

GP In Hours

Syndromic Surveillance System: England

Data to: 14 August 2016

15 August 2016

Year: 2016 Week: 32

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 measles remained above seasonal levels during week 32, with the highest rates in the South West and London (figures 14 & 14a).

Consultations for pertussis remain above seasonal levels (figure 16).

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

http://www.metoffice.gov.uk/weather/uk/heathealth/

Diagnostic indicators at a glance:

Upper respiratory tract infection Influenza-like illness Pharyngitis decreasing Scarlet fever No trend Similar to baseline levels Similar Sim			
Influenza-like illness Pharyngitis decreasing similar to baseline levels decreasing similar to baseline levels pheumonia no trend above baseline levels below baseline levels decreasing above baseline levels decreasing above baseline levels conjunctivitis no trend below baseline levels held below baseline levels above baseline levels held below baseline levels above baseline levels decreasing below baseline levels held below baseline levels above baseline levels below baseline levels above baseline levels above baseline levels below baseline levels below baseline levels below baseline levels above baseline levels similar to baseline levels similar to baseline levels similar to baseline levels allergic rhinitis no trend similar to baseline levels similar	Indicator	Trend	Level
Pharyngitis Scarlet fever no trend similar to baseline levels below baseline levels below baseline levels below baseline levels below baseline levels similar to baseline levels below baseline levels similar to baseline levels below baseline levels conjunctivitis no trend below baseline levels below baseline levels similar to baseline levels below baseline levels below baseline levels no trend below baseline levels similar to baseline levels below baseline levels chickenpox decreasing below baseline levels below baseline levels similar to baseline levels below baseline levels similar to baseline levels below baseline levels similar to baseline levels	Upper respiratory tract infection	decreasing	similar to baseline levels
Scarlet fever Lower respiratory tract infection Pneumonia Odecreasing Pneumonia Odecreasing Pneumonia Odecreasing	Influenza-like illness	no trend	similar to baseline levels
Lower respiratory tract infection Pneumonia Pneumonia Gastroenteritis Vomiting Diarrhoea Diarrhoea Severe asthma Wheeze Conjunctivitis Measles Rubella Pertussis Pertussis Cellulitis Pertussis Cellulitis No trend Allergic rhinitis Pneumonia No trend Above baseline levels Sevimilar to baseline levels below baseline levels similar to baseline levels below baseline levels similar to baseline levels	Pharyngitis	decreasing	similar to baseline levels
Pneumonia no trend above baseline levels Gastroenteritis decreasing below baseline levels Vomiting decreasing below baseline levels Diarrhoea no trend similar to baseline levels Severe asthma decreasing above baseline levels Wheeze decreasing above baseline levels Conjunctivitis no trend below baseline levels Mumps no trend below baseline levels Measles no trend above baseline levels Rubella no trend below baseline levels Pertussis no trend above baseline levels Chickenpox decreasing below baseline levels Cellulitis no trend similar to baseline levels Impetigo decreasing below baseline levels Allergic rhinitis no trend similar to baseline levels	Scarlet fever	no trend	similar to baseline levels
Gastroenteritis decreasing below baseline levels Vomiting decreasing below baseline levels Diarrhoea no trend similar to baseline levels Severe asthma decreasing above baseline levels Wheeze decreasing above baseline levels Conjunctivitis no trend below baseline levels Mumps no trend below baseline levels Measles no trend above baseline levels Rubella no trend below baseline levels Pertussis no trend above baseline levels Chickenpox decreasing below baseline levels Cellulitis no trend similar to baseline levels Impetigo decreasing below baseline levels Allergic rhinitis No trend similar to baseline levels above baseline levels	Lower respiratory tract infection	decreasing	similar to baseline levels
Vomiting decreasing below baseline levels Diarrhoea no trend similar to baseline levels Severe asthma decreasing above baseline levels Wheeze decreasing above baseline levels Conjunctivitis no trend below baseline levels Mumps no trend below baseline levels Measles no trend above baseline levels Rubella no trend below baseline levels Rubella no trend below baseline levels Pertussis no trend above baseline levels Chickenpox decreasing below baseline levels Herpes zoster no trend similar to baseline levels Cellulitis no trend similar to baseline levels Impetigo decreasing below baseline levels Allergic rhinitis no trend similar to baseline levels similar to baseline levels above baseline levels	Pneumonia	no trend	above baseline levels
Diarrhoea no trend similar to baseline levels Severe asthma decreasing above baseline levels Wheeze decreasing above baseline levels Conjunctivitis no trend below baseline levels Mumps no trend below baseline levels Measles no trend above baseline levels Rubella no trend below baseline levels Pertussis no trend above baseline levels Chickenpox decreasing below baseline levels Cellulitis no trend similar to baseline levels Cellulitis no trend similar to baseline levels Allergic rhinitis no trend similar to baseline levels Allergic rhinitis no trend similar to baseline levels Allergic rhinitis no trend above baseline levels above baseline levels Allergic rhinitis no trend above baseline levels above baseline levels	Gastroenteritis	decreasing	below baseline levels
Severe asthma decreasing above baseline levels Wheeze decreasing above baseline levels Conjunctivitis no trend below baseline levels Mumps no trend below baseline levels Measles no trend above baseline levels Rubella no trend below baseline levels Pertussis no trend above baseline levels Chickenpox decreasing below baseline levels Herpes zoster no trend similar to baseline levels Cellulitis no trend similar to baseline levels Impetigo decreasing below baseline levels Allergic rhinitis no trend similar to baseline levels similar to baseline levels above baseline levels similar to baseline levels above baseline levels	Vomiting	decreasing	below baseline levels
Wheeze decreasing above baseline levels Conjunctivitis no trend below baseline levels Mumps no trend below baseline levels Measles no trend above baseline levels Rubella no trend below baseline levels Pertussis no trend above baseline levels Chickenpox decreasing below baseline levels Herpes zoster no trend similar to baseline levels Cellulitis no trend similar to baseline levels Impetigo decreasing below baseline levels Allergic rhinitis no trend similar to baseline levels Allergic rhinitis no trend similar to baseline levels Heat/sunstroke no trend above baseline levels	Diarrhoea	no trend	similar to baseline levels
Conjunctivitis no trend below baseline levels Mumps no trend below baseline levels Measles no trend above baseline levels Rubella no trend below baseline levels Pertussis no trend above baseline levels Chickenpox decreasing below baseline levels Herpes zoster no trend similar to baseline levels Cellulitis no trend similar to baseline levels Impetigo decreasing below baseline levels Allergic rhinitis no trend similar to baseline levels Heat/sunstroke no trend above baseline levels	Severe asthma	decreasing	above baseline levels
Mumps no trend below baseline levels Measles no trend above baseline levels Rubella no trend below baseline levels Pertussis no trend above baseline levels Chickenpox decreasing below baseline levels Herpes zoster no trend similar to baseline levels Cellulitis no trend similar to baseline levels Impetigo decreasing below baseline levels Allergic rhinitis no trend similar to baseline levels Heat/sunstroke no trend above baseline levels	Wheeze	decreasing	above baseline levels
Measles no trend above baseline levels Rubella no trend below baseline levels Pertussis no trend above baseline levels Chickenpox decreasing below baseline levels Herpes zoster no trend similar to baseline levels Cellulitis no trend similar to baseline levels Impetigo decreasing below baseline levels Allergic rhinitis no trend similar to baseline levels Heat/sunstroke no trend above baseline levels	Conjunctivitis	no trend	below baseline levels
Rubella no trend below baseline levels Pertussis no trend above baseline levels Chickenpox decreasing below baseline levels Herpes zoster no trend similar to baseline levels Cellulitis no trend similar to baseline levels Impetigo decreasing below baseline levels Allergic rhinitis no trend similar to baseline levels Allergic rhinitis no trend similar to baseline levels Heat/sunstroke no trend above baseline levels	Mumps	no trend	below baseline levels
Pertussis no trend above baseline levels Chickenpox decreasing below baseline levels Herpes zoster no trend similar to baseline levels Cellulitis no trend similar to baseline levels Impetigo decreasing below baseline levels Allergic rhinitis no trend similar to baseline levels Heat/sunstroke no trend above baseline levels	Measles	no trend	above baseline levels
Chickenpox decreasing below baseline levels Herpes zoster no trend similar to baseline levels Cellulitis no trend similar to baseline levels Impetigo decreasing below baseline levels Allergic rhinitis no trend similar to baseline levels Heat/sunstroke no trend above baseline levels	Rubella	no trend	below baseline levels
Herpes zoster no trend similar to baseline levels Cellulitis no trend similar to baseline levels lmpetigo decreasing below baseline levels Allergic rhinitis no trend similar to baseline levels Heat/sunstroke no trend above baseline levels	Pertussis	no trend	
Cellulitis no trend similar to baseline levels Impetigo decreasing below baseline levels Allergic rhinitis no trend similar to baseline levels Heat/sunstroke no trend above baseline levels	•	•	
Impetigo decreasing below baseline levels Allergic rhinitis no trend similar to baseline levels Heat/sunstroke no trend above baseline levels	•		
Allergic rhinitis no trend similar to baseline levels Heat/sunstroke no trend above baseline levels			
Heat/sunstroke no trend above baseline levels			
	_		
Insect Bites decreasing above baseline levels			
	Insect Bites	decreasing	above baseline levels

GP practices and denominator population:

Year	Week	GP Practices Reporting**	Population size**
2016	32	4648	36.0 million

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



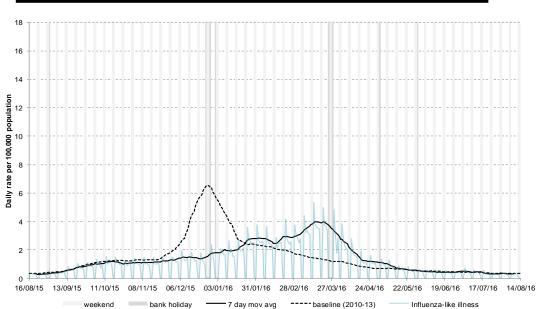
1: Upper respiratory tract infection (URTI)

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

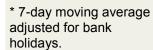


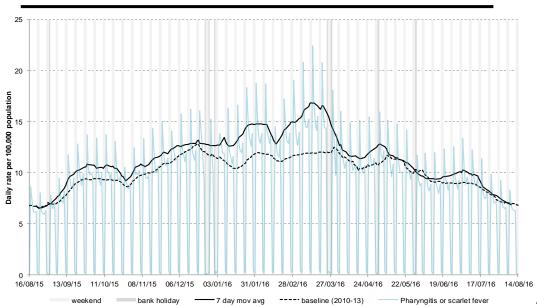
2: Influenza-like illness (ILI)

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



3: Pharyngitis or scarlet fever





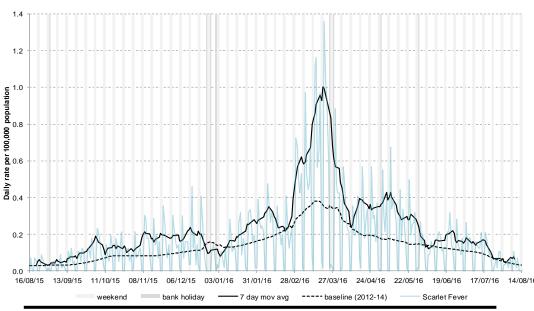


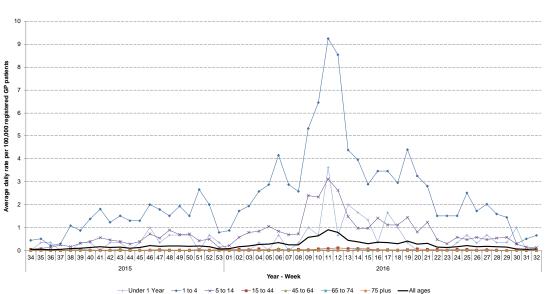
4: Scarlet fever

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).

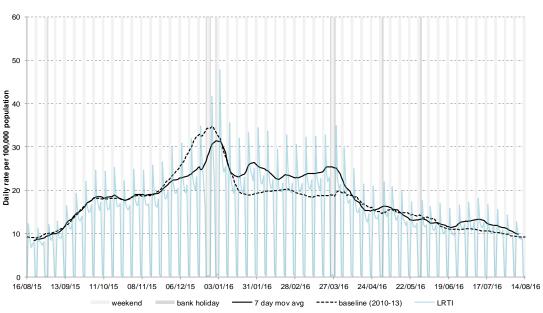




5: Lower respiratory tract infection (LRTI)

Daily incidence rate

(and 7-day moving average*) per 100,000 population (all England,

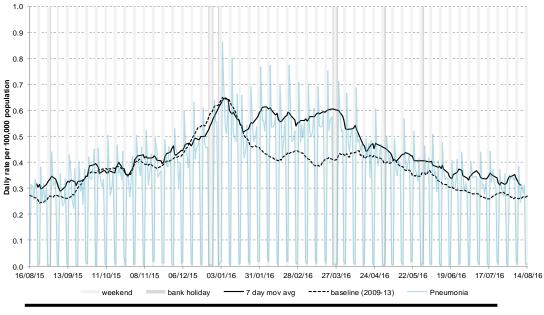






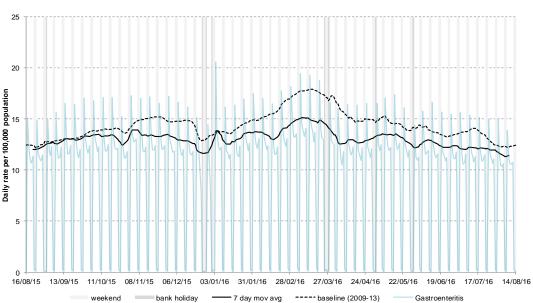
6: Pneumonia

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

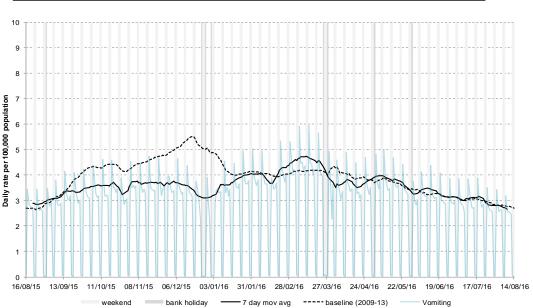


7: Gastroenteritis

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



8: Vomiting

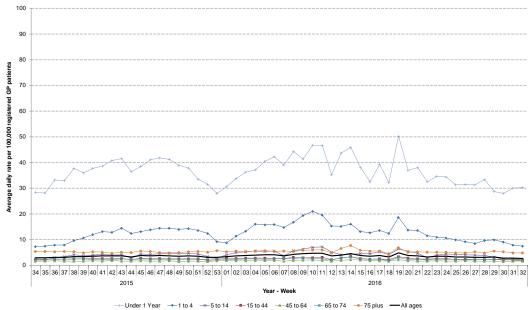


^{* 7-}day moving average adjusted for bank holidays.



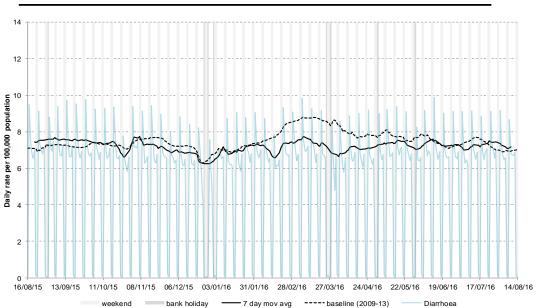
8a: Vomiting by age

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



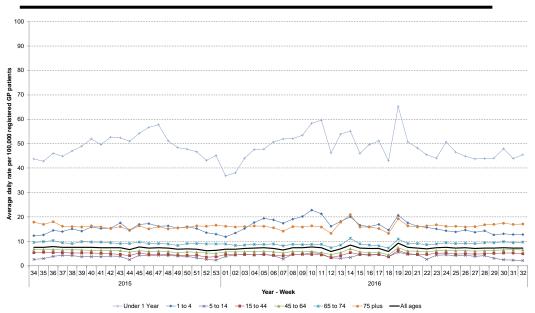
9: Diarrhoea

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



9a. Diarrhoea by age

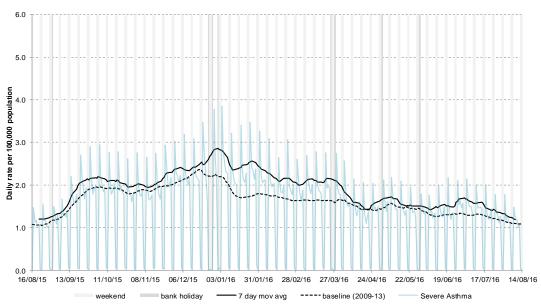
Average daily incidence rate by week per 100,000 population (all England).





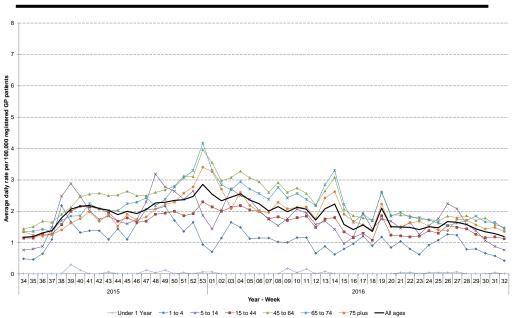
10: Severe asthma

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

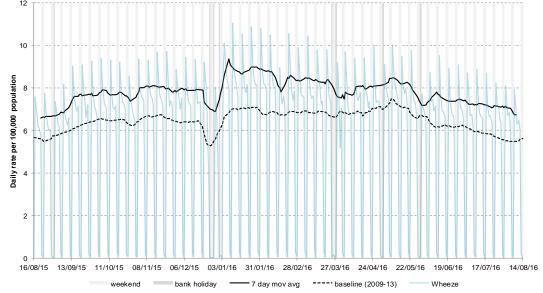


10a: Severe asthma by age

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



11: Wheeze



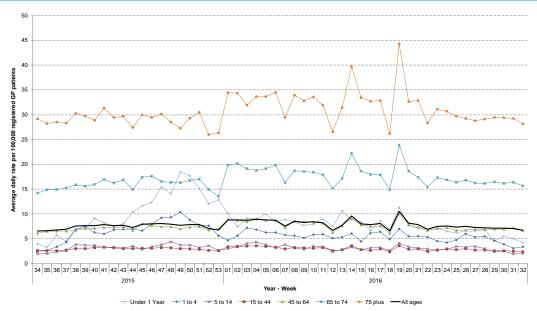
^{* 7-}day moving average adjusted for bank holidays.





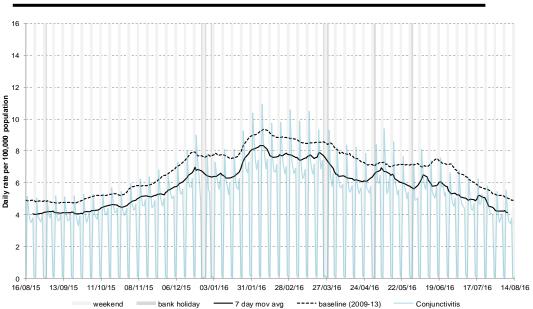
11a: Wheeze by age

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



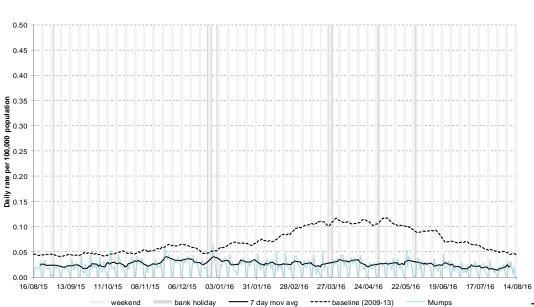
12: Conjunctivitis

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



13: Mumps

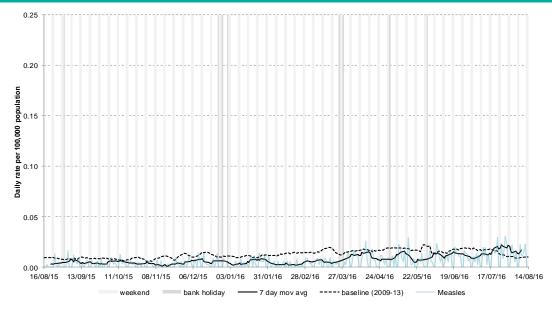
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).





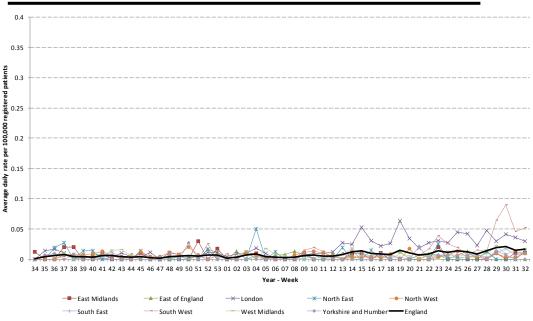
14: Measles

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

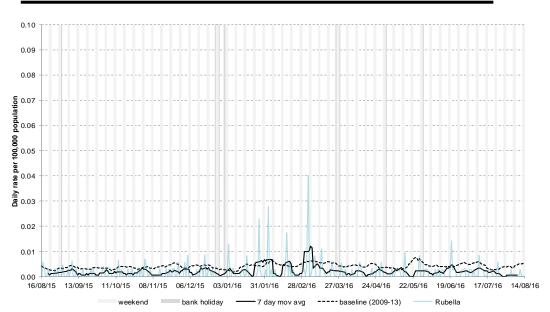


14a: Measles by PHE Centre

Average daily incidence rate by week per 100,000 population (using geographical boundaries of the 9 PHE centres).



15: Rubella

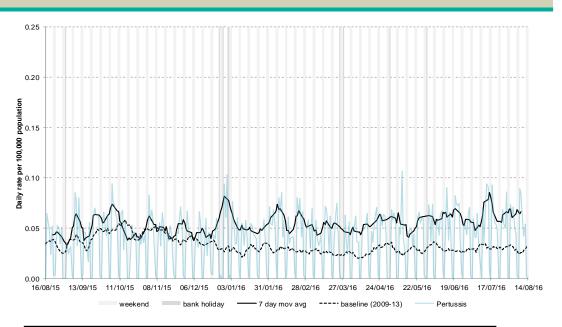


^{* 7-}day moving average adjusted for bank holidays.



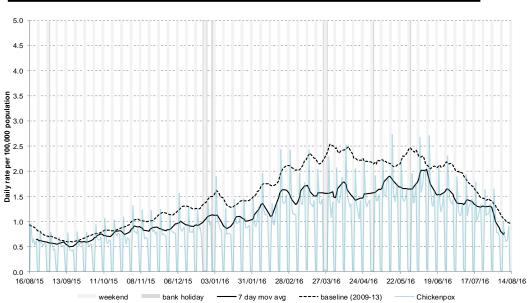
16: Pertussis

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

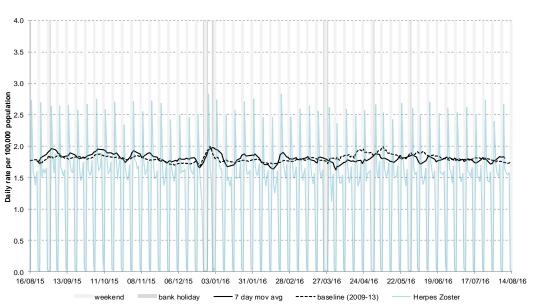


17: Chickenpox

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



18: Herpes zoster

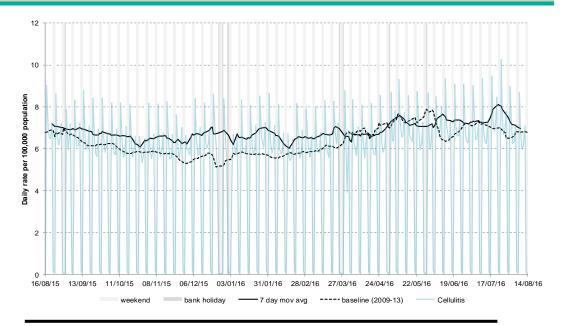


^{* 7-}day moving average adjusted for bank holidays.



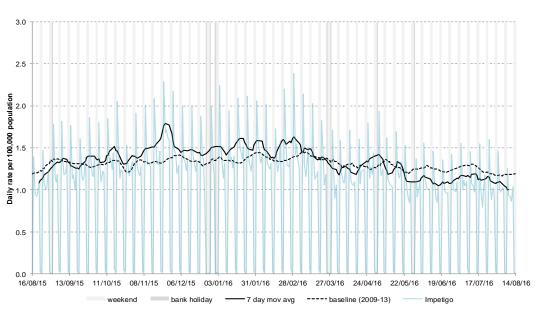
19: Cellulitis

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



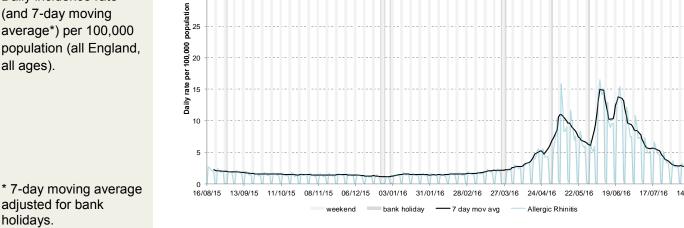
20: Impetigo

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



21: Allergic rhinitis

35

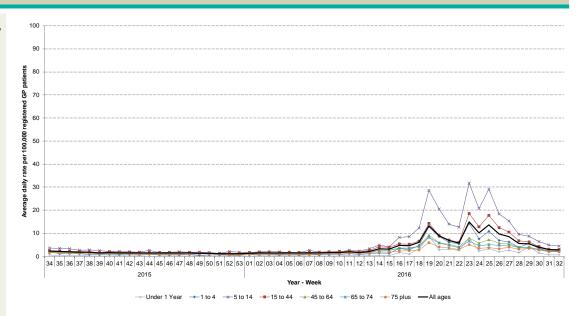


adjusted for bank holidays.



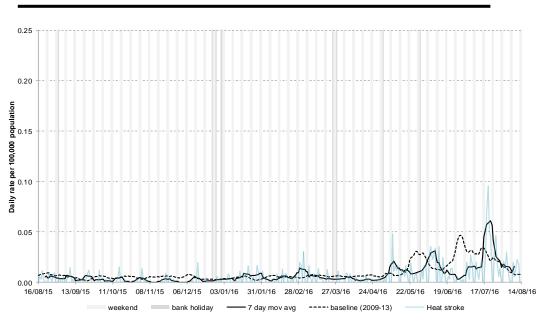
21a: Allergic rhinitis by age

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



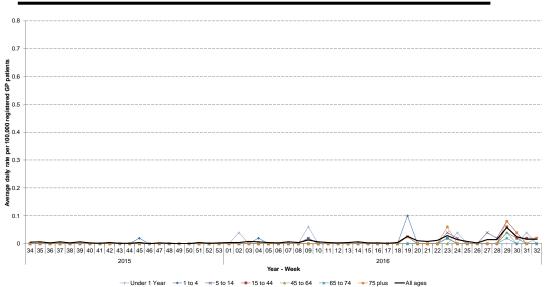
22: Heat/sunstroke

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



22a: Heat/sun stroke by age

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



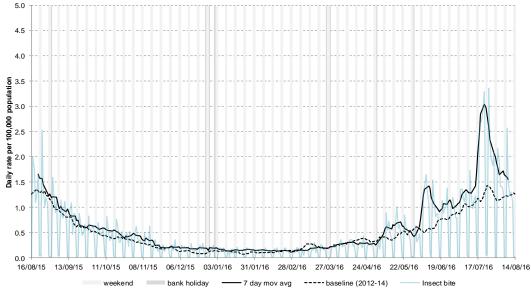


GP In Hours

15 August 2016 Year: 2016 Week: 32

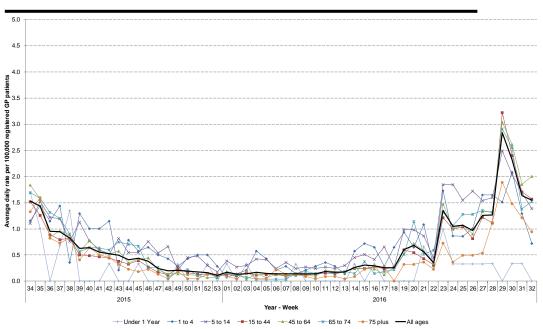
23: Insect Bites

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



23a: Insect bites by age

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



Intentionally left blank.

^{* 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.
- Historic baselines are smoothed to remove bank holiday effects. Data from 2009 has been excluded for selected indicators which were affected by the H1N1 influenza pandemic. No baseline is currently included for allergic rhinitis.

Maps:

- From week 40 2015 the influenza-like illness thresholds illustrated in the bulletin appendix maps 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 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[®] 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

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

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.