



## RSC Communicable and Respiratory Disease Report for England

### Key Statistics:

|                             |                         |
|-----------------------------|-------------------------|
| Week Number/Year.....       | 48/2022                 |
| Week Starting - Ending..... | 28/11/2022 - 04/12/2022 |
| No. of Practices.....       | 504                     |
| Population.....             | 5,234,198               |

### National (England)

- **Acute Bronchitis** : increased from 7.4 in week 47 to 8.8 in week 48.
- **Asthma** : increased from 16.2 in week 47 to 18.1 in week 48.
- **Common Cold** : increased from 3.4 in week 47 to 4.1 in week 48.
- **Influenza-like illness** : increased from 6.6 in week 47 to 9.4 in week 48.
- **Respiratory System Diseases** : increased from 373.0 in week 47 to 413.1 in week 48.
- **COVID-19** : decreased from 41.1 in week 47 to 35.6 in week 48.

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

- **Acute Bronchitis** : increased from 3.4 in week 47 to 5.1 in week 48 in the London region, increased from 11.7 in week 47 to 15.1 in week 48 in the North region, was unchanged at 6.7 in week 47 and 6.7 in week 48 in the South region, and increased from 7.2 in week 47 to 7.9 in week 48 in the Midlands And East region.
- **Asthma** : increased from 13.7 in week 47 to 13.8 in week 48 in the London region, increased from 20.1 in week 47 to 21.7 in week 48 in the North region, increased from 14.6 in week 47 to 17.7 in week 48 in the South region, and increased from 16.4 in week 47 to 18.3 in week 48 in the Midlands And East region.
- **Common Cold** : increased from 3.7 in week 47 to 3.8 in week 48 in the London region, increased from 3.4 in week 47 to 4.5 in week 48 in the North region, increased from 3.1 in week 47 to 3.3 in week 48 in the South region, and increased from 3.7 in week 47 to 5.8 in week 48 in the Midlands And East region.
- **Influenza-like illness** : increased from 8.3 in week 47 to 10.2 in week 48 in the London region, increased from 7.9 in week 47 to 12.8 in week 48 in the North region, increased from 5.5 in week 47 to 8.0 in week 48 in the South region, and increased from 5.0 in week 47 to 6.4 in week 48 in the Midlands And East region.
- **Respiratory System Diseases** : increased from 293.6 in week 47 to 330.0 in week 48 in the London region, increased from 465.0 in week 47 to 531.4 in week 48 in the North region, increased from 336.3 in week 47 to 354.2 in week 48 in the South region, and increased from 400.6 in week 47 to 455.1 in week 48 in the Midlands And East region.
- **COVID-19** : decreased from 26.5 in week 47 to 24.8 in week 48 in the London region, decreased from 39.1 in week 47 to 32.7 in week 48 in the North region, decreased from 51.1 in week 47 to 41.9 in week 48 in the South region, and decreased from 40.8 in week 47 to 39.1 in week 48 in the Midlands And East region.

### Comment:

Presentations of influenza-like illness (ILI) have increased this week and they are above the seasonal average for this time of year with the exception of the South and Midlands and East regions, and the population aged 65 years and over. Presentations of symptoms involving respiratory and chest, strep sore throat and scarlatina (also known as scarlet fever), acute tonsillitis and scabies are above the seasonal average.

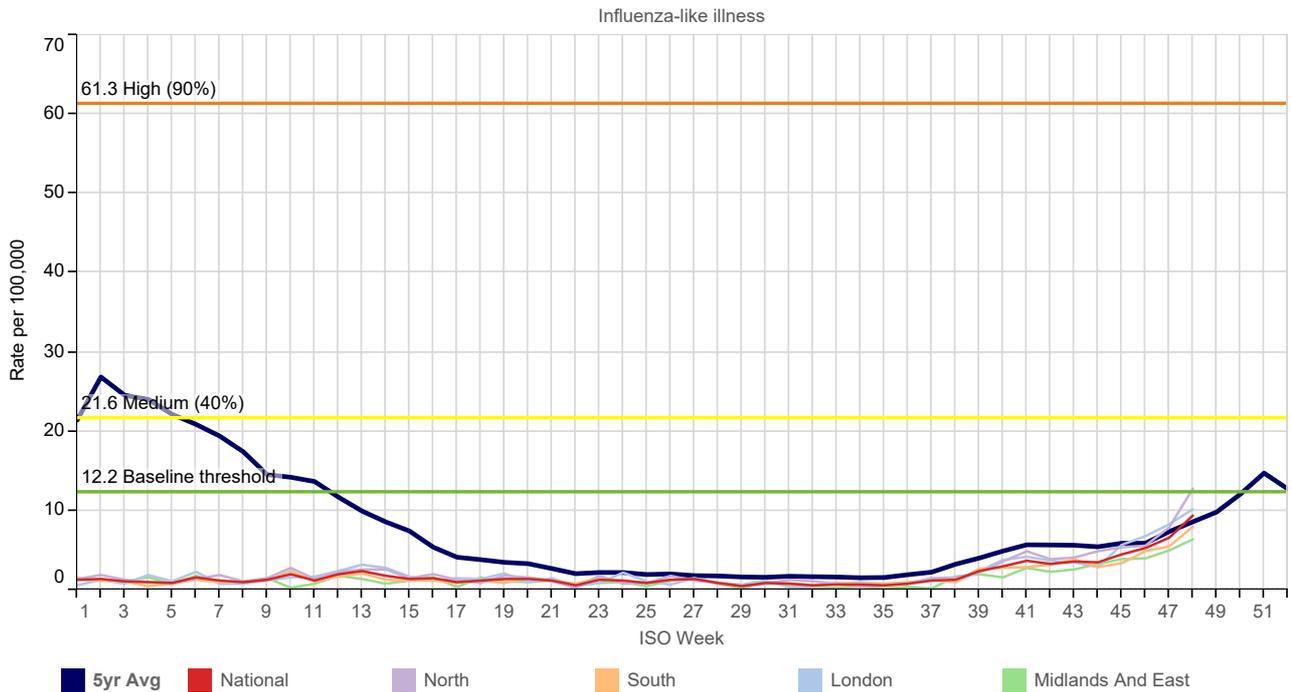
Rates of COVID-19 have continued to decrease this week in all regions and age bands though the highest rates were in the South region and the population aged 65 years and over.

This report includes a virology update. Circulating influenza (A and B), SARS-CoV-2 and RSV have been detected.

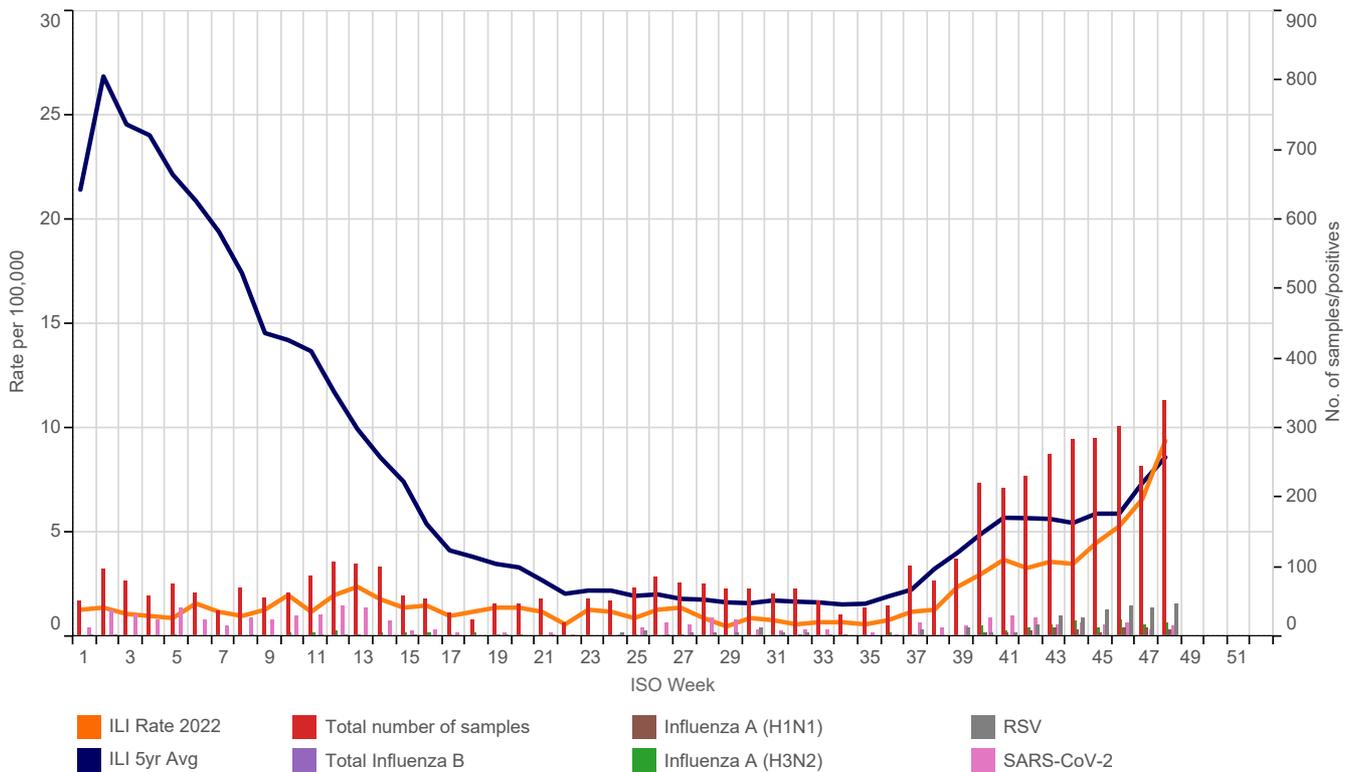
# Winter Focus 2022

Please see page 15 for explanatory notes on the data.

## (A) Influenza-like illness: national incidence rate 2022 by region\*

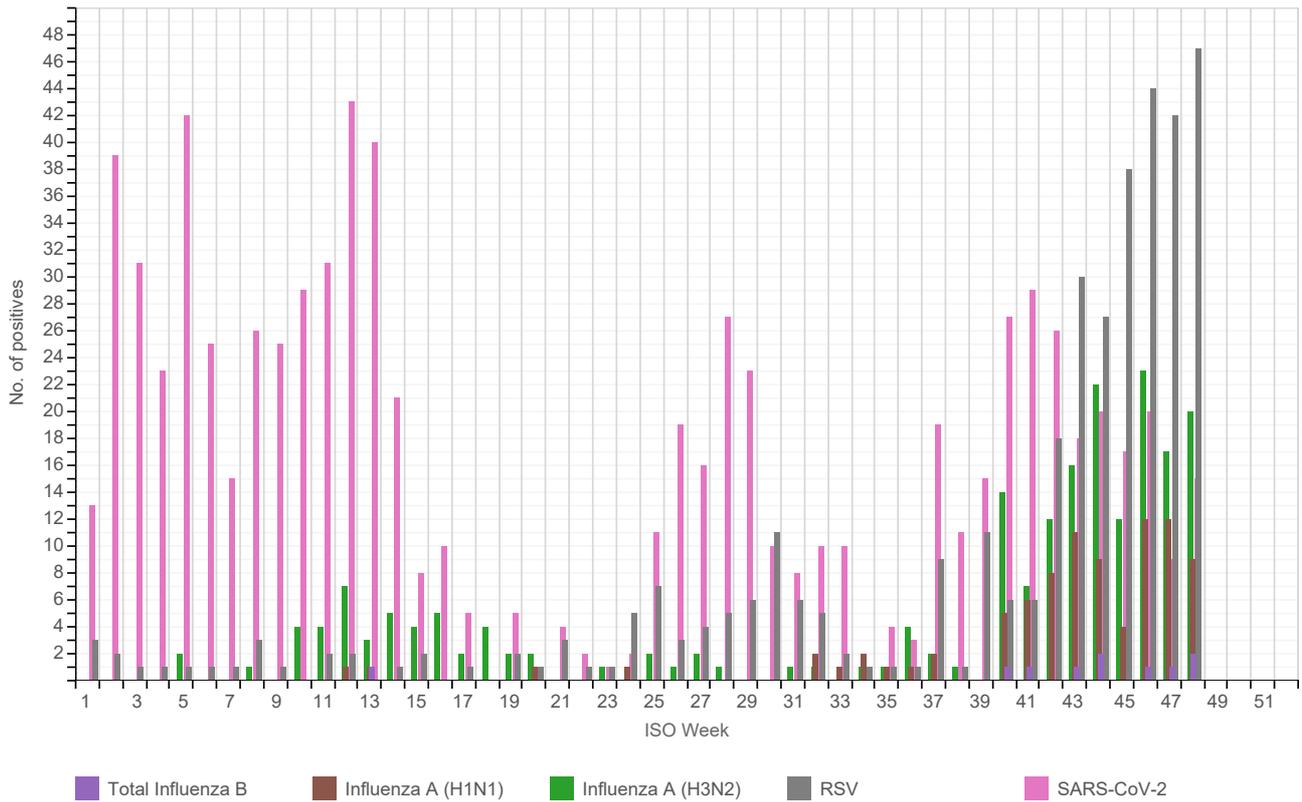


## (B) RCGP/UKHSA RSV, Influenza and SARS-CoV-2 Virology Swab Surveillance 2022\*

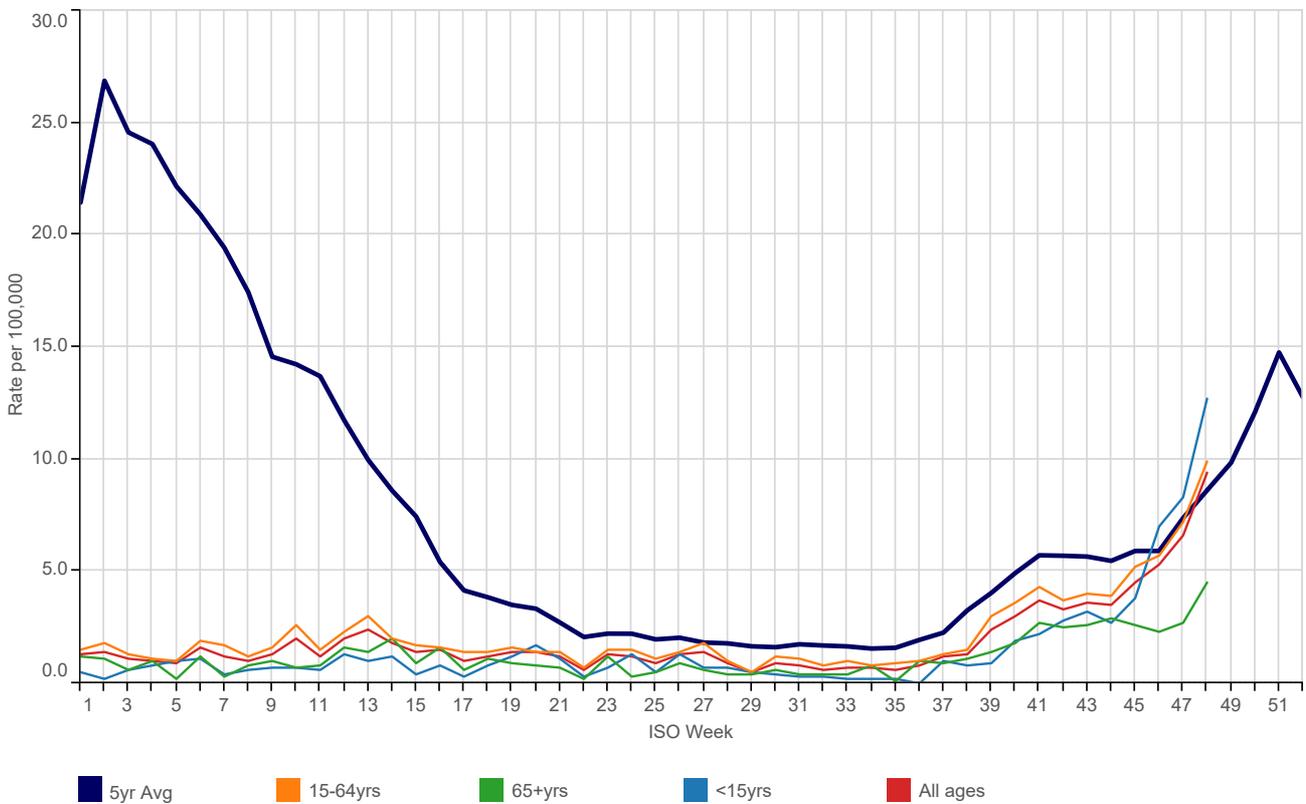


\* The seasonal average line (blue) is based on 5 year historic RCGP RSC level (Graph A & B). The weekly virology samples displayed are offset from the ISO Week (Graphs B & C).

**(C) RCGP/UKHSA RSV, Influenza and SARS-CoV-2 Virology Swab Surveillance 2022 by viral strain\***



**(D) Influenza-like illness: national incidence rate 2022 by age group\***



**(E) Influenza-like illness: national incidence rate 2022 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  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  | 31  | 32  | 33  | 34  |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <15yrs   | 0.3 | 0.8 | 1.2 | 1.7 | 1.1 | 0.3 | 0.7 | 1.3 | 0.5 | 1.3 | 0.7 | 0.7 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 |
| 15-64yrs | 1.4 | 1.4 | 1.6 | 1.4 | 1.4 | 0.7 | 1.5 | 1.5 | 1.1 | 1.4 | 1.8 | 1.0 | 0.5 | 1.2 | 1.1 | 0.8 | 1.0 | 0.8 |
| 65+yrs   | 0.6 | 1.1 | 0.9 | 0.8 | 0.7 | 0.2 | 1.2 | 0.3 | 0.5 | 0.9 | 0.6 | 0.4 | 0.4 | 0.6 | 0.4 | 0.4 | 0.4 | 0.8 |
| All ages | 1.0 | 1.2 | 1.4 | 1.4 | 1.2 | 0.6 | 1.3 | 1.2 | 0.9 | 1.3 | 1.4 | 0.9 | 0.5 | 0.9 | 0.8 | 0.6 | 0.7 | 0.7 |

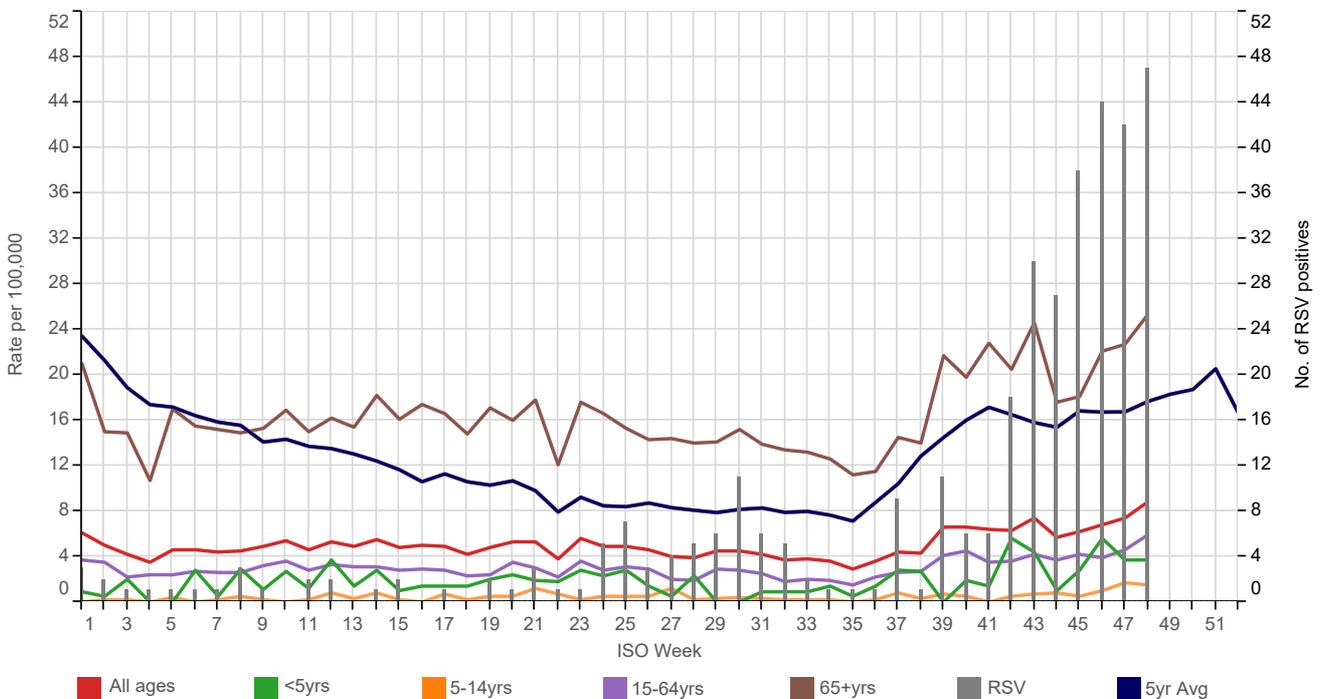
  

|          | 35  | 36  | 37  | 38  | 39  | 40  | 41  | 42  | 43  | 44  | 45  | 46  | 47  | 48   | 49 | 50 | 51 | 52 |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|----|----|----|----|
| <15yrs   | 0.2 | 0.0 | 1.0 | 0.8 | 0.9 | 1.9 | 2.2 | 2.8 | 3.2 | 2.7 | 3.8 | 7.0 | 8.3 | 12.7 |    |    |    |    |
| 15-64yrs | 0.9 | 1.0 | 1.3 | 1.5 | 3.0 | 3.6 | 4.3 | 3.7 | 4.0 | 3.9 | 5.2 | 5.7 | 7.2 | 9.9  |    |    |    |    |
| 65+yrs   | 0.1 | 1.0 | 0.9 | 1.1 | 1.4 | 1.8 | 2.7 | 2.5 | 2.6 | 2.9 | 2.6 | 2.3 | 2.7 | 4.5  |    |    |    |    |
| All ages | 0.6 | 0.8 | 1.2 | 1.3 | 2.4 | 3.0 | 3.7 | 3.3 | 3.6 | 3.5 | 4.5 | 5.3 | 6.6 | 9.4  |    |    |    |    |

| 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> |
|----------|------------------------------|----------------------------------|-----------------------------|--------------------------------|------------------------------|
| All Ages | <12.2                        | 12.2 to <21.6                    | 21.6 to <61.3               | 61.3 to <97.3                  | 97.3+                        |
| <15yrs   | <10.7                        | 10.7 to <17.6                    | 17.6 to <47.7               | 47.7 to <74.1                  | 74.1+                        |
| 15-64yrs | <15.0                        | 15.0 to <26.1                    | 26.1 to <63.4               | 63.4 to <93.8                  | 93.8+                        |
| 65+yrs   | <11.5                        | 11.5 to <16.5                    | 16.5 to <37.8               | 37.8 to <54.5                  | 54.5+                        |

**Threshold levels**  
<sup>1</sup>Below baseline threshold  
<sup>2</sup>baseline threshold breach to < 40th percentile  
<sup>3</sup>40th to <90th percentile  
<sup>4</sup>90th to <97.5th percentile  
<sup>5</sup>97.5th+ percentile

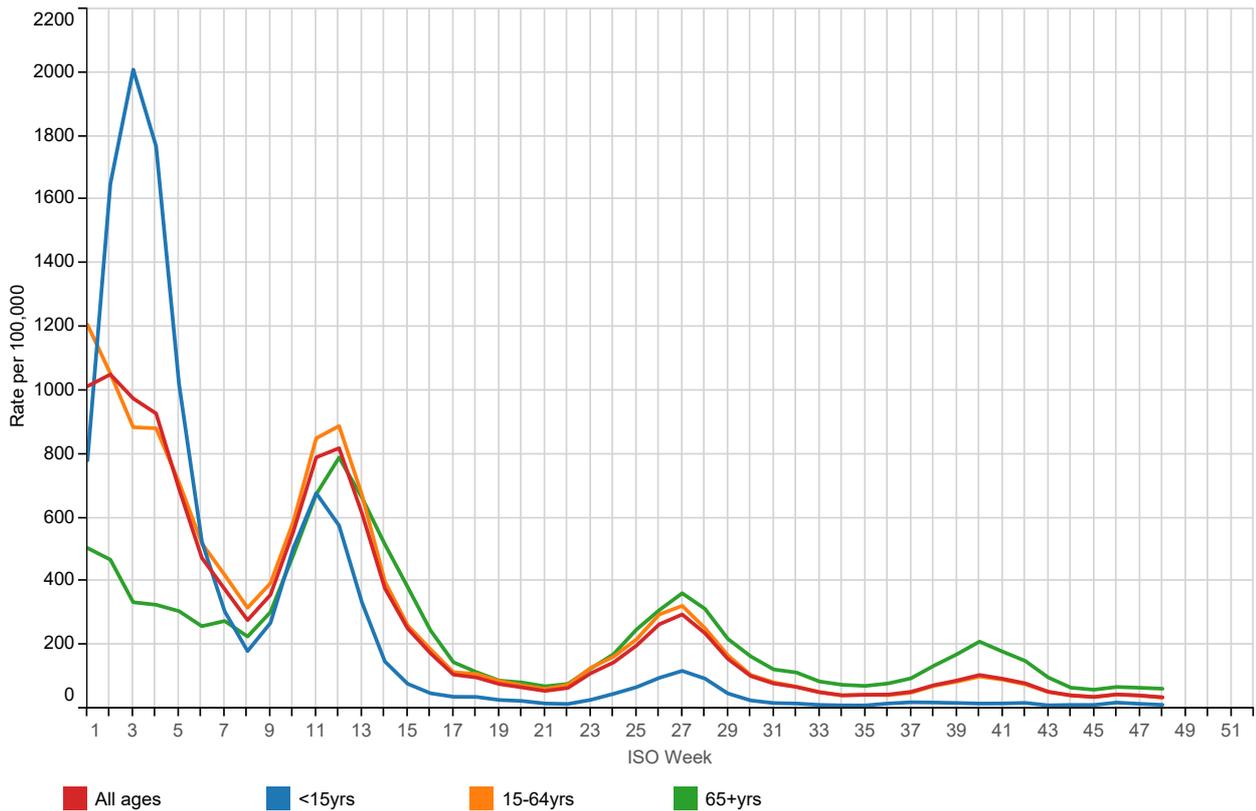
**(F) Acute Bronchitis: national incidence rate 2022 by age group\***



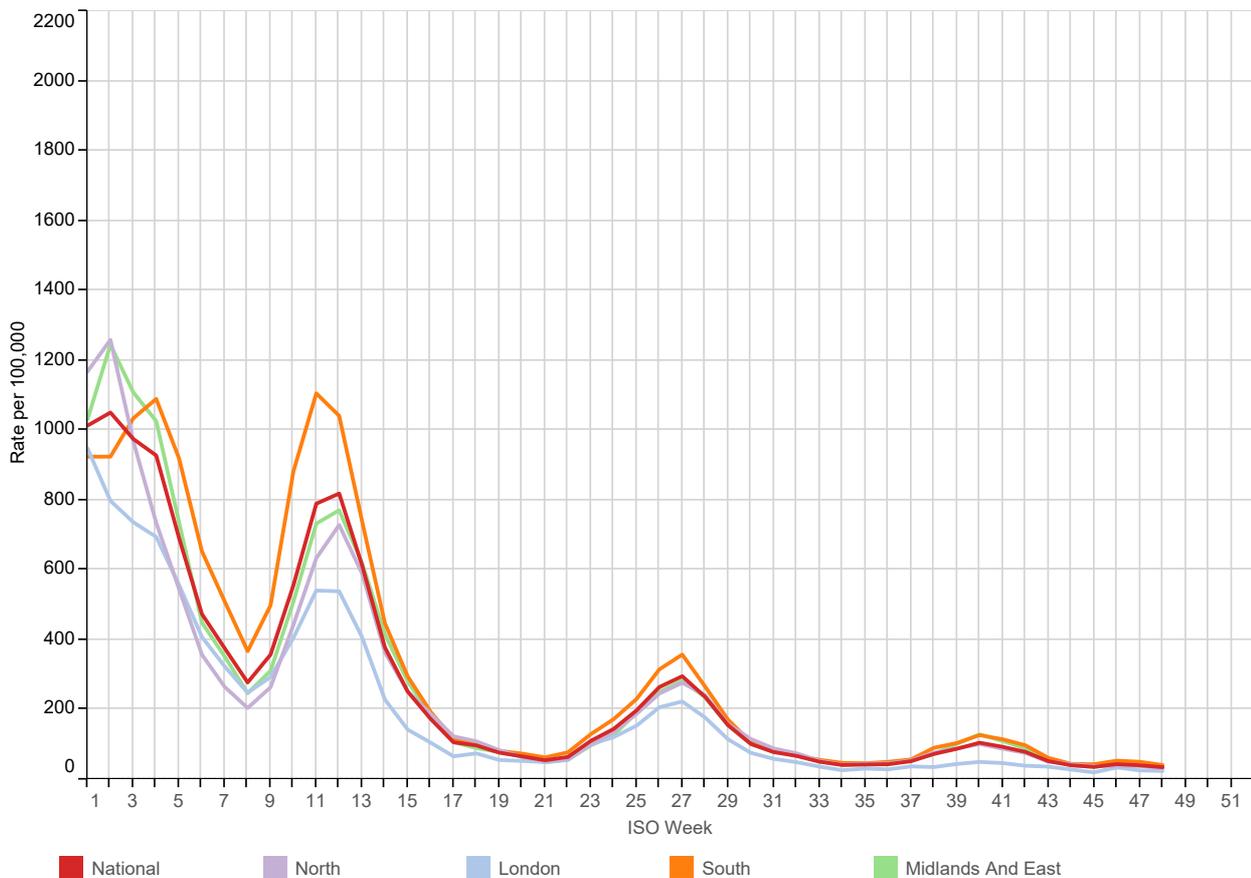
**Weekly Influenza-like illness and Acute Bronchitis incidence rates per 100,000 persons**

| Influenza-like illness |      | Bronchitis |                   | Influenza-like illness |      | Bronchitis |  |
|------------------------|------|------------|-------------------|------------------------|------|------------|--|
| <1yr                   | 6.3  | 19.0       | London            | 10.2                   | 5.1  |            |  |
| 1-4yrs                 | 13.4 | 3.7        | North             | 12.8                   | 15.1 |            |  |
| 5-14yrs                | 13.0 | 1.5        | South             | 8.0                    | 6.7  |            |  |
| 15-24yrs               | 9.7  | 1.9        | Midlands And East | 6.4                    | 7.9  |            |  |
| 25-44yrs               | 11.4 | 3.5        | National          | 9.4                    | 8.8  |            |  |
| 45-64yrs               | 8.1  | 10.6       |                   |                        |      |            |  |
| 65-74yrs               | 3.7  | 24.3       |                   |                        |      |            |  |
| 75-84yrs               | 6.0  | 30.4       |                   |                        |      |            |  |
| 85+yrs                 | 4.1  | 16.2       |                   |                        |      |            |  |
| All ages               | 9.4  | 8.8        |                   |                        |      |            |  |

**(G) COVID-19 : national incidence rate 2022 by age group\***



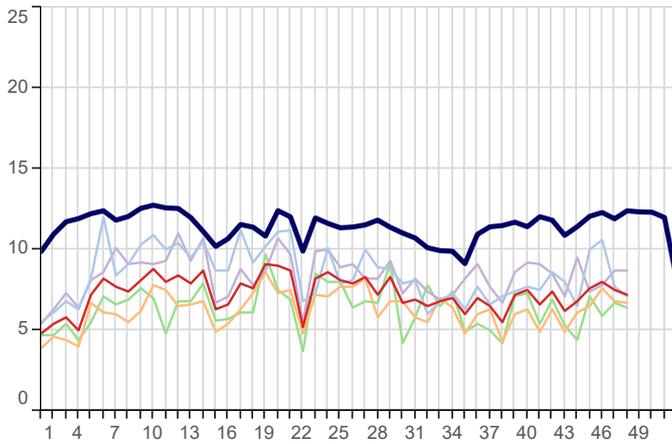
**(H) COVID-19 : national incidence rate 2022 by region\***



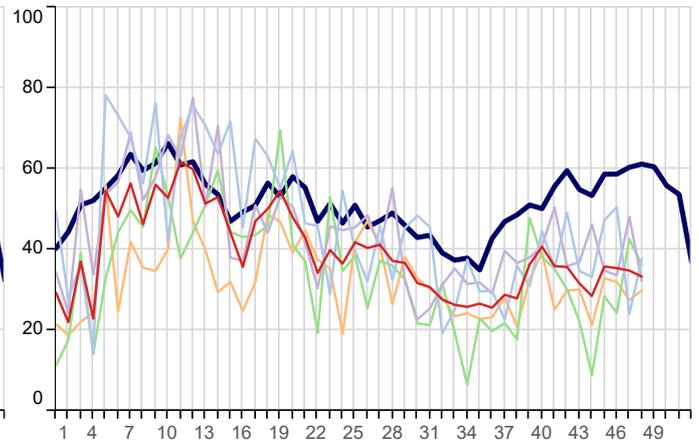
# 1. Water & Food Borne Disorders:

5yr Avg   National   London   North   South   Midlands And East

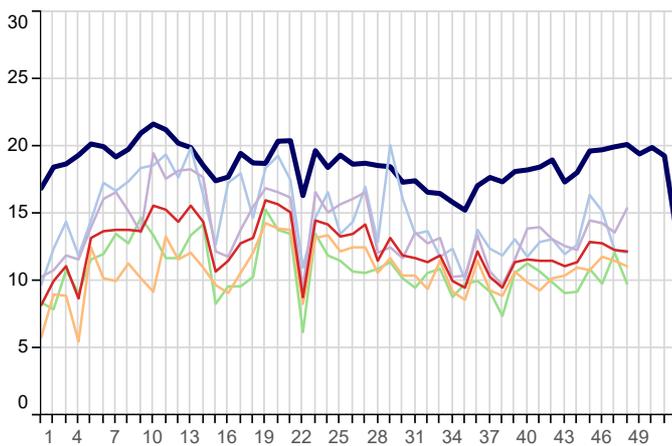
**Infectious Intestinal Disease (ICD10: A00-A09)**  
Weekly incidence (per 100,000 **all ages**) by regions  
for 2022 compared with 5 year average



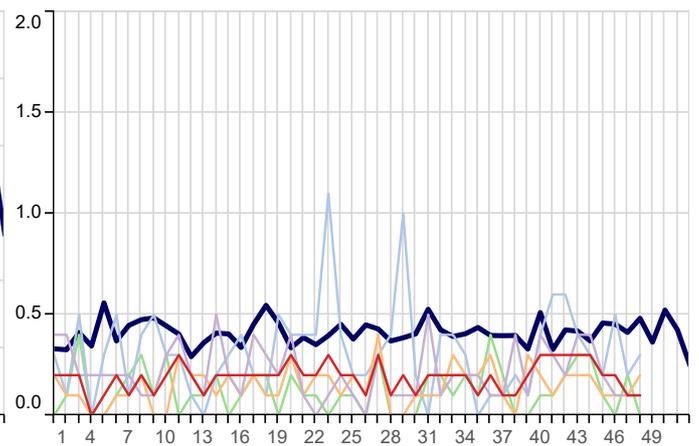
**Infectious Intestinal Disease (ICD10: A00-A09)**  
Weekly incidence (per 100,000 **0-4 years**) by regions  
for 2022 compared with 5 year average



**Non-Infective Enteritis & Colitis (ICD10: K50-K52)**  
Weekly incidence (per 100,000 **all ages**) by region  
for 2022 compared with 5 year average



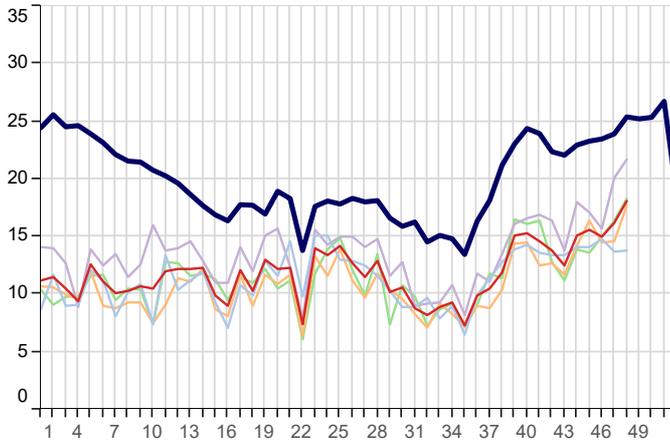
**Viral Hepatitis (ICD10: B15-B19)**  
Weekly incidence (per 100,000 **all ages**) by region  
for 2022 compared with 5 year average



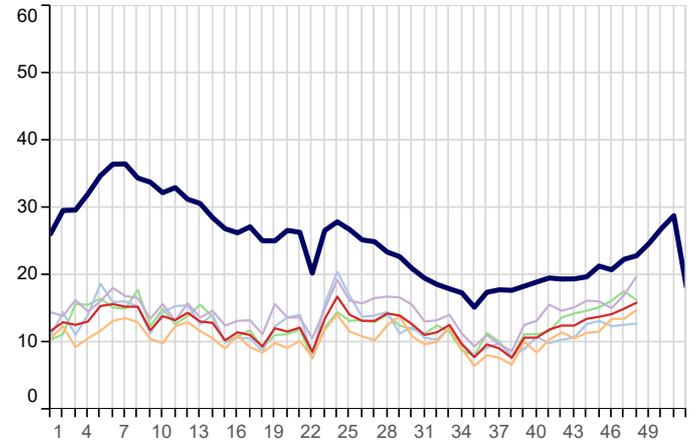
## 2. Environmentally Sensitive Disorders:

5yr Avg   National   London   North   South   Midlands And East

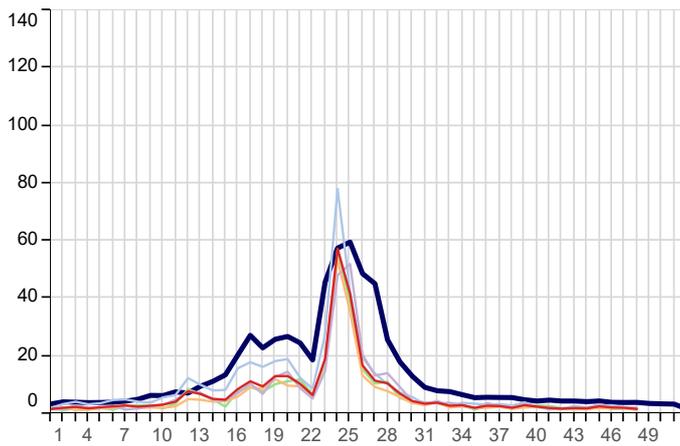
**Asthma (ICD10: J45-J46)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



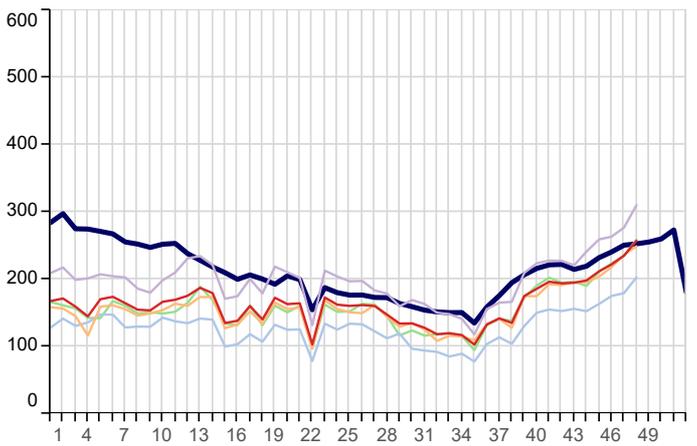
**Disorders of Conjunctiva (ICD10: H10-H13)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



**Hayfever/Allergic Rhinitis (ICD10: J30)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



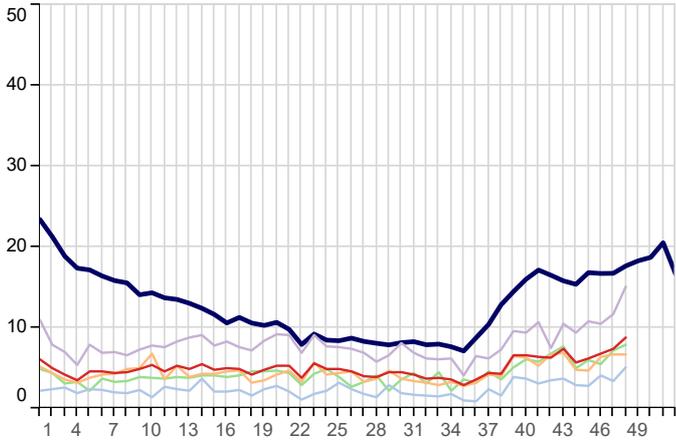
**Symptoms involving Respiratory & Chest (ICD10: R05-R07,R09)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



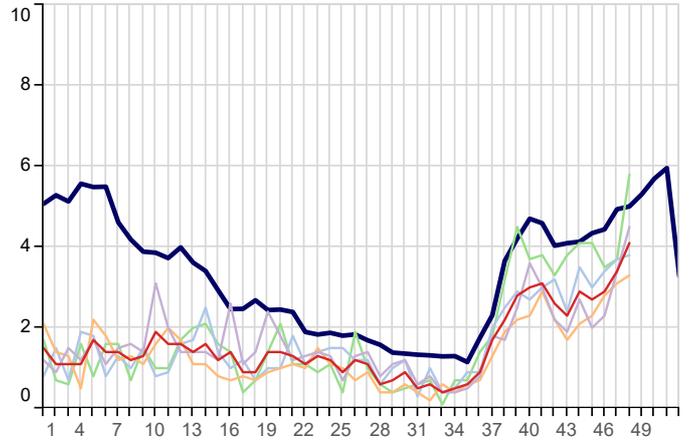
### 3. Respiratory Infections:

5yr Avg    National    London    North    South    Midlands And East

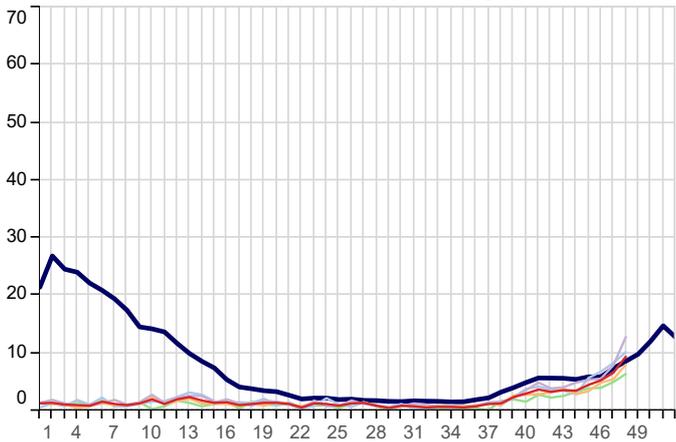
**Acute Bronchitis (ICD10: J20-J21,J40)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



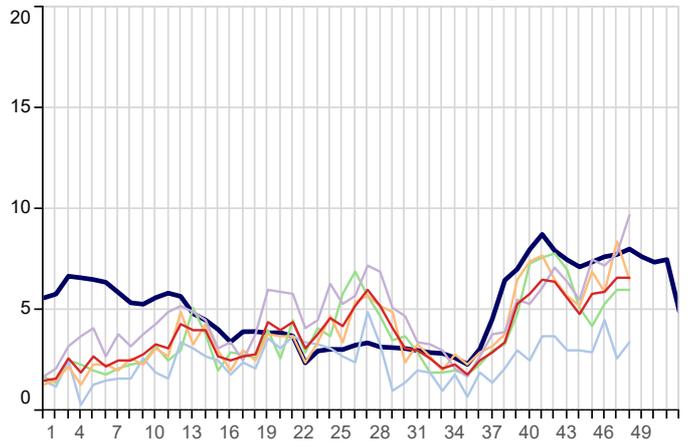
**Common Cold (ICD10: J00,J06)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



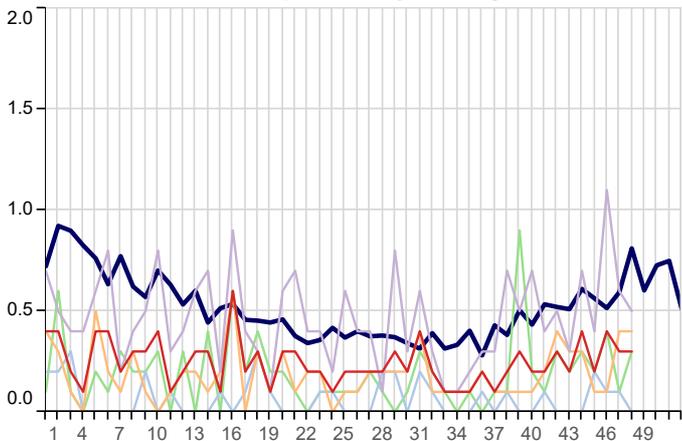
**Influenza-like illness (ICD10: J09-J11)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



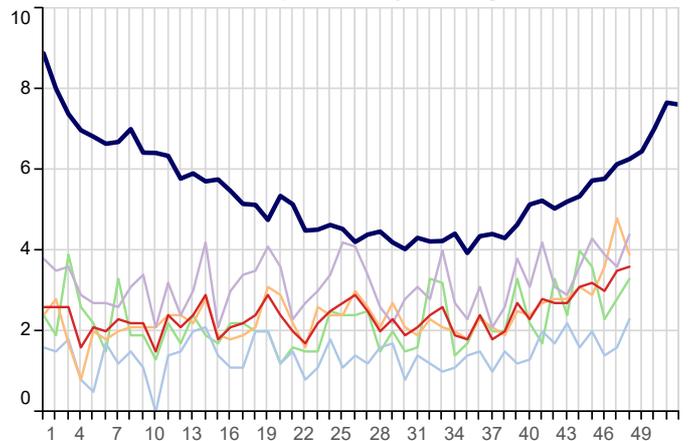
**Acute Laryngitis/Tracheitis (ICD10: J04)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



**Pleurisy (ICD10: R091)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



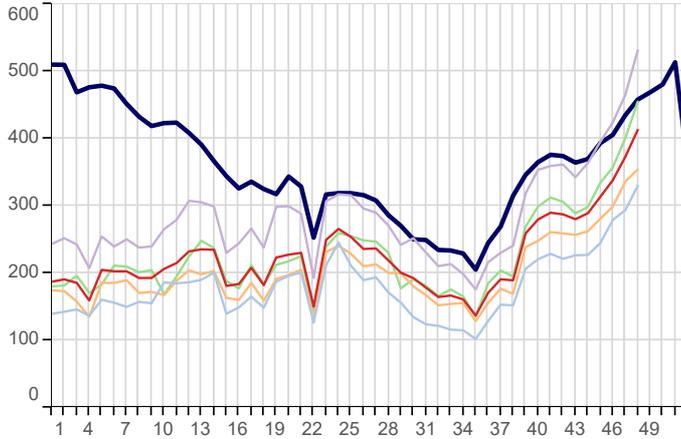
**Pneumonia/Pneumonitis (ICD10: J12-J18)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



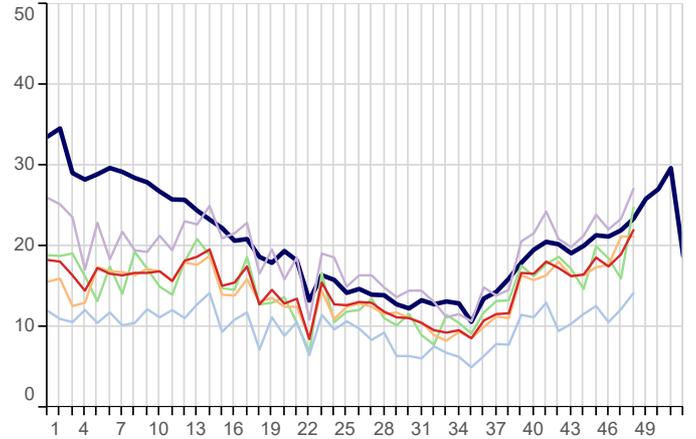
### 3. Respiratory Infections(Continued):

5yr Avg National London North South Midlands And East

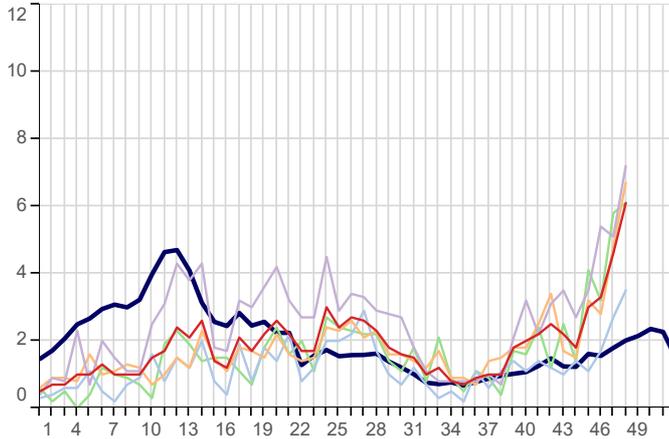
**Respiratory System Diseases (ICD10: J00-J99)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



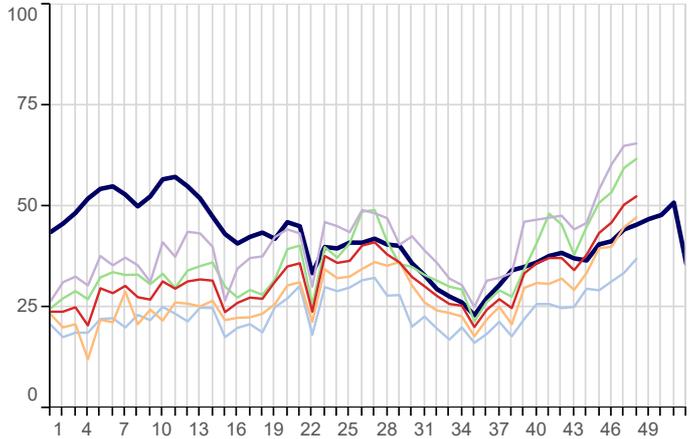
**Acute Sinusitis (ICD10: J01)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



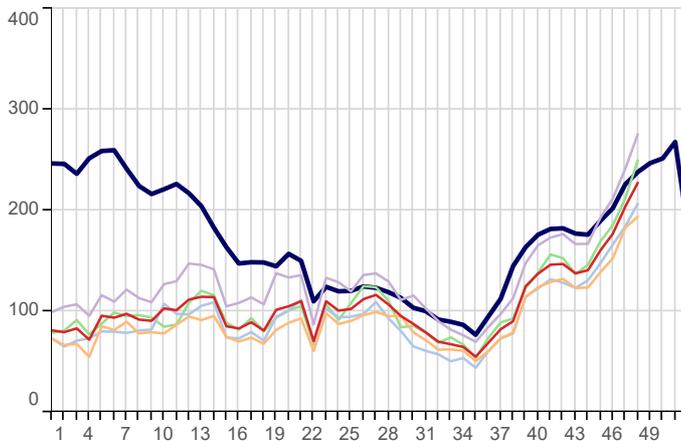
**Strep Sore Throat, Scarlatina and Peritonsillar Abscess (ICD10: A38,J02,J36)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



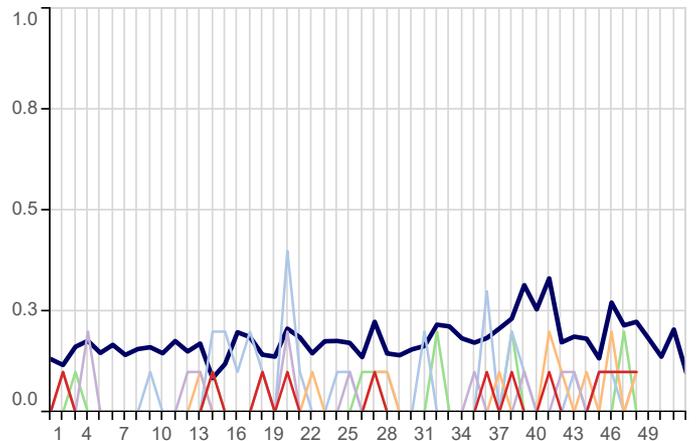
**Acute Tonsillitis/Pharyngitis (ICD10: J02-J03)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



**Upper Respiratory Tract Infections (URTI)(ICD10: J00-J06)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



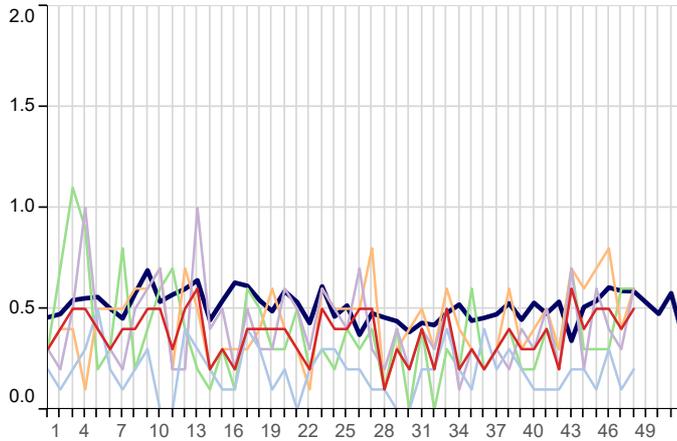
**Whooping Cough (ICD10: A37)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



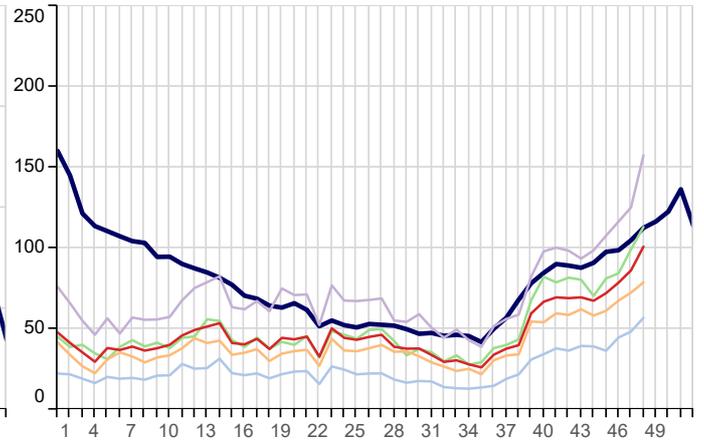
### 3. Respiratory Infections(Continued):

5yr Avg   National   London   North   South   Midlands And East

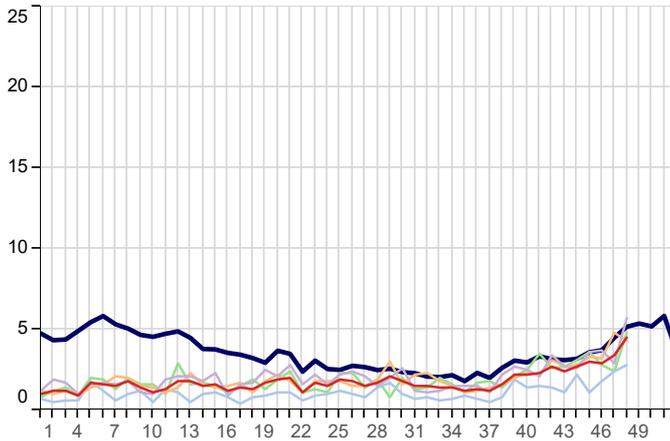
**Infectious Mononucleosis (ICD10: B27)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



**Lower Respiratory Tract Infections (LRTI)(ICD10: J20-J22)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



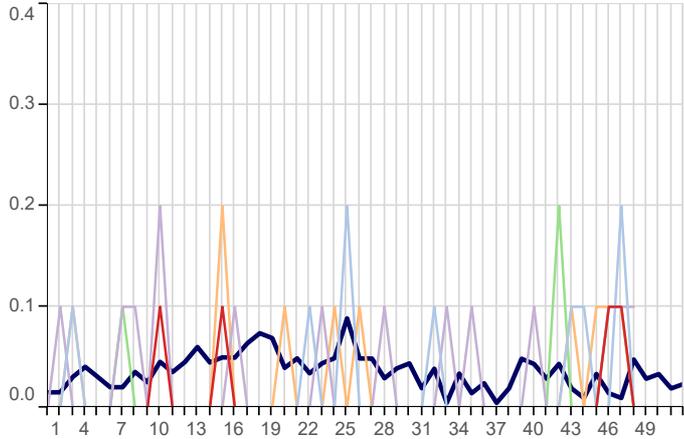
**Acute Otitis Media (ICD10: H650-H651,H660,H669)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



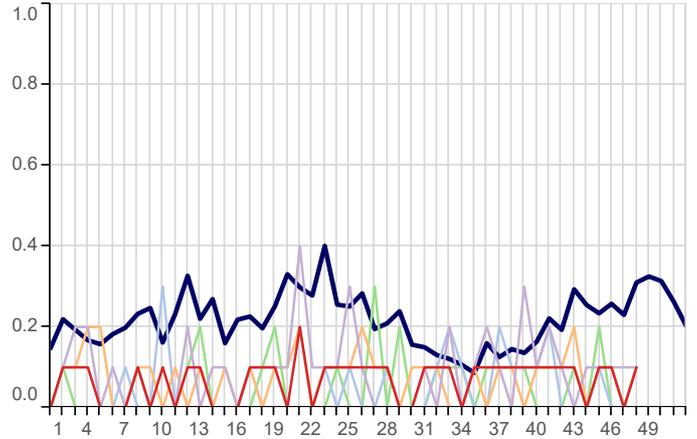
## 4. Vaccine Sensitive Disorders

5yr Avg National London North South Midlands And East

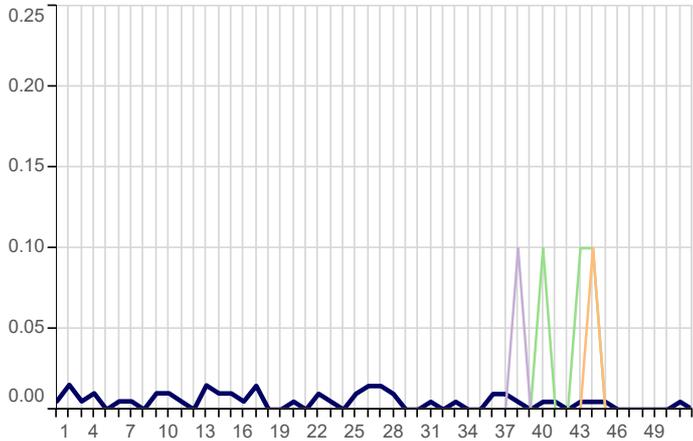
**Measles (ICD10: B05)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



**Mumps (ICD10: B26)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average

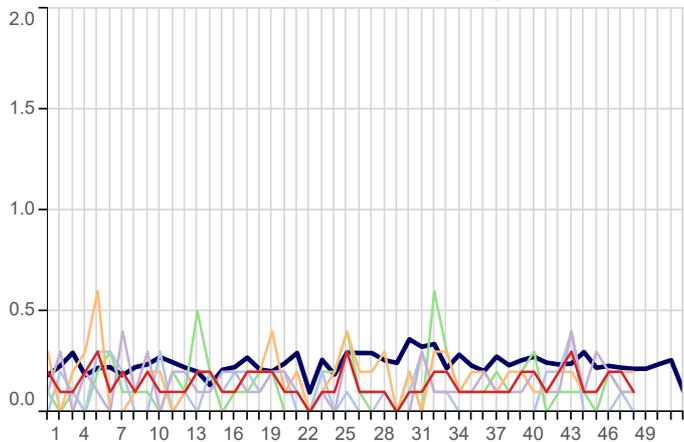


**Rubella (ICD10: B06)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average

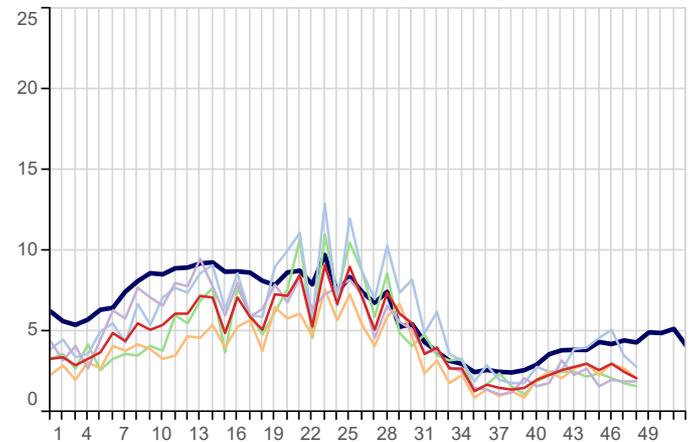


## 5. Skin Contagions

**Bullous Dermatoses (ICD10: L10-L14)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



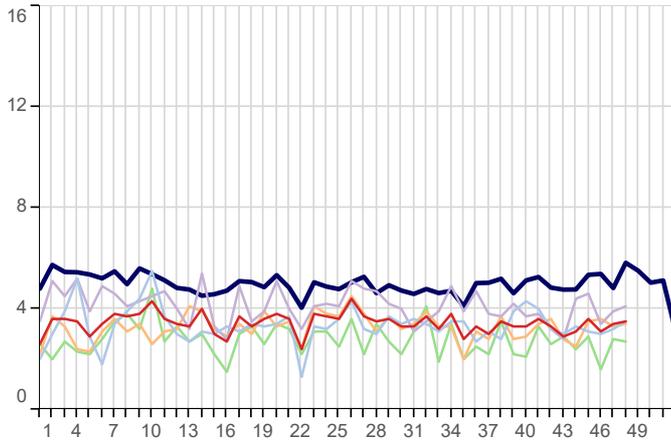
**Chickenpox (ICD10: B01)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



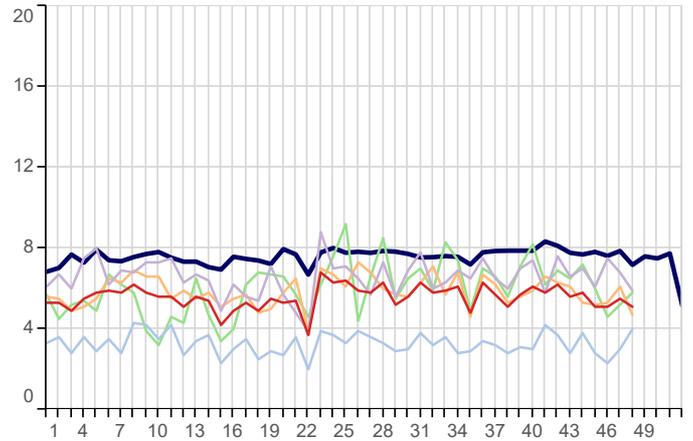
# 5. Skin Contagions (Continued)

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

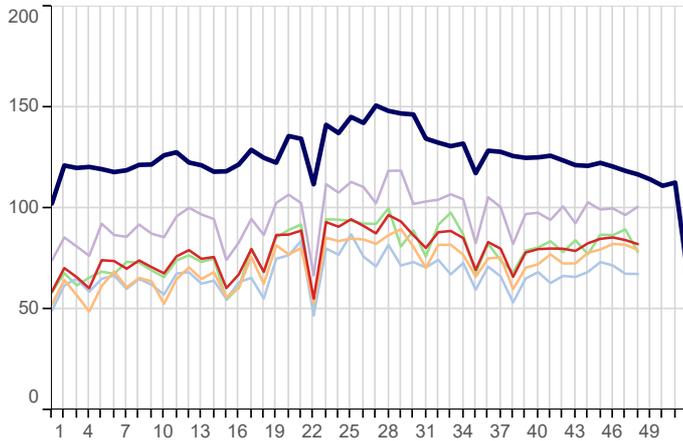
**Herpes Simplex (ICD10: B00)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



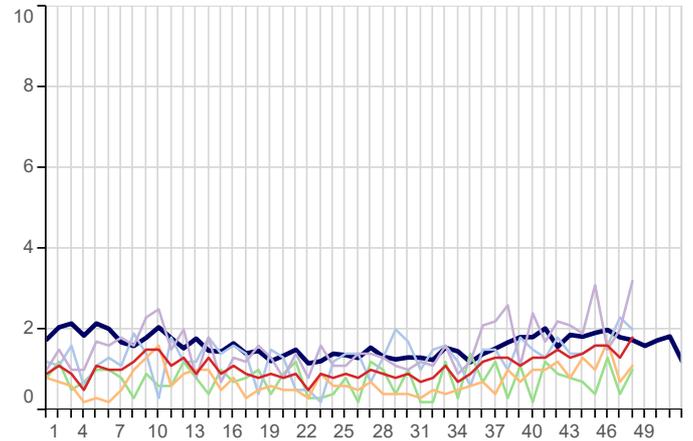
**Herpes Zoster (ICD10: B02)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



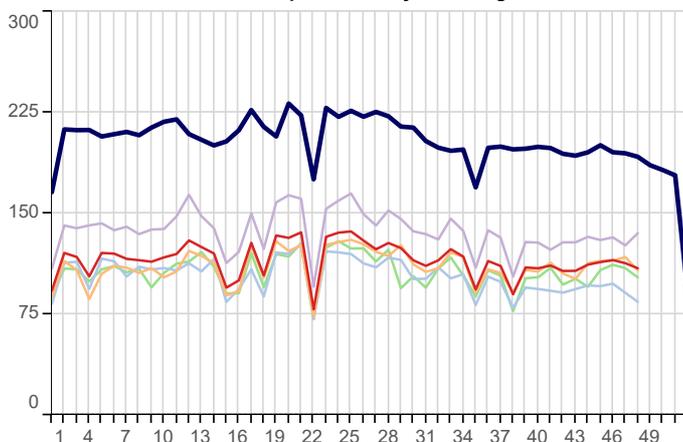
**Infections of Skin & Subcutaneous Tissue (ICD10: L00-L08)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



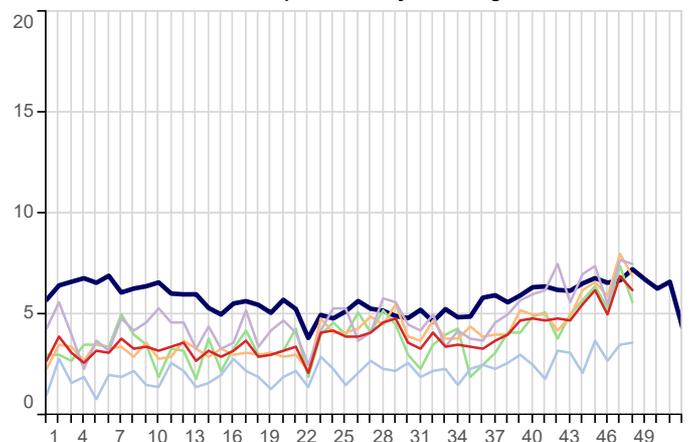
**Scabies (ICD10: B86)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



**Symptoms involving Skin & Oth Integument Tiss (ICD10: R20-R23)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



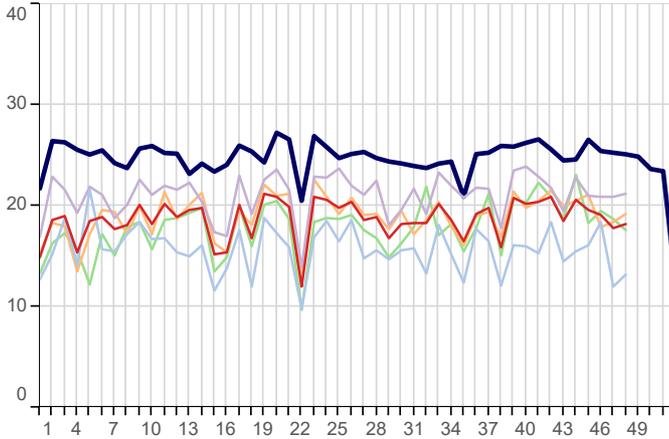
**Impetigo (ICD10: L01)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



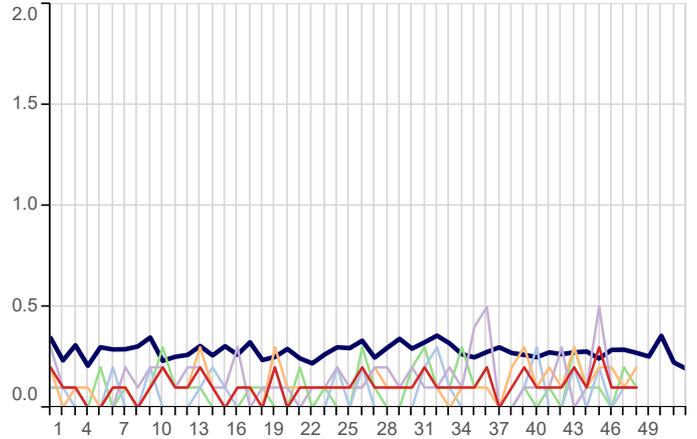
## 6. Disorders Affecting the Nervous System

5yr Avg National London North South Midlands And East

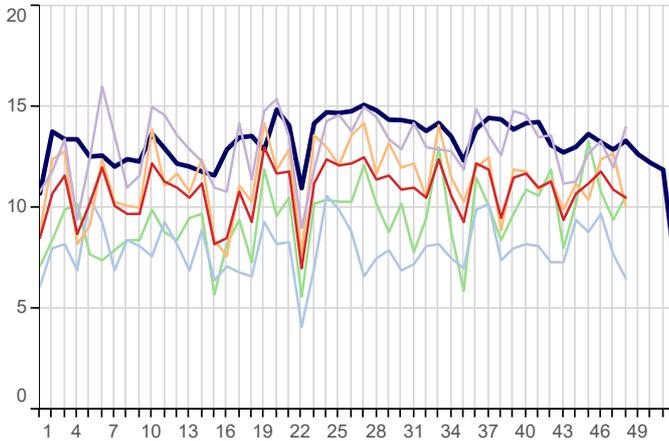
**Disorders of The Peripheral Nervous System (ICD10: G50-G64,G70-G72)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



**Meningitis/Encephalitis (ICD10: A170-A171,A390,A38-A85,A87,G00-G05)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average

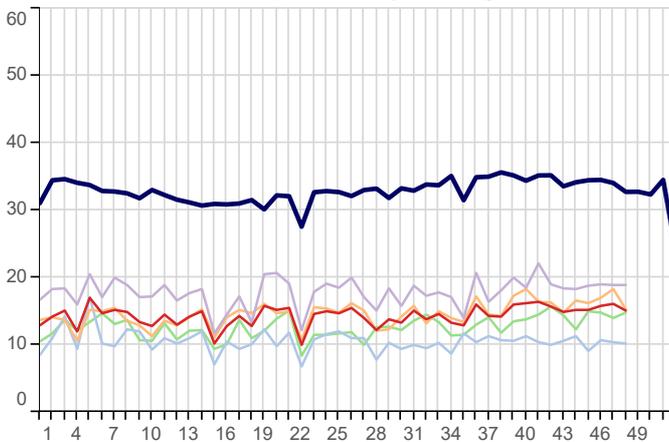


**Symptoms Involving Nervous & Musculoskeletal (ICD10: R25-R29)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



## 7. Genitourinary System Disorders

**Urinary Tract Infection/Cystitis (ICD10: N30,N390)**  
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average



## 8. Tabular Summary by Disease

| Disease Name                                   | Week beginning<br>Week ending |                  | 28/11/2022<br>04/12/2022 |                  | 21/11/2022<br>27/11/2022 |                  | 14/11/2022<br>20/11/2022 |                  | 07/11/2022<br>13/11/2022 |       |
|--|-------------------------------|------------------|--------------------------|------------------|--------------------------|------------------|--------------------------|------------------|--------------------------|-------|
|  | Rate                          | Numer            | Rate                     | Numer            | Rate                     | Numer            | Rate                     | Numer            | Rate                     | Numer |
| Allergic Rhinitis                              | 1.7                           | 91               | 2.1                      | 107              | 2.2                      | 113              | 2.6                      | 136              |                          |       |
| Asthma   | 18.1                          | 945              | 16.2                     | 844              | 15.0                     | 771              | 15.6                     | 808              |                          |       |
| Bronchitis                                     | 8.8                           | 459              | 7.4                      | 387              | 6.8                      | 351              | 6.2                      | 321              |                          |       |
| Bullous Dermatoses                             | 0.1                           | 5                | 0.2                      | 8                | 0.2                      | 8                | 0.1                      | 5                |                          |       |
| Chickenpox                                     | 2.1                           | 110              | 2.5                      | 129              | 3.0                      | 156              | 2.6                      | 135              |                          |       |
| Common Cold                                    | 4.1                           | 217              | 3.4                      | 178              | 2.9                      | 149              | 2.7                      | 139              |                          |       |
| Conjunctival Disorders                         | 15.9                          | 834              | 15.0                     | 782              | 14.2                     | 729              | 13.8                     | 713              |                          |       |
| Herpes Simplex                                 | 3.5                           | 182              | 3.4                      | 175              | 3.1                      | 158              | 3.6                      | 188              |                          |       |
| Herpes Zoster                                  | 5.1                           | 265              | 5.5                      | 287              | 5.1                      | 264              | 5.1                      | 265              |                          |       |
| Impetigo                                       | 6.2                           | 323              | 6.9                      | 358              | 5.0                      | 258              | 6.2                      | 321              |                          |       |
| Infectious Mononucleosis                       | 0.5                           | 27               | 0.4                      | 19               | 0.5                      | 27               | 0.5                      | 25               |                          |       |
| Influenza-like illness                         | 9.4                           | 493              | 6.6                      | 345              | 5.3                      | 275              | 4.5                      | 233              |                          |       |
| Infectious Intestinal Diseases                 | 7.2                           | 379              | 7.5                      | 390              | 8.0                      | 411              | 7.6                      | 393              |                          |       |
| Laryngitis and Tracheitis                      | 6.6                           | 346              | 6.6                      | 346              | 5.9                      | 302              | 5.8                      | 300              |                          |       |
| Lower Respiratory Tract Infections             | 101.0                         | 5,285            | 86.3                     | 4,502            | 78.7                     | 4,052            | 72.2                     | 3,737            |                          |       |
| Measles  | 0.0                           | 1                | 0.1                      | 5                | 0.1                      | 3                | 0.0                      | 1                |                          |       |
| Meningitis and Encephalitis                    | 0.1                           | 7                | 0.1                      | 6                | 0.1                      | 5                | 0.3                      | 14               |                          |       |
| Mumps  | 0.1                           | 3                | 0.0                      | 1                | 0.1                      | 3                | 0.1                      | 5                |                          |       |
| Non-infective Enteritis and Colitis            | 12.2                          | 638              | 12.3                     | 643              | 12.8                     | 661              | 12.9                     | 670              |                          |       |
| Otitis Media Acute                             | 4.5                           | 234              | 3.4                      | 176              | 2.9                      | 151              | 3.0                      | 155              |                          |       |
| Peripheral Nervous Disease                     | 18.2                          | 953              | 17.8                     | 928              | 19.1                     | 982              | 19.6                     | 1,013            |                          |       |
| Pleurisy                                       | 0.3                           | 18               | 0.3                      | 17               | 0.4                      | 22               | 0.2                      | 12               |                          |       |
| Pneumonia and Pneumonitis                      | 3.6                           | 189              | 3.5                      | 181              | 3.0                      | 154              | 3.2                      | 166              |                          |       |
| Respiratory System Diseases                    | 413.1                         | 21,624           | 373.0                    | 19,461           | 338.3                    | 17,422           | 313.6                    | 16,237           |                          |       |
| Rubella  | 0.0                           | 0                | 0.0                      | 0                | 0.0                      | 0                | 0.0                      | 0                |                          |       |
| Scabies  | 1.8                           | 94               | 1.3                      | 69               | 1.6                      | 80               | 1.6                      | 82               |                          |       |
| Sinusitis                                      | 22.0                          | 1,150            | 19.0                     | 993              | 17.5                     | 901              | 18.6                     | 963              |                          |       |
| Skin and Subcutaneous Tissue Infections        | 82.3                          | 4,310            | 84.3                     | 4,397            | 85.6                     | 4,408            | 84.9                     | 4,398            |                          |       |
| Strep Throat and Peritonsillar Abscess         | 6.1                           | 318              | 4.6                      | 241              | 3.3                      | 172              | 3.0                      | 156              |                          |       |
| Symptoms involving musculoskeletal             | 10.5                          | 549              | 10.9                     | 569              | 11.8                     | 607              | 11.2                     | 580              |                          |       |
| Symptoms involving Respiratory and Chest       | 257.3                         | 13,469           | 235.2                    | 12,270           | 222.1                    | 11,436           | 211.8                    | 10,967           |                          |       |
| Symptoms involving Skin and Integument Tissues | 109.3                         | 5,722            | 113.1                    | 5,899            | 115.4                    | 5,943            | 113.9                    | 5,898            |                          |       |
| Tonsillitis and acute Pharyngitis              | 52.5                          | 2,749            | 50.4                     | 2,632            | 46.0                     | 2,368            | 43.4                     | 2,245            |                          |       |
| Upper Respiratory Tract Infections             | 227.5                         | 11,910           | 203.9                    | 10,637           | 177.0                    | 9,114            | 160.4                    | 8,307            |                          |       |
| Urinary Tract Infections                       | 15.1                          | 791              | 16.1                     | 838              | 15.8                     | 815              | 15.2                     | 788              |                          |       |
| Viral Hepatitis                                | 0.1                           | 7                | 0.1                      | 7                | 0.2                      | 8                | 0.2                      | 8                |                          |       |
| Whooping Cough                                 | 0.1                           | 5                | 0.1                      | 4                | 0.1                      | 5                | 0.1                      | 3                |                          |       |
| <b>Practice Count</b>                          |                               | <b>504</b>       |                          | <b>504</b>       |                          | <b>497</b>       |                          | <b>500</b>       |                          |       |
| <b>Denom</b>                                   |                               | <b>5,234,198</b> |                          | <b>5,217,795</b> |                          | <b>5,149,912</b> |                          | <b>5,177,789</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 a five-year average, 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 the UK Health Security Agency. 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 E, page 4. 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 the UK Health Security Agency. The bulletin can be found at the following URL:

<https://www.gov.uk/government/collections/syndromic-surveillance-systems-and-analyses>

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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