# GP In Hours

Syndromic Surveillance System: England

## Key messages

**Data to:  15 November 2015**

GP consultation rates for respiratory indicators stabilised during week 46.

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 – Winter preparedness**
http://www.metoffice.gov.uk/weather/uk/coldweatheralert/

## Diagnostic indicators at a glance:

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

## GP practices and denominator population:

| Year | Week | GP Practices Reporting** | Population size** |
|---|---|---|---|
| 2015 | 46 | 4006 | 30.2 million |

**based on the average number of practices and denominator population in the reporting working week.
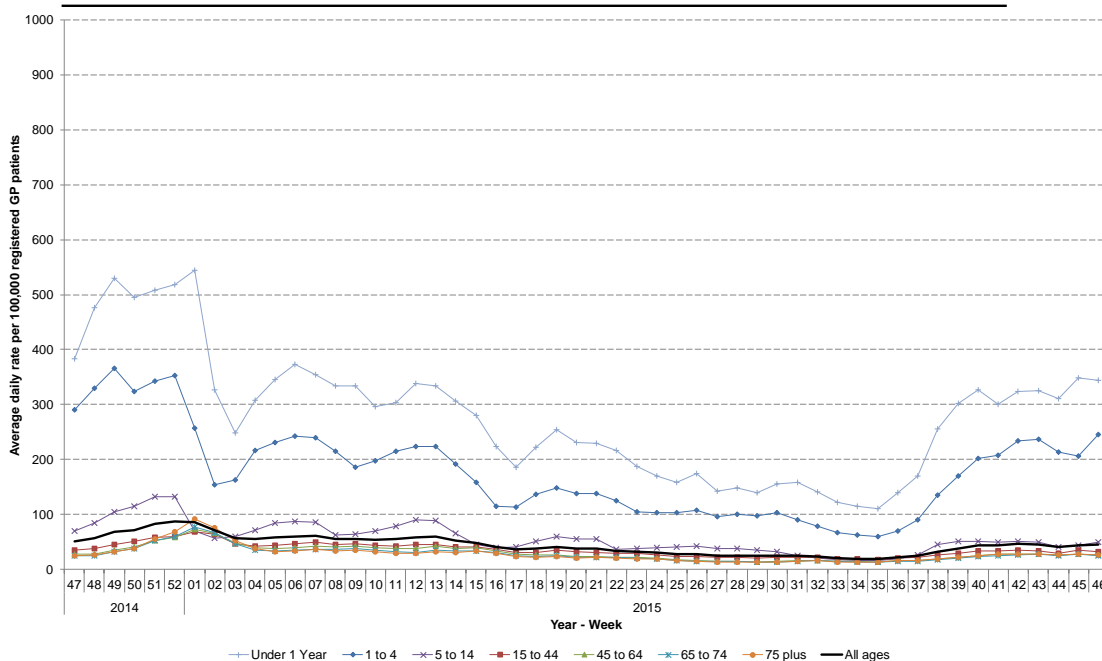
**1: Upper respiratory tract infection (URTI)**

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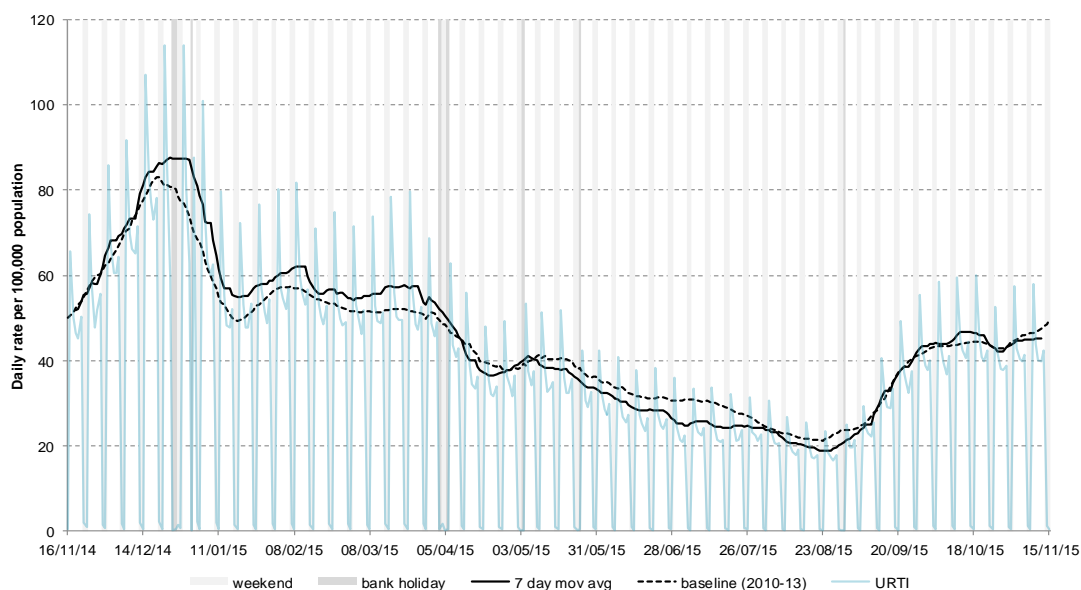


**1a: Upper respiratory tract infection (URTI) by age**

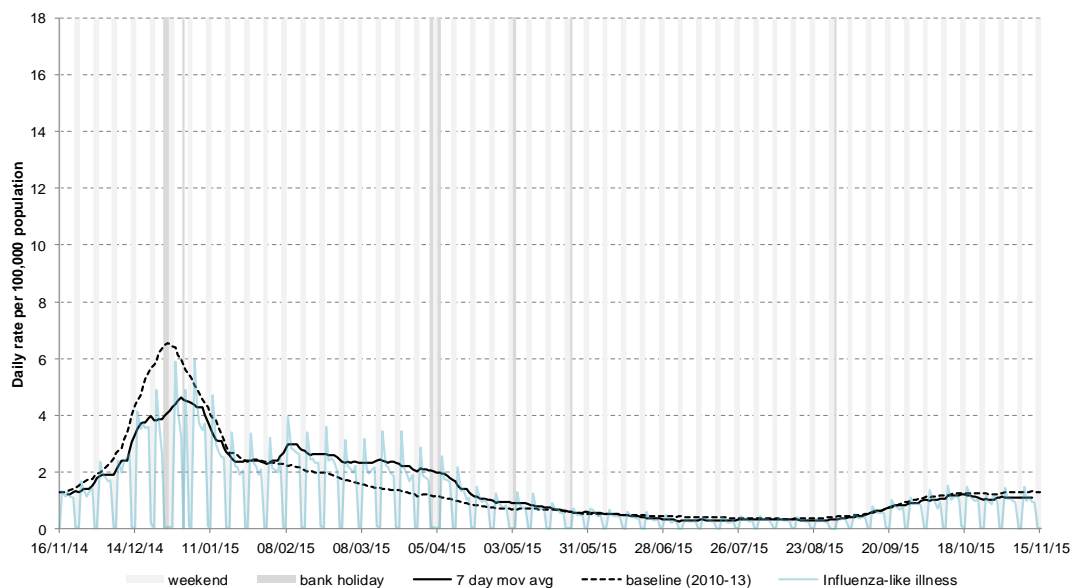Average daily incidence rate by week per 100,000 population (all England)



**Intentionally left blank**

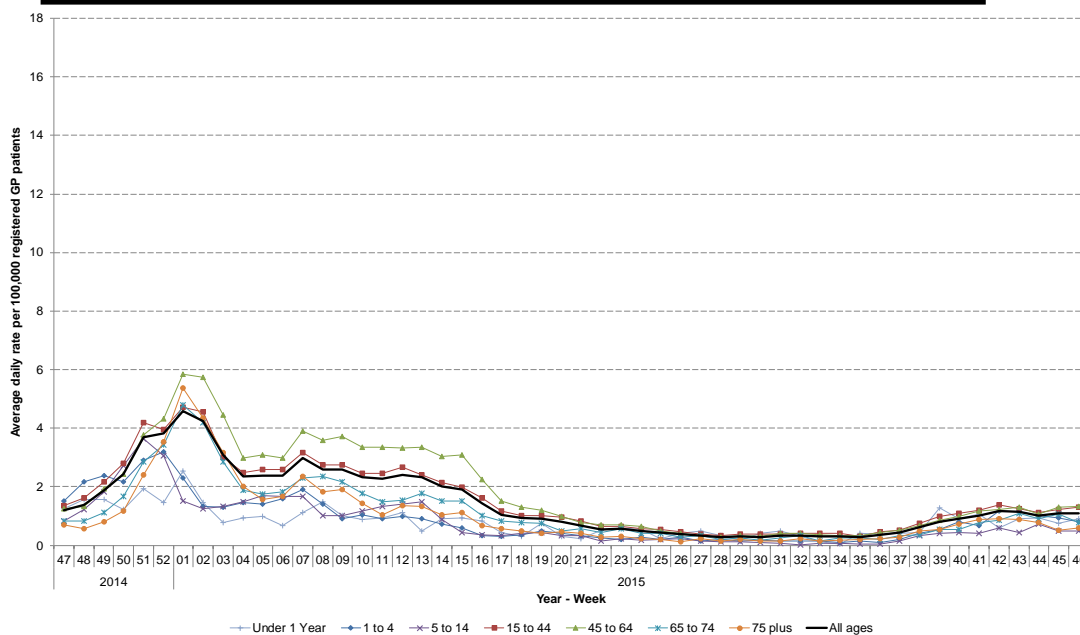* 7-day moving average adjusted for bank holidays.

## 2: Influenza-like illness (ILI)

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



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

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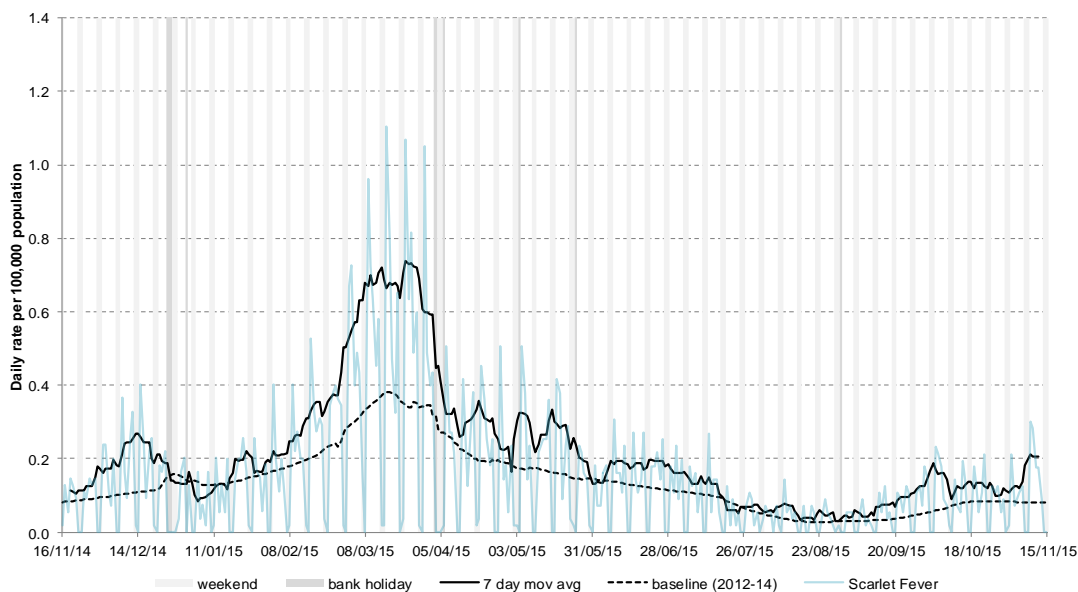


## 3: Pharyngitis or scarlet fever

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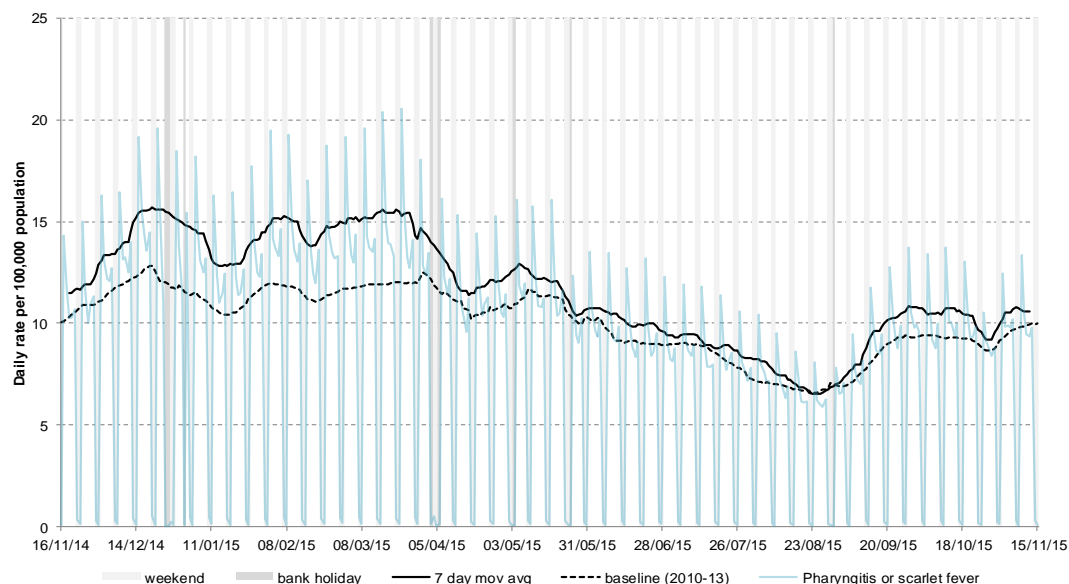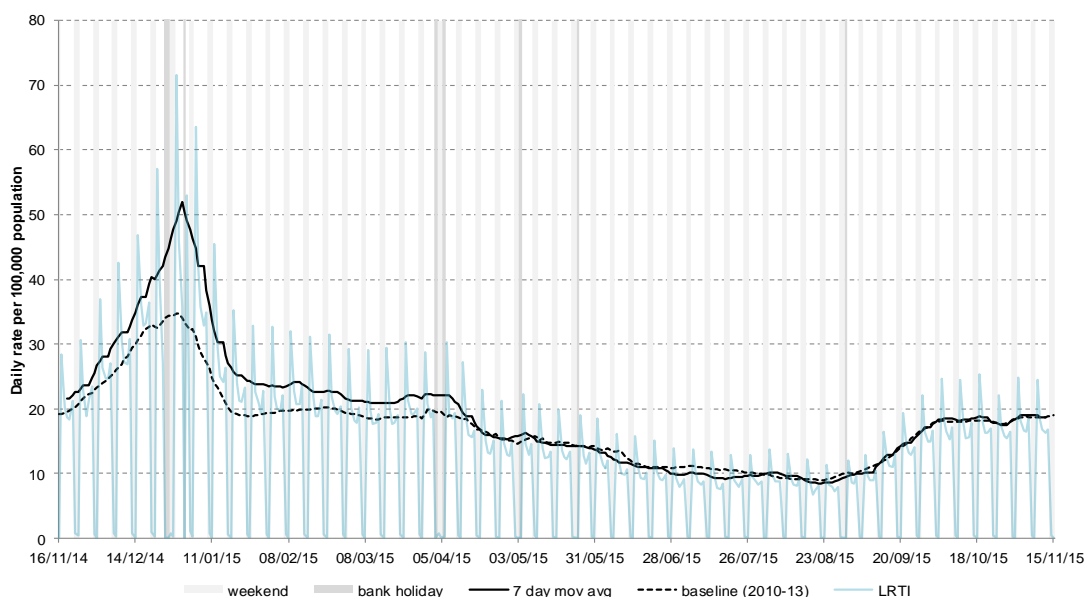


* 7-day moving average adjusted for bank holidays.

## 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).
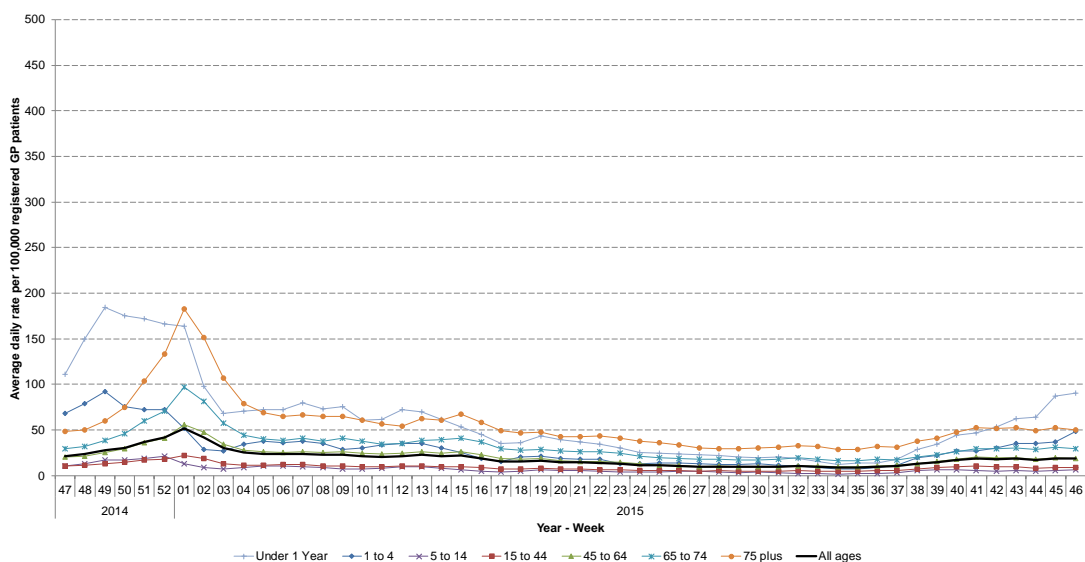


## 5: Lower respiratory tract infection (LRTI)

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



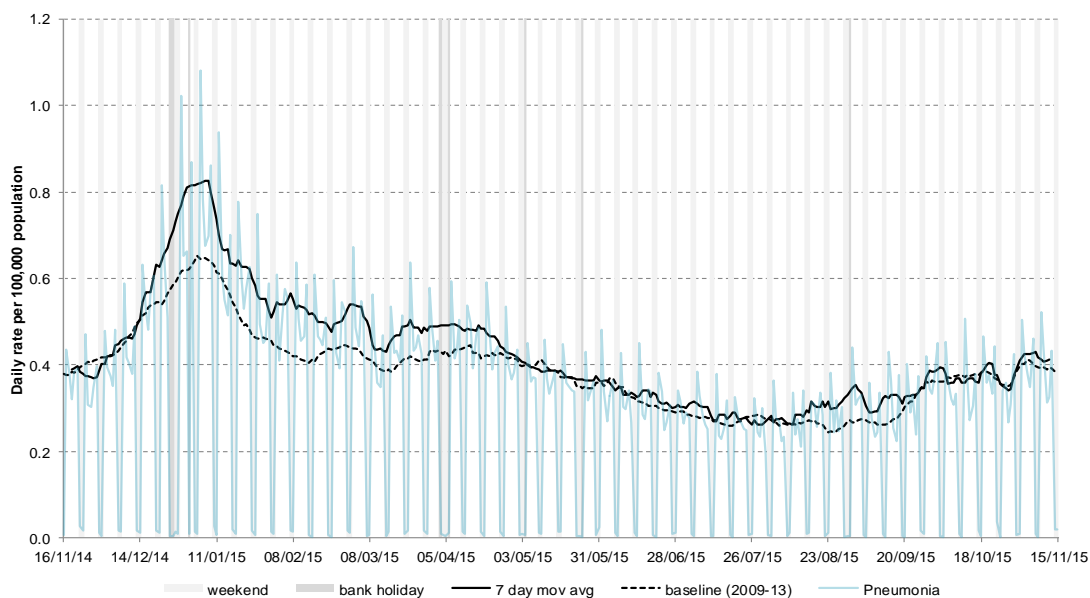## 5a: Lower respiratory tract infection (LRTI) by age

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



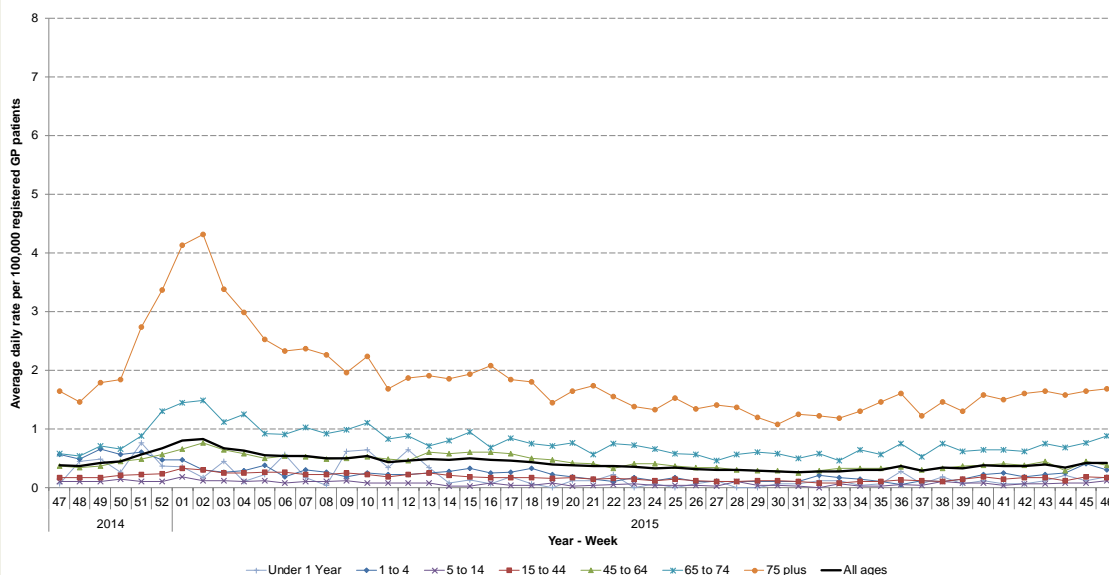* 7-day moving average adjusted for bank holidays.

4

## 6: Pneumonia

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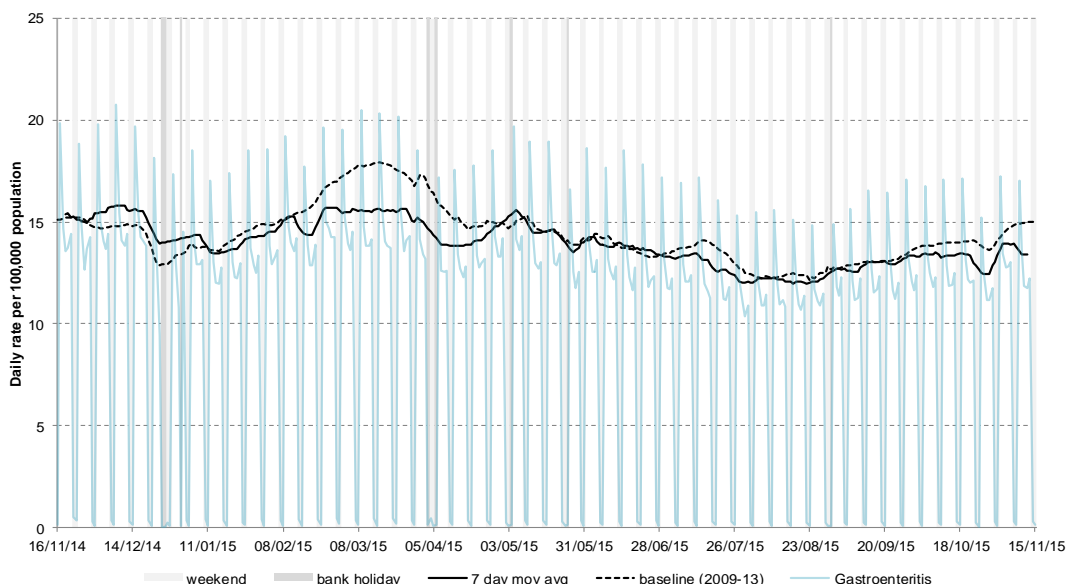


## 6a: Pneumonia by age

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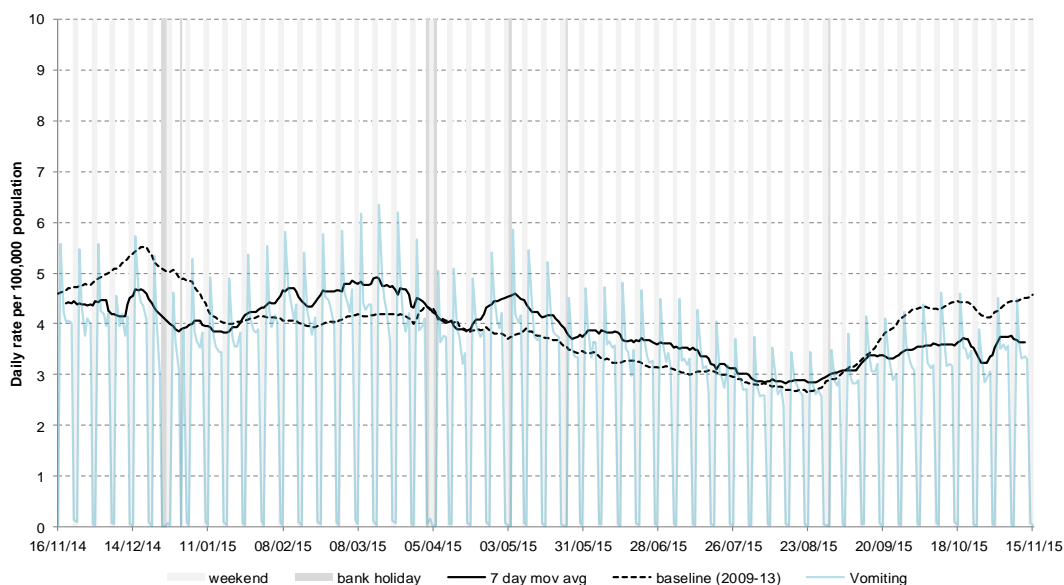


## 7: Gastroenteritis

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

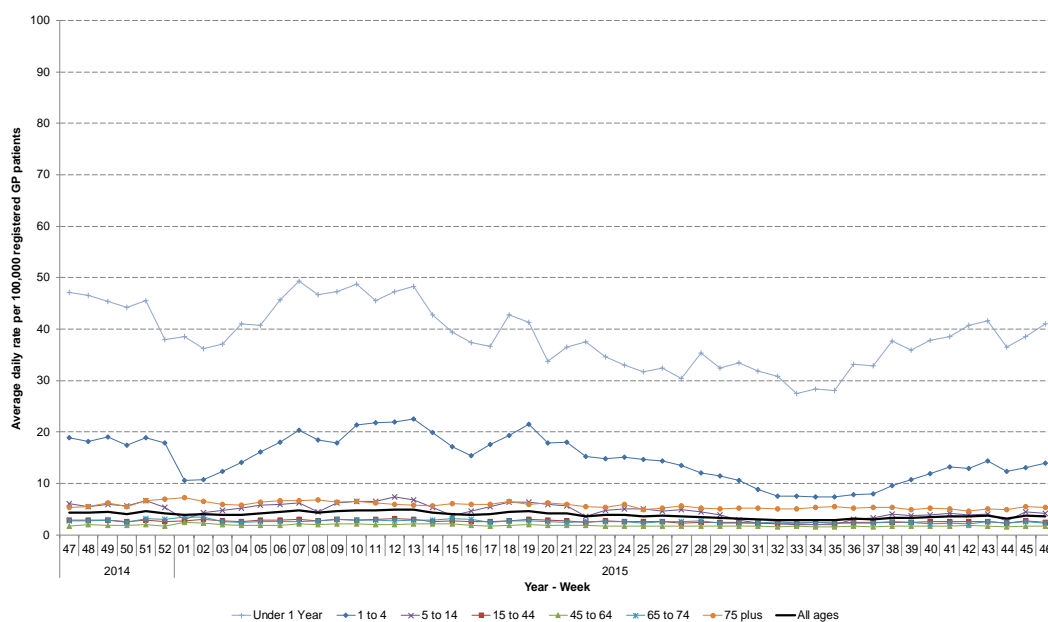* 7-day moving average adjusted for bank holidays.



5

## 8: Vomiting

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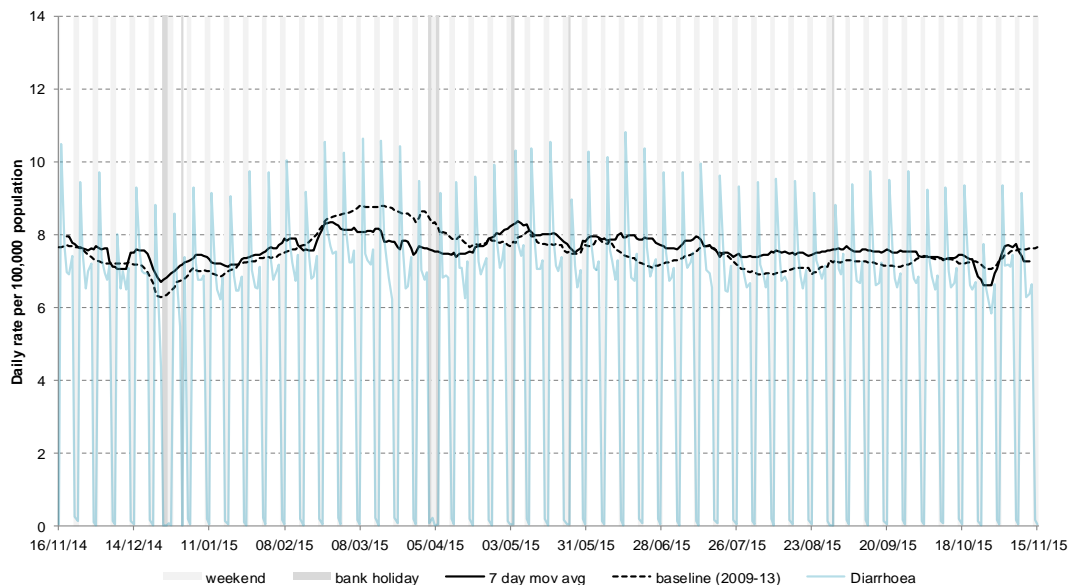


## 8a: Vomiting by age

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



## 9: Diarrhoea

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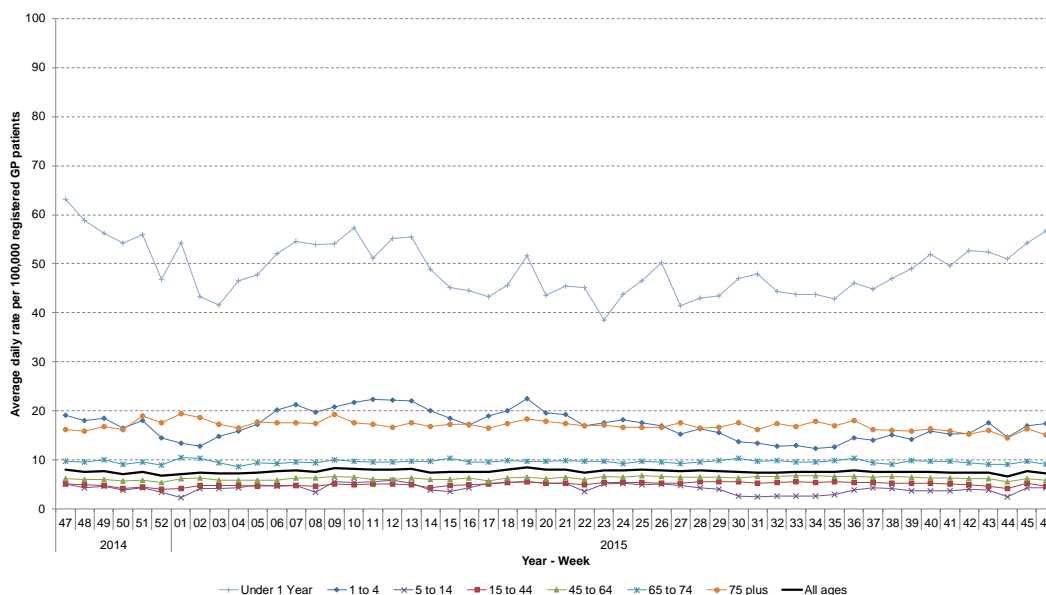


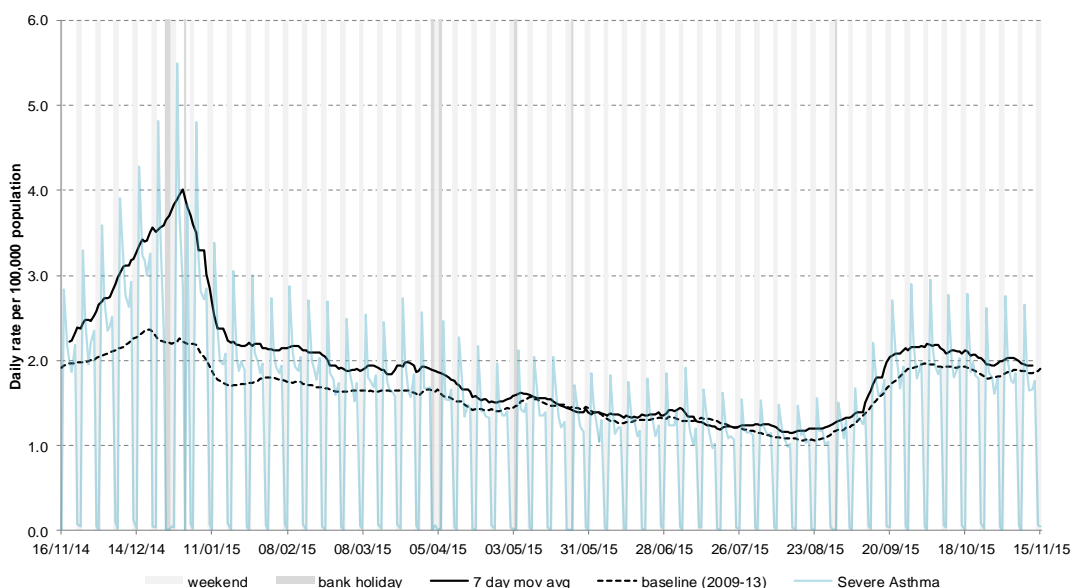* 7-day moving average adjusted for bank holidays.

## 9a. Diarrhoea by age

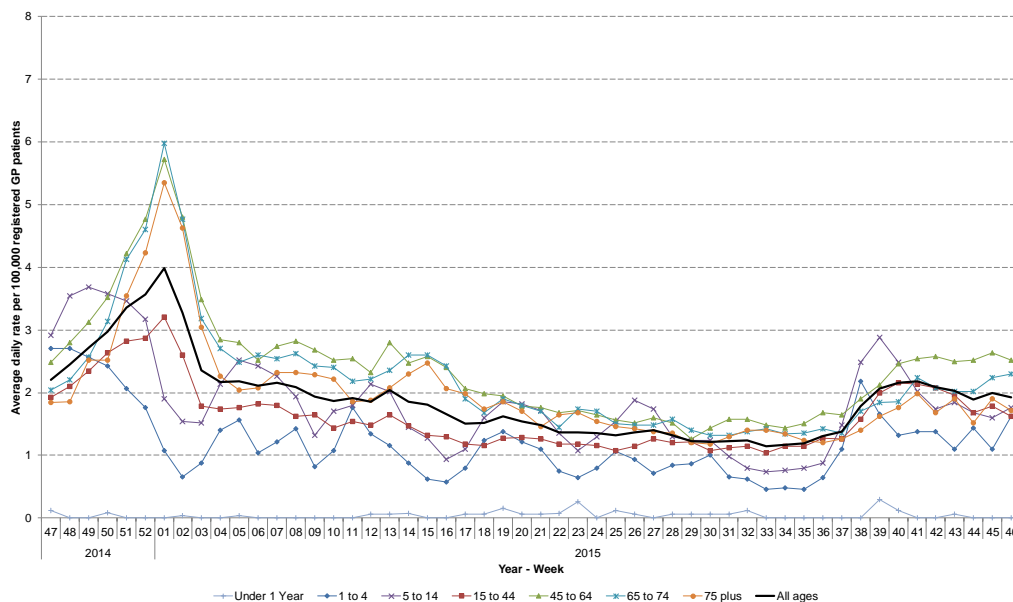Average daily incidence rate by week per 100,000 population (all England)



## 10: Severe asthma

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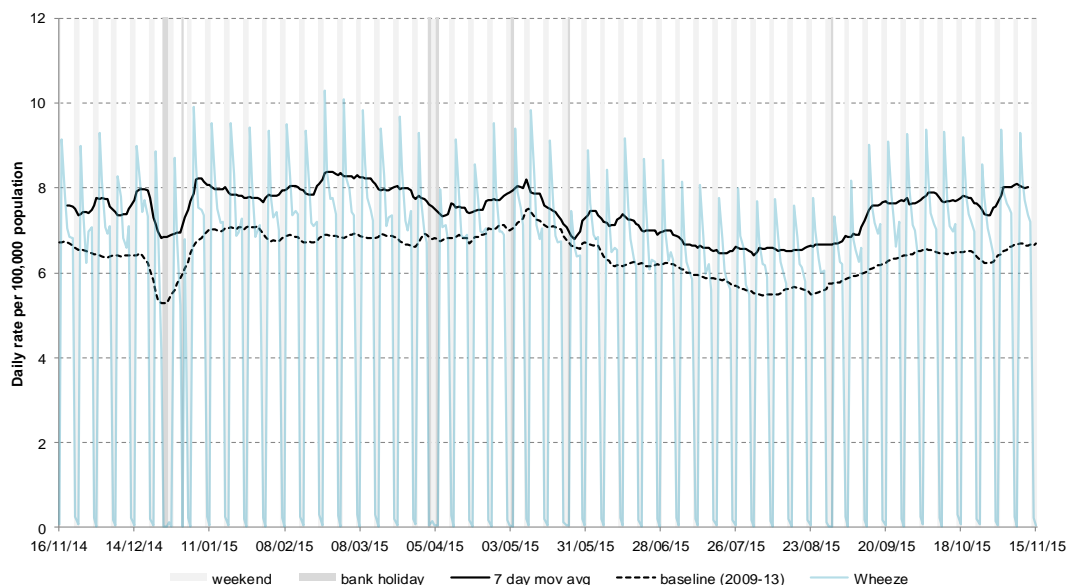


## 10a: Severe asthma by age

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



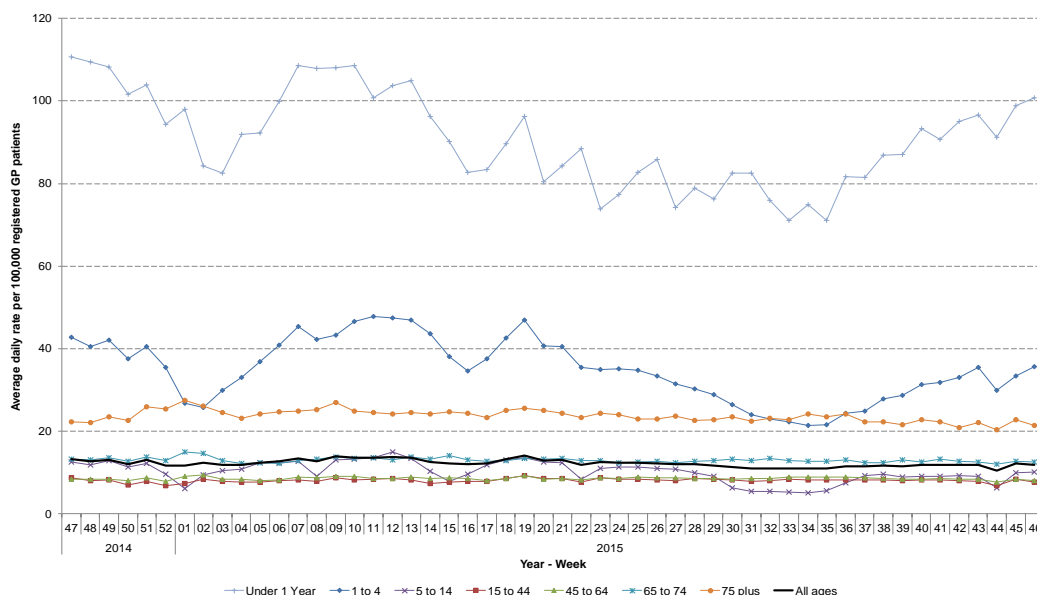* 7-day moving average adjusted for bank holidays.

7

## 11: Wheeze

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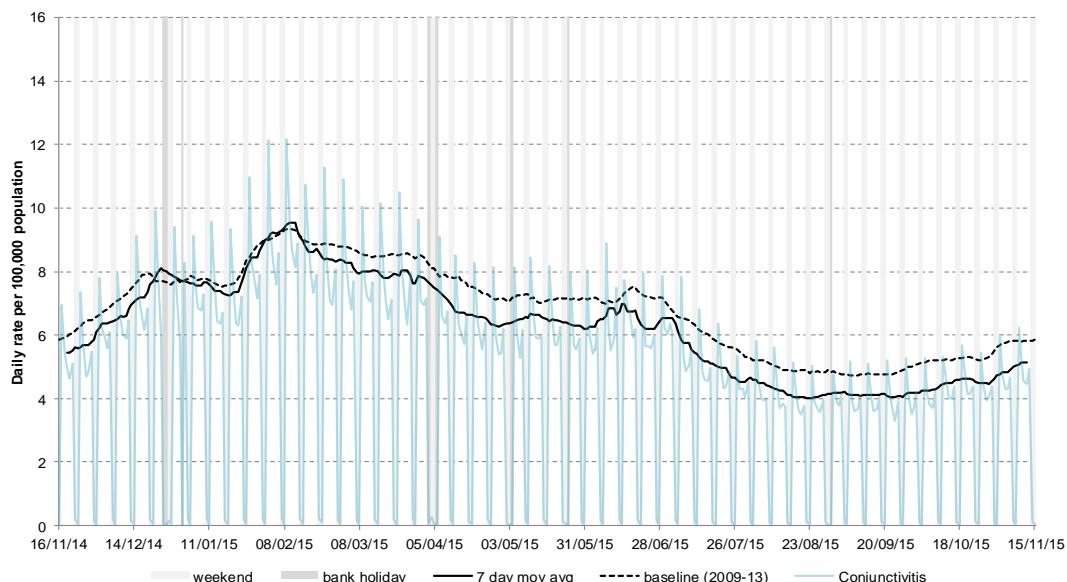


## 11a: Wheeze by age

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).



* 7-day moving average adjusted for bank holidays.

## 13: Mumps

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



## 14: Measles

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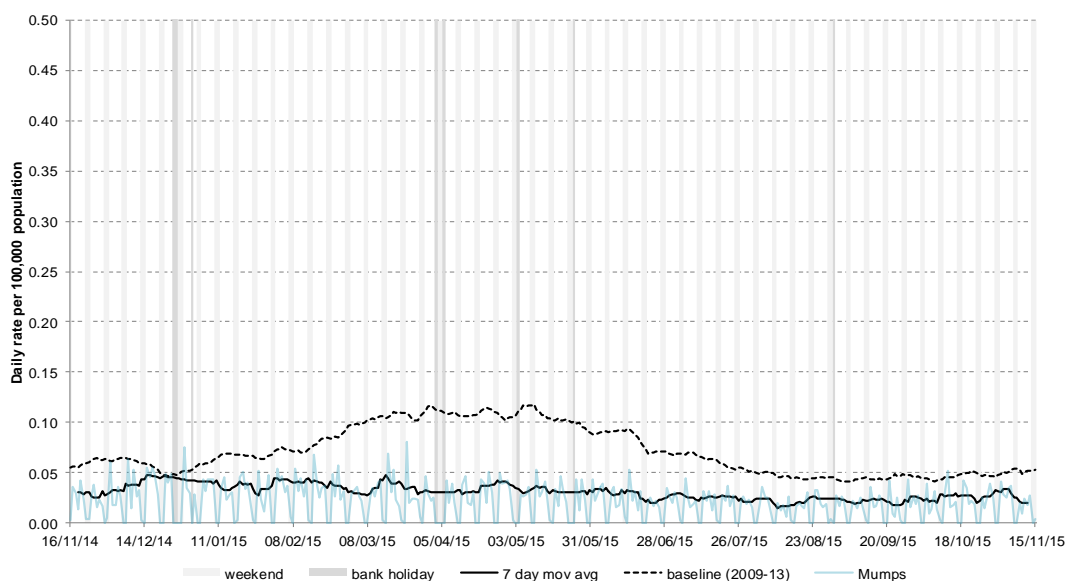


## 15: Rubella

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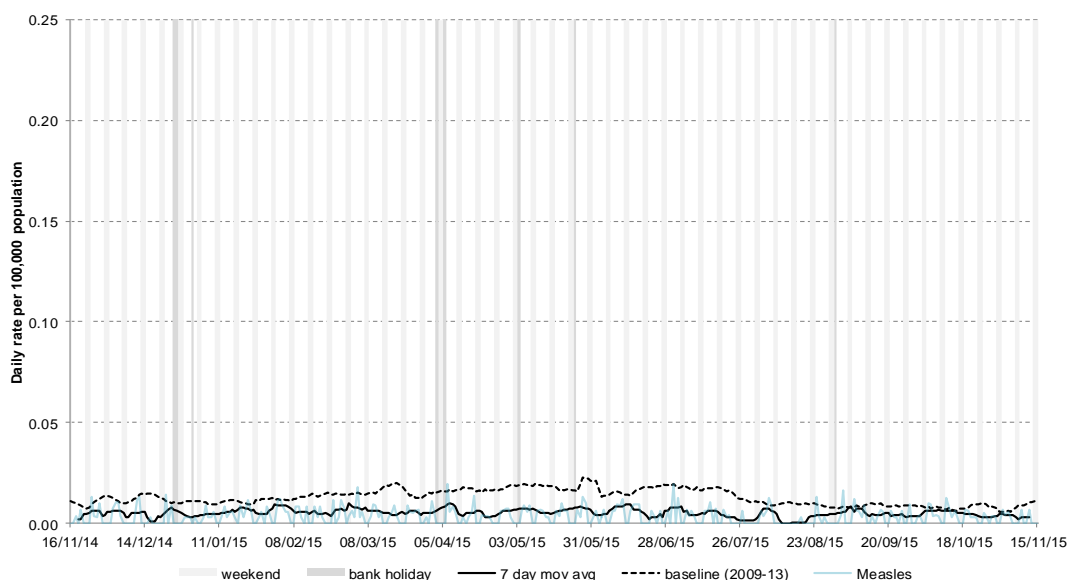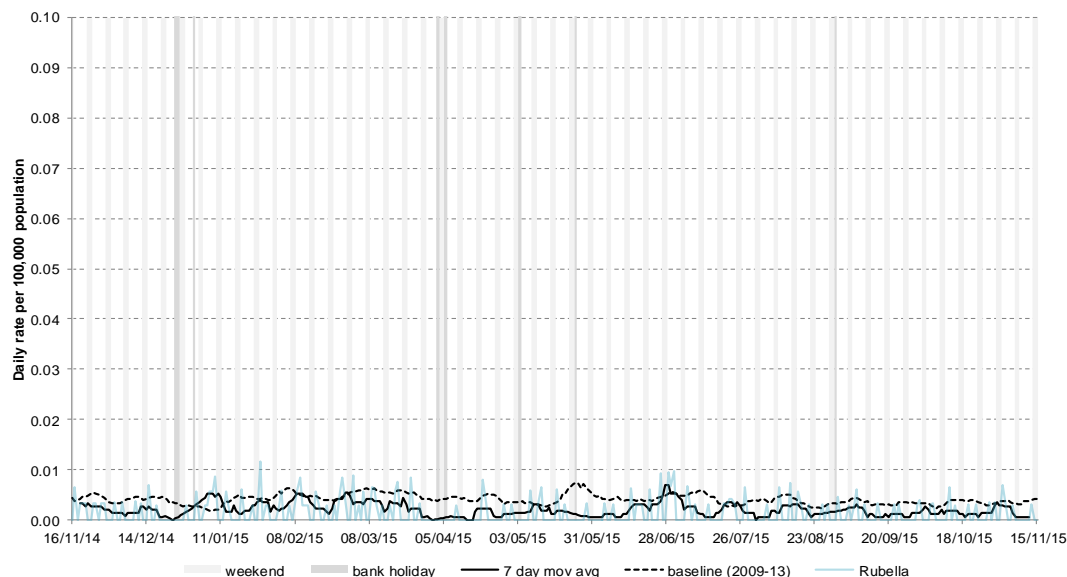


* 7-day moving average adjusted for bank holidays.

## 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).
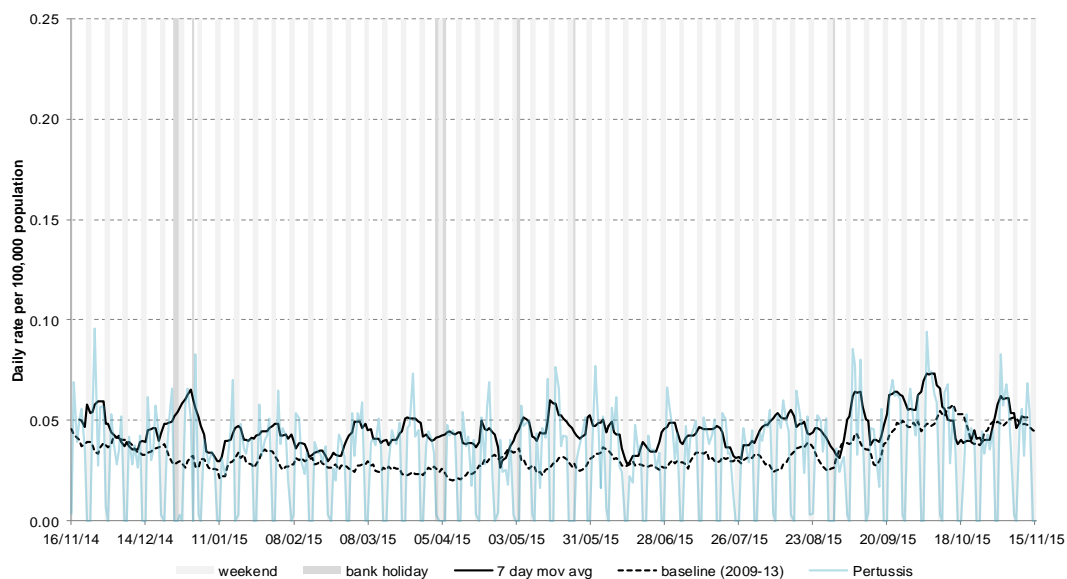


## 18: Herpes zoster

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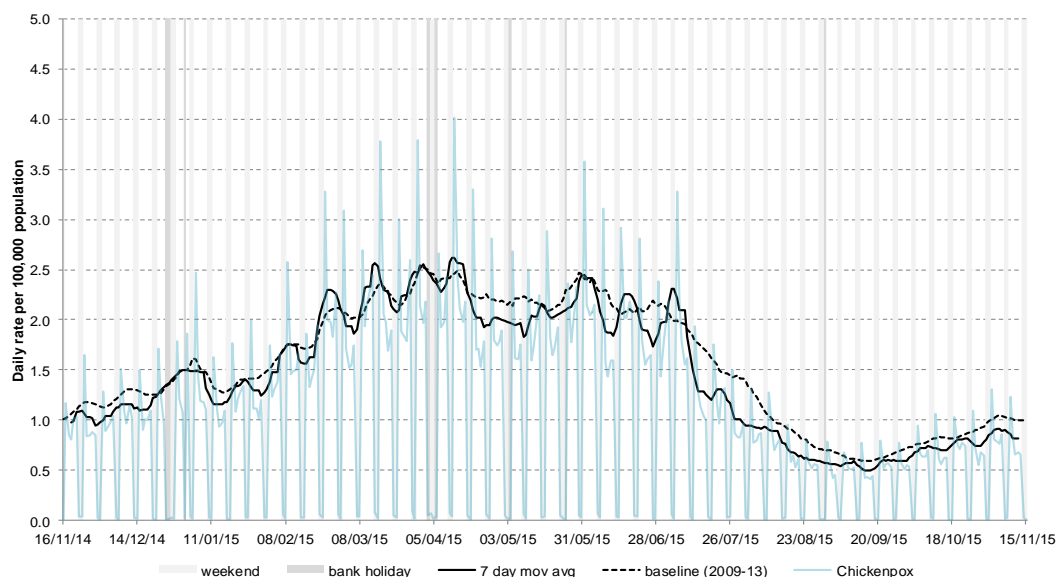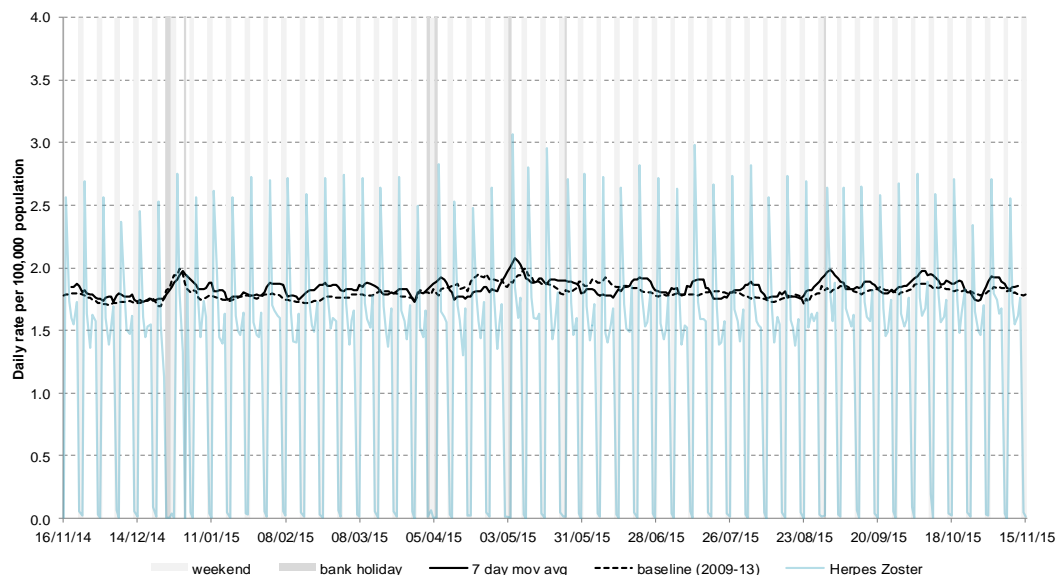


* 7-day moving average adjusted for bank holidays.

Public Health
England

## 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).



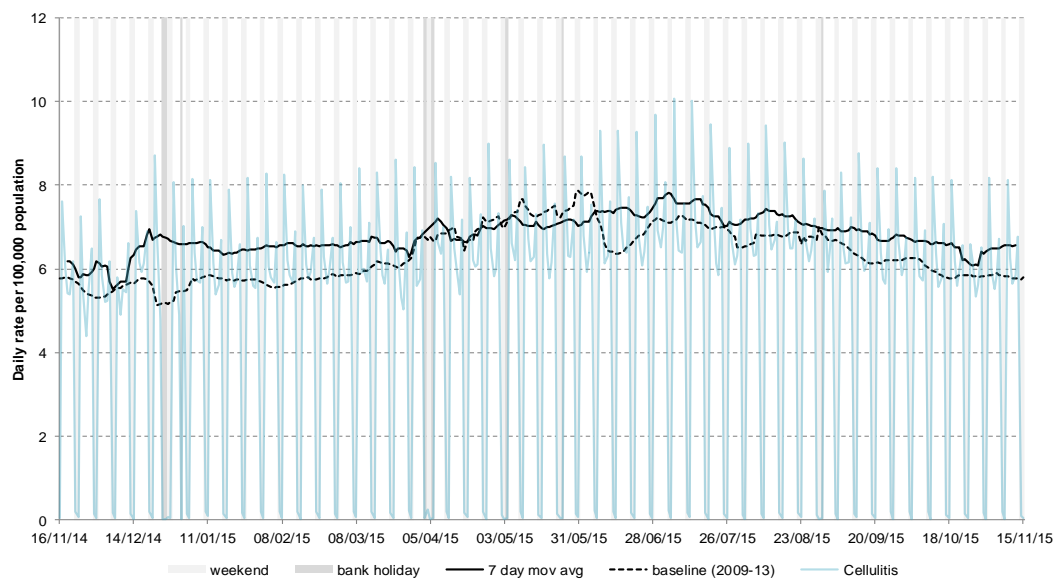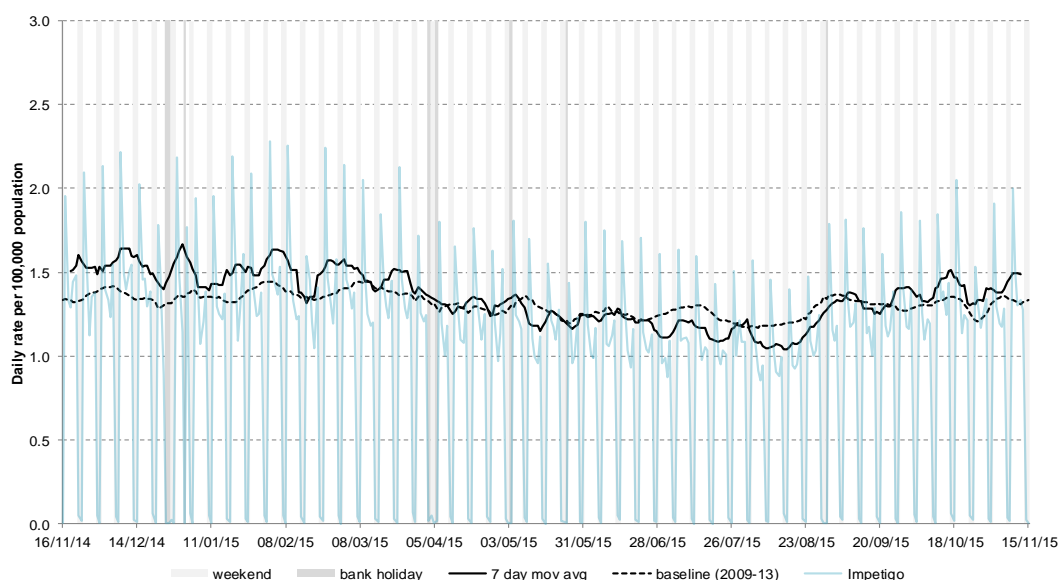**Intentionally left blank**

* 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. |
| | • Historic baselines are smoothed to remove bank holiday effects. Data from 2009 has been excluded for selected indicators which were affected by the H1N1 influenza pandemic. No baseline is currently included for allergic rhinitis. |
| **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
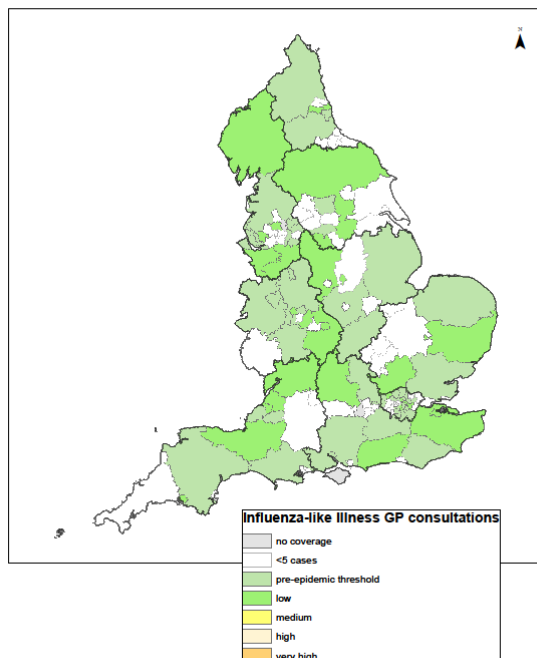**Tel:** 0344 225 3560 > Option 4 > Option 2          **Fax:** 0121 236 2215
**Web:** https://www.gov.uk/government/collections/syndromic-surveillance-systems-and-analyses
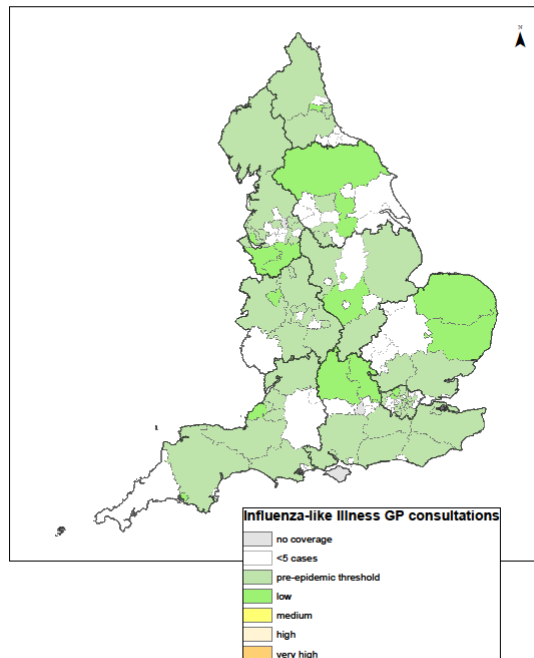
**England**

Influenza-like illness GP consultations by LA (England)

**Week 43**



**Week 44**



**Week 45**



**Week 46**

Public Health
England
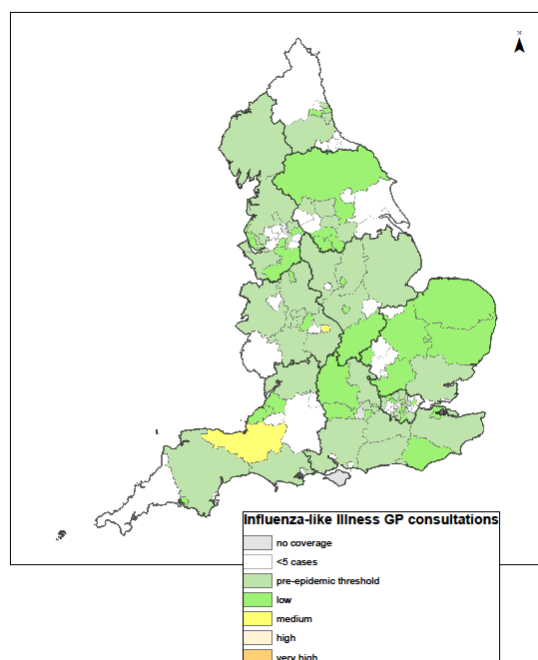
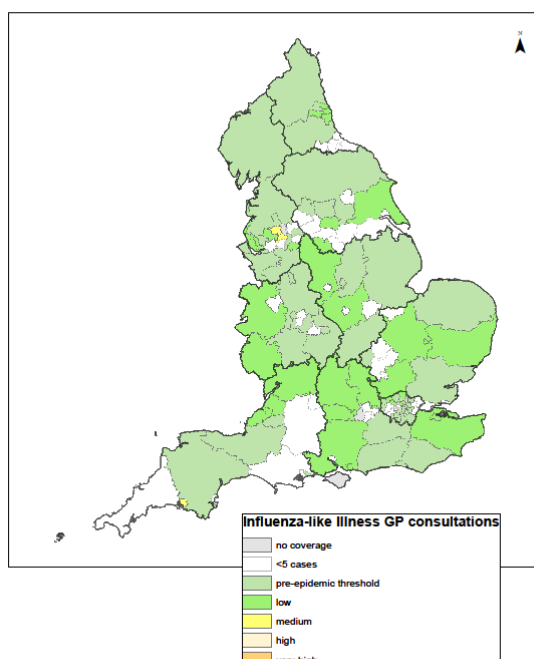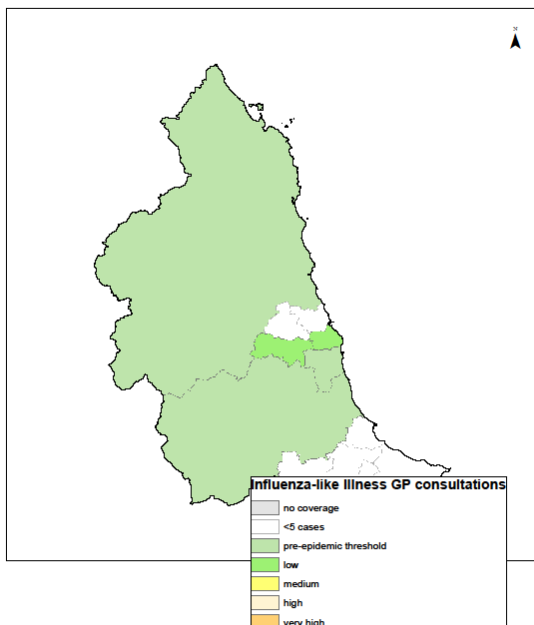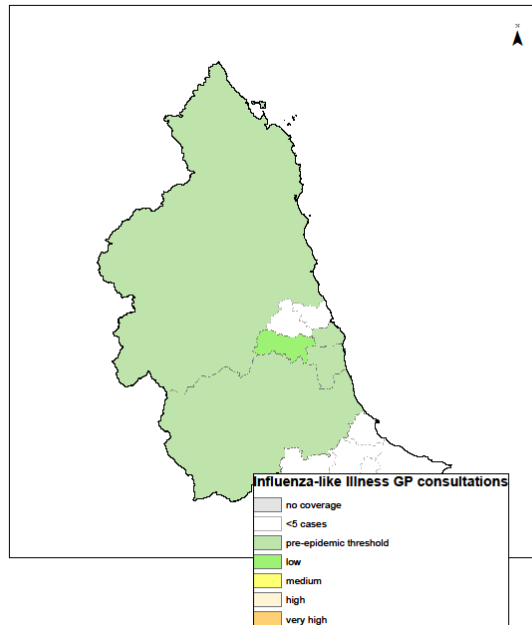**North East**

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

**Week 43**



**Week 44**



**Week 45**



**Week 46**



Contains Ordnance Survey data ©Crown copyright and database right 2015. Contains National Statistics data ©Crown copyright and database right 2015.

Public Health
England
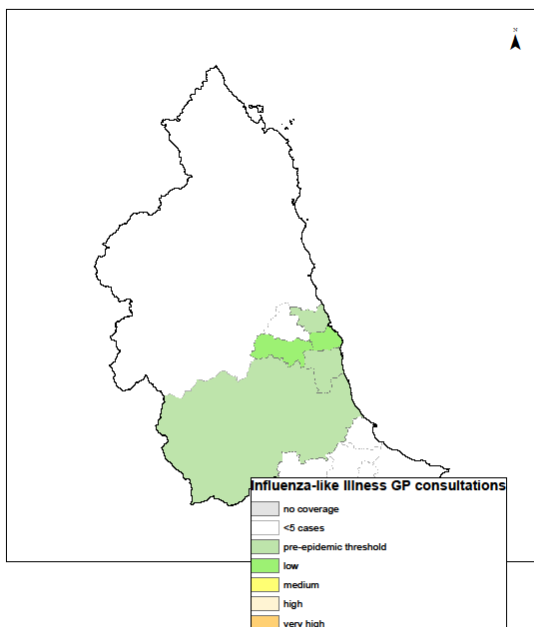
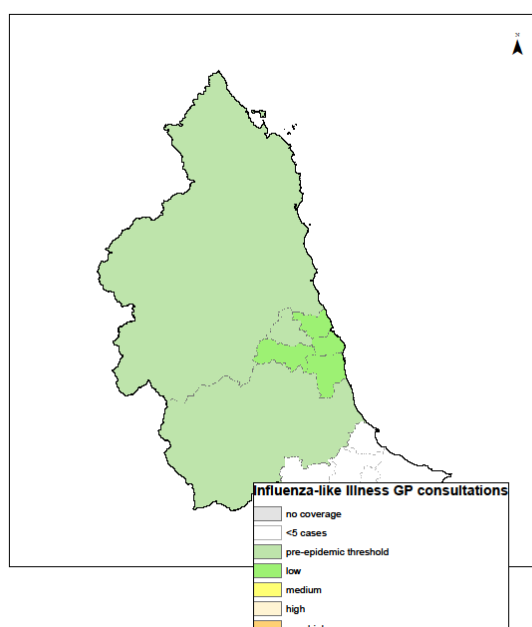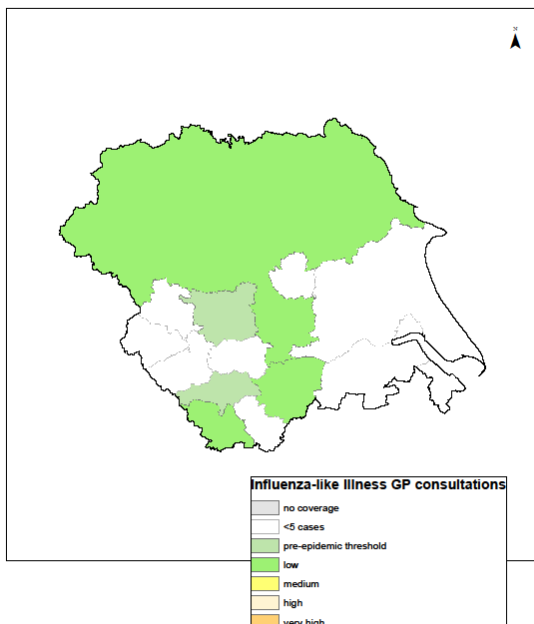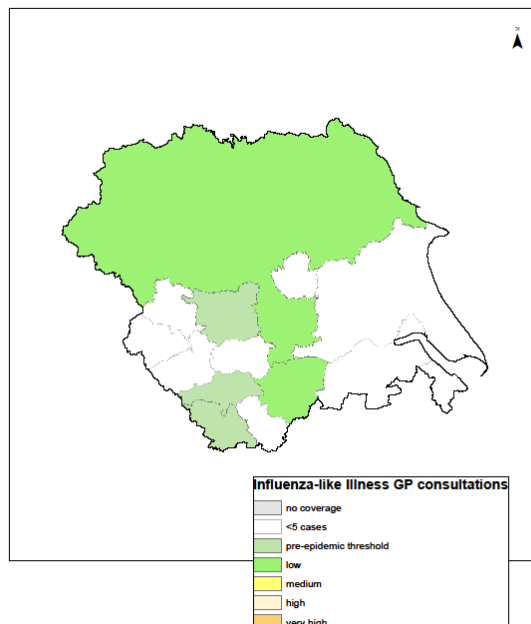**Yorkshire & Humber**

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

Week 43



Week 44



Week 45



Week 46



Contains Ordnance Survey data ©Crown copyright and database right 2015. Contains National Statistics data ©Crown copyright and database right 2015.

15

Public Health England
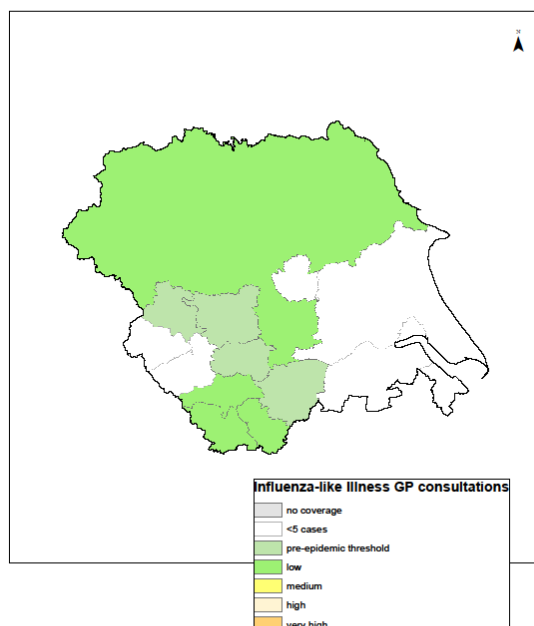
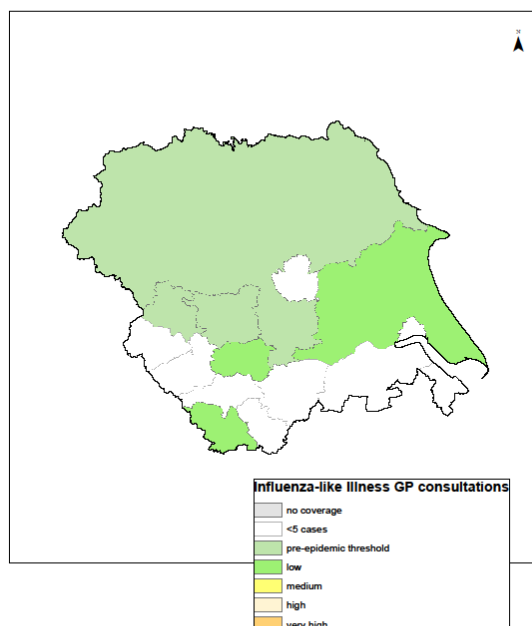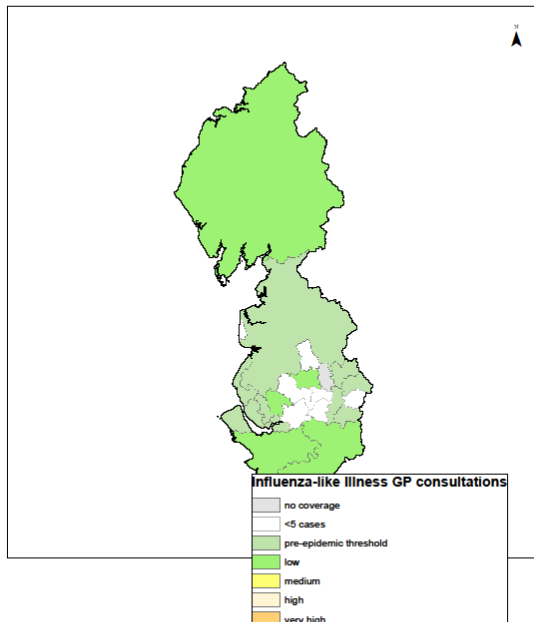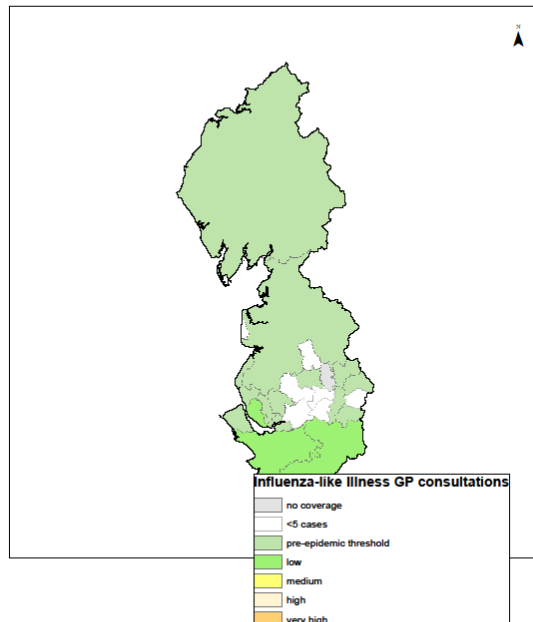**North West**

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

**Week 43**



Influenza-like Illness GP consultations
- no coverage
- <5 cases
- pre-epidemic threshold
- low
- medium
- high
- very high

**Week 44**



Influenza-like Illness GP consultations
- no coverage
- <5 cases
- pre-epidemic threshold
- low
- medium
- high
- very high

**Week 45**



Influenza-like Illness GP consultations
- no coverage
- <5 cases
- pre-epidemic threshold
- low
- medium
- high
- very high

**Week 46**



Influenza-like Illness GP consultations
- no coverage
- <5 cases
- pre-epidemic threshold
- low
- medium
- high
- very high

Public Health England
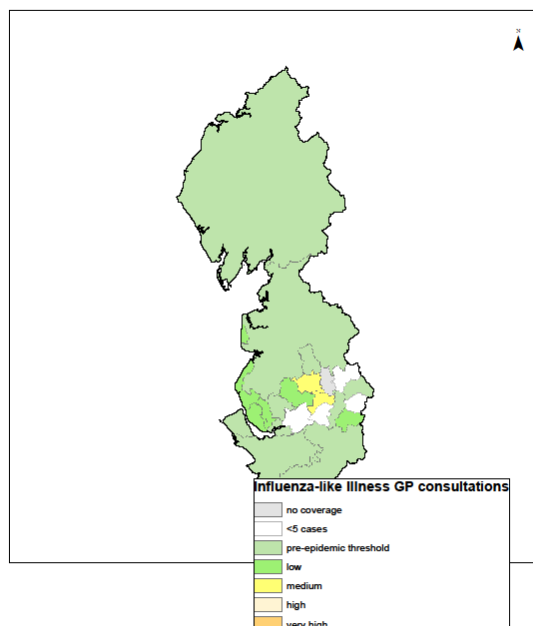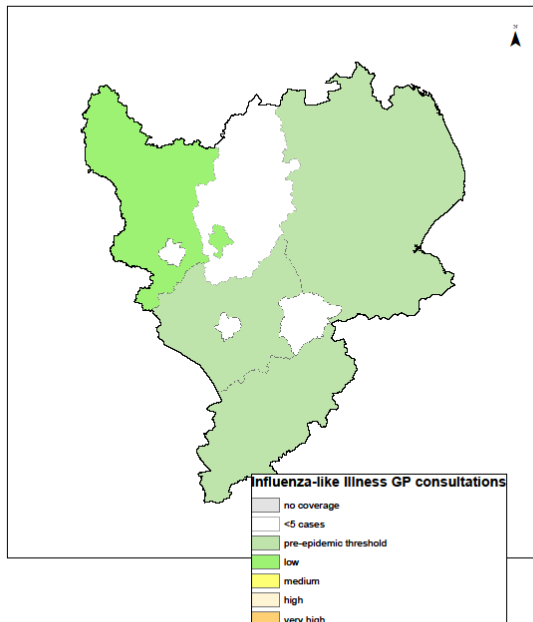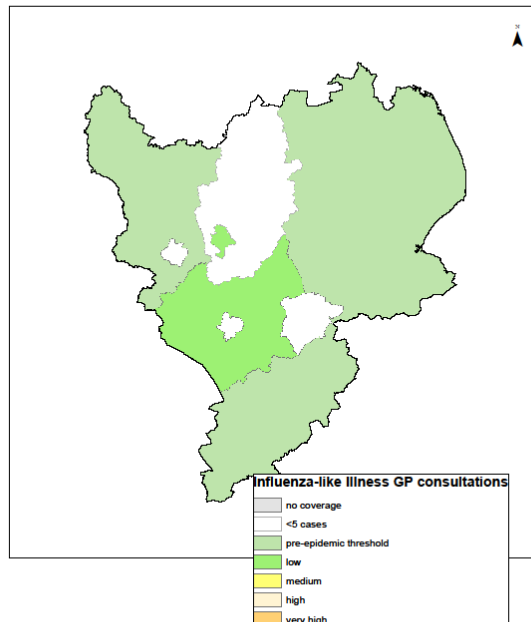
**East Midlands**

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

**Week 43**



**Week 44**



**Week 45**



**Week 46**



Contains Ordnance Survey data ©Crown copyright and database right 201. Contains National Statistics data ©Crown copyright and database right 2015.

Public Health England
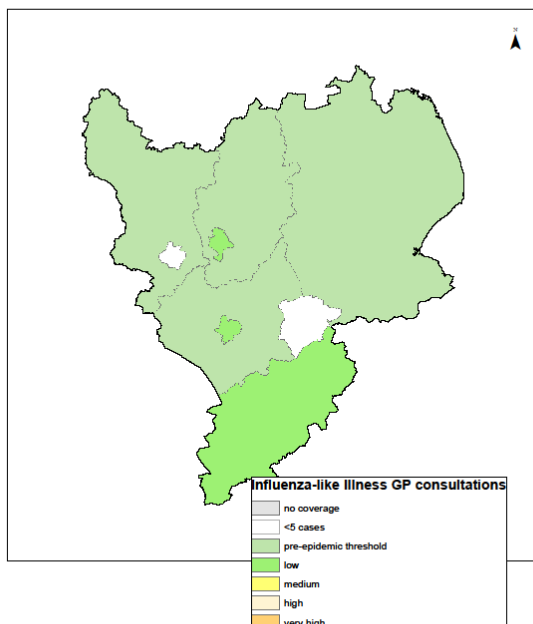
## West Midlands

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

### Week 43



Influenza-like illness GP consultations
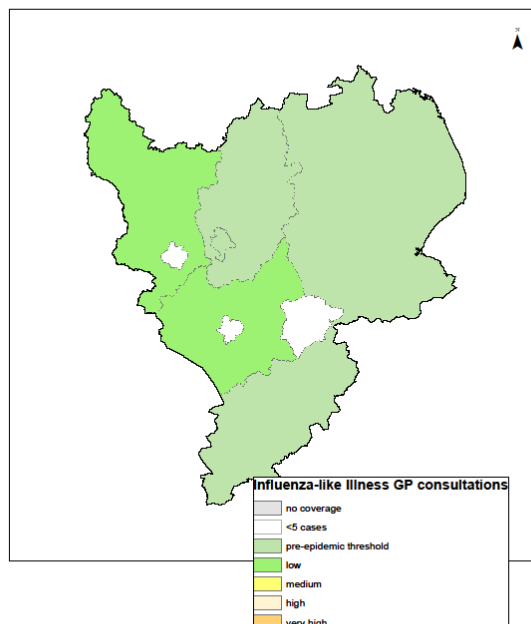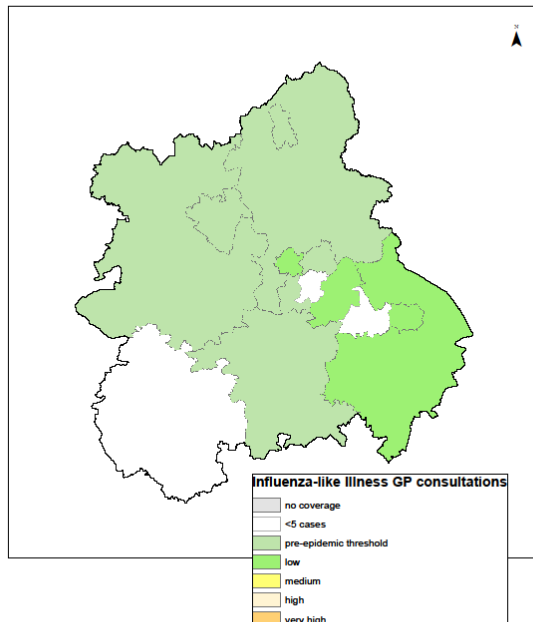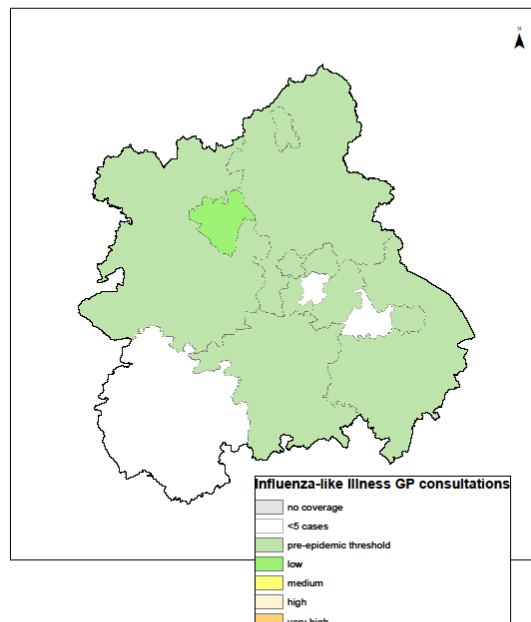- no coverage
- <5 cases
- pre-epidemic threshold
- low
- medium
- high
- very high

### Week 44



Influenza-like illness GP consultations
- no coverage
- <5 cases
- pre-epidemic threshold
- low
- medium
- high
- very high

### Week 45



Influenza-like illness GP consultations
- no coverage
- <5 cases
- pre-epidemic threshold
- low
- medium
- high
- very high

### Week 46



Influenza-like illness GP consultations
- no coverage
- <5 cases
- pre-epidemic threshold
- low
- medium
- high
- very high

Contains Ordnance Survey data ©Crown copyright and database right 2015. Contains National Statistics data ©Crown copyright and database right 2015.
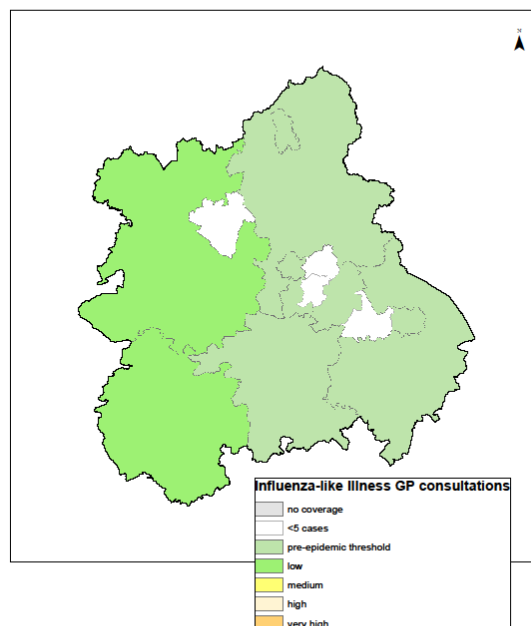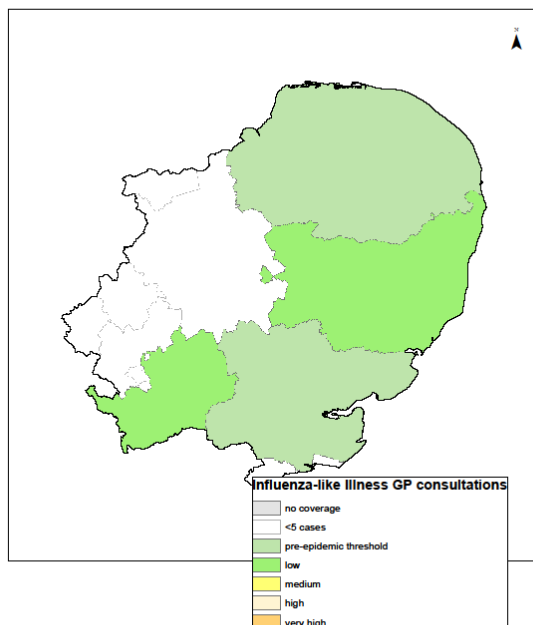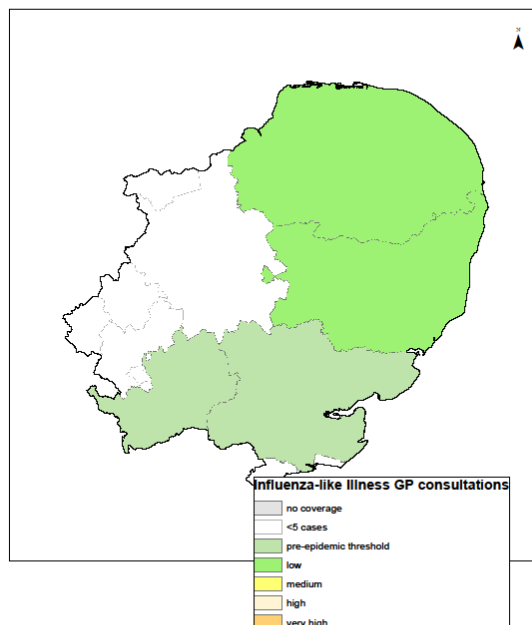
Public Health England

**East of England**

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

**Week 43**



**Week 44**



**Week 45**



**Week 46**



Contains Ordnance Survey data ©Crown copyright and database right 2015. Contains National Statistics data ©Crown copyright and database right 2015.
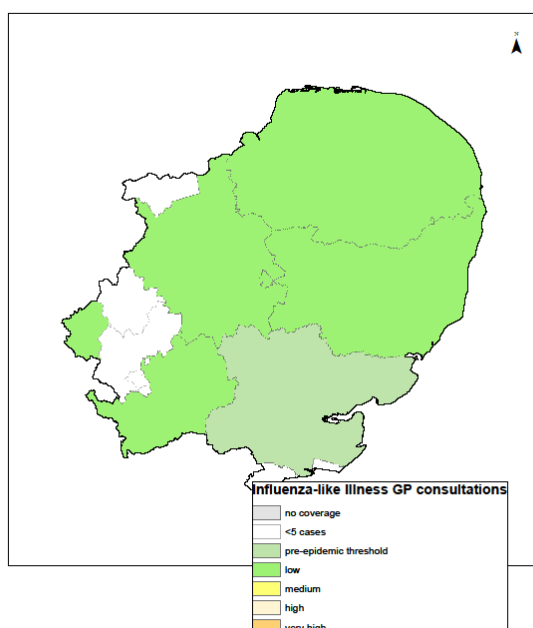
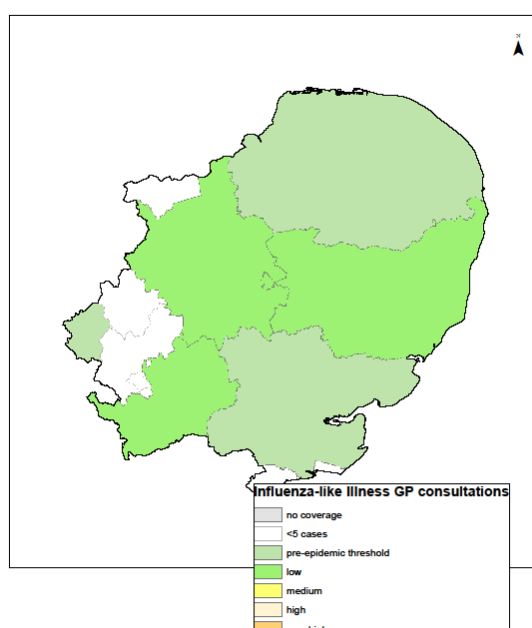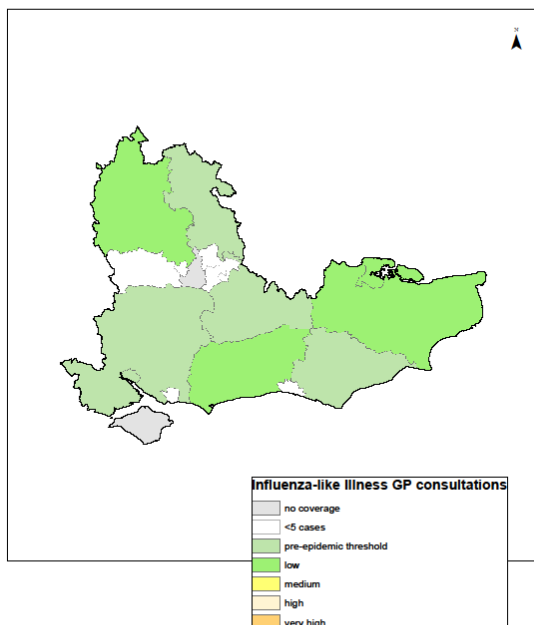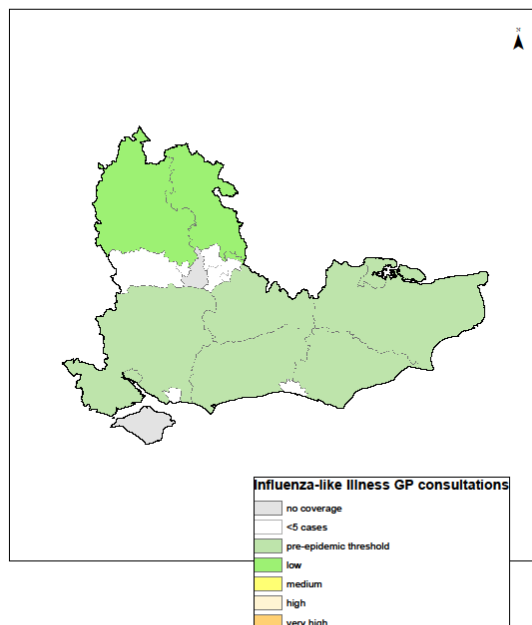**South East**

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

**Week 43**



Influenza-like Illness GP consultations
- no coverage
- <5 cases
- pre-epidemic threshold
- low
- medium
- high
- very high

**Week 44**



Influenza-like Illness GP consultations
- no coverage
- <5 cases
- pre-epidemic threshold
- low
- medium
- high
- very high

**Week 45**



Influenza-like Illness GP consultations
- no coverage
- <5 cases
- pre-epidemic threshold
- low
- medium
- high
- very high

**Week 46**



Influenza-like Illness GP consultations
- no coverage
- <5 cases
- pre-epidemic threshold
- low
- medium
- high
- very high

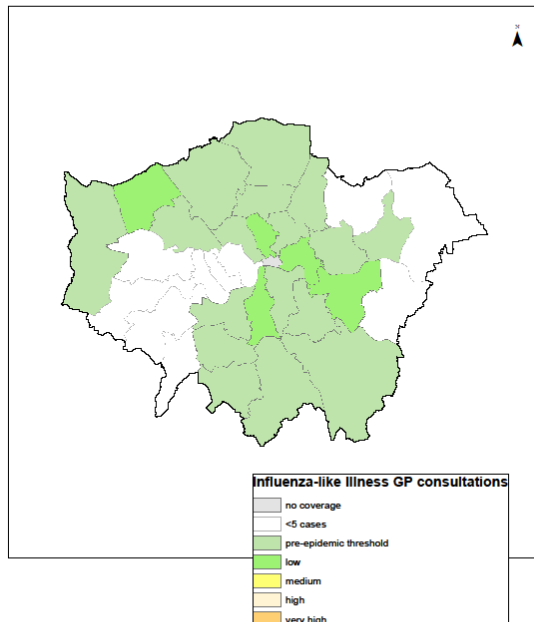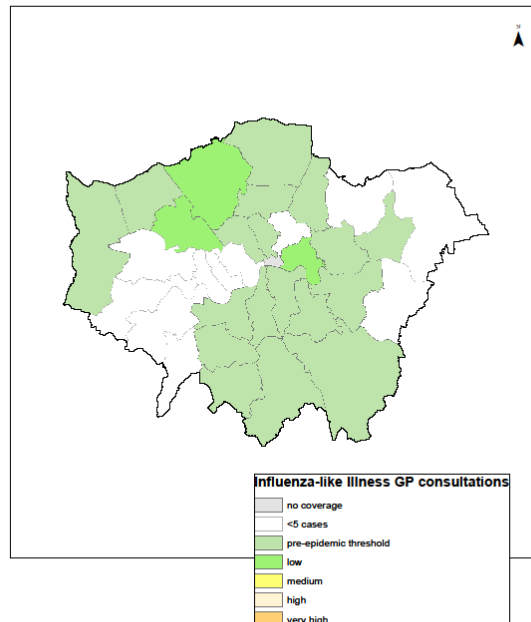**London**

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

**Week 43**



**Week 44**



**Week 45**



**Week 46**



Contains Ordnance Survey data ©Crown copyright and database right 2015. Contains National Statistics data

Public Health England
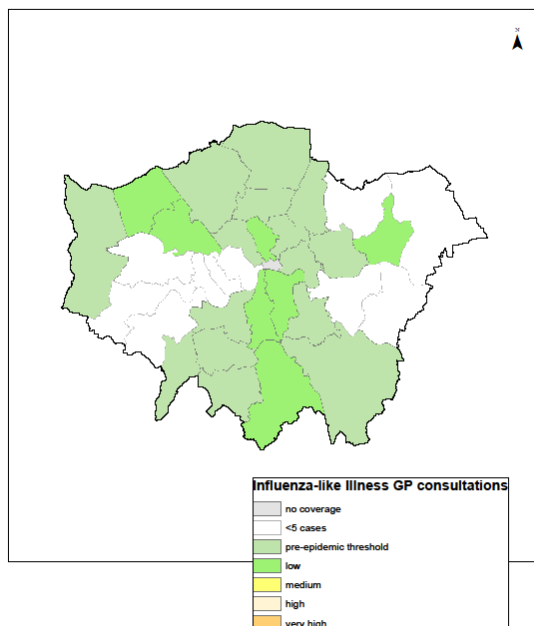
**South West**

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

**Week 43**



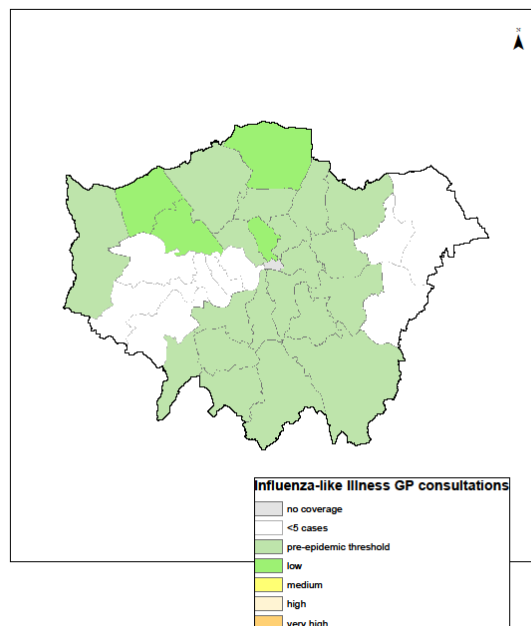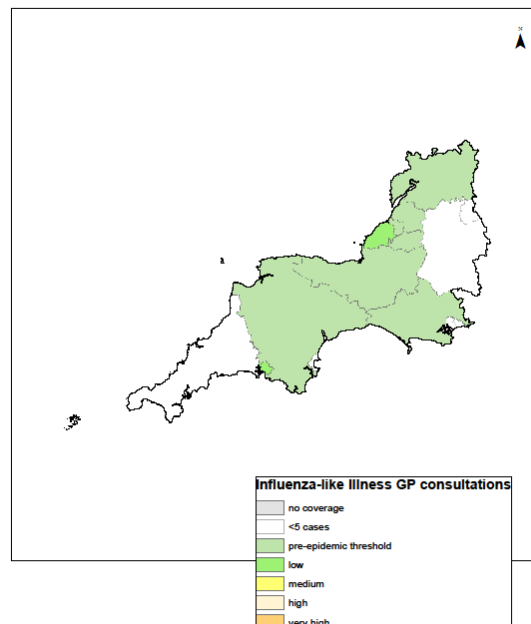Influenza-like Illness GP consultations
- no coverage
- <5 cases
- pre-epidemic threshold
- low
- medium
- high
- very high

**Week 44**



Influenza-like Illness GP consultations
- no coverage
- <5 cases
- pre-epidemic threshold
- low
- medium
- high
- very high

**Week 45**



Influenza-like Illness GP consultations
- no coverage
- <5 cases
- pre-epidemic threshold
- low
- medium
- high
- very high

**Week 46**



Influenza-like Illness GP consultations
- no coverage
- <5 cases
- pre-epidemic threshold
- low
- medium
- high
- very high

Contains Ordnance Survey data ©Crown copyright and database right 2015. Contains National Statistics data