

RSC Communicable and Respiratory Disease Report for England

Key Statistics:

Week Number/Year..... 39/2023
 Week Starting - Ending..... 25/09/2023 - 01/10/2023
 No. of Practices..... 1,526
 Population..... 15,036,587

National (England)

- **Acute Bronchitis** : increased from 6.7 in week 38 to 7.7 in week 39.
- **Asthma** : decreased from 9.6 in week 38 to 9.5 in week 39.
- **Common Cold** : increased from 1.9 in week 38 to 2.7 in week 39.
- **Influenza-like illness** : increased from 1.8 in week 38 to 2.8 in week 39.
- **Respiratory System Diseases** : increased from 254.2 in week 38 to 290.0 in week 39.
- **COVID-19** : increased from 24.7 in week 38 to 32.6 in week 39.

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

- **Acute Bronchitis** : increased from 3.2 in week 38 to 4.6 in week 39 in the London region, increased from 9.8 in week 38 to 11.4 in week 39 in the North region, increased from 6.0 in week 38 to 6.4 in week 39 in the South region, and increased from 7.0 in week 38 to 8.2 in week 39 in the Midlands And East region.
- **Asthma** : increased from 7.6 in week 38 to 8.4 in week 39 in the London region, increased from 9.6 in week 38 to 9.9 in week 39 in the North region, decreased from 10.6 in week 38 to 9.8 in week 39 in the South region, and was unchanged at 9.8 in week 38 and 9.8 in week 39 in the Midlands And East region.
- **Common Cold** : increased from 1.9 in week 38 to 3.3 in week 39 in the London region, increased from 2.0 in week 38 to 2.3 in week 39 in the North region, increased from 1.7 in week 38 to 2.5 in week 39 in the South region, and increased from 2.2 in week 38 to 2.7 in week 39 in the Midlands And East region.
- **Influenza-like illness** : increased from 2.5 in week 38 to 3.8 in week 39 in the London region, increased from 2.4 in week 38 to 3.0 in week 39 in the North region, increased from 1.2 in week 38 to 2.5 in week 39 in the South region, and increased from 1.3 in week 38 to 2.1 in week 39 in the Midlands And East region.
- **Respiratory System Diseases** : increased from 197.1 in week 38 to 226.5 in week 39 in the London region, increased from 302.1 in week 38 to 347.9 in week 39 in the North region, increased from 242.8 in week 38 to 278.2 in week 39 in the South region, and increased from 261.7 in week 38 to 297.2 in week 39 in the Midlands And East region.
- **COVID-19** : increased from 14.5 in week 38 to 16.9 in week 39 in the London region, increased from 27.5 in week 38 to 37.6 in week 39 in the North region, increased from 28.0 in week 38 to 36.4 in week 39 in the South region, and increased from 25.2 in week 38 to 35.6 in week 39 in the Midlands And East region.

Comment:

Overall presentations with respiratory infections have increased this week though they are below the levels usually seen at this time of year in most regions, though are closer to the seasonal average in the North (page 9).

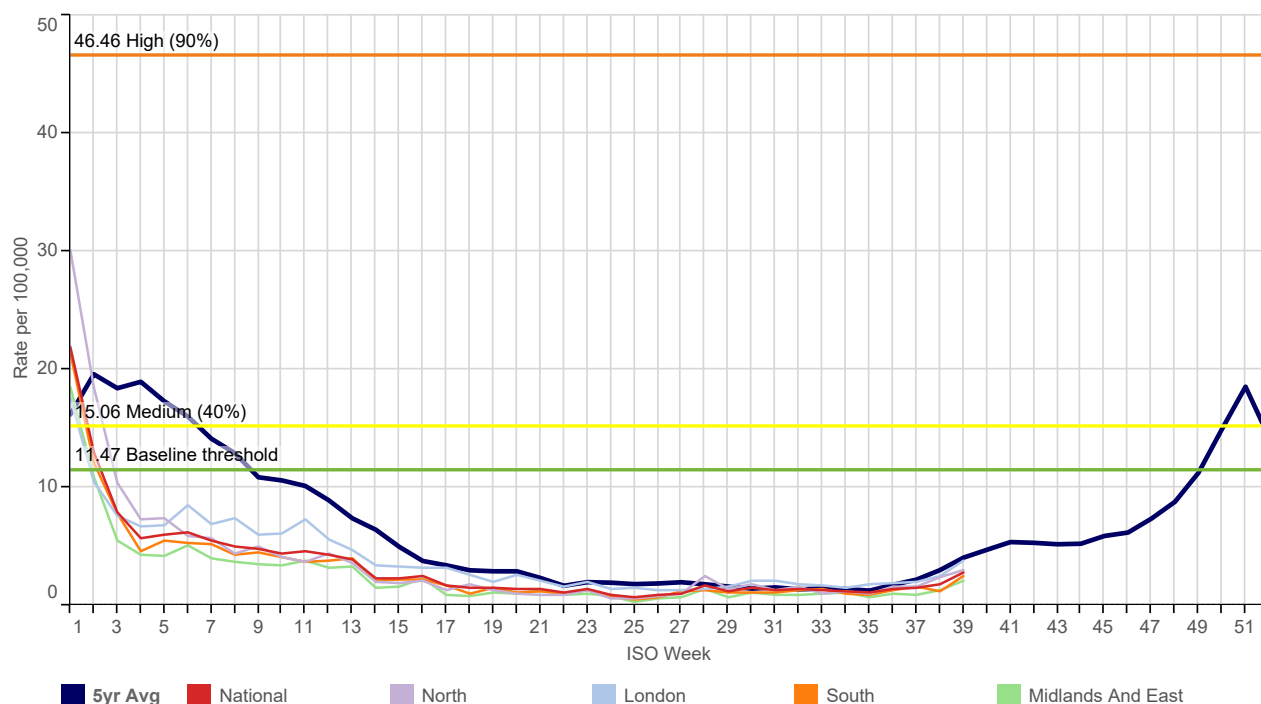
Rates of COVID-19 have continued to increase in all regions and age bands. Influenza-like illness rates have increased and nationally, increasing by over 50% this week compared to last week although rates remains below the seasonal average. Scabies rates remain above the seasonal norm particularly in the North and London regions (page 12).

This report includes a virology update. SARS-CoV-2 and human rhinovirus are the predominant circulating viruses detected.

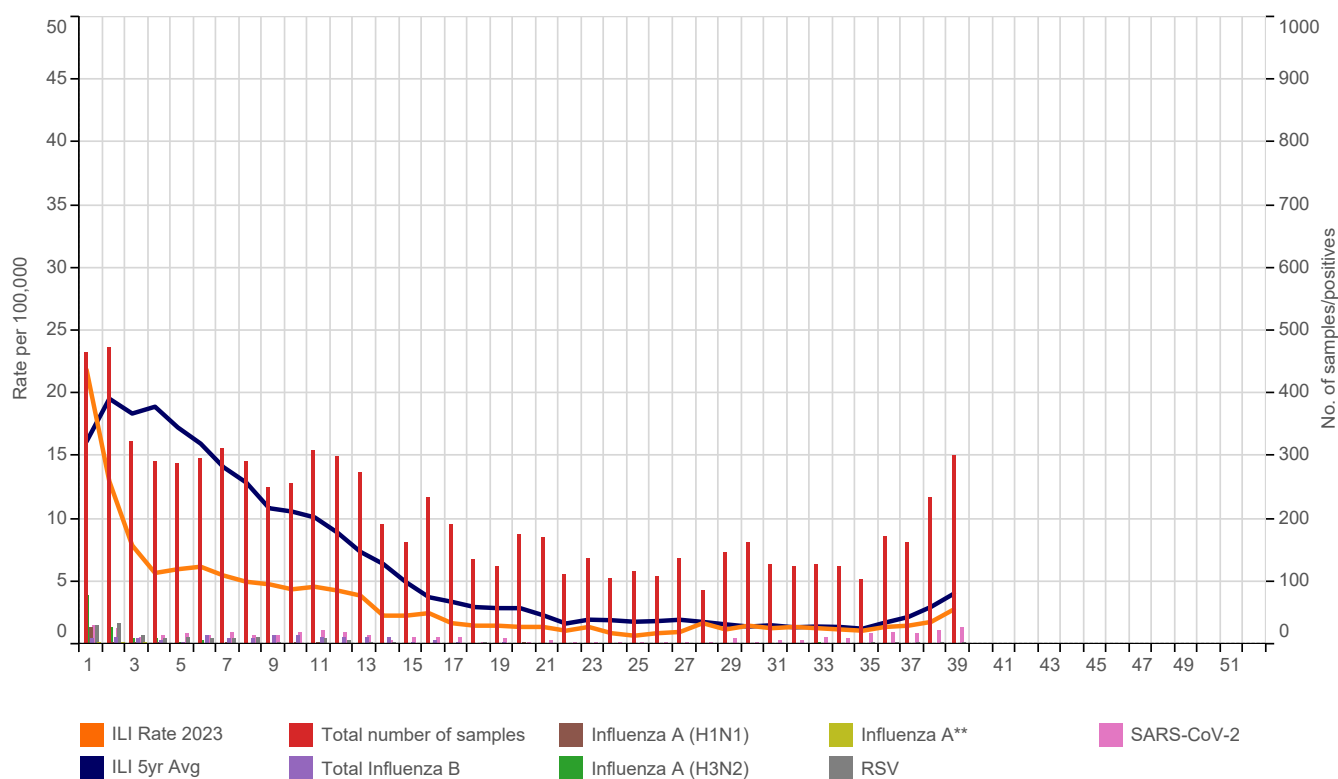
2023 Focus

Please see page 15 for explanatory notes on the data.

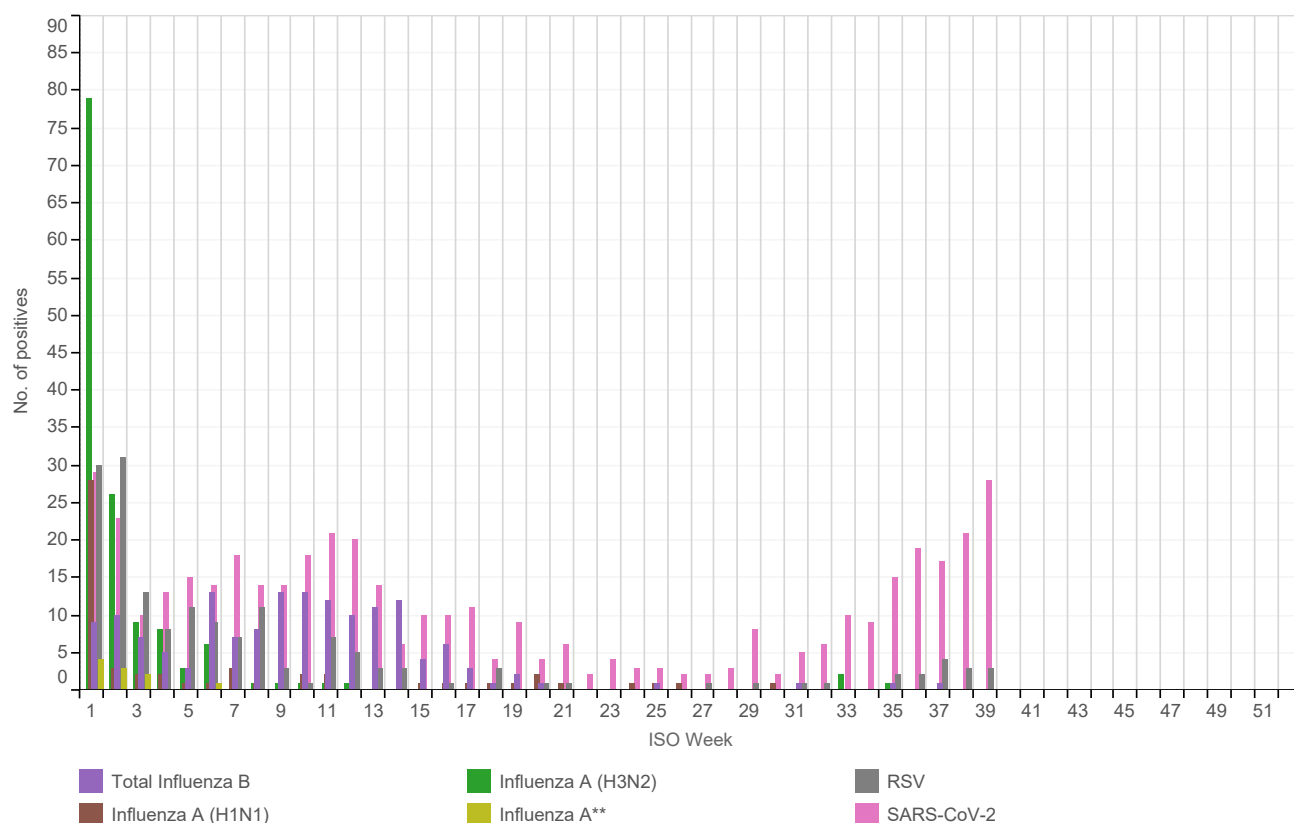
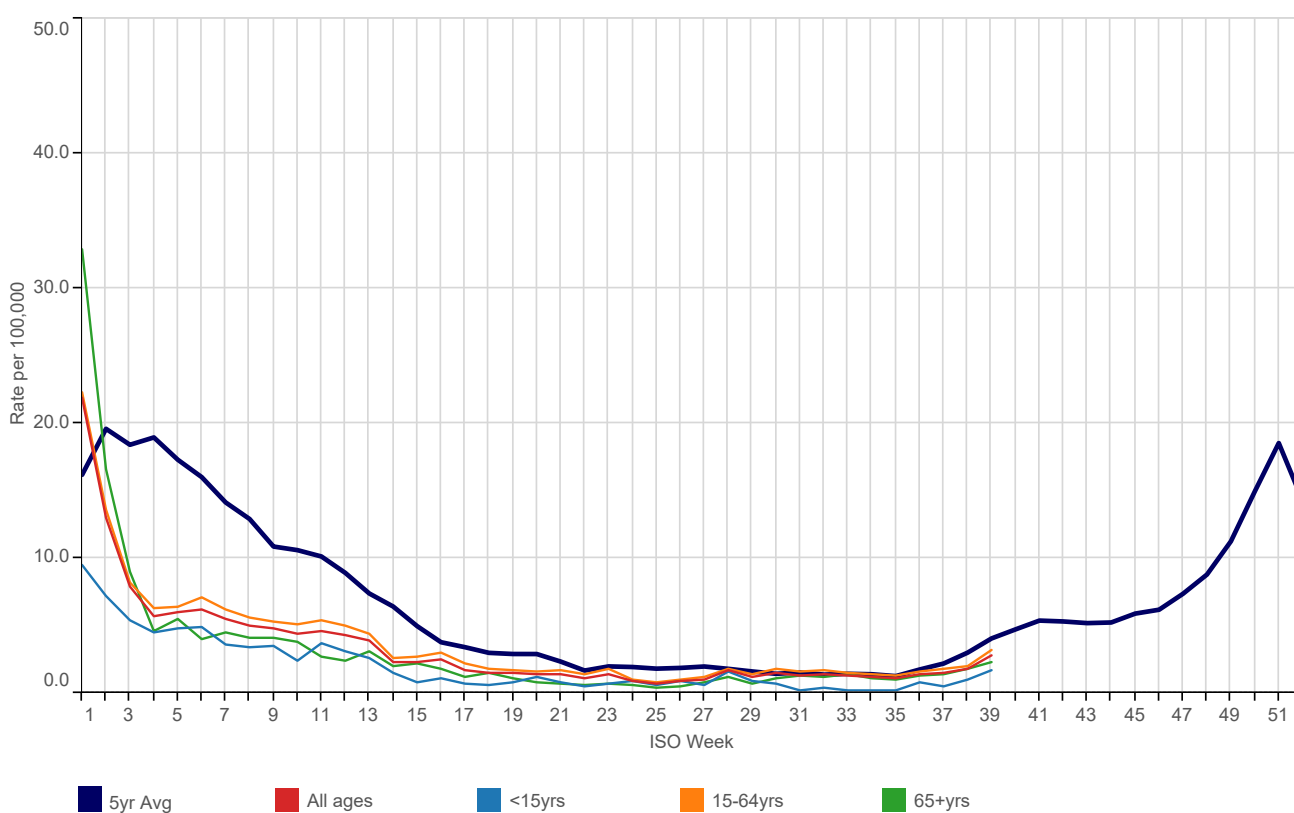
(A) Influenza-like illness: national incidence rate 2023 by region*



(B) RCGP/UKHSA RSV, Influenza and SARS-CoV-2 Virology Swab Surveillance 2023*



* The seasonal average line (blue) is based on 5 year historic RCGP RSC data (Graph A & B). The weekly virology samples displayed are offset from the ISO Week (Graphs B & C). **No specified subtype, or coinfection with H1N1 and H3N2.

(C) RCGP/UKHSA RSV, Influenza and SARS-CoV-2 Virology Swab Surveillance 2023 by viral strain***(D) Influenza-like illness: national incidence rate 2023 by age group***

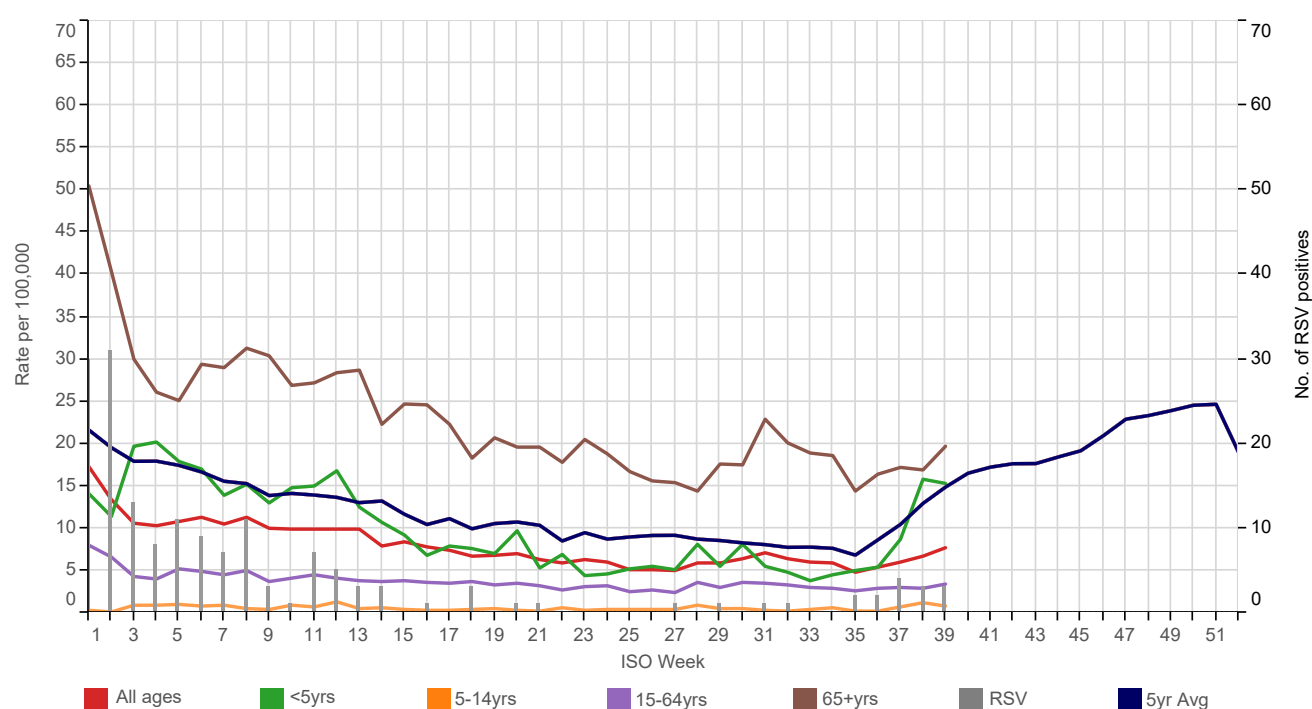
(E) Influenza-like illness: national incidence rate 2023 by age group*

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.

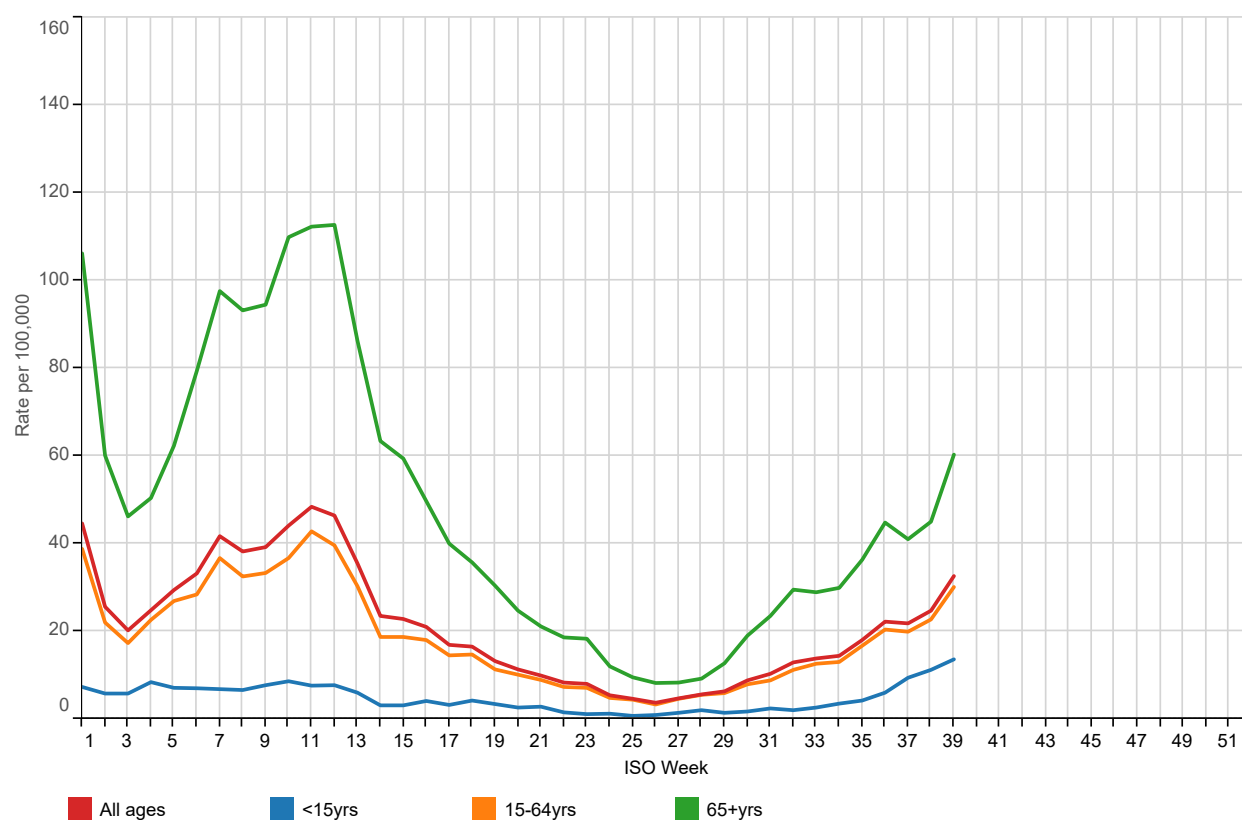
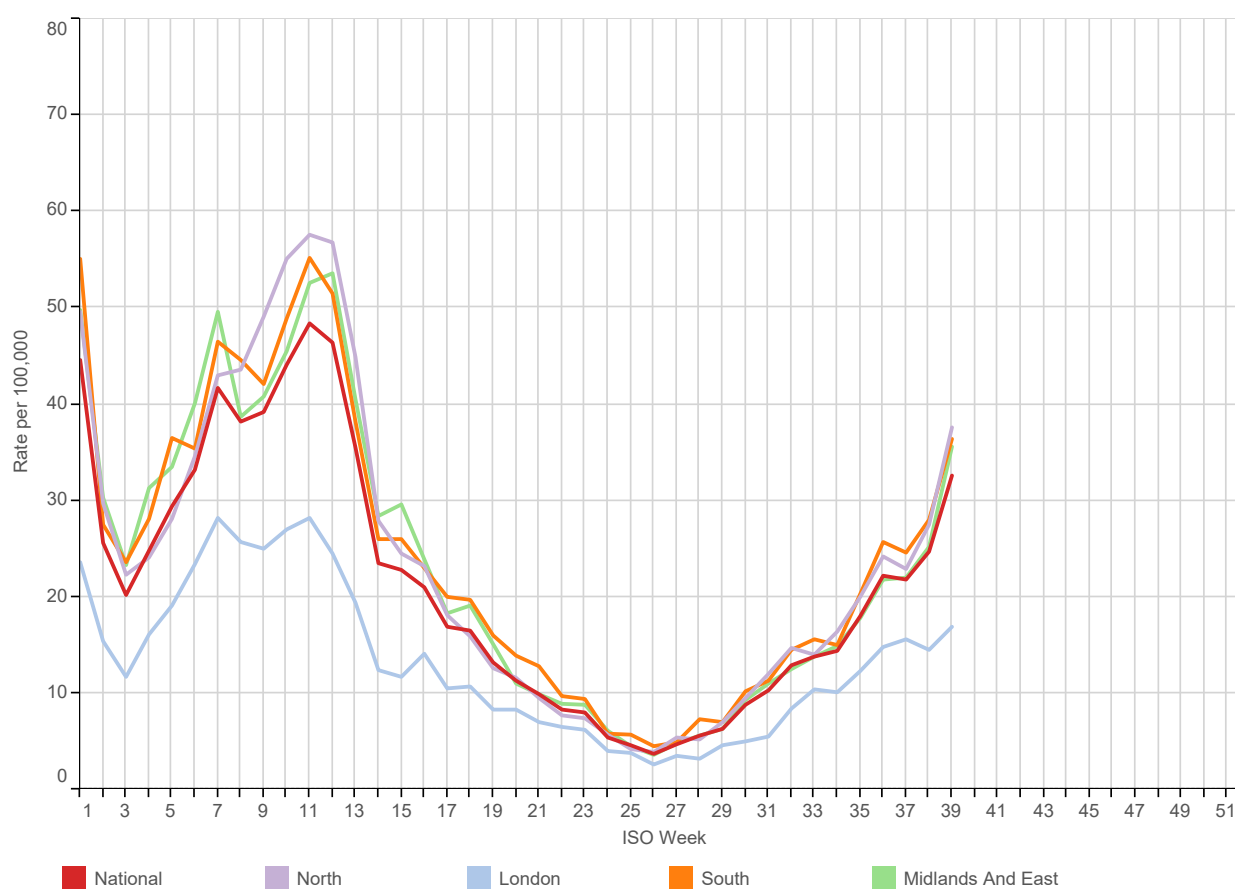
Table 1	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
15-64yrs	2.2	1.8	1.7	1.6	1.7	1.4	1.8	1.0	0.8	1.0	1.2	1.8	1.4	1.8	1.6	1.7	1.5	1.4
65+yrs	1.2	1.5	1.1	0.8	0.7	0.6	0.7	0.6	0.4	0.5	0.8	1.2	0.7	1.1	1.3	1.2	1.4	1.1
<15yrs	0.7	0.6	0.8	1.2	0.8	0.5	0.7	0.9	0.6	0.9	0.6	1.6	0.9	0.7	0.2	0.4	0.2	0.2
All ages	1.7	1.5	1.5	1.4	1.4	1.1	1.4	0.9	0.7	0.9	1.0	1.7	1.2	1.5	1.3	1.4	1.3	1.2

	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
<15yrs	0.2	0.8	0.5	1.0	1.7													
15-64yrs	1.3	1.6	1.8	2.0	3.2													
65+yrs	1.0	1.3	1.4	1.8	2.3													
All ages	1.1	1.4	1.5	1.8	2.8													

Table 2	Below Threshold ¹	Threshold to Medium ²	Medium to High ³	High to Very High ⁴	Above Very High ⁵
15-64yrs	<14.62	14.62 to 16.81	16.81 to 60.16	60.16 to 105.70	105.70+
65+yrs	<12.54	11.03 to 12.54	12.54 to 45.79	45.79 to 81.19	81.19+
<15yrs	<8.05	8.05 to 13.38	13.38 to 30.96	30.96 to 44.85	44.85+
All Ages	<11.47	11.47 to 15.06	15.06 to 46.46	46.46 to 76.44	76.44+

Threshold levels¹Below baseline threshold²baseline threshold breach to < 40th percentile³40th to <90th percentile⁴90th to <97.5th percentile⁵97.5th+ percentile**(F) Acute Bronchitis: national incidence rate 2023 by age group*****Weekly Influenza-like illness and Acute Bronchitis incidence rates per 100,000 persons**

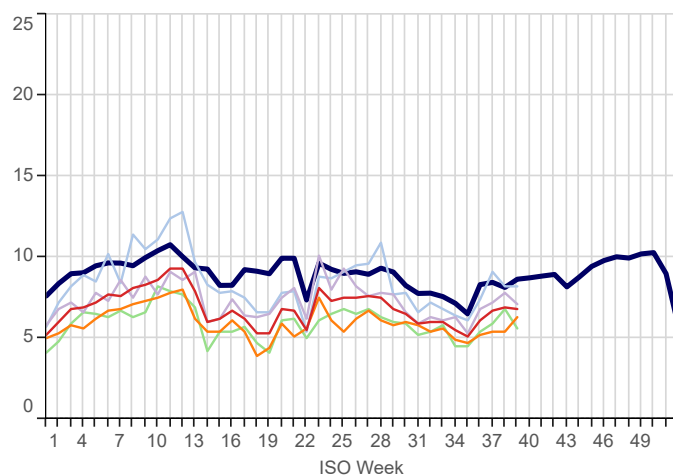
Influenza-like illness		Bronchitis		Influenza-like illness		Acute Bronchitis	
<1yr	1.5	154.6	London	3.8	4.6		
1-4yrs	1.5	15.3	North	3.0	11.4		
5-14yrs	1.9	0.8	South	2.5	6.4		
15-24yrs	3.2	0.7	Midlands And East	2.1	8.2		
25-44yrs	3.4	1.2	National	2.8	7.7		
45-64yrs	3.1	7.3					
65-74yrs	1.7	17.2					
75-84yrs	3.3	24.4					
85+yrs	1.4	17.0					
All ages	2.8	7.7					

(G) COVID-19 : national incidence rate 2023 by age group***(H) COVID-19 : national incidence rate 2023 by region***

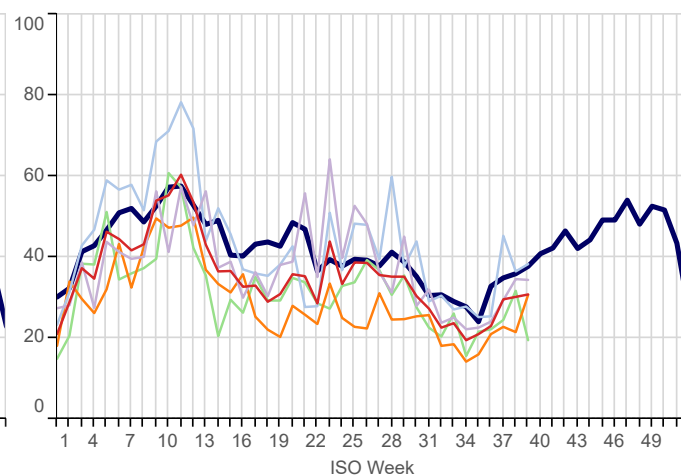
1. Water & Food Borne Disorders:

5yr Avg National North London South Midlands And East

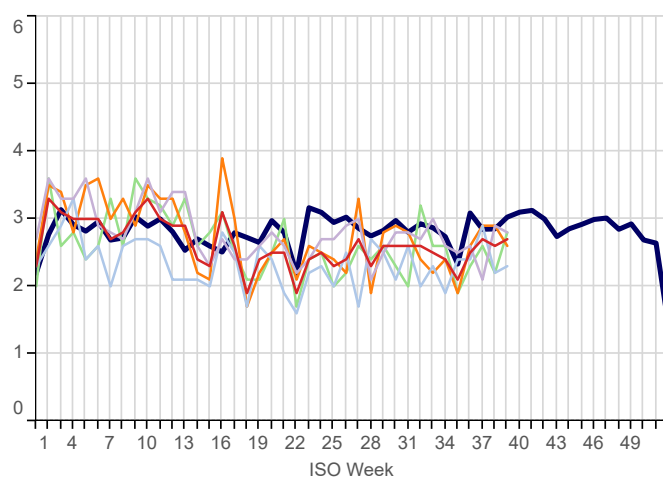
Infectious Intestinal Disease (ICD10: A00-A09)
Weekly incidence (per 100,000 **all ages**) by regions
for 2023 compared with 5 year average



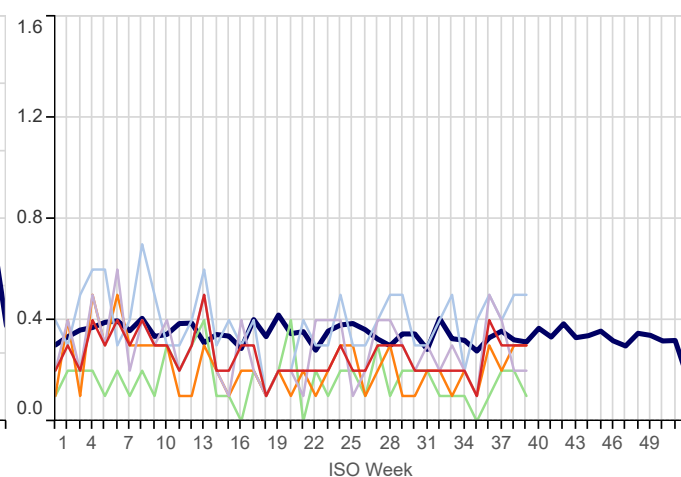
Infectious Intestinal Disease (ICD10: A00-A09)
Weekly incidence (per 100,000 **0-4 years**) by regions
for 2023 compared with 5 year average



Non-Infective Enteritis & Colitis (ICD10: K50-K52)
Weekly incidence (per 100,000 **all ages**) by region
for 2023 compared with 5 year average



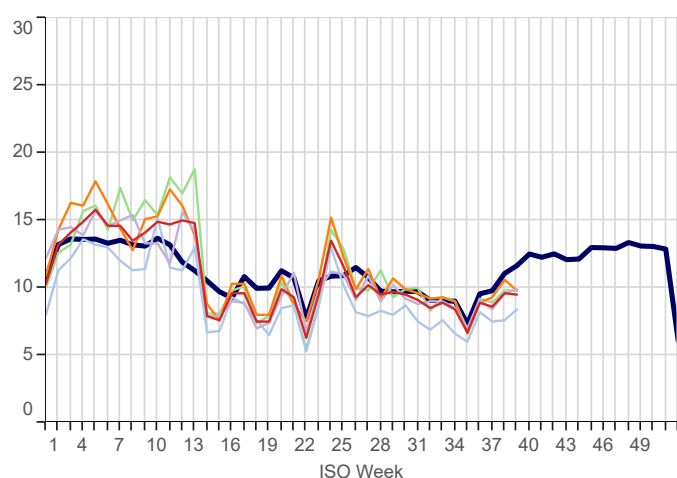
Viral Hepatitis (ICD10: B15-B19)
Weekly incidence (per 100,000 **all ages**) by region
for 2023 compared with 5 year average



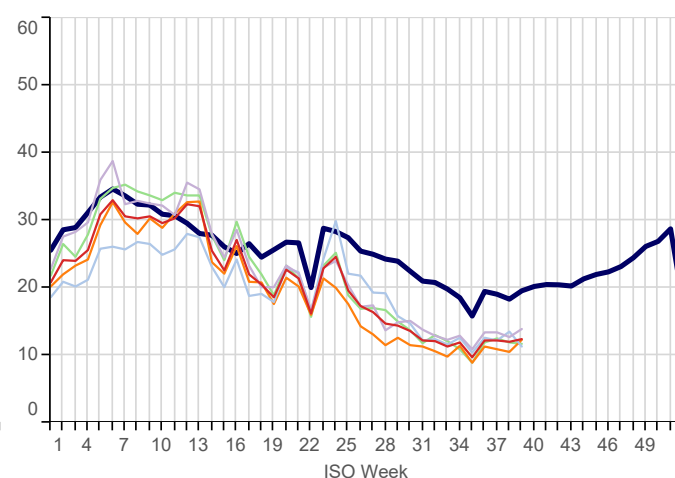
2. Environmentally Sensitive Disorders:

5yr Avg National North London South Midlands And East

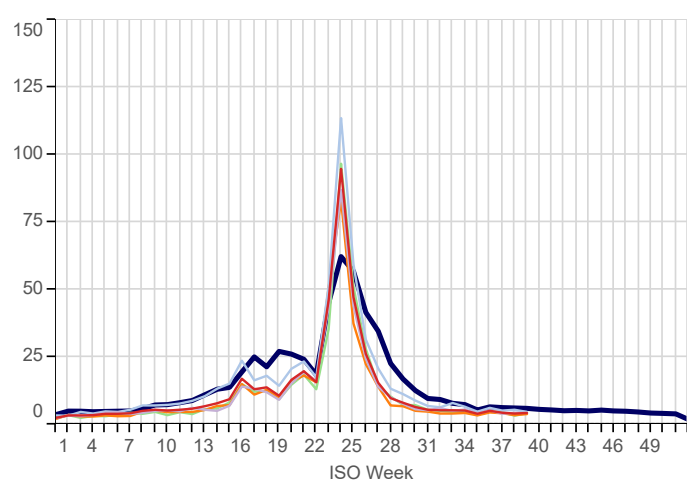
Asthma (ICD10: J45-J46)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



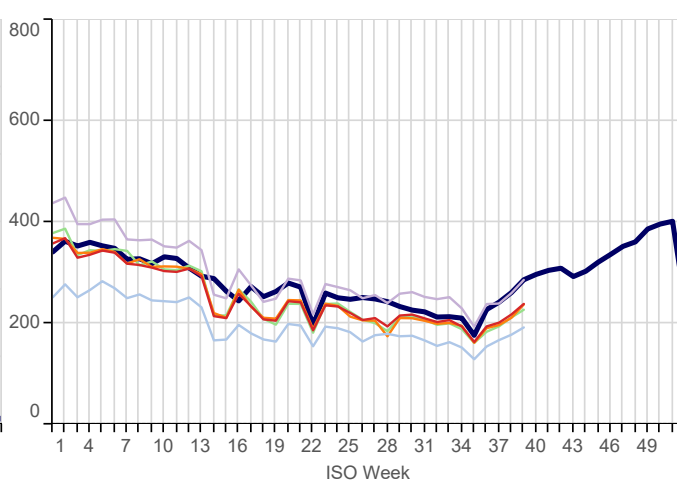
Disorders of Conjunctiva (ICD10: H10-H13)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



Hayfever/Allergic Rhinitis (ICD10: J30)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



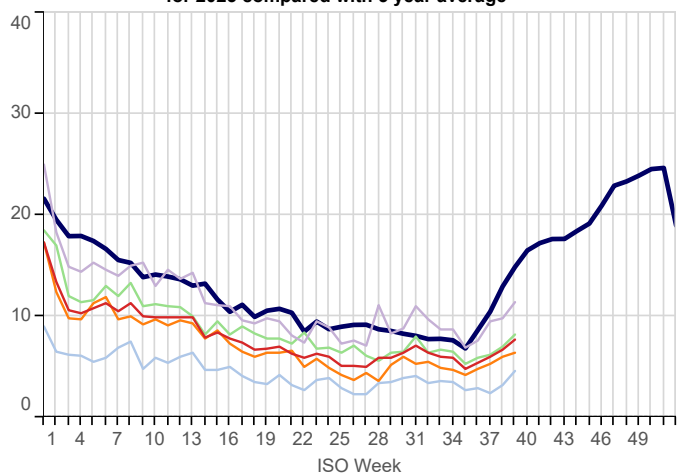
Symptoms involving Respiratory & Chest (ICD10: R05-R07,R09)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



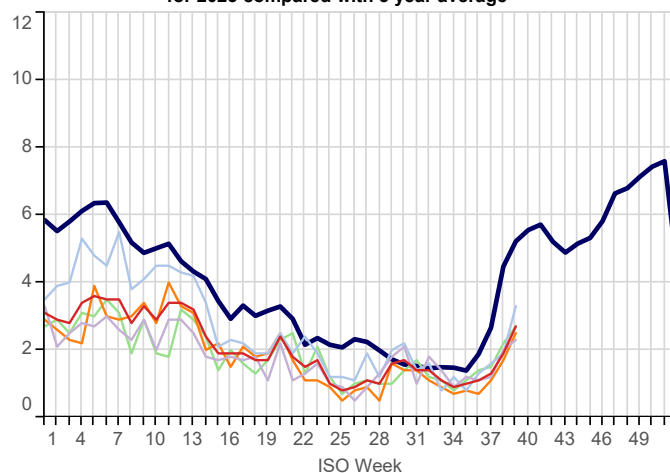
3. Respiratory Infections:

5yr Avg National North London South Midlands And East

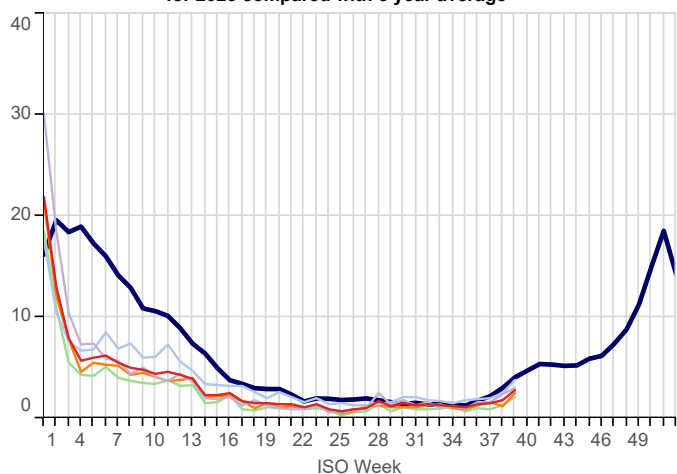
Acute Bronchitis (ICD10: J20-J21,J40)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



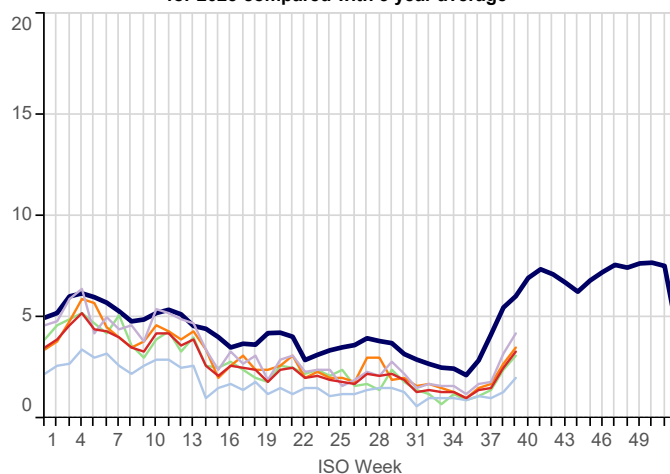
Common Cold (ICD10: J00,J06)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



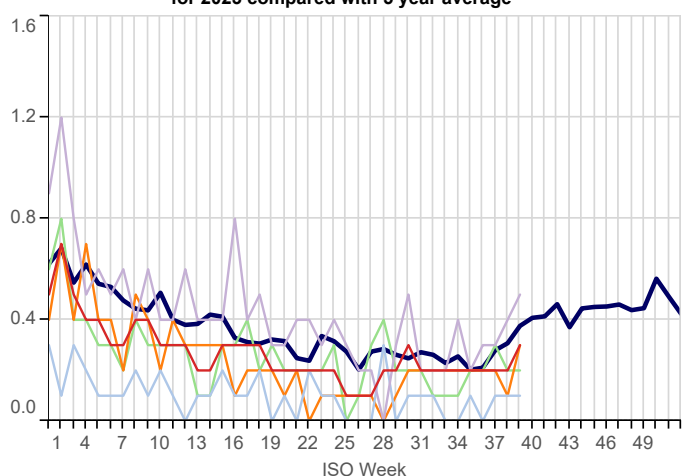
Influenza-like illness (ICD10: J09-J11)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



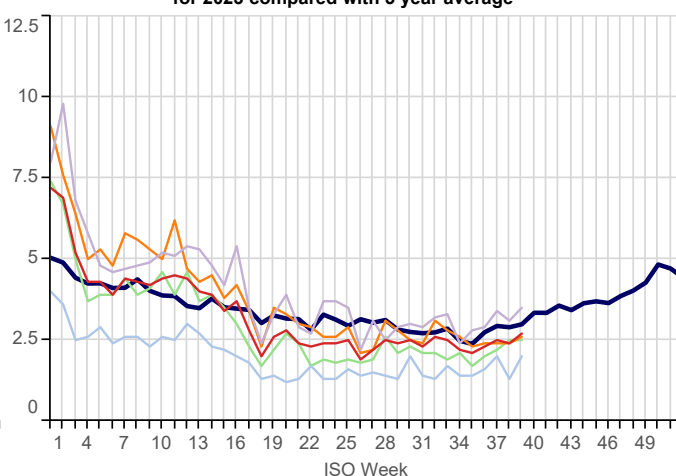
Acute Laryngitis/Tracheitis (ICD10: J04)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



Pleurisy (ICD10: R091)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



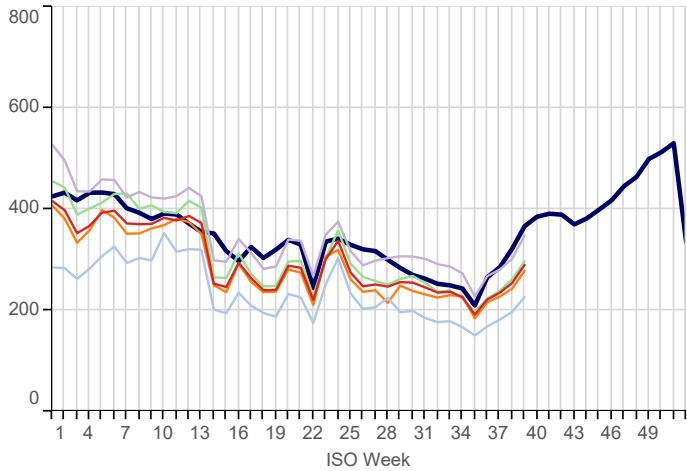
Pneumonia/Pneumonitis (ICD10: J12-J18)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



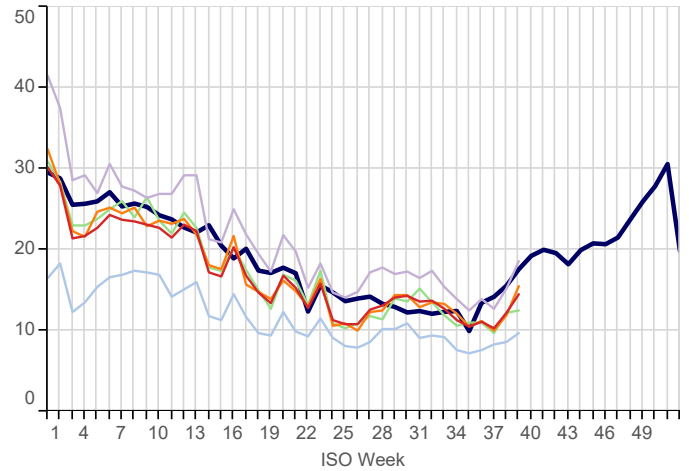
3. Respiratory Infections(Continued):

5yr Avg National North London South Midlands And East

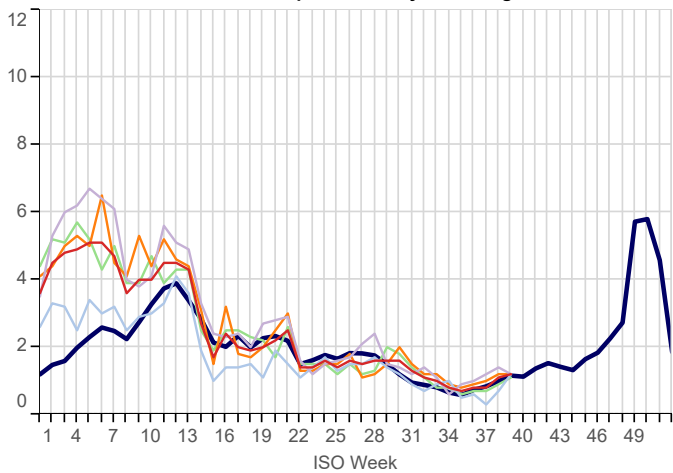
Respiratory System Diseases (ICD10: J00-J99)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



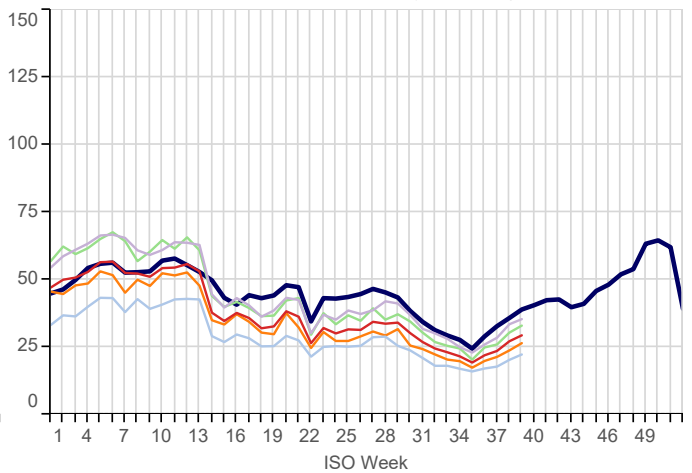
Acute Sinusitis (ICD10: J01)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



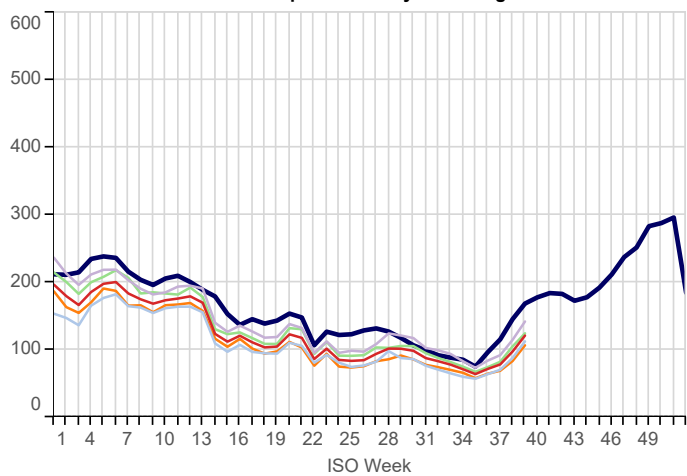
Strep Sore Throat, Scarletina and Peritonsillar Abscess (ICD10: A38,J020,J36)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



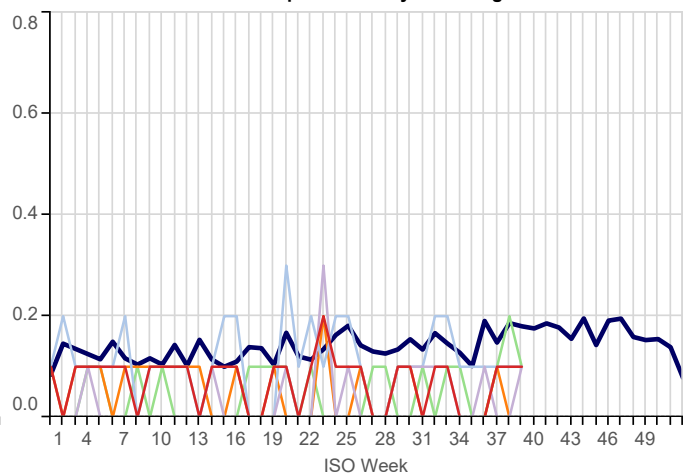
Acute Tonsillitis/Pharyngitis (ICD10: J02-J03)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



Upper Respiratory Tract Infections (URTI)(ICD10: J00-J06)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



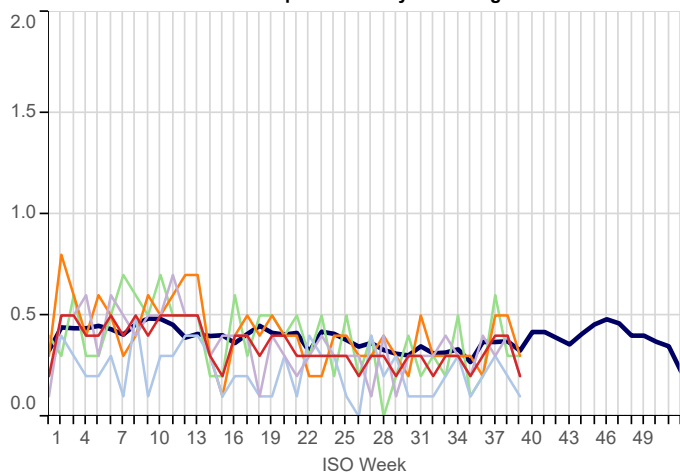
Whooping Cough (ICD10: A37)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



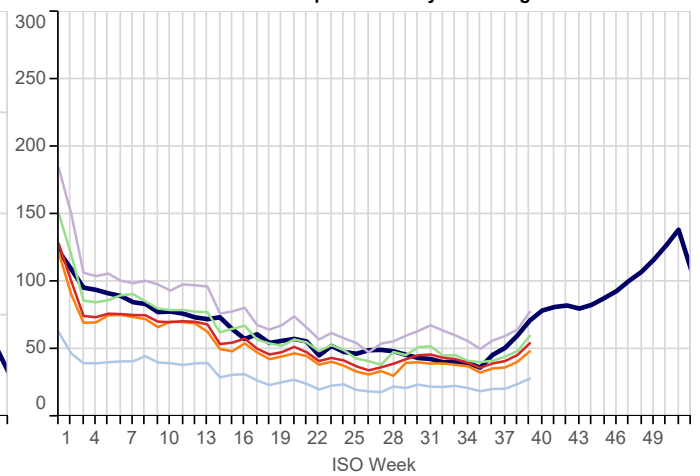
3. Respiratory Infections(Continued):

5yr Avg National North London South Midlands And East

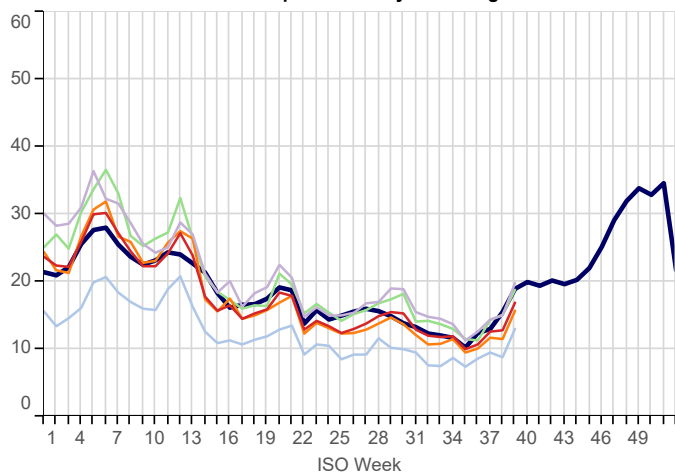
Infectious Mononucleosis (ICD10: B27)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



Lower Respiratory Tract Infections (LRTI)(ICD10: J20-J22)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



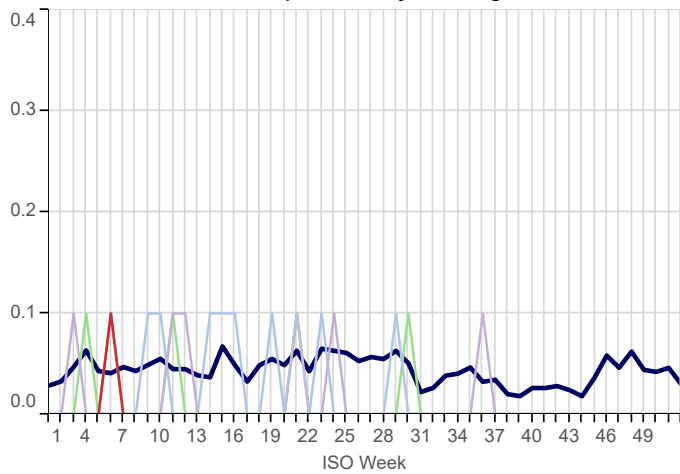
Acute Otitis Media (ICD10: H650-H651,H660,H669)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



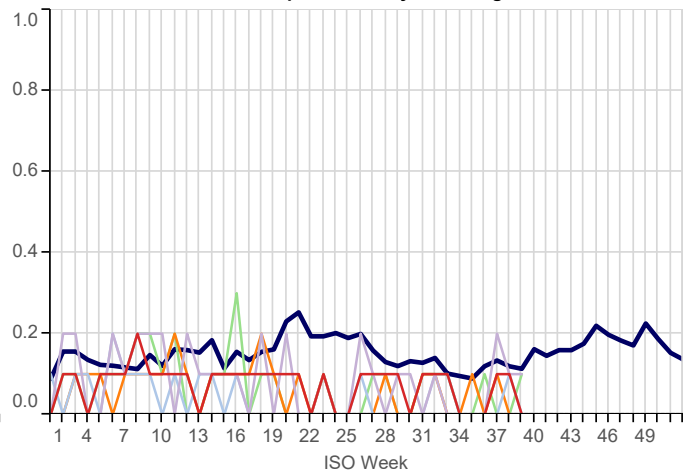
4. Vaccine Sensitive Disorders

5yr Avg National North London South Midlands And East

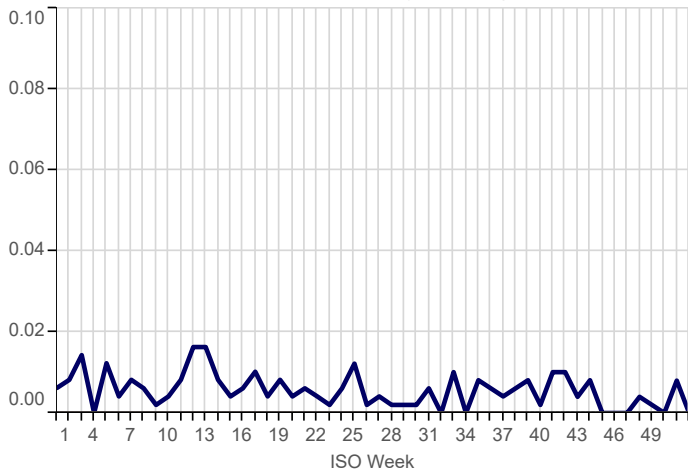
Measles (ICD10: B05)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



Mumps (ICD10: B26)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average

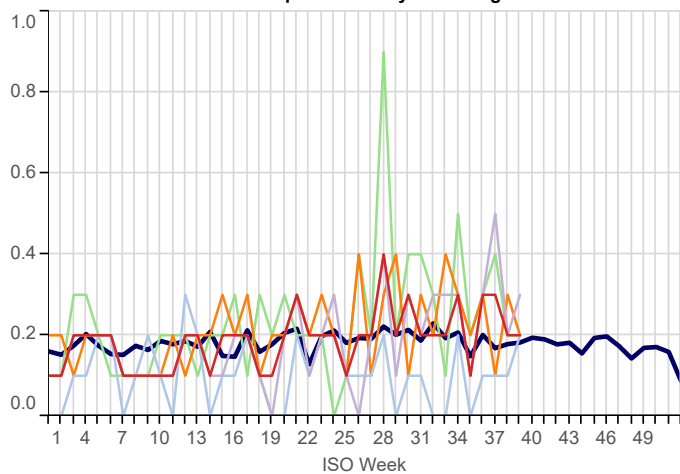


Rubella (ICD10: B06)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average

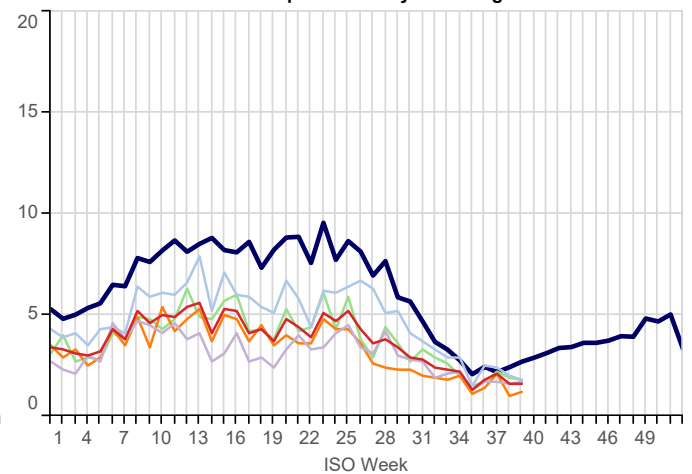


5. Skin Contagions

Bullous Dermatoses (ICD10: L10-L14)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



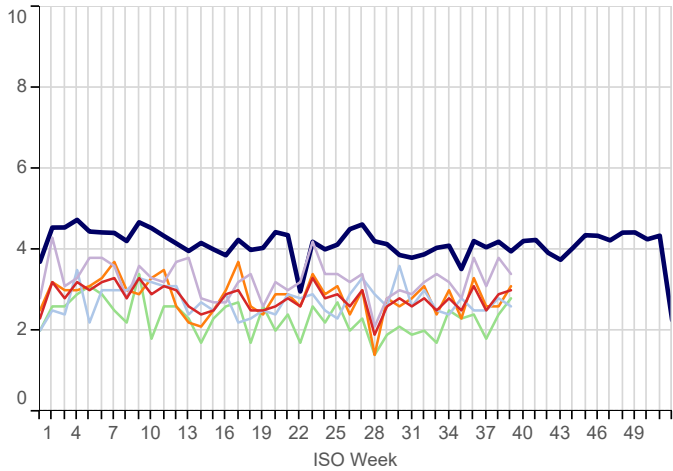
Chickenpox (ICD10: B01)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



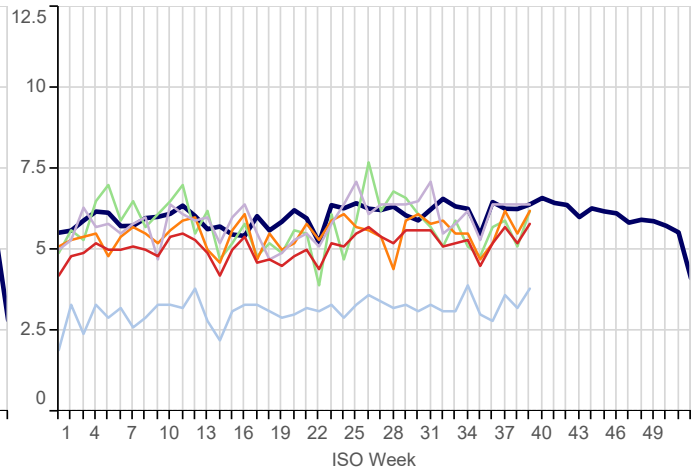
5. Skin Contagions (Continued)

5yr Avg National North London South Midlands And East

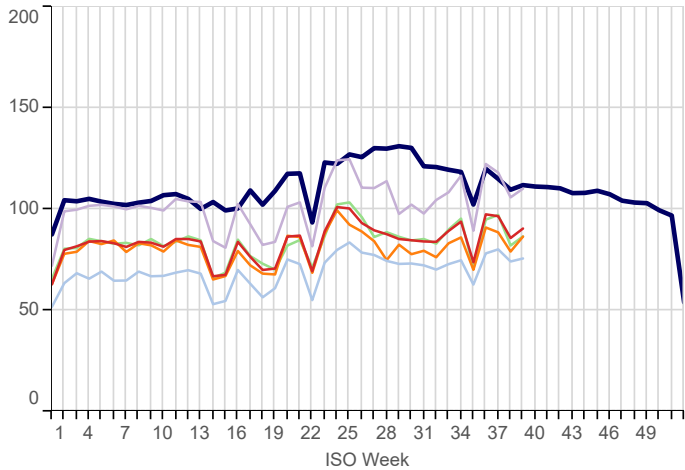
Herpes Simplex (ICD10: B00)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



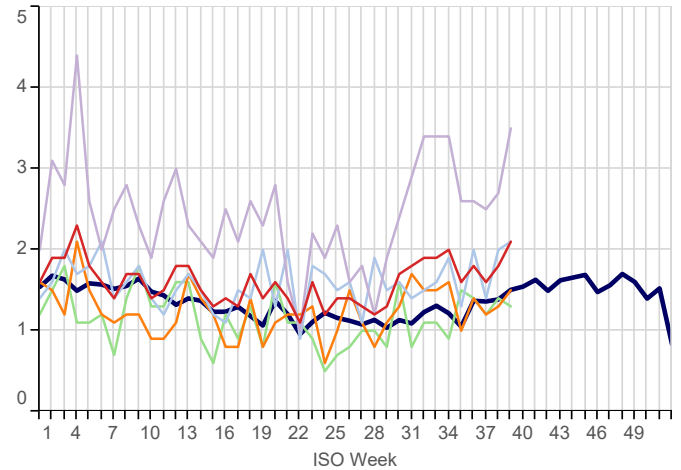
Herpes Zoster (ICD10: B02)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



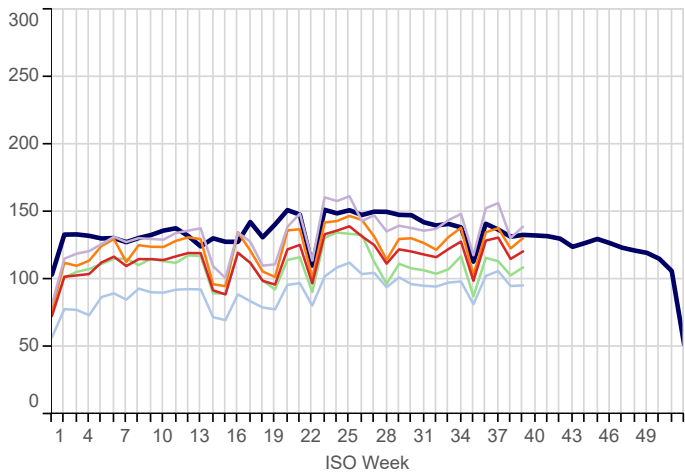
Infections of Skin & Subcutaneous Tissue (ICD10: L00-L08)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



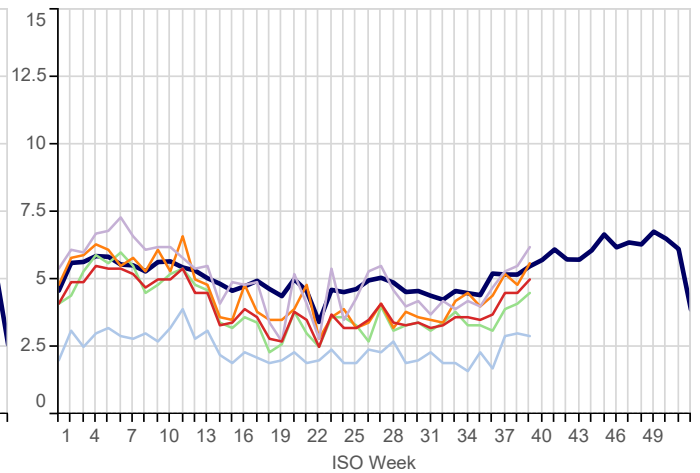
Scabies (ICD10: B86)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



Symptoms involving Skin & Oth Integument Tiss (ICD10: R20-R23)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



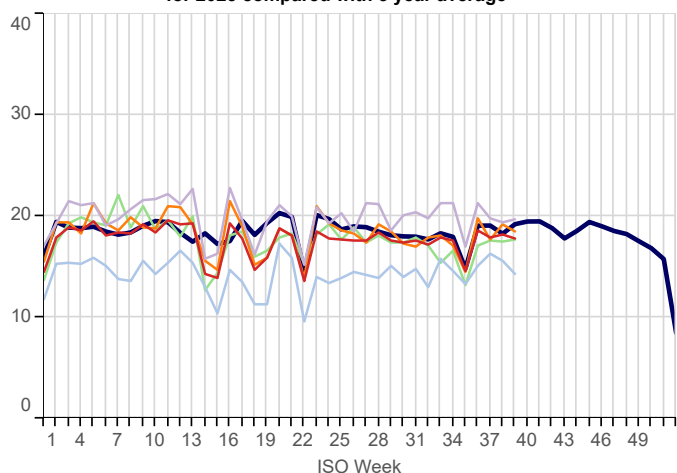
Impetigo (ICD10: L01)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



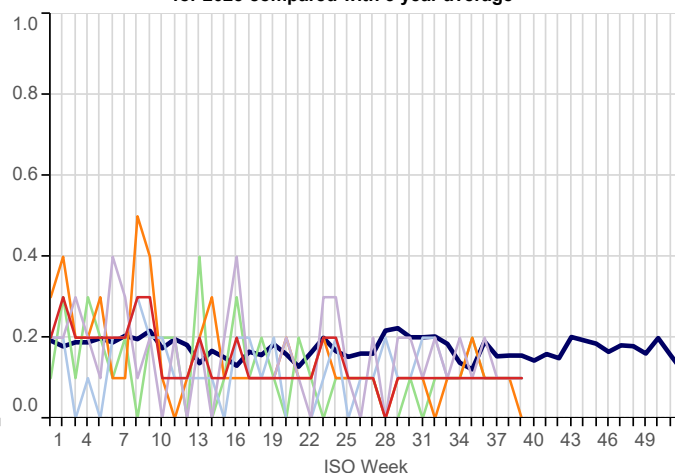
6. Disorders Affecting the Nervous System

5yr Avg National North London South Midlands And East

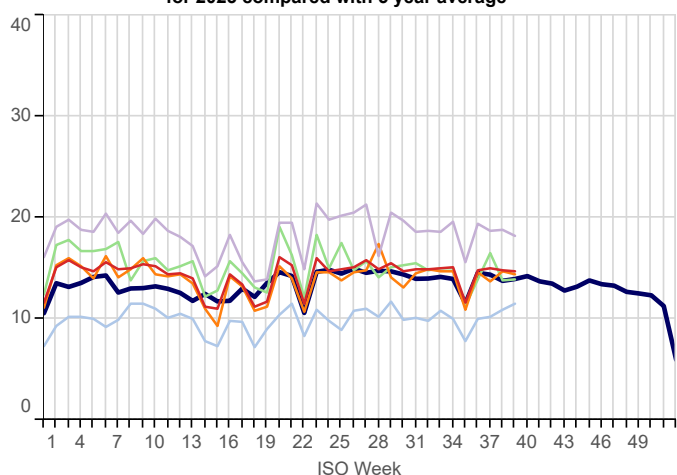
Disorders of The Peripheral Nervous System (ICD10: G50-G64,G70-G72)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



Meningitis/Encephalitis (ICD10: A170-A171,A390,A38-A85,A87,G00-G05)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average

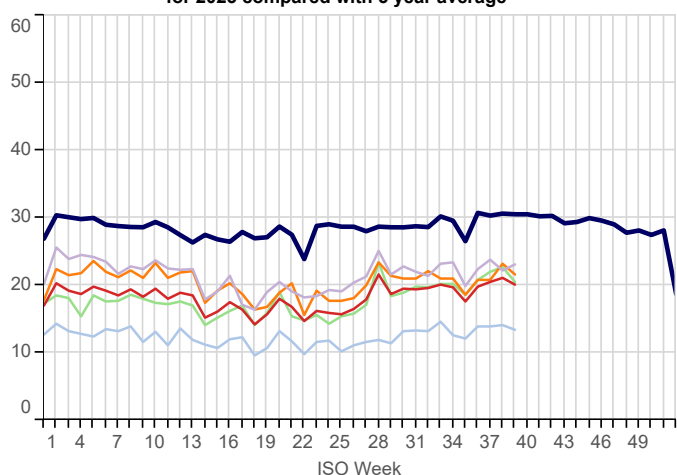


Symptoms Involving Nervous & Musculoskeletal (ICD10: R25-R29)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



7. Genitourinary System Disorders

Urinary Tract Infection/Cystitis (ICD10: N30,N390)
Weekly incidence (per 100,000 all ages) by region
for 2023 compared with 5 year average



8. Tabular Summary by Disease

Disease Name	Week beginning Week ending		25/09/2023 01/10/2023		18/09/2023 24/09/2023		11/09/2023 17/09/2023		04/09/2023 10/09/2023	
	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer
Acute Bronchitis	7.7	1,164	6.7	1,038	6.0	917	5.4	800		
Allergic Rhinitis	4.3	645	4.1	628	4.4	675	5.1	759		
Asthma	9.5	1,433	9.6	1,488	8.6	1,311	8.9	1,314		
Bullous Dermatoses	0.2	32	0.2	38	0.3	40	0.3	37		
Chickenpox	1.6	239	1.6	241	2.1	319	1.8	261		
Common Cold	2.7	400	1.9	300	1.3	197	1.1	159		
Conjunctival Disorders	12.4	1,859	12.0	1,852	12.2	1,851	12.2	1,810		
COVID-19	32.6	4,895	24.7	3,829	21.8	3,319	22.2	3,289		
Herpes Simplex	3.0	450	2.9	454	2.5	383	3.1	456		
Herpes Zoster	5.8	866	5.2	806	5.7	866	5.2	762		
Impetigo	5.0	746	4.5	692	4.5	679	3.7	541		
Infectious Intestinal Diseases	6.8	1,016	6.9	1,064	6.7	1,016	6.1	899		
Infectious Mononucleosis	0.2	34	0.4	60	0.4	65	0.3	37		
Influenza-like illness	2.8	424	1.8	276	1.5	227	1.4	212		
Laryngitis and Tracheitis	3.3	494	2.5	390	1.5	230	1.4	207		
Lower Respiratory Tract Infections	54.4	8,185	45.6	7,068	41.2	6,268	39.4	5,822		
Measles	0.0	0	0.0	2	0.0	2	0.0	5		
Meningitis and Encephalitis	0.1	15	0.1	20	0.1	11	0.1	16		
Mumps	0.0	7	0.1	10	0.1	12	0.0	6		
Non-infective Enteritis and Colitis	2.7	400	2.6	407	2.7	403	2.5	369		
Otitis Media Acute	16.9	2,540	12.8	1,978	12.6	1,913	10.7	1,585		
Peripheral Nervous Disease	17.8	2,674	18.2	2,821	17.9	2,726	18.6	2,757		
Pleurisy	0.3	45	0.2	34	0.2	37	0.2	27		
Pneumonia and Pneumonitis	2.7	404	2.4	371	2.5	383	2.3	341		
Respiratory System Diseases	290.0	43,613	254.2	39,367	234.9	35,713	221.7	32,795		
Rubella	0.0	0	0.0	0	0.0	3	0.0	1		
Scabies	2.1	317	1.8	281	1.6	239	1.8	270		
Sinusitis	14.5	2,173	12.2	1,893	10.3	1,568	11.1	1,648		
Skin and Subcutaneous Tissue Infections	90.5	13,609	85.8	13,293	96.6	14,691	97.5	14,422		
Strep Throat and Peritonsillar Abscess	1.2	177	1.1	169	0.8	129	0.8	121		
Symptoms involving musculoskeletal	14.7	2,207	14.8	2,298	15.0	2,278	14.8	2,182		
Symptoms involving Respiratory and Chest	238.6	35,871	217.7	33,724	201.5	30,634	194.1	28,715		
Symptoms involving Skin and Integument Tissues	120.8	18,162	115.2	17,836	131.0	19,922	128.8	19,051		
Tonsillitis and acute Pharyngitis	29.4	4,423	27.2	4,215	23.6	3,592	22.0	3,261		
Upper Respiratory Tract Infections	121.2	18,224	97.6	15,111	78.4	11,918	71.8	10,626		
Urinary Tract Infections	20.1	3,017	21.1	3,275	20.5	3,117	19.8	2,936		
Viral Hepatitis	0.3	41	0.3	44	0.3	41	0.4	53		
Whooping Cough	0.1	10	0.1	13	0.1	14	0.0	5		
Practice Count		1,526		1,568		1,547		1,487		
Denom		15,036,587		15,488,335		15,205,766		14,791,949		

FURTHER INFORMATION:

About the report

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 (Graph A, page 2 and Table E, page 4 of this report). 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.

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 2011/12- 2021/22 excluding the pandemic year 2020/21).

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 Magentus data management and EMIS-X 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 Magentus 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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