



Royal College of  
General Practitioners  
Research and Surveillance Centre

## RSC Communicable and Respiratory Disease Report for England

### Key Statistics:

Week Number/Year.....19/2017  
Week Starting - Ending.....08/05/2017 - 14/05/2017  
No. of Practices.....153  
Population.....1521333

### National (England)

- **Acute Bronchitis** : increased from **47.6** in week 18 to **57.0** in week 19.
- **Asthma** : increased from **11.6** in week 18 to **12.4** in week 19.
- **Common Cold** : increased from **53.7** in week 18 to **69.2** in week 19.
- **Influenza-Like illness** : increased from **2.6** in week 18 to **3.0** in week 19.
- **Respiratory System Diseases** : increased from **214.7** in week 18 to **256.3** in week 19.

### Regional (London, North, South and Midlands And East)

- **Acute Bronchitis** : increased from **36.7** in week 18 to **44.4** in week 19 in the London region, increased from **56.9** in week 18 to **63.0** in week 19 in the North region, increased from **35.0** in week 18 to **45.9** in week 19 in the South region, and increased from **68.3** in week 18 to **83.0** in week 19 in the Midlands And East region.
- **Asthma** : decreased from **14.9** in week 18 to **12.0** in week 19 in the London region, was unchanged at **11.0** in week 18 compared with **10.8** in week 19 in the North region, increased from **11.0** in week 18 to **13.8** in week 19 in the South region, and increased from **9.6** in week 18 to **13.4** in week 19 in the Midlands And East region.
- **Common Cold** : increased from **78.6** in week 18 to **97.4** in week 19 in the London region, increased from **51.4** in week 18 to **66.3** in week 19 in the North region, increased from **41.8** in week 18 to **49.1** in week 19 in the South region, and increased from **49.0** in week 18 to **77.7** in week 19 in the Midlands And East region.
- **Influenza-Like illness** : decreased from **4.7** in week 18 to **4.4** in week 19 in the London region, increased from **1.7** in week 18 to **2.3** in week 19 in the North region, increased from **1.7** in week 18 to **2.5** in week 19 in the South region, and increased a little from **3.2** in week 18 to **3.3** in week 19 in the Midlands And East region.
- **Respiratory System Diseases** : increased from **234.9** in week 18 to **271.3** in week 19 in the London region, increased from **229.5** in week 18 to **260.6** in week 19 in the North region, increased from **179.6** in week 18 to **208.4** in week 19 in the South region, and increased from **228.2** in week 18 to **321.5** in week 19 in the Midlands And East region.

### Comment:

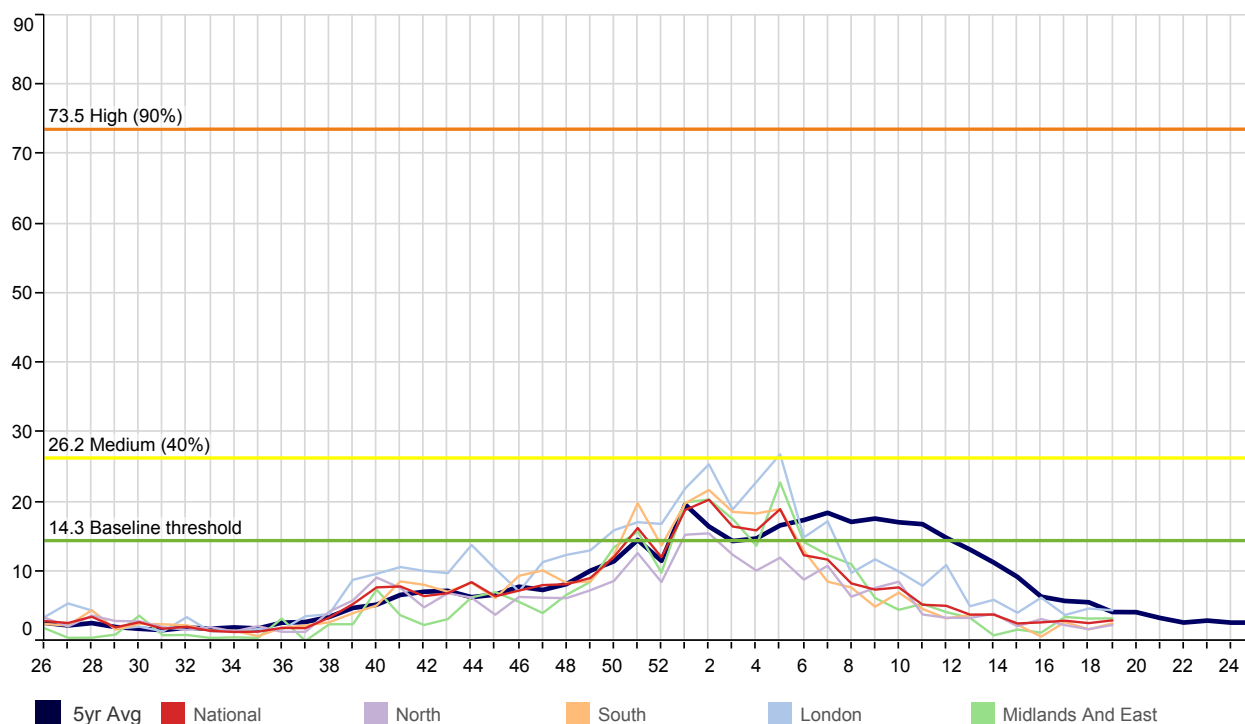
The rates of respiratory conditions increased this week, though they remain at or below seasonally expected levels.

Presentations of influenza-like illness in primary care also increased, and are below the baseline threshold.

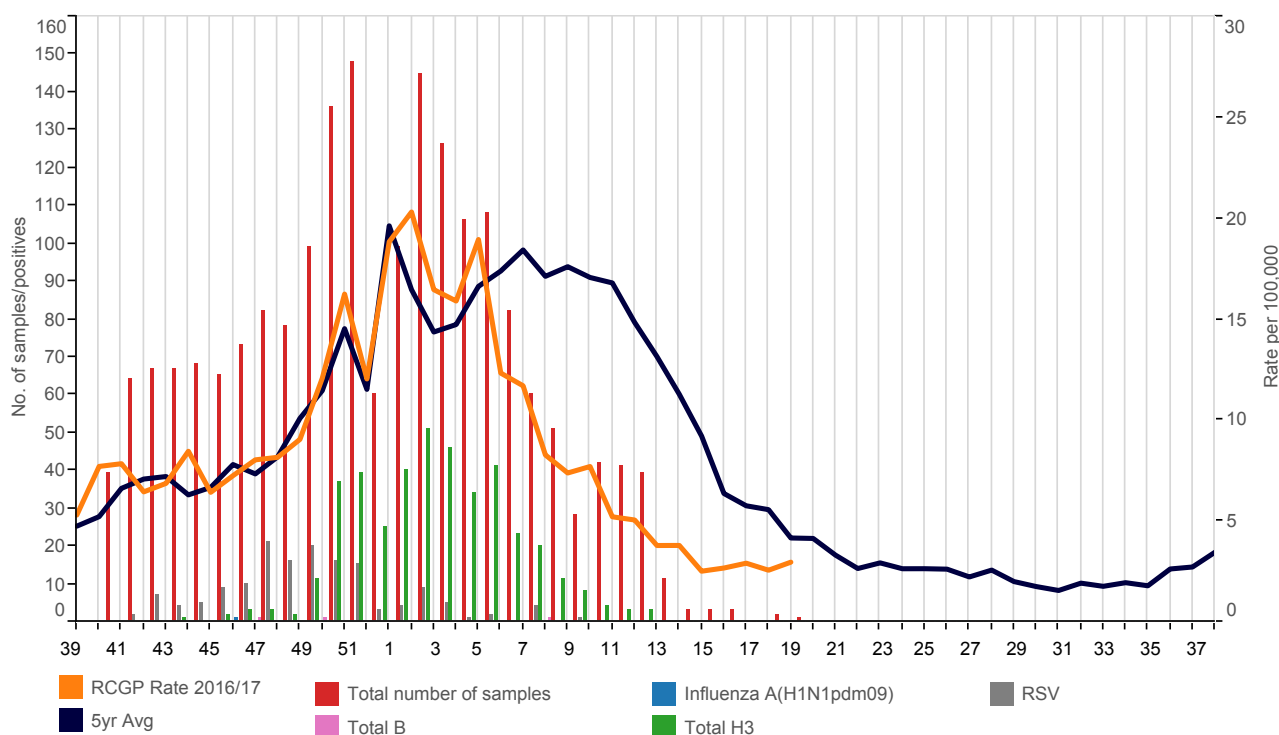
## Winter Focus 2016/17

Please see page 13 for explanatory notes on the data.

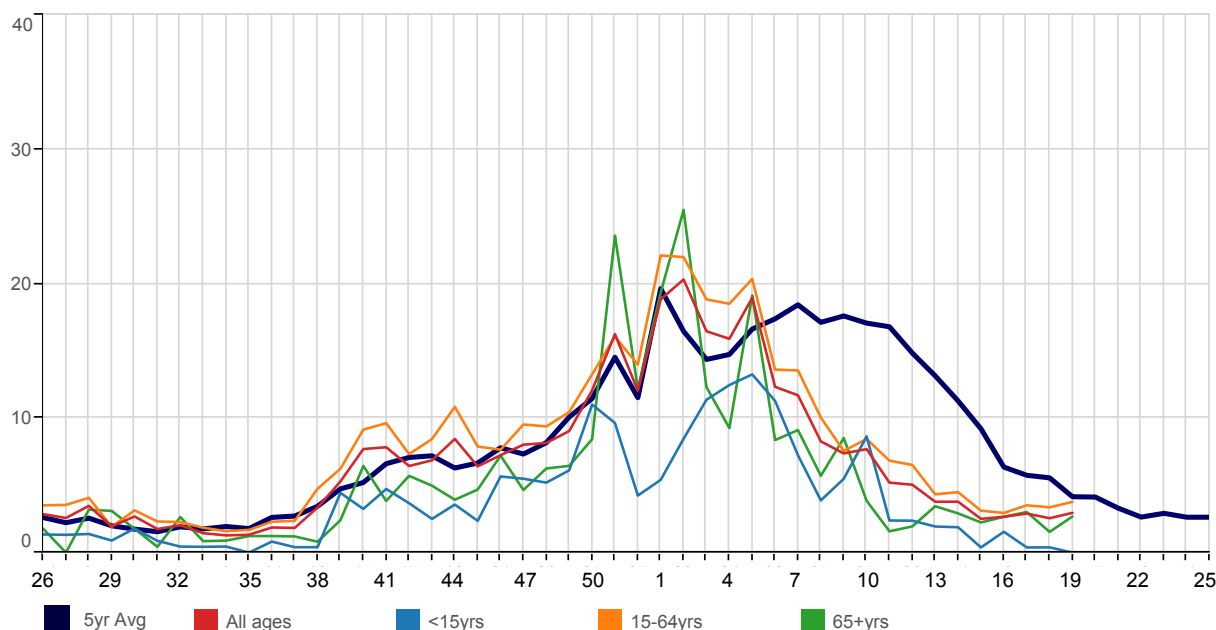
### (A) Influenza-like illness: incidence rate winter 2016/17\*



### (B) RCGP/PHE RSV and Influenza Virology Swab Surveillance 2016/17(all ages, gender & regions combined)\*



\* The thresholds used are the agreed RCGP/ Public Health England levels for 2016/17. The rolling average line (blue) is based on 5 year historic RCGP RSC level.

**(C) Influenza-like illness: national incidence rate 2016/2017 by age group\*****(D) Influenza-like illness: national incidence rate 2016/2017 by age group\***

This table shows the level of intensity of ILI by age band. MEM thresholds have been calculated separately for each age band - the ranges are shown in the table Threshold levels by age band.

Table 1	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4
<15yrs	4.73	3.68	2.51	3.57	2.36	5.66	5.49	5.21	6.12	11.01	9.64	4.24	5.41	8.47	11.37	12.46
15-64yrs	9.63	7.33	8.44	10.84	7.89	7.65	9.53	9.39	10.45	13.26	16.05	13.98	22.10	21.98	18.83	18.50
65+yrs	3.84	5.71	4.98	3.93	4.69	7.21	4.66	6.26	6.45	8.43	23.57	12.16	19.35	25.49	12.31	9.27
All ages	7.84	6.44	6.86	8.45	6.42	7.25	8.03	8.15	9.04	12.07	16.24	12.04	18.84	20.31	16.46	15.90

	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
<15yrs	13.25	11.28	7.24	3.88	5.49	8.64	2.39	2.38	1.94	1.89	0.38	1.55	0.38	0.39	0.00	
15-64yrs	20.35	13.61	13.55	10.04	7.56	8.45	6.84	6.52	4.34	4.50	3.12	2.95	3.52	3.37	3.78	
65+yrs	19.13	8.37	9.11	5.72	8.52	3.85	1.58	1.95	3.45	2.92	2.24	2.67	3.02	1.54	2.69	
All ages	18.95	12.33	11.70	8.27	7.38	7.70	5.21	5.05	3.78	3.79	2.51	2.67	2.91	2.56	2.96	

Table 2	Below Threshold <sup>1</sup>	Threshold to Medium <sup>2</sup>	Medium to High <sup>3</sup>	High to Very High <sup>4</sup>	Above Very High <sup>5</sup>
0-14	<11.0	11.0 to <18.0	18.0 to <55.3	55.3 to <90.7	90.7+
15-64	<14.6	14.6 to <28.2	28.2 to <63.1	63.1 to <90.1	90.1+
65+	<11.1	11.1 to <14.6	14.6 to <32.8	32.8 to <46.8	46.8+
All Ages	<14.3	14.3 to <26.2	26.2 to <73.5	73.5 to <116.1	116.1+

**Threshold levels**

<sup>1</sup>Below baseline threshold

<sup>2</sup>baseline threshold breach to < 40th percentile

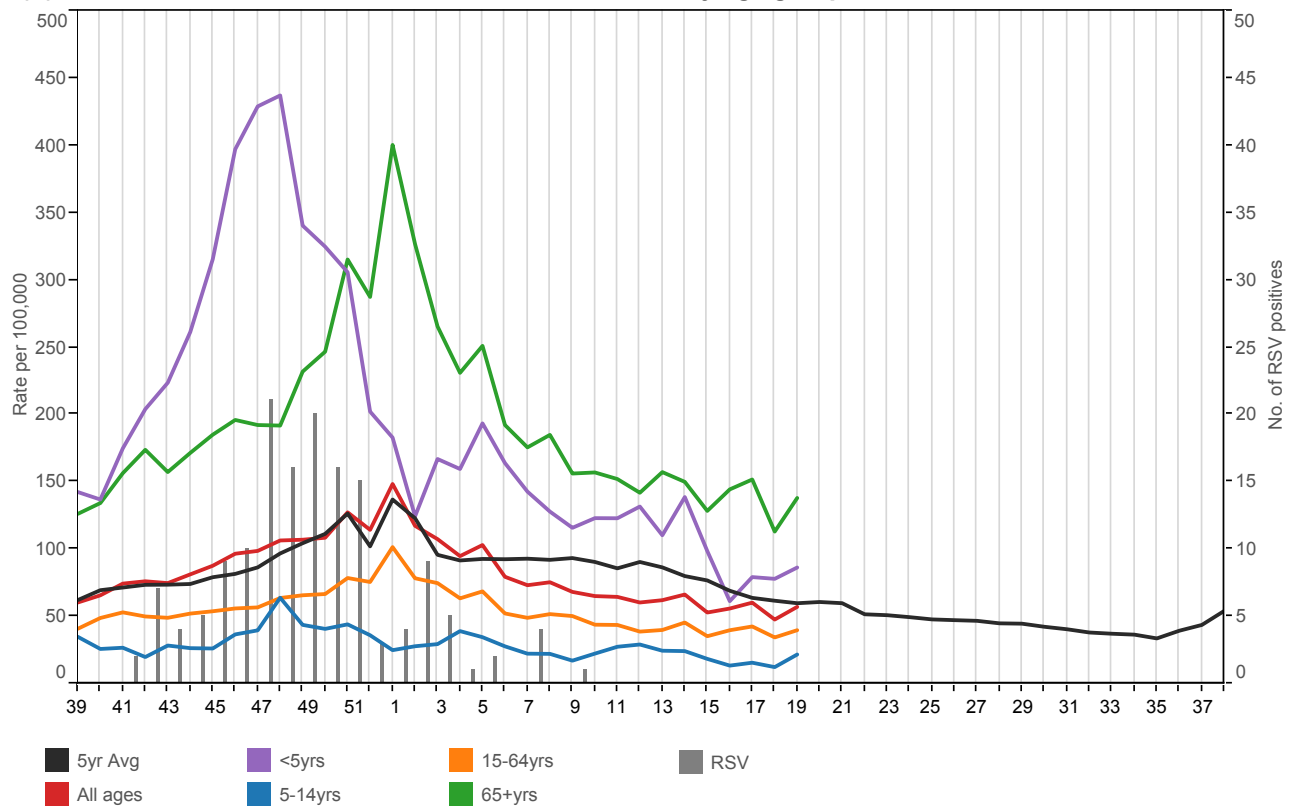
<sup>3</sup>40th to <90th percentile

<sup>4</sup>90th to <97.5th percentile

<sup>5</sup>97.5th+ percentile

**Weekly influenza-like illness and bronchitis incidence rates per 100,000 persons**

Influenza-like illness		Bronchitis	Influenza-like illness		Acute Bronchitis
<1yr	0.0	215.3	London	4.4	44.4
1-4yrs	0.0	60.4	North	2.3	63.0
5-14yrs	0.0	21.6	South	2.5	45.9
15-24yrs	4.1	18.3	Midlands And East	3.3	83.0
25-44yrs	3.5	32.8	National	3.0	57.0
45-64yrs	4.0	58.5			
65-74yrs	4.9	97.1			
75-84yrs	0.0	147.9			
85+yrs	0.0	280.6			
All ages	3.0	57.0			

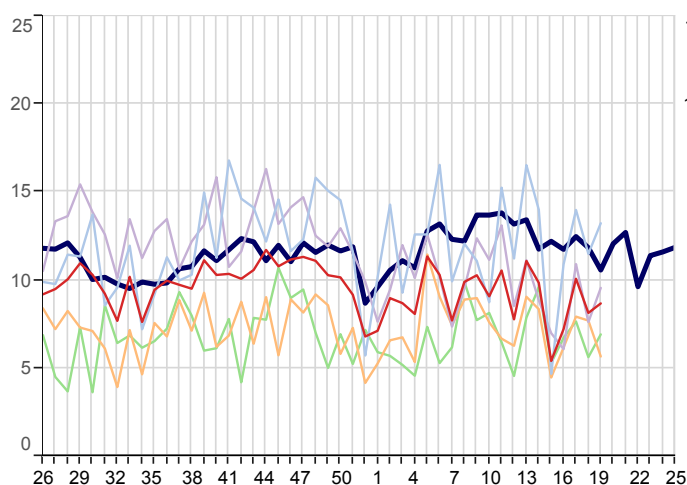
**(E) Acute Bronchitis: national incidence rate 2016/2017 by age group\*****Weekly Influenza-like illness and Acute Bronchitis incidence rates per 100,000 persons**

	Influenza-like illness	Acute Bronchitis
<5yrs	0.0	86.3
5-14yrs	0.0	21.6
15-64yrs	3.8	39.7
65+yrs	2.7	137.9
All ages	3.0	57.0

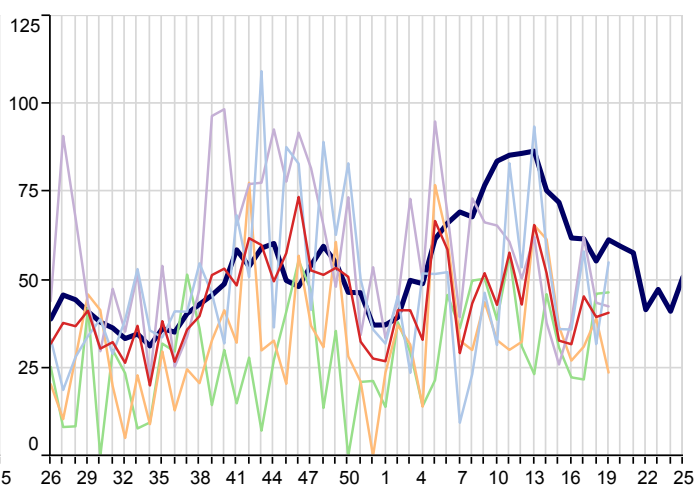
# 1. Water & Food Borne Disorders:

5yr Avg   National   London   North   South   Midlands And East

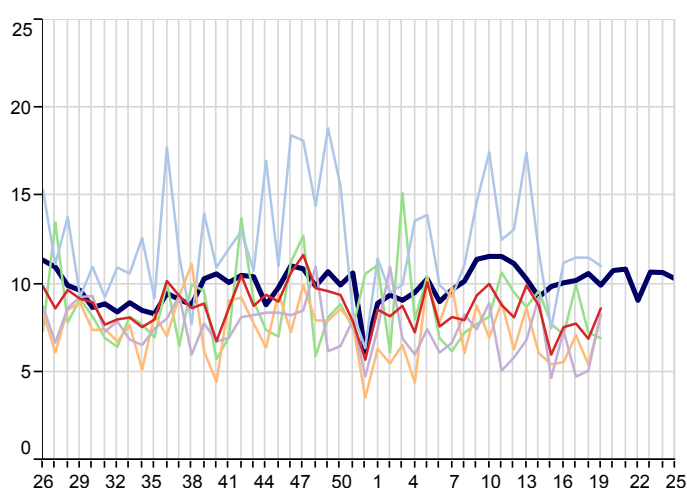
**Infectious Intestinal Disease (ICD10: A00-A09)**  
Weekly incidence (per 100,000 **all ages**) by regions  
for 2016 compared with 5 year average



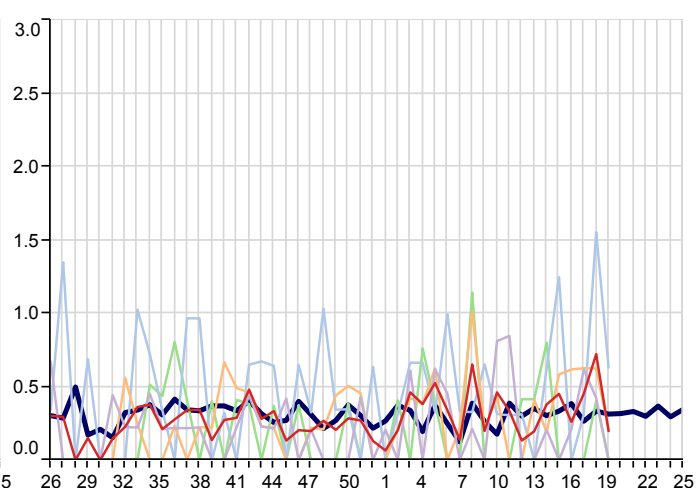
**Infectious Intestinal Disease (ICD10: A00-A09)**  
Weekly incidence (per 100,000 **0-4 years**) by regions  
for 2016 compared with 5 year average



**Non-Infective Enteritis & Colitis (ICD10: K50-K52)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



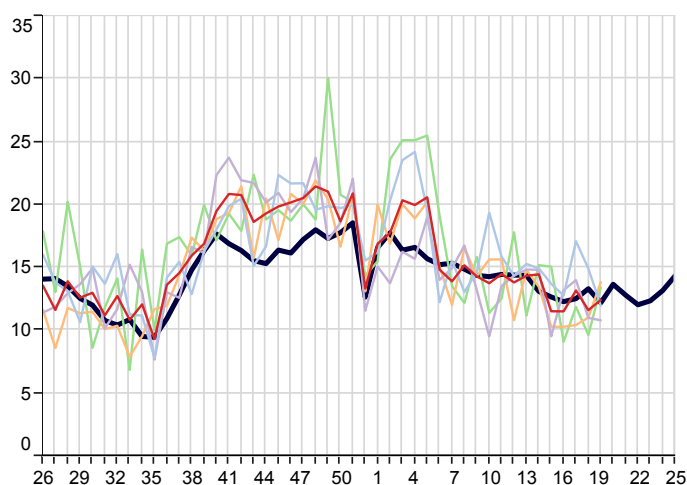
**Viral Hepatitis (ICD10: B15-B19)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



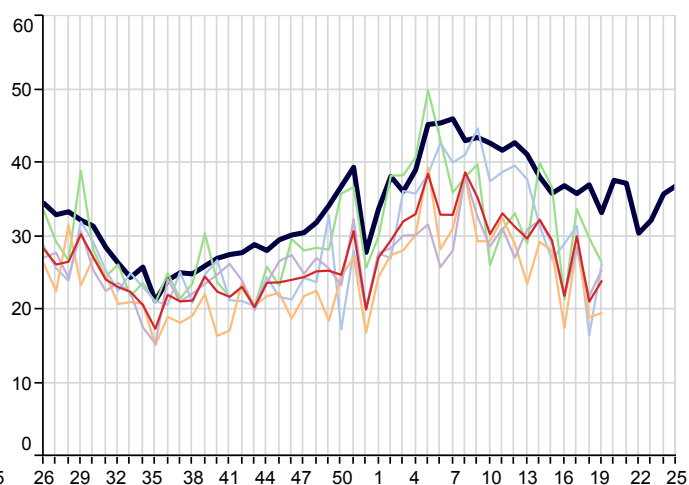
## 2. Environmentally Sensitive Disorders:

5yr Avg   National   London   North   South   Midlands And East

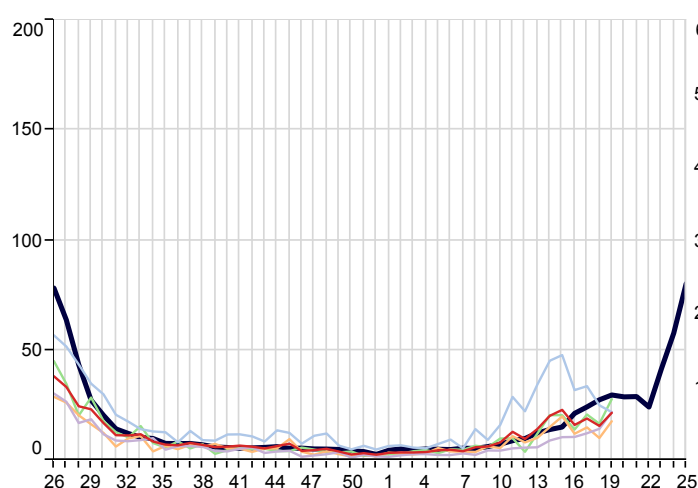
**Asthma (ICD10: J45-J46)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



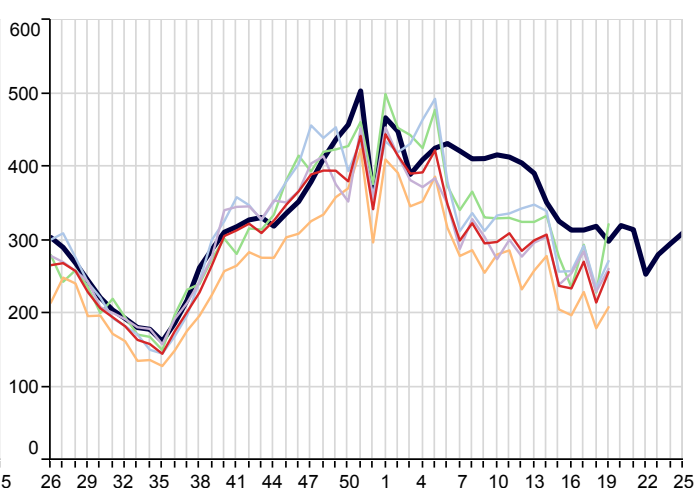
**Disorders of Conjunctiva (ICD10: H10-H13)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



**Hayfever/Allergic Rhinitis (ICD10: J30)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



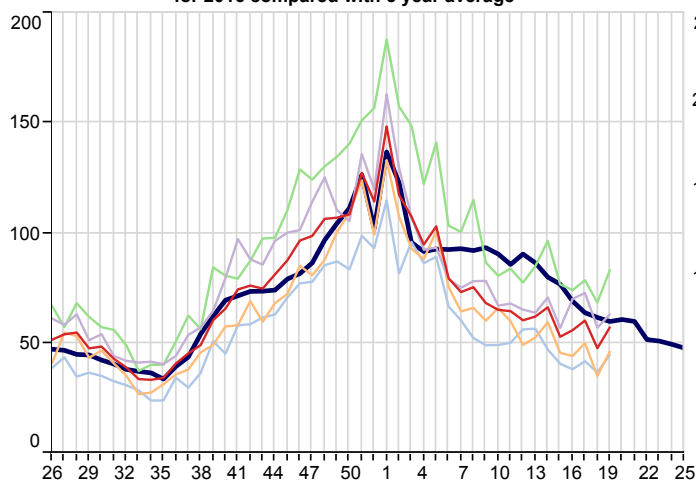
**Symptoms involving Respiratory & Chest (ICD10: R05-R07,R09)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



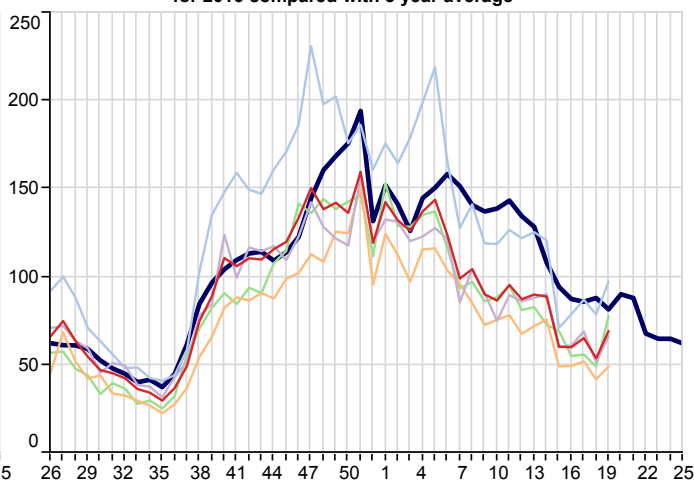
### 3. Respiratory Infections:

5yr Avg   National   North   South   London   Midlands And East

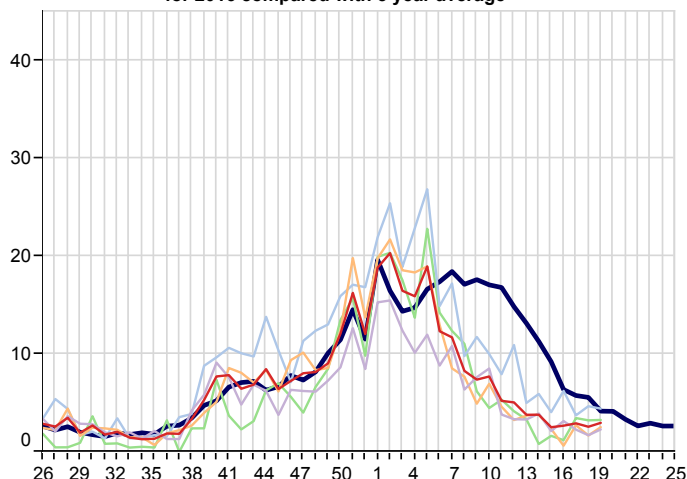
**Acute Bronchitis (ICD10: J20-J21,J40)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



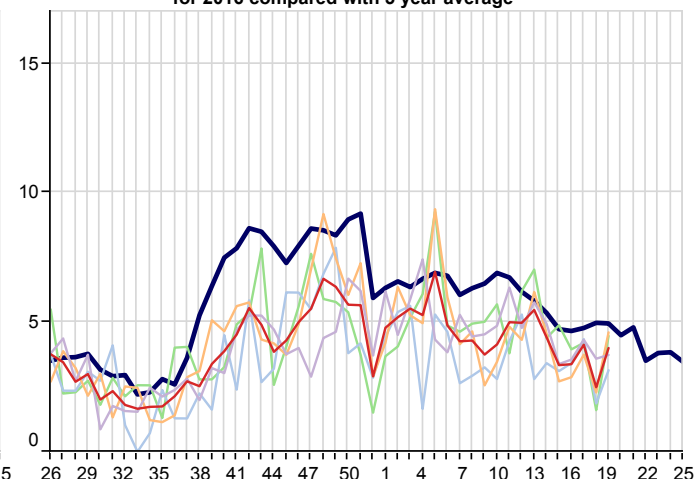
**Common Cold (ICD10: J00,J06)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



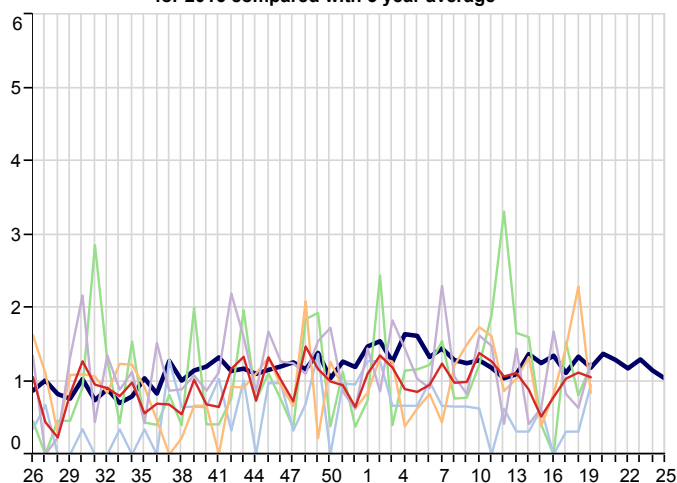
**Influenza-Like Illness (ICD10: J09-J11)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



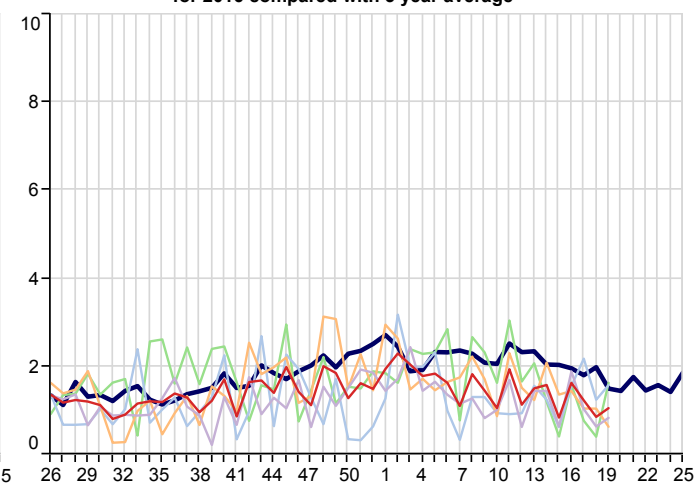
**Acute Laryngitis/Tracheitis (ICD10: J04)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



**Pleurisy (ICD10: R091)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



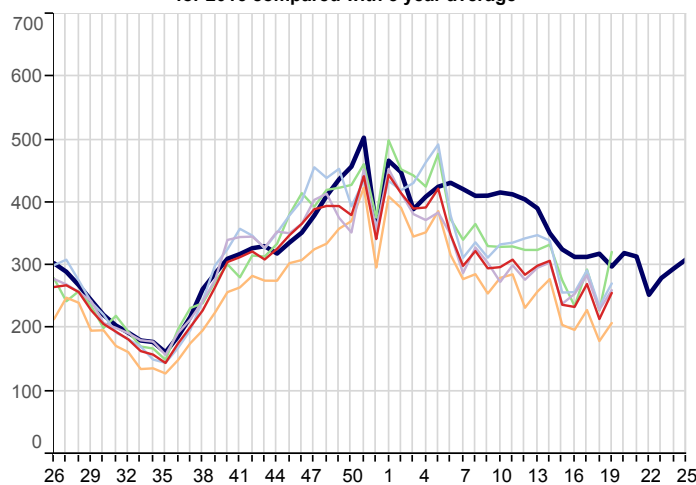
**Pneumonia/Pneumonitis (ICD10: J12-J18)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



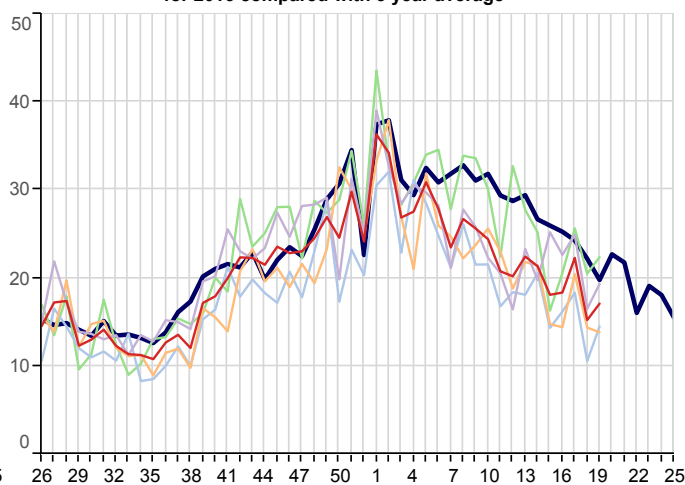
### 3. Respiratory Infections(Continued):

5yr Avg   National   North   South   London   Midlands And East

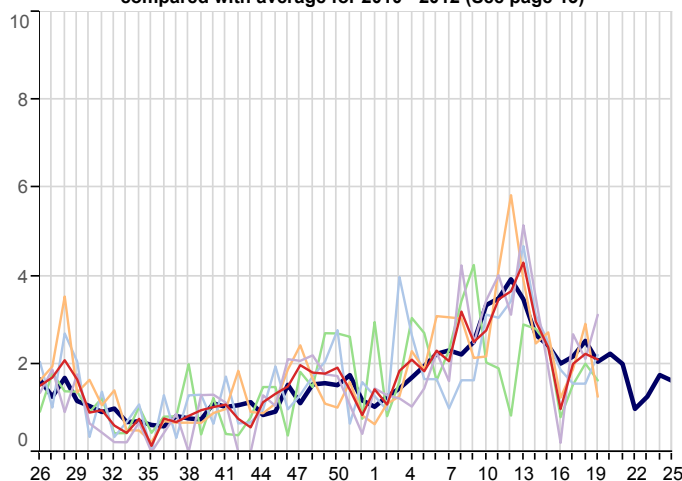
**Respiratory System Diseases (ICD10: J00-J99)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



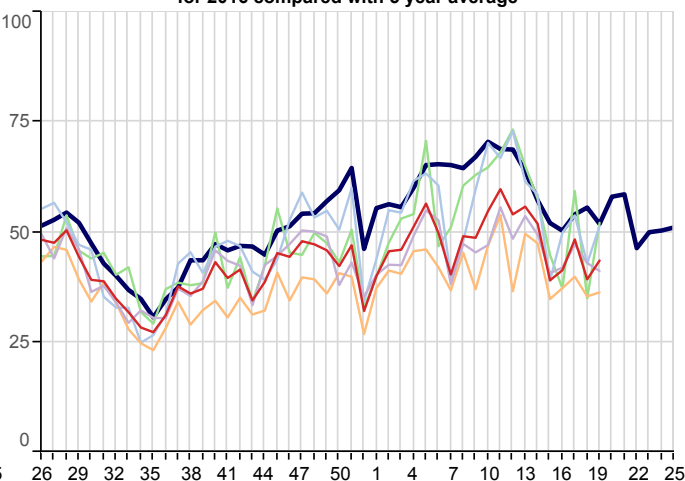
**Acute Sinusitis (ICD10: J01)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



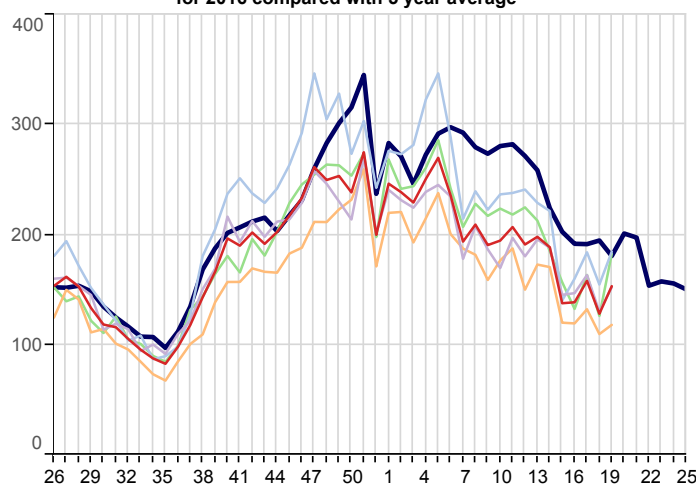
**Strep Sore Throat, Scarletina and Peritonsillar Abscess (ICD10: A38,J020,J36)**  
Weekly incidence (per 100,000 all ages) by region for 2016  
compared with average for 2010 - 2012 (See page 13)



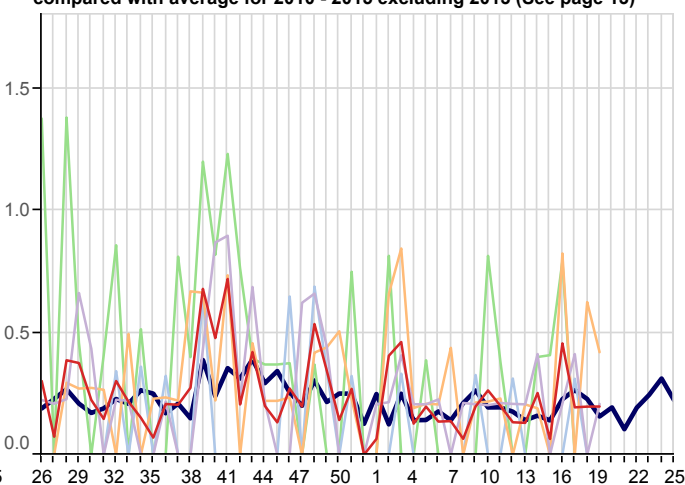
**Acute Tonsillitis/Pharyngitis (ICD10: J02-J03)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



**Upper Respiratory Tract Infections (URTI)(ICD10: J00-J06)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



**Whooping Cough (ICD10: A37)**  
Weekly incidence (per 100,000 all ages) by region for 2016  
compared with average for 2010 - 2015 excluding 2013 (See page 13)

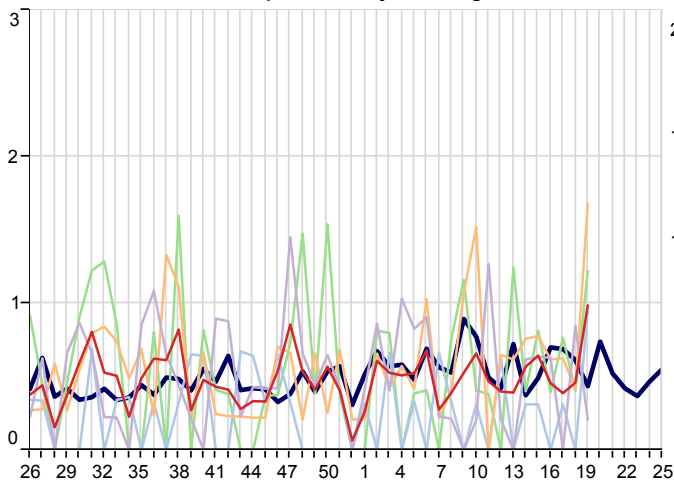




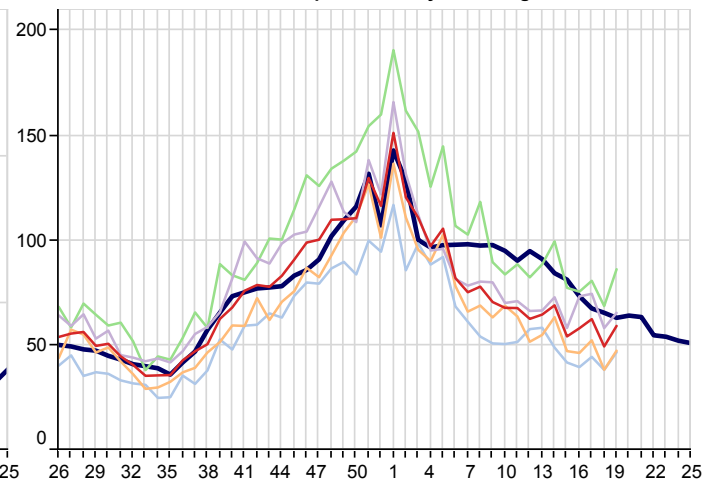
### 3. Respiratory Infections(Continued):

5yr Avg   National   North   South   London   Midlands And East

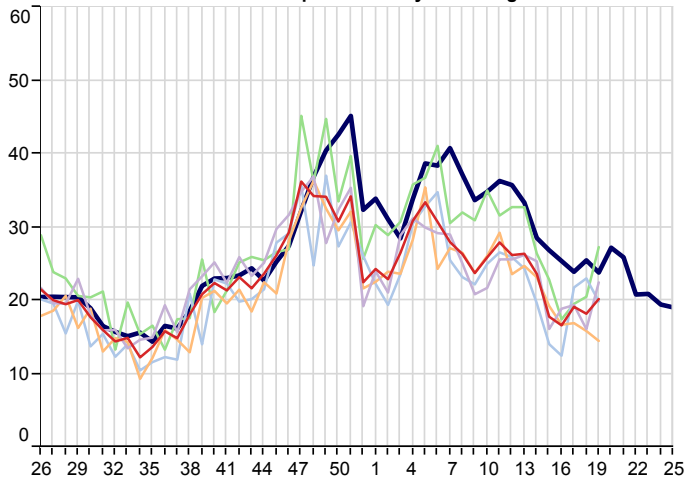
**Infectious Mononucleosis (ICD10: B27)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



**Lower Respiratory Tract Infections (LRTI)(ICD10: J20-J22)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



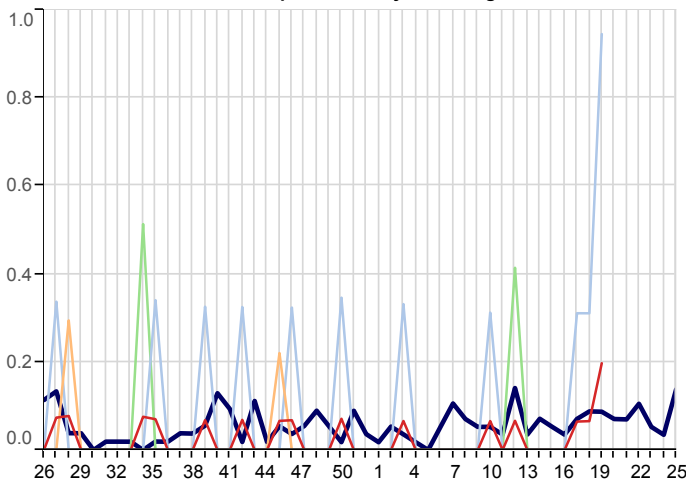
**Acute Otitis Media (ICD10: H650-H651,H660,H669)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



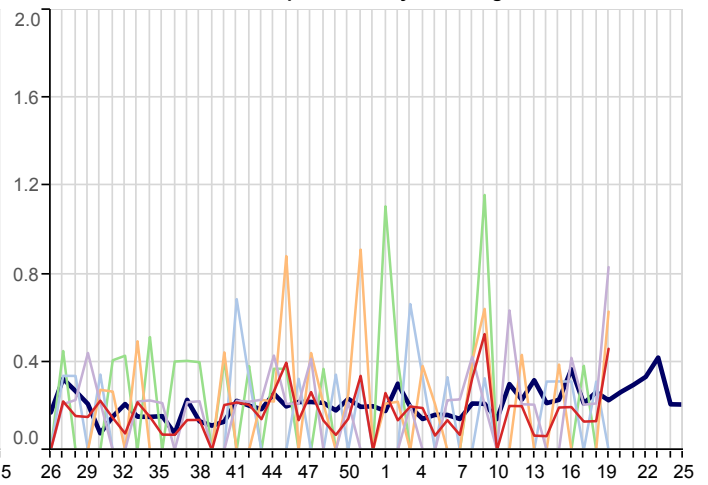
## 4. Vaccine Sensitive Disorders

5yr Avg   National   North   South   London   Midlands And East

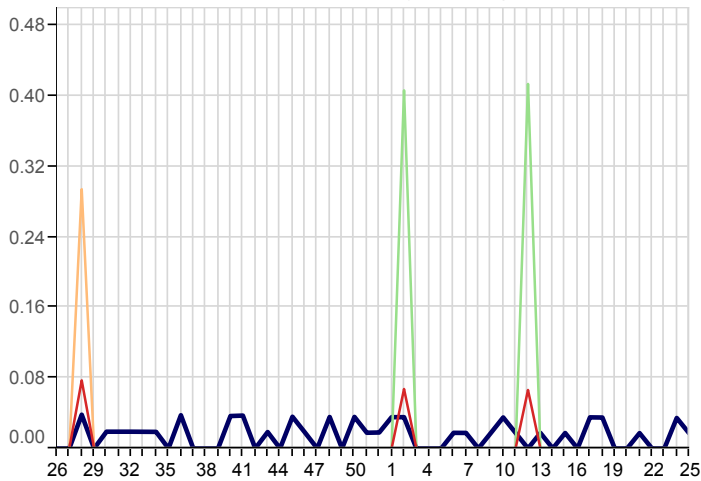
**Measles (ICD10: B05)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



**Mumps (ICD10: B26)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average

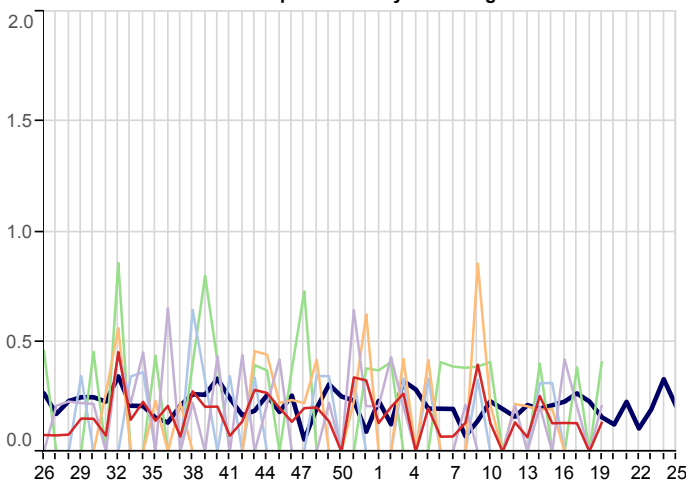


**Rubella (ICD10: B06)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average

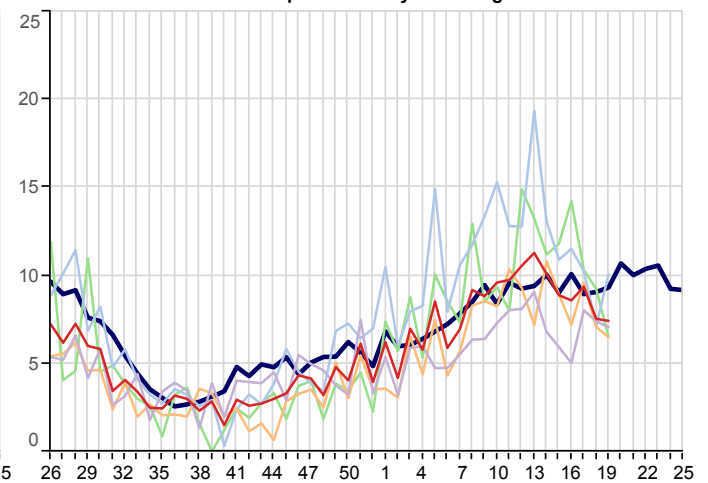


## 5. Skin Contagions

**Bullous Dermatoses (ICD10: L10-L14)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



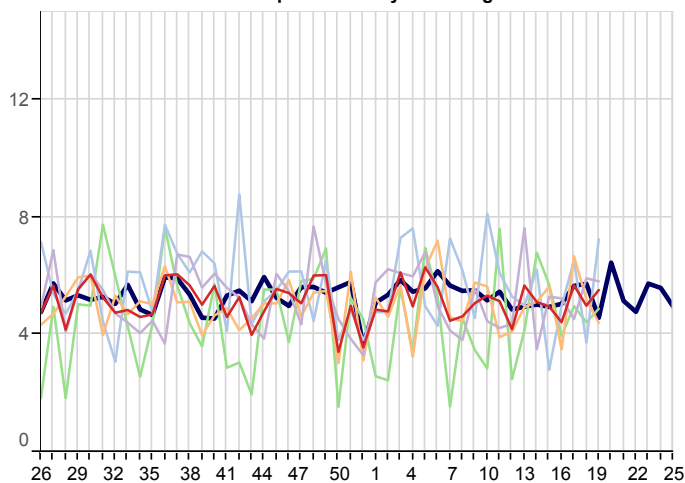
**Chickenpox (ICD10: B01)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



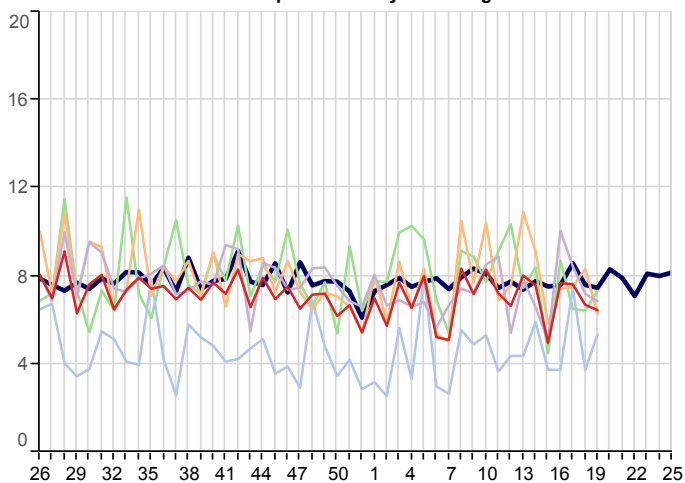
## 5. Skin Contagions (Continued)

5yr Avg   National   North   South   London   Midlands And East

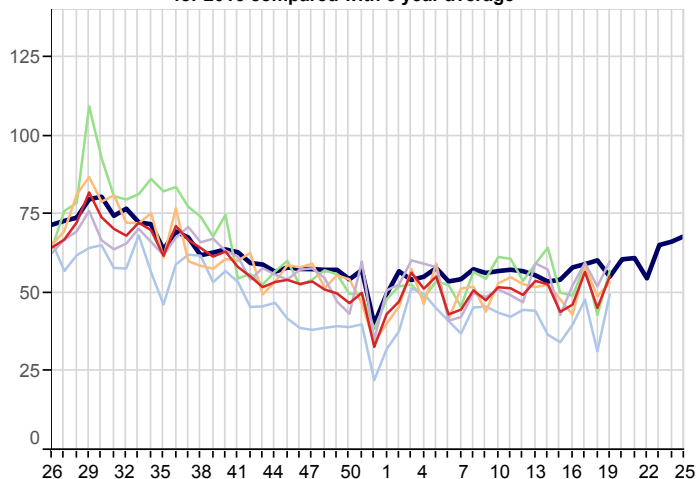
**Herpes Simplex (ICD10: B00)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



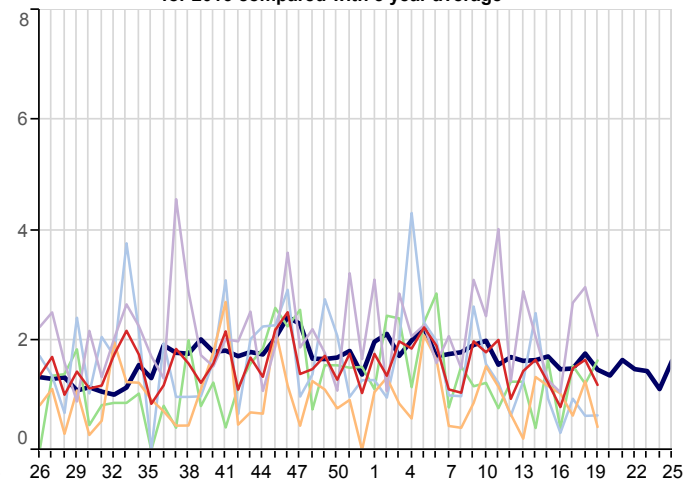
**Herpes Zoster (ICD10: B02)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



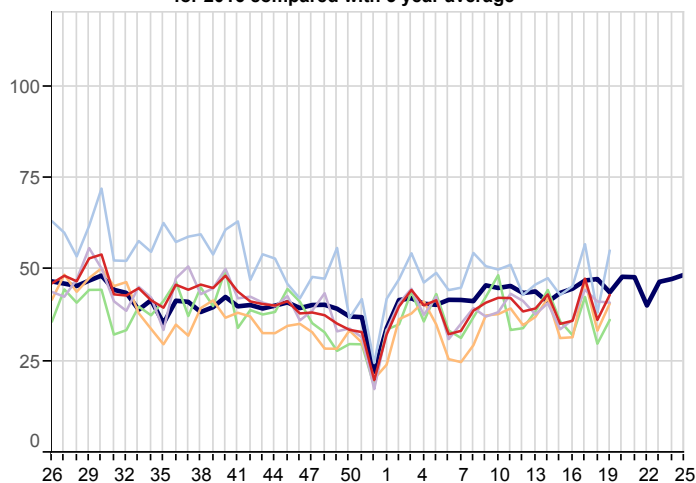
**Infections of Skin & Subcutaneous Tissue (ICD10: L00-L08)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



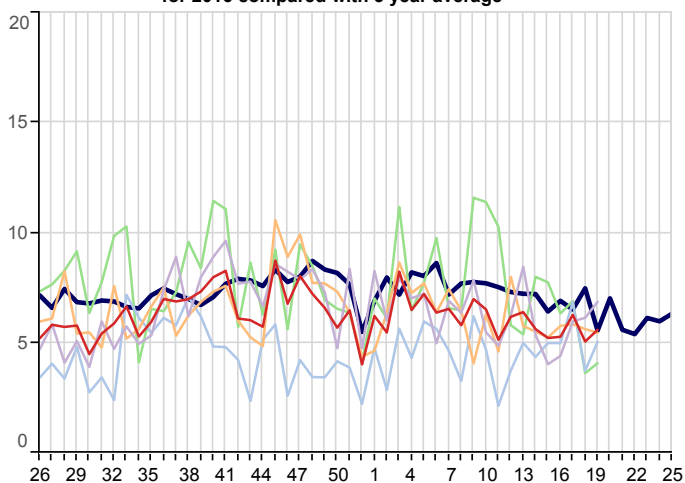
**Scabies (ICD10: B86)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



**Symptoms involving Skin & Oth Integument Tiss (ICD10: R20-R23)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



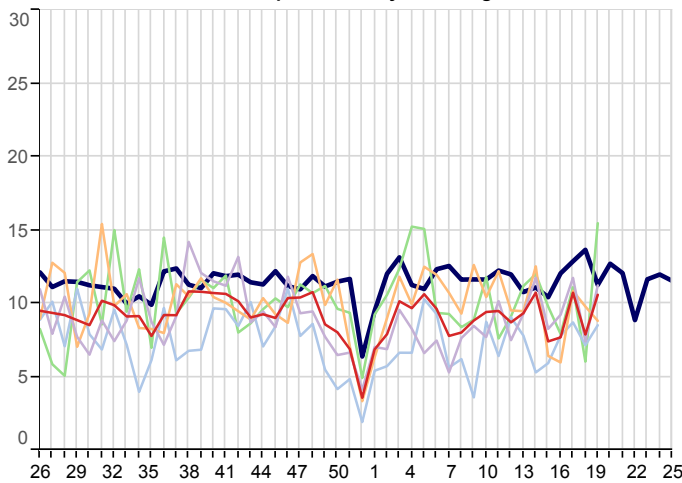
**Impetigo (ICD10: L01)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



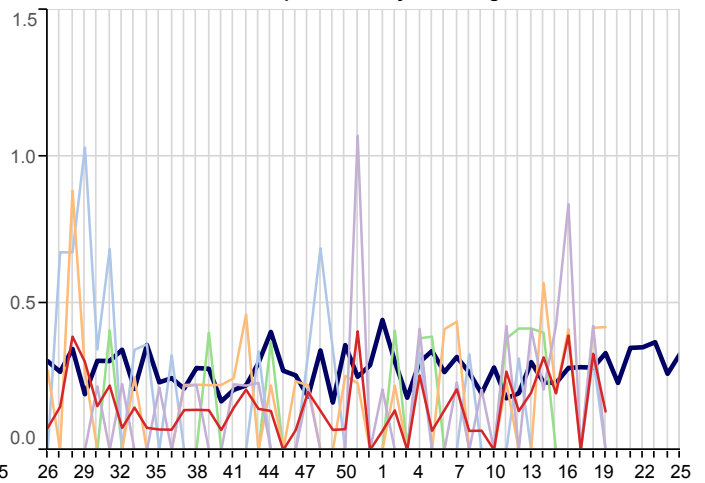
## 6. Disorders Affecting the Nervous System

5yr Avg   National   North   South   London   Midlands And East

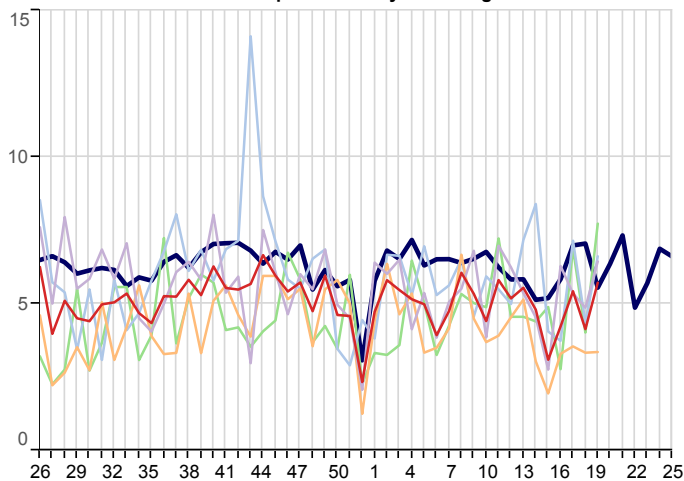
**Disorders of The Peripheral Nervous System (ICD10: G50-G64,G70-G72)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



**Meningitis/Encephalitis (ICD10: A170-A171,A390,A38-A85,A87,G00-G05)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average

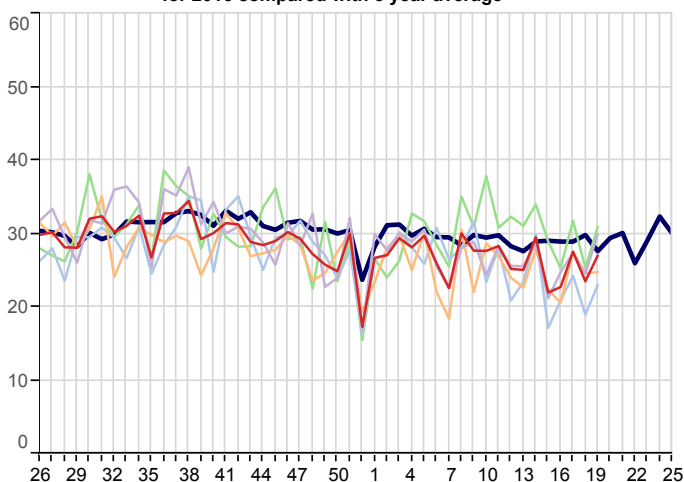


**Symptoms Involving Nervous & Musculoskeletal (ICD10: R25-R29)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



## 7. Genitourinary System Disorders

**Urinary Tract Infection/Cystitis (ICD10: N30,N390)**  
Weekly incidence (per 100,000 all ages) by region  
for 2016 compared with 5 year average



## 8. Tabular Summary by Disease

Disease Name	Week beginning Week ending		08/05/2017 14/05/2017		01/05/2017 07/05/2017		24/04/2017 30/04/2017		17/04/2017 23/04/2017	
	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer
Allergic Rhinitis	21.4	326	15.5	236	18.9	292	15.9	245		
Asthma	12.4	189	11.6	177	13.2	204	11.5	177		
Acute Bronchitis	57.0	867	47.6	725	60.1	931	55.8	857		
Bullous Dermatoses	0.1	2	0.0	0	0.1	2	0.1	2		
Chickenpox	7.4	113	7.5	115	9.4	145	8.6	132		
Common Cold	69.2	1,053	53.7	819	65.2	1,010	60.0	923		
Conjunctival Disorders	23.9	363	21.1	321	30.0	464	21.9	336		
Herpes Simplex	5.5	84	5.0	76	5.7	88	4.4	68		
Herpes Zoster	6.4	98	6.7	102	7.6	118	7.7	118		
Impetigo	5.6	85	5.1	77	6.3	97	5.3	81		
Infectious Mononucleosis	1.0	15	0.5	7	0.4	6	0.5	7		
Influenza-like illness	3.0	45	2.6	39	2.9	45	2.7	41		
Infectious Intestinal Diseases	8.7	132	8.1	124	10.1	156	7.2	111		
Laryngitis and Tracheitis	4.0	61	2.5	38	4.1	64	3.4	52		
Lower Respiratory Tract Infections	59.2	901	49.4	753	62.5	967	58.1	893		
Measles	0.2	3	0.1	1	0.1	1	0.0	0		
Meningitis and Encephalitis	0.1	2	0.3	5	0.0	0	0.4	6		
Mumps	0.5	7	0.1	2	0.1	2	0.2	3		
Non-infective Enteritis and Colitis	8.6	131	6.9	105	7.8	120	7.5	116		
Otitis Media Acute	20.2	307	18.2	277	19.1	296	16.6	255		
Peripheral Nervous Disease	10.6	161	7.9	120	10.7	166	7.7	118		
Pleurisy	1.1	16	1.1	17	1.0	16	0.8	12		
Pneumonia and Pneumonitis	1.1	16	0.9	13	1.2	19	1.6	25		
Respiratory System Diseases	256.3	3,899	214.7	3,272	270.4	4,186	233.9	3,596		
Rubella	0.0	0	0.0	0	0.0	0	0.0	0		
Scabies	1.2	18	1.6	25	1.5	23	0.8	12		
Sinusitis	17.1	260	15.2	232	22.3	345	18.3	282		
Skin and Subcutaneous Tissue Infections	55.2	840	45.2	689	56.6	877	46.3	711		
Strep Throat and Peritonsillar Abscess	2.1	32	2.2	34	2.0	31	1.0	15		
Symptoms involving musculoskeletal	5.7	87	4.1	63	5.4	84	4.2	65		
Symptoms involving Respiratory and Chest	19.2	292	17.0	259	21.1	326	16.6	255		
Symptoms involving Skin and Integument Tissues	43.1	655	36.2	552	47.5	735	36.0	553		
Tonsillitis and acute Pharyngitis	43.5	662	39.2	598	48.3	748	41.3	635		
Upper Respiratory Tract Infections	153.2	2,331	128.1	1,953	158.0	2,446	138.6	2,130		
Urinary Tract Infections	27.0	411	23.5	358	27.5	426	22.7	349		
Viral Hepatitis	0.2	3	0.7	11	0.5	7	0.3	4		
Whooping Cough	0.2	3	0.2	3	0.2	3	0.5	7		
Denom	1,521,333		1,524,073		1,548,172		1,537,151			
Practice Count	153		153		158		156			

## FURTHER INFORMATION:

### About the report

#### Winter focus

The first two pages of data within this report focus on Influenza-Like Illness, in order to provide information about the on set of seasonal influenza and early warning of any epidemic.

#### Rate calculation

Each weekly incidence rate is presented per 100,000 population. All presentations are for males and females, and for all age groups, unless otherwise stated.

The denominator used for this report is taken from our most recent extract of data from GP practice systems, and includes all patients currently registered with eligible practices. The denominator varies week-on-week as patients register and deregister; it may also be the case that all patients from an individual practice are excluded because of problems with the data extraction from that practice in a specific week. As stated above, patients who have withheld consent for data-sharing are excluded.

In addition to the national rate, we present data for the four NHS England regions: North; Midlands and East; South; and London.

#### Five-year averages

Weekly rates are set against the five-year average, calculated from data for the calendar years 2011-2015. Previously we reported against a ten-year average. The change to a five-year average was made because longer-term trends in the incidence of disease have led to weekly rates for certain diseases becoming increasingly divergent from their ten-year average. The use of five-year averages lessens this effect and enables more meaningful comparison.

For two diseases, years with exceptionally high incidence have been excluded from the averages: for Whooping Cough, data from 2012 has been excluded; for Strep Sore Throat, Scarletina and Peritonsillar Abscess, data from 2013 and 2014 have been excluded so that similar rates in the future will appear as exceptional rather than normal in comparison.

#### Threshold calculation for Influenza-Like Illness (ILI)

We are now using the Moving Epidemic Method (MEM) to calculate threshold and intensity levels for Influenza-Like Illness. MEM works by identifying seasonal epidemic peaks and then calculates thresholds and intensity levels based on the pre and post epidemic values. This allows us to report the severity of ILI against multiple thresholds, rather than a simple comparison with the five-year average as the wide variation in ILI year on year, especially during the seasonal peak, makes the average less representative.

In addition to the All Ages thresholds, we have also calculated thresholds for three age bands: those aged under 15, 15-64 year olds and those aged 65 and over. ILI incidence rates vary among different age groups, and the age-specific thresholds allow us to highlight epidemics where ILI disproportionately affects a particular age group.

This methodology is used by the European Centre for Disease Prevention and Control to standardise reporting of influenza activity across Europe, and is also in use by Public Health England. Full details of the methodology can be found in: Vega *et al.* (2012) Influenza surveillance in Europe: establishing epidemic thresholds by the moving epidemic method. Influenza and Other Respiratory Viruses 7(4), 546–558. For ease of graphical representation, the final threshold (Very High) is not included in Graph A, page 2, but it is part of Table 3, page 3.

Both the *all-ages* thresholds and the *age-specific* thresholds are shown in Table 2, page 3. Ten years of data were used for *all-ages* and *age-specific* thresholds calculation (winter seasons 2004/05- 2014/15 excluding 2009/10).

## About the Royal College of General Practitioners (RCGP) Research and Surveillance Centre (RSC)

### What we do

The RCGP RSC was established in 1957, with the current name in use since 2009. The Centre is an internationally renowned source of information, analysis and interpretation concerning the onset, patterns, prevalence and trends over time of morbidity in primary care. The RSC is an active research and surveillance unit that collects and monitors data; its most important research is the surveillance of influenza and the monitoring of vaccine effectiveness.

The RSC data and analytics hub is housed in the Section of Clinical Medicine and Ageing at the University of Surrey.

Further information about the RSC can be found on our website:

<http://www.rcgp.org.uk/clinical-and-research/our-programmes/research-and-surveillance-centre.aspx>

### Our data extraction process and information governance

Data are extracted twice weekly from practice systems by Apollo Medical Software Solutions on the RCGP's behalf. Patients who have withheld consent for data sharing are excluded from the extraction process.

Data are pseudonymised as close to source as possible. Data are held on secure servers at the RCGP data and analytics hub in the Section of Clinical Medicine and Ageing at the University of Surrey. Both Apollo and the University of Surrey are Registered and compliant with the Data Protection Act and fully compliant with all relevant NHS Digital data information governance best practice.

### What the data is used for

The RCGP RSC has been providing reports weekly about health and disease, called the Weekly Returns Service (WRS) since 1964. The WRS monitors the number of patients consulting with new episodes of illness classified by diagnosis in England and provides weekly incidence rates per 100,000 population for these new episodes of illness. It is the key primary care element of the national disease monitoring systems run by Public Health England. The bulletin can be found at the following URL:

<https://www.gov.uk/government/publications/syndromic-surveillance-summary>

In addition to the WRS, the data is used for other research studies. Any other uses of the data for research follow ethical approval or agreement from NIHR proportionate review, and where relevant Health Research Authority Confidential Advisory Group advice that further approval is not needed. Full details can be found on our website:

<http://www.rcgp.org.uk/clinical-and-research/our-programmes/research-and-surveillance-centre.aspx>

### For further information

For further information about the work of the RSC, or if you would like to be included on our email notification list, please contact:

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