

RSC Communicable and Respiratory Disease Report for England

Key Statistics:

Week Number/Year..... 50/2022
 Week Starting - Ending..... 12/12/2022 - 18/12/2022
 No. of Practices..... 501
 Population..... 5,207,641

National (England)

- **Acute Bronchitis** : increased from 11.1 in week 49 to 13.0 in week 50.
- **Asthma** : increased from 20.4 in week 49 to 25.3 in week 50.
- **Common Cold** : was unchanged at 5.8 in week 49 and 5.8 in week 50.
- **Influenza-like illness** : increased from 15.5 in week 49 to 23.9 in week 50.
- **Respiratory System Diseases** : increased from 558.2 in week 49 to 603.7 in week 50.
- **COVID-19** : increased from 50.1 in week 49 to 57.7 in week 50.

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

- **Acute Bronchitis** : increased from 5.5 in week 49 to 6.9 in week 50 in the London region, increased from 17.7 in week 49 to 18.9 in week 50 in the North region, increased from 11.3 in week 49 to 13.1 in week 50 in the South region, and increased from 8.3 in week 49 to 10.7 in week 50 in the Midlands And East region.
- **Asthma** : increased from 15.4 in week 49 to 18.3 in week 50 in the London region, increased from 25.4 in week 49 to 31.5 in week 50 in the North region, increased from 20.3 in week 49 to 24.3 in week 50 in the South region, and increased from 19.8 in week 49 to 25.7 in week 50 in the Midlands And East region.
- **Common Cold** : decreased from 6.8 in week 49 to 6.7 in week 50 in the London region, decreased from 5.9 in week 49 to 5.5 in week 50 in the North region, increased from 4.4 in week 49 to 5.1 in week 50 in the South region, and decreased from 7.8 in week 49 to 6.6 in week 50 in the Midlands And East region.
- **Influenza-like illness** : increased from 16.8 in week 49 to 25.7 in week 50 in the London region, increased from 20.9 in week 49 to 25.2 in week 50 in the North region, increased from 14.0 in week 49 to 26.4 in week 50 in the South region, and increased from 10.5 in week 49 to 14.6 in week 50 in the Midlands And East region.
- **Respiratory System Diseases** : increased from 473.2 in week 49 to 479.4 in week 50 in the London region, increased from 708.6 in week 49 to 736.2 in week 50 in the North region, increased from 503.4 in week 49 to 551.8 in week 50 in the South region, and increased from 575.2 in week 49 to 649.1 in week 50 in the Midlands And East region.
- **COVID-19** : increased from 30.0 in week 49 to 33.8 in week 50 in the London region, increased from 44.2 in week 49 to 47.5 in week 50 in the North region, increased from 64.3 in week 49 to 78.8 in week 50 in the South region, and increased from 49.2 in week 49 to 57.7 in week 50 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. The highest rates were in the South region and the population aged under 15 years. Presentations of the following conditions are above the seasonal average: symptoms involving respiratory and chest, common cold, acute laryngitis, respiratory system diseases, acute sinusitis, scarlet fever, acute tonsillitis, upper and lower respiratory tract infections and impetigo. Rates for scarlet fever and acute tonsillitis have reached a peak and decreased this week.

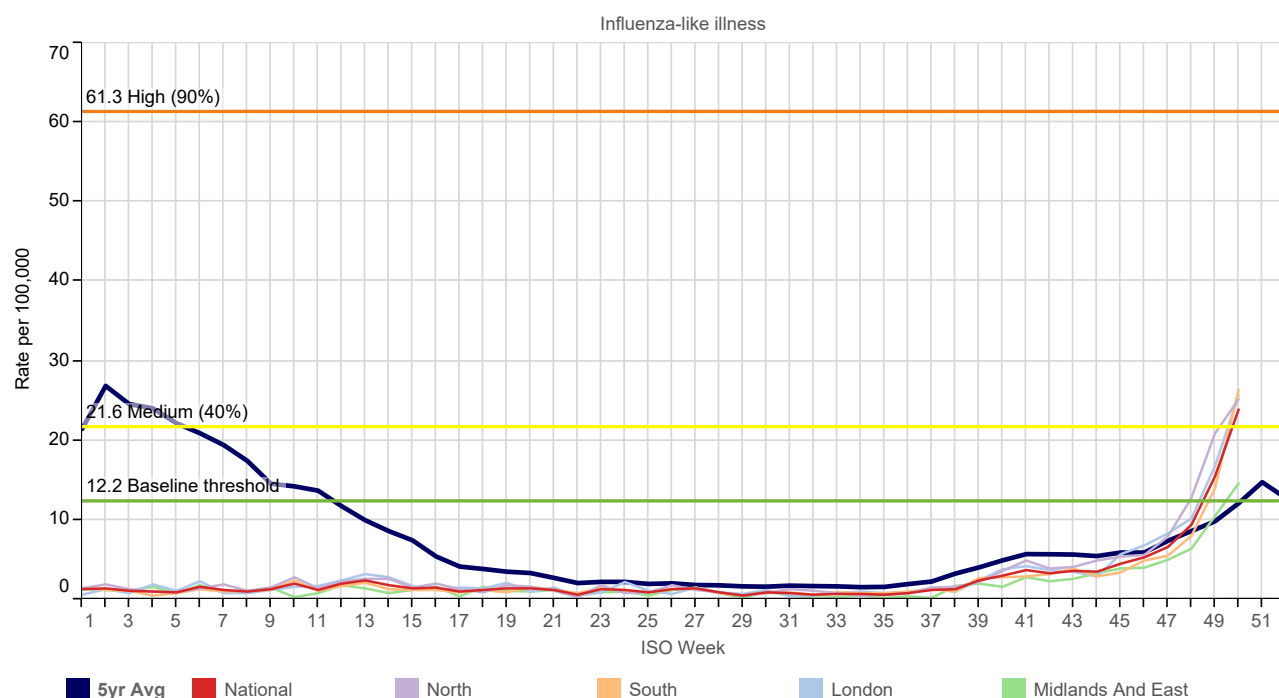
Rates of COVID-19 have increased in all regions and age bands except the population aged under 15 years. The number of cases have also increased in all regions and the highest rates were in the South region like those for ILI.

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

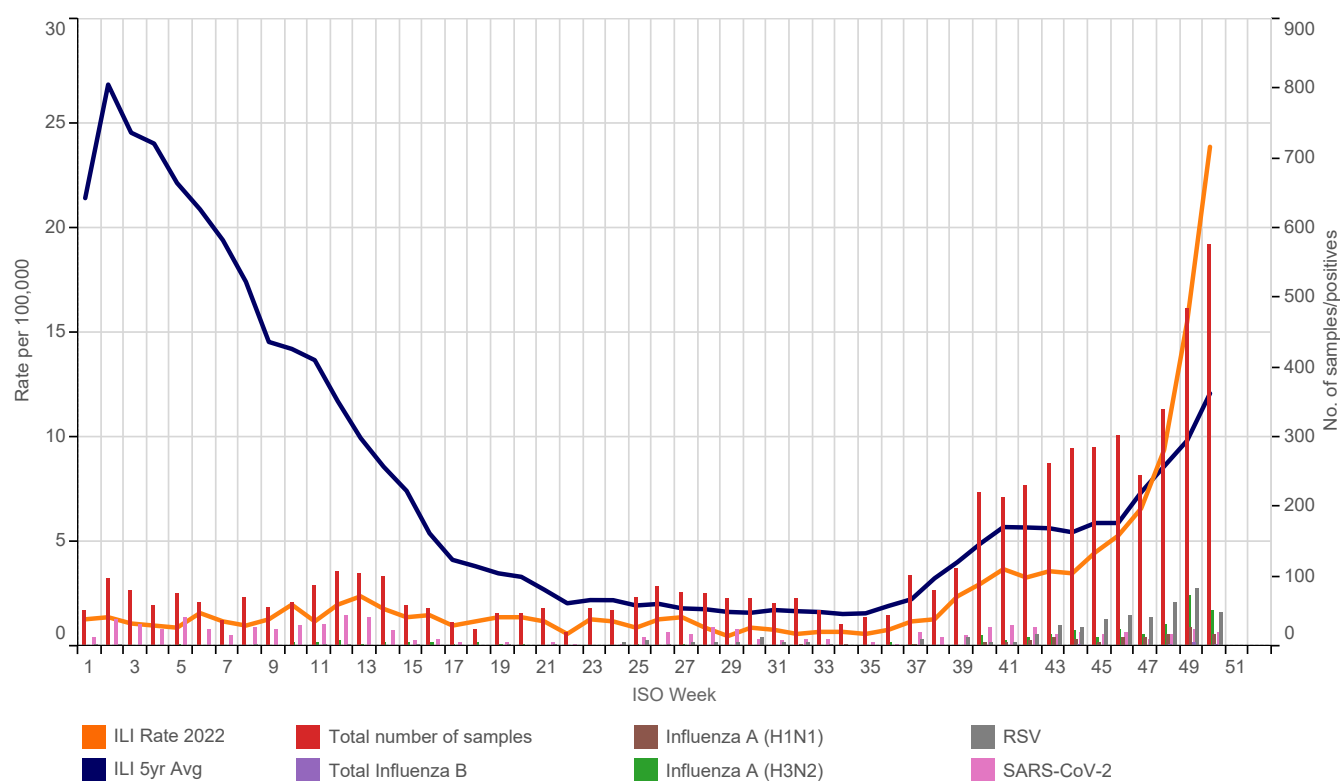
Winter Focus 2022

Please see page 15 for explanatory notes on the data.

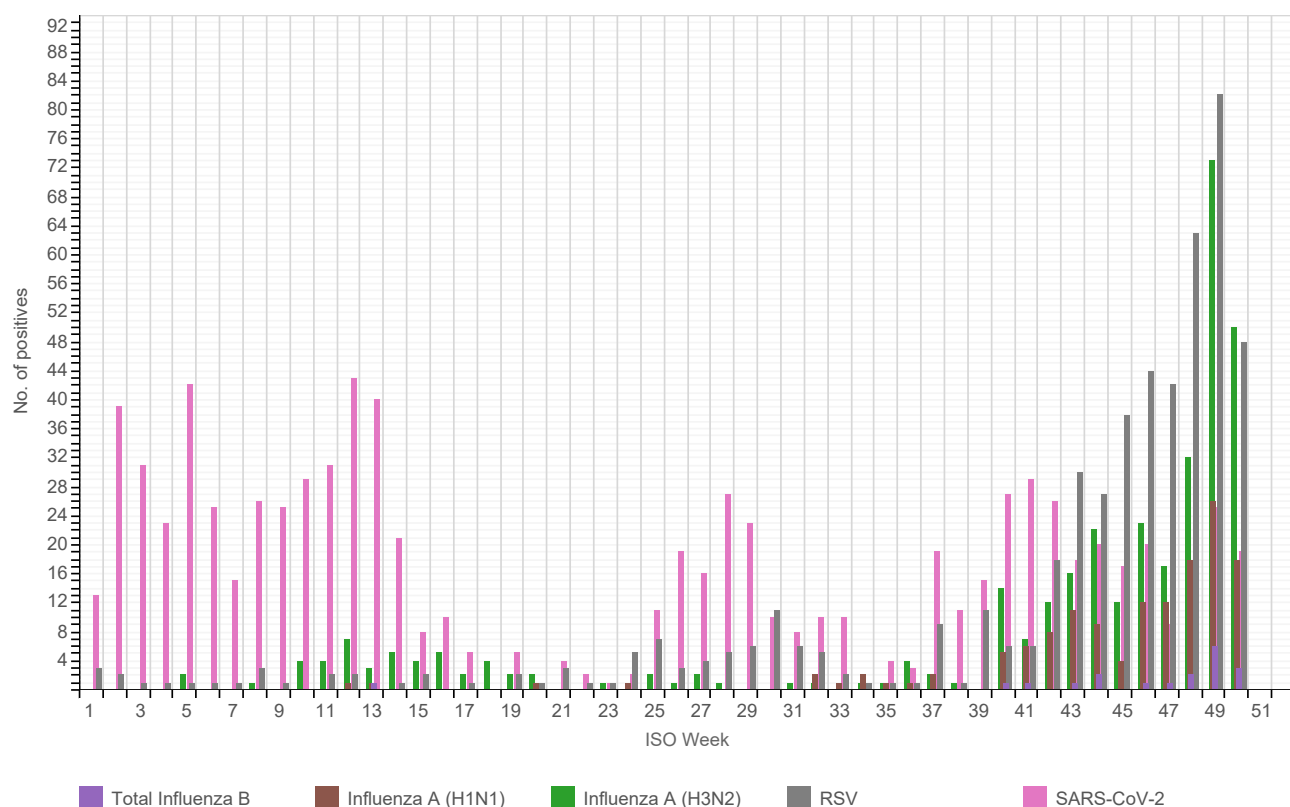
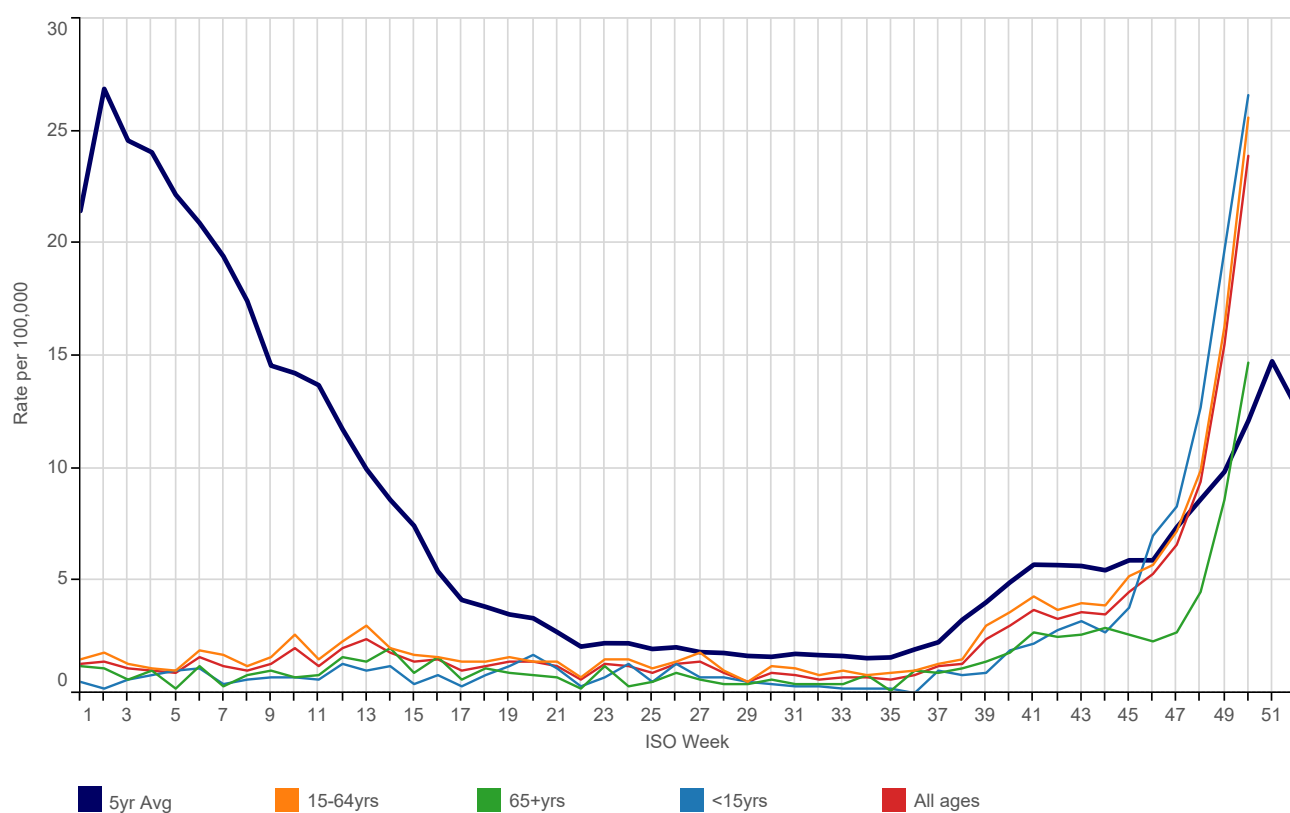
(A) Influenza-like illness: national incidence rate 2022 by region*



(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***

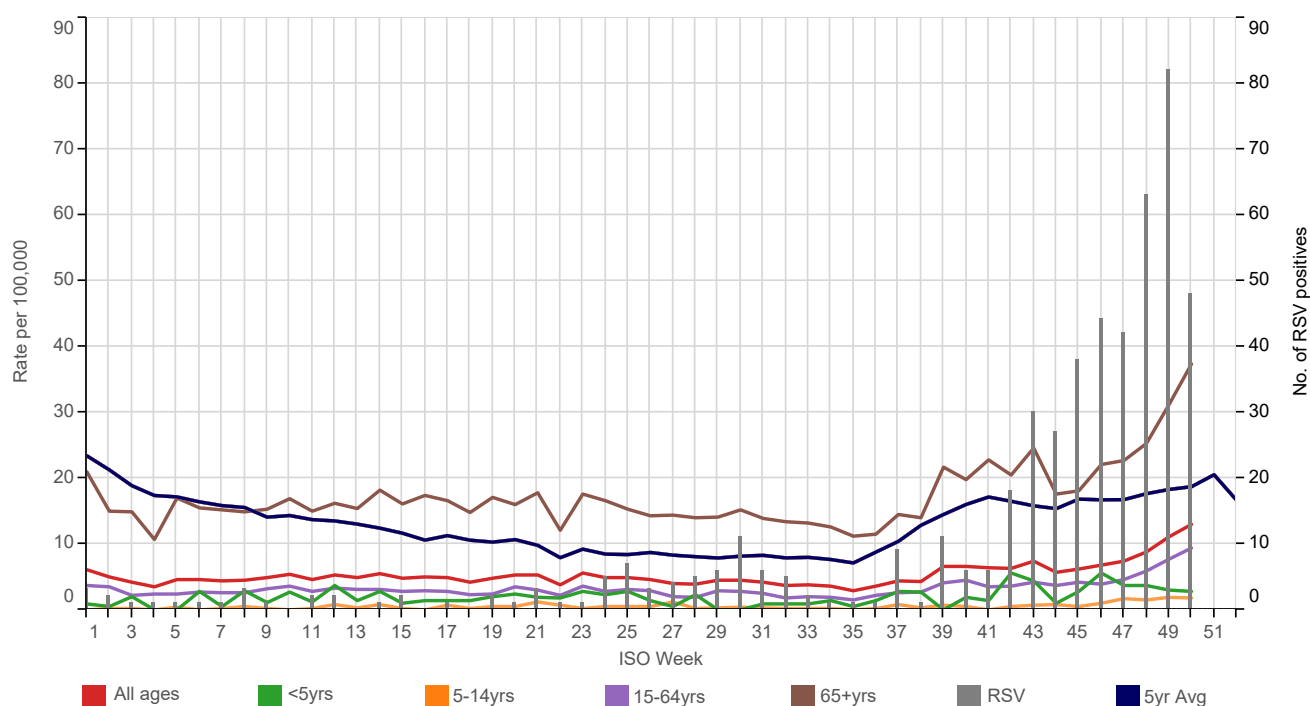
(E) Influenza-like illness: national incidence rate 2022 by age group*

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.

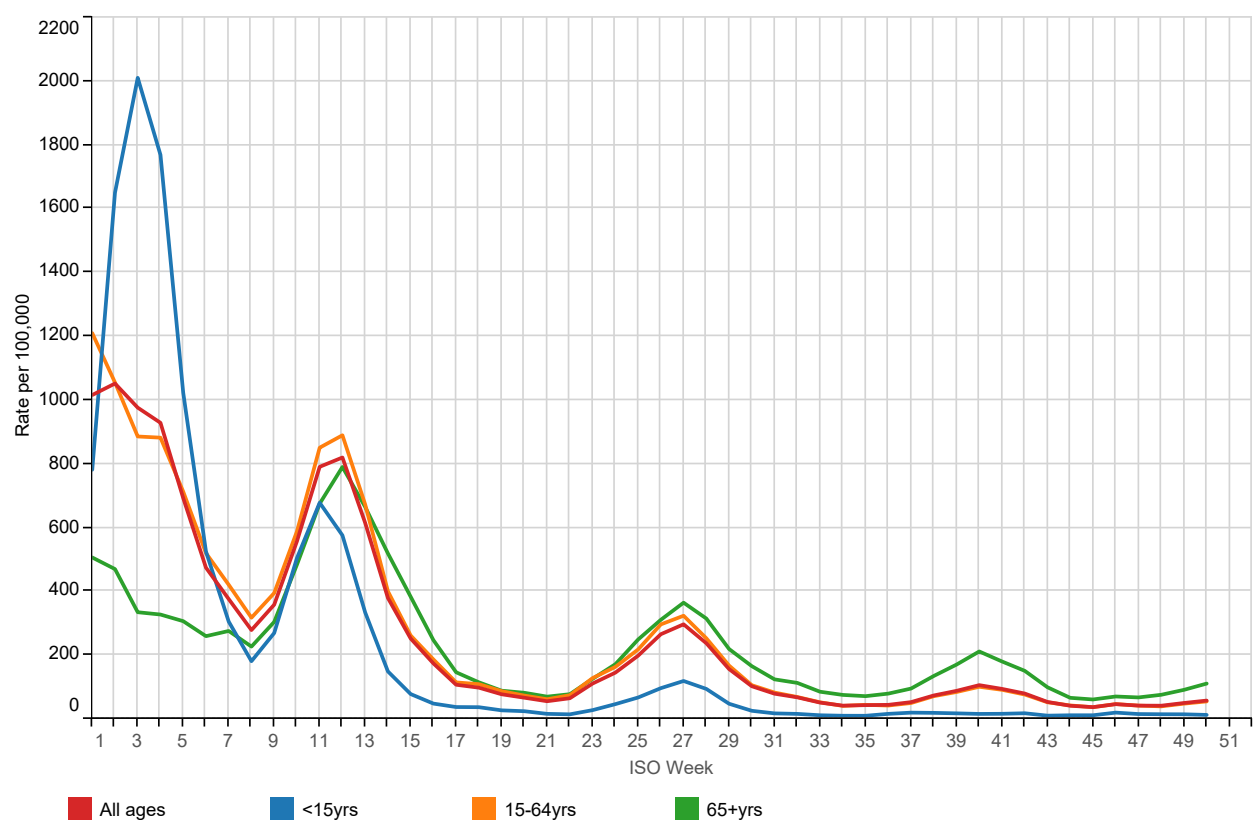
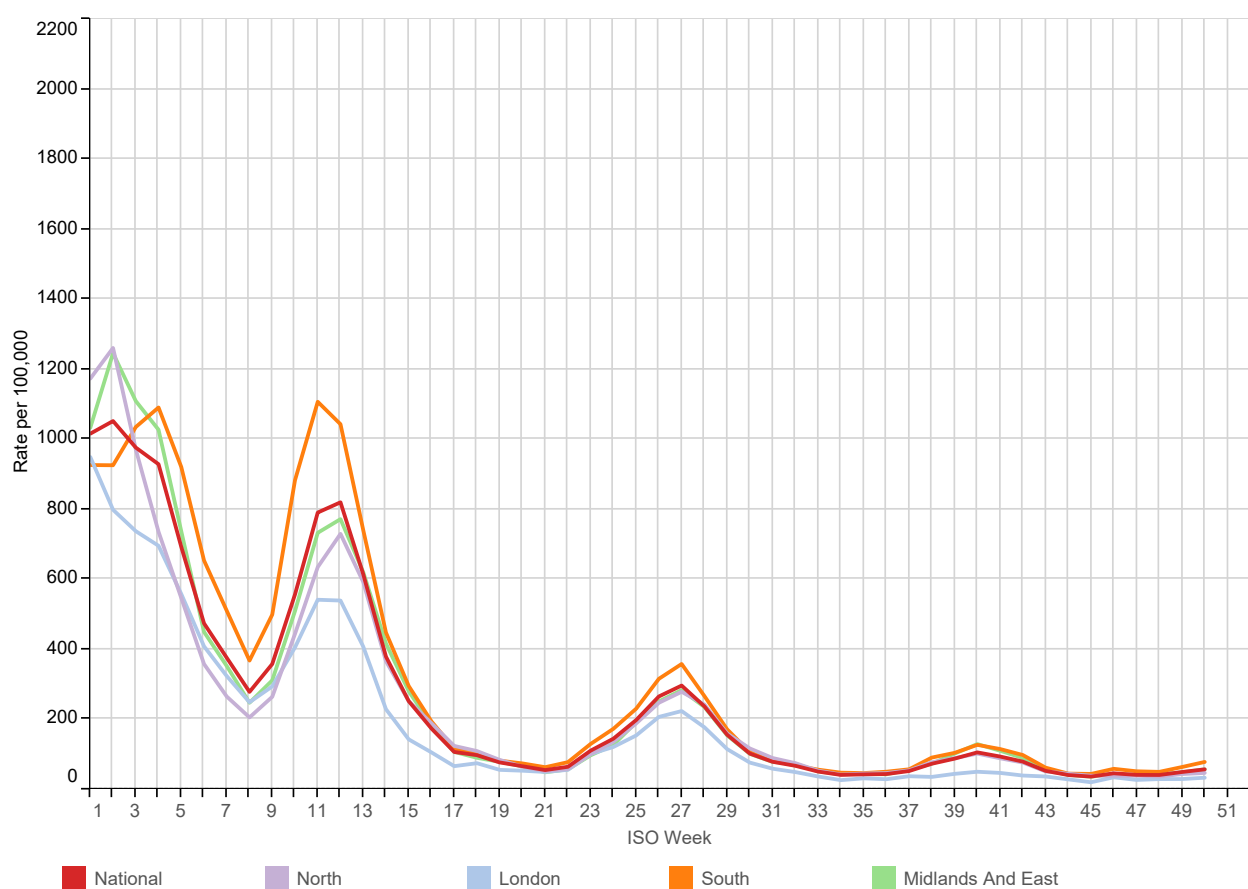
Table 1	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
<15yrs	0.3	0.8	1.2	1.7	1.1	0.3	0.7	1.3	0.5	1.3	0.7	0.7	0.5	0.4	0.3	0.3	0.2	0.2
15-64yrs	1.4	1.4	1.6	1.4	1.4	0.7	1.5	1.5	1.1	1.4	1.8	1.0	0.5	1.2	1.1	0.8	1.0	0.8
65+yrs	0.6	1.1	0.9	0.8	0.7	0.2	1.2	0.3	0.5	0.9	0.6	0.4	0.4	0.6	0.4	0.4	0.4	0.8
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	19.7	26.6		
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		
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		
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		

Table 2	Below Threshold ¹	Threshold to Medium ²	Medium to High ³	High to Very High ⁴	Above Very High ⁵	Threshold levels
All Ages	<12.2	12.2 to <21.6	21.6 to <61.3	61.3 to <97.3	97.3+	¹ Below baseline threshold
<15yrs	<10.7	10.7 to <17.6	17.6 to <47.7	47.7 to <74.1	74.1+	² 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+	³ 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+	⁴ 90th to <97.5th percentile
						⁵ 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**

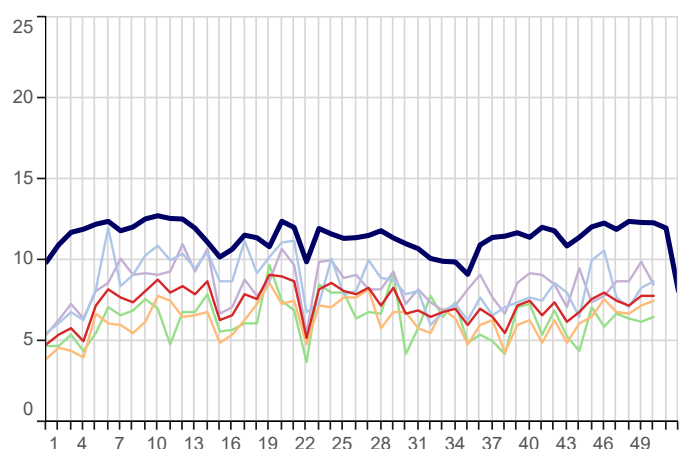
Influenza-like illness		Bronchitis		Influenza-like illness		Bronchitis	
<1yr	15.6	0.0	London	25.7	6.9		
1-4yrs	24.1	2.8	North	25.2	18.9		
5-14yrs	28.3	1.8	South	26.4	13.1		
15-24yrs	28.3	3.6	Midlands And East	14.6	10.7		
25-44yrs	30.9	6.7	National	23.9	13.0		
45-64yrs	18.0	15.1					
65-74yrs	11.3	32.2					
75-84yrs	14.4	47.0					
85+yrs	28.3	31.6					
All ages	23.9	13.0					

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

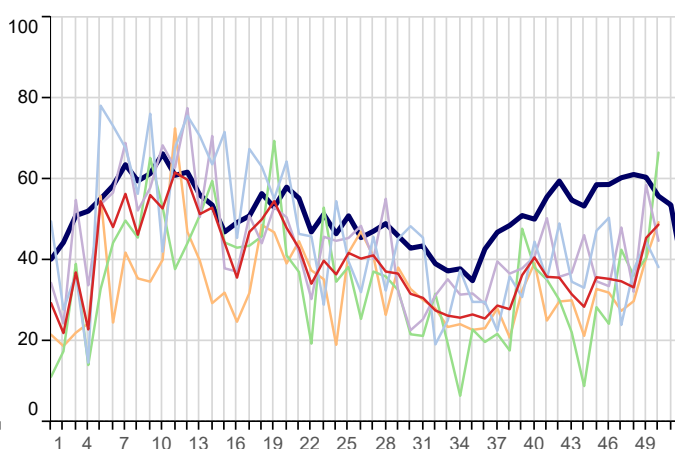
1. Water & Food Borne Disorders:

5yr Avg National London North South Midlands And East

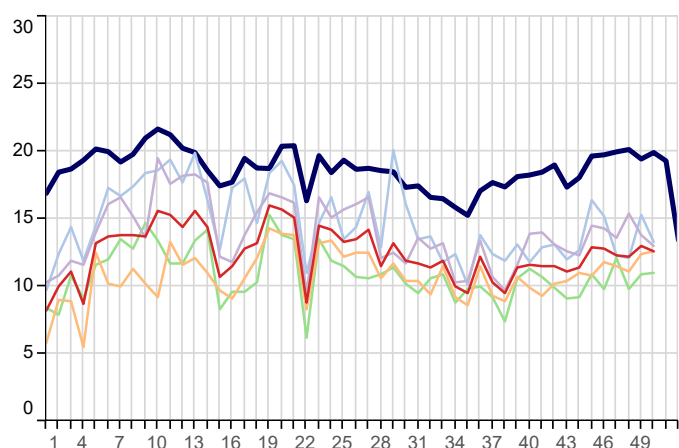
Infectious Intestinal Disease (ICD10: A00-A09)
Weekly incidence (per 100,000 **all ages**) by regions
for 2022 compared with 5 year average



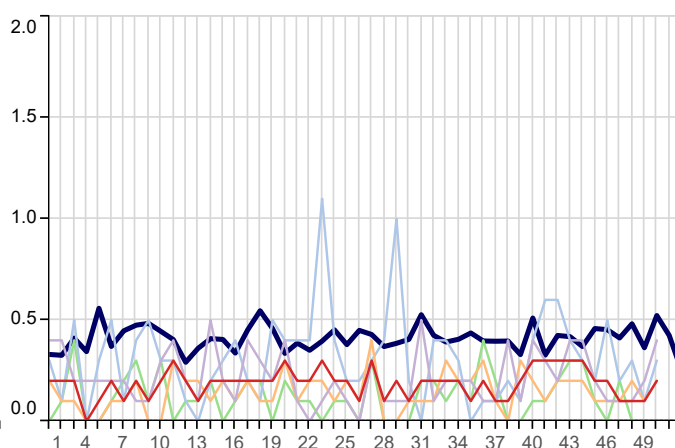
Infectious Intestinal Disease (ICD10: A00-A09)
Weekly incidence (per 100,000 **0-4 years**) by regions
for 2022 compared with 5 year average



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



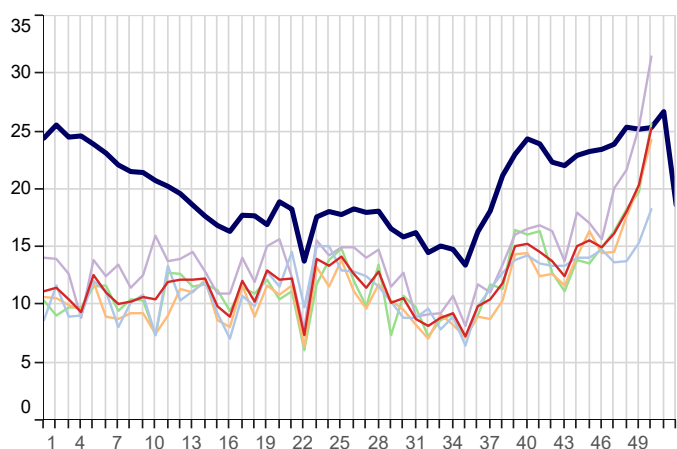
Viral Hepatitis (ICD10: B15-B19)
Weekly incidence (per 100,000 **all ages**) by region
for 2022 compared with 5 year average



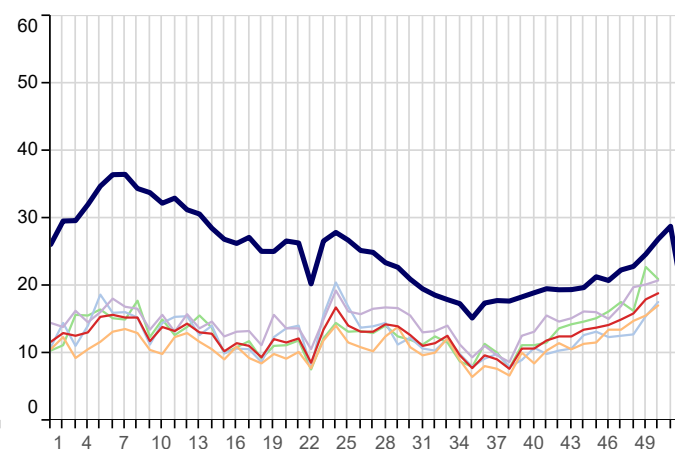
2. Environmentally Sensitive Disorders:

5yr Avg National London North South Midlands And East

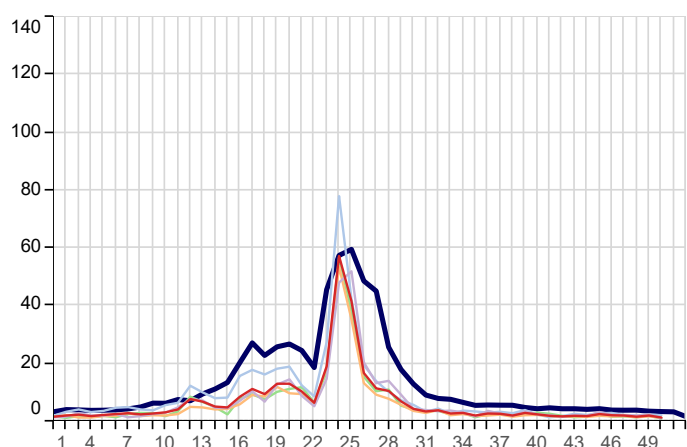
Asthma (ICD10: J45-J46)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



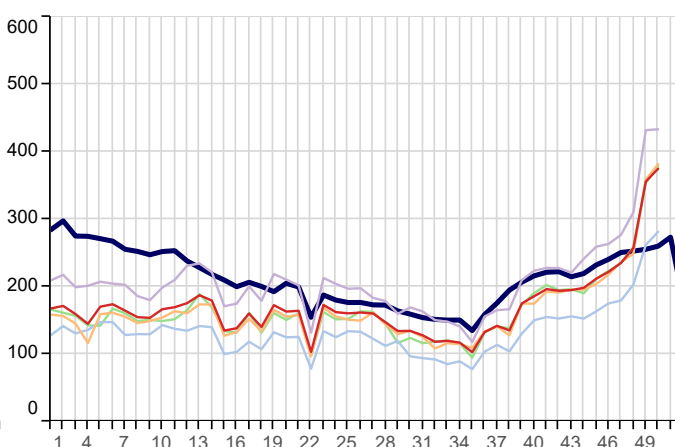
Disorders of Conjunctiva (ICD10: H10-H13)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



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



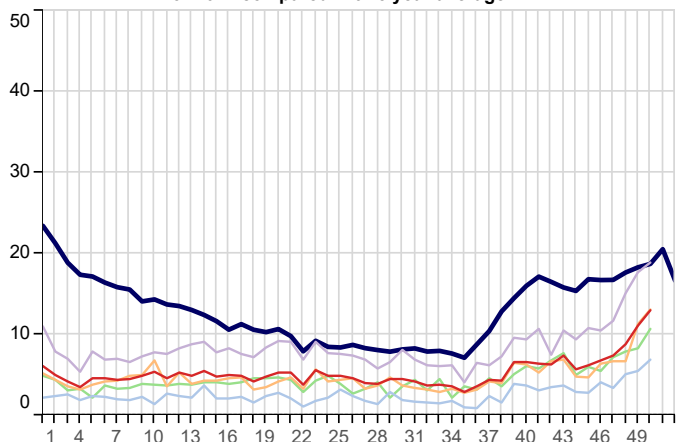
Symptoms involving Respiratory & Chest (ICD10: R05-R07,R09)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



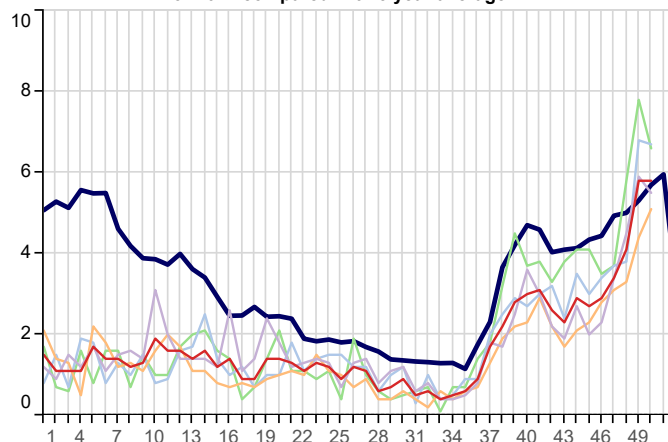
3. Respiratory Infections:

5yr Avg National London North South Midlands And East

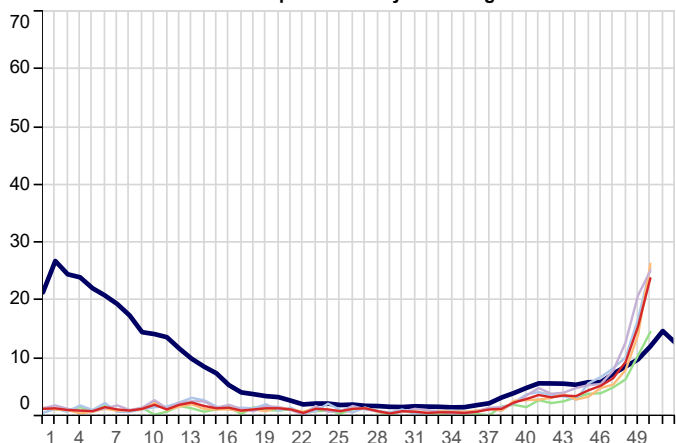
Acute Bronchitis (ICD10: J20-J21,J40)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



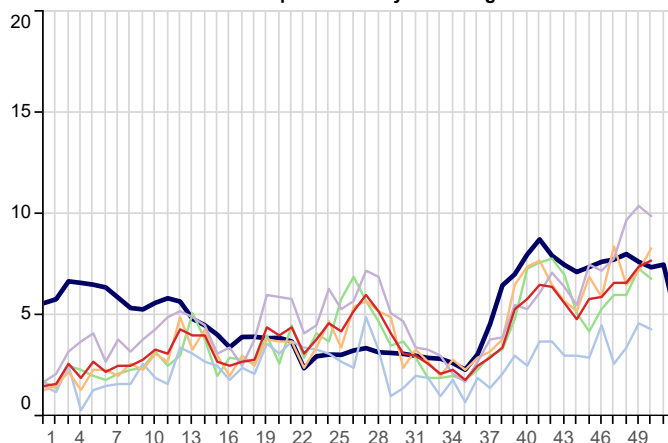
Common Cold (ICD10: J00,J06)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



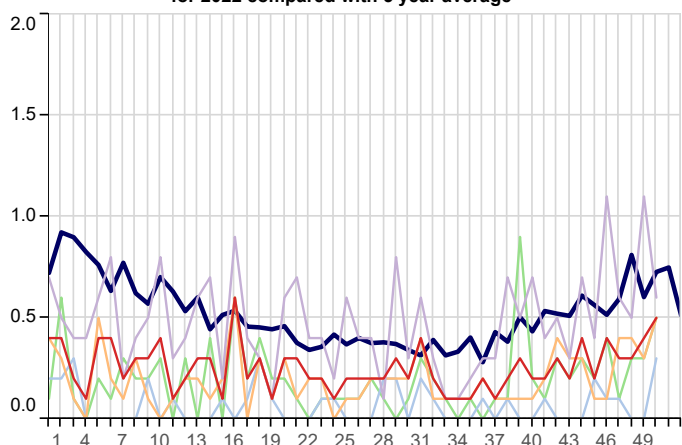
Influenza-like illness (ICD10: J09-J11)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



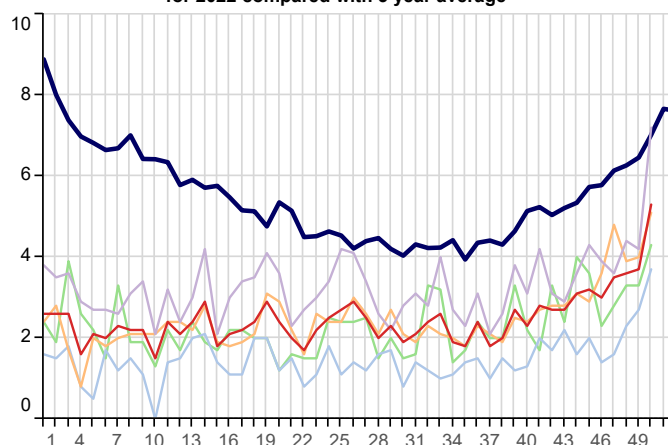
Acute Laryngitis/Tracheitis (ICD10: J04)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



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



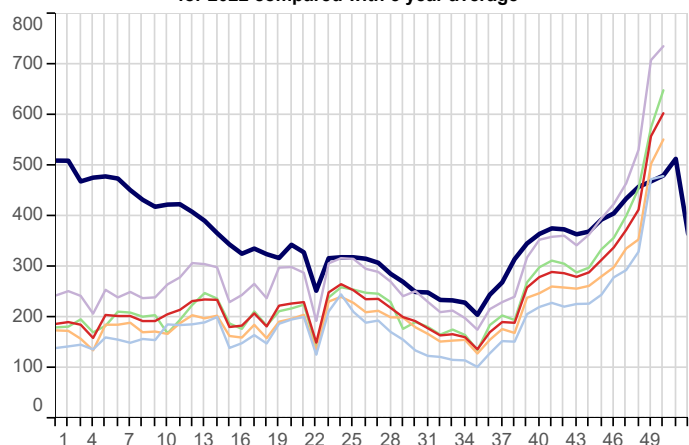
Pneumonia/Pneumonitis (ICD10: J12-J18)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



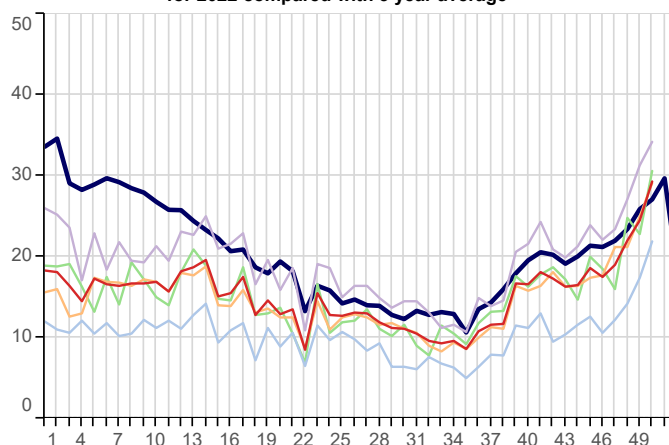
3. Respiratory Infections(Continued):

5yr Avg National London North South Midlands And East

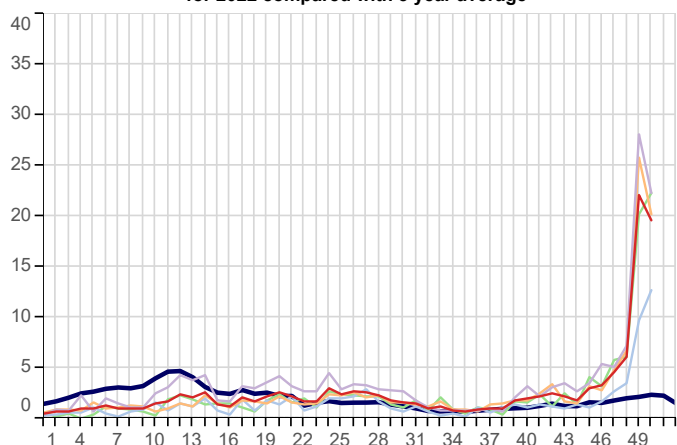
Respiratory System Diseases (ICD10: J00-J99)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



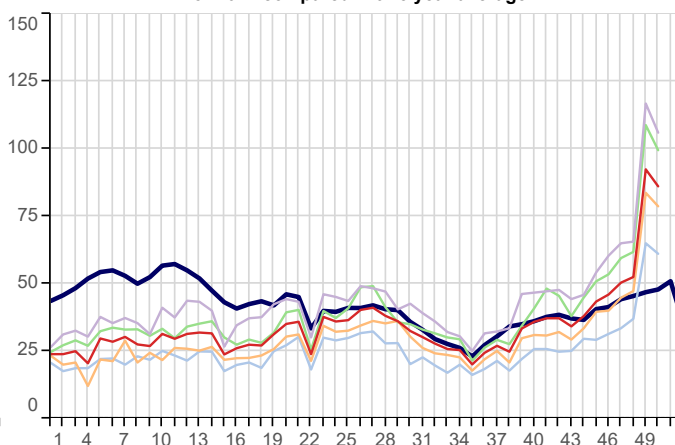
Acute Sinusitis (ICD10: J01)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



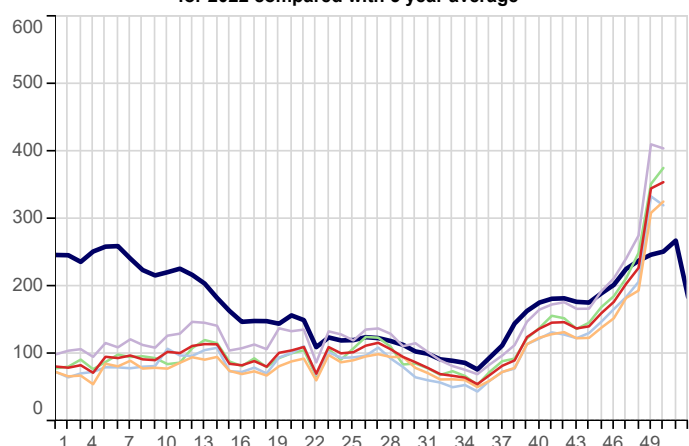
Strep Sore Throat, Scarletina and Peritonsillar Abscess (ICD10: A38,J020,J36)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



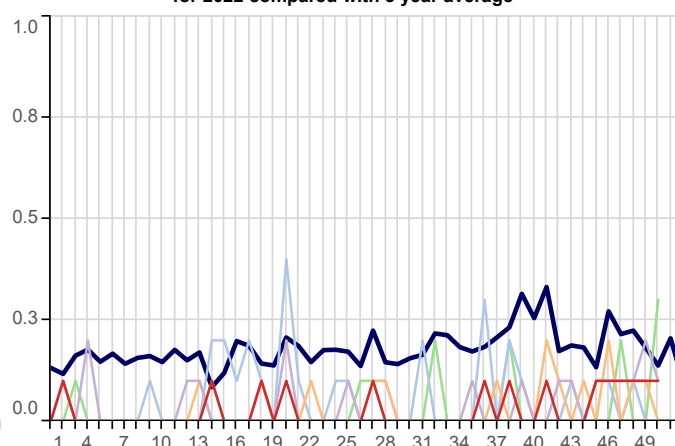
Acute Tonsillitis/Pharyngitis (ICD10: J02-J03)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



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



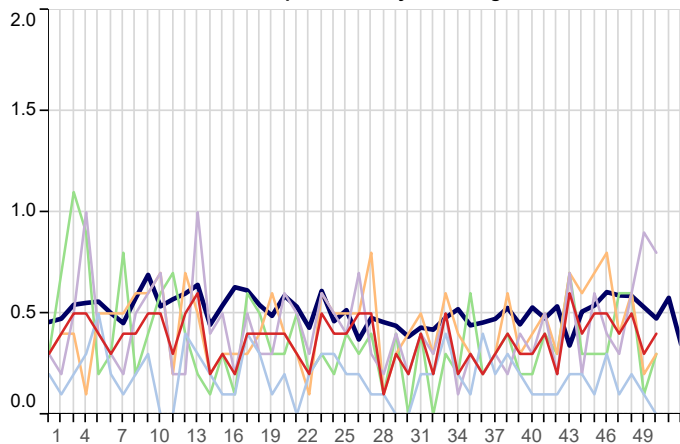
Whooping Cough (ICD10: A37)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



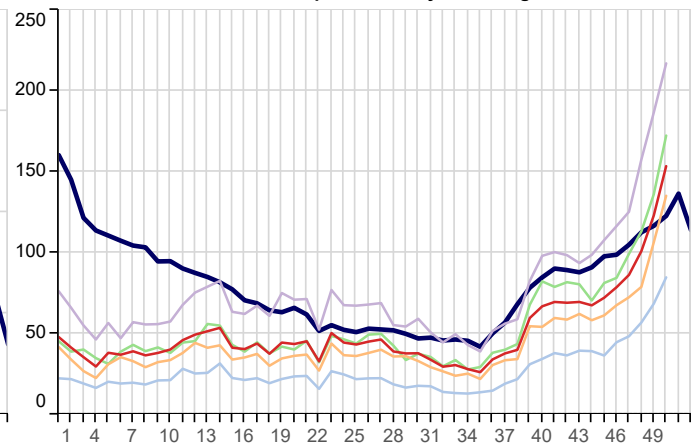
3. Respiratory Infections(Continued):

5yr Avg National London North South Midlands And East

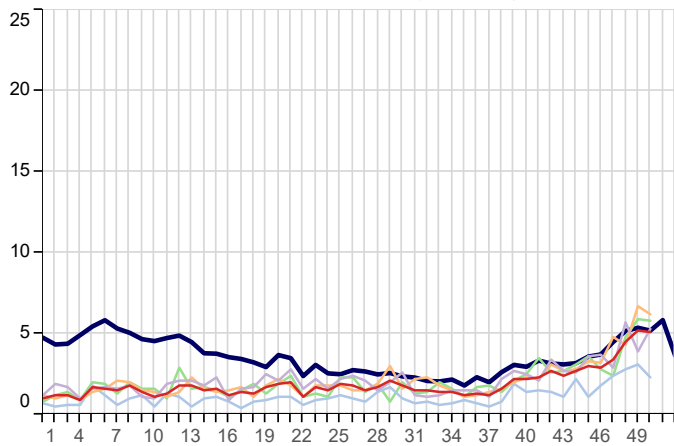
Infectious Mononucleosis (ICD10: B27)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



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



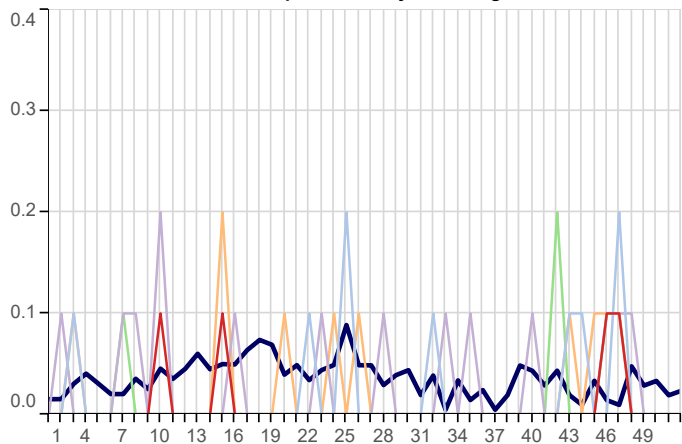
Acute Otitis Media (ICD10: H650-H651,H660,H669)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



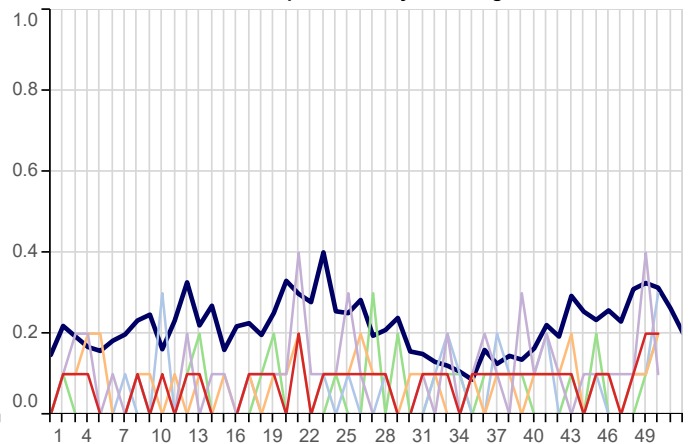
4. Vaccine Sensitive Disorders

5yr Avg National London North South Midlands And East

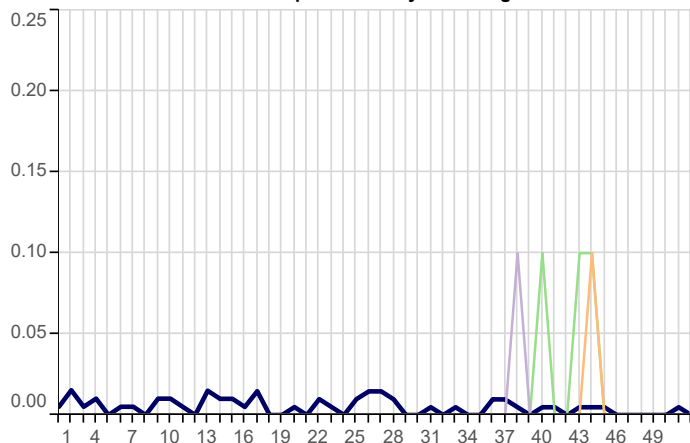
Measles (ICD10: B05)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



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

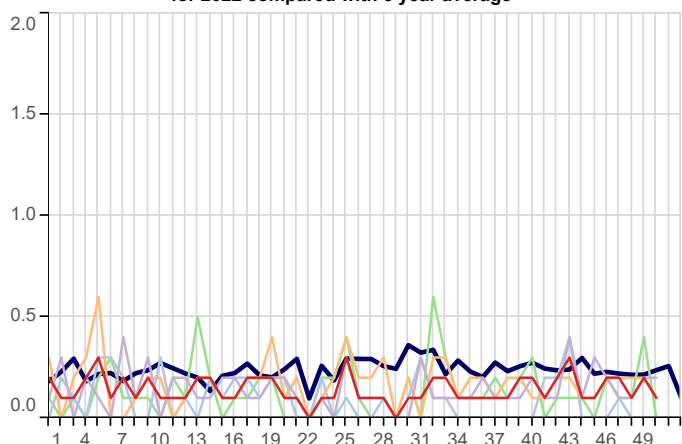


Rubella (ICD10: B06)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average

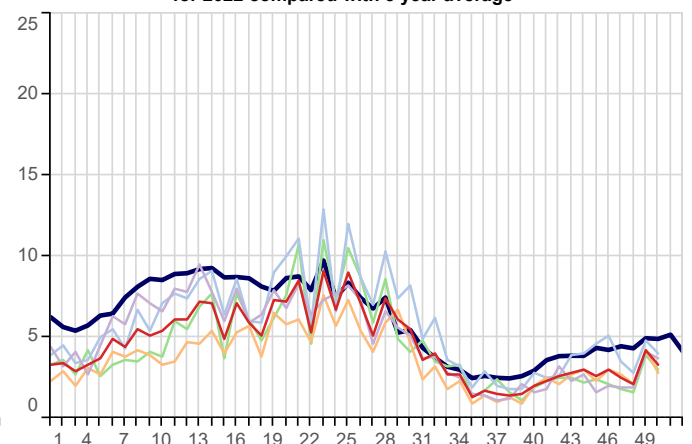


5. Skin Contagions

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



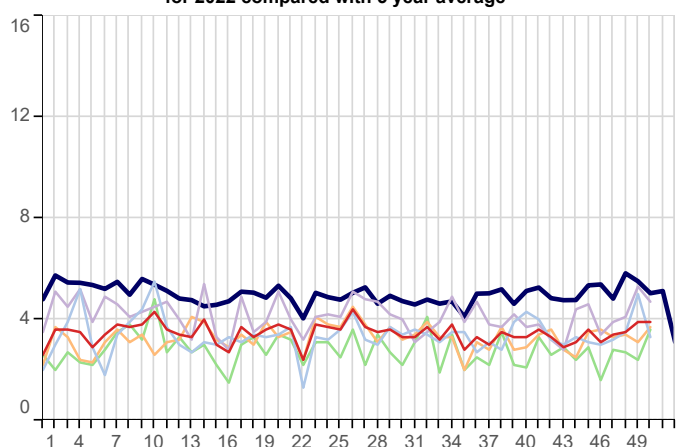
Chickenpox (ICD10: B01)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



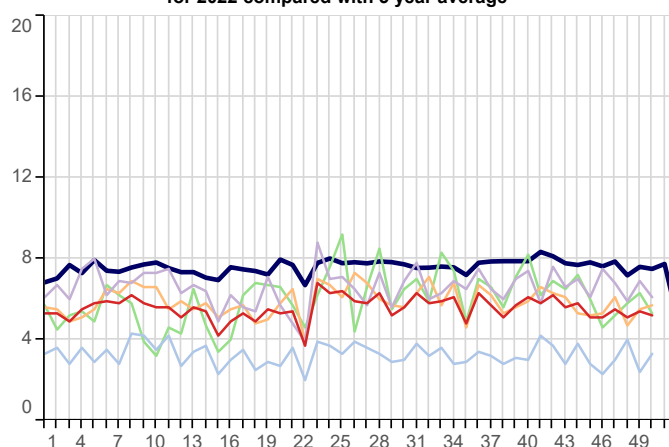
5. Skin Contagions (Continued)

5yr Avg National London North South Midlands And East

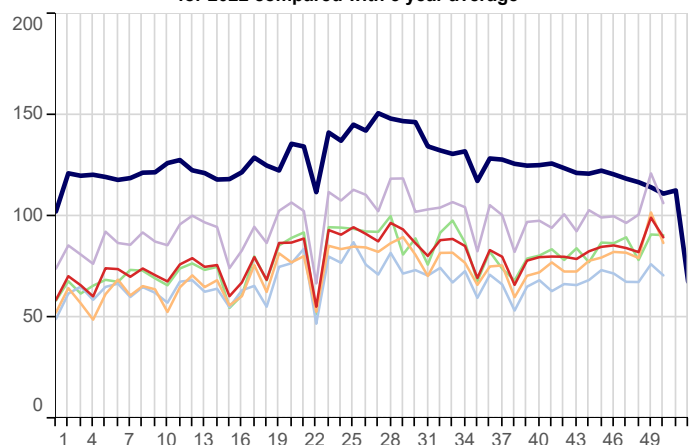
Herpes Simplex (ICD10: B00)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



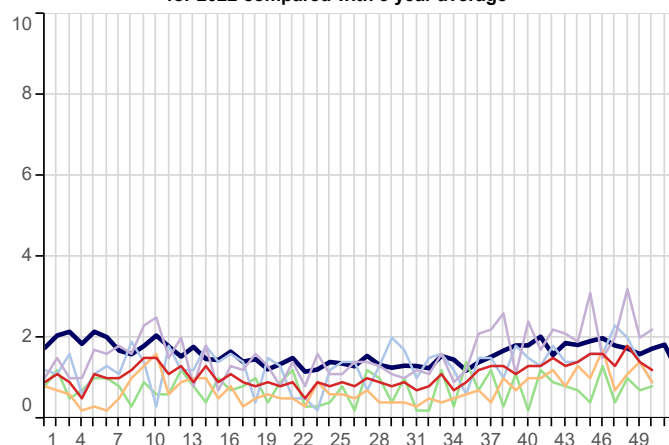
Herpes Zoster (ICD10: B02)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



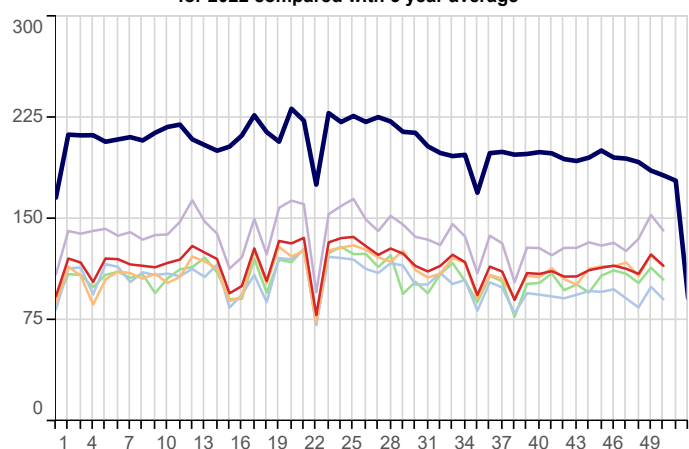
Infections of Skin & Subcutaneous Tissue (ICD10: L00-L08)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



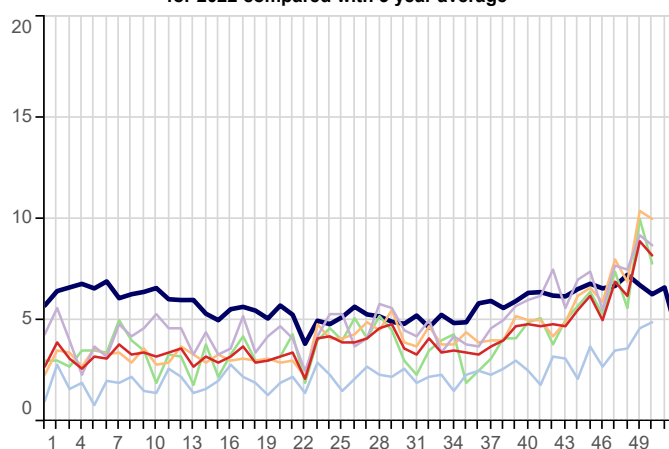
Scabies (ICD10: B86)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



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

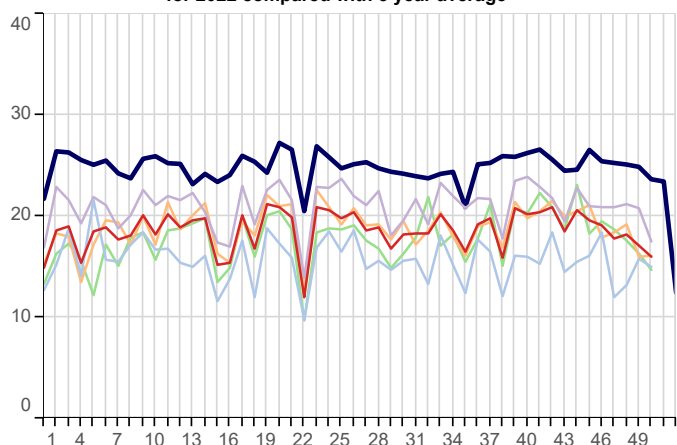
London

North

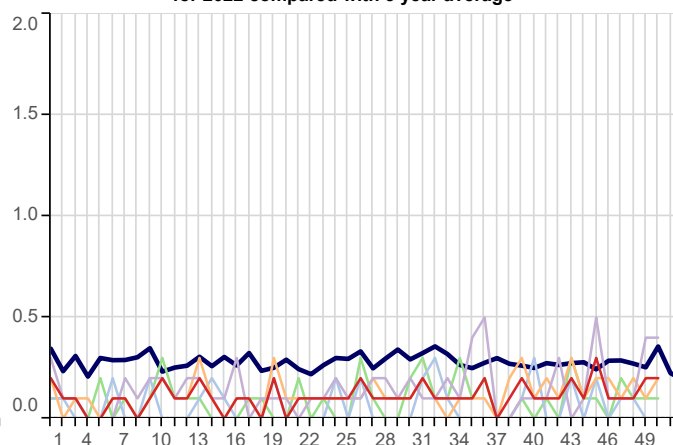
South

Midlands And East

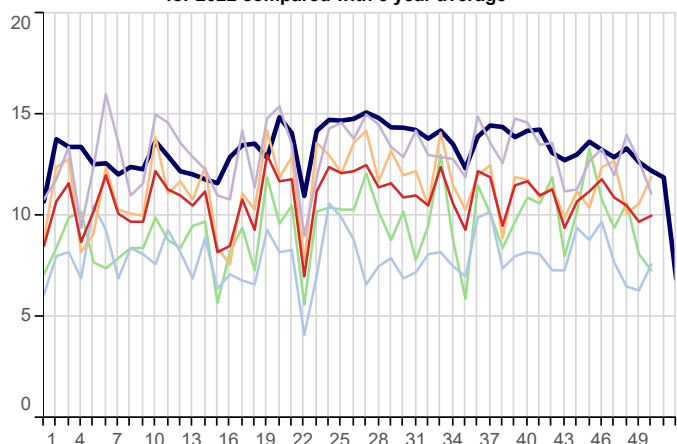
Disorders of The Peripheral Nervous System (ICD10: G50-G64,G70-G72)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



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

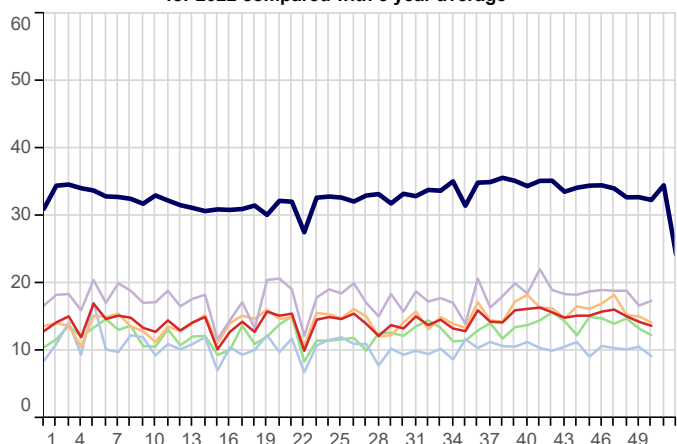


Symptoms Involving Nervous & Musculoskeletal (ICD10: R25-R29)
Weekly incidence (per 100,000 all ages) by region
for 2022 compared with 5 year average



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

Disease Name	Week beginning Week ending		12/12/2022 18/12/2022		05/12/2022 11/12/2022		28/11/2022 04/12/2022		21/11/2022 27/11/2022	
	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer
Allergic Rhinitis	1.4	73	2.1	105	1.7	91	2.1	107		
Asthma	25.3	1,315	20.4	1,004	18.1	945	16.2	844		
Bronchitis	13.0	676	11.1	545	8.8	459	7.4	387		
Bullous Dermatoses	0.1	5	0.2	9	0.1	5	0.2	8		
Chickenpox	3.3	172	4.2	208	2.1	110	2.5	129		
Common Cold	5.8	302	5.8	287	4.1	217	3.4	178		
Conjunctival Disorders	18.9	983	18.0	887	15.9	834	15.0	782		
Herpes Simplex	3.9	201	3.9	190	3.5	182	3.4	175		
Herpes Zoster	5.2	273	5.4	264	5.1	265	5.5	287		
Impetigo	8.2	429	8.9	439	6.2	323	6.9	358		
Infectious Mononucleosis	0.4	19	0.3	16	0.5	27	0.4	19		
Influenza-like illness	23.9	1,243	15.5	762	9.4	493	6.6	345		
Infectious Intestinal Diseases	7.8	407	7.8	386	7.2	379	7.5	390		
Laryngitis and Tracheitis	7.7	399	7.4	366	6.6	346	6.6	346		
Lower Respiratory Tract Infections	153.5	7,994	123.0	6,058	101.0	5,285	86.3	4,502		
Measles	0.0	0	0.0	0	0.0	1	0.1	5		
Meningitis and Encephalitis	0.2	10	0.2	8	0.1	7	0.1	6		
Mumps	0.2	10	0.2	8	0.1	3	0.0	1		
Non-infective Enteritis and Colitis	12.6	655	13.0	640	12.2	638	12.3	643		
Otitis Media Acute	5.1	265	5.2	256	4.5	234	3.4	176		
Peripheral Nervous Disease	16.0	834	17.1	843	18.2	953	17.8	928		
Pleurisy	0.5	25	0.4	20	0.3	18	0.3	17		
Pneumonia and Pneumonitis	5.3	274	3.7	180	3.6	189	3.5	181		
Respiratory System Diseases	603.7	31,439	558.2	27,482	413.1	21,624	373.0	19,461		
Rubella	0.0	0	0.0	0	0.0	0	0.0	0		
Scabies	1.2	63	1.4	70	1.8	94	1.3	69		
Sinusitis	29.3	1,525	24.5	1,208	22.0	1,150	19.0	993		
Skin and Subcutaneous Tissue Infections	89.6	4,664	99.3	4,887	82.3	4,310	84.3	4,397		
Strep Throat and Peritonsillar Abscess	19.6	1,021	22.1	1,089	6.1	318	4.6	241		
Symptoms involving musculoskeletal	10.0	520	9.7	480	10.5	549	10.9	569		
Symptoms involving Respiratory and Chest	375.0	19,531	355.8	17,516	257.3	13,469	235.2	12,270		
Symptoms involving Skin and Integument Tissues	115.4	6,008	123.7	6,090	109.3	5,722	113.1	5,899		
Tonsillitis and acute Pharyngitis	86.1	4,485	92.4	4,550	52.5	2,749	50.4	2,632		
Upper Respiratory Tract Infections	354.6	18,465	345.3	17,000	227.5	11,910	203.9	10,637		
Urinary Tract Infections	13.7	714	14.3	702	15.1	791	16.1	838		
Viral Hepatitis	0.2	13	0.1	4	0.1	7	0.1	7		
Whooping Cough	0.1	4	0.1	3	0.1	5	0.1	4		
Practice Count		501		462		504		504		
Denom		5,207,641		4,923,368		5,234,198		5,217,795		

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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