

## RSC Communicable and Respiratory Disease Report for England

### Key Statistics:

Week Number/Year..... 1/2021  
 Week Starting - Ending..... 30/12/2020 - 05/01/2021  
 No. of Practices..... 379  
 Population..... 3,888,833

### National (England)

- **Acute Bronchitis** : increased from **2.5** in week 53 to **2.8** in week 1.
- **Asthma** : increased from **5.2** in week 53 to **7.4** in week 1.
- **Common Cold** : increased from **0.5** in week 53 to **0.7** in week 1.
- **Influenza-like illness** : increased from **0.9** in week 53 to **1.1** in week 1.
- **Respiratory System Diseases** : increased from **74.7** in week 53 to **92.2** in week 1.
- **COVID-19** : decreased from **373.2** in week 53 to **343.9** in week 1.

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

- **Acute Bronchitis** : increased from **1.6** in week 53 to **2.2** in week 1 in the London region, decreased from **5.2** in week 53 to **5.0** in week 1 in the North region, increased from **1.5** in week 53 to **1.7** in week 1 in the South region, and increased from **1.1** in week 53 to **1.8** in week 1 in the Midlands And East region.
- **Asthma** : increased from **3.6** in week 53 to **5.2** in week 1 in the London region, increased from **5.6** in week 53 to **9.2** in week 1 in the North region, increased from **5.4** in week 53 to **7.3** in week 1 in the South region, and increased from **5.4** in week 53 to **6.9** in week 1 in the Midlands And East region.
- **Common Cold** : was unchanged at **1.2** in week 53 and **1.2** in week 1 in the London region, increased from **0.3** in week 53 to **0.9** in week 1 in the North region, increased from **0.2** in week 53 to **0.4** in week 1 in the South region, and decreased from **0.6** in week 53 to **0.3** in week 1 in the Midlands And East region.
- **Influenza-like illness** : increased from **0.6** in week 53 to **0.9** in week 1 in the London region, increased from **1.1** in week 53 to **1.5** in week 1 in the North region, was unchanged at **1.1** in week 53 and **1.1** in week 1 in the South region, and decreased from **0.5** in week 53 to **0.3** in week 1 in the Midlands And East region.
- **Respiratory System Diseases** : increased from **58.8** in week 53 to **68.2** in week 1 in the London region, increased from **100.1** in week 53 to **117.6** in week 1 in the North region, increased from **65.7** in week 53 to **84.0** in week 1 in the South region, and increased from **68.2** in week 53 to **92.5** in week 1 in the Midlands And East region.
- **COVID-19** : decreased from **630.8** in week 53 to **551.0** in week 1 in the London region, decreased from **311.1** in week 53 to **291.4** in week 1 in the North region, decreased from **323.6** in week 53 to **292.3** in week 1 in the South region, and decreased from **341.4** in week 53 to **337.2** in week 1 in the Midlands And East region.

### Comment:

Overall presentations of respiratory diseases have increased this week, though remain below seasonal levels for this time of year.

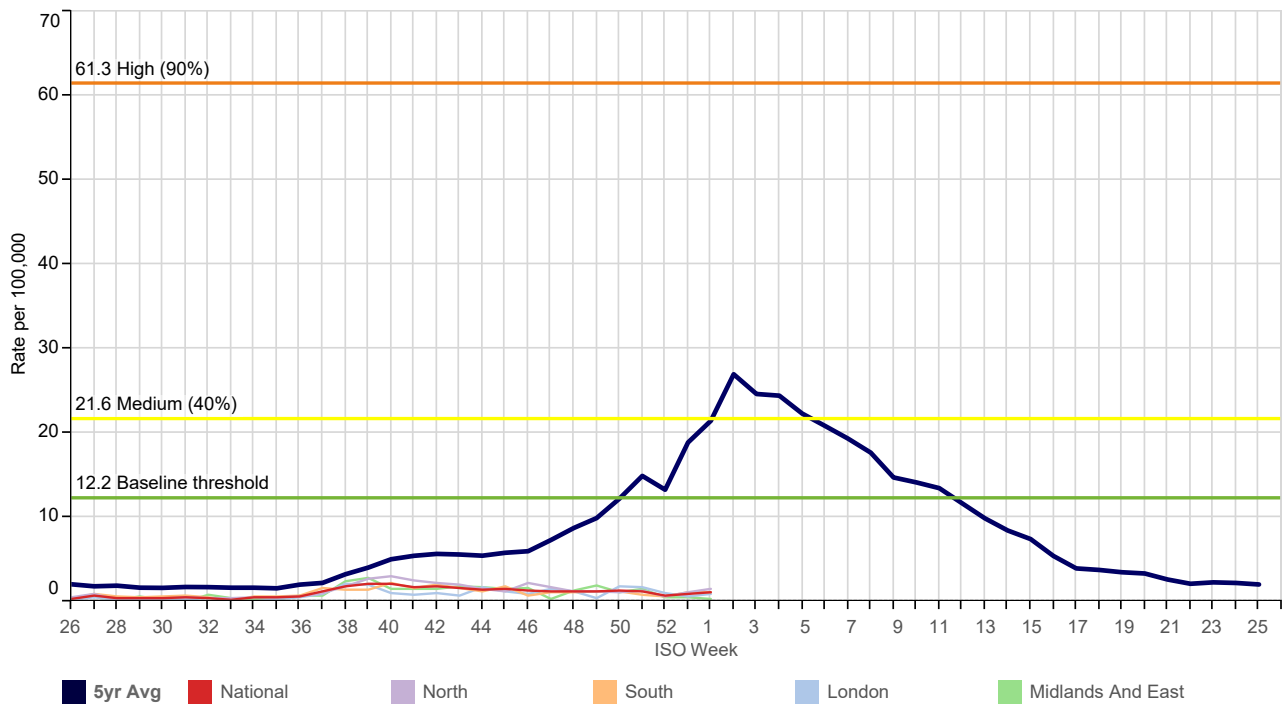
COVID-19 incidence has been increasing, the small step down in incidence this week may reflect the delay in test results being transferred into clinical records.

This report includes a virology update.

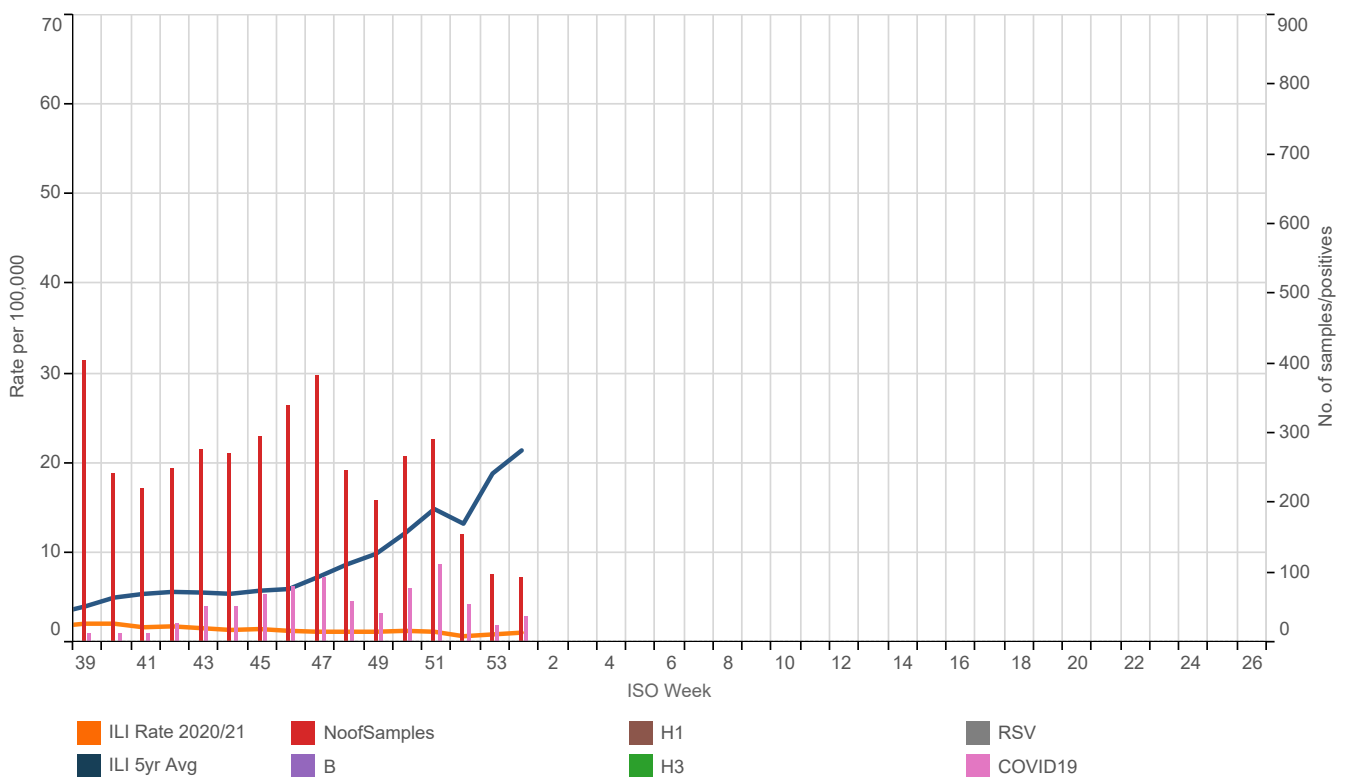
## Winter Focus 2020/21

Please see page 15 for explanatory notes on the data.

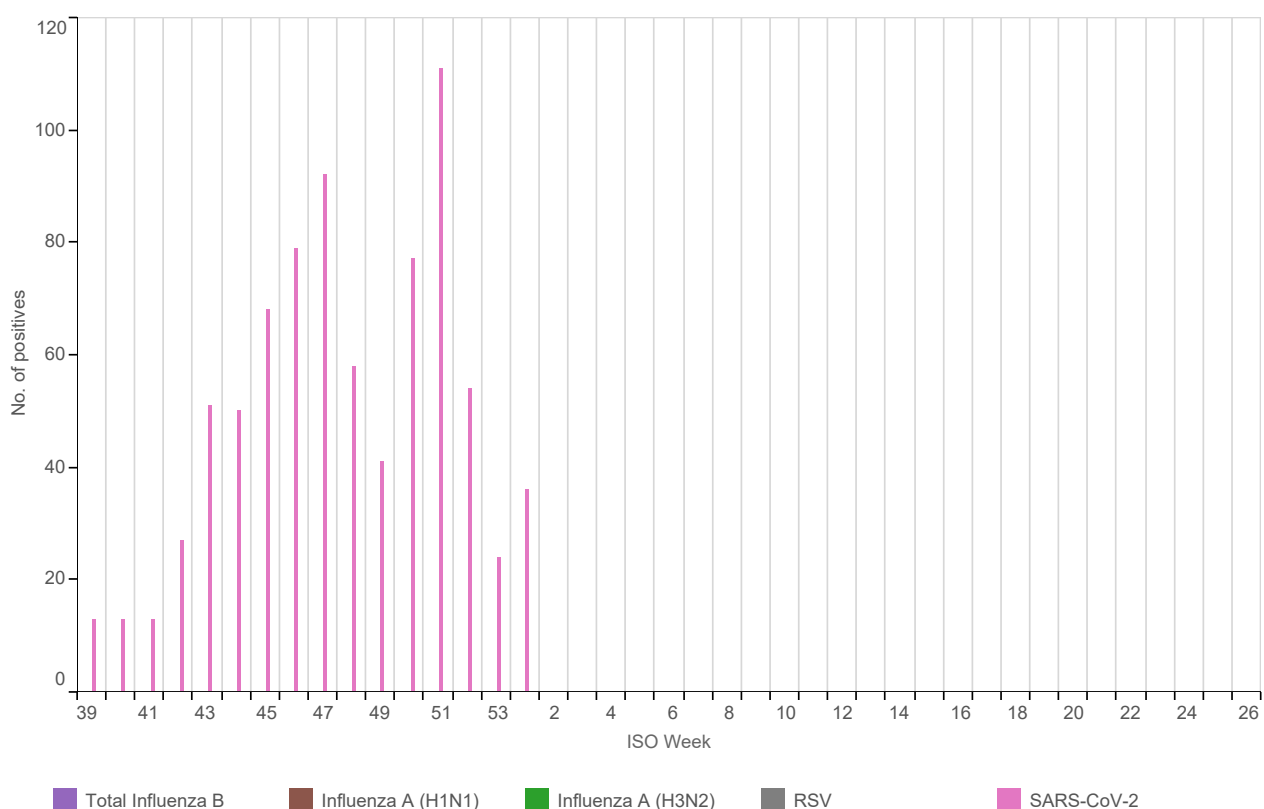
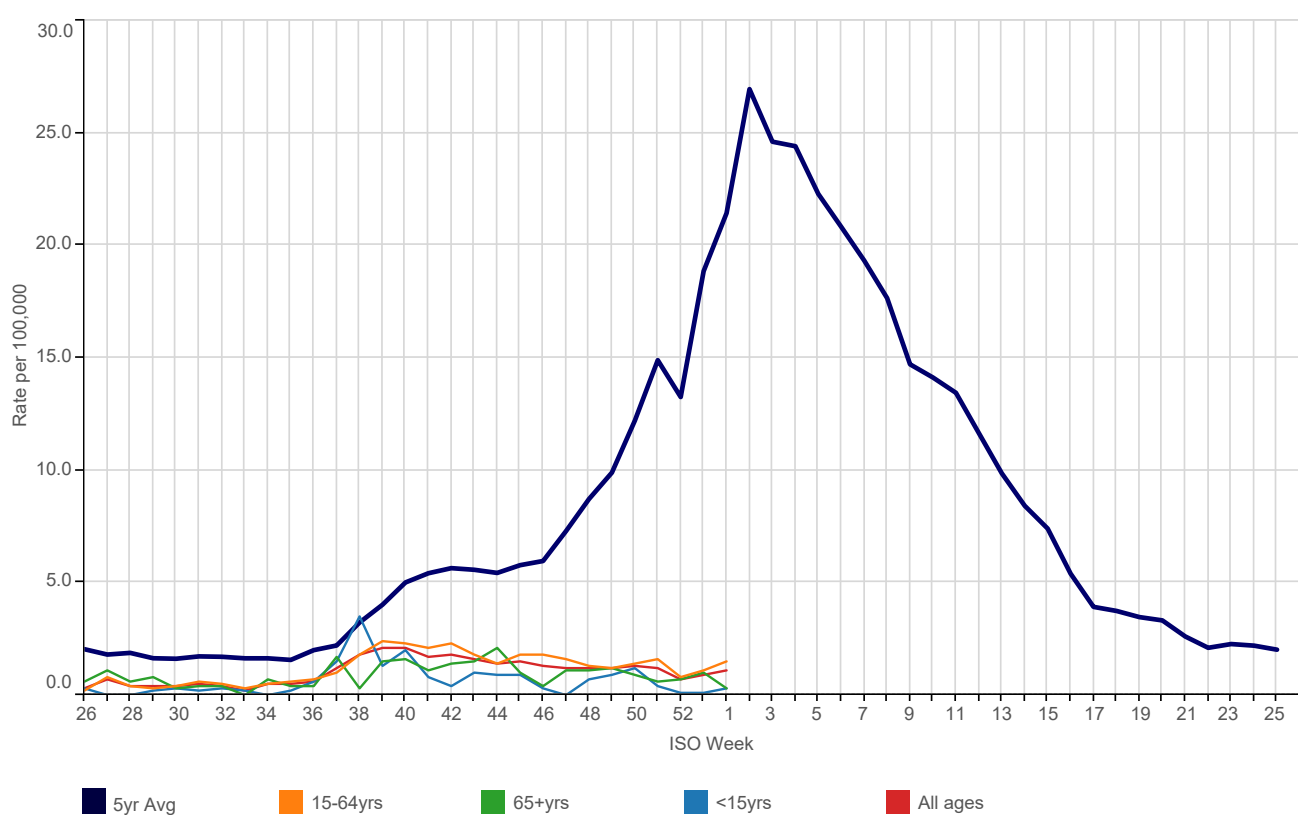
### (A) Influenza-like illness: national incidence rate winter 2020/21 by region\*



### (B) RCGP/PHE RSV, Influenza and SARS-CoV-2 Virology Swab Surveillance 2020/21\*



\* The rolling average line (blue) is based on 5 year historic RCGP RSC level (Graph A). The weekly virology samples displayed are offset from the ISO Week by -0.6 (Graphs B & C).

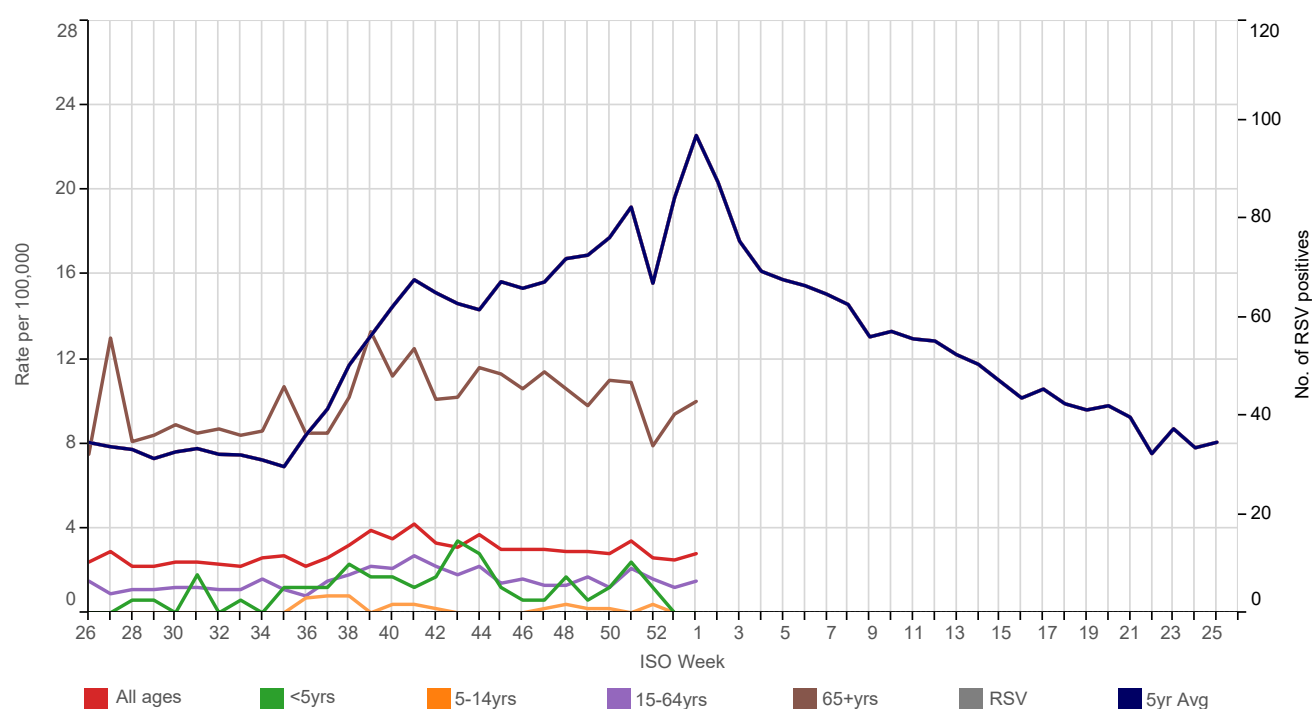
**(C) RCGP/PHE RSV, Influenza and SARS-CoV-2 Virology Swab Surveillance 2020/21 by viral strain\*****(D) Influenza-like illness: national incidence rate 2020/21 by age group\***

**(E) Influenza-like illness: national incidence rate 2020/21 by age group\***

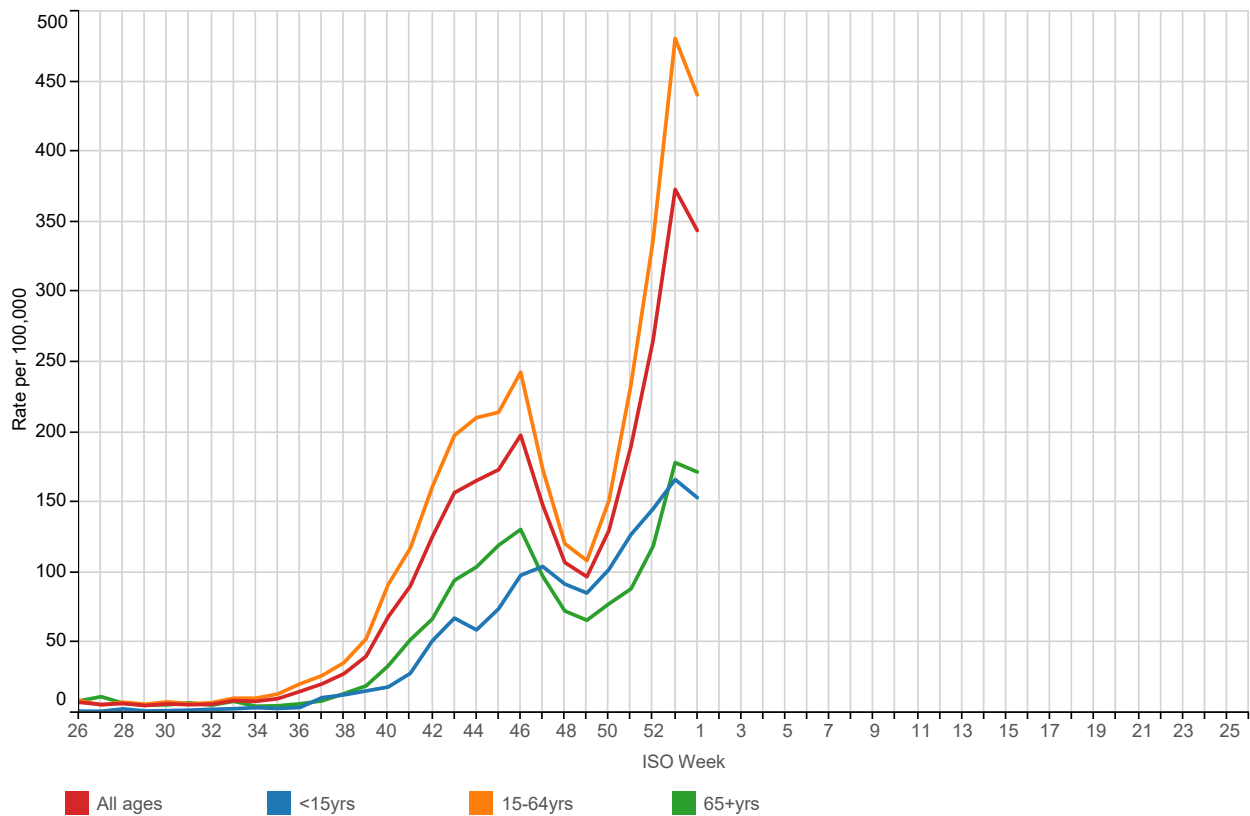
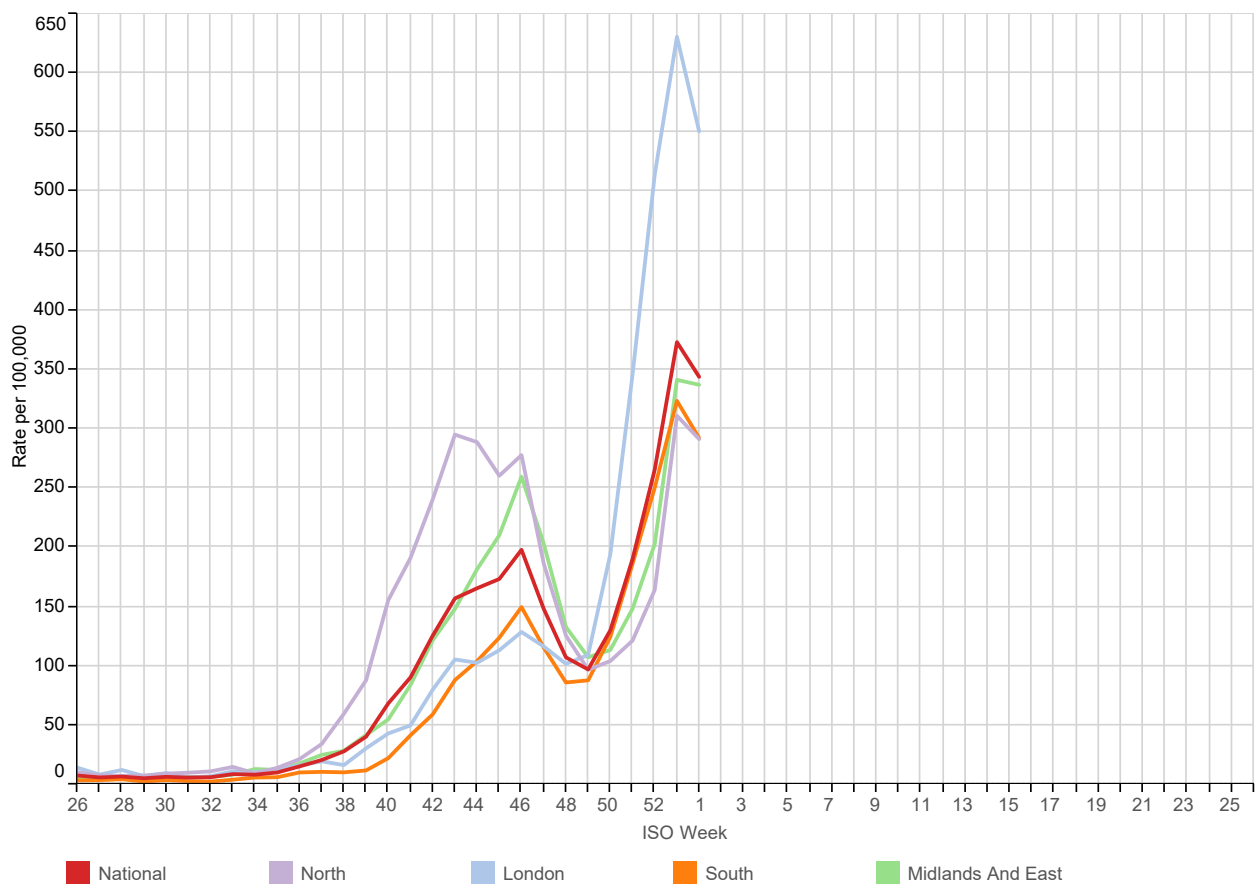
This table shows the level of intensity of ILI by age band. MEM thresholds have been calculated separately for each age band - the ranges are shown in the table Threshold levels by age band.

Table 1	40	41	42	43	44	45	46	47	48	49	50	51	52	53	1	2	3	4
<15yrs	2.0	0.8	0.4	1.0	0.9	0.9	0.3	0.0	0.7	0.9	1.2	0.4	0.1	0.1	0.3			
15-64yrs	2.3	2.1	2.3	1.8	1.4	1.8	1.8	1.6	1.3	1.2	1.4	1.6	0.8	1.1	1.5			
65+yrs	1.6	1.1	1.4	1.5	2.1	1.0	0.4	1.1	1.1	1.2	0.9	0.6	0.7	1.0	0.3			
All ages	2.1	1.7	1.8	1.6	1.4	1.5	1.3	1.2	1.2	1.2	1.3	1.2	0.7	0.9	1.1			
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
<15yrs																		
15-64yrs																		
65+yrs																		
All ages																		

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
All Ages	<12.2	12.2 to <21.6	21.6 to <61.3	61.3 to <97.3	97.3+	<sup>1</sup> Below baseline threshold
<15yrs	<10.7	10.7 to <17.6	17.6 to <47.7	47.7 to <74.1	74.1+	<sup>2</sup> baseline threshold breach to < 40th percentile
15-64yrs	<15.0	15.0 to <26.1	26.1 to <63.4	63.4 to <93.8	93.8+	<sup>3</sup> 40th to <90th percentile
65+yrs	<11.5	11.5 to <16.5	16.5 to <37.8	37.8 to <54.5	54.5+	<sup>4</sup> 90th to <97.5th percentile
						<sup>5</sup> 97.5th+ percentile

**(F) Acute Bronchitis: national incidence rate 2020/21 by age group\*****Weekly Influenza-like illness and Acute Bronchitis incidence rates per 100,000 persons**

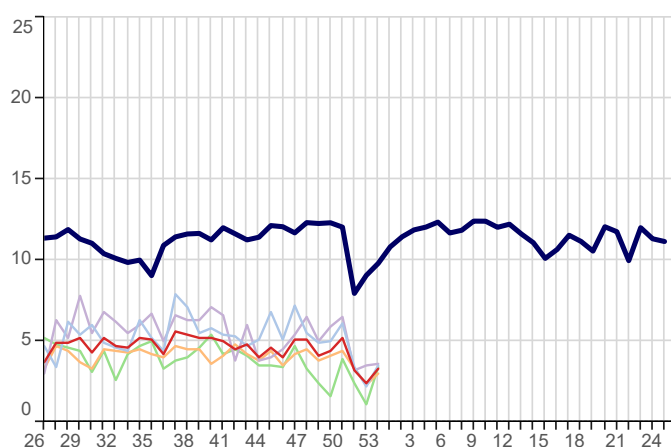
Influenza-like illness		Bronchitis		Influenza-like illness		Bronchitis	
<1yr	5.6	0.0	London	0.9	2.2		
1-4yrs	0.0	0.0	North	1.5	5.0		
5-14yrs	0.0	0.0	South	1.1	1.7		
15-24yrs	0.2	0.0	Midlands And East	0.3	1.8		
25-44yrs	1.1	0.4	National	1.1	2.8		
45-64yrs	2.4	3.4					
65-74yrs	0.3	10.1					
75-84yrs	0.4	10.0					
85+yrs	0.0	9.6					
All ages	1.1	2.8					

**(G) COVID-19 : national incidence rate 2020/21 by age group\*****(H) COVID-19 : national incidence rate 2020/21 by region\***

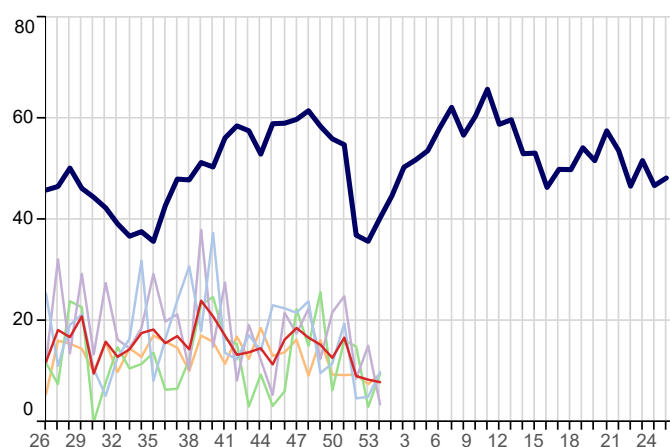
# 1. Water & Food Borne Disorders:

5yr Avg   National   London   North   South   Midlands And East

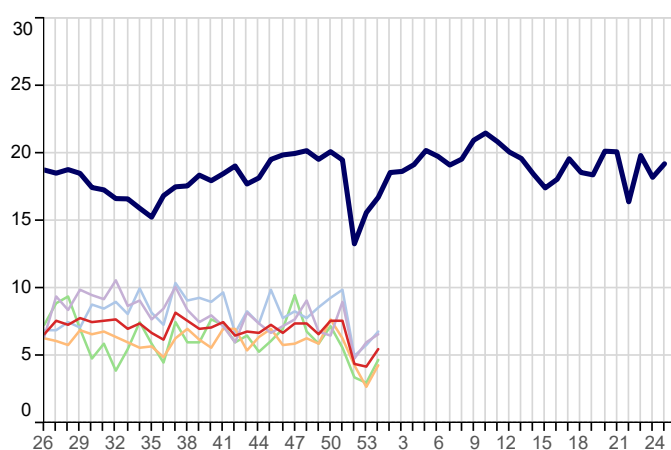
**Infectious Intestinal Disease (ICD10: A00-A09)**  
Weekly incidence (per 100,000 **all ages**) by regions  
for 2020/21 compared with 5 year average



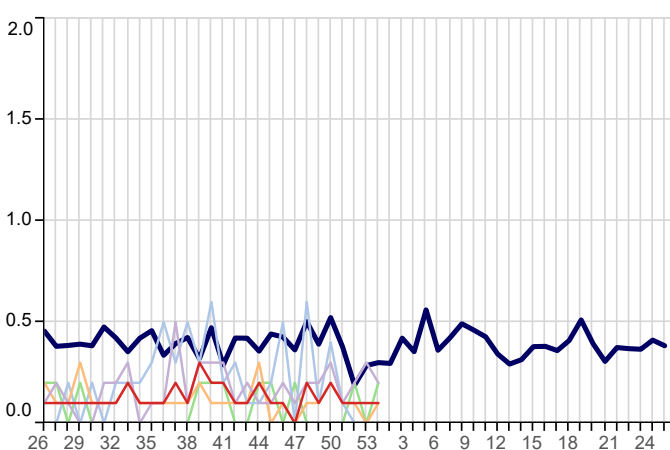
**Infectious Intestinal Disease (ICD10: A00-A09)**  
Weekly incidence (per 100,000 **0-4 years**) by regions  
for 2020/21 compared with 5 year average



**Non-Infective Enteritis & Colitis (ICD10: K50-K52)**  
Weekly incidence (per 100,000 **all ages**) by region  
for 2020/21 compared with 5 year average



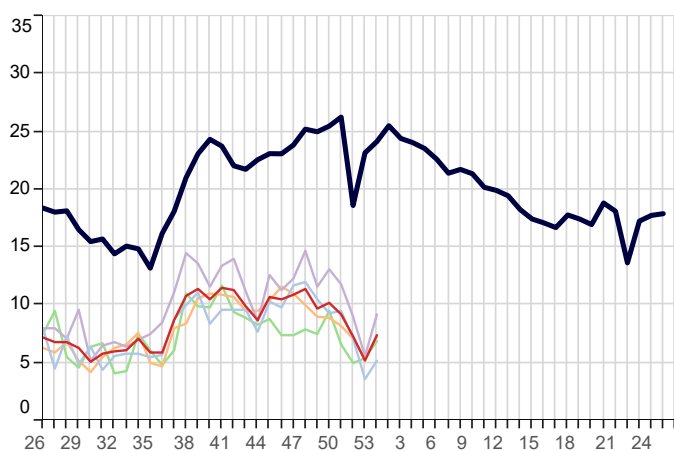
**Viral Hepatitis (ICD10: B15-B19)**  
Weekly incidence (per 100,000 **all ages**) by region  
for 2020/21 compared with 5 year average



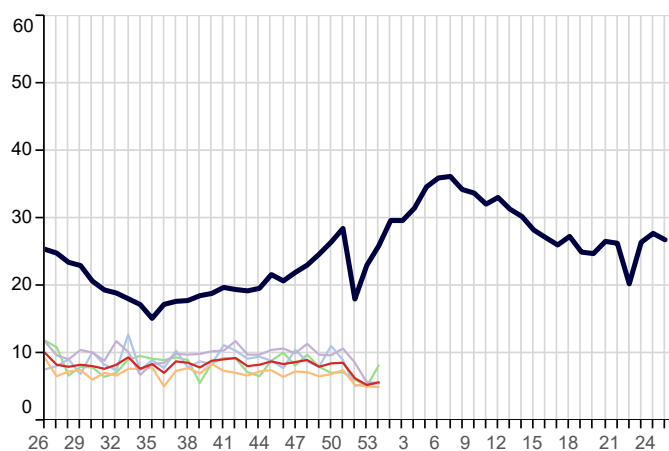
## 2. Environmentally Sensitive Disorders:

5yr Avg   National   London   North   South   Midlands And East

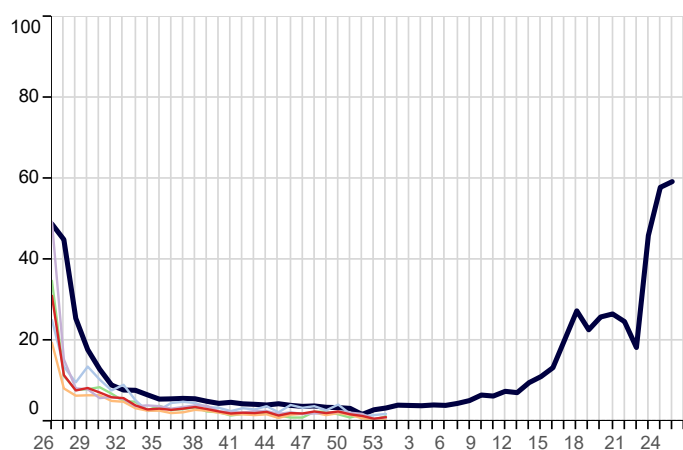
**Asthma (ICD10: J45-J46)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



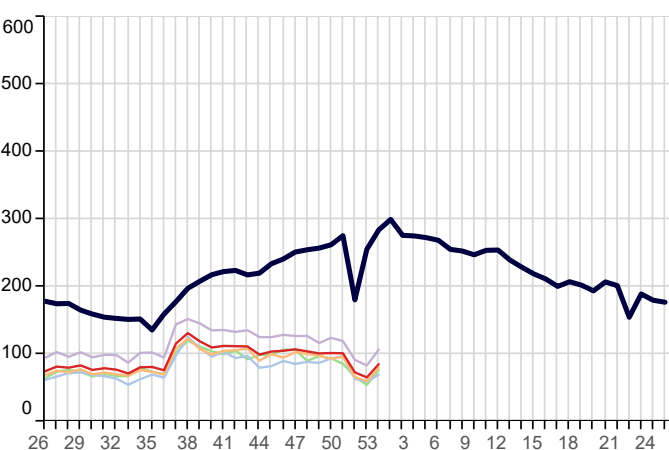
**Disorders of Conjunctiva (ICD10: H10-H13)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



**Hayfever/Allergic Rhinitis (ICD10: J30)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



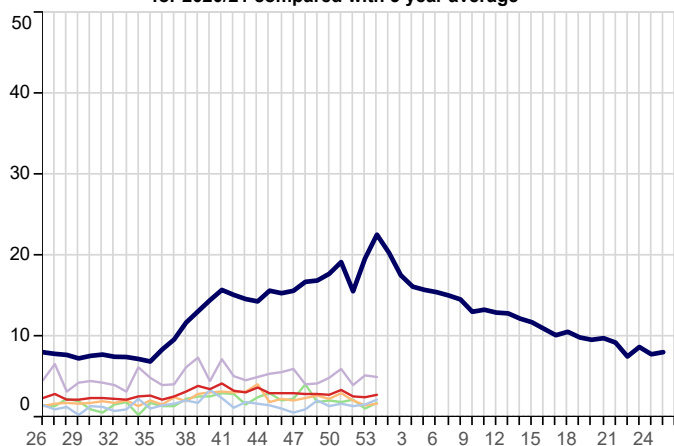
**Symptoms involving Respiratory & Chest (ICD10: R05-R07,R09)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



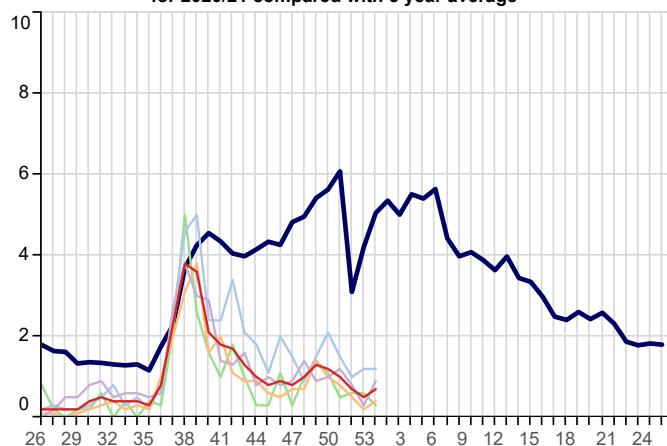
### 3. Respiratory Infections:

5yr Avg   National   London   North   South   Midlands And East

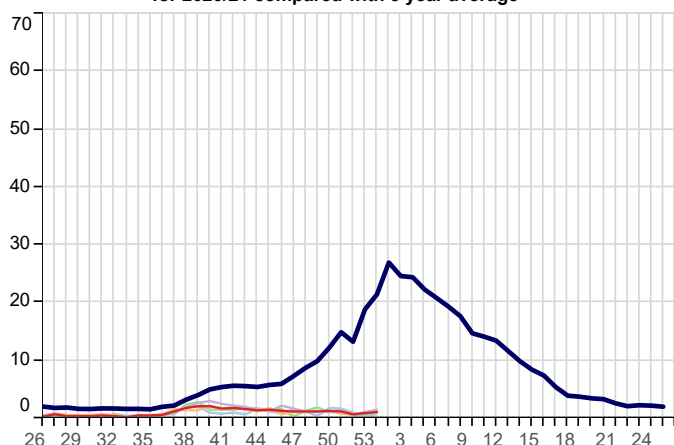
**Acute Bronchitis (ICD10: J20-J21,J40)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



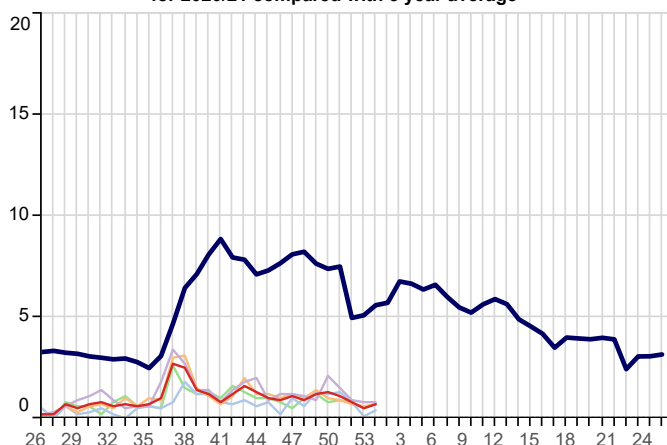
**Common Cold (ICD10: J00,J06)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



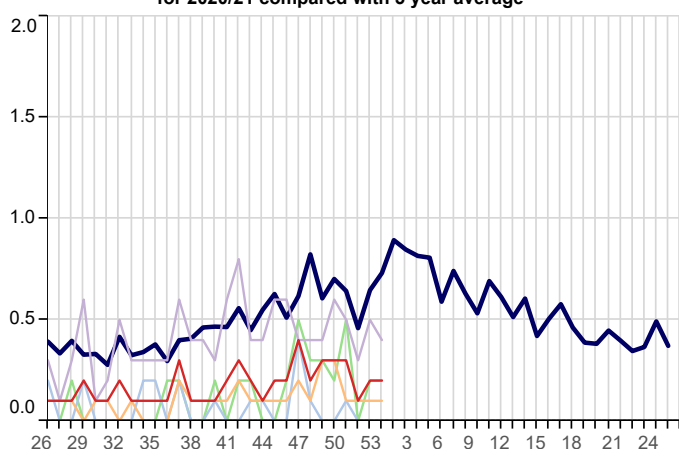
**Influenza-like illness (ICD10: J09-J11)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



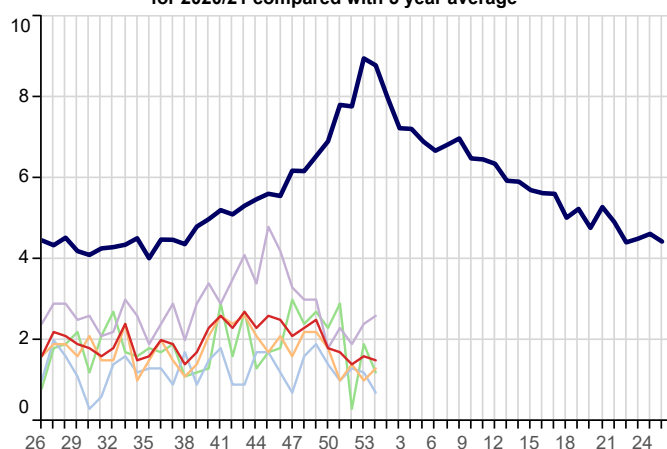
**Acute Laryngitis/Tracheitis (ICD10: J04)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



**Pleurisy (ICD10: R091)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



**Pneumonia/Pneumonitis (ICD10: J12-J18)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average

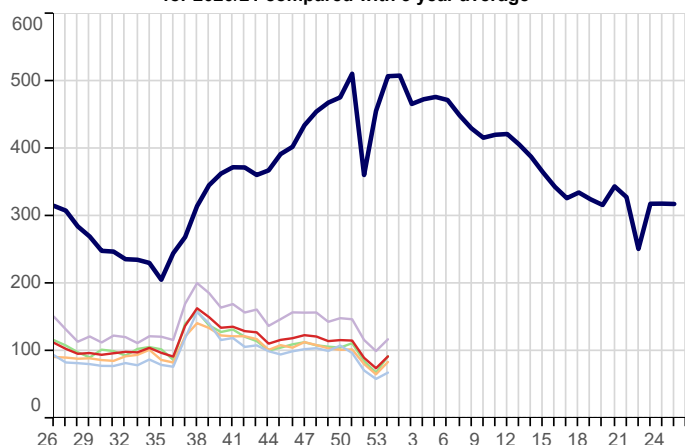




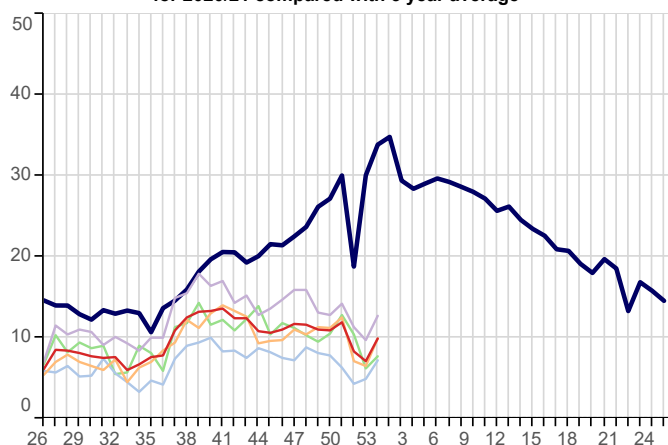
### 3. Respiratory Infections(Continued):

5yr Avg   National   London   North   South   Midlands And East

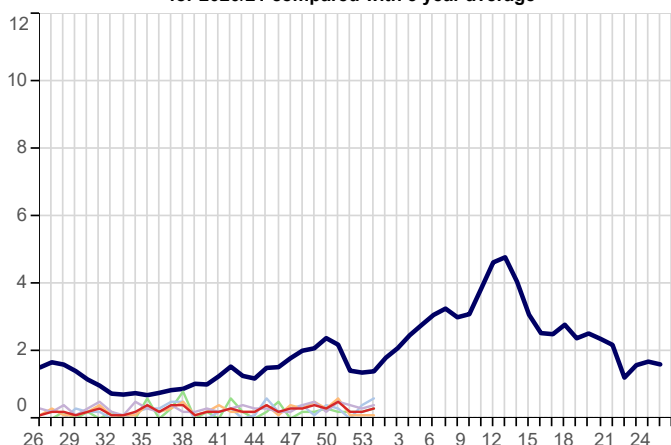
**Respiratory System Diseases (ICD10: J00-J99)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



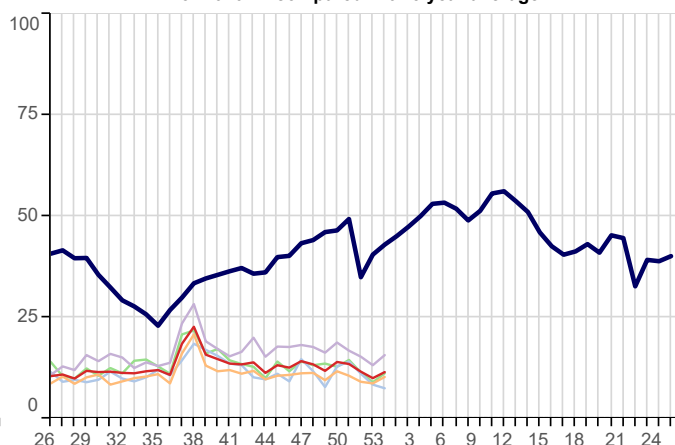
**Acute Sinusitis (ICD10: J01)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



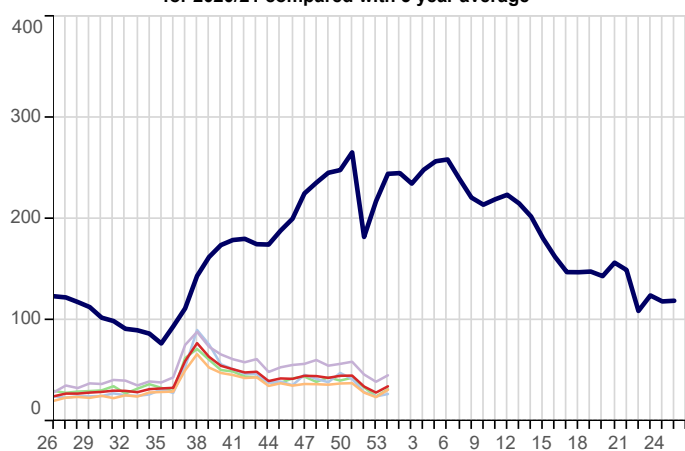
**Strep Sore Throat, Scarletina and Peritonsillar Abscess (ICD10: A38,J02,J36)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



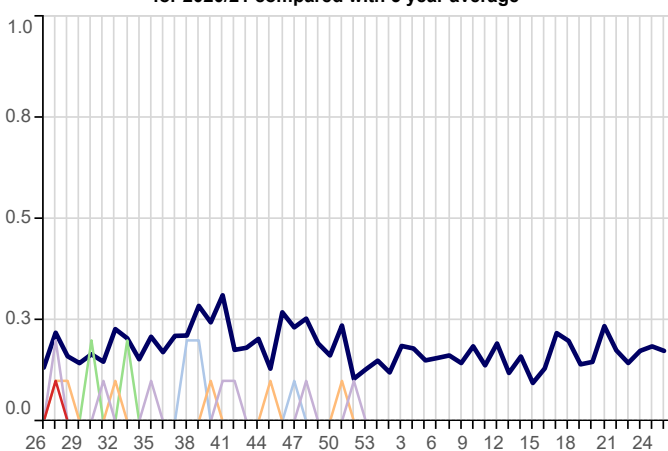
**Acute Tonsillitis/Pharyngitis (ICD10: J02-J03)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



**Upper Respiratory Tract Infections (URTI)(ICD10: J00-J06)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



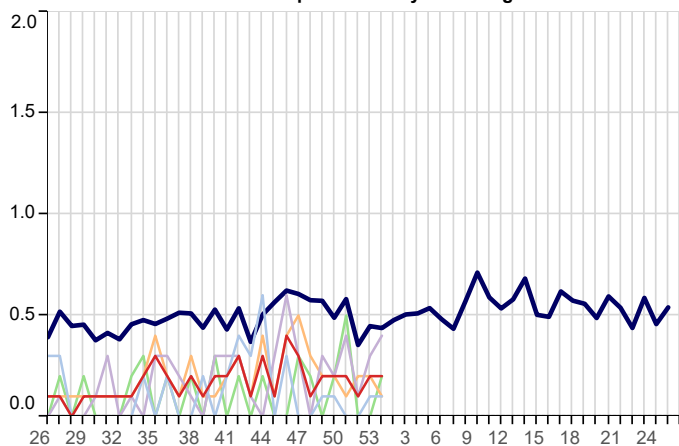
**Whooping Cough (ICD10: A37)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



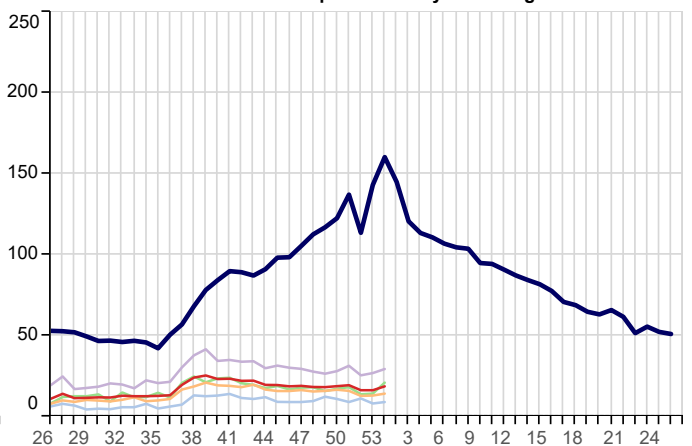
### 3. Respiratory Infections(Continued):

5yr Avg   National   London   North   South   Midlands And East

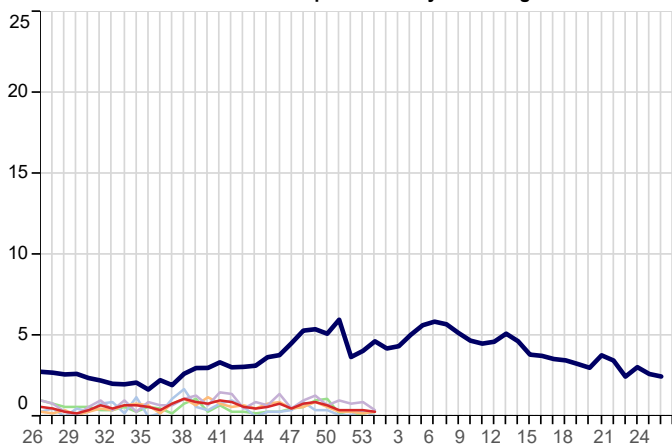
**Infectious Mononucleosis (ICD10: B27)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



**Lower Respiratory Tract Infections (LRTI)(ICD10: J20-J22)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



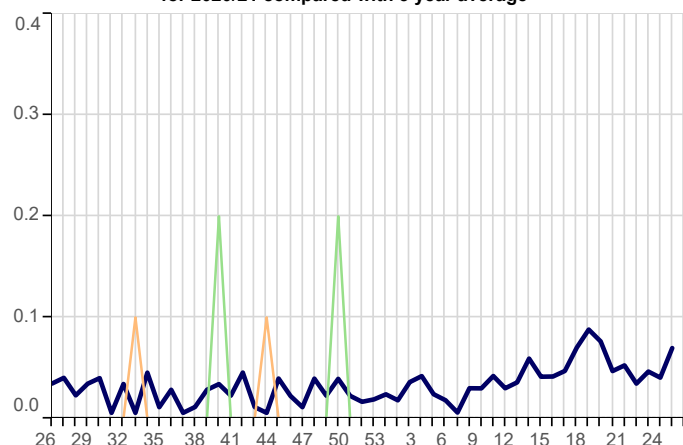
**Acute Otitis Media (ICD10: H650-H651,H660,H669)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



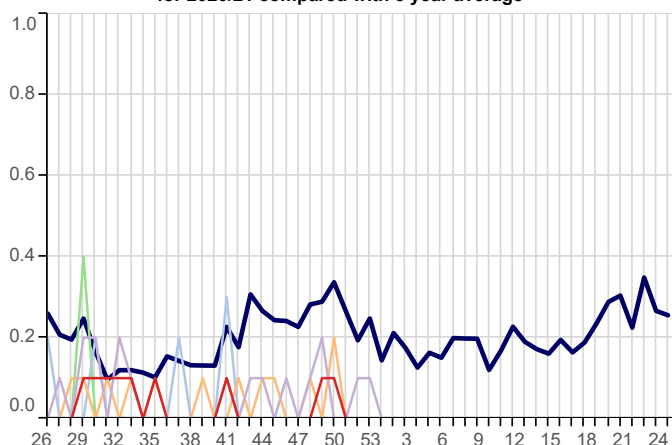
## 4. Vaccine Sensitive Disorders

5yr Avg   National   London   North   South   Midlands And East

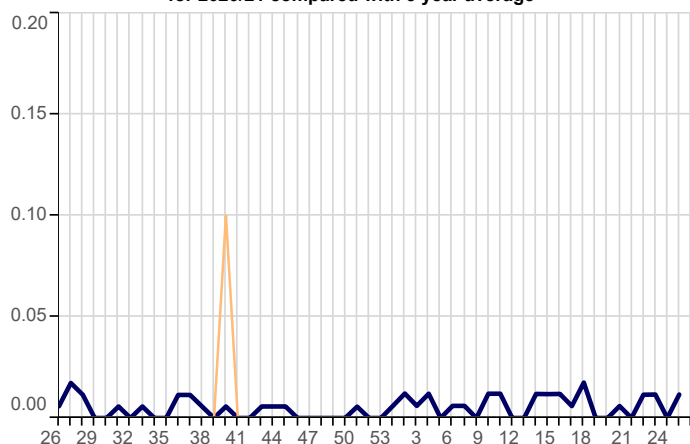
**Measles (ICD10: B05)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



**Mumps (ICD10: B26)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average

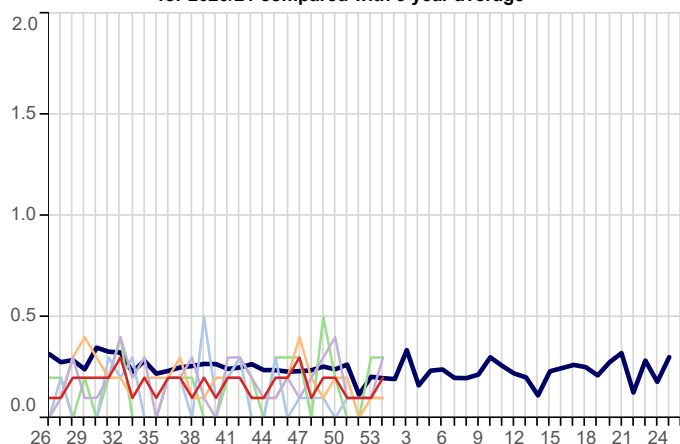


**Rubella (ICD10: B06)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average

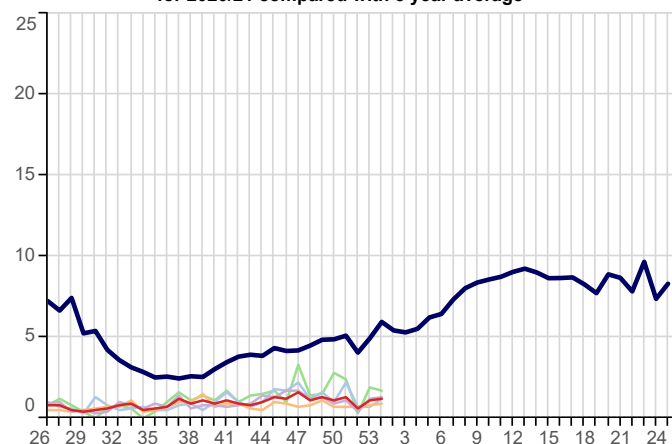


## 5. Skin Contagions

**Bullous Dermatoses (ICD10: L10-L14)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



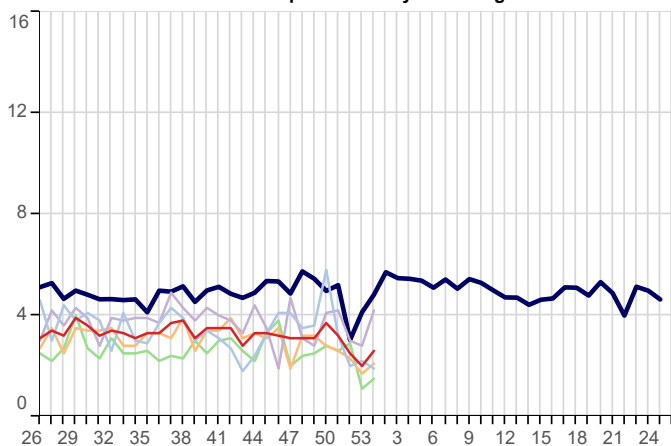
**Chickenpox (ICD10: B01)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



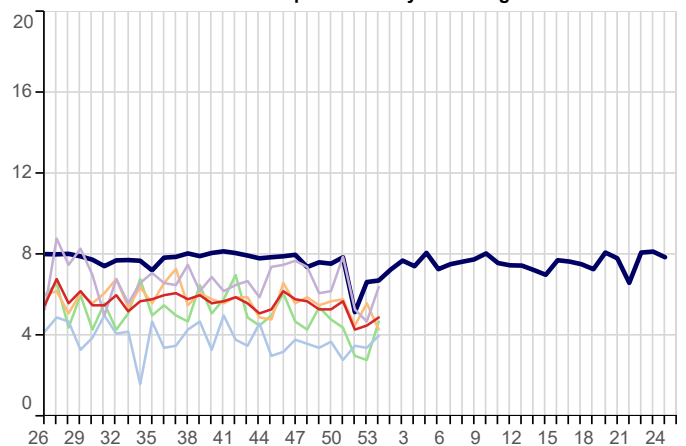
## 5. Skin Contagions (Continued)

5yr Avg   National   London   North   South   Midlands And East

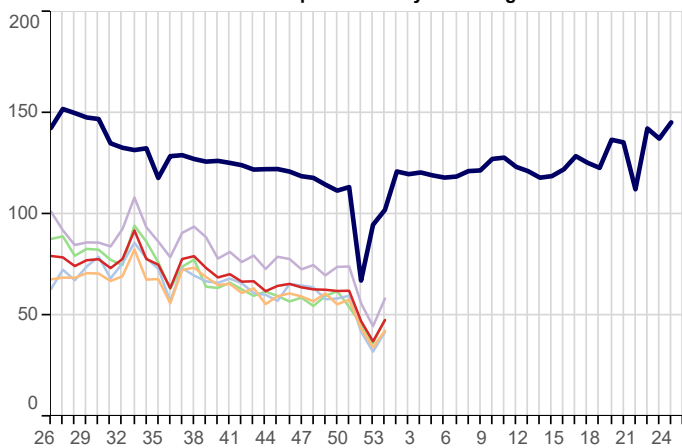
**Herpes Simplex (ICD10: B00)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



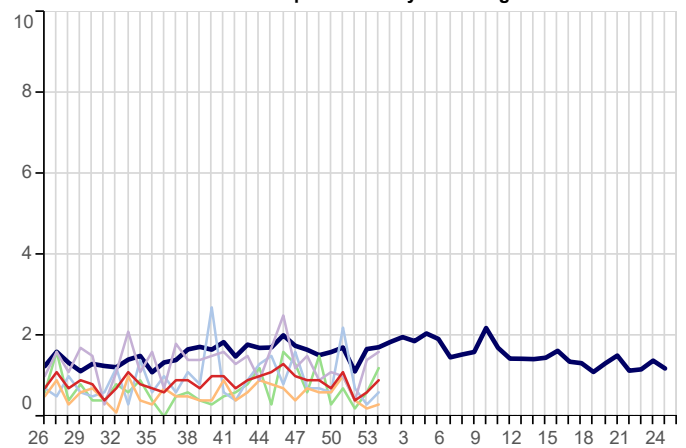
**Herpes Zoster (ICD10: B02)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



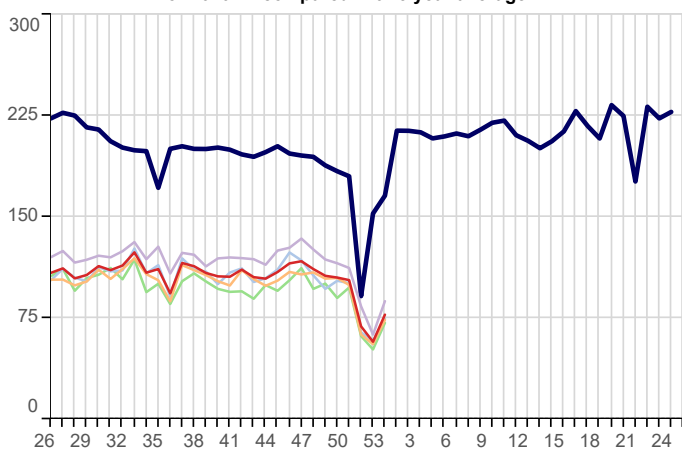
**Infections of Skin & Subcutaneous Tissue (ICD10: L00-L08)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



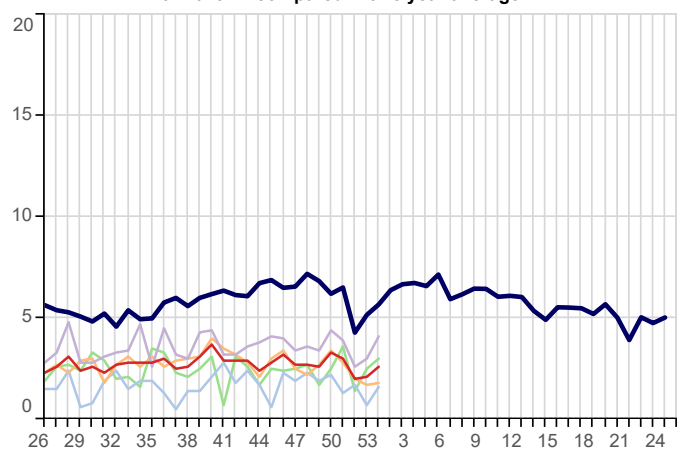
**Scabies (ICD10: B86)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



**Symptoms involving Skin & Oth Integument Tiss (ICD10: R20-R23)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



**Impetigo (ICD10: L01)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



## 6. Disorders Affecting the Nervous System

5yr Avg

National

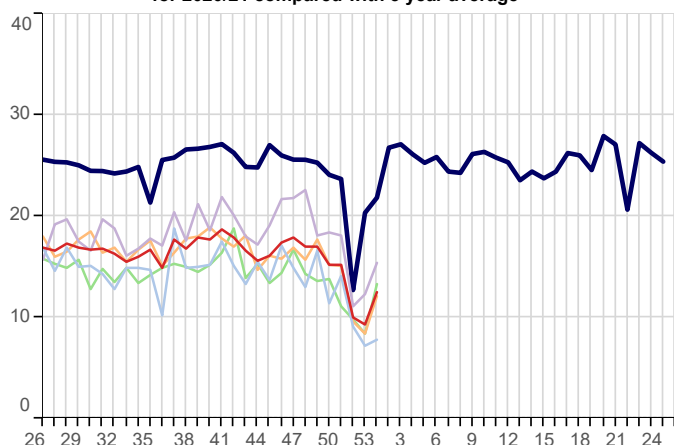
London

North

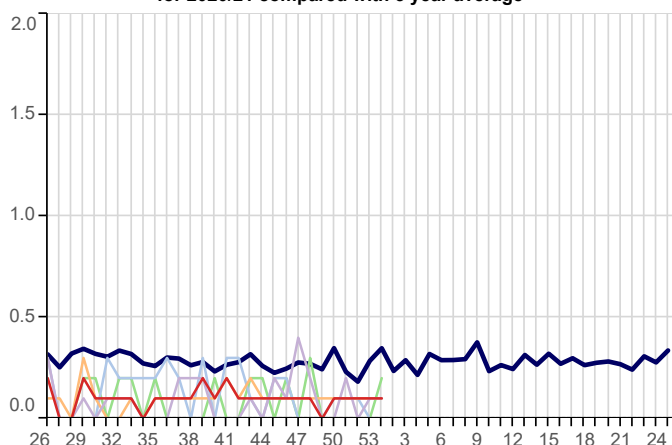
South

Midlands And East

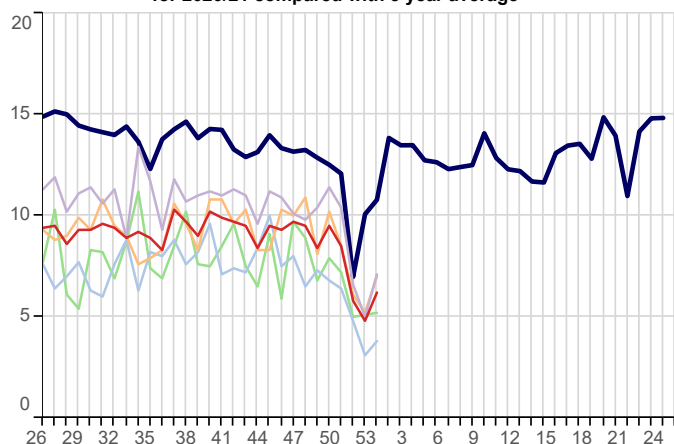
**Disorders of The Peripheral Nervous System (ICD10: G50-G64,G70-G72)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



**Meningitis/Encephalitis (ICD10: A170-A171,A390,A38-A85,A87,G00-G05)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average

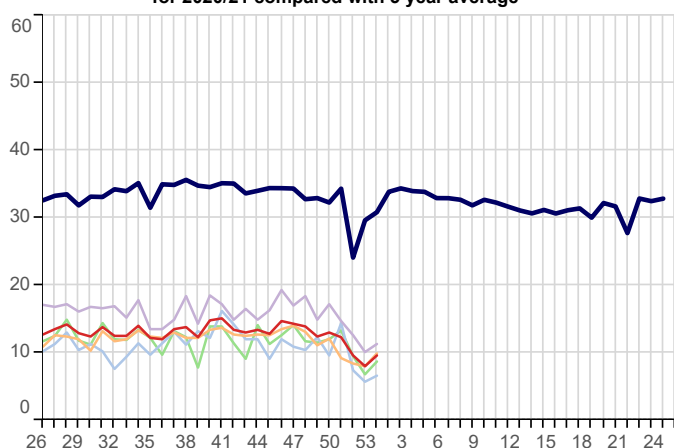


**Symptoms Involving Nervous & Musculoskeletal (ICD10: R25-R29)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



## 7. Genitourinary System Disorders

**Urinary Tract Infection/Cystitis (ICD10: N30,N390)**  
Weekly incidence (per 100,000 all ages) by region  
for 2020/21 compared with 5 year average



## 8. Tabular Summary by Disease

Disease Name	Week beginning Week ending		Offset week 30/12/2020 05/01/2021		21/12/2020 27/12/2020		14/12/2020 20/12/2020		30/12/2019 05/01/2020	
	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer
Allergic Rhinitis	1.1	42	0.7	30	1.4	54	1.8	69		
Asthma	7.4	289	5.2	212	7.3	291	9.2	361		
Bronchitis	2.8	107	2.5	103	2.6	102	3.4	135		
Bullous Dermatoses	0.2	7	0.1	5	0.1	2	0.1	5		
Chickenpox	1.2	45	1.1	44	0.6	22	1.3	52		
Common Cold	0.7	26	0.5	19	0.7	28	1.0	39		
Conjunctival Disorders	5.7	223	5.3	218	6.3	253	8.6	339		
Herpes Simplex	2.6	100	2.0	82	2.5	101	3.2	124		
Herpes Zoster	4.9	190	4.5	185	4.3	172	5.7	223		
Impetigo	2.6	102	2.1	84	2.0	81	3.0	117		
Infectious Mononucleosis	0.2	8	0.2	8	0.1	4	0.2	9		
Influenza-like illness	1.1	41	0.9	38	0.7	26	1.2	48		
Infectious Intestinal Diseases	3.3	129	2.4	100	3.2	126	5.2	205		
Laryngitis and Tracheitis	0.7	26	0.5	22	0.8	32	1.1	45		
Lower Respiratory Tract Infections	18.7	727	16.3	667	16.3	651	19.4	762		
Measles	0.0	0	0.0	0	0.0	0	0.0	0		
Meningitis and Encephalitis	0.1	4	0.1	3	0.1	2	0.1	4		
Mumps	0.0	0	0.0	1	0.0	1	0.0	0		
Non-infective Enteritis and Colitis	5.5	213	4.2	170	4.4	177	7.6	299		
Otitis Media Acute	0.3	11	0.4	18	0.4	15	0.4	17		
Peripheral Nervous Disease	12.5	486	9.3	381	10.0	398	15.2	597		
Pleurisy	0.2	8	0.2	9	0.1	4	0.3	11		
Pneumonia and Pneumonitis	1.5	60	1.6	64	1.4	54	1.7	65		
Respiratory System Diseases	92.2	3,585	74.7	3,056	90.1	3,599	115.7	4,544		
Rubella	0.0	0	0.0	0	0.0	0	0.0	0		
Scabies	0.9	34	0.6	26	0.4	17	1.1	45		
Sinusitis	9.9	385	7.1	291	8.3	333	11.9	469		
Skin and Subcutaneous Tissue Infections	47.7	1,856	37.2	1,521	47.2	1,884	62.2	2,445		
Strep Throat and Peritonsillar Abscess	0.3	11	0.2	10	0.2	8	0.5	18		
Symptoms involving musculoskeletal	6.2	241	4.8	197	5.8	232	8.5	332		
Symptoms involving Respiratory and Chest	85.1	3,310	65.5	2,681	73.0	2,914	101.3	3,978		
Symptoms involving Skin and Integument Tissues	77.6	3,016	57.5	2,355	68.9	2,753	103.2	4,052		
Tonsillitis and acute Pharyngitis	11.5	448	10.0	408	11.6	462	13.5	532		
Upper Respiratory Tract Infections	34.6	1,347	28.4	1,163	34.4	1,374	45.2	1,777		
Urinary Tract Infections	9.6	372	8.0	328	9.6	383	12.3	482		
Viral Hepatitis	0.1	4	0.1	4	0.1	5	0.1	4		
Whooping Cough	0.0	0	0.0	0	0.0	1	0.0	1		
<b>Practice Count</b>	<b>379</b>		<b>402</b>		<b>396</b>		<b>394</b>			
<b>Denom</b>	<b>3,888,833</b>		<b>4,092,331</b>		<b>3,993,121</b>		<b>3,928,203</b>			

## FURTHER INFORMATION:

### About the report

#### Winter focus

The first two pages of data within this report focus on Influenza-like illness and COVID-19, in order to provide information about seasonal influenza and early warnings 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 2014-2018. 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 2006/07- 2016/17 excluding 2009/10).

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

### Acknowledgement:

Staff from the Data Science department at the National Physical Laboratory (<https://www.npl.co.uk/data-science>) assisted in the provision of and extension of the primary care national surveillance reports during the 2020 SARS-CoV-2 pandemic; as well as adding resilience.

### 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 at the Oxford-Royal College of General Practitioners Research and Surveillance Centre.

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 at the Oxford-Royal College of General Practitioners Research and Surveillance Centre. Both Wellbeing data management and the University of Oxford 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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