



20 June 2018

Year: 2018 Week: 24

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## Key messages

Data to: 17 June 2018

There was a further increase in GP consultations for allergic rhinitis during week 24 (figure 20) in line with recent warm weather and the grass pollen season. Consultations remain within the range seen in previous years (figure 20b).

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 | decreasing | 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 | decreasing | below baseline levels      |
| Pneumonia                         | decreasing | below baseline levels      |
| Gastroenteritis                   | no trend   | below baseline levels      |
| Vomiting                          | no trend   | below baseline levels      |
| Diarrhoea                         | no trend   | below baseline levels      |
| Asthma                            | no trend   | similar to baseline levels |
| Conjunctivitis                    | no trend   | below baseline levels      |
| Mumps                             | no trend   | below baseline levels      |
| Measles                           | no trend   | above baseline levels      |
| Rubella                           | no trend   | above baseline levels      |
| Pertussis                         | no trend   | below baseline levels      |
| Chickenpox                        | no trend   | below baseline levels      |
| Herpes zoster                     | no trend   | below baseline levels      |
| Cellulitis                        | no trend   | similar to baseline levels |
| Impetigo                          | no trend   | below baseline levels      |
| Allergic rhinitis                 | increasing | above baseline levels      |
| Heat/sunstroke                    | no trend   | below baseline levels      |
| Insect Bites                      | decreasing | above baseline levels      |

## GP practices and denominator population:

| Year | Week | GP Practices Reporting** | Population size** |
|------|------|--------------------------|-------------------|
| 2018 | 24   | 2,853                    | 24.0 million      |

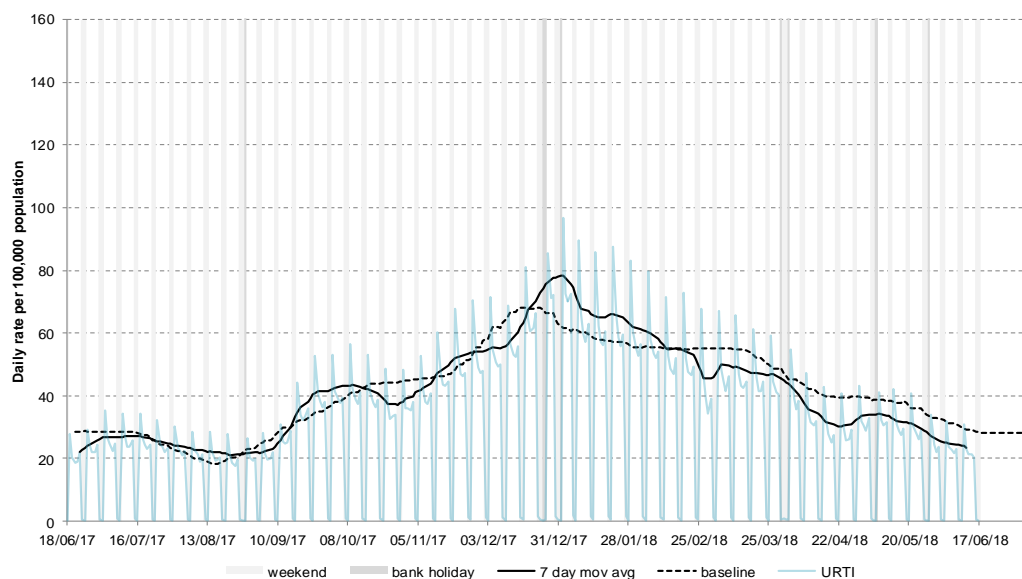
\*\*based on the average number of practices and denominator population in the reporting working week.

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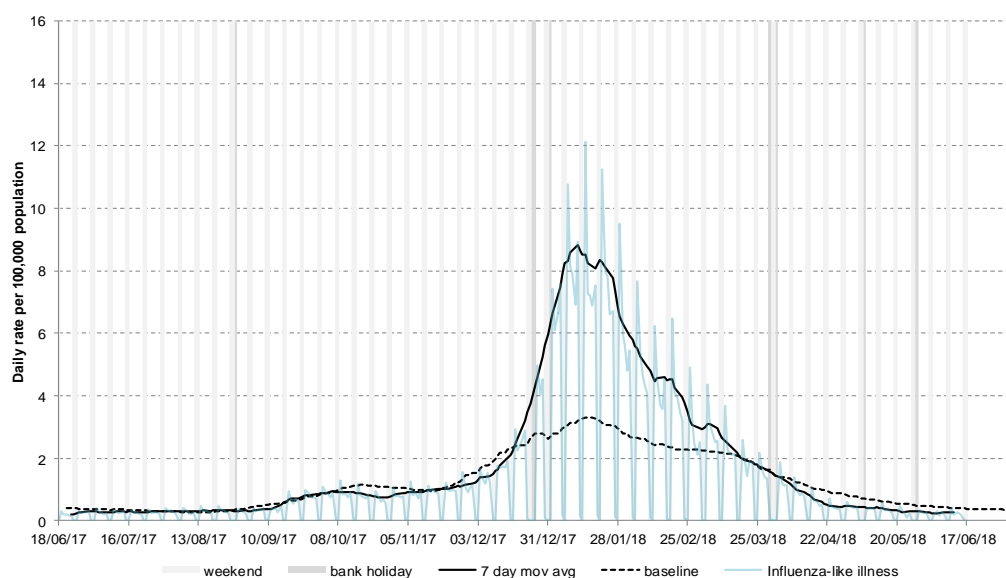
## 1: Upper respiratory tract infection (URTI)

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



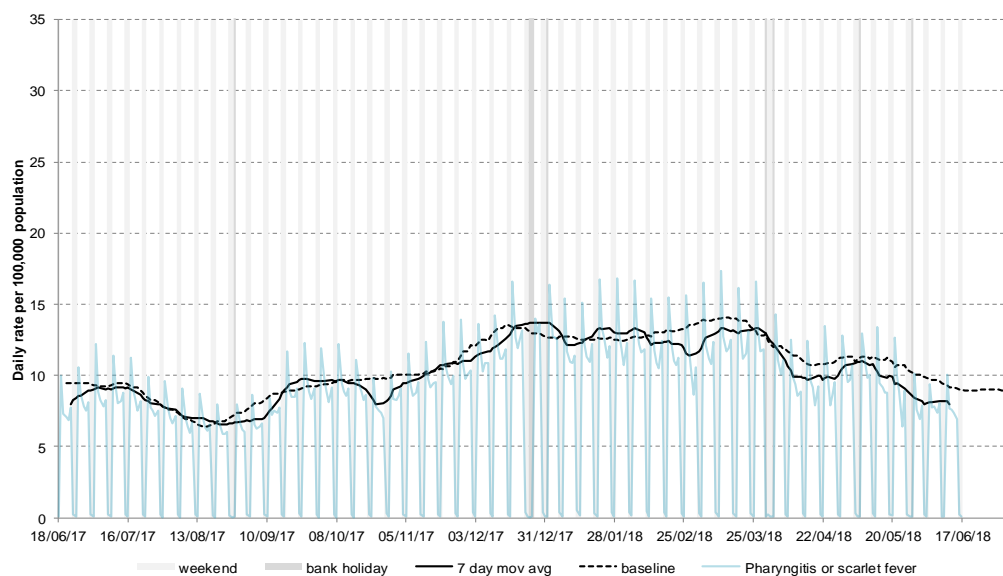
## 2: Influenza-like illness (ILI)

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).



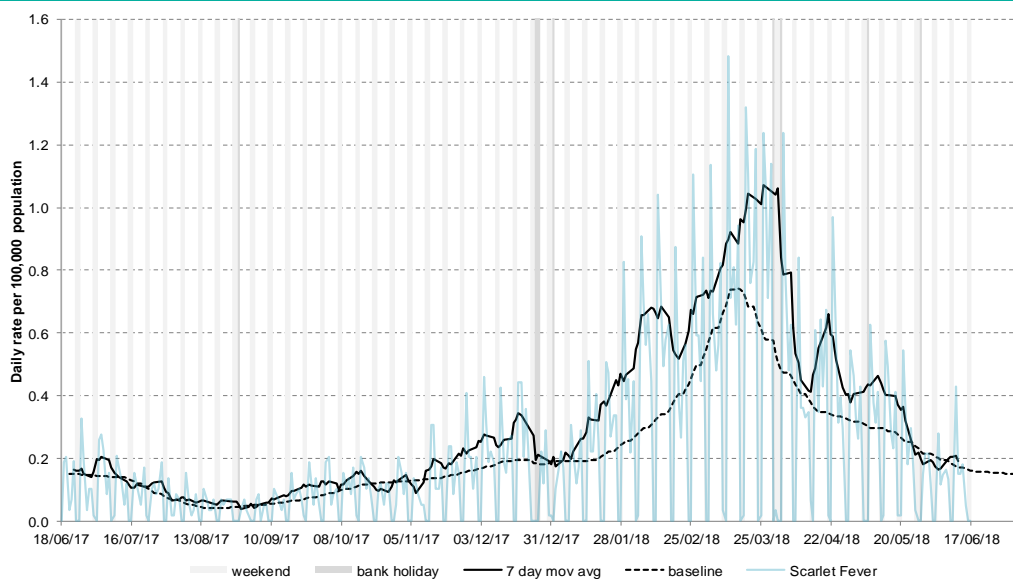
\* 7-day moving average adjusted for bank holidays.

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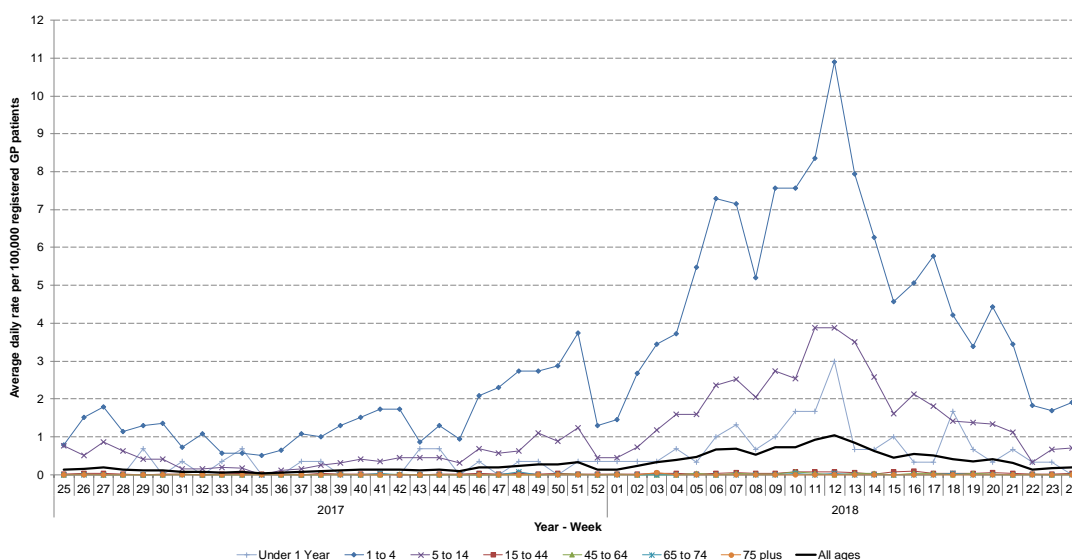
## 4: Scarlet fever

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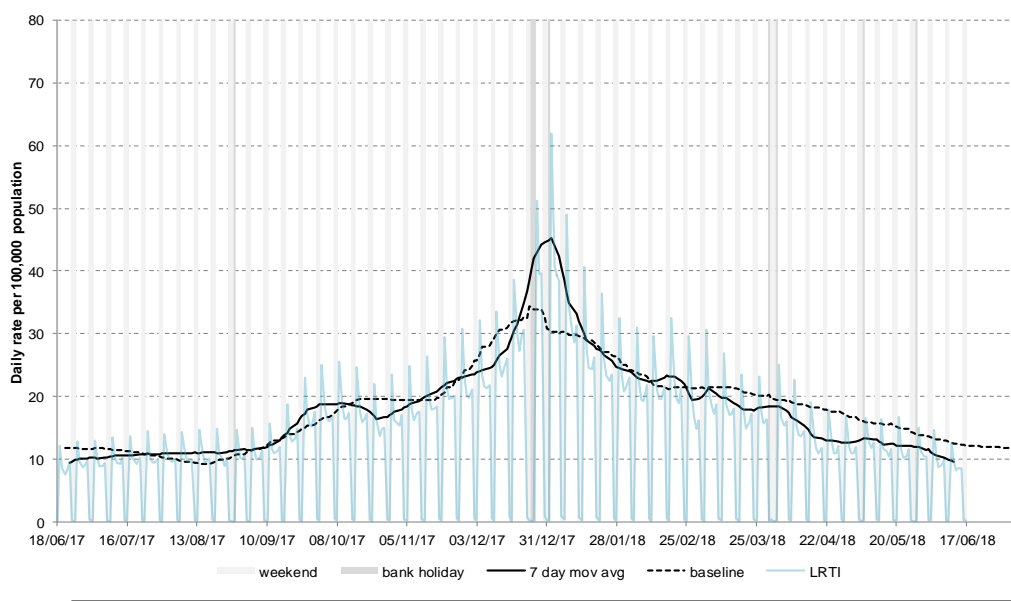
\* 7-day moving average adjusted for bank holidays.

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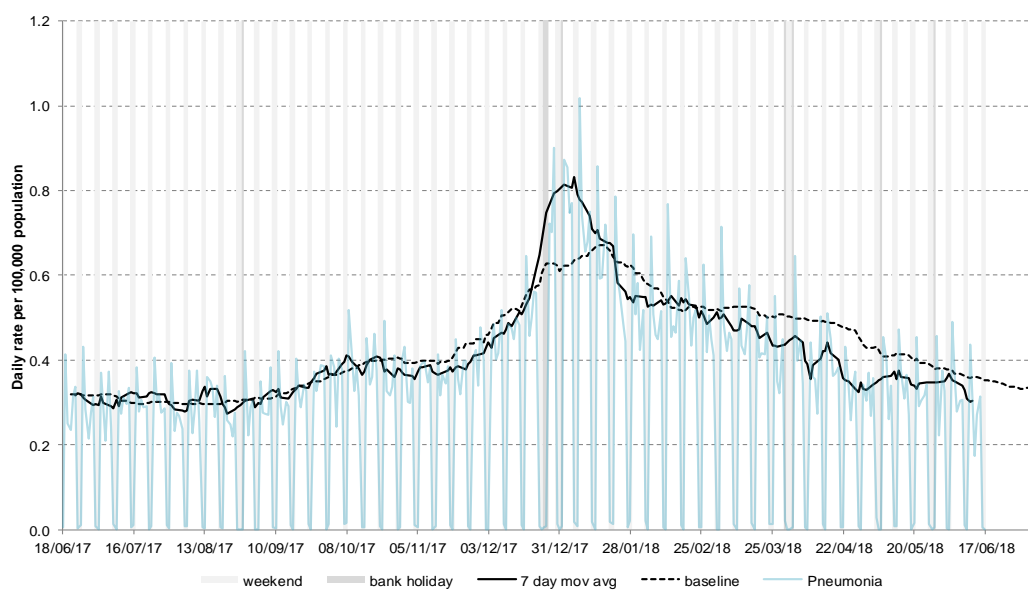
## 5: Lower respiratory tract infection (LRTI)

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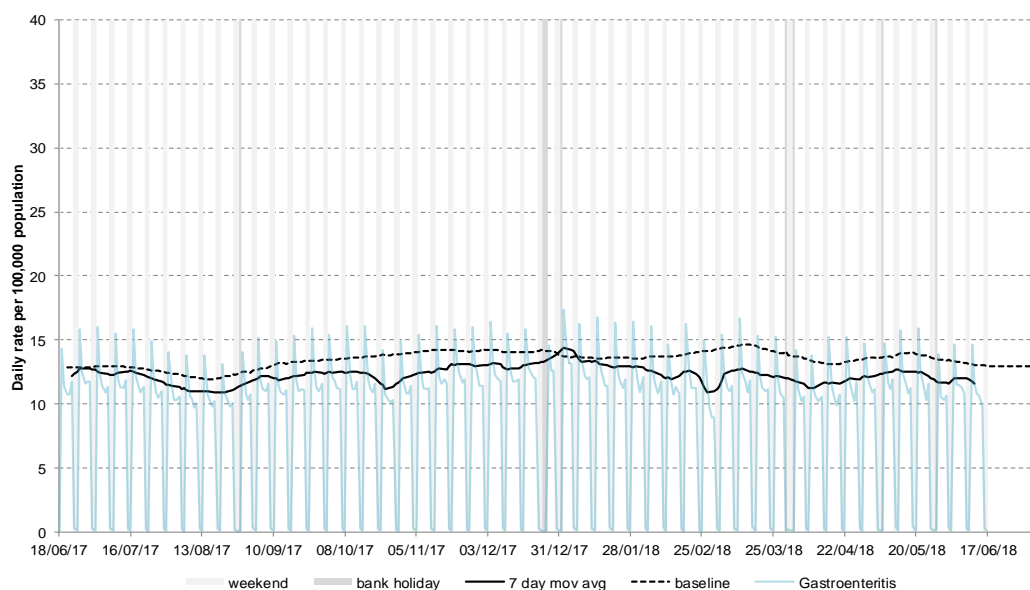
\* 7-day moving average adjusted for bank holidays.

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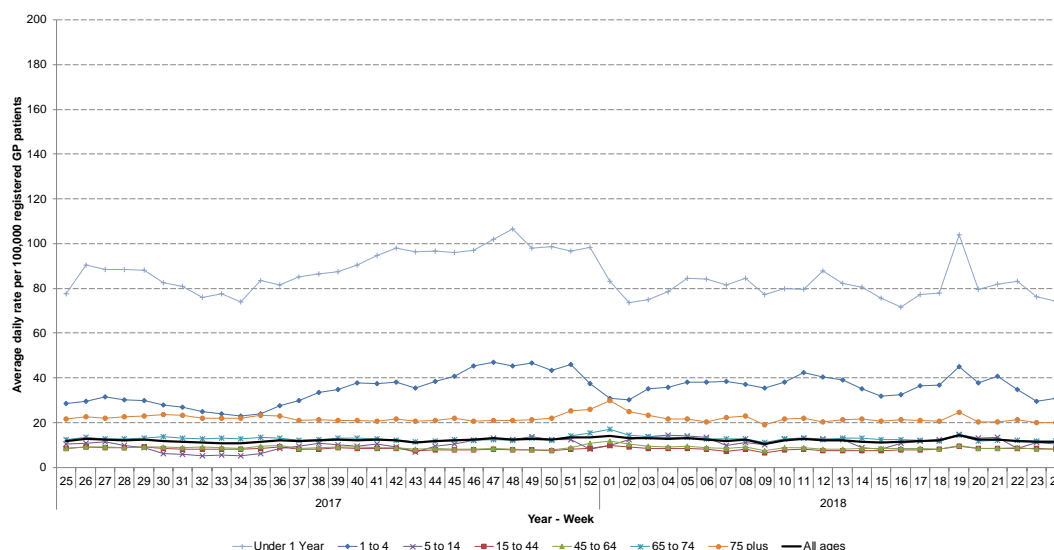
## 7: Gastroenteritis

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



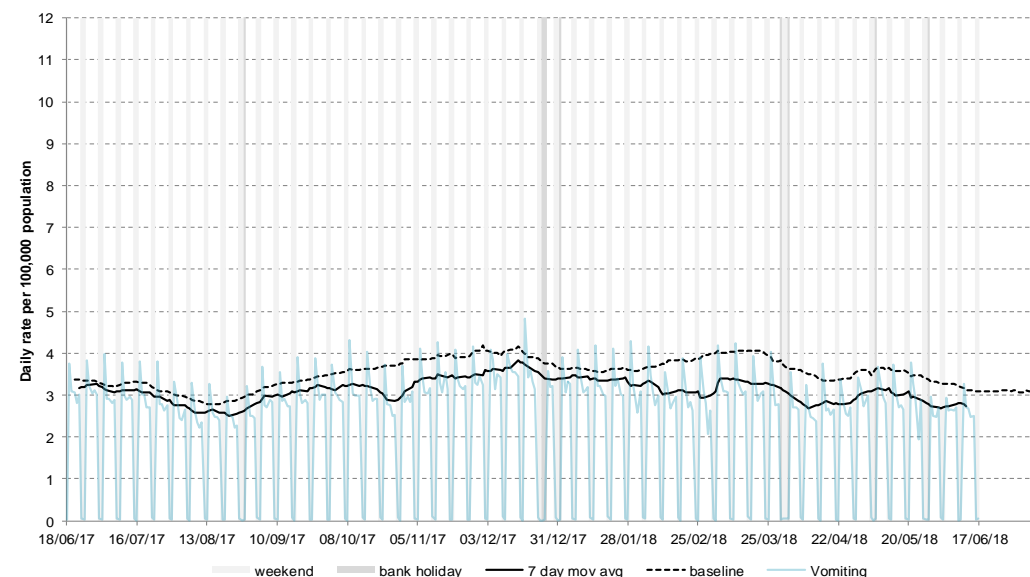
## 7a: Gastroenteritis by age

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).



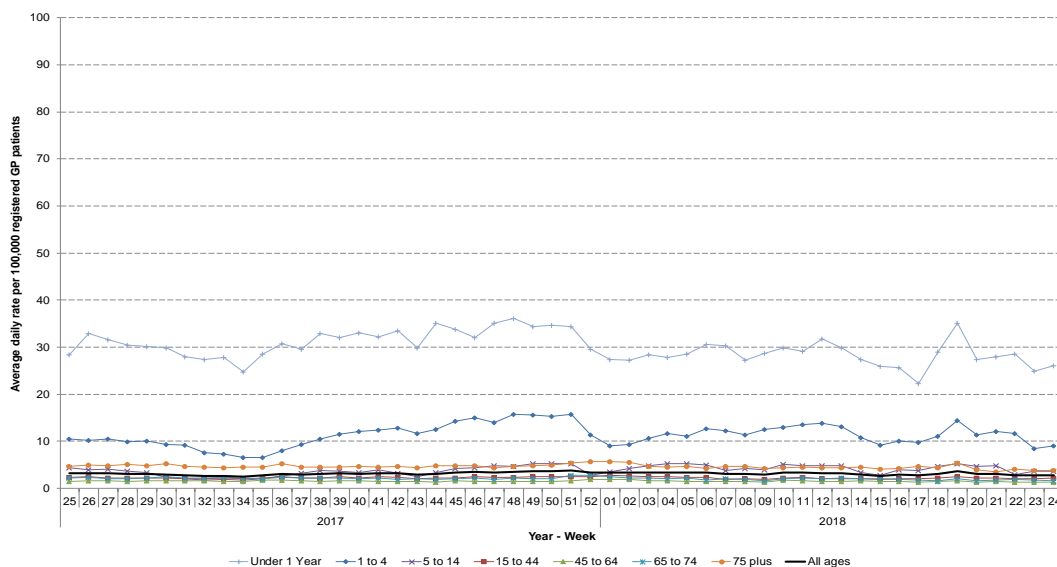
\* 7-day moving average adjusted for bank holidays.

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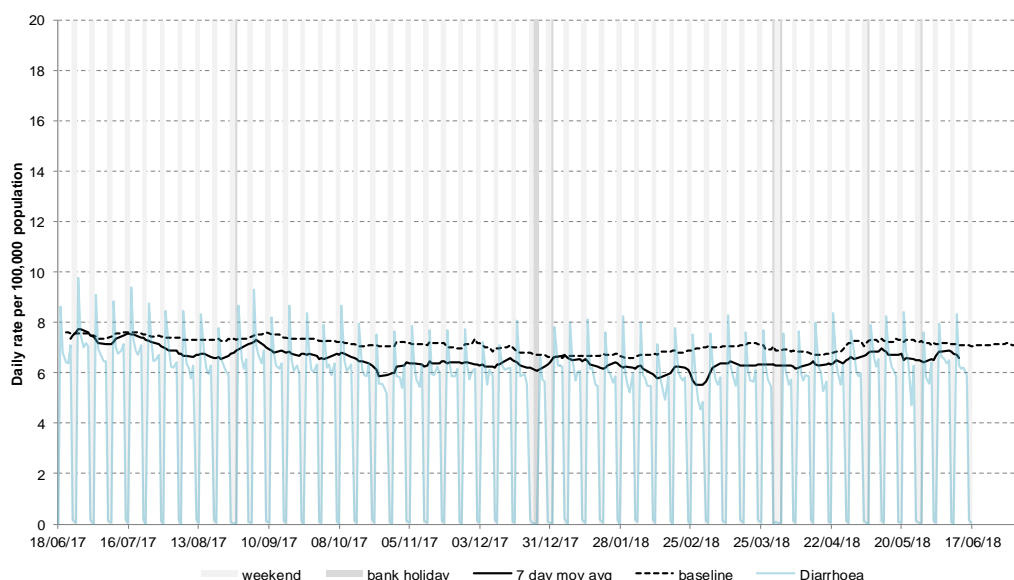
## 8a: Vomiting by age

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



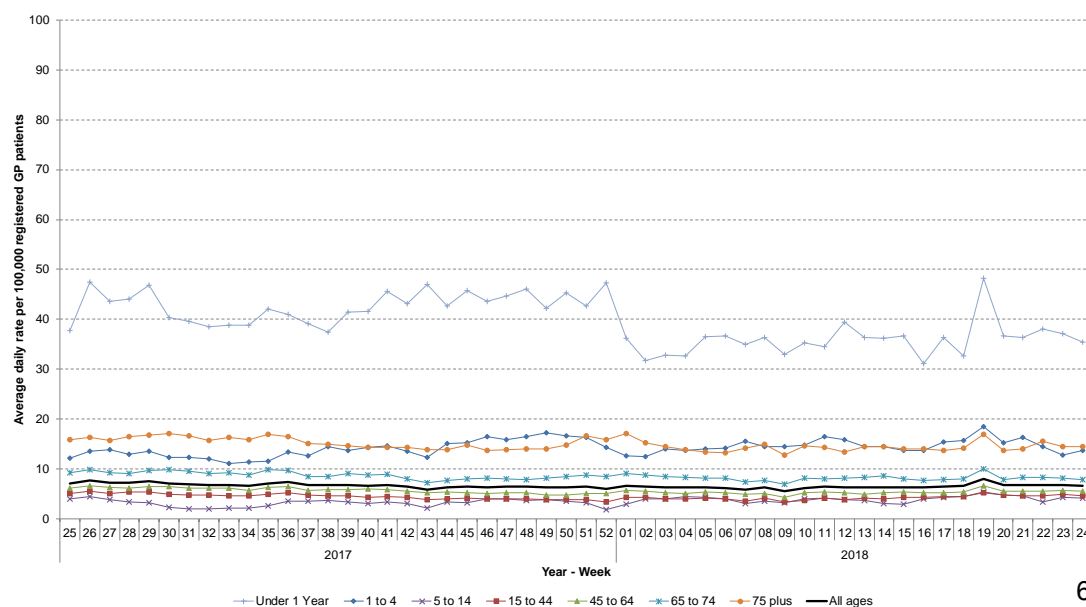
## 9: Diarrhoea

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).



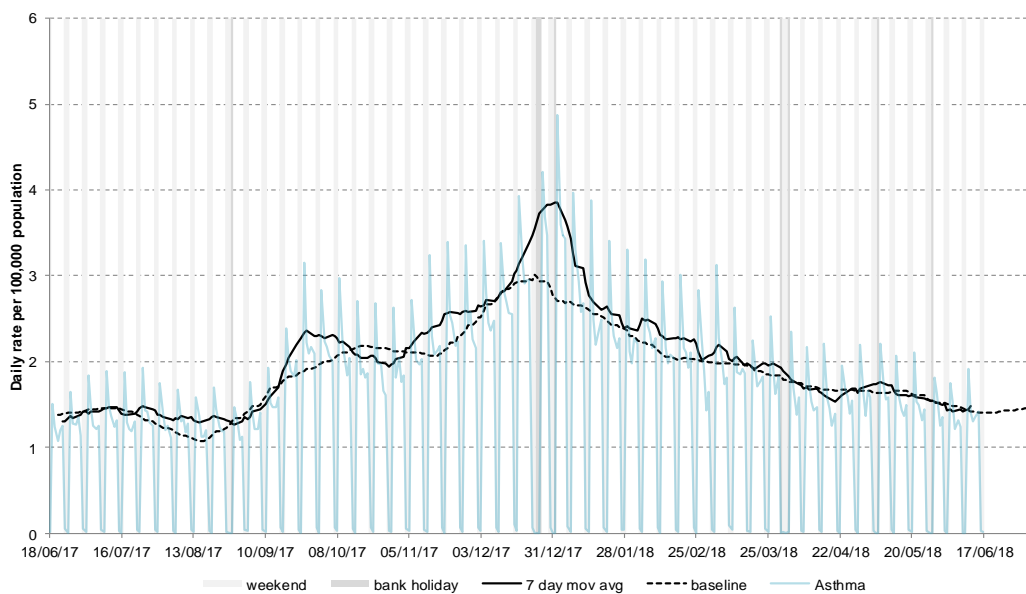
\* 7-day moving average adjusted for bank holidays.

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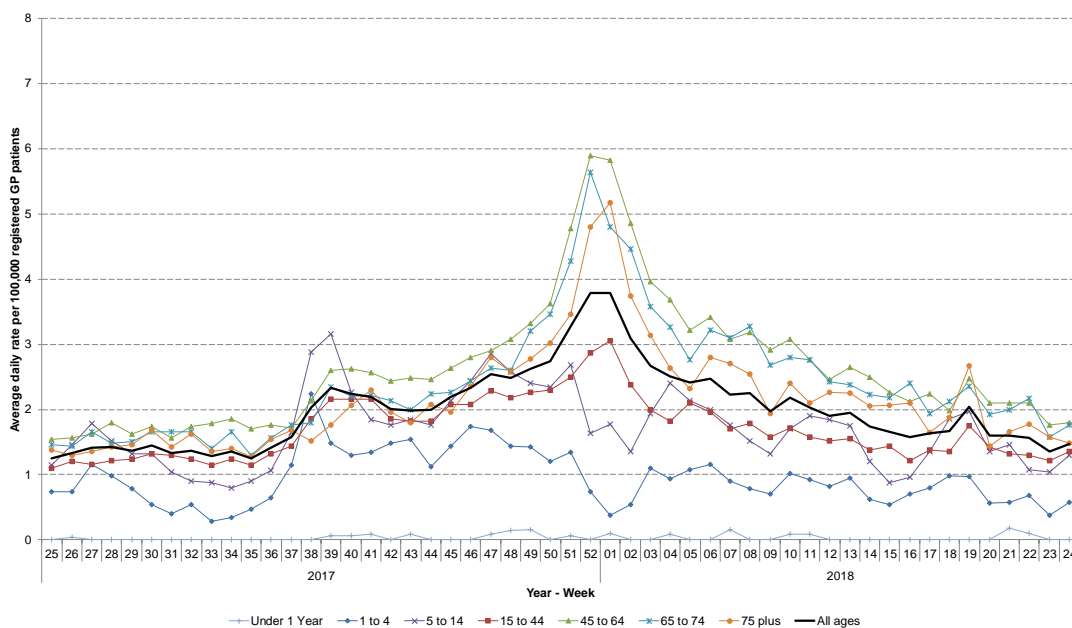
## 10: Asthma

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



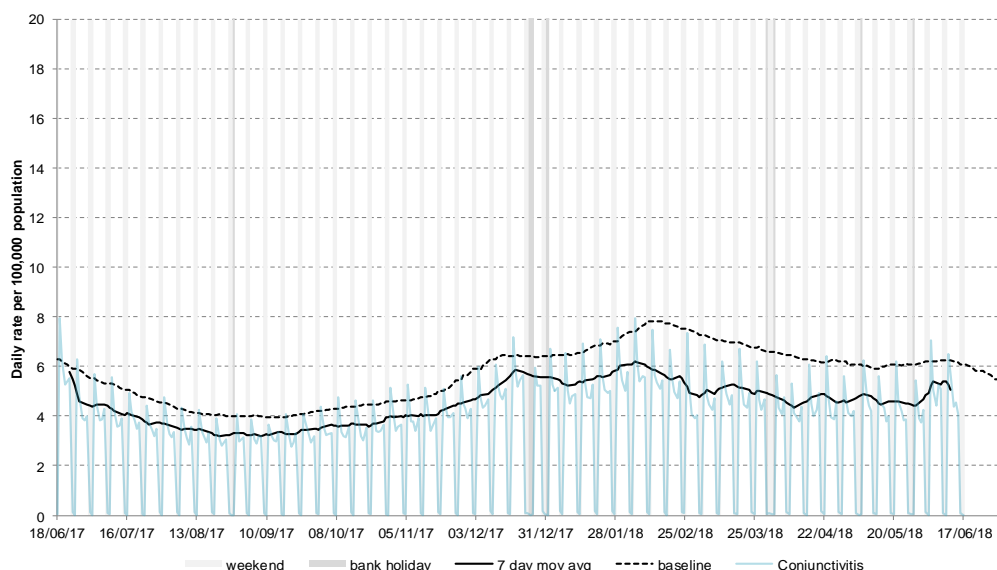
## 10a: Asthma by age

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



## 11: Conjunctivitis

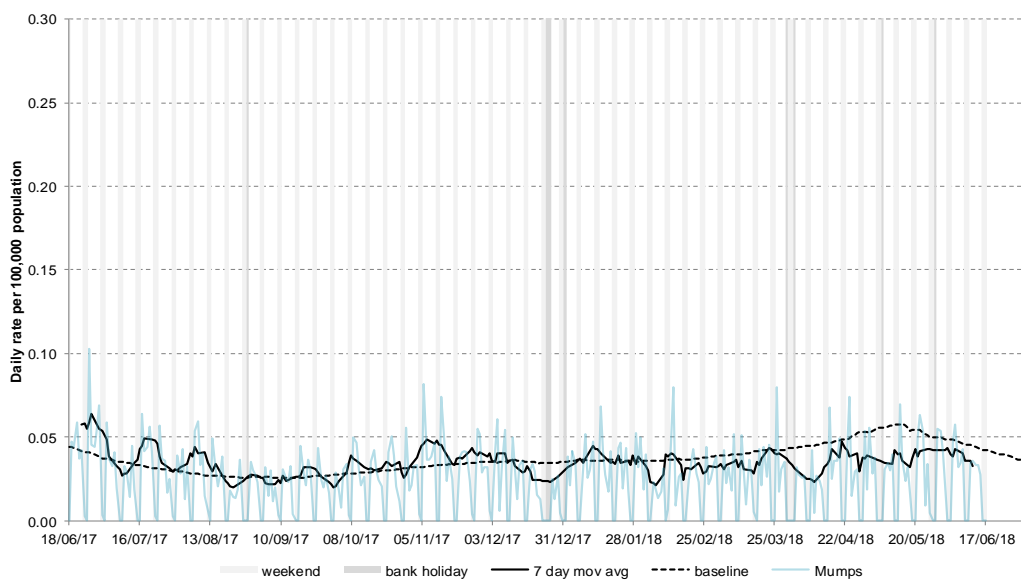
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



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

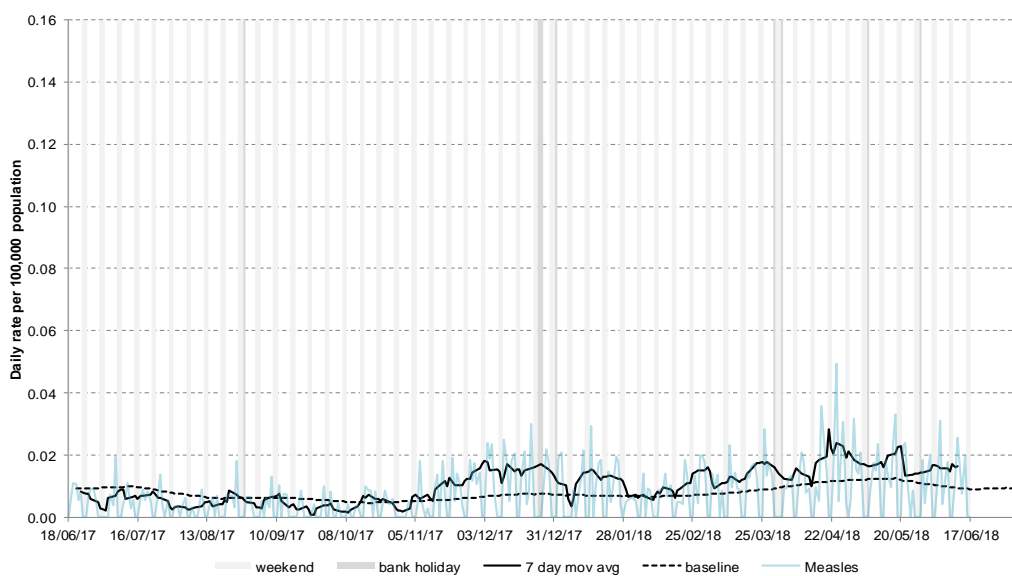
## 12: Mumps

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



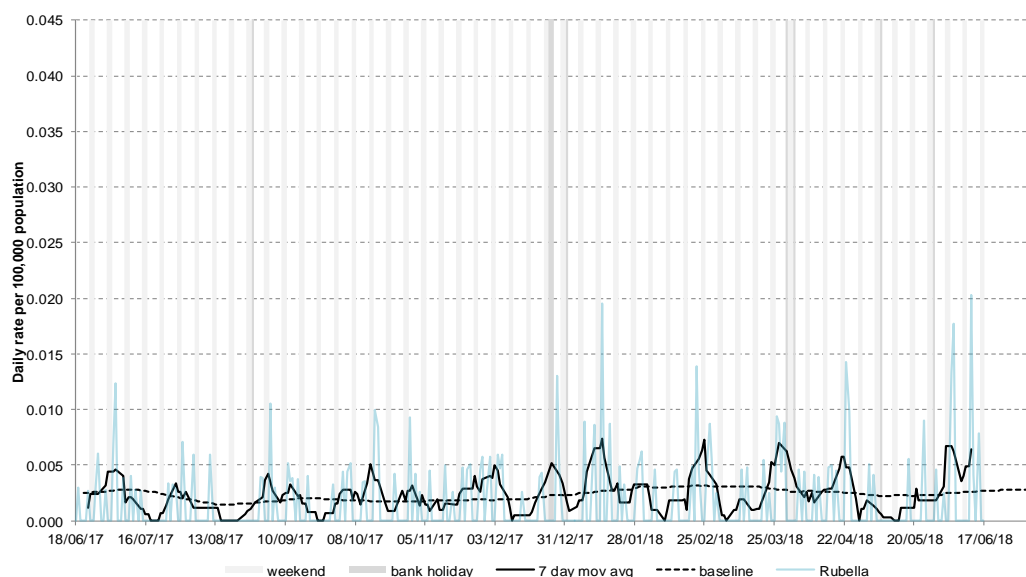
## 13: Measles

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



## 14: Rubella

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

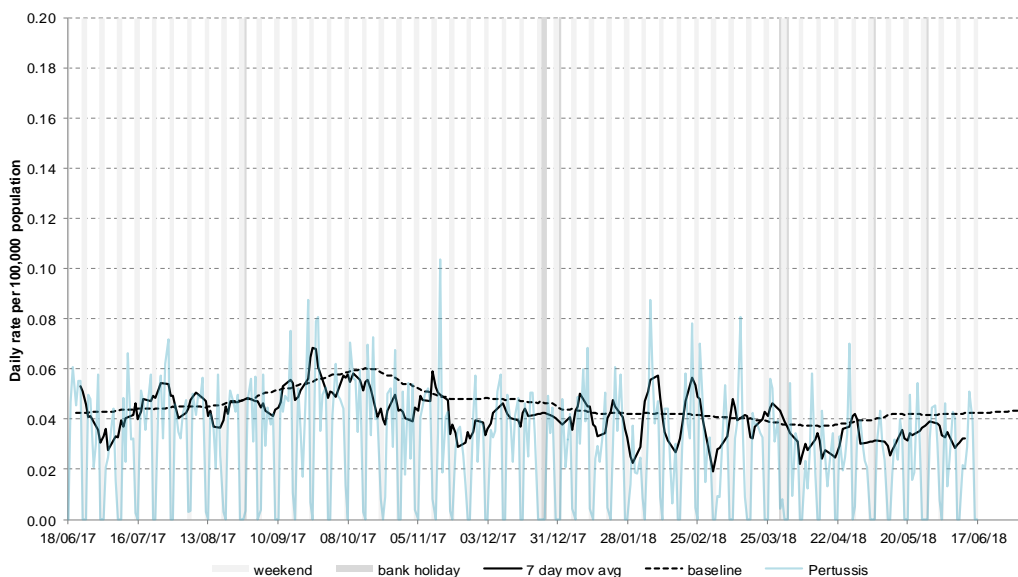


\* 7-day moving average adjusted for bank holidays.



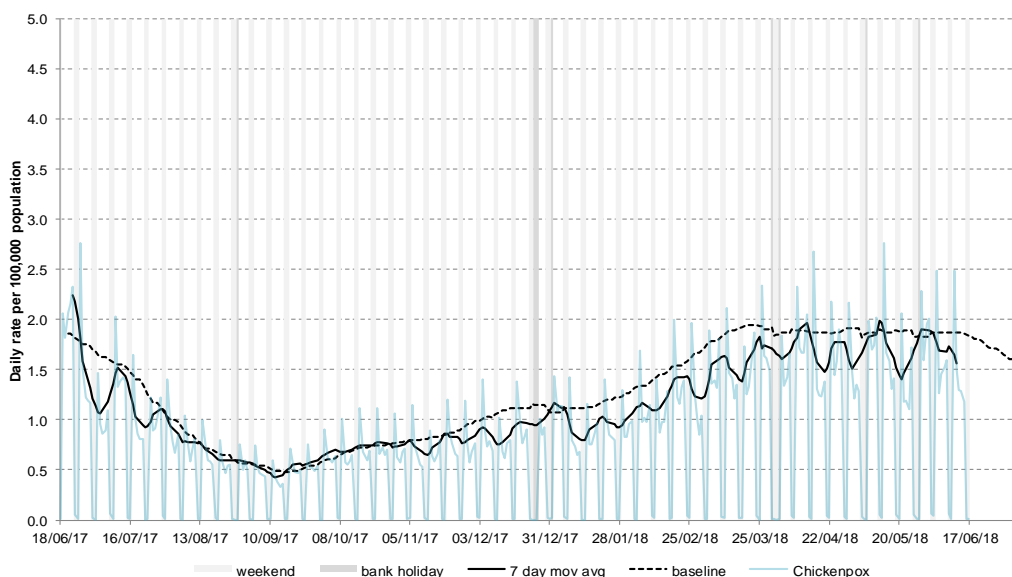
## 15: Pertussis

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



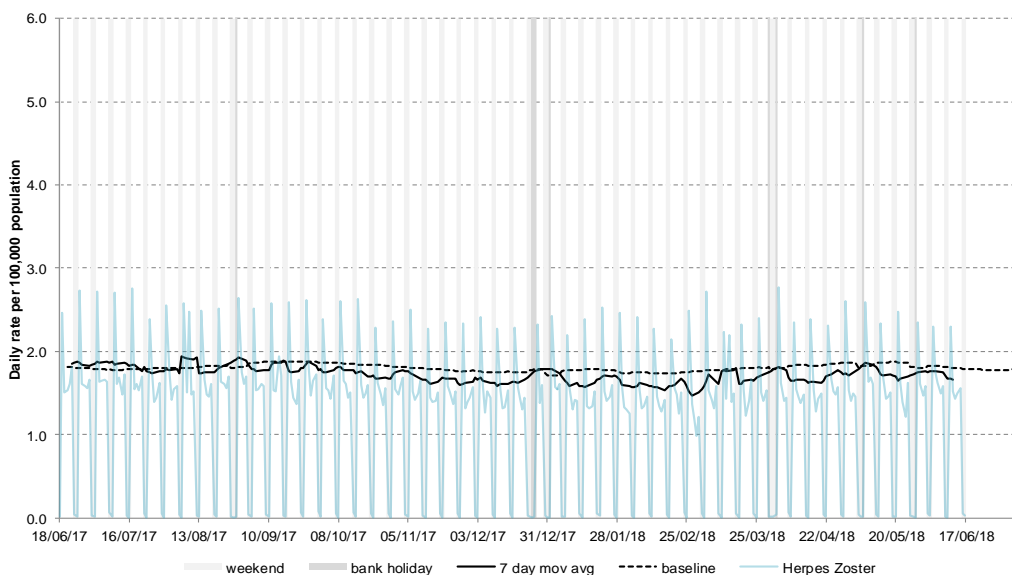
## 16: Chickenpox

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



## 17: Herpes zoster

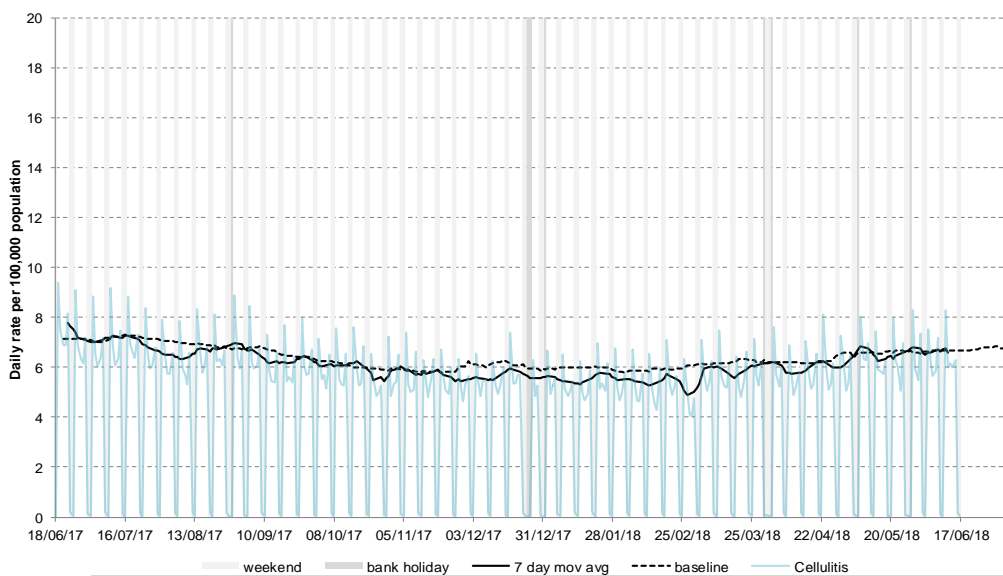
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



\* 7-day moving average

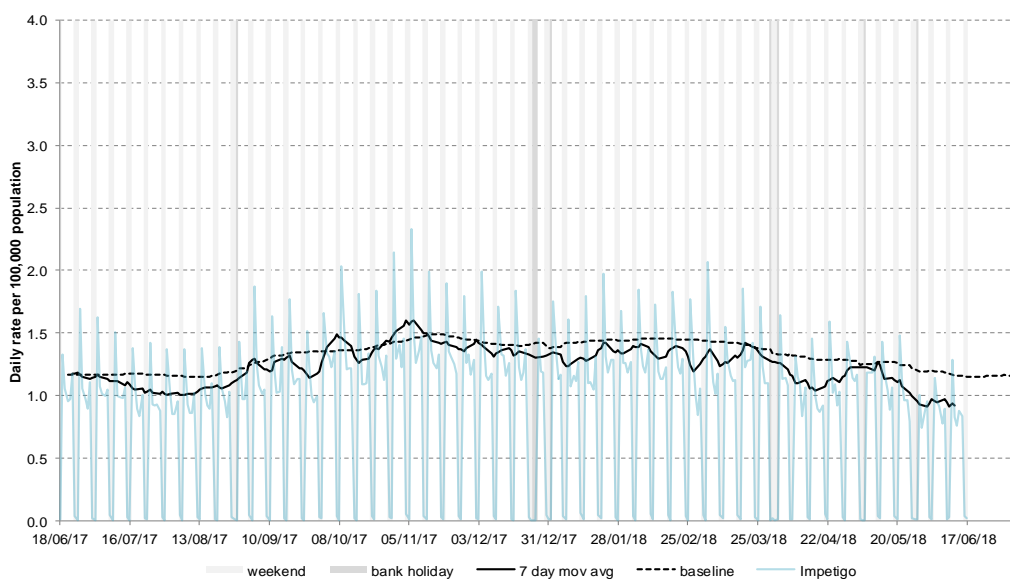
## 18: Cellulitis

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



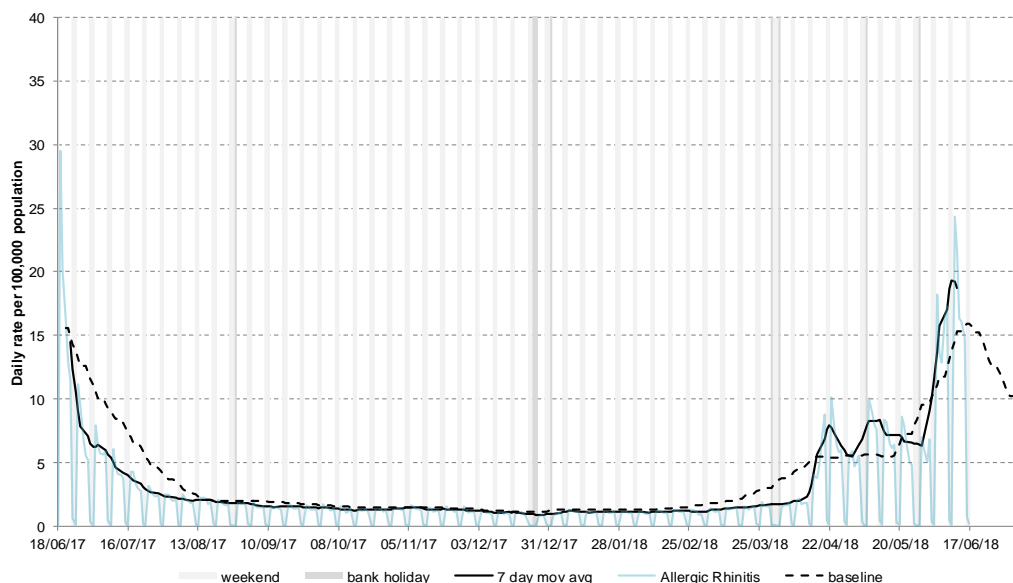
## 19: Impetigo

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).



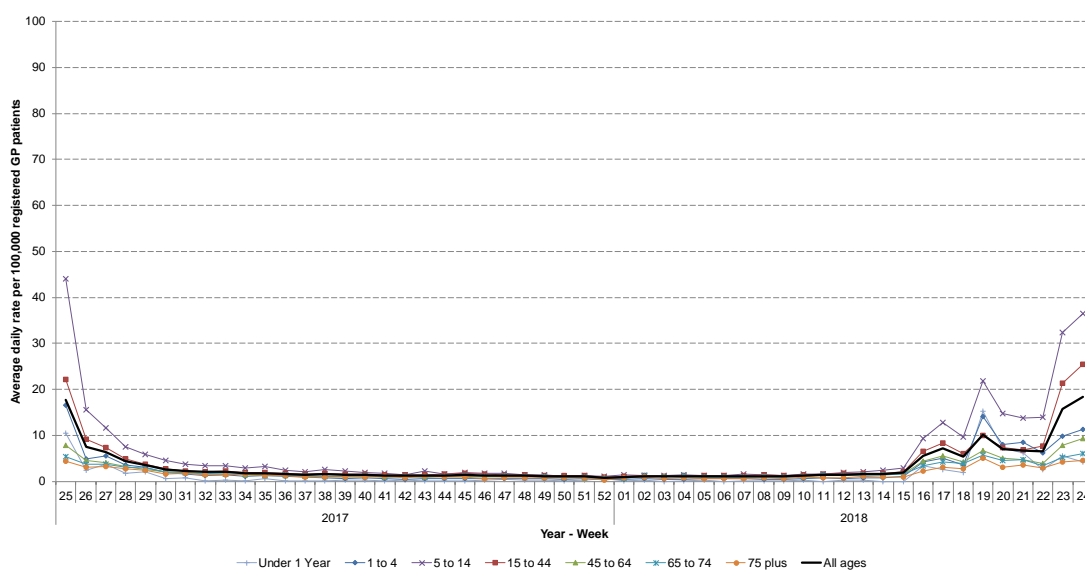
\* 7-day moving average

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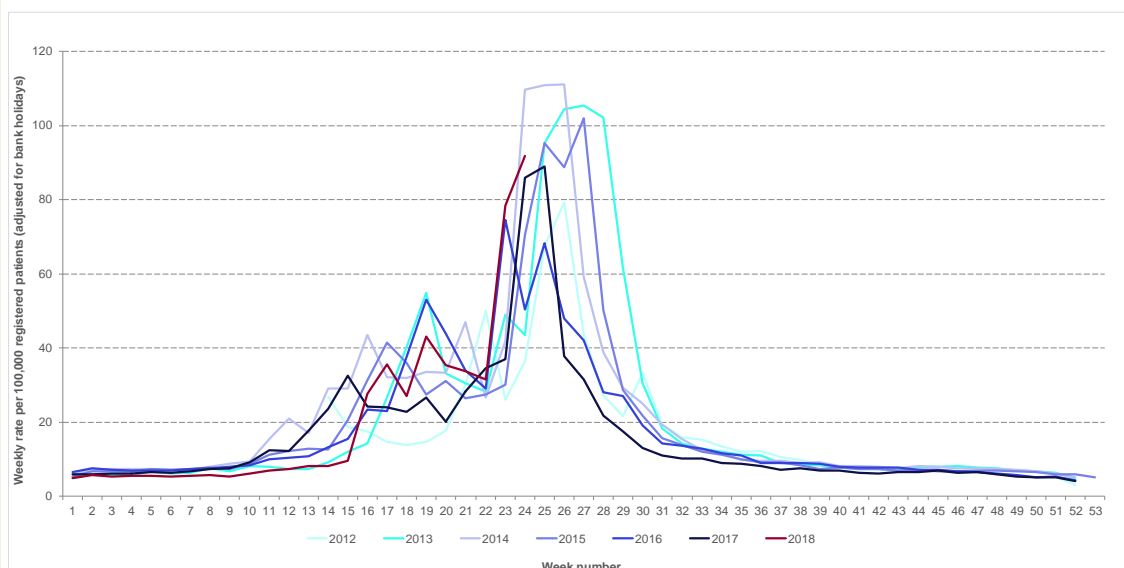
## 20a: Allergic rhinitis by age

Weekly incidence rate by week per 100,000 population (all England since April 2012).



## 20b: Allergic rhinitis

Weekly incidence rate since April 2012 per 100,000 population (all England).



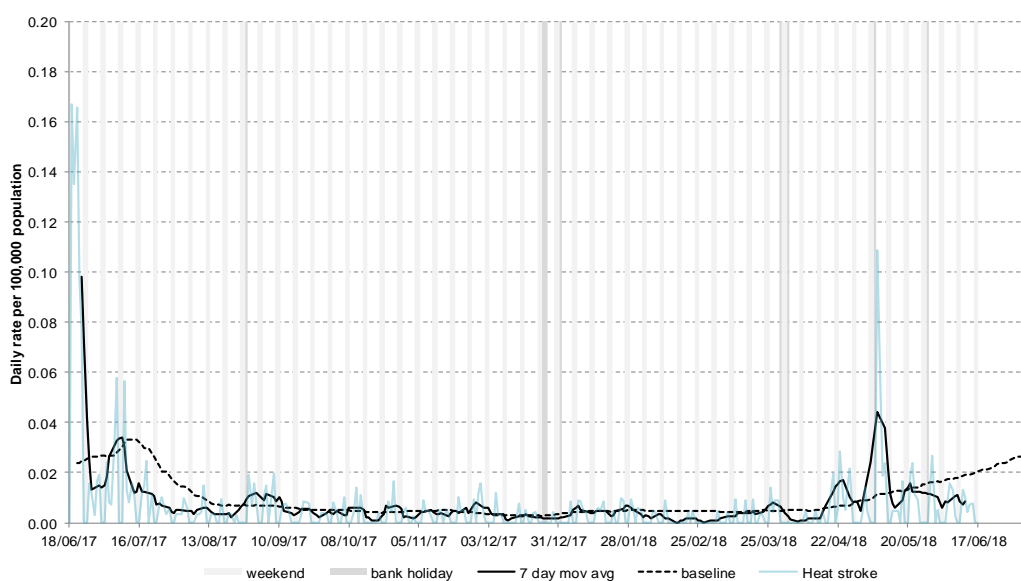
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\* 7-day moving average adjusted for bank holidays.

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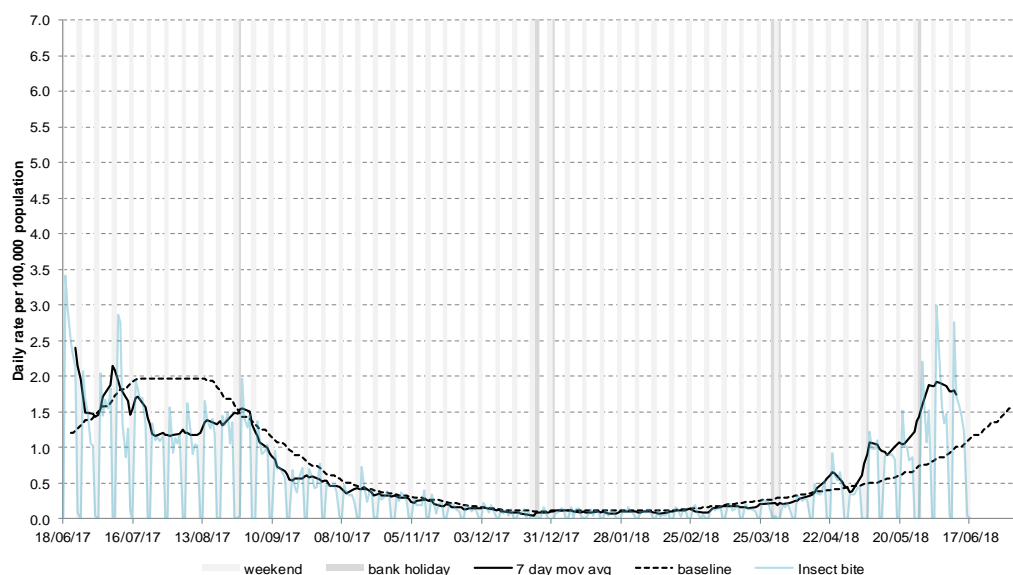
## 21: Heat/sunstroke

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



## 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.

## 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 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. **ILI 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.
- 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:**

<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. *Influenza Other Respir Viruses*. 2013;7(4):546-58.

<sup>2</sup> 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.

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