

RSC Communicable and Respiratory Disease Report for England

Week Number / Year

52 / 2024

Population

18,801,343

Dates

23/12/2024 - 29/12/2024

No. Practices

1,736

Notes

All rates in this report are given per 100,000 population presenting in the week of the report. A rolling 5-year average rate is also provided as a historical comparison. Rates are provided for four regions (North, South, Midlands and East, and London). For acute respiratory infections, a breakdown by age group is also provided.

Rates are presented on a weekly basis, using ISO week numbers.

Please see page 20 for further explanatory notes on the data.

Comments

As is typical of the Christmas week, the rate of new presentations has sharply decreased for almost all conditions due to holiday surgery closures.

Rates of acute respiratory infections (ARI, page 7) have decreased in all regions, and are at or below the seasonal average.

Rates of influenza-like illness (ILI, pages 3 to 5) have also decreased in all regions, but are at or above the seasonal average. In all age bands, ILI rates remain above the seasonal epidemic threshold. ILI rates in children under 5 years old and in adults 65 years and older are at the medium to high level: see Table (E), page 5.

Overall rates of COVID-19 have decreased slightly and remain low (page 6).

This report includes a respiratory virology update: see Graph (C), page 4. RSV and influenza A (H1N1) are the predominant circulating viruses detected by the UK Health Security Agency (UKHSA) Reference Virology Laboratory.

Other comments:

- Rates of measles (page 15) remain elevated.
- Rates of scabies (page 16) remain above the seasonal average.

Seasonal Focus

In the "Change since last week" column, a change in rate of 5% to 10% is marked with a single arrow ($^{\diamond}$ or $^{\diamond}$), while a change of more than 10% is marked with a double arrow ($^{\diamond}$ or $^{\diamond}$). A flat line ($^{\leftarrow}$) indicates the rate was stable, changing less than 5%.

Region Breakdown

	Acute res	spiratory	infections (ARI)	Influe	enza-like	illness (ILI)	Exacerbations of chronic lung disease (ECLD)			
	This week	Last week	Change since last week	This week	Last week	Change since last week	This week	Last week	Change since last week	
London	197.6	319.5	> −122.0	10.9	15.1	> −4.2	9.8	16.3	> −6.5	
Midlands And East	285.5	437.8	> −152.3	11.7	16.7	> −5.0	18.3	30.5	> −12.2	
North	337.6	505.6	> −168.0	16.7	20.4	> −3.7	27.7	42.5	> −14.8	
South	259.6	383.9	> −124.3	15.4	19.0	> −3.6	19.8	29.1	> −9.3	
National	273.3	414.8	⇒ −141.5	13.9	18.0	⇒ -4.1	19.4	30.3	⇒ -10.8	
		er respira	atory tract (LRTI)		er respira	atory tract (URTI)	COVID-19			
	This week	Last week	Change since last week	This week	Last week	Change since last week	This week	Last week	Change since last week	
			idot week	******	WCCK	last week	WCCK	WCCK		
London	59.3	91.4	> -32.1	129.0	214.2	35.2 35.2 36.2 37.2 	0.5	1.2	> −0.6	
London Midlands And East		91.4 167.9								
			> −32.1	129.0	214.2	> −85.2	0.5	1.2	> −0.6	
Midlands And East	113.4	167.9	> −32.1 > −54.5	129.0 160.7	214.2 250.7	> −85.2 > −90.0	0.5 0.7	1.2 1.1	> −0.6 > −0.5	

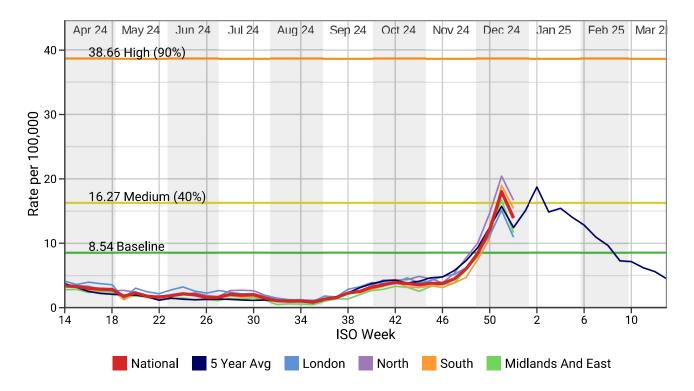
Age Group Breakdown

	Acute respiratory infections (ARI)			Influ	ıenza-like	illness (ILI)	Exacerbations of chronic lung disease (ECLD)			
	This week	Last week	Change since last week	This week	Last week	Change since last week	This week	Last week	Change since last week	
<1yr	1,298.9	1,886.8	> −587.9	33.9	38.5	> −4.6	0.0	0.0	- 0.0	
1-4yrs	999.2	1,579.7	> −580.5	24.7	34.2	> −9.5	1.2	2.5	> −1.2	
5-14yrs	278.6	488.7	> −210.1	8.1	14.4	> −6.3	4.6	9.7	⇒ -5.1	
15-64yrs	209.3	309.6	> −100.2	13.2	18.1	> −4.9	16.6	25.6	> −9.0	
65+yrs	300.8	435.5	> −134.7	17.1	15.5	^ 1.5	44.5	68.5	> −23.9	
All ages	273.3	414.8	⇒ −141.5	13.9	18.0	⇒ -4.1	19.4	30.3	⇒ -10.8	
	Lower re	spiratory t (LRTI	ract infections)	Upper re	spiratory t (URT	tract infections I)	COVID-19			
	This week	Last week	Change since last week	This week	Last week	Change since last week	This week	Last week	Change since last week	
<1yr	385.2	613.5	以 −228.3	1,033.4	1,460.4	> −427.0	1.9	3.3	> −1.3	
1-4yrs	185.4	301.8	> −116.4	902.7	1,418.9	> −516.2	0.0	0.7	> −0.7	
5-14yrs	47.2	79.1	> −31.8	234.3	411.1	> −176.8	0.1	0.3	> −0.2	
15-64yrs	83.1	120.6	> −37.5	108.4	162.7	> −54.3	0.6	1.1	> −0.5	
65+yrs	188.3	271.1	> −82.8	70.9	105.6	> −34.6	1.6	3.1	> −1.5	
All ages	104.2	153.6	⇒ -49.5	154.8	240.5	⇒ −85.8	0.7	1.3	⇒ -0.7	

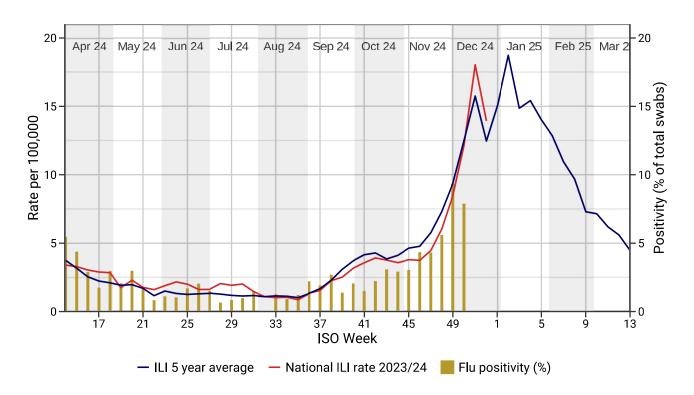
2024/25 Focus

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

The horizontal lines in the following graph are thresholds derived from the Moving Epidemic Method (MEM) model. See p20 for more information.

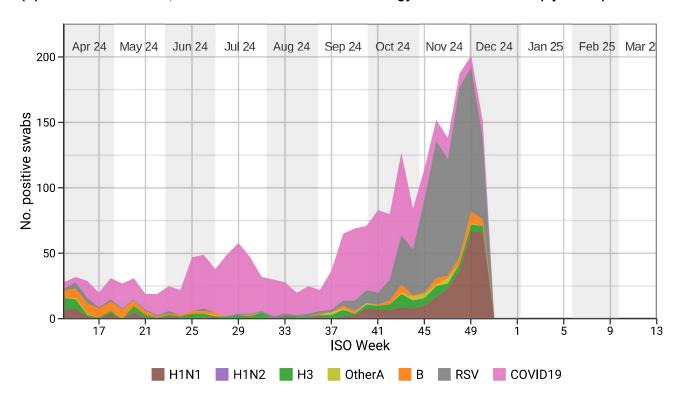


(B) RCGP/UKHSA influenza virology swab surveillance

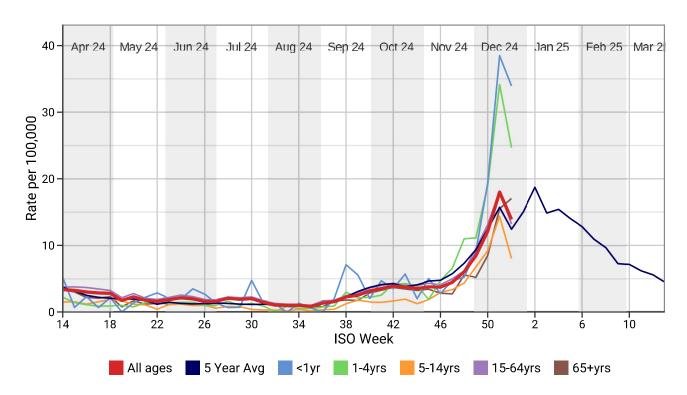


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(C) RCGP/UKHSA RSV, influenza and SARS-CoV-2 virology swab surveilance (by strain)



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



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

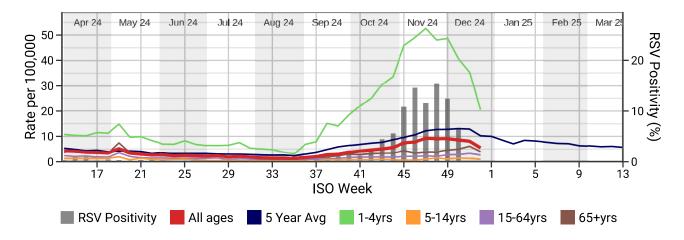
This table shows the level of intensity of ILI by age band. MEM thresholds have been calculated separately for each age band - thresholds are shown in the second table. Refer to page 19 for more information.

	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	8.0	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		1.2	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	2.9	1.8	2.3	1.8	1.6	1.9	2.2	2.0	1.6	1.6	2.1	1.9	2.0	1.5	1.1	1.0	1.0
	35	36	37	38	39	40	41	42	43 4	14 4	5 4	6 47	48	4	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 1	.9 4	.7 6.6	11.0	1	1.1	18.9	34.2	24.7
5-14yrs	0.2	0.4	0.4	1.2	1.8	1.5	1.5		2.0	1.3 1	.9 2	.9 3.4	4.4	. (6.8	9.2	14.4	8.1
15-64yrs	1.0	1.7	1.8	2.5	2.8	3.6	4.0	4.4	4.1	4.1 4	.3 4	.1 5.0	6.2		9.5	13.1	18.1	13.2
65+yrs	0.9	0.8	1.6	1.8		2.9	3.3	3.7	3.5	3.3 3	3.4 2	.8 2.7	5.6	. !	5.2	8.5	15.5	17.1
All ages	0.9	1.3	1.5	2.2	2.5	3.2	3.6	3.9	3.8	3.6	.8 3	.8 4.5	6.0	1 {	8.5	12.1	17.8	13.8

	Below Threshold	Threshold to Medium	Medium to High	High to Very High	Above Very High
1-4yrs	<7.9	7.9 to 12.6	12.6 to 26.2	26.2 to 36.1	36.1+
5-14yrs	< 5.4	5.4 to 10.7	10.7 to 26.6	26.6 to 39.9	39.9+
15-64yrs	<9.8	9.8 to 17.9	17.9 to 43.0	43.0 to 63.4	63.4+
65+yrs	<9.3	9.3 to 15.0	15.0 to 38.8	38.8 to 59.0	59.0+
All Ages	<8.54	8.54 to 16.27	16.27 to 38.66	38.66 to 56.68	56.68+

(F) Acute Bronchitis and Bronchiolitis: national incidence rate by age band

Children under 1 year old are omitted from the following graph.

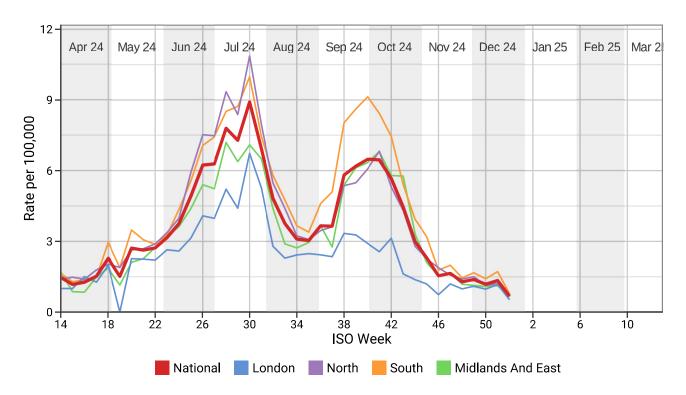


Weekly incidence rates of influenza-like illness, and acute bronchitis and bronchiolitis (per 100,000)

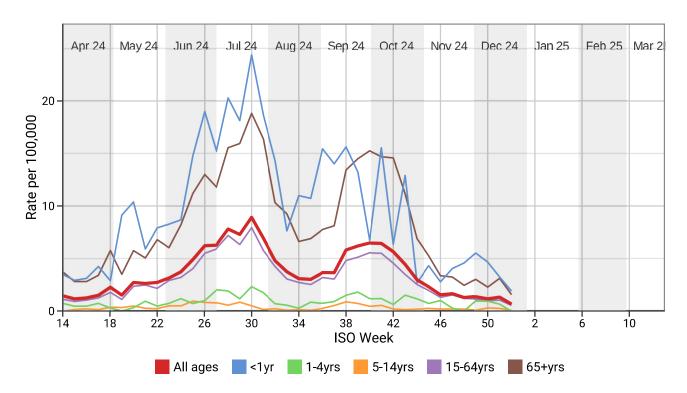
	Influenza-like illness (ILI)	ARI-Bronchitis and Bronchiolitis
<1yr	33.9	252.7
1-4yrs	24.7	20.4
5-14yrs	8.1	1.0
15-24yrs	7.8	0.9
25-44yrs	13.9	2.2
45-64yrs	15.0	4.1
65-74yrs	11.0	3.4
75-84yrs	20.4	4.5
85+yrs	30.0	5.1
All ages	13.9	5.5

	Influenza-like illness (ILI)	ARI-Bronchitis and Bronchiolitis			
London	10.9	3.6			
Midlands And East	11.7	6.0			
North	16.7	6.1			
South	15.4	5.8			
National	13.9	5.5			

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

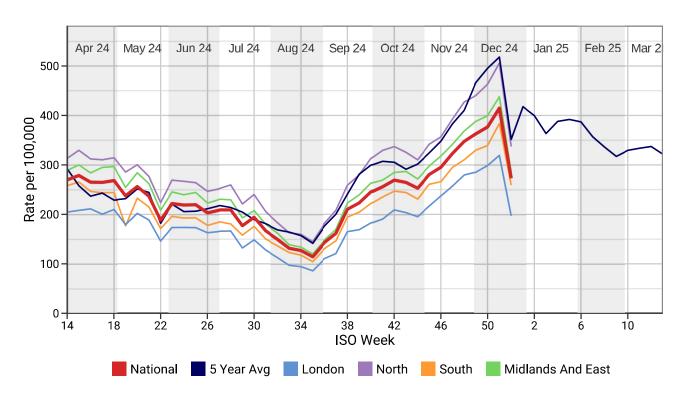


(H) COVID-19: national incidence rate by age band

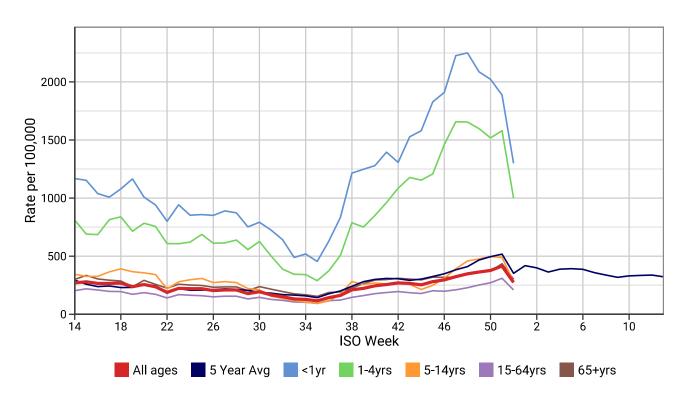


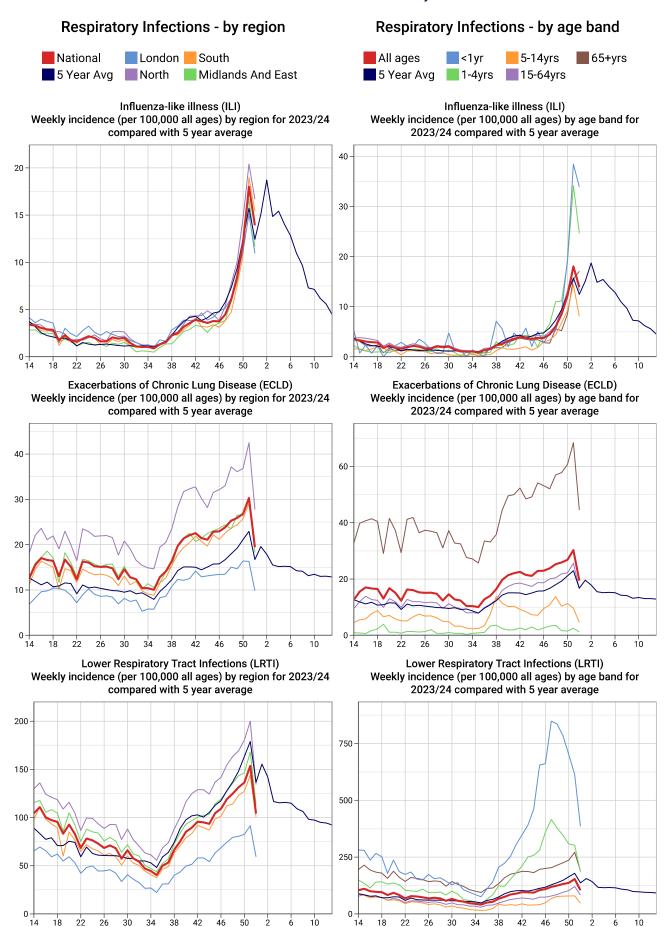
1. Respiratory Infections

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

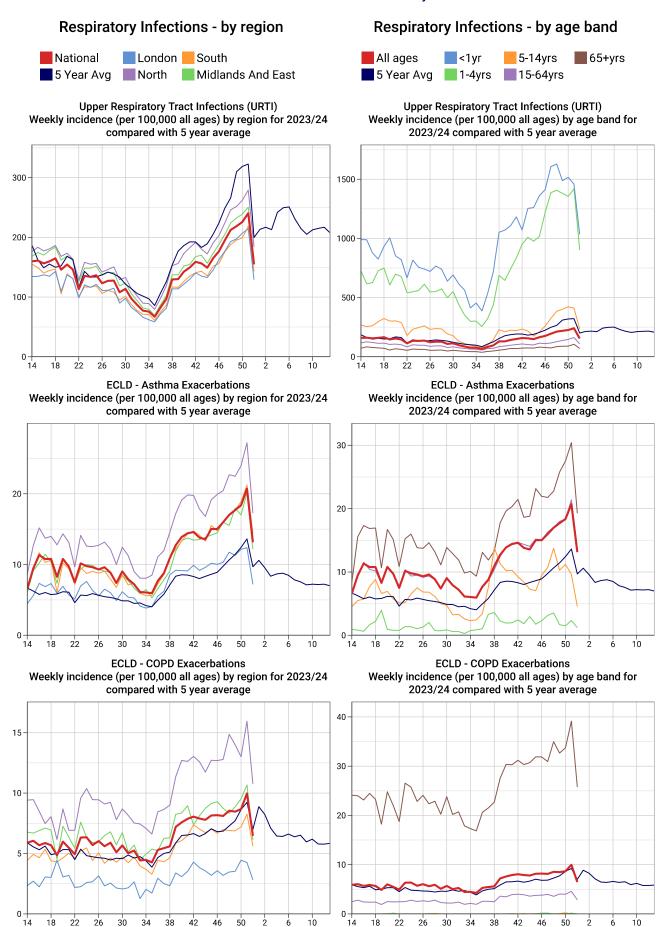


(J) Acute Respiratory Infections (ARI): national incidence rate by age band

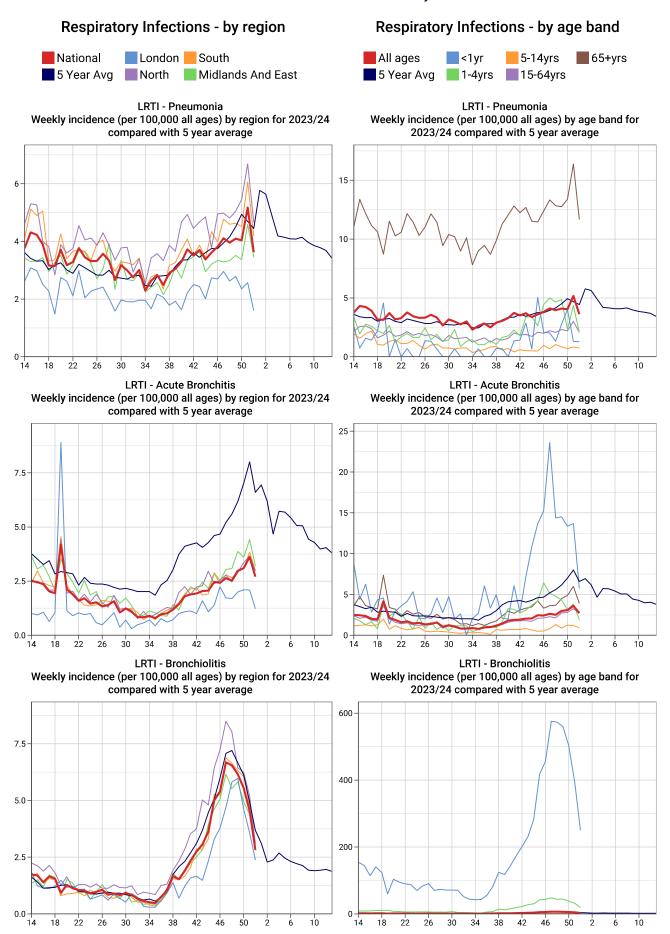




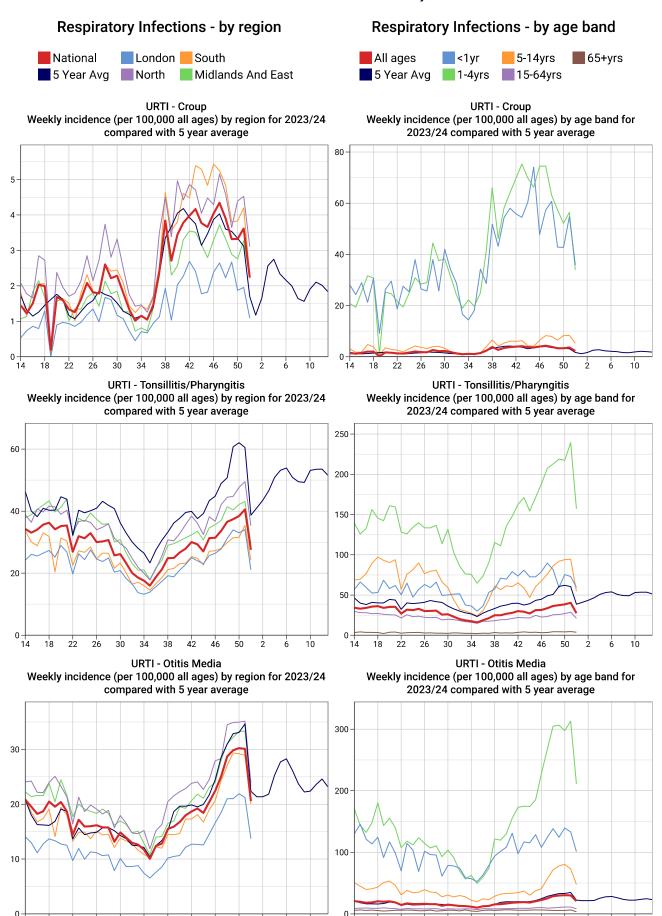
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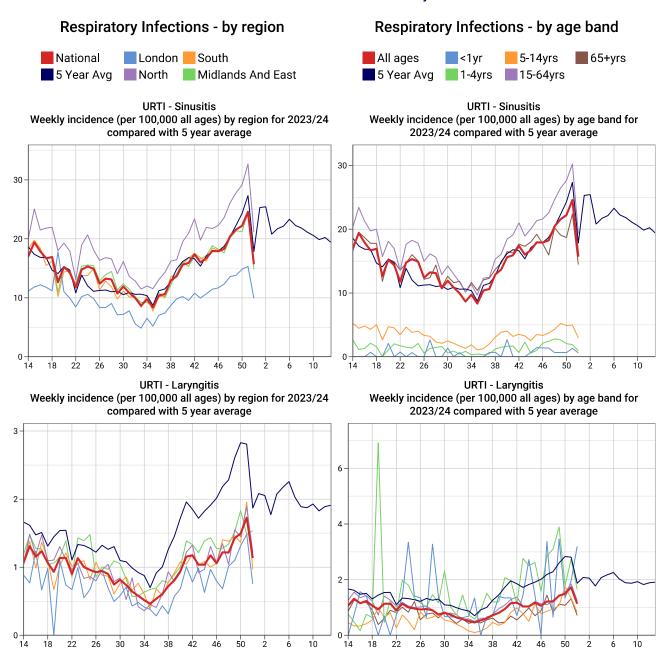
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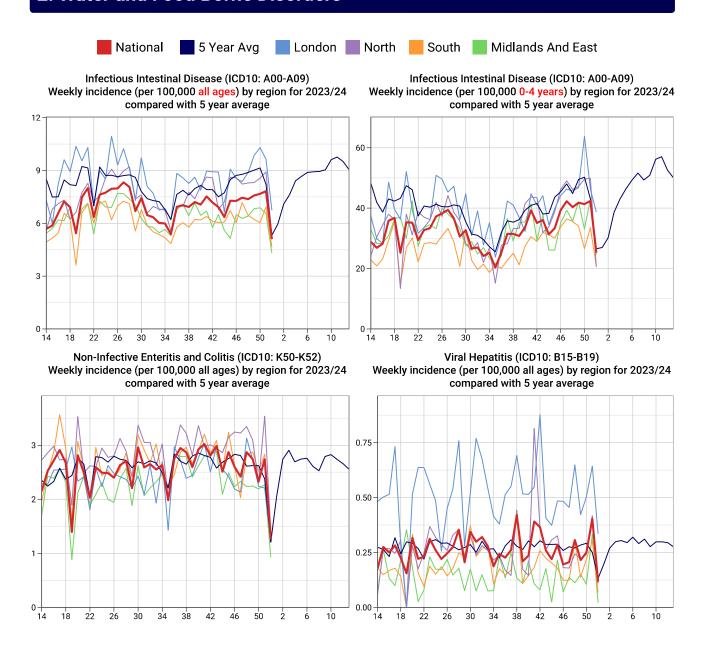
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38 42 46 50

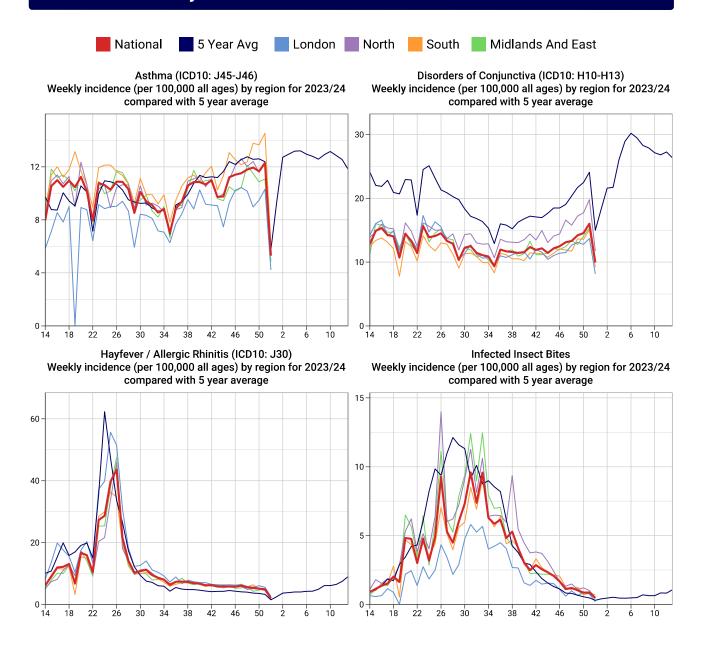
RCGP Research and Surveillance Centre - Weekly Returns Service



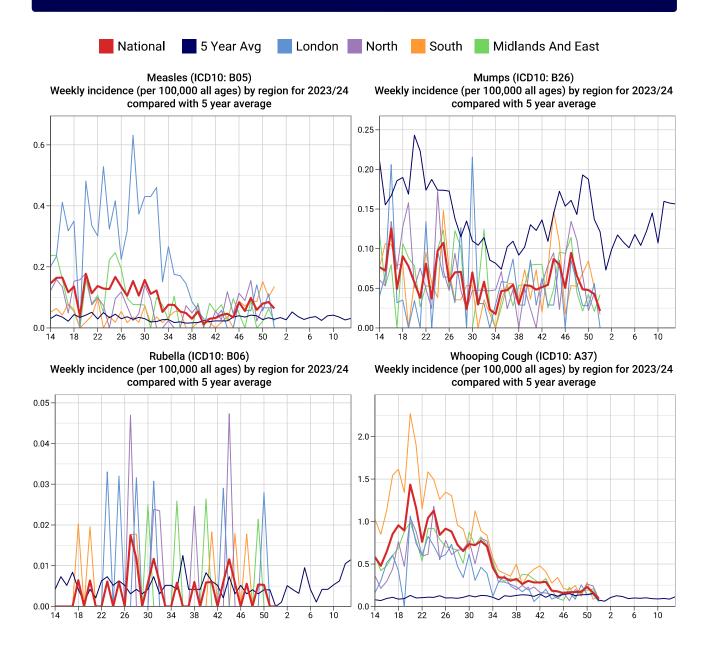
2. Water and Food Borne Disorders



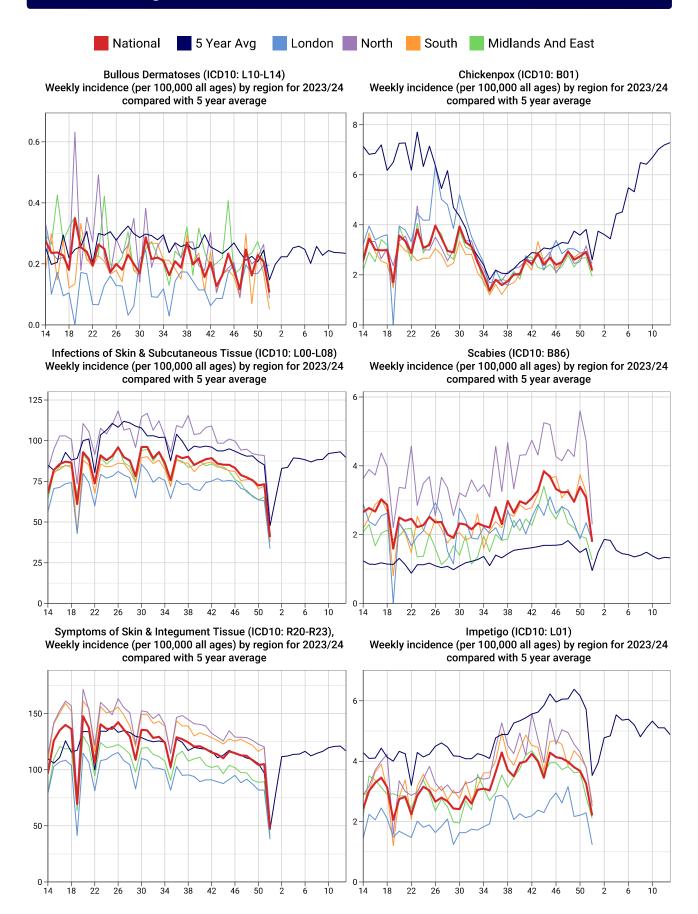
3. Environmentally Sensitive Disorders



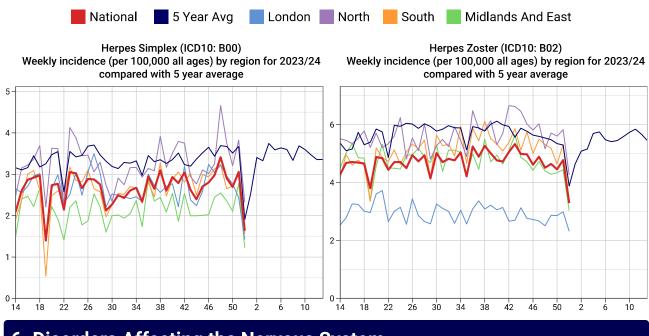
4. Vaccine Sensitive Disorders



5. Skin Contagions



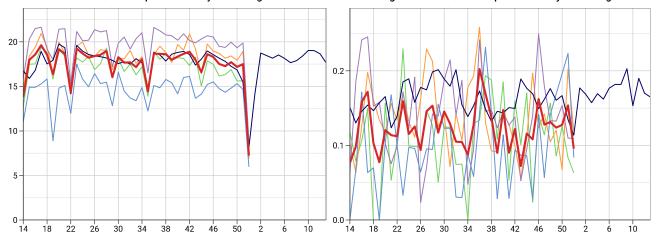
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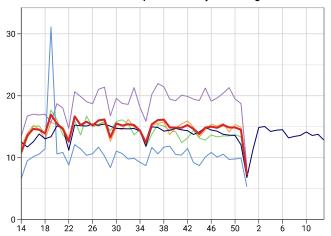
6. Disorders Affecting the Nervous System

Disorders of Peripheral Nervous System (ICD10: G50-G64,G70-G72), Weekly incidence (per 100,000 all ages) by region for 2023/24 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 2023/24 compared with 5 year average



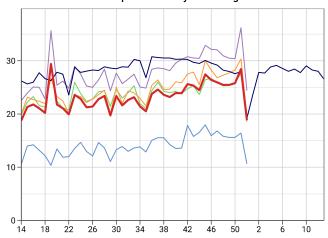
Symptoms of Nervous & Musculoskeletal Systems (ICD10: R25-R29), Weekly incidence (per 100,000 all ages) by region for 2023/24 compared with 5 year average



7. Genitourinary System Disorders



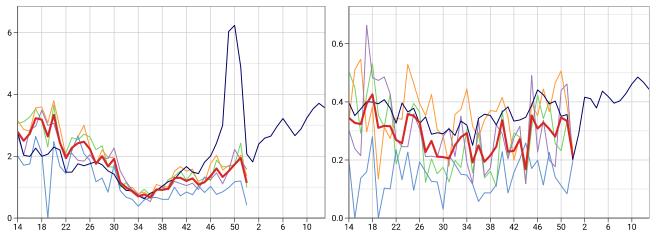
Urinary Tract Infection/Cystitis (ICD10: N30,N390)
Weekly incidence (per 100,000 all ages) by region for 2023/24
compared with 5 year average



8. Other Disorders

Strep Sore Throat, Scarlatina and Peritonsillar Abscess (ICD10: A38,J020,J36), Weekly incidence (per 100,000 all ages) by region for 2023/24 compared with 5 year average

Infectious Mononucleosis (ICD10: B27)
Weekly incidence (per 100,000 all ages) by region for 2023/24
compared with 5 year average



9. Tabular Summary by Disease

	Week 49	Week 50	Week 51	Week 52
Dates	02/12/2024 - 08/12/2024	09/12/2024 - 15/12/2024	16/12/2024 - 22/12/2024	23/12/2024 - 29/12/2024
Population	18,554,913	18,803,239	18,852,529	18,801,343
Practice Count	1,716	1,736	1,739	1,736

	Wee	ek 49	Wee	ek 50	Wee	ek 51	Week 52	
Disease	Rate	Count	Rate	Count	Rate	Count	Rate	Count
Acute Bronchitis	3.0	553	3.1	582	3.6	682	2.7	509
Acute Respiratory Infections (ARI)	362.9	67,343	376.8	70,852	414.8	78,196	273.3	51,385
Allergic Rhinitis	5.4	999	5.1	962	4.9	921	2.0	378
Asthma	11.9	2,217	11.7	2,192	12.3	2,320	5.3	995
Bronchiolitis	6.2	1,142	5.5	1,043	4.5	857	2.8	530
Bullous Dermatoses	0.2	30	0.2	43	0.2	39	0.1	20
COVID-19	1.4	257	1.2	223	1.3	253	0.7	128
Chickenpox	2.6	484	2.7	514	2.9	549	2.2	410
Conjunctival Disorders	14.2	2,631	14.5	2,735	16.0	3,021	9.9	1,866
Croup	3.3	616	3.3	625	3.6	682	2.2	420
ECLD - COPD exacerbations	8.5	1,571	8.7	1,630	10.0	1,880	6.5	1,215
ECLD - asthma exacerbations	17.7	3,283	18.4	3,452	20.7	3,906	13.1	2,470
Exacerbations of chronic lung disease (ECLD)	25.9	4,808	26.8	5,042	30.3	5,706	19.4	3,655
Herpes Simplex	2.9	539	2.7	506	3.1	576	1.6	307
Herpes Zoster	4.6	861	4.5	838	4.8	900	3.3	618
Impetigo	3.8	705	3.7	692	3.3	615	2.2	414
Infected Insect Bites	1.0	192	0.9	161	0.9	163	0.5	89
Infectious Intestinal Diseases	7.6	1,406	7.7	1,443	7.8	1,476	5.1	959
Infectious Mononucleosis	0.3	52	0.3	65	0.3	63	0.2	40
Influenza-like Illness (ILI)	8.5	1,569	12.1	2,282	18.0	3,396	13.9	2,618
Laryngitis	1.4	265	1.5	281	1.7	326	1.1	213
Lower respiratory tract infections (LRTI)	131.3	24,360	136.4	25,648	153.6	28,963	104.2	19,586
Measles	0.1	11	0.1	15	0.1	16	0.1	12
Meningitis and Encephalitis	0.1	23	0.1	24	0.2	29	0.1	18
Mumps	0.0	9	0.0	9	0.0	8	0.0	4
Non-infective Enteritis and Colitis	2.7	509	2.3	438	2.7	517	1.3	238
Peripheral Nervous Disease	17.7	3,288	17.2	3,231	17.5	3,299	7.2	1,360
Pneumonia	4.1	760	4.0	759	5.2	975	3.6	681
Rubella	0.0	1	0.0	1	0.0	0	0.0	0
Scabies	3.0	549	3.4	637	3.1	581	1.8	337
Sinusitis	21.6	4,003	22.2	4,176	24.6	4,634	15.7	2,952
Skin and Subcutaneous Tissue Infections	75.6	14,020	72.5	13,626	73.2	13,802	40.8	7,667
Strep Throat and Peritonsillar Abscess	1.5	281	1.7	326	1.9	366	1.1	214
Symptoms involving Skin and Integument Tissues	108.4	20,116	104.4	19,625	104.9	19,776	47.2	8,874
Symptoms involving musculoskeletal	14.9	2,762	14.9	2,799	14.5	2,737	7.2	1,355
Tonsillitis and Pharyngitis	37.4	6,943	38.4	7,225	40.5	7,640	27.6	5,181
Upper respiratory tract infections (URTI)	218.9	40,609	225.9	42,470	240.5	45,349	154.8	29,099
Urinary Tract Infections	25.5	4,726	25.8	4,850	28.4	5,362	18.8	3,537
Viral Hepatitis	0.2	40	0.2	47	0.4	76	0.1	22
Whooping Cough	0.2	32	0.2	43	0.2	31	0.1	17

Further Information

Focus on winter respiratory infections and infections with epidemic or pandemic infection

A key role of the RSC is to monitor conditions that cause winter pressures on the NHS, as well as provide early warnings of outbreaks, epidemics, and pandemics. The RSC has been collecting data on infections since 1957, conducting sentinel surveillance since 1967 (with virology added in 1993), and serosurveillance from 2000.

Pages 2-6 of this report focus on influenza-like illness (ILI), virology data, and acute respiratory infections (ARI). ILI is the name given to clinically identified flu cases, around half of which will be due to the influenza virus (the other half will be due to other viruses).

Measuring the level of circulating influenza

The level of influenza-like illness (ILI) is reported using intensity thresholds (Graph A, page 2 and Table E, page 4). These are calculated using the Moving Epidemic Method (MEM). MEM works by identifying seasonal epidemic peaks and then calculating a baseline threshold and intensity levels based on pre- and post-epidemic rates. This provides a better measure of severity of ILI than simply comparing it to the five-year average rate.

The MEM intensity levels for ILI are defined as follows:

Threshold to Medium Below 40% percentile

Medium to High From 40% to below 90% percentile

High to Very High From 90% to below 97.5% percentile

Above Very High At or above 97.5% percentile

The MEM methodology is used by the UK Health Security Agency (UKHSA) and by the European Centre for Disease Prevention and Control (ECDC) to standardise reporting of influenza activity.

More information about MEM can be found at:

https://www.ecdc.europa.eu/en/news-events/acute-respiratory-infections-eueea-epidemiological-update-and-current-public-health

Rate of monitored conditions

Our monitored conditions are reported as the number of new cases each week per 100,000 population. We refer to this as the 'weekly incidence'. All conditions are shown with males and females combined.

The report's population, also called the denominator, is the registered population of RSC practices who share anonymised data for this report. The denominator varies weekly as patients register and deregister; additionally, a practice's data may not be included if there is an issue with data extraction.

Five-year averages

In addition to weekly incidence rates, we plot a five-year average for most conditions. Previously a ten-year average was used, but this window was shortened to reflect faster changes in seasonal variations and therefore enable a more meaningful comparison to relevant historic trends. COVID-19 pandemic years are excluded from this calculation for some conditions.

Regional rates of monitored conditions

In addition to a national rate, we present regional rates for all monitored conditions for four regions of England. The four RSC regions are aggregated NHS regions:

North NHS North East and Yorkshire, and North West regions

Midlands and East NHS East of England and Midlands regions

South NHS South East and South West regions

London NHS London region

Reporting of acute respiratory infections (ARI) by age band

In addition to regional rates, we report rates by age band for ARI. We display five age bands: those aged under 1 year, 1-4 years, 5-14 years, 15-64 years, and those aged 65 years and over. We subdivide ARI into four categories:

- influenza-like illness (ILI);
- exacerbations of chronic lung disease (ECLD), mainly asthma and chronic obstructive pulmonary disease (COPD);
- lower respiratory tract infections (LRTI), including bronchitis and pneumonia;
- upper respiratory tract infections (URTI), including tonsilitis and sinusitis.

More information about our classification of ARI can be found at:

https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2024.29.35.2300682

About the RCGP Research and Surveillance Centre (RSC)

What we do

Established in 1957, the Oxford-Royal College of General Practitioners (RCGP) Research and Surveillance Centre (RSC) 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 provides weekly reports about health and disease: the Weekly Returns Service (WRS). The WRS has been produced since 1967, in collaboration with the UK Health Security Agency (UKHSA) and its predecessor bodies. The University of Oxford currently provides the WRS on behalf of RCGP and UKHSA.

The RSC is active in research and surveillance. In addition to the WRS, the RSC contributes data to UKHSA's Syndromic Surveillance system, and supports vaccine effectiveness studies. The role of general practice members of the RSC is set out in an annual commissioning letter.

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

www.rcgp.org.uk/representing-you/research-at-rcgp/research-surveillance-centre

Our data extraction process and governance

Data are extracted on behalf of the RSC from practice computerised medical record systems, twice a week by Magentus Data Management, or daily by EMIS-X Analytics (EXA). 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 Nuffield Department of Primary Care Health Sciences (NDPCHS) at the University of Oxford. Our systems meet the requirements of the General Data Protection Regulation (GDPR). Further information about the NHS England approval of the RSC's data security can be found at:

https://www.dsptoolkit.nhs.uk/OrganisationSearch/EE133863-MSD-NDPCHS

What the data is used for

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.

In addition to the WRS, the data are 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.

Get in touch

For further information about the work of the RSC, or if you would like to be included on our email notification list, please contact:

Director: Professor Simon de Lusignan (Simon.DeLusignanPA@phc.ox.ac.uk)

RCGP Research and Surveillance Centre Policy, Research and Campaigns Royal College of General Practitioners 30 Euston Square London, NW1 2FB Tel: 020 3188 7400 Nuffield Department of Primary Care Health Sciences Gibson Building Radcliffe Observatory Quarter Woodstock Road Oxford, OX2 6GG Tel: 01865 617855



