Public Health England

GP In Hours

Syndromic Surveillance System: England

19 December 2017 | Year: 2017 Week: 50

In This Issue:

Key messages

Data to: 17 December 2017

During week 50 there were further small increases in GP consultations for a number of respiratory indicators, including influenza-like illness, all within seasonally expected levels (figures 1, 2, 5 & 6).

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): **Levels 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	increasing	below baseline levels
Influenza-like illness	increasing	below baseline levels
Pharyngitis	increasing	below baseline levels
Scarlet fever	no trend	above baseline levels
Lower respiratory tract infection	increasing	below baseline levels
Pneumonia	increasing	below baseline levels
Gastroenteritis	no trend	below baseline levels
Vomiting	no trend	below baseline levels
Diarrhoea	no trend	below baseline levels
Asthma	increasing	similar to baseline levels
Wheeze	no trend	above baseline levels
Conjunctivitis	increasing	below baseline levels
Mumps	no trend	similar to baseline levels
Measles	no trend	above baseline levels
Rubella	no trend	below baseline levels
Pertussis	no trend	below baseline levels
Chickenpox	no trend	below baseline levels
Herpes zoster	no trend	below baseline levels
Cellulitis	no trend	below baseline levels
Impetigo	no trend	below baseline levels

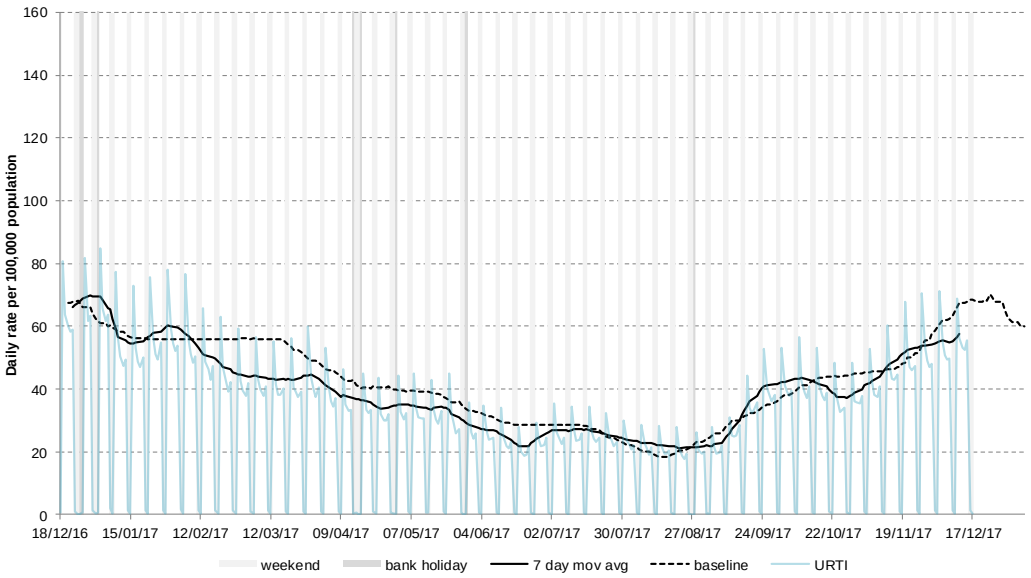
GP practices and denominator population:

Year	Week	GP Practices Reporting**	Population size**
2017	50	4,220	34.6 million

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

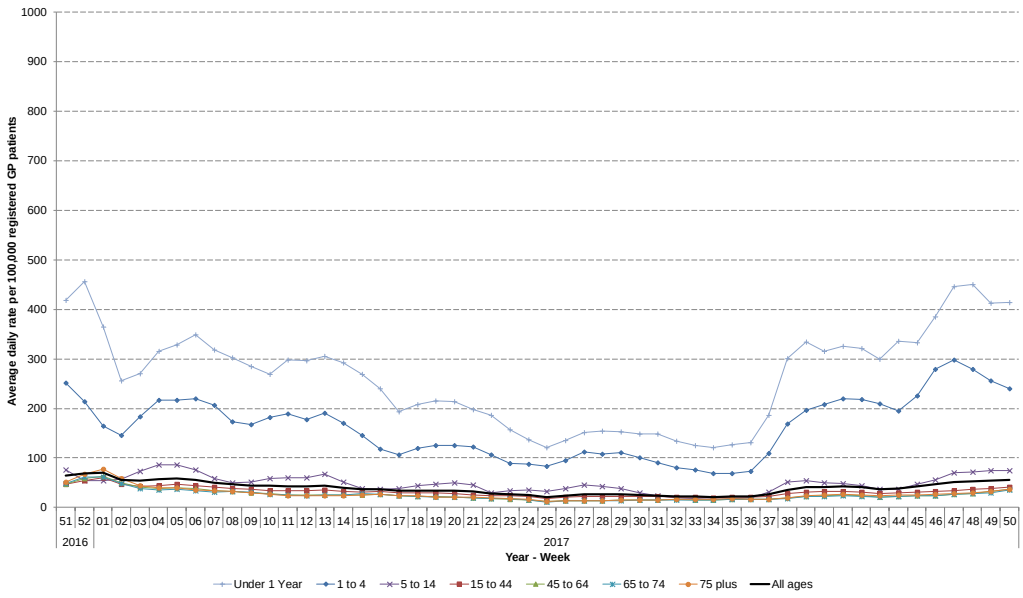
1: Upper respiratory tract infection (URTI)

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



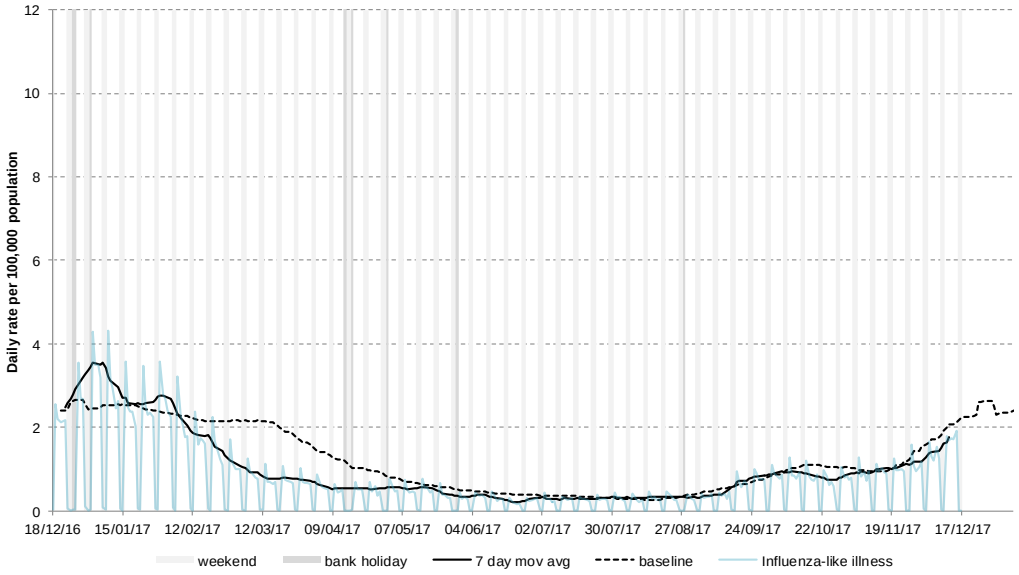
1a: Upper respiratory tract infection (URTI) by age

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



2: Influenza-like illness

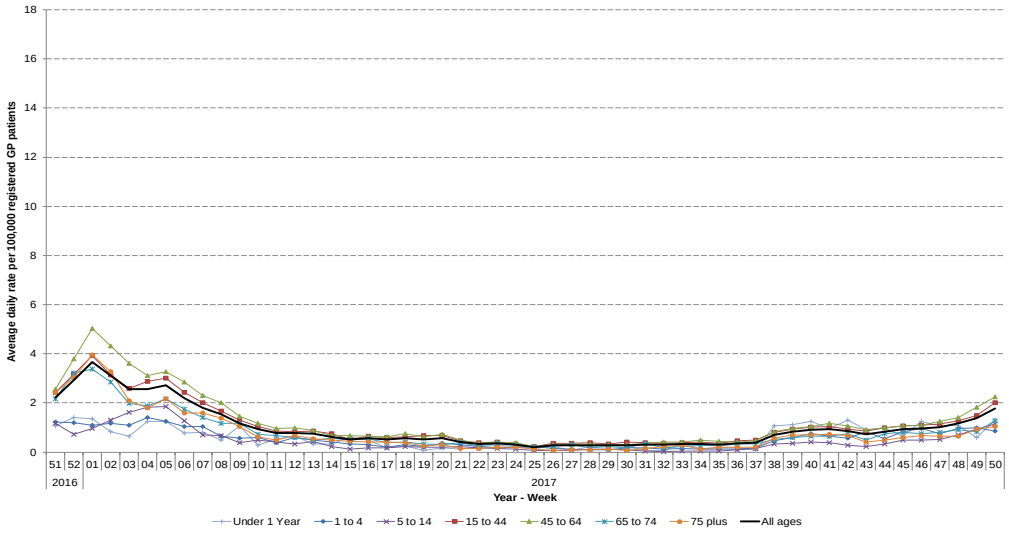
Daily incidence rates (and 7-day moving average*) per 100,000 population (all England, all ages).



* 7-day moving average adjusted for bank holidays.

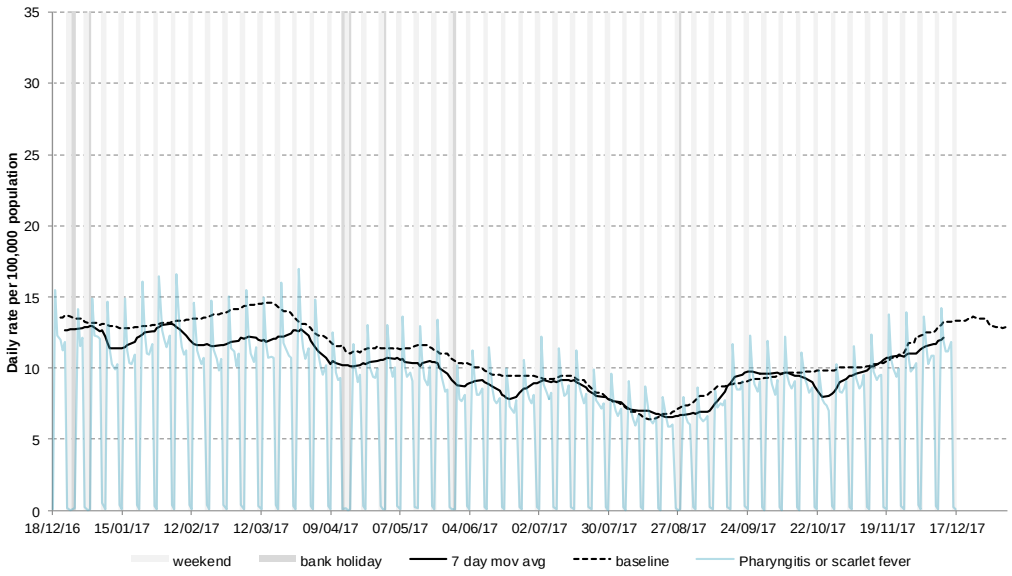
2a: Influenza-like illness by age

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



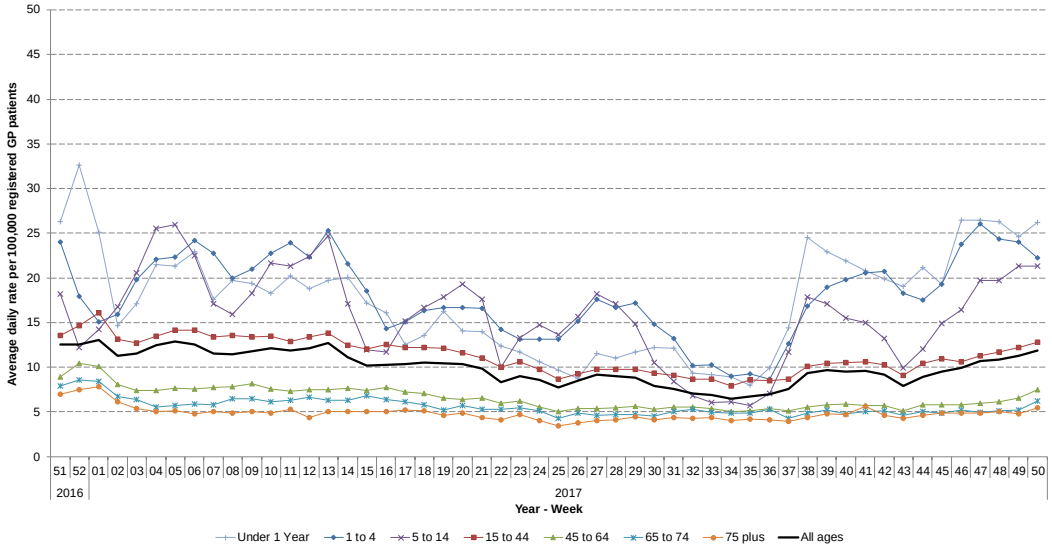
3: Pharyngitis or scarlet fever

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



3a: Pharyngitis/scarlet fever by age

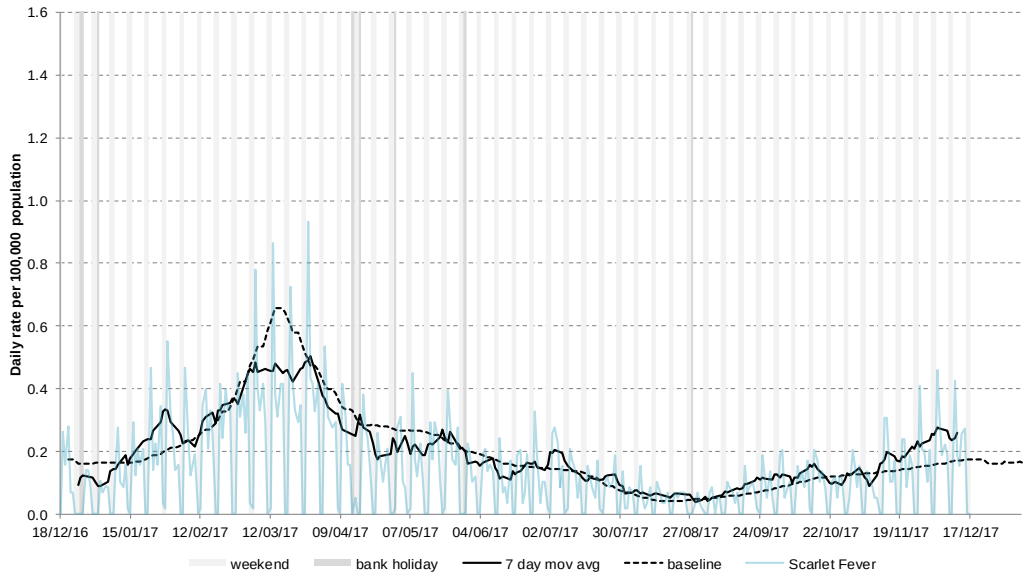
Average daily incidence rate by week per 100,000 population (all England).



* 7-day moving average

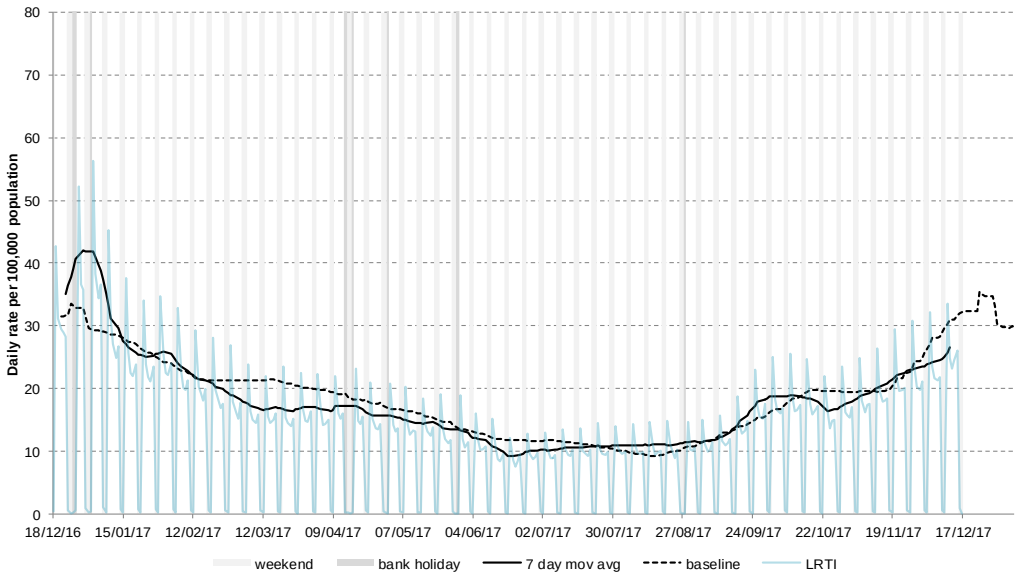
4: Scarlet fever

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)



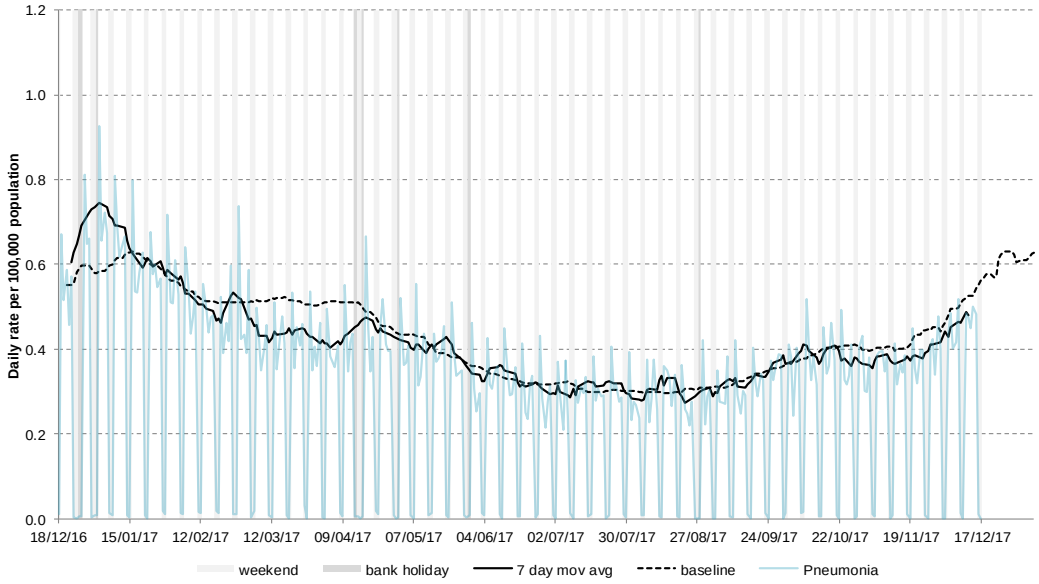
5: Lower respiratory tract infection (LRTI)

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



6: Pneumonia

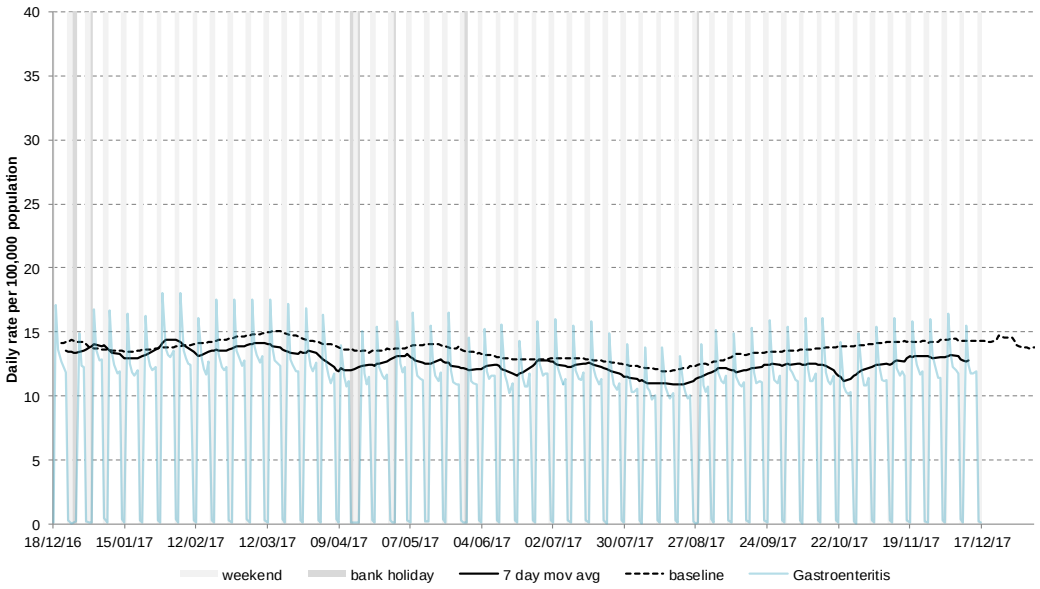
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



* 7-day moving average adjusted for bank holidays.

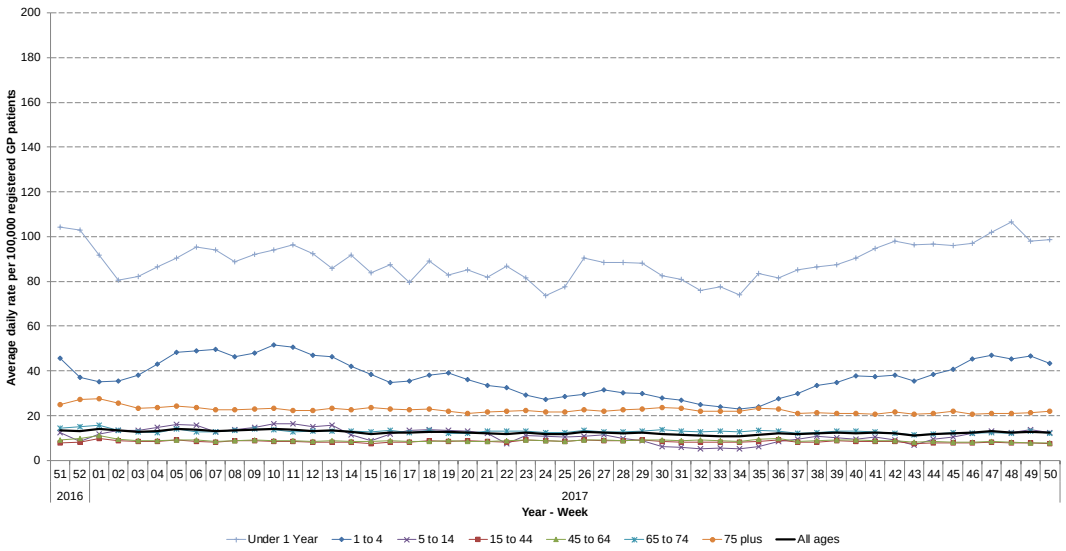
7: Gastroenteritis

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



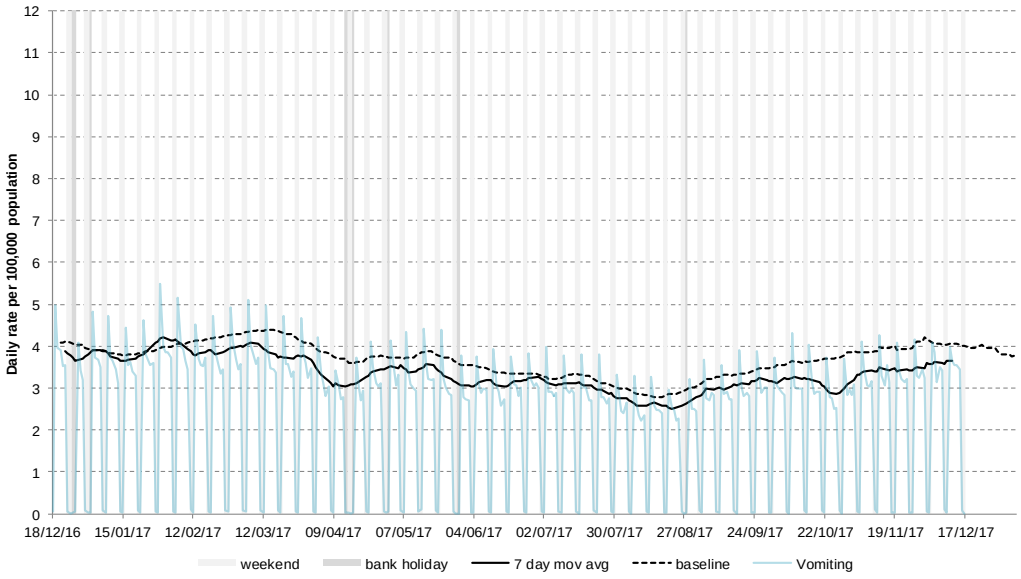
7a: Gastroenteritis by age

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



8: Vomiting

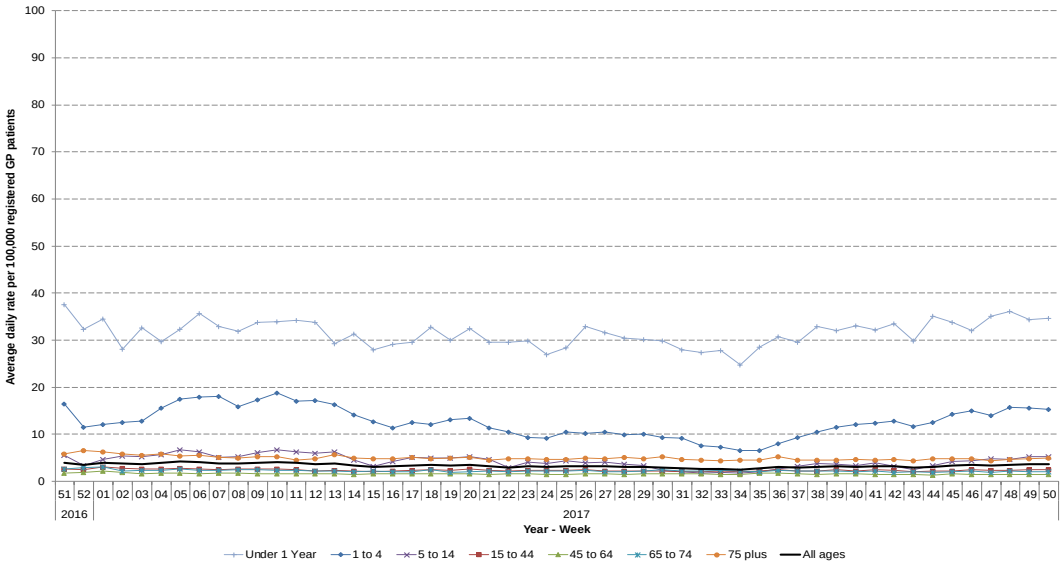
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



* 7-day moving average adjusted for bank holidays.

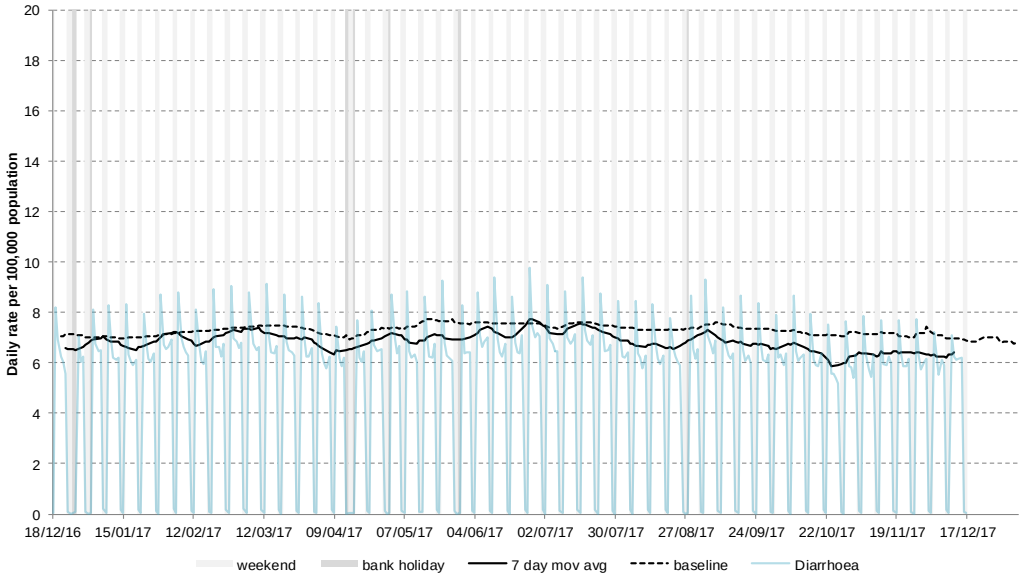
8a: Vomiting by age

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



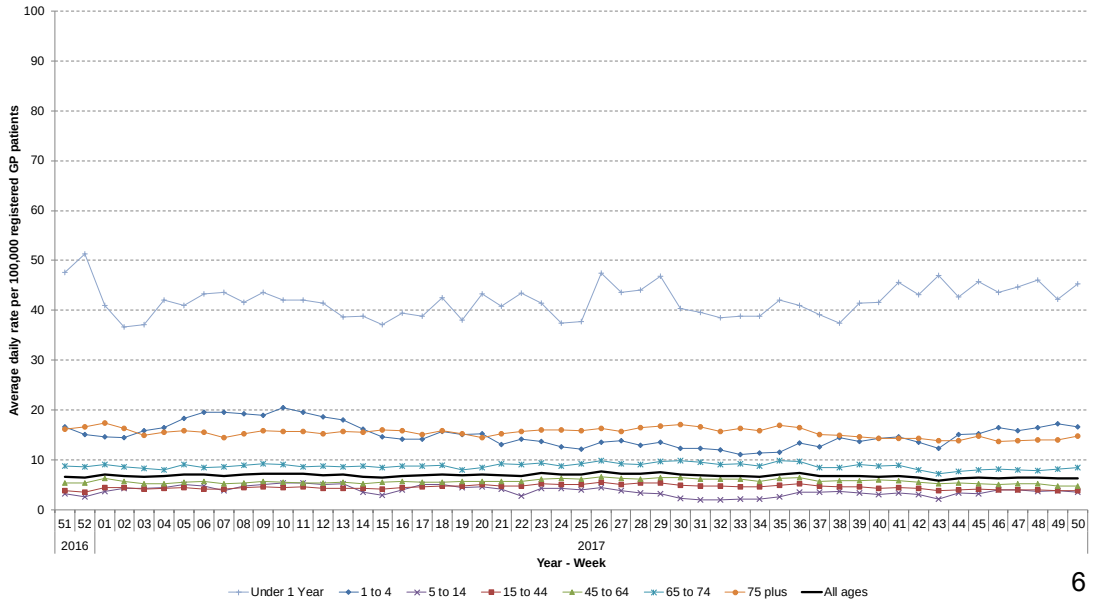
9: Diarrhoea

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



9a. Diarrhoea by age

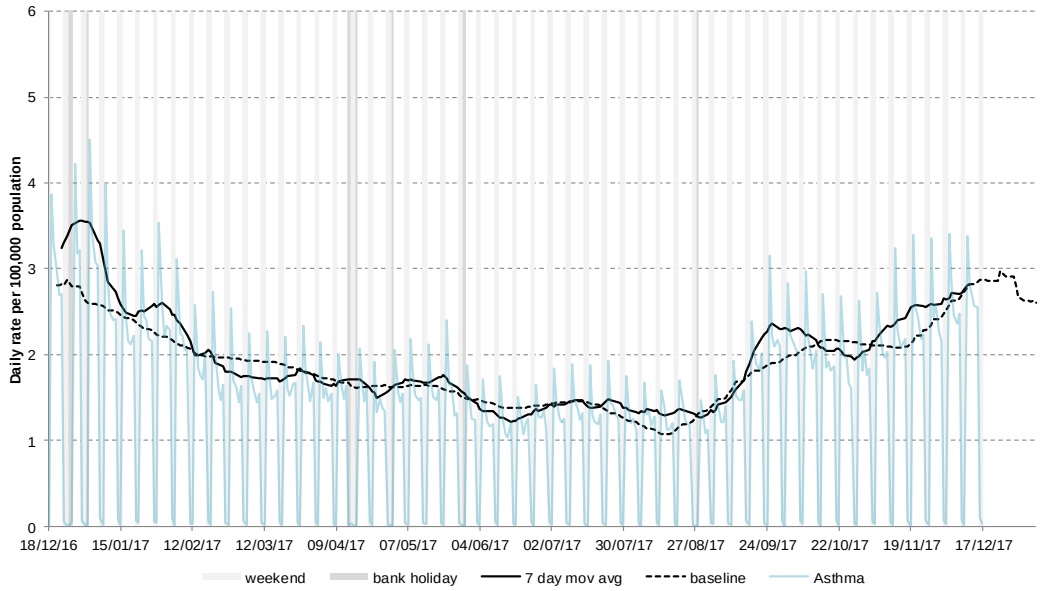
Average daily incidence rate by week per 100,000 population (all England).



* 7-day moving average adjusted for bank holidays.

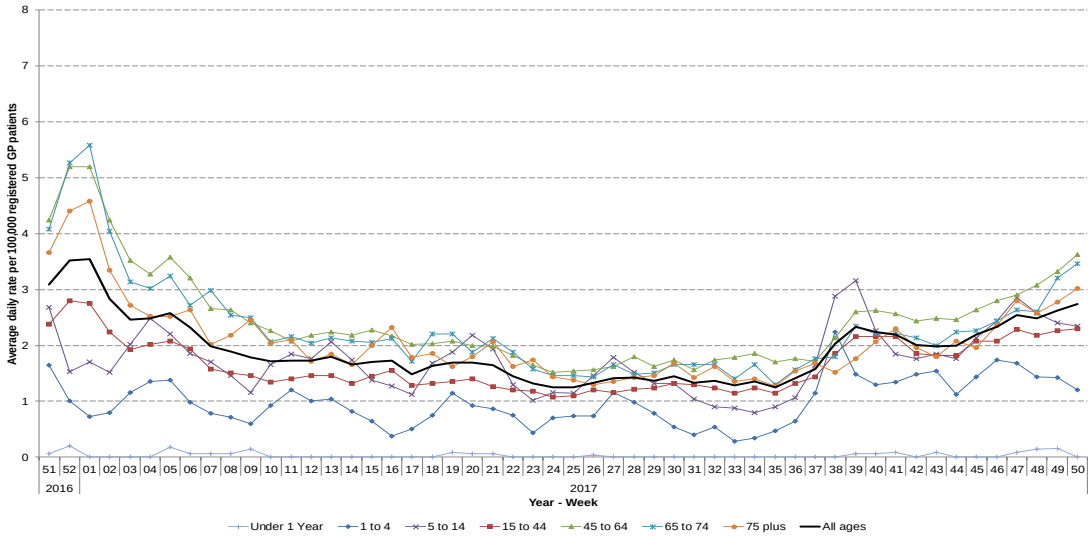
10: Asthma

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



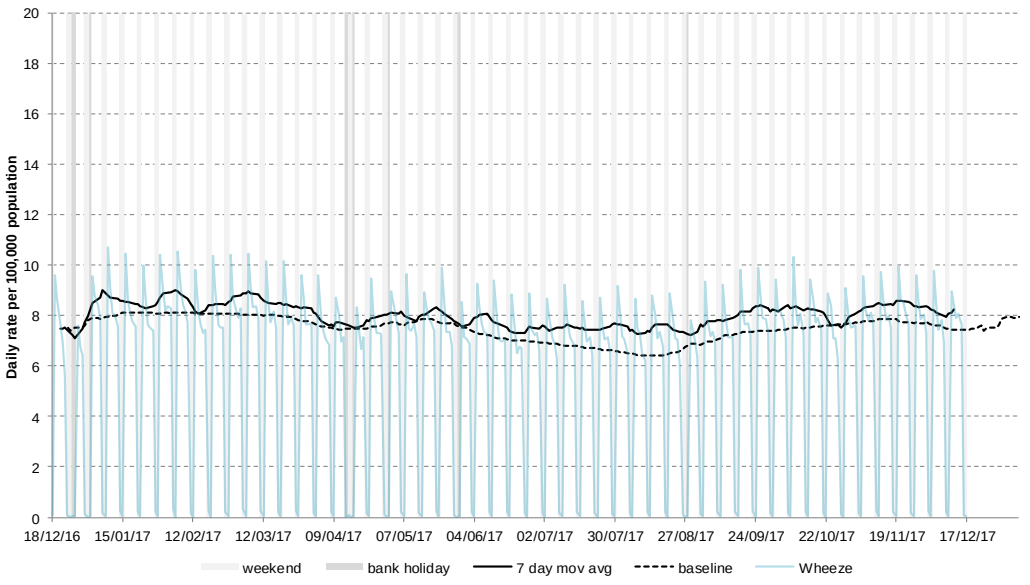
10a: Asthma by age

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



11: Wheeze

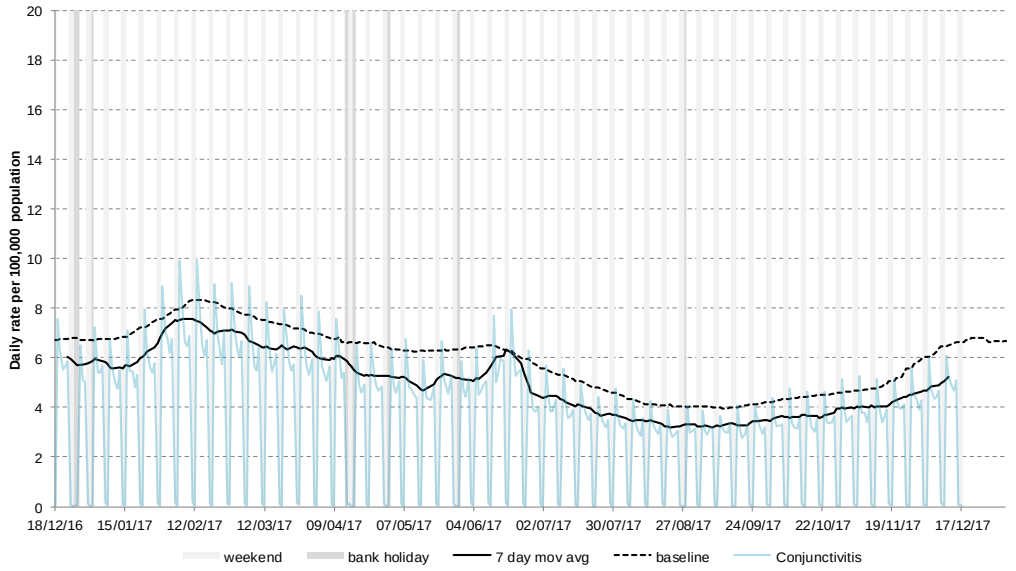
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



* 7-day moving average adjusted for bank holidays.

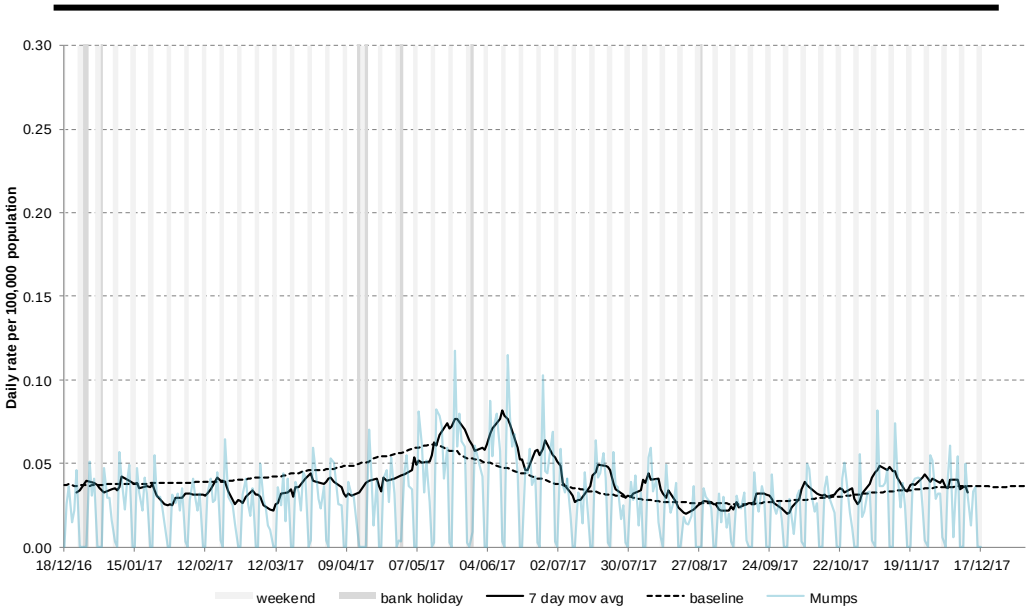
12: Conjunctivitis

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



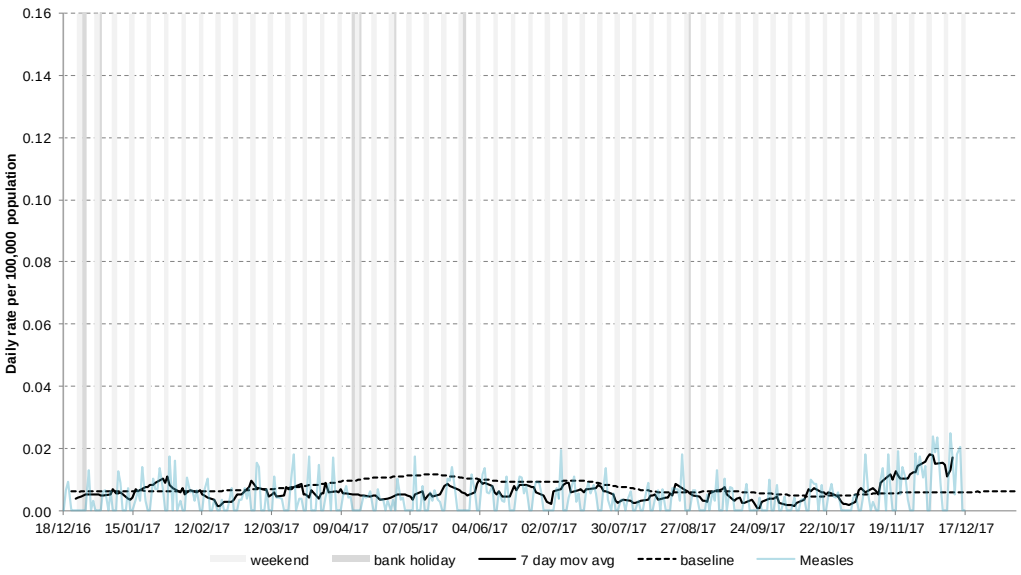
13: Mumps

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



14: Measles

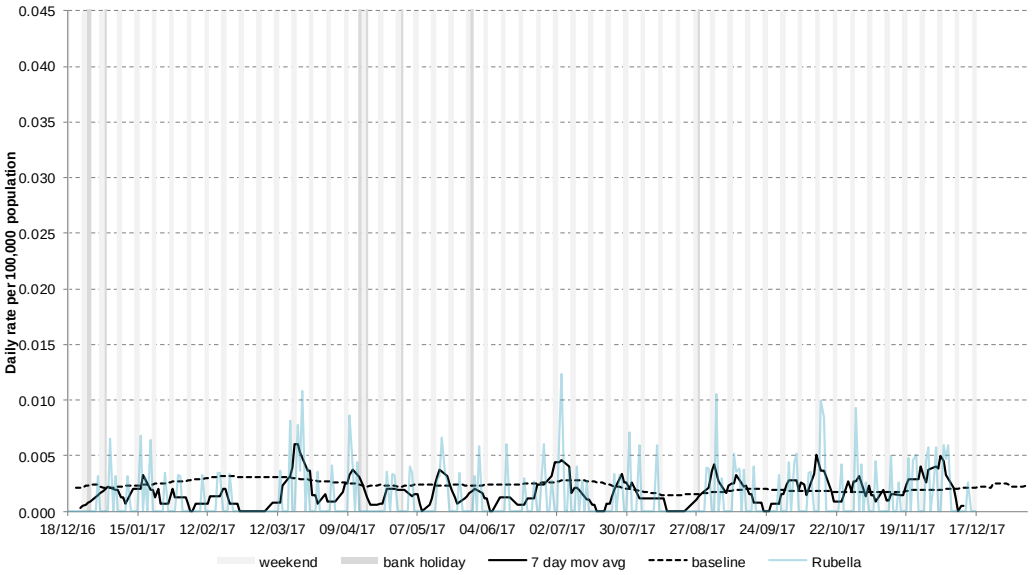
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



* 7-day moving average

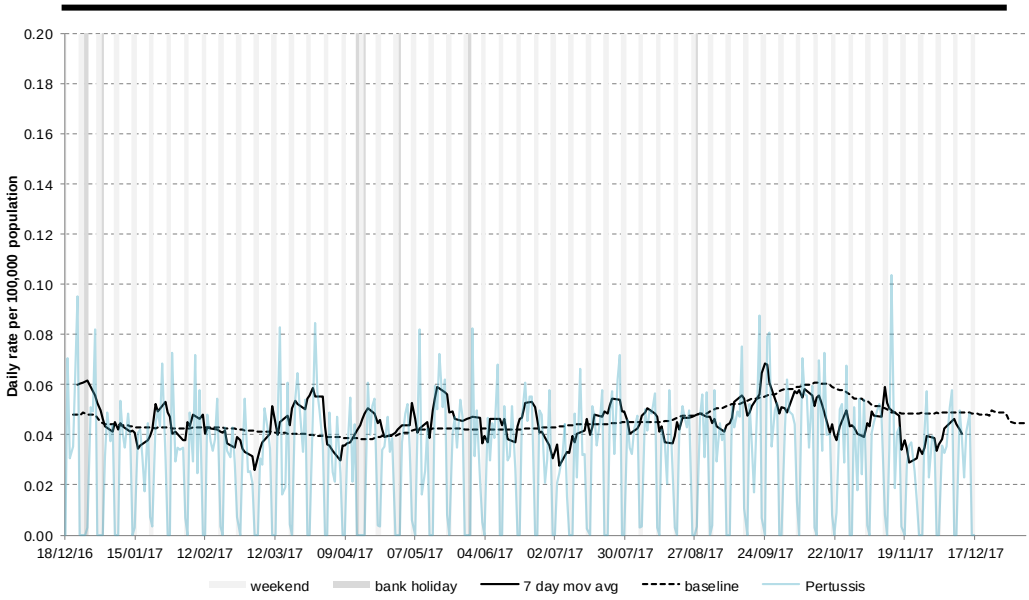
15: Rubella

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



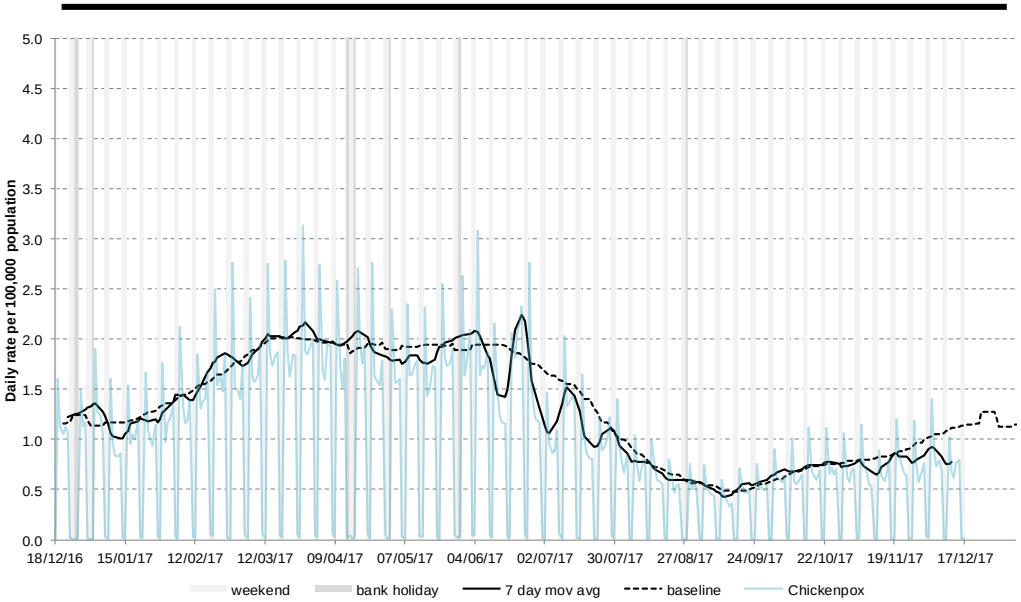
16: Pertussis

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



17: Chickenpox

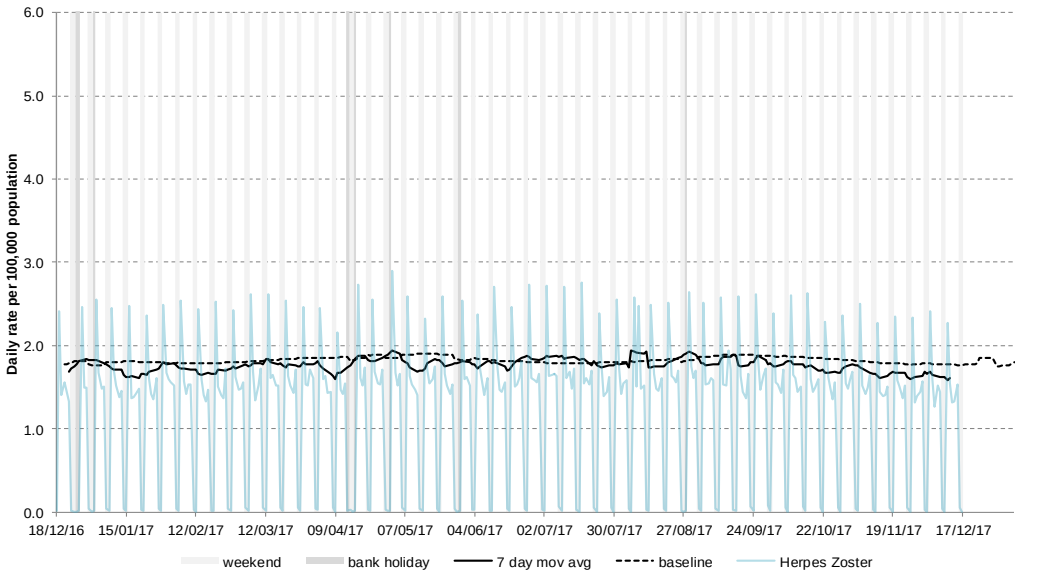
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



* 7-day moving average

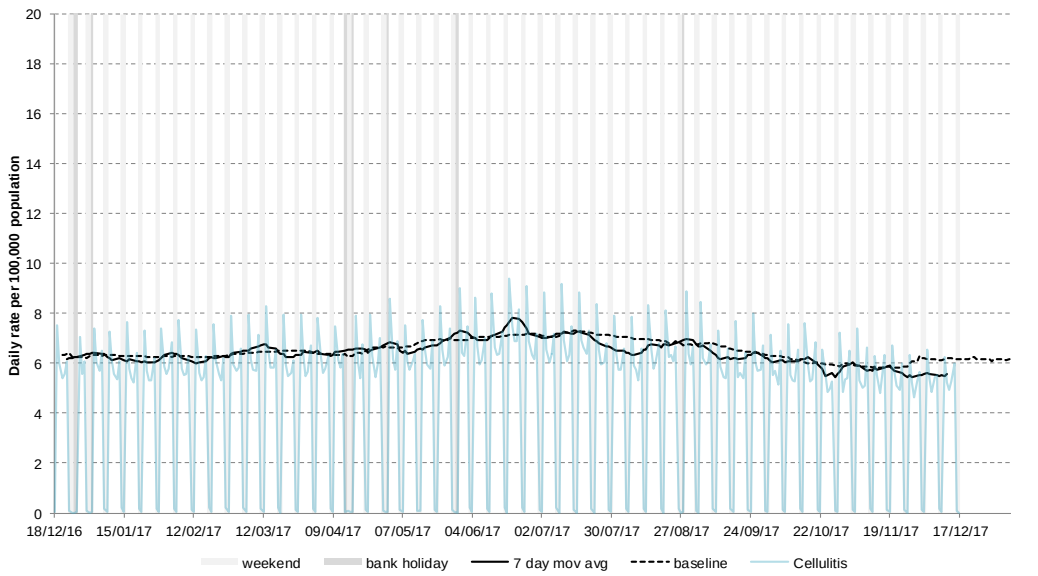
18: Herpes zoster

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



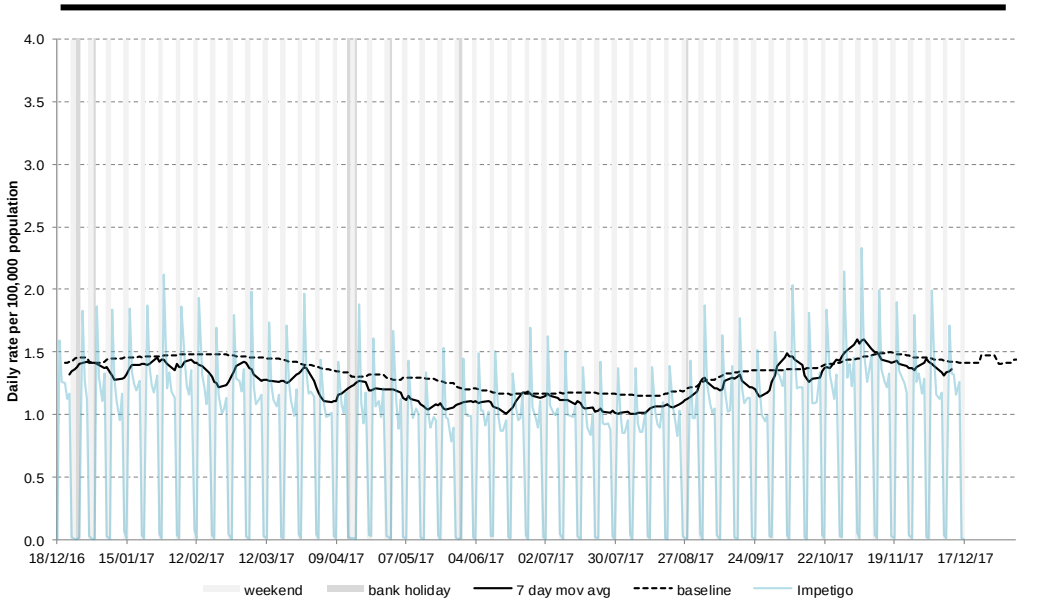
19: Cellulitis

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 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).[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 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 current ILI thresholds are based on previous influenza seasons from 2012/13 onwards. 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 2015. Contains National Statistics data © Crown copyright and database right 2015.

[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.

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

GP In Hours Syndromic Surveillance System Bulletin.

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6th Floor, 5 St Philip's Place, Birmingham, B3 2PW
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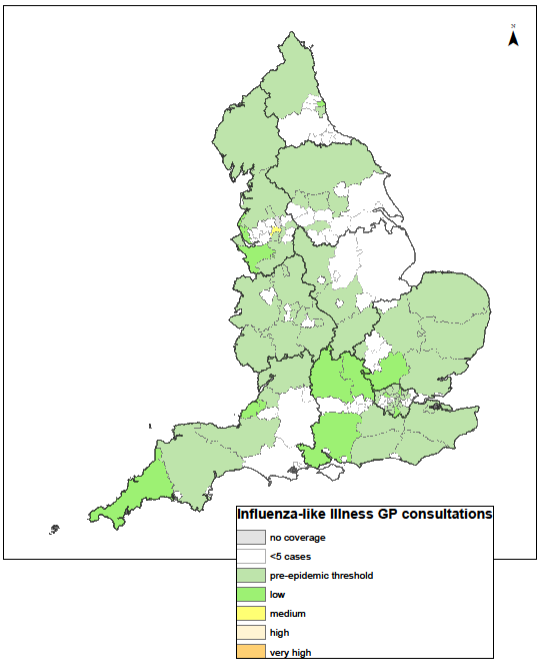
Web: https://www.gov.uk/government/collections/syndromic-surveillance-systems-and-analyses

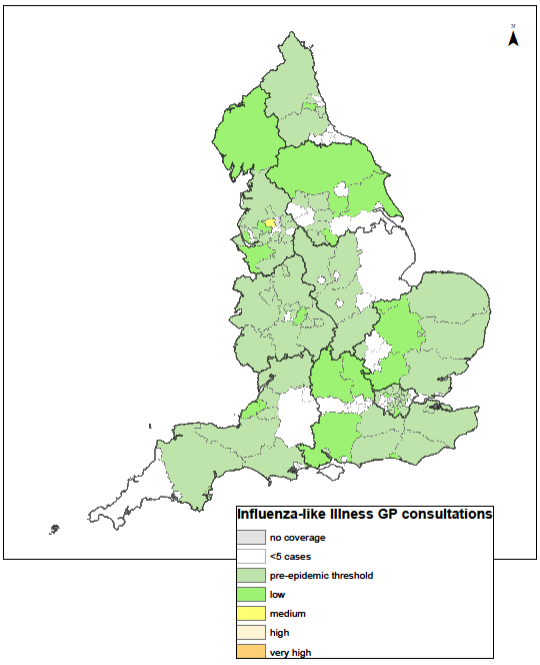
England

Influenza-like illness GP consultations by LA (England)

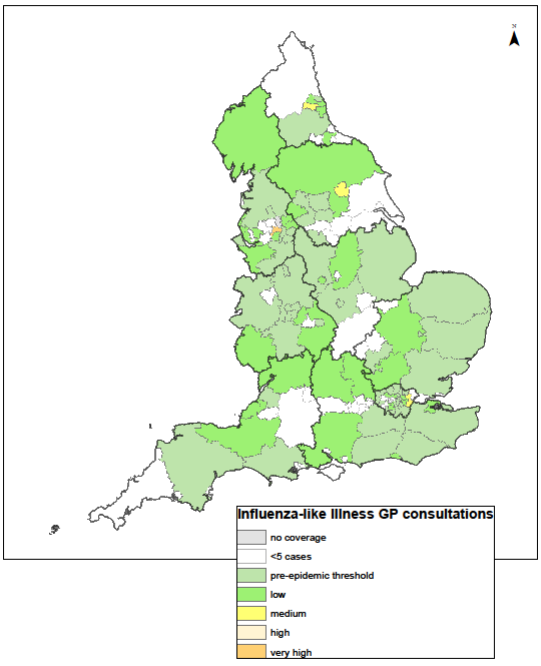
Week 47



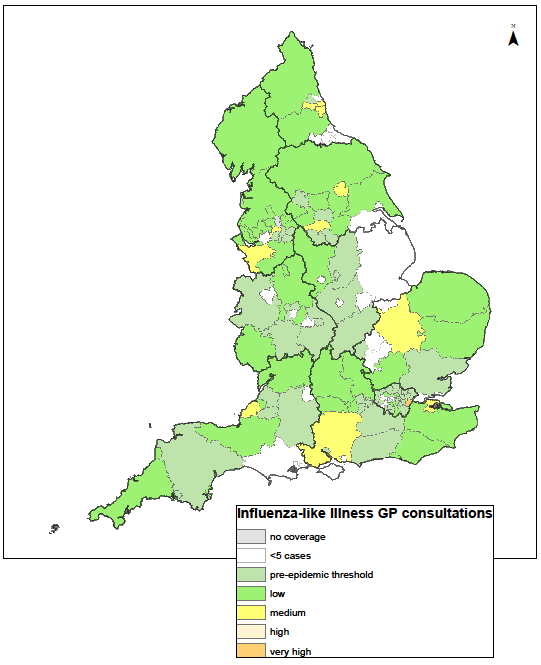
Week 48



Week 49



Week 50

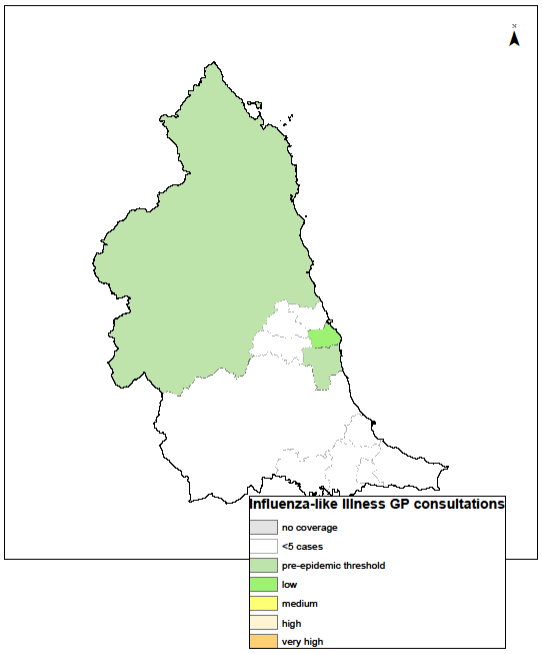


Please read the notes section (page 11) to understand the caveats and limitations on the use and interpretation of local ILI consultation data

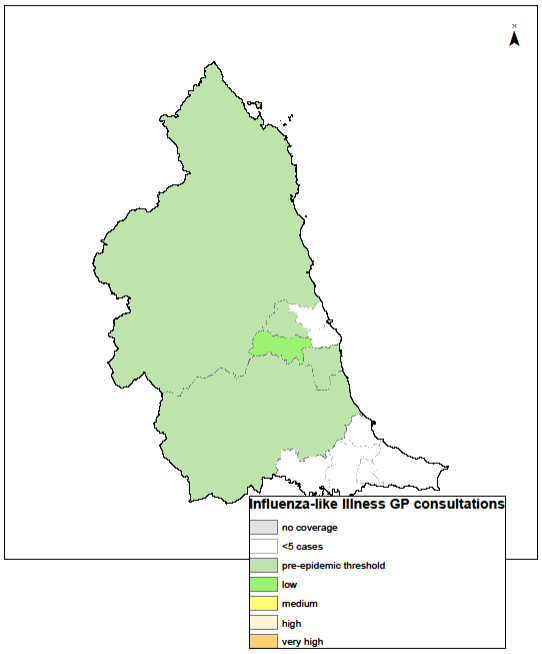
North East

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

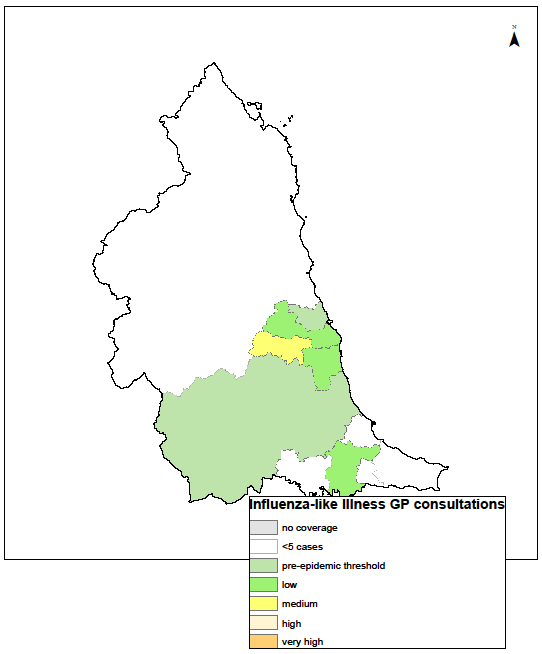
Week 47



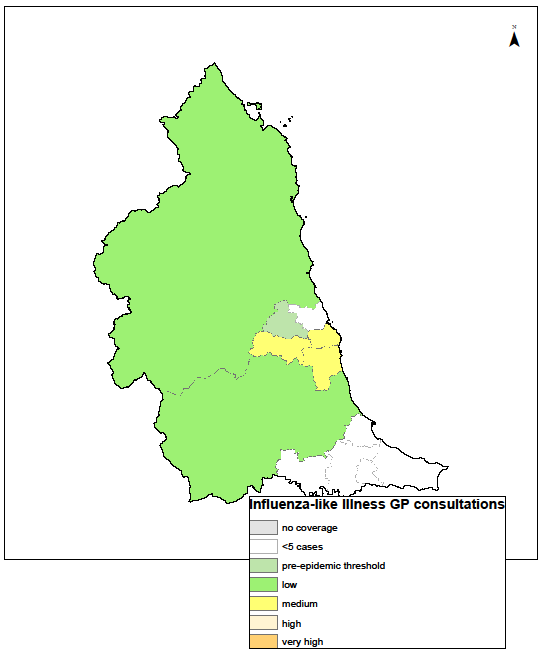
Week 48



Week 49



Week 50



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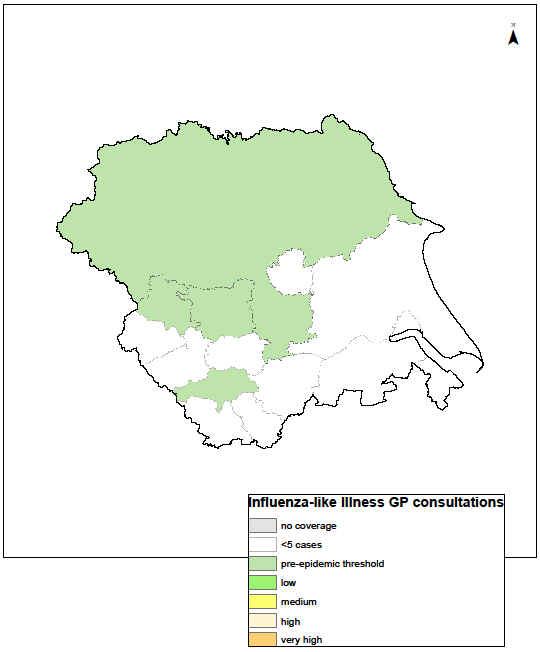
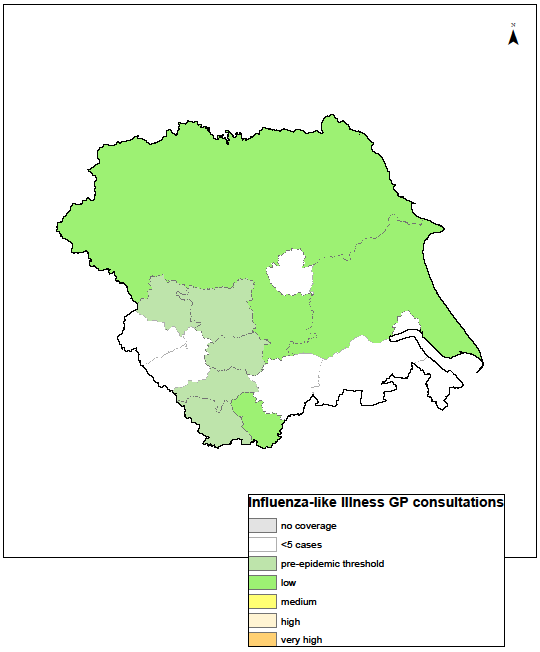
Yorkshire & Humber

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

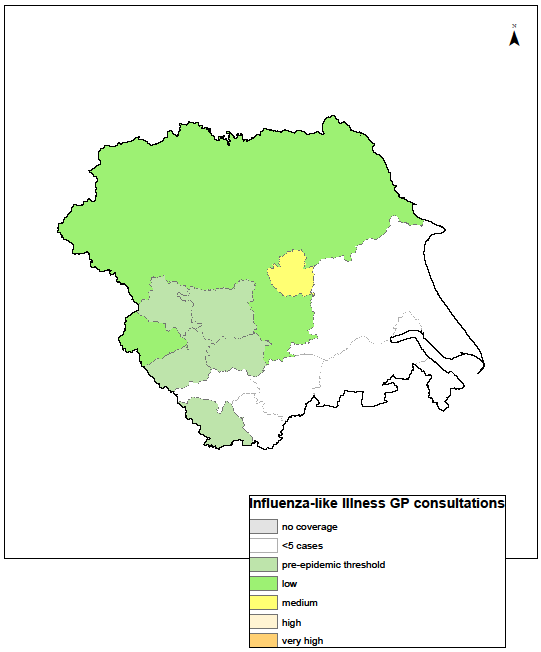
Week 47



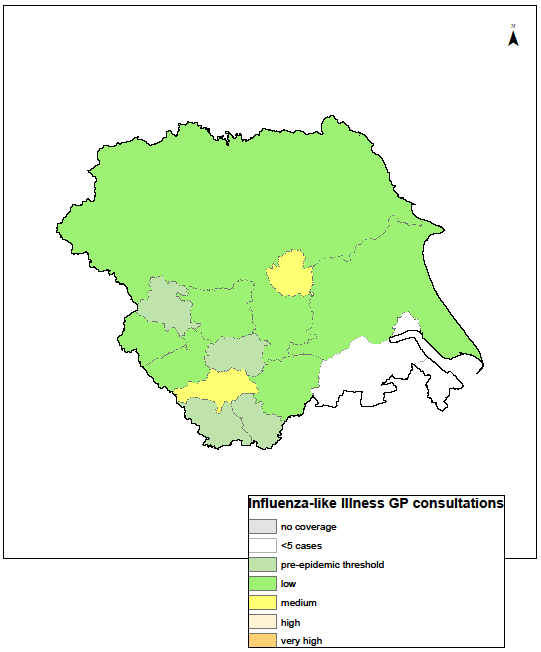
Week 48



Week 49



Week 50



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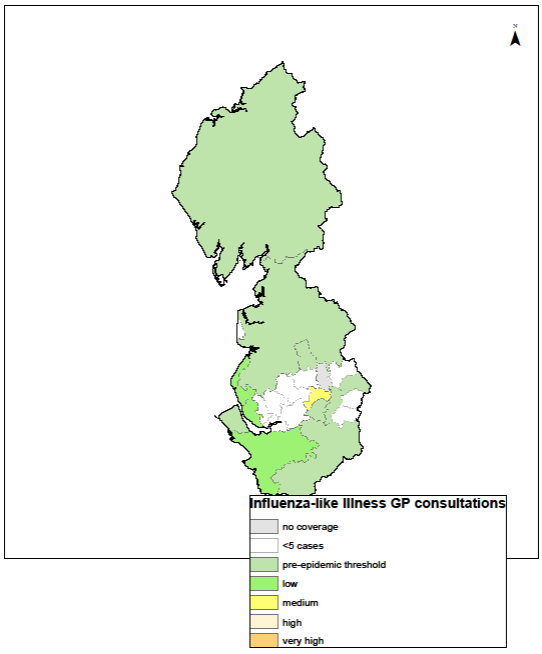
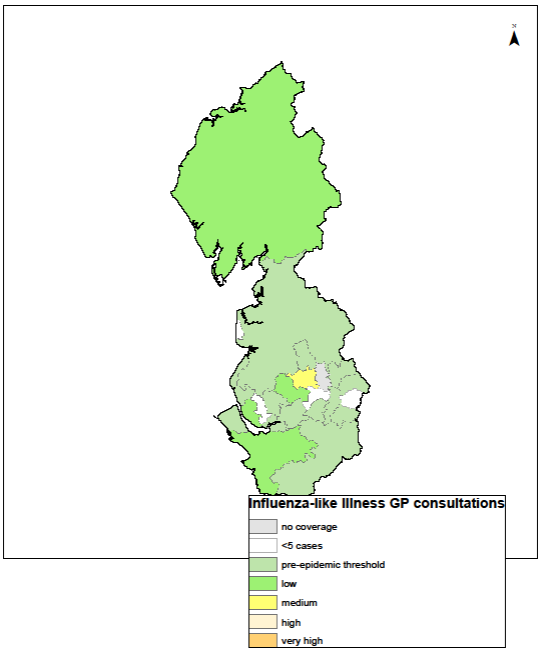
North West

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

Week 47



Week 48



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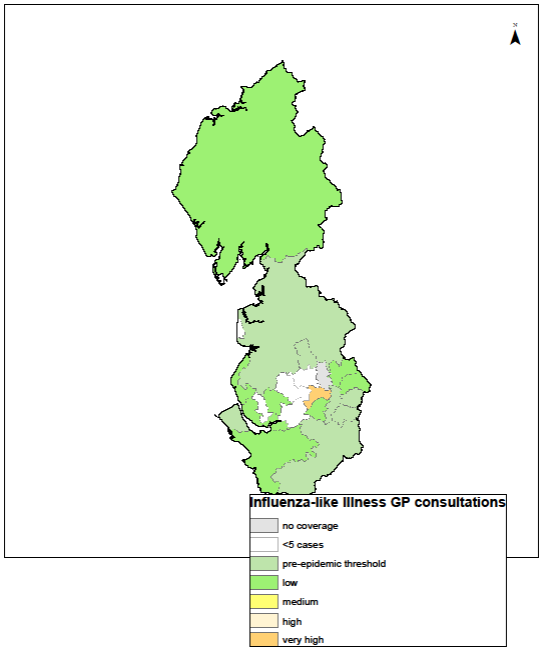

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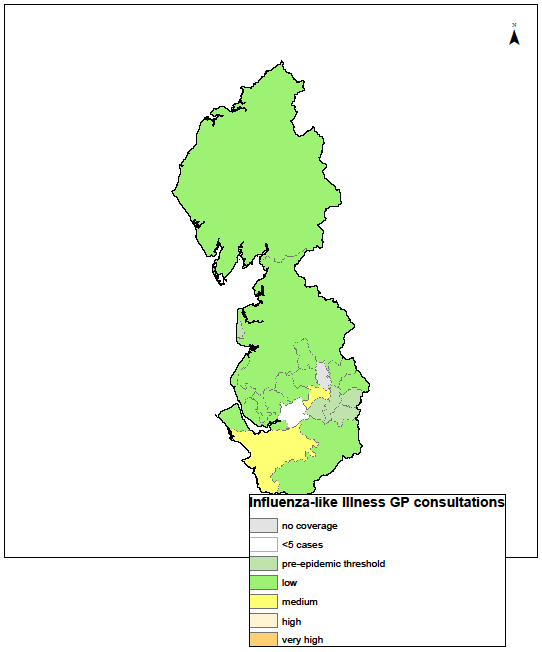

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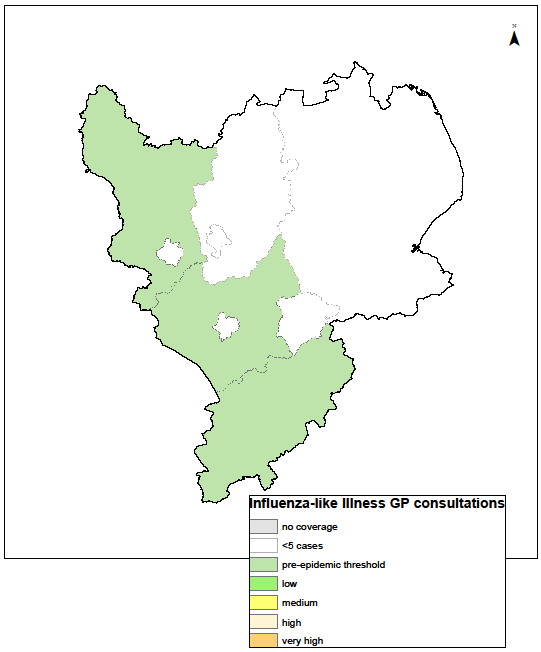
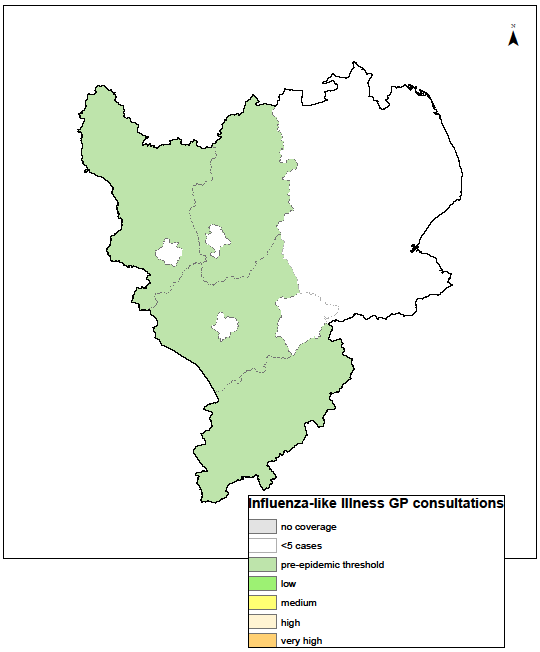
East Midlands

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

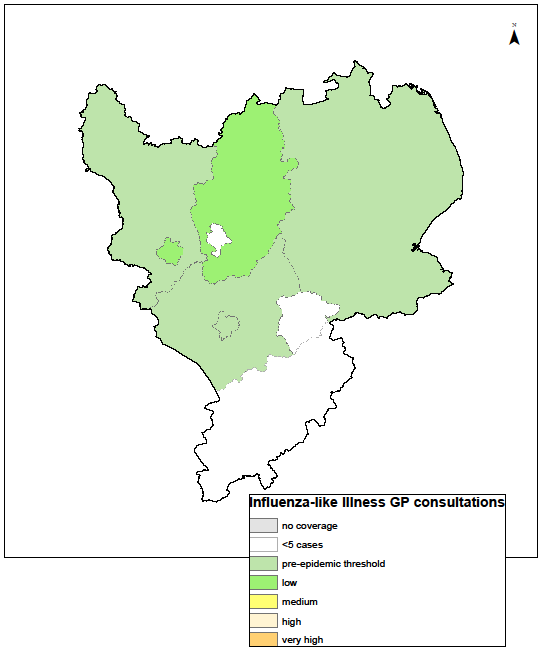
Week 47



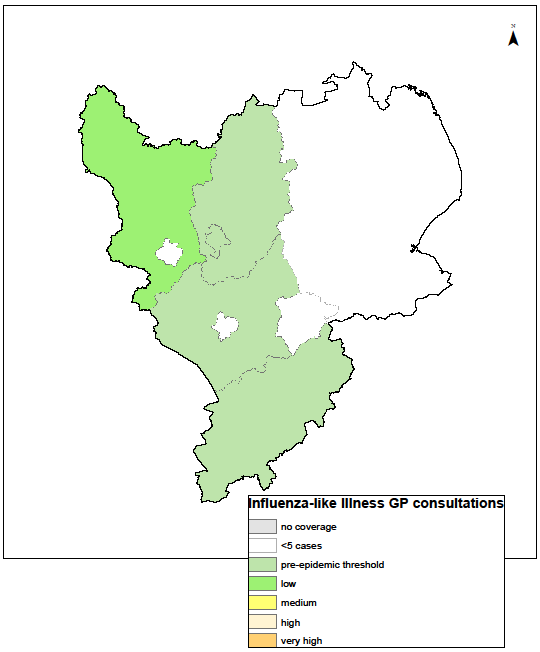
Week 48



Week 49



Week 50

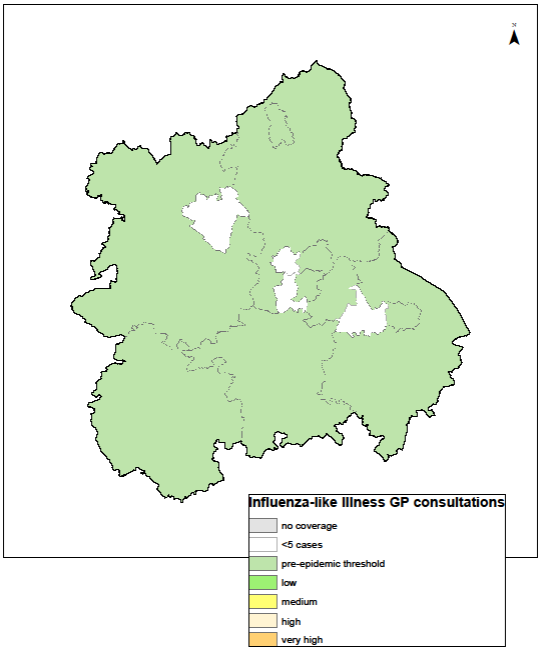


Please read the notes section (page 11) to understand the caveats and limitations on the use and interpretation of local ILI consultation data

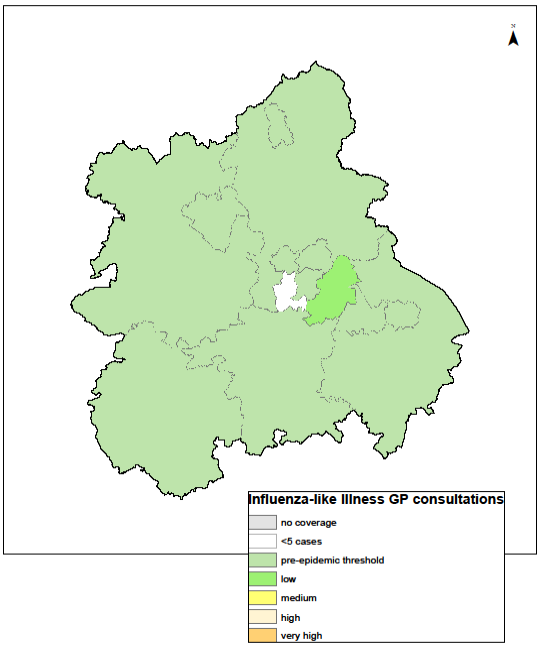
West Midlands

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

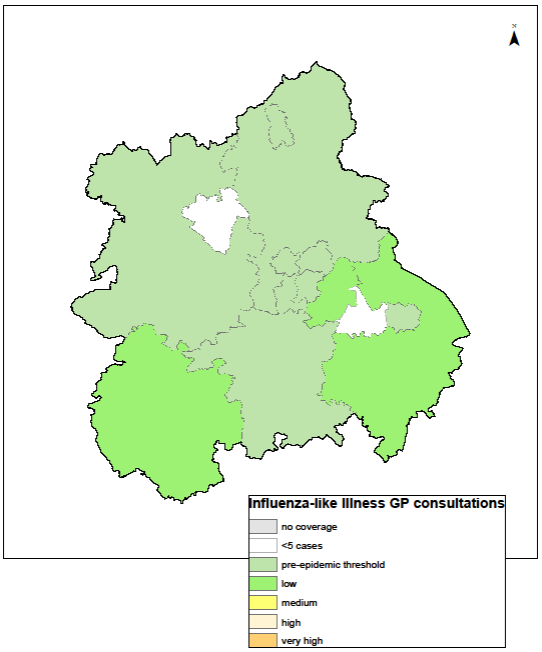
Week 47



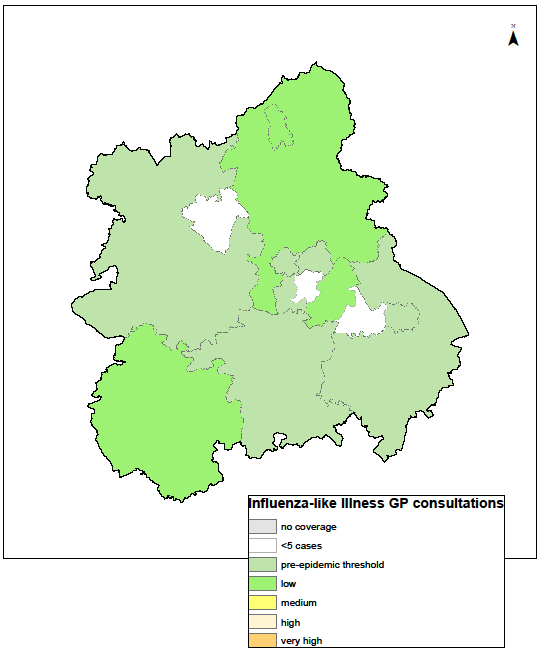
Week 48



Week 49



Week 50



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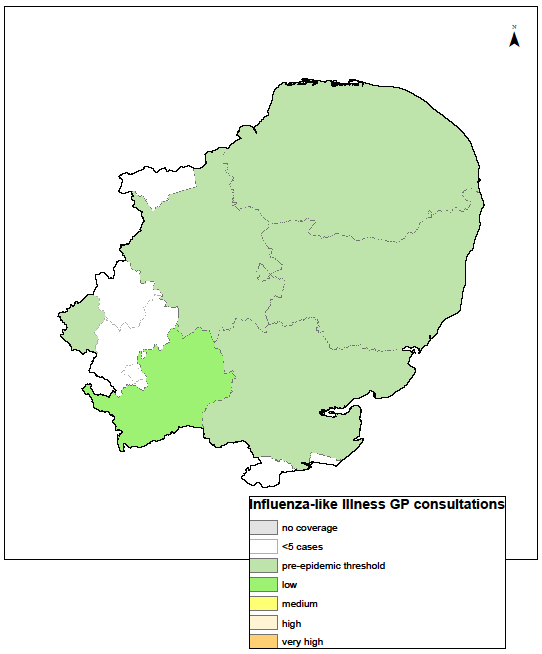
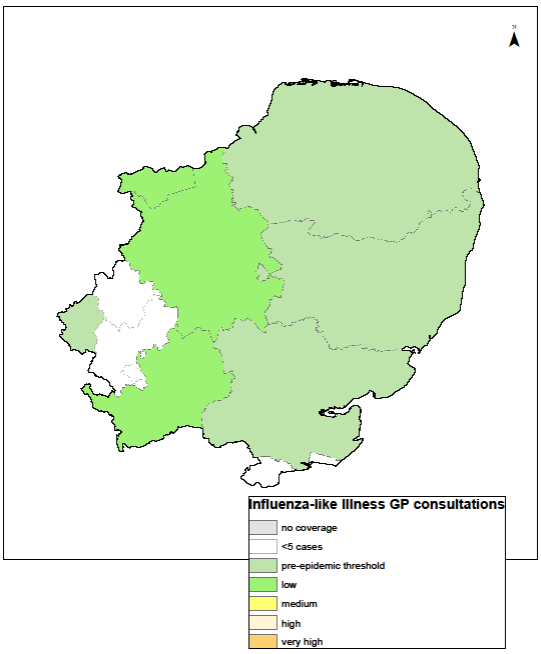
East of England

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

Week 47



Week 48



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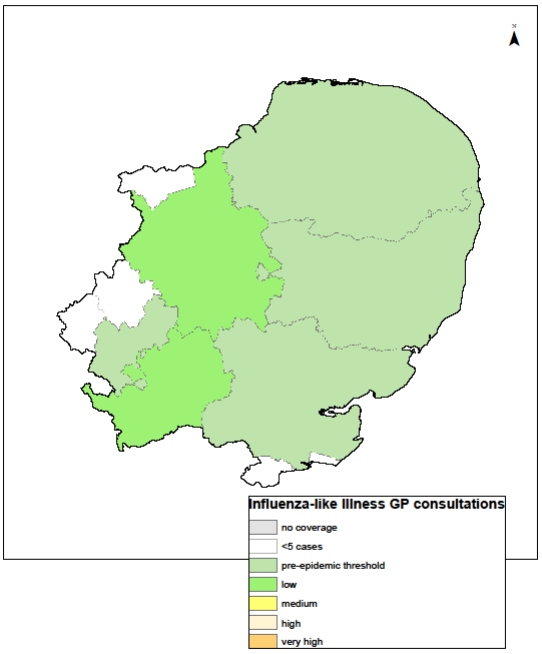
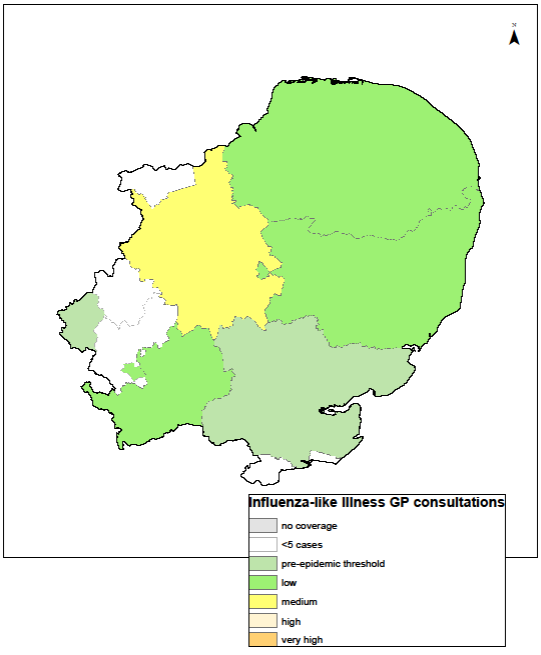


Week 50



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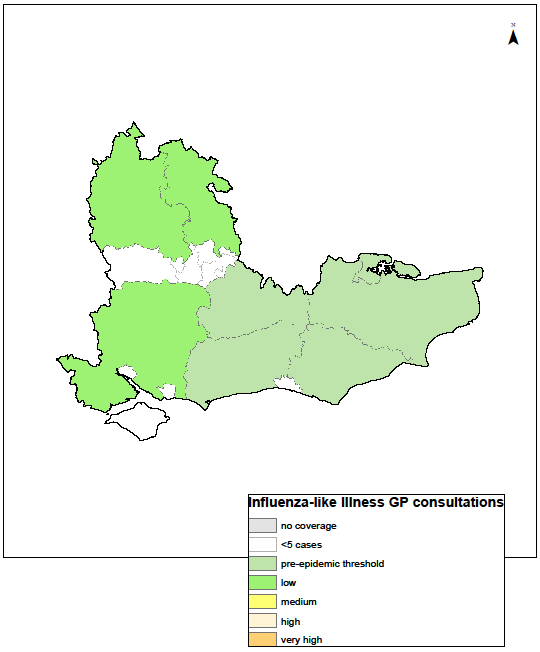
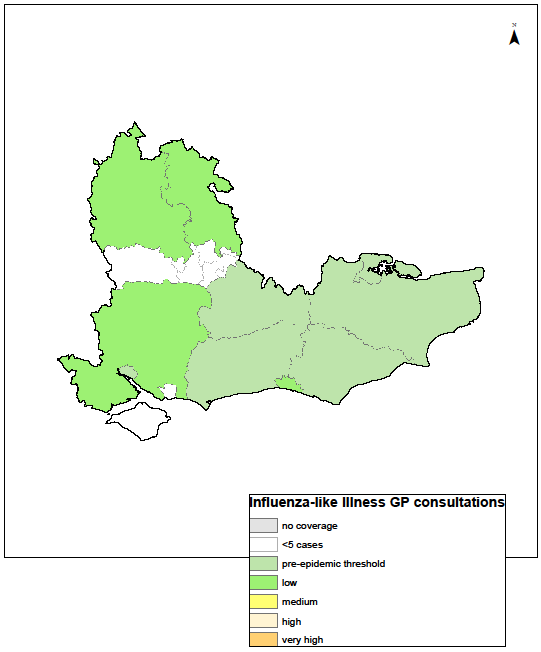
South East

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

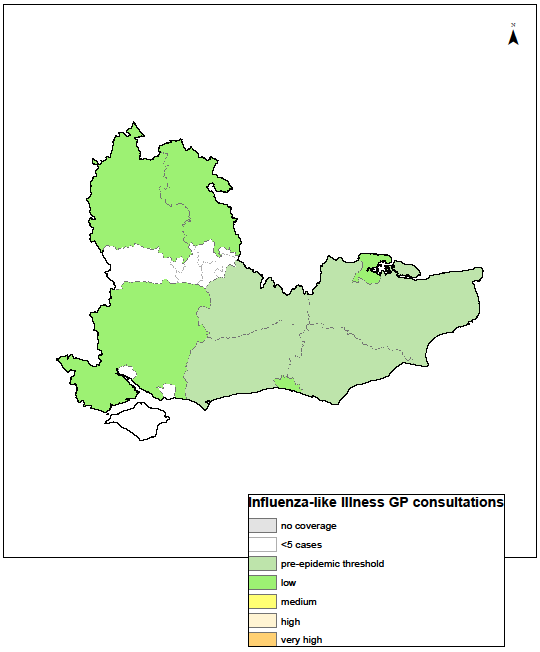
Week 47



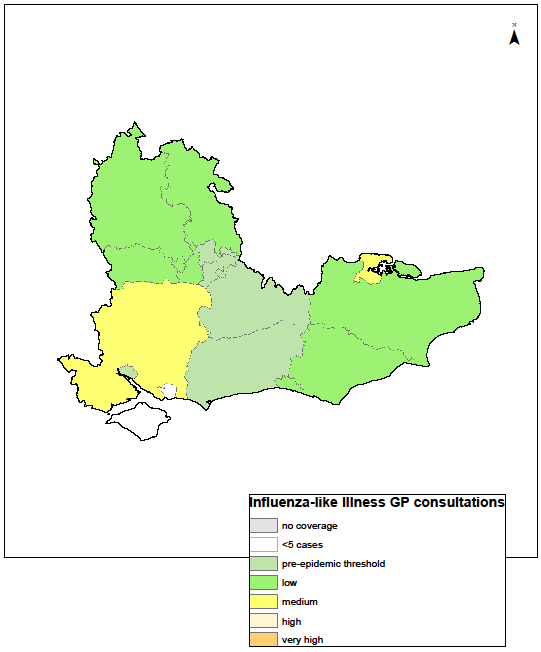
Week 48



Week 49



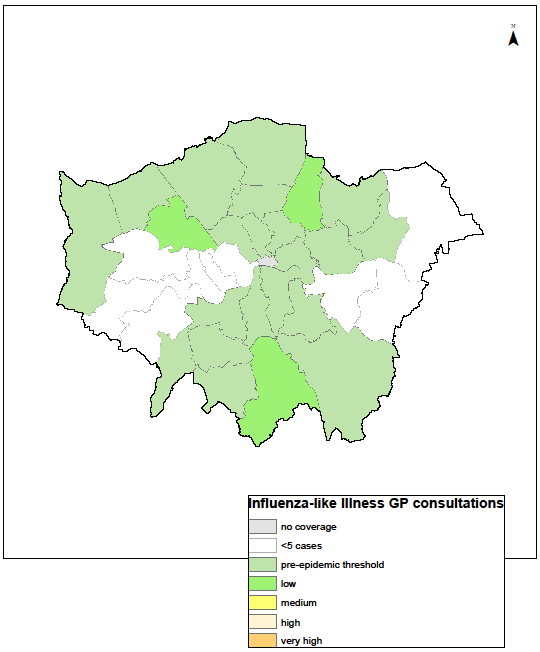
Week 50



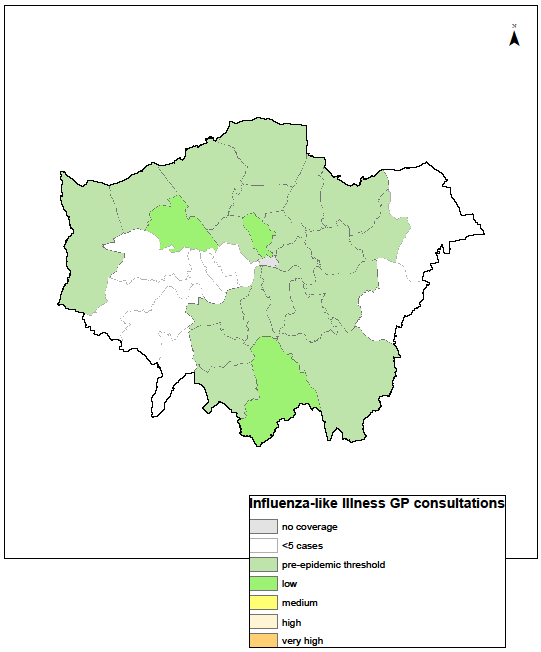
London

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

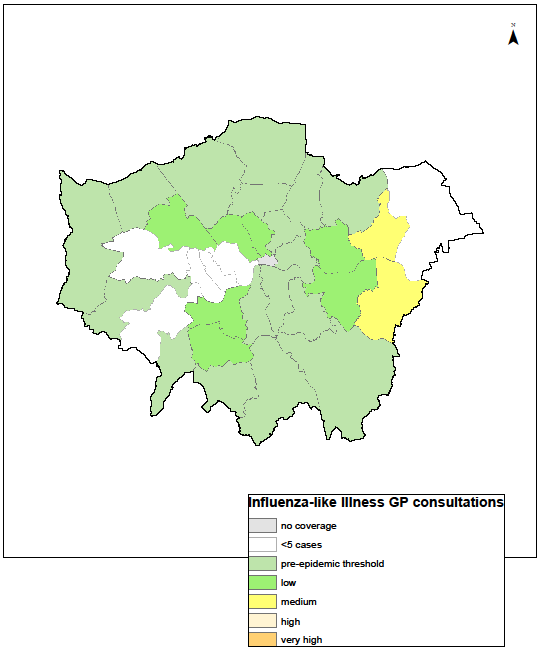
Week 47



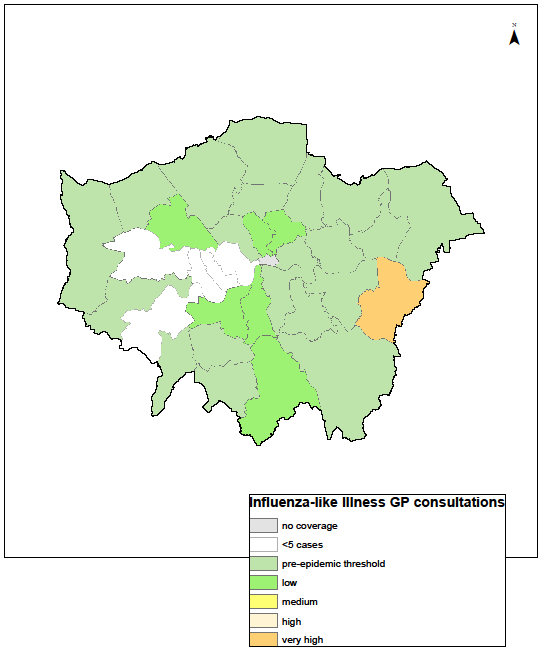
Week 48



Week 49



Week 50



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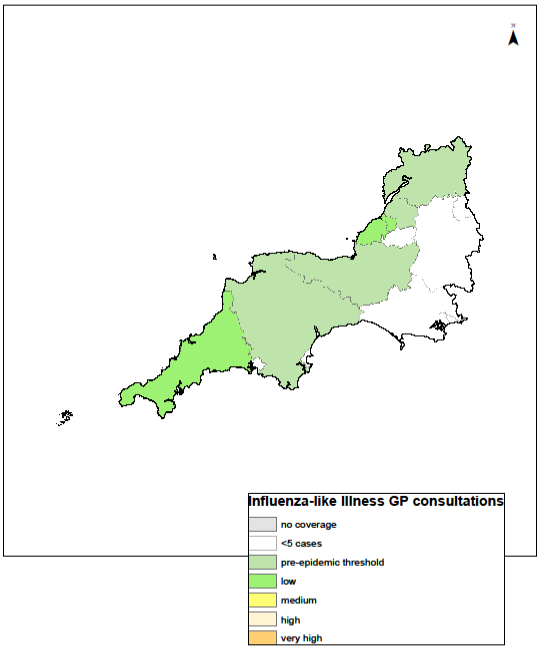
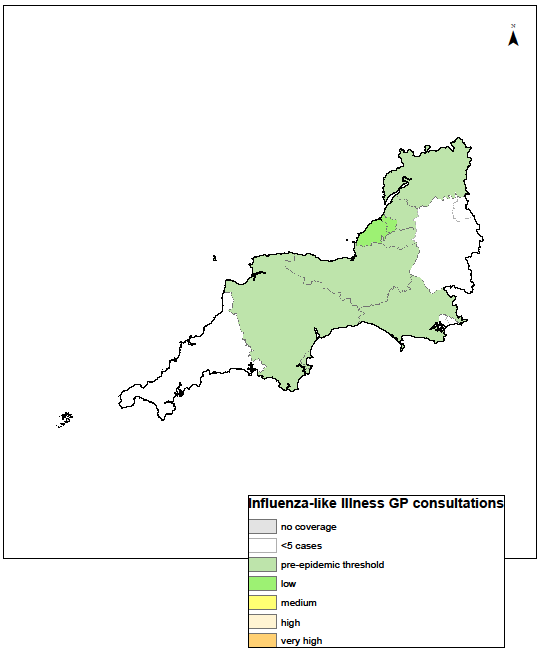
South West

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

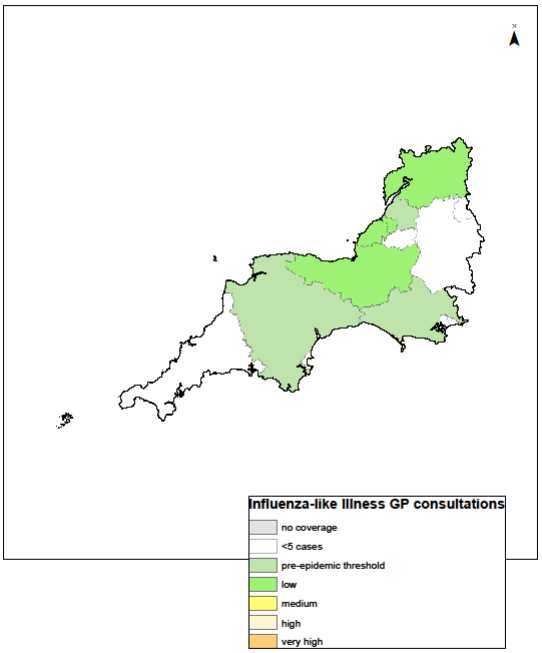
Week 47



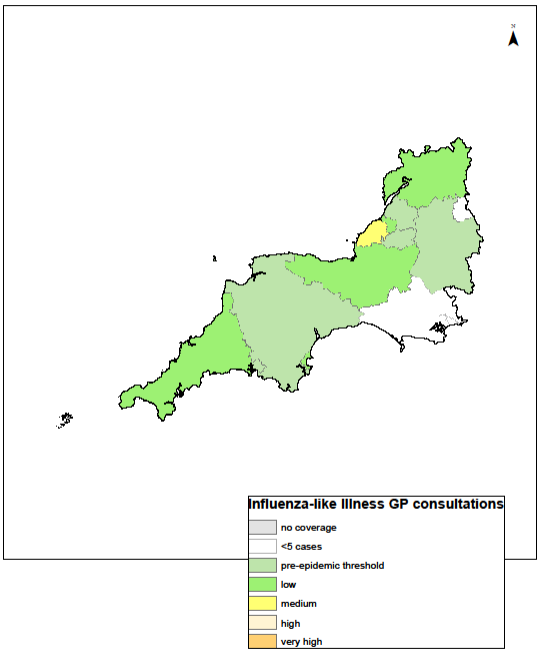
Week 48



Week 49



Week 50



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