

RSC Communicable and Respiratory Disease Report for England

Key Statistics:

Week Number/Year..... 44/2024
 Week Starting - Ending..... 28/10/2024 - 03/11/2024
 No. of Practices..... 1,645
 Population..... 17,256,820

National (England)

- **Acute Respiratory Infections:** decreased from **264.9** in week 43 to **253.3** in week 44.
- **Influenza-like illness:** decreased from **3.8** in week 43 to **3.6** in week 44.
- **Exacerbations of Chronic Lung Disease:** decreased from **21.4** in week 43 to **21.1** in week 44.
- **Lower Respiratory Tract Infections:** decreased from **95.0** in week 43 to **93.5** in week 44.
- **Upper Respiratory Tract Infections:** decreased from **156.4** in week 43 to **149.0** in week 44.
- **COVID-19:** decreased from **4.5** in week 43 to **3.0** in week 44.

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

- **Acute Respiratory Infections:** decreased from **204.0** in week 43 to **195.8** in week 44 in the London region, decreased from **325.7** in week 43 to **310.5** in week 44 in the North region, decreased from **244.6** in week 43 to **231.5** in week 44 in the South region, and decreased from **287.2** in week 43 to **271.9** in week 44 in the Midlands And East region.
- **Influenza-like illness:** decreased from **4.6** in week 43 to **3.9** in week 44 in the London region, increased from **4.4** in week 43 to **4.9** in week 44 in the North region, decreased from **3.2** in week 43 to **3.1** in week 44 in the South region, and decreased from **3.2** in week 43 to **2.6** in week 44 in the Midlands And East region.
- **Exacerbations of Chronic Lung Disease:** increased from **12.9** in week 43 to **13.1** in week 44 in the London region, decreased from **30.2** in week 43 to **28.2** in week 44 in the North region, decreased from **20.7** in week 43 to **19.7** in week 44 in the South region, and increased from **21.4** in week 43 to **22.5** in week 44 in the Midlands And East region.
- **Lower Respiratory Tract Infections:** decreased from **58.1** in week 43 to **54.3** in week 44 in the London region, decreased from **128.9** in week 43 to **124.4** in week 44 in the North region, decreased from **89.4** in week 43 to **87.0** in week 44 in the South region, and increased from **102.2** in week 43 to **103.4** in week 44 in the Midlands And East region.
- **Upper Respiratory Tract Infections:** decreased from **135.2** in week 43 to **132.8** in week 44 in the London region, decreased from **180.2** in week 43 to **172.4** in week 44 in the North region, decreased from **143.2** in week 43 to **135.3** in week 44 in the South region, and decreased from **169.9** in week 43 to **156.6** in week 44 in the Midlands And East region.
- **COVID-19:** decreased from **1.6** in week 43 to **1.4** in week 44 in the London region, decreased from **4.3** in week 43 to **2.8** in week 44 in the North region, decreased from **5.4** in week 43 to **3.9** in week 44 in the South region, and decreased from **5.8** in week 43 to **3.3** in week 44 in the Midlands And East region.

Comment:

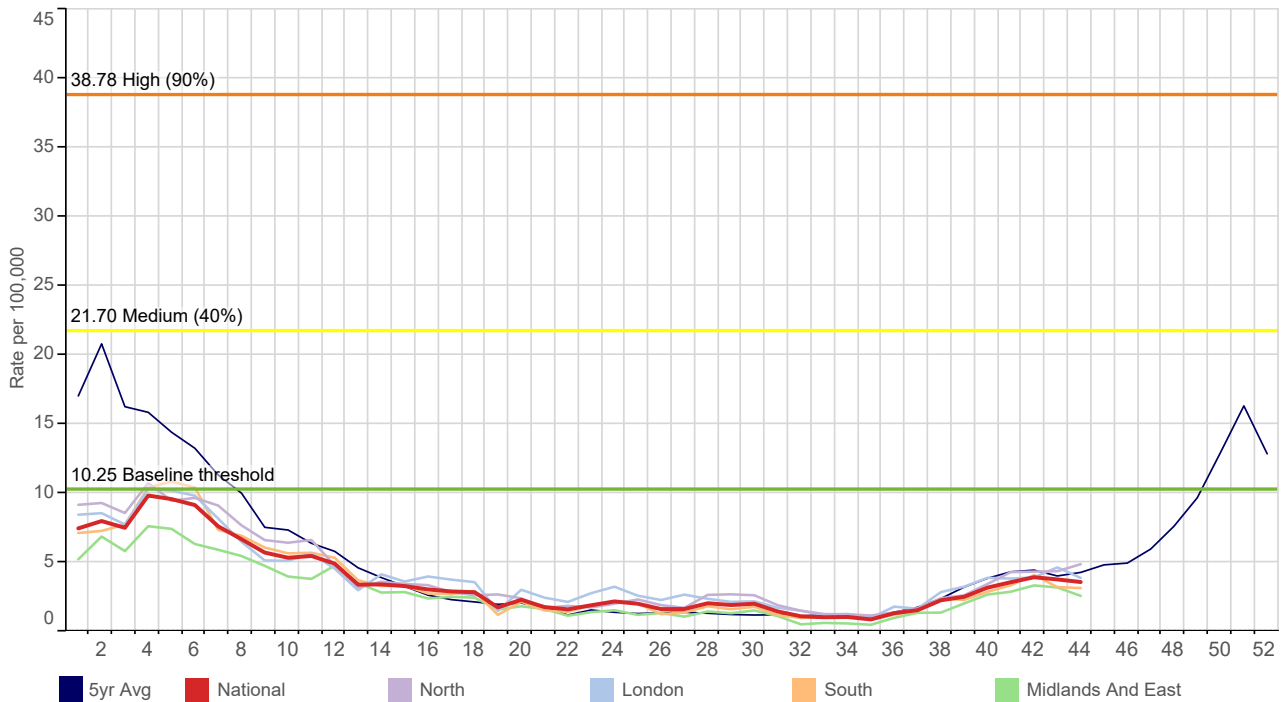
Overall rates of acute respiratory infections (ARI) have decreased and remain at or below the seasonal average apart from the North region (page 6). The overall weekly rate of influenza-like illness (ILI) has decreased and is at or below the seasonal average for this time of year (pages 2 and 3), while rates of COVID-19 have decreased in all regions (page 5). Exacerbations of chronic lung disease (ECLD, page 7), whooping cough (page 14) and scabies (page 15) remain above their seasonal averages.

This report includes a respiratory virology update. SARS-CoV-2, is the predominant circulating virus detected by the UK Health Security Agency (UKHSA) Reference Virology Lab. Though RSV detection is increasing as anticipated at this time of year. Rates presented in this report are the number of new cases per 100,000 people by condition and region, with age-band also reported for acute respiratory infections (pages 3 to 11). The second Friday report which started in the pandemic has now ceased. The RCGP Weekly Return has reverted to reporting weekly.

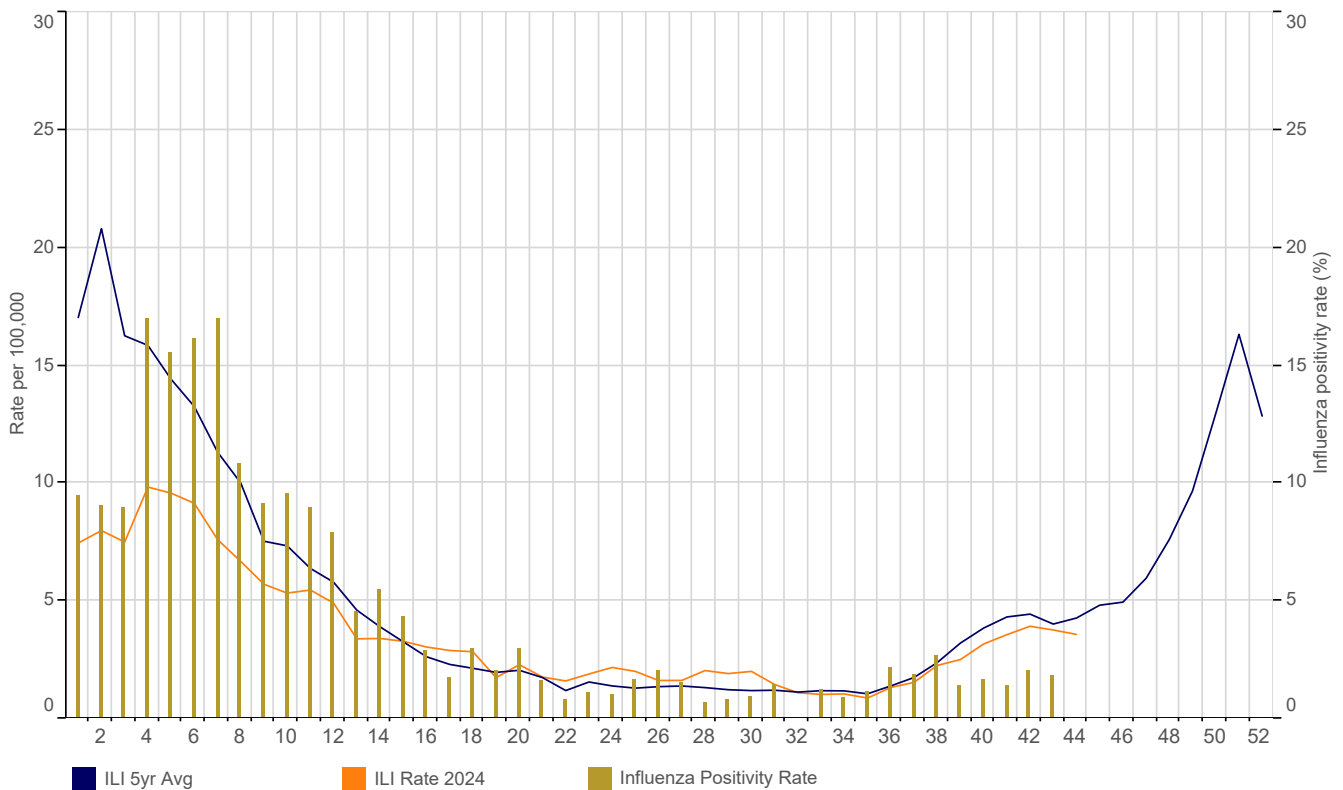
2024 Focus

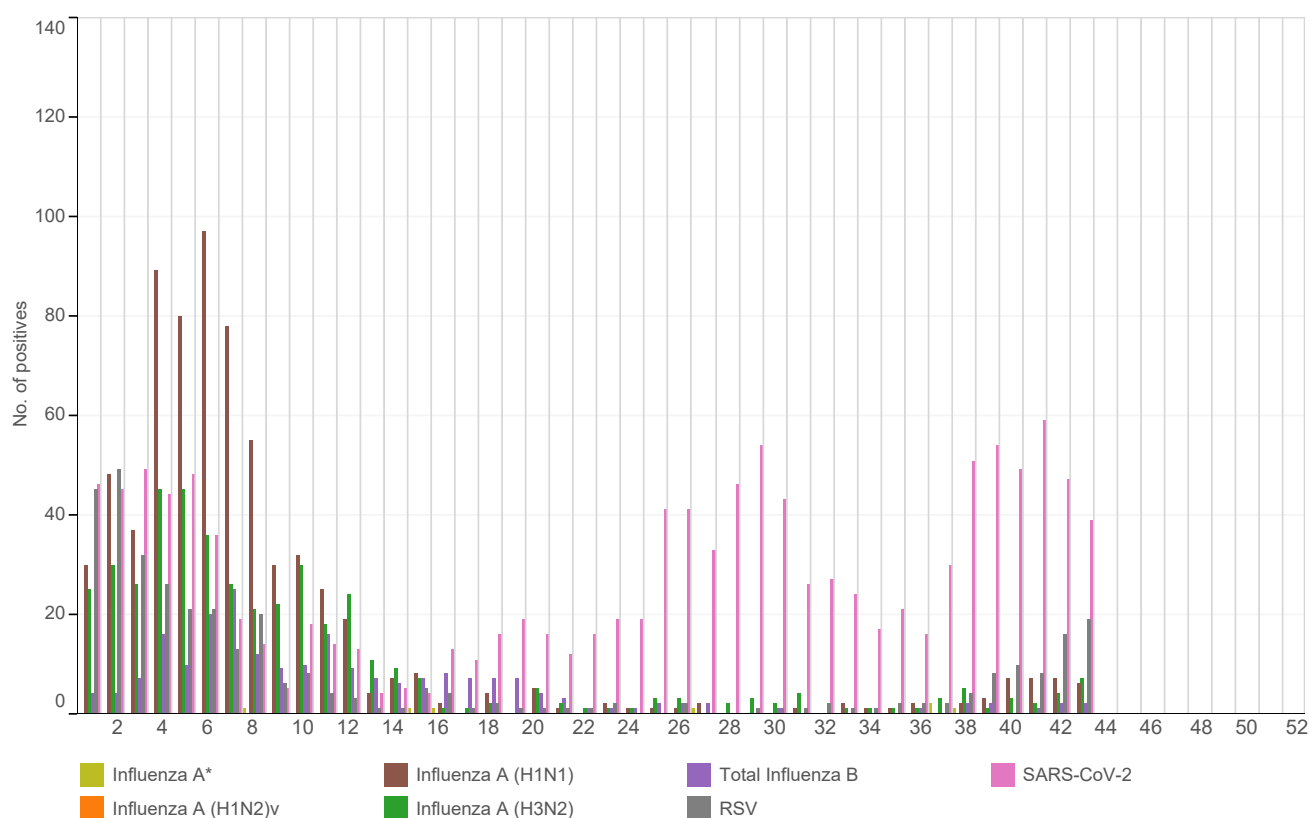
Please see page 19 for explanatory notes on the data.

(A) Influenza-like illness: national incidence rate 2024 by region



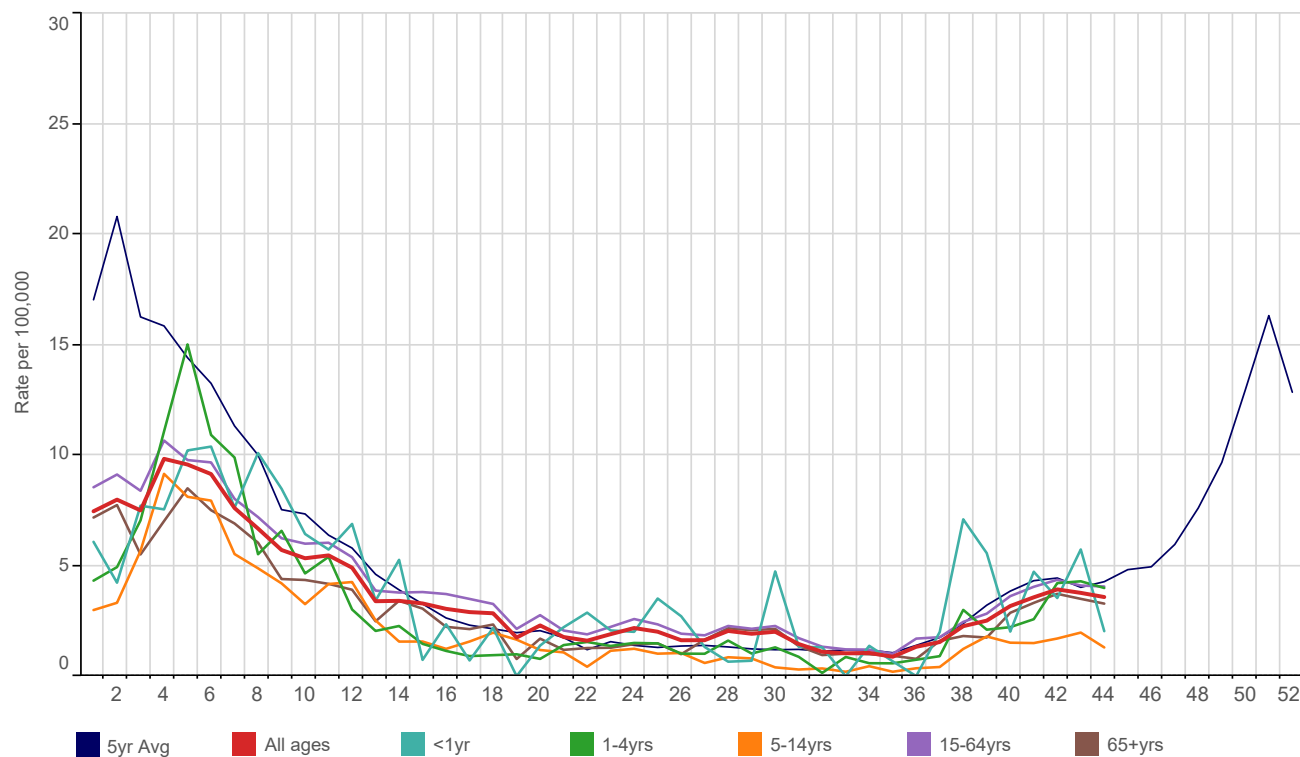
(B) RCGP/UKHSA Influenza Virology Swab Surveillance 2024



(C) RCGP/UKHSA RSV, Influenza and SARS-CoV-2 Virology Swab Surveillance 2024 by viral strain

The weekly virology samples displayed are offset from the ISO Week (Graph C).

*No specified subtype, or coinfection with H1N1 and H3N2.

(D) Influenza-like illness: national incidence rate 2024 by age band

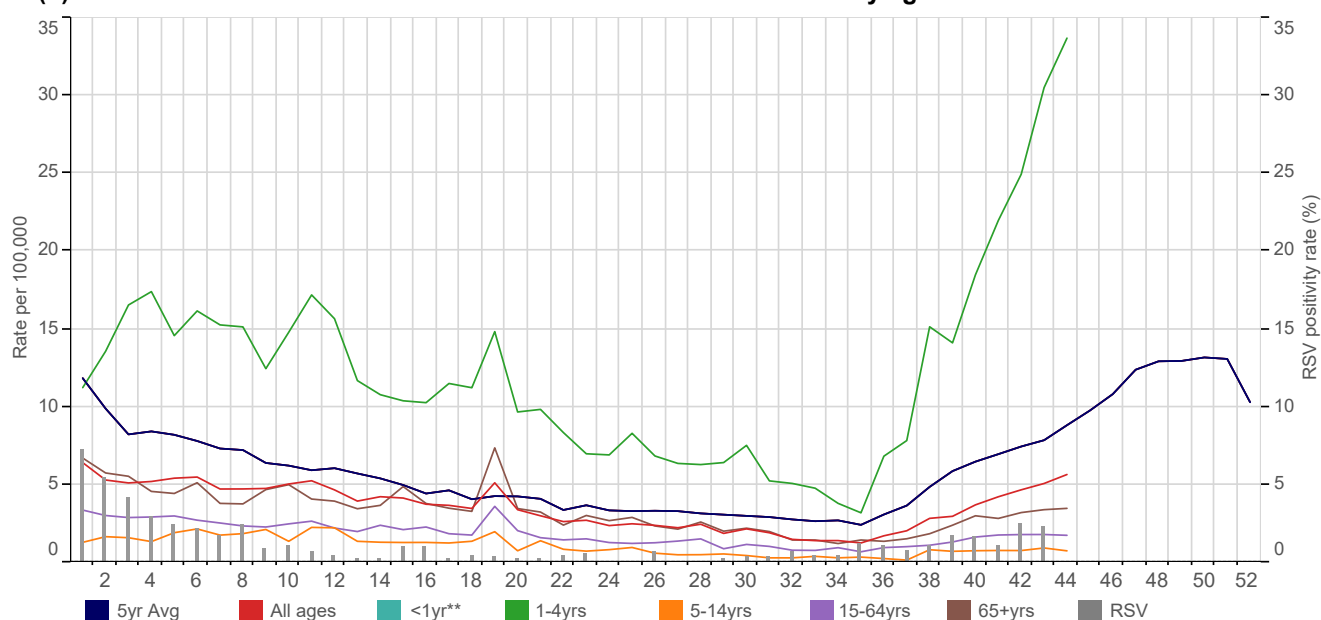
(E) Influenza-like illness: national incidence rate 2024 by age band

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
1-4yrs	0.9	0.9	1.0	0.8	1.4	1.5	1.4	1.5	1.5	1.0	1.0	1.6	1.0	1.3	0.9	0.1	0.9	0.6
5-14yrs	1.6	2.0	1.7	1.2	1.1	0.4	1.1	1.2	1.0	1.0	0.6	0.9	0.8	0.4	0.3	0.3	0.2	0.4
15-64yrs	3.5	3.3	2.1	2.8	2.1	1.9	2.2	2.6	2.3	1.9	1.8	2.3	2.1	2.3	1.7	1.3	1.2	1.2
65+yrs	2.1	2.3	0.8	1.7	1.2	1.3	1.3	1.4	1.5	1.0	1.6	2.2	2.1	2.1	1.4	1.0	1.0	1.0
All ages	2.9	2.8	1.7	2.3	1.8	1.6	1.9	2.2	2.0	1.6	1.6	2.0	1.9	2.0	1.5	1.1	1.0	1.1
	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
1-4yrs	0.6	0.7	0.9	3.0	2.1	2.2	2.6	4.2	4.3	4.0								
5-14yrs	0.2	0.4	0.4	1.2	1.8	1.5	1.5	1.7	2.0	1.3								
15-64yrs	1.0	1.7	1.8	2.5	2.8	3.6	4.0	4.4	4.1	4.1								
65+yrs	0.9	0.8	1.6	1.8	1.7	2.9	3.3	3.7	3.5	3.3								
All ages	0.9	1.3	1.5	2.3	2.5	3.2	3.6	3.9	3.8	3.6								

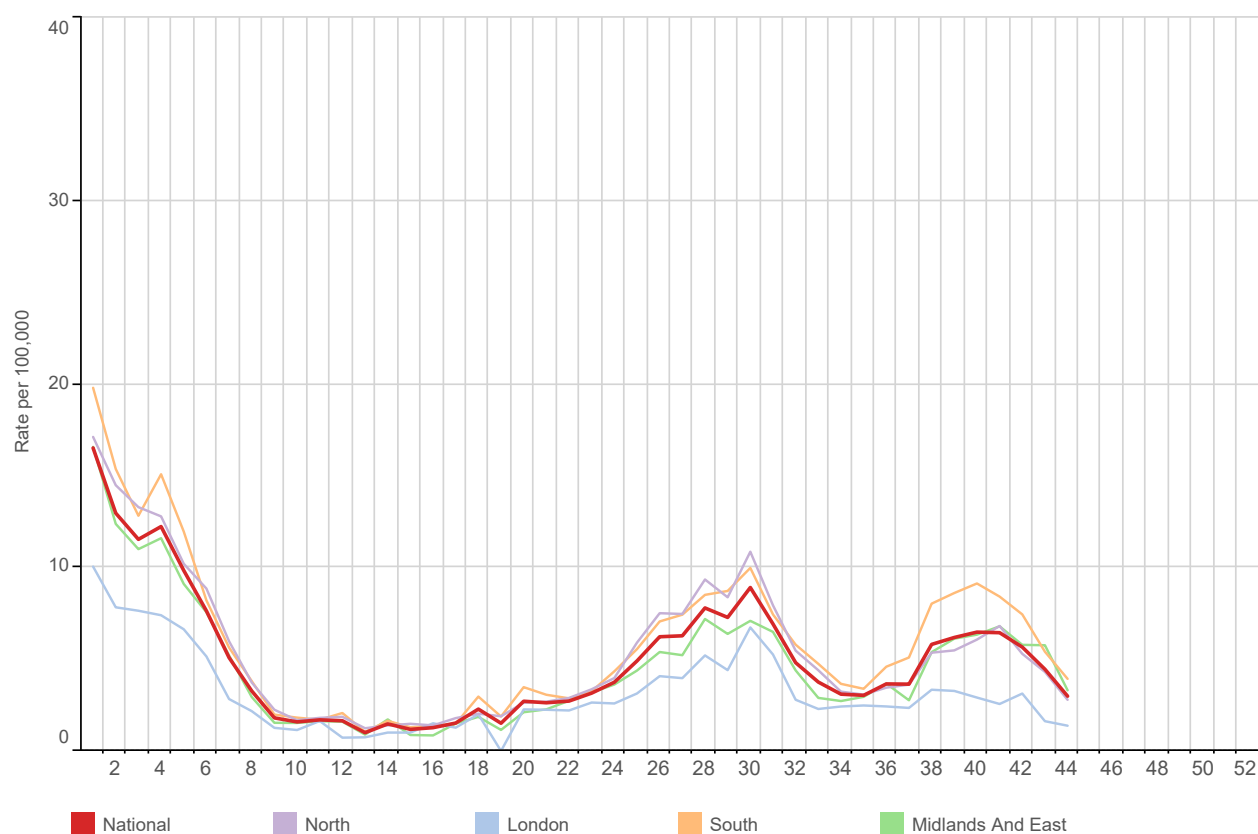
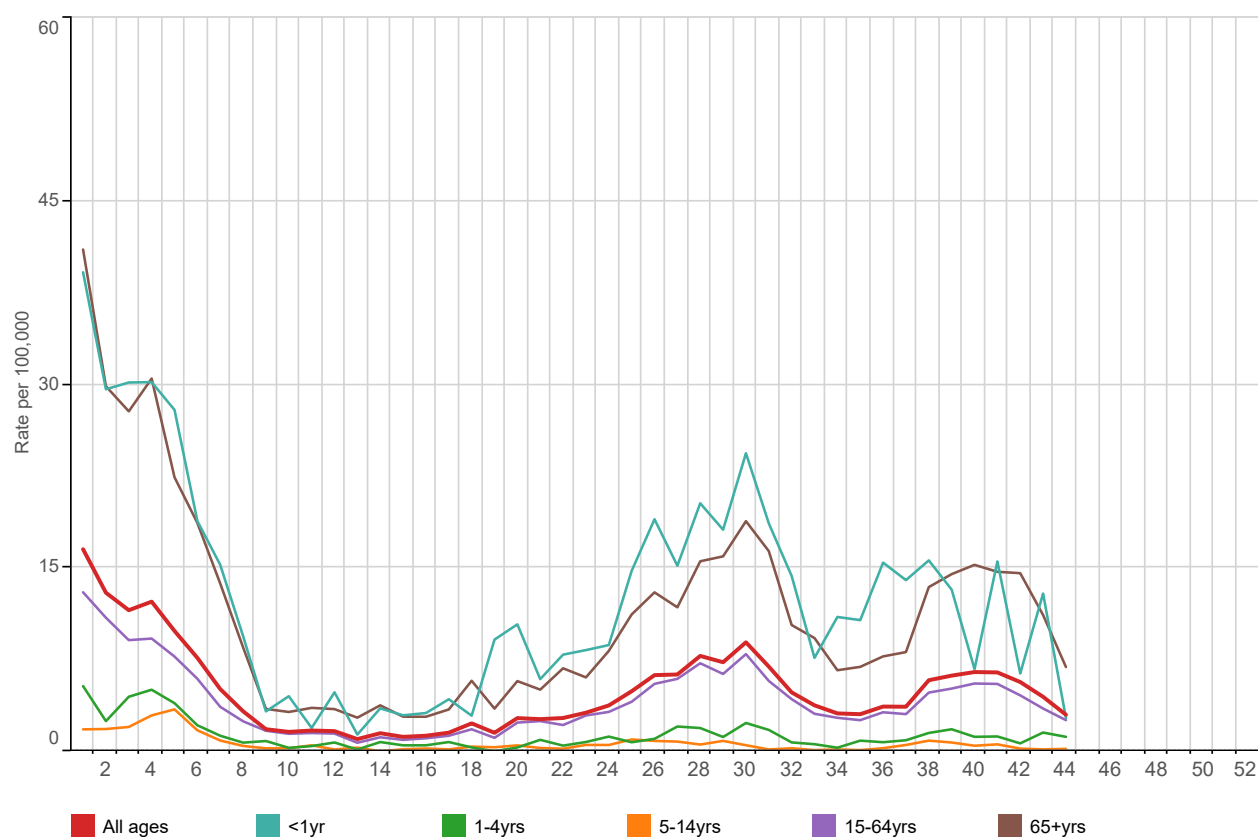
Table 2	Below Threshold ¹	Threshold to Medium ²	Medium to High ³	High to Very High ⁴	Above Very High ⁵
1-4yrs	<8.05	8.05 to 15.57	15.58 to 23.50	23.51 to 28.19	28.20+
5-14yrs	<6.53	6.53 to 15.55	15.56 to 32.18	32.19 to 44.39	44.40+
15-64yrs	<12.23	12.23 to 24.53	24.54 to 45.08	45.09 to 58.99	59.00+
65+yrs	<9.62	9.62 to 16.69	16.70 to 35.98	35.99 to 50.52	50.53+
All Ages	<10.25	10.25 to 21.69	21.70 to 38.77	38.78 to 50.11	50.12+

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 and Bronchiolitis: national incidence rate 2024 by age band**Weekly Influenza-like illness and Acute Bronchitis and Bronchiolitis incidence rates per 100,000 persons**

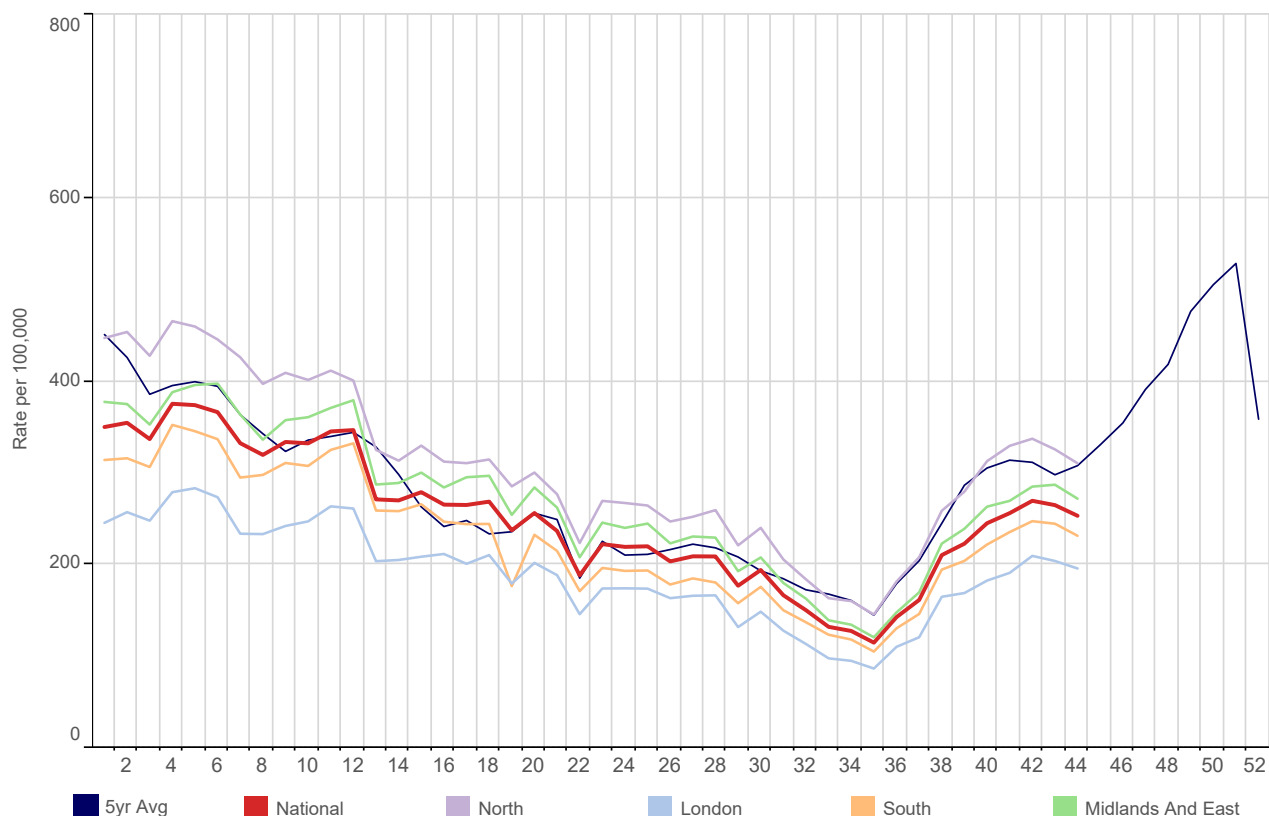
Influenza-like illness		Acute Bronchitis and Bronchiolitis		Influenza-like illness		Acute Bronchitis and Bronchiolitis	
<1yr		2.0		290.5		London	
1-4yrs		4.0		33.7		North	
5-14yrs		1.3		0.7		South	
15-24yrs		2.8		0.8		Midlands And East	
25-44yrs		4.1		1.3		National	
45-64yrs		4.6		2.7			
65-74yrs		3.4		3.4			
75-84yrs		3.3		4.0			
85+yrs		3.1		2.6			
All ages		3.6		5.7			

**The <1yr age band is not presented (Graph F).

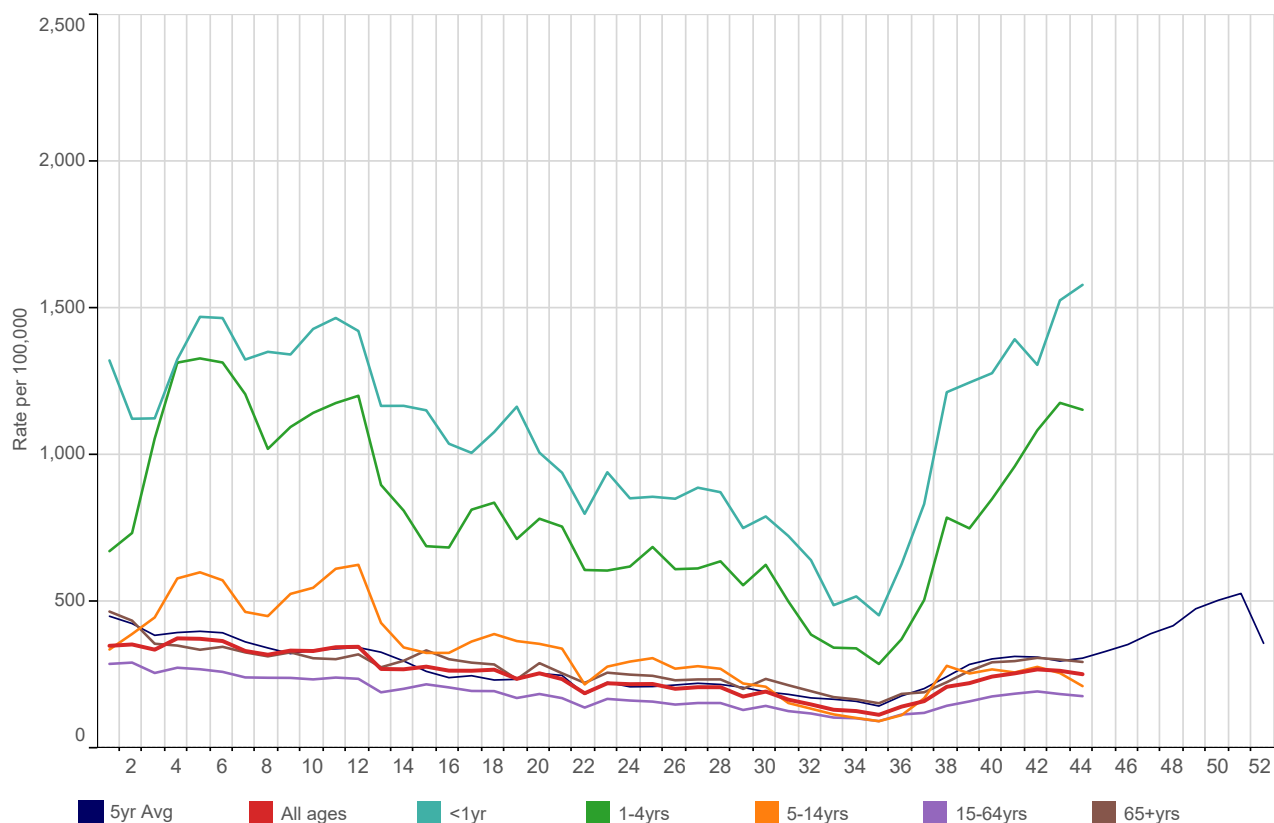
(G) COVID-19: national incidence rate 2024 by region**(H) COVID-19: national incidence rate 2024 by age band**

1. Respiratory Infections

(I) Acute Respiratory Infections (ARI): national incidence rate 2024 by region



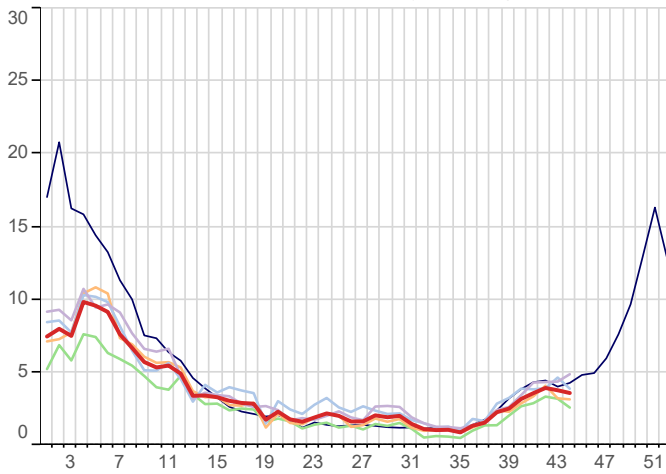
(J) Acute Respiratory Infections (ARI): national incidence rate 2024 by age band



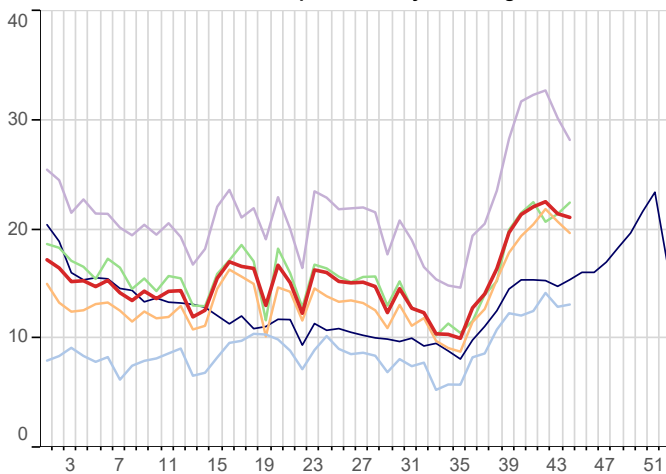
1. Respiratory Infections - *by region*

5yr Avg National South
 North Midlands And East
 London

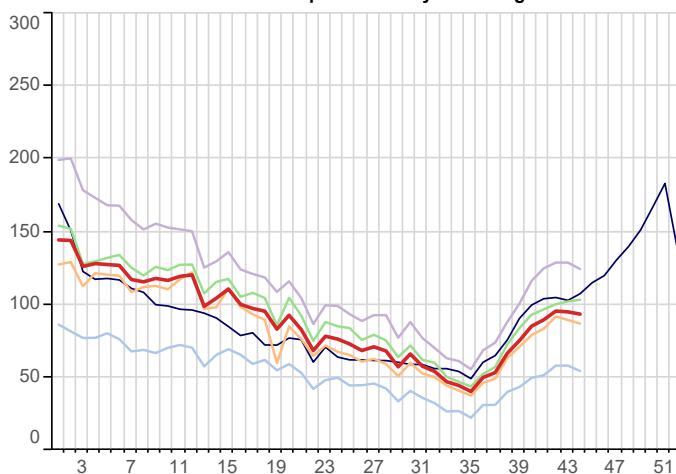
Influenza-like illness (ILI)
 Weekly incidence (per 100,000 all ages) by region
 for 2024 compared with 5 year average



Exacerbations of Chronic Lung Disease (ECLD)
 Weekly incidence (per 100,000 all ages) by region
 for 2024 compared with 5 year average

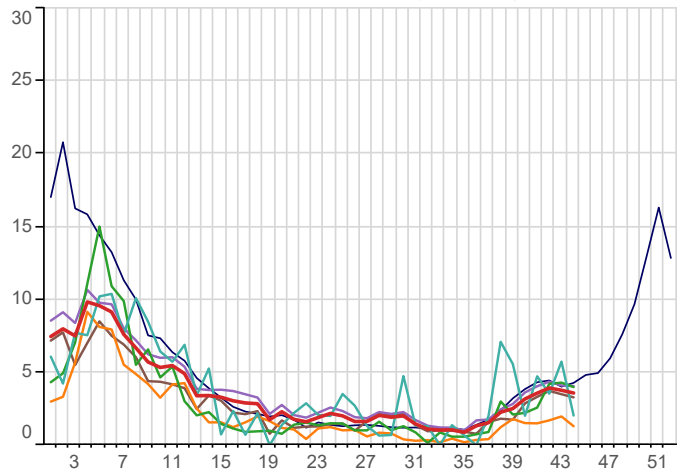


Lower Respiratory Tract Infections (LRTI)
 Weekly incidence (per 100,000 all ages) by region
 for 2024 compared with 5 year average

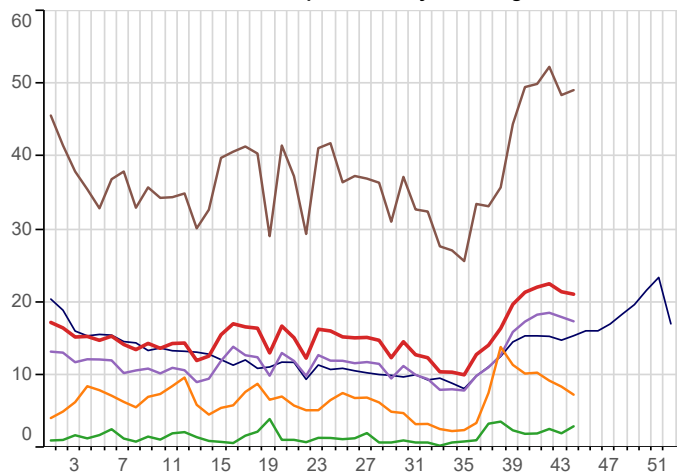
1. Respiratory Infections - *by age band*

5yr Avg All ages 5-14yrs
 <1yr 15-64yrs
 1-4yrs 65+yrs

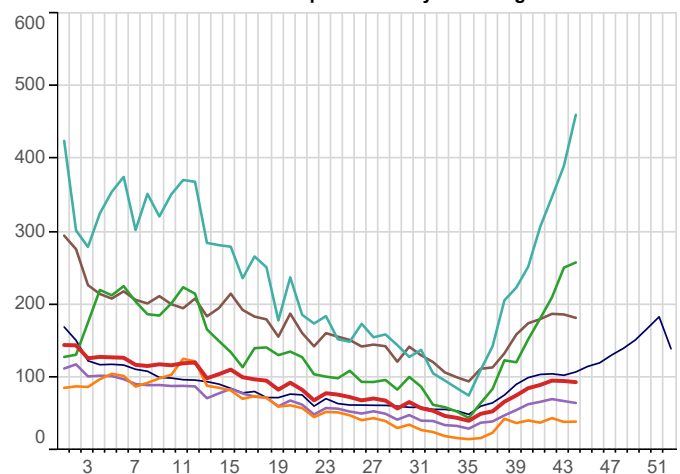
Influenza-like illness (ILI)
 Weekly incidence (per 100,000 all regions) by age band
 for 2024 compared with 5 year average



Exacerbations of Chronic Lung Disease (ECLD)
 Weekly incidence (per 100,000 all regions) by age band
 for 2024 compared with 5 year average



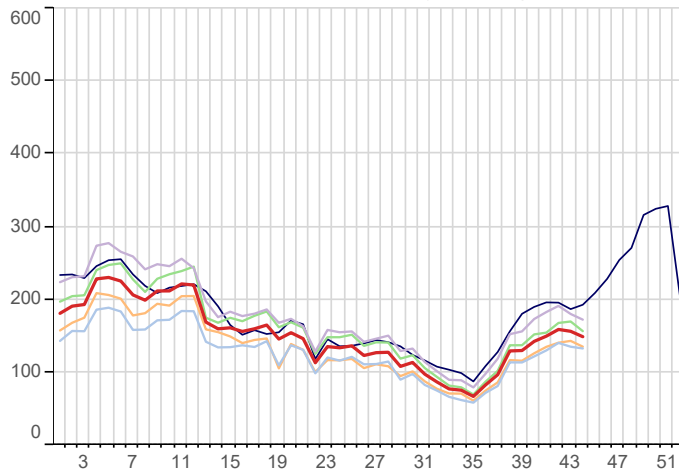
Lower Respiratory Tract Infections (LRTI)
 Weekly incidence (per 100,000 all regions) by age band
 for 2024 compared with 5 year average



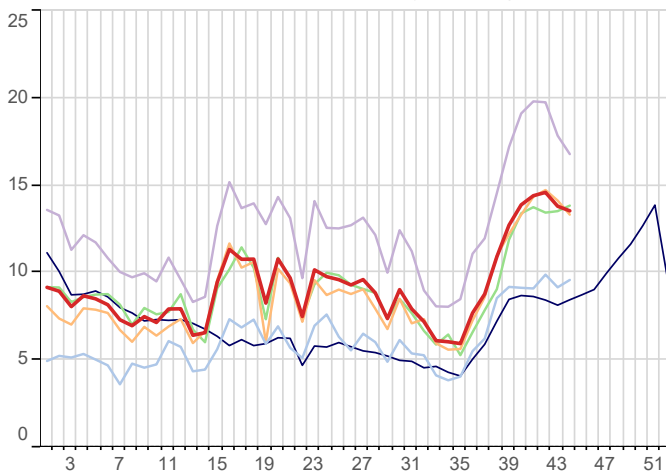
1. Respiratory Infections - *by region*

5yr Avg National South
 North Midlands And East
 London

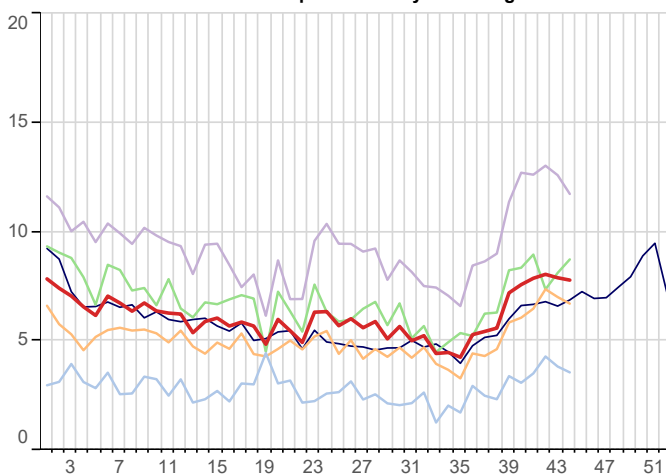
Upper Respiratory Tract Infections (URTI)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



Exacerbations of Chronic Lung Disease (ECLD) - Asthma Exacerbations
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



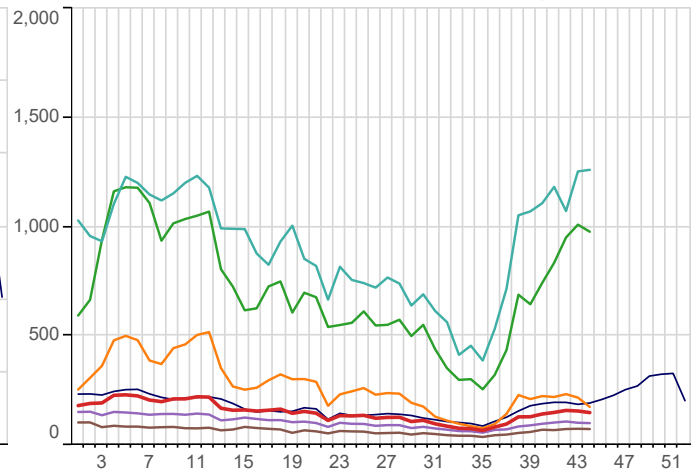
Exacerbations of Chronic Lung Disease (ECLD) - COPD Exacerbations
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



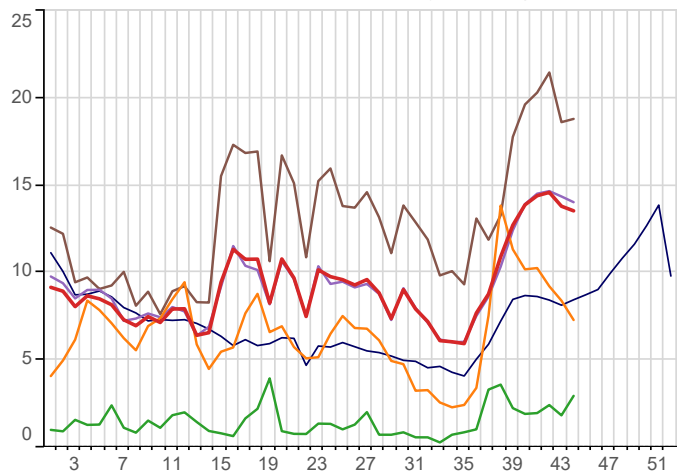
1. Respiratory Infections - *by age band*

5yr Avg All ages 5-14yrs
 <1yr 15-64yrs
 1-4yrs 65+yrs

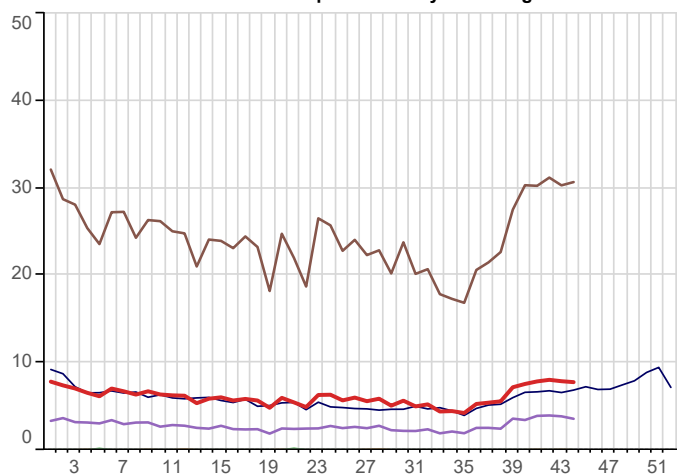
Upper Respiratory Tract Infections (URTI)
Weekly incidence (per 100,000 all regions) by age band
for 2024 compared with 5 year average



Exacerbations of Chronic Lung Disease (ECLD) - Asthma Exacerbations
Weekly incidence (per 100,000 all regions) by age band
for 2024 compared with 5 year average

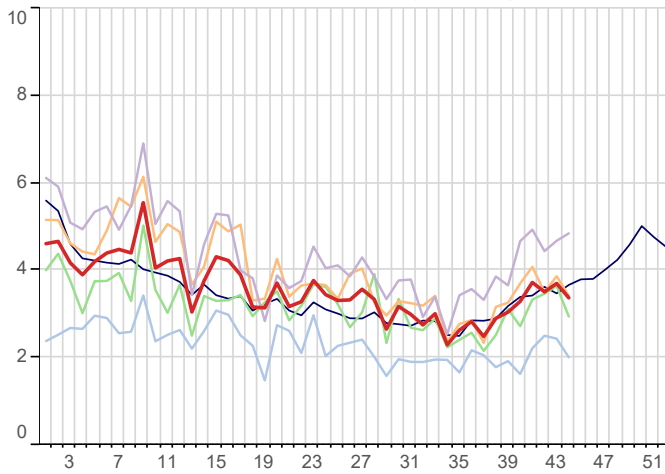


Exacerbations of Chronic Lung Disease (ECLD) - COPD Exacerbations
Weekly incidence (per 100,000 all regions) by age band
for 2024 compared with 5 year average

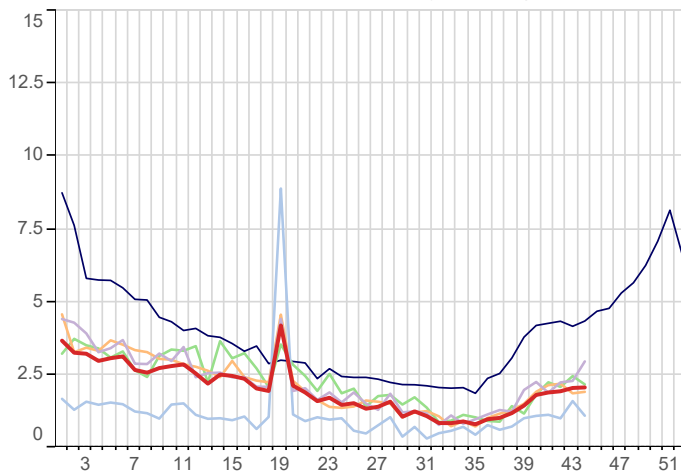


1. Respiratory Infections - *by region*

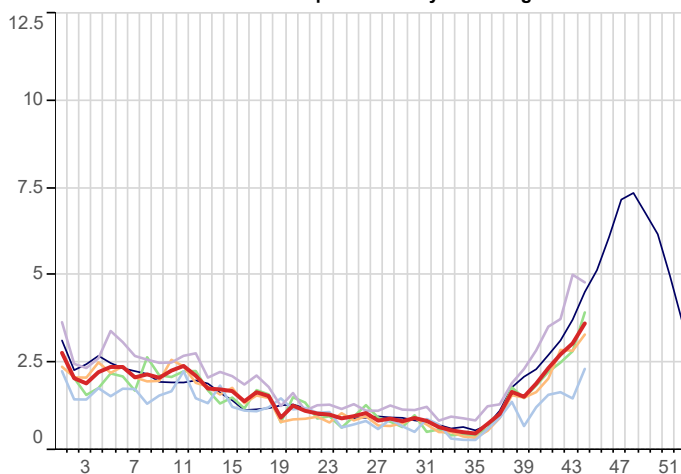
Lower Respiratory Tract Infections (LRTI) - Pneumonia
 Weekly incidence (per 100,000 all ages) by region
 for 2024 compared with 5 year average



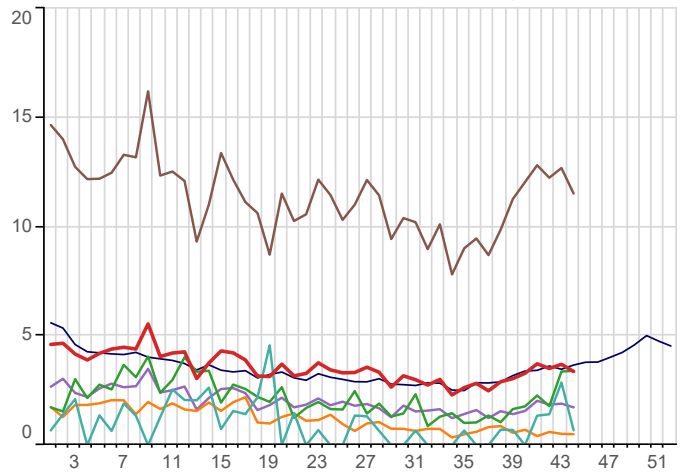
Lower Respiratory Tract Infections (LRTI) - Acute Bronchitis
 Weekly incidence (per 100,000 all ages) by region
 for 2024 compared with 5 year average



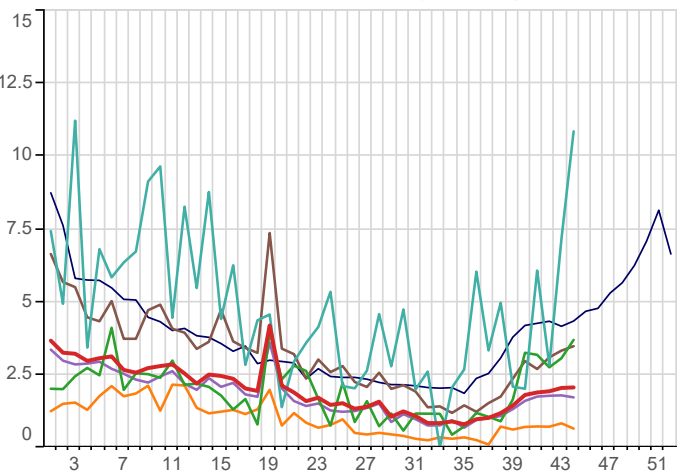
Lower Respiratory Tract Infections (LRTI) - Bronchiolitis
 Weekly incidence (per 100,000 all ages) by region
 for 2024 compared with 5 year average

1. Respiratory Infections - *by age band*

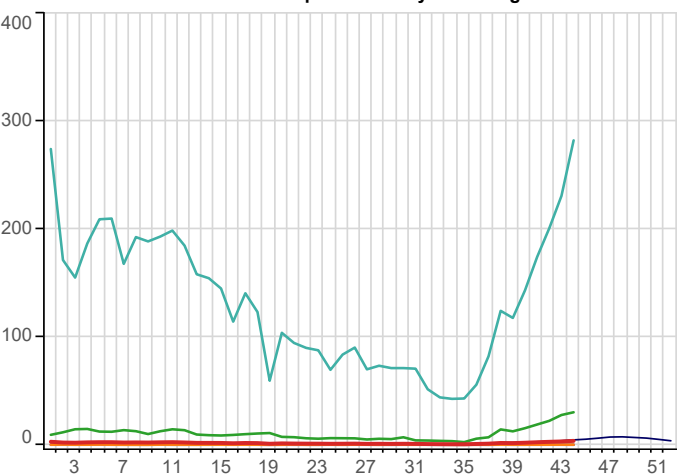
Lower Respiratory Tract Infections (LRTI) - Pneumonia
 Weekly incidence (per 100,000 all regions) by age band
 for 2024 compared with 5 year average



Lower Respiratory Tract Infections (LRTI) - Acute Bronchitis
 Weekly incidence (per 100,000 all regions) by age band
 for 2024 compared with 5 year average

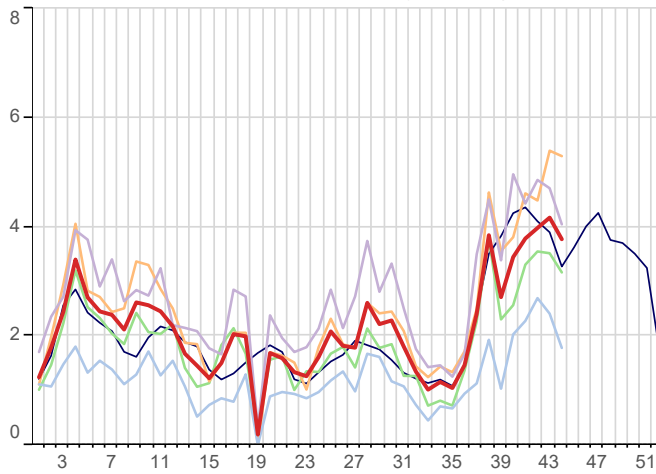


Lower Respiratory Tract Infections (LRTI) - Bronchiolitis
 Weekly incidence (per 100,000 all regions) by age band
 for 2024 compared with 5 year average

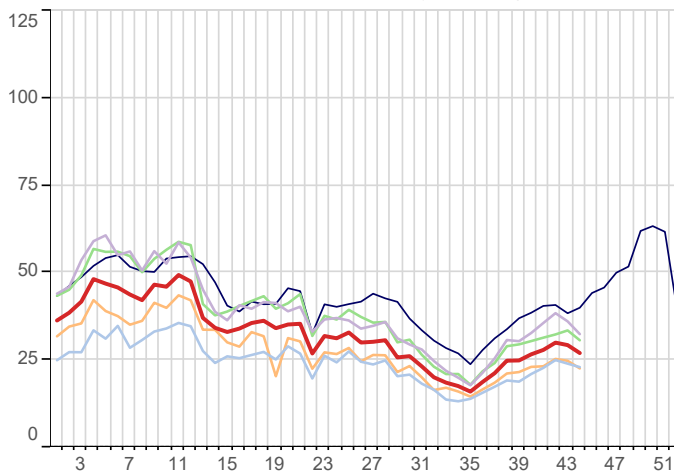


1. Respiratory Infections - *by region*

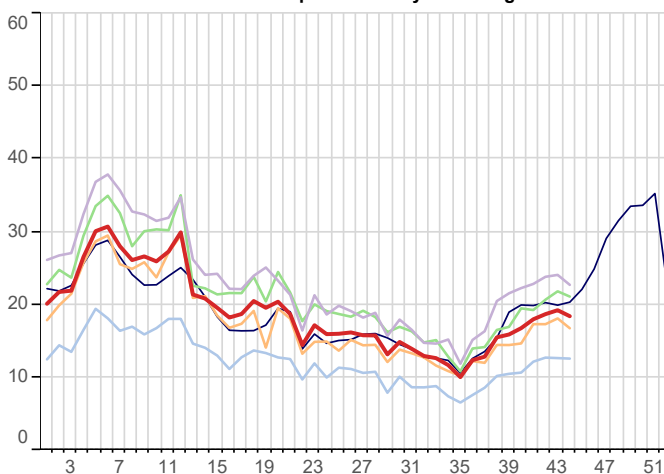
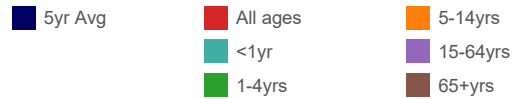
Upper Respiratory Tract Infections (URTI) - Croup
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



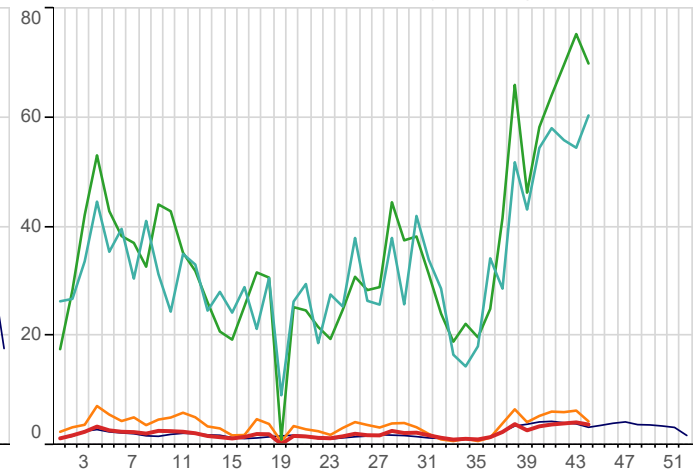
Upper Respiratory Tract Infections (URTI) - Tonsillitis/Pharyngitis
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



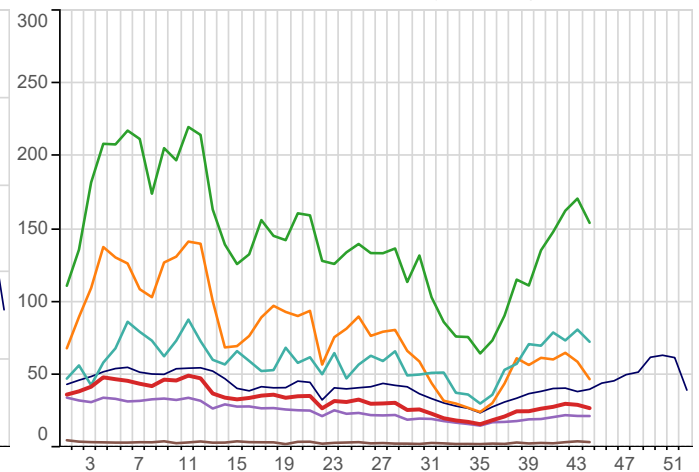
Upper Respiratory Tract Infections (URTI) - Otitis Media
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average

1. Respiratory Infections - *by age band*

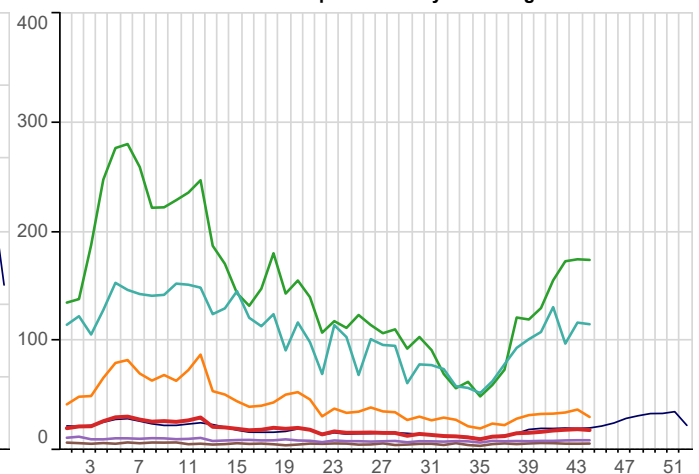
Upper Respiratory Tract Infections (URTI) - Croup
Weekly incidence (per 100,000 all regions) by age band
for 2024 compared with 5 year average

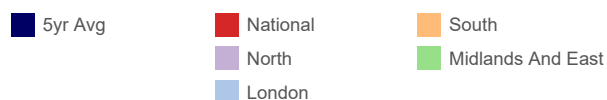


Upper Respiratory Tract Infections (URTI) - Tonsillitis/Pharyngitis
Weekly incidence (per 100,000 all regions) by age band
for 2024 compared with 5 year average

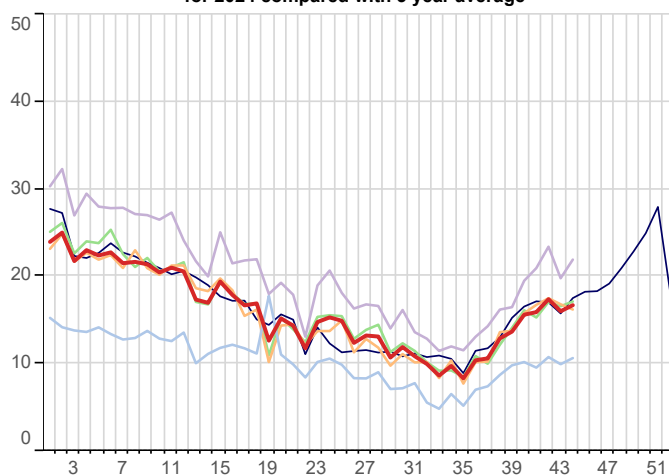


Upper Respiratory Tract Infections (URTI) - Otitis Media
Weekly incidence (per 100,000 all regions) by age band
for 2024 compared with 5 year average

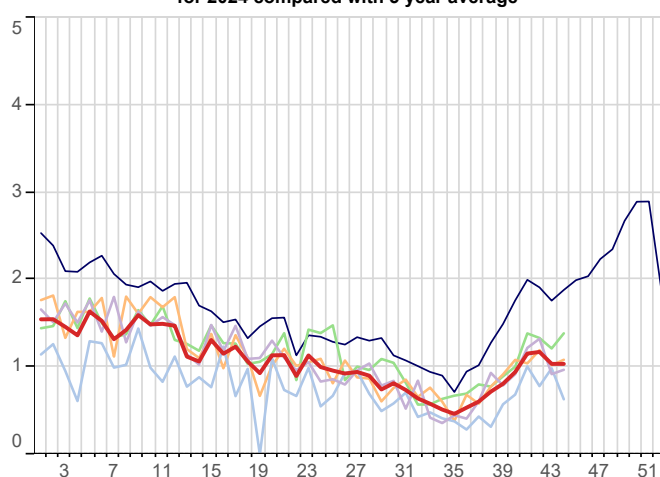


1. Respiratory Infections - *by region*

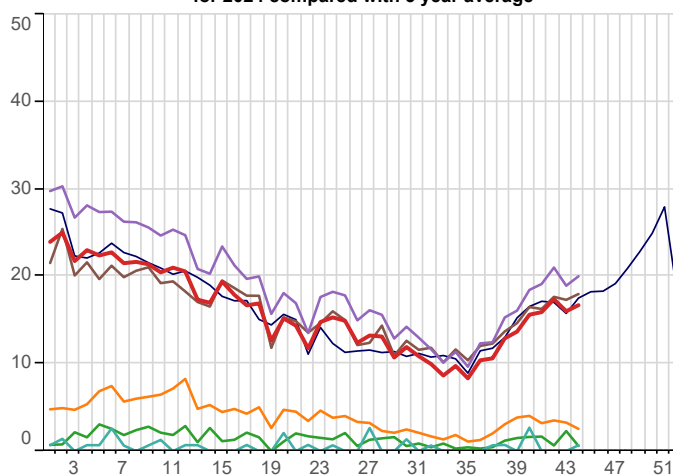
Upper Respiratory Tract Infections (URTI) - Sinusitis
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



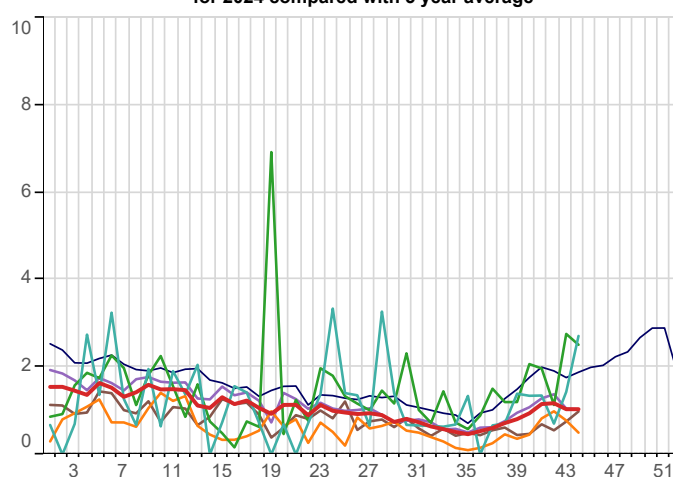
Upper Respiratory Tract Infections (URTI) - Laryngitis
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average

1. Respiratory Infections - *by age band*

Upper Respiratory Tract Infections (URTI) - Sinusitis
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



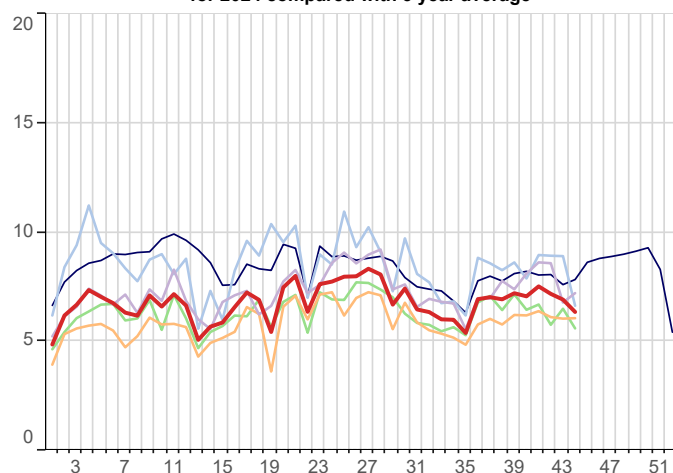
Upper Respiratory Tract Infections (URTI) - Laryngitis
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



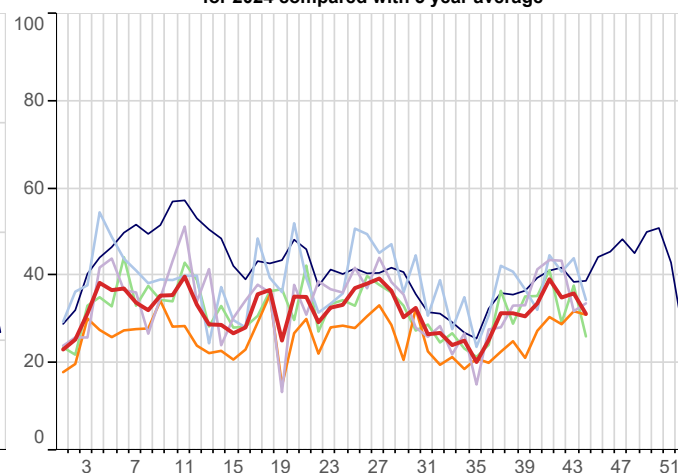
2. Water & Food Borne Disorders

5yr Avg National North London South Midlands And East

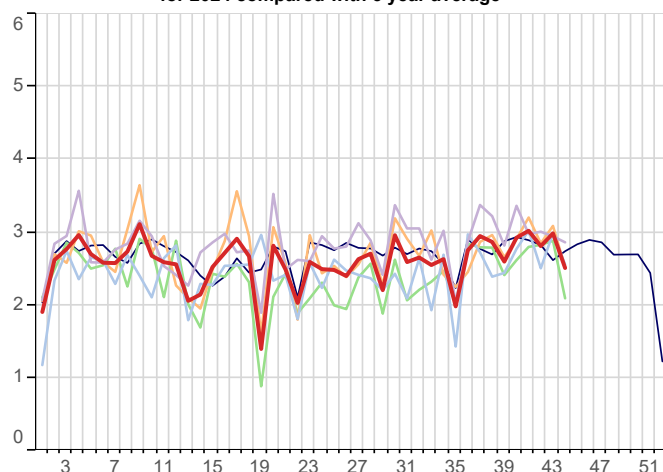
Infectious Intestinal Disease (ICD10: A00-A09)
Weekly incidence (per 100,000 **all ages**) by region
for 2024 compared with 5 year average



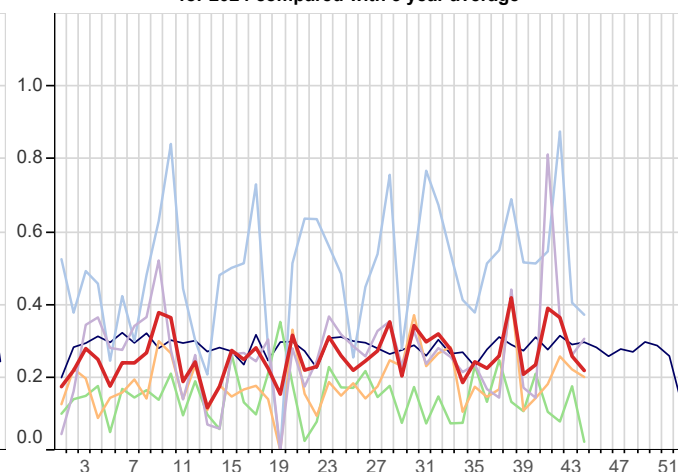
Infectious Intestinal Disease (ICD10: A00-A09)
Weekly incidence (per 100,000 **0-4 years**) by region
for 2024 compared with 5 year average



Non-Infective Enteritis & Colitis (ICD10: K50-K52)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



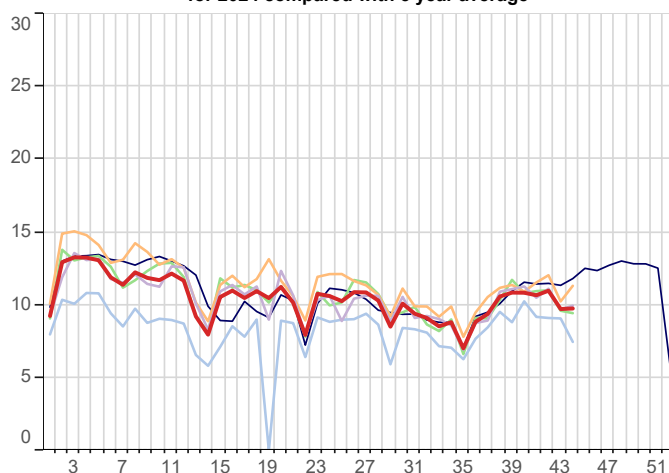
Viral Hepatitis (ICD10: B15-B19)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



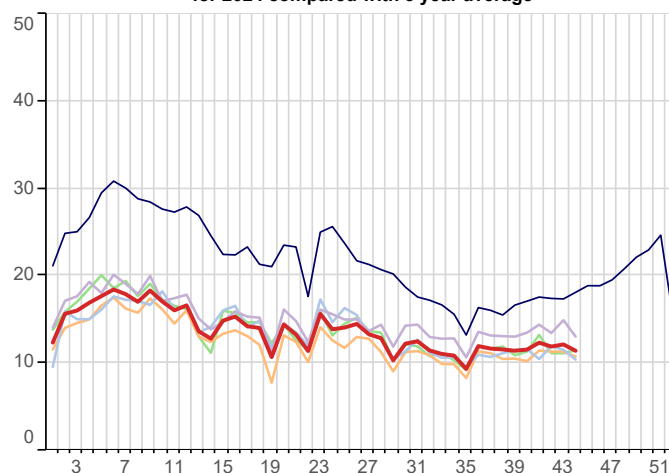
3. Environmentally Sensitive Disorders

5yr Avg National North London South Midlands And East

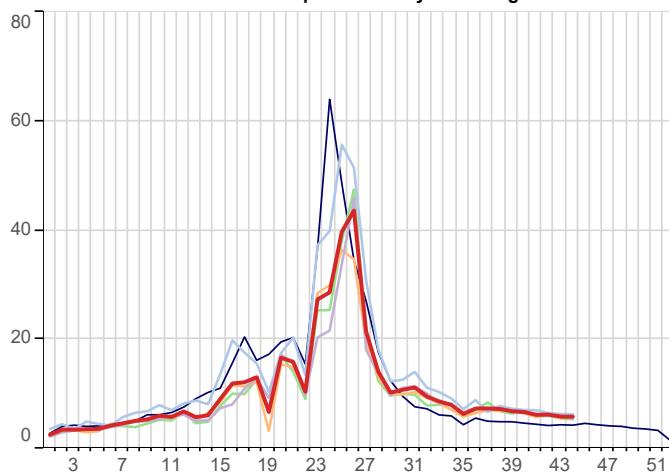
Asthma (ICD10: J45-J46)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



Disorders of Conjunctiva (ICD10: H10-H13)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



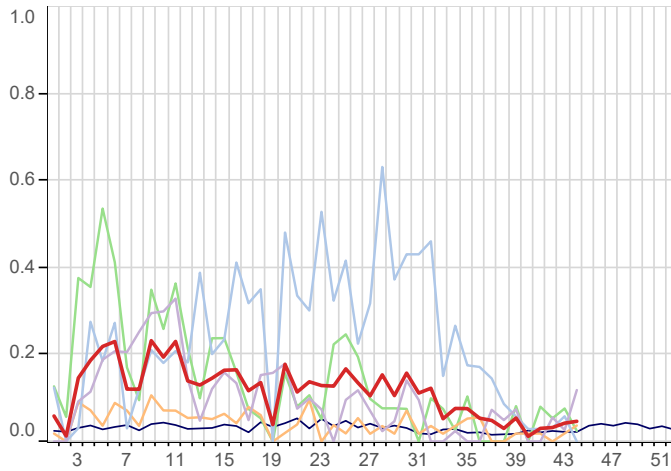
Hayfever/Allergic Rhinitis (ICD10: J30)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



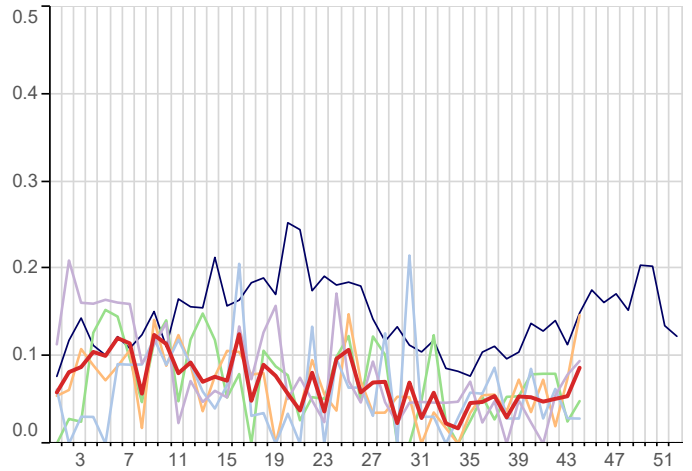
4. Vaccine Sensitive Disorders

5yr Avg National North London South Midlands And East

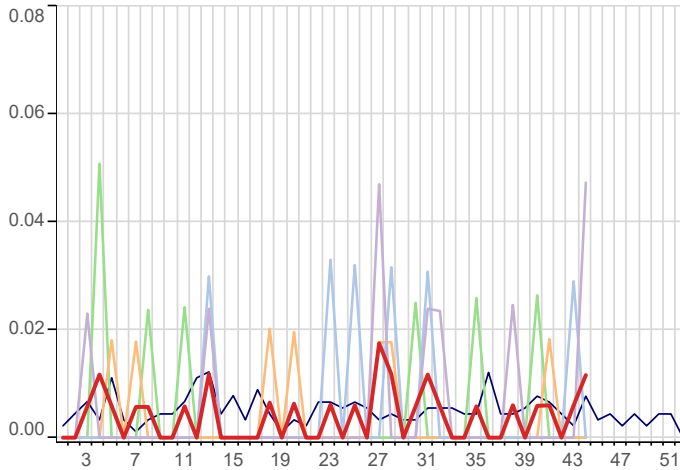
Measles (ICD10: B05)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



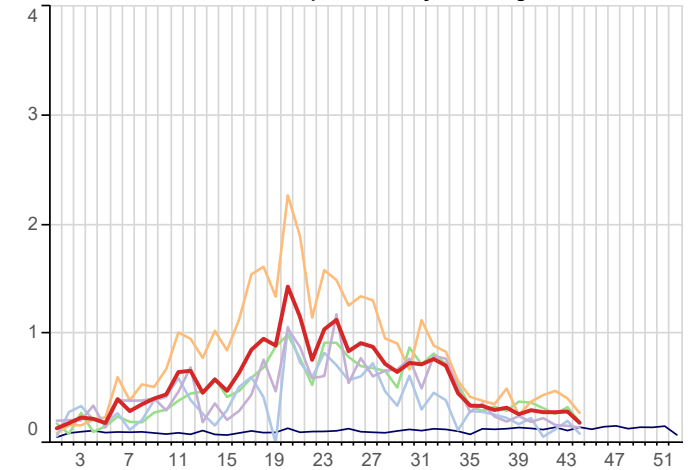
Mumps (ICD10: B26)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



Rubella (ICD10: B06)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average

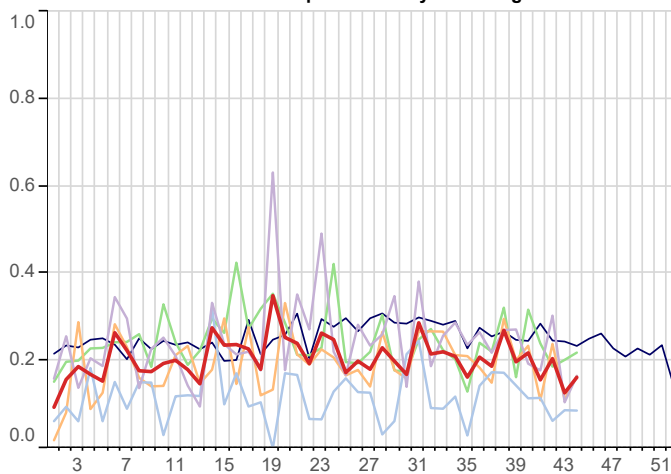


Whooping Cough (ICD10: A37)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average

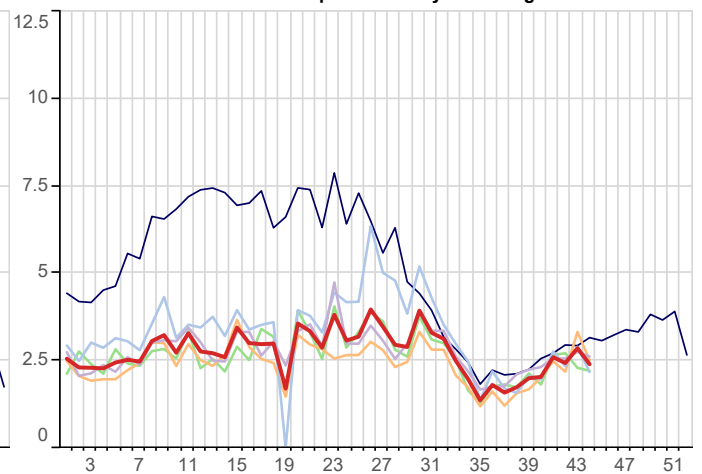


5. Skin Contagions

Bullous Dermatoses (ICD10: L10-L14)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



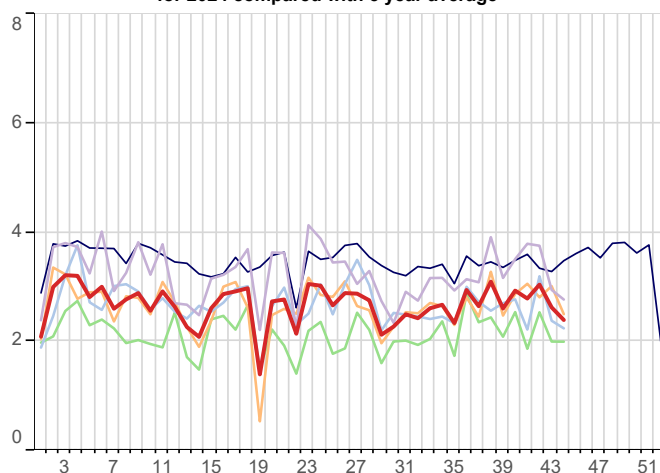
Chickenpox (ICD10: B01)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



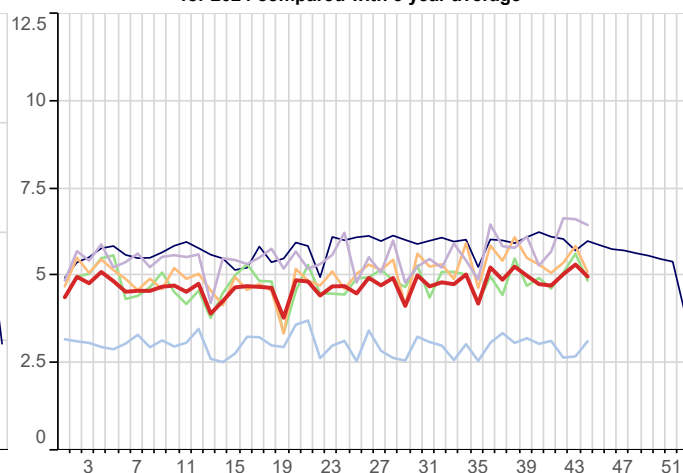
5. Skin Contagions (Continued)

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

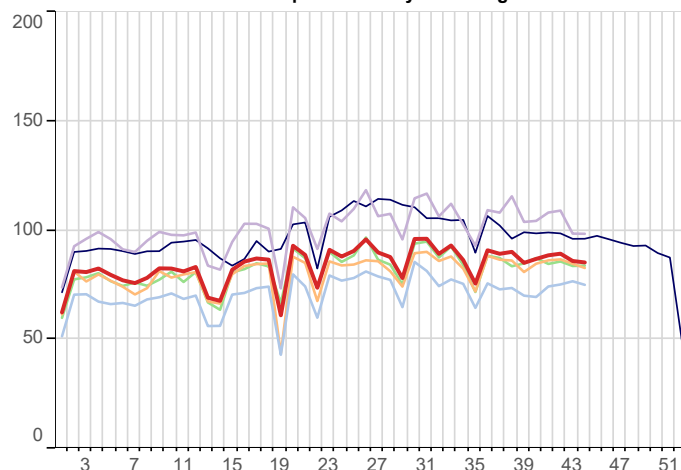
Herpes Simplex (ICD10: B00)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



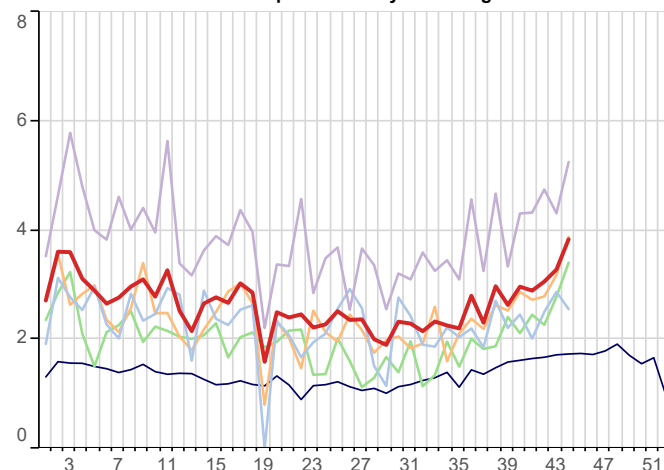
Herpes Zoster (ICD10: B02)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



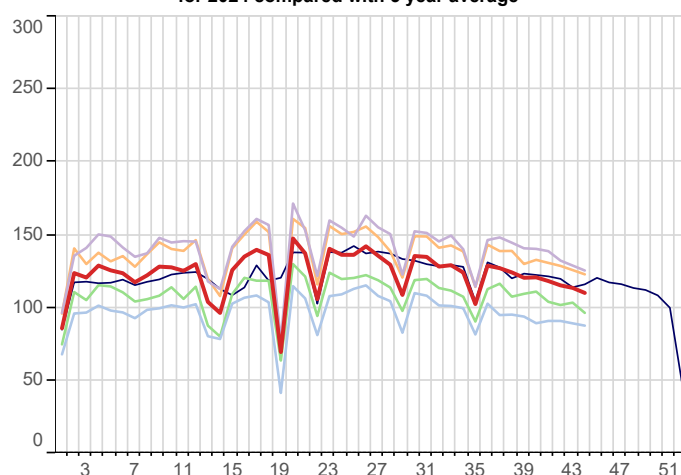
Infections of Skin & Subcutaneous Tissue (ICD10: L00-L08)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



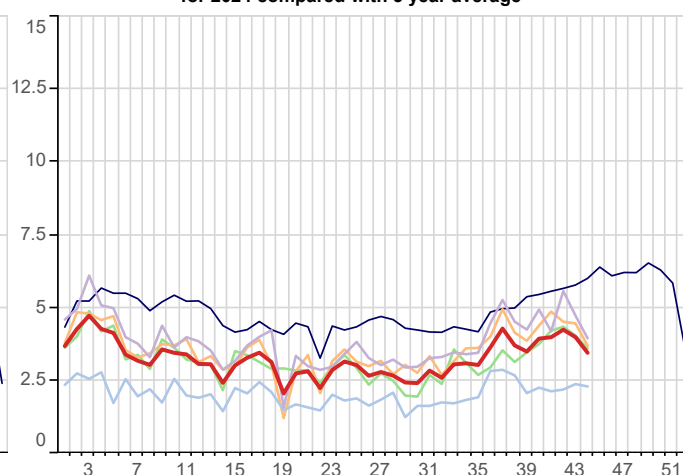
Scabies (ICD10: B86)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



Symptoms involving Skin & Oth Integument Tiss (ICD10: R20-R23)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



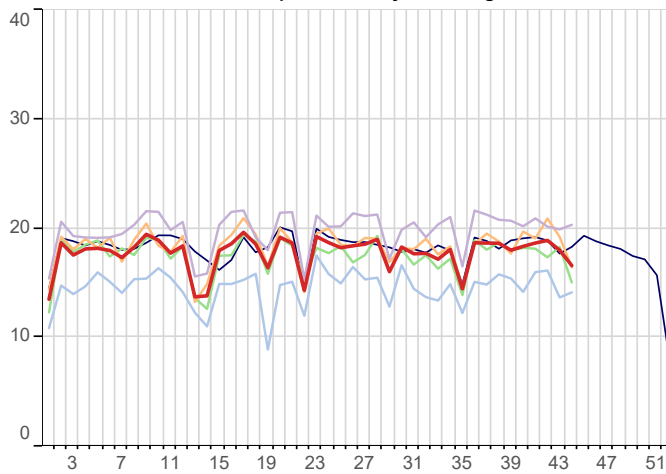
Impetigo (ICD10: L01)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



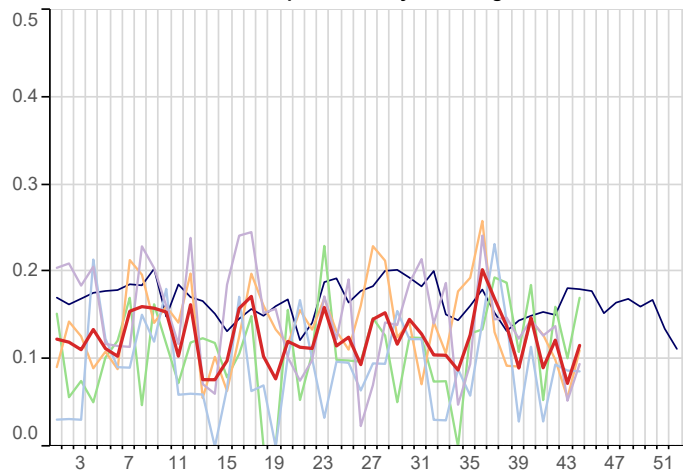
6. Disorders Affecting the Nervous System

5yr Avg National North London South Midlands And East

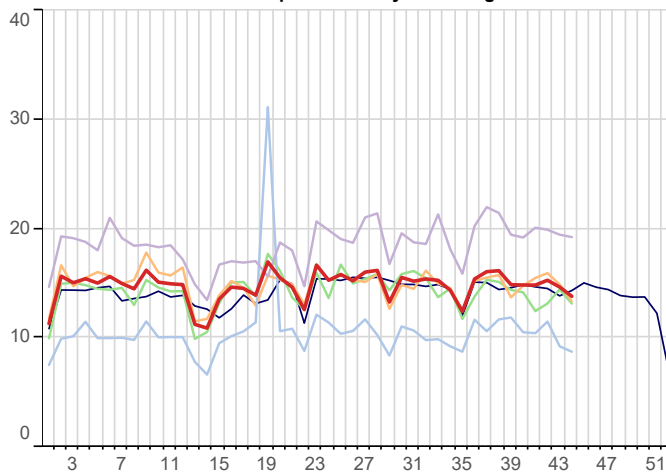
Disorders of The Peripheral Nervous System (ICD10: G50-G64,G70-G72)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



Meningitis/Encephalitis(ICD10: A170-A171,A390,A38-A85,A87,G00-G05)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average

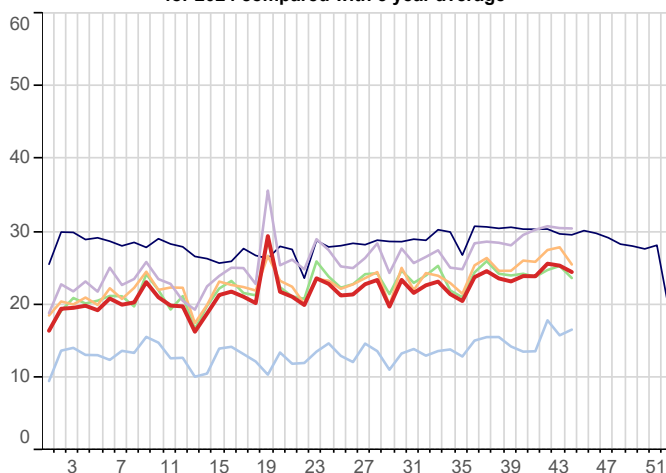


Symptoms Involving Nervous & Musculoskeletal (ICD10: R25-R29)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



7. Genitourinary System Disorders

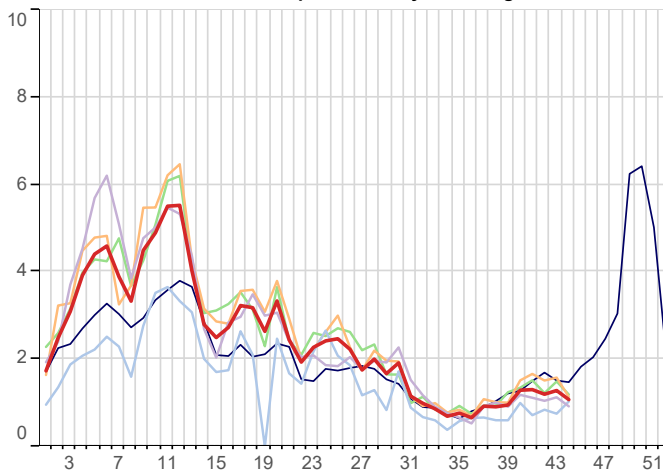
Urinary Tract Infection/Cystitis (ICD10: N30,N390)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



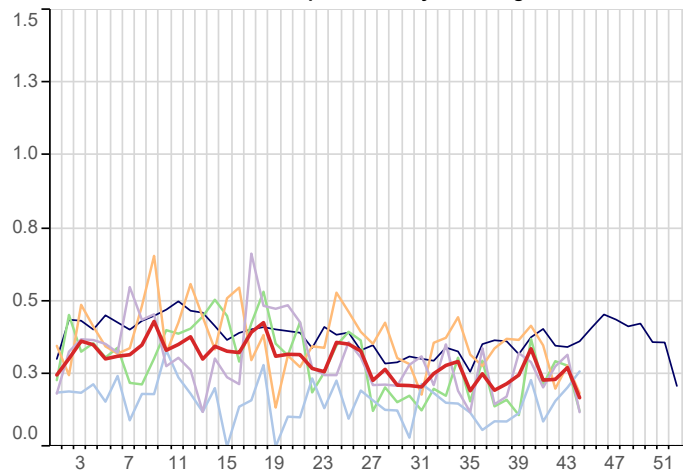
8. Other Disorders

5yr Avg National North London South Midlands And East

Strep Sore Throat, Scarlatina and Peritonsillar Abscess (ICD10: A38,J020,J36)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



Infectious Mononucleosis (ICD10: B27)
Weekly incidence (per 100,000 all ages) by region
for 2024 compared with 5 year average



8. Tabular Summary by Disease

	Week beginning Week ending		28/10/2024 03/11/2024		21/10/2024 27/10/2024		14/10/2024 20/10/2024		07/10/2024 13/10/2024	
Disease Name	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer
Acute Bronchitis	2.1	356	2.0	339	1.9	301	1.9	314		
Acute respiratory infections (ARI)	253.3	43,708	264.9	43,926	269.6	42,021	256.2	42,566		
Allergic Rhinitis	5.9	1,011	5.9	972	6.2	973	6.2	1,030		
Asthma	9.8	1,685	9.7	1,613	11.0	1,712	10.7	1,774		
Bronchiolitis	3.6	626	3.1	507	2.7	427	2.3	390		
Bullous Dermatoses	0.2	28	0.1	21	0.2	32	0.2	26		
Chickenpox	2.4	415	2.9	475	2.4	380	2.6	433		
Conjunctival Disorders	11.4	1,973	12.2	2,016	11.9	1,857	12.4	2,054		
COVID-19	3.0	516	4.5	739	5.7	883	6.5	1,072		
Croup	3.8	651	4.2	691	4.0	620	3.8	629		
ECLD - Asthma exacerbations	13.5	2,338	13.8	2,290	14.6	2,276	14.4	2,395		
ECLD - COPD exacerbations	7.8	1,344	7.9	1,309	8.1	1,255	7.9	1,308		
Exacerbations of chronic lung disease	21.1	3,642	21.4	3,555	22.5	3,513	22.1	3,668		
Herpes Simplex	2.4	413	2.6	435	3.0	474	2.8	463		
Herpes Zoster	5.0	860	5.3	883	5.0	787	4.7	785		
Impetigo	3.5	596	4.0	662	4.2	662	4.0	663		
Infectious Intestinal Diseases	6.4	1,096	6.9	1,147	7.2	1,119	7.5	1,250		
Infectious Mononucleosis	0.2	29	0.3	45	0.2	36	0.2	38		
Influenza-like illness	3.6	618	3.8	625	3.9	612	3.6	593		
Laryngitis	1.0	179	1.0	172	1.2	183	1.2	192		
Lower respiratory tract infections	93.5	16,130	95.0	15,749	95.6	14,893	89.5	14,879		
Measles	0.0	8	0.0	7	0.0	5	0.0	5		
Meningitis and Encephalitis	0.1	20	0.1	12	0.1	19	0.1	15		
Mumps	0.1	15	0.1	9	0.1	8	0.0	8		
Non-infective Enteritis and Colitis	2.5	433	3.0	495	2.8	438	3.0	502		
Otitis Media	18.4	3,176	19.2	3,188	18.7	2,913	18.0	2,988		
Peripheral Nervous Disease	16.6	2,862	18.0	2,984	18.9	2,944	18.7	3,099		
Pneumonia	3.4	582	3.7	614	3.5	547	3.7	619		
Rubella	0.0	2	0.0	1	0.0	0	0.0	1		
Scabies	3.8	662	3.3	544	3.1	477	2.9	481		
Sinusitis	16.7	2,884	16.0	2,656	17.4	2,711	15.9	2,645		
Skin and Subcutaneous Tissue Infections	85.3	14,717	85.9	14,249	89.3	13,916	88.5	14,713		
Strep Throat and Peritonsillar Abscess	1.1	186	1.3	213	1.2	187	1.3	217		
Symptoms involving musculoskeletal	13.8	2,383	14.7	2,430	15.3	2,381	14.8	2,465		
Symptoms involving Skin and Integument Tissues	110.2	19,019	113.7	18,848	115.4	17,987	118.4	19,672		
Tonsillitis/Pharyngitis	27.0	4,665	29.3	4,859	30.0	4,678	27.9	4,641		
Upper respiratory tract infections	149.0	25,708	156.4	25,932	159.0	24,775	149.7	24,883		
Urinary Tract Infections	24.5	4,225	25.4	4,205	25.6	3,994	23.9	3,971		
Viral Hepatitis	0.2	38	0.3	43	0.4	57	0.4	65		
Whooping Cough	0.2	32	0.3	48	0.3	44	0.3	47		
Practice Count		1,645		1,589		1,521		1,608		
Denom		17,256,820		16,579,817		15,584,494		16,616,407		

FURTHER INFORMATION:

About the report

Focus

The first two pages of data within this report focus on influenza-like illness and virology data, 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 bands, 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 (navy blue lines), 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 four age bands: those aged 1-4, 5-14, 15-64 and those aged 65 and over. ILI incidence rates vary among different age bands, and the age-specific thresholds allow us to highlight epidemics where ILI disproportionately affects a particular age band.

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. Five years of data were used for *all-ages* and *age-specific* thresholds calculation (winter seasons 2015/16, 2016/17, 2017/18, 2018/19 and 2022/23, excluding 2019/20, 2020/21 and 2021/22).

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 Analytics (EXA) 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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