

# **GP In Hours**

Syndromic Surveillance System: England

Data to: 22 January 2017

24 January 2017 Year: 2017 Week: 3

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### **Key messages**

During week 3 there were continued decreases in GP consultations for respiratory conditions including influenza-like illness and pneumonia (figures 1, 2, 5, 6 & 10). There were, however, increases in several respiratory conditions (including asthma and influenza-like illness) in children aged <1, 1-4 and 5-14 years (figures 1a & 2a).

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:

3		
Indicator	Trend	Level
Upper respiratory tract infection	decreasing	similar to baseline levels
Influenza-like illness	decreasing	similar to baseline levels
Pharyngitis	no trend	below baseline levels
Scarlet fever	increasing	similar to baseline levels
Lower respiratory tract infection	decreasing	similar to baseline levels
Pneumonia	decreasing	similar to baseline levels
Gastroenteritis	decreasing	similar to baseline levels
Vomiting	decreasing	similar to baseline levels
Diarrhoea	decreasing	below baseline levels
Asthma	decreasing	similar to baseline levels
Wheeze	decreasing	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	decreasing	below baseline levels
Chickenpox	no trend	similar to baseline levels
Herpes zoster	decreasing	below 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	3	3,886	30.6 million

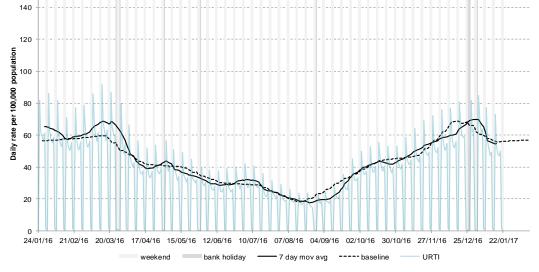
<sup>\*\*</sup>based on the average number of practices and denominator population in the reporting working week.



# 1: Upper respiratory tract infection (URTI)

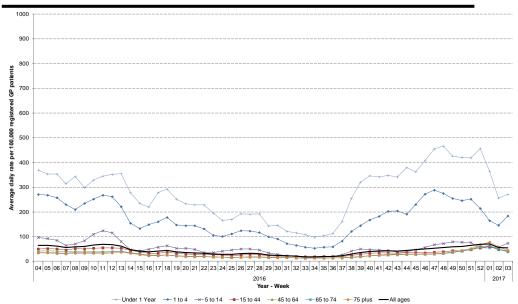
160

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

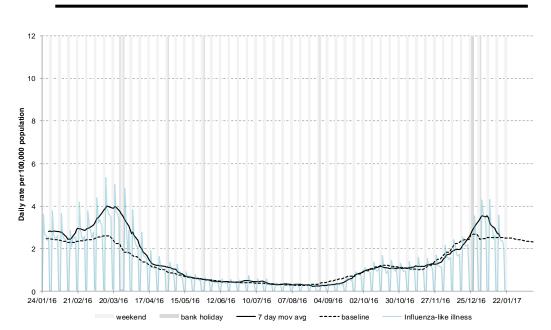


# 1a: Upper respiratory tract infection by age

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



# 2: Influenza-like illness (ILI)



<sup>\* 7-</sup>day moving average adjusted for bank holidays.



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

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

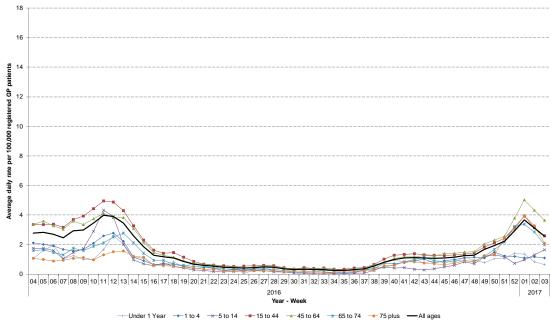
# 3: Pharyngitis or scarlet fever

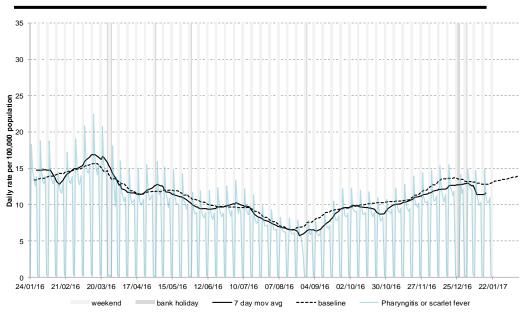
Daily incidence rates (and 7-day moving average\*) per 100,000 population (all England, all ages).

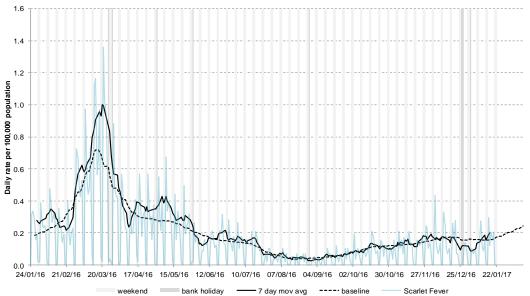
#### 4: Scarlet fever

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.



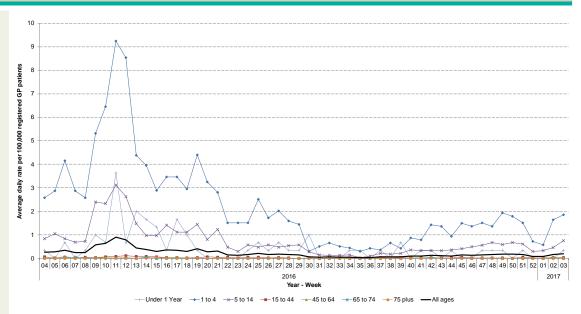






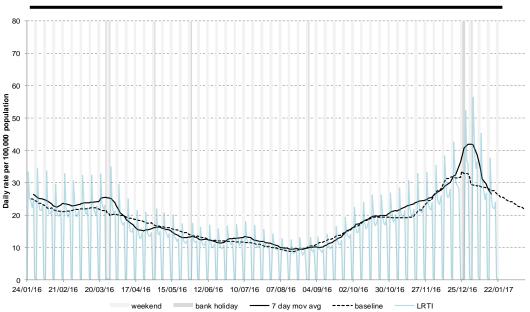
### 4a: Scarlet fever by age

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



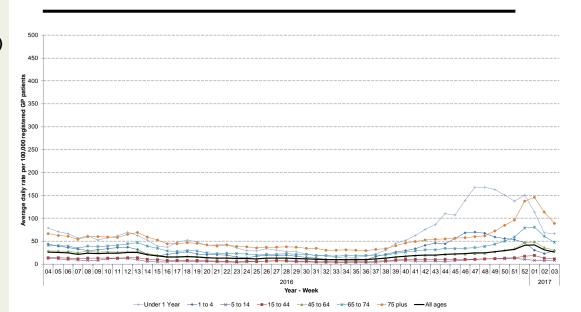
### 5: Lower respiratory tract infection (LRTI)

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.



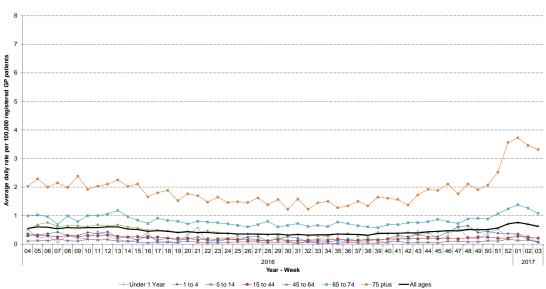
#### 6: Pneumonia

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

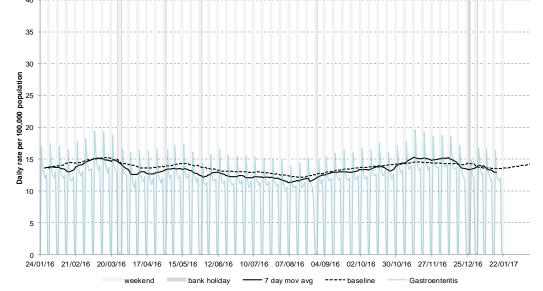


#### 6a: Pneumonia by age

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



#### 7: Gastroenteritis

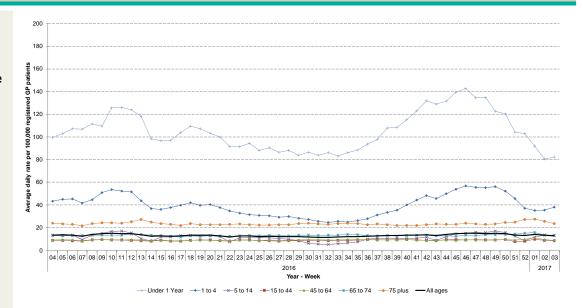


<sup>\* 7-</sup>day moving average adjusted for bank holidays.



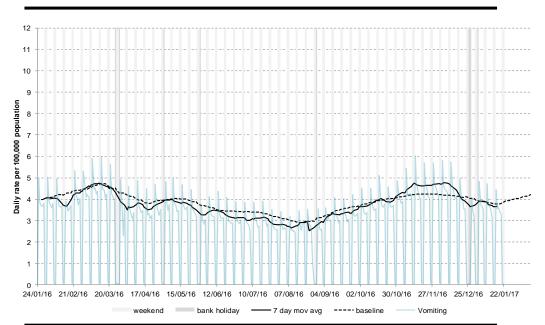
### 7a: Gastroenteritis by age

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



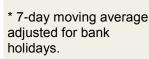
#### 8: Vomiting

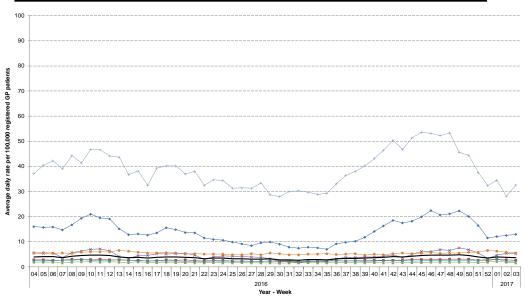
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



#### 8a: Vomiting by age

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





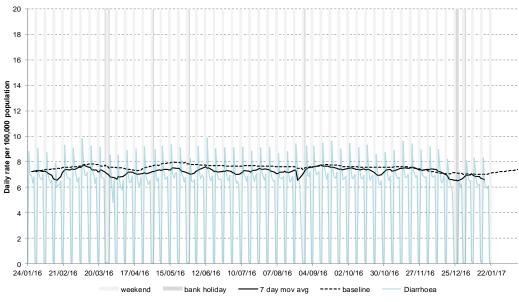
→ 5 to 14 — 15 to 44 — 45 to 64





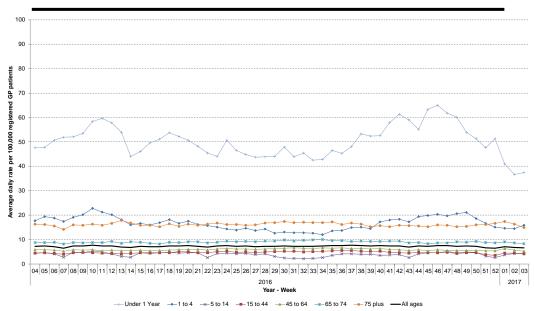
#### 9: Diarrhoea

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).



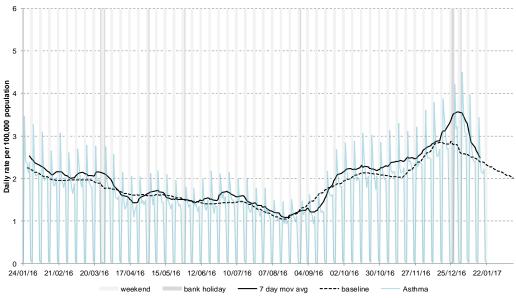
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<sup>\* 7-</sup>day moving average adjusted for bank holidays.



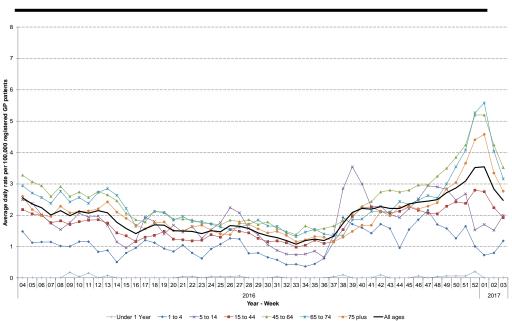
#### 10: Asthma

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

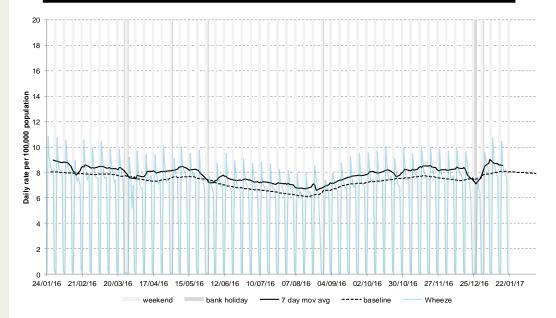


#### 10a: Asthma by age

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



#### 11: Wheeze



<sup>\* 7-</sup>day moving average adjusted for bank holidays.



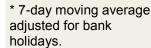
#### 11a: Wheeze by age

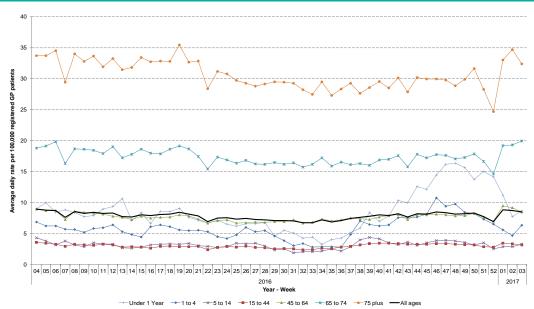
Average daily incidence rate by week per 100,000 population (all England).

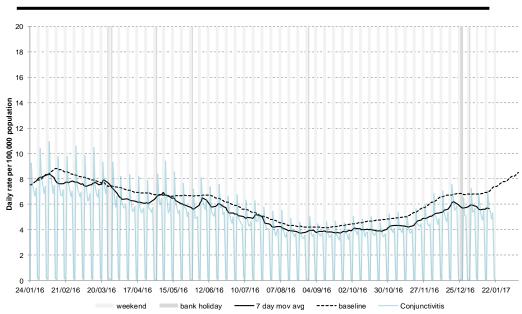
### 12: Conjunctivitis

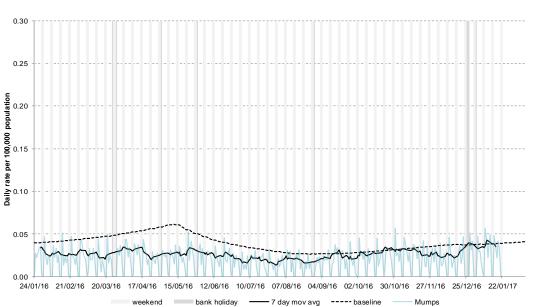
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).

#### 13: Mumps





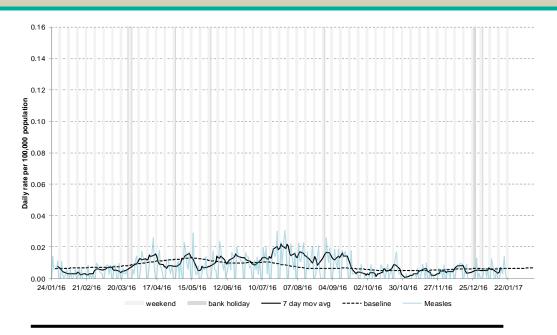






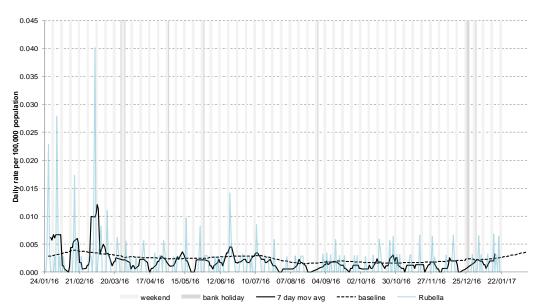
#### 14: Measles

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



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#### 15: Rubella

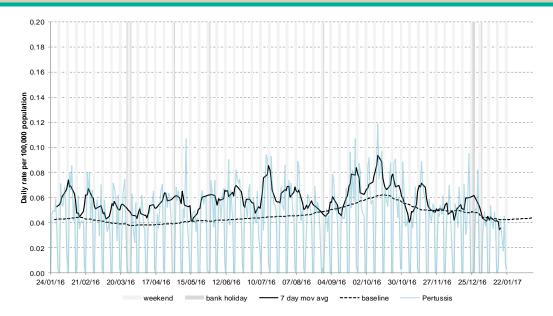


<sup>\* 7-</sup>day moving average adjusted for bank holidays.



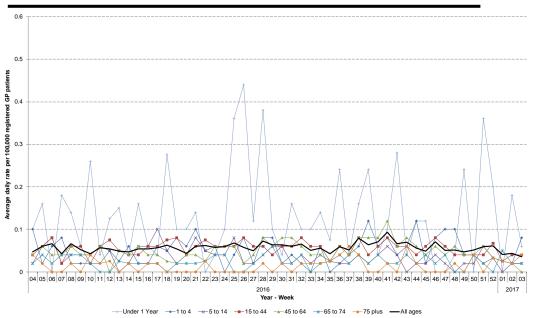
#### 16: Pertussis

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

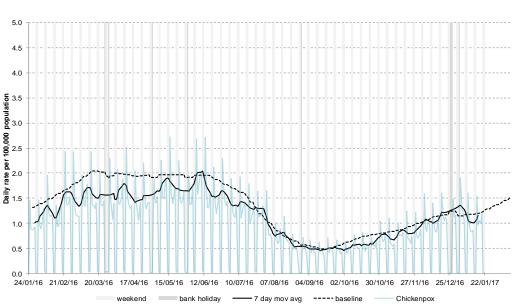


#### 16a: Pertussis by age

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



### 17: Chickenpox

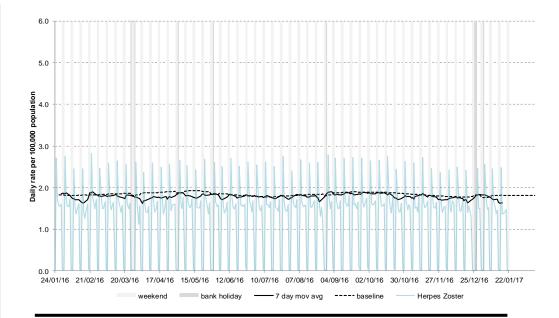


<sup>\* 7-</sup>day moving average adjusted for bank holidays.



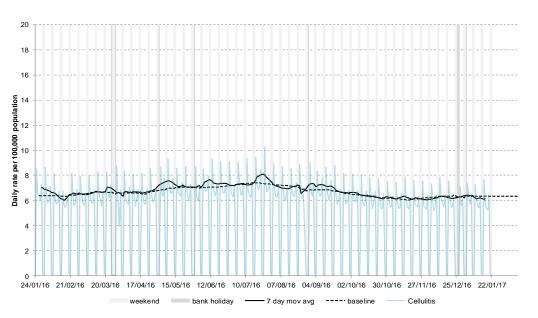
#### 18: Herpes zoster

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

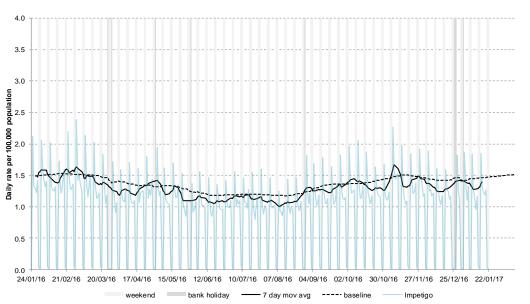


#### 19: Cellulitis

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



#### 20: Impetigo



<sup>\* 7-</sup>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.

#### Acknowledgements:

We thank and acknowledge the University of Nottingham, ClinRisk<sup>®</sup> 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

-analyses

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syndromic.surveillance @phe.gov.uk

<sup>&</sup>lt;sup>1</sup> Vega T et al. Influenza Other Respir Viruses. 2013;7(4):546-58.

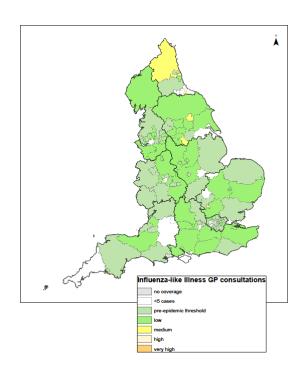
<sup>&</sup>lt;sup>2</sup> Green HK et al. Epidemiol Infect. 2015;143(1):1-12.

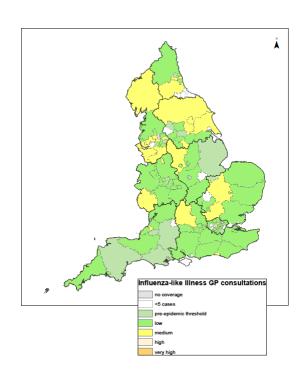
24 January 2017 Year: 2017 Week:

#### England

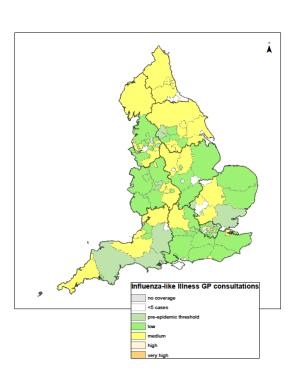
Influenzalike illness GP consultations by LA (England)

#### Week 52 Week 1

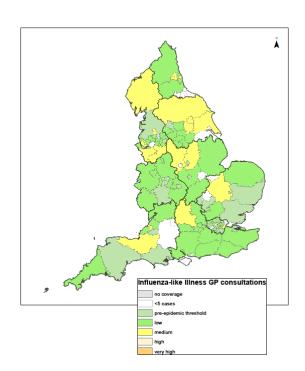




Week 2





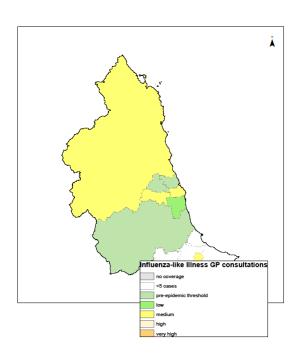


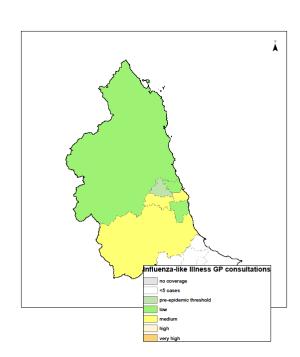
24 January 2017 Year: 2017 Week: 3

#### **North East**

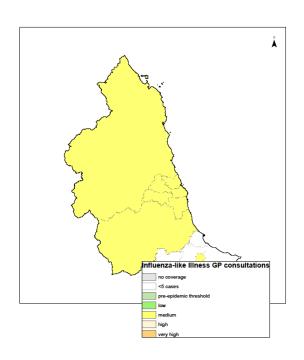
Influenzalike illness GP consultations by LA (North East PHE Centre)

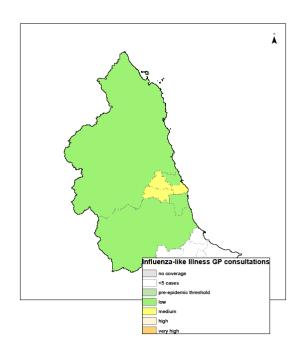
#### Week 52 Week 1





### Week 2 Week 3



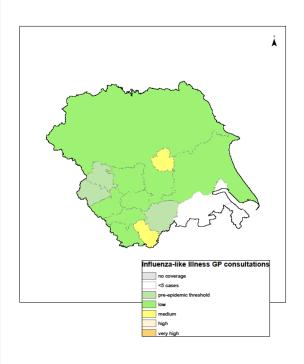


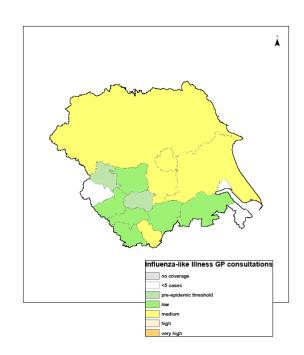
24 January 2017 Year: 2017 Week: 3

# Yorkshire & Humber

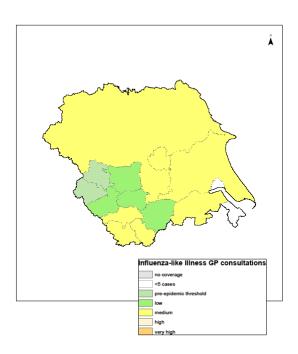
Influenzalike illness GP consultations by LA (Yorkshire & Humber PHE Centre)

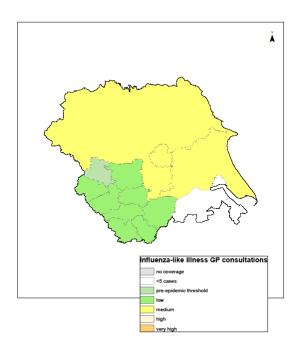
### Week 52 Week 1





Week 2 Week 3



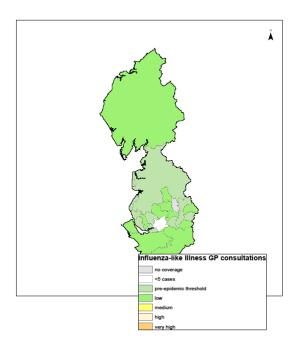


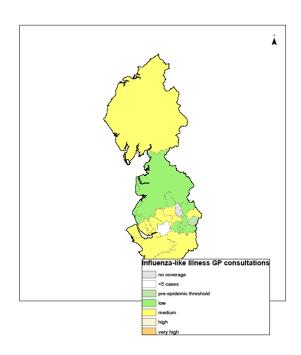
24 January 2017 Year: 2017 Week:

#### **North West**

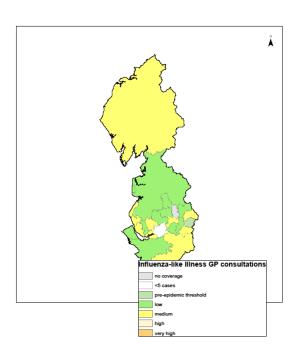
Week 52 Week 1

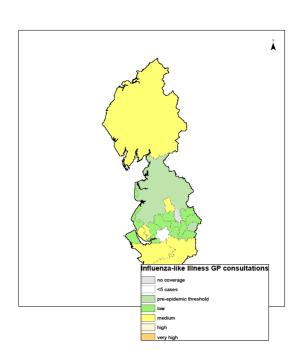
Influenzalike illness GP consultations by LA (North West PHE Centre)





Week 2 Week 3



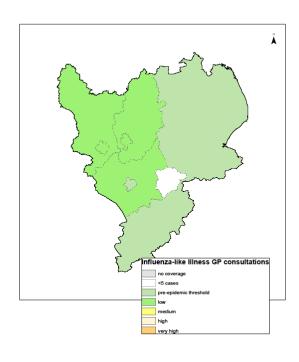


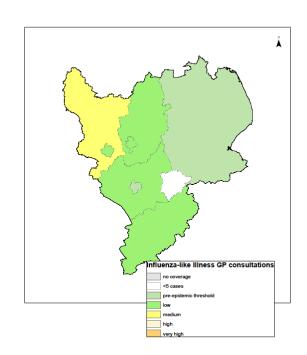
24 January 2017 Year: 2017 Week: 3

### East Midlands

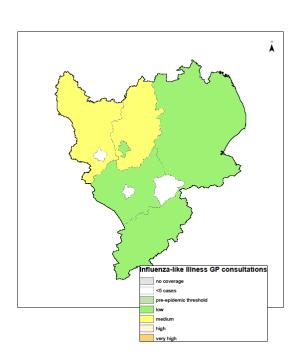
Influenzalike illness GP consultations by LA (East Midlands PHE Centre)

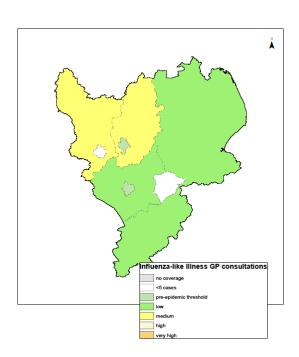






Week 2 Week 3



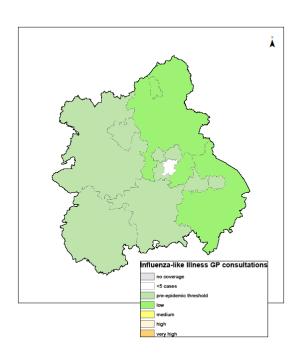


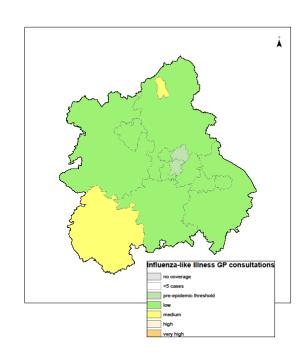
24 January 2017 Year: 2017 Week: 3

### West Midlands

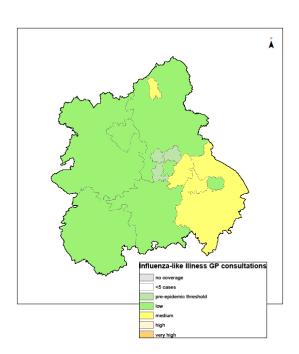
Influenzalike illness GP consultations by LA (West Midlands PHE Centre)

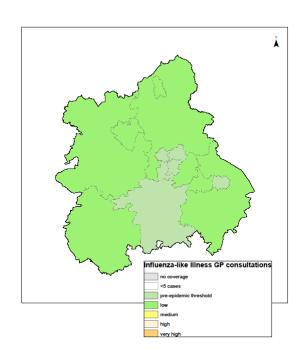






Week 2 Week 3

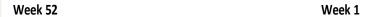


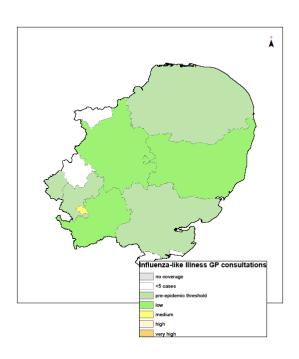


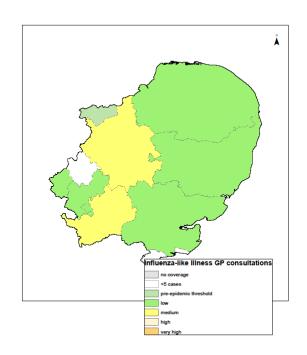
24 January 2017 Year: 2017 Week:

### East of England

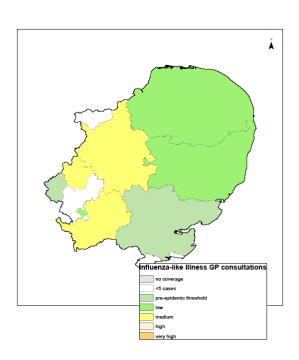
Influenzalike illness GP consultations by LA (East of England PHE Centre)

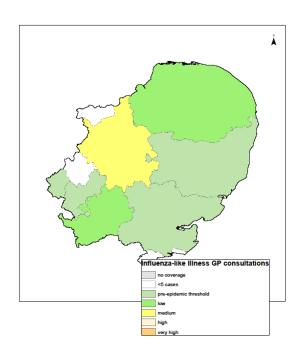






Week 2 Week 3



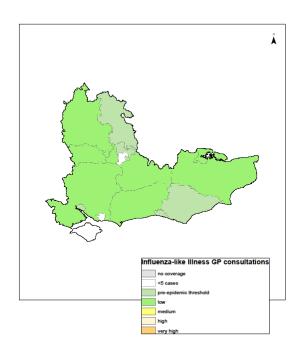


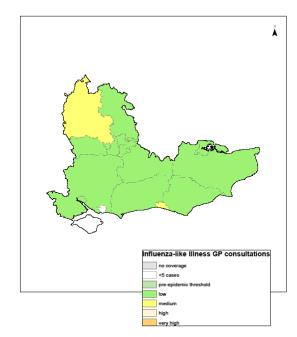
24 January 2017 Year: 2017 Week: 3

#### **South East**

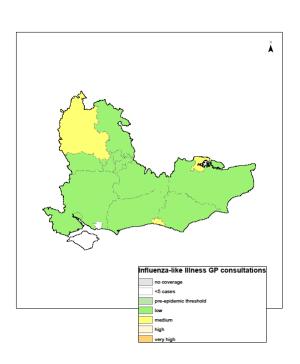
Week 52 Week 1

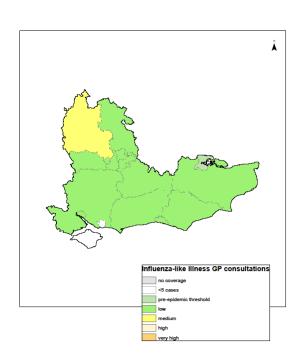
Influenzalike illness GP consultations by LA (South East PHE Centre)





Week 2 Week 3



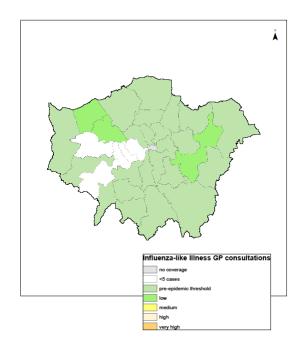


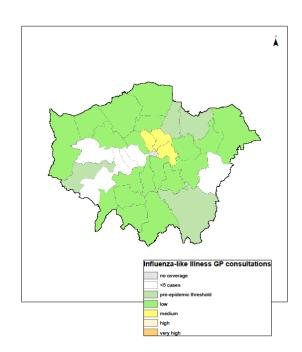
24 January 2017 Year: 2017 Week: 3

#### London

Week 52 Week 1

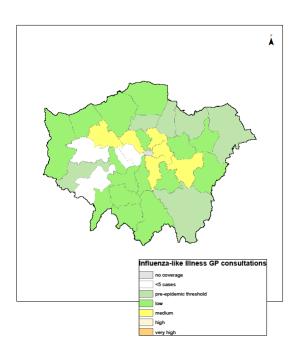
Influenzalike illness GP consultations by LA (London PHE Centre)

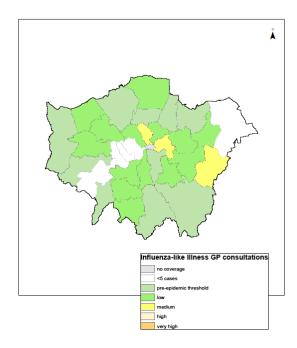




Week 2

Week 3





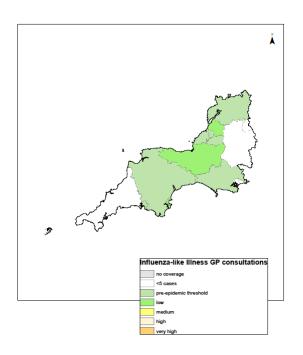
24 January 2017 Year: 2017 Week: 3

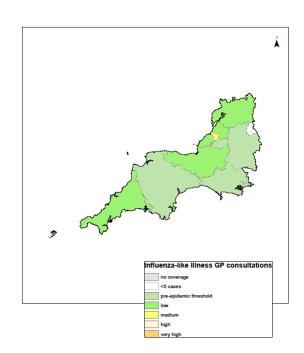
Week 1

#### **South West**

Week 52

Influenzalike illness GP consultations by LA (South West PHE Centre)





Week 2 Week 3

