

# **GP In Hours**

Syndromic Surveillance System: England

Data to: 01 October 2017

04 October 2017 Year: 2017 Wee

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### Key messages

During week 39 there were increases in GP consultations for upper respiratory tract infection, particularly in children aged under 5 years (figures 1 & 1a). There were further increases in asthma consultations, particularly in children age 5-14 years (figures 9 & 9a).

### Diagnostic indicators at a glance:

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

#### **GP** practices and denominator population:

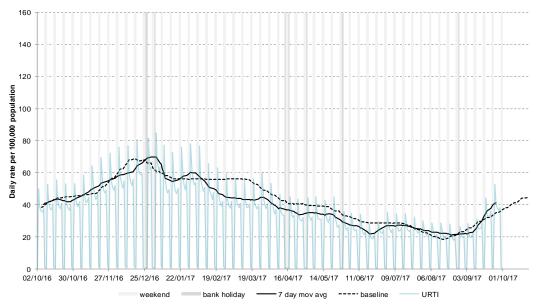
Year	Week	GP Practices Reporting**	Population size**
2017	39	3,271	26.4 million

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



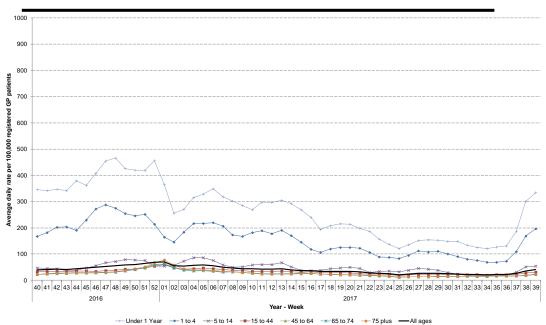
# 1: Upper respiratory tract infection (URTI)

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

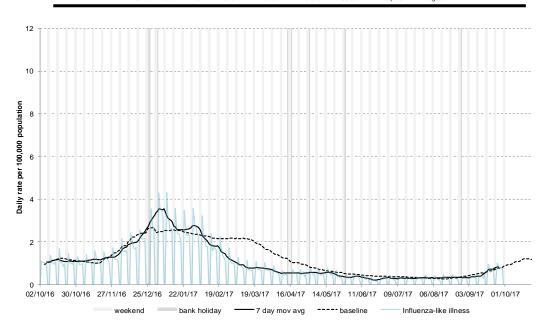


#### 1a: Upper respiratory tract infection (URTI) by age

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



#### 2: Influenza-like illness

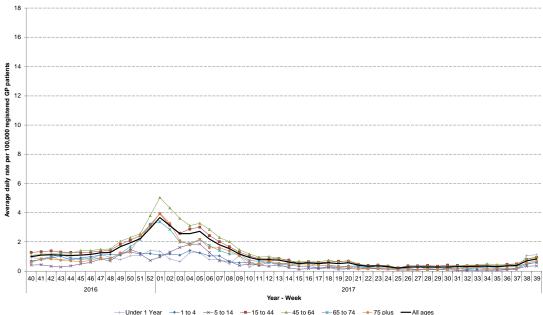


<sup>\* 7-</sup>day moving average adjusted for bank holidays.



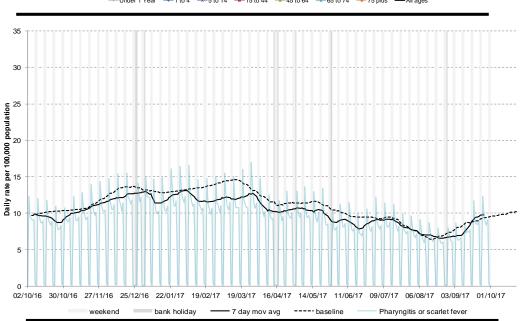
### 2a: Influenza-like illness by age

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



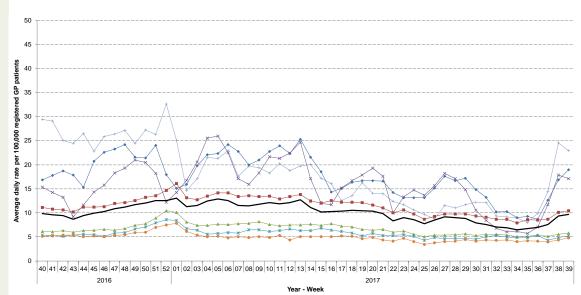
### 3: Pharyngitis or scarlet fever

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



## 3a: Pharyngitis/scarlet fever by age

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



— Under 1 Year → 1 to 4 → 5 to 14 — 15 to 44 → 45 to 64 → 65 to 74 → 75 plus — All ages



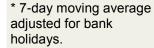
### 4: Lower respiratory tract infection (LRTI)

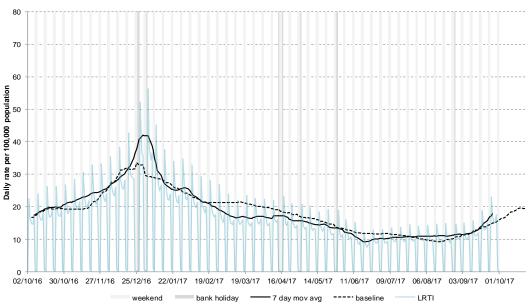
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).

#### 5: Pneumonia

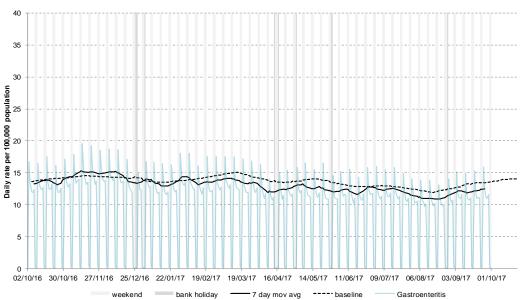
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).

#### 6: Gastroenteritis





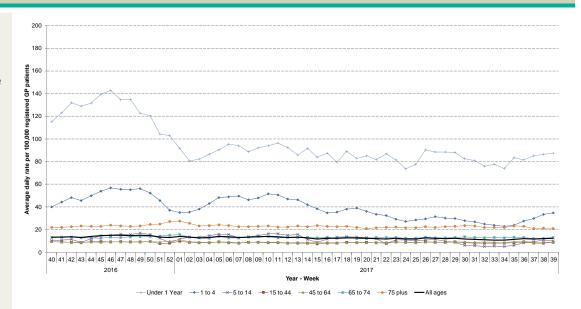






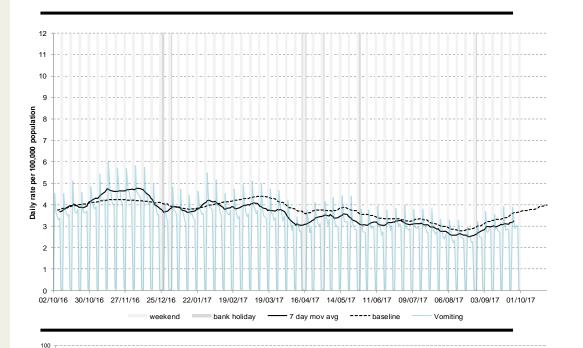
#### 6a: Gastroenteritis by age

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



#### 7: Vomiting

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



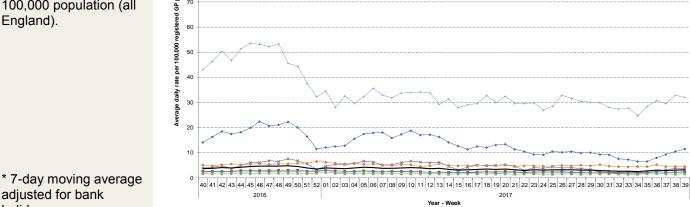
→ 1 to 4 → 5 to 14 → 15 to 44 → 45 to 64 → 65 to 74 → 75 plus — All ages

#### 7a: Vomiting by age

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

80

70



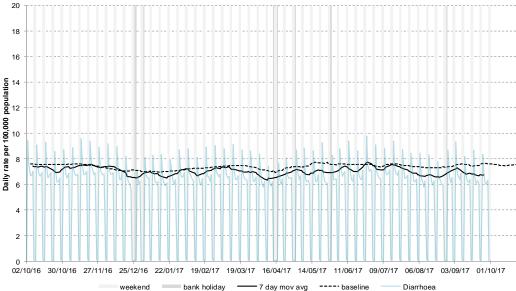
adjusted for bank holidays.





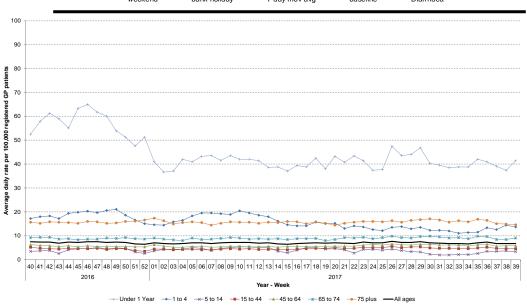
#### 8: Diarrhoea

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



#### 8a. Diarrhoea by age

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



#### Intentionally left blank

<sup>\* 7-</sup>day moving average adjusted for bank holidays.



25/12/16 22/01/17

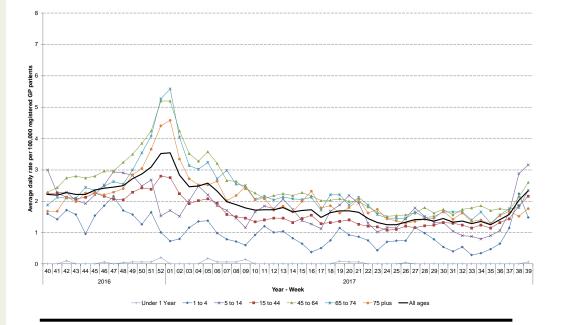
#### 9: Asthma

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

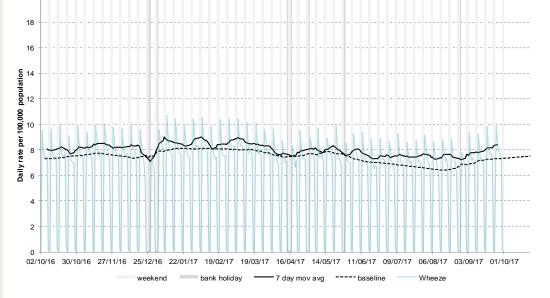
Daily rate per 100,000 population

#### 9a: Asthma by age

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



#### 10: Wheeze

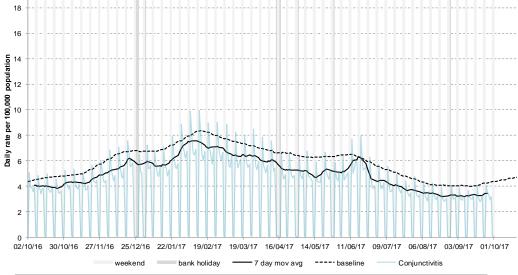


<sup>\* 7-</sup>day moving average adjusted for bank holidays.



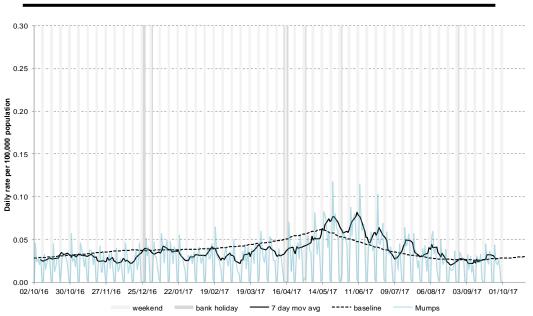
#### 11: Conjunctivitis

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

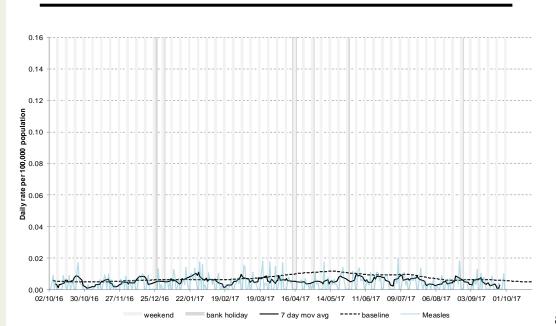


#### 12: Mumps

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



#### 13: Measles





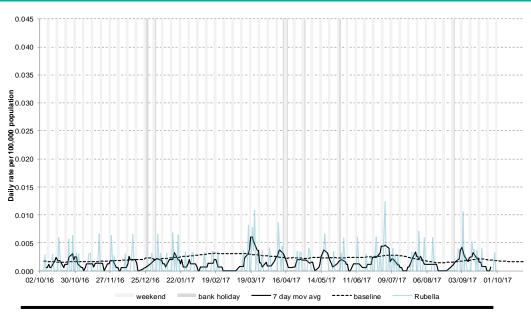
#### 14: Rubella

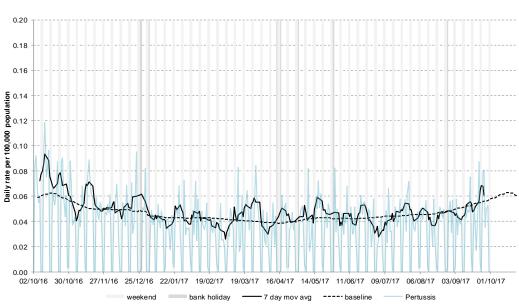
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).

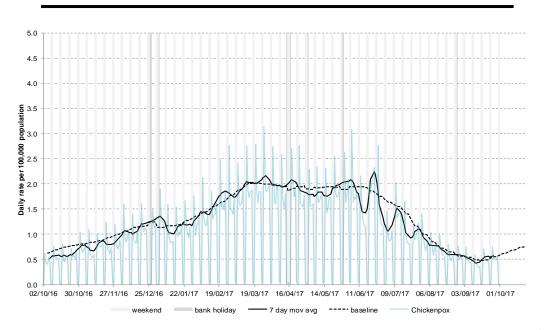
### 15: Pertussis

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

#### 16: Chickenpox



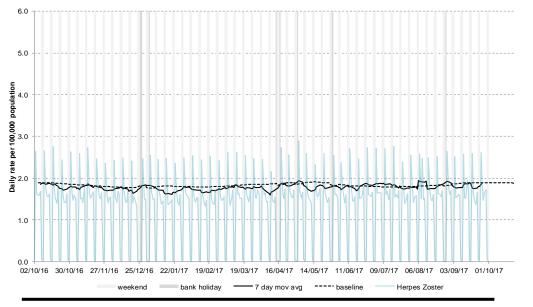






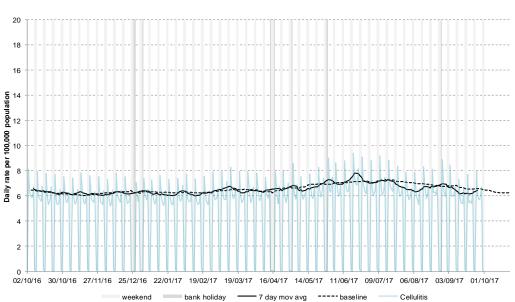
#### 17: Herpes zoster

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

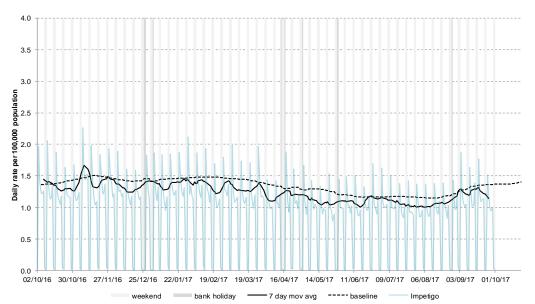


#### 18: Cellulitis

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



#### 19: Impetigo



<sup>\* 7-</sup>day moving average adjusted for bank holidays.



### Notes and further information

- The Public Health England GP in hours surveillance system is a syndromic surveillance system monitoring community-based morbidity recorded by GP practices.
- 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.
- This system captures anonymised GP morbidity data from two GP clinical software systems, EMIS, from version 1 of the QSurveillance® database, and TPP SystmOne.
- 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.

#### Maps:

- From week 40 2015 the influenza-like illness thresholds illustrated in the bulletin appendix maps 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 ILI thresholds have been calculated separately for each of the nine PHE Centres to allow for structural differences between areas e.g. background rates are historically higher in London than other areas of England.
- The current ILI thresholds are based on six previous influenza seasons (excluding the 2009/10 H1N1 pandemic). In future, thresholds will be recalculated each year incorporating the latest season's data.
- The maps on the following pages contains Ordnance Survey data © Crown copyright and database right 2014. Contains National Statistics data © Crown copyright and database right 2014.

#### 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.

#### **GP In Hours Syndromic Surveillance System Bulletin.**

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<sup>&</sup>lt;sup>1</sup> Vega T et al. Influenza Other Respir Viruses. 2013;7(4):546-58.

<sup>&</sup>lt;sup>2</sup> Green HK et al. Epidemiol Infect. 2015;143(1):1-12.