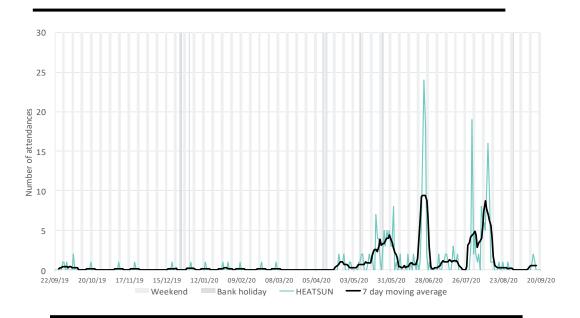
# 14. Acute alcohol intoxication

Daily percentage of all attendances recorded as acute alcohol intoxication attendances across the EDSSS network.



#### 15. Heat/sun stroke.

Daily percentage of all attendances recorded as impact of heat/sun attendances across the EDSSS network.



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#### Notes and caveats:

- ▶ National EDSSS began operating in April 2018. Following the introduction of the Emergency Care Data Set (ECDS) the: <a href="https://www.england.nhs.uk/ourwork/tsd/ec-data-set/">https://www.england.nhs.uk/ourwork/tsd/ec-data-set/</a>
- ▶EDSSS receives an automated daily transfer of anonymised ED data from NHS Digital
- ▶ The number of EDs reporting through ECDS continues to increase
- ▶ Not all EDs currently provide data through ECDS on a daily basis
- ► EDs are eligible for inclusion in this report only where the EDSSS reporting criteria have been met during the surveillance week reported:

Data relates to attendances at a type 1 ED

Data for 7 of the 7 most recent days was received by PHE

Data for those days was received within 2 calendar days of the patient arrival

- ► Where an ED meets these criteria, all data received from that ED previous to the current surveillance week is included
- ►EDs eligible for inclusion is likely to change each week, which will in turn affect the historical data inclusion
- ▶ Individual EDs will not be identified in syndromic surveillance reporting in these bulletins

#### ▶ All EDs report diagnoses to EDSSS using SnomedCT codes

- ► Not all diagnoses are confirmed
- ► The syndromic indicators presented in this bulletin are based on the **primary diagnosis** of each attendance as reported by EDs using SnomedCT codes:

Respiratory: All respiratory diseases and conditions (infectious and non infectious).

Acute Respiratory Infections (ARI): All acute infectious respiratory diseases.

Asthma: As indicated by title.

Bronchiolitis/ bronchitis: As indicated by title (excluding 'chronic').

Influenza-like Illness (ILI): As indicated by title.

Pneumonia: As indicated by title.

**COVID-19-like:** Coronavirus\* or Severe Acute Respiratory Syndrome (SARS).

\*Please note: not all EDs have reported a coronavirus diagnosis code.

Gastrointestinal: All gastrointestinal diseases and conditions (infectious and non infectious).

Gastroenteritis: All infectious gastrointestinal diseases.

Cardiac: All cardiac conditions.

Myocardial Ischaemia: All ischaemic heart disease.

Acute alcohol intoxication: As indicated by title (excluding 'chronic')

- ► EDSSS indicators are likely to be an underestimation of number attendances as they are based on primary diagnosis only.
- ► The EDSSS should therefore be used to monitor trends in ED attendances and not numbers of 'cases'.
- ▶ Baselines represent seasonally expected levels of activity and are constructed from historical data since July 2010. They take into account the change from sentinel EDSSS to National EDSSS and current coverage. Gastroenteritis, diarrhoea and vomiting baselines also account for changes since the introduction of rotavirus vaccine in July 2013. Baselines are refreshed using the latest data on a regular basis.
- ▶ Sentinel EDSSS 2010 to March 2018, collected data through a bespoke, voluntary network of EDs across England and Northern Ireland
- ► Sentinel EDSSS reports be found in bulletins up to and including week 13 2018: https://www.gov.uk/government/collections/syndromic-surveillance-systems-and-analyses

#### **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.

**Emergency Department Syndromic Surveillance System Bulletin.** 

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