



Emergency Department

Syndromic Surveillance System: England & Northern Ireland

Data to: 07 January 2018

10 January 2018

Year: 2018 Week: 1

In This Issue:

Key messages.

Diagnostic indicators at a glance.

Weekly report statistics.

Total attendances.

Attendances by age.

Triage.

Respiratory.

Gastrointestinal.

Cardiac.

Introduction to charts.

Notes and caveats.

Acknowledgements.

Key messages

Respiratory and acute respiratory indicators decreased during week 1 but remained above seasonally expected levels, particularly in adult age groups (figures 7-9). ED attendances for influenza-like illness (ILI) continued to increase (figure 12; please note small numbers of ILI attendances).

A data transfer problem has resulted in limited availability from 4 EDs during week 1 2018. A data transfer problem continues in 1 ED resulting in incomplete data availability since 19/05/17.

A Cold Watch System operates in England from 1 November to 31 March each year. As part of the Public Health England Cold Weather Plan for England the PHE Real-time Syndromic Surveillance team will be monitoring the impact of cold weather on syndromic surveillance data during this period.

Cold weather alert level (current reporting week): Level 1 Winter preparedness - 3 Severe weather action http://www.metoffice.gov.uk/weather/uk/coldweatheralert/

Diagnostic indicators at a glance:

Further details on the syndromic indicators reported can be found on page 10.

Indicator	Current trend		
Triage Severity Ratio	decreasing		
Respiratory	y decreasing		
Acute Respiratory Infection	decreasing		
Bronchitis/ Bronchiolitis	decreasing		
Influenza-like Illness	increasing		
Pneumonia	increasing		
Asthma/ Wheeze/ Difficulty Breathing	no trend		
Gastrointestinal	no trend		
Gastroenteritis	no trend		
Cardiac	no trend		
Myocardial Ischaemia	no trend		
Meningitis	no trend		

EDSSS weekly report statistics

Including new EDs which have recently started reporting*.

Date	Total	Triage Category Coded		Diagnoses Coded		EDs
	Attendances	Number		Number		Reporting
01/01/2018	7,483	5,674	75.8	5,828	77.9	33
02/01/2018	7,764	5,863	75.5	5,964	76.8	33
03/01/2018	6,221	4,637	74.5	4,819	77.5	29
04/01/2018	6,050	4,437	73.3	4,723	78.1	29
05/01/2018	6,051	4,457	73.7	4,569	75.5	29
06/01/2018	5,540	4,156	75.0	4,404	79.5	29
07/01/2018	5,155	4,114	79.8	4,103	79.6	28
Total	44,264	33,338	75.3	34,410	77.7	(max)* 33

3 diagnosis coding systems in use:

Snomed-CT (20EDs)
ICD10 (0EDs)

CDS (13EDs)

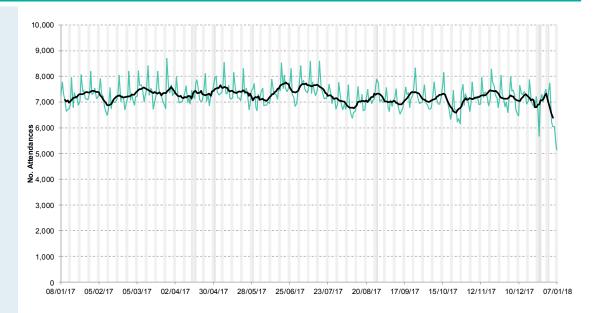
*Data from the new EDs will be presented in charts following a 14 day data validation.





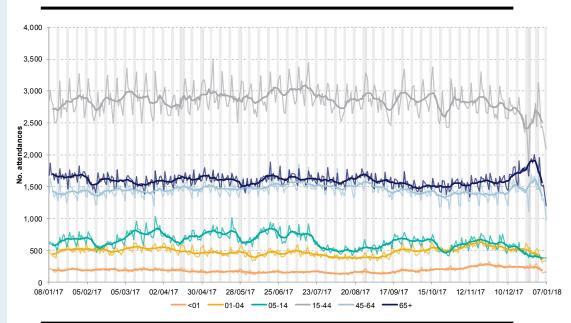
1: Total attendances.

Daily number of total attendances recorded across the EDSSS network.



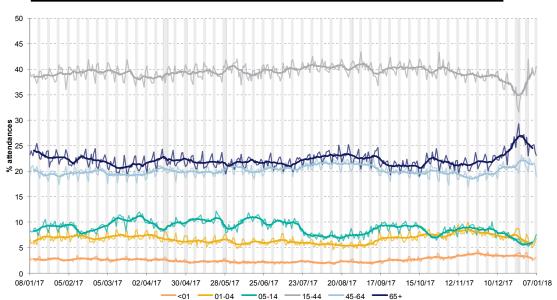
2: Daily attendances by age: Numbers.

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



3: Daily attendances by age: Percentages.

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





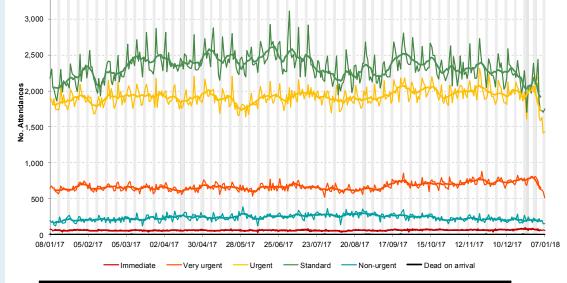
3.500

10 January 2018 Year: 2018 Week: 1

4: Triage category: severity of illness.

Triage category is assigned according to the clinical priority of each presenting patient.

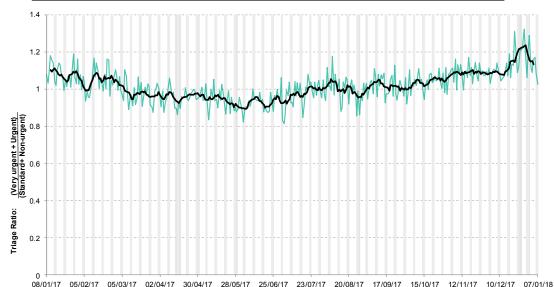
Includes 33/33 EDs.



5: Triage category severity ratio.

The ratio of patients classified as very urgent or urgent to those classified as standard or non-urgent.

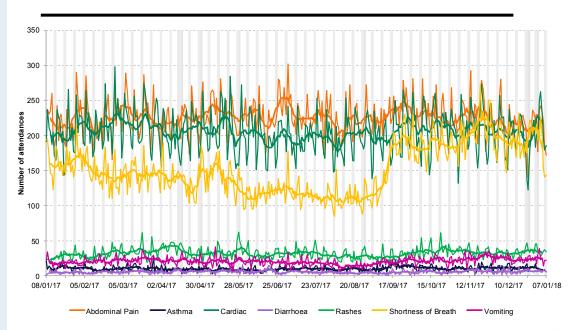
Includes 33/33 EDs.



6: Triage presentation.

Triage presentation indicators are based on the triage descriptors recorded in each ED. Data are displayed as the number of attendances recorded with triage information.

Includes 18/33 EDs which report standard terms, not using free text.

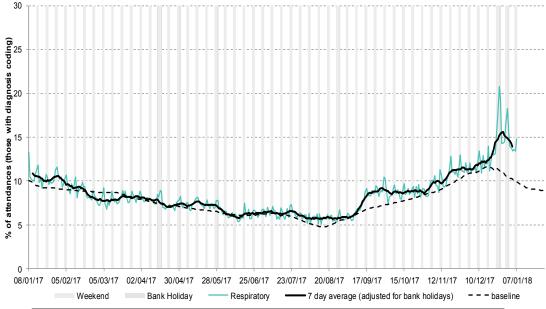




7: Respiratory.

Daily percentage of all attendances recorded as respiratory attendances across the EDSSS network.

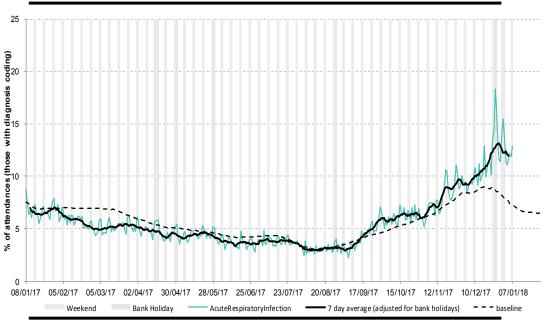
Includes 33/33 EDs.



8: Acute Respiratory Infection.

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

Includes 19/33 EDs.



9: Acute Respiratory Infection by age group.

7 day moving average of ARI attendances presented as a proportion of the attendances within each age group.

Includes 19/33 EDs.

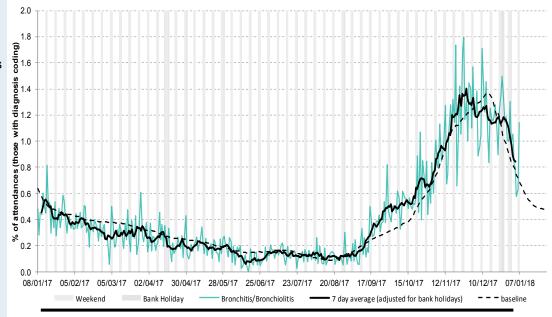




10: Bronchitis/ Bronchiolitis.

Daily percentage of all attendances recorded as bronchitis/ bronchiolitis attendances across the EDSSS network.

Includes 19/33 EDs.



11: Bronchitis/ Bronchiolitis by age group

7 day moving average of bronchitis/ bronchiolitis attendances presented as a proportion of the attendances within each age group.

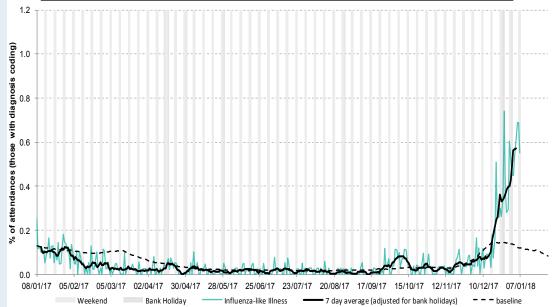
Includes 19/33 EDs.



12: Influenza-like Illness.

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

Includes 19/33 EDs.



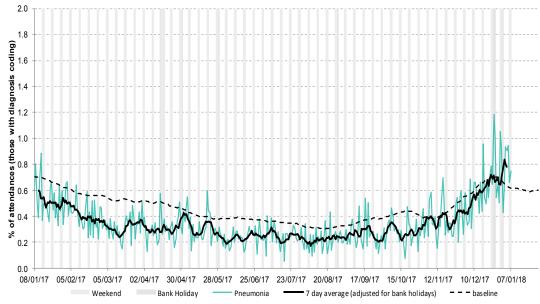




13: Pneumonia.

Daily percentage of all attendances recorded as pneumonia attendances across the EDSSS network.

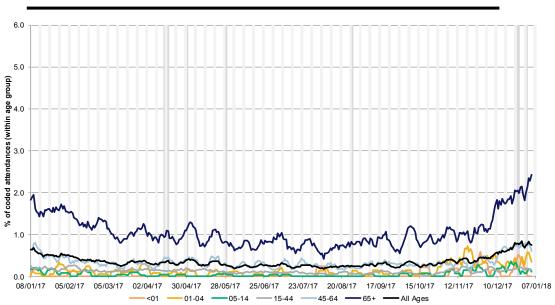
Includes 19/33 EDs.



14: Pneumonia by age group.

7 day moving average of pneumonia attendances presented as a proportion of the attendances within each age group.

Includes 19/33 EDs.



Intentionally left blank

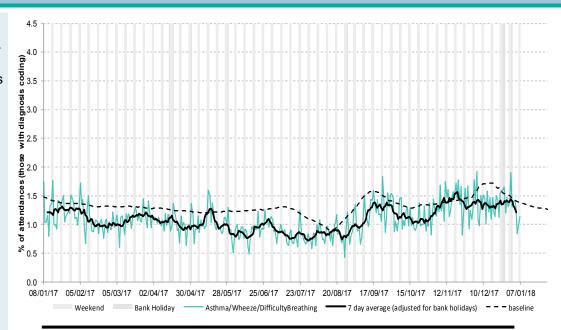




15: Asthma/Wheeze/ Difficulty Breathing.

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

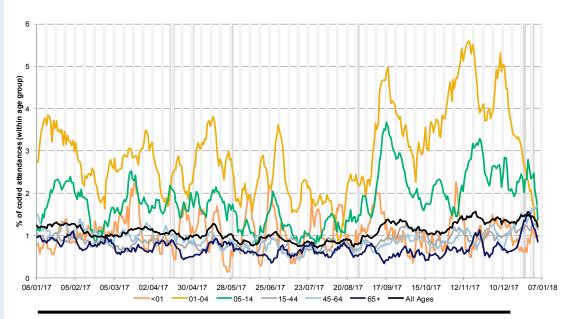
Includes 19/33 EDs.



16: Asthma/Wheeze/ Difficulty Breathing by age

7 day moving average of asthma/wheeze/ difficulty breathing attendances presented as a proportion of the attendances within each age group.

Includes 19/33 EDs.



Intentionally left blank



17: Gastrointestinal.

Daily percentage of all attendances recorded as gastrointestinal attendances across the EDSSS network.

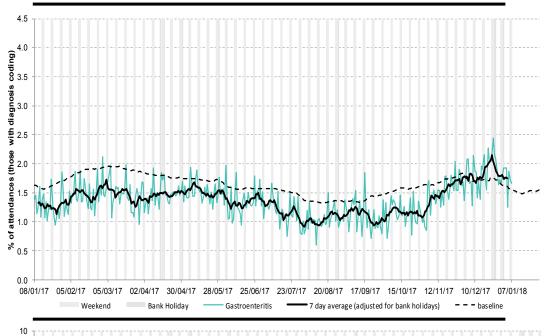
Includes 33/33 EDs.

08/01/17 05/02/17 05/03/17 02/04/17 30/04/17 28/05/17 25/06/17 23/07/17 20/08/17 17/09/17 15/10/17 12/11/17 10/12/17 07/01/18 Weekend Bank Holiday Gastrointestinal 7 day average (adjusted for bank holidays) --- baseline

18: Gastroenteritis

Daily percentage of all attendances recorded as gastroenteritis attendances across the EDSSS network.

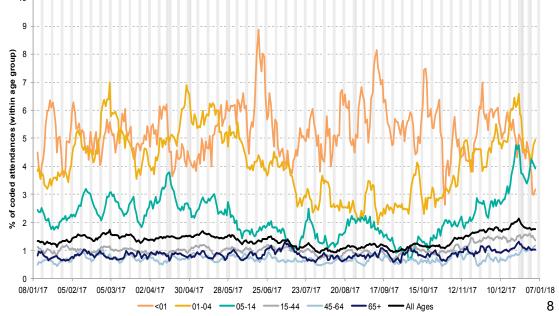
Includes 19/33 EDs.



19: Gastroenteritis by age group.

7 day moving average of gastroenteritis attendances presented as a proportion of the attendances within each age group.

Includes 19/33 EDs.







20: Cardiac.

Daily percentage of all attendances recorded as cardiac attendances across the EDSSS network.

Includes 35/33 EDs.

21: Myocardial Ischaemia.

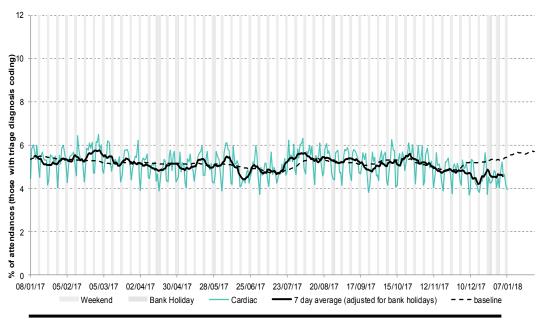
Daily percentage of all attendances recorded as myocardial ischaemia attendances across the EDSSS network.

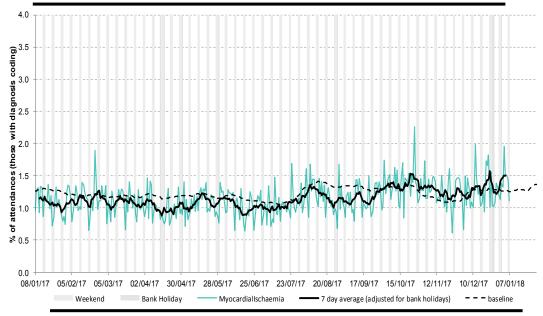
Includes 20/33 EDs.

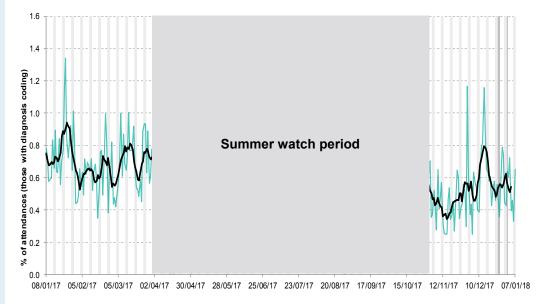
22: 'Impact of cold weather' indicator.

Daily percentage of female attendances recorded as 'fracture of the femur/wrist/forearm plus cold specific diagnoses of hypothermia and other diagnoses recorded in the EDs as 'effects of reduced temperature', across the EDSSS network.

Includes 20/33 EDs.











Introduction to the EDSSS charts:

- ▶ Weekends and Bank holidays are marked by vertical grey lines (bank holidays darker).
- ▶ The entry of each new ED is marked by a vertical red line.
- ▶ A new site is not included in charts until it has reported a minimum of 14 days.
- ▶ A 7 day moving average is overlaid on the daily data reported in each chart, unless specified.
- ▶ Where the percentage attendances related to an individual syndromic indicator is given, the denominator used is the total number of attendances with a diagnosis code recorded.
- ▶ Baselines represent seasonally expected levels of activity and are constructed from historical data. Furthermore, they take into account any known substantial changes in data collection, population coverage or reporting practices. Baselines are refreshed using the latest data on a regular basis.

Notes and caveats:

- ▶ During July/August 2016 there were changes in clinical working practices at selected EDs which may impact on coding, and therefore the graphs/data presented in this report. Where appropriate, caveats will be included.
- ▶ Participating Hospital Emergency Departments (EDs) report to EDSSS through the automated daily transfer of anonymised data to PHE, for analysis and interpretation by the PHE Real-time Syndromic Surveillance Team (ReSST).
- ▶ Several EDSSS contributing departments are now using the new RCEM Unified Diagnostic Dataset (UDDA) to record diagnoses. Where UDDA is in place the ICD-10 or Snomed CT code is extracted for EDSSS reporting.
- ▶The syndromic indicators presented in this bulletin are based on the WHO recommendations for syndromes to be used for mass gatherings. Each code system has been mapped to the syndromes described:

Level 1: Broad, generic indicator, available using all ED coding systems reported.

Level 2: More specific indicator, available from EDs using ICD-10 and Snomed CT.

Level 3: Very specific indicator, available from EDs using ICD-10 and Snomed CT.

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

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

Asthma/Wheeze/Difficulty Breathing: As indicated by title, including dyspnoea & stridor.

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

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

Pneumonia: As indicated by title.

Cardiac: All cardiac conditions (including 'chest pain').

Myocardial Ischaemia: All Ischaemic heart disease.

attendances coded vary considerably between each ED.

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

Other (chart only presented when a public health need):

Meningitis: All cause meningitis (exc. meningococcal disease with no mention of meningitis). **Heat/ sunstroke:** As indicated by title.

- ➤ Details on diagnosis are not consistently recorded for all ED attendances and the levels of
- ► Where the diagnosis codes used in an individual ED cannot be matched to level 2 and 3 syndromic indicators, the ED is excluded from the analysis of those indicators.
- ▶ If you are interested in joining the EDSSS please contact ReSST using the details below.

Acknowledgements:

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

We thank L2S2 Ltd for undertaking the daily extraction and transfer of anonymised attendance data from all participating EDs.

We thank EMIS Health for facilitating data extraction at the relevant EDSSS sites.

Emergency Department Syndromic Surveillance System Bulletin.

Produced by: PHE Real-time Syndromic Surveillance Team 6th Floor, 5 St Philip's Place, Birmingham, B3 2PW

syndromic.surveillance @phe.gov.uk

Contact ReSST:

Web: https://www.gov.uk/government/collections/syndromic-surveillance-systems-and-analyses 10