

# RSC Communicable and Respiratory Disease Report for England

## **Key Statistics:**

## **National (England)**

- Acute Respiratory Infections: decreased from 375.5 in week 4 to 374.0 in week 5.
- Influenza-like illness: decreased from 9.8 in week 4 to 9.6 in week 5.
- Exacerbations of Chronic Lung Disease: decreased from 15.3 in week 4 to 14.8 in week 5.
- Lower Respiratory Tract Infections: decreased from 128.2 in week 4 to 127.5 in week 5.
- Upper Respiratory Tract Infections: increased from 228.4 in week 4 to 230.4 in week 5.
- COVID-19: decreased from 12.2 in week 4 to 9.8 in week 5.

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

- Acute Respiratory Infections: increased from 279.0 in week 4 to 283.4 in week 5 in the London region, decreased from 465.6 in week 4 to 459.7 in week 5 in the North region, decreased from 352.4 in week 4 to 345.5 in week 5 in the South region, and increased from 388.1 in week 4 to 395.9 in week 5 in the Midlands And East region.
- Influenza-like illness: decreased from 10.3 in week 4 to 10.2 in week 5 in the London region, decreased from 10.7 in week 4 to 9.5 in week 5 in the North region, increased from 10.4 in week 4 to 10.8 in week 5 in the South region, and decreased from 7.6 in week 4 to 7.4 in week 5 in the Midlands And East region.
- Exacerbations of Chronic Lung Disease: decreased from 8.4 in week 4 to 7.9 in week 5 in the London region, decreased from 22.8 in week 4 to 21.5 in week 5 in the North region, increased from 12.6 in week 4 to 13.2 in week 5 in the South region, and decreased from 16.6 in week 4 to 15.5 in week 5 in the Midlands And East region.
- Lower Respiratory Tract Infections: increased from 77.1 in week 4 to 80.3 in week 5 in the London region, decreased from 173.4 in week 4 to 168.3 in week 5 in the North region, decreased from 121.6 in week 4 to 120.6 in week 5 in the South region, and increased from 129.6 in week 4 to 132.1 in week 5 in the Midlands And East region.
- Upper Respiratory Tract Infections: increased from 186.1 in week 4 to 188.8 in week 5 in the London region, increased from 274.0 in week 4 to 277.6 in week 5 in the North region, decreased from 208.9 in week 4 to 206.3 in week 5 in the South region, and increased from 240.5 in week 4 to 247.6 in week 5 in the Midlands And East region.
- COVID-19: decreased from 7.4 in week 4 to 6.6 in week 5 in the London region, decreased from 12.8 in week 4 to 10.2 in week 5 in the North region, decreased from 15.1 in week 4 to 12.0 in week 5 in the South region, and decreased from 11.6 in week 4 to 9.1 in week 5 in the Midlands And East region.

## Comment:

Overall presentations of acute respiratory infections (ARI) decreased a little this week and they are below seasonal levels for this time of year except for the North (graph I, page 6), while ARI increased in age bands under 1, aged 1-4 and 5-14 years. There is an increase in the diagnosis of Strep sore throat and Scarlatina (page 17).

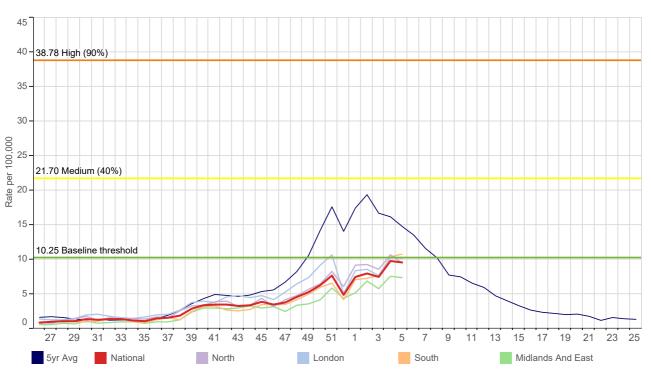
Rates have also decreased for influenza-like illness (ILI) (pages 2 and 3), acute bronchitis and bronchiolitis combined (page 4) and COVID-19 (page 5). However, the rate of influenza positivity across our respiratory swabs had increased to over 15% (Page 2). Rates of scabies have also decreased though they remain above the seasonal norm (page 15).

This report includes a respiratory virology update. Influenza – particularly Influenza H1N1, SARS-CoV-2 and RSV are the predominant circulating viruses detected by the UK Health Security Agency (UKHSA) Reference Virology Lab.

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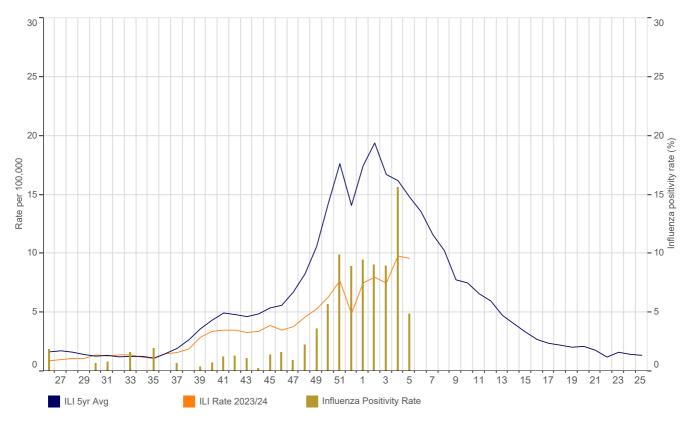
## 2023/24 Focus

Please see page 19 for explanatory notes on the data.



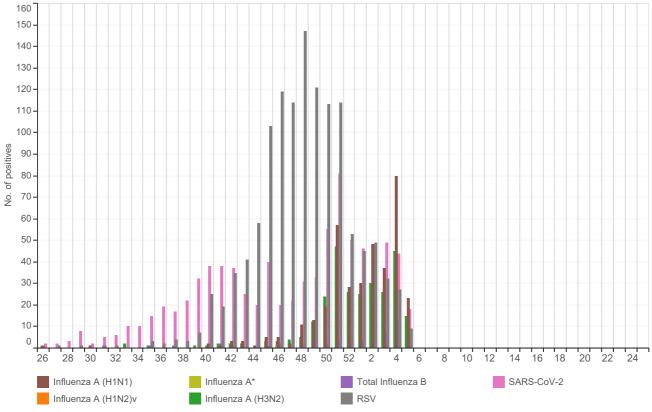
### (A) Influenza-like illness: national incidence rate 2023/24 by region

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



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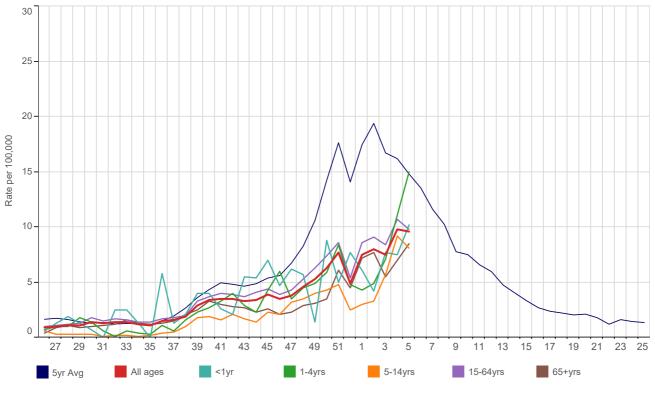
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(C) RCGP/UKHSA RSV, Influenza and SARS-CoV-2 Virology Swab Surveillance 2023/24 by viral strain

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



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#### (E) Influenza-like illness: national incidence rate 2023/24 by age band

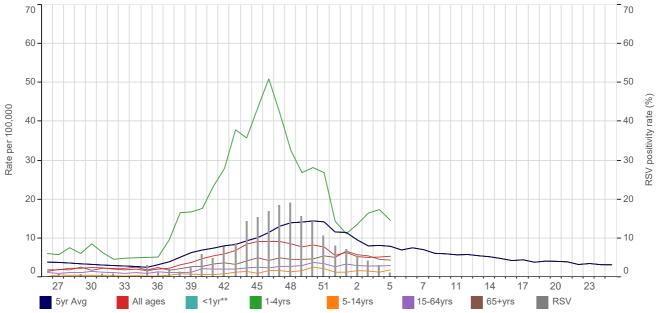
This table shows the level of intensity of ILI by age band. MEM thresholds have been calculated separately for each age band - the ranges are shown in the table Threshold levels by age band.

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	5.9	8.4	4.8	4.3	4.9	7.1	11.1	15.0				
5-14yrs	1.4	2.3	2.1	3.2	3.5	4.0	4.3	4.8	2.5	3.0	3.3	5.7	9.2	8.1				
15-64yrs	4.1	4.4	3.9	4.3	5.3	6.3	7.4	8.6	5.4	8.6	9.1	8.4	10.7	9.8				
65+yrs	2.3	2.6	2.1	2.3	2.9	3.1	3.5	6.1	4.5	7.2	7.7	5.5	7.0	8.5				
All ages	3.4	3.9	3.5	3.8	4.6	5.3	6.3	7.7	4.9	7.5	8.0	7.5	9.8	9.6				

	Below	Threshold to	Medium to	High to	Above
Table 2	Threshold	Medium <sup>2</sup>	High <sup>3</sup>	Very High <sup>4</sup>	Very High⁵
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+

<u>Threshold levels</u> <sup>1</sup>Below baseline threshold <sup>2</sup>baseline threshold breach to < 40th percentile <sup>3</sup>40th to <90th percentile <sup>4</sup>90th to <97.5th percentile <sup>5</sup>97.5th+ percentile



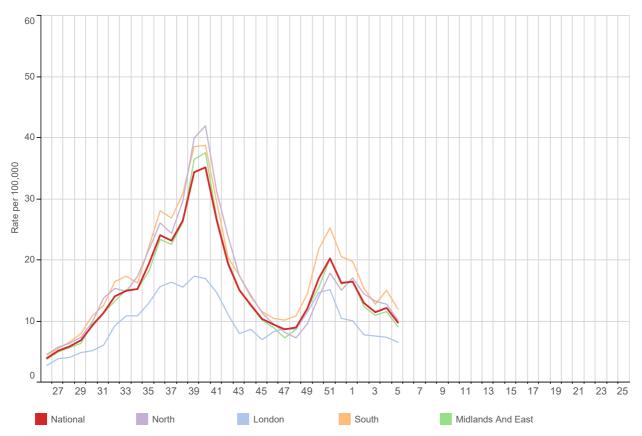


Weekly Influenza-like illness and Acute Bronchitis and Bronchiolitis incidence rates per 100,000 persons

	Influenza-like illness	Acute Bronchitis and Bronchiolitis		Influenza-like illness	Acute Bronchitis and Bronchiolitis
<1yr	10.2	213.9	London	10.2	3.1
1-4yrs	15.0	14.6	North	9.5	6.8
5-14yrs	8.1	1.9	South	10.8	5.9
15-24yrs	8.9	1.8	Midlands And East	7.4	5.3
25-44yrs	10.3	2.8	National	9.6	5.4
45-64yrs	9.6	3.7			
65-74yrs	6.9	4.1			
75-84yrs	7.6	4.6			
85+yrs	16.7	5.2			
All ages	9.6	5.4	**The <1yr age band is	not presented (Graph F).	

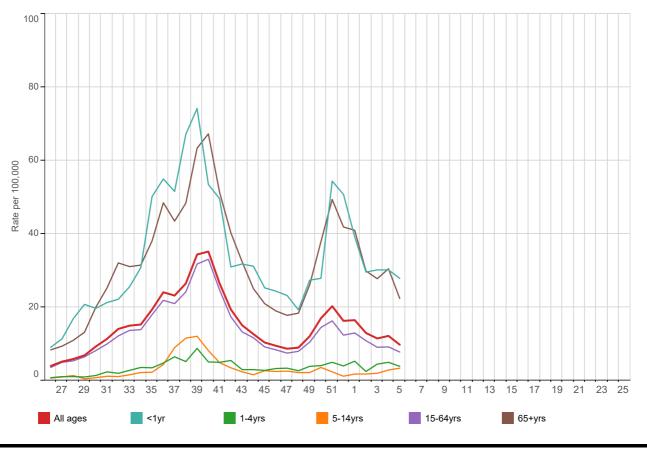
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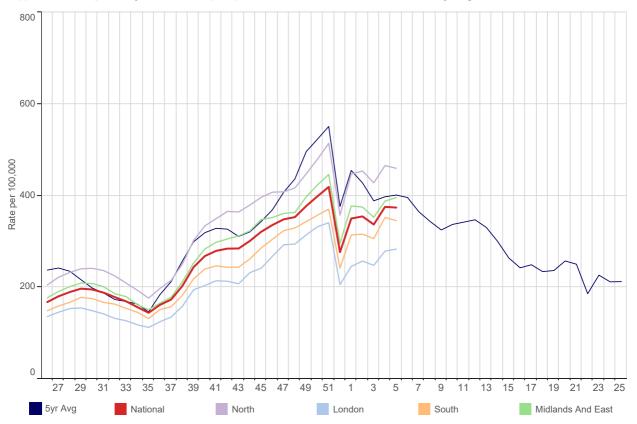
(G) COVID-19: national incidence rate 2023/24 by region





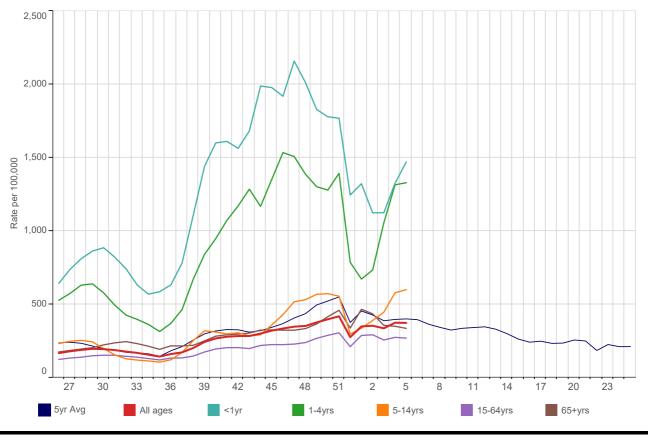
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# 1. Respiratory Infections

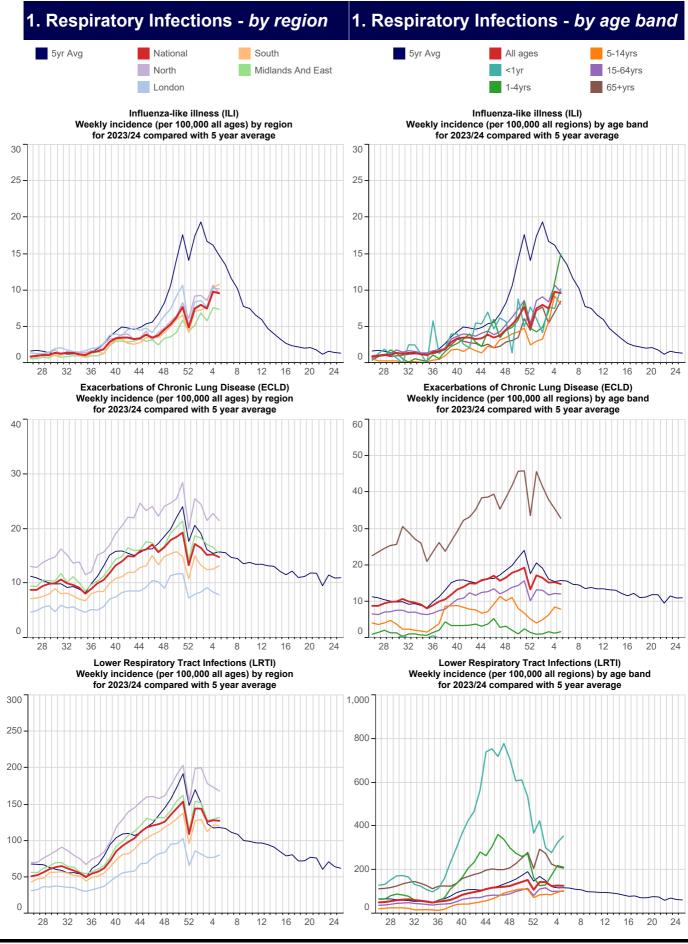


### (I) Acute Respiratory Infections (ARI): national incidence rate 2023/24 by region

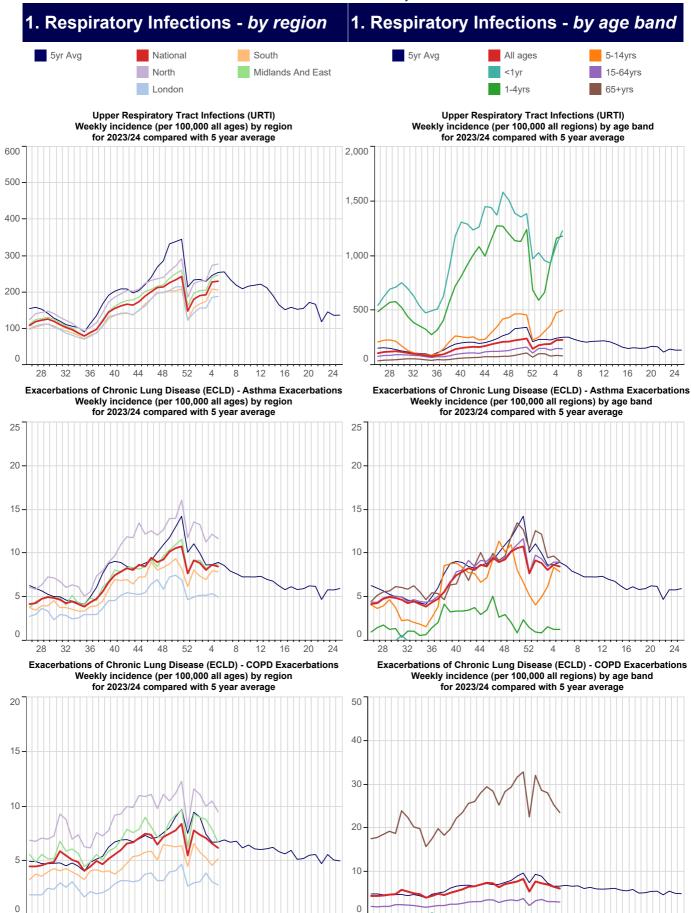
(J) Acute Respiratory Infections (ARI): national incidence rate 2023/24 by age band



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28 32 36 40

28 32 36 40 44 48 52 4 8 12 16 20 24

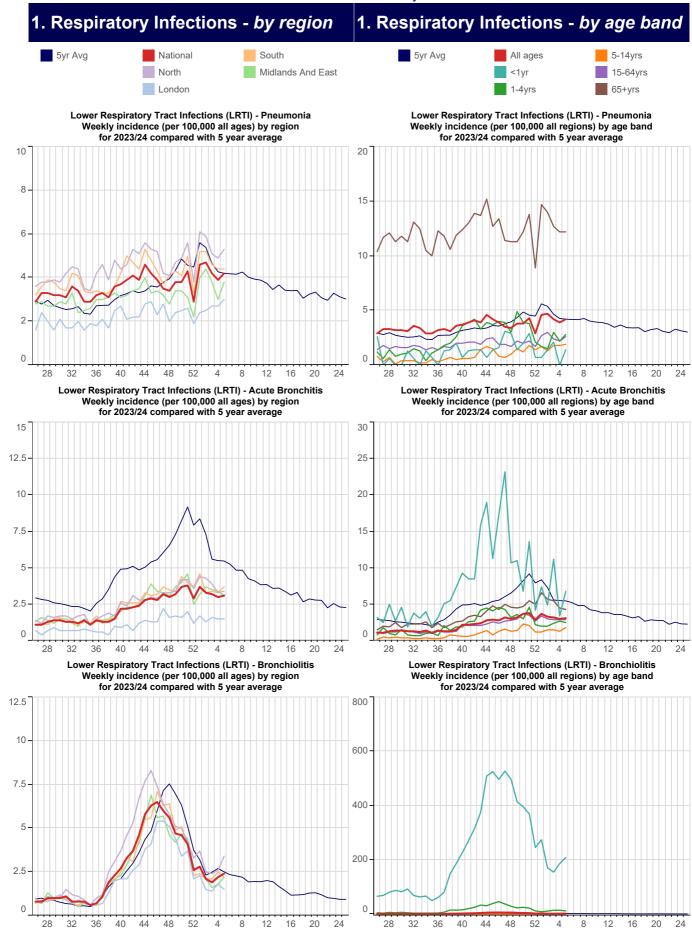
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8 12 16 20 24

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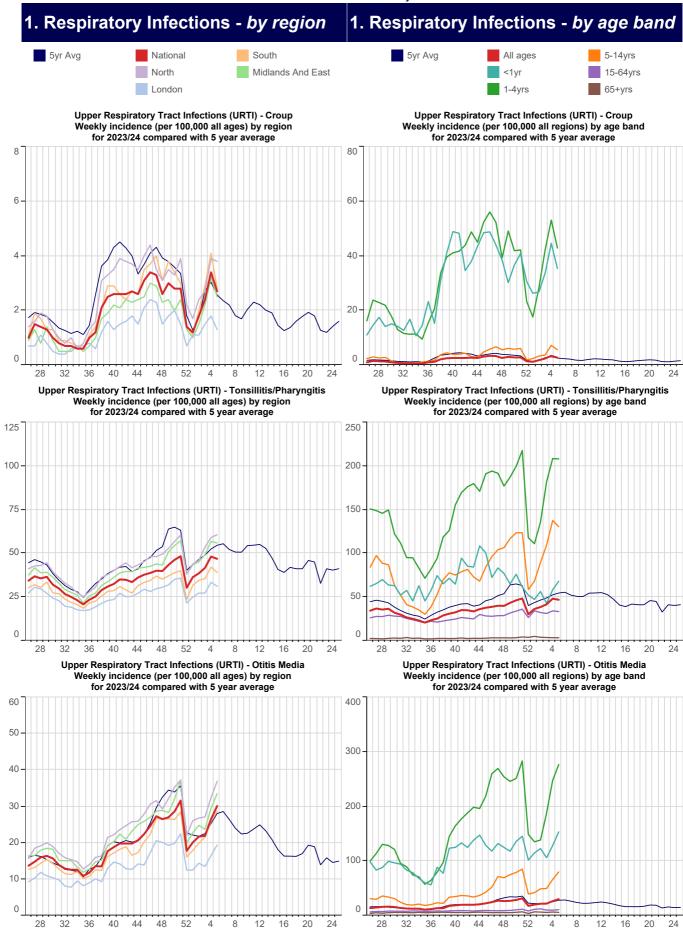
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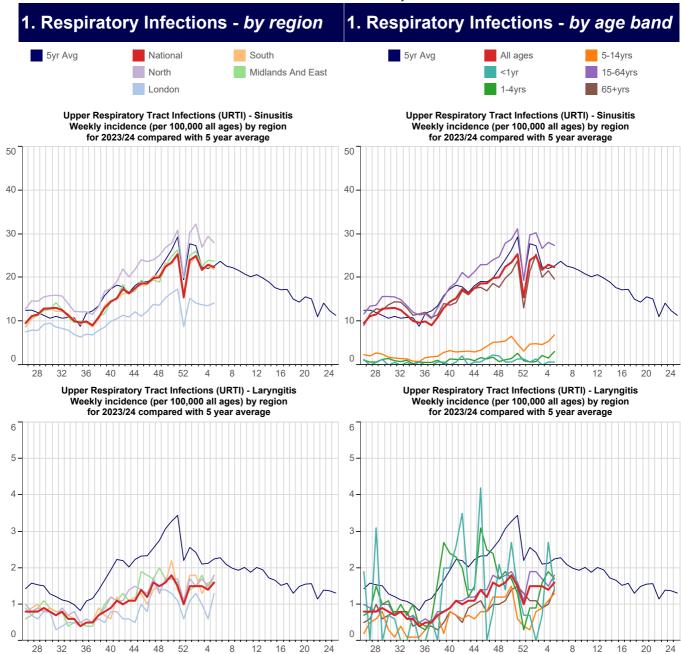


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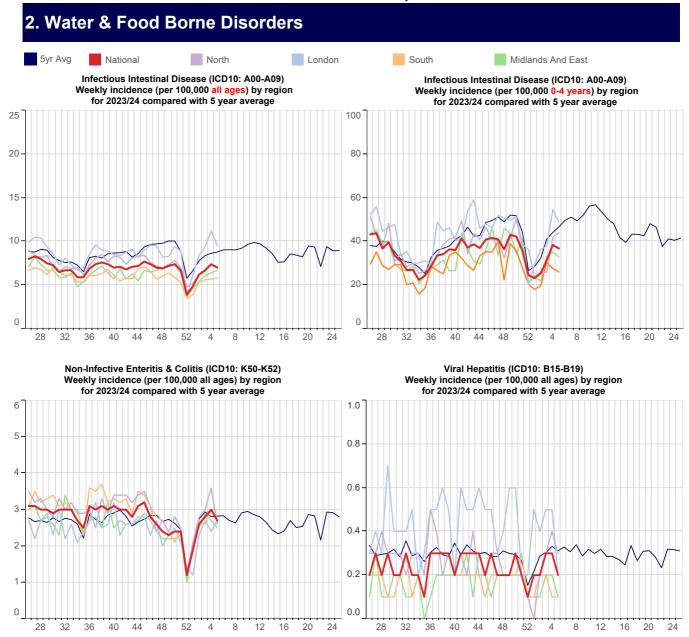
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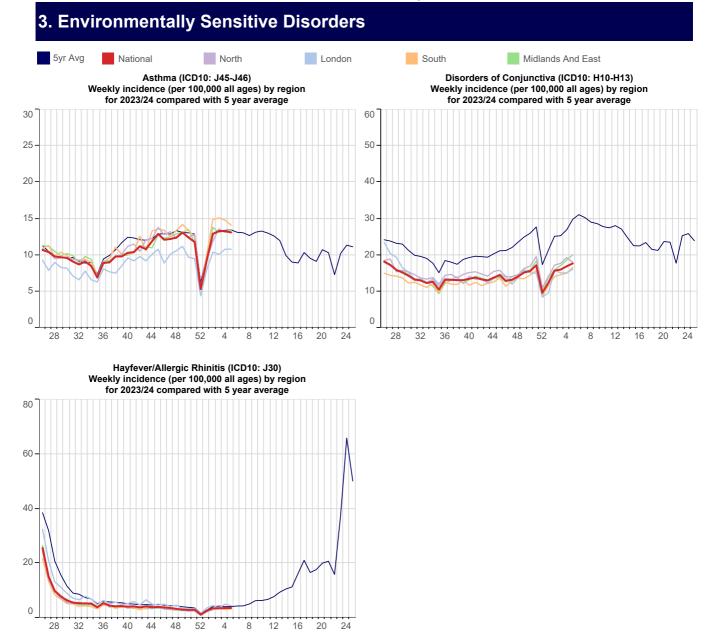
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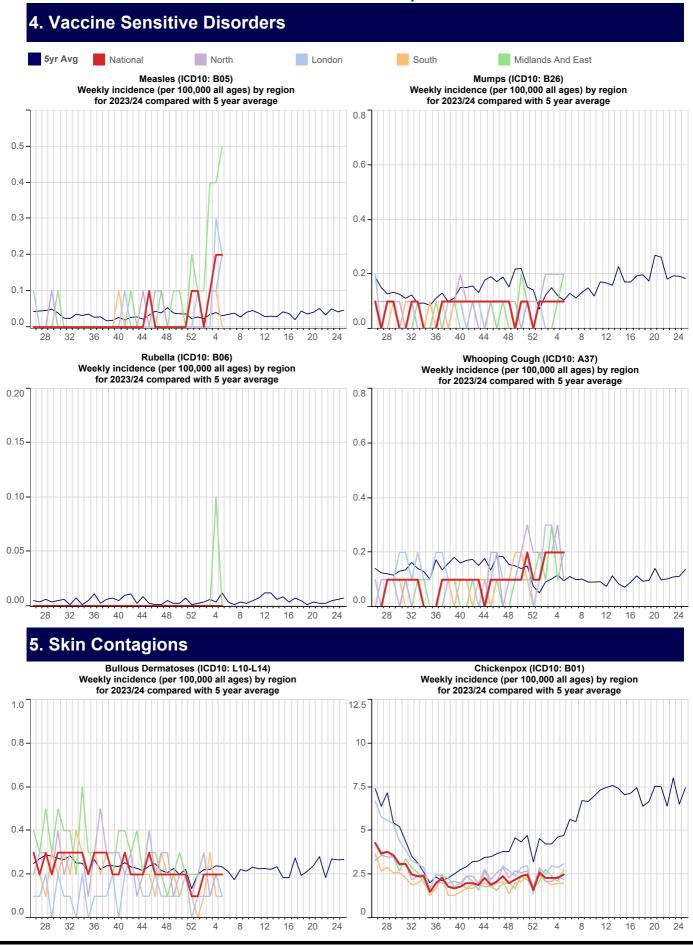
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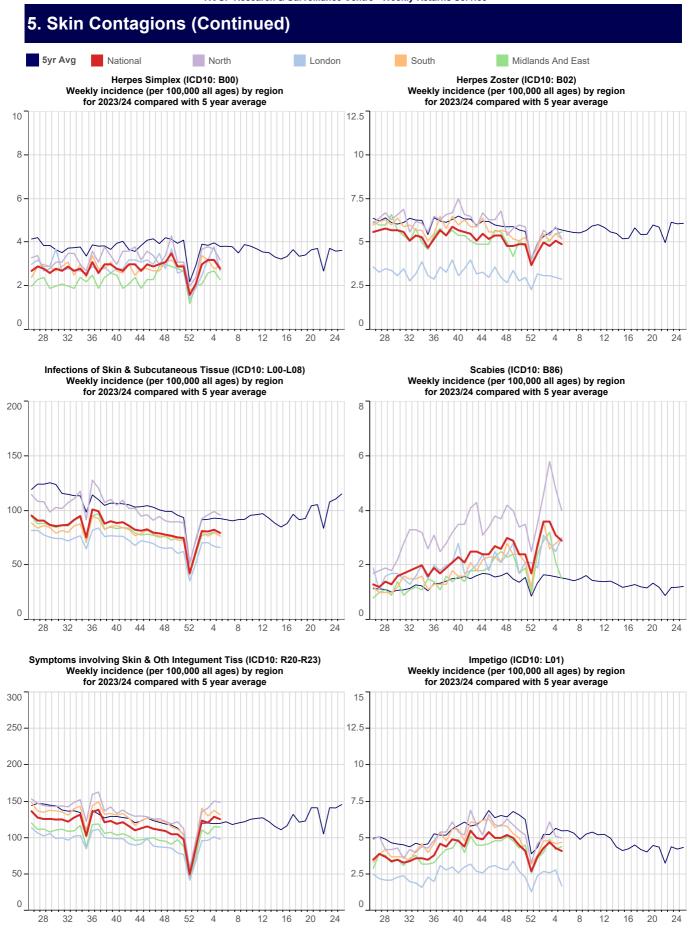


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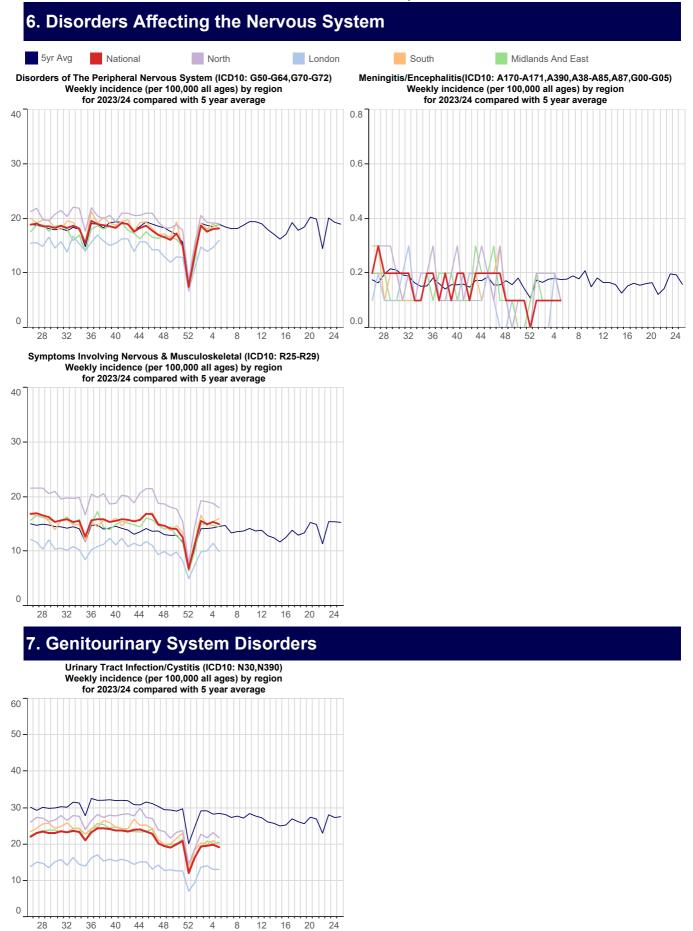


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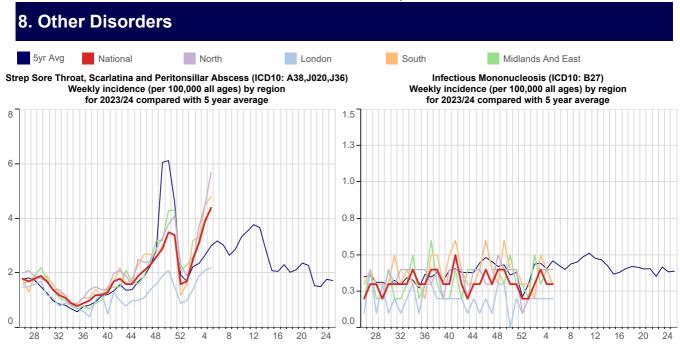
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# 8. Tabular Summary by Disease

Week beginning Week ending		29/01/2024 04/02/2024		22/01/2024 28/01/2024		15/01/2024 21/01/2024		08/01/2024 14/01/2024
Disease Name	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer
Acute Bronchitis	3.1	519	3.0	510	3.2	551	3.3	517
Acute respiratory infections (ARI)	374.0	63,283	375.5	64,383	337.0	57,655	354.7	56,332
Allergic Rhinitis	3.6	614	3.6	612	3.5	593	3.5	555
Asthma	13.1	2,213	13.3	2,274	13.3	2,272	12.9	2,056
Bronchiolitis	2.4	403	2.2	383	1.9	327	2.1	327
Bullous Dermatoses	0.2	26	0.2	29	0.2	32	0.2	25
Chickenpox	2.5	415	2.3	392	2.3	394	2.3	367
Conjunctival Disorders	17.7	2,994	16.9	2,904	16.0	2,745	15.7	2,489
COVID-19	9.8	1,666	12.2	2,099	11.5	1,975	13.0	2,060
Croup	2.7	458	3.4	583	2.4	418	1.8	284
ECLD - Asthma exacerbations	8.5	1,440	8.7	1,489	8.1	1,380	8.9	1,421
ECLD - COPD exacerbations	6.2	1,044	6.6	1,126	7.1	1,208	7.4	1,178
Exacerbations of chronic lung disease	14.8	2,499	15.3	2,624	15.2	2,605	16.5	2,616
Herpes Simplex	2.8	476	3.2	549	3.2	550	3.0	476
Herpes Zoster	4.9	821	5.1	877	4.8	820	5.0	790
Impetigo	4.1	700	4.3	733	4.7	809	4.3	679
Infectious Intestinal Diseases	7.0	1,192	7.4	1,261	6.7	1,143	6.2	983
Infectious Mononucleosis	0.3	51	0.3	60	0.4	62	0.3	48
Influenza-like illness	9.6	1,621	9.8	1,687	7.5	1,284	8.0	1,269
Laryngitis	1.6	277	1.4	234	1.5	250	1.5	246
Lower respiratory tract infections	127.5	21,578	128.2	21,978	126.2	21,592	144.1	22,880
Measles	0.2	37	0.2	32	0.1	25	0.0	2
Meningitis and Encephalitis	0.1	19	0.1	23	0.1	19	0.1	19
Mumps	0.1	17	0.1	18	0.1	15	0.1	13
Non-infective Enteritis and Colitis	2.7	457	3.0	508	2.8	474	2.6	416
Otitis Media	30.1	5,092	26.5	4,552	21.9	3,749	21.7	3,453
Peripheral Nervous Disease	18.2	3,074	18.1	3,106	17.6	3,003	18.7	2,966
Pneumonia	4.2	711	3.9	669	4.2	714	4.7	741
Rubella	0.0	1	0.0	2	0.0	1	0.0	0
Scabies	2.9	490	3.1	534	3.6	616	3.6	573
Sinusitis	22.4	3,791	23.0	3,946	21.8	3,724	25.0	3,974
Skin and Subcutaneous Tissue Infections	79.6	13,470	82.5	14,147	80.9	13,837	81.3	12,916
Strep Throat and Peritonsillar Abscess	4.4	746	3.9	673	3.1	530	2.5	396
Symptoms involving musculoskeletal	15.0	2,541	15.4	2,644	15.0	2,575	15.6	2,485
Symptoms involving Skin and Integument Tissues	125.7	21,277	129.0	22,120	120.8	20,667	123.8	19,668
Tonsillitis/Pharyngitis	46.9	7,938	48.2	8,265	41.7	7,143	38.6	6,126
Upper respiratory tract infections	230.4	38,988	228.4	39,166	193.2	33,060	190.9	30,326
Urinary Tract Infections	19.2	3,255	19.9	3,404	19.6	3,347	19.4	3,087
Viral Hepatitis	0.2	30	0.3	43	0.3	48	0.2	35
Whooping Cough	0.2	31	0.2	38	0.2	40	0.2	29
Practice Count		1,656		1,694		1,692		1,578
Denom	1	6,921,594	1	7,148,209		17,110,623	1	5,881,902

# 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 (<u>https://www.npl.co.uk/data-science</u>) 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 Practioners 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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