

# **GP In Hours**

Syndromic Surveillance System: England

### Key messages

Data to: 02 April 2017

There were increases in allergic rhinitis during week 13, in line with seasonally expected levels (figure 21).

GP consultations for chickenpox continued to increase, mainly in children aged 0-14 years (figures 17 & 17a).

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:**

| 0          | 5                       |            |                            |
|------------|-------------------------|------------|----------------------------|
|            | ndicator                | Trend      | Level                      |
| Upper resp | iratory tract infection | no trend   | below baseline levels      |
|            | Influenza-like illness  | no trend   | below baseline levels      |
|            | Pharyngitis             | increasing | below baseline levels      |
|            | Scarlet fever           | increasing | similar to baseline levels |
| Lower resp | iratory tract infection | no trend   | below baseline levels      |
|            | Pneumonia               | no trend   | 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                  | decreasing | above baseline levels      |
|            | Conjunctivitis          | no trend   | below baseline levels      |
|            | Mumps                   | no trend   | below baseline levels      |
|            | Measles                 | no trend   | similar to baseline levels |
|            | Rubella                 | decreasing | below baseline levels      |
|            | Pertussis               | increasing | above baseline levels      |
|            | Chickenpox              | increasing | above baseline levels      |
|            | Herpes zoster           | no trend   | similar to baseline levels |
|            | Cellulitis              | no trend   | similar to baseline levels |
|            | Impetigo                | no trend   | similar to baseline levels |
|            | Allergic rhinitis       | increasing | similar to baseline levels |
|            |                         |            |                            |

### GP practices and denominator population:

| Year | Week | GP Practices Reporting** | Population size** |
|------|------|--------------------------|-------------------|
| 2017 | 13   | 3,540                    | 27.7 million      |

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

In This Issue:

Key messages.

**Diagnostic indicators** at a glance.

GP practices and

denominator population.

National syndromic indicators.

Notes and further

information.

Appendix.

## Dublic Health England

### 03 April 2017

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

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

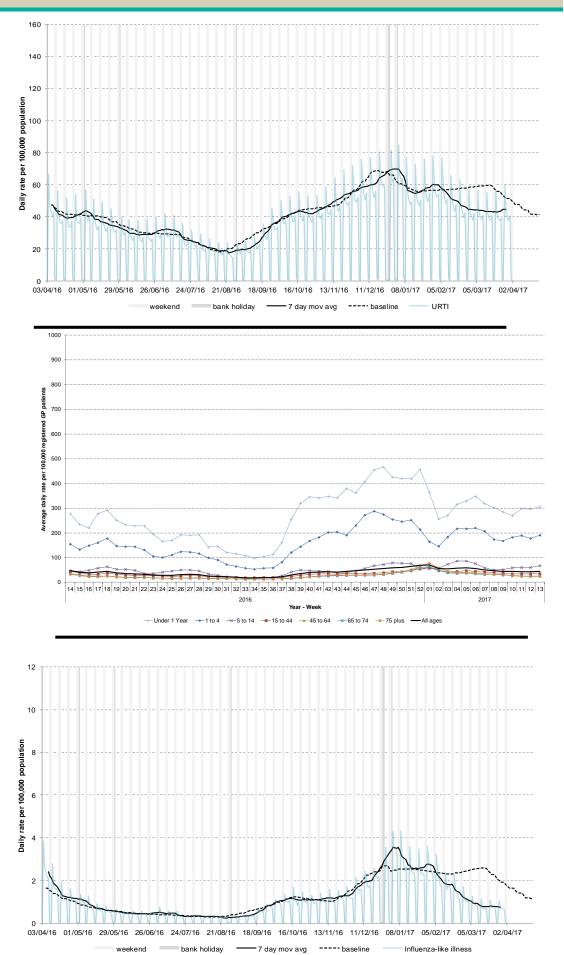
#### 1a: Upper respiratory tract infection by age

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



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

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



### Nublic Health England

### 03 April 2017

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

18

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

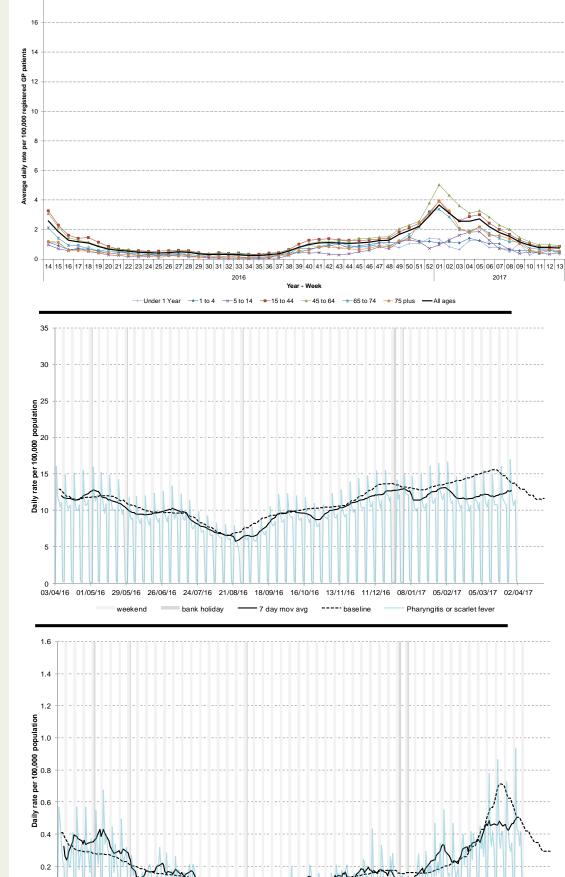
#### 3: Pharyngitis or scarlet fever

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.



16/10/16 13/11/16 11/12/16 08/01/17

---- baseline

· 7 day mov avq

0.0 03/04/16 01/05/16 29/05/16 26/06/16 24/07/16 21/08/16 18/09/16

weekend

bank holiday

### **GP In Hours**

05/02/17 05/03/17 02/04/17

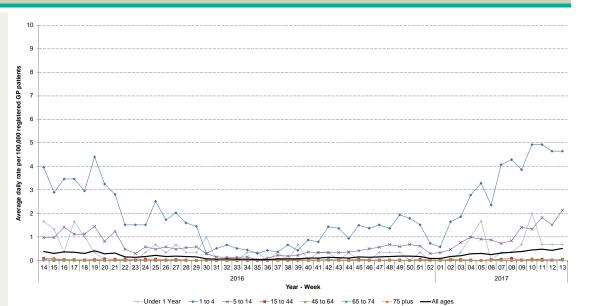
Scarlet Fever

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Public Health England

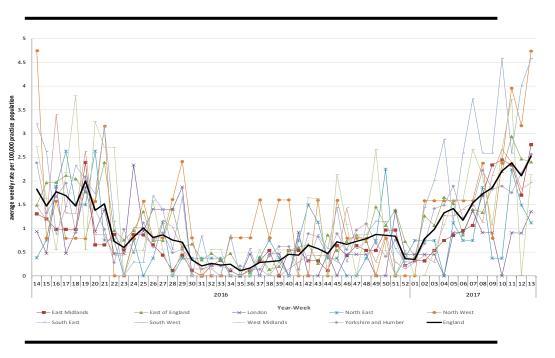
## 4a: Scarlet fever by age

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



#### 4b: Scarlet fever by PHE centre

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



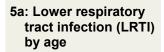
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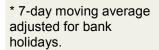
Year: 2017 Week: 13

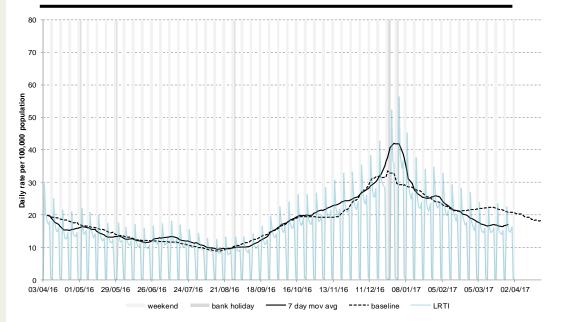
## 5: Lower respiratory tract infection (LRTI)

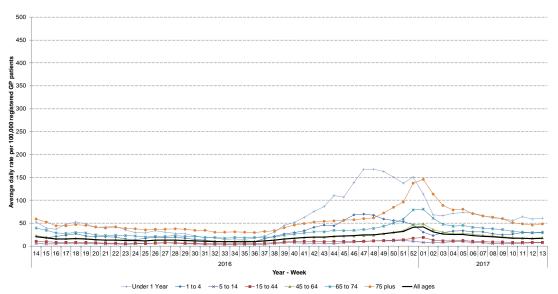
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



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







#### 6: Pneumonia

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

1.2

### 1.0 0.2 0.0 03/04/16 01/05/16 29/05/16 26/06/16 24/07/16 21/08/16 18/09/16 16/10/16 13/11/16 11/12/16 08/01/17 05/02/17 05/03/17 02/04/17 weekend bank holiday 7 day mov avg ---- baseline Pneumonia

### 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).

40

35

30

Daily rate per 100,000 population 57 12

10

5

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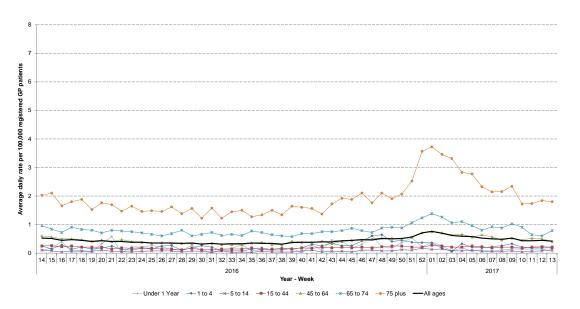
\* 7-day moving average adjusted for bank holidays.

weekend

- 7 day mov avg

---- baseline

Gastroenteritis



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Public Health England

### 7a: Gastroenteritis by age

200

180

**d GP patients** 140

edistered

100,000 100 rate per 1 80 daily 60 Average 40 20 0

100

90 80

70

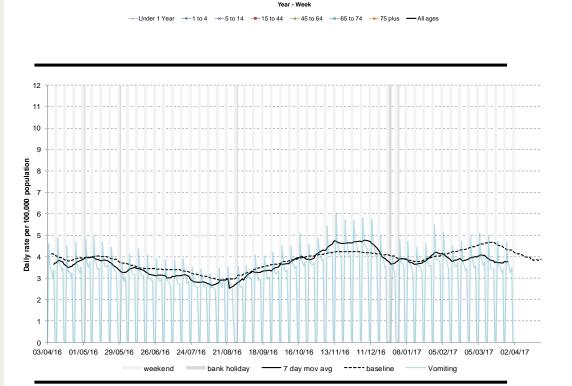
60 50 40 daily I 30 Average 20 10 E

0

patients

rate per 100,000 registered GP |

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



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 51 52 01 02 03 04 05 06 07 08 09 10 11 12 13

2016

### 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).

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

## **GP In Hours**

2017

2016

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 51 52 01 02 03 04 05 06 07 08 09 10 11 12 13

2017

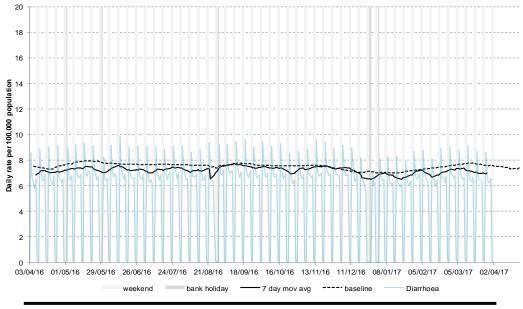
#### 9: Diarrhoea

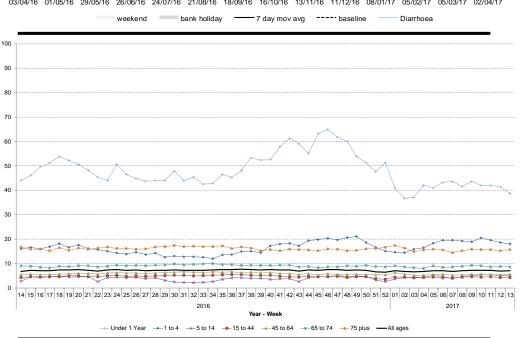
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).

### 9a. Diarrhoea by age

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

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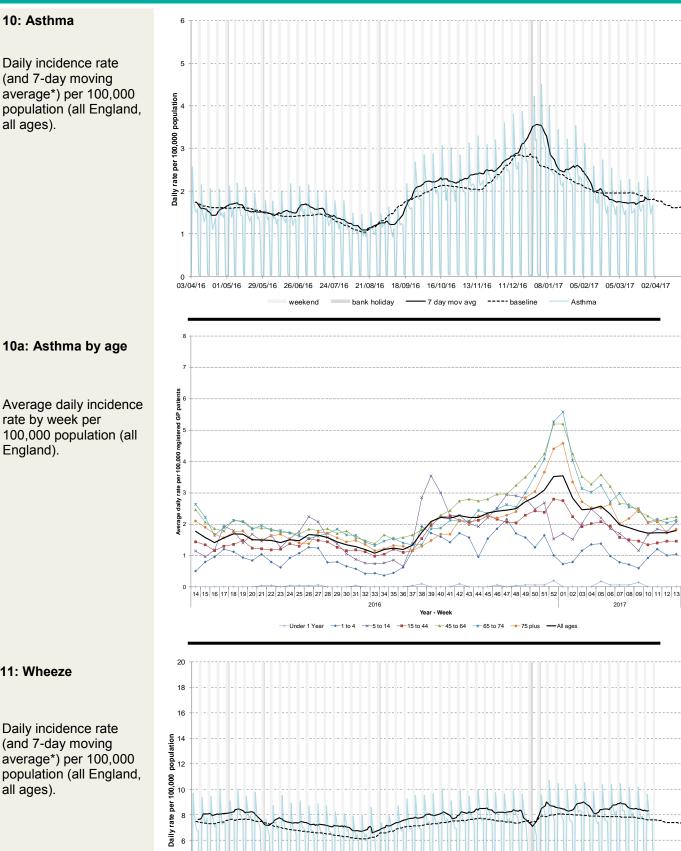




#### 10: Asthma

all ages).





03/04/16 01/05/16 29/05/16 26/06/16 24/07/16 21/08/16 18/09/16 16/10/16 13/11/16 11/12/16 08/01/17 05/02/17 05/03/17 02/04/17

7 day mov avg

---- baseline

Wheeze

bank holiday

weekend

### 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.

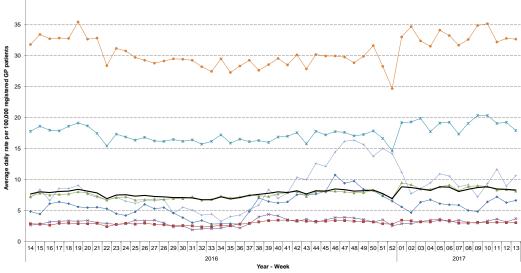
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#### 11a: Wheeze by age

40

Daily rate per 100,000 population

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



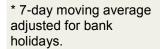
#### 12: Conjunctivitis

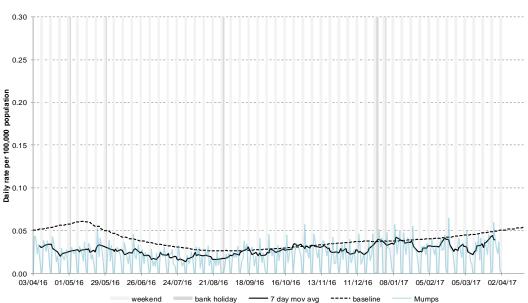
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



#### 13: Mumps

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





### **GP In Hours**

Year: 2017 Week: 13

#### WWW Public Health England

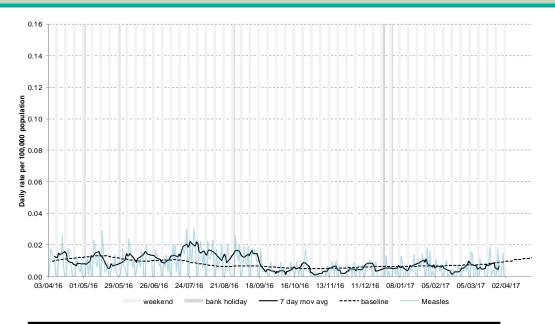
### 03 April 2017

#### 14: Measles

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



'ear: 2017 Week: 13

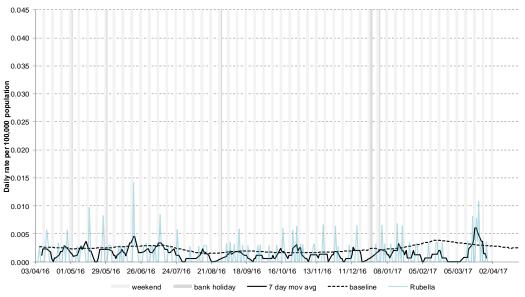


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### 15: Rubella

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

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

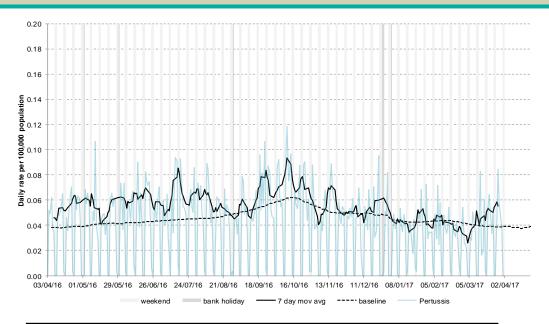


### **GP In Hours**

#### (ear: 2017 Week: 13

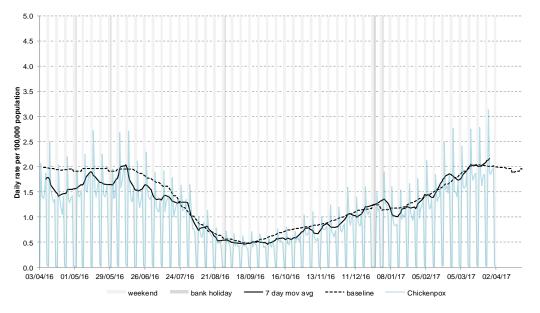
#### 16: Pertussis

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



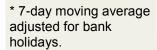
### 17: Chickenpox

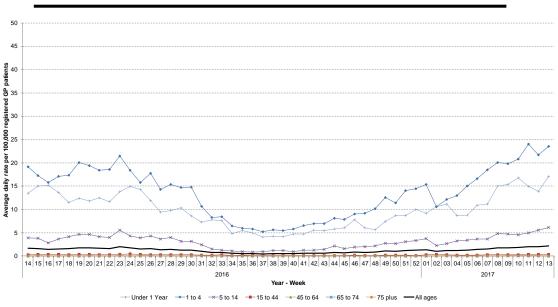
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



## 17a: Chickenpox by age

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





### 18: Herpes zoster

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

### 19: Cellulitis

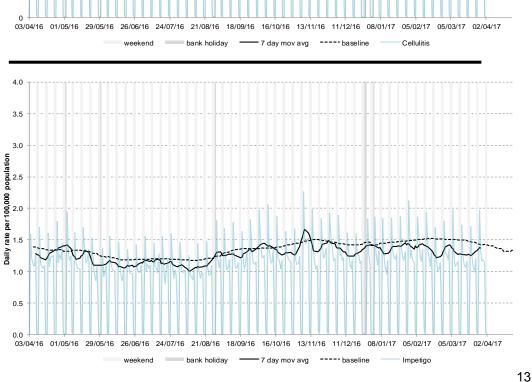
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



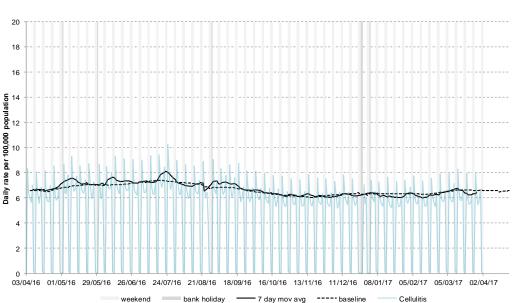
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).

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





#### 6.0 5.0 Daily rate per 100,000 population 0.0 0.0 0.0 0.0 1.0 0.0 03/04/16 01/05/16 29/05/16 26/06/16 24/07/16 21/08/16 18/09/16 16/10/16 13/11/16 11/12/16 08/01/17 05/02/17 05/03/17 02/04/17 bank holiday ---- baseline Herpes Zoster weekend 7 day mov avq

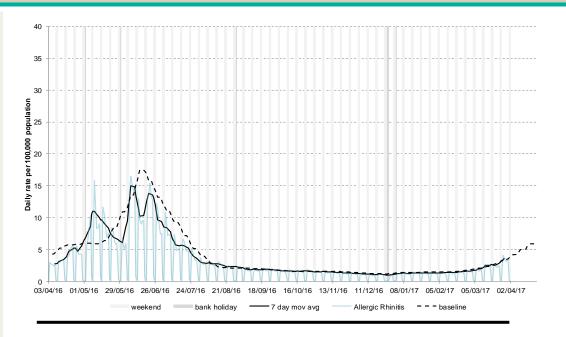


### **GP In Hours**

### 03 April 2017

### 21: Allergic rhinitis

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



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

Maps:

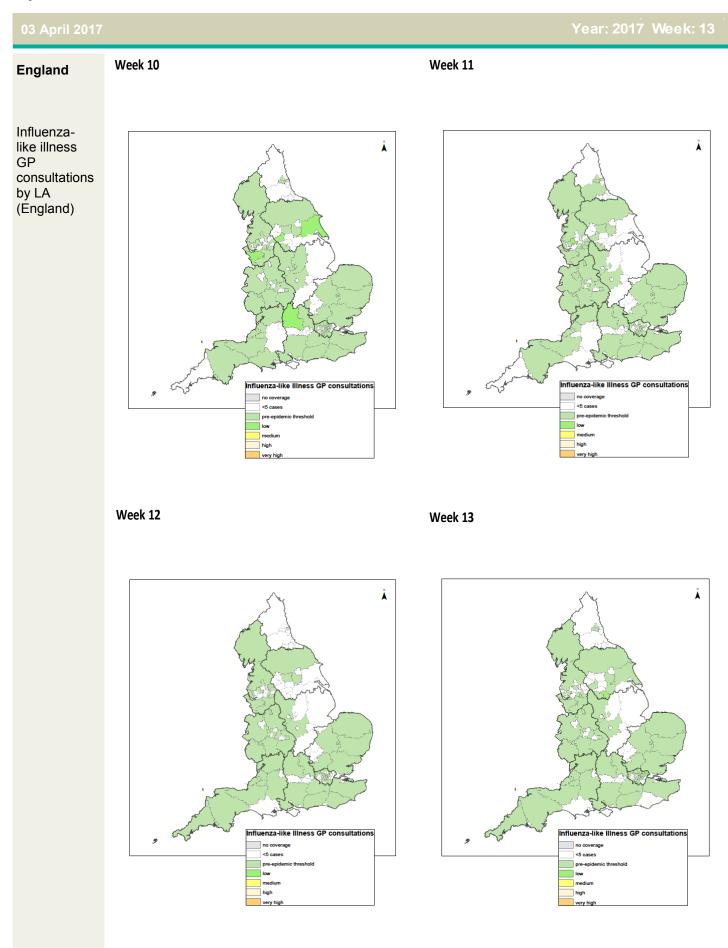
information

### Notes and further 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. From week 40 2015 the influenza-like illness thresholds illustrated in the bulletin appendix maps are calculated using the "Moving Epidemic Method" (MEM).<sup>1</sup> MEM is used as a standard methodology for setting influenza surveillance thresholds across Europe.<sup>2</sup> The ILI thresholds have been calculated separately for each of the nine PHE Centres to allow for structural differences between areas e.g. background rates are historically higher in London than other areas of England. The current ILI thresholds are based on six previous influenza seasons (excluding the 2009/10 H1N1 pandemic). In future, thresholds will be recalculated each year incorporating the latest season's data. The maps on the following pages contains Ordnance Survey data © Crown copyright and database right 2014. Contains National Statistics data © Crown copyright and database right 2014. <sup>1</sup> Vega T et al. Influenza Other Respir Viruses. 2013;7(4):546-58. <sup>2</sup> Green HK et al. *Epidemiol Infect.* 2015;**143**(1):1-12. We thank and acknowledge the University of Nottingham, ClinRisk<sup>®</sup> and the contribution of Acknowledgements: 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.

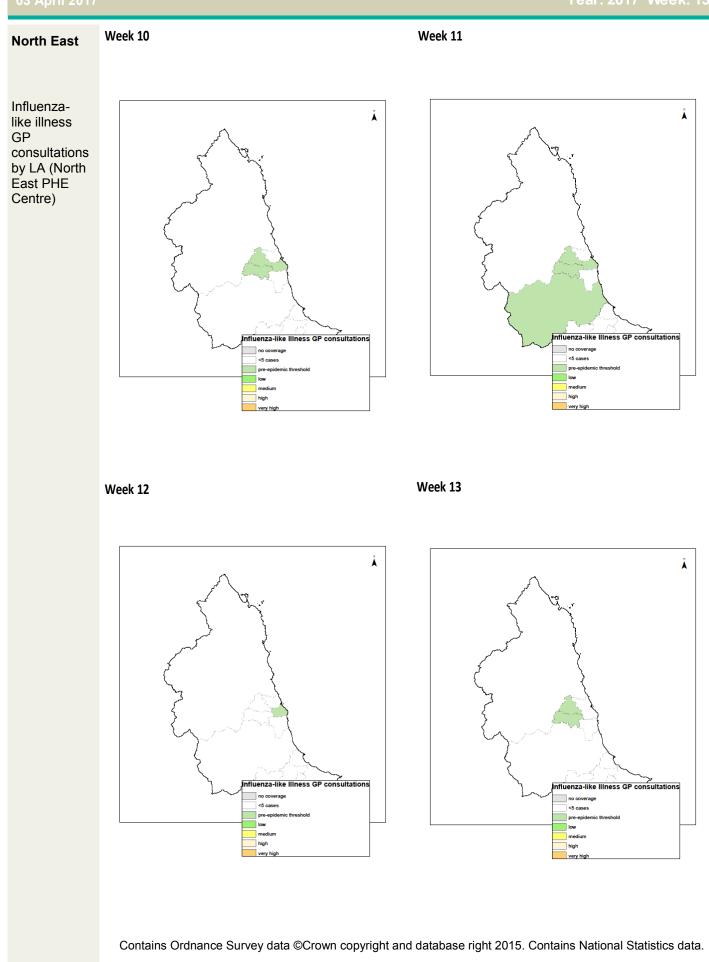
### GP In Hours Syndromic Surveillance System Bulletin.

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

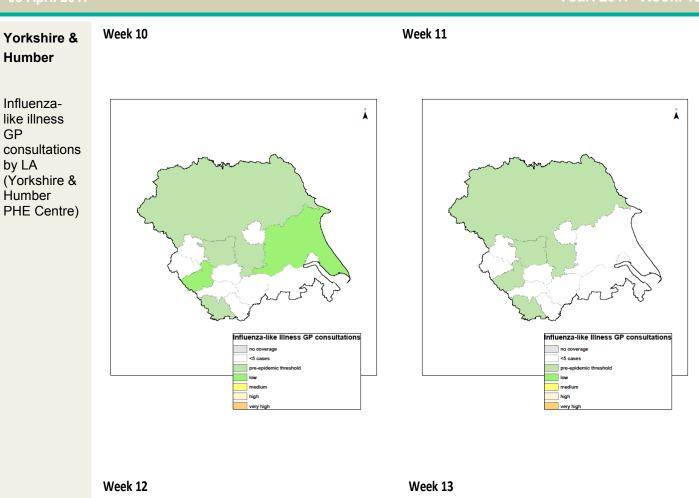
Produced by: PHE Real-time Syndromic Surveillance Team 6<sup>th</sup> Floor, 5 St Philip's Place, Birmingham, B3 2PW **Tel:** 0344 225 3560 > Option 4 > Option 2 Fax: 0121 236 2215 Web: https://www.gov.uk/government/collections/syndromic-surveillance-systems-and -analyses

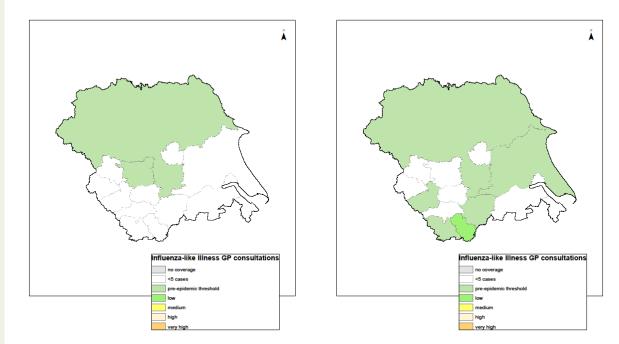


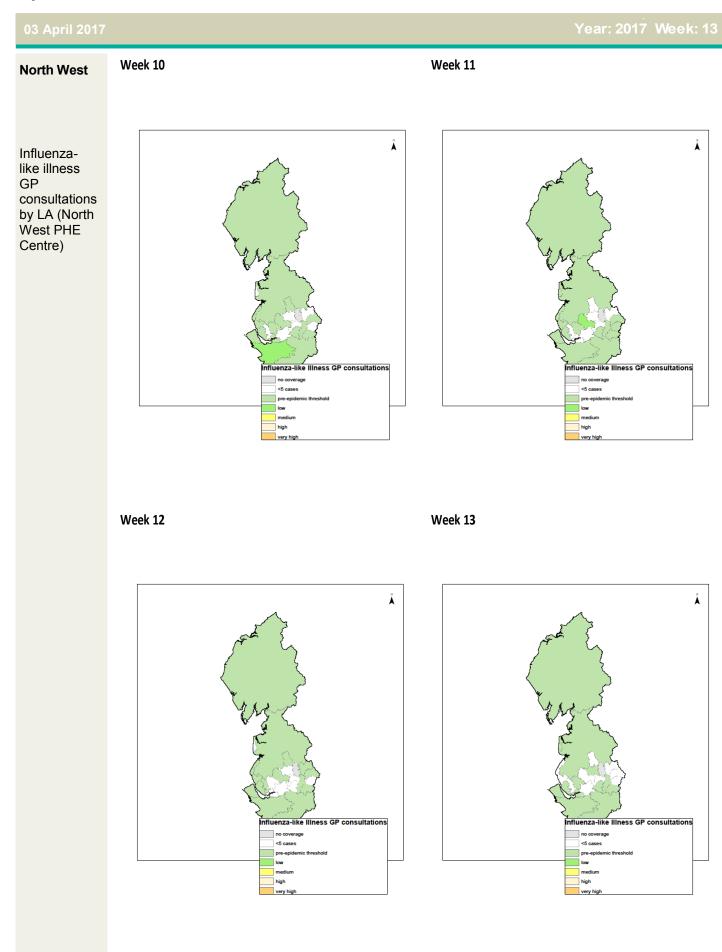
### Year: 2017 Week: 13

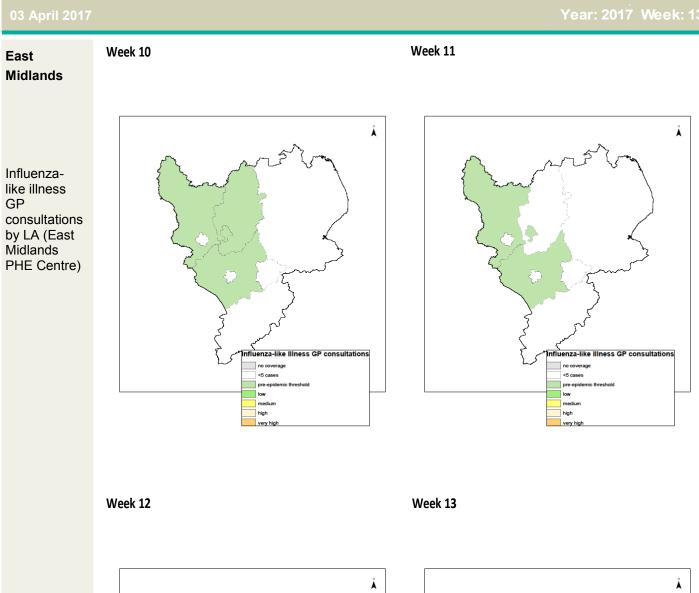


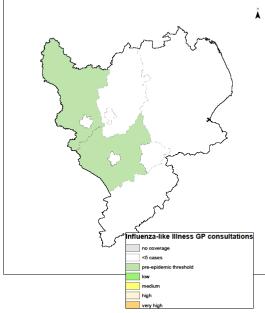
#### 03 April 2017

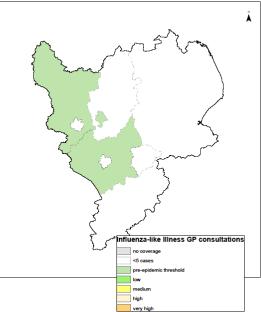


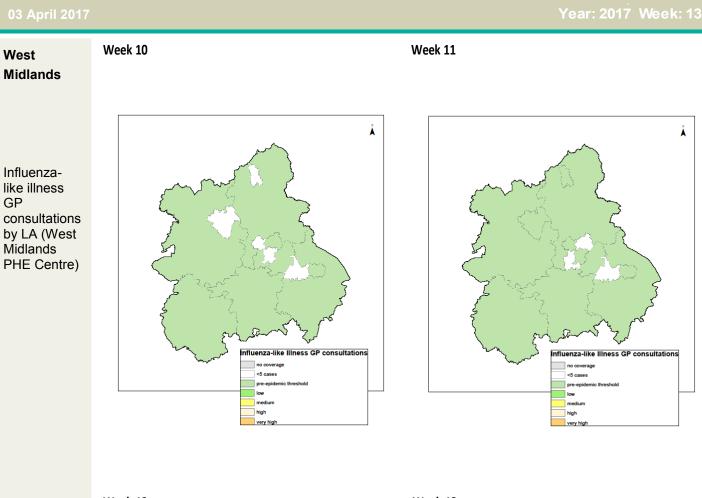






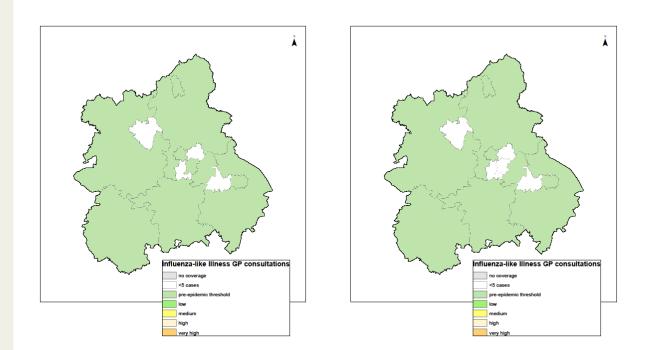






Week 12

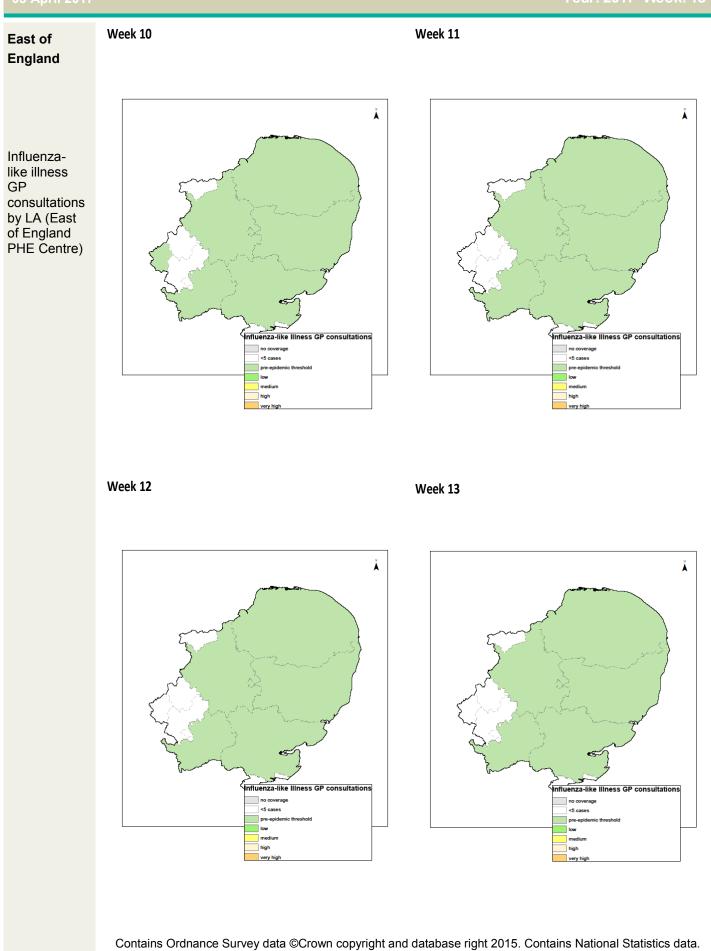
Week 13



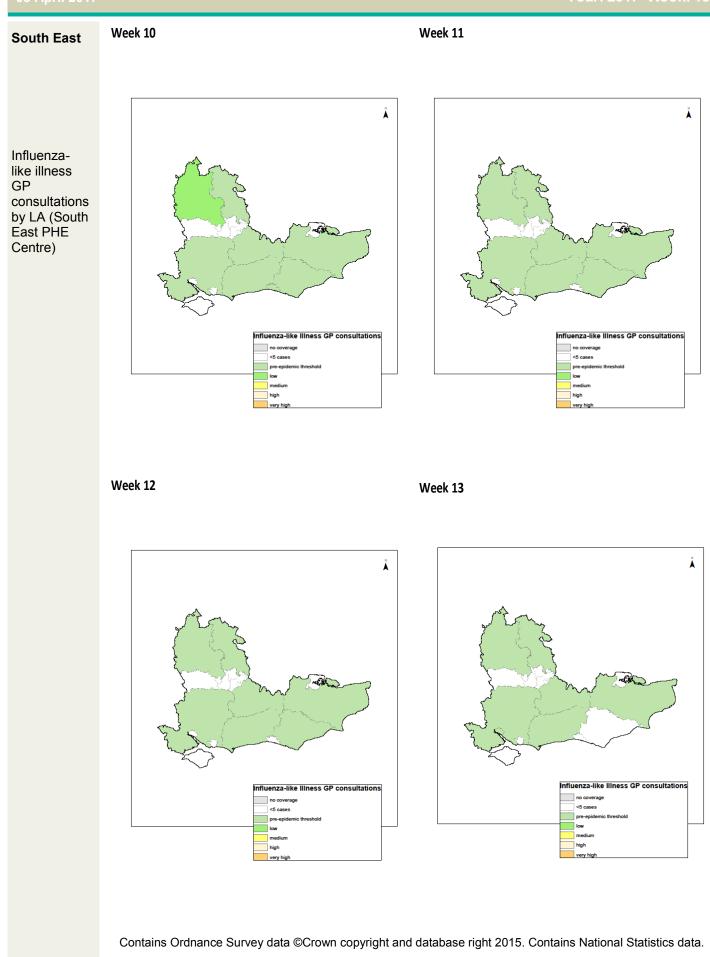
Nublic Health England

### **GP In Hours Appendix**





### Year: 2017 Week: 13



### Year: 2017 Week: 13



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#### Year: 2017 Week: 13

