



17 January 2017

Year: 2017 Week: 2

## 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: 15 January 2017

There were decreases in GP consultations for respiratory conditions during week 2, (figures 1,2, 5, 6 & 10).

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 2 Alert and readiness** - **3 Severe weather action**  
<http://www.metoffice.gov.uk/weather/uk/coldweatheralert/>

## Diagnostic indicators at a glance:

| Indicator                         | Trend      | Level                      |
|-----------------------------------|------------|----------------------------|
| Upper respiratory tract infection | decreasing | above baseline levels      |
| Influenza-like illness            | decreasing | above baseline levels      |
| Pharyngitis                       | decreasing | below baseline levels      |
| Scarlet fever                     | no trend   | similar to baseline levels |
| Lower respiratory tract infection | decreasing | above baseline levels      |
| Pneumonia                         | decreasing | above baseline levels      |
| Gastroenteritis                   | no trend   | similar to baseline levels |
| Vomiting                          | no trend   | similar to baseline levels |
| Diarrhoea                         | no trend   | similar to baseline levels |
| Asthma                            | decreasing | above baseline levels      |
| Wheeze                            | no trend   | above 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                         | no trend   | similar to 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                          | no trend   | below baseline levels      |

## GP practices and denominator population:

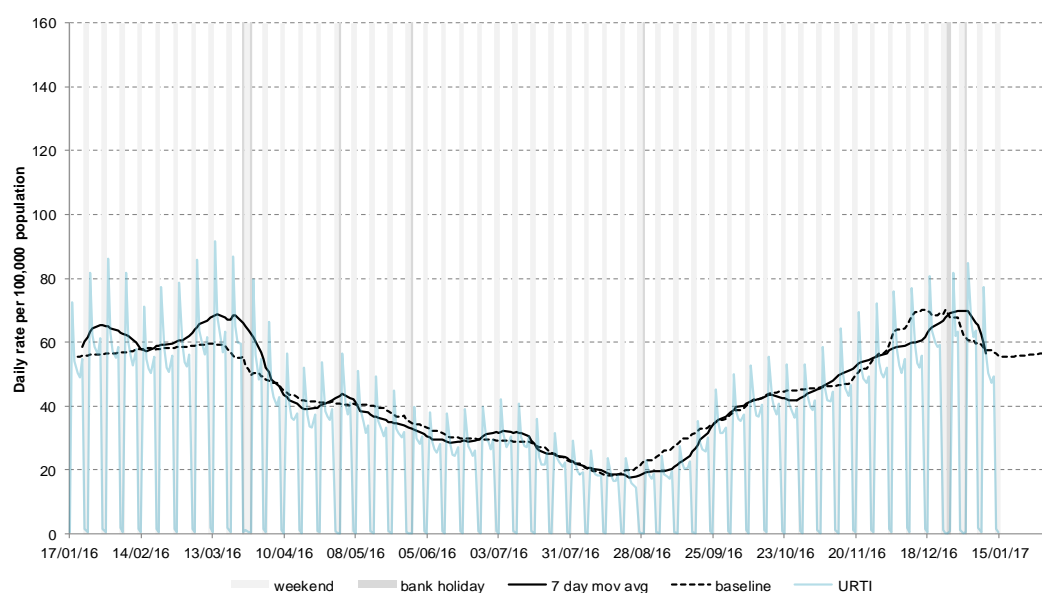
| Year | Week | GP Practices Reporting** | Population size** |
|------|------|--------------------------|-------------------|
| 2017 | 2    | 3,963                    | 31.3 million      |

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

Year: 2017 Week: 2

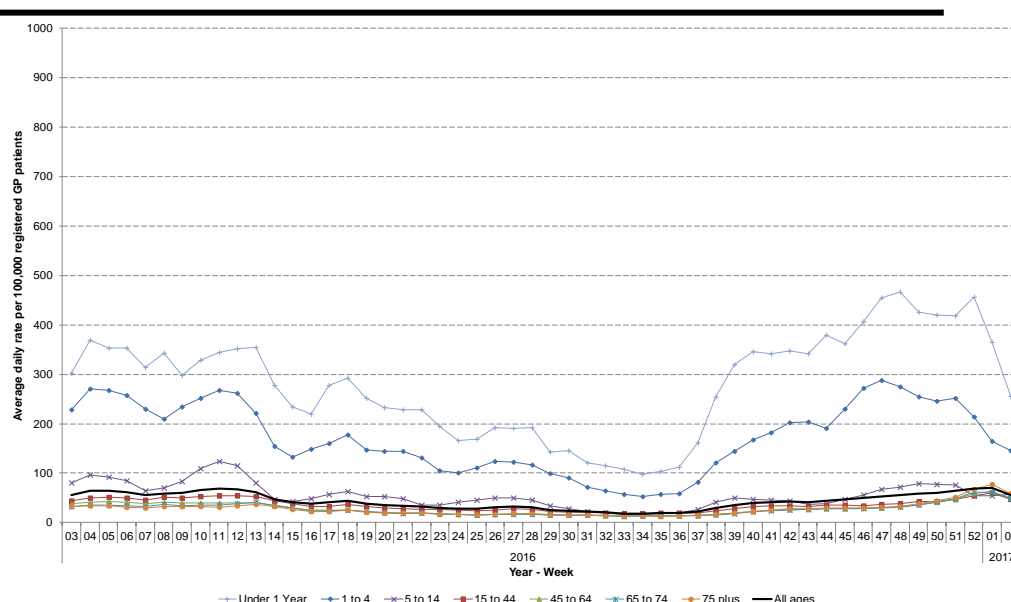
## 1: Upper respiratory tract infection (URTI)

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



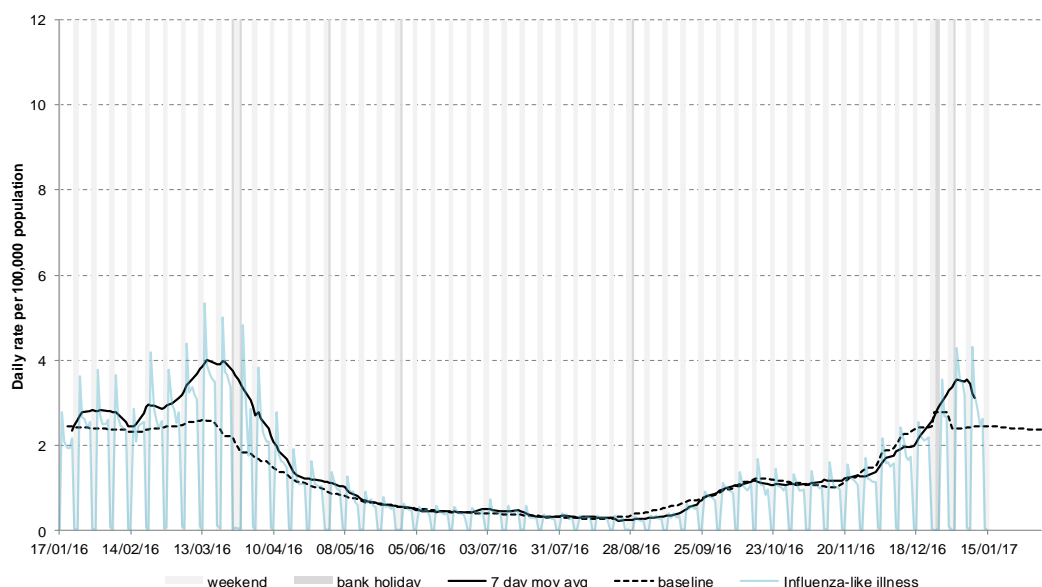
### 1a: Upper respiratory tract infection by age

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



## 2: Influenza-like illness (ILI)

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



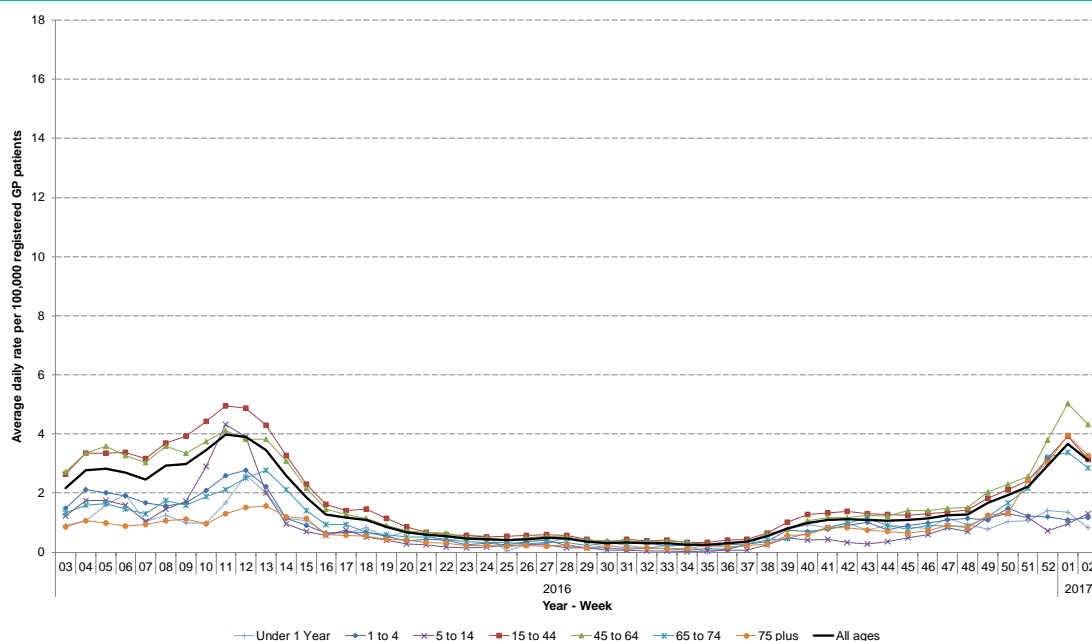
\* 7-day moving average adjusted for bank holidays.

17 January 2017

Year: 2017 Week: 2

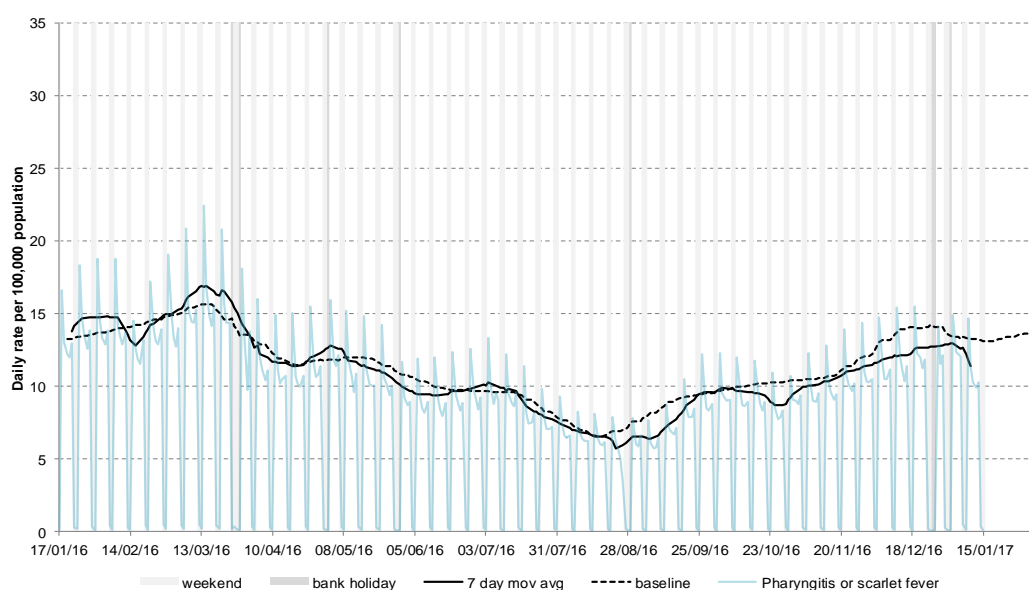
## 2a: Influenza-like illness (ILI) by age

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



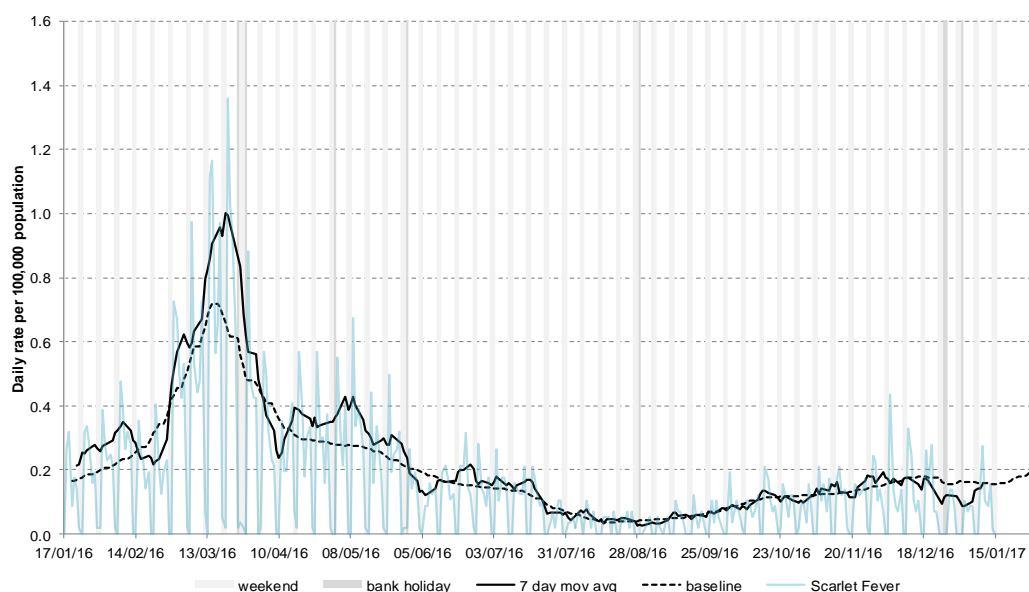
## 3: Pharyngitis or scarlet fever

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



## 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).



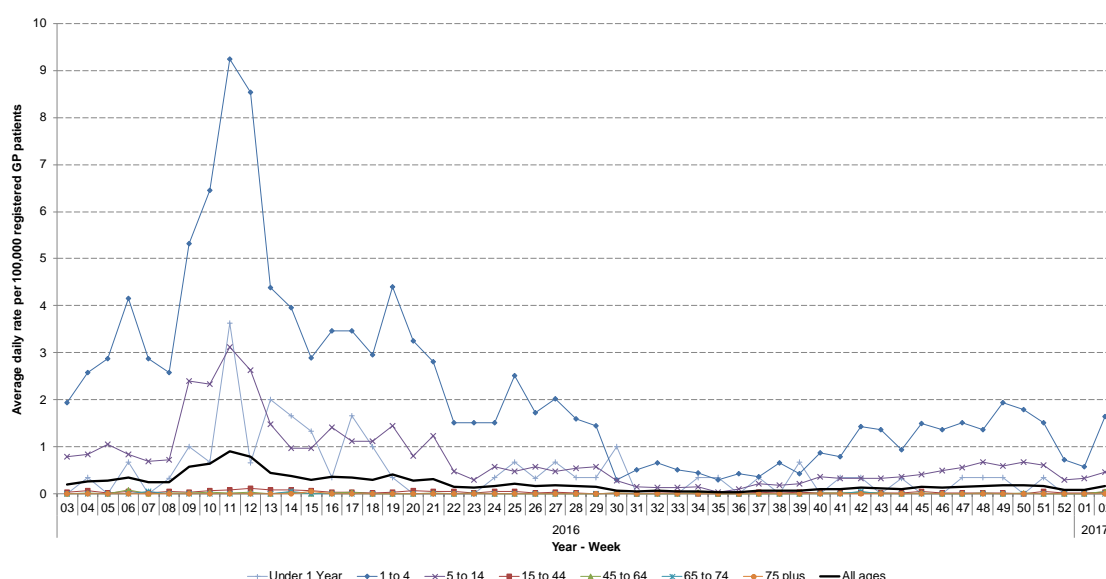
\* 7-day moving average adjusted for bank holidays.

17 January 2017

Year: 2017 Week: 2

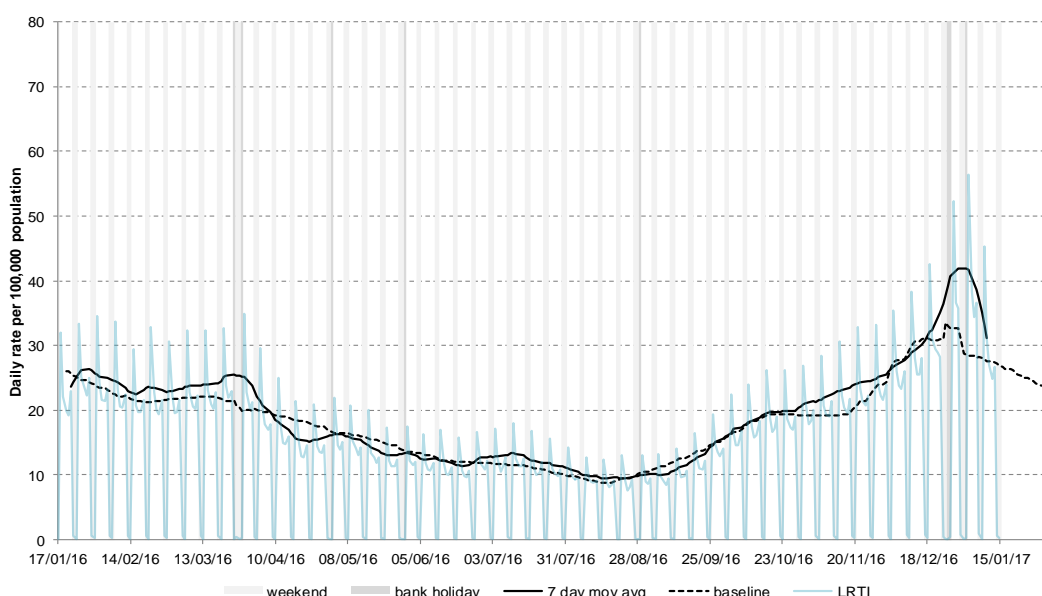
## 4a: Scarlet fever by age

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



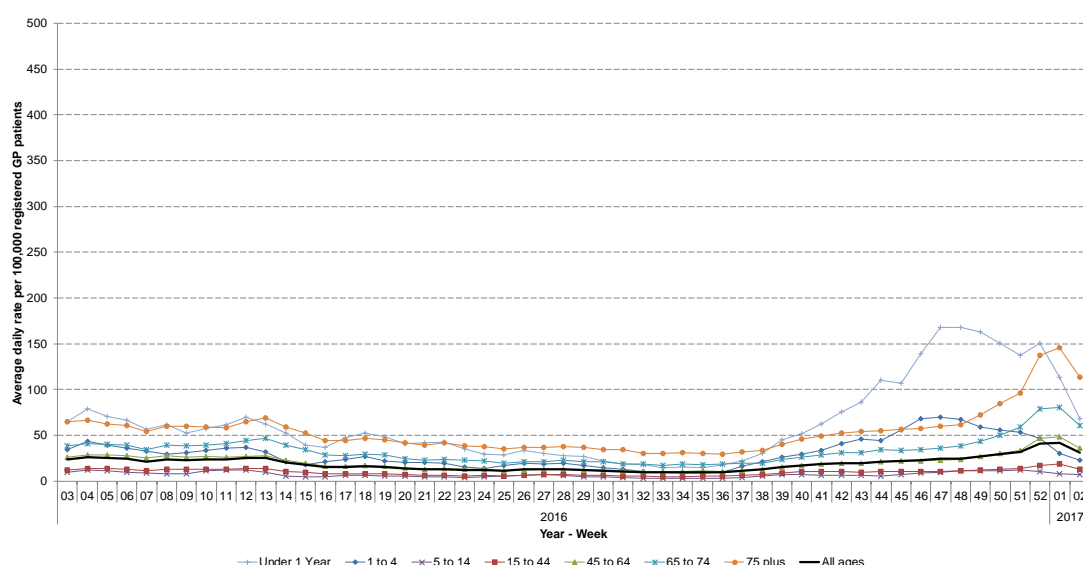
## 5: Lower respiratory tract infection (LRTI)

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



## 5a: Lower respiratory tract infection (LRTI) by age

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



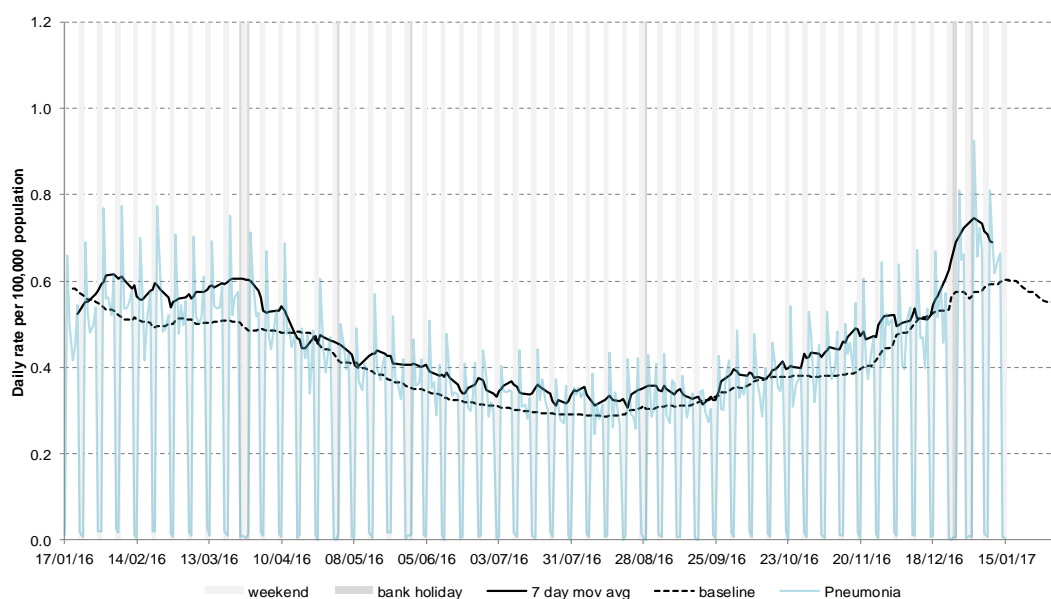
\* 7-day moving average adjusted for bank holidays.

17 January 2017

Year: 2017 Week: 2

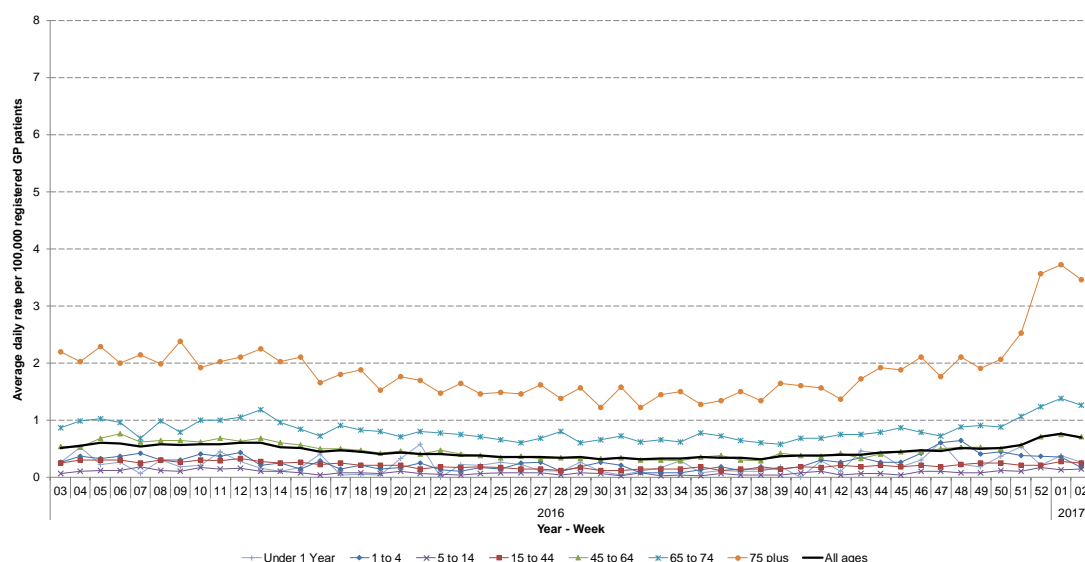
## 6: Pneumonia

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



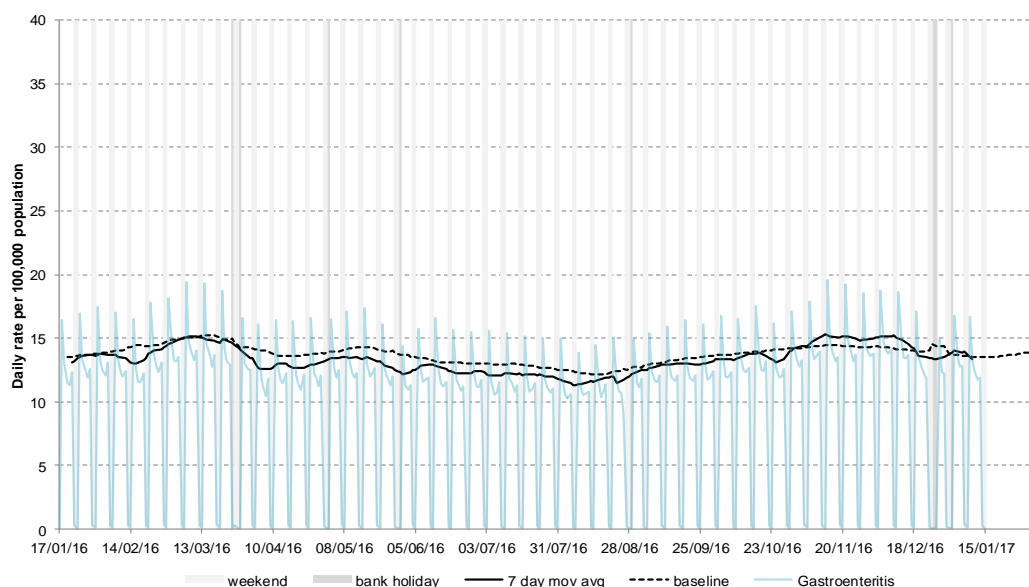
## 6a: Pneumonia by age

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



## 7: Gastroenteritis

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



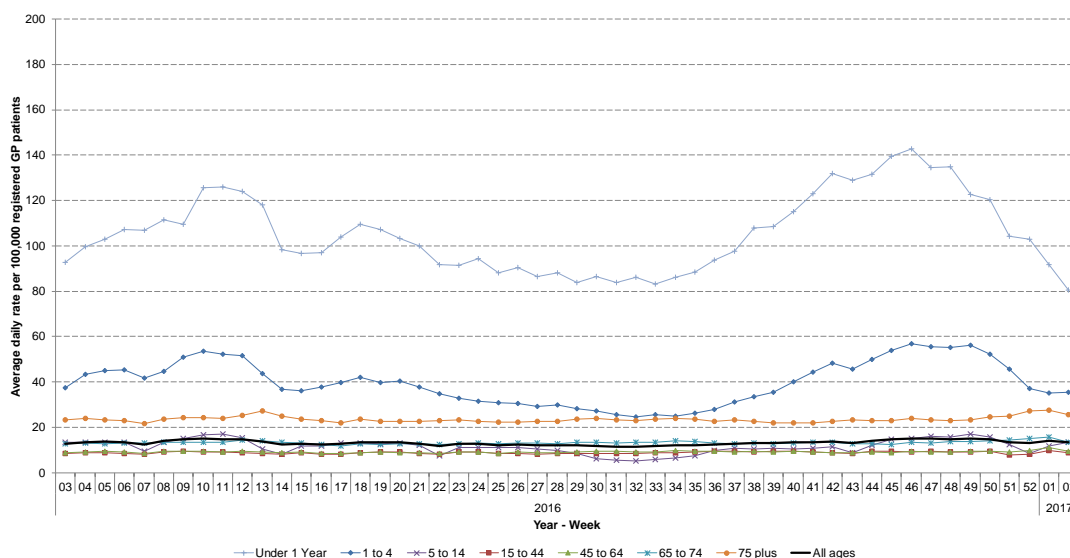
\* 7-day moving average adjusted for bank holidays.

17 January 2017

Year: 2017 Week: 2

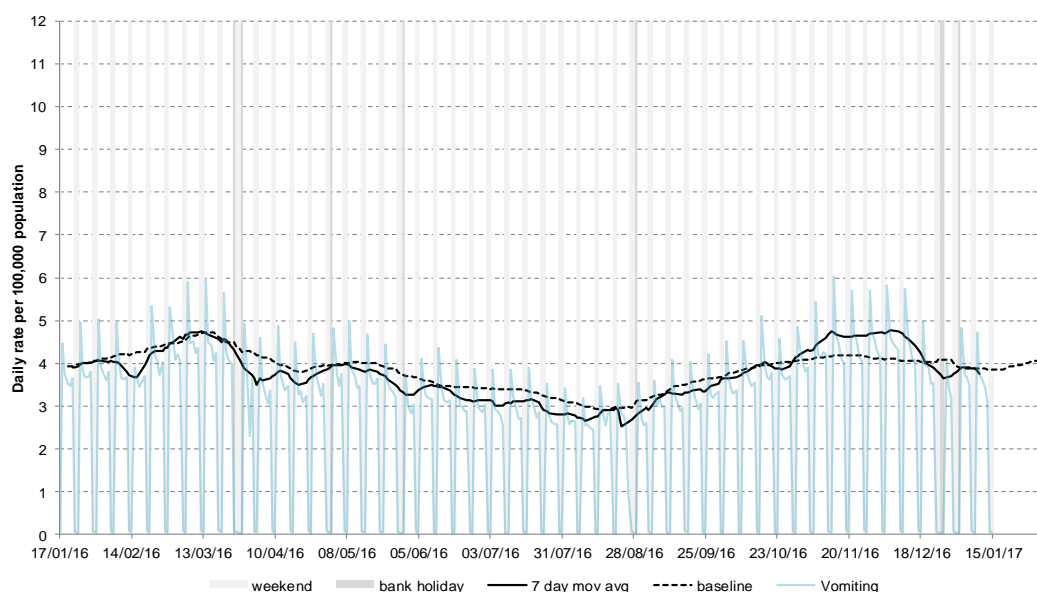
## 7a: Gastroenteritis by age

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



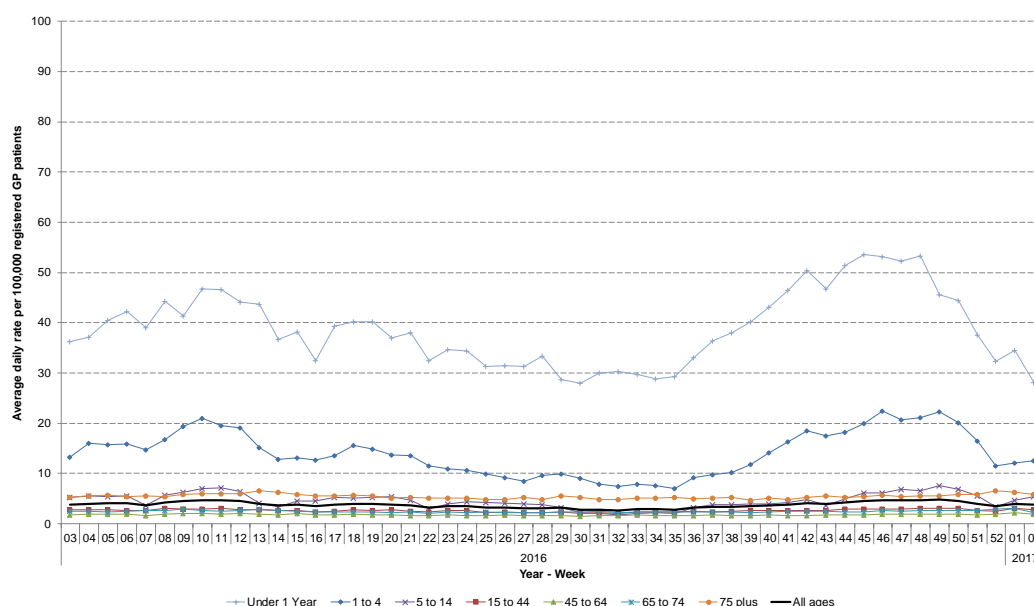
## 8: Vomiting

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



## 8a: Vomiting by age

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



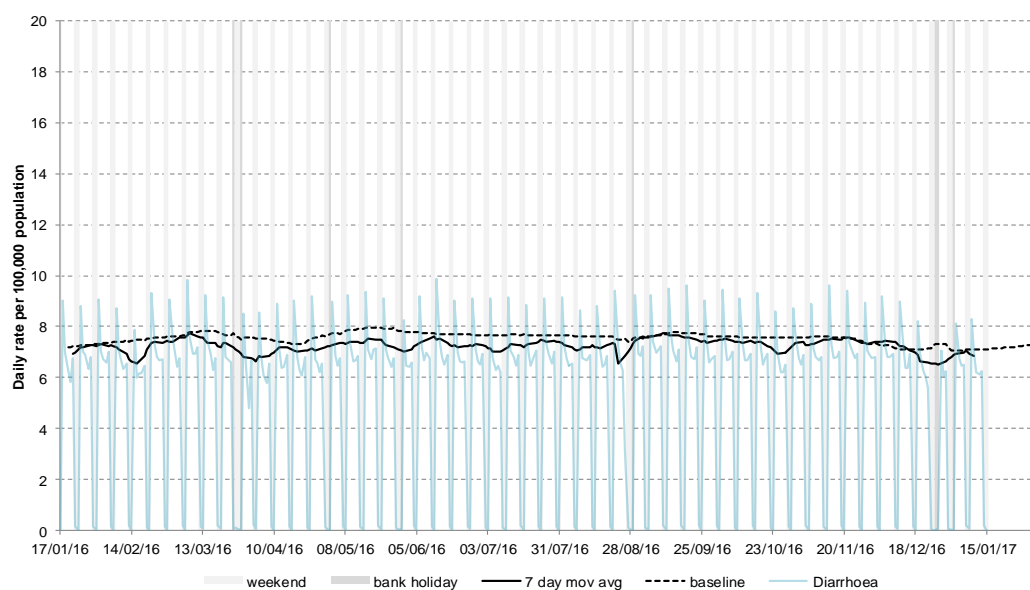
\* 7-day moving average adjusted for bank holidays.

17 January 2017

Year: 2017 Week: 2

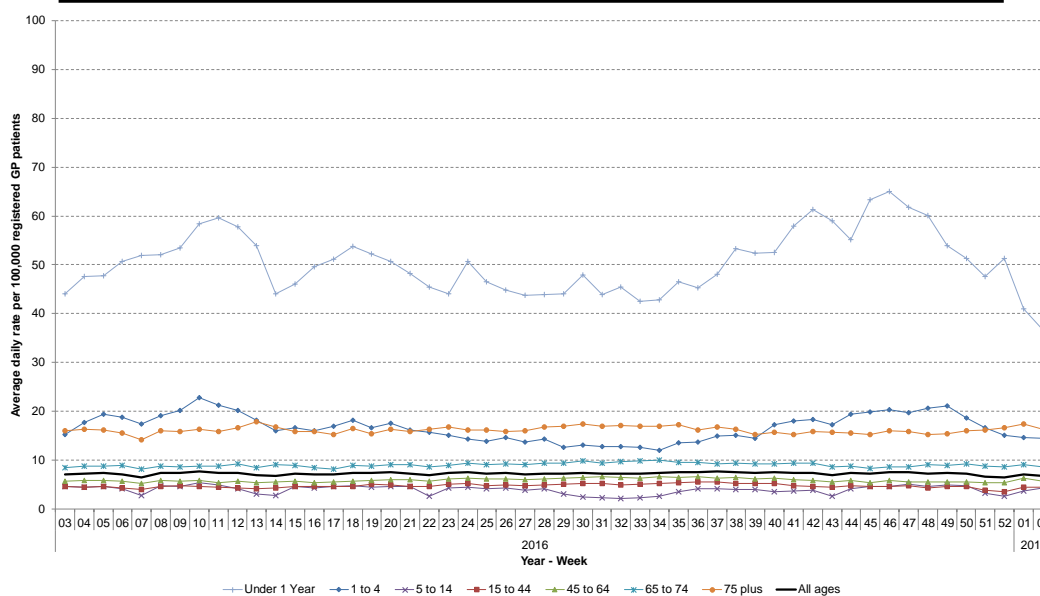
## 9: Diarrhoea

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).



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

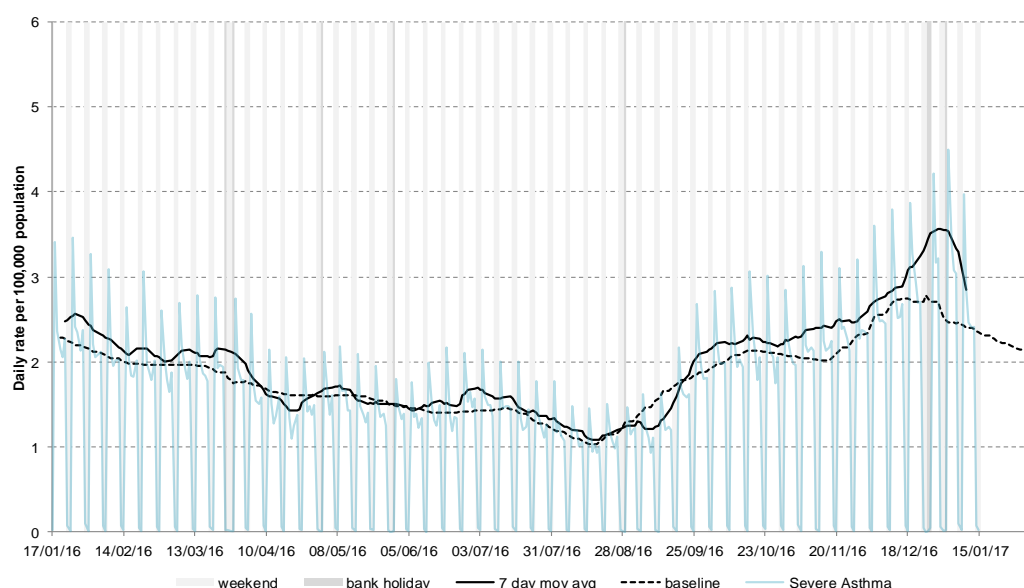


17 January 2017

Year: 2017 Week: 2

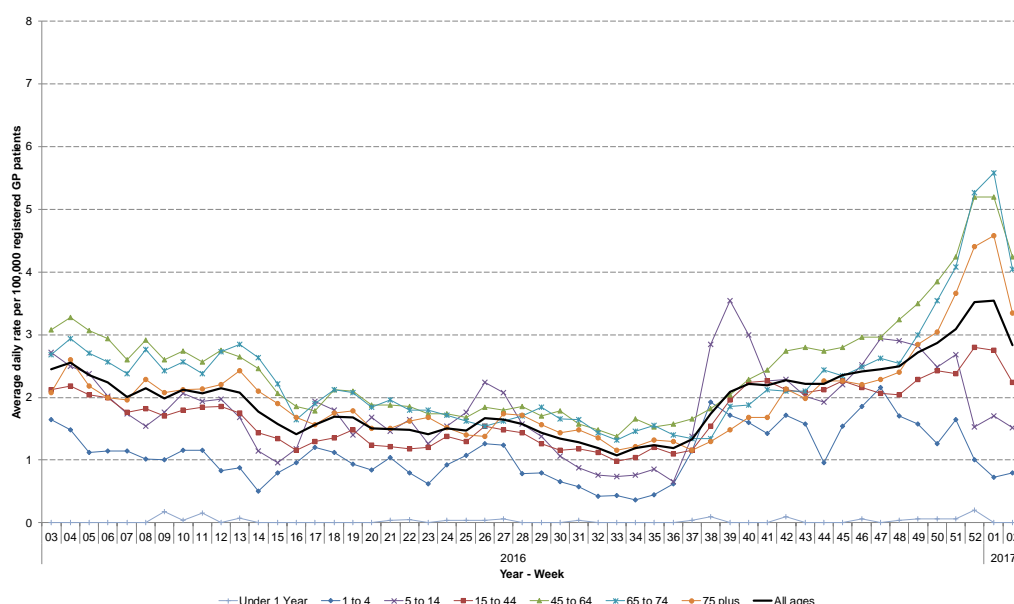
## 10: Asthma

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



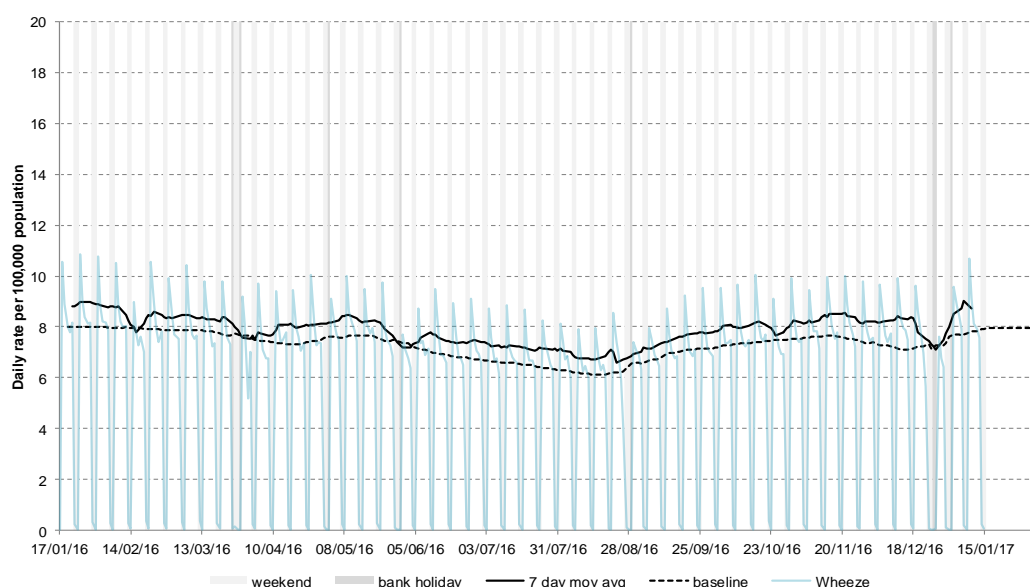
## 10a: Asthma by age

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



## 11: 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.

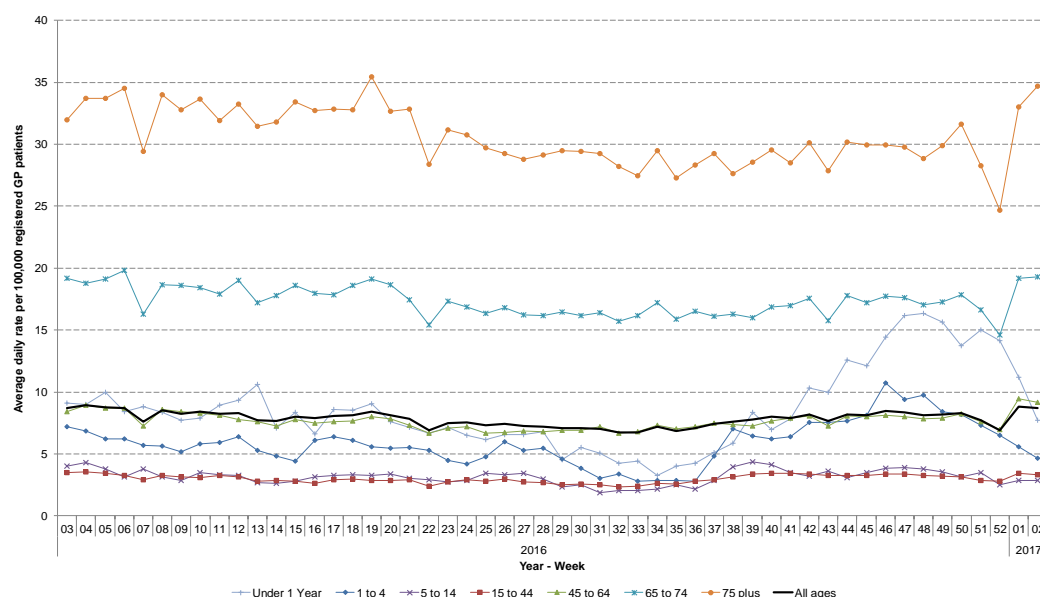


17 January 2017

Year: 2017 Week: 2

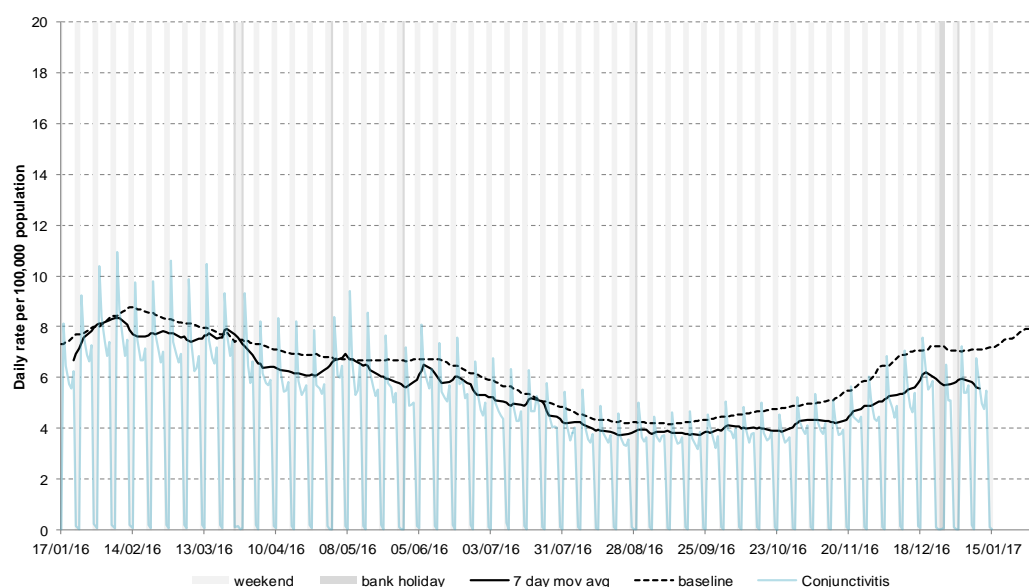
## 11a: Wheeze by age

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



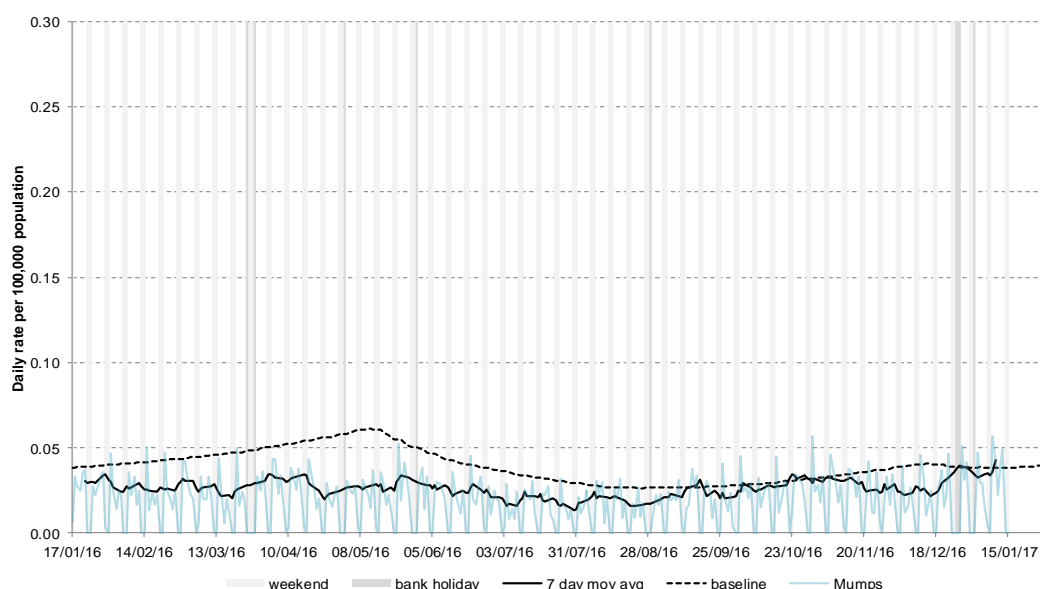
## 12: Conjunctivitis

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).



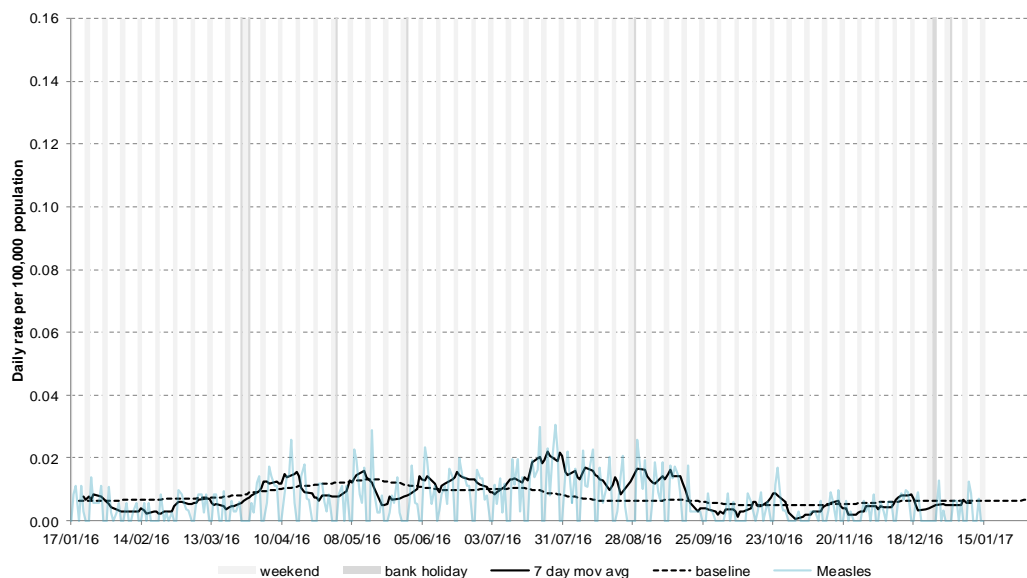
\* 7-day moving average adjusted for bank holidays.

17 January 2017

Year: 2017 Week: 2

## 14: Measles

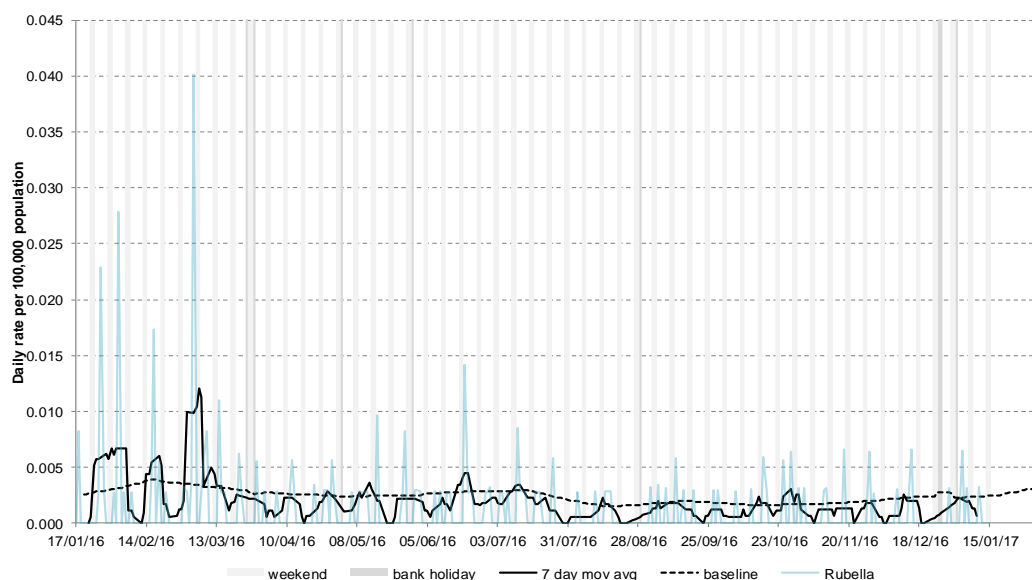
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



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## 15: Rubella

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



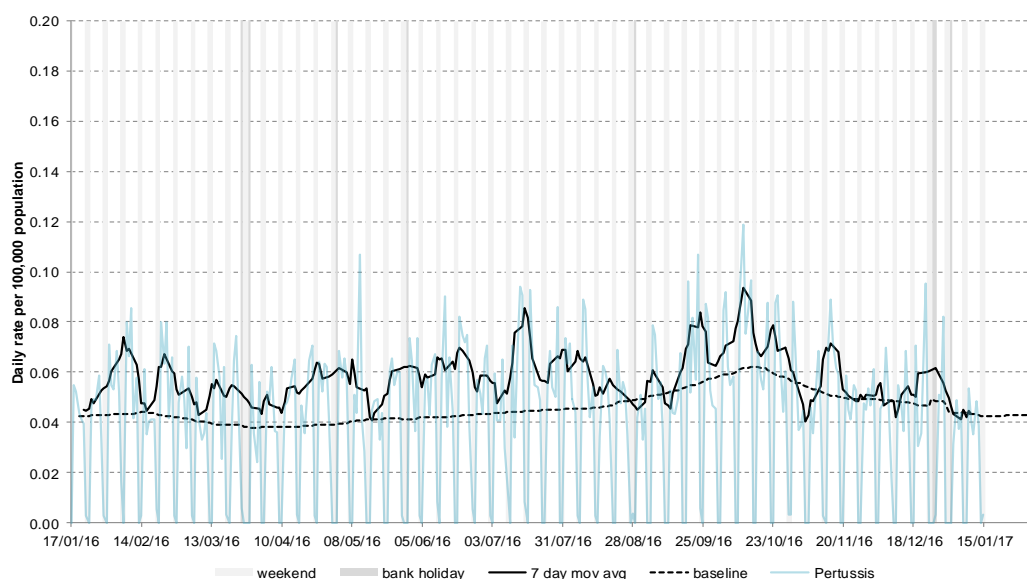
\* 7-day moving average adjusted for bank holidays.

17 January 2017

Year: 2017 Week: 2

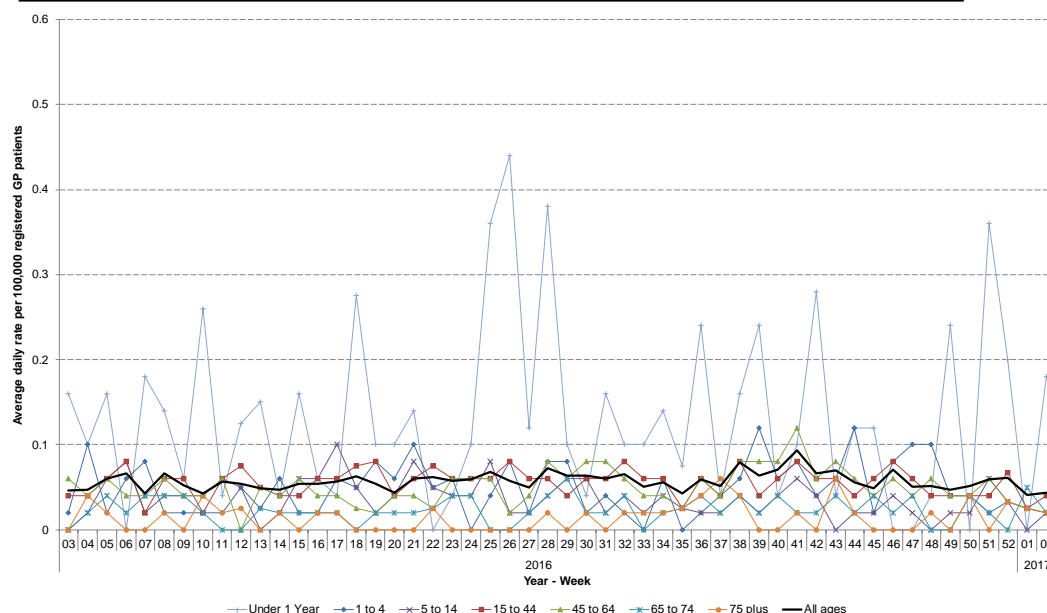
## 16: Pertussis

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



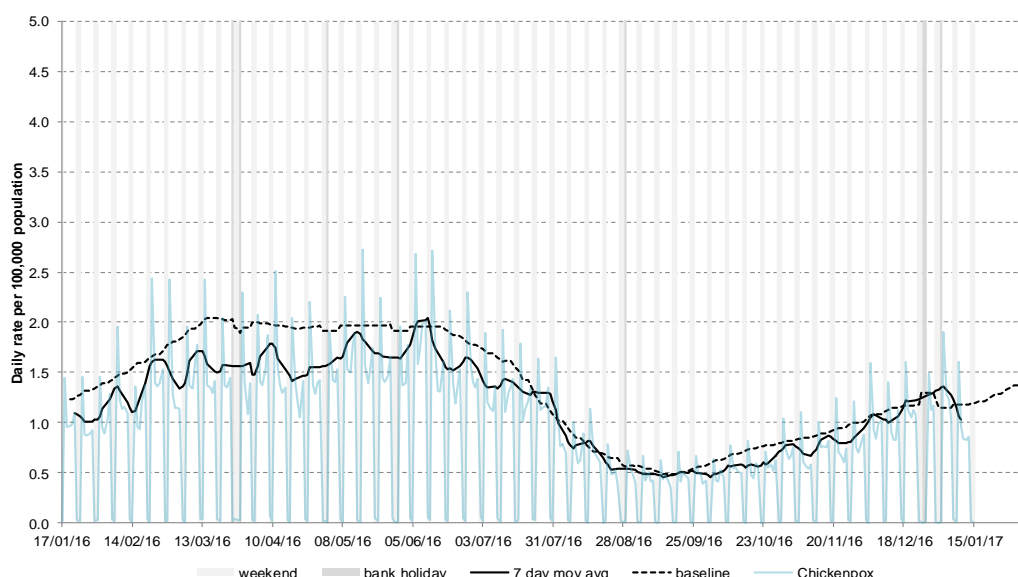
## 16a: Pertussis by age

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



## 17: Chickenpox

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



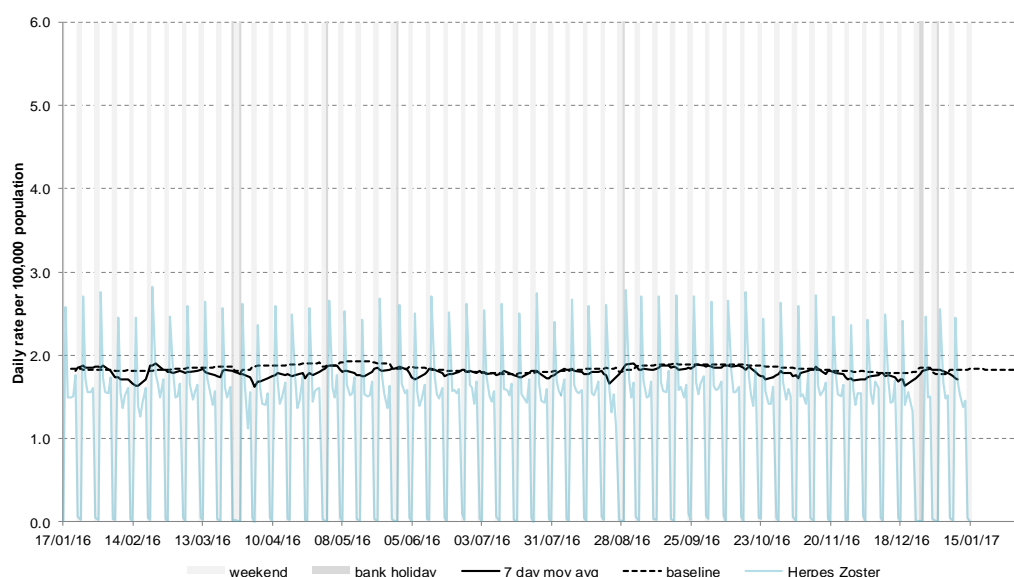
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17 January 2017

Year: 2017 Week: 2

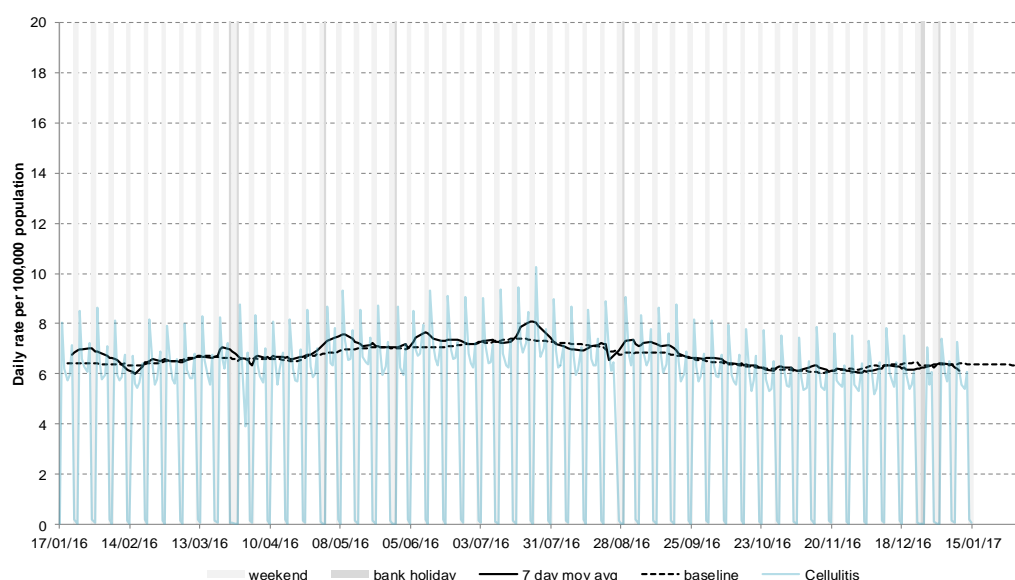
## 18: Herpes zoster

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



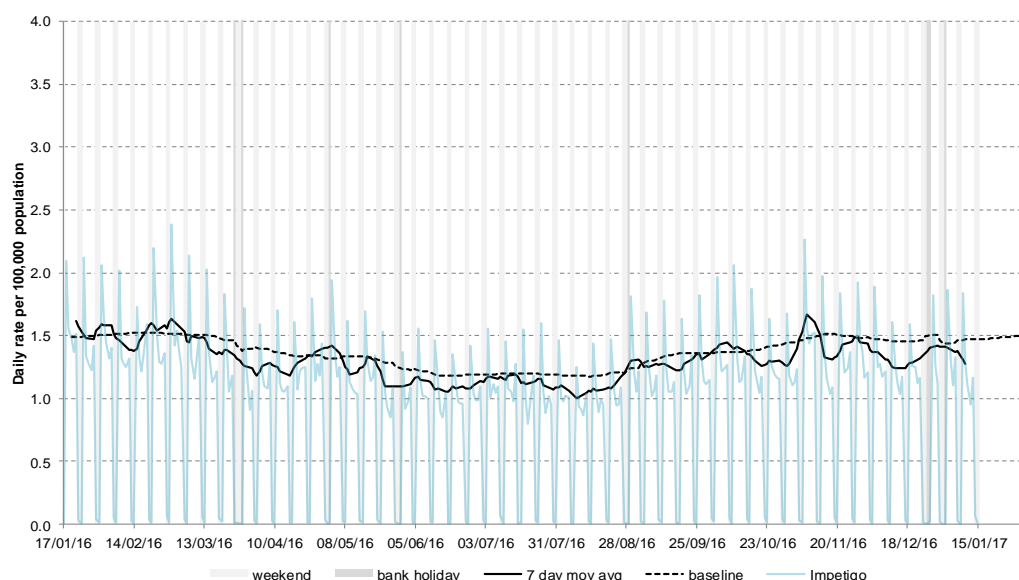
## 19: Cellulitis

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).



\* 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).<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.

<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.

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## 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.

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## GP In Hours Syndromic Surveillance System Bulletin.

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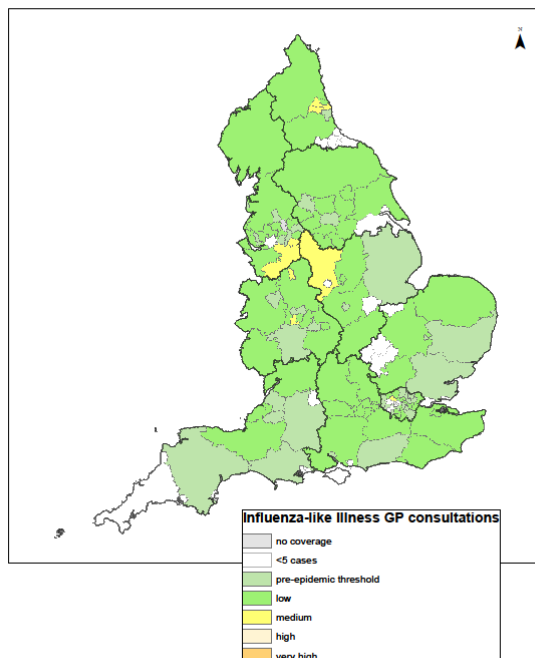
17 January 2017

Year: 2017 Week: 2

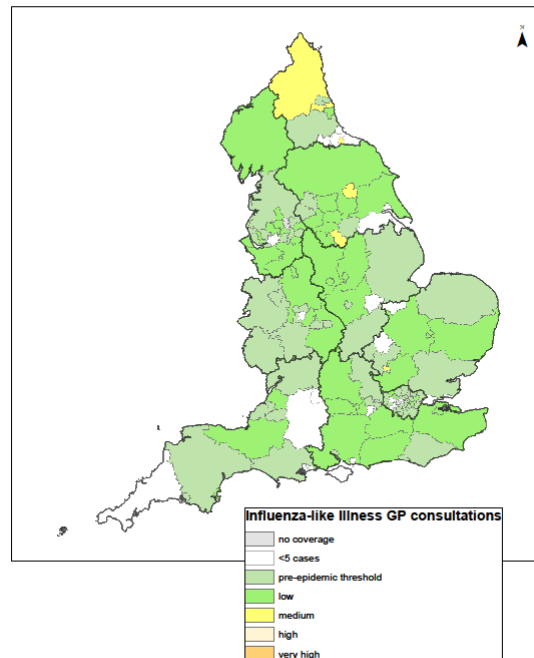
## England

Influenza-like illness  
GP consultations  
by LA  
(England)

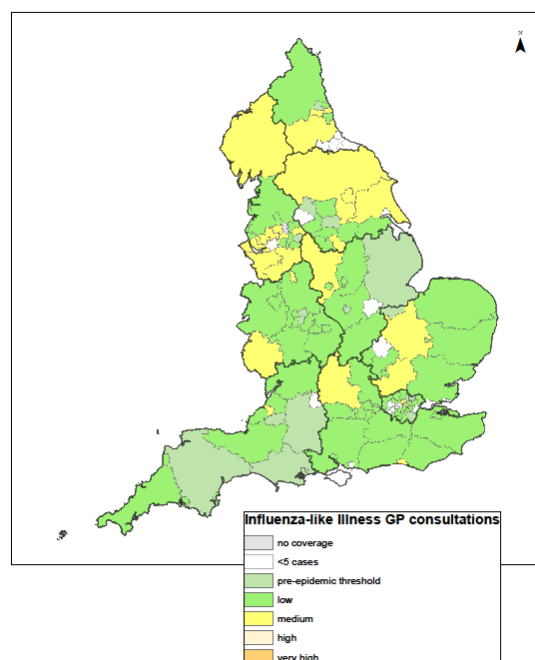
Week 51



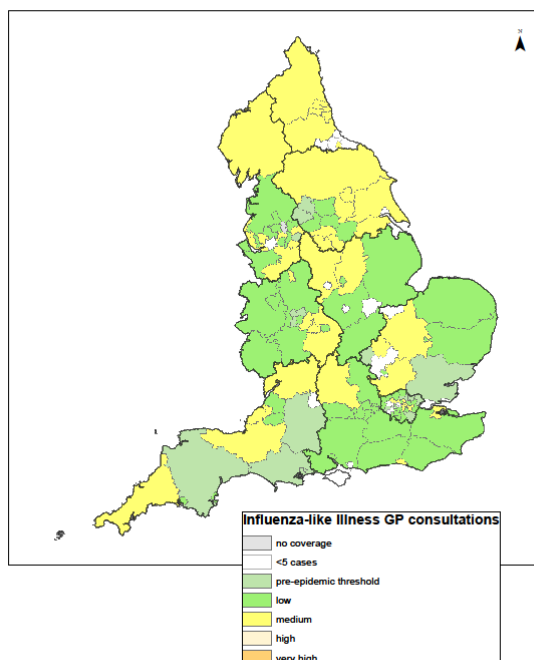
Week 52



Week 1



Week 2



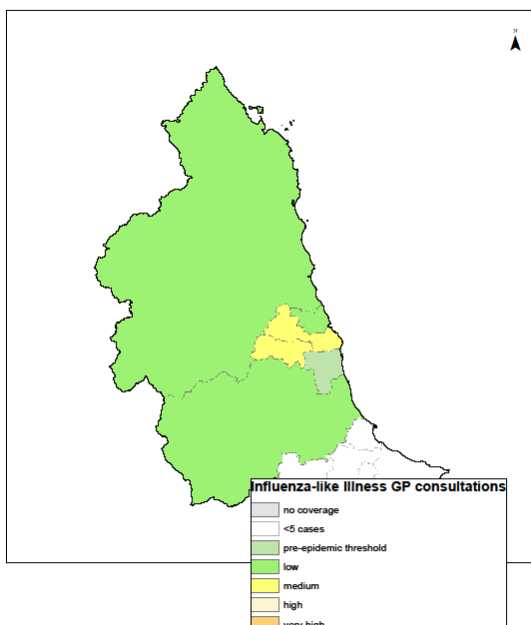
17 January 2017

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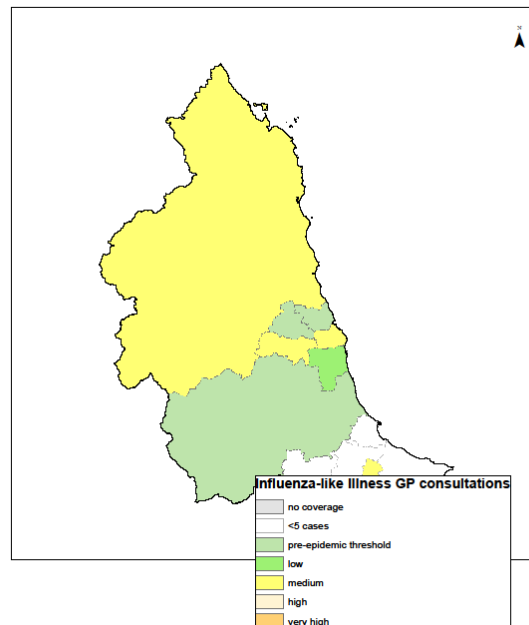
## North East

Influenza-like illness  
GP  
consultations  
by LA (North  
East PHE  
Centre)

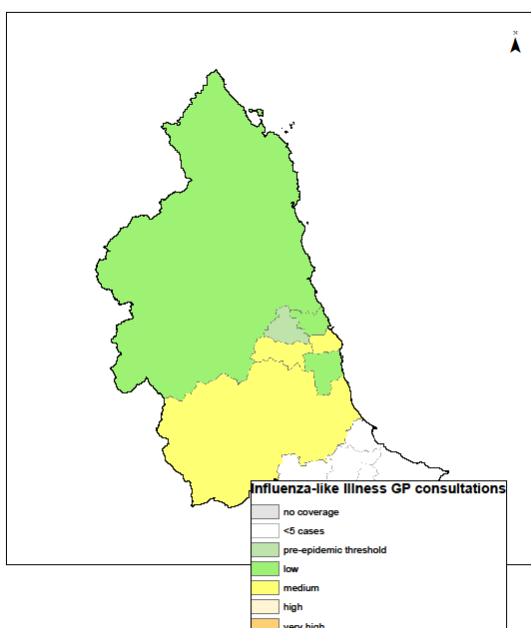
### Week 51



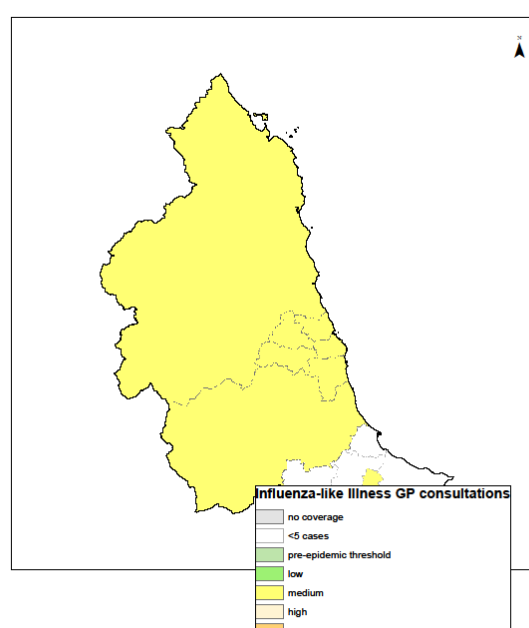
### Week 52



### Week 1



### Week 2





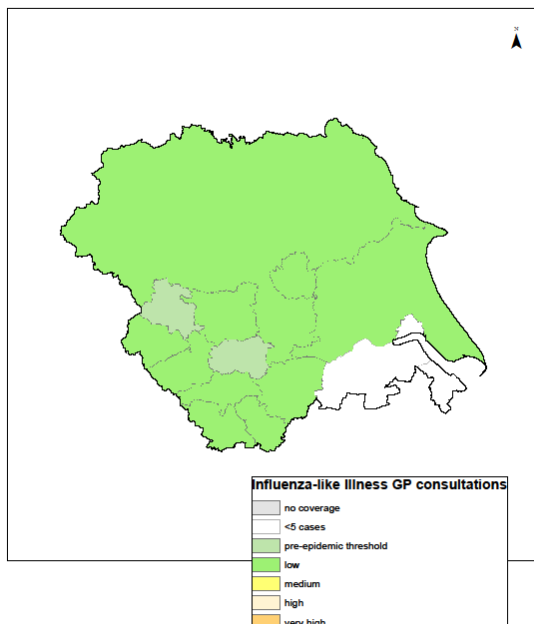
17 January 2017

Year: 2017 Week: 2

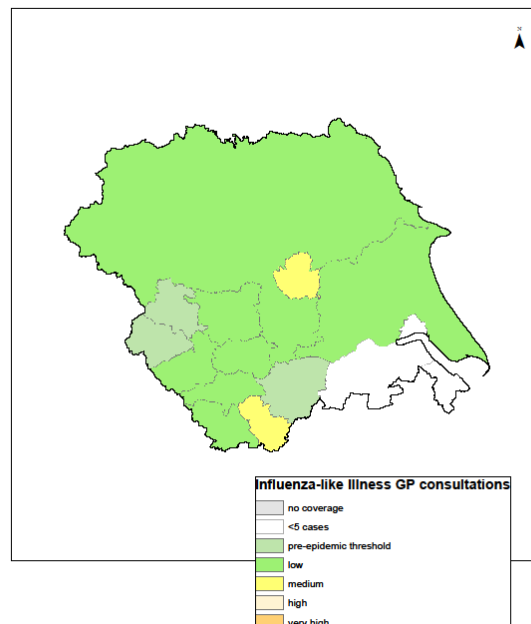
## Yorkshire & Humber

Influenza-like illness GP consultations by LA (Yorkshire & Humber PHE Centre)

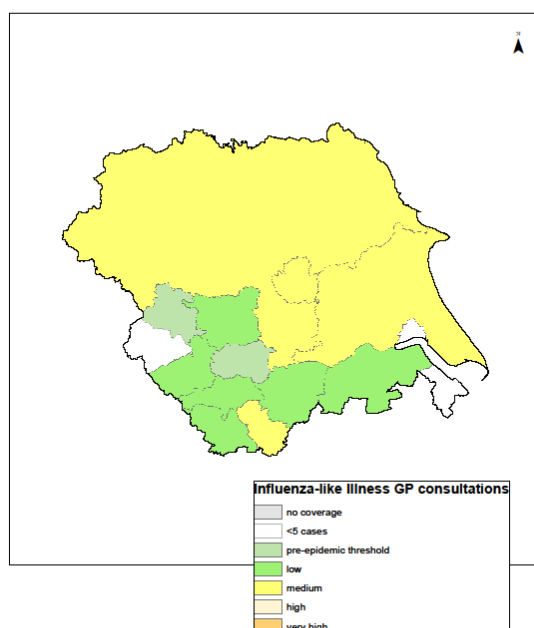
Week 51



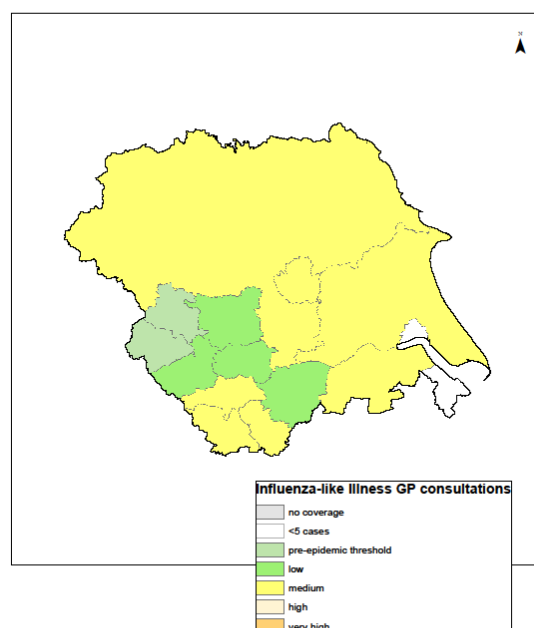
Week 52



Week 1



Week 2



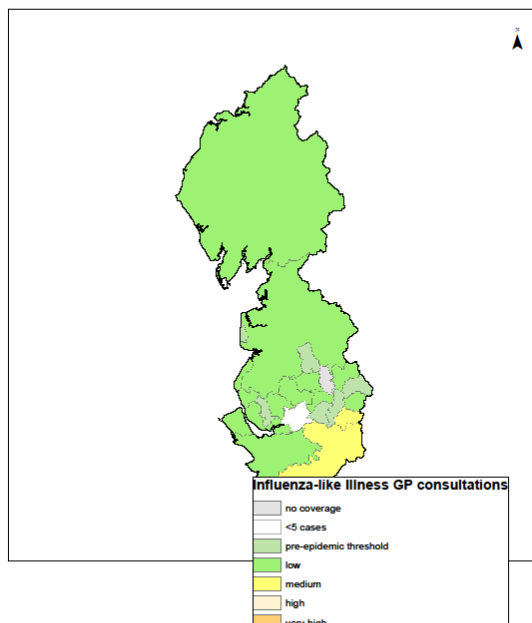
17 January 2017

Year: 2017 Week: 2

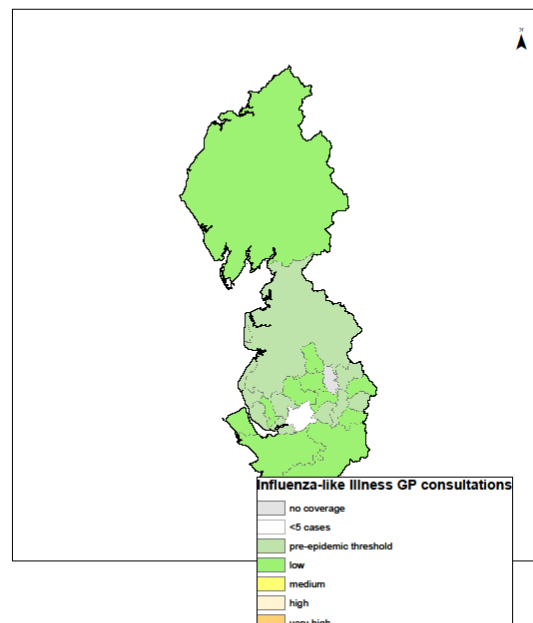
## North West

Influenza-like illness  
GP  
consultations  
by LA (North  
West PHE  
Centre)

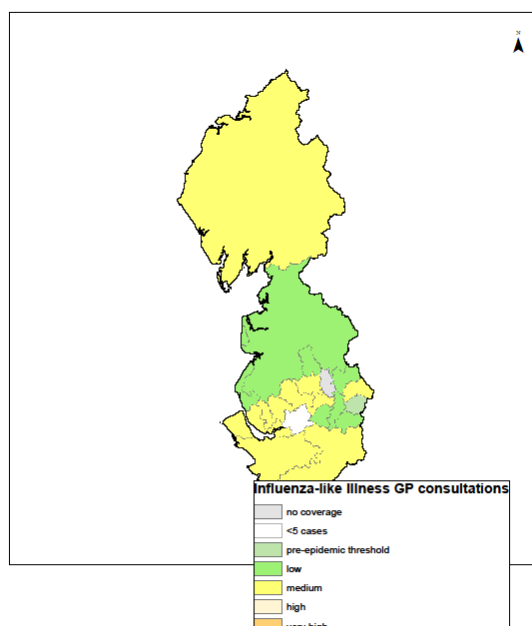
Week 51



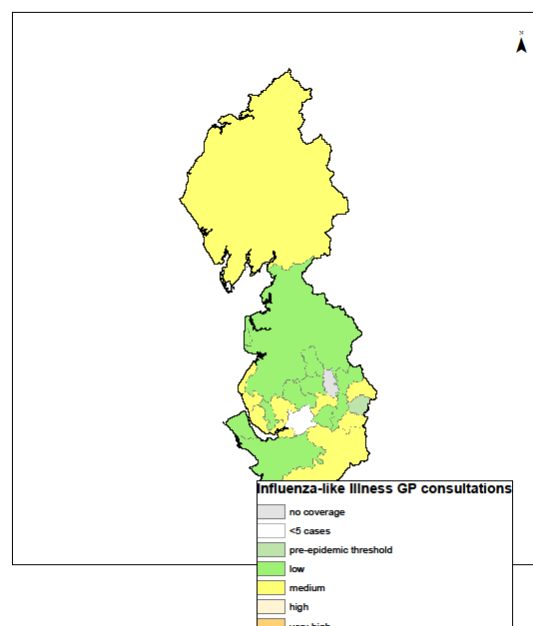
Week 52



Week 1



Week 2



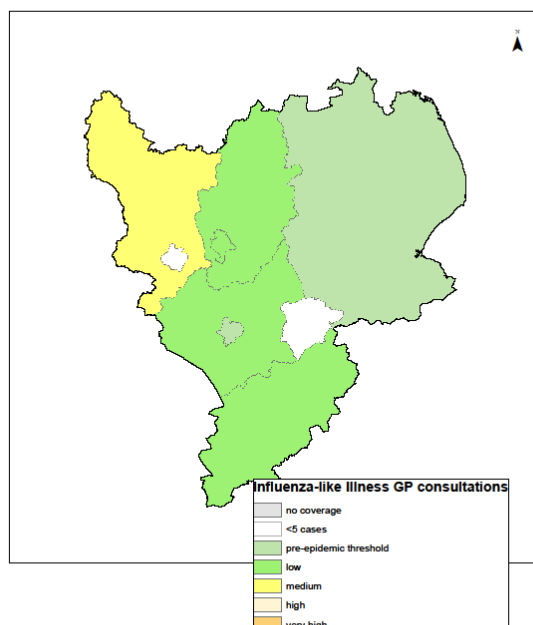
17 January 2017

Year: 2017 Week: 2

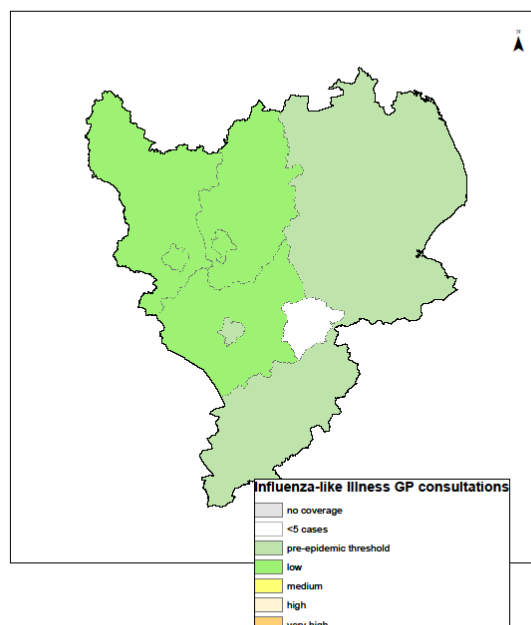
## East Midlands

Influenza-  
like illness  
GP  
consultations  
by LA (East  
Midlands  
PHE Centre)

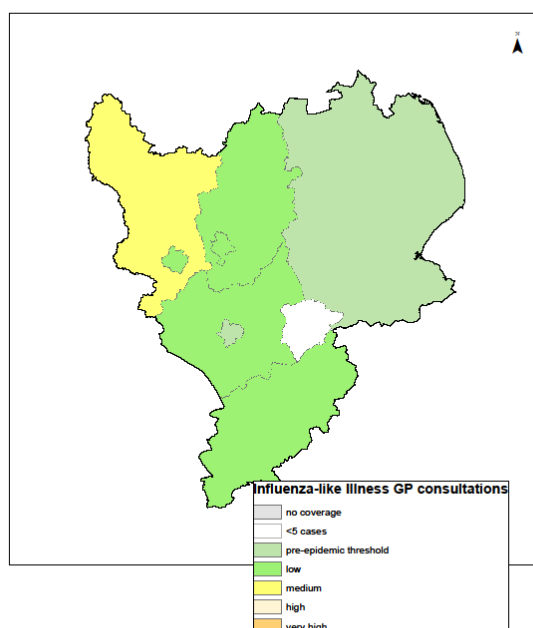
Week 51



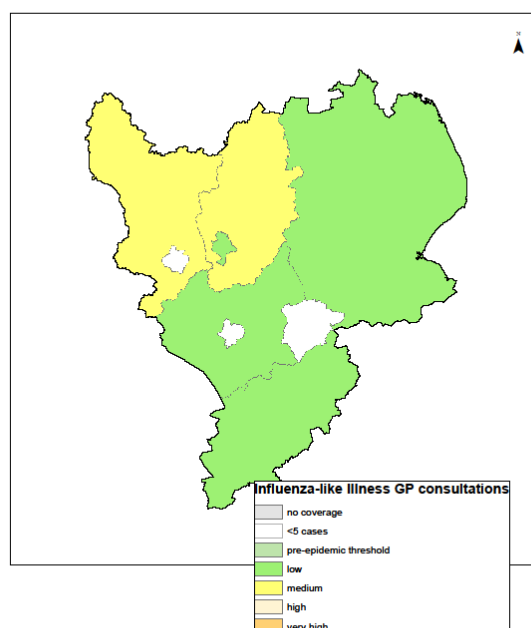
Week 52



Week 1



Week 2



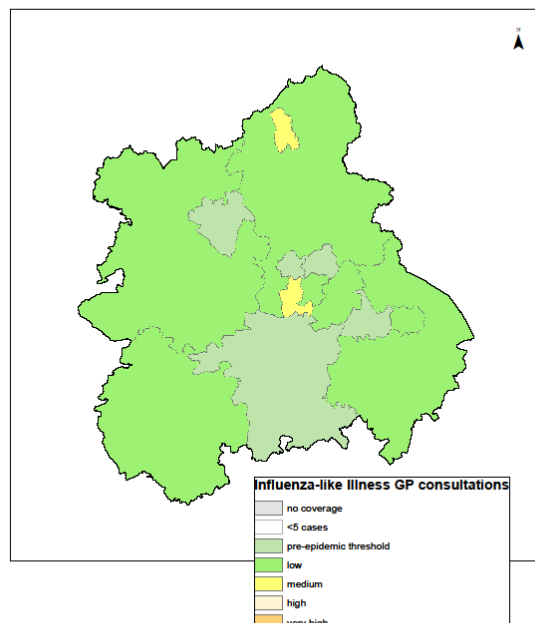
17 January 2017

Year: 2017 Week: 2

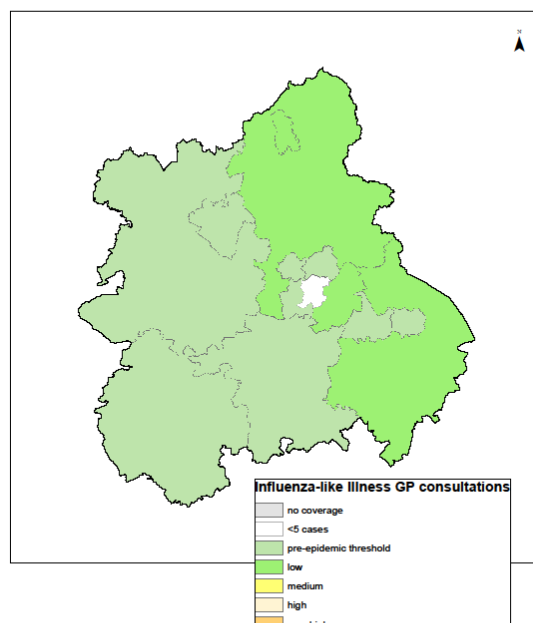
## West Midlands

Influenza-  
like illness  
GP  
consultations  
by LA (West  
Midlands  
PHE Centre)

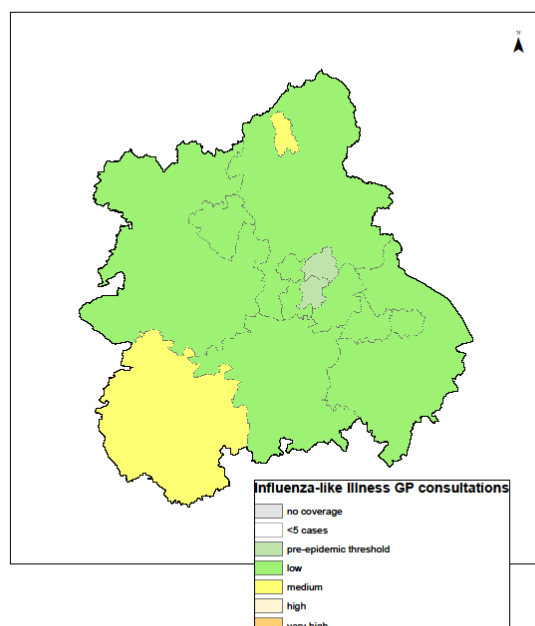
Week 51



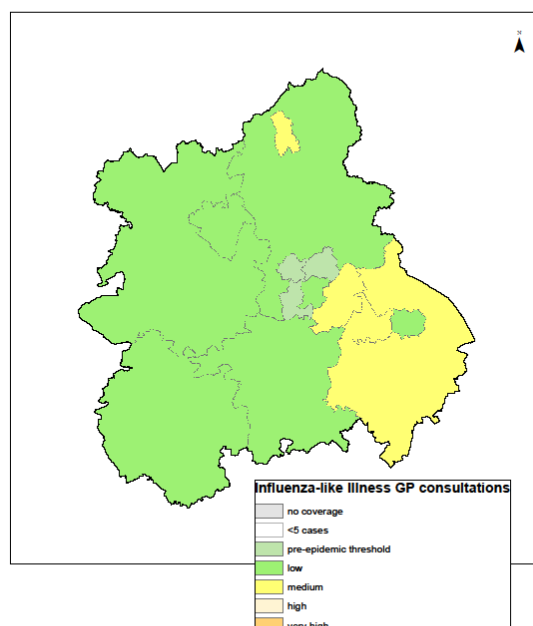
Week 52



Week 1



Week 2



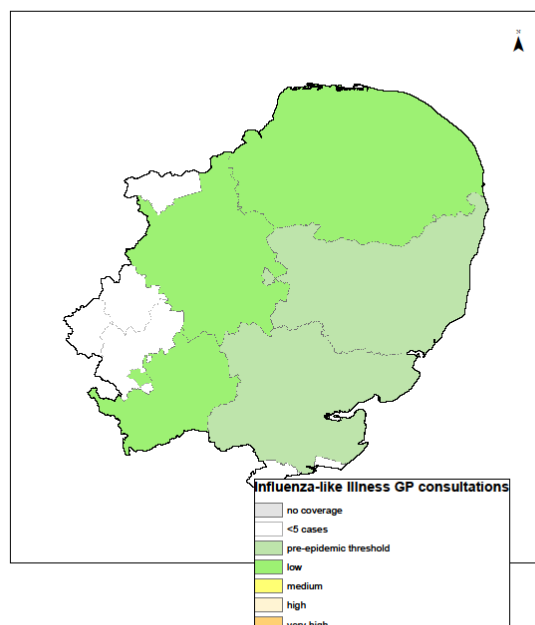
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Year: 2017 Week: 2

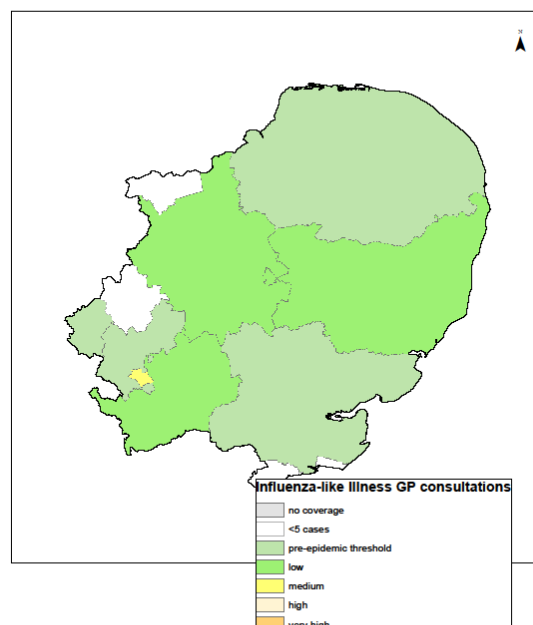
## East of England

Influenza-like illness GP consultations by LA (East of England PHE Centre)

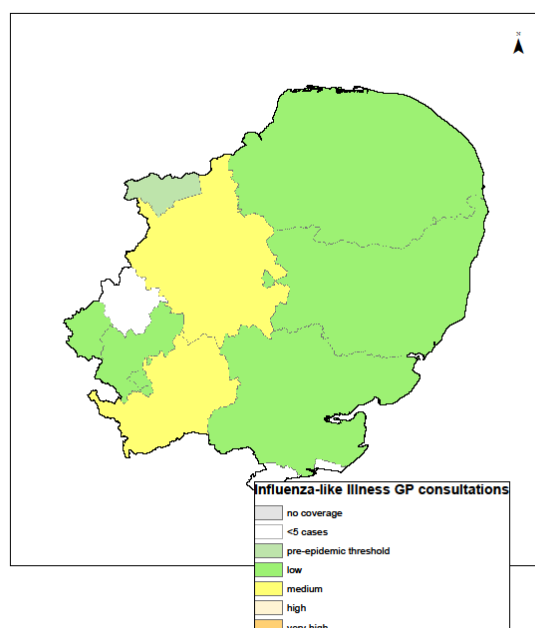
Week 51



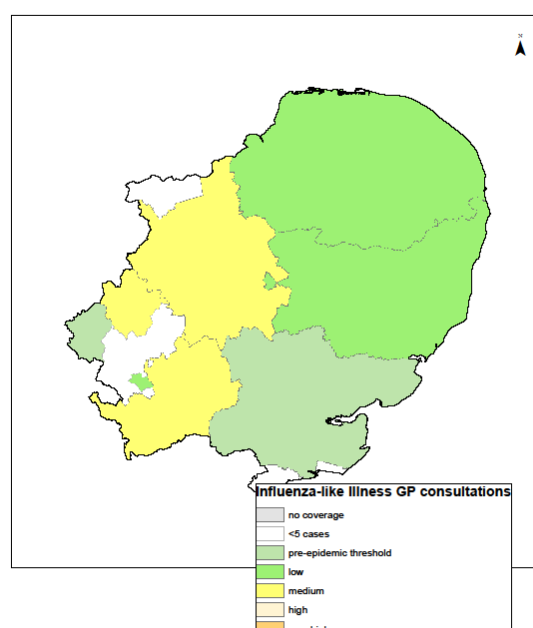
Week 52



Week 1



Week 2



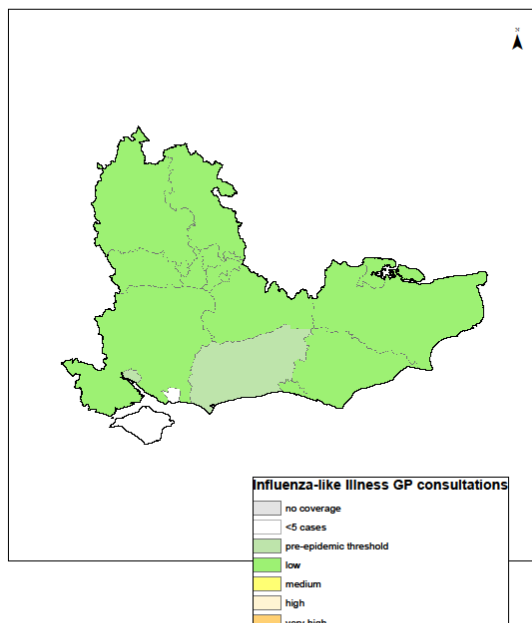
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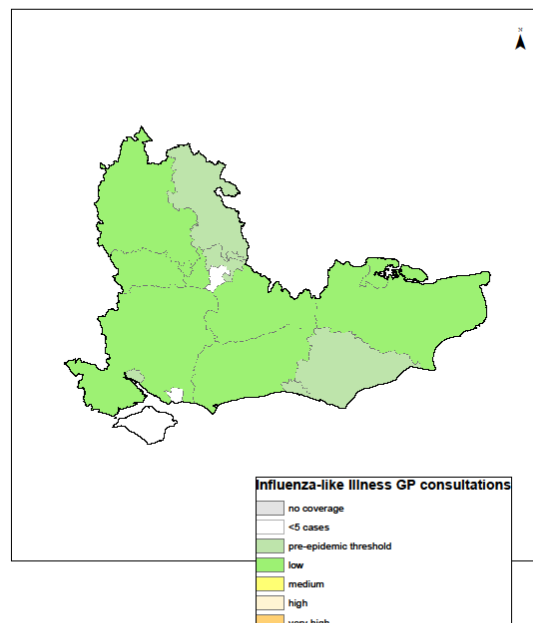
## South East

Influenza-like illness  
GP  
consultations  
by LA (South  
East PHE  
Centre)

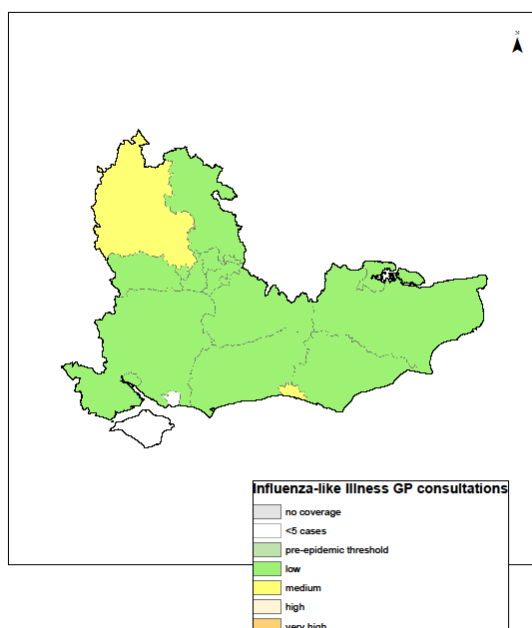
### Week 51



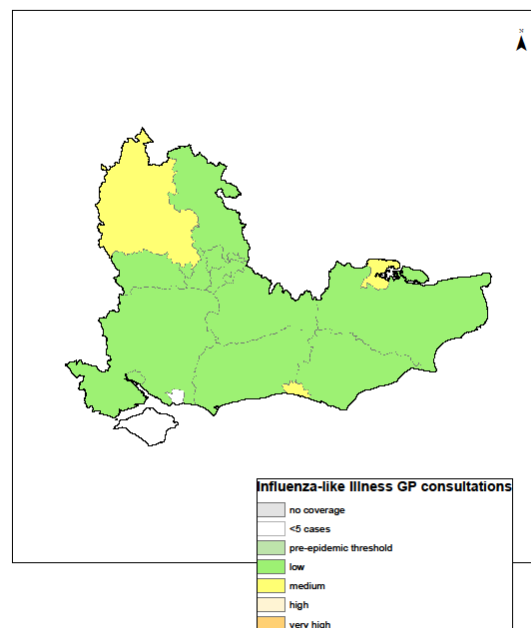
### Week 52



### Week 1



### Week 2



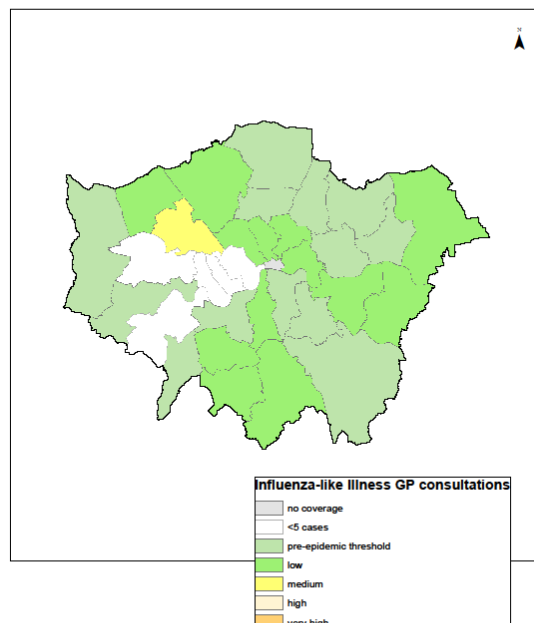
17 January 2017

Year: 2017 Week: 2

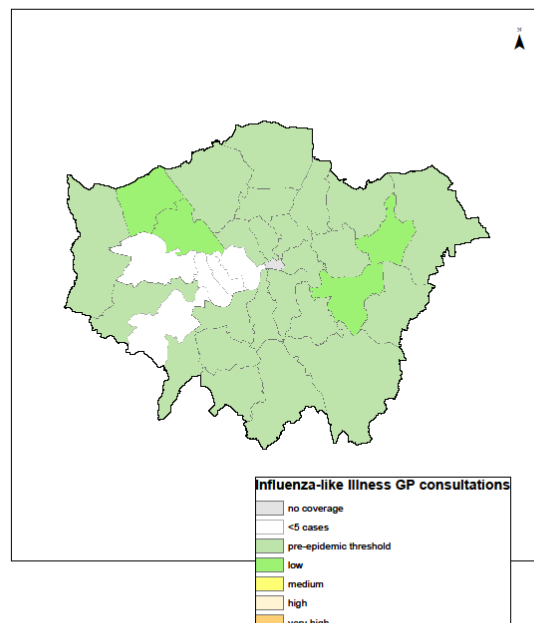
## London

Influenza-like illness  
GP  
consultations  
by LA  
(London  
PHE Centre)

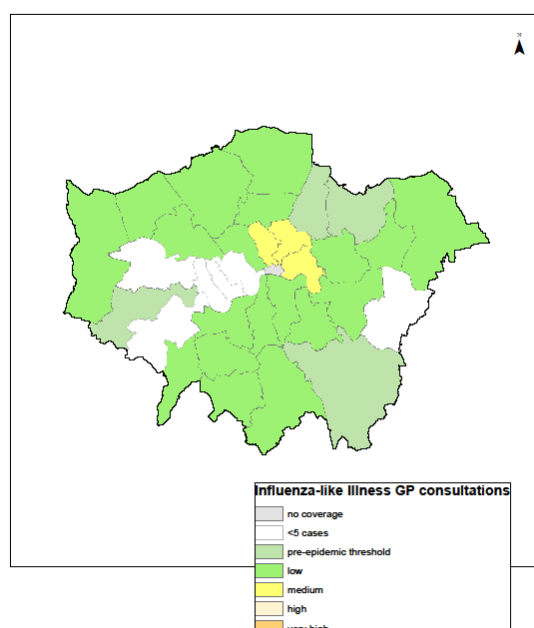
### Week 51



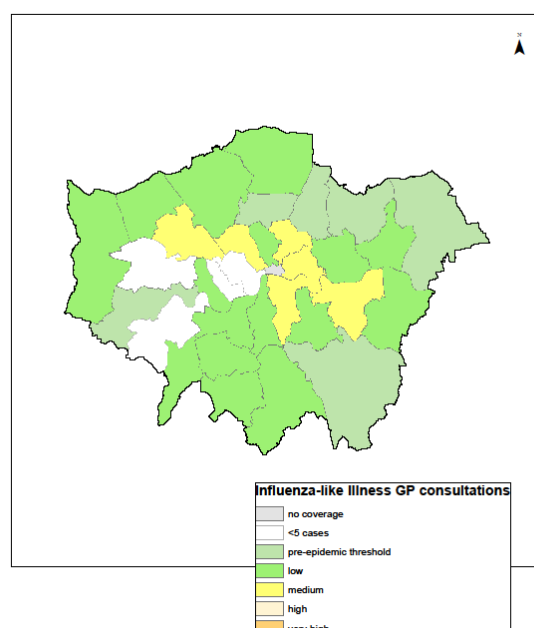
### Week 52



### Week 1



### Week 2





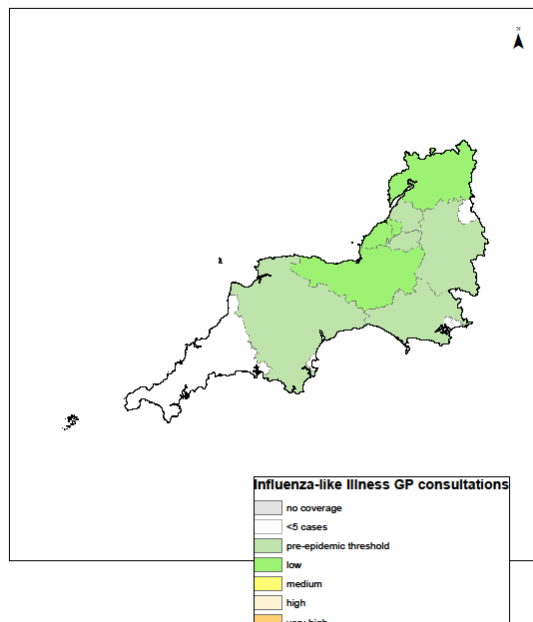
17 January 2017

Year: 2017 Week: 2

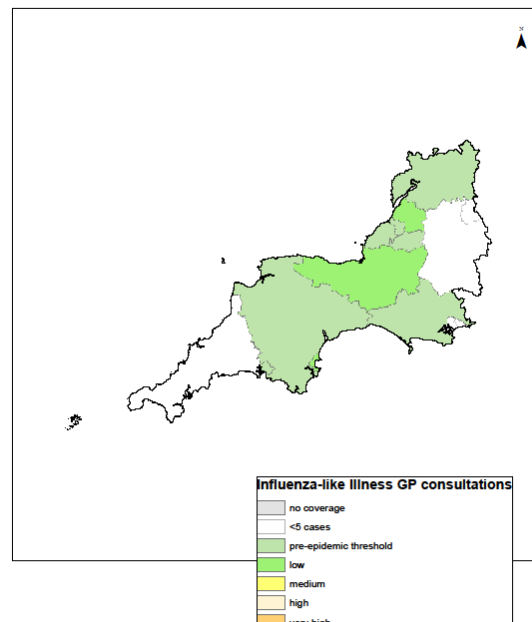
## South West

Influenza-like illness  
GP  
consultations  
by LA (South  
West PHE  
Centre)

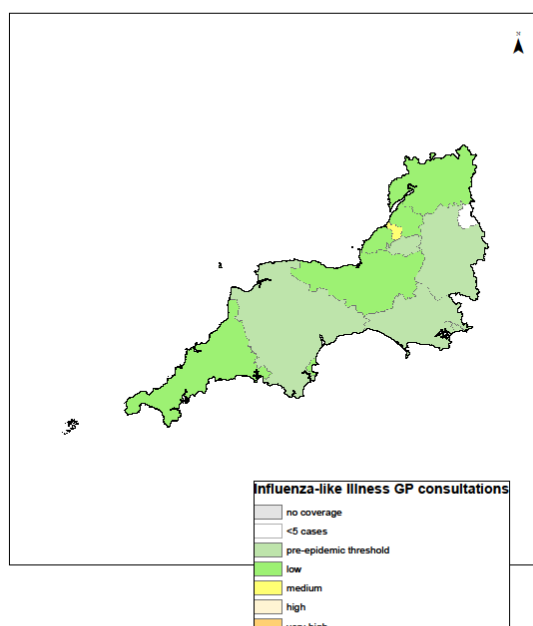
### Week 51



### Week 52



### Week 1



### Week 2

