Royal College of General Practitioners

RSC Communicable and Respiratory Disease Report for England

Key Statistics:

Week Number/Year.................... **51/2022**
Week Starting - Ending............. **19/12/2022 - 25/12/2022**
No. of Practices......................... **497**
Population................................. **5,231,449**

National (England)

- **Acute Bronchitis :** increased from **13.0** in week 50 to **15.5** in week 51.
- **Asthma :** decreased from **25.3** in week 50 to **24.5** in week 51.
- **Common Cold :** decreased from **5.8** in week 50 to **5.5** in week 51.
- **Influenza-like illness :** increased from **23.9** in week 50 to **31.3** in week 51.
- **Respiratory System Diseases :** increased from **603.7** in week 50 to **606.3** in week 51.
- **COVID-19 :** decreased from **65.5** in week 50 to **51.1** in week 51.

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

- **Acute Bronchitis :** increased from **6.9** in week 50 to **7.2** in week 51 in the London region, increased from **18.9** in week 50 to **23.6** in week 51 in the North region, increased from **13.1** in week 50 to **14.6** in week 51 in the South region, and increased from **10.7** in week 50 to **15.0** in week 51 in the Midlands And East region.

- **Asthma :** decreased from **18.3** in week 50 to **16.5** in week 51 in the London region, increased from **31.5** in week 50 to **31.6** in week 51 in the North region, decreased from **24.3** in week 50 to **23.6** in week 51 in the South region, and decreased from **25.7** in week 50 to **25.1** in week 51 in the Midlands And East region.

- **Common Cold :** decreased from **6.7** in week 50 to **5.7** in week 51 in the London region, increased from **5.5** in week 50 to **5.6** in week 51 in the North region, decreased from **5.1** in week 50 to **4.5** in week 51 in the South region, and increased from **6.6** in week 50 to **7.5** in week 51 in the Midlands And East region.

- **Influenza-like illness :** increased from **25.7** in week 50 to **29.6** in week 51 in the London region, increased from **25.2** in week 50 to **36.8** in week 51 in the North region, increased from **26.4** in week 50 to **33.3** in week 51 in the South region, and increased from **14.6** in week 50 to **20.9** in week 51 in the Midlands And East region.

- **Respiratory System Diseases :** decreased from **479.4** in week 50 to **430.9** in week 51 in the London region, increased from **736.2** in week 50 to **795.8** in week 51 in the North region, decreased from **551.8** in week 50 to **547.0** in week 51 in the South region, and increased from **649.1** in week 50 to **653.1** in week 51 in the Midlands And East region.

- **COVID-19 :** decreased from **38.2** in week 50 to **24.5** in week 51 in the London region, decreased from **53.4** in week 50 to **42.7** in week 51 in the North region, decreased from **91.7** in week 50 to **72.3** in week 51 in the South region, and decreased from **62.0** in week 50 to **48.3** in week 51 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 in all regions and age bands, and remain above our Moving Epidemic Method (MEM) medium threshold. The highest rates were in the North region and the age-band 15-64 years. Presentations of the following conditions are above the seasonal average: symptoms involving respiratory and chest, respiratory system diseases, acute sinusitis, strep sore throat, scarlatina and peritonsillar abscess, acute tonsillitis, and upper and lower respiratory tract infections.

Rates of COVID-19 have decreased in all regions and age bands.

This report does not include a virology update.

Winter Focus 2022

Please see page 15 for explanatory notes on the data.

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

Influenza-like illness
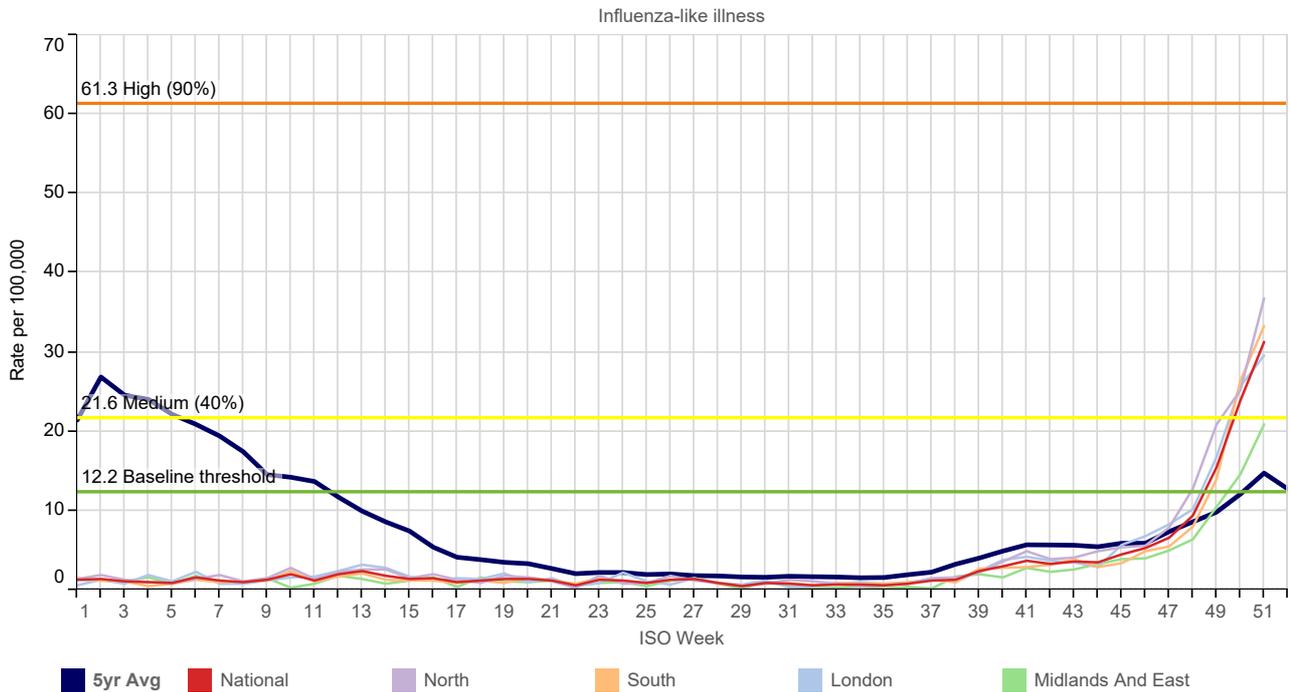
(B) RCGP/UKHSA RSV, Influenza and SARS-CoV-2 Virology Swab Surveillance 2022*
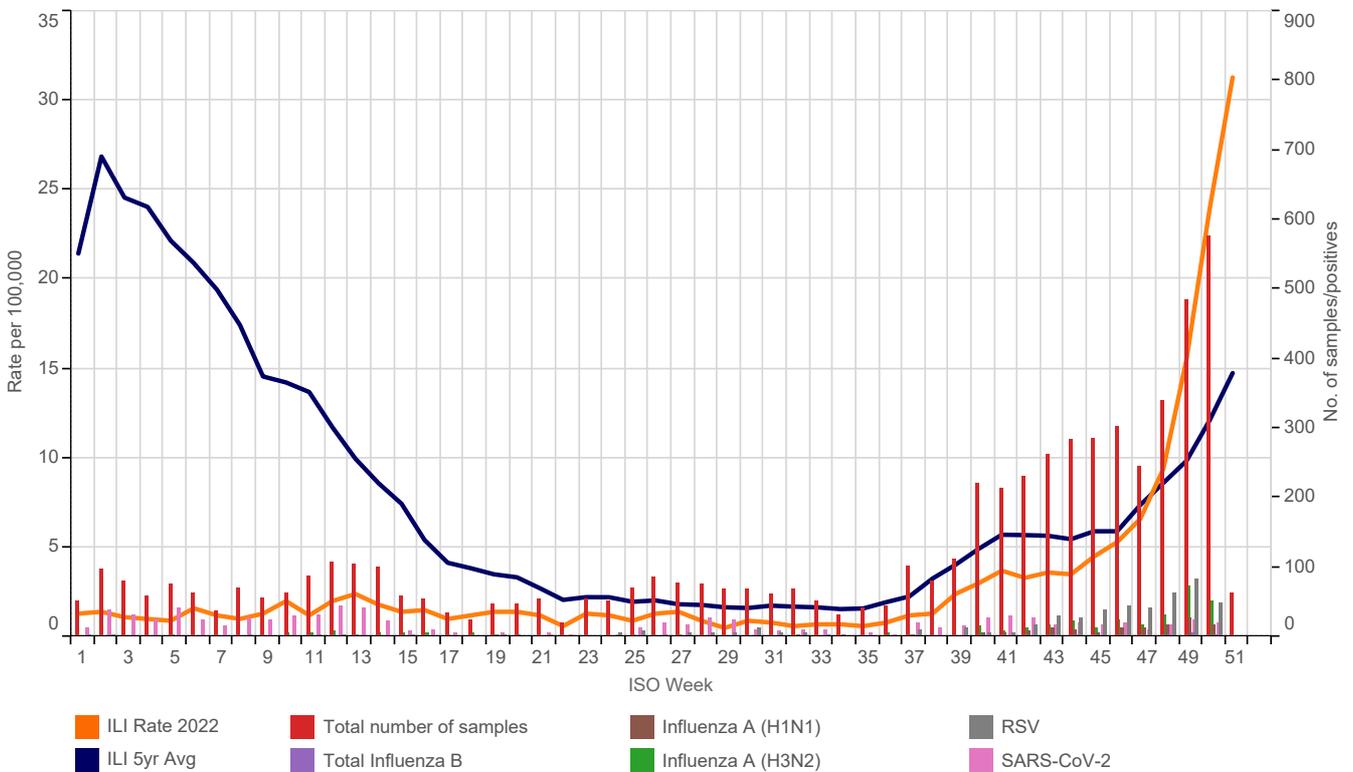
* The seasonal average line(blue) is based on 5 year historic RCGP RSC level (Graph A & B). The weekly virology samples displayed are offset from the ISO Week (Graphs B & C).

(C) RCGP/UKHSA RSV, Influenza and SARS-CoV-2 Virology Swab Surveillance 2022 by viral strain*
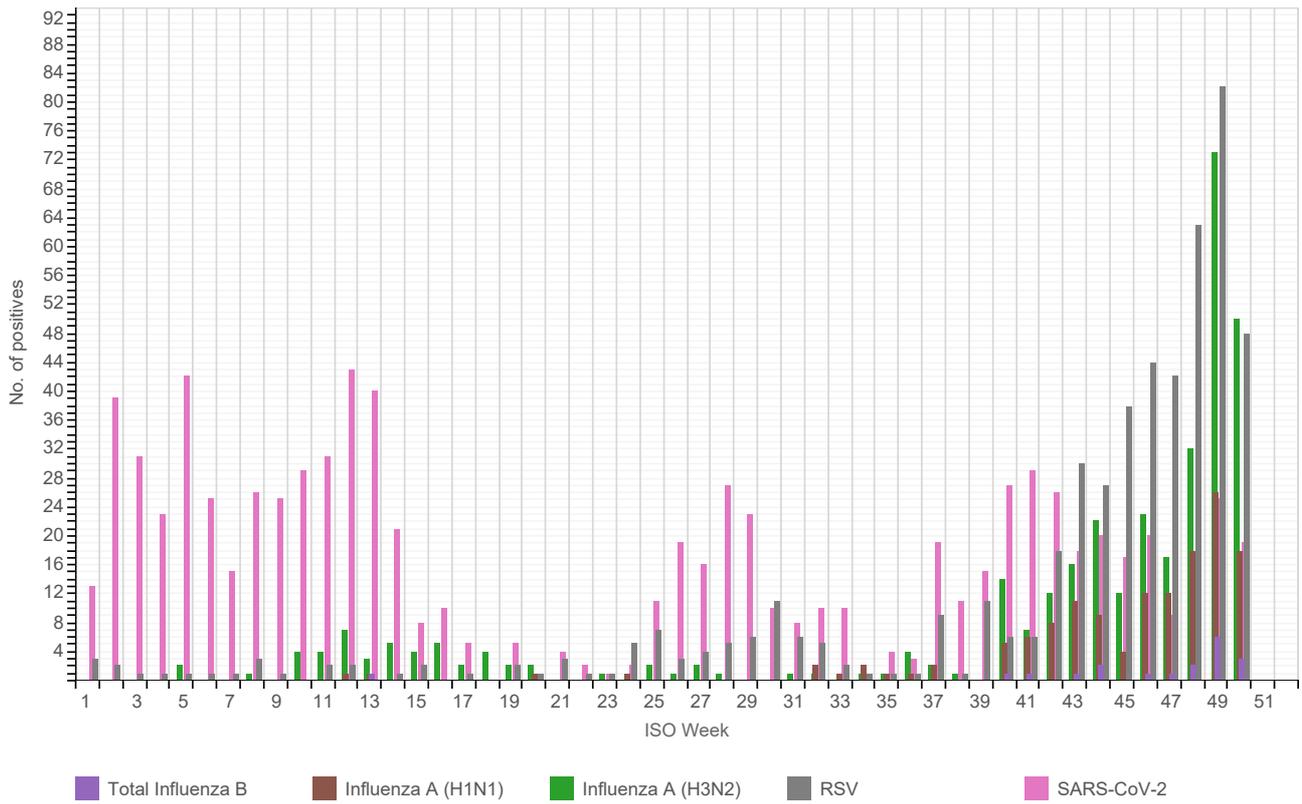
Legend: Total Influenza B | Influenza A (H1N1) | Influenza A (H3N2) | RSV | SARS-CoV-2

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

Legend: 5yr Avg | 15-64yrs | 65+yrs | <15yrs | All ages
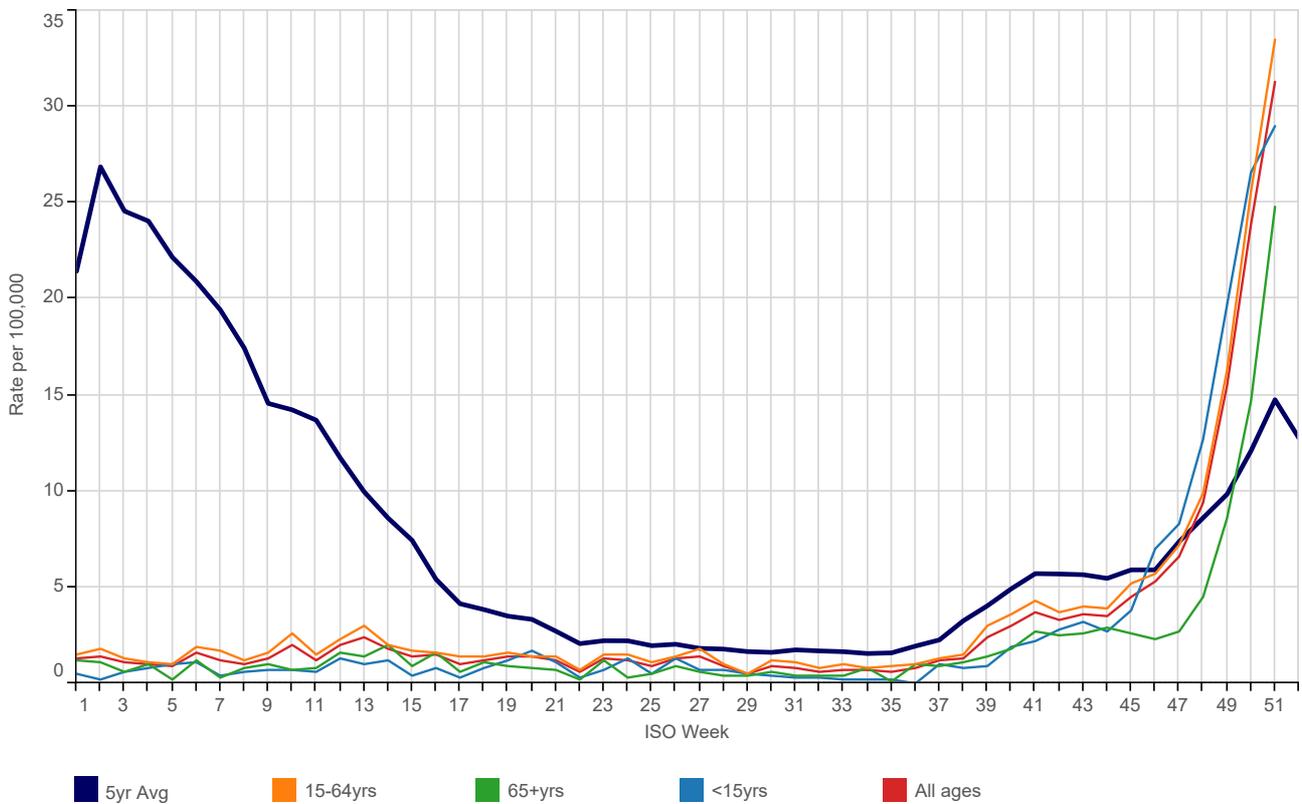
(E) Influenza-like illness: national incidence rate 2022 by age group*

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	19.7	26.6	29.0	
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	16.3	25.6	33.5	
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	8.6	14.7	24.8	
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	15.5	23.9	31.3	

Table 2	Below Threshold[1]	Threshold to Medium[2]	Medium to High[3]	High to Very High[4]	Above Very High[5]
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

[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

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

Legend: All ages, <5yrs, 5-14yrs, 15-64yrs, 65+yrs, RSV, 5yr Avg
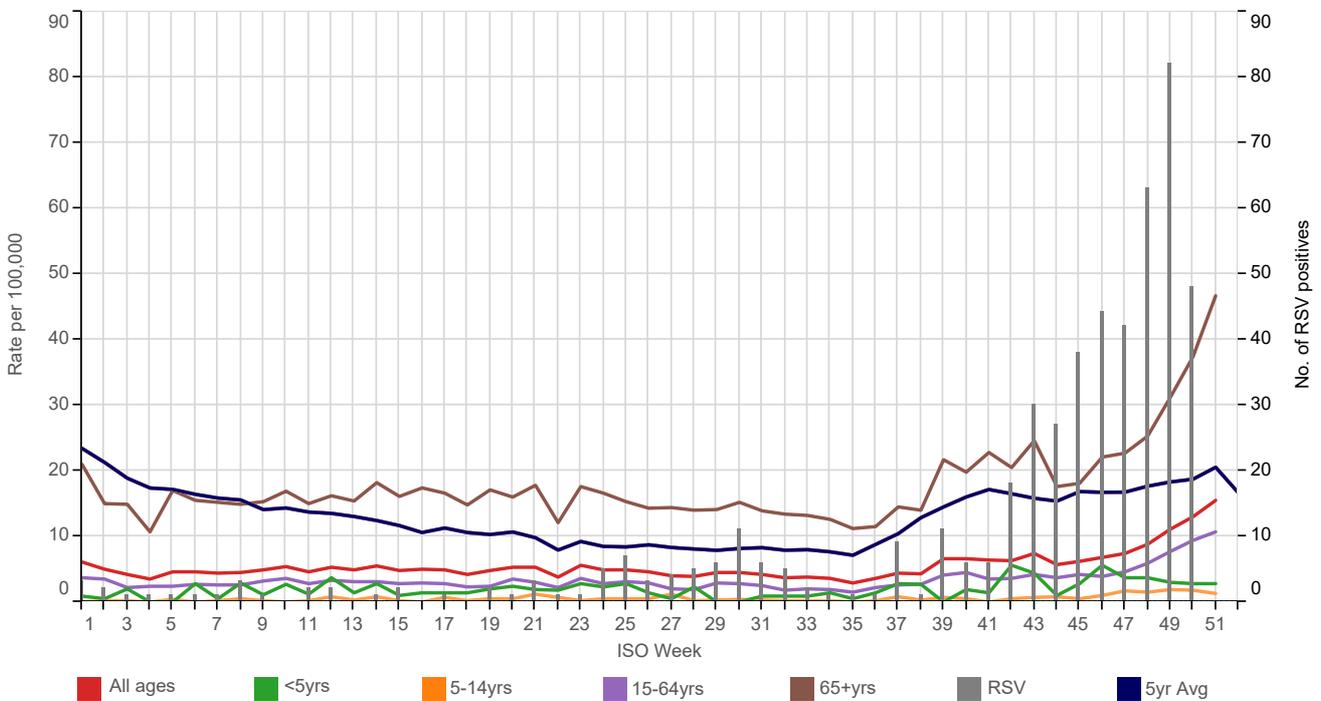
Weekly Influenza-like illness and Acute Bronchitis incidence rates per 100,000 persons

	Influenza-like illness	Bronchitis		Influenza-like illness	Bronchitis
<1yr	32.7	6.5	London	29.6	7.2
1-4yrs	28.8	2.8	North	36.8	23.6
5-14yrs	28.8	1.3	South	33.3	14.6
15-24yrs	31.7	2.4	Midlands And East	20.9	15.0
25-44yrs	37.7	7.4	National	31.3	15.5
45-64yrs	29.6	18.5			
65-74yrs	22.0	46.4			
75-84yrs	25.7	50.2			
85+yrs	32.8	38.5			
All ages	31.3	15.5			

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

■ All ages	■ <15yrs	■ 15-64yrs	■ 65+yrs

(H) COVID-19 : national incidence rate 2022 by region*
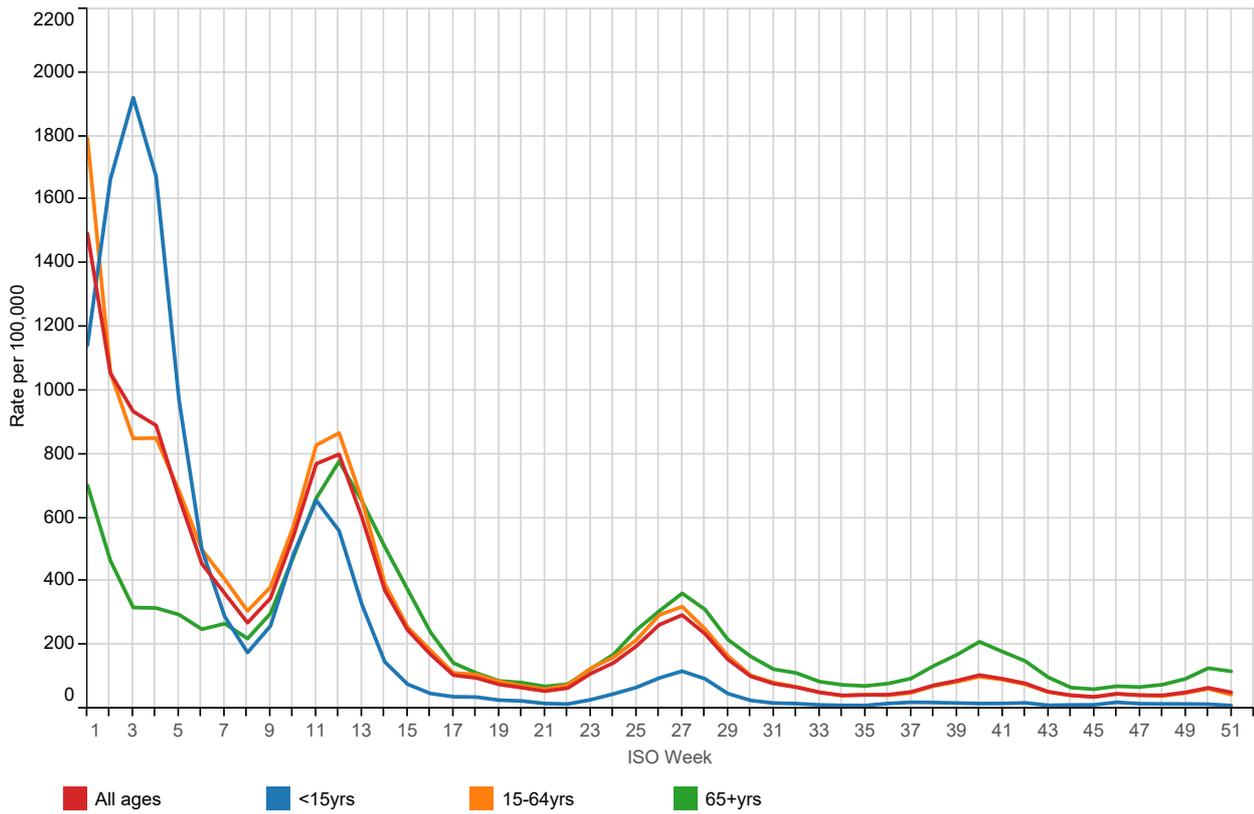
■ National	■ North	■ London	■ South	■ Midlands And East
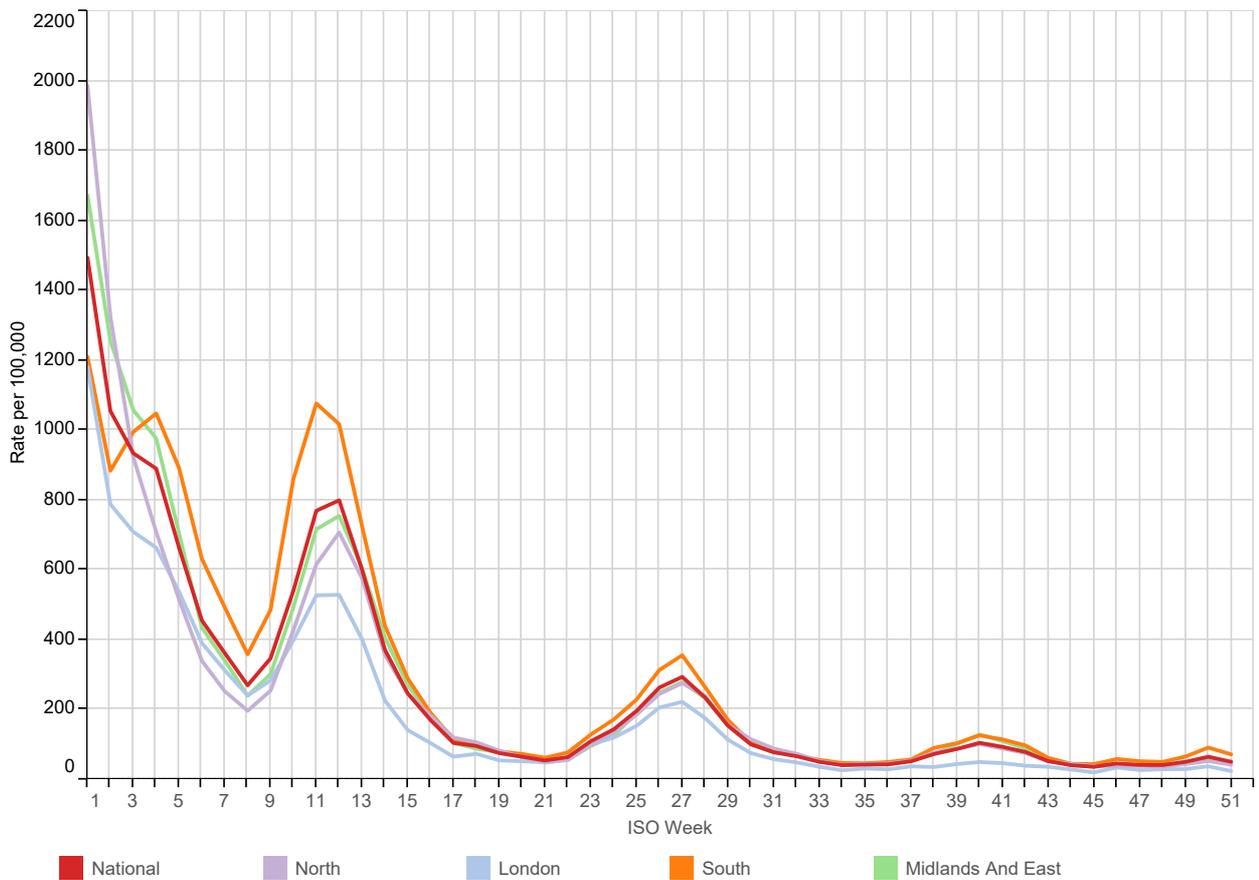
1. Water & Food Borne Disorders:

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
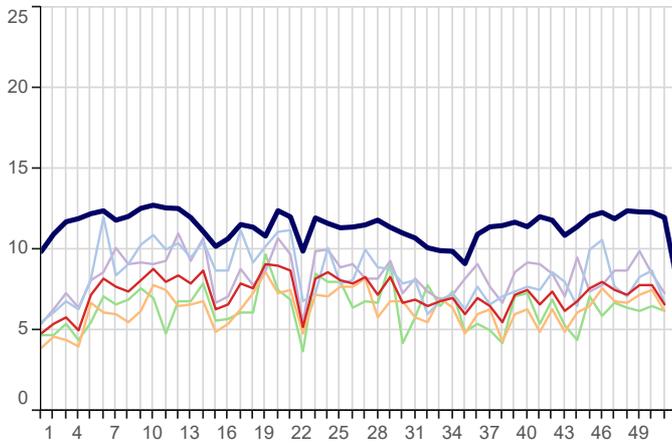
Infectious Intestinal Disease (ICD10: A00-A09)
Weekly incidence (per 100,000 0-4 years) by regions
for 2022 compared with 5 year average
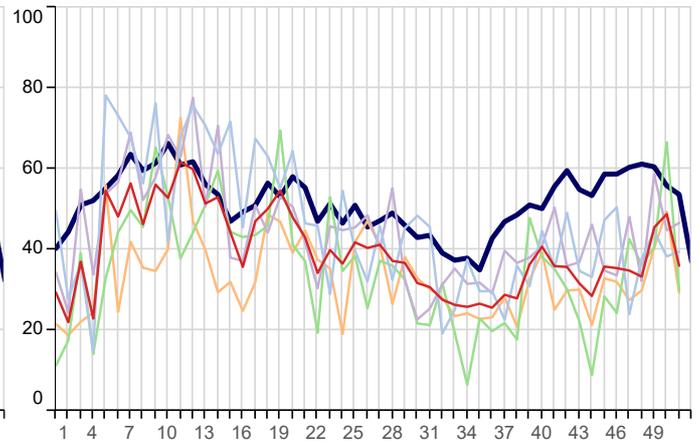
Non-Infective Enteritis & Colitis (ICD10: K50-K52)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
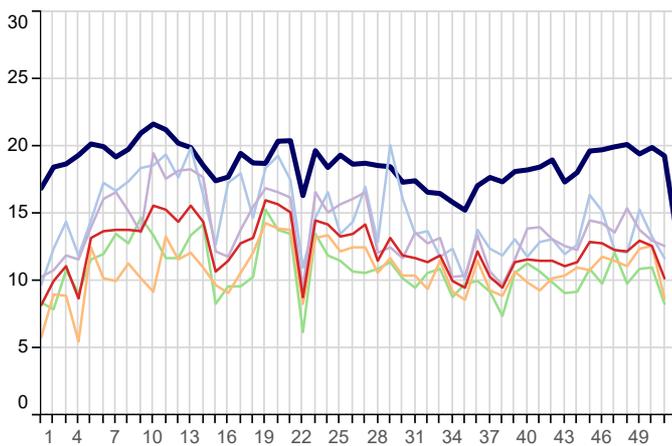
Viral Hepatitis (ICD10: B15-B19)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
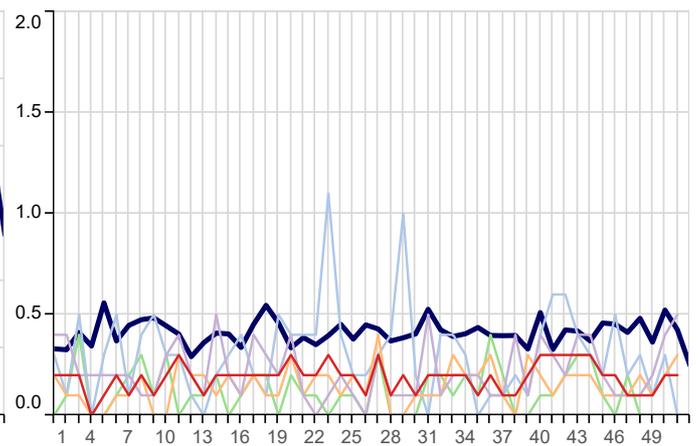
2. Environmentally Sensitive Disorders:

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
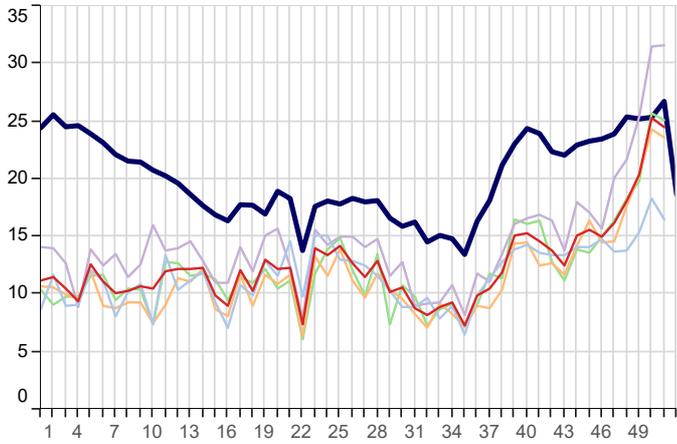
Disorders of Conjunctiva (ICD10: H10-H13)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
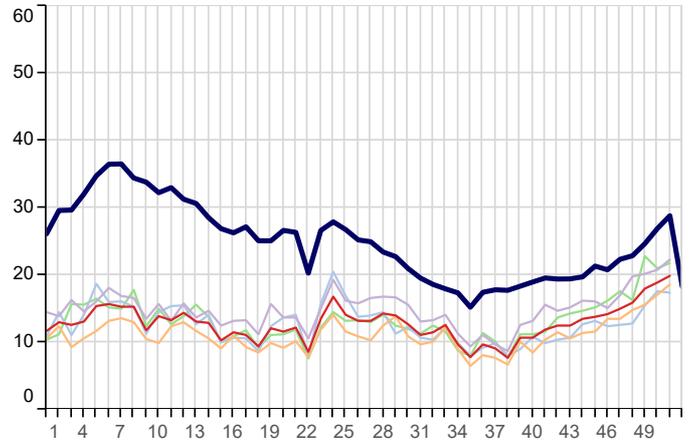
Hayfever/Allergic Rhinitis (ICD10: J30)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
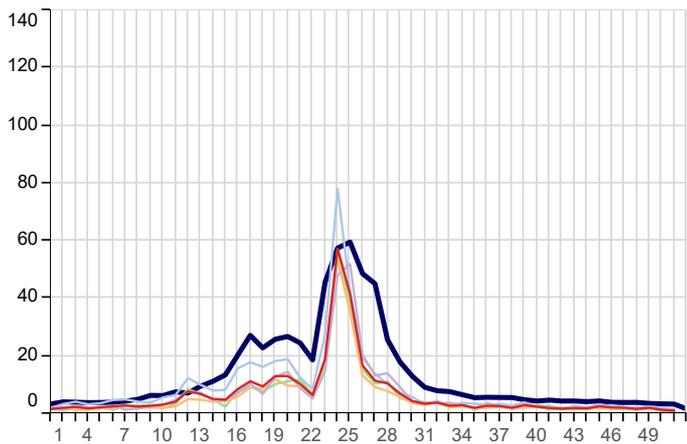
Symptoms involving Respiratory & Chest (ICD10: R05-R07,R09)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
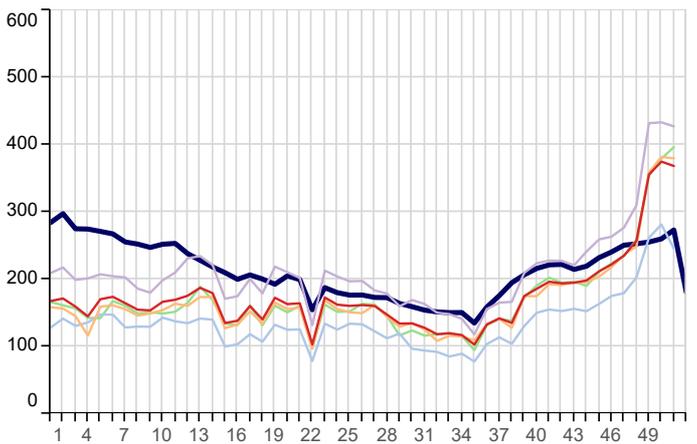
3. Respiratory Infections:

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
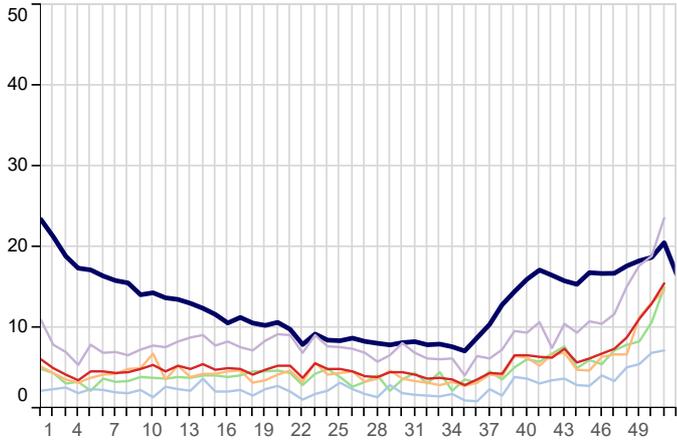
Common Cold (ICD10: J00,J06)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
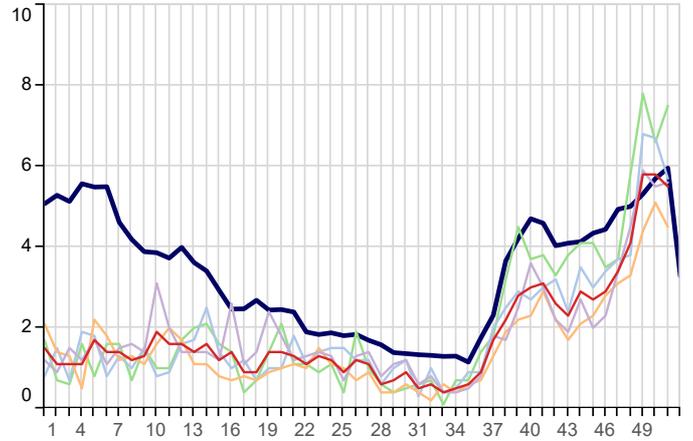
**Influenza-like illness (ICD10: J09-J11)**
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
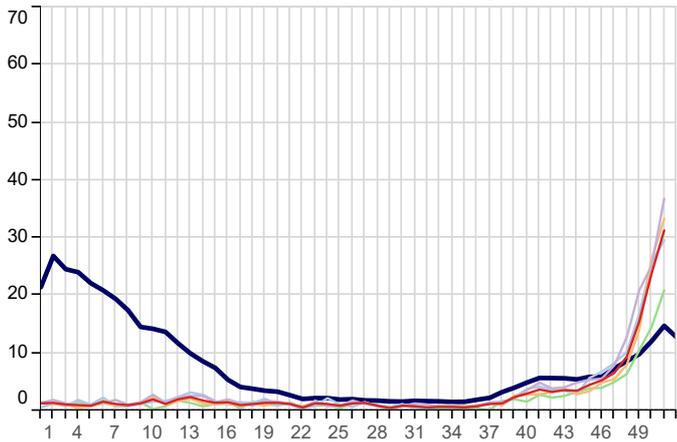
Acute Laryngitis/Tracheitis (ICD10: J04)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
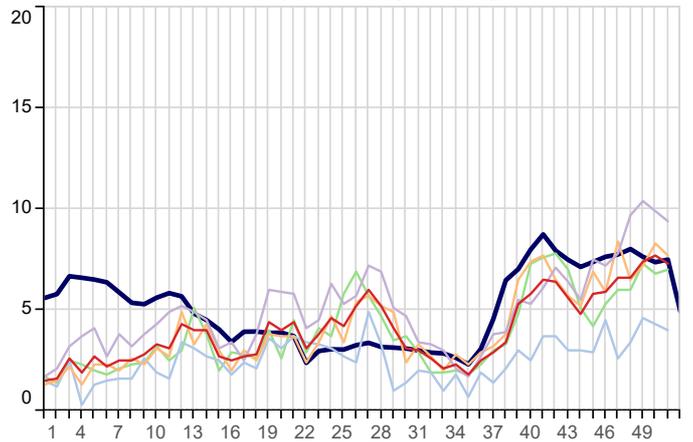
Pleurisy (ICD10: R091)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
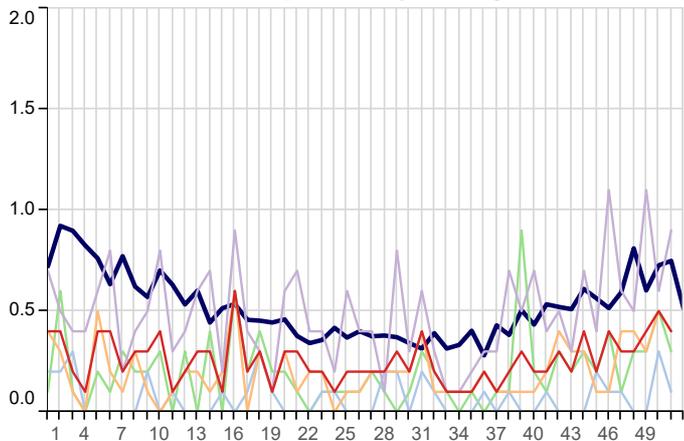
Pneumonia/Pneumonitis (ICD10: J12-J18)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
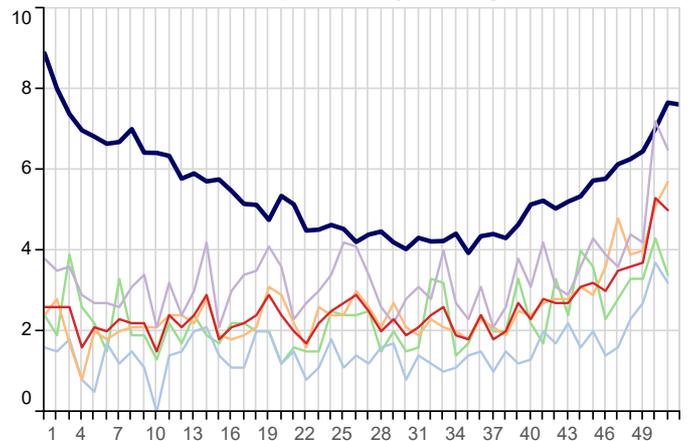
3. Respiratory Infections(Continued):

**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
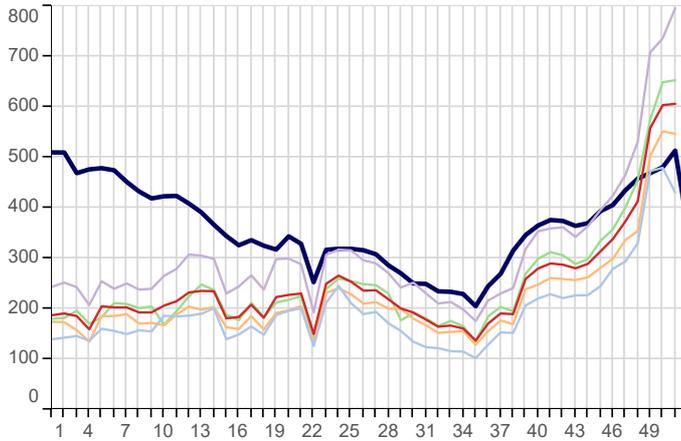
Acute Sinusitis (ICD10: J01)
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average
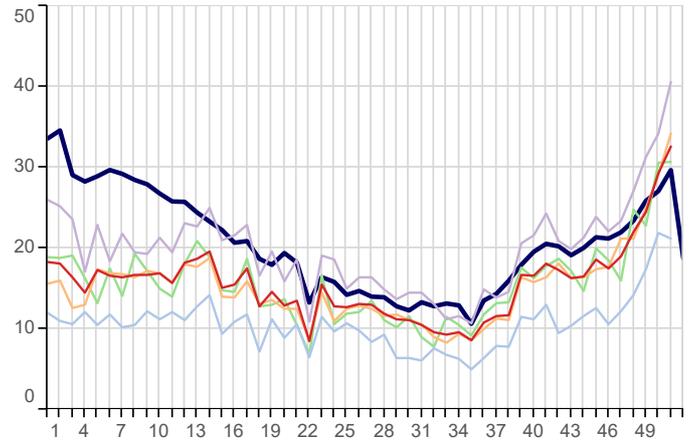
Strep Sore Throat, Scarlatina and Peritonsillar Abscess (ICD10: A38,J020,J36)
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average
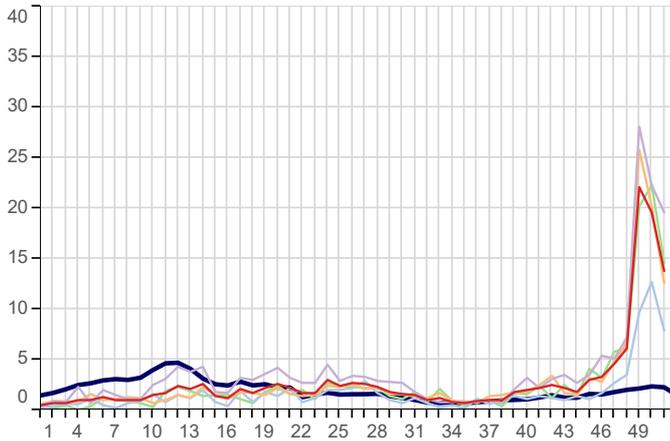
Acute Tonsillitis/Pharyngitis (ICD10: J02-J03)
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average
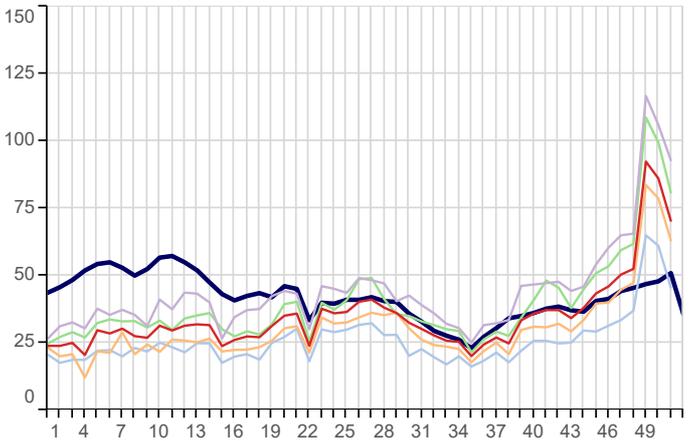
Upper Respiratory Tract Infections (URTI)(ICD10: J00-J06)
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average
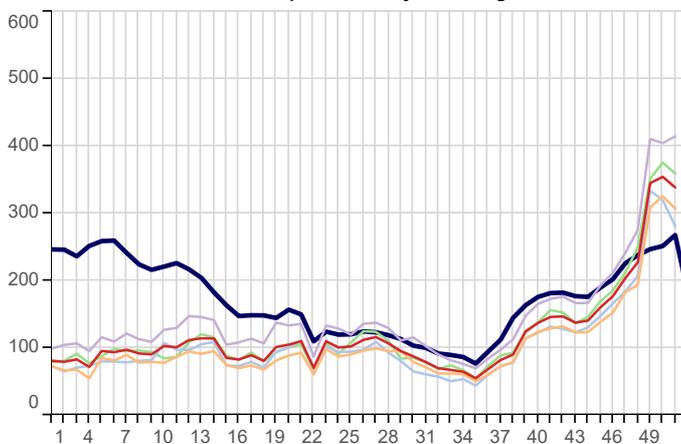
Whooping Cough (ICD10: A37)
Weekly incidence (per 100,000 all ages) by region for 2022 compared with 5 year average
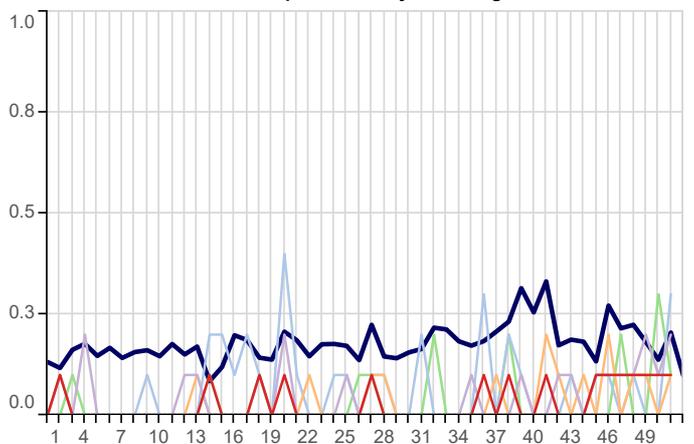
3. Respiratory Infections(Continued):

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
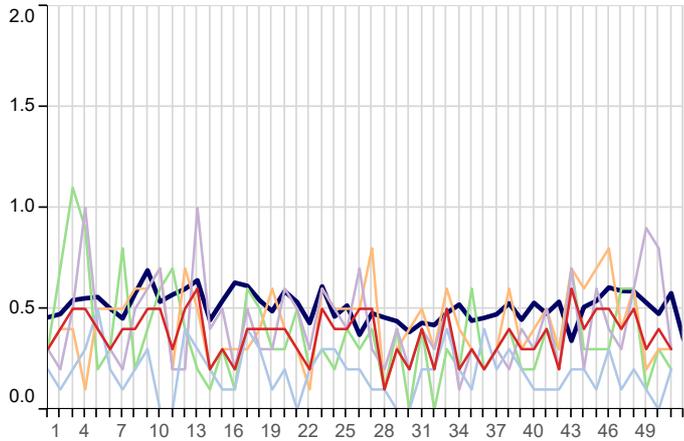
Lower Respiratory Tract Infections (LRTI)(ICD10: J20-J22)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
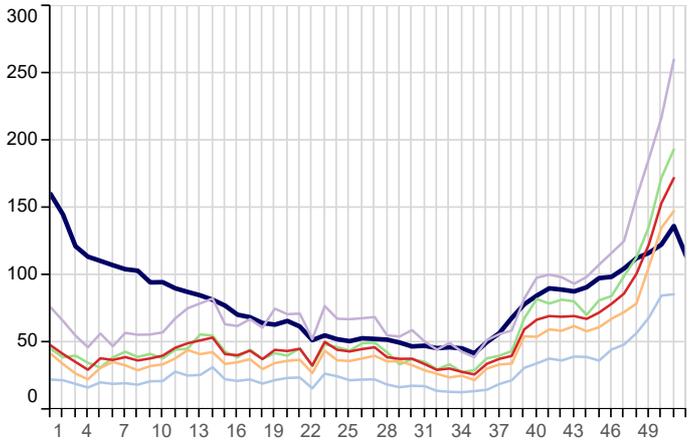
Acute Otitis Media (ICD10: H650-H651,H660,H669)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
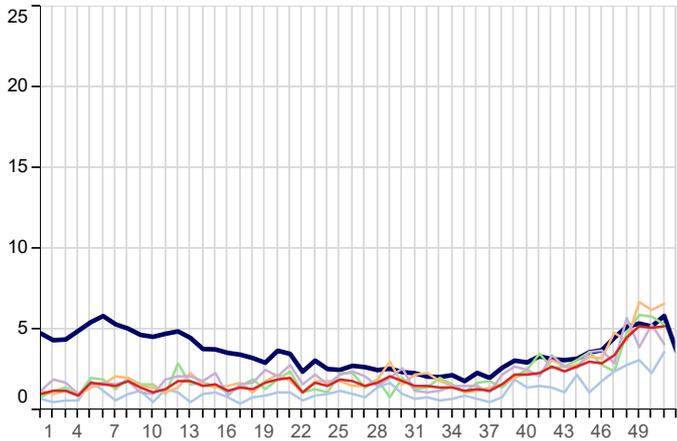
4. Vaccine Sensitive Disorders

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
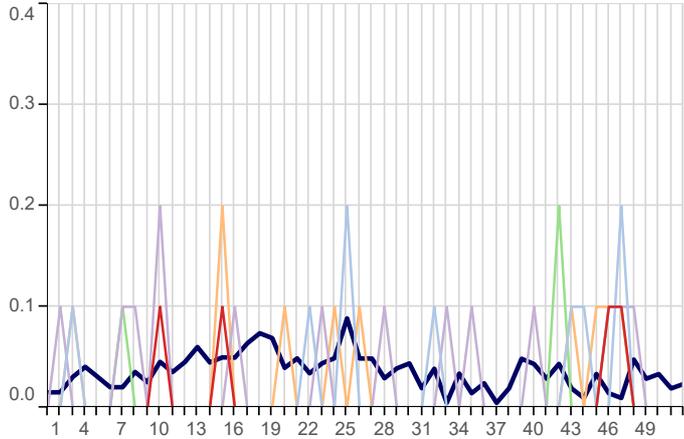
Mumps (ICD10: B26)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
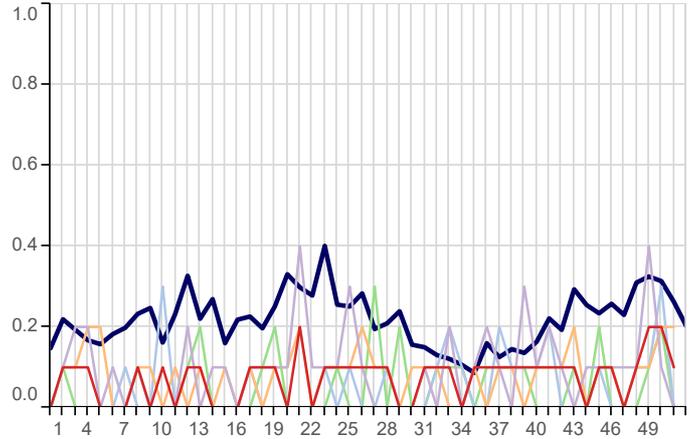
Rubella (ICD10: B06)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
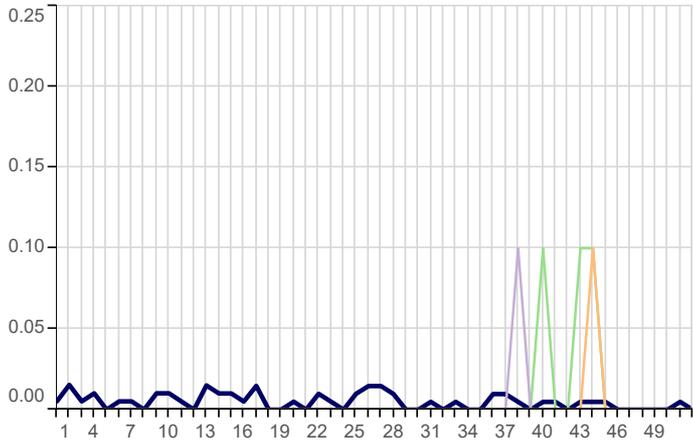
5. Skin Contagions

Bullous Dermatoses (ICD10: L10-L14)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
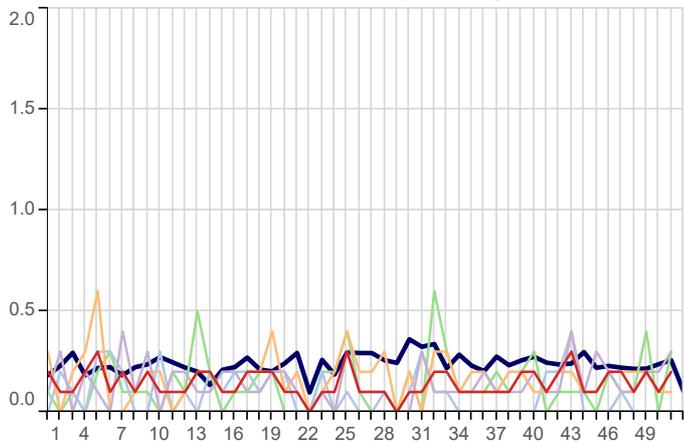
Chickenpox (ICD10: B01)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
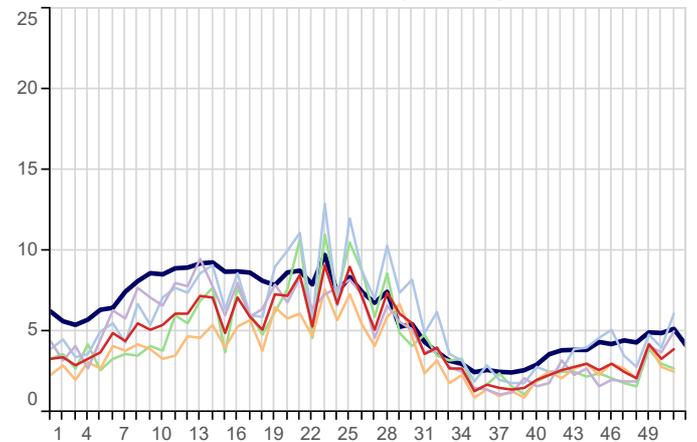
5. Skin Contagions (Continued)

**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
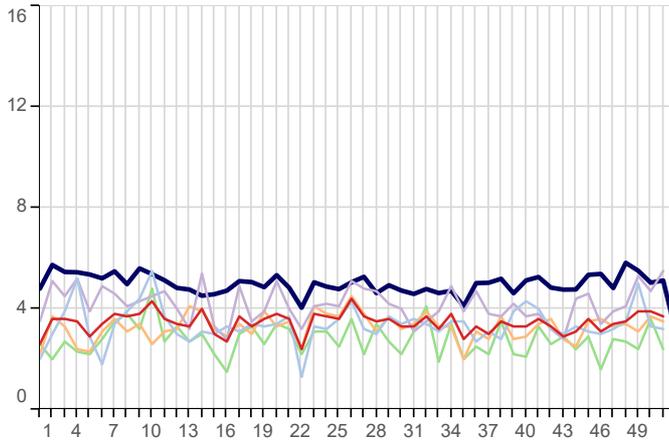
Herpes Zoster (ICD10: B02)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
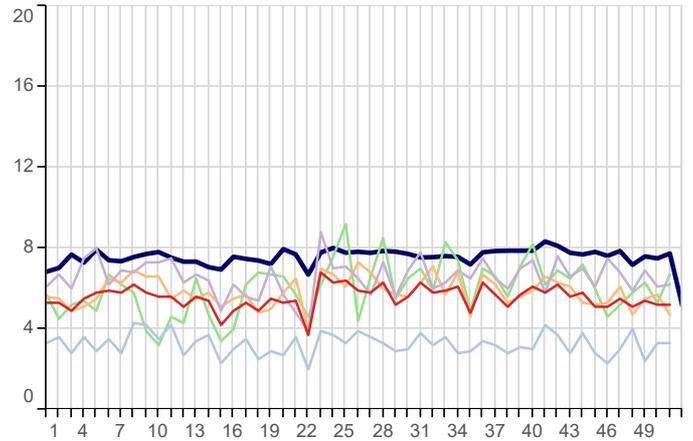
Infections of Skin & Subcutaneous Tissue (ICD10: L00-L08)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
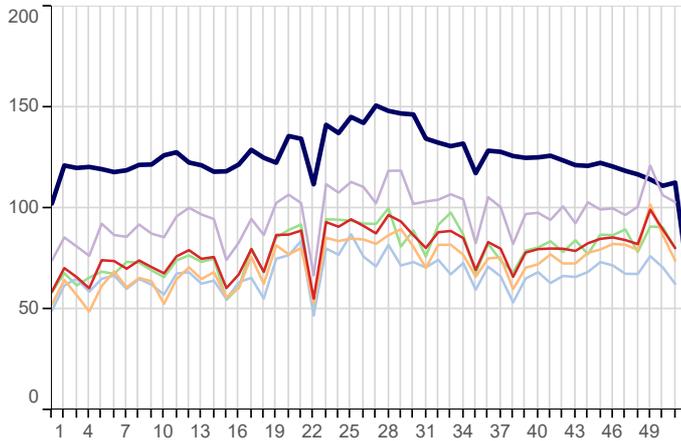
Scabies (ICD10: B86)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
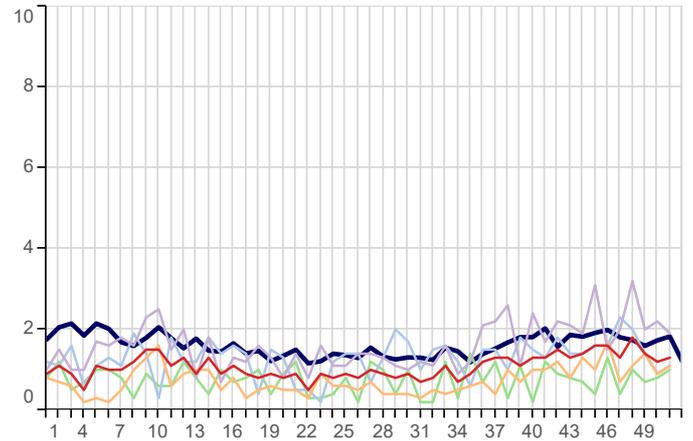
Symptoms involving Skin & Oth Integument Tiss (ICD10: R20-R23)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
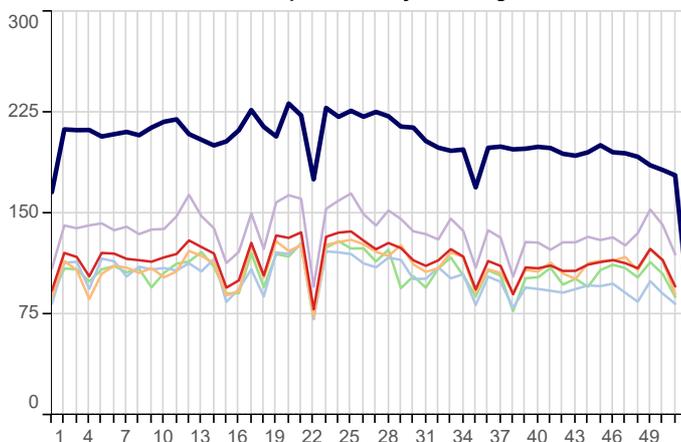
Impetigo (ICD10: L01)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
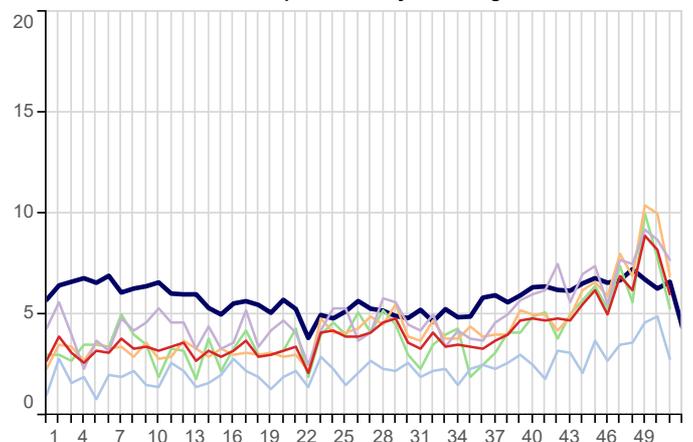
6. Disorders Affecting the Nervous System

■ 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
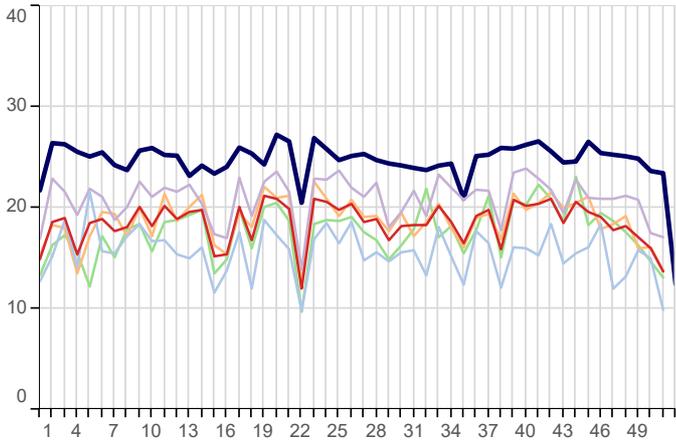
Meningitis/Encephalitis(ICD10: A170-A171,A390,A38-A85,A87,G00-G05)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
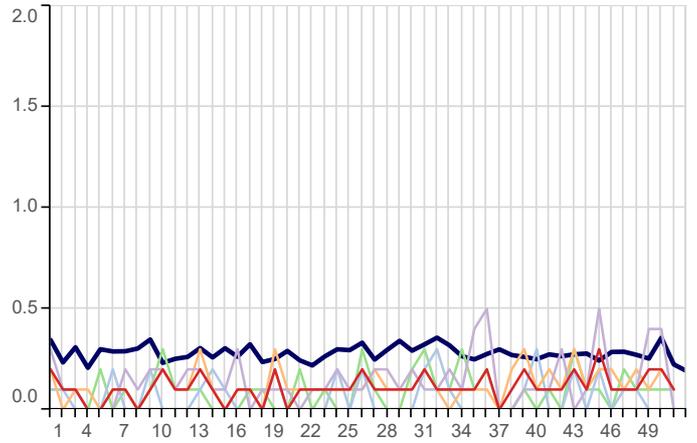
Symptoms Involving Nervous & Musculoskeletal (ICD10: R25-R29)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average
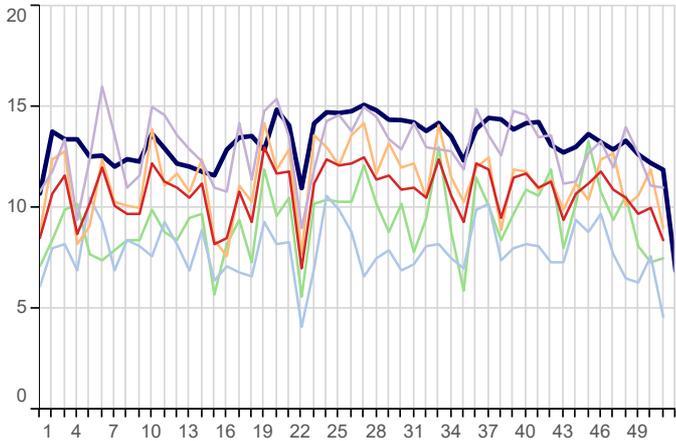
7. Genitourinary System Disorders

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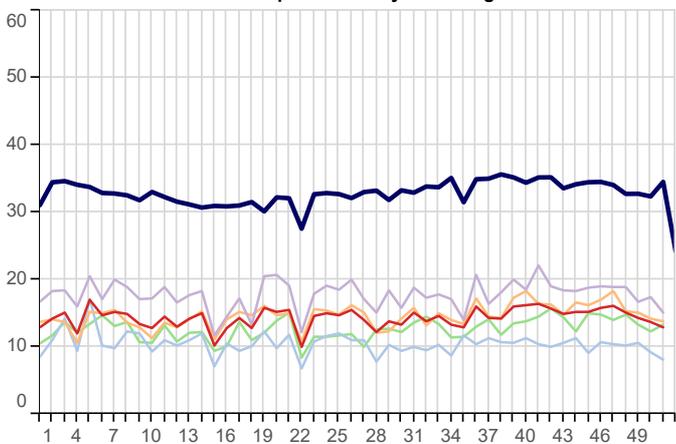
8. Tabular Summary by Disease

Week beginning Week ending	19/12/2022 25/12/2022		12/12/2022 18/12/2022		05/12/2022 11/12/2022		28/11/2022 04/12/2022	
Disease Name	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer
Allergic Rhinitis	1.1	56	1.4	73	2.1	105	1.7	91
Asthma	24.5	1,282	25.3	1,315	20.4	1,004	18.1	945
Bronchitis	15.5	812	13.0	676	11.1	545	8.8	459
Bullous Dermatoses	0.2	9	0.1	5	0.2	9	0.1	5
Chickenpox	3.9	202	3.3	172	4.2	208	2.1	110
Common Cold	5.5	290	5.8	302	5.8	287	4.1	217
Conjunctival Disorders	19.9	1,039	18.9	983	18.0	887	15.9	834
Herpes Simplex	3.7	196	3.9	201	3.9	190	3.5	182
Herpes Zoster	5.2	270	5.2	273	5.4	264	5.1	265
Impetigo	6.0	316	8.2	429	8.9	439	6.2	323
Infectious Mononucleosis	0.3	14	0.4	19	0.3	16	0.5	27
Influenza-like illness	31.3	1,636	23.9	1,243	15.5	762	9.4	493
Infectious Intestinal Diseases	6.6	343	7.8	407	7.8	386	7.2	379
Laryngitis and Tracheitis	7.3	380	7.7	399	7.4	366	6.6	346
Lower Respiratory Tract Infections	172.2	9,011	153.5	7,994	123.0	6,058	101.0	5,285
Measles	0.0	0	0.0	0	0.0	0	0.0	1
Meningitis and Encephalitis	0.1	3	0.2	10	0.2	8	0.1	7
Mumps	0.1	3	0.2	10	0.2	8	0.1	3
Non-infective Enteritis and Colitis	10.2	535	12.6	655	13.0	640	12.2	638
Otitis Media Acute	5.2	270	5.1	265	5.2	256	4.5	234
Peripheral Nervous Disease	13.7	719	16.0	834	17.1	843	18.2	953
Pleurisy	0.4	23	0.5	25	0.4	20	0.3	18
Pneumonia and Pneumonitis	5.0	262	5.3	274	3.7	180	3.6	189
Respiratory System Diseases	606.3	31,719	603.7	31,439	558.2	27,482	413.1	21,624
Rubella	0.0	0	0.0	0	0.0	0	0.0	0
Scabies	1.3	66	1.2	63	1.4	70	1.8	94
Sinusitis	32.6	1,708	29.3	1,525	24.5	1,208	22.0	1,150
Skin and Subcutaneous Tissue Infections	80.3	4,203	89.6	4,664	99.3	4,887	82.3	4,310
Strep Throat and Peritonsillar Abscess	13.8	722	19.6	1,021	22.1	1,089	6.1	318
Symptoms involving musculoskeletal	8.4	438	10.0	520	9.7	480	10.5	549
Symptoms involving Respiratory and Chest	368.5	19,278	375.0	19,531	355.8	17,516	257.3	13,469
Symptoms involving Skin and Integument Tissues	95.8	5,012	115.4	6,008	123.7	6,090	109.3	5,722
Tonsillitis and acute Pharyngitis	70.4	3,683	86.1	4,485	92.4	4,550	52.5	2,749
Upper Respiratory Tract Infections	338.8	17,722	354.6	18,465	345.3	17,000	227.5	11,910
Urinary Tract Infections	12.9	675	13.7	714	14.3	702	15.1	791
Viral Hepatitis	0.2	12	0.2	13	0.1	4	0.1	7
Whooping Cough	0.1	7	0.1	4	0.1	3	0.1	5
Practice Count	**497**		**501**		**462**		**504**	
Denom	**5,231,449**		**5,207,641**		**4,923,368**		**5,234,198**	

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)

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 Practioners 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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