



21 September 2016

Year: 2016 Week: 37

In This Issue:

- Key messages.
- Diagnostic indicators at a glance.
- GP practices and denominator population.
- National syndromic indicators.
- Notes and further information.
- Appendix.

Key messages

Data to: 18 September 2016

GP consultations for respiratory indicators have risen slightly during week 37 but remain below seasonally expected levels.

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 1-3 Summer preparedness - Heatwave action**
<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	below baseline levels
Pharyngitis	increasing	below baseline levels
Scarlet fever	increasing	similar to baseline levels
Lower respiratory tract infection	increasing	below baseline levels
Pneumonia	decreasing	above baseline levels
Gastroenteritis	increasing	below baseline levels
Vomiting	increasing	below baseline levels
Diarrhoea	no trend	similar to baseline levels
Severe asthma	no trend	below baseline levels
Wheeze	increasing	above baseline levels
Conjunctivitis	no trend	below baseline levels
Mumps	increasing	similar to baseline levels
Measles	no trend	above baseline levels
Rubella	no trend	similar to baseline levels
Pertussis	no trend	similar to baseline levels
Chickenpox	decreasing	below baseline levels
Herpes zoster	no trend	similar to baseline levels
Cellulitis	no trend	above baseline levels
Impetigo	no trend	below baseline levels
Heat/sunstroke	no trend	above baseline levels
Insect Bites	increasing	above baseline levels

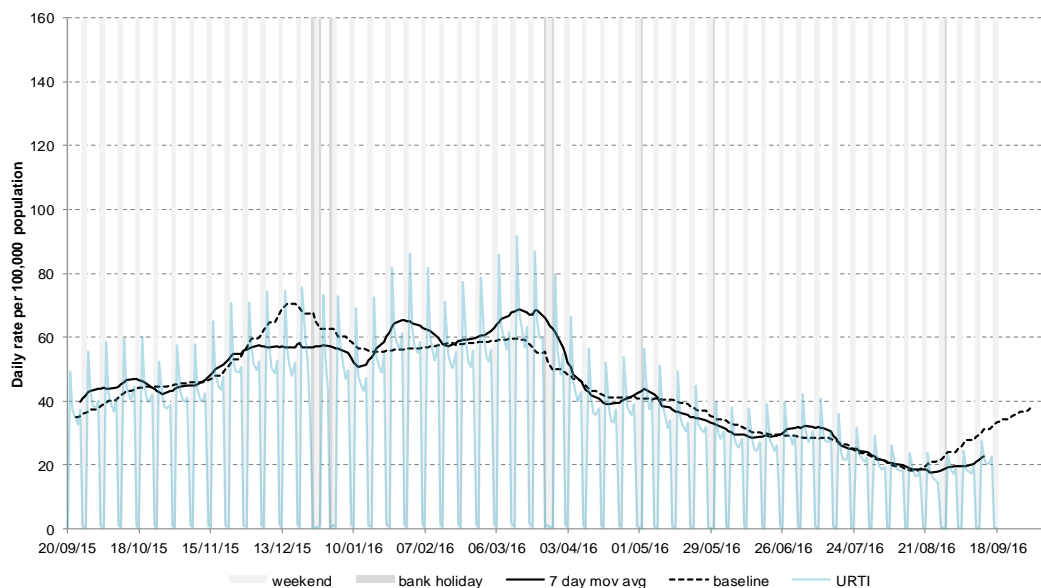
GP practices and denominator population:

Year	Week	GP Practices Reporting**	Population size**
2016	37	4506	35.0 million

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

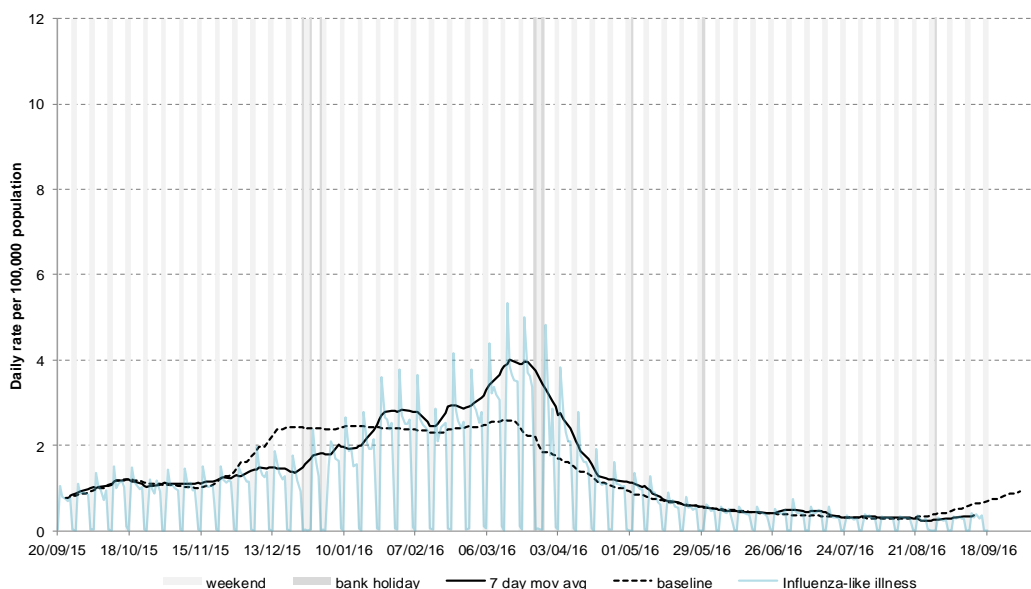
1: Upper respiratory tract infection (URTI)

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



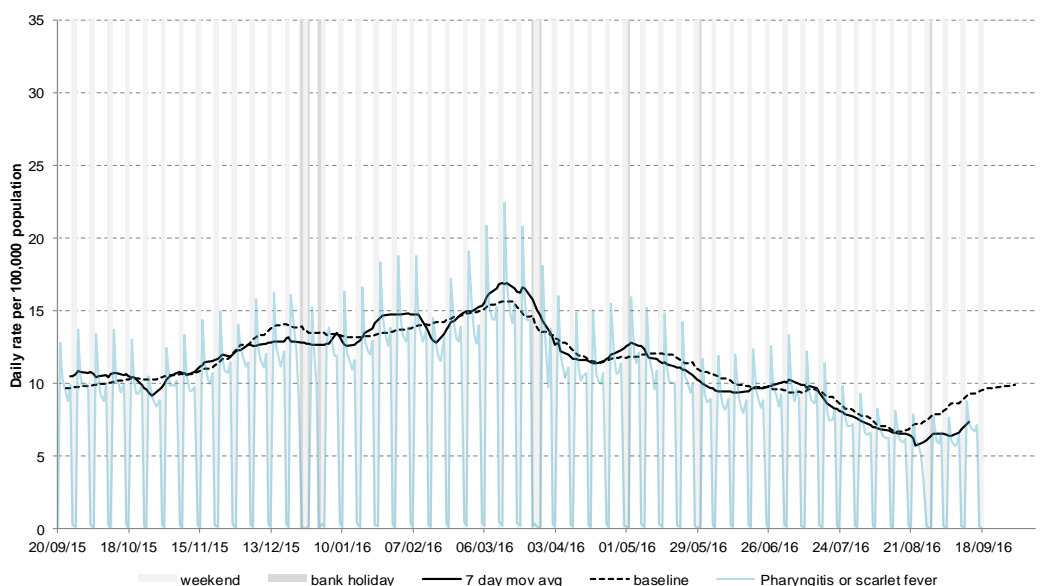
2: Influenza-like illness (ILI)

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



3: Pharyngitis or scarlet fever

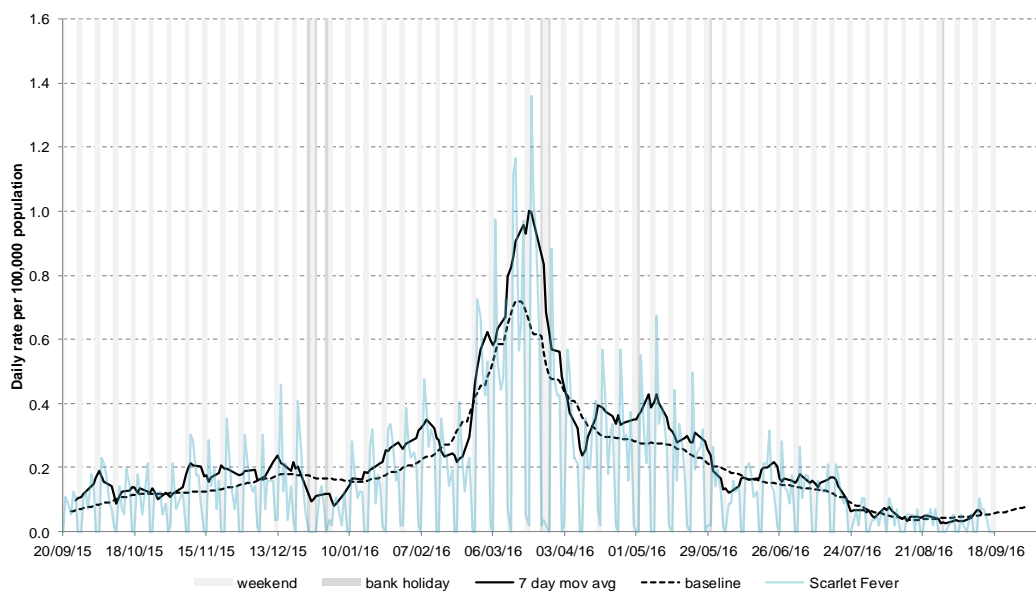
Daily incidence rates (and 7-day moving average*) per 100,000 population (all England, all ages).



* 7-day moving average adjusted for bank holidays.

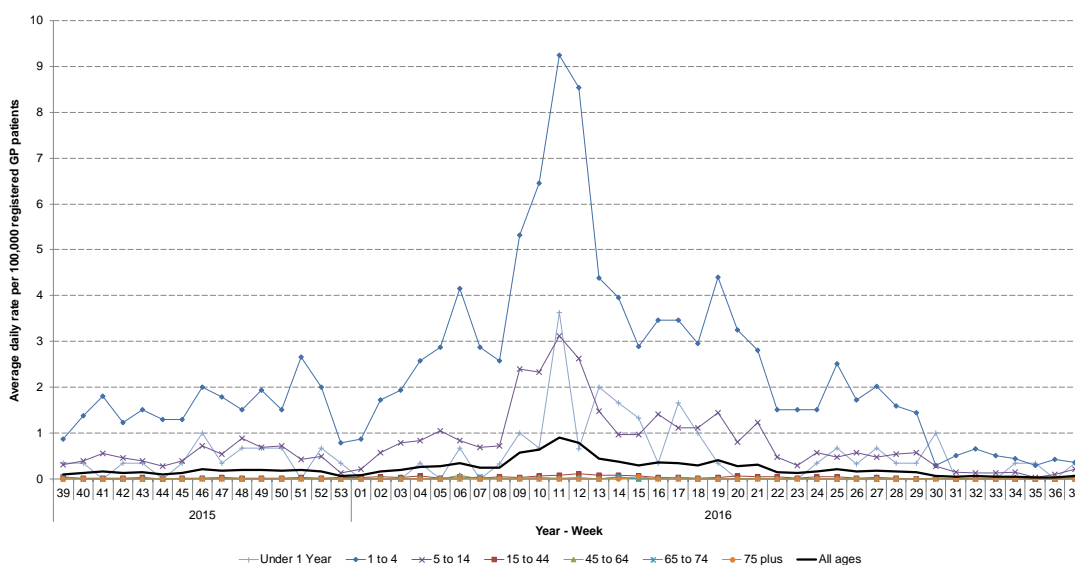
4: Scarlet fever

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



4a: Scarlet fever by age

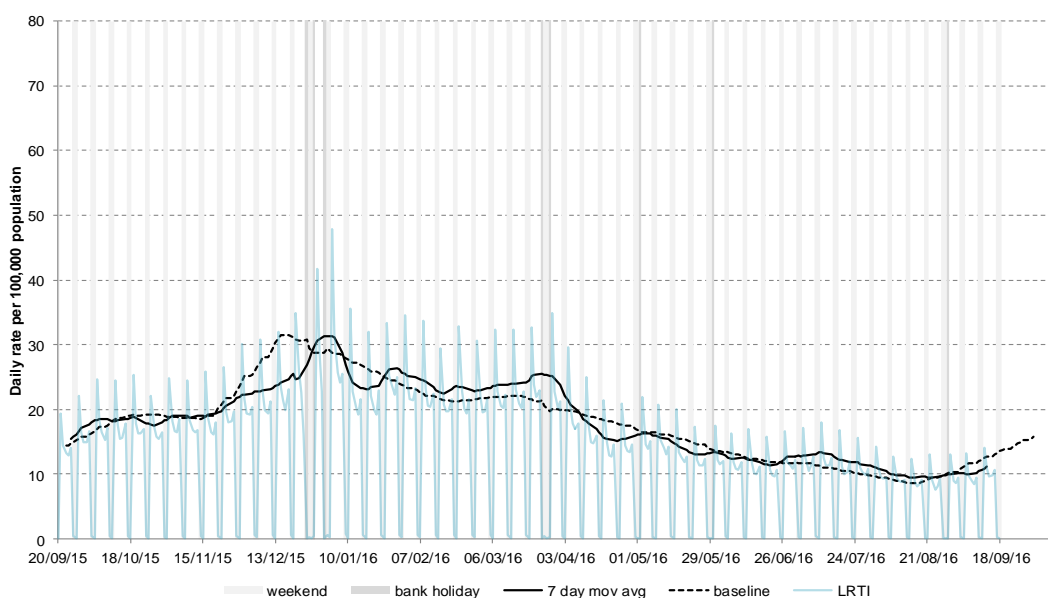
Average daily incidence rate by week per 100,000 population (all England) based on a population denominator of approximately 5.5 million patients).



5: Lower respiratory tract infection (LRTI)

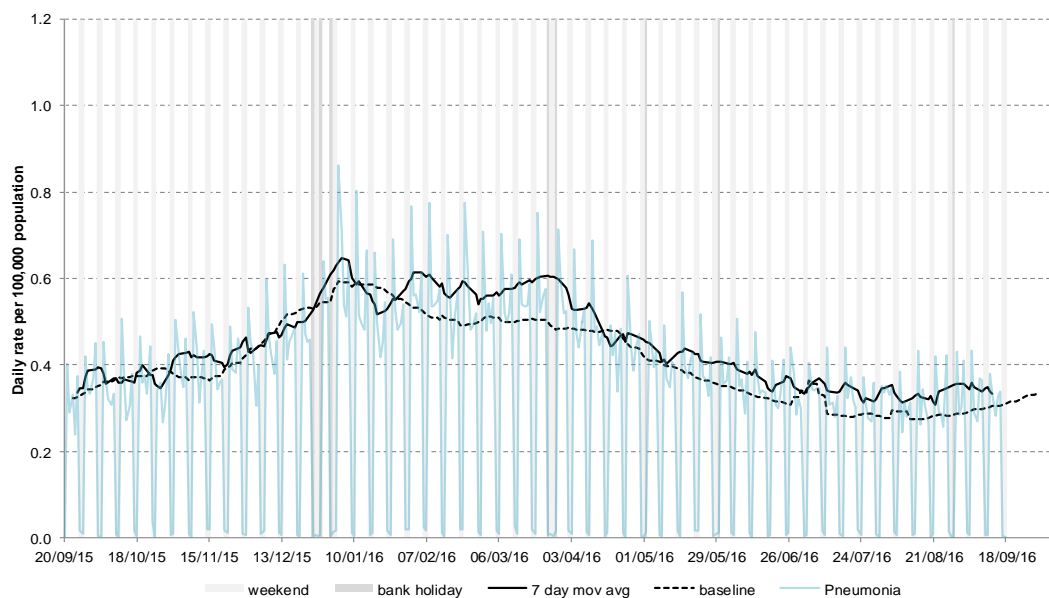
Daily incidence rate

(and 7-day moving average*) per 100,000 population (all England, * 7-day moving average adjusted for bank holidays).



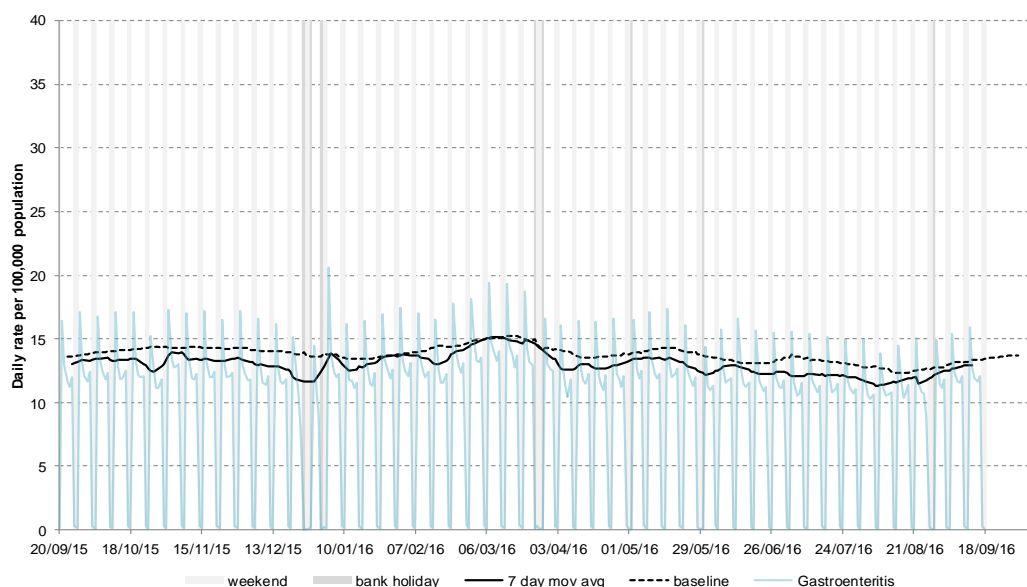
6: Pneumonia

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



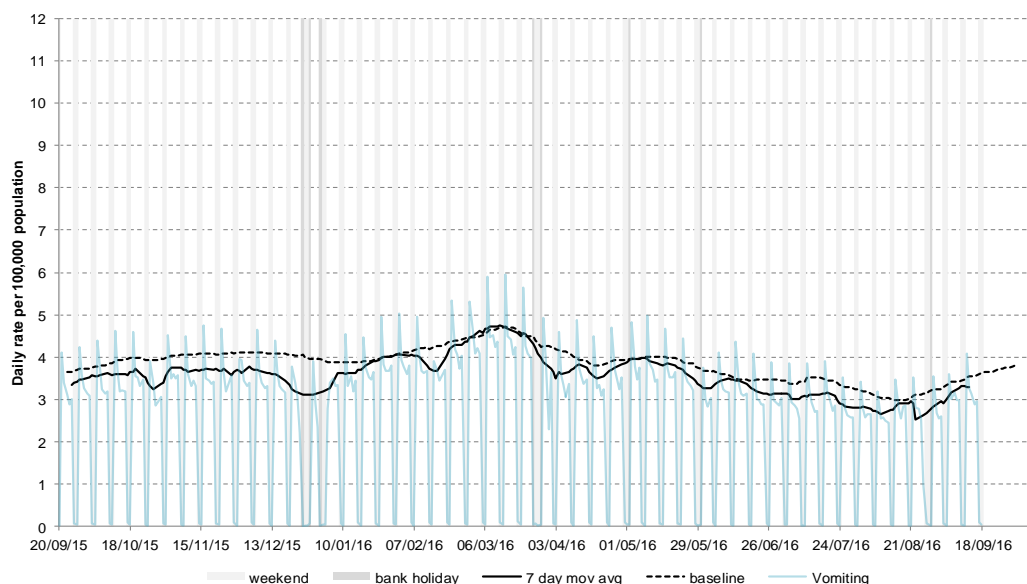
7: Gastroenteritis

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



8: Vomiting

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



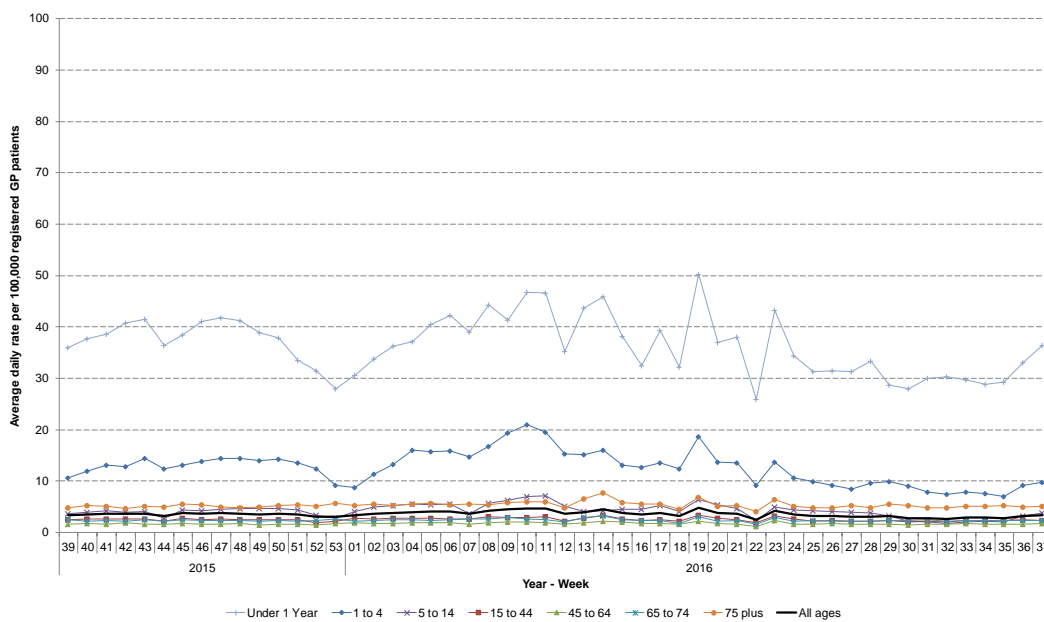
* 7-day moving average adjusted for bank holidays.

21 September 2016

Year: 2016 Week: 37

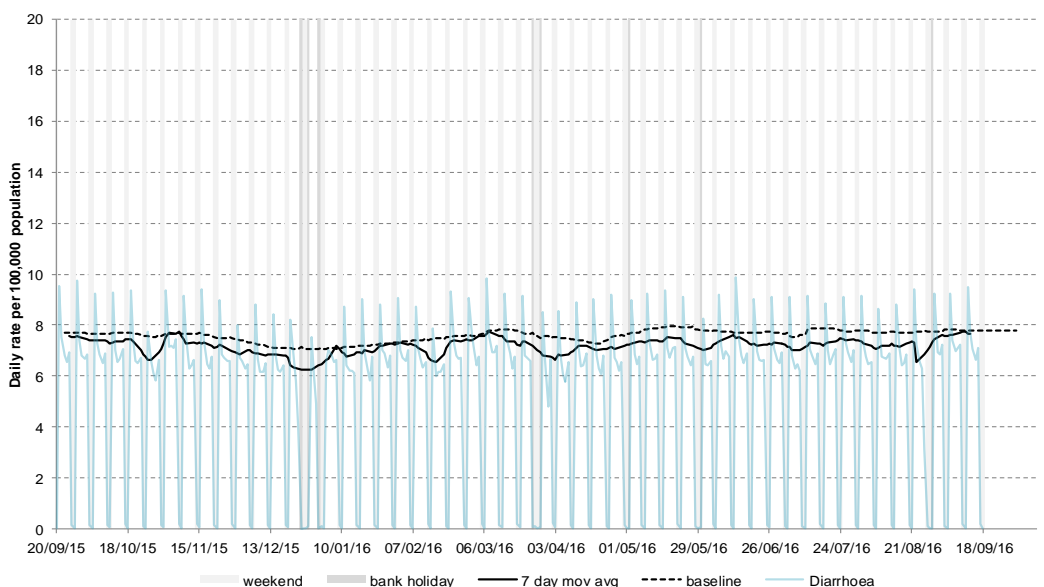
8a: Vomiting by age

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



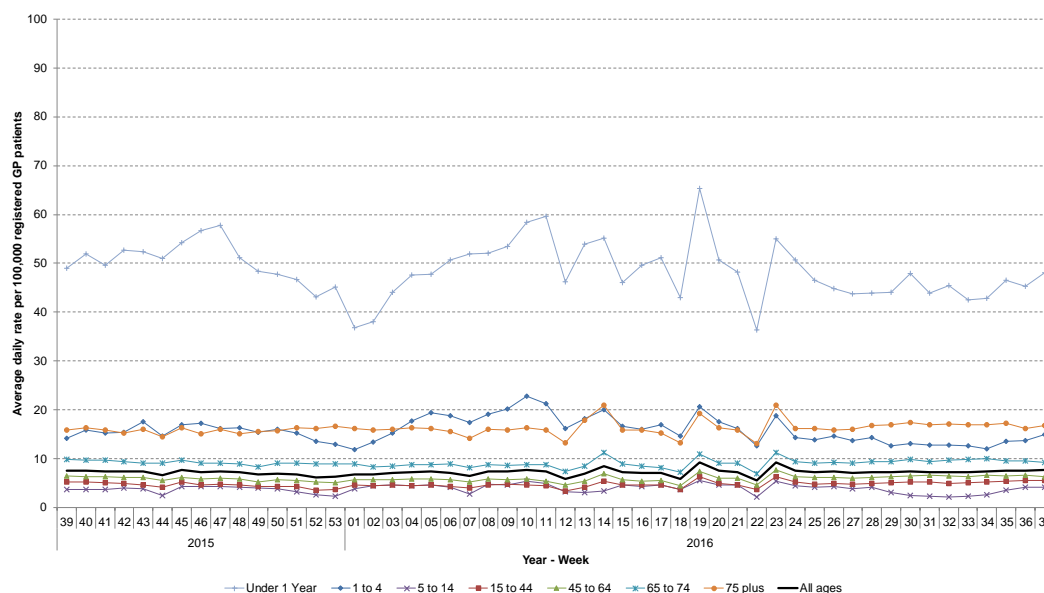
9: Diarrhoea

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



9a. Diarrhoea by age

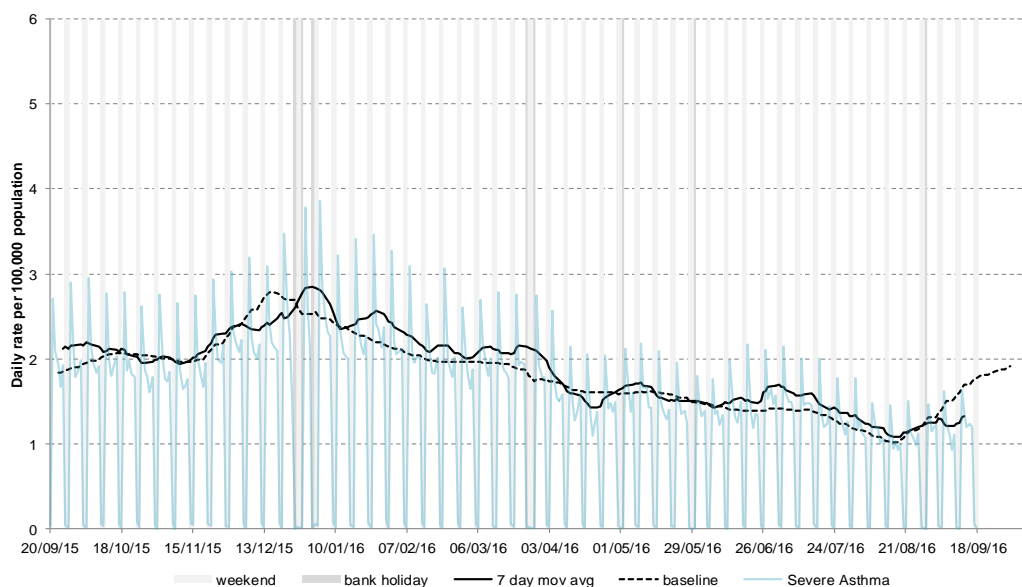
Average daily incidence rate by week per 100,000 population (all England).



* 7-day moving average adjusted for bank holidays.

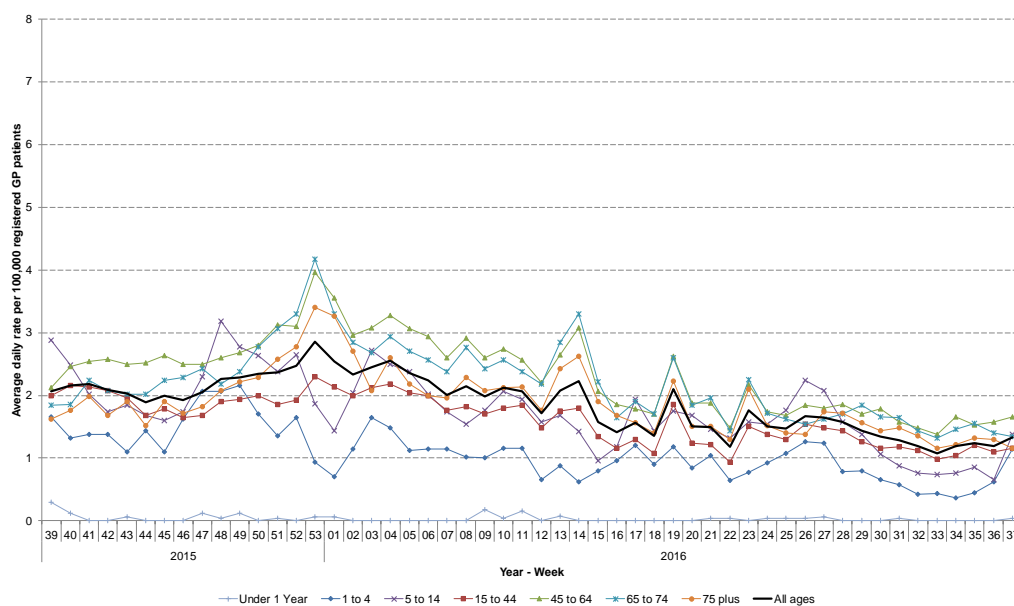
10: Severe asthma

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



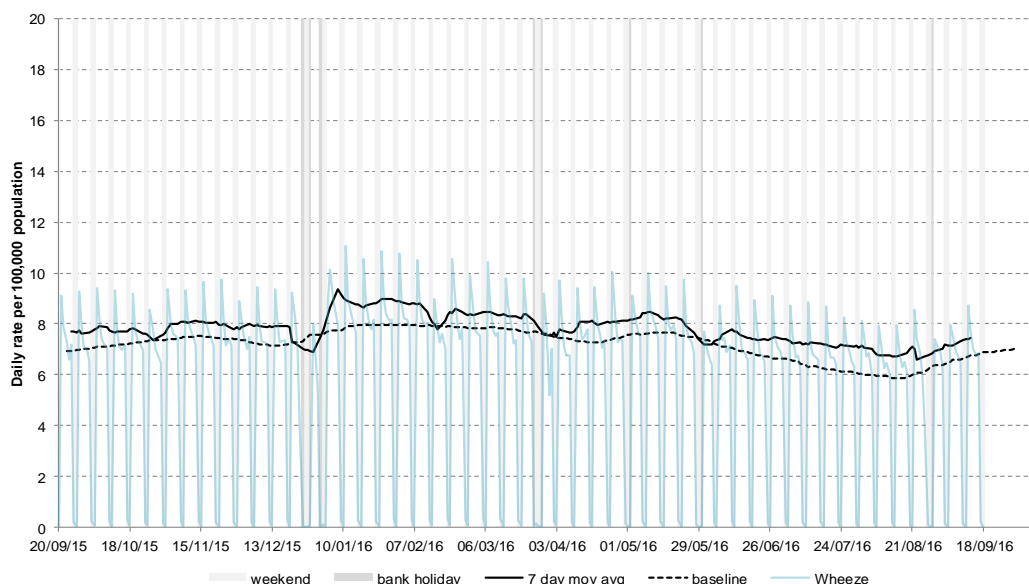
10a: Severe asthma by age

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



11: Wheeze

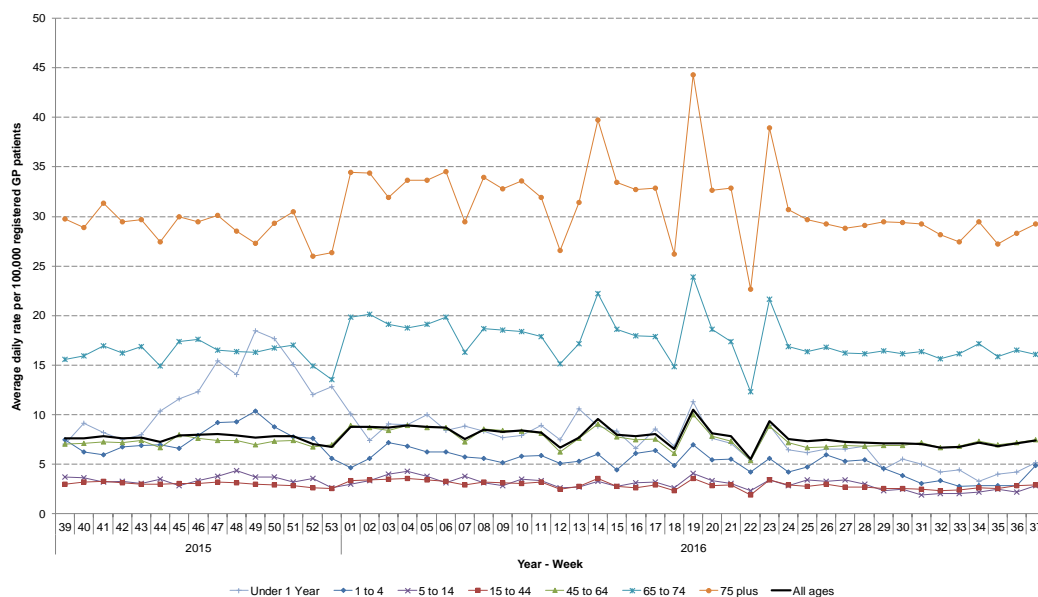
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



* 7-day moving average adjusted for bank holidays.

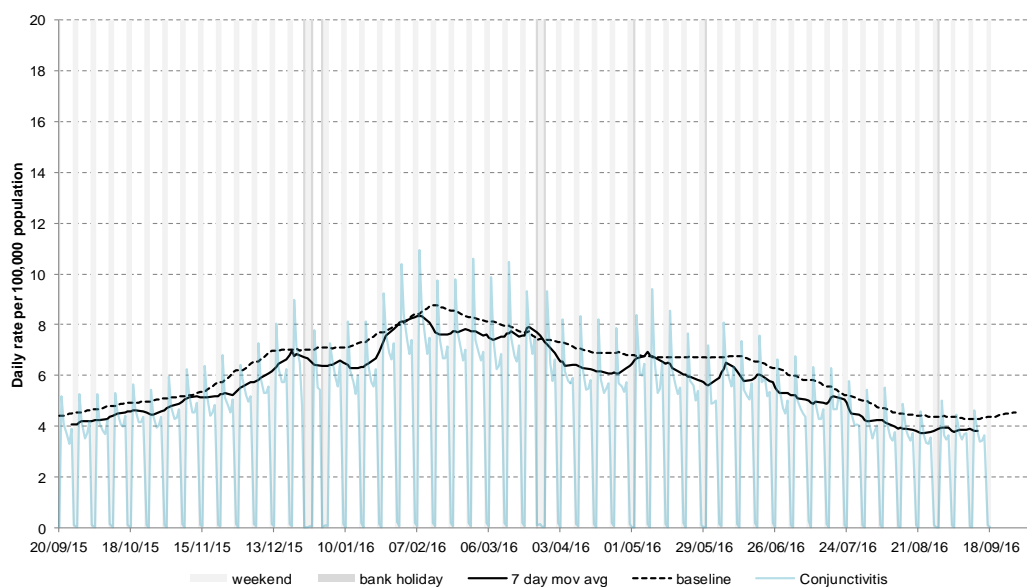
11a: Wheeze by age

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



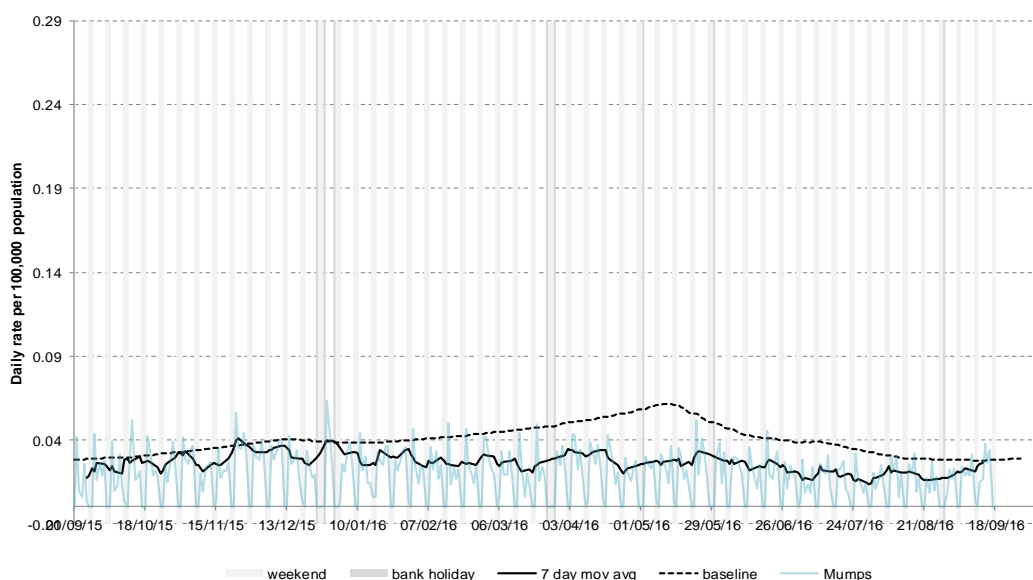
12: Conjunctivitis

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



13: Mumps

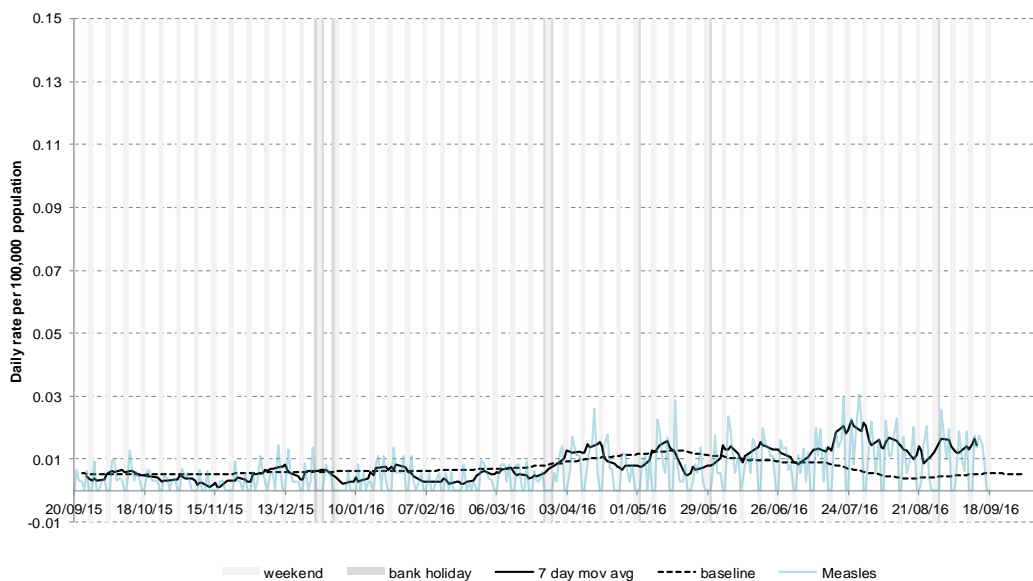
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



* 7-day moving average adjusted for bank holidays.

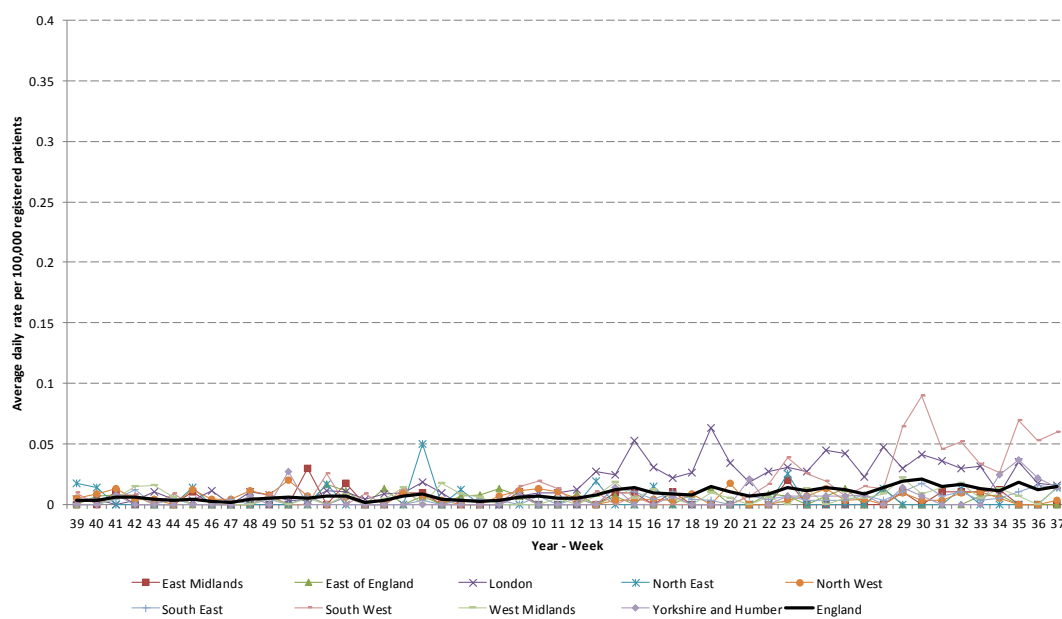
14: Measles

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



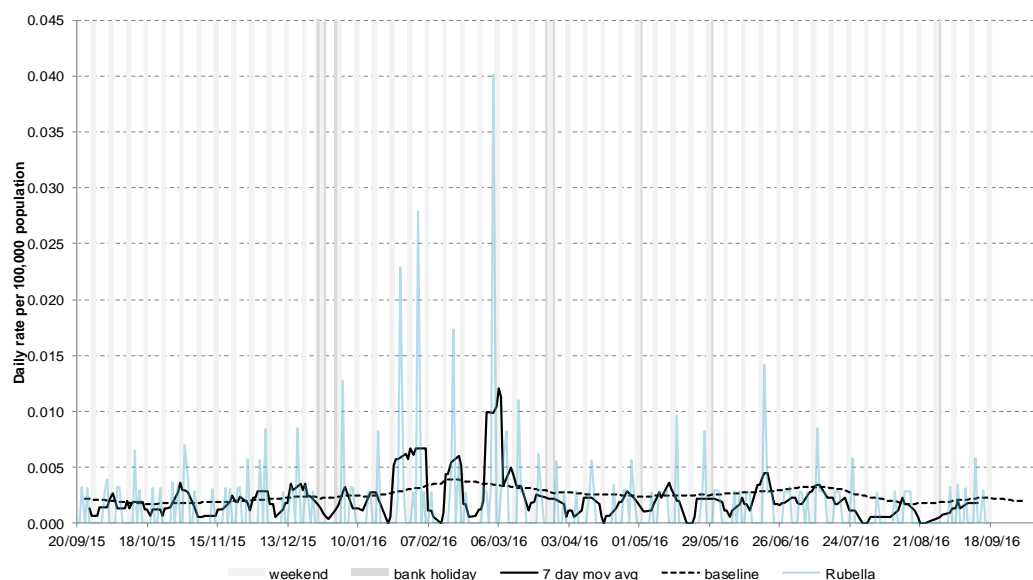
14a: Measles by PHE Centre

Average daily incidence rate by week per 100,000 population (using geographical boundaries of the 9 PHE centres).



15: Rubella

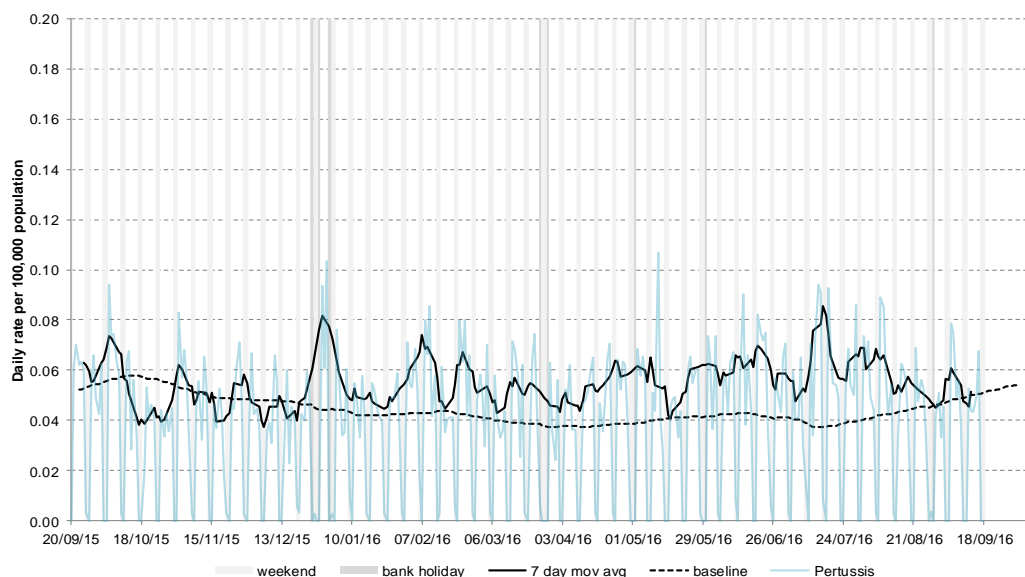
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



* 7-day moving average adjusted for bank holidays.

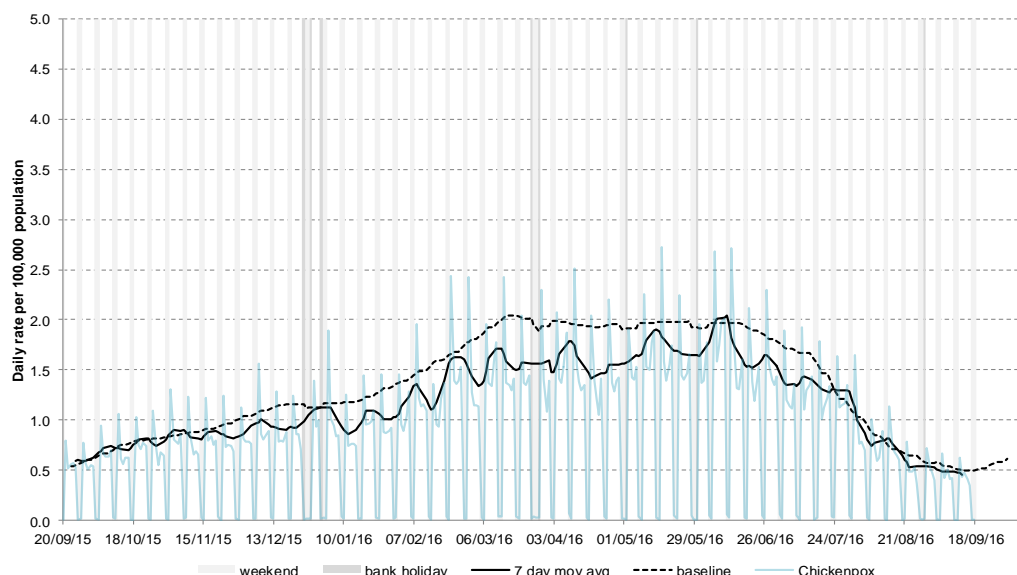
16: Pertussis

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



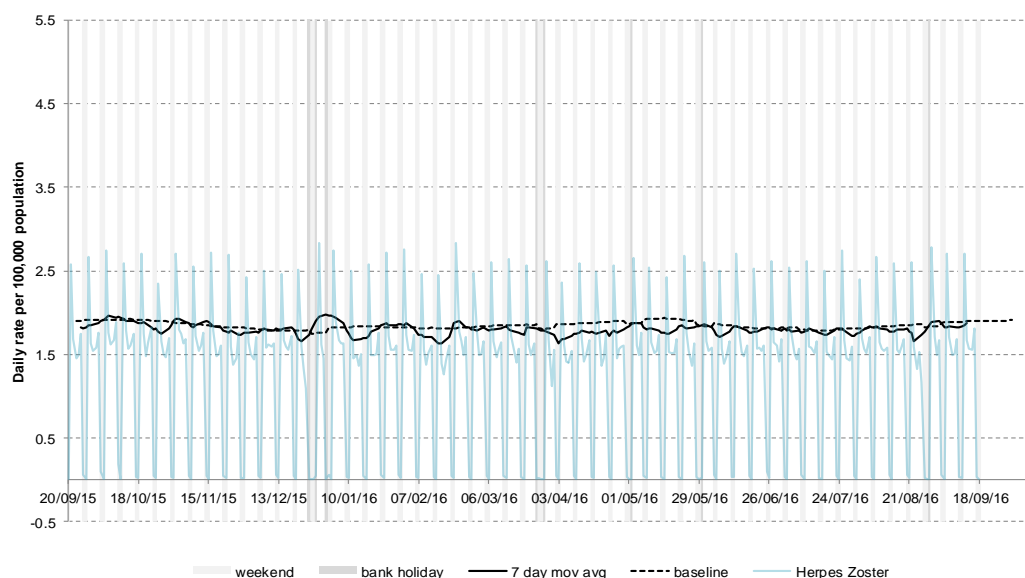
17: Chickenpox

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



18: Herpes zoster

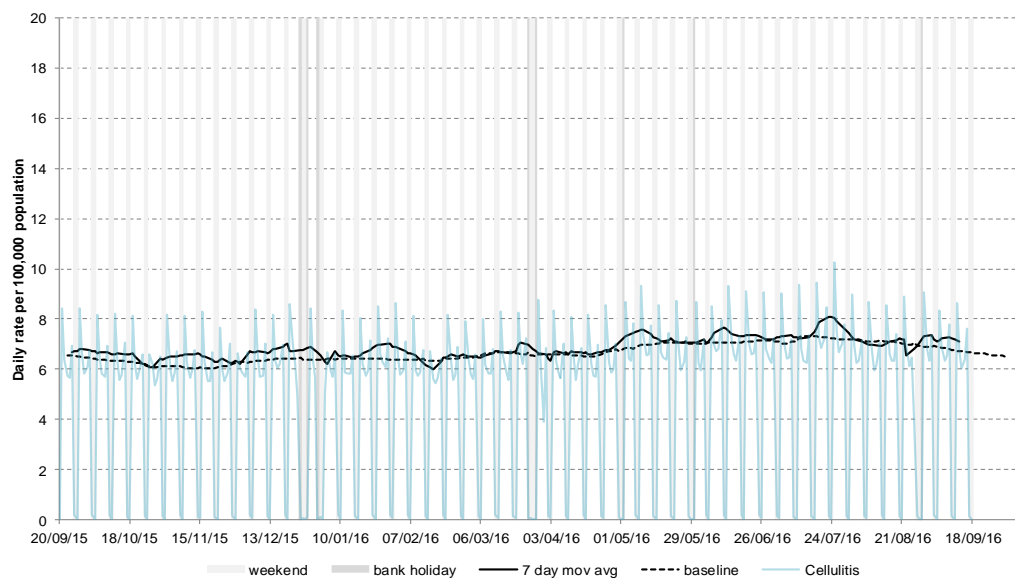
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



* 7-day moving average adjusted for bank holidays.

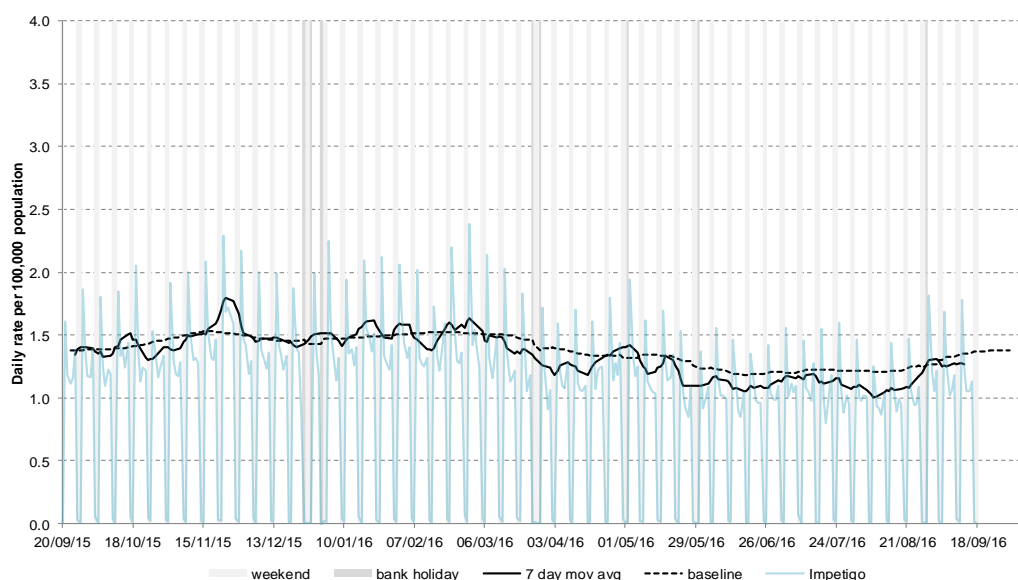
19: Cellulitis

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



20: Impetigo

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



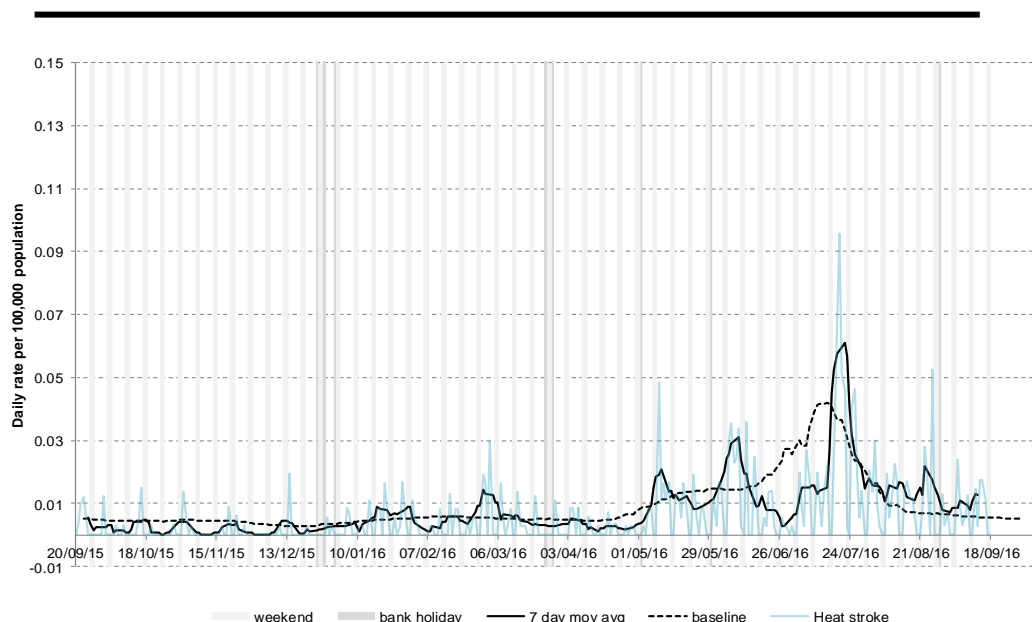
21: Intentionally blank

* 7-day moving average adjusted for bank holidays.

21a: Intentionally blank

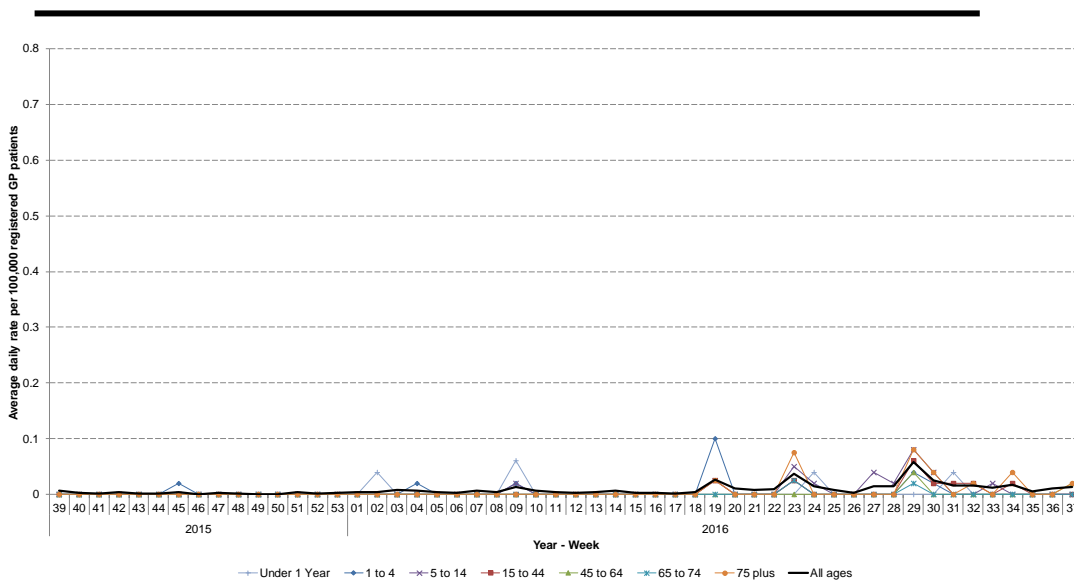
22: Heat/sunstroke

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



22a: Heat/sun stroke by age

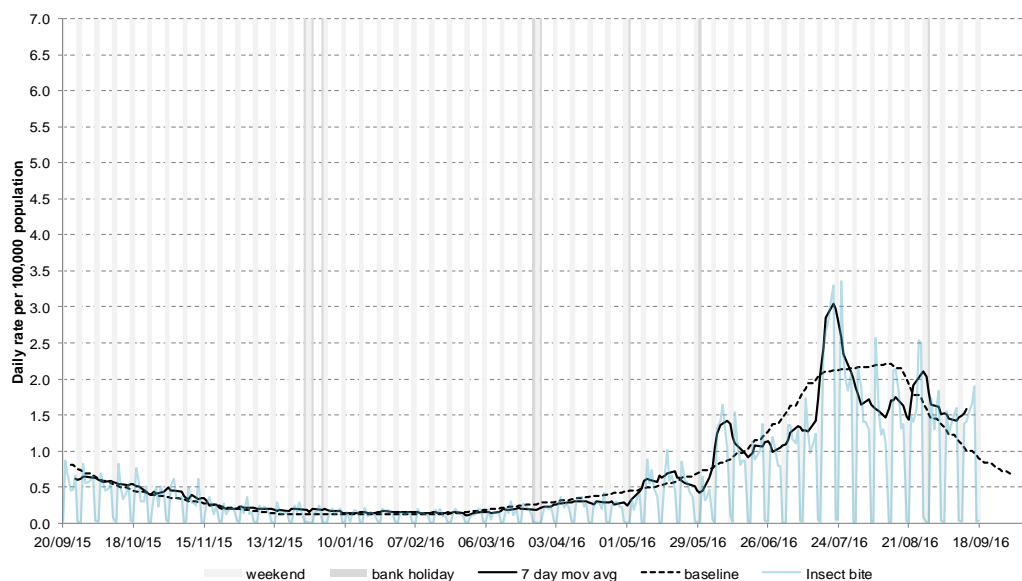
Average daily incidence rate by week per 100,000 population (all England).



* 7-day moving average adjusted for bank holidays.

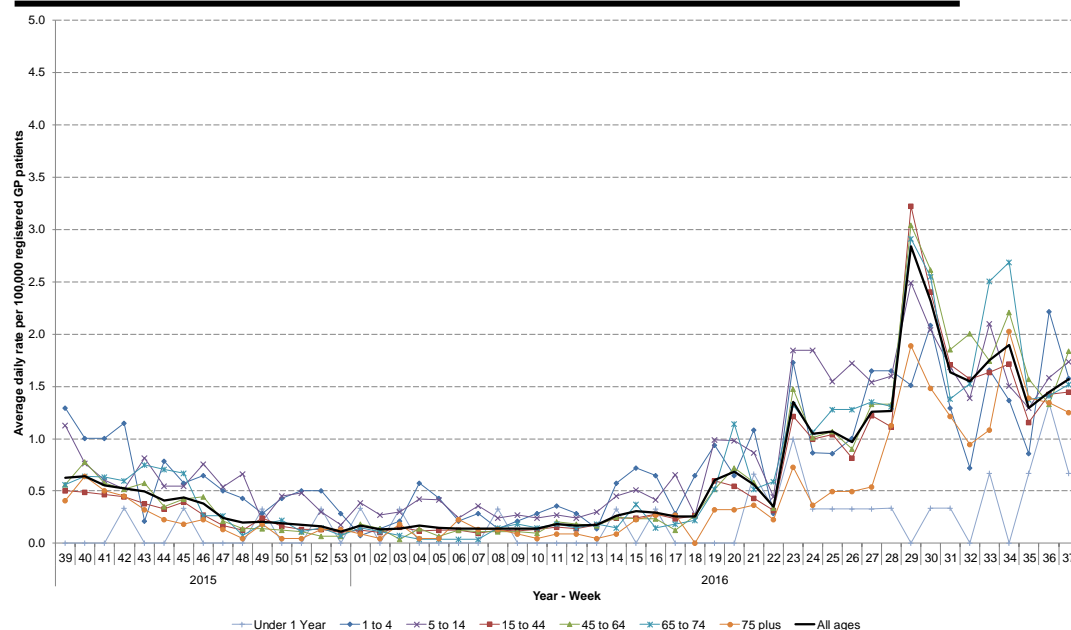
23: Insect Bites

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



23a: Insect bites by age

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



Intentionally left blank.

* 7-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).¹ MEM is used as a standard methodology for setting influenza surveillance thresholds across Europe.²
- 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.

¹ Vega T et al. *Influenza Other Respir Viruses*. 2013;7(4):546-58.

² Green HK et al. *Epidemiol Infect*. 2015;143(1):1-12.

Acknowledgements:

We thank and acknowledge the University of Nottingham, ClinRisk® 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.

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

Tel: 0344 225 3560 > Option 4 > Option 2 **Fax:** 0121 236 2215

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

Contact ReSST:
syndromic-surveillance
@phe.gov.uk