Royal College of General Practitioners
Research and Surveillance Centre

RSC Communicable and Respiratory Disease Report for England

Key Statistics:

Week Number/Year…….01/2019
Week Starting - Ending……..31/12/2018 - 06/01/2019
No. of Practices……...225
Population…….2289340

National (England)

- **Acute Bronchitis :** increased from **78.1** in week 52 to **122.8** in week 1.
- **Asthma :** increased from **12.2** in week 52 to **17.3** in week 1.
- **Common Cold :** increased from **87.6** in week 52 to **114.0** in week 1.
- **Influenza-Like illness :** increased from **8.4** in week 52 to **14.8** in week 1.
- **Respiratory System Diseases :** increased from **257.1** in week 52 to **371.5** in week 1.

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

- **Acute Bronchitis :** increased from **57.4** in week 52 to **73.2** in week 1 in the London region, increased from **102.0** in week 52 to **159.6** in week 1 in the North region, increased from **65.4** in week 52 to **110.8** in week 1 in the South region, and increased from **87.9** in week 52 to **139.8** in week 1 in the Midlands And East region.
- **Asthma :** increased from **11.2** in week 52 to **12.8** in week 1 in the London region, increased from **15.3** in week 52 to **20.5** in week 1 in the North region, increased from **9.7** in week 52 to **17.5** in week 1 in the South region, and increased from **13.0** in week 52 to **16.0** in week 1 in the Midlands And East region.
- **Common Cold :** increased from **107.4** in week 52 to **132.4** in week 1 in the London region, increased from **90.6** in week 52 to **131.2** in week 1 in the North region, increased from **69.7** in week 52 to **86.2** in week 1 in the South region, and increased from **97.9** in week 52 to **119.7** in week 1 in the Midlands And East region.
- **Influenza-Like illness :** increased from **8.8** in week 52 to **15.5** in week 1 in the London region, increased from **9.4** in week 52 to **15.8** in week 1 in the North region, increased from **7.0** in week 52 to **12.7** in week 1 in the South region, and increased from **9.3** in week 52 to **16.6** in week 1 in the Midlands And East region.
- **Respiratory System Diseases :** increased from **242.9** in week 52 to **326.8** in week 1 in the London region, increased from **305.4** in week 52 to **449.9** in week 1 in the North region, increased from **211.0** in week 52 to **317.0** in week 1 in the South region, and increased from **288.8** in week 52 to **396.0** in week 1 in the Midlands And East region.

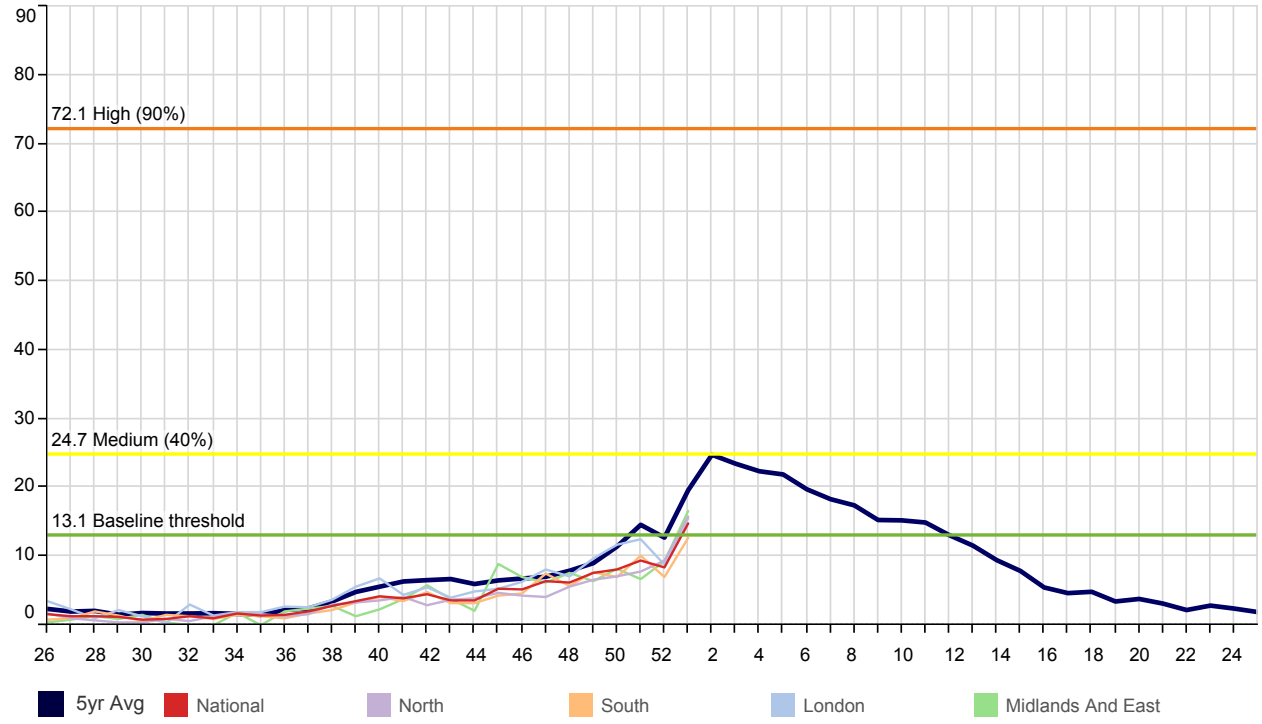
Comment:

Presentations of respiratory and other monitored conditions increased this week and are at or below those anticipated at this time of year. This weeks rise takes us back to around the levels seen prior to the Christmas and New Year's Day closures.

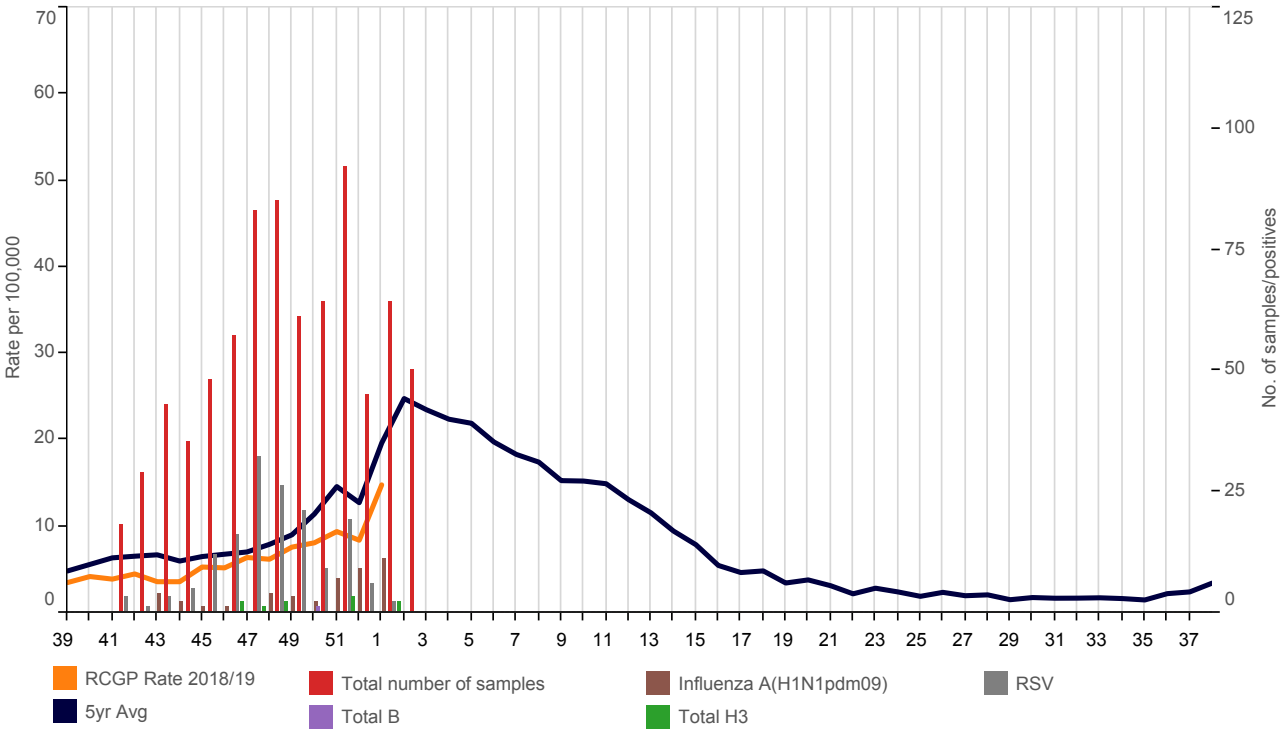
Winter Focus 2018/19

Please see page 13 for explanatory notes on the data.

(A) Influenza-like illness: incidence rate winter 2018/19*

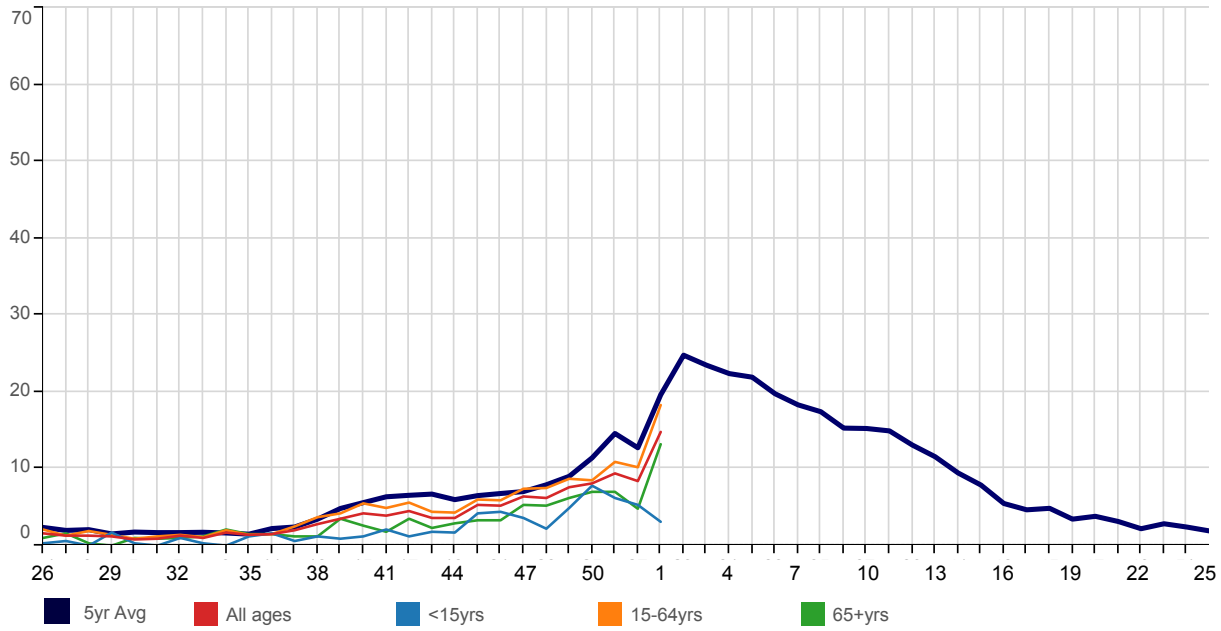


(B) RCGP/PHE RSV and Influenza Virology Swab Surveillance 2018/19(all ages, gender & regions combined)*



* The thresholds used are the agreed RCGP/ Public Health England levels for 2018/19. The rolling average line(blue) is based on 5 year historic RCGP RSC level.

(C) Influenza-like illness: national incidence rate 2018/2019 by age group*



(D) Influenza-like illness: national incidence rate 2018/2019 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	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4
<15yrs	1.2	2.1	1.2	1.8	1.7	4.2	4.4	3.6	2.2	4.9	7.8	6.2	5.3	3.1			
15-64yrs	5.5	4.9	5.6	4.4	4.3	6.0	5.9	7.4	7.5	8.7	8.5	10.9	10.2	18.3			
65+yrs	2.6	1.8	3.5	2.3	2.9	3.3	3.3	5.3	5.2	6.2	7.0	7.0	4.8	13.2			
All ages	4.2	3.9	4.5	3.6	3.6	5.3	5.2	6.4	6.2	7.6	8.1	9.4	8.4	14.8			

	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
<15yrs																
15-64yrs																
65+yrs																
All ages																

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 <16.5	16.5 to <50.4	50.4 to <82.4	82.4+
15-64	<14.6	14.6 to <28.9	28.9 to <69.6	69.6 to <102.7	102.7+
65+	<11.7	11.7 to <17.6	17.6 to <43.6	43.6 to <65.1	65.1+
All Ages	<13.1	13.1 to <24.7	24.7 to <72.1	72.1 to <115.6	115.6+

Threshold levels

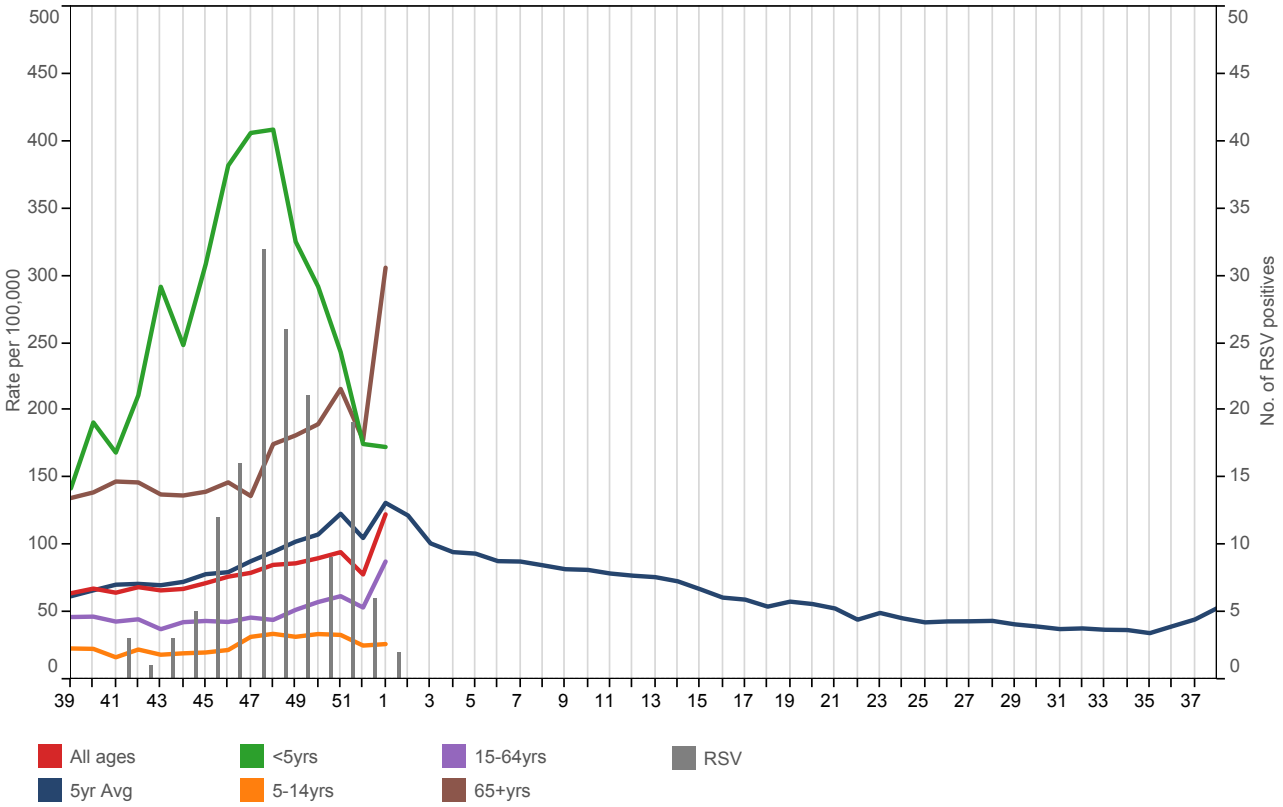
[1]*Below baseline threshold*
[2]*baseline threshold breach to < 40th percentile*
[3]*40th to <90th percentile*
[4]*90th to <97.5th percentile*
[5]*97.5th+ percentile*

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

	Influenza-like illness	Acute Bronchitis
<1yr	9.2	515.6
1-4yrs	3.9	99.9
5-14yrs	2.3	26.4
15-24yrs	10.0	30.7
25-44yrs	18.8	64.2
45-64yrs	21.7	142.0
65-74yrs	12.2	226.1
75-84yrs	18.1	343.4
85+yrs	5.6	537.5
All ages	14.8	122.8

	Influenza-like illness	Acute Bronchitis
London	15.5	73.2
North	15.8	159.6
South	12.7	110.8
Midlands And East	16.6	139.8
National	14.8	122.8

(E) Acute Bronchitis: national incidence rate 2018/2019 by age group*

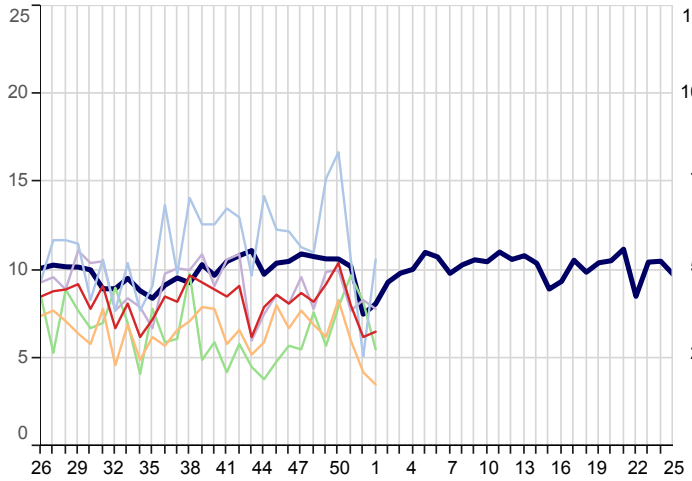


Weekly Influenza-like illness and Acute Bronchitis incidence rates per 100,000 persons

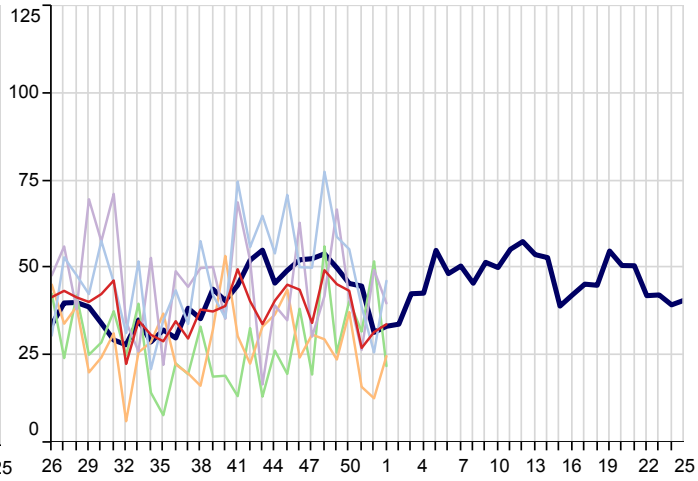
	Influenza-like illness	Acute Bronchitis
<5yrs	4.8	172.8
5-14yrs	2.3	26.4
15-64yrs	18.3	87.7
65+yrs	13.2	306.1
All ages	14.8	122.8

1. Water & Food Borne Disorders:

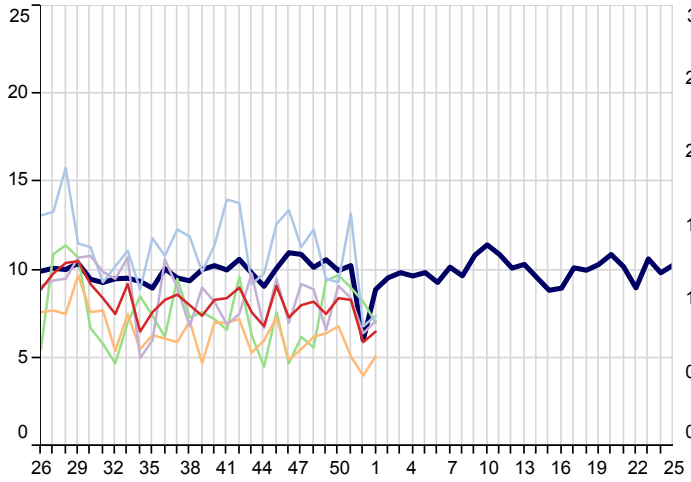
Infectious Intestinal Disease (ICD10: A00-A09)
Weekly incidence (per 100,000 all ages) by regions
for 2018/19 compared with 5 year average



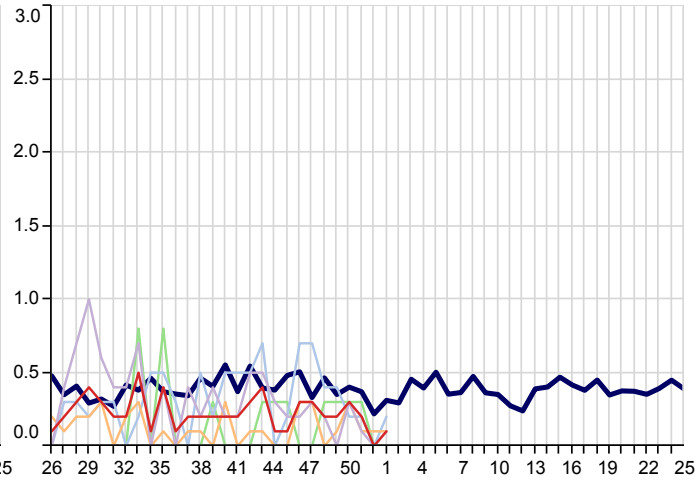
Infectious Intestinal Disease (ICD10: A00-A09)
Weekly incidence (per 100,000 0-4 years) by regions
for 2018/19 compared with 5 year average



Non-Infective Enteritis & Colitis (ICD10: K50-K52)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average

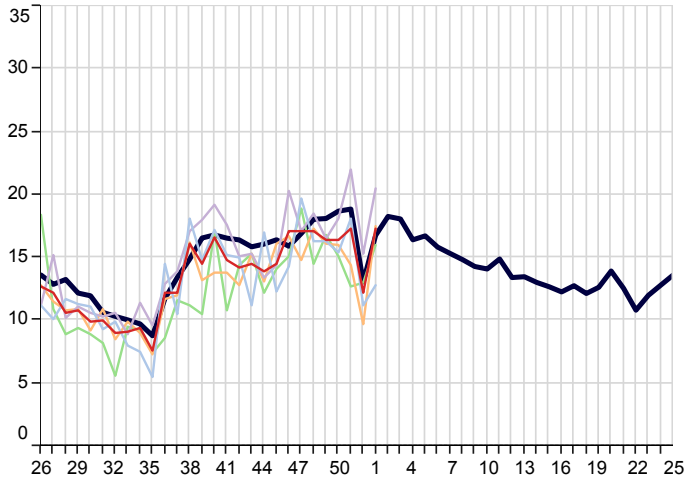


Viral Hepatitis (ICD10: B15-B19)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average

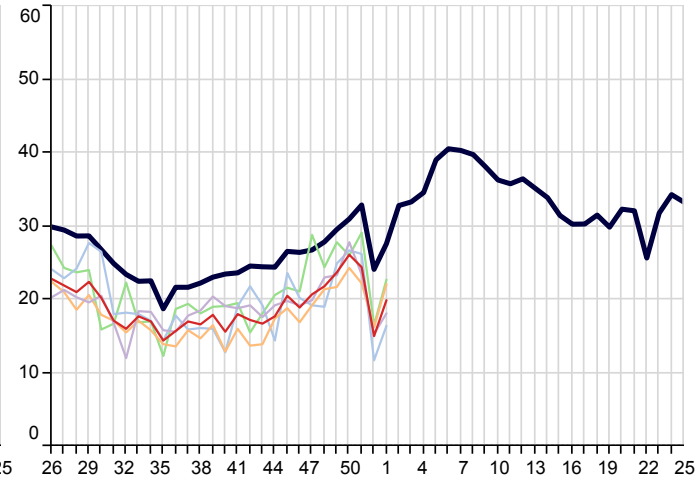


2. Environmentally Sensitive Disorders:

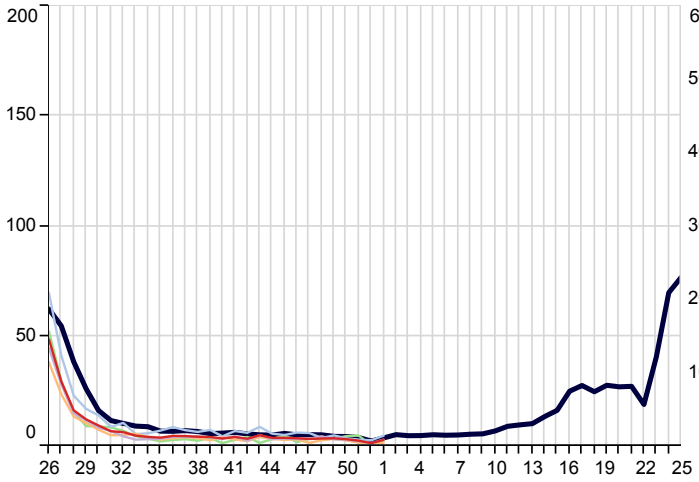
Asthma (ICD10: J45-J46)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



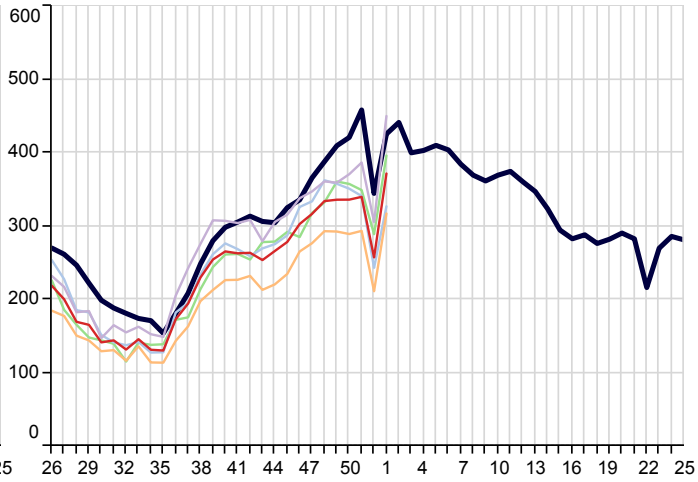
Disorders of Conjunctiva (ICD10: H10-H13)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



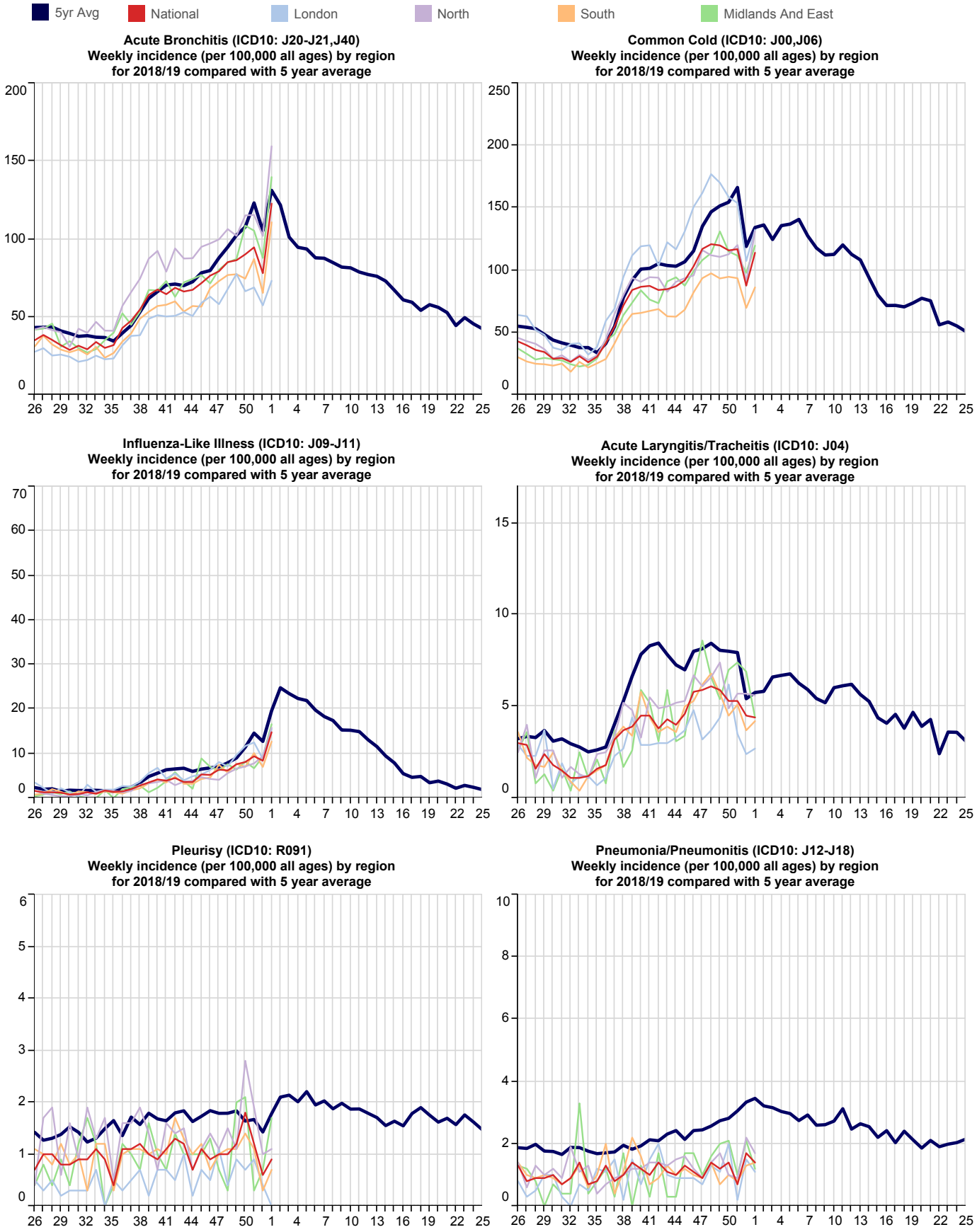
Hayfever/Allergic Rhinitis (ICD10: J30)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



Symptoms involving Respiratory & Chest (ICD10: R05-R07,R09)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average

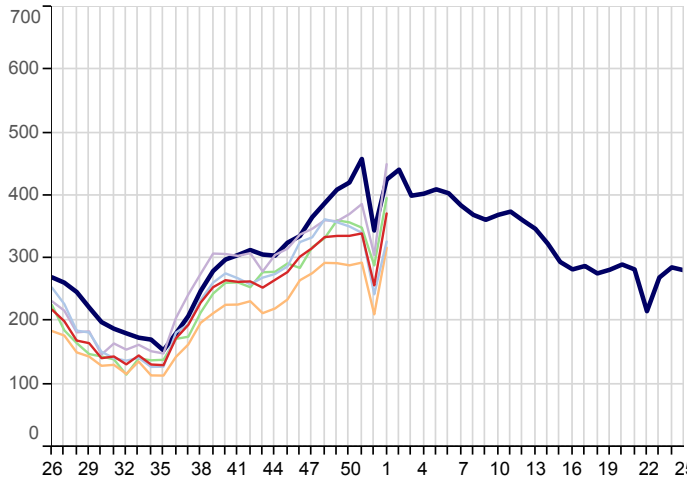


3. Respiratory Infections:

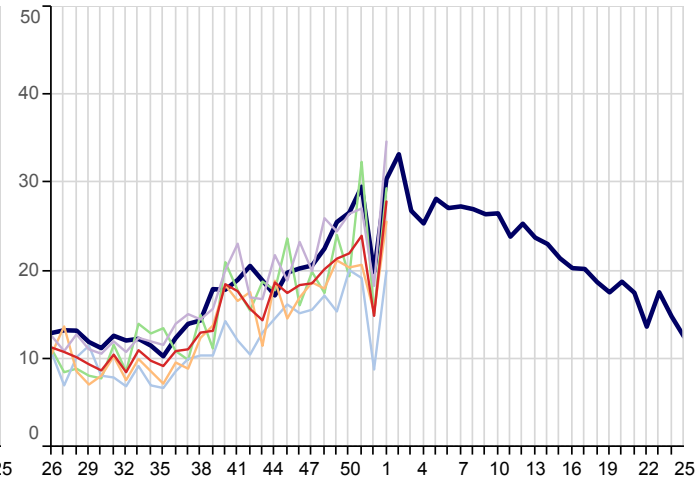


3. Respiratory Infections(Continued):

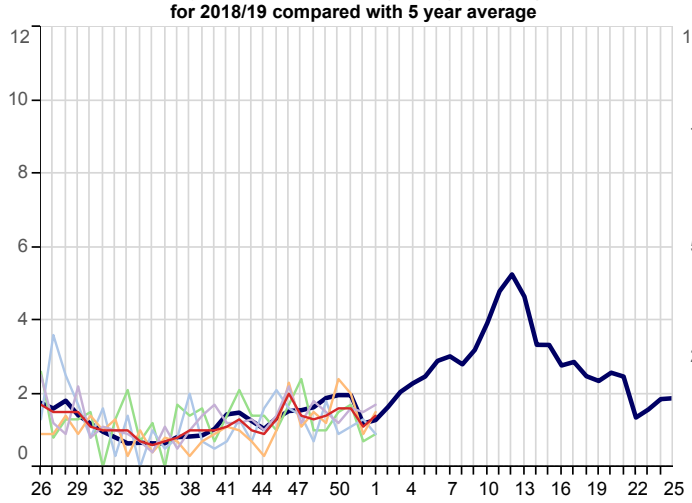
Respiratory System Diseases (ICD10: J00-J99)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



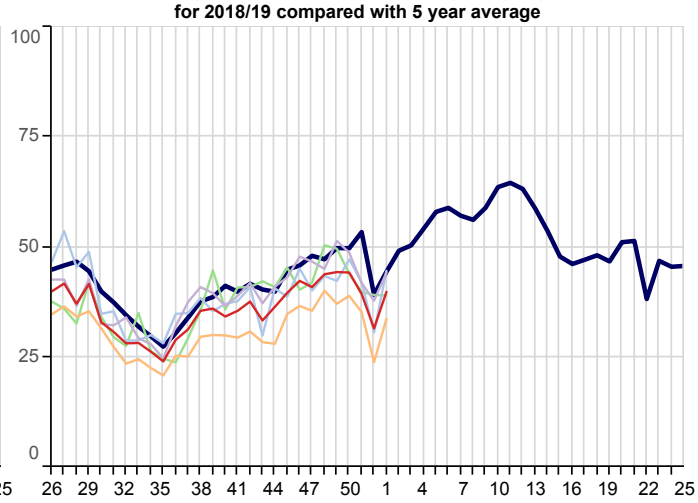
Acute Sinusitis (ICD10: J01)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



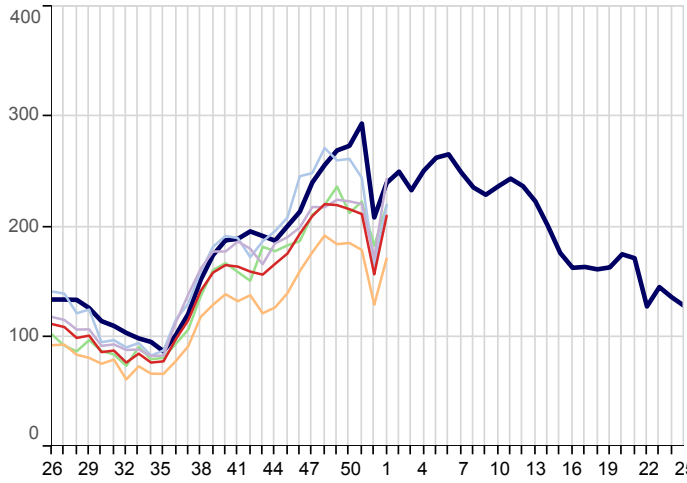
Strep Sore Throat, Scarlatina and Peritonsillar Abscess (ICD10: A38,J020,J36)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



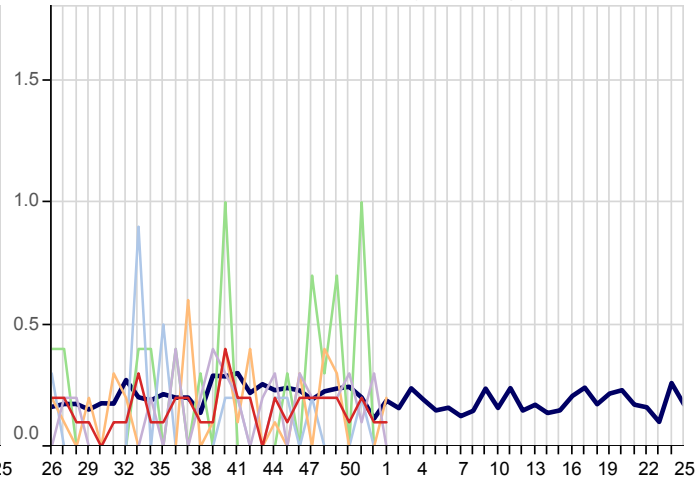
Acute Tonsillitis/Pharyngitis (ICD10: J02-J03)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



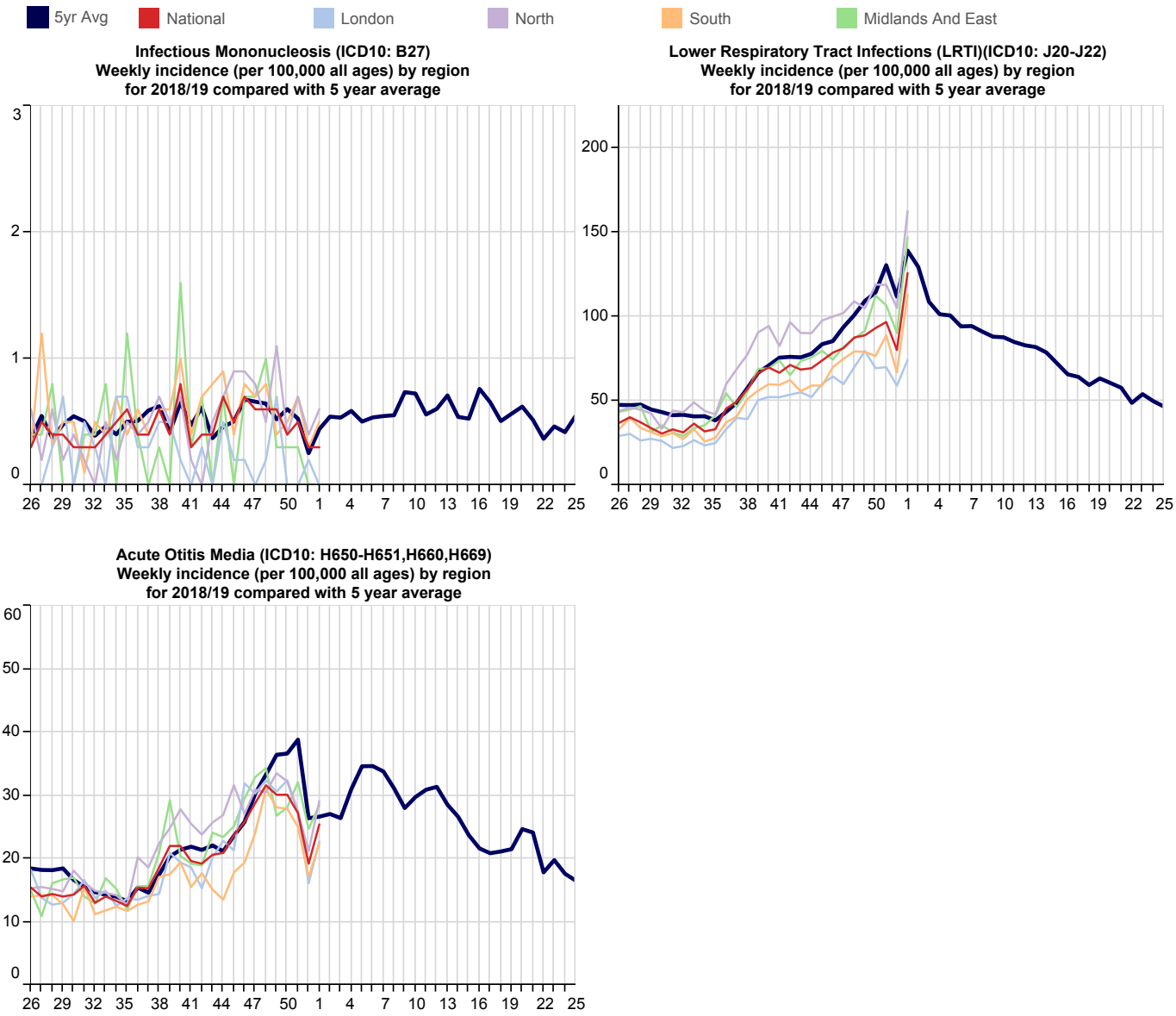
Upper Respiratory Tract Infections (URTI)(ICD10: J00-J06)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



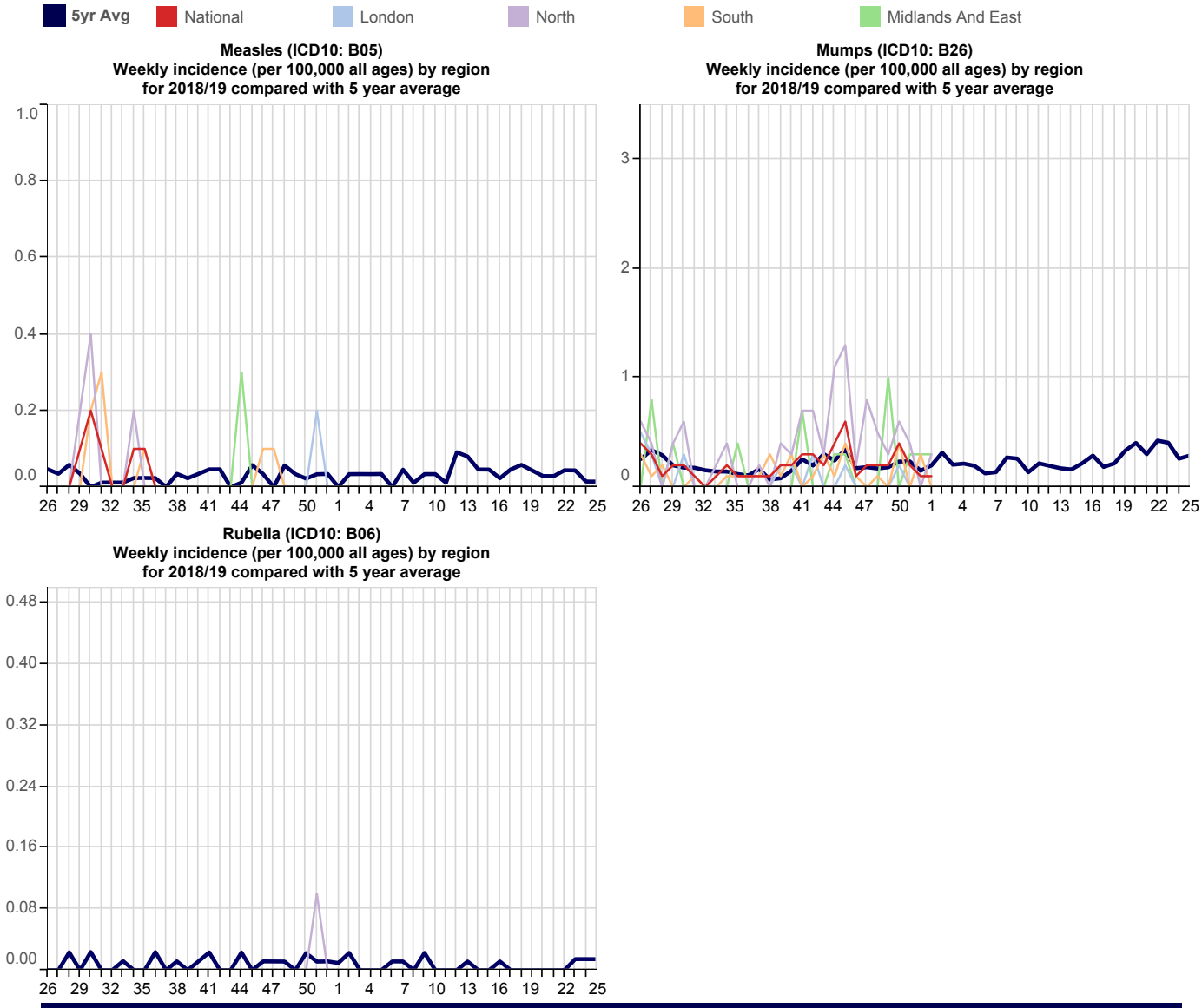
Whooping Cough (ICD10: A37)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



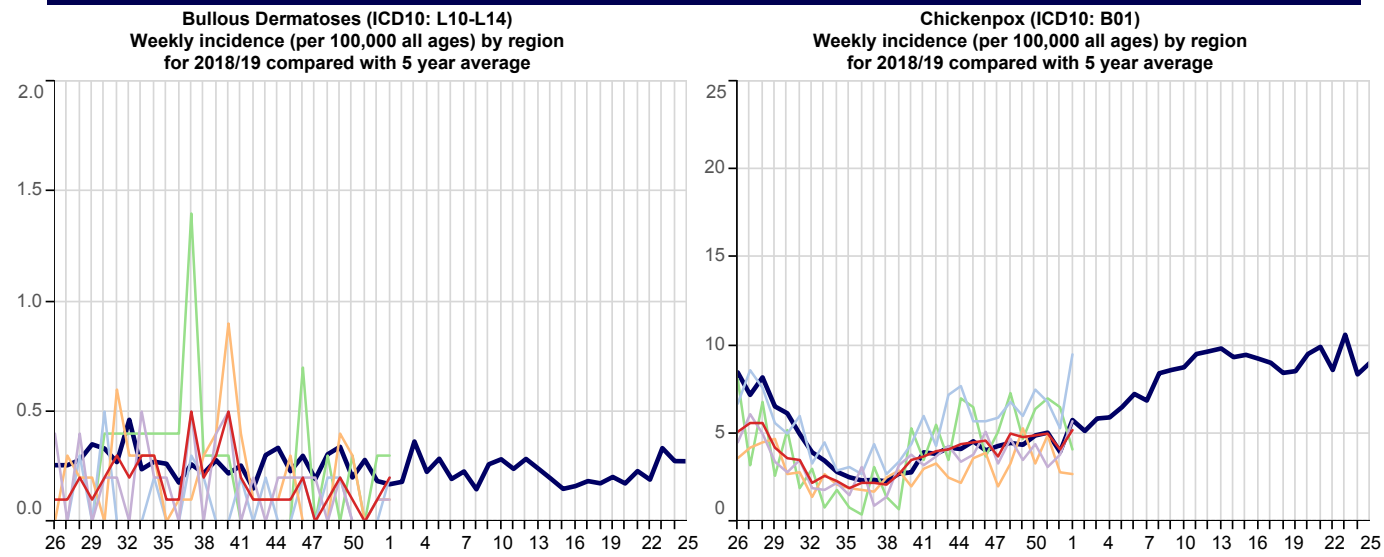
3. Respiratory Infections(Continued):



4. Vaccine Sensitive Disorders



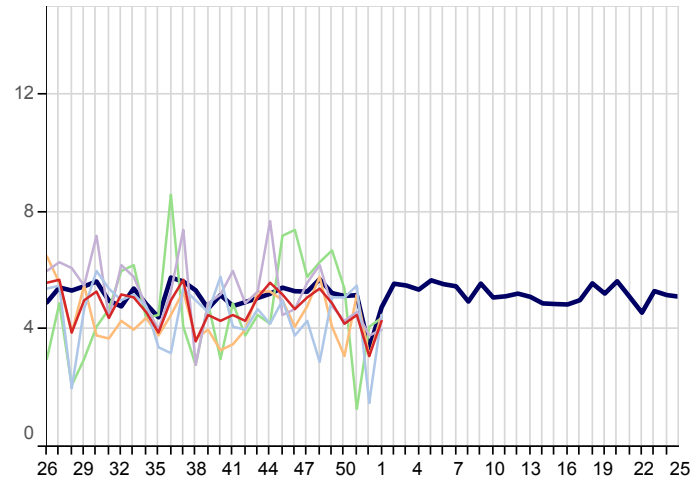
5. Skin Contagions



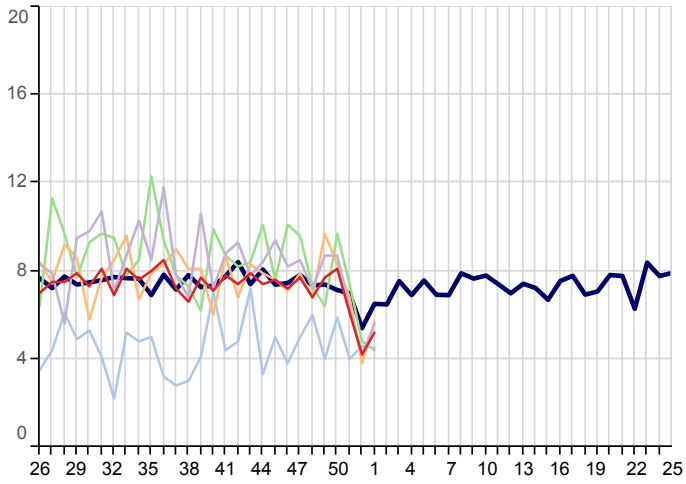
5. Skin Contagions (Continued)

5yr Avg | National | London | North | South | Midlands And East

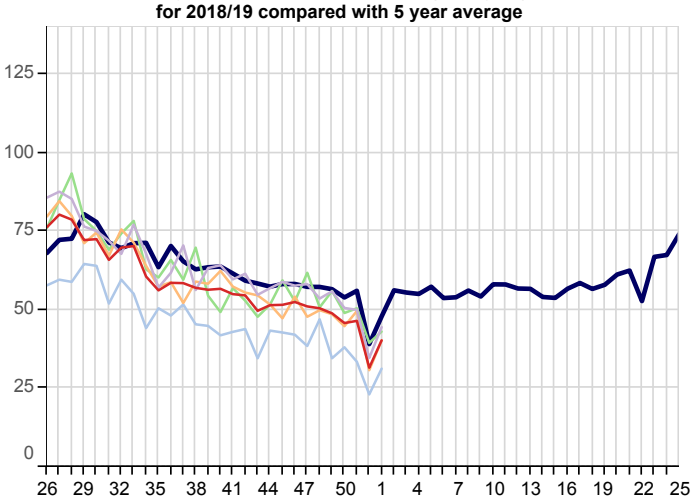
Herpes Simplex (ICD10: B00)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



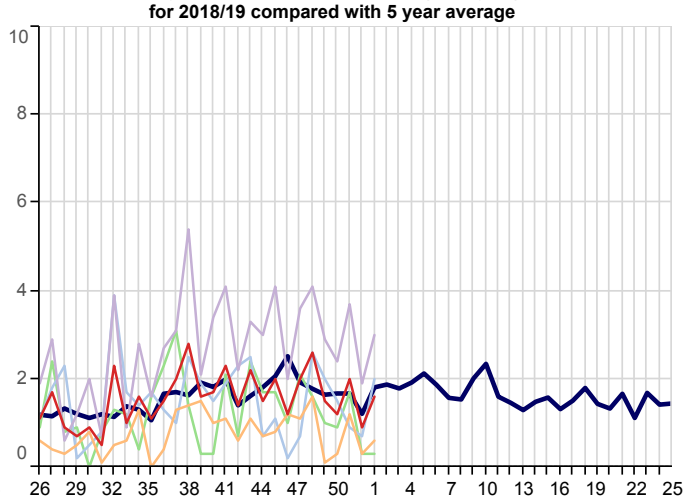
Herpes Zoster (ICD10: B02)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



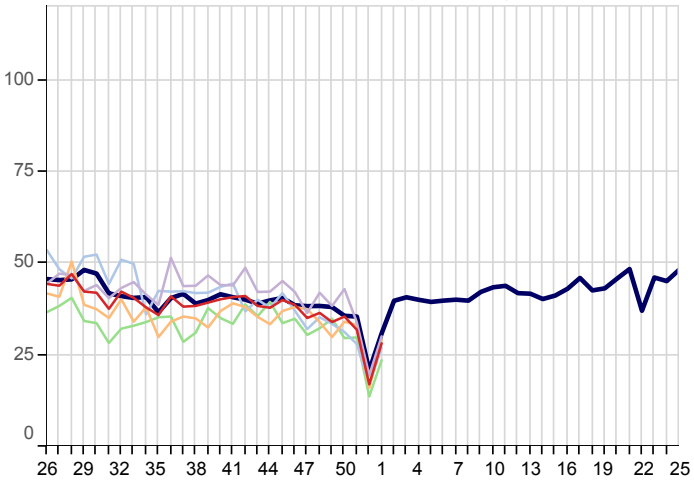
Infections of Skin & Subcutaneous Tissue (ICD10: L00-L08)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



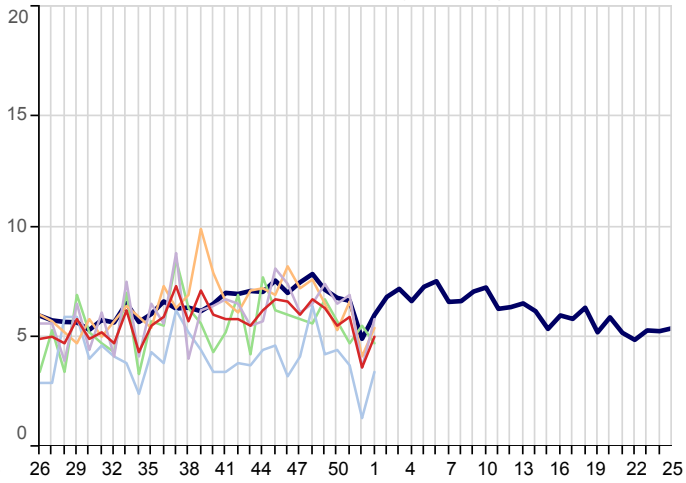
Scabies (ICD10: B86)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



Symptoms involving Skin & Oth Integument Tiss (ICD10: R20-R23)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



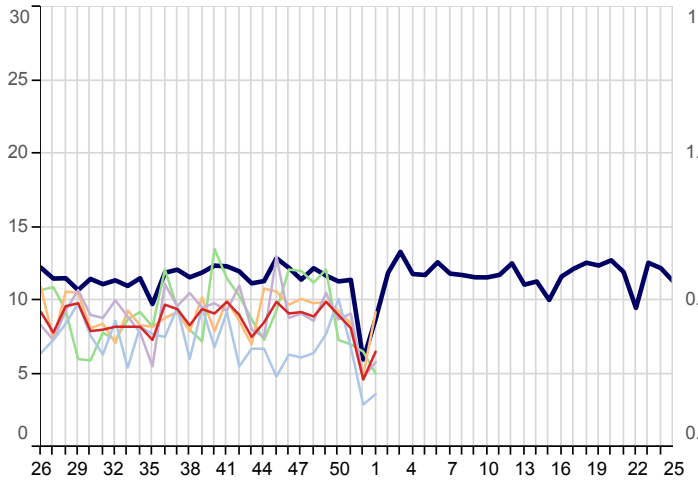
Impetigo (ICD10: L01)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



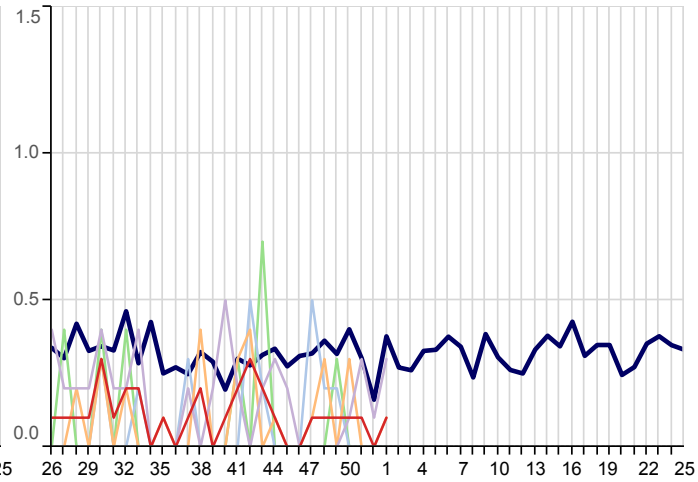
6. Disorders Affecting the Nervous System

5yr Avg National London North South Midlands And East

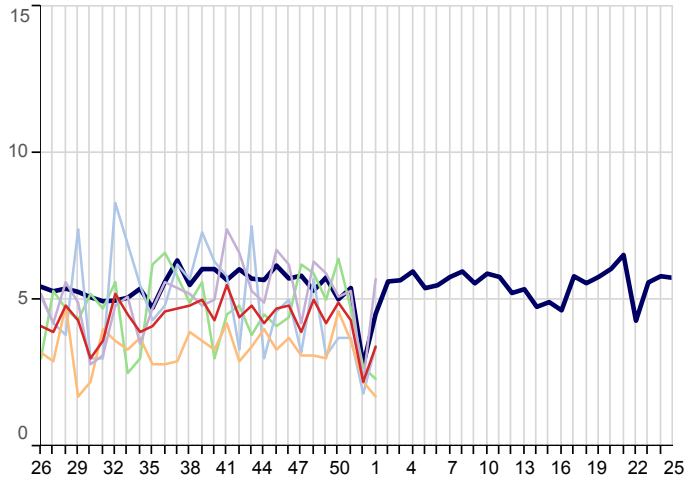
Disorders of The Peripheral Nervous System (ICD10: G50-G64,G70-G72)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



Meningitis/Encephalitis(ICD10: A170-A171,A390,A38-A85,A87,G00-G05)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average

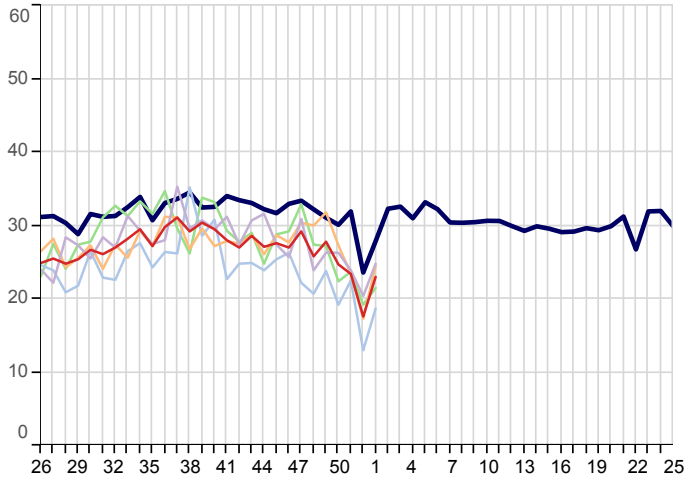


Symptoms Involving Nervous & Musculoskeletal (ICD10: R25-R29)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



7. Genitourinary System Disorders

Urinary Tract Infection/Cystitis (ICD10: N30,N390)
Weekly incidence (per 100,000 all ages) by region
for 2018/19 compared with 5 year average



8. Tabular Summary by Disease

Week beginning / Week ending	31/12/2018 06/01/2019		24/12/2018 30/12/2018		17/12/2018 23/12/2018		10/12/2018 16/12/2018	
Disease Name	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer
Acute Bronchitis	122.8	2,811	78.1	1,731	94.7	2,068	90.2	2,040
Allergic Rhinitis	2.8	63	1.3	28	2.4	53	3.1	71
Asthma	17.3	396	12.2	270	17.3	377	16.4	371
Bullous Dermatoses	0.2	4	0.1	3	0.0	0	0.1	3
Chickenpox	5.2	118	4.1	91	5.0	110	4.9	111
Common Cold	114.0	2,609	87.6	1,941	116.9	2,553	115.9	2,623
Conjunctival Disorders	19.9	455	15.0	333	24.4	532	26.1	590
Herpes Simplex	4.3	99	3.1	69	4.5	99	4.2	95
Herpes Zoster	5.2	120	4.2	94	6.1	134	8.1	184
Impetigo	5.0	115	3.6	79	5.9	128	5.5	125
Infectious Mononucleosis	0.3	8	0.3	6	0.5	11	0.4	8
Influenza-like illness	14.8	339	8.4	187	9.4	206	8.1	184
Infectious Intestinal Diseases	6.5	149	6.2	137	8.0	174	10.4	236
Laryngitis and Tracheitis	4.4	100	4.5	99	5.3	115	5.3	120
Lower Respiratory Tract Infections	125.8	2,879	80.2	1,777	96.8	2,114	93.2	2,108
Measles	0.0	0	0.0	0	0.0	1	0.0	0
Meningitis and Encephalitis	0.1	3	0.0	1	0.1	2	0.1	3
Mumps	0.1	3	0.1	3	0.2	4	0.4	8
Non-infective Enteritis and Colitis	6.5	148	5.9	130	8.3	182	8.4	190
Otitis Media Acute	25.4	582	19.2	425	27.2	594	30.1	682
Peripheral Nervous Disease	6.5	148	4.6	102	8.1	177	9.0	203
Pleurisy	0.9	20	0.6	13	1.2	26	1.8	40
Pneumonia and Pneumonitis	1.4	32	1.7	38	0.7	16	1.4	31
Respiratory System Diseases	371.5	8,504	257.1	5,697	339.7	7,421	335.9	7,600
Rubella	0.0	0	0.0	0	0.0	1	0.0	0
Scabies	1.6	36	0.9	19	2.0	43	1.2	28
Sinusitis	27.9	638	14.9	330	24.0	524	22.0	498
Skin and Subcutaneous Tissue Infections	40.3	922	31.6	700	46.5	1,015	45.8	1,037
Strep Throat and Peritonsillar Abscess	1.4	31	1.1	25	1.6	36	1.6	36
Symptoms involving musculoskeletal	3.4	77	2.2	48	4.3	94	4.9	110
Symptoms involving Respiratory and Chest	18.6	425	11.3	250	16.0	350	17.6	399
Symptoms involving Skin and Integument Tissues	28.2	645	17.0	377	31.9	696	35.5	804
Tonsillitis and acute Pharyngitis	39.8	912	31.5	699	39.3	859	44.2	1,001
Upper Respiratory Tract Infections	209.9	4,806	156.7	3,472	211.5	4,619	215.9	4,884
Urinary Tract Infections	23.0	527	17.6	390	23.4	511	24.7	558
Viral Hepatitis	0.1	3	0.0	1	0.2	4	0.3	6
Whooping Cough	0.1	2	0.1	2	0.2	5	0.1	2
Practice Count		**225**		**218**		**217**		**224**
Denom		**2,289,340**		**2,216,030**		**2,184,291**		**2,262,596**

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 2013-2017. 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/rsc

Our data extraction process and information governance

Data are extracted twice weekly from practice systems by Wellbeing data management 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 Wellbeing data management 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/rsc

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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