

# **GP In Hours**

Syndromic Surveillance System: England

#### 20 December 2016

In This Issue:

Key messages.

Diagnostic indicators at a glance.

GP practices and denominator population.

National syndromic indicators.

Notes and further

information.

Appendix.

#### Year: 2016 Week: 50

### Key messages

Data to: 18 December 2016

There was a further small increase in GP consultations for influenza-like illness during week 50, however levels remain within seasonally expected limits (figure 2).

There was a small decrease in vomiting during week 50, particularly in children under 5 years (figures 8, 8a, 9 & 9a).

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 and Action http://www.metoffice.gov.uk/weather/uk/coldweatheralert/

#### Diagnostic indicators at a glance:

<b>J J</b>		
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	similar to baseline levels
Lower respiratory tract infection	increasing	similar to baseline levels
Pneumonia	increasing	similar to baseline levels
Gastroenteritis	no trend	above baseline levels
Vomiting	no trend	above baseline levels
Diarrhoea	no trend	similar to baseline levels
Severe asthma	increasing	above 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	similar to baseline levels
Impetigo	decreasing	below baseline levels

#### GP practices and denominator population:

Year	Week	GP Practices Reporting**	Population size**
2016	50	4,076	32.1 million

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

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#### 20 December 2016

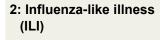
#### 1: Upper respiratory tract infection (URTI)

160

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

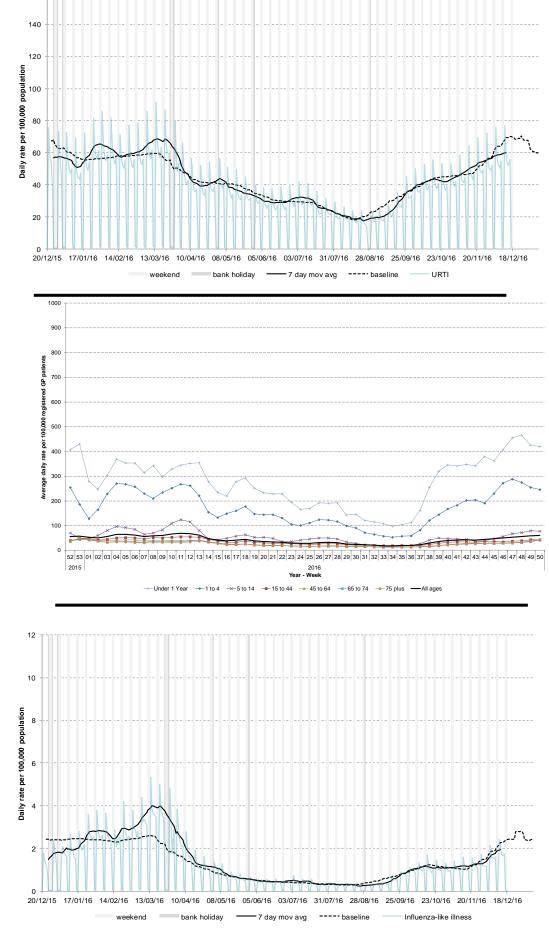
#### 1a: Upper respiratory tract infection by age

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



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

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



### **GP In Hours**

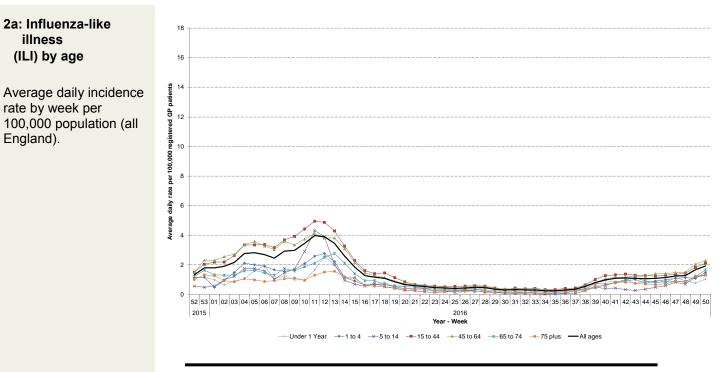
#### 20 December 2016

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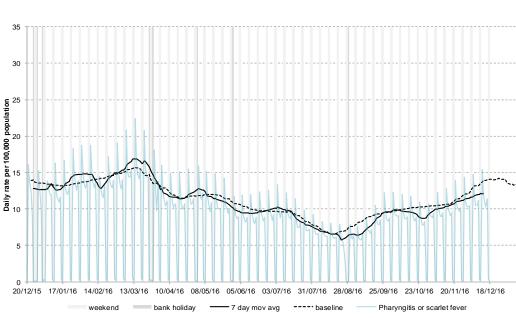
## GP In Hours

'ear: 2016 Week: 50



#### 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.

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## **GP In Hours**

Year: 2016 Week: 50

#### 4: Scarlet fever

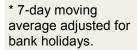
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, based on a population denominator of approximately 5.5 million patients).

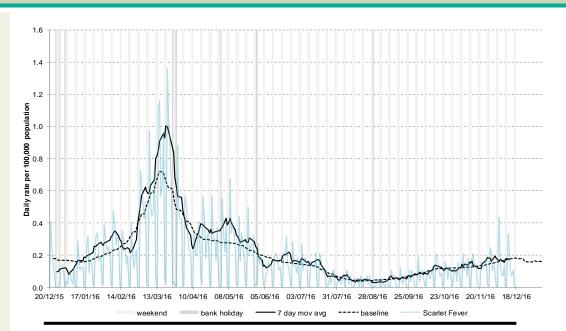
## 4a: Scarlet fever by age

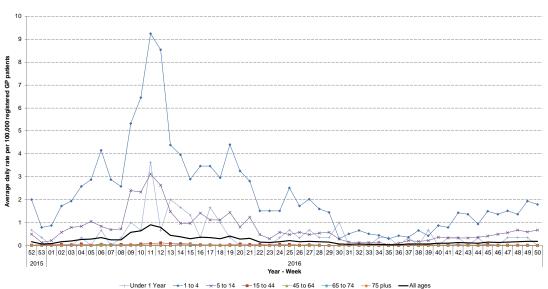
Average daily incidence rate by week per 100,000 population (all England) based on a population denominator of approximately 5.5 million patients).

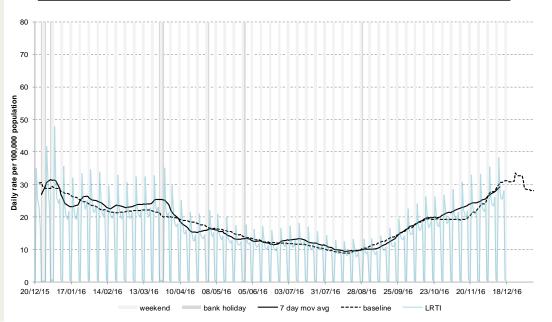
#### 5: Lower respiratory tract infection (LRTI)

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









#### 6: Pneumonia

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

1.2

1.0

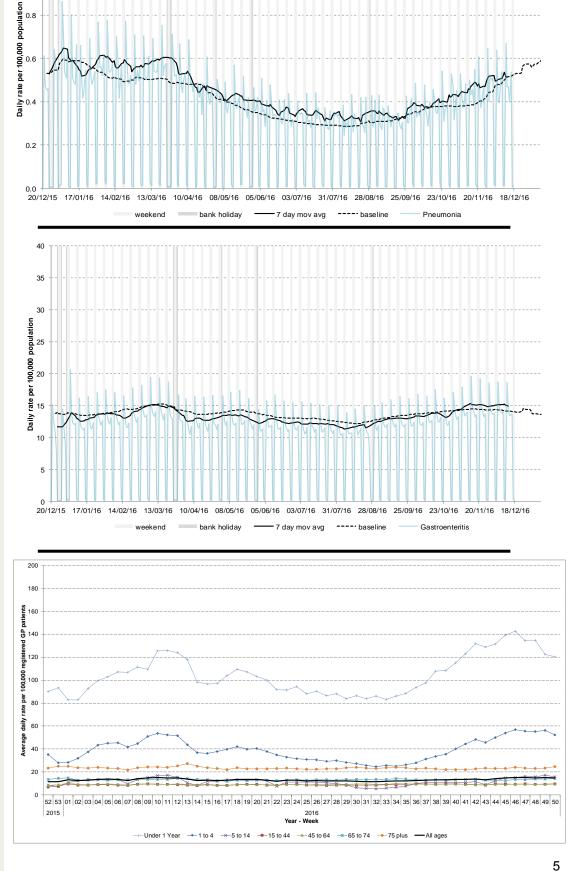
#### 7: Gastroenteritis

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



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

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



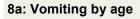
### **GP In Hours**

#### 20 December 2016

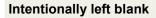
#### 8: Vomiting

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages). 12

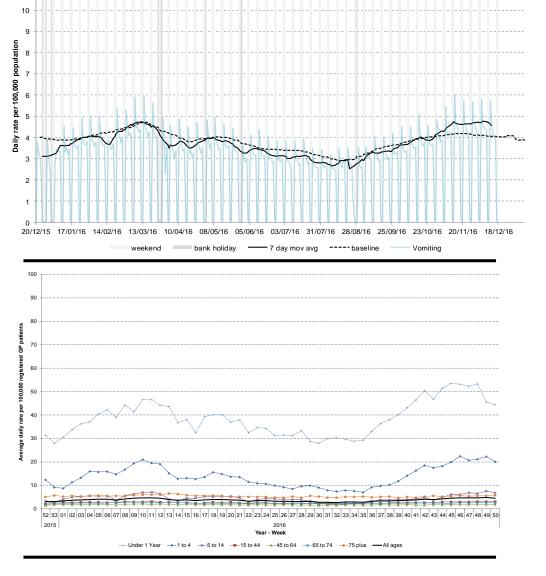
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Average daily incidence rate by week per 100,000 population (all England).



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



/ear: 2016 Week: 50

#### 9: Diarrhoea

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

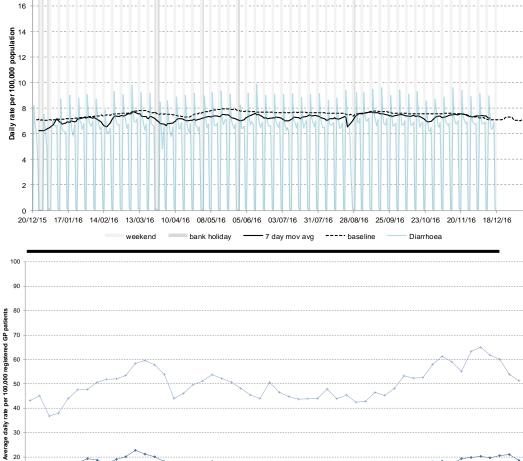
20

18

2015

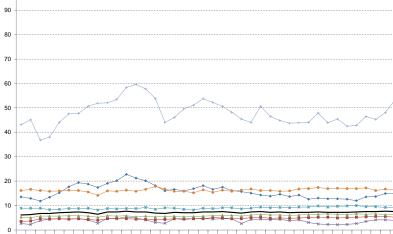


Average daily incidence rate by week per 100,000 population (all England).



52 53 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

2016 Year - Week ---- Under 1 Year ---- 1 to 4 ----- 5 to 14 ----- 15 to 44 ----- 45 to 64 ------ 65 to 74 ------ 75 plus ------ All ages



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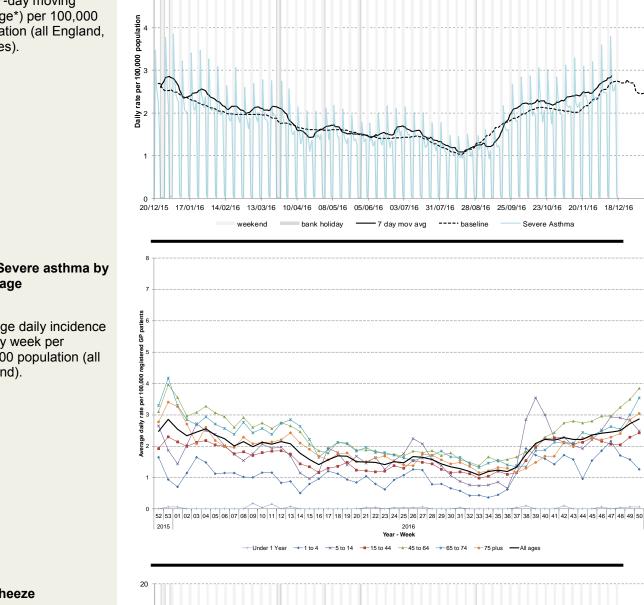
\* 7-day moving average adjusted for bank holidays.

## **GP In Hours**

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### **GP In Hours**



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#### 10: Severe asthma

6

5

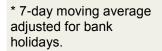
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).

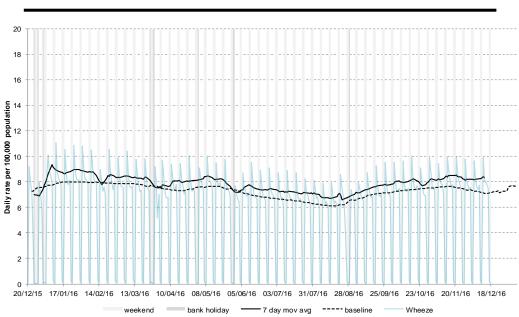
#### 10a: Severe asthma by age

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).





#### 20 December 2016

#### 11a: Wheeze by age

40

35

30

25

20

10

Average daily rate per 100,000 registered GP patients

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



### (and 7-day moving average\*) per 100 (

Daily incidence rate

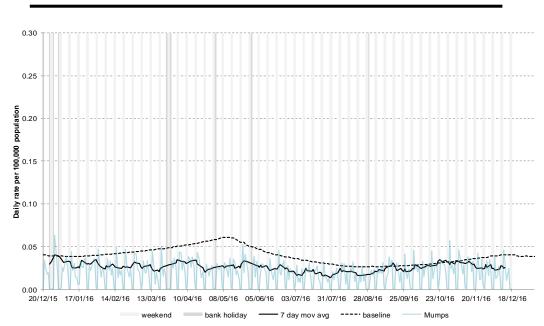
12: Conjunctivitis

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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Year: 2016 Week: 5

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#### 20 December 2016

#### 14: Measles

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages). 0.16

0.14

0.12

Alia Daily Daily

0.02

0.00

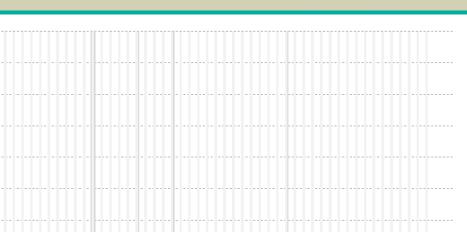
20/12/15 17/01/16

14/02/16

13/03/16

weekend

bank holiday



10/04/16 08/05/16 05/06/16 03/07/16 31/07/16 28/08/16 25/09/16 23/10/16 20/11/16

7 day mov avg

---- baseline

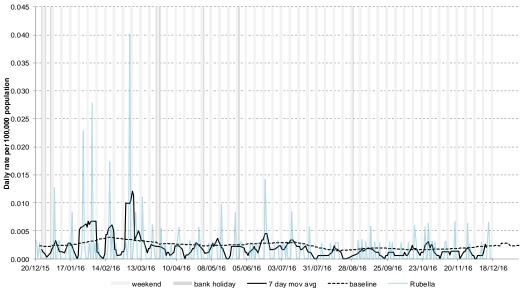
Measles

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#### 15: Rubella

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

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



### **GP In Hours**

18/12/16

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#### 16: Pertussis

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

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2015

Under 1 Year

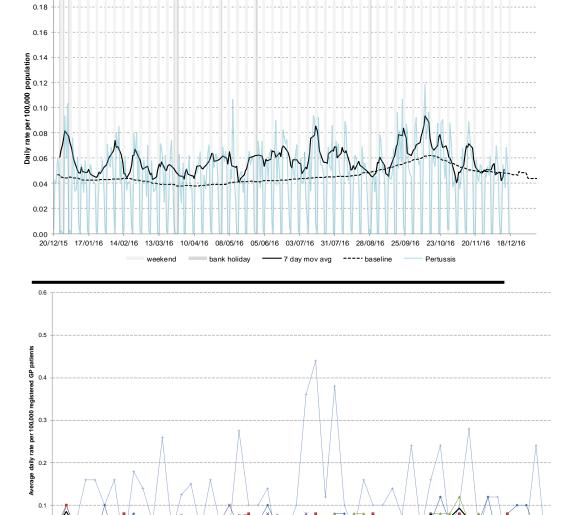
#### 16a: Pertussis by age

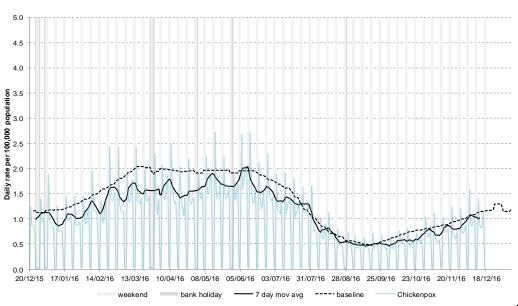
Average daily incidence rate by week per 100,000 population (all England).

### 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.





52 53 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 2016 Week

Year

### **GP In Hours**

#### 20 December 2016

#### 18: Herpes zoster

Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages). 6.0

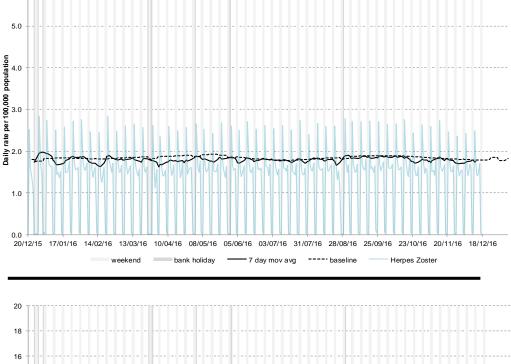
#### 19: Cellulitis

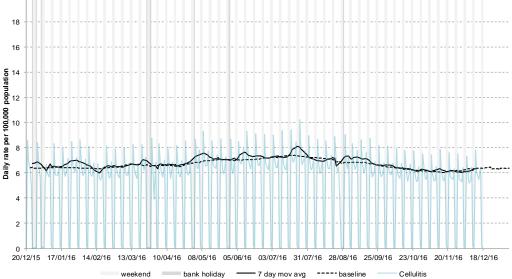
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).

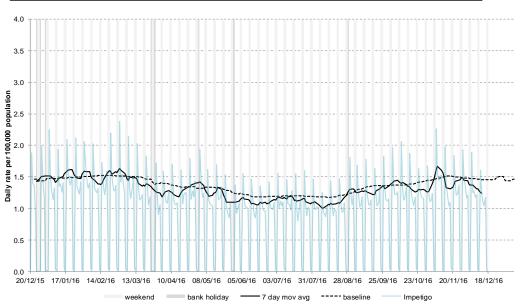


Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).

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



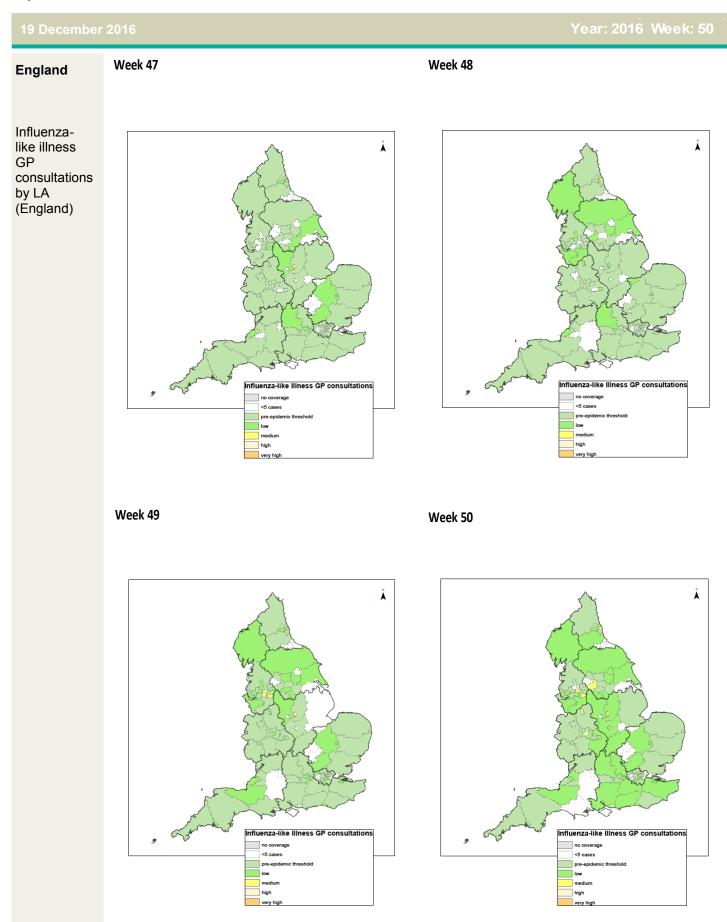




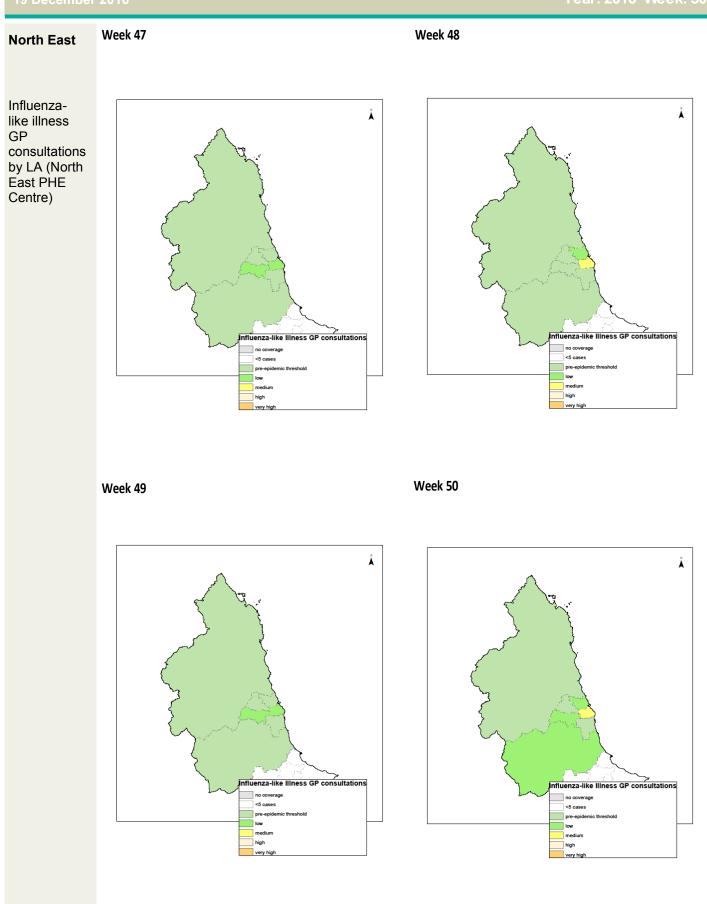
## **GP In Hours**

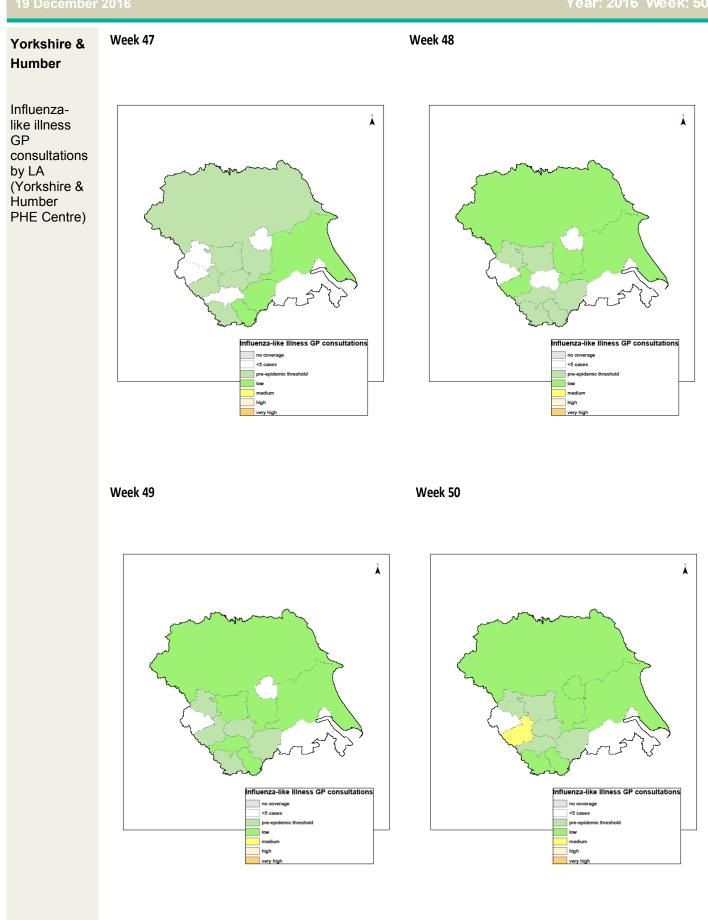
Year: 2016 Week: 50

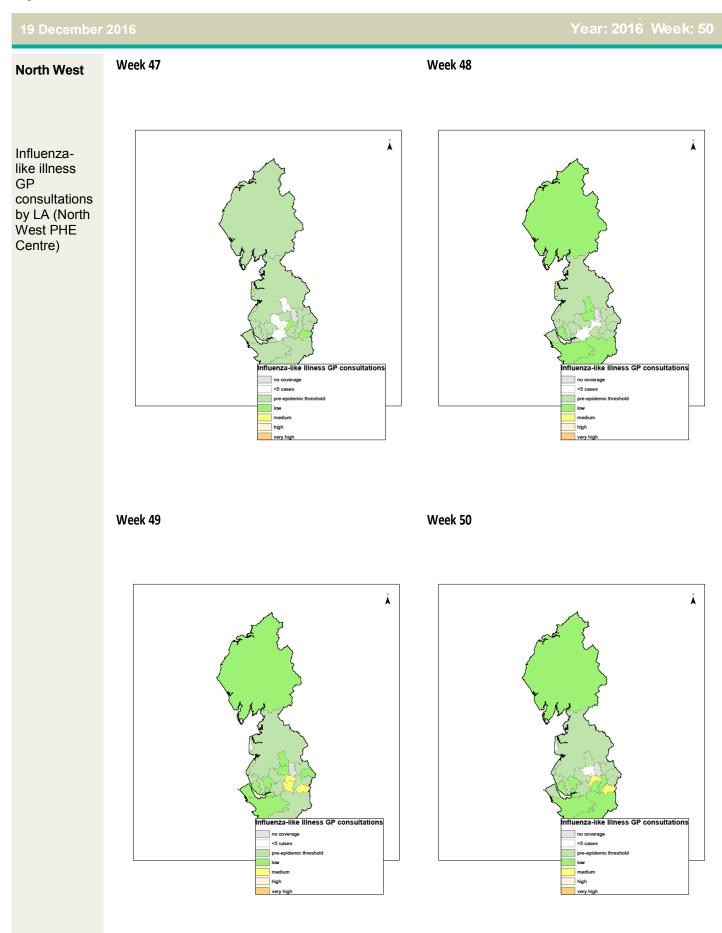
20 December 2016 Year: 2016 Week: 50			
Notes and further information	<ul> <li>The Public Health England GP in hours surveillance system is a syndromic surveillance system monitoring community-based morbidity recorded by GP practices.</li> <li>GP consultation data are analysed on a daily basis to identify 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</li> </ul>		
	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.		
	<ul> <li>This system captures anonymised GP morbidity data from two GP clinical software systems, EMIS, from version 1 of the QSurveillance® database, and TPP SystmOne.</li> </ul>		
	• 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.		
	<ul> <li>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.</li> </ul>		
	<ol> <li><sup>1</sup> Vega T et al. Influenza Other Respir Viruses. 2013;7(4):546-58.</li> <li><sup>2</sup> Green HK et al. Epidemiol Infect. 2015;143(1):1-12.</li> </ol>		
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		
Contact ReSST: syndromic.surveillance @phe.gov.uk	6 <sup>th</sup> Floor, 5 St Philip's Place, Birmingham, B3 2PW <b>Tel:</b> 0344 225 3560 > Option 4 > Option 2 <b>Fax:</b> 0121 236 2215 <b>Web:</b> <u>https://www.gov.uk/government/collections/syndromic-surveillance-systems-and</u> <u>-analyses</u>		



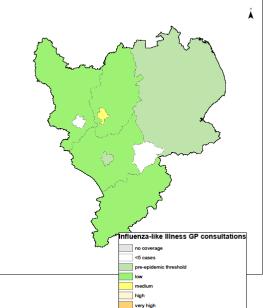
#### Year: 2016 Week: 50







### Week 47 Week 48 East Midlands Å Å Influenzalike illness GP consultations by LA (East Midlands PHE Centre) nza-like Illness GP consultations enza-like Illness GP consultations no coverage no coverage <5 cases <5 cases pre-epide pre-epide low mediun medium high high /ery h very h Week 49 Week 50 Ă Ă



### Week 48 Week 47 West Midlands Ă Å Influenzalike illness GP consultations by LA (West Midlands PHE Centre) nfluenza-like Illness GP consultations fluenza-like Illness GP consultations no coverage <5 cases <5 ci pre-ep low ow mediur high high very h very Week 49 Week 50 Ă Ă

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

Influenza-like Illness GP consultations

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Influenza-like Illness GP consultations

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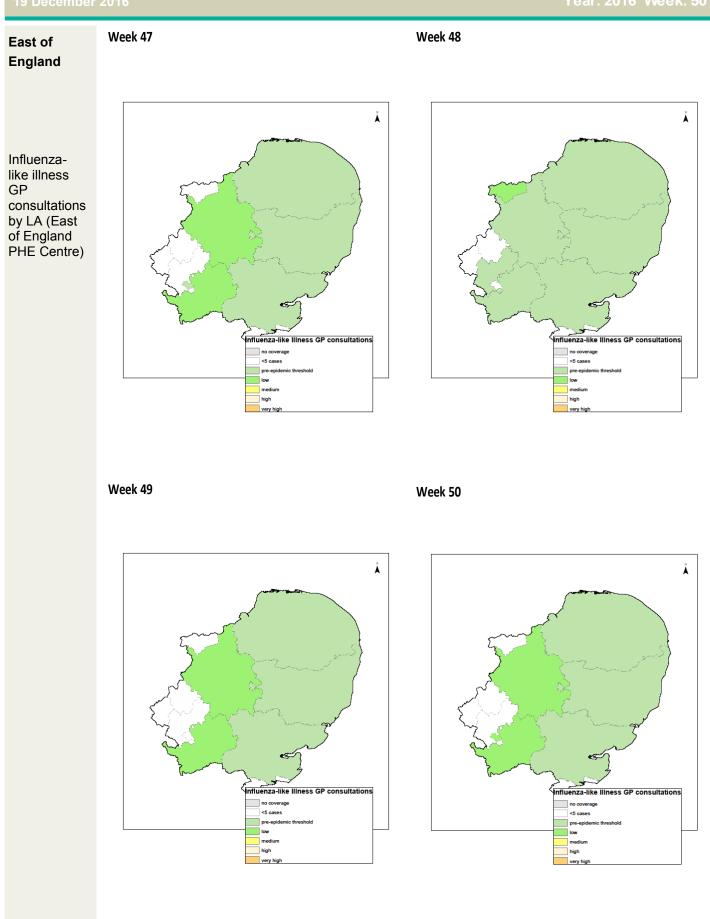
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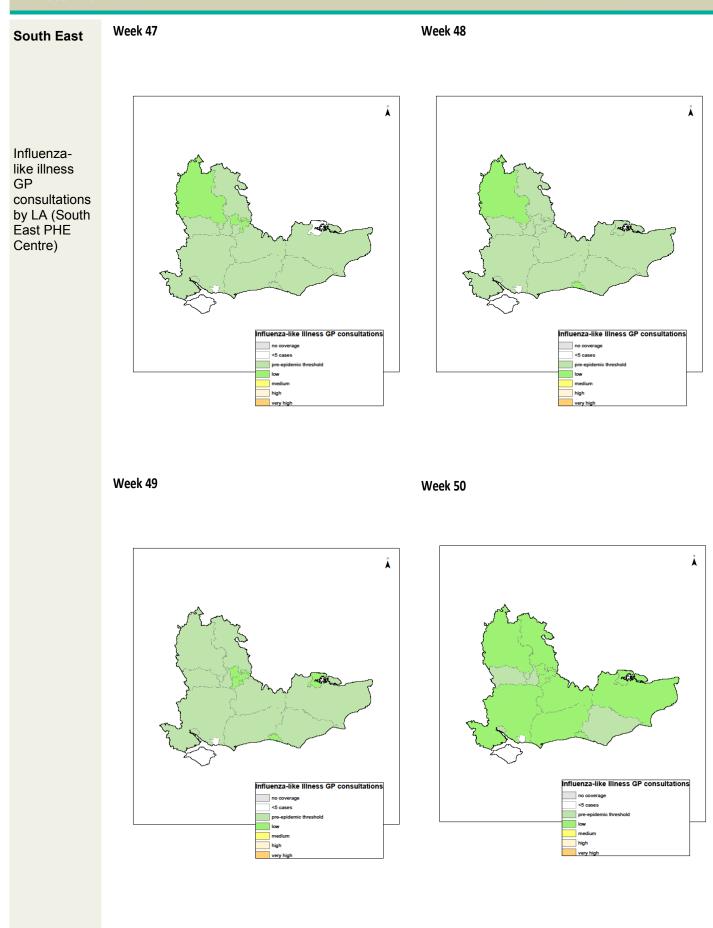
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## **GP In Hours Appendix**



#### Year: 2016 Week: 50





#### Year: 2016 Week: 50

