

Syndromic Surveillance System: England

#### 05 September 2018

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**Diagnostic indicators** 

Year: 2018 Week: 35

### Key messages

Data to: 02 September 2018

GP consultations for asthma increased during week 35, as expected at this time of year (figure 10).

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. Heat-health watch level (current reporting week): Level 1 Summer preparedness

http://www.metoffice.gov.uk/weather/uk/heathealth/

#### Diagnostic indicators at a glance:

Indicator	Trend	Level
Upper respiratory tract infection	increasing	below baseline levels
Influenza-like illness	no trend	similar to baseline levels
Pharyngitis	no trend	below baseline levels
Scarlet fever	no trend	similar to baseline levels
Lower respiratory tract infection	increasing	below baseline levels
Pneumonia	no trend	below baseline levels
Gastroenteritis	no trend	below baseline levels
Vomiting	no trend	below baseline levels
Diarrhoea	no trend	similar to baseline levels
Asthma	increasing	similar to baseline levels
Conjunctivitis	no trend	below baseline levels
Mumps	no trend	similar to baseline levels
Measles	no trend	similar to baseline levels
Rubella	no trend	similar to baseline levels
Pertussis	decreasing	below baseline levels
Chickenpox	decreasing	below baseline levels
Herpes zoster	increasing	similar to baseline levels
Cellulitis	increasing	similar to baseline levels
Impetigo	increasing	similar to baseline levels
Allergic rhinitis	no trend	below baseline levels
Heat/sunstroke	no trend	below baseline levels
Insect Bites	decreasing	similar to baseline levels

#### GP practices and denominator population:

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Year	Week	GP Practices Reporting**	Population size**
2018	35	2557	22.0 million

\*\*based on the average number of practices and denominator population in the reporting working week.

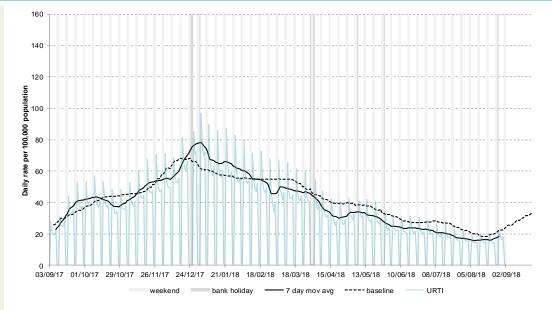
#### 05 September 2018

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#### 1: Upper respiratory tract infection (URTI)

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



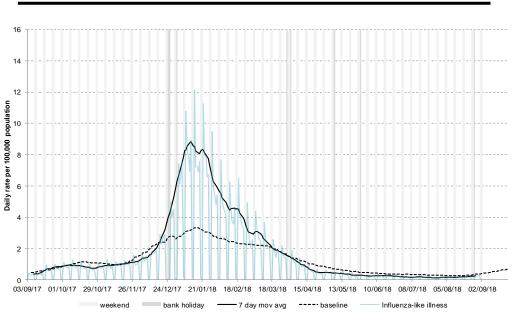
#### 2: Influenza-like illness (ILI)

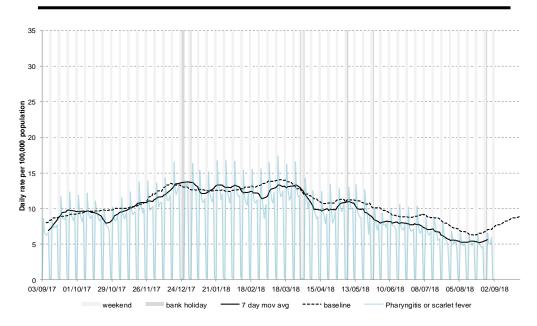
Daily incidence rates (and 7-day moving average\*) per 100,000 population (all England, all ages).

#### 3: Pharyngitis or scarlet fever

Daily incidence rates (and 7-day moving average\*) per 100,000 population (all England, all ages).

\* 7-day moving average adjusted for bank holidays.

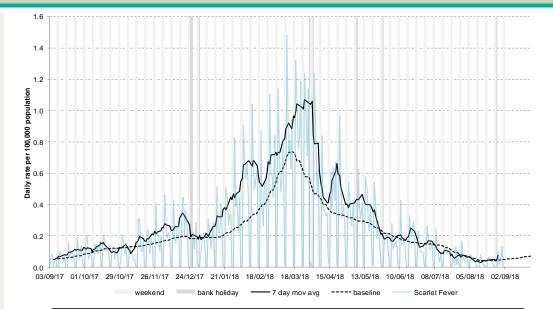




#### Year: 2018 Week: 3

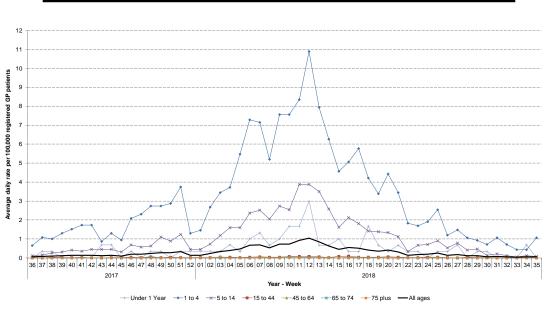
#### 4: Scarlet fever

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, based on a denominator population of approximately 5.5 million patients)



### 4a: Scarlet fever by age

Average daily incidence rate by week per 100,000 population (all England, based on a denominator population of approximately 5.5 million patients).



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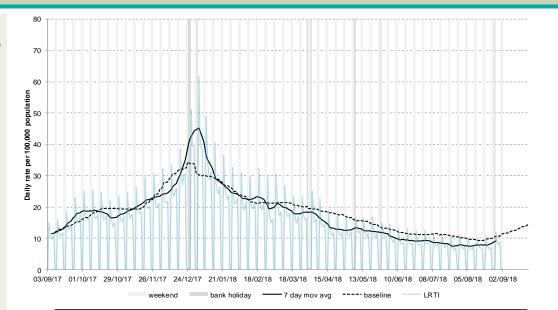
### **GP In Hours**

#### WWW Public Health England

#### 05 September 2018

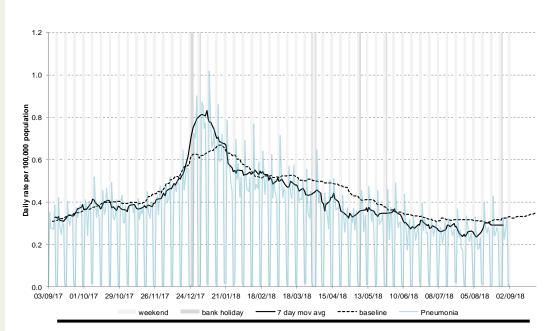
### 5: Lower respiratory tract infection (LRTI)

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



#### 6: Pneumonia

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



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\* 7-day moving average adjusted for bank holidays.

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#### 05 September 2018

#### 7: Gastroenteritis

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).

### 7a: Gastroenteritis by age

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Daily rate per 100,000 population

2017

Average daily incidence rate by week per 100,000 population (all England).

#### 8: Vomiting

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).

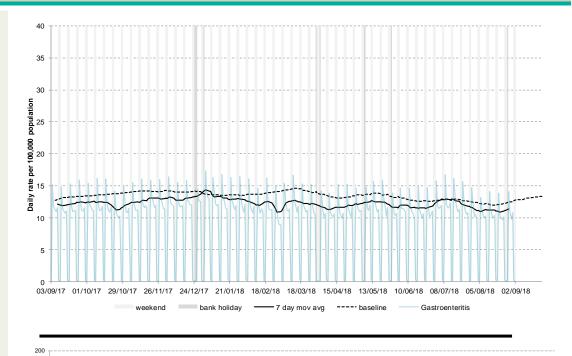
\* 7-day moving average adjusted for bank holidays.



36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

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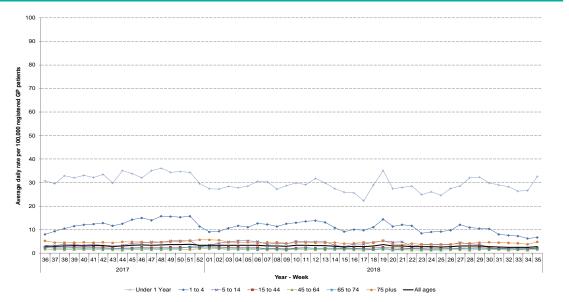
### **GP In Hours**

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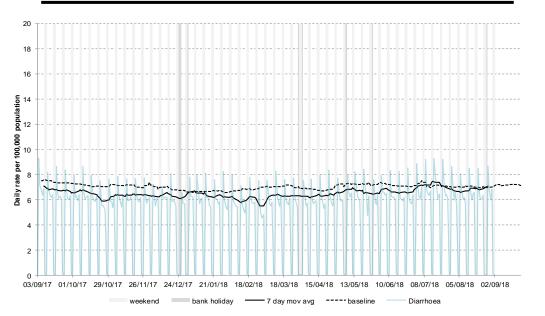
#### 8a: Vomiting by age

Average daily incidence rate by week per 100,000 population (all England).



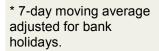
#### 9: Diarrhoea

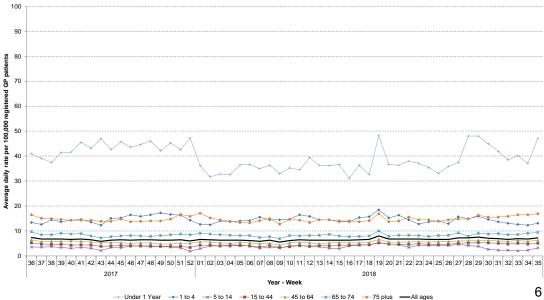
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



#### 9a. Diarrhoea by age

Average daily incidence rate by week per 100,000 population (all England).





### **GP In Hours**

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#### 05 September 2018

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Daily rate per 100,000 population

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100,000 registered GP patients

Average daily rate per 1

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weekend

bank holiday

#### 10: Asthma

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).

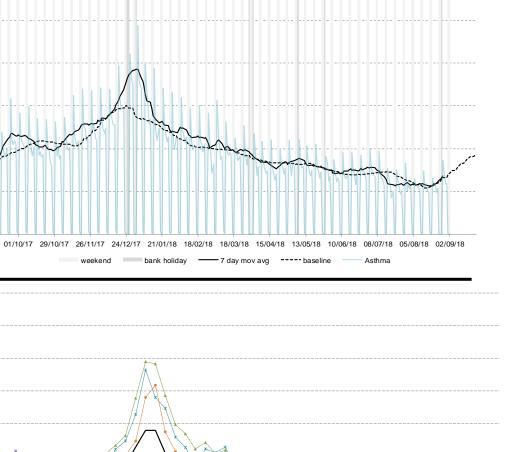
#### 10a: Asthma by age

Average daily incidence rate by week per 100,000 population (all England).



Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).

\* 7-day moving average adjusted for bank holidays.





03/09/17 01/10/17 29/10/17 26/11/17 24/12/17 21/01/18 18/02/18 18/03/18 15/04/18 13/05/18 10/06/18 08/07/18 05/08/18 02/09/18

-

7 day mov avg ----- baseline

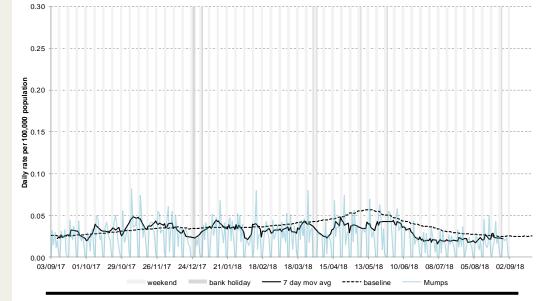
Conjunctivitis

### **GP In Hours**

Year: 2018 Week: 35

#### 12: Mumps

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



#### 13: Measles

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).

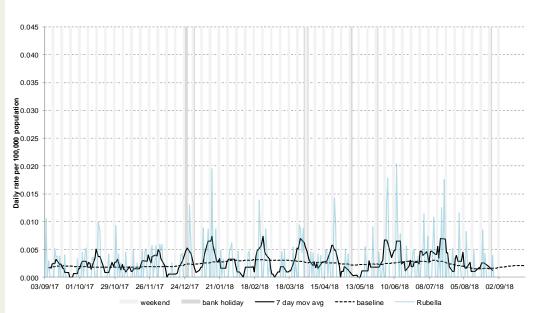


Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).

\* 7-day moving average adjusted for bank holidays.





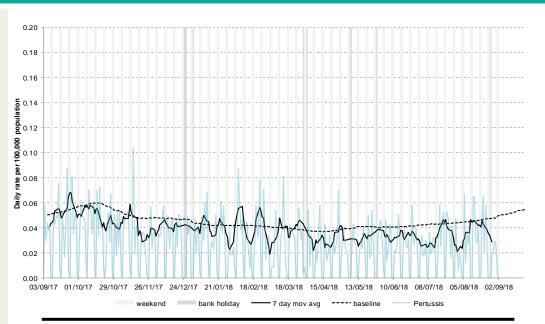


### **GP In Hours**

/ear: 2018 Week: 35

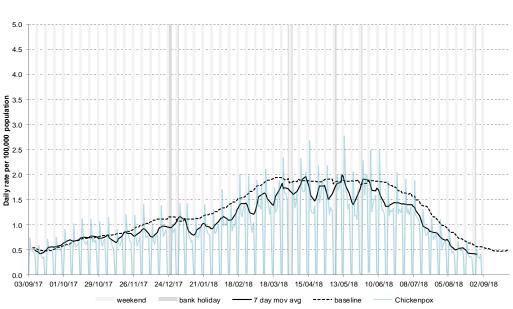
#### 15: Pertussis

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



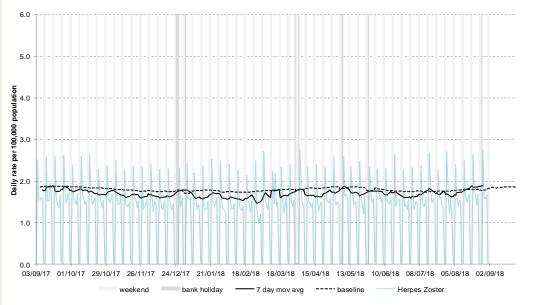
#### 16: Chickenpox

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



#### 17: Herpes zoster

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



### **GP In Hours**

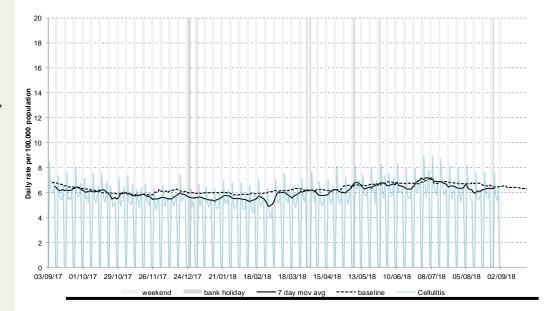
Year: 2018 Week: 35

### **GP In Hours**

Year: 2018 Week: 35

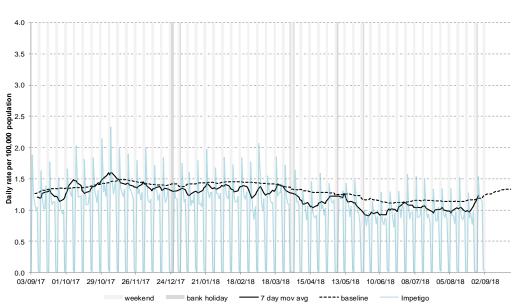
#### 18: Cellulitis

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



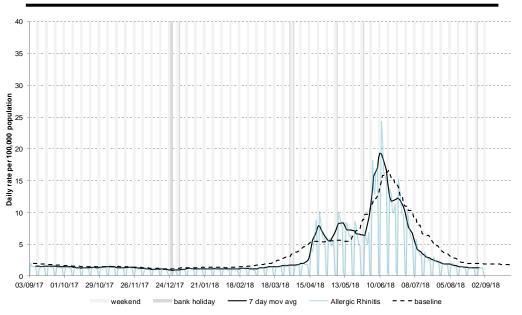
#### 19: Impetigo

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



#### 20: Allergic rhinitis

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



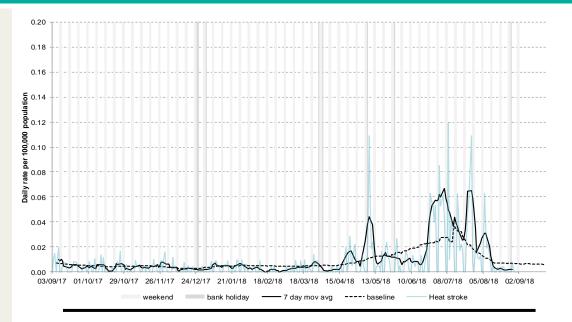
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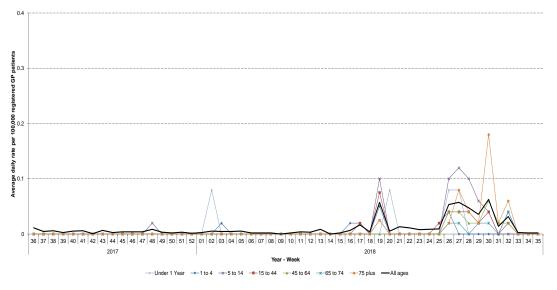
#### 21: Heat/sunstroke

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



#### 21a: Heat/sunstroke

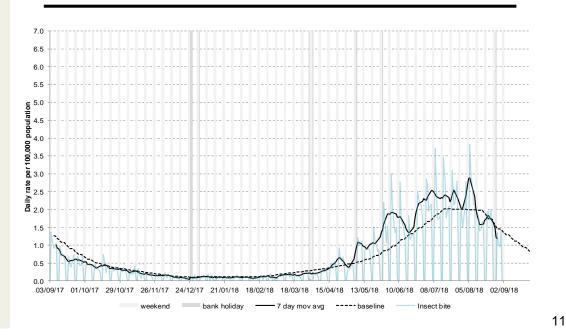
Average daily incidence rate by week per 100,000 population (all England).



#### 22: Insect bites

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).

\* 7-day moving average adjusted for bank holidays.



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Notes and further information	<ul> <li>The Public Health England GP in hours surveillance system is a syndromic surveillance system monitoring community-based morbidity recorded by GP practices.</li> </ul>
	• GP consultation data are analysed on a daily basis to identify national and regional trends. A statistical algorithm underpins each system, routinely identifying activity that has increased significantly or is statistically significantly high for the time of year. Results from these daily analyses are assessed by the ReSST, along with analysis by age group, and anything deemed of public health importance is alerted by the team.
	<ul> <li>This system captures anonymised GP morbidity data from two GP clinical software systems, EMIS, from version 1 of the QSurveillance® database, and TPP SystmOne.</li> </ul>
	• Baselines represent seasonally expected levels of activity and are constructed from historical data since April 2012. They take into account any known substantial changes in data collection, population coverage or reporting practices. 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.
Maps:	• From week 40 2017 the levels of influenza-like illness (ILI) rates are illustrated in the bulletin appendix maps. The ILI intensity levels are calculated using the "Moving Epidemic Method" (MEM). <sup>1</sup> MEM is used as a standard methodology for setting influenza surveillance thresholds across Europe. <sup>2</sup>
	• The current ILI thresholds are based upon previous influenza seasons from 2012/13 onwards and therefore illustrate activity levels in relation to previous ILI activity recorded in the GPIH system. IILI thresholds presented in the maps should be interpreted with caution and reference made to other GP surveillance systems incorporating more historical data, which are available in the PHE National Influenza Report.
	• The ILI thresholds have been calculated separately for each of the nine PHE Centres to allow for differences between areas e.g. background ILI rates are historically higher in London than other areas of England. However, upper tier Local Authority (utLA) ILI consultation rates are compared to Centre-level thresholds only and therefore utLAs with higher background rates than the Centre may appear to have higher ILI activity.
	<ul> <li>ILI consultation rates presented for each utLA in the maps should be interpreted in context of regional and national ILI activity. The small numbers reported at this local level can often result in short-lived fluctuations in rates causing threshold exceedances that are out of context with national and regional activity. utLA ILI data should therefore be interpreted with caution and interpreted in context with the national influenza report which can be found here:</li> </ul>
	https://www.gov.uk/government/statistics/weekly-national-flu-reports
	• The maps on the following pages contains Ordnance Survey data © Crown copyright and database right 2015. Contains National Statistics data © Crown copyright and database right 2015.
	<sup>1</sup> Vega T et al. <i>Influenza Other Respir Viruses</i> . 2013; <b>7</b> (4):546-58.
	<sup>2</sup> Green HK et al. <i>Epidemiol Infect</i> . 2015; <b>143</b> (1):1-12.
Acknowledgements:	We thank and acknowledge the University of Nottingham, ClinRisk <sup>®</sup> and the contribution of EMIS and EMIS practices. Data source: version 1 of the QSurveillance® database.
	We thank TPP, ResearchOne and the SystmOne GP practices contributing to this surveillance system.
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