



Royal College of  
General Practitioners  
Research and Surveillance Centre

## RSC Communicable and Respiratory Disease Report for England

### Key Statistics:

Week Number/Year.....18/2018  
Week Starting - Ending.....30/04/2018 - 06/05/2018  
No. of Practices.....163  
Population.....1696749

### National (England)

- **Acute Bronchitis** : was unchanged at **51.9** in week 17 compared with **50.4** in week 18.
- **Asthma** : decreased from **13.3** in week 17 to **12.3** in week 18.
- **Common Cold** : increased from **62.5** in week 17 to **69.3** in week 18.
- **Influenza-Like illness** : decreased from **3.4** in week 17 to **3.1** in week 18.
- **Respiratory System Diseases** : was unchanged at **277.3** in week 17 compared with **269.1** in week 18.

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

- **Acute Bronchitis** : decreased from **36.0** in week 17 to **28.8** in week 18 in the London region, decreased from **64.9** in week 17 to **59.6** in week 18 in the North region, increased from **48.4** in week 17 to **51.3** in week 18 in the South region, and increased from **58.2** in week 17 to **64.5** in week 18 in the Midlands And East region.
- **Asthma** : decreased from **16.7** in week 17 to **12.5** in week 18 in the London region, was unchanged at **12.2** in week 17 compared with **12.5** in week 18 in the North region, increased from **10.7** in week 17 to **13.1** in week 18 in the South region, and decreased from **17.4** in week 17 to **9.7** in week 18 in the Midlands And East region.
- **Common Cold** : increased from **76.9** in week 17 to **86.6** in week 18 in the London region, increased from **62.8** in week 17 to **76.1** in week 18 in the North region, increased from **54.1** in week 17 to **58.1** in week 18 in the South region, and decreased from **59.1** in week 17 to **50.4** in week 18 in the Midlands And East region.
- **Influenza-Like illness** : increased from **4.1** in week 17 to **5.1** in week 18 in the London region, decreased from **3.4** in week 17 to **1.9** in week 18 in the North region, decreased a little from **2.8** in week 17 to **2.7** in week 18 in the South region, and decreased from **4.1** in week 17 to **3.1** in week 18 in the Midlands And East region.
- **Respiratory System Diseases** : decreased from **317.0** in week 17 to **274.0** in week 18 in the London region, increased a little from **283.4** in week 17 to **296.8** in week 18 in the North region, was unchanged at **241.4** in week 17 compared with **246.4** in week 18 in the South region, and decreased from **290.2** in week 17 to **251.6** in week 18 in the Midlands And East region.

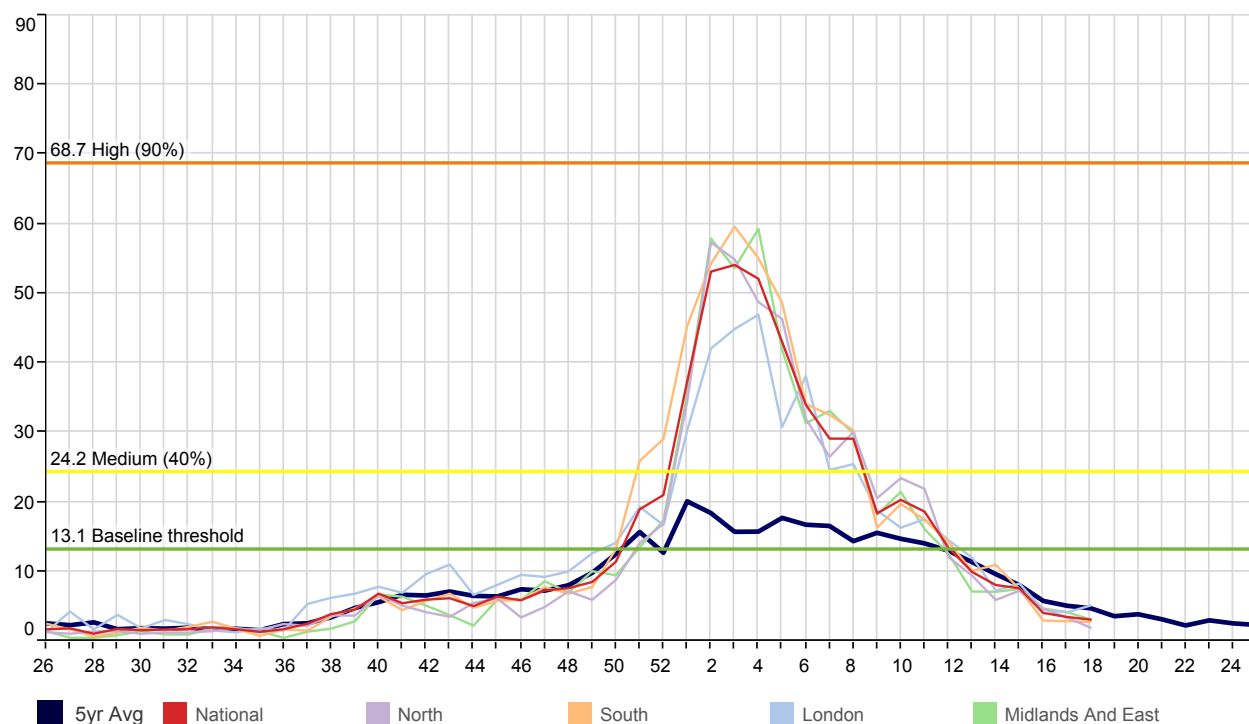
### Comment:

Presentations of many respiratory and other conditions have decreased this week and are in line with those anticipated at this time of year.

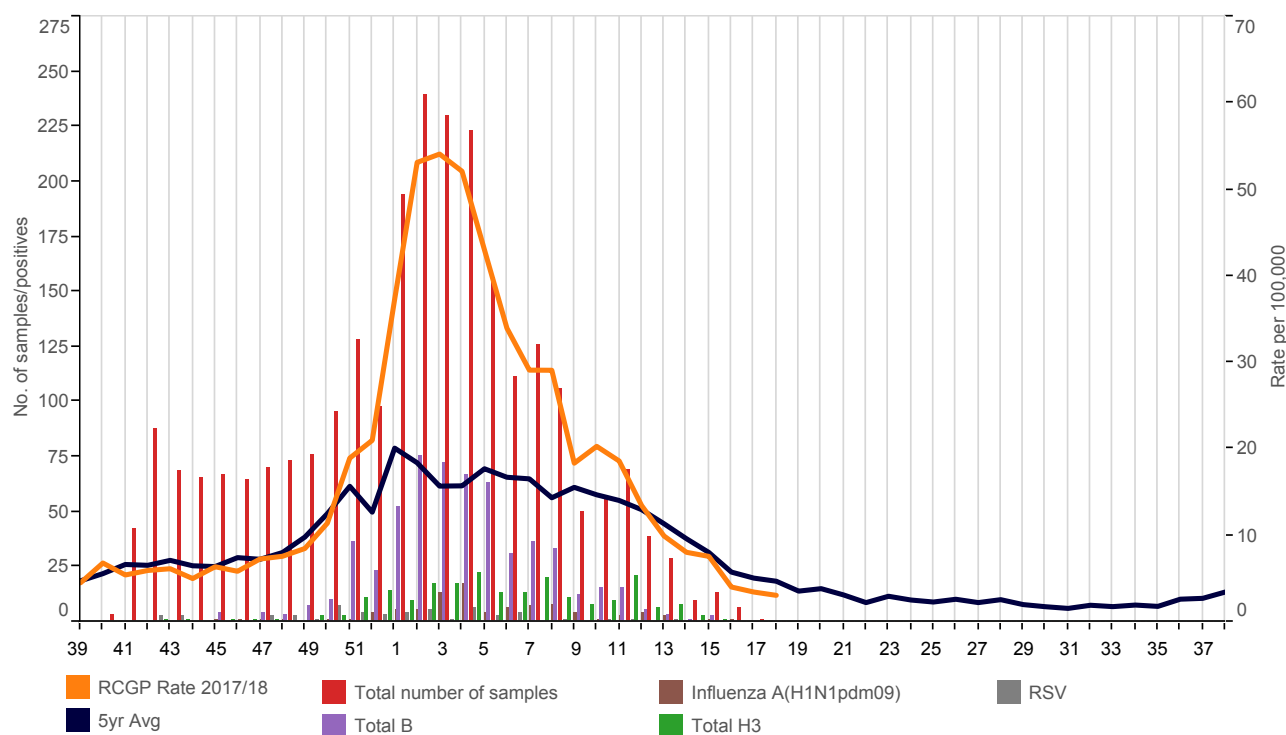
## Winter Focus 2017/18

Please see page 13 for explanatory notes on the data.

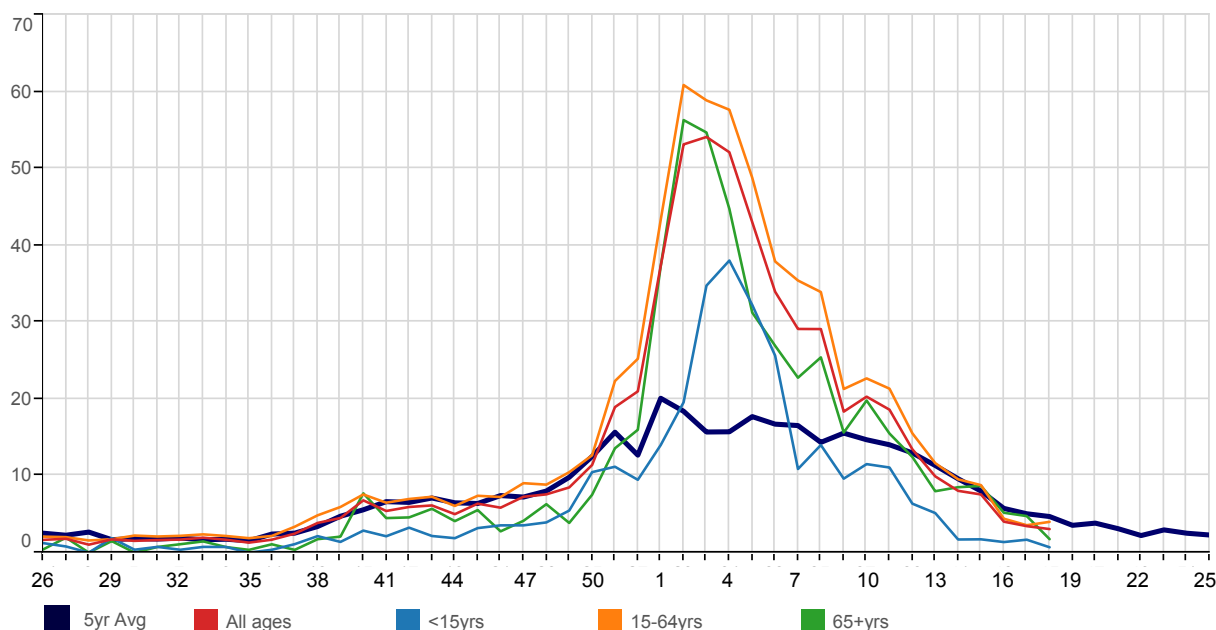
### (A) Influenza-like illness: incidence rate winter 2017/18\*



### (B) RCGP/PHE RSV and Influenza Virology Swab Surveillance 2017/18(all ages, gender & regions combined)\*



\* The thresholds used are the agreed RCGP/ Public Health England levels for 2017/18. The rolling average line (blue) is based on 5 year historic RCGP RSC level.

**(C) Influenza-like illness: national incidence rate 2017/2018 by age group\*****(D) Influenza-like illness: national incidence rate 2017/2018 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.

	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4
<15yrs	2.87	2.13	3.25	2.17	1.88	3.19	3.55	3.55	3.93	5.47	10.47	11.18	9.48	14.00	19.56	34.75	38.01
15-64yrs	7.57	6.50	6.98	7.27	6.08	7.40	7.24	9.04	8.85	10.47	12.66	22.33	25.23	43.32	60.86	58.86	57.64
65+yrs	7.71	4.49	4.58	5.70	4.10	5.54	2.77	4.14	6.30	3.86	7.53	13.58	15.99	37.27	56.30	54.68	44.74
All ages	6.80	5.42	5.94	6.14	5.01	6.37	5.85	7.27	7.58	8.48	11.41	18.94	20.99	37.33	53.13	54.09	52.11

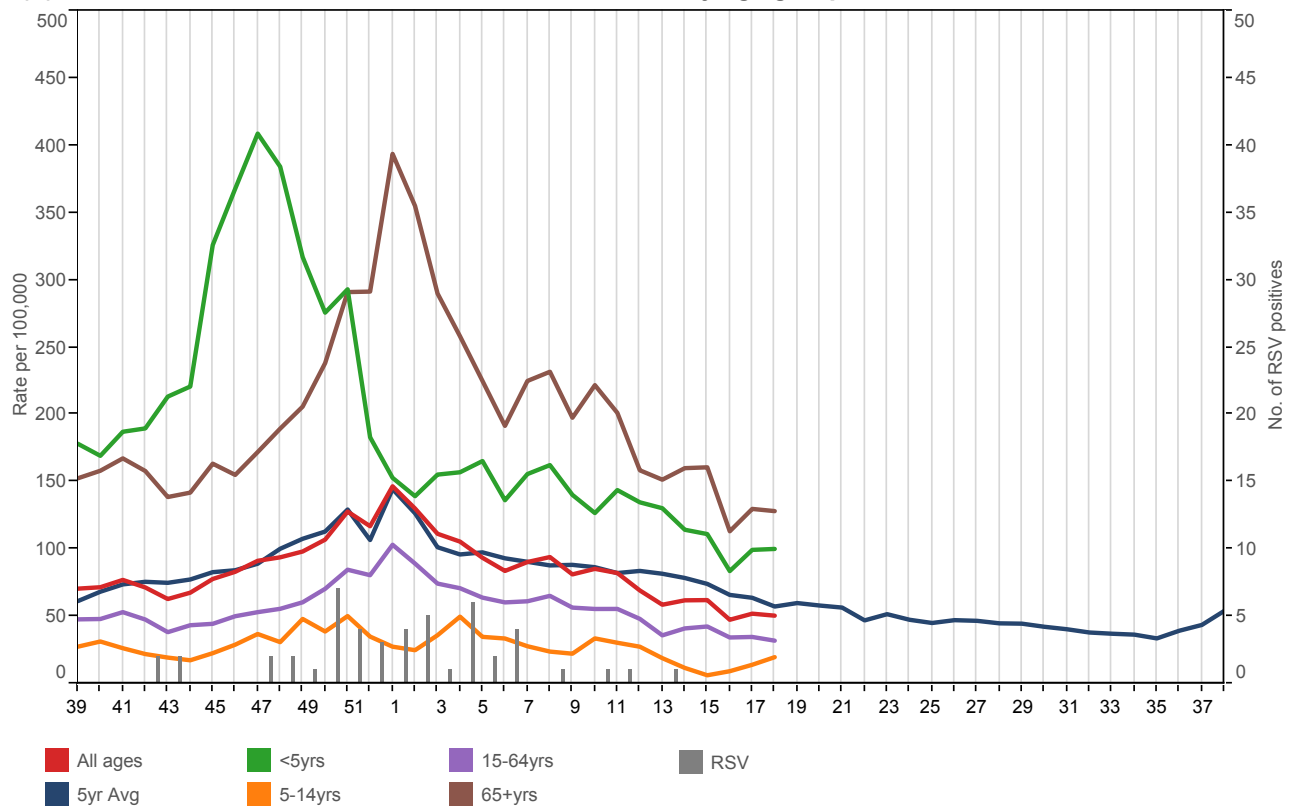
  

	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
<15yrs	32.24	25.65	10.88	14.00	9.63	11.52	11.08	6.37	5.15	1.71	1.73	1.38	1.68	0.70		
15-64yrs	48.79	37.90	35.41	33.91	21.29	22.67	21.34	15.53	11.65	9.54	8.78	4.41	3.57	4.01		
65+yrs	31.24	26.93	22.76	25.41	15.63	19.80	15.50	12.45	7.99	8.52	8.68	5.19	4.76	1.75		
All ages	43.01	33.96	29.11	29.09	18.35	20.29	18.60	13.45	9.93	8.04	7.57	4.03	3.45	3.06		

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>	Threshold levels
0-14	<10.8	10.8 to <16.2	16.2 to <49.0	49.0 to <80.0	80.0+	<sup>1</sup> Below baseline threshold
15-64	<14.6	14.6 to <27.5	27.5 to <62.6	62.6 to <90.0	90.0+	<sup>2</sup> baseline threshold breach to < 40th percentile
65+	<11.0	11.0 to <15.8	15.8 to <34.4	34.4 to <48.5	48.5+	<sup>3</sup> 40th to <90th percentile
All Ages	<13.1	13.1 to <24.2	24.2 to <68.7	68.7 to <108.9	108.9+	<sup>4</sup> 90th to <97.5th percentile
						<sup>5</sup> 97.5th+ percentile

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

	Influenza-like illness	Acute Bronchitis		Influenza-like illness	Acute Bronchitis
<1yr	0.0	181.1	London	5.1	28.8
1-4yrs	0.0	82.0	North	1.9	59.6
5-14yrs	1.0	19.6	South	2.7	51.3
15-24yrs	3.7	11.6	Midlands And East	3.1	64.5
25-44yrs	3.1	20.3	National	3.1	50.4
45-64yrs	5.2	55.6			
65-74yrs	1.9	91.7			
75-84yrs	2.2	150.8			
85+yrs	0.0	225.2			
All ages	3.1	50.4			

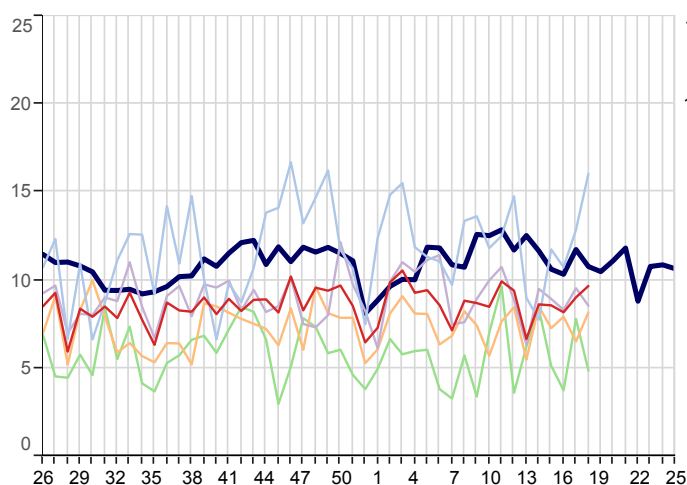
**(E) Acute Bronchitis: national incidence rate 2017/2018 by age group\*****Weekly Influenza-like illness and Acute Bronchitis incidence rates per 100,000 persons**

	Influenza-like illness	Acute Bronchitis
<5yrs	0.0	100.0
5-14yrs	1.0	19.6
15-64yrs	4.0	31.9
65+yrs	1.8	128.2
All ages	3.1	50.4

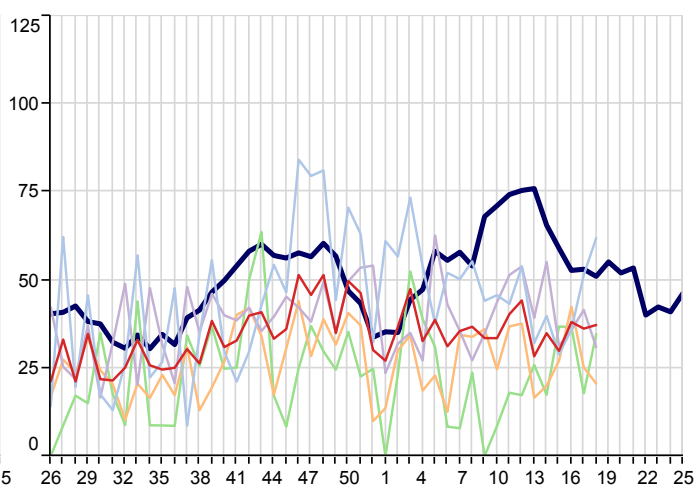
# 1. Water & Food Borne Disorders:

5yr Avg   National   London   North   South   Midlands And East

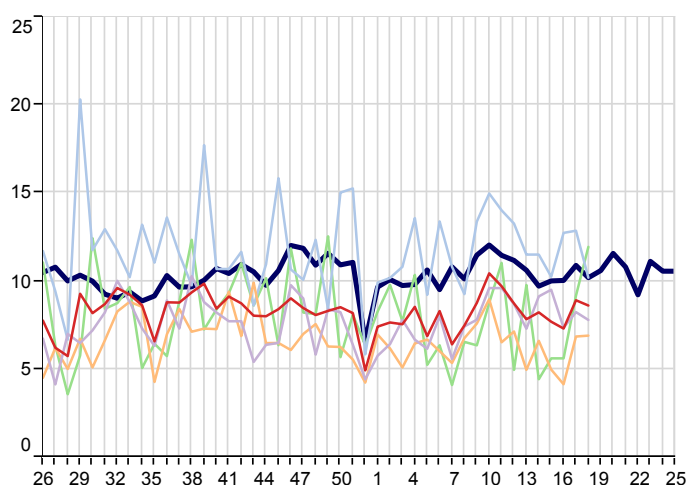
**Infectious Intestinal Disease (ICD10: A00-A09)**  
Weekly incidence (per 100,000 **all ages**) by regions  
for 2018 compared with 5 year average



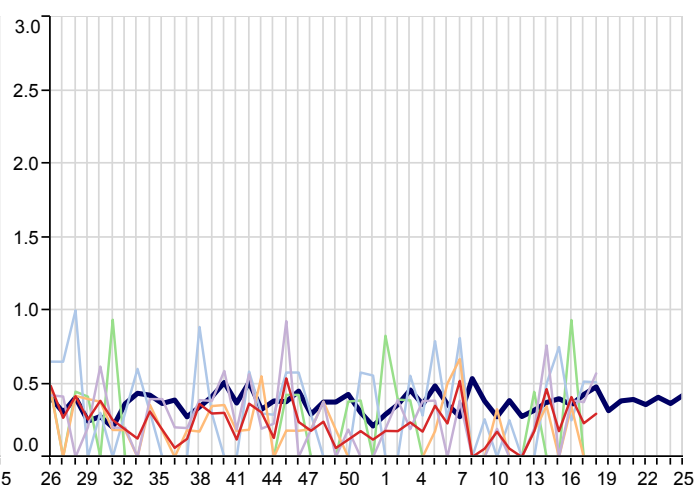
**Infectious Intestinal Disease (ICD10: A00-A09)**  
Weekly incidence (per 100,000 **0-4 years**) by regions  
for 2018 compared with 5 year average



**Non-Infective Enteritis & Colitis (ICD10: K50-K52)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



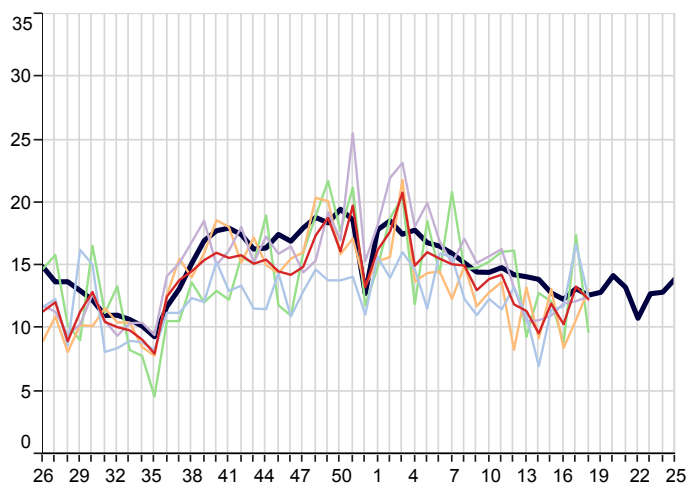
**Viral Hepatitis (ICD10: B15-B19)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



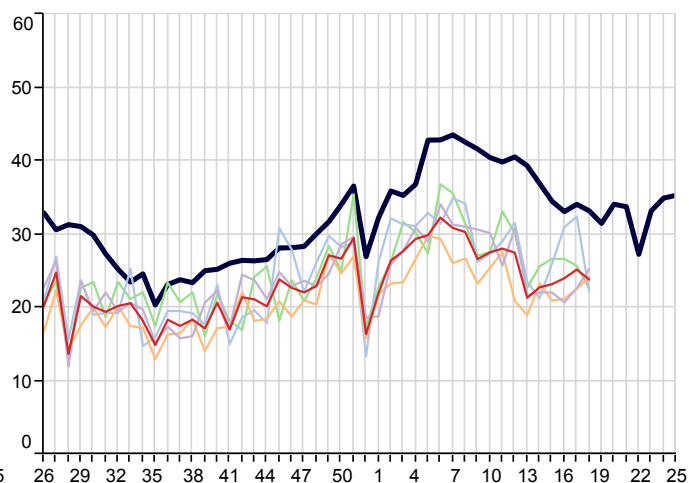
## 2. Environmentally Sensitive Disorders:

5yr Avg   National   London   North   South   Midlands And East

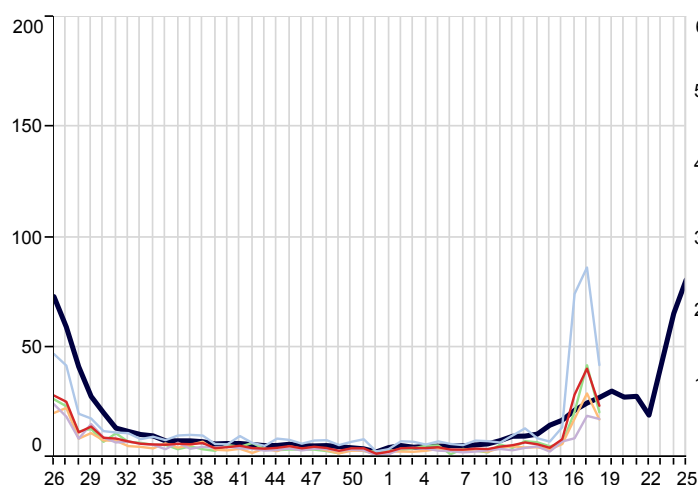
**Asthma (ICD10: J45-J46)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



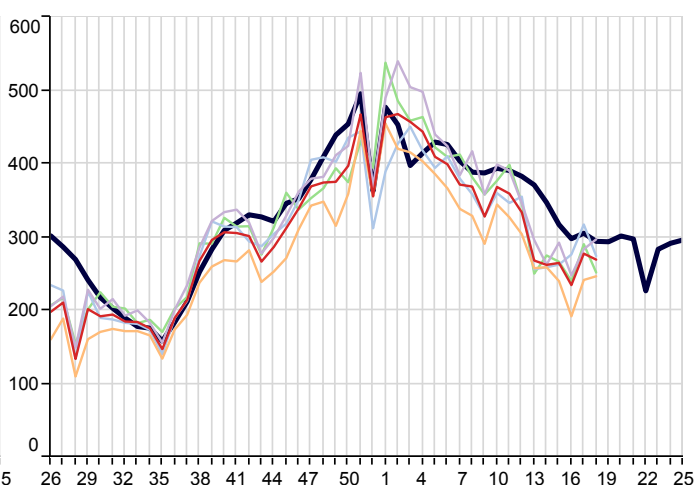
**Disorders of Conjunctiva (ICD10: H10-H13)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



**Hayfever/Allergic Rhinitis (ICD10: J30)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



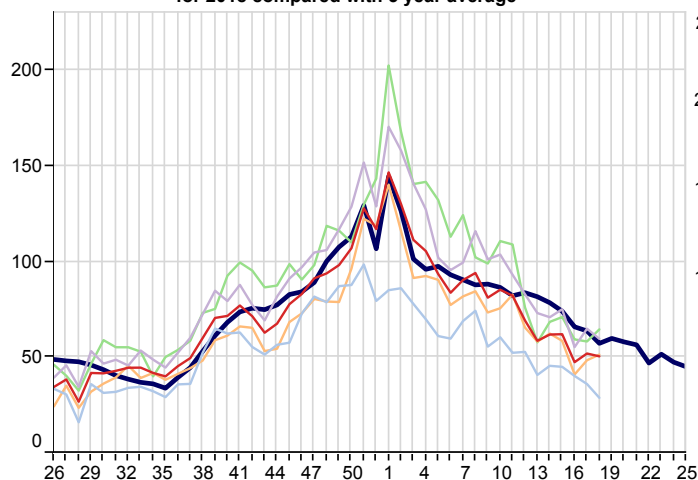
**Symptoms involving Respiratory & Chest (ICD10: R05-R07,R09)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



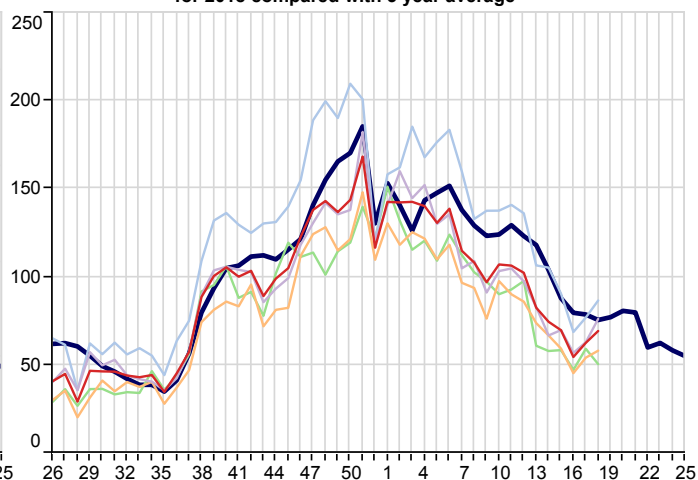
### 3. Respiratory Infections:

5yr Avg   National   London   North   South   Midlands And East

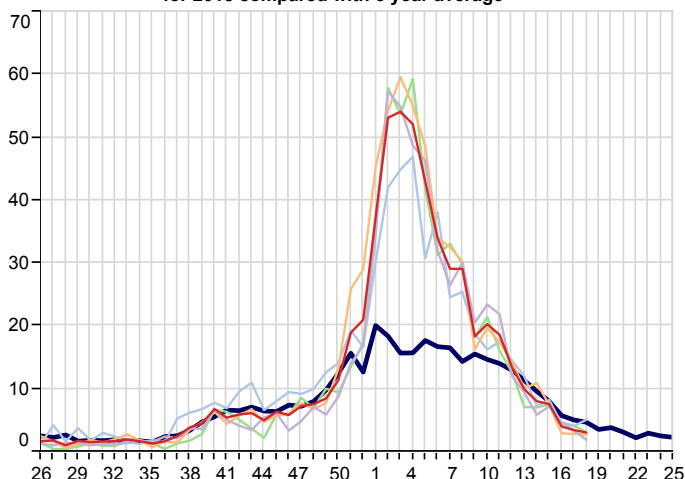
**Acute Bronchitis (ICD10: J20-J21,J40)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



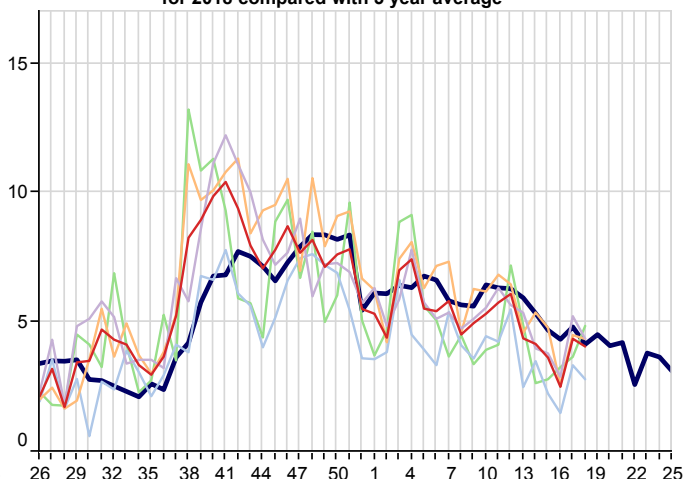
**Common Cold (ICD10: J00,J06)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



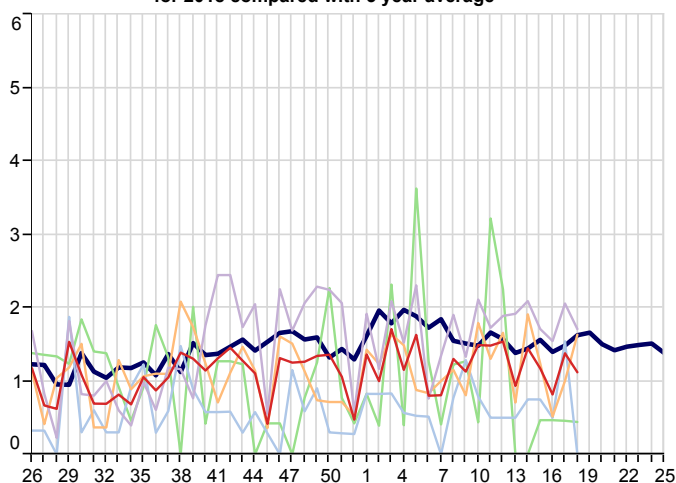
**Influenza-Like Illness (ICD10: J09-J11)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



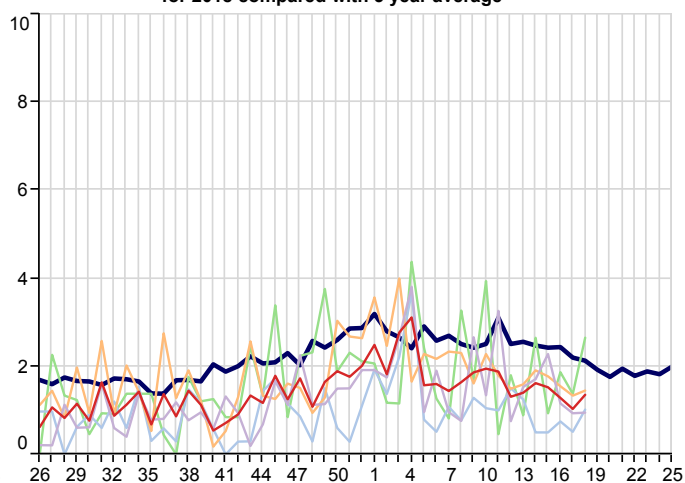
**Acute Laryngitis/Tracheitis (ICD10: J04)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



**Pleurisy (ICD10: R091)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



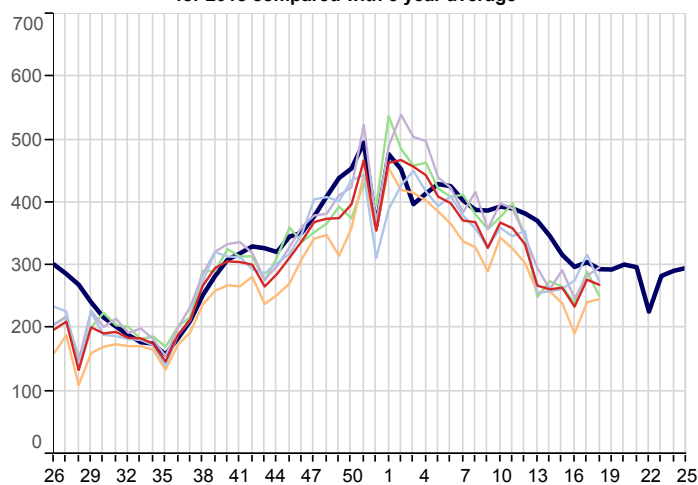
**Pneumonia/Pneumonitis (ICD10: J12-J18)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



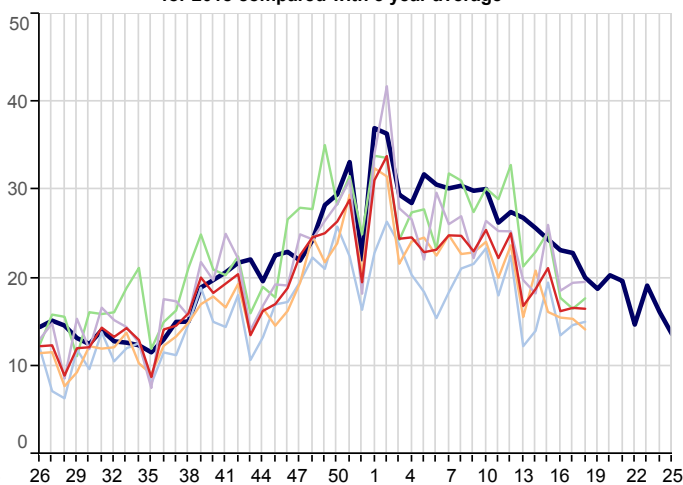
### 3. Respiratory Infections(Continued):

5yr Avg   National   London   North   South   Midlands And East

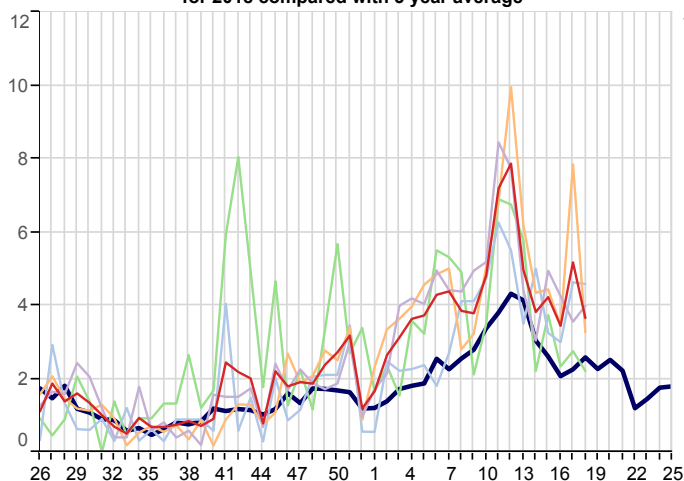
**Respiratory System Diseases (ICD10: J00-J99)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



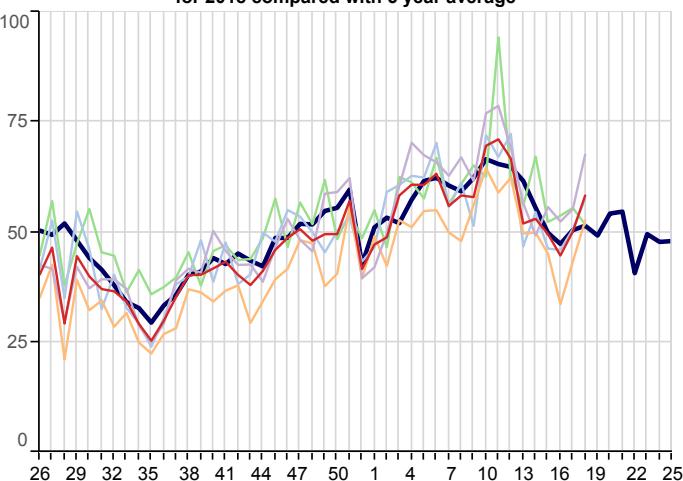
**Acute Sinusitis (ICD10: J01)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



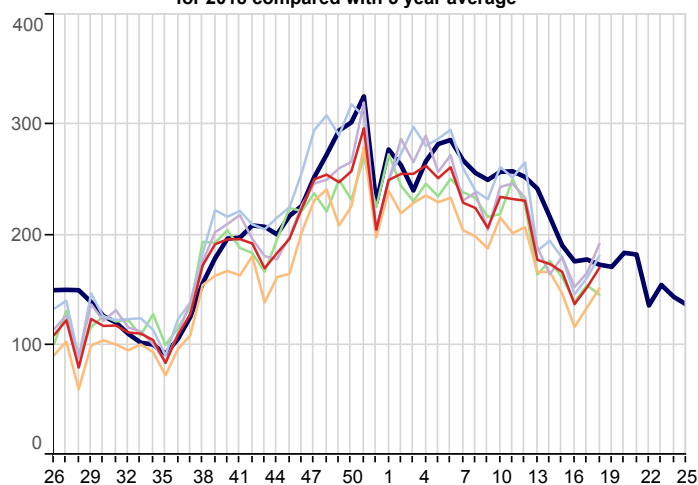
**Strep Sore Throat, Scarletina and Peritonsillar Abscess (ICD10: A38,J020,J36)**  
Weekly incidence (per 100,000 all ages) by region for 2017  
for 2018 compared with 5 year average



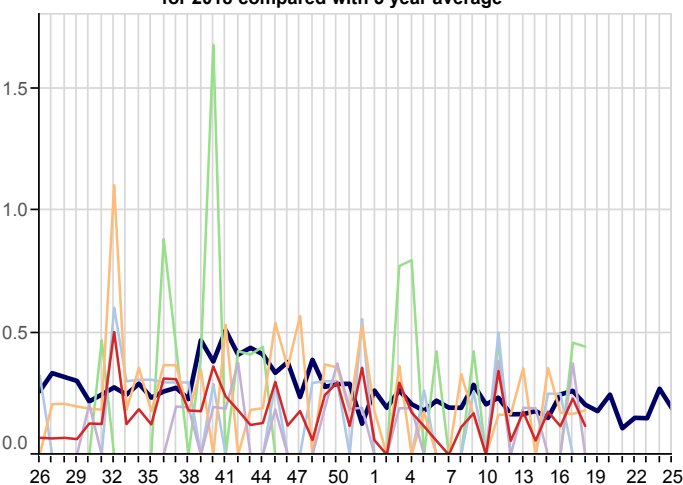
**Acute Tonsillitis/Pharyngitis (ICD10: J02-J03)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



**Upper Respiratory Tract Infections (URTI)(ICD10: J00-J06)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



**Whooping Cough (ICD10: A37)**  
Weekly incidence (per 100,000 all ages) by region for 2017  
for 2018 compared with 5 year average

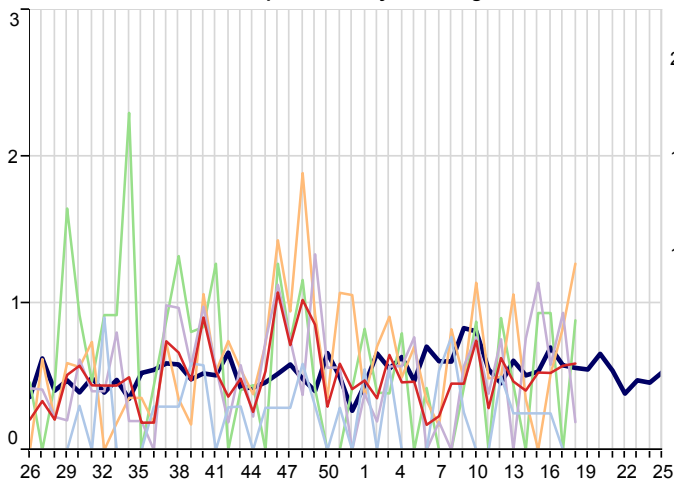




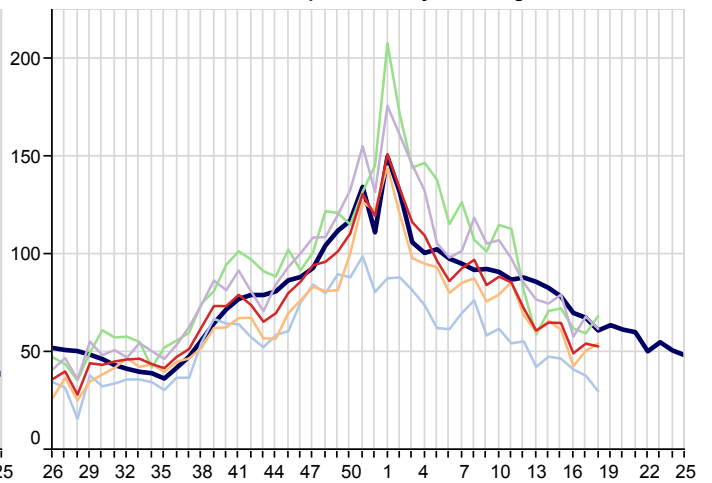
### 3. Respiratory Infections(Continued):

5yr Avg   National   London   North   South   Midlands And East

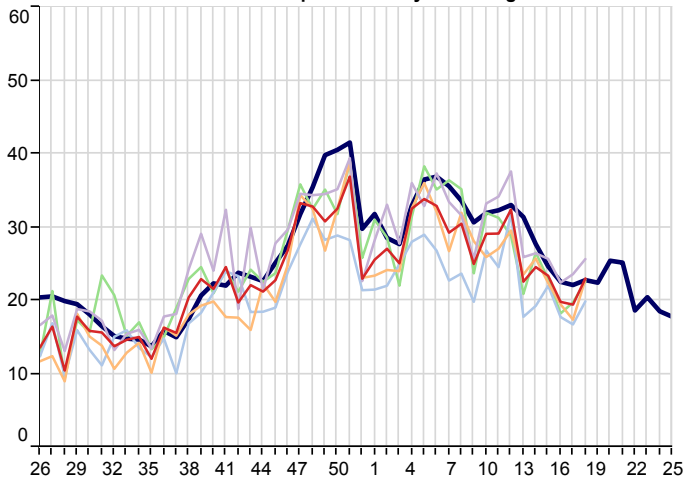
**Infectious Mononucleosis (ICD10: B27)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



**Lower Respiratory Tract Infections (LRTI)(ICD10: J20-J22)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



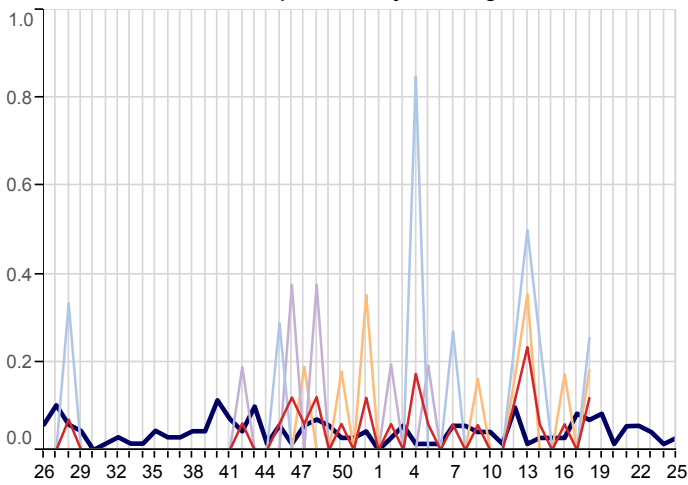
**Acute Otitis Media (ICD10: H650-H651,H660,H669)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



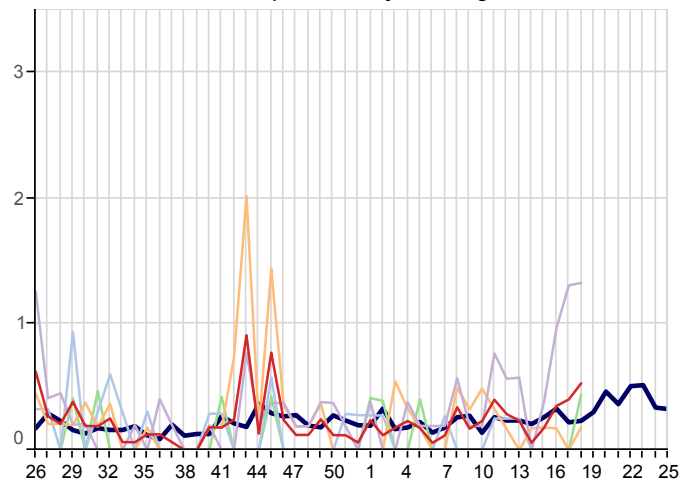
## 4. Vaccine Sensitive Disorders

5yr Avg   National   London   North   South   Midlands And East

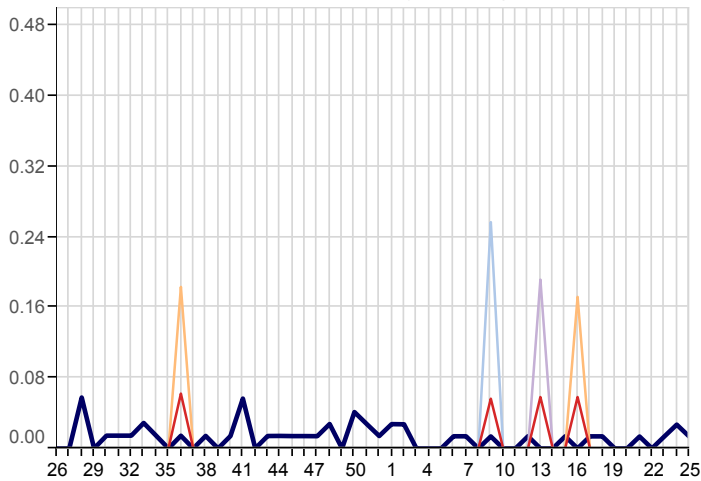
**Measles (ICD10: B05)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



**Mumps (ICD10: B26)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average

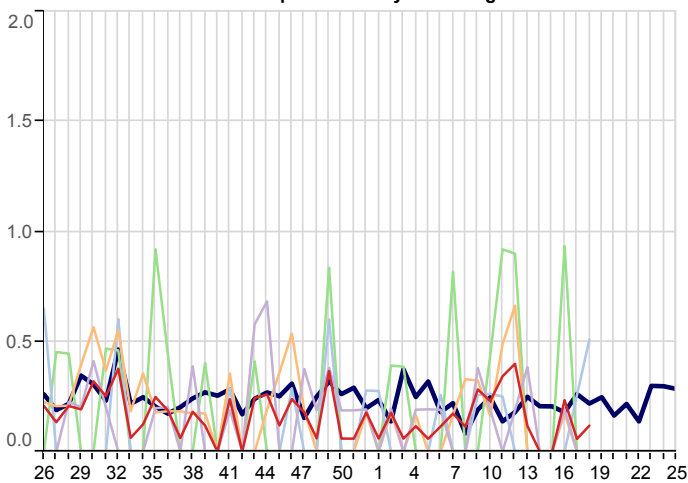


**Rubella (ICD10: B06)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average

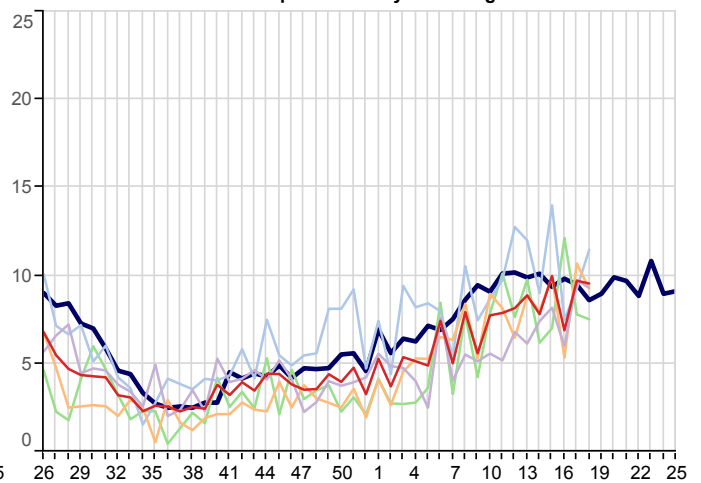


## 5. Skin Contagions

**Bullous Dermatoses (ICD10: L10-L14)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



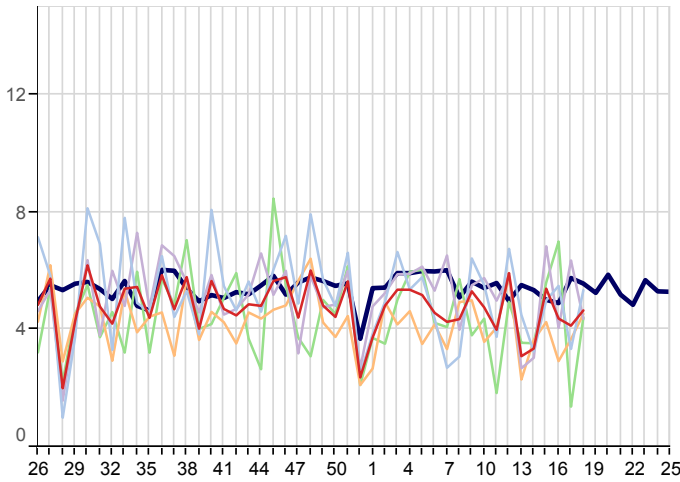
**Chickenpox (ICD10: B01)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



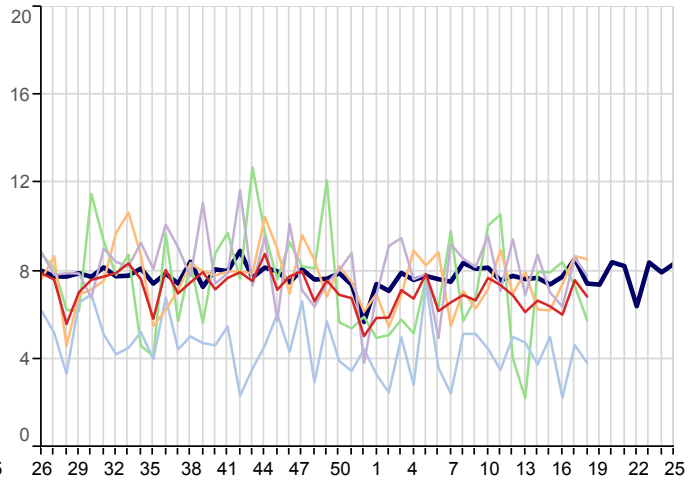
## 5. Skin Contagions (Continued)

5yr Avg   National   London   North   South   Midlands And East

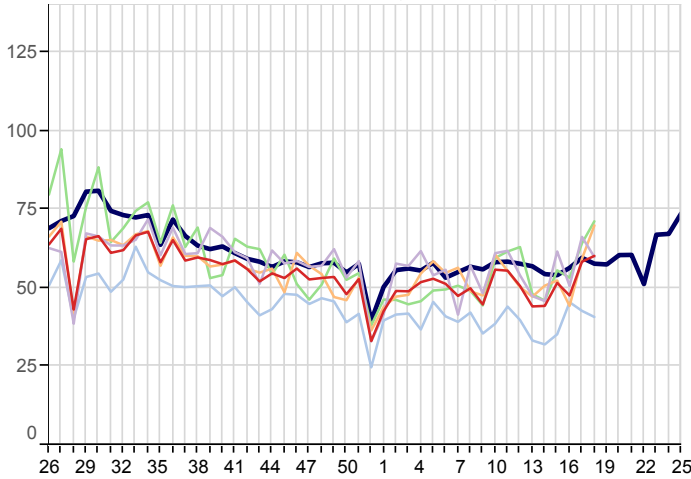
**Herpes Simplex (ICD10: B00)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



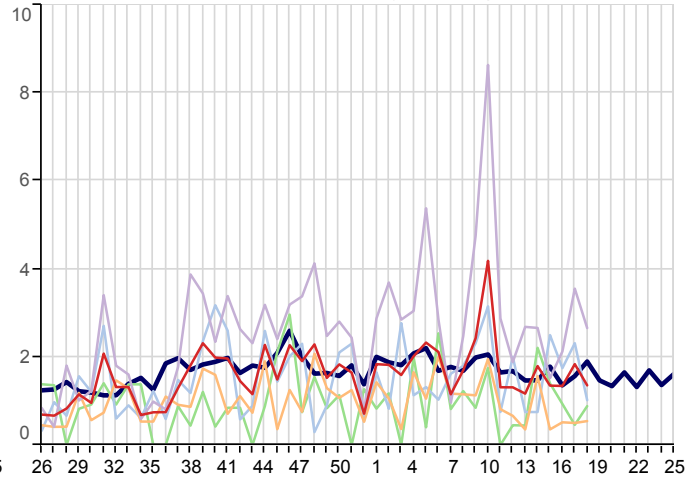
**Herpes Zoster (ICD10: B02)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



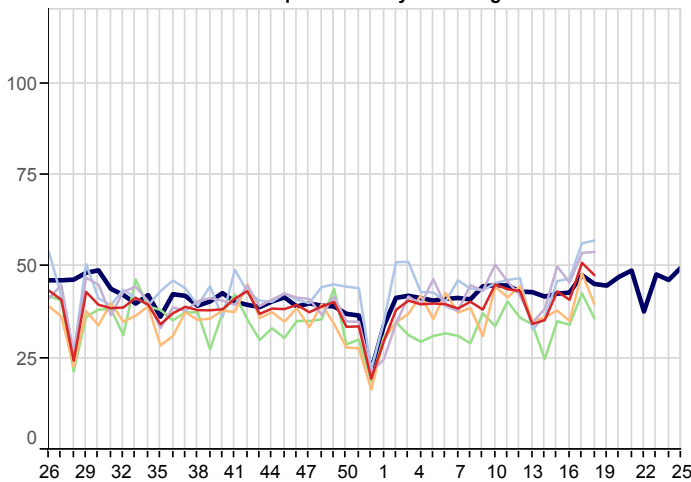
**Infections of Skin & Subcutaneous Tissue (ICD10: L00-L08)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



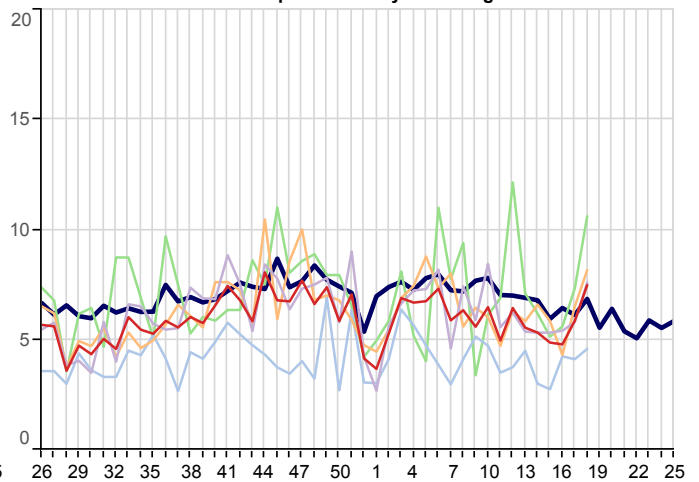
**Scabies (ICD10: B86)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



**Symptoms involving Skin & Oth Integument Tiss (ICD10: R20-R23)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



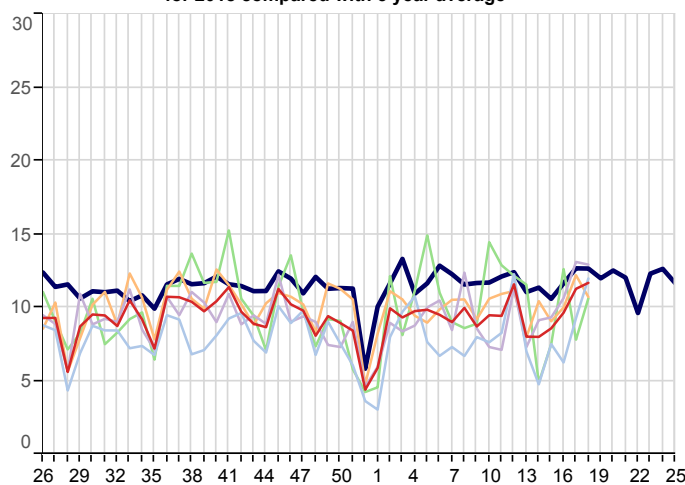
**Impetigo (ICD10: L01)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



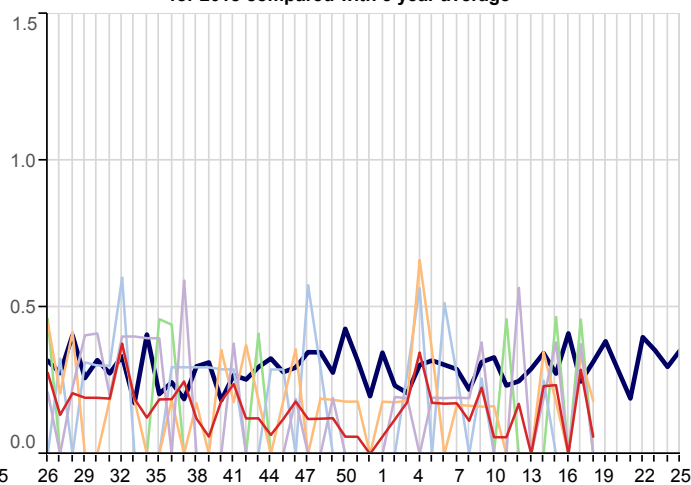
## 6. Disorders Affecting the Nervous System

5yr Avg   National   London   North   South   Midlands And East

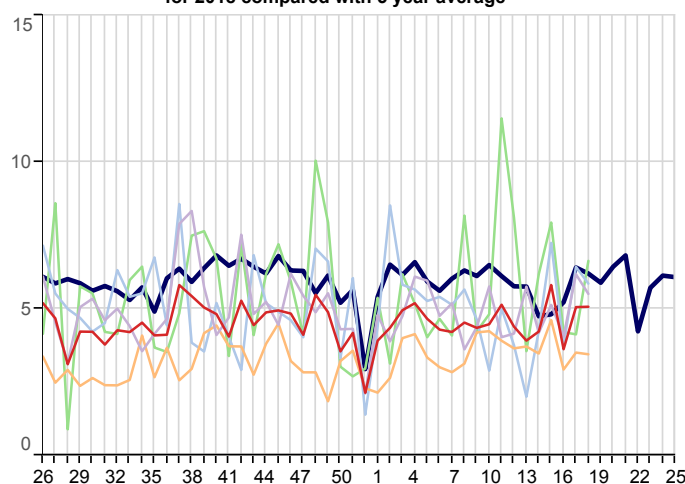
**Disorders of The Peripheral Nervous System (ICD10: G50-G64,G70-G72)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



**Meningitis/Encephalitis (ICD10: A170-A171,A390,A38-A85,A87,G00-G05)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average

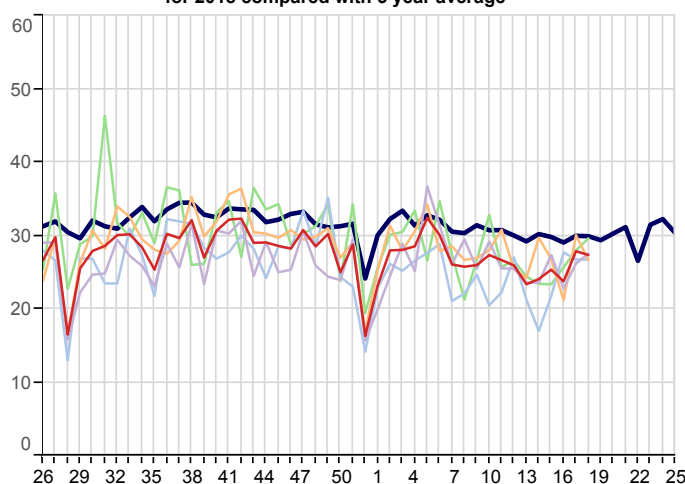


**Symptoms Involving Nervous & Musculoskeletal (ICD10: R25-R29)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



## 7. Genitourinary System Disorders

**Urinary Tract Infection/Cystitis (ICD10: N30,N390)**  
Weekly incidence (per 100,000 all ages) by region  
for 2018 compared with 5 year average



## 8. Tabular Summary by Disease

Disease Name	Week beginning Week ending		30/04/2018 06/05/2018		23/04/2018 29/04/2018		16/04/2018 22/04/2018		09/04/2018 15/04/2018	
	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer
Acute Bronchitis	50.4	856	51.9	904	47.4	812	62.0	1,057		
Allergic Rhinitis	23.3	395	40.2	699	28.4	486	8.0	137		
Asthma	12.3	209	13.3	232	10.3	177	12.0	204		
Bullous Dermatoses	0.1	2	0.1	1	0.2	4	0.0	0		
Chickenpox	9.5	162	9.7	169	6.9	118	10.0	170		
Common Cold	69.3	1,175	62.5	1,088	54.5	933	69.7	1,188		
Conjunctival Disorders	23.8	404	25.2	438	24.0	411	23.2	395		
Herpes Simplex	4.7	79	4.1	72	4.4	75	5.4	92		
Herpes Zoster	6.8	116	7.6	132	6.0	103	6.4	109		
Impetigo	7.5	127	5.9	102	4.8	82	4.9	83		
Infectious Mononucleosis	0.6	10	0.6	10	0.5	9	0.5	9		
Influenza-like illness	3.1	52	3.4	60	4.0	69	7.6	129		
Infectious Intestinal Diseases	9.7	164	9.0	157	8.2	140	8.6	146		
Laryngitis and Tracheitis	4.1	69	4.4	76	2.5	43	3.6	62		
Lower Respiratory Tract Infections	53.0	899	54.4	947	49.4	847	65.0	1,107		
Measles	0.1	2	0.0	0	0.1	1	0.0	0		
Meningitis and Encephalitis	0.1	1	0.3	5	0.0	0	0.2	4		
Mumps	0.5	9	0.4	7	0.4	6	0.2	3		
Non-infective Enteritis and Colitis	8.6	146	8.9	155	7.3	125	7.7	131		
Otitis Media Acute	23.0	390	19.4	338	19.8	339	23.4	398		
Peripheral Nervous Disease	11.7	198	11.3	196	9.6	165	8.6	146		
Pleurisy	1.1	19	1.4	24	0.8	14	1.2	20		
Pneumonia and Pneumonitis	1.4	23	1.0	18	1.3	22	1.5	26		
Respiratory System Diseases	269.1	4,566	277.3	4,827	234.4	4,015	264.6	4,510		
Rubella	0.0	0	0.0	0	0.1	1	0.0	0		
Scabies	1.4	23	1.8	32	1.3	23	1.3	23		
Sinusitis	16.5	280	16.6	289	16.2	278	21.1	360		
Skin and Subcutaneous Tissue Infections	60.2	1,021	58.3	1,015	47.6	815	51.6	879		
Strep Throat and Peritonsillar Abscess	3.7	62	5.2	90	3.4	59	4.2	72		
Symptoms involving musculoskeletal	5.1	86	5.1	88	3.6	62	5.8	99		
Symptoms involving Respiratory and Chest	19.9	338	19.7	343	18.6	319	20.6	351		
Symptoms involving Skin and Integument Tissues	47.6	808	51.0	887	40.9	700	43.2	736		
Tonsillitis and acute Pharyngitis	58.3	989	50.1	872	44.7	765	49.5	844		
Upper Respiratory Tract Infections	169.8	2,881	152.0	2,646	136.9	2,345	166.2	2,833		
Urinary Tract Infections	27.3	464	27.9	485	23.8	407	25.3	432		
Viral Hepatitis	0.3	5	0.2	4	0.4	7	0.2	3		
Whooping Cough	0.1	2	0.2	4	0.1	2	0.2	3		
<b>Denom</b>	<b>1,696,749</b>		<b>1,740,729</b>		<b>1,713,008</b>		<b>1,704,344</b>			
<b>Practice Count</b>	<b>163</b>		<b>165</b>		<b>164</b>		<b>164</b>			

## 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 2012-2016. 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.

#### **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 2005/06- 2015/16 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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