

# **GP In Hours**

Syndromic Surveillance System: England

Data to: 16 September 2018

17 September 2018

Year: 2018 Week: 37

# In This Issue:

Key messages.

Diagnostic indicators at a glance.

GP practices and denominator population.

National syndromic indicators.

Notes and further information.

Appendix.

# Key messages

GP consultations for asthma in children aged 1-4 and 5-14 years increased during week 37 in line with seasonal expectations (figure 10a).

A Heat-Health Watch system operates in England from 1 June to 15 September each year. As part of the Heatwave Plan for England, the PHE Real-time Syndromic Surveillance team will be routinely monitoring the public health impact of hot weather using syndromic surveillance data during this period.

Heat-health watch level (current reporting week): Level 1 Summer preparedness <a href="http://www.metoffice.gov.uk/weather/uk/heathealth/">http://www.metoffice.gov.uk/weather/uk/heathealth/</a>

# Diagnostic indicators at a glance:

Indicator	Trend	Level
Upper respiratory tract infection	increasing	below baseline levels
Influenza-like illness	no trend	similar to baseline levels
Pharyngitis	increasing	below baseline levels
Scarlet fever	no trend	similar to baseline levels
Lower respiratory tract infection	increasing	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
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	no trend	below baseline levels
Chickenpox	no trend	similar to baseline levels
Herpes zoster	no trend	similar to baseline levels
Cellulitis	decreasing	below baseline levels
Impetigo	no trend	below baseline levels
Allergic rhinitis	no trend	below baseline levels
Heat/sunstroke	no trend	below baseline levels
Insect Bites	decreasing	below baseline levels

# GP practices and denominator population:

Year	Week	GP Practices Reporting**	Population size**
2018	37	3,141	26.9 million

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



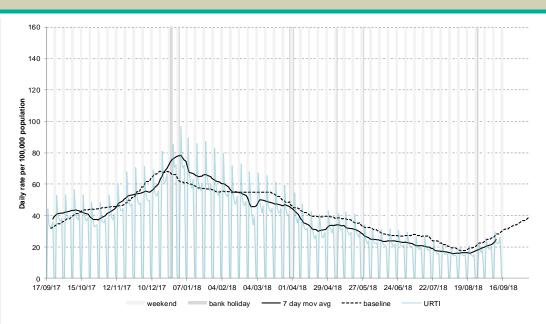


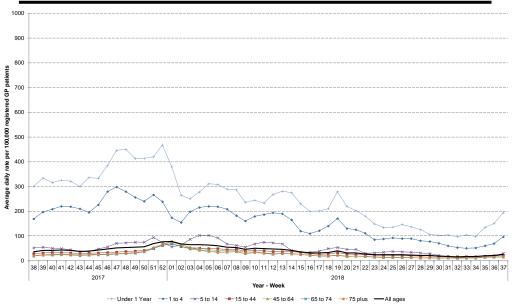
# 1: Upper respiratory tract infection (URTI)

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).





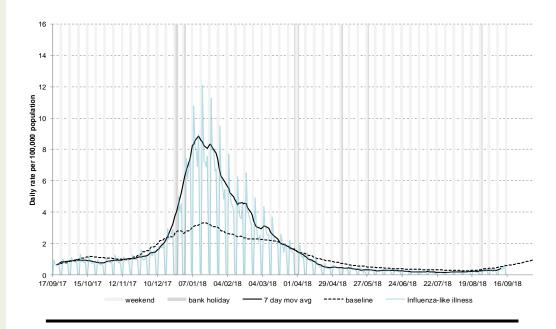
<sup>\* 7-</sup>day moving average adjusted for bank holidays.





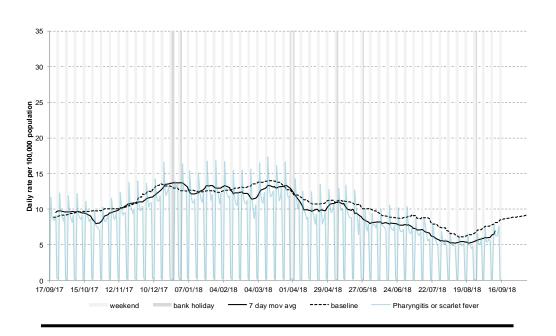
# 2: Influenza-like illness (ILI)

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



# 3: Pharyngitis or scarlet fever

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

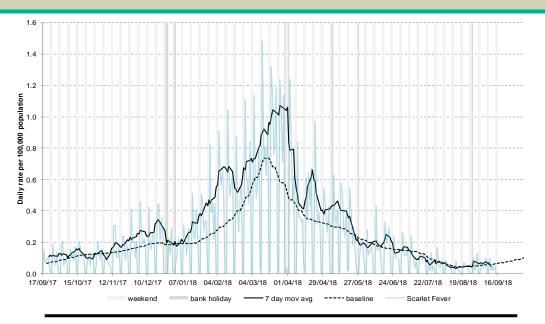


# Intentionally left blank

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

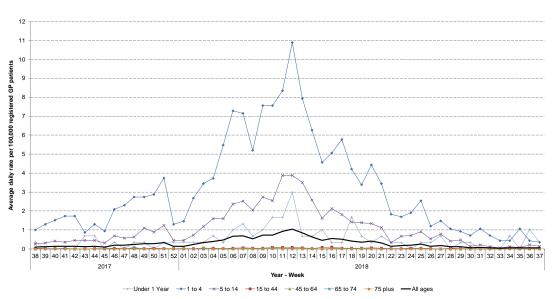
#### 4: Scarlet fever

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

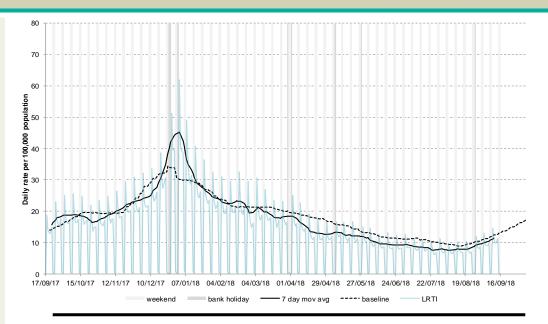


# Intentionally left blank

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

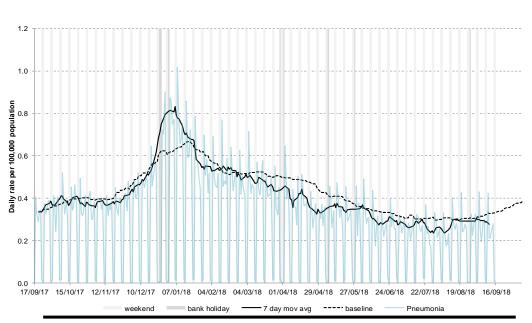
# 5: Lower respiratory tract infection (LRTI)

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).



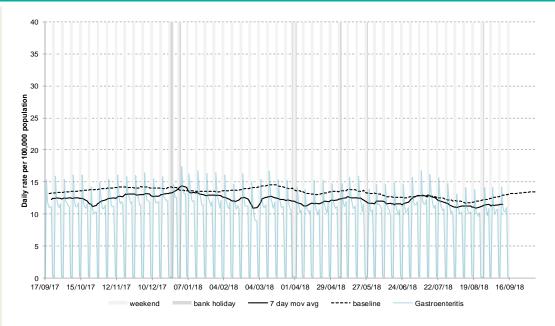
# Intentionally left blank

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



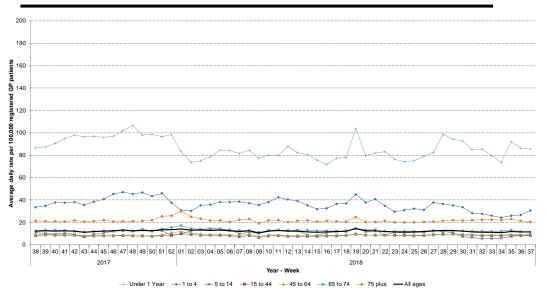
#### 7: Gastroenteritis

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

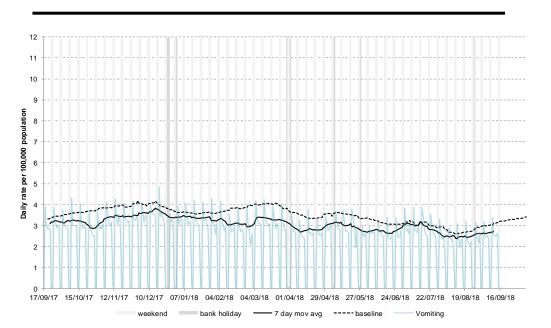


# 7a: Gastroenteritis by age

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



# 8: Vomiting



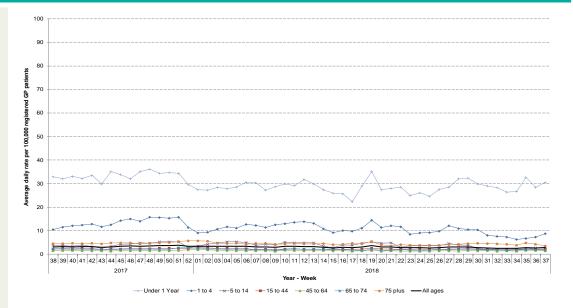
<sup>\* 7-</sup>day moving average adjusted for bank holidays.





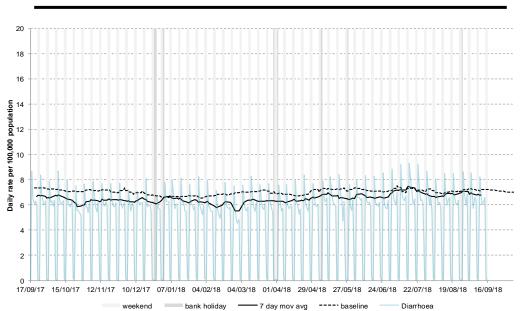
# 8a: Vomiting by age

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



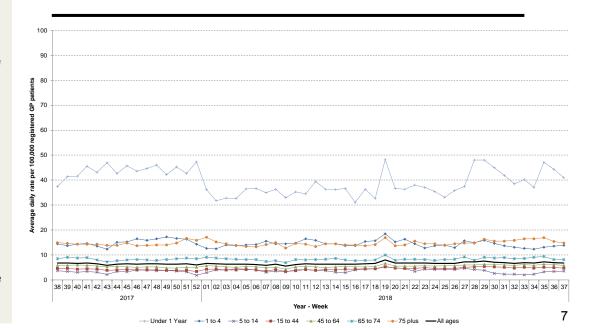
#### 9: Diarrhoea

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).

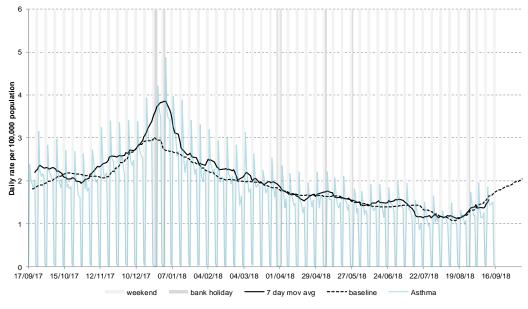


\* 7-day moving average adjusted for bank holidays.



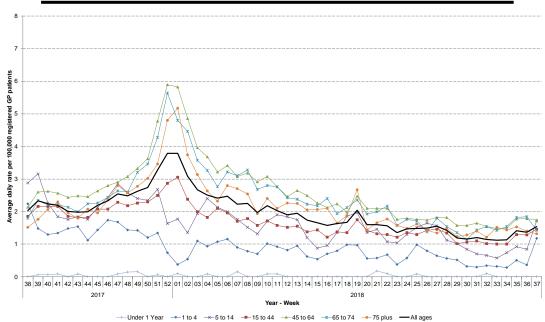
### 10: Asthma

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

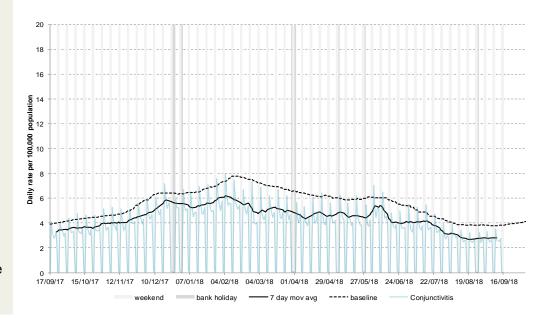


# 10a: Asthma by age

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



# 11: Conjunctivitis



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



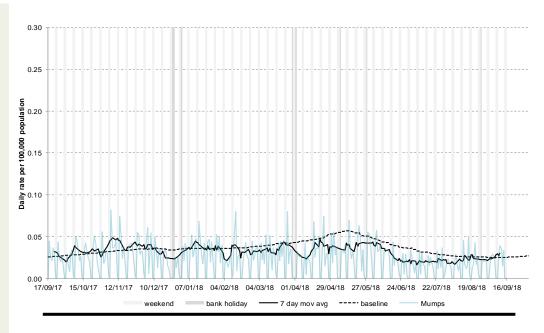


17 Sentember 2018

Year: 2018 Week: 37

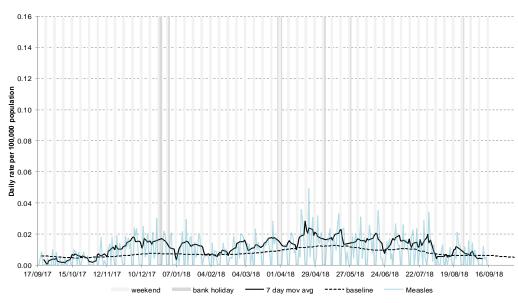
# 12: Mumps

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



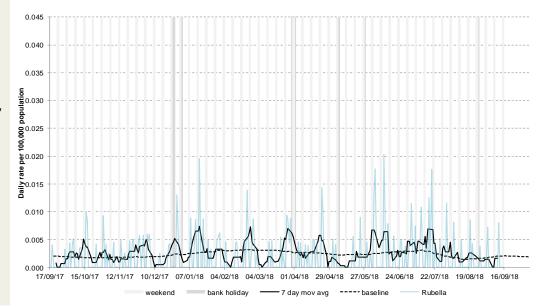
### 13: Measles

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



## 14: Rubella

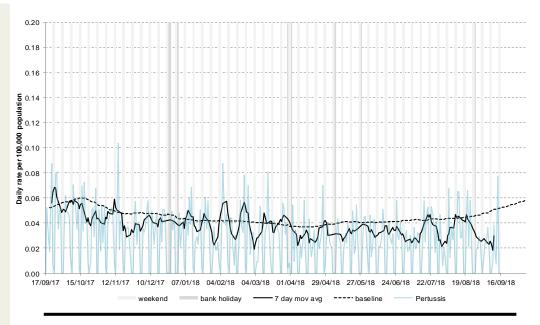
Daily incidence rate (and 7-day moving average\*) per 100,000 population (all England, all ages).



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

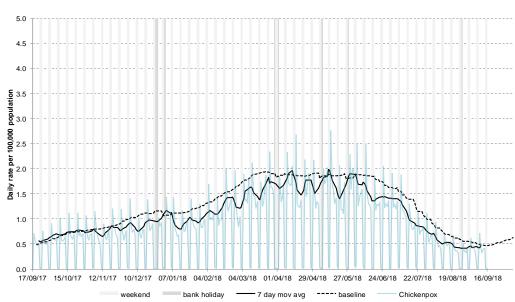
### 15: Pertussis

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

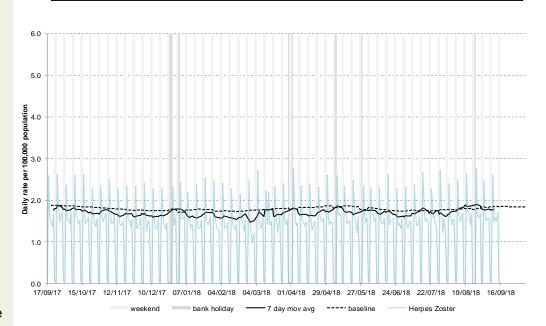


# 16: Chickenpox

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



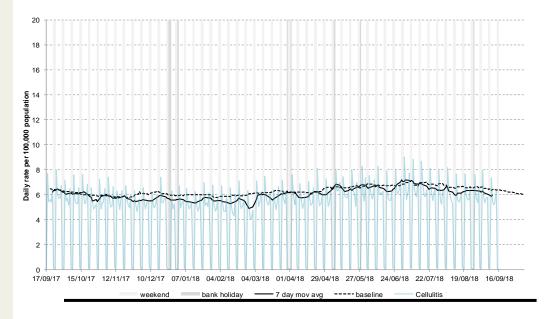
# 17: Herpes zoster





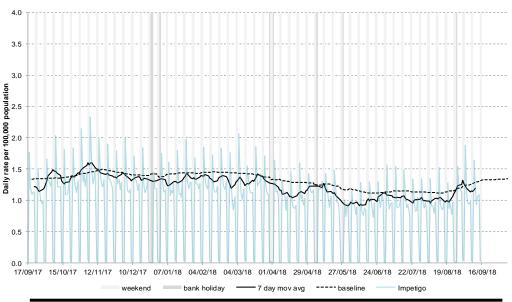
### 18: Cellulitis

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

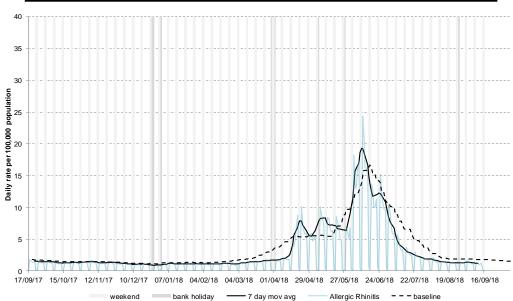


# 19: Impetigo

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



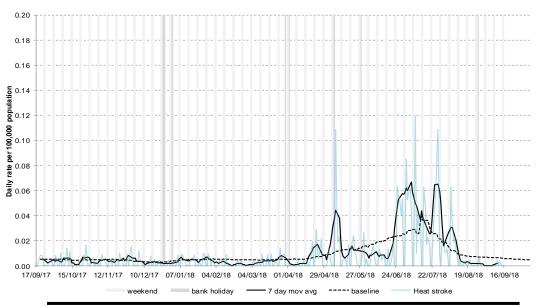
# 20: Allergic rhinitis





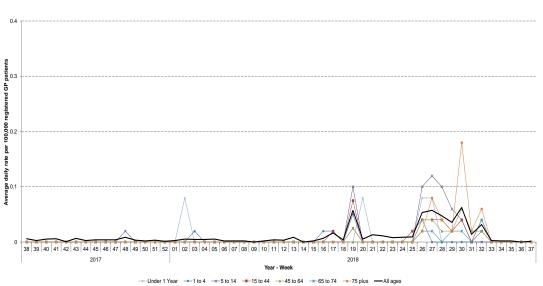
#### 21: Heat/sunstroke

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

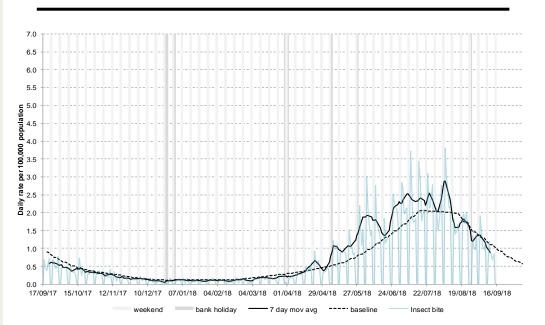


#### 21a: Heat/sunstroke

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



### 22: Insect bites



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



17 September 2018

Year: 2018 Week: 37

# 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 since April 2012. They take into account any known substantial changes in
  data collection, population coverage or reporting practices. Gastroenteritis, diarrhoea and
  vomiting baselines also account for changes since the introduction of rotavirus vaccine in
  July 2013. 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).<sup>1</sup> MEM is used as a standard methodology for setting influenza surveillance thresholds across Europe.<sup>2</sup>
- The current ILI thresholds are based upon previous influenza seasons from 2012/13
  onwards and therefore illustrate activity levels in relation to previous ILI activity recorded in
  the GPIH system. IILI thresholds presented in the maps should be interpreted with caution
  and reference made to other GP surveillance systems incorporating more historical
  data, which are available in the PHE National Influenza Report.
- 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 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.
  - <sup>1</sup> Vega T et al. Influenza Other Respir Viruses. 2013;**7**(4):546-58.

### **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.**

**Produced by:** PHE Real-time Syndromic Surveillance Team 1st Floor, 5 St Philip's Place, Birmingham, B3 2PW

Web: <a href="https://www.gov.uk/government/collections/syndromic-surveillance-systems-and-analyses">https://www.gov.uk/government/collections/syndromic-surveillance-systems-and-analyses</a>

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