



22 November 2016

Year: 2016 Week: 46

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## Key messages

Data to: 20 November 2016

During week 46 there have been further increases in GP consultations for a range of respiratory conditions, with lower respiratory tract infection and severe asthma being above seasonal baselines (figures 5 and 10).

There were also further increases in vomiting consultations in week 46, with rates highest in the under 5 years age groups (figures 8 and 8a).

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 1/2 Winter Preparedness and Action/Alert and Readiness**  
<http://www.metoffice.gov.uk/weather/uk/coldweatheralert/>

## Diagnostic indicators at a glance:

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

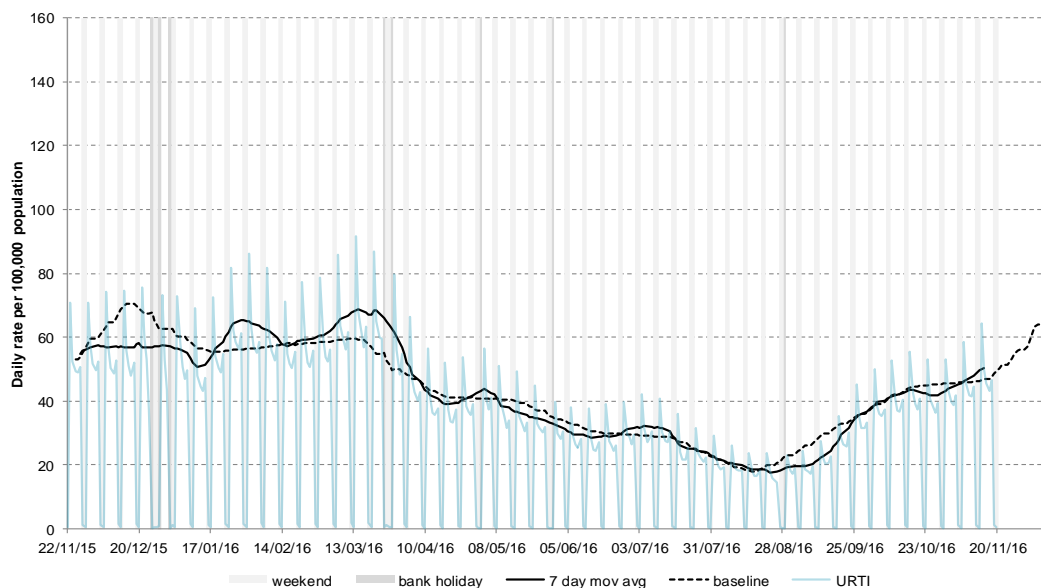
## GP practices and denominator population:

Year	Week	GP Practices Reporting**	Population size**
2016	46	4,107	32.2 million

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

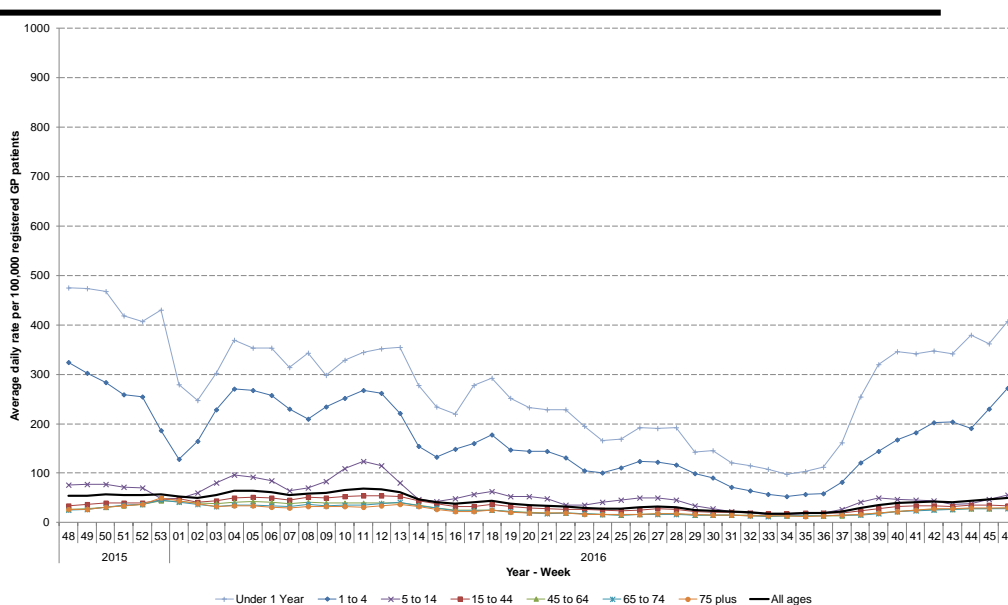
## 1: Upper respiratory tract infection (URTI)

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



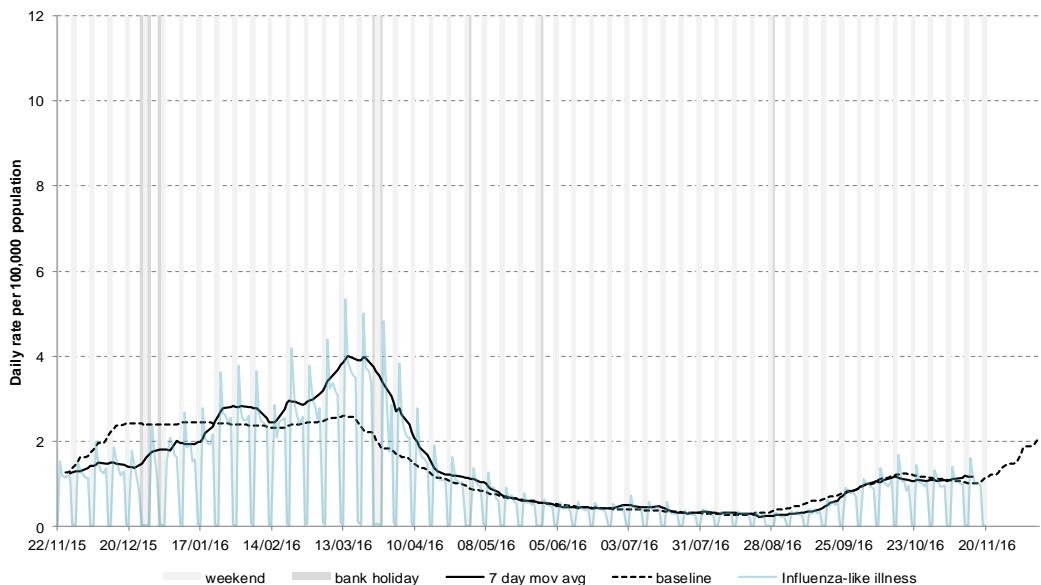
### 1a: Upper respiratory tract infection by age

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



## 2: Influenza-like illness (ILI)

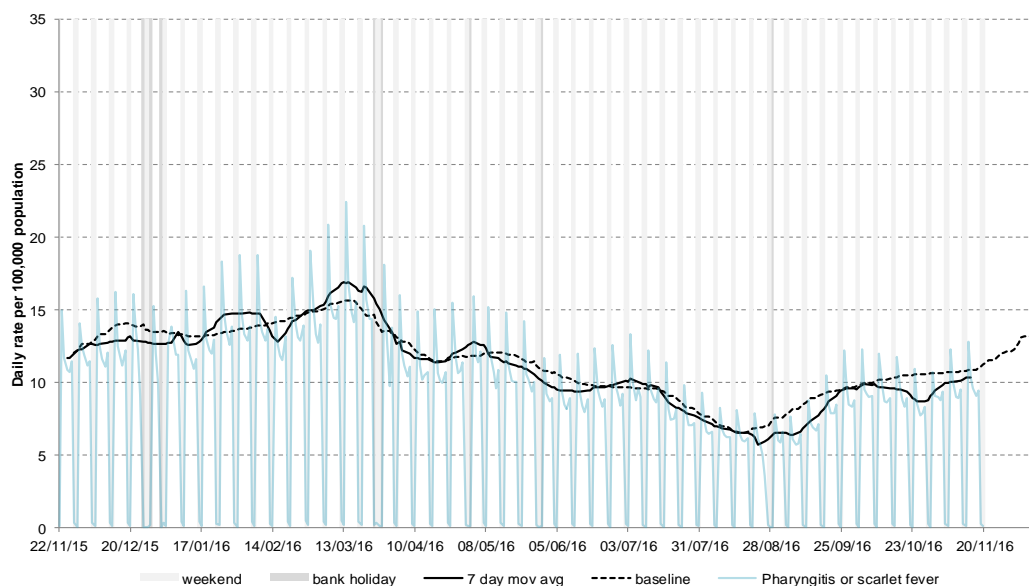
Daily incidence rates (and 7-day moving average\*) per 100,000 population (all England, all ages).



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

### 3: Pharyngitis or scarlet fever

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



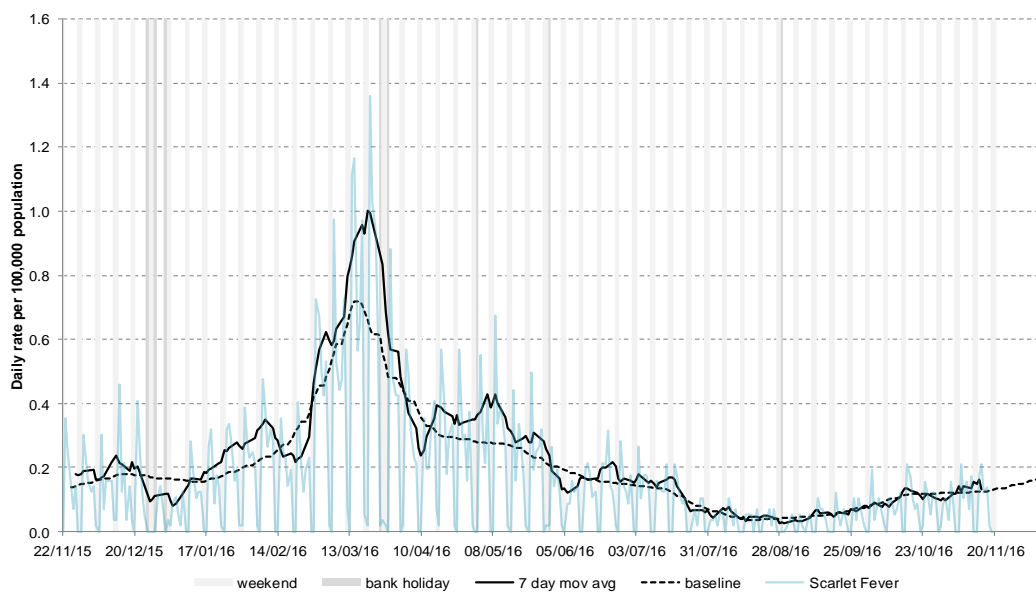
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\* 7-day moving average adjusted for bank holidays.

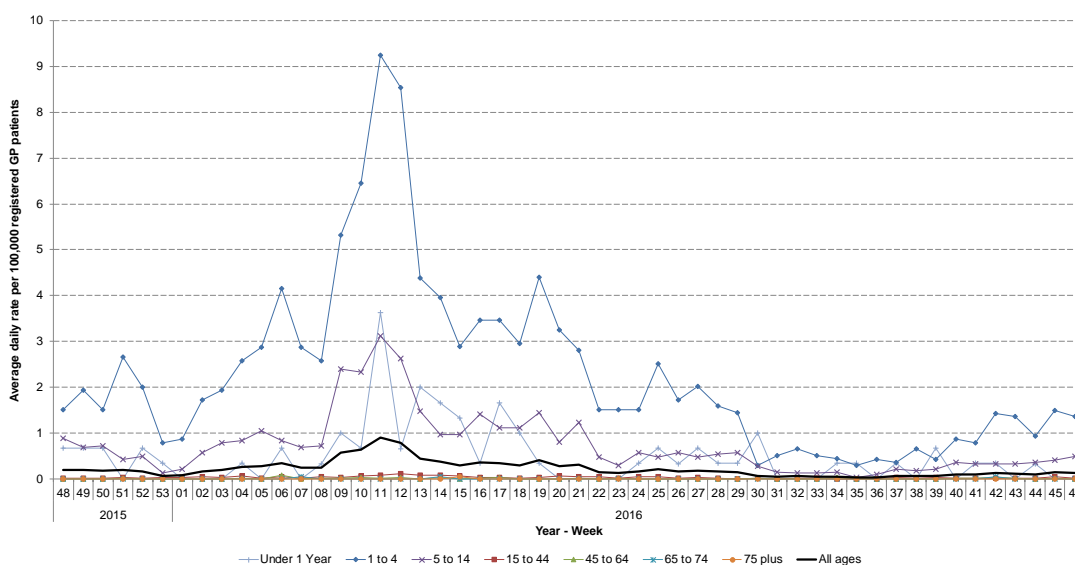
## 4: Scarlet fever

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).



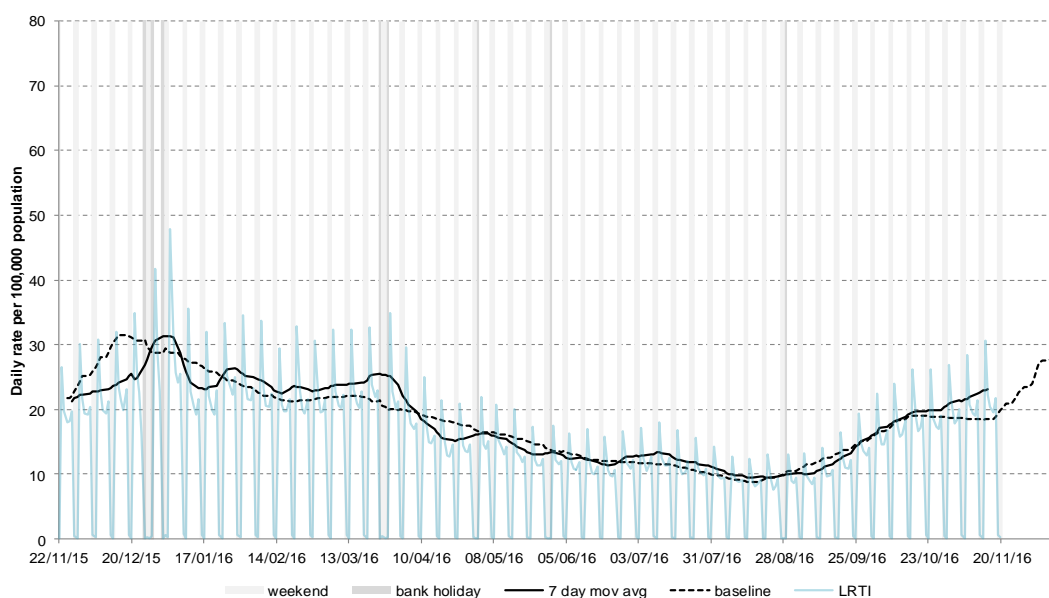
### 4a: Scarlet fever by age

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)

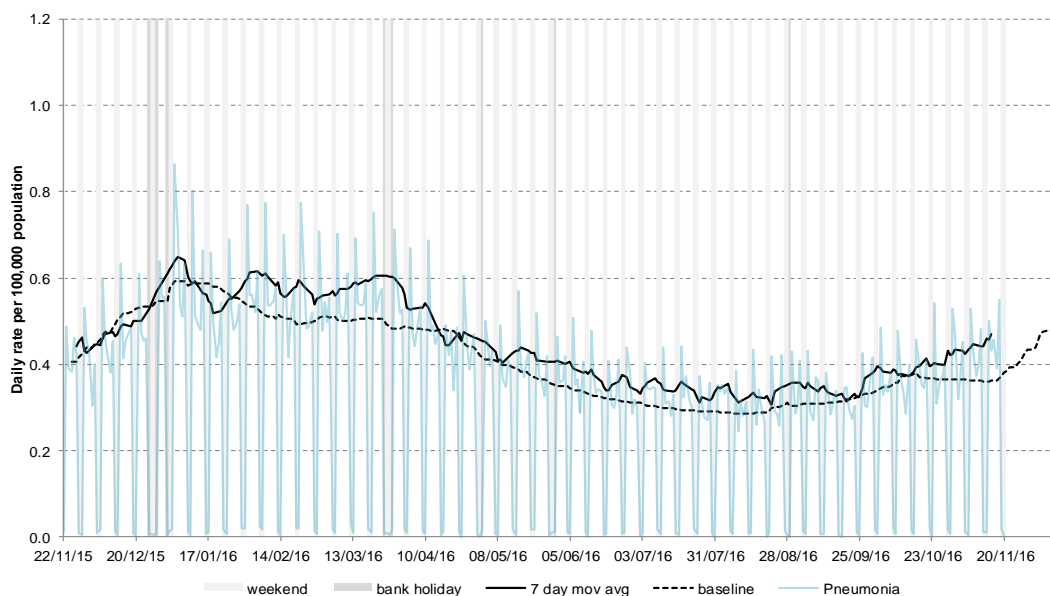
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



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

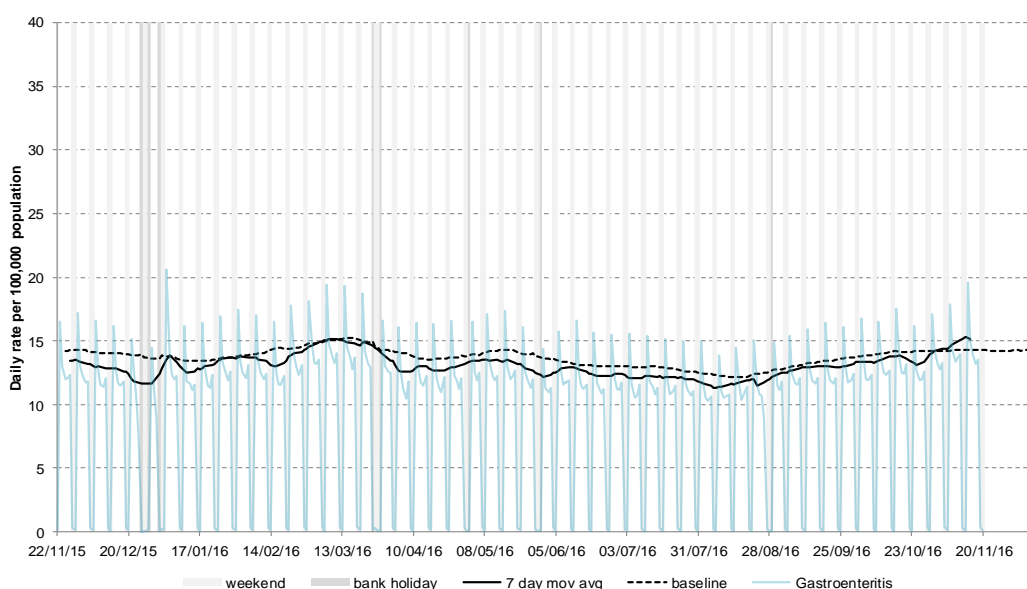
## 6: Pneumonia

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



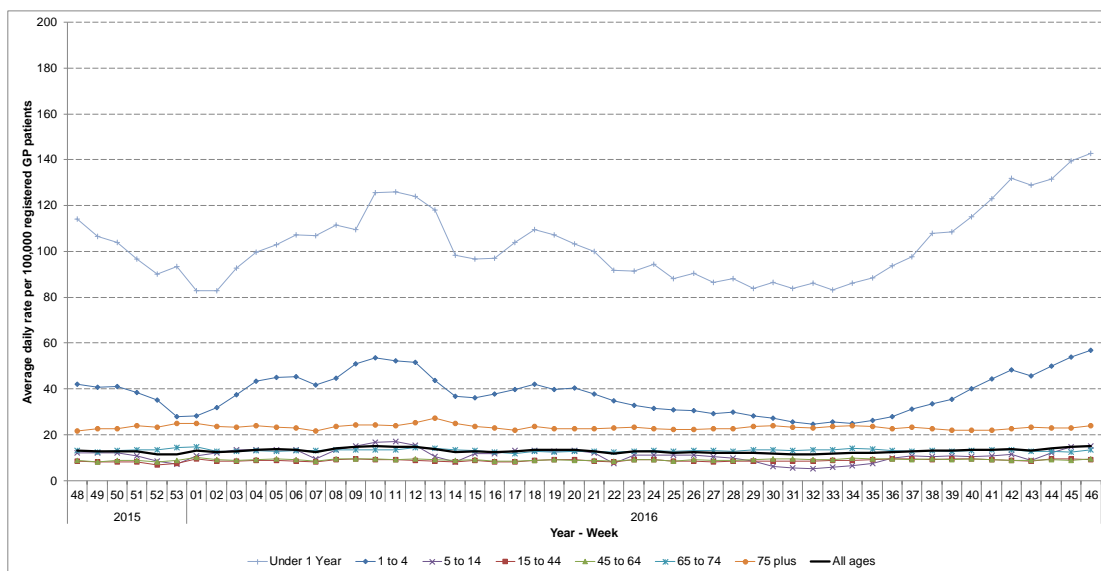
## 7: Gastroenteritis

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



## 7a: Gastroenteritis by age

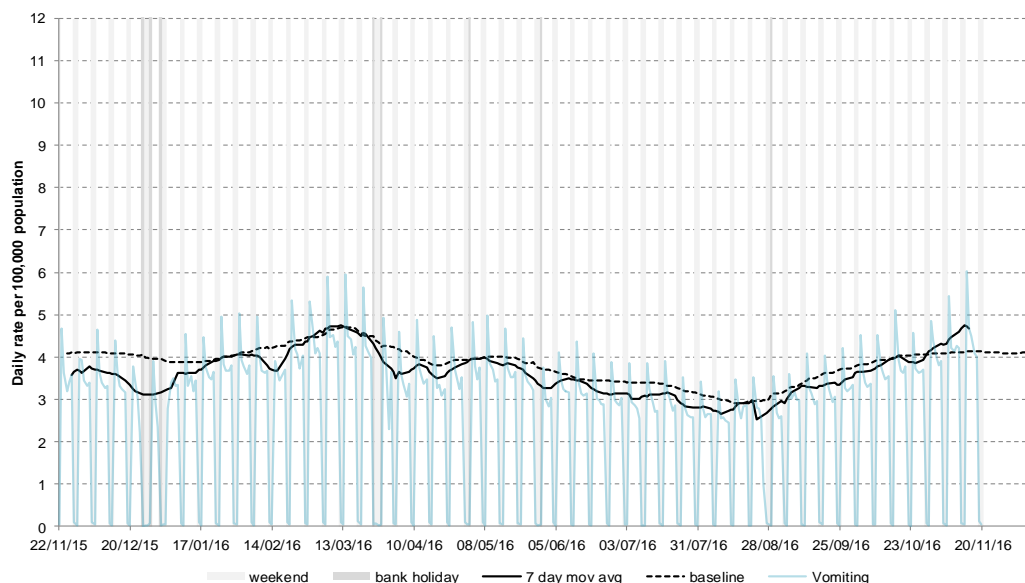
Average daily incidence rate by week per 100,000 population (all England) based on a population denominator of approximately 5.5 million patients).



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

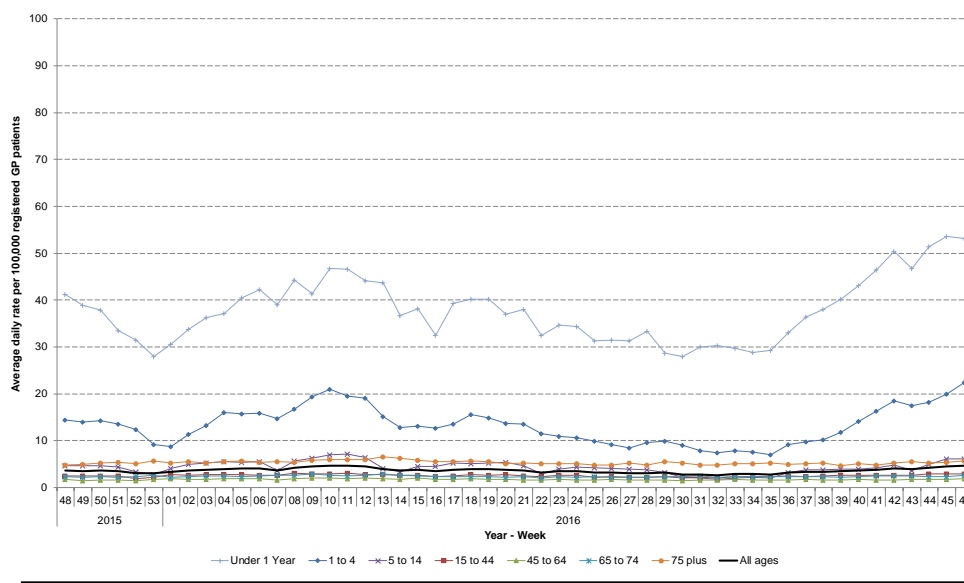
## 8: Vomiting

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



## 8a: Vomiting by age

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

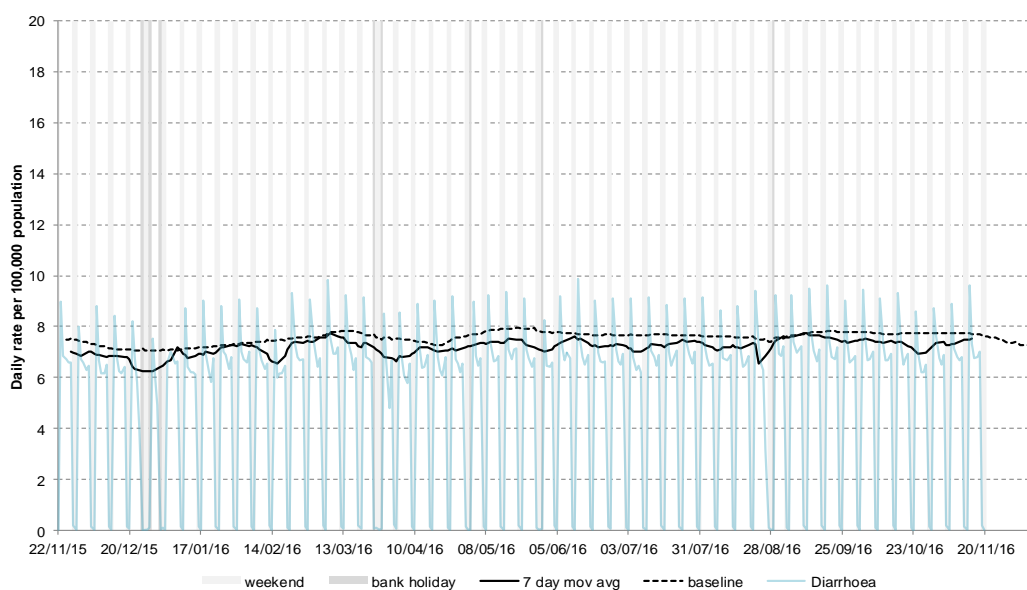


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\* 7-day moving average adjusted for bank holidays.

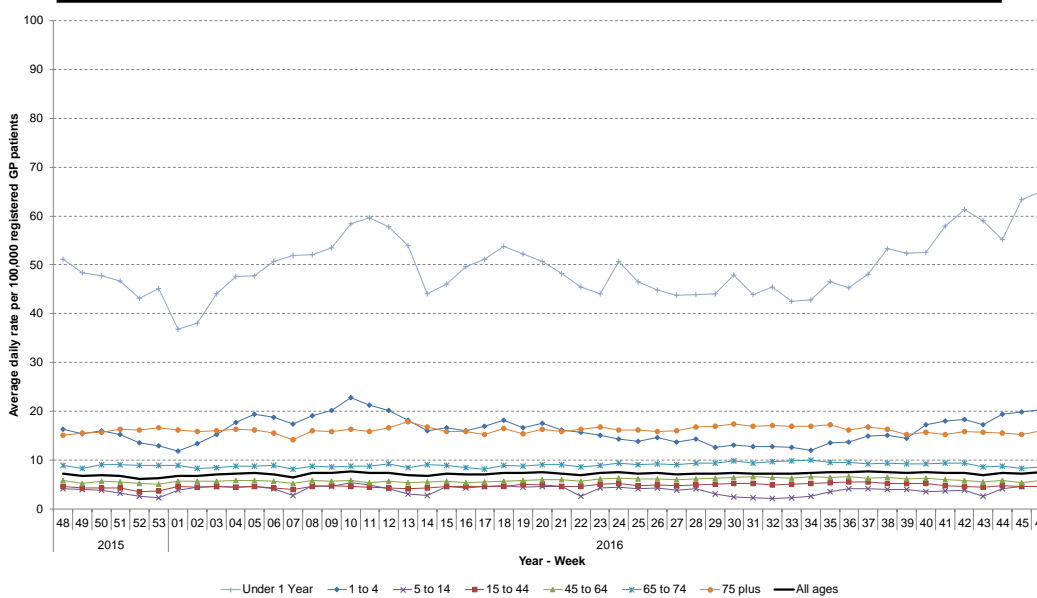
## 9: Diarrhoea

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).

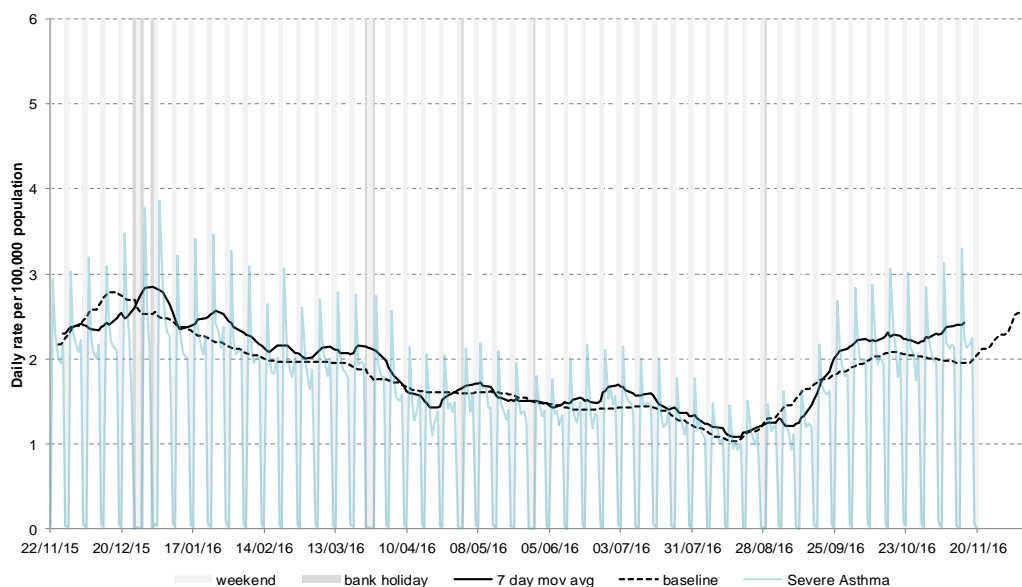


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\* 7-day moving average adjusted for bank holidays.

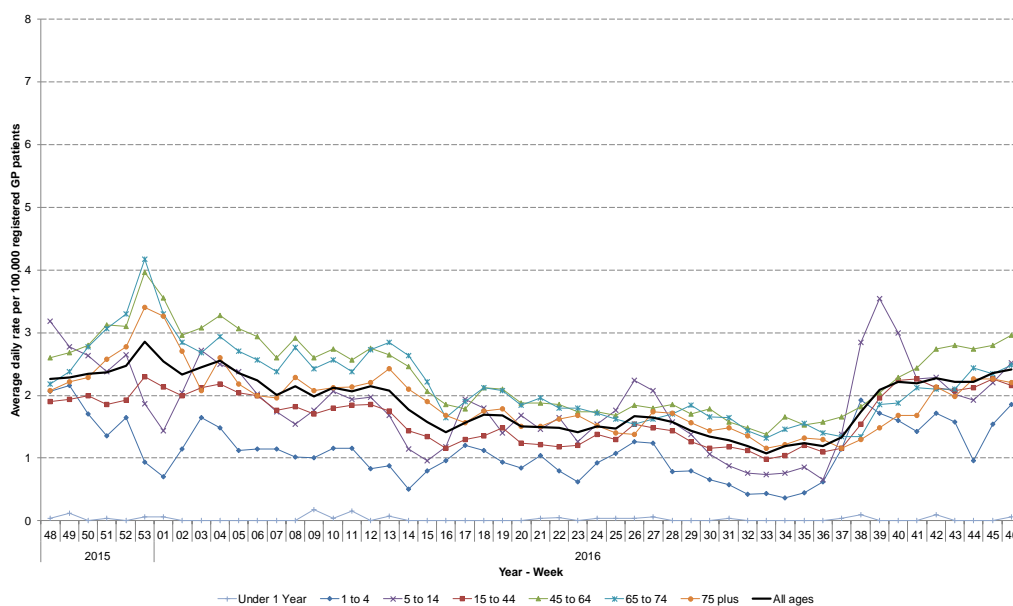
## 10: Severe asthma

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



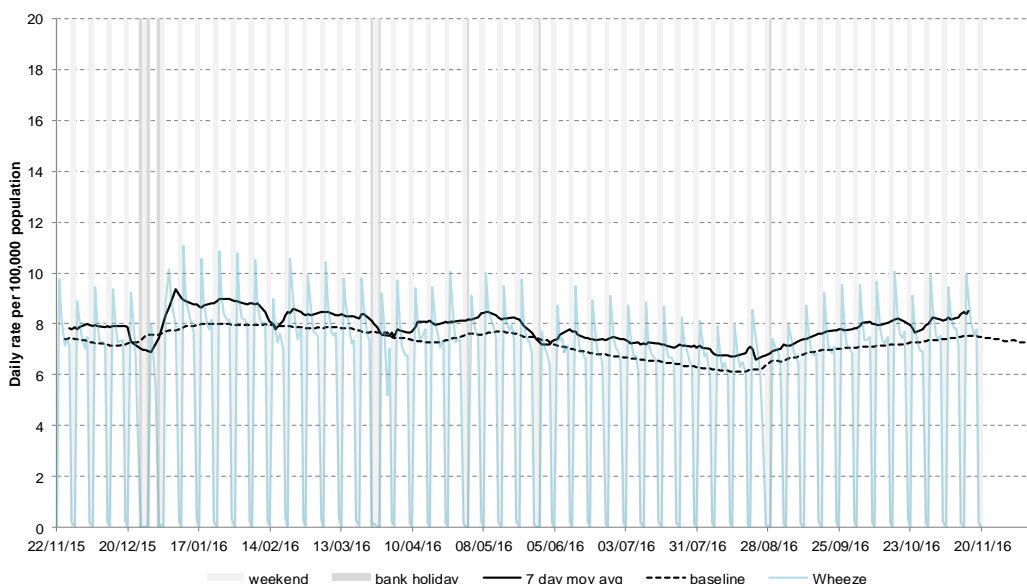
## 10a: Severe asthma by age

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).

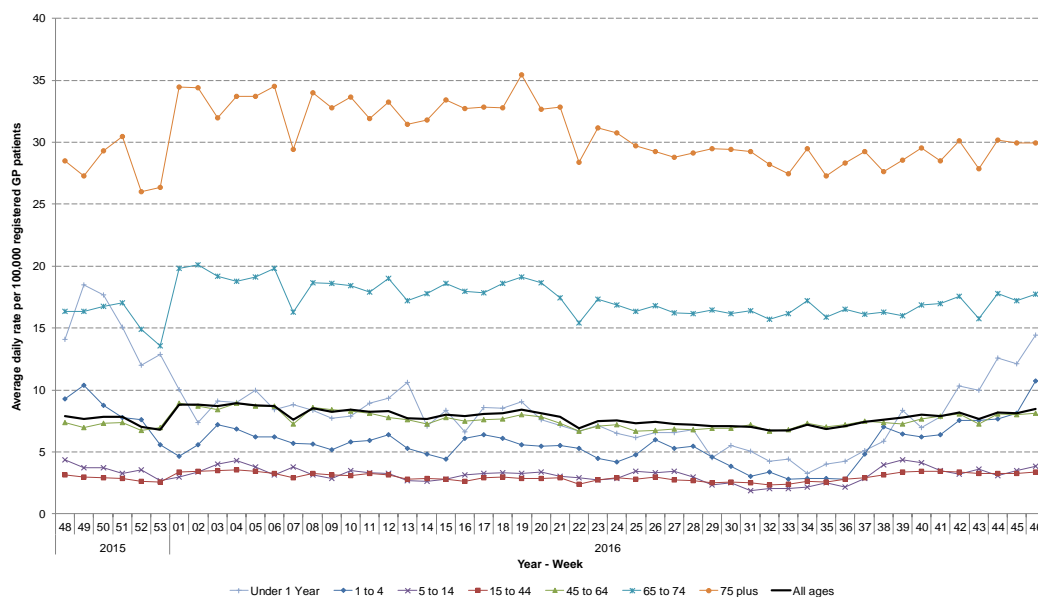


\* 7-day moving average adjusted for bank holidays.



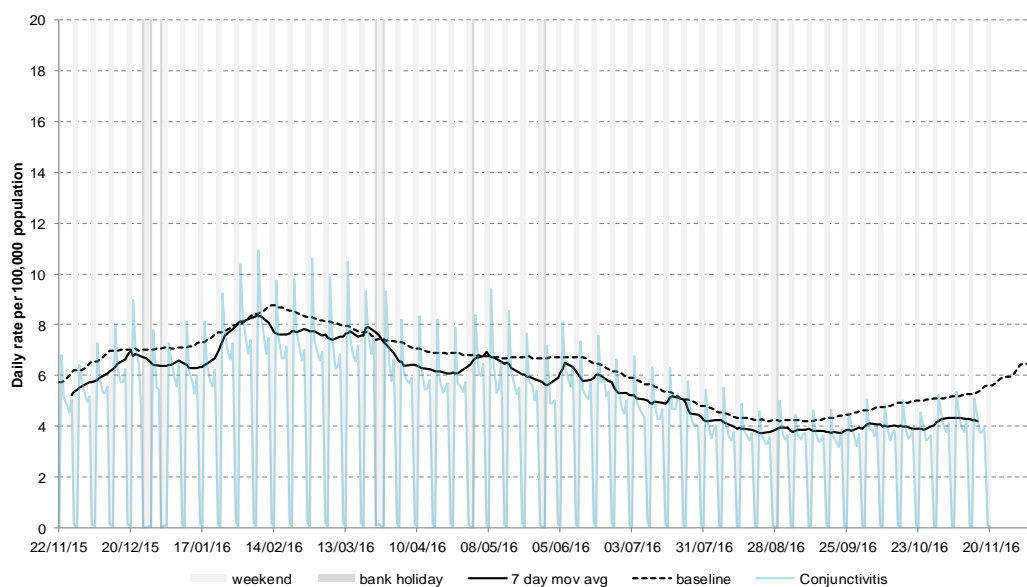
## 11a: Wheeze by age

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



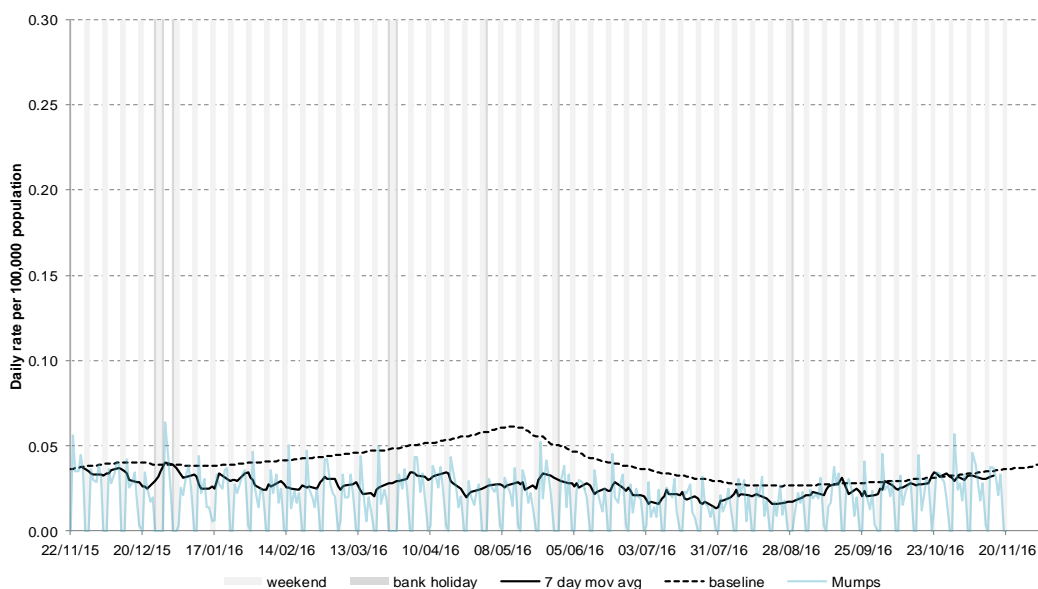
## 12: Conjunctivitis

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).



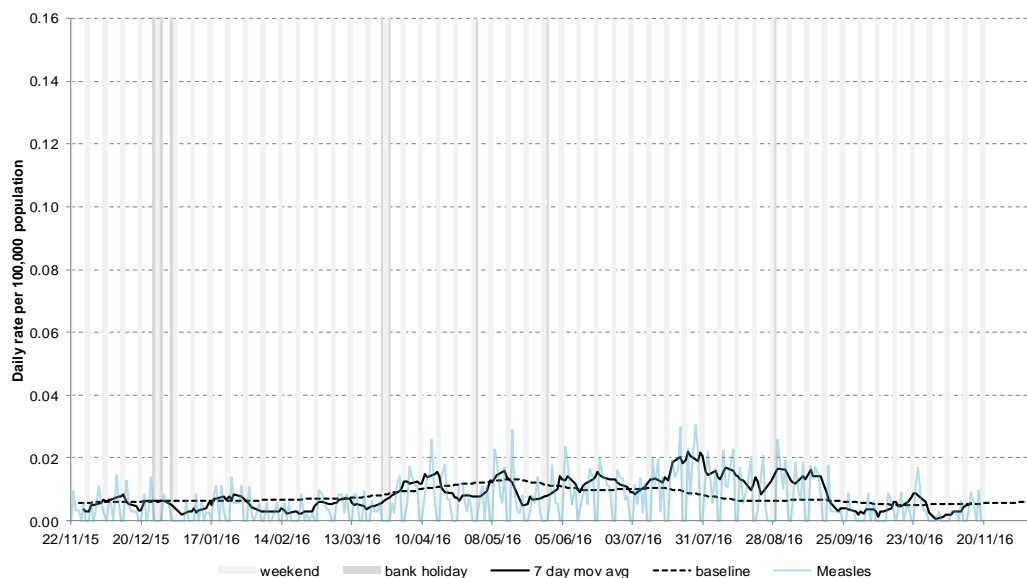
\* 7-day moving average adjusted for bank holidays.

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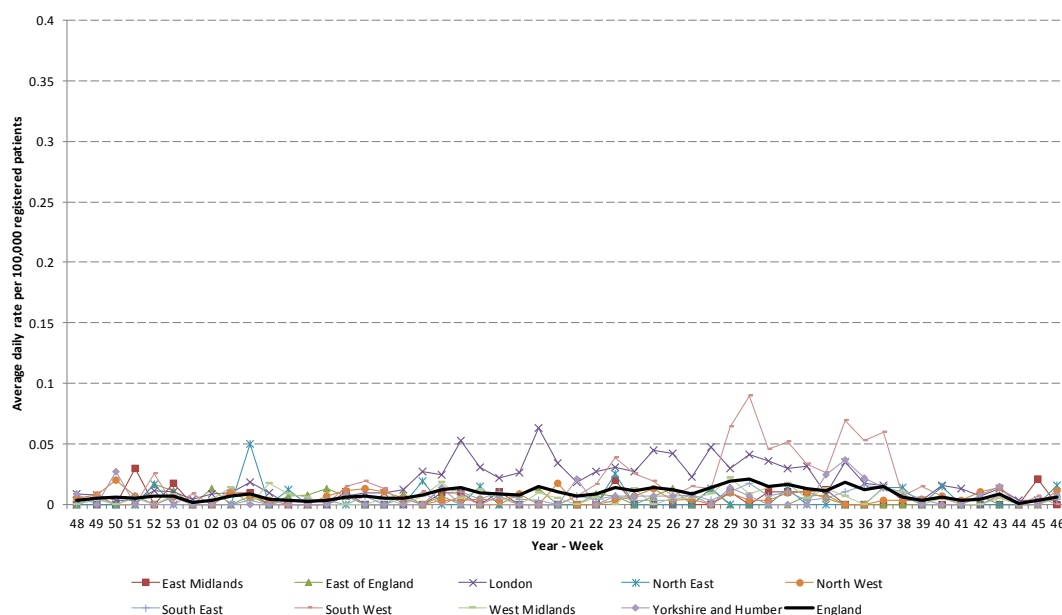
## 14: Measles

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



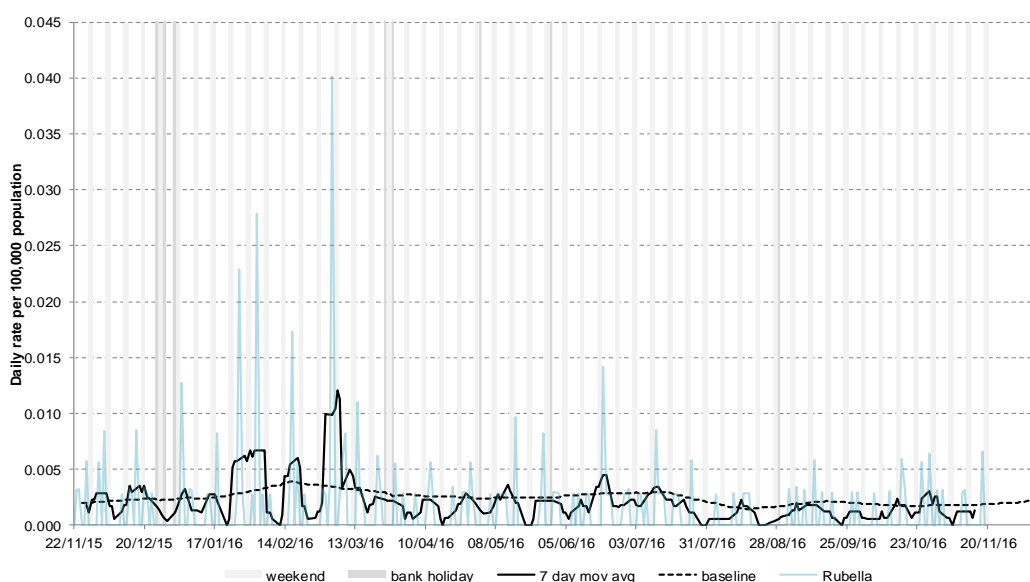
## 14a: Measles by PHE Centre

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



## 15: Rubella

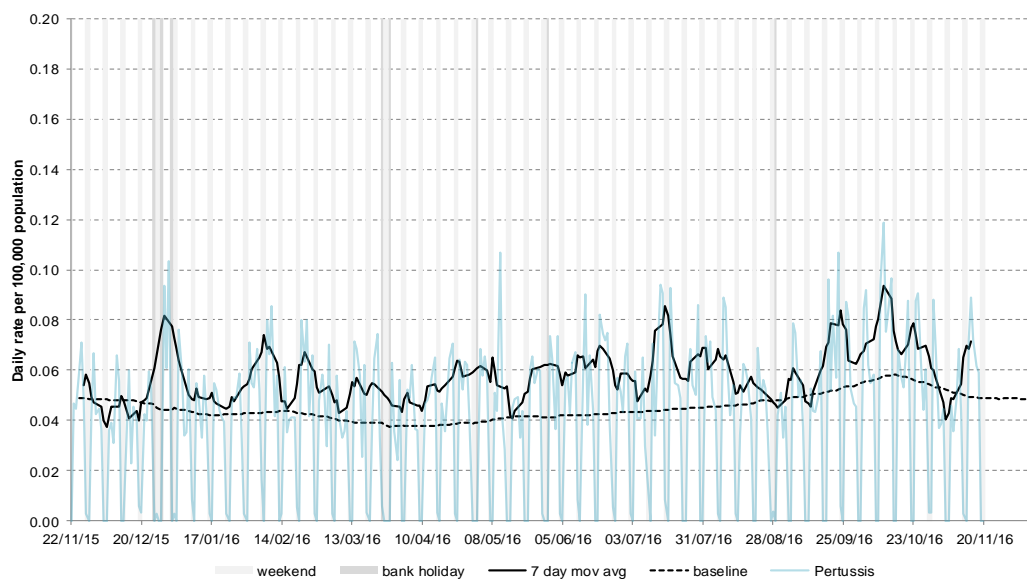
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



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

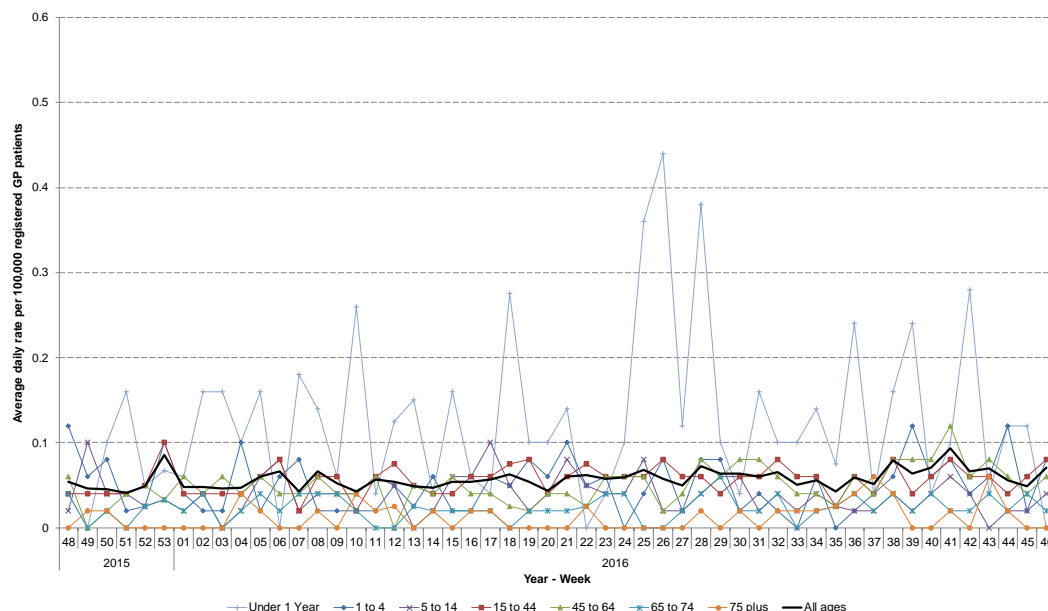
## 16: Pertussis

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



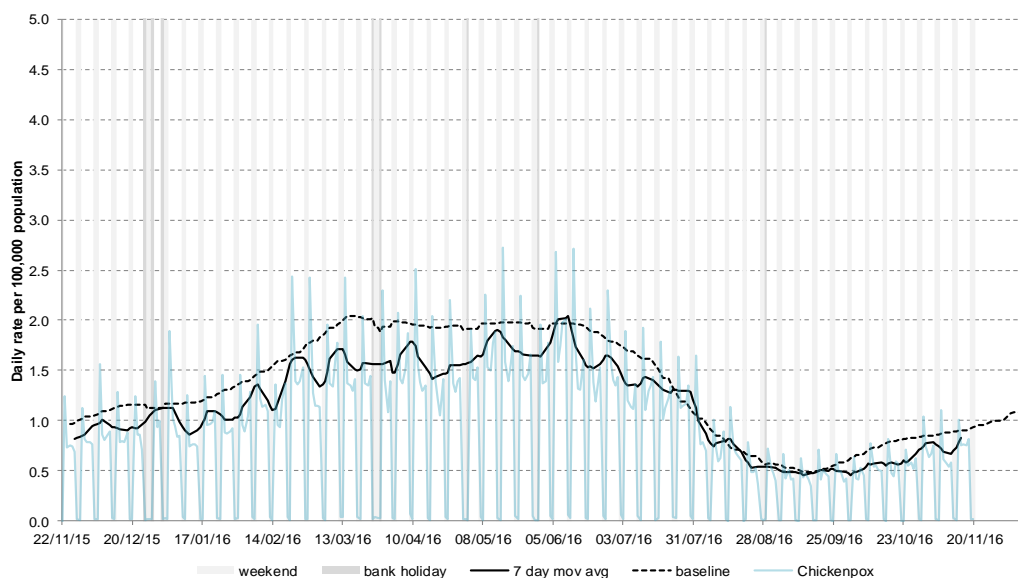
## 16a: Pertussis by age

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



## 17: Chickenpox

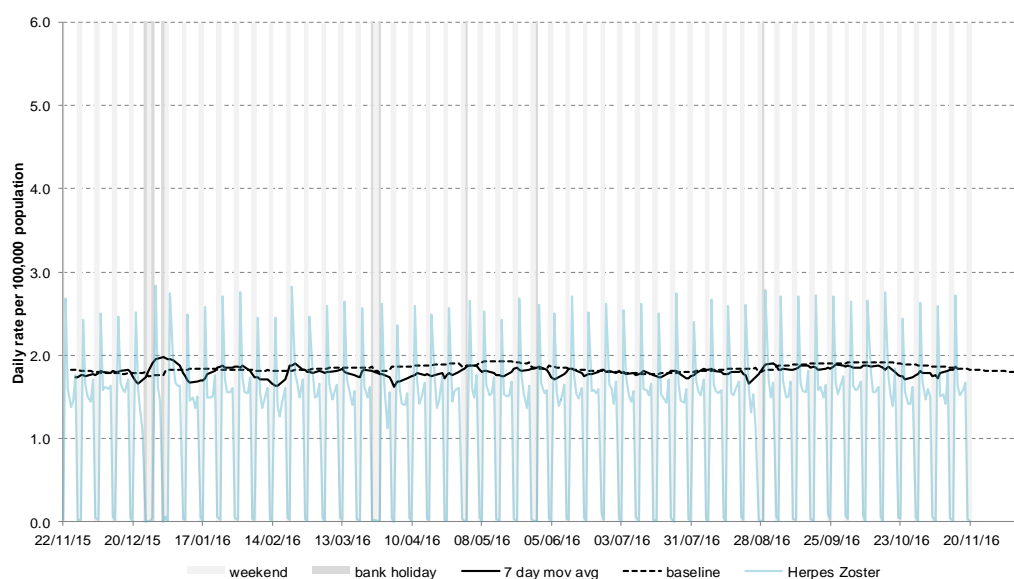
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



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

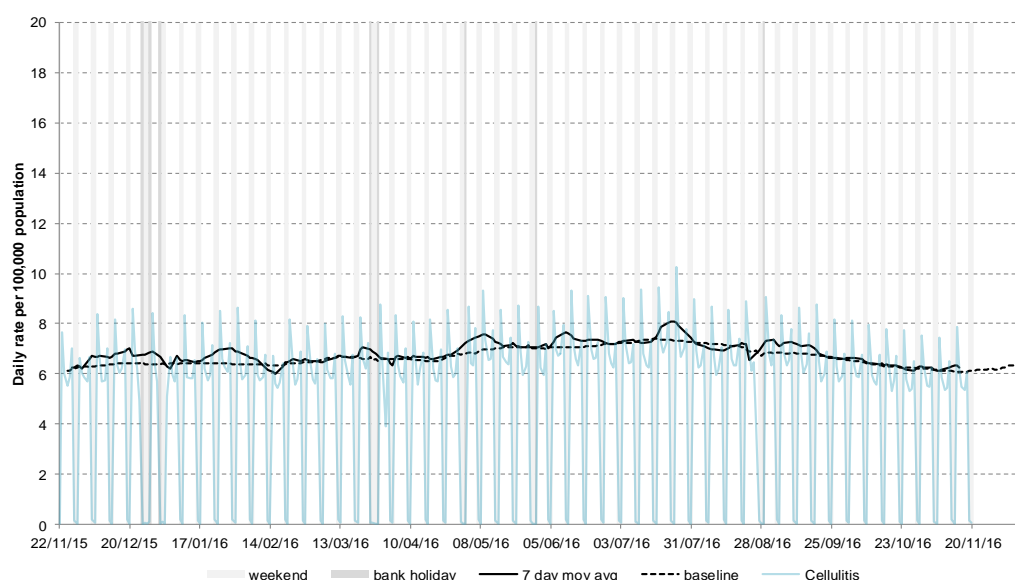
## 18: Herpes zoster

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



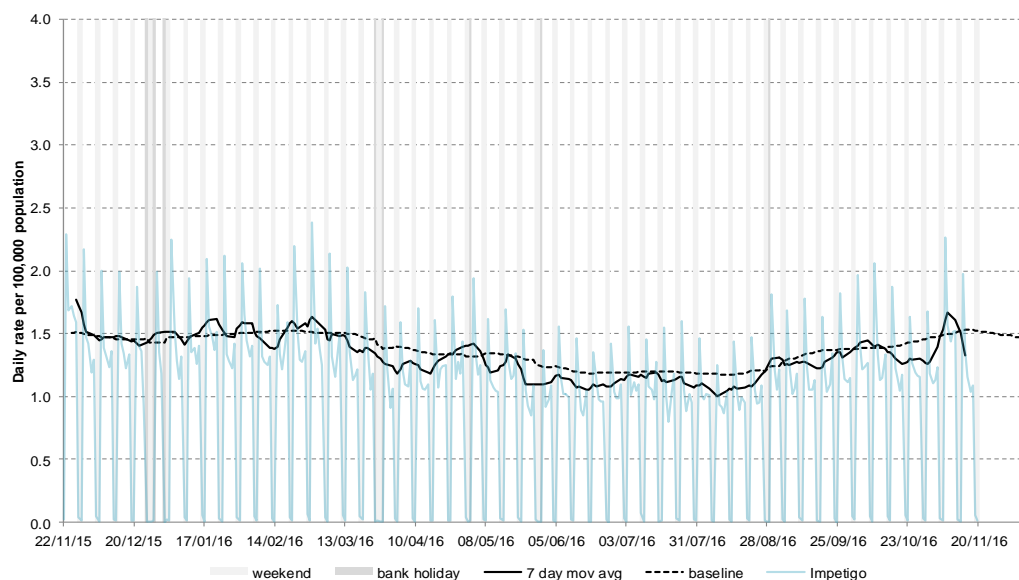
## 19: Cellulitis

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

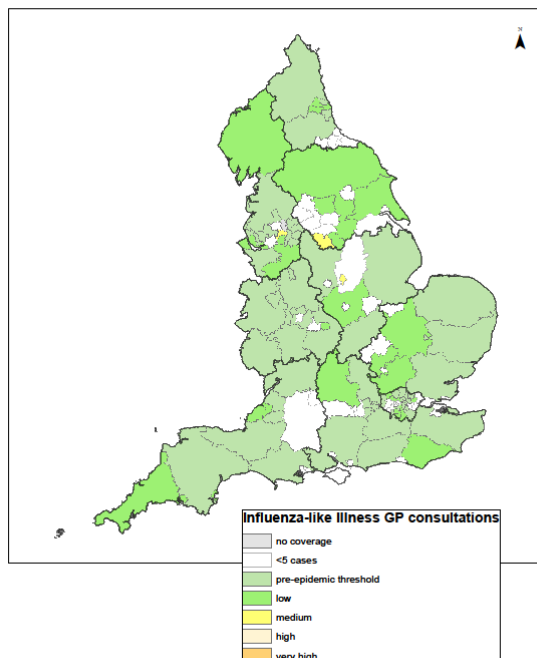
**Web:** <https://www.gov.uk/government/collections/syndromic-surveillance-systems-and-analyses>

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

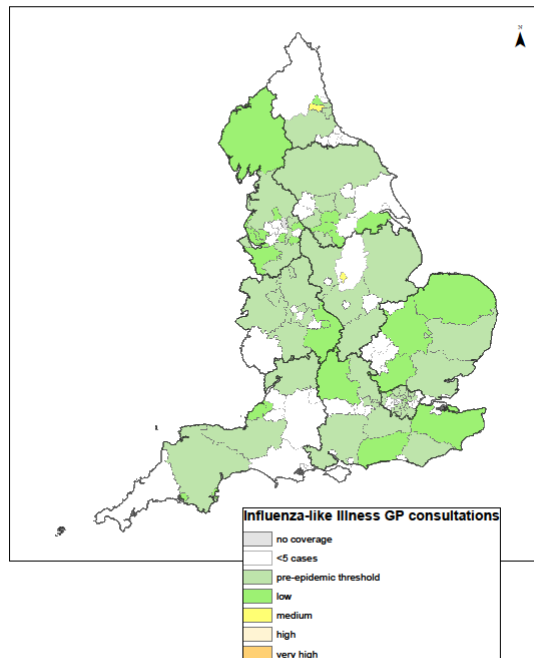
England

Influenza-like illness  
GP consultations  
by LA  
(England)

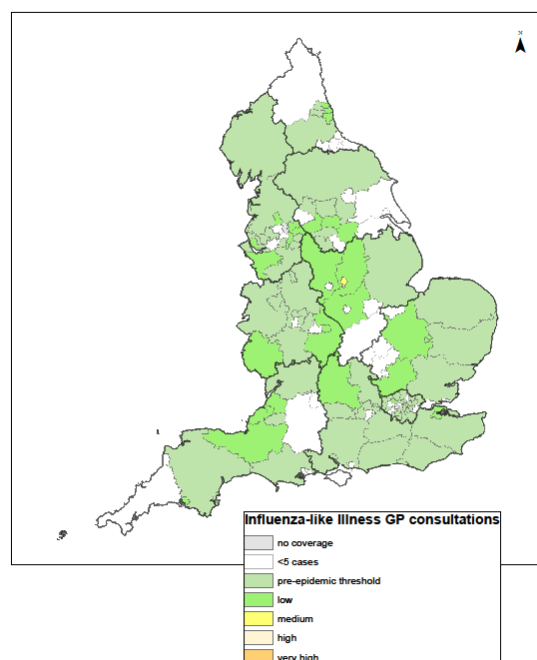
Week 43



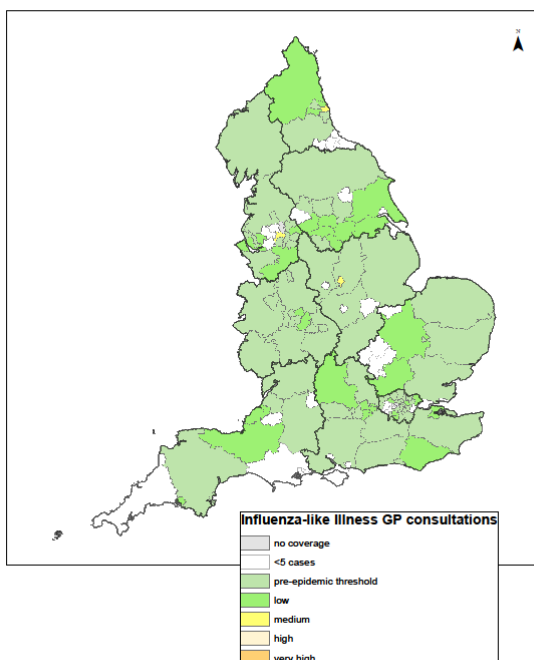
Week 44



Week 45



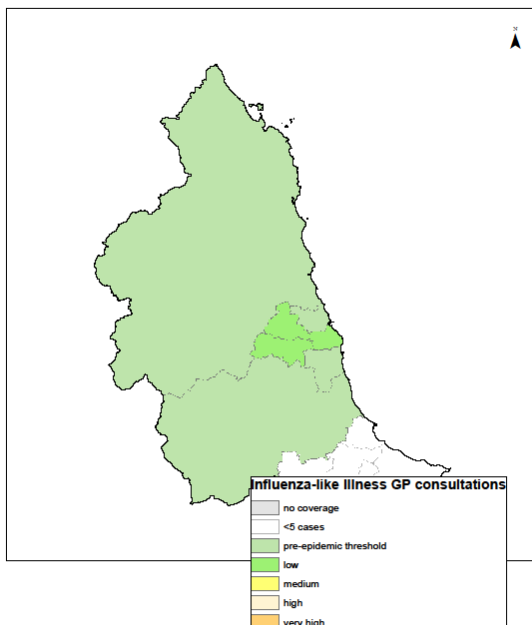
Week 46



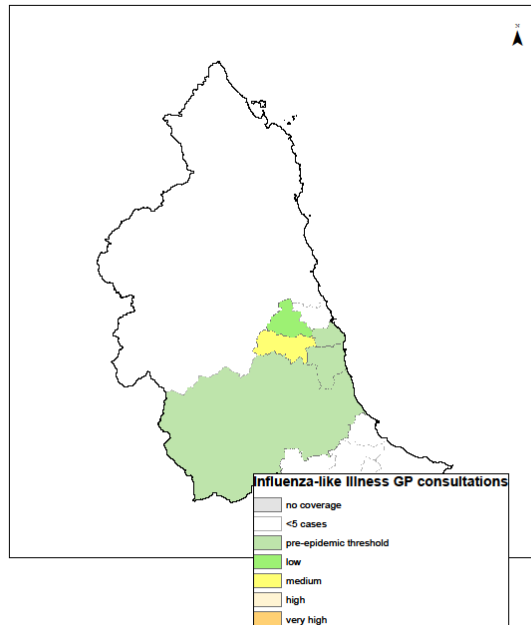
## North East

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

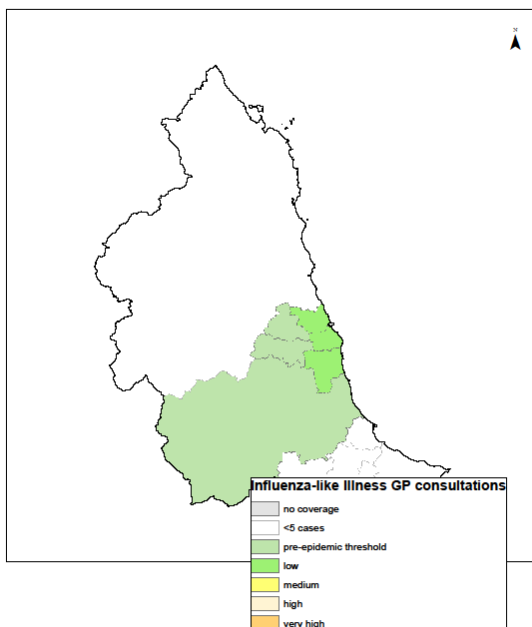
Week 43



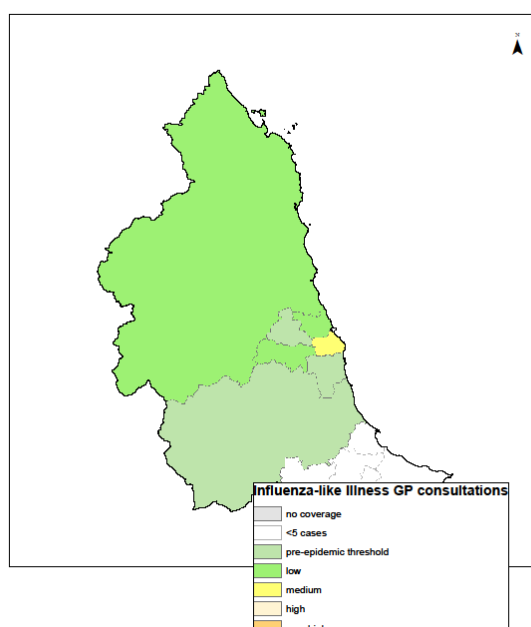
Week 44



Week 45



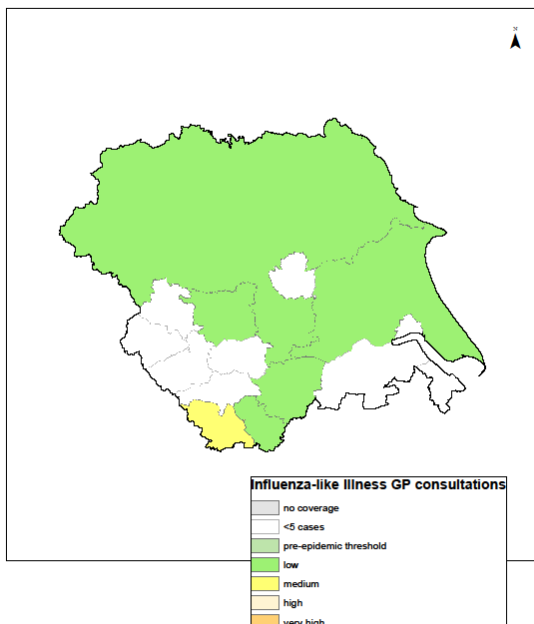
Week 46



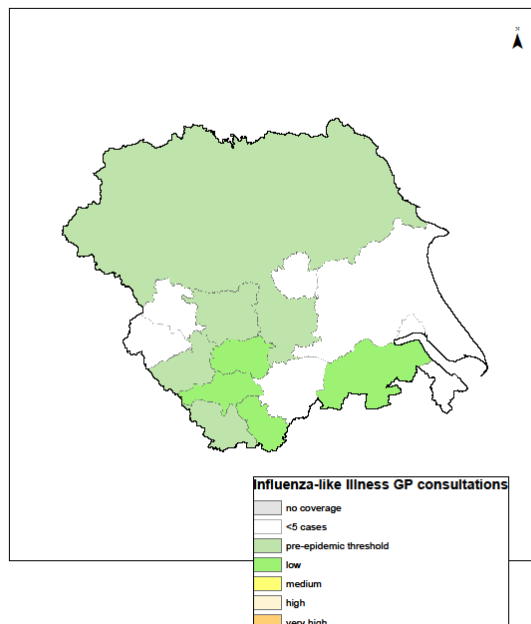
## Yorkshire & Humber

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

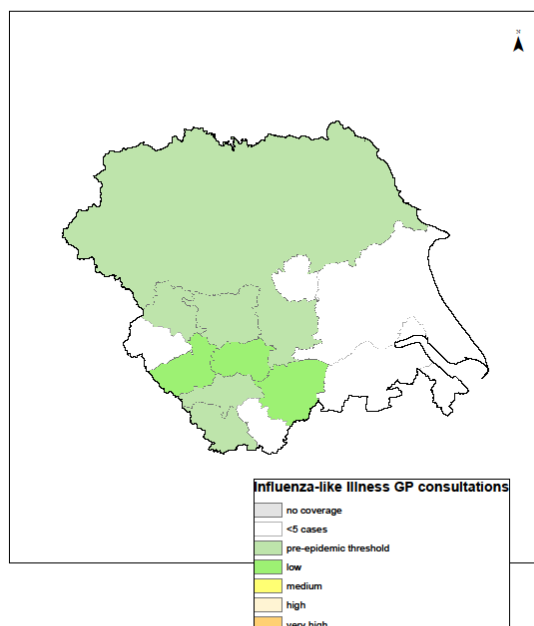
Week 43



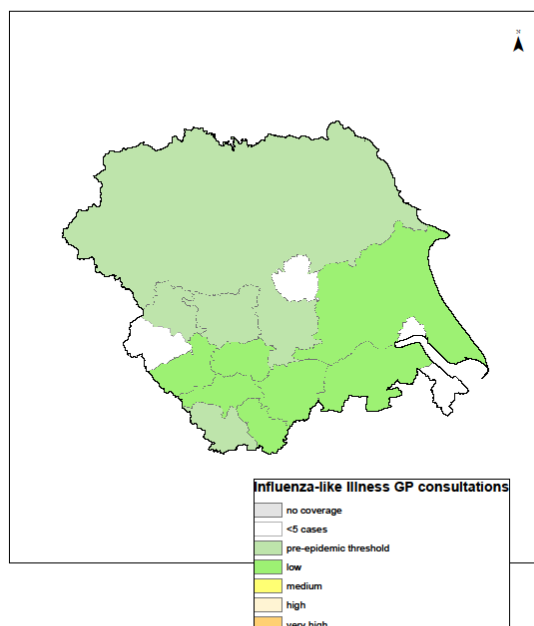
Week 44



Week 45



Week 46

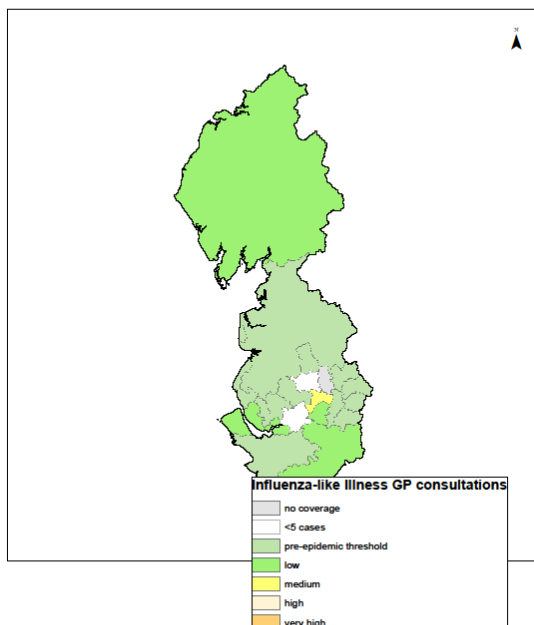




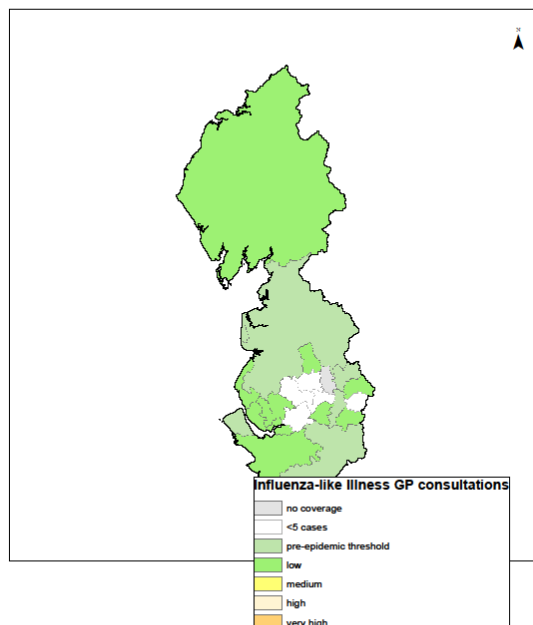
## North West

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

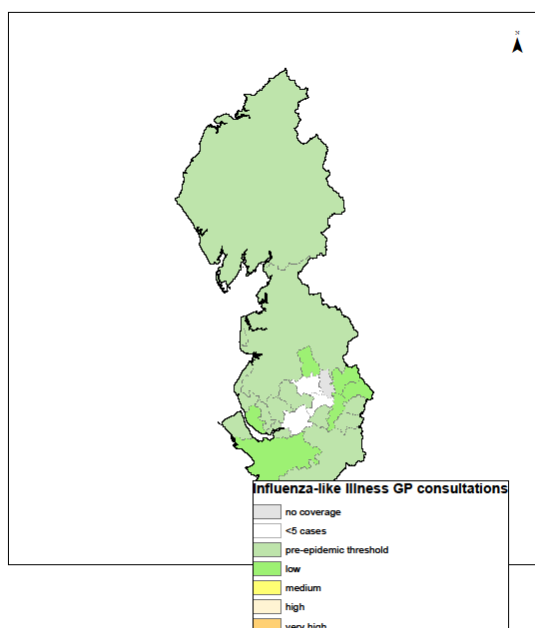
### Week 43



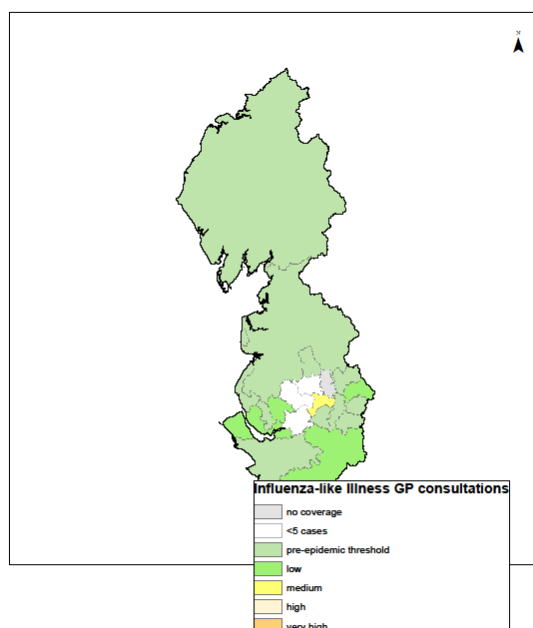
### Week 44



### Week 45



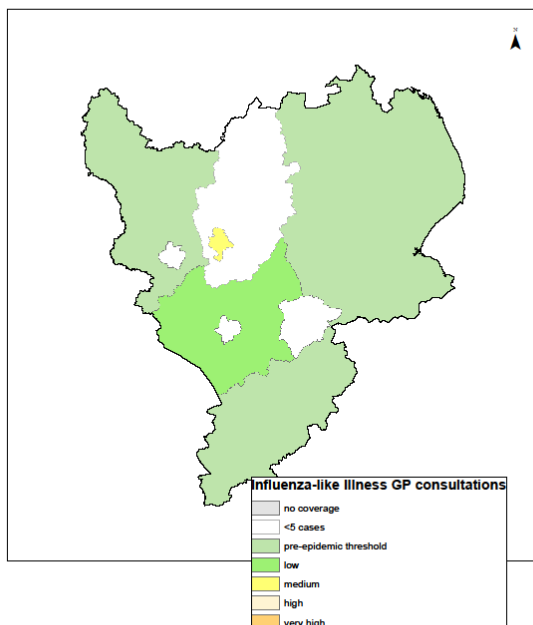
### Week 46



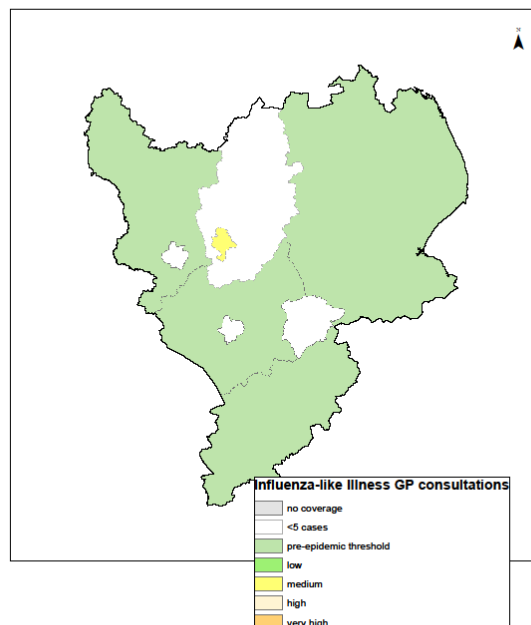
**East  
Midlands**

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

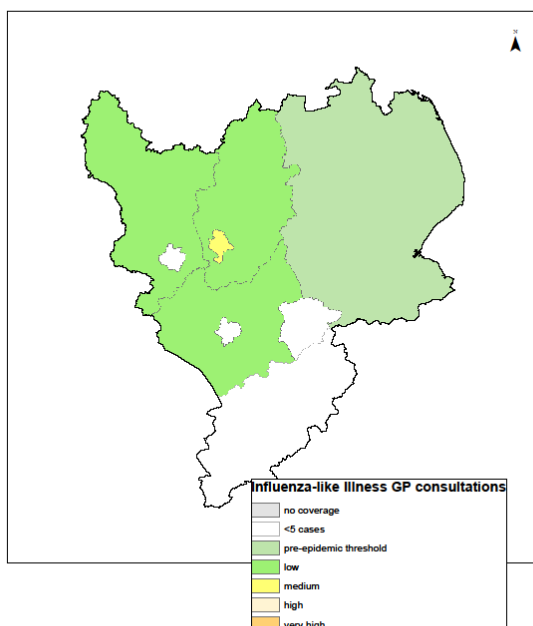
**Week 43**



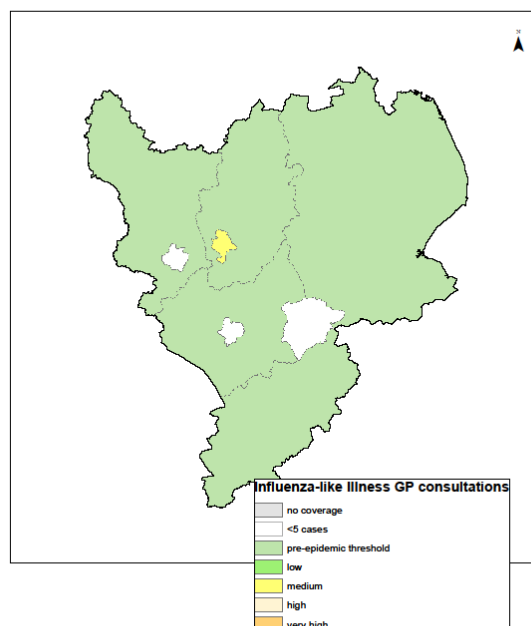
**Week 44**



**Week 45**



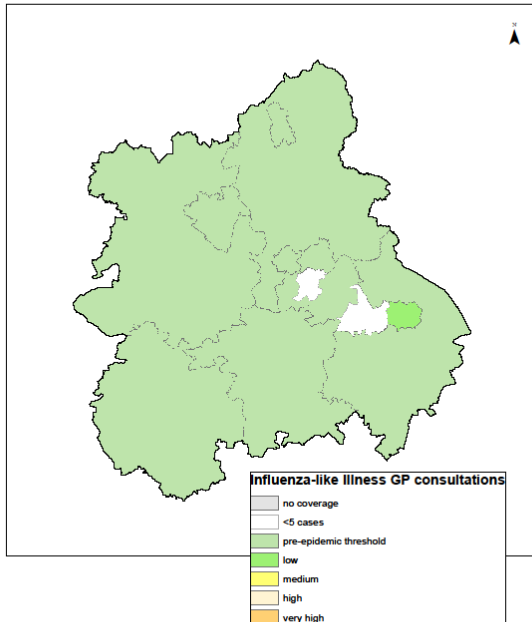
**Week 46**



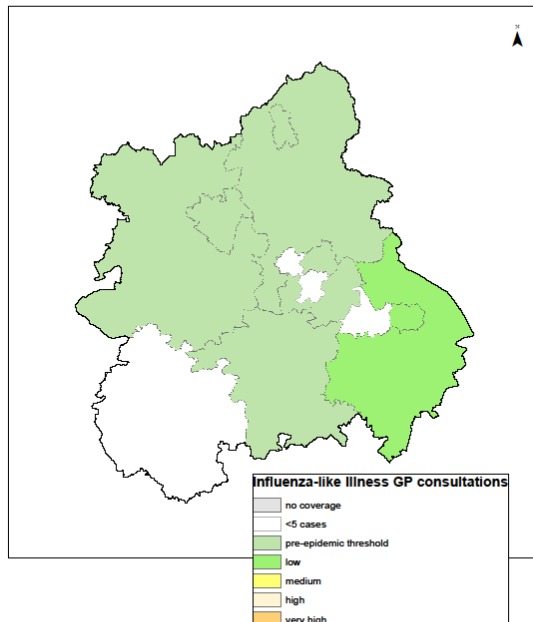
**West Midlands**

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

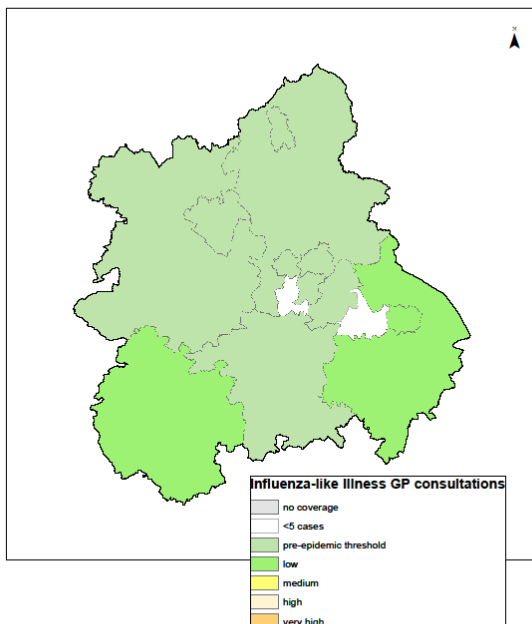
**Week 43**



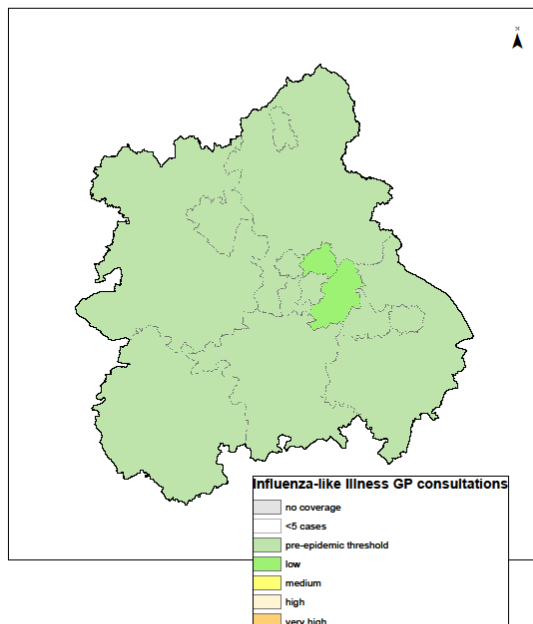
**Week 44**



**Week 45**



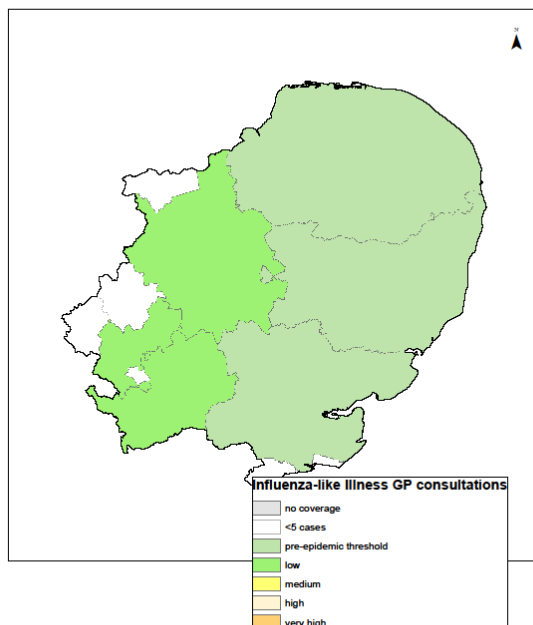
**Week 46**



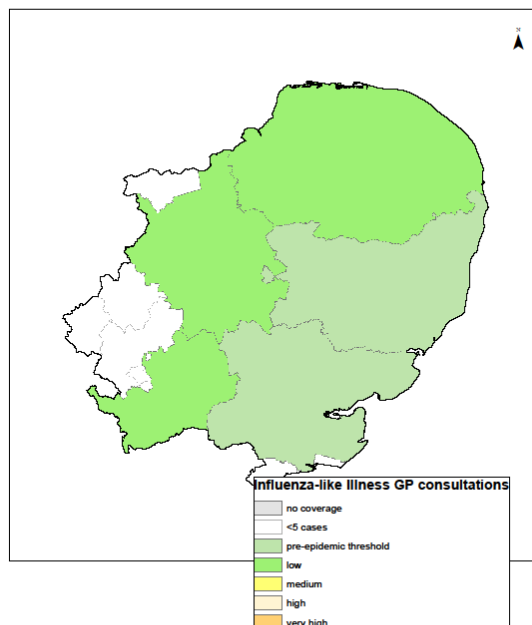
## East of England

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

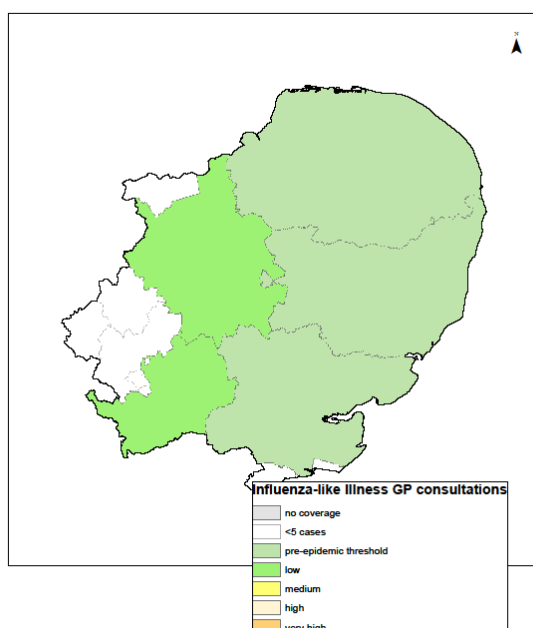
Week 43



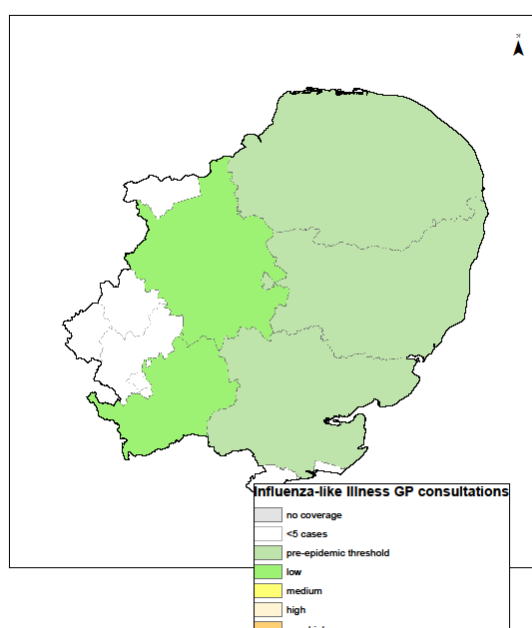
Week 44



Week 45



Week 46

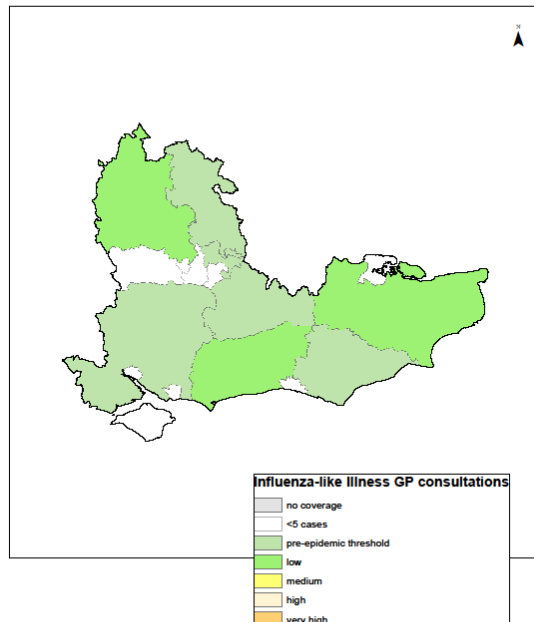
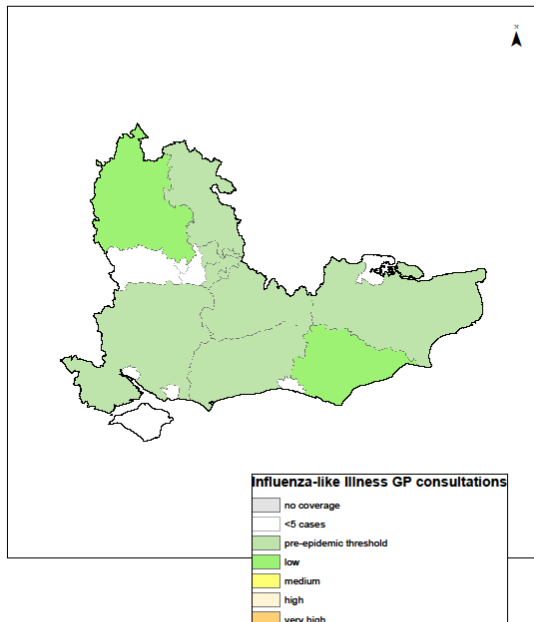


**South East**

**Week 43**

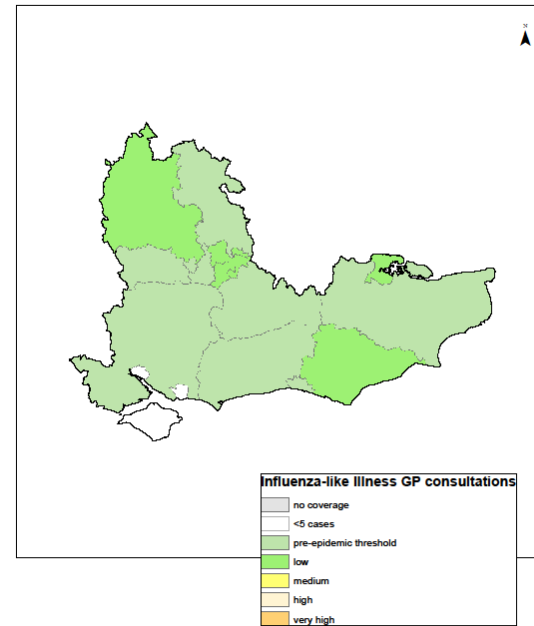
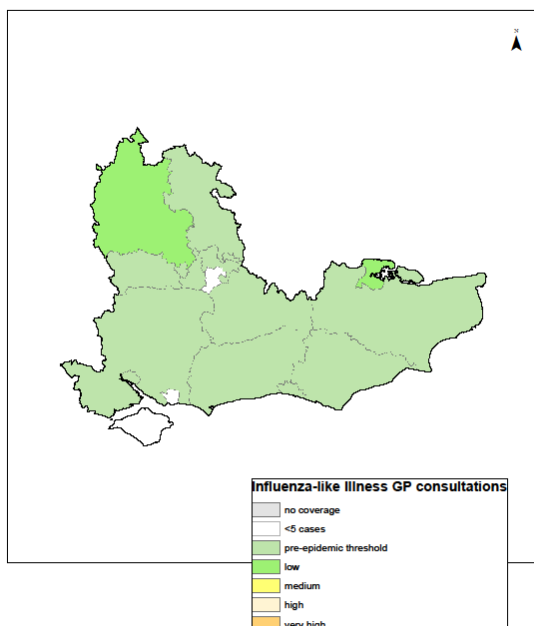
**Week 44**

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



**Week 45**

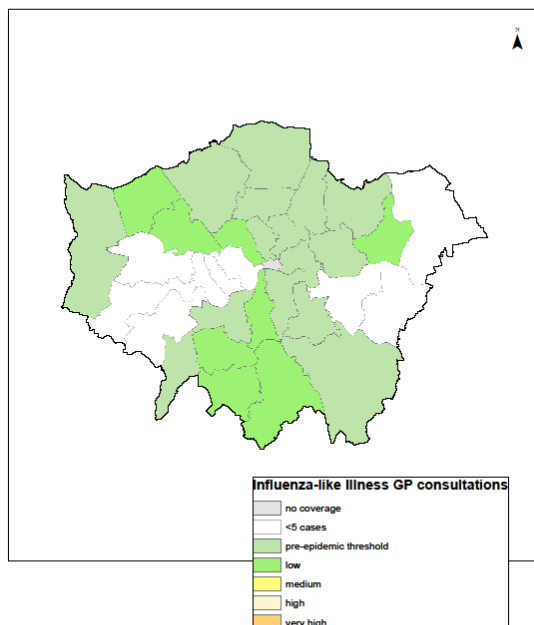
**Week 46**



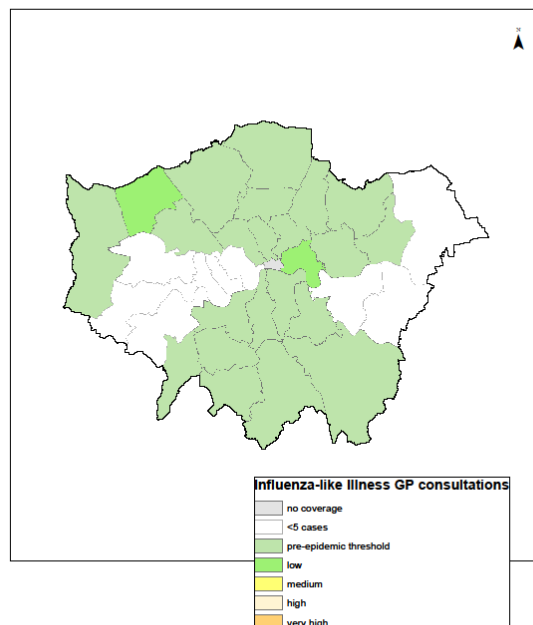
**London**

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

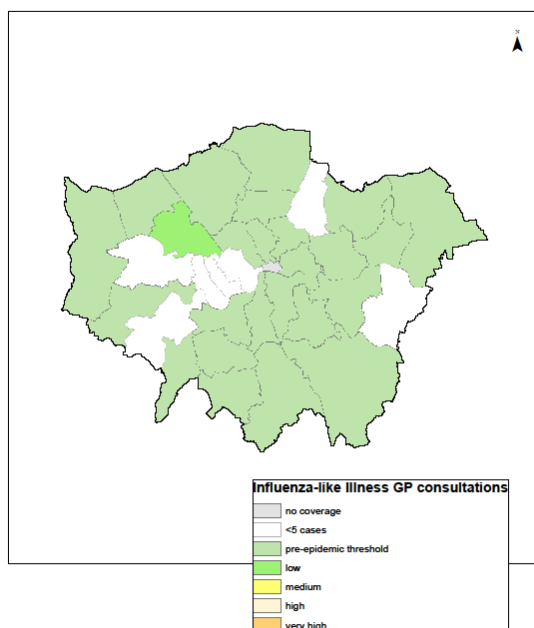
**Week 43**



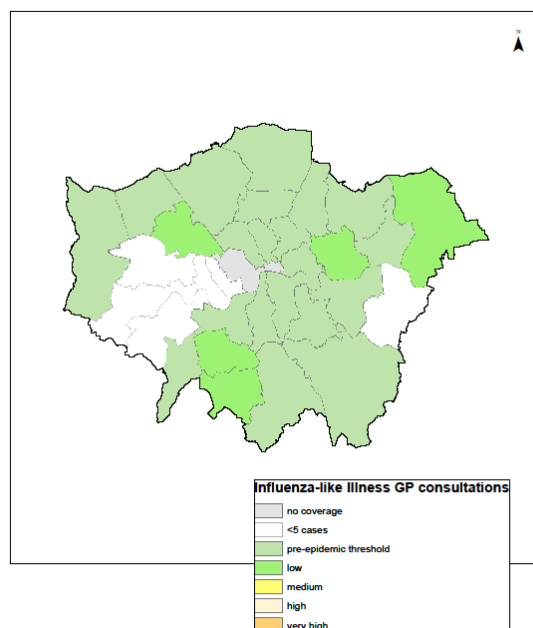
**Week 44**



**Week 45**



**Week 46**

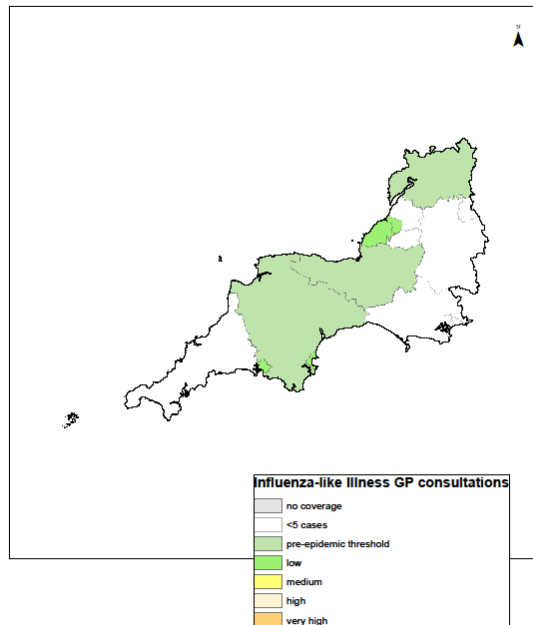
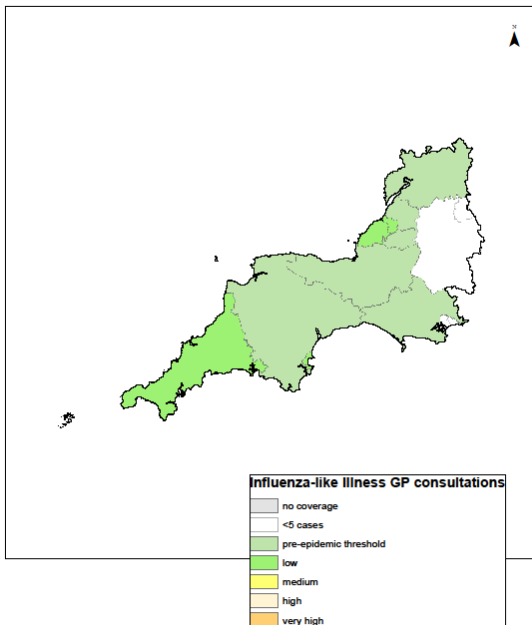


## South West

### Week 43

### Week 44

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



### Week 45

### Week 46

