Royal College of General Practitioners
Research and Surveillance Centre

RSC Communicable and Respiratory Disease Report for England

Key Statistics:

Week Number/Year…….09/2018
Week Starting - Ending……..26/02/2018 - 04/03/2018
No. of Practices……...169
Population…….1771280

National (England)

- **Acute Bronchitis :** decreased from **94.0** in week 8 to **81.1** in week 9.
- **Asthma :** decreased from **15.0** in week 8 to **13.0** in week 9.
- **Common Cold :** decreased from **108.1** in week 8 to **96.9** in week 9.
- **Influenza-Like illness :** decreased from **29.1** in week 8 to **18.3** in week 9.
- **Respiratory System Diseases :** decreased from **368.8** in week 8 to **327.8** in week 9.

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

- **Acute Bronchitis :** decreased from **74.3** in week 8 to **55.5** in week 9 in the London region, decreased from **115.9** in week 8 to **101.2** in week 9 in the North region, decreased from **84.5** in week 8 to **73.4** in week 9 in the South region, and decreased a little from **102.2** in week 8 to **99.0** in week 9 in the Midlands And East region.
- **Asthma :** decreased from **12.3** in week 8 to **11.1** in week 9 in the London region, decreased from **17.1** in week 8 to **15.2** in week 9 in the North region, decreased from **15.0** in week 8 to **11.8** in week 9 in the South region, and was unchanged at **14.7** in week 8 compared with **14.8** in week 9 in the Midlands And East region.
- **Common Cold :** increased a little from **132.9** in week 8 to **137.6** in week 9 in the London region, decreased from **109.0** in week 8 to **91.1** in week 9 in the North region, decreased from **93.7** in week 8 to **76.3** in week 9 in the South region, and decreased from **102.6** in week 8 to **97.3** in week 9 in the Midlands And East region.
- **Influenza-Like illness :** decreased from **25.4** in week 8 to **18.8** in week 9 in the London region, decreased from **30.1** in week 8 to **20.5** in week 9 in the North region, decreased from **30.3** in week 8 to **16.3** in week 9 in the South region, and decreased from **29.8** in week 8 to **18.2** in week 9 in the Midlands And East region.
- **Respiratory System Diseases :** decreased from **358.3** in week 8 to **328.3** in week 9 in the London region, decreased from **416.8** in week 8 to **357.9** in week 9 in the North region, decreased from **328.8** in week 8 to **290.6** in week 9 in the South region, and decreased from **381.3** in week 8 to **357.8** in week 9 in the Midlands And East region.

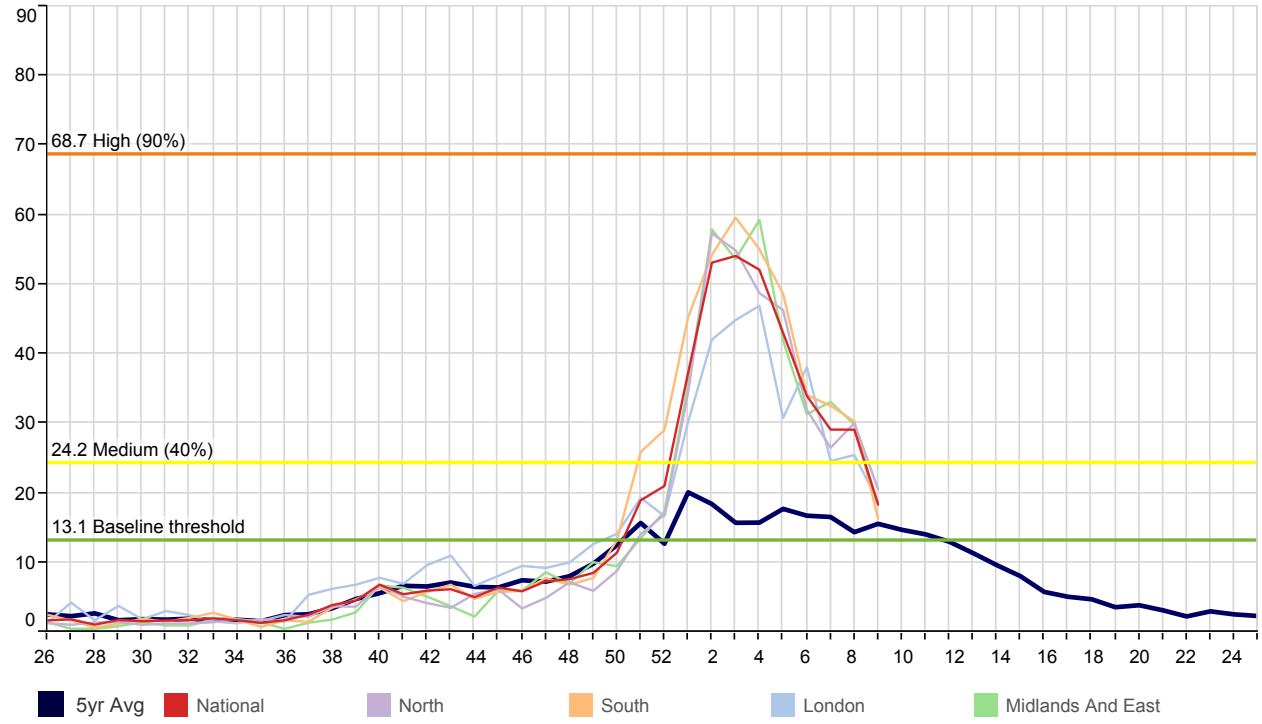
Comment:

Presentations of many respiratory and other conditions have decreased this week and are in line with those anticipated at this time of year. Influenza B is the predominant circulating strain of influenza (Graph B). Rates of influenza-like-illness in primary care have decreased from 29 to 18 new cases per 100,000 people this week. They have reduced to above the baseline threshold overall and for people below 15 years old the rate has fallen below the baseline threshold (Graph A, Table D).

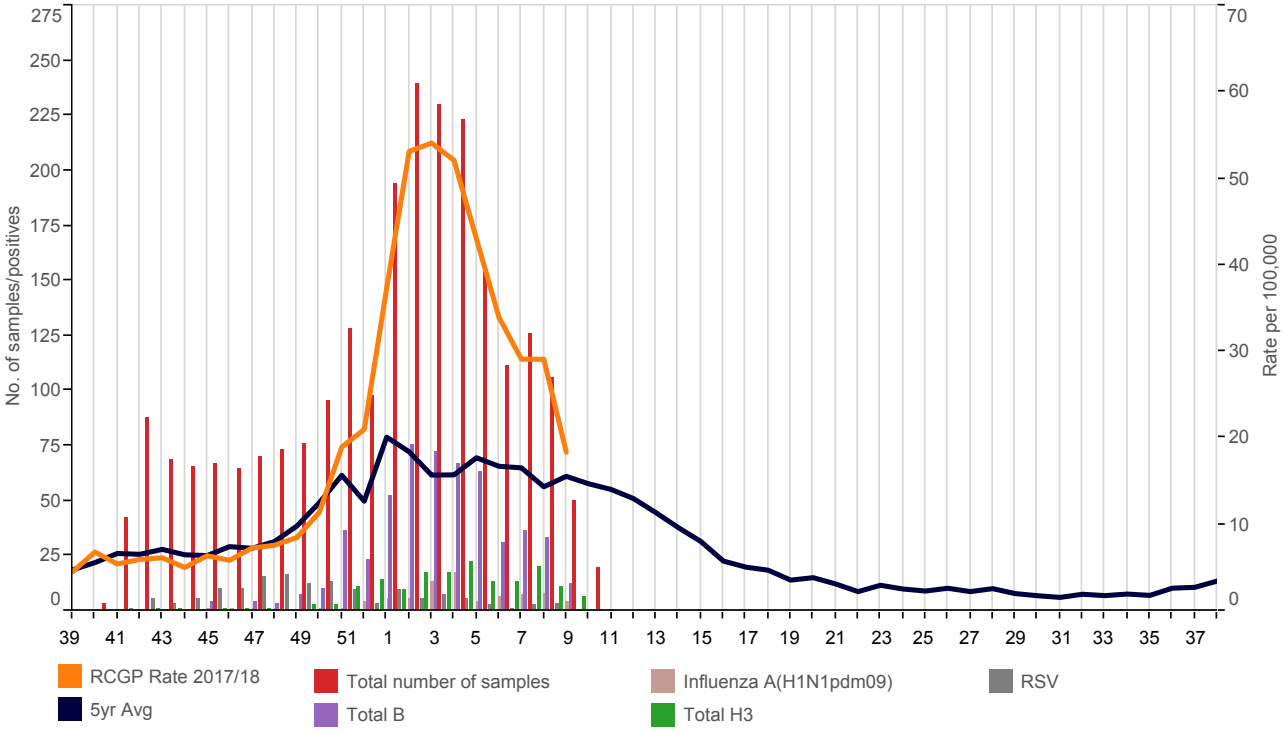
Winter Focus 2017/18

Please see page 13 for explanatory notes on the data.

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

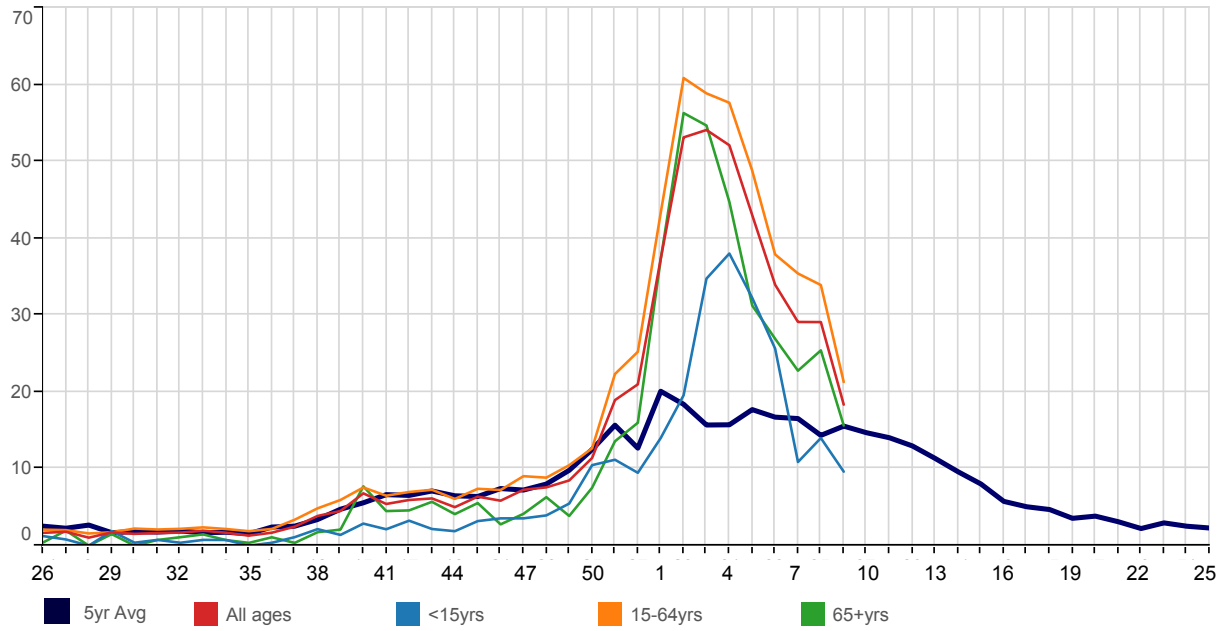


(B) RCGP/PHE RSV and Influenza Virology Swab Surveillance 2017/18(all ages, gender & regions combined)*



* 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											
15-64yrs	48.79	37.90	35.41	33.91	21.29											
65+yrs	31.24	26.93	22.76	25.41	15.63											
All ages	43.01	33.96	29.11	29.09	18.35											

Table 2	Below Treshold[1]	Threshold to Medium[2]	Medium to High[3]	High to Very High[4]	Above Very High[5]
0-14	<10.8	10.8 to <16.2	16.2 to <49.0	49.0 to <80.0	80.0+
15-64	<14.6	14.6 to <27.5	27.5 to <62.6	62.6 to <90.0	90.0+
65+	<11.0	11.0 to <15.8	15.8 to <34.4	34.4 to <48.5	48.5+
All Ages	<13.1	13.1 to <24.2	24.2 to <68.7	68.7 to <108.9	108.9+

Threshold levels

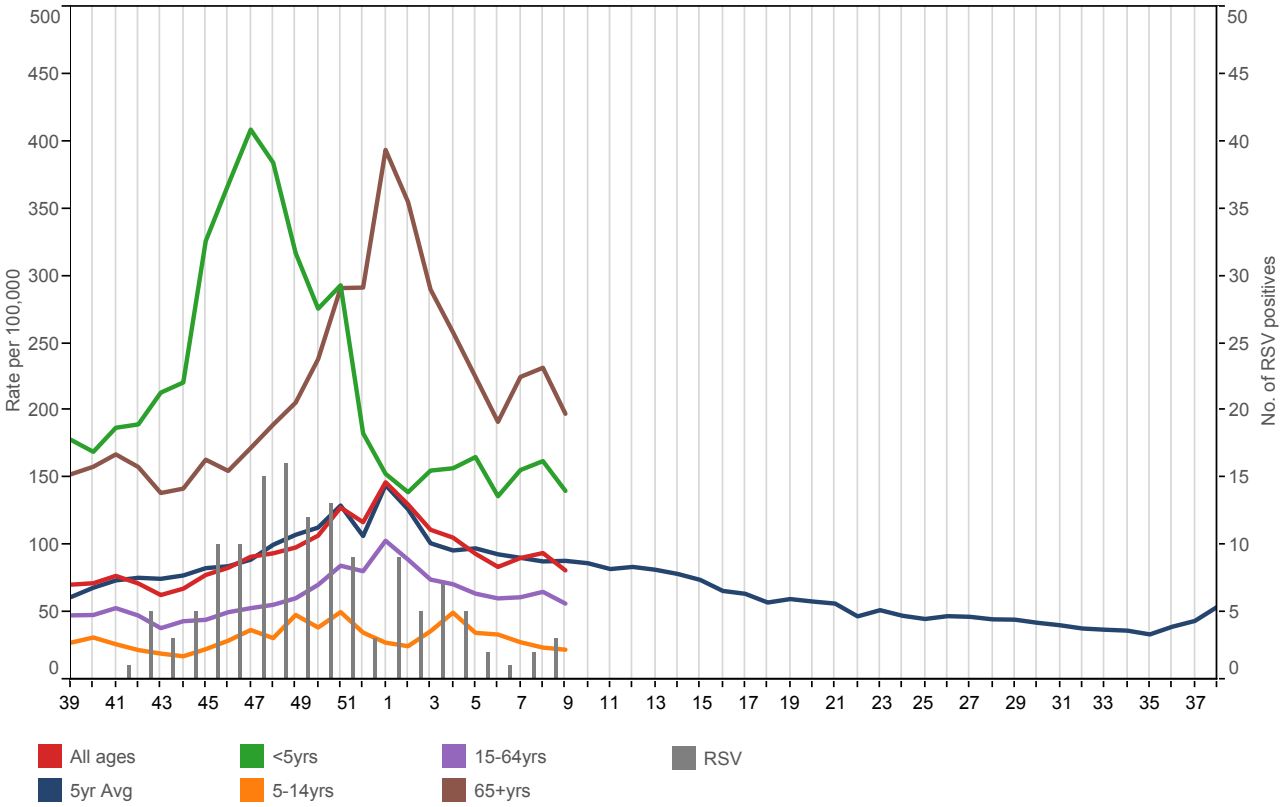
[1]*Below baseline threshold*
[2]*baseline threshold breach to < 40th percentile*
[3]*40th to <90th percentile*
[4]*90th to <97.5th percentile*
[5]*97.5th+ percentile*

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

	Influenza-like illness	Acute Bronchitis
<1yr	5.6	263.0
1-4yrs	6.2	113.0
5-14yrs	11.3	22.2
15-24yrs	14.4	20.7
25-44yrs	19.6	40.0
45-64yrs	26.7	93.2
65-74yrs	15.1	142.3
75-84yrs	16.8	224.6
85+yrs	14.9	360.0
All ages	18.3	81.1

	Influenza-like illness	Acute Bronchitis
London	18.8	55.5
North	20.5	101.2
South	16.3	73.4
Midlands And East	18.2	99.0
National	18.3	81.1

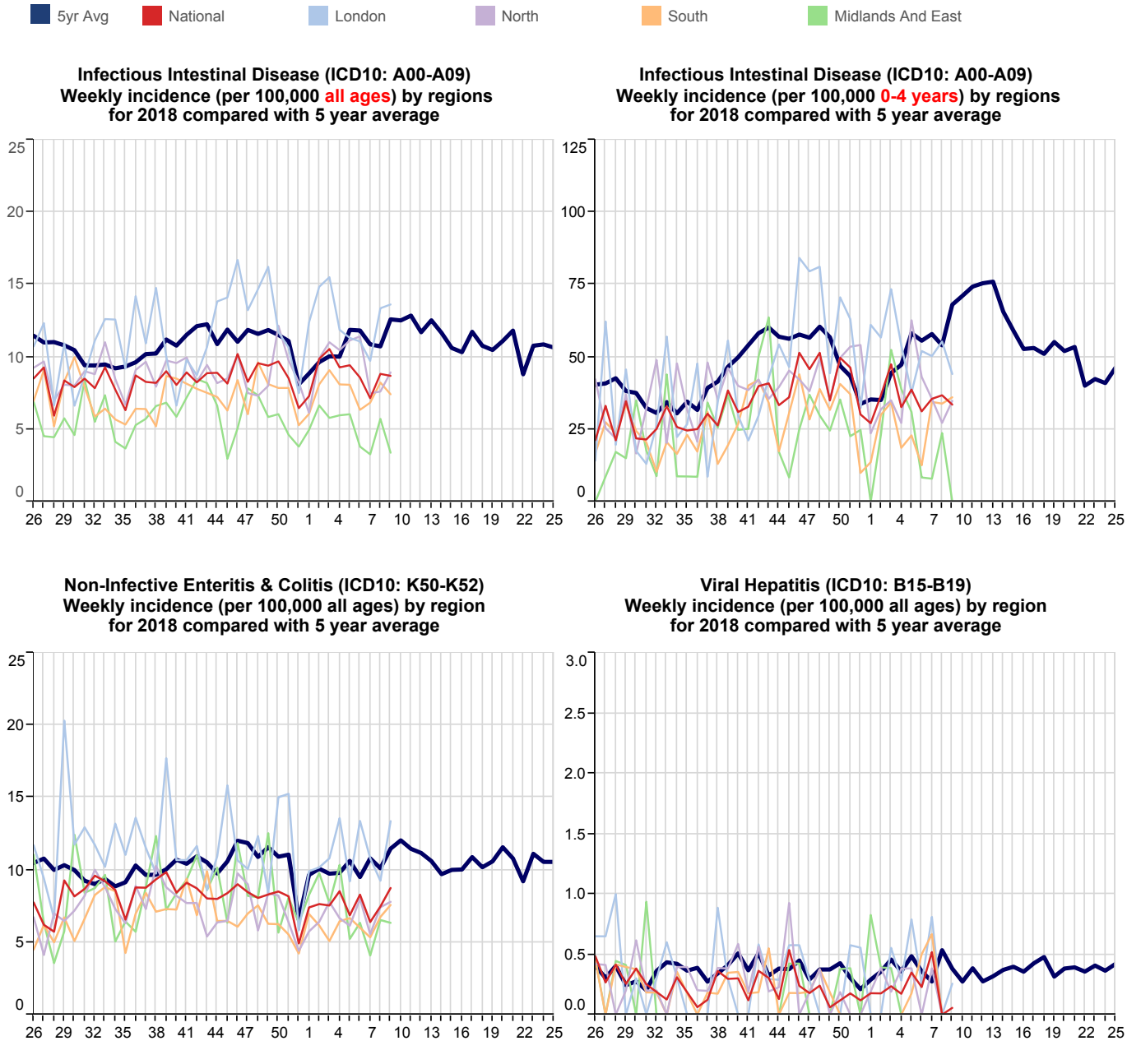
(E) Acute Bronchitis: national incidence rate 2017/2018 by age group*



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

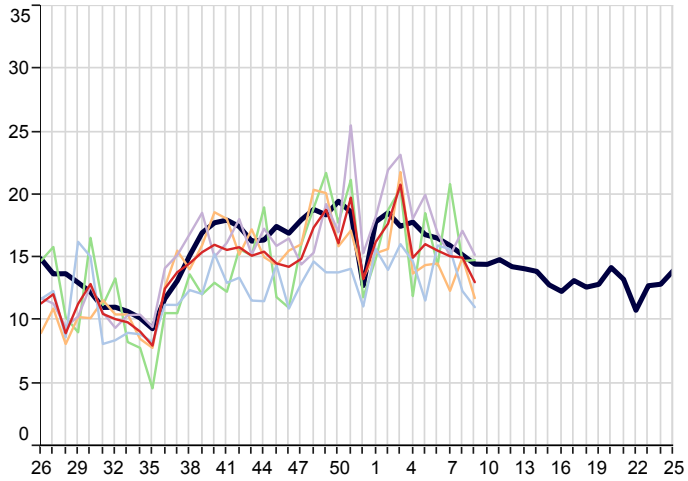
	Influenza-like illness	Acute Bronchitis
<5yrs	6.1	140.2
5-14yrs	11.3	22.2
15-64yrs	21.3	56.4
65+yrs	15.6	197.5
All ages	18.3	81.1

1. Water & Food Borne Disorders:

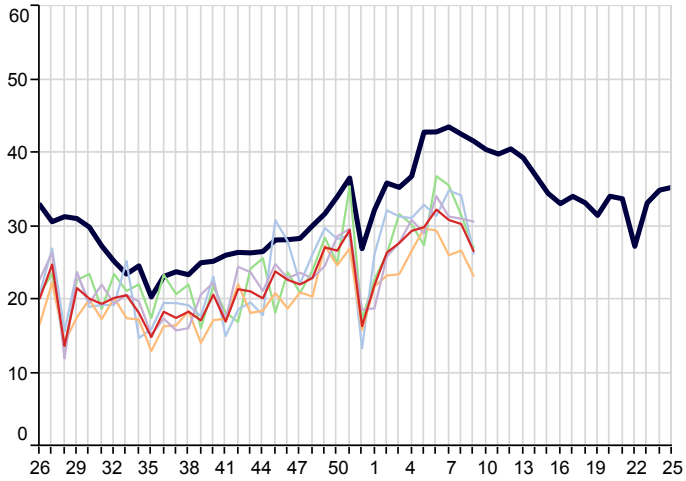


2. Environmentally Sensitive Disorders:

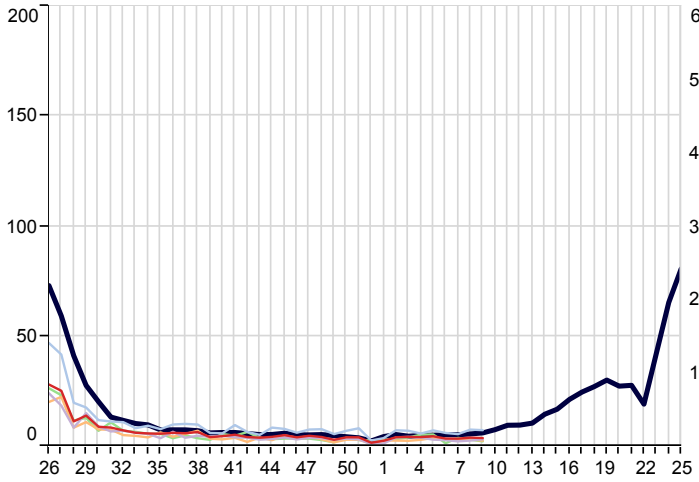
Asthma (ICD10: J45-J46)
Weekly incidence (per 100,000 all ages) by region for 2018 compared with 5 year average



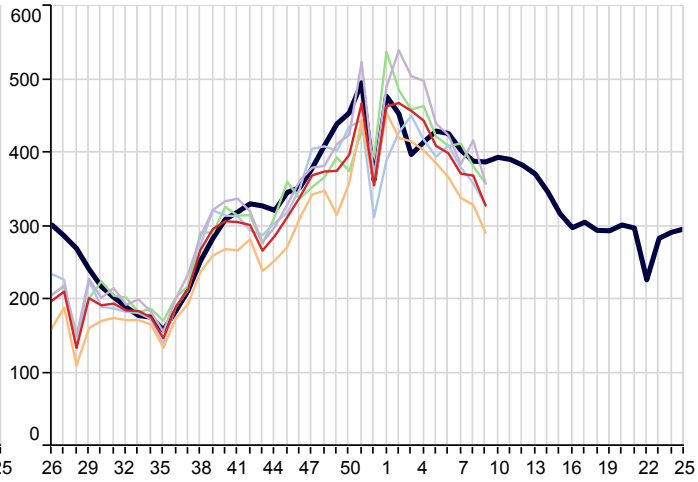
Disorders of Conjunctiva (ICD10: H10-H13)
Weekly incidence (per 100,000 all ages) by region for 2018 compared with 5 year average



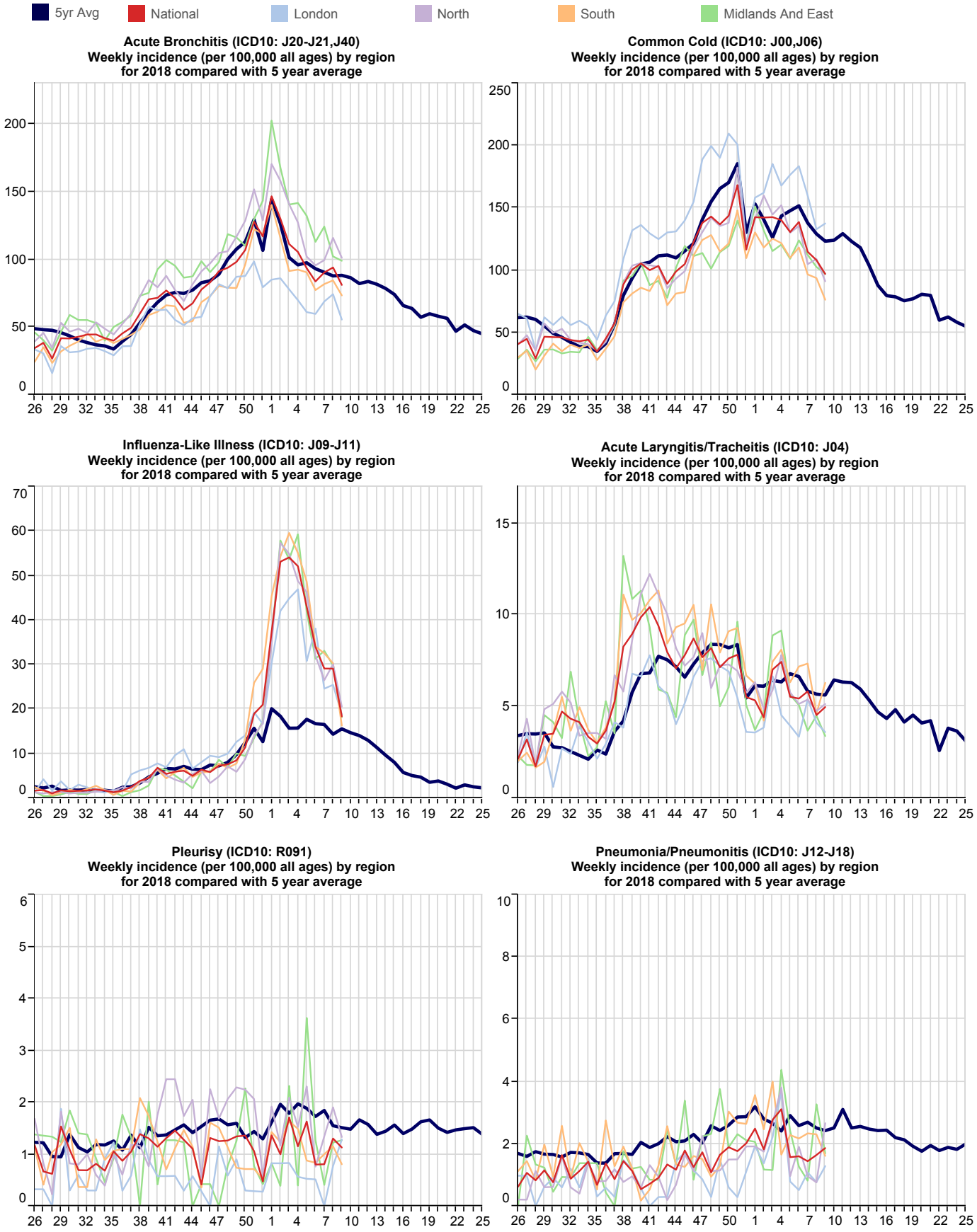
Hayfever/Allergic Rhinitis (ICD10: J30)
Weekly incidence (per 100,000 all ages) by region for 2018 compared with 5 year average



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

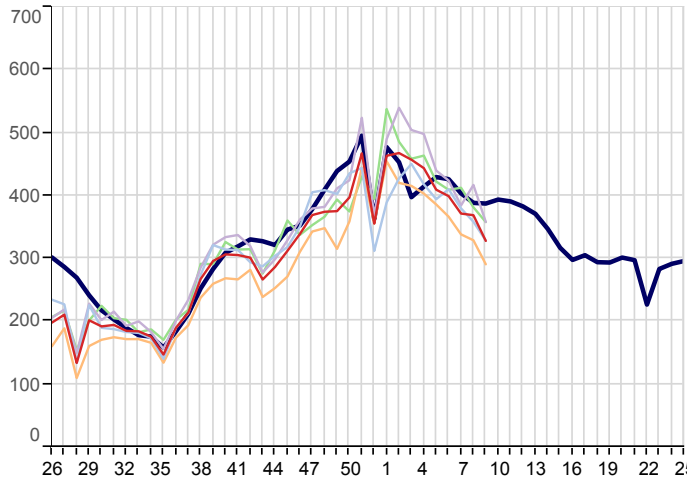


3. Respiratory Infections:

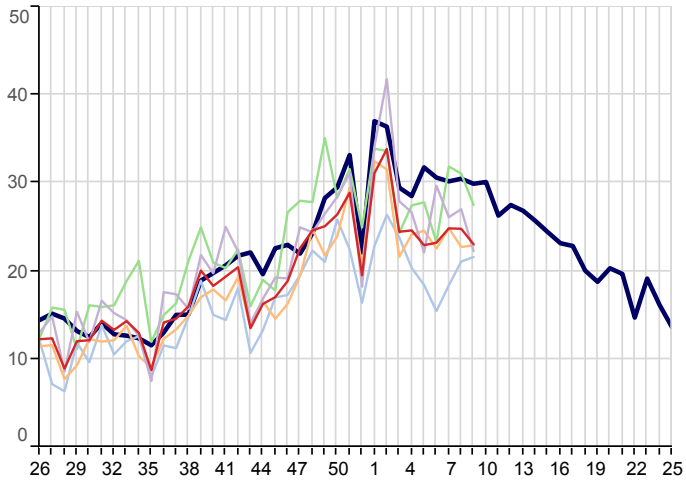


3. Respiratory Infections(Continued):

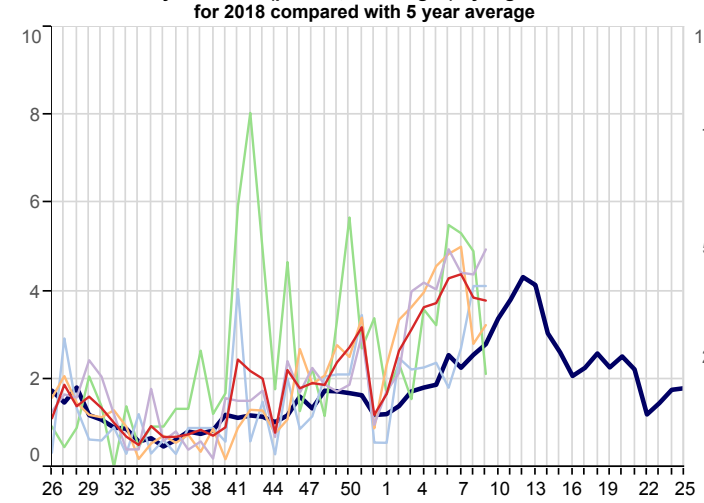
Respiratory System Diseases (ICD10: J00-J99)
Weekly incidence (per 100,000 all ages) by region
for 2018 compared with 5 year average



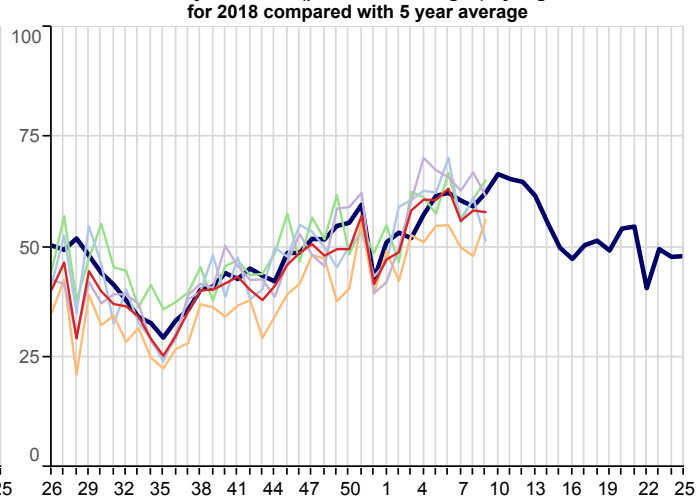
Acute Sinusitis (ICD10: J01)
Weekly incidence (per 100,000 all ages) by region
for 2018 compared with 5 year average



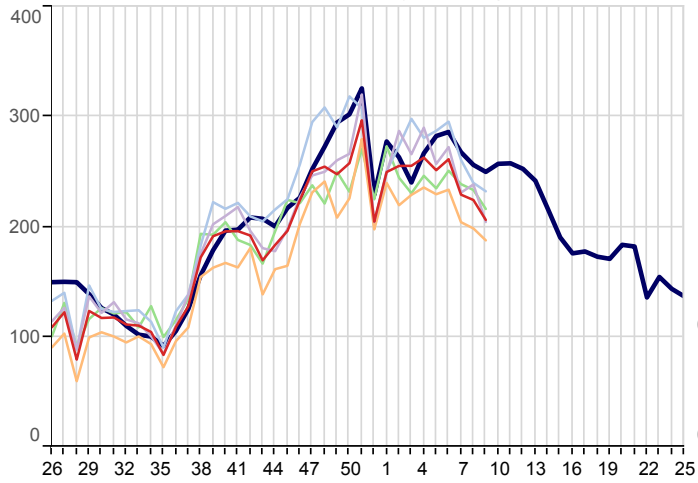
Strep Sore Throat, Scarlatina and Peritonsillar Abscess (ICD10: A38,J020,J36)
Weekly incidence (per 100,000 all ages) by region for 2017
for 2018 compared with 5 year average



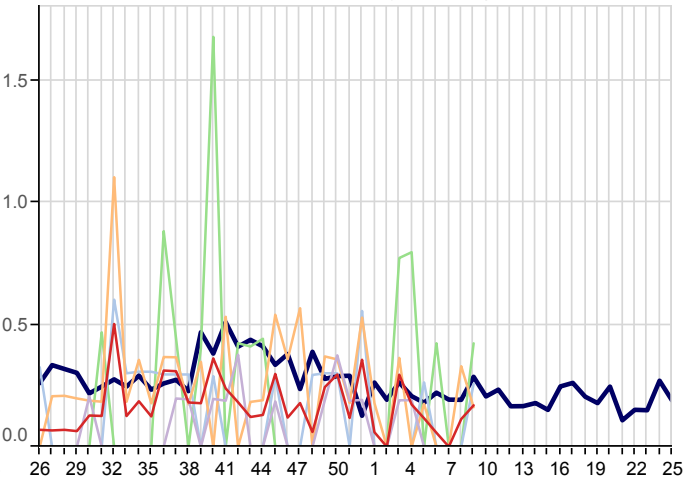
Acute Tonsillitis/Pharyngitis (ICD10: J02-J03)
Weekly incidence (per 100,000 all ages) by region
for 2018 compared with 5 year average



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

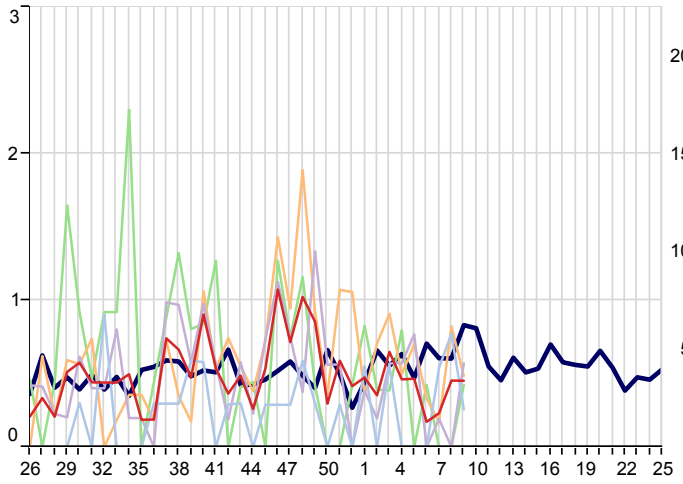


Whooping Cough (ICD10: A37)
Weekly incidence (per 100,000 all ages) by region for 2017
for 2018 compared with 5 year average

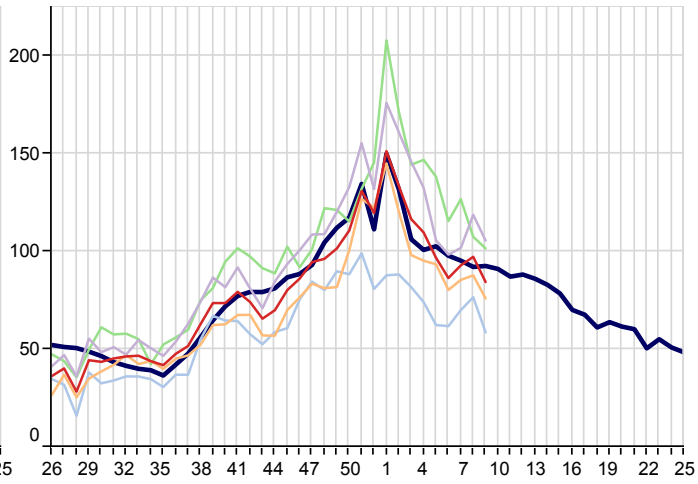


3. Respiratory Infections(Continued):

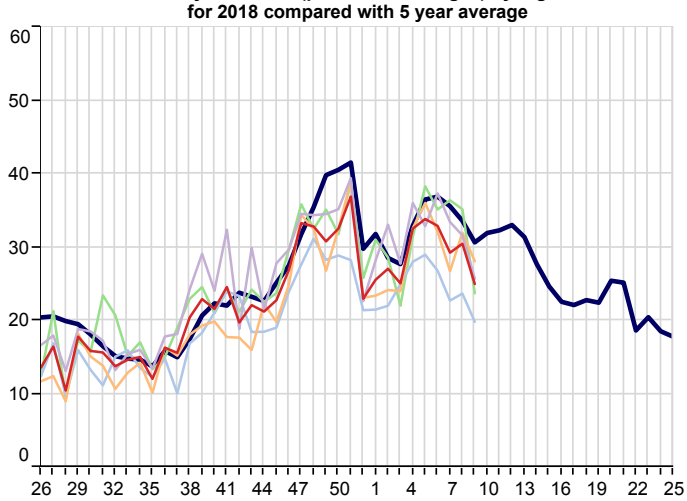
Infectious Mononucleosis (ICD10: B27)
Weekly incidence (per 100,000 all ages) by region
for 2018 compared with 5 year average



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

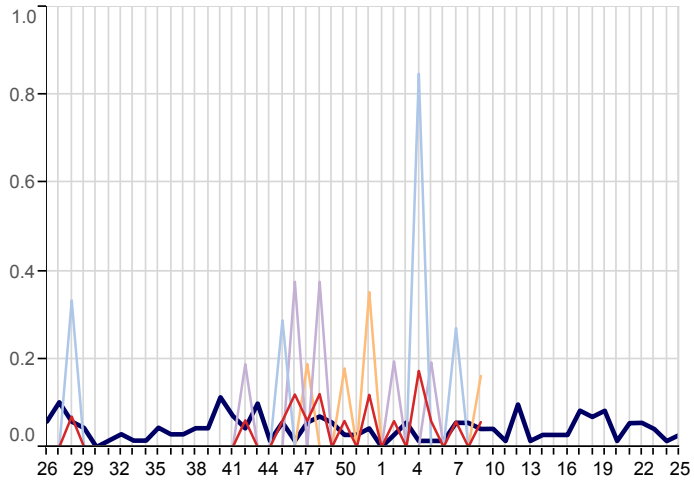


Acute Otitis Media (ICD10: H650-H651,H660,H669)
Weekly incidence (per 100,000 all ages) by region
for 2018 compared with 5 year average

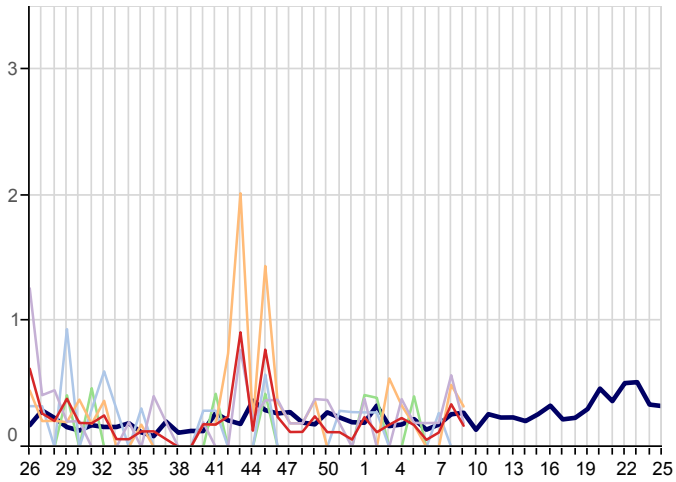


4. Vaccine Sensitive Disorders

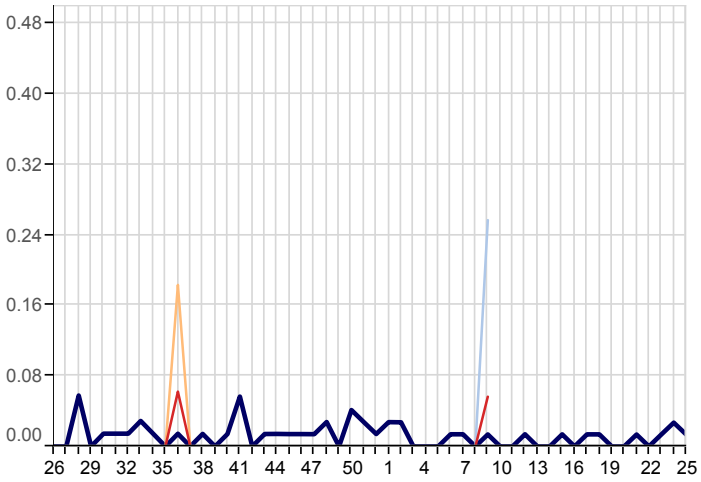
Measles (ICD10: B05)
Weekly incidence (per 100,000 all ages) by region for 2018 compared with 5 year average



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

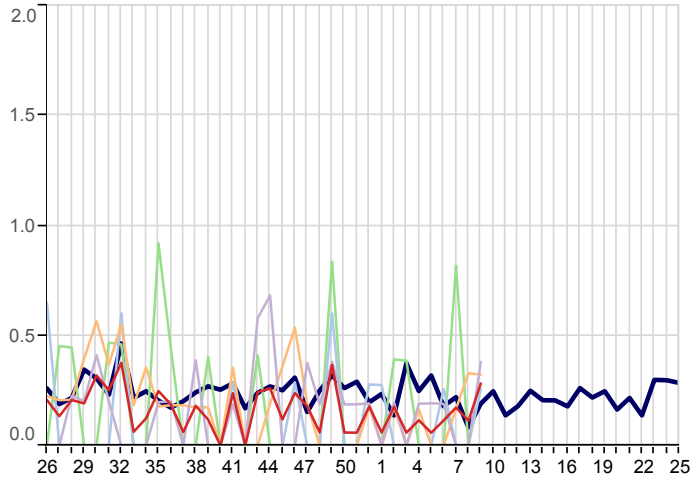


Rubella (ICD10: B06)
Weekly incidence (per 100,000 all ages) by region for 2018 compared with 5 year average

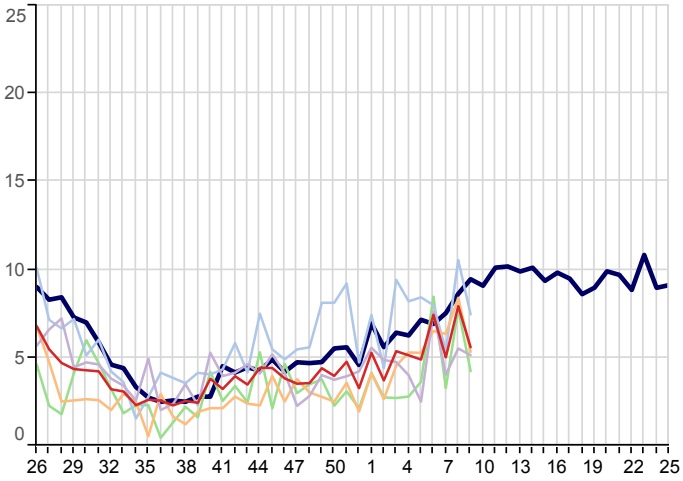


5. Skin Contagions

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



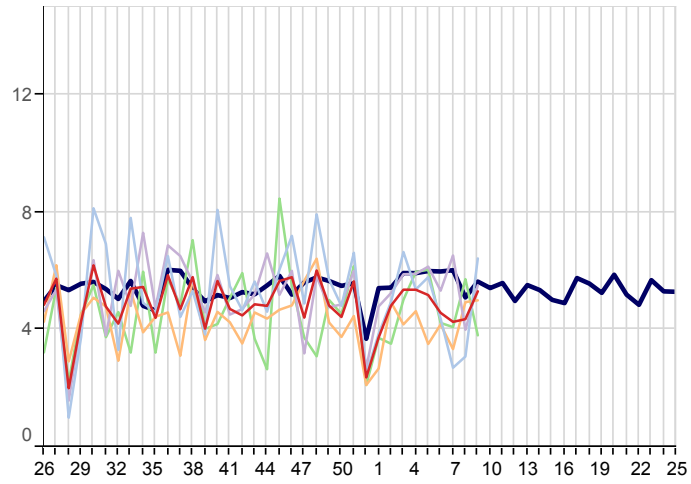
Chickenpox (ICD10: B01)
Weekly incidence (per 100,000 all ages) by region for 2018 compared with 5 year average



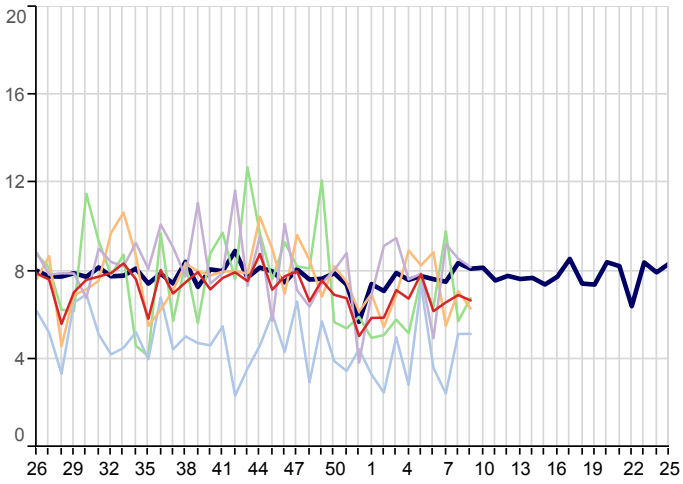
5. Skin Contagions (Continued)

5yr Avg National London North South Midlands And East

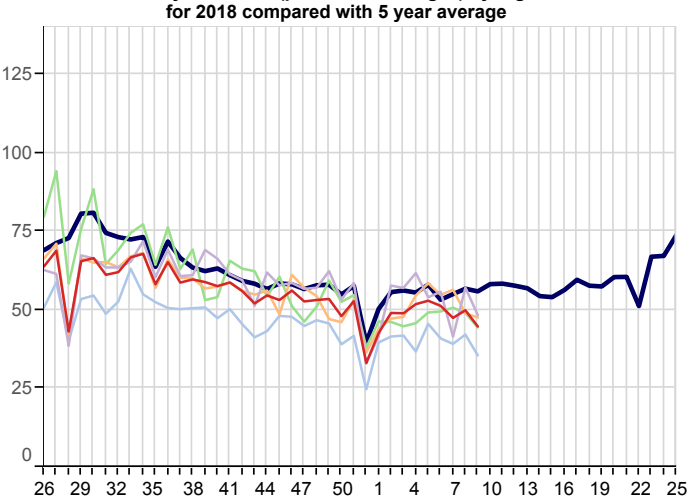
Herpes Simplex (ICD10: B00)
Weekly incidence (per 100,000 all ages) by region
for 2018 compared with 5 year average



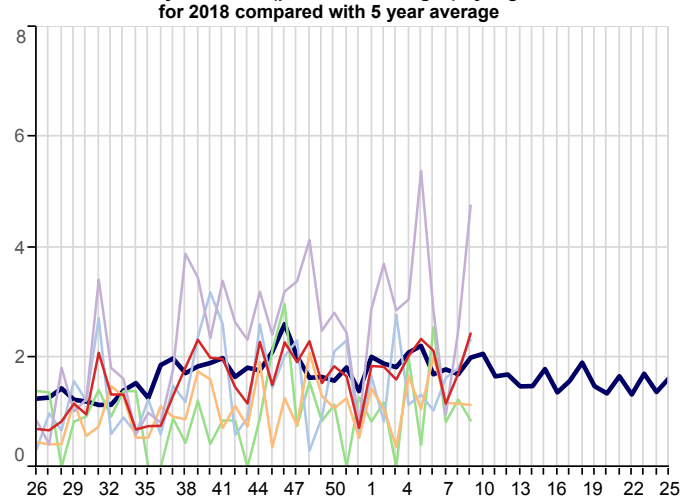
Herpes Zoster (ICD10: B02)
Weekly incidence (per 100,000 all ages) by region
for 2018 compared with 5 year average



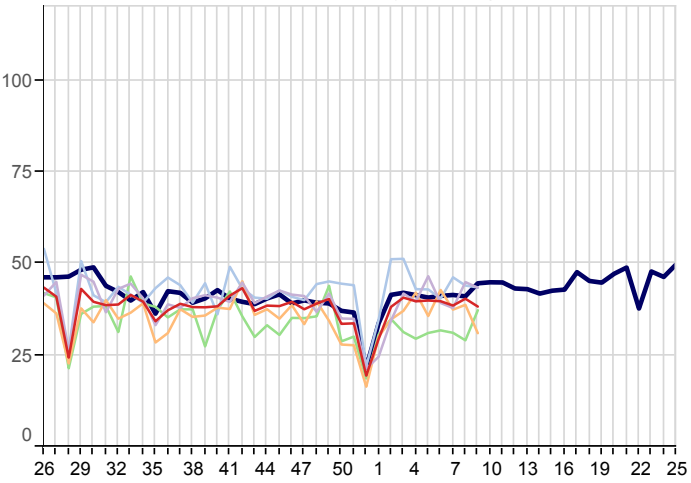
Infections of Skin & Subcutaneous Tissue (ICD10: L00-L08)
Weekly incidence (per 100,000 all ages) by region
for 2018 compared with 5 year average



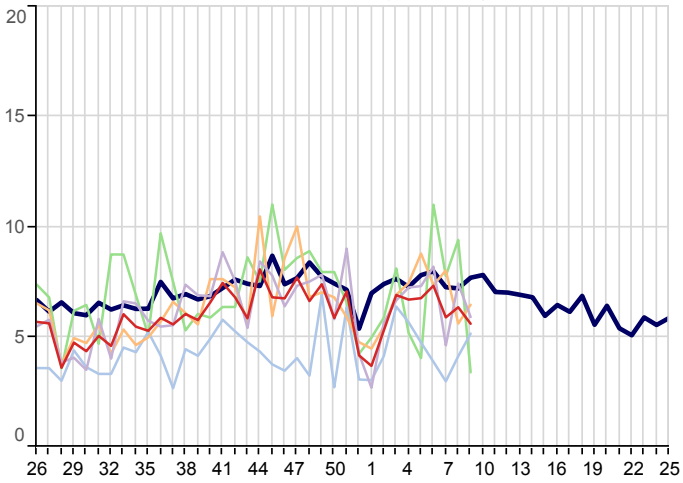
Scabies (ICD10: B86)
Weekly incidence (per 100,000 all ages) by region
for 2018 compared with 5 year average



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



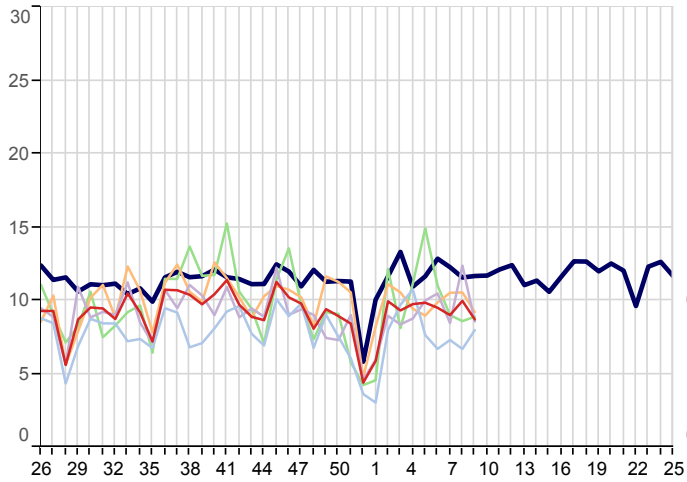
Impetigo (ICD10: L01)
Weekly incidence (per 100,000 all ages) by region
for 2018 compared with 5 year average



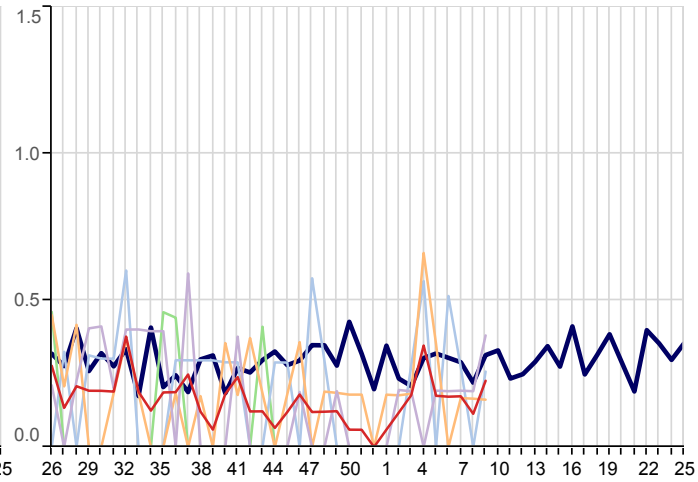
6. Disorders Affecting the Nervous System

5yr Avg National London North South Midlands And East

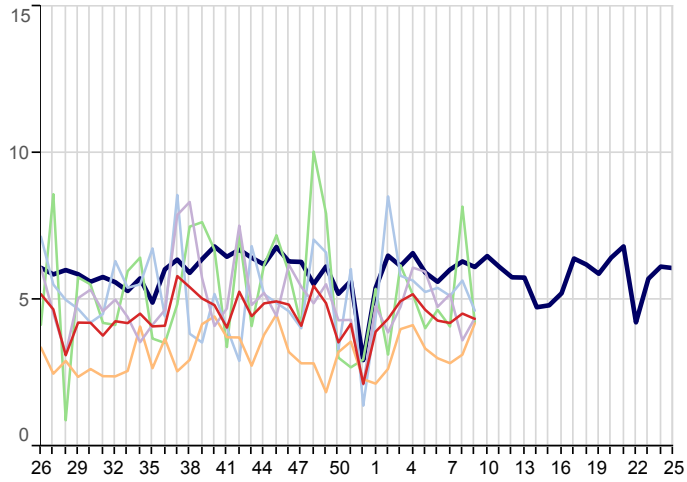
Disorders of The Peripheral Nervous System (ICD10: G50-G64,G70-G72)
Weekly incidence (per 100,000 all ages) by region
for 2018 compared with 5 year average



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

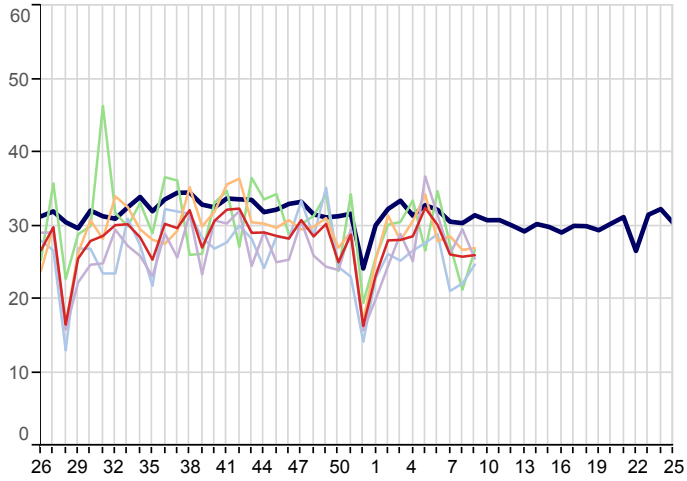


Symptoms Involving Nervous & Musculoskeletal (ICD10: R25-R29)
Weekly incidence (per 100,000 all ages) by region
for 2018 compared with 5 year average



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

Week beginning / Week ending	26/02/2018 04/03/2018		19/02/2018 25/02/2018		12/02/2018 18/02/2018		05/02/2018 11/02/2018	
Disease Name	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer
Acute Bronchitis	81.1	1,437	94.0	1,661	90.3	1,567	83.7	1,464
Allergic Rhinitis	3.6	64	3.8	67	3.3	58	3.4	59
Asthma	13.0	231	15.0	265	15.1	262	15.6	272
Bullous Dermatoses	0.3	5	0.1	2	0.2	3	0.1	2
Chickenpox	5.6	99	7.9	140	5.0	87	7.4	130
Common Cold	96.9	1,717	108.1	1,910	114.8	1,992	138.7	2,426
Conjunctival Disorders	26.6	471	30.3	535	30.8	535	32.2	564
Herpes Simplex	5.3	94	4.4	77	4.3	74	4.6	80
Herpes Zoster	6.7	118	6.9	122	6.6	114	6.2	108
Impetigo	5.6	99	6.3	112	5.9	102	7.3	128
Infectious Mononucleosis	0.5	8	0.5	8	0.2	4	0.2	3
Influenza-like illness	18.3	325	29.1	514	29.1	505	34.0	594
Infectious Intestinal Diseases	8.7	154	8.8	156	7.1	124	8.6	150
Laryngitis and Tracheitis	5.0	88	4.5	80	5.8	101	5.4	95
Lower Respiratory Tract Infections	84.3	1,494	97.2	1,718	92.9	1,611	86.4	1,511
Measles	0.1	1	0.0	0	0.1	1	0.0	0
Meningitis and Encephalitis	0.2	4	0.1	2	0.2	3	0.2	3
Mumps	0.2	3	0.3	6	0.1	2	0.1	1
Non-infective Enteritis and Colitis	8.8	155	7.5	132	6.4	111	8.3	145
Otitis Media Acute	25.0	442	30.5	538	29.2	507	32.9	575
Peripheral Nervous Disease	8.7	154	10.0	176	9.0	156	9.5	166
Pleurisy	1.1	20	1.3	23	0.8	14	0.8	14
Pneumonia and Pneumonitis	1.9	33	1.6	29	1.4	25	1.6	28
Respiratory System Diseases	327.8	5,807	368.8	6,515	371.3	6,442	399.1	6,981
Rubella	0.1	1	0.0	0	0.0	0	0.0	0
Scabies	2.4	43	1.7	30	1.2	20	2.1	37
Sinusitis	23.0	408	24.8	438	24.8	431	23.2	406
Skin and Subcutaneous Tissue Infections	44.7	792	49.9	881	47.4	823	51.3	897
Strep Throat and Peritonsillar Abscess	3.8	67	3.8	68	4.4	76	4.3	75
Symptoms involving musculoskeletal	4.3	77	4.5	80	4.2	73	4.3	75
Symptoms involving Respiratory and Chest	20.3	360	22.8	403	21.7	377	24.5	429
Symptoms involving Skin and Integument Tissues	38.2	677	40.4	713	38.5	668	39.7	694
Tonsillitis and acute Pharyngitis	57.9	1,026	58.3	1,030	55.9	970	63.2	1,106
Upper Respiratory Tract Infections	206.1	3,651	224.3	3,962	229.1	3,975	261.3	4,571
Urinary Tract Infections	26.0	460	25.8	455	26.1	452	30.1	526
Viral Hepatitis	0.1	1	0.0	0	0.5	9	0.2	4
Whooping Cough	0.2	3	0.1	2	0.0	0	0.1	1
Denom		**1,771,280**		**1,766,716**		**1,734,861**		**1,749,119**
Practice Count		**169**		**170**		**166**		**168**

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:

RCGP Research & Surveillance Centre
CIRC, First floor
30 Euston Square
London NW1 2FB
Tel: +44 (0)203 188 7690

Medical Director: Professor Simon de Lusignan
MedicalDirectorRSC@rcgp.org.uk

RCGP Research & Surveillance Centre
University of Surrey
Section of Clinical Medicine and Agein
GUILDFORD
GU2 7XH
Tel: +44 (0)1483 684802

Practice Liaison Officer: Ivelina Yonova
i.yonova@surrey.ac.uk
Tel: +44 (0)1483 682758