Royal College of General Practitioners

RSC Communicable and Respiratory Disease Report for England

Key Statistics:

Week Number/Year..... 49/2023
Week Starting - Ending..... 04/12/2023 - 10/12/2023
No. of Practices..... 1,626
Population..... 16,496,788

National (England)

- Acute Respiratory Infections: increased from 353.2 in week 48 to 377.3 in week 49.
- Influenza-like illness: increased from 4.6 in week 48 to 5.3 in week 49.
- Exacerbations of Chronic Lung Disease: increased from 16.6 in week 48 to 17.9 in week 49.
- Lower Respiratory Tract Infections: increased from 126.3 in week 48 to 136.0 in week 49.
- Upper Respiratory Tract Infections: increased from 214.8 in week 48 to 226.2 in week 49.
- COVID-19: increased from 9.0 in week 48 to 12.1 in week 49.

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

- Acute Respiratory Infections: increased from 294.4 in week 48 to 314.4 in week 49 in the London region, increased from 416.8 in week 48 to 447.6 in week 49 in the North region, increased from 329.5 in week 48 to 343.4 in week 49 in the South region, and increased from 363.4 in week 48 to 397.2 in week 49 in the Midlands And East region.
- Influenza-like illness: increased from 6.5 in week 48 to 7.4 in week 49 in the London region, increased from 4.8 in week 48 to 5.7 in week 49 in the North region, increased from 4.2 in week 48 to 5.0 in week 49 in the South region, and increased from 3.4 in week 48 to 3.6 in week 49 in the Midlands And East region.
- Exacerbations of Chronic Lung Disease: increased from 9.1 in week 48 to 11.4 in week 49 in the London region, increased from 24.1 in week 48 to 24.7 in week 49 in the North region, increased from 14.9 in week 48 to 15.4 in week 49 in the South region, and increased from 16.8 in week 48 to 19.2 in week 49 in the Midlands And East region.
- Lower Respiratory Tract Infections: increased from 84.0 in week 48 to 95.5 in week 49 in the London region, increased from 162.1 in week 48 to 176.1 in week 49 in the North region, increased from 118.8 in week 48 to 123.8 in week 49 in the South region, and increased from 131.9 in week 48 to 141.7 in week 49 in the Midlands And East region.
- Upper Respiratory Tract Infections: increased from 200.4 in week 48 to 204.8 in week 49 in the London region, increased from 240.9 in week 48 to 258.1 in week 49 in the North region, increased from 198.4 in week 48 to 204.0 in week 49 in the South region, and increased from 220.4 in week 48 to 238.4 in week 49 in the Midlands And East region.
- COVID-19: increased from 8.7 in week 48 to 11.5 in week 49 in the London region, increased from 7.3 in week 48 to 9.6 in week 49 in the North region, increased from 10.9 in week 48 to 14.5 in week 49 in the South region, and increased from 8.7 in week 48 to 12.2 in week 49 in the Midlands And East region.

Comment:

Overall presentations of acute respiratory infections (ARI) have increased this week though they are below the seasonal norm (page 6).

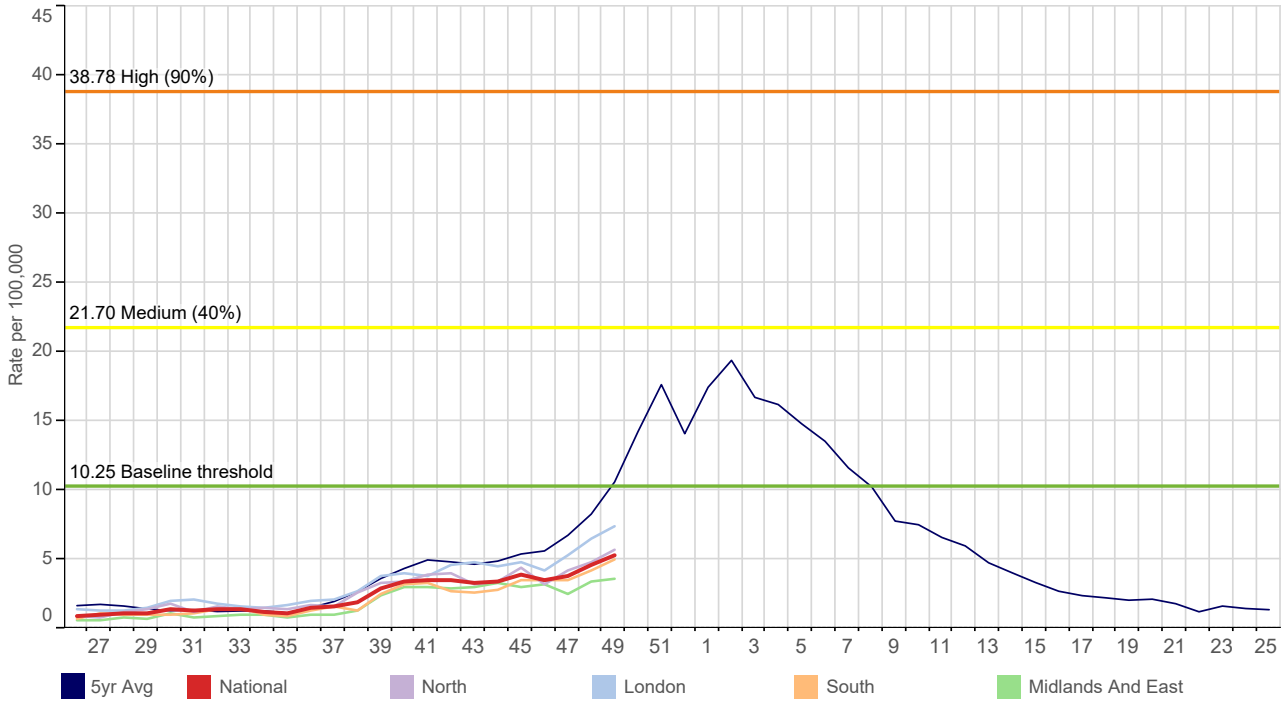
Rates of COVID-19 have increased this week in all regions and age bands, though rates in children aged 5-14 years were unchanged (page 5). Bronchitis and bronchiolitis in children aged under 5 are associated with respiratory syncytial virus (RSV) infections, and may have peaked (graph F, page 4). Scabies rates remain above the seasonal norm in all regions (page 15).

This report includes a respiratory virology update. SARS-CoV-2, RSV and Influenza are the predominant circulating viruses detected by the UK Health Security Agency (UKHSA) Reference Virology Lab.

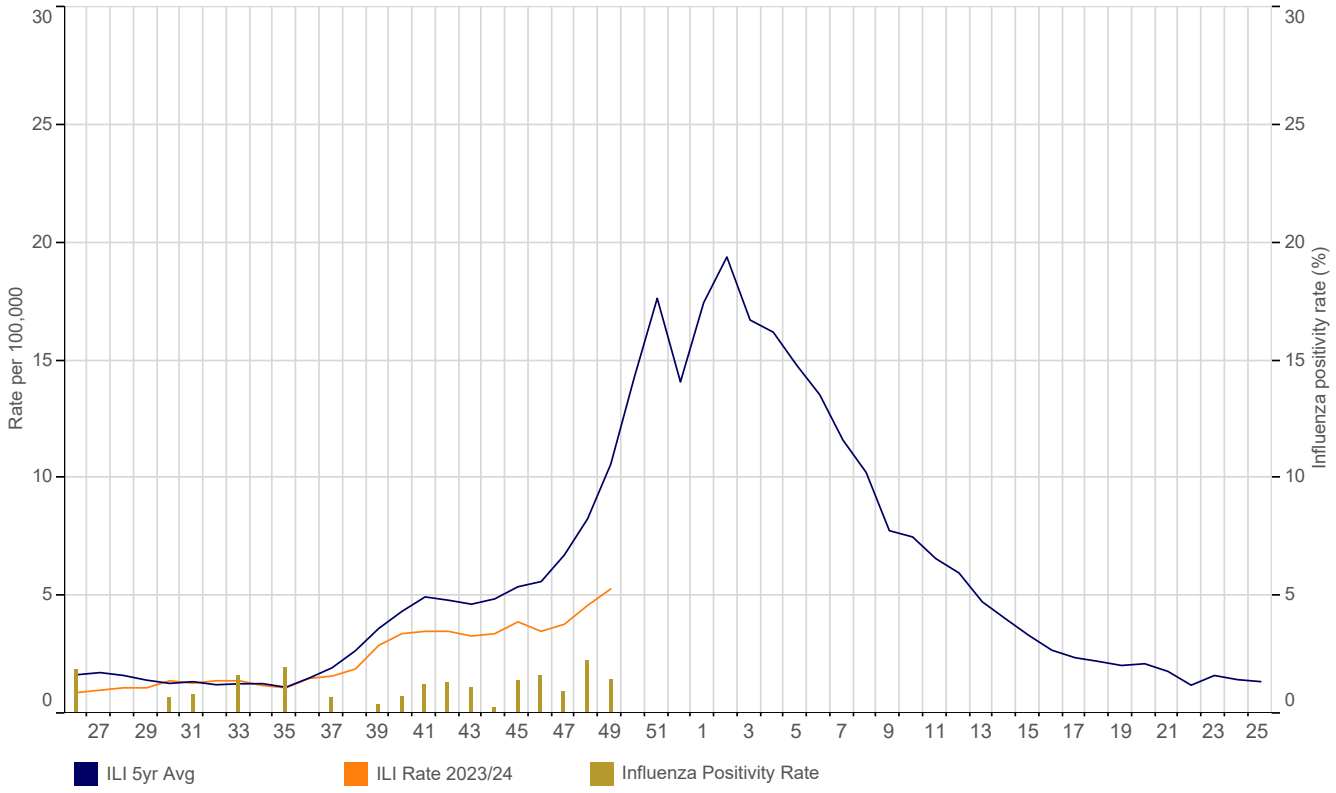
2023/24 Focus

Please see page 19 for explanatory notes on the data.

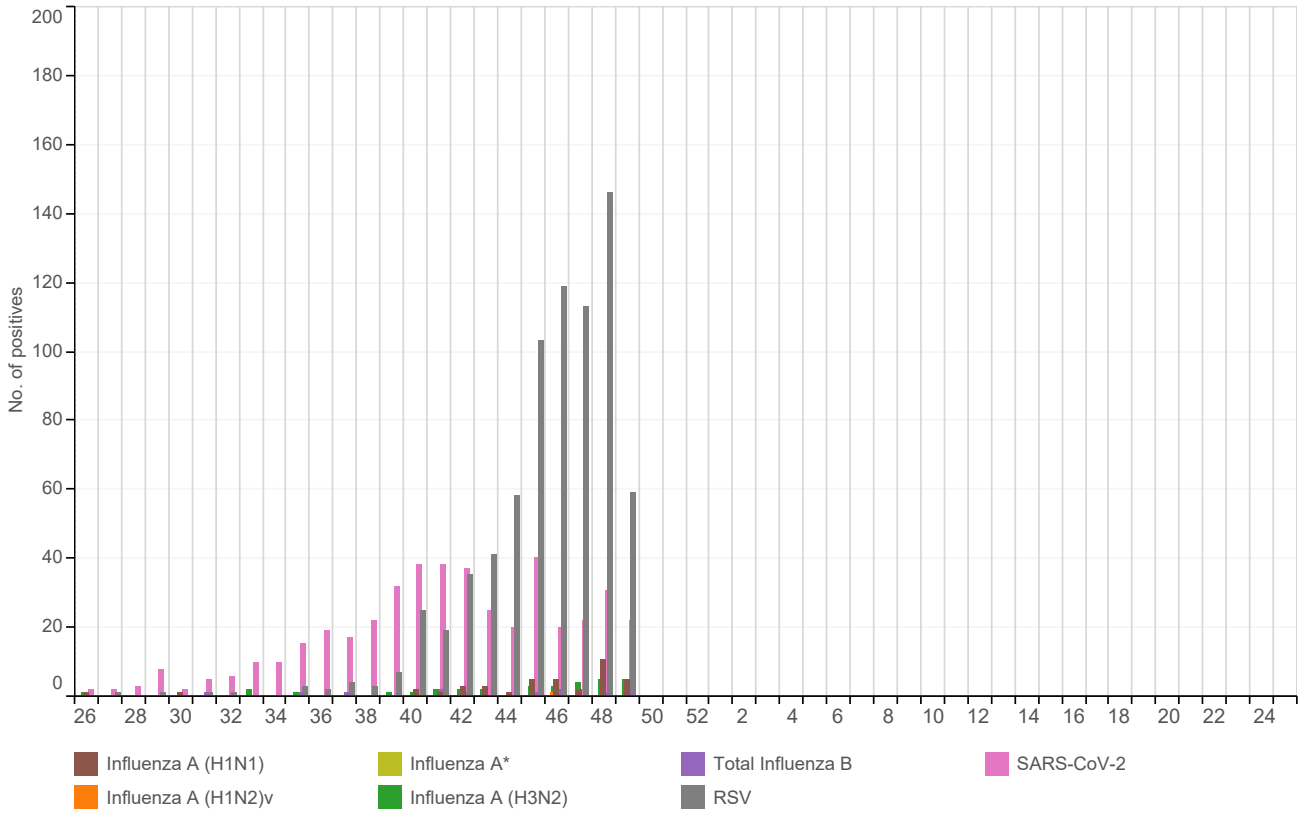
(A) Influenza-like illness: national incidence rate 2023/24 by region



(B) RCGP/UKHSA Influenza Virology Swab Surveillance 2023/24

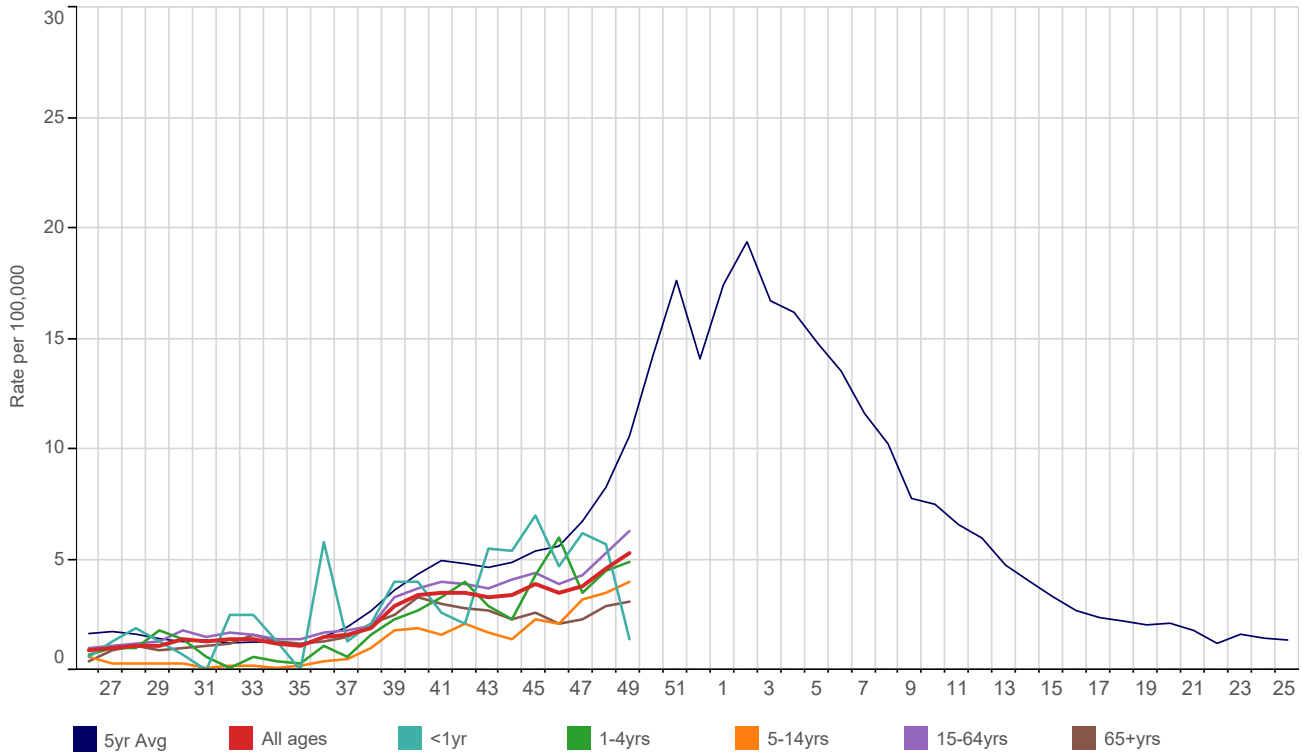


(C) RCGP/UKHSA RSV, Influenza and SARS-CoV-2 Virology Swab Surveillance 2023/24 by viral strain



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 2023/24 by age band



(E) Influenza-like illness: national incidence rate 2023/24 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	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
1-4yrs	0.7	1.0	1.0	1.8	1.4	0.6	0.1	0.6	0.4	0.3	1.1	0.6	1.6	2.3	2.7	3.3	4.0	2.9
5-14yrs	0.6	0.3	0.3	0.3	0.3	0.1	0.2	0.2	0.1	0.2	0.4	0.5	1.0	1.8	1.9	1.6	2.1	1.7
15-64yrs	1.0	1.1	1.2	1.3	1.8	1.5	1.7	1.6	1.4	1.4	1.7	1.8	2.0	3.3	3.7	4.0	3.9	3.7
65+yrs	0.4	0.9	1.1	0.9	1.0	1.1	1.2	1.6	1.3	1.2	1.3	1.5	2.1	2.5	3.3	3.0	2.8	2.7
All ages	0.9	1.0	1.1	1.1	1.4	1.3	1.4	1.4	1.2	1.1	1.5	1.6	1.9	2.9	3.4	3.5	3.5	3.3

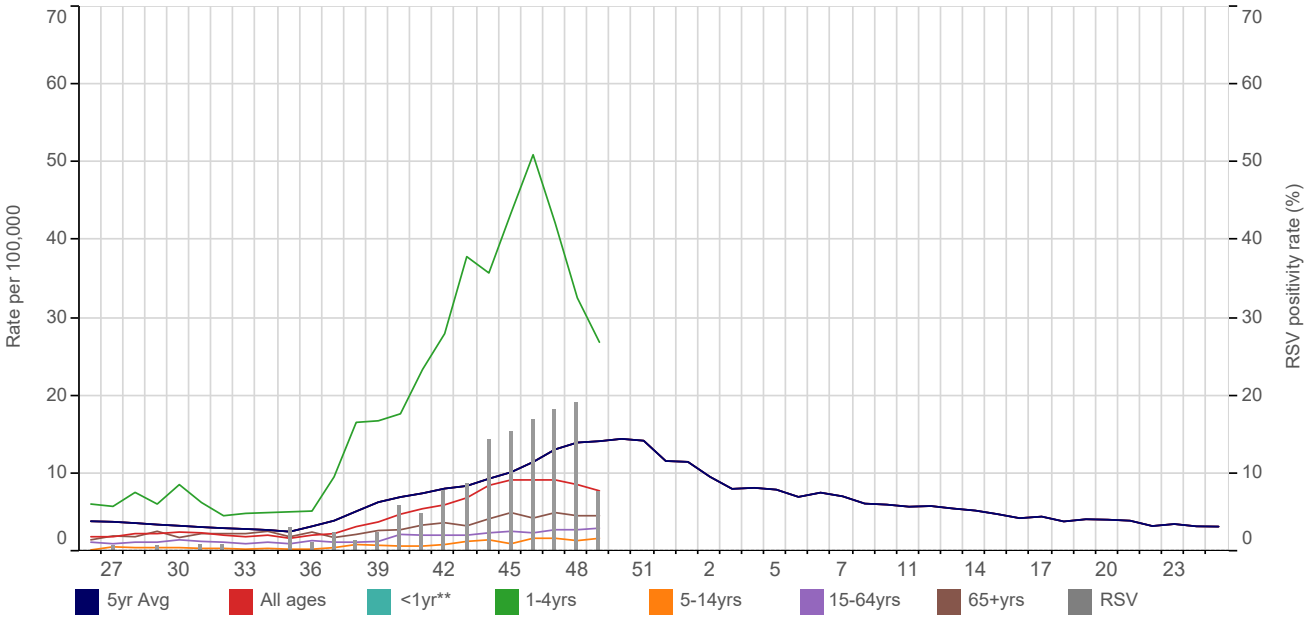
	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9
1-4yrs	2.3	4.3	6.0	3.5	4.5	4.9												
5-14yrs	1.4	2.3	2.1	3.2	3.5	4.0												
15-64yrs	4.1	4.4	3.9	4.3	5.3	6.3												
65+yrs	2.3	2.6	2.1	2.3	2.9	3.1												
All ages	3.4	3.9	3.5	3.8	4.6	5.3												

Table 2	Below Threshold	Threshold to Medium	Medium to High[3]	High to Very High	
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 2023/24 by age band



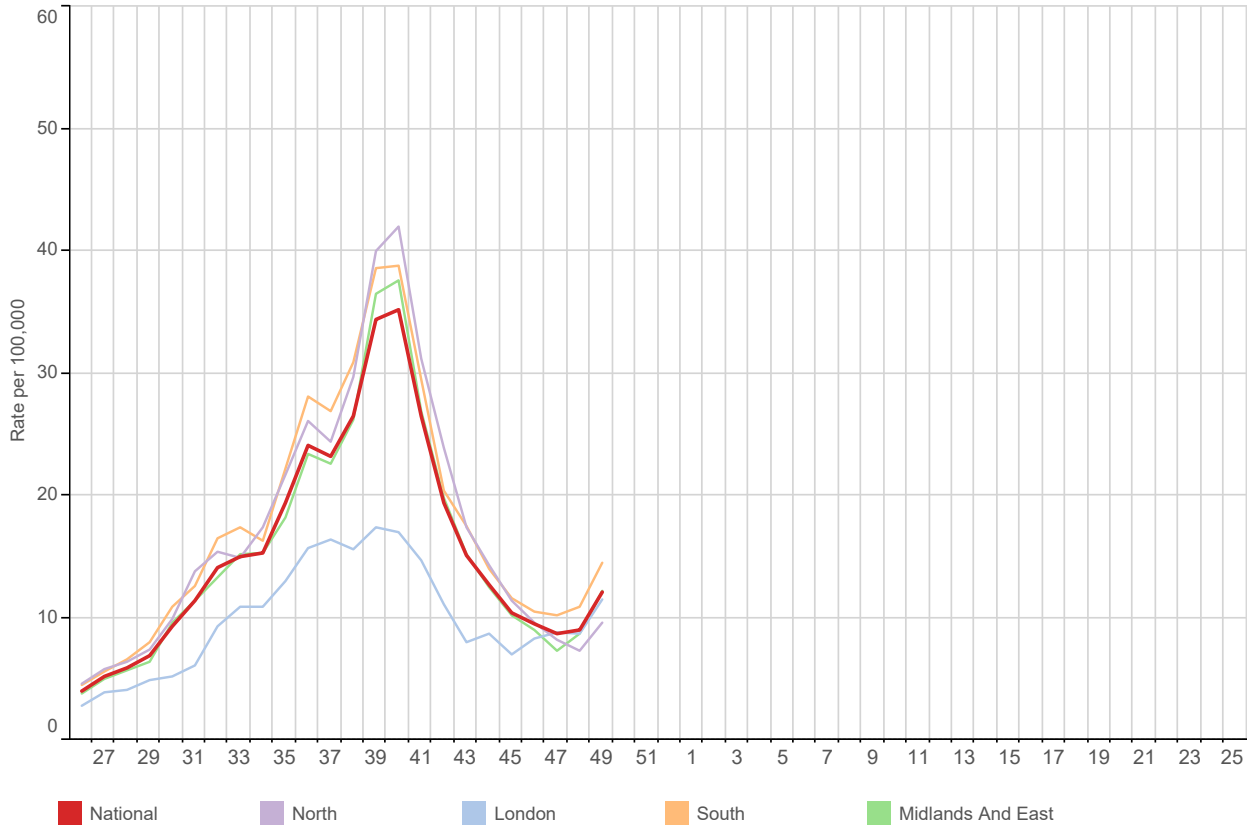
Weekly Influenza-like illness and Acute Bronchitis and Bronchiolitis incidence rates per 100,000 persons

	Influenza-like illness	Acute Bronchitis and Bronchiolitis
<1yr	1.4	422.2
1-4yrs	4.9	26.9
5-14yrs	4.0	1.7
15-24yrs	4.9	1.5
25-44yrs	6.7	3.1
45-64yrs	6.4	3.8
65-74yrs	3.3	4.7
75-84yrs	2.7	5.1
85+yrs	3.0	2.5
All ages	5.3	7.8

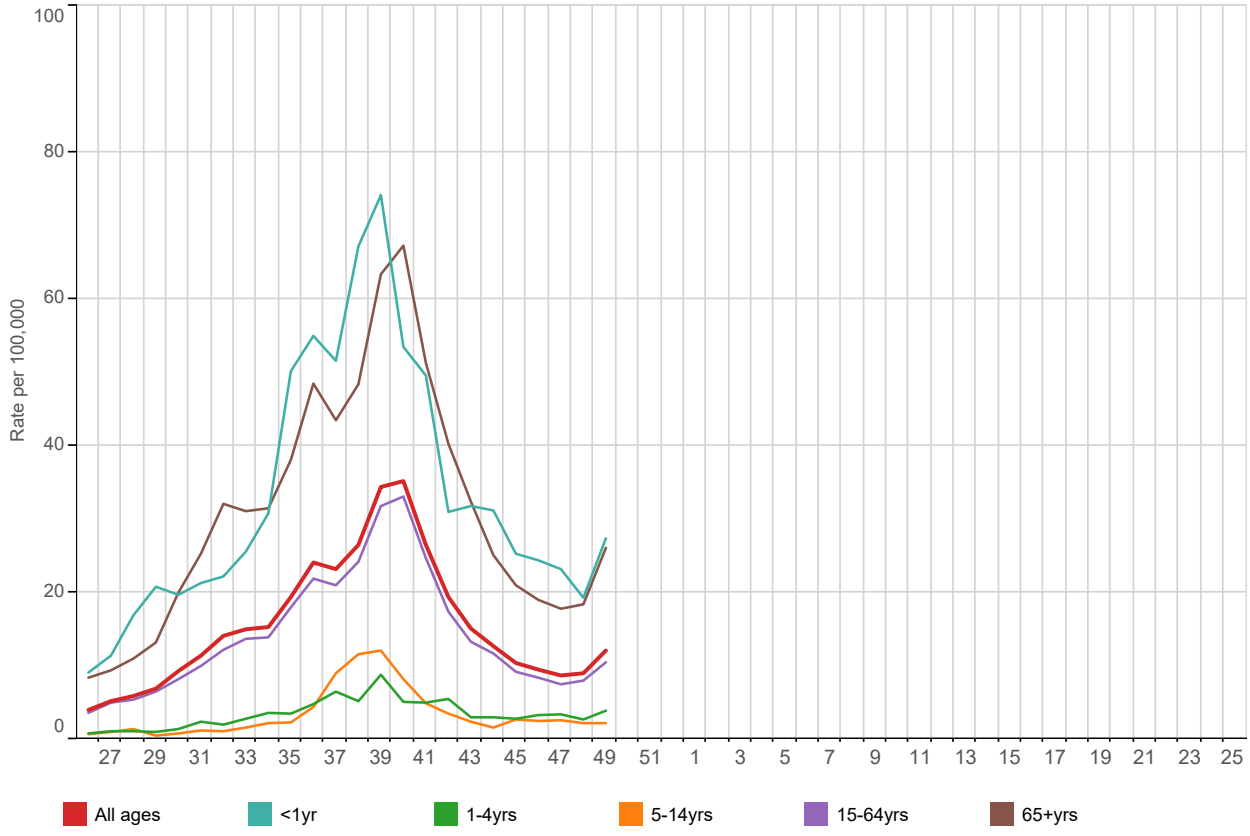
	Influenza-like illness	Acute Bronchitis and Bronchiolitis
London	7.4	6.1
North	5.7	8.5
South	5.0	8.3
Midlands And East	3.6	7.9
National	5.3	7.8

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

(G) COVID-19: national incidence rate 2023/24 by region

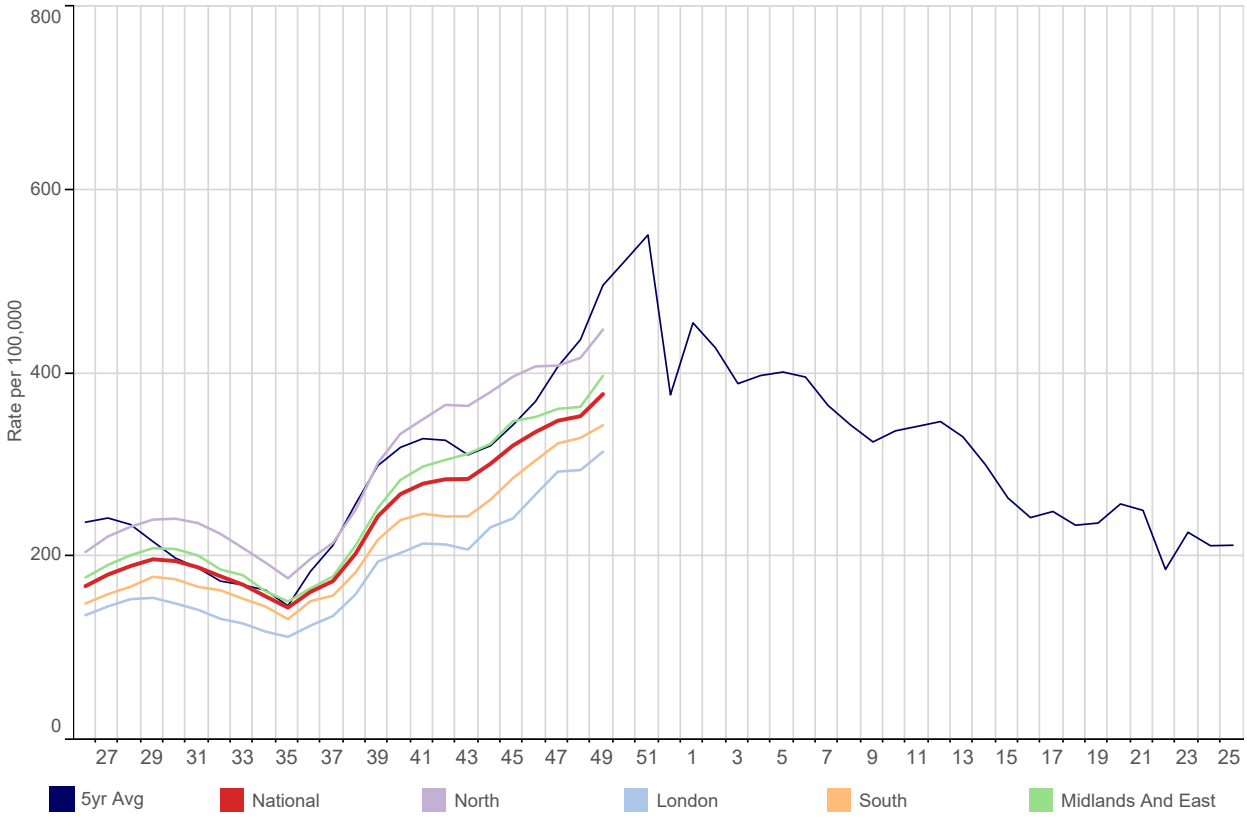


(H) COVID-19: national incidence rate 2023/24 by age band

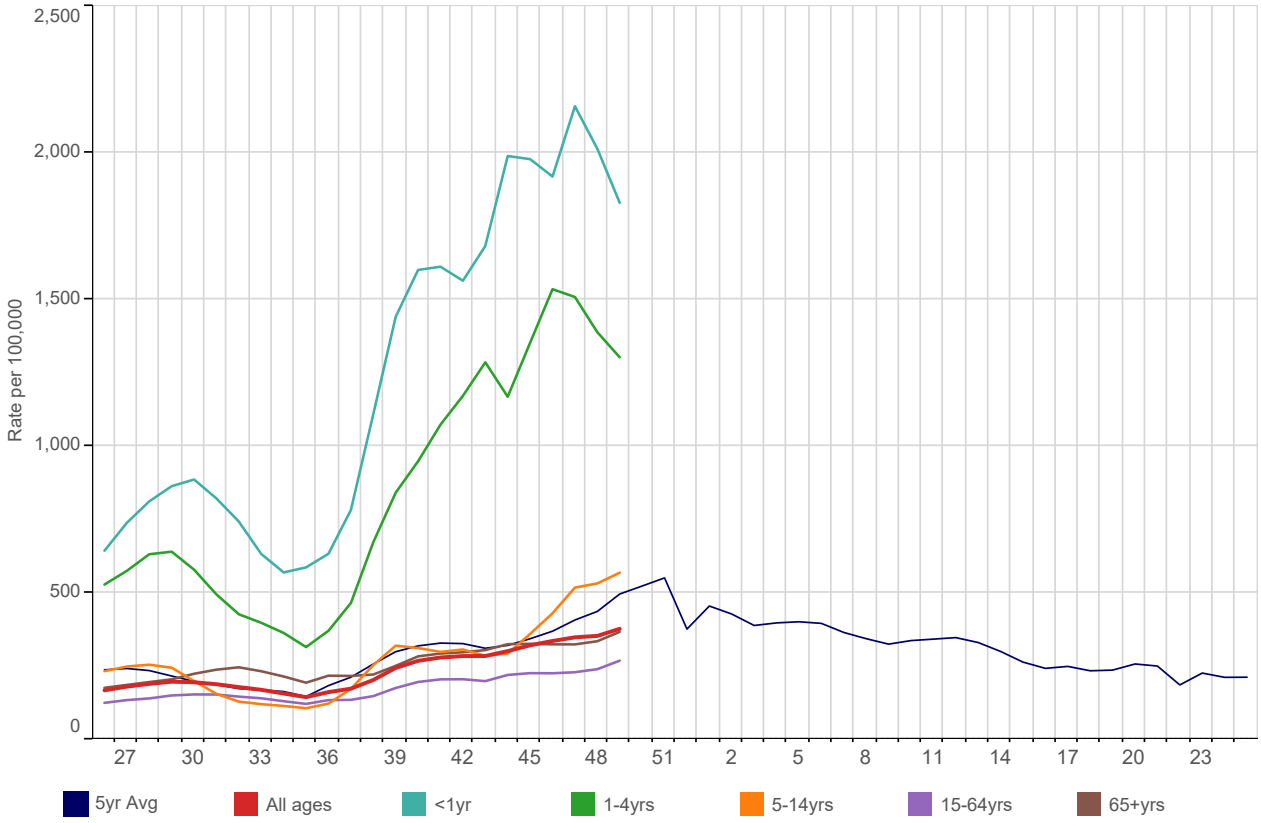


1. Respiratory Infections

(I) Acute Respiratory Infections (ARI): national incidence rate 2023/24 by region



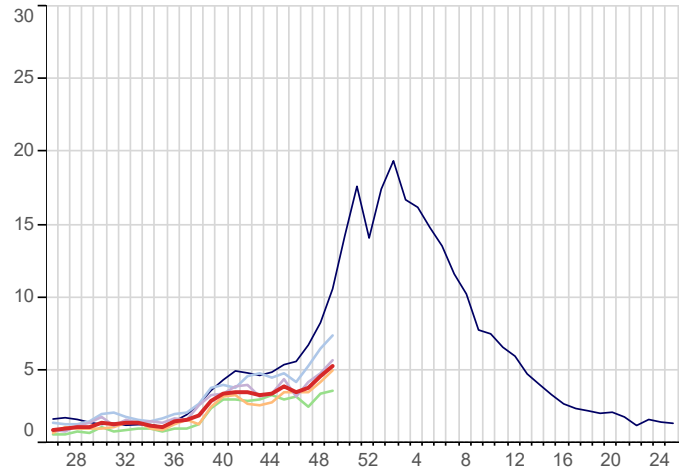
( ) Acute Respiratory Infections (ARI): national incidence rate 2023/24 by age band



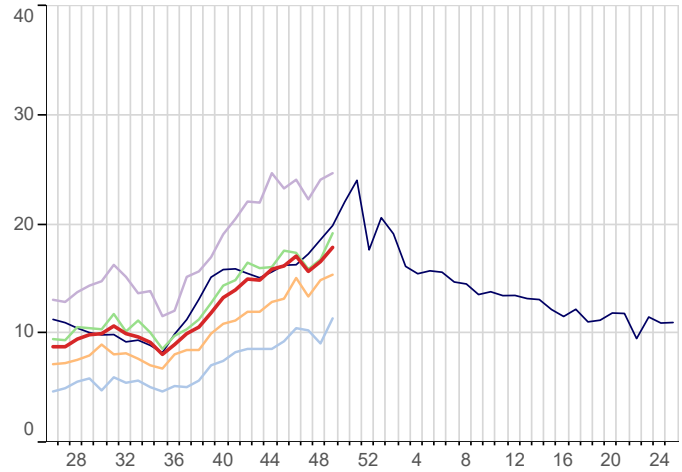
1. Respiratory Infections -

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

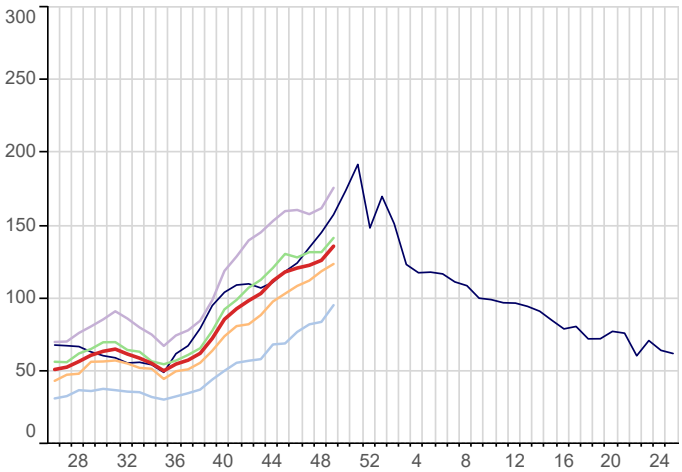
Influenza-like illness (ILI)
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average



Exacerbations of Chronic Lung Disease (ECLD)
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average



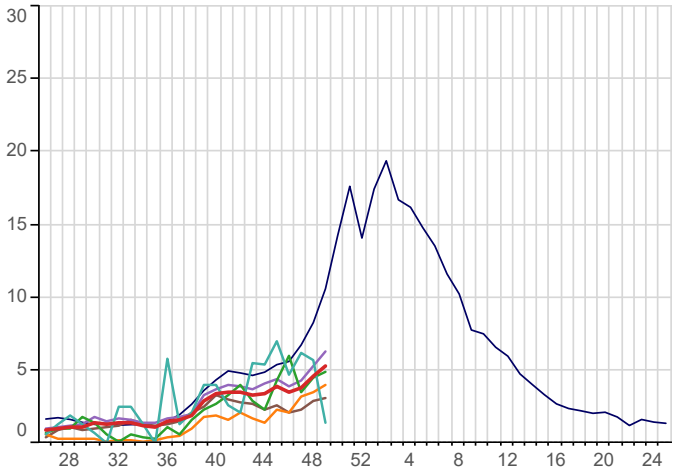
Lower Respiratory Tract Infections (LRTI)
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average



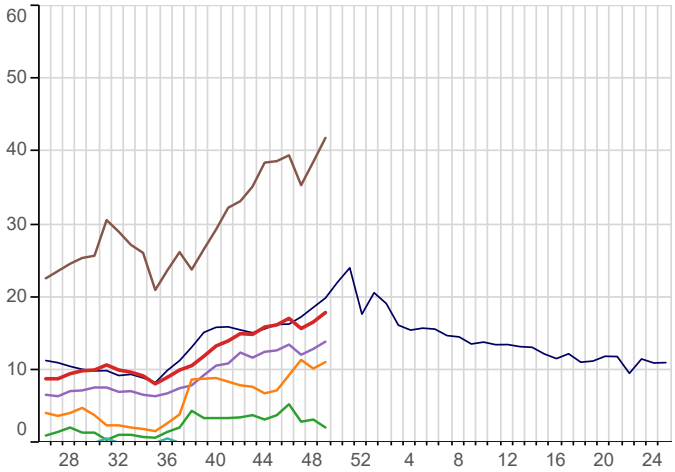
1. Respiratory Infections -

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

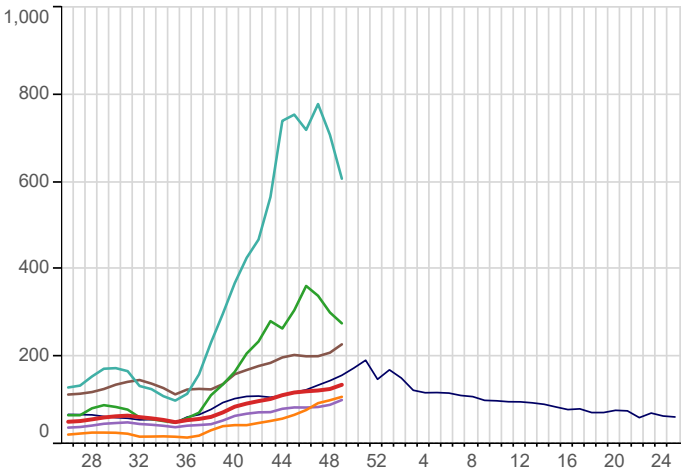
Influenza-like illness (ILI)
Weekly incidence (per 100,000 all regions) by age band
for 2023/24 compared with 5 year average



Exacerbations of Chronic Lung Disease (ECLD)
Weekly incidence (per 100,000 all regions) by age band
for 2023/24 compared with 5 year average



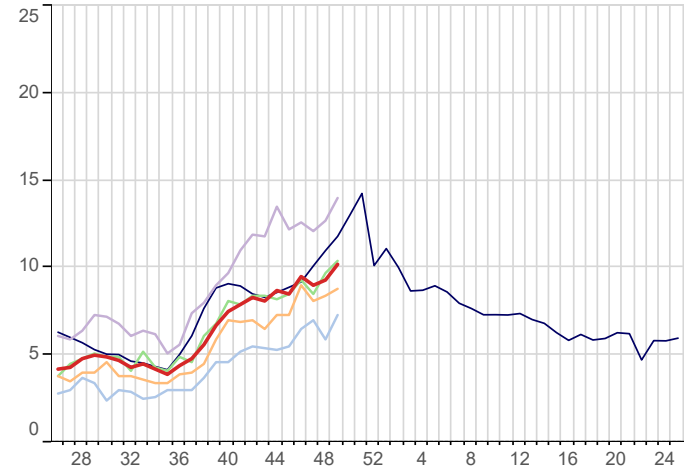
Lower Respiratory Tract Infections (LRTI)
Weekly incidence (per 100,000 all regions) by age band
for 2023/24 compared with 5 year average



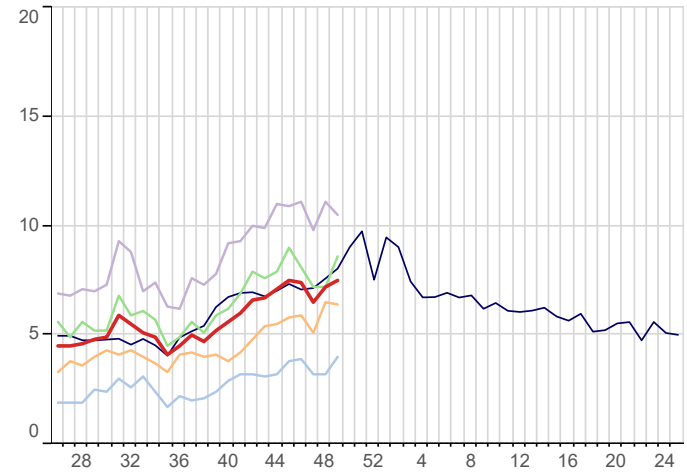
1. Respiratory Infections -

Upper Respiratory Tract Infections (URTI)
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average

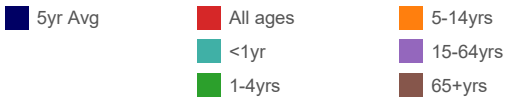
Exacerbations of Chronic Lung Disease (ECLD) - Asthma Exacerbations
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average



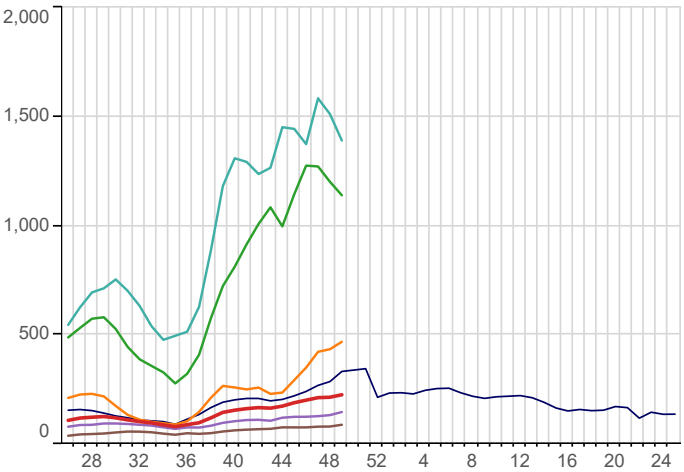
Exacerbations of Chronic Lung Disease (ECLD) - COPD Exacerbations
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average



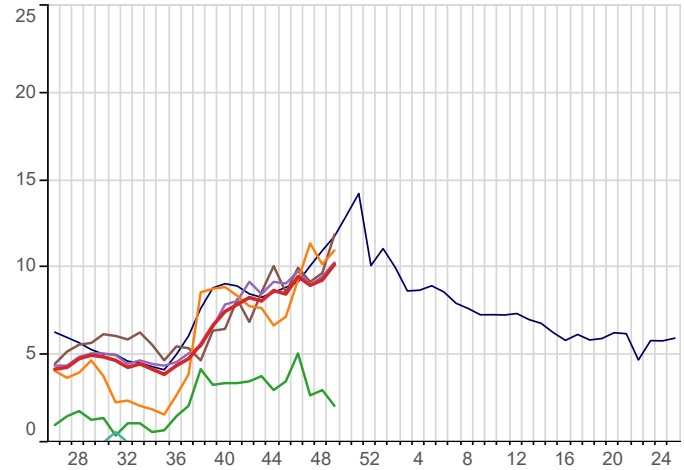
1. Respiratory Infections -



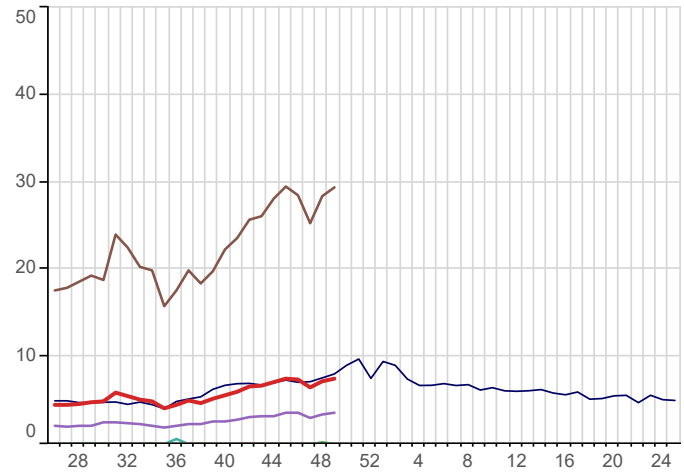
Upper Respiratory Tract Infections (URTI)
Weekly incidence (per 100,000 all regions) by age band
for 2023/24 compared with 5 year average



Exacerbations of Chronic Lung Disease (ECLD) - Asthma Exacerbations
Weekly incidence (per 100,000 all regions) by age band
for 2023/24 compared with 5 year average



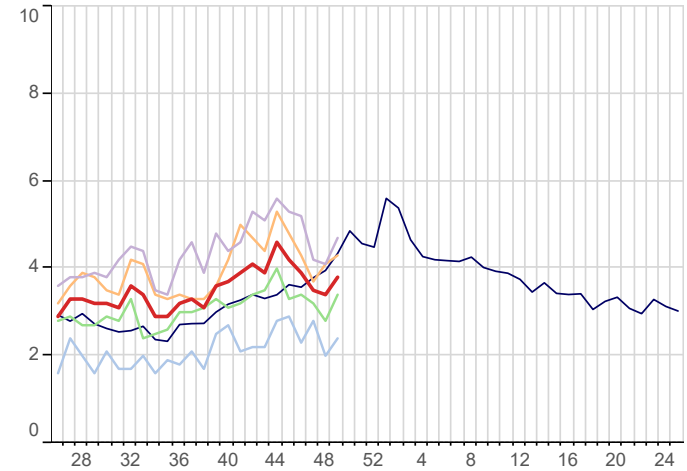
Exacerbations of Chronic Lung Disease (ECLD) - COPD Exacerbations
Weekly incidence (per 100,000 all regions) by age band
for 2023/24 compared with 5 year average



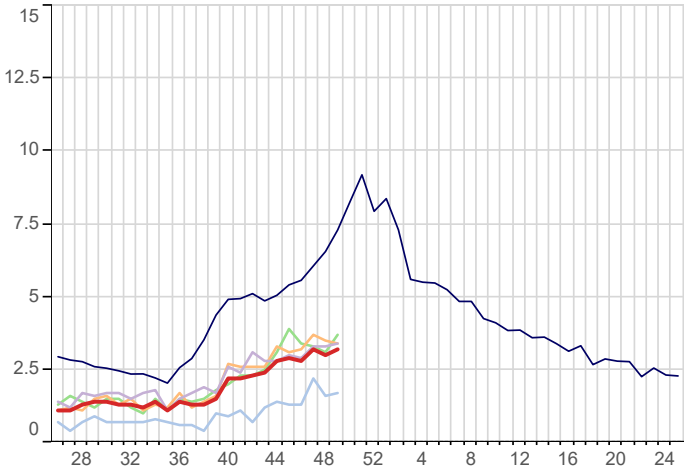
1. Respiratory Infections -

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

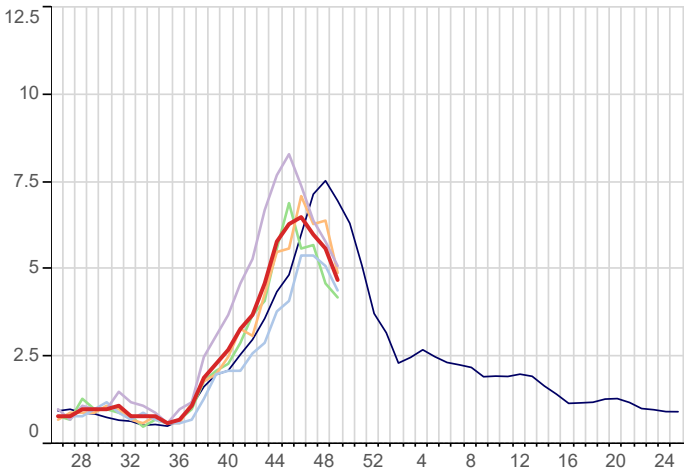
Lower Respiratory Tract Infections (LRTI) - Pneumonia
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average



Lower Respiratory Tract Infections (LRTI) - Acute Bronchitis
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average



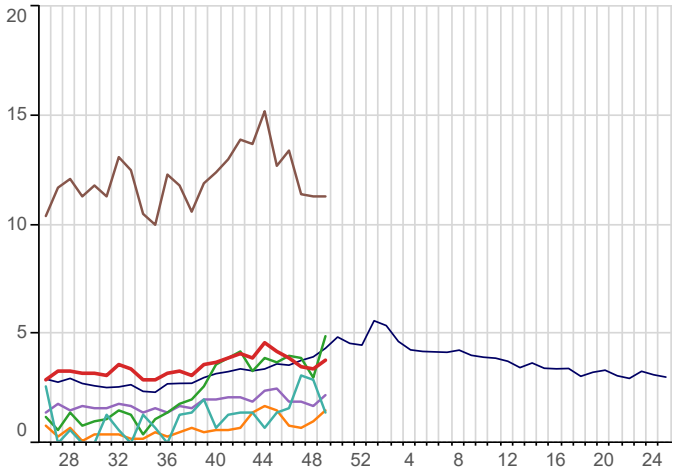
Lower Respiratory Tract Infections (LRTI) - Bronchiolitis
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average



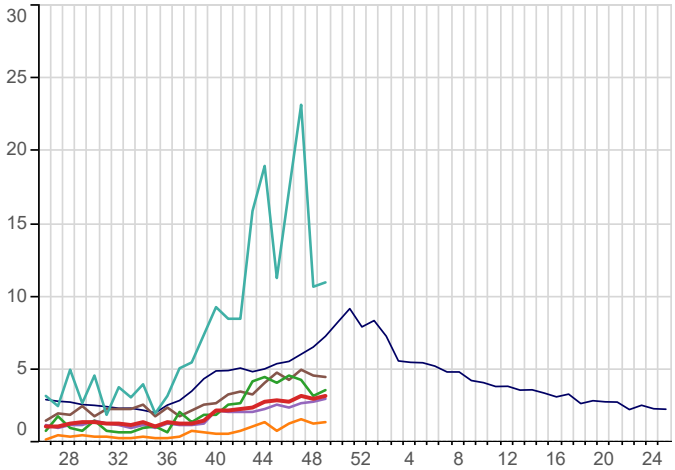
1. Respiratory Infections -

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

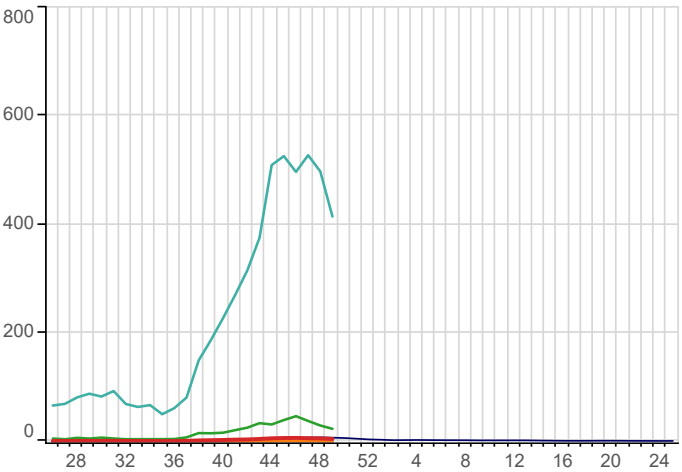
Lower Respiratory Tract Infections (LRTI) - Pneumonia
Weekly incidence (per 100,000 all regions) by age band
for 2023/24 compared with 5 year average



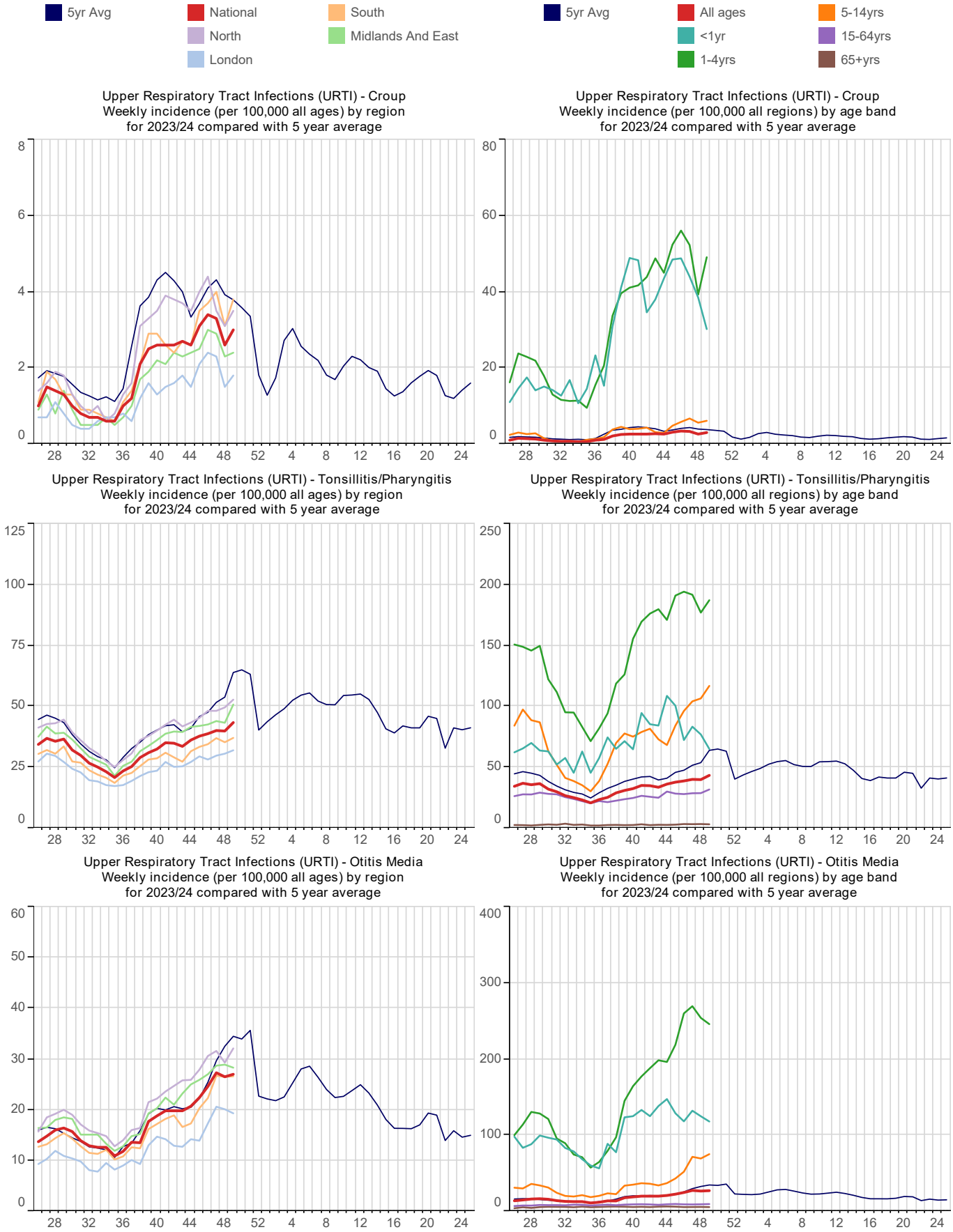
Lower Respiratory Tract Infections (LRTI) - Acute Bronchitis
Weekly incidence (per 100,000 all regions) by age band
for 2023/24 compared with 5 year average



Lower Respiratory Tract Infections (LRTI) - Bronchiolitis
Weekly incidence (per 100,000 all regions) by age band
for 2023/24 compared with 5 year average



1. Respiratory Infections -

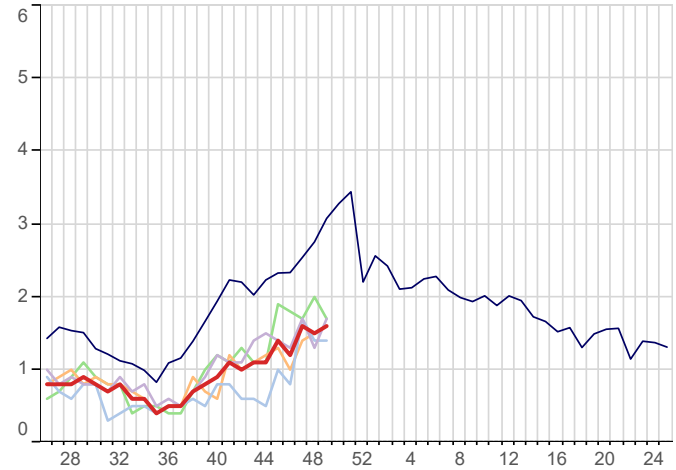


1. Respiratory Infections -

5yr Avg
National
South
North
Midlands And East
London

Upper Respiratory Tract Infections (URTI) - Sinusitis
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average

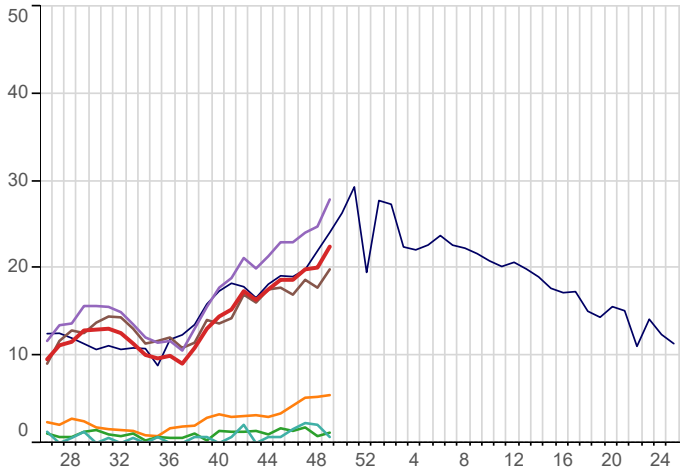
Upper Respiratory Tract Infections (URTI) - Laryngitis
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average



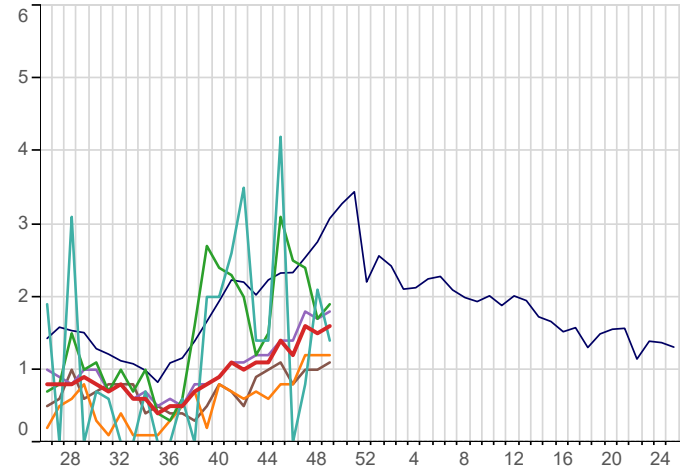
1. Respiratory Infections -

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

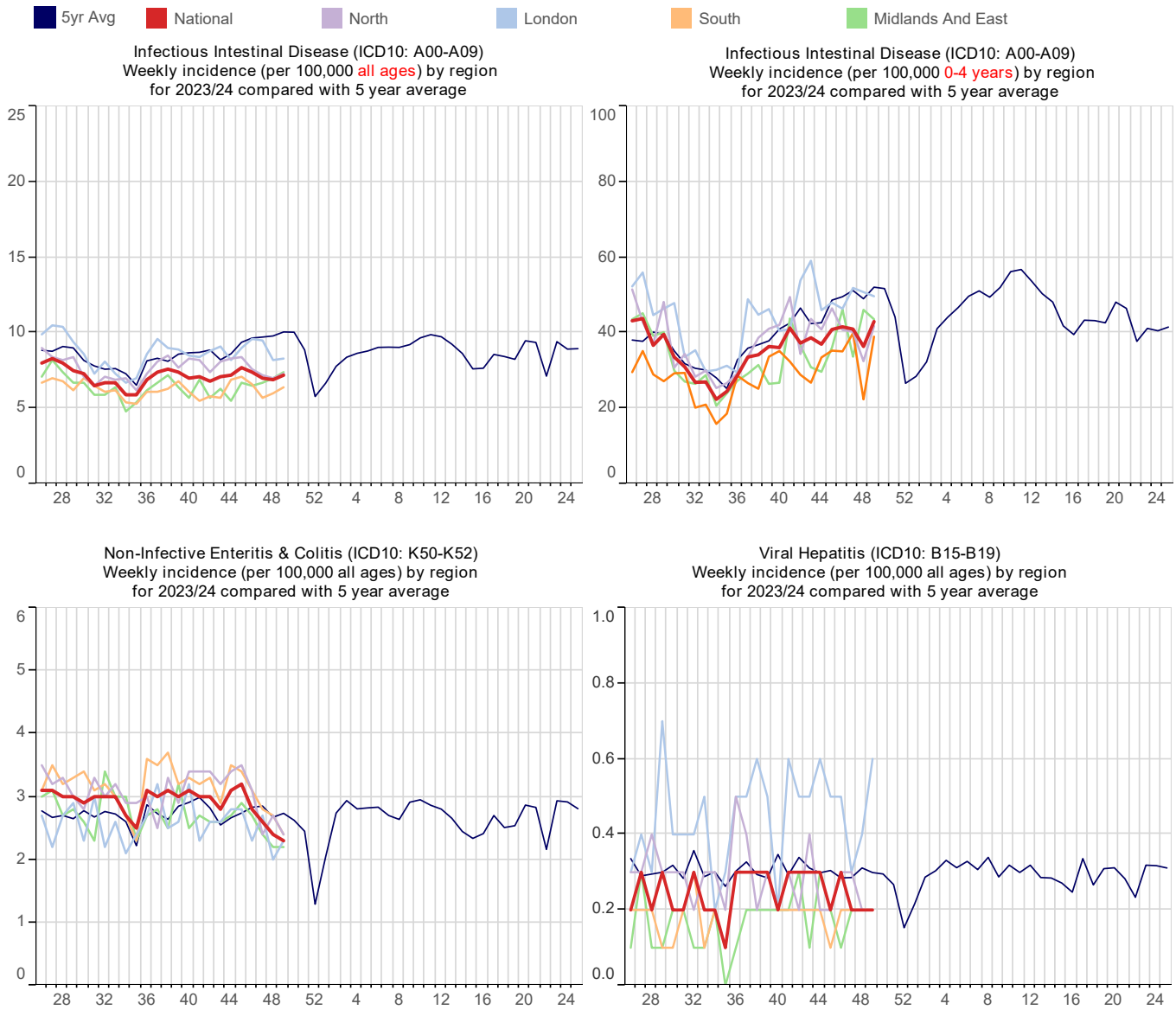
Upper Respiratory Tract Infections (URTI) - Sinusitis
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average



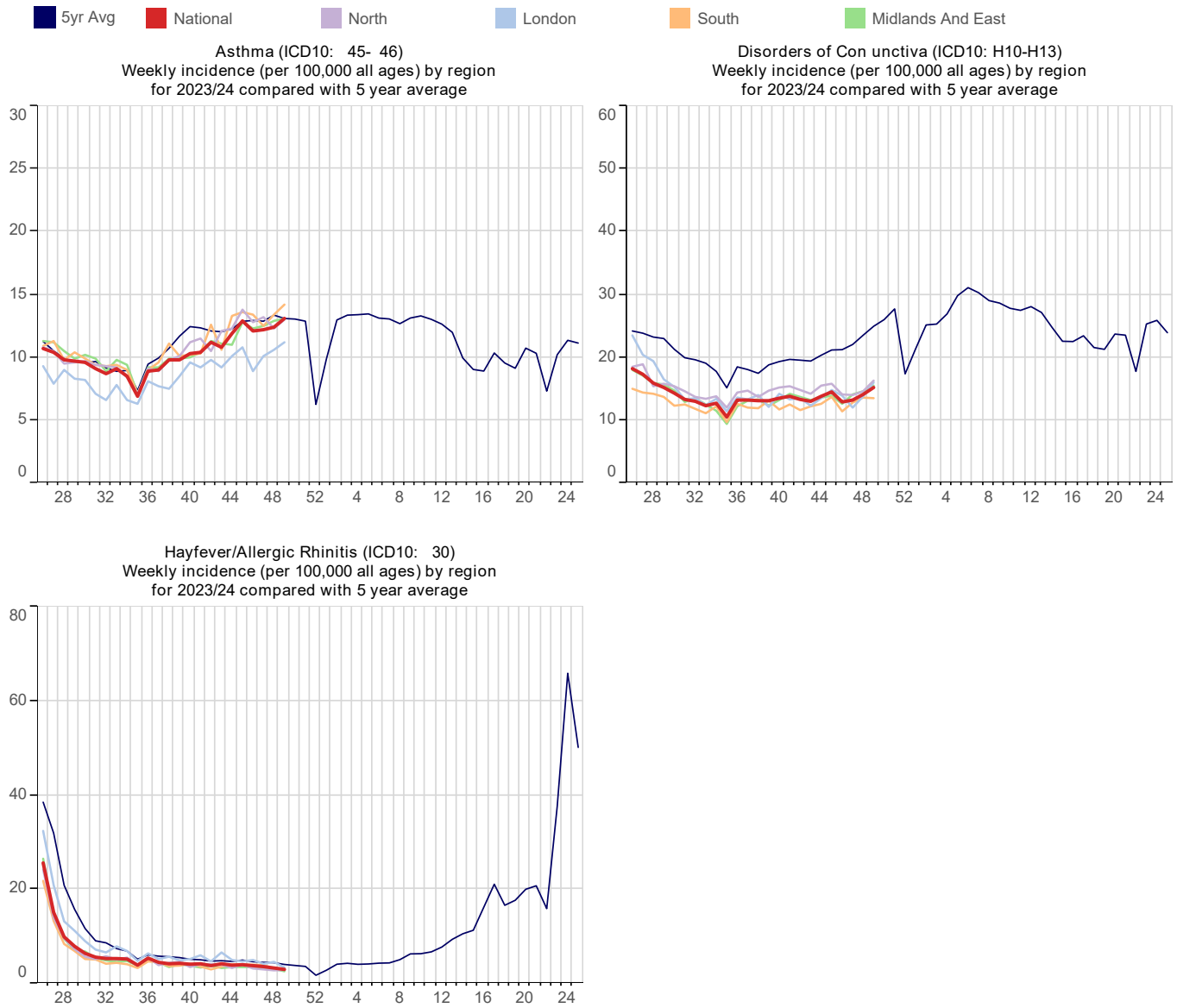
Upper Respiratory Tract Infections (URTI) - Laryngitis
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average



2. Water & Food Borne Disorders



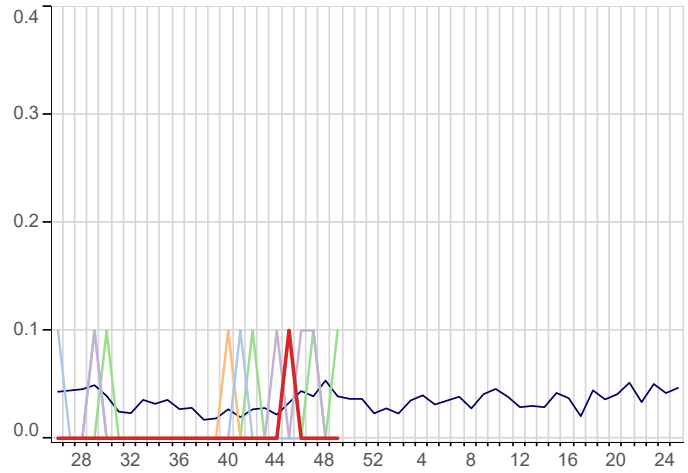
3. Environmentally Sensitive Disorders



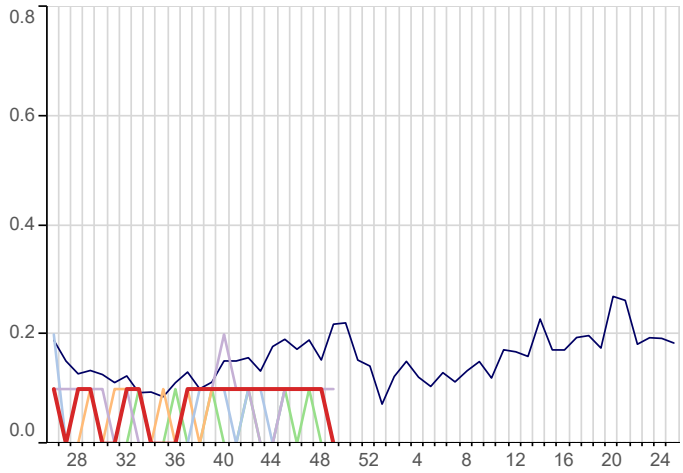
4. Vaccine Sensitive Disorders

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

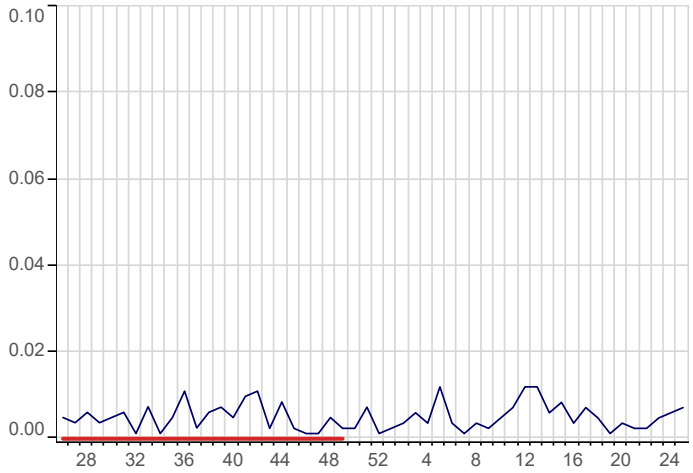
Measles (ICD10: B05)
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average



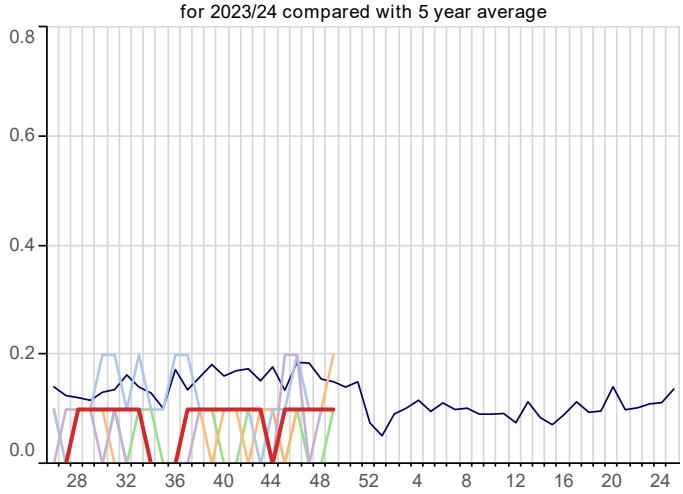
Mumps (ICD10: B26)
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average



Rubella (ICD10: B06)
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average

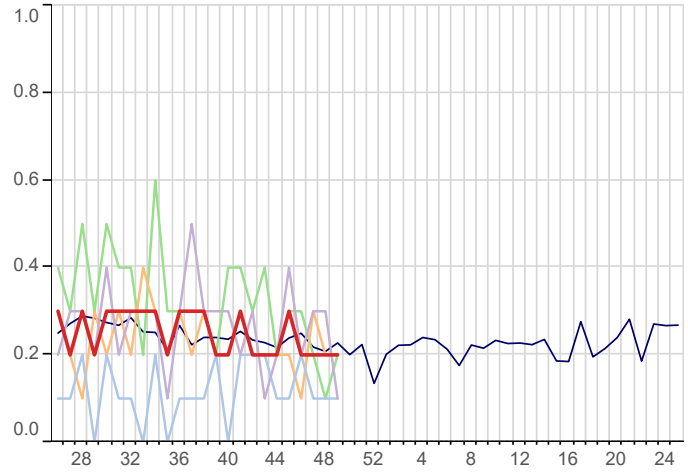


Whooping Cough (ICD10: A37)
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average

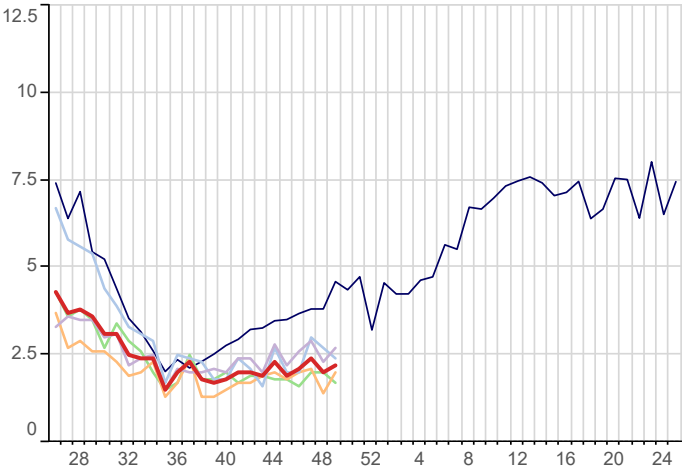


5. Skin Contagions

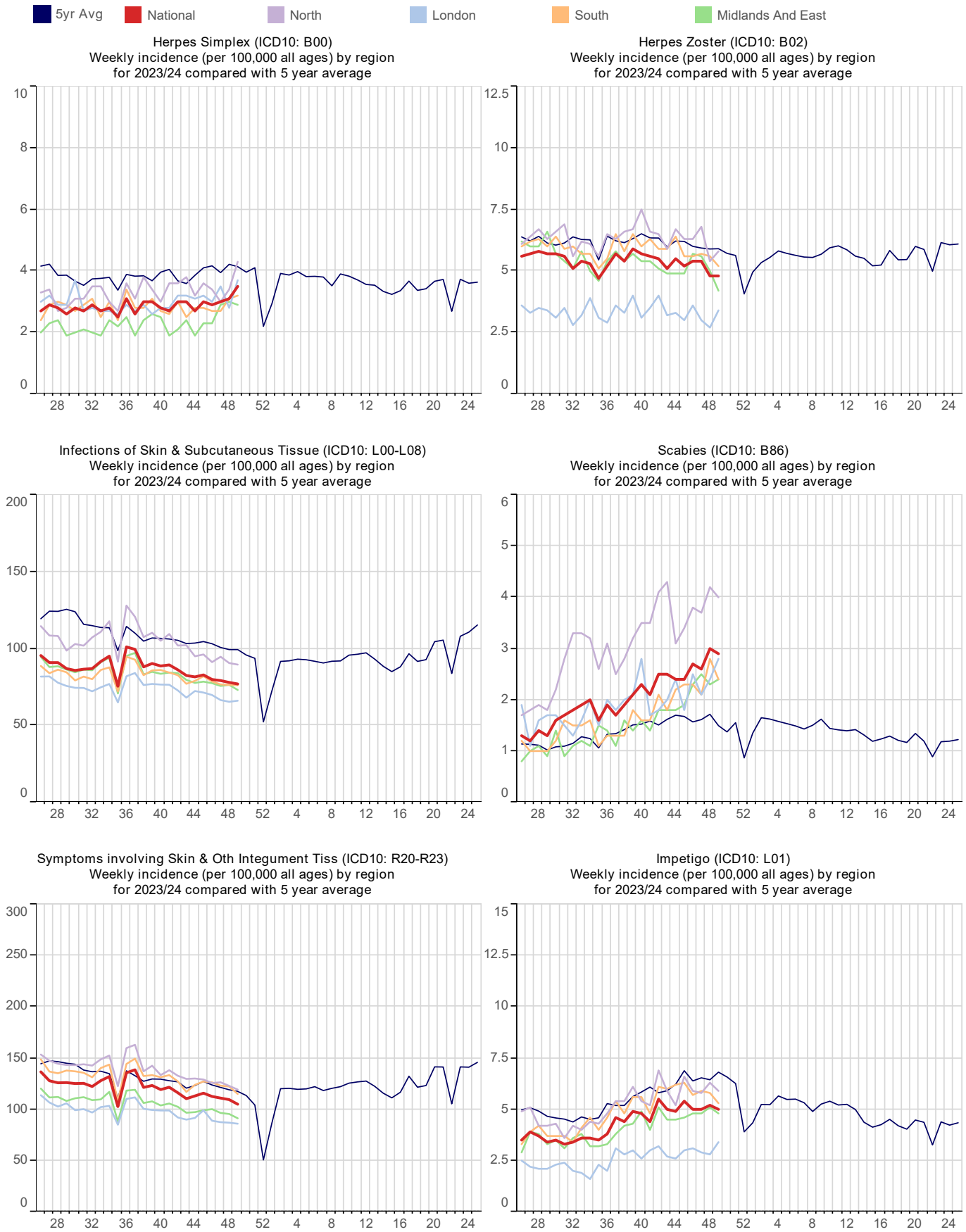
Bullous Dermatoses (ICD10: L10-L14)
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average



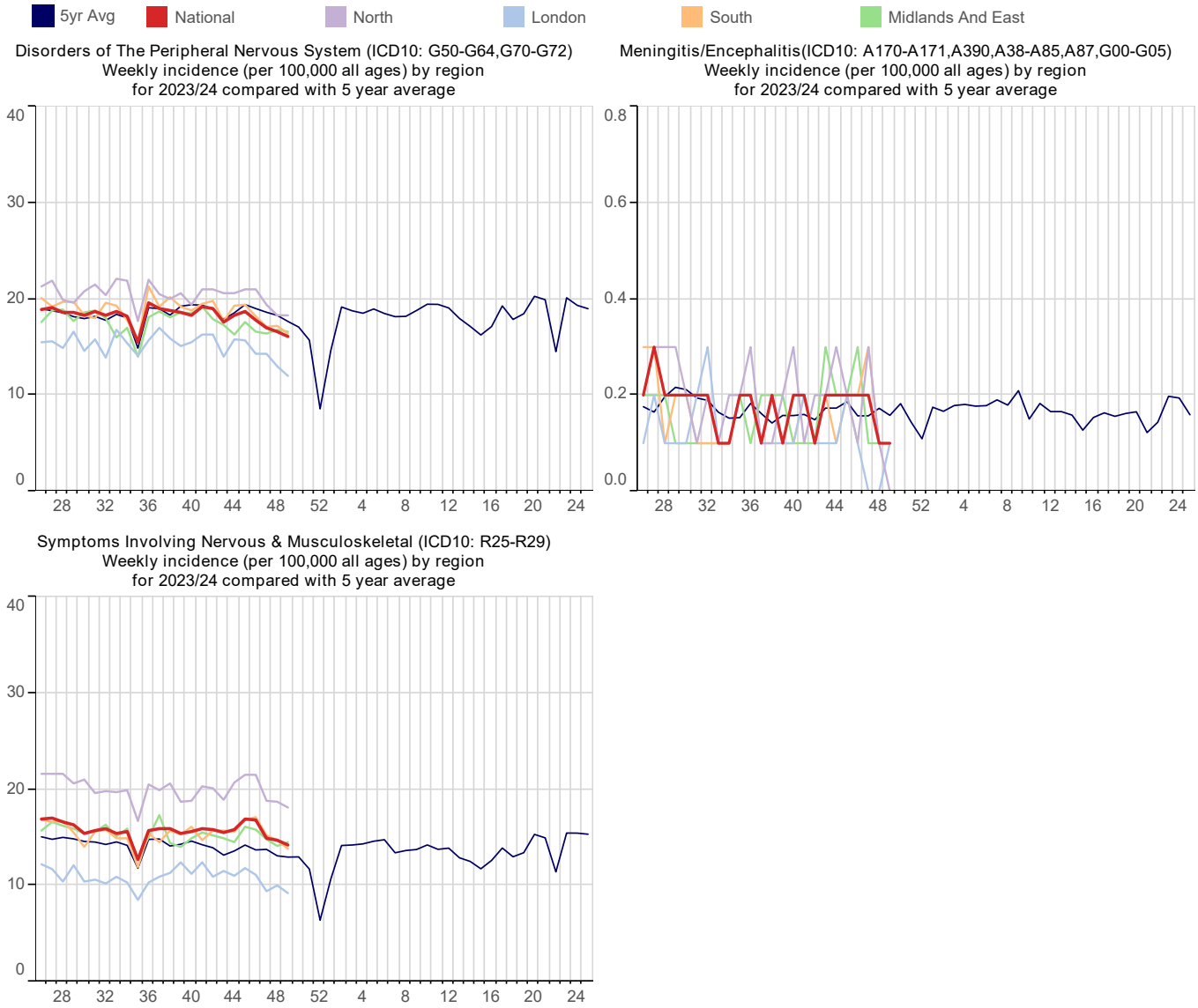
Chickenpox (ICD10: B01)
Weekly incidence (per 100,000 all ages) by region
for 2023/24 compared with 5 year average



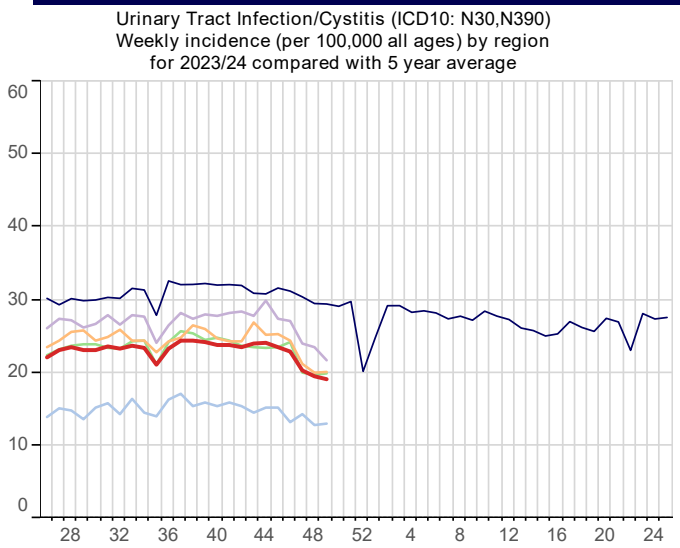
5. Skin Contagions (Continued)



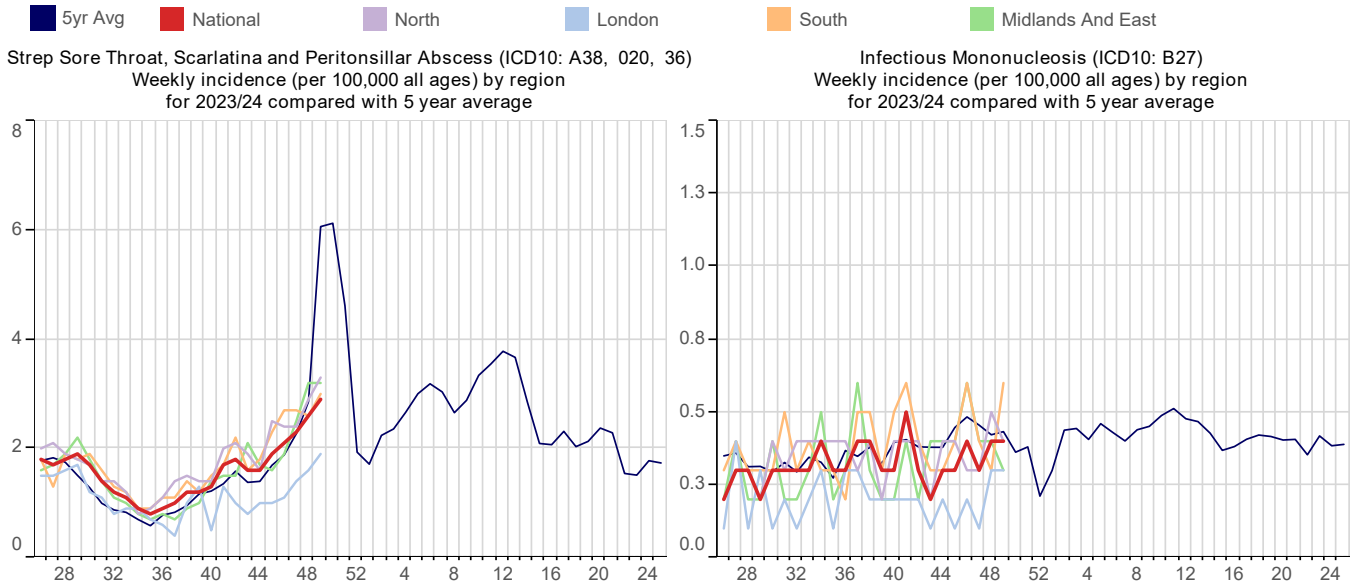
6. Disorders Affecting the Nervous System



7. Genitourinary System Disorders



8. Other Disorders



8. Tabular Summary by Disease

Week beginning Week ending	04/12/2023 10/12/2023		27/11/2023 03/12/2023		20/11/2023 26/11/2023		13/11/2023 19/11/2023	
Disease Name	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer
Acute Bronchitis	3.2	522	3.0	483	3.2	494	2.8	392
Acute respiratory infections (ARI)	377.3	62,244	353.2	57,127	348.3	53,300	335.9	47,024
Allergic Rhinitis	3.0	497	3.3	537	3.6	546	3.8	538
Asthma	13.1	2,154	12.4	2,011	12.2	1,873	12.1	1,694
Bronchiolitis	4.7	775	5.6	904	6.0	923	6.5	907
Bullous Dermatoses	0.2	26	0.2	33	0.2	35	0.2	29
Chickenpox	2.2	362	2.0	328	2.4	372	2.1	289
Con unctival Disorders	15.2	2,504	14.1	2,287	13.2	2,027	12.9	1,804
COVID-19	12.1	2,000	9.0	1,461	8.7	1,337	9.5	1,327
Croup	3.0	495	2.6	424	3.3	504	3.4	482
ECLD - Asthma exacerbations	10.2	1,687	9.3	1,505	9.0	1,381	9.5	1,333
ECLD - COPD exacerbations	7.5	1,239	7.2	1,167	6.5	988	7.4	1,033
Exacerbations of chronic lung disease	17.9	2,952	16.6	2,688	15.7	2,396	17.1	2,394
Herpes Simplex	3.5	582	3.1	503	3.0	454	2.9	400
Herpes Zoster	4.8	788	4.8	784	5.4	831	5.4	762
Impetigo	5.0	818	5.2	841	5.0	771	5.0	702
Infectious Intestinal Diseases	7.2	1,194	6.9	1,113	7.0	1,075	7.4	1,037
Infectious Mononucleosis	0.4	67	0.4	63	0.3	47	0.4	61
Influenza-like illness	5.3	880	4.6	747	3.8	583	3.5	489
Laryngitis	1.6	265	1.5	247	1.6	249	1.2	172
Lower respiratory tract infections	136.0	22,443	126.3	20,435	122.9	18,812	121.0	16,937
Measles	0.0	5	0.0	4	0.0	7	0.0	4
Meningitis and Encephalitis	0.1	16	0.1	16	0.2	29	0.2	25
Mumps	0.0	8	0.1	13	0.1	14	0.1	12
Non-infective Enteritis and Colitis	2.3	383	2.4	394	2.6	392	2.8	398
Otitis Media	27.0	4,457	26.5	4,291	27.3	4,170	24.6	3,450
Peripheral Nervous Disease	16.1	2,652	16.6	2,679	17.0	2,602	17.8	2,489
Pneumonia	3.8	631	3.4	550	3.5	541	3.9	548
Rubella	0.0	0	0.0	1	0.0	1	0.0	1
Scabies	2.9	478	3.0	484	2.6	398	2.7	379
Sinusitis	22.5	3,719	20.1	3,244	19.9	3,040	18.7	2,616
Skin and Subcutaneous Tissue Infections	77.0	12,698	78.0	12,615	79.2	12,115	79.9	11,186
Strep Throat and Peritonsillar Abscess	2.9	475	2.6	422	2.3	357	2.1	298
Symptoms involving musculoskeletal	14.2	2,341	14.7	2,373	14.9	2,283	16.8	2,346
Symptoms involving Skin and Integument Tissues	105.0	17,315	109.5	17,717	111.0	16,980	112.6	15,768
Tonsillitis/Pharyngitis	43.4	7,161	39.9	6,459	40.1	6,142	38.8	5,437
Upper respiratory tract infections	226.2	37,311	214.8	34,751	212.9	32,580	201.5	28,211
Urinary Tract Infections	19.1	3,152	19.5	3,148	20.3	3,110	22.9	3,210
Viral Hepatitis	0.2	41	0.2	38	0.2	38	0.3	40
Whooping Cough	0.1	22	0.1	14	0.1	9	0.1	17
Practice Count		1,626		1,580		1,501		1,404
Denom		16,496,788		16,174,866		15,301,641		13,997,991

FURTHER INFORMATION:

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.

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.

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.

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)

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.

The RCGP RSC was established in 1957, with the current name in use since 2009. The Centre is an internationally renowned source of information, analysis and interpretation concerning the onset, patterns, prevalence and trends over time of morbidity in primary care. The RSC is an active research and surveillance unit that collects and monitors data; its most important research is the surveillance of influenza and the monitoring of vaccine effectiveness.

The RSC data and analytics hub is housed at the Oxford-Royal College of General Practioners Research and Surveillance Centre.

Further information about the RSC can be found on our website:

http://www.rcgp.org.uk/rsc

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.

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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