Royal College of General Practitioners

RSC Communicable and Respiratory Disease Report for England

Key Statistics:

Week Number/Year....................	9/2021
Week Starting - Ending.............	01/03/2021 - 07/03/2021
No. of Practices.........................	479
Population...................................	4,661,274

National (England)

- **Acute Bronchitis :** decreased from **2.8** in week 8 to **2.6** in week 9.
- **Asthma :** increased from **10.9** in week 8 to **11.4** in week 9.
- **Common Cold :** increased from **0.3** in week 8 to **0.4** in week 9.
- **Influenza-like illness :** was unchanged at **0.4** in week 8 to **0.4** and week 9.
- **Respiratory System Diseases :** increased from **101.9** in week 8 to **109.1** in week 9.
- **COVID-19 :** decreased from **46.7** in week 8 to **28.7** in week 9.

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

- **Acute Bronchitis :** decreased from **1.4** in week 8 to **0.8** in week 9 in the London region, decreased from **4.7** in week 8 to **4.4** in week 9 in the North region, decreased from **2.3** in week 8 to **2.1** in week 9 in the South region, and increased from **2.1** in week 8 to **2.5** in week 9 in the Midlands And East region.

- **Asthma :** increased from **9.0** in week 8 to **11.7** in week 9 in the London region, increased from **12.4** in week 8 to **13.5** in week 9 in the North region, decreased from **11.0** in week 8 to **10.6** in week 9 in the South region, and decreased from **10.3** in week 8 to **9.1** in week 9 in the Midlands And East region.

- **Common Cold :** was unchanged at **0.5** in week 8 and **0.5** in week 9 in the London region, increased from **0.2** in week 8 to **0.4** in week 9 in the North region, increased from **0.2** in week 8 to **0.3** in week 9 in the South region, and decreased from **0.6** in week 8 to **0.4** in week 9 in the Midlands And East region.

- **Influenza-like illness :** increased from **0.1** in week 8 to **0.2** in week 9 in the London region, was unchanged at **0.7** in week 8 and **0.7** in week 9 in the North region, decreased from **0.3** in week 8 to **0.2** in week 9 in the South region, and increased from **0.4** in week 8 to **0.6** in week 9 in the Midlands And East region.

- **Respiratory System Diseases :** increased from **78.1** in week 8 to **83.9** in week 9 in the London region, increased from **130.7** in week 8 to **138.3** in week 9 in the North region, increased from **95.2** in week 8 to **103.3** in week 9 in the South region, and increased from **93.0** in week 8 to **98.6** in week 9 in the Midlands And East region.

- **COVID-19 :** decreased from **32.7** in week 8 to **19.2** in week 9 in the London region, decreased from **71.1** in week 8 to **47.1** in week 9 in the North region, decreased from **28.8** in week 8 to **16.7** in week 9 in the South region, and decreased from **60.3** in week 8 to **34.5** in week 9 in the Midlands And East region.

Comment:

Overall presentations of respiratory diseases have increased this week, and remain below seasonal levels for this time of year. The rate of the decline in community incidence of COVID-19 has continued this week, albeit at a slower rate. (Reported COVID-19 incidence lags behind our other results, as this is a test rather than a clinical diagnosis).

This report includes a virology update.

Winter Focus 2020/21

Please see page 15 for explanatory notes on the data.

(A) Influenza-like illness: national incidence rate winter 2020/21 by region*
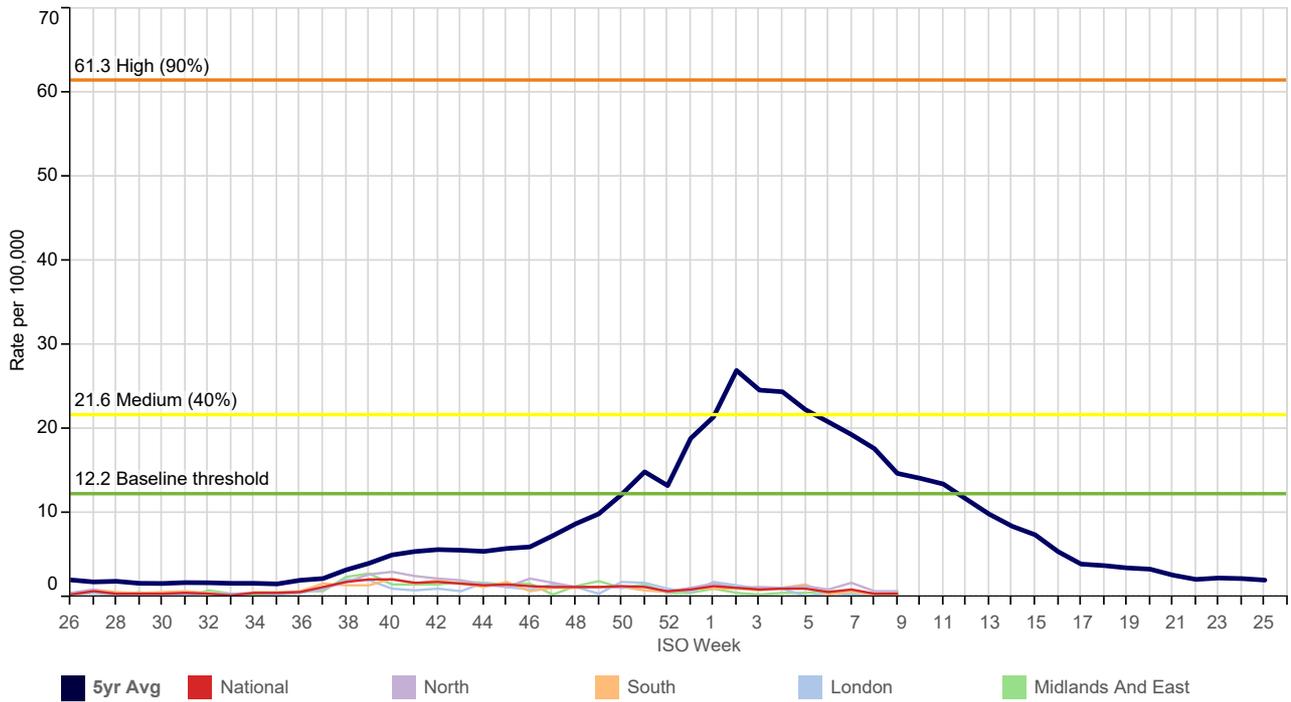
(B) RCGP/PHE RSV, Influenza and SARS-CoV-2 Virology Swab Surveillance 2020/21*
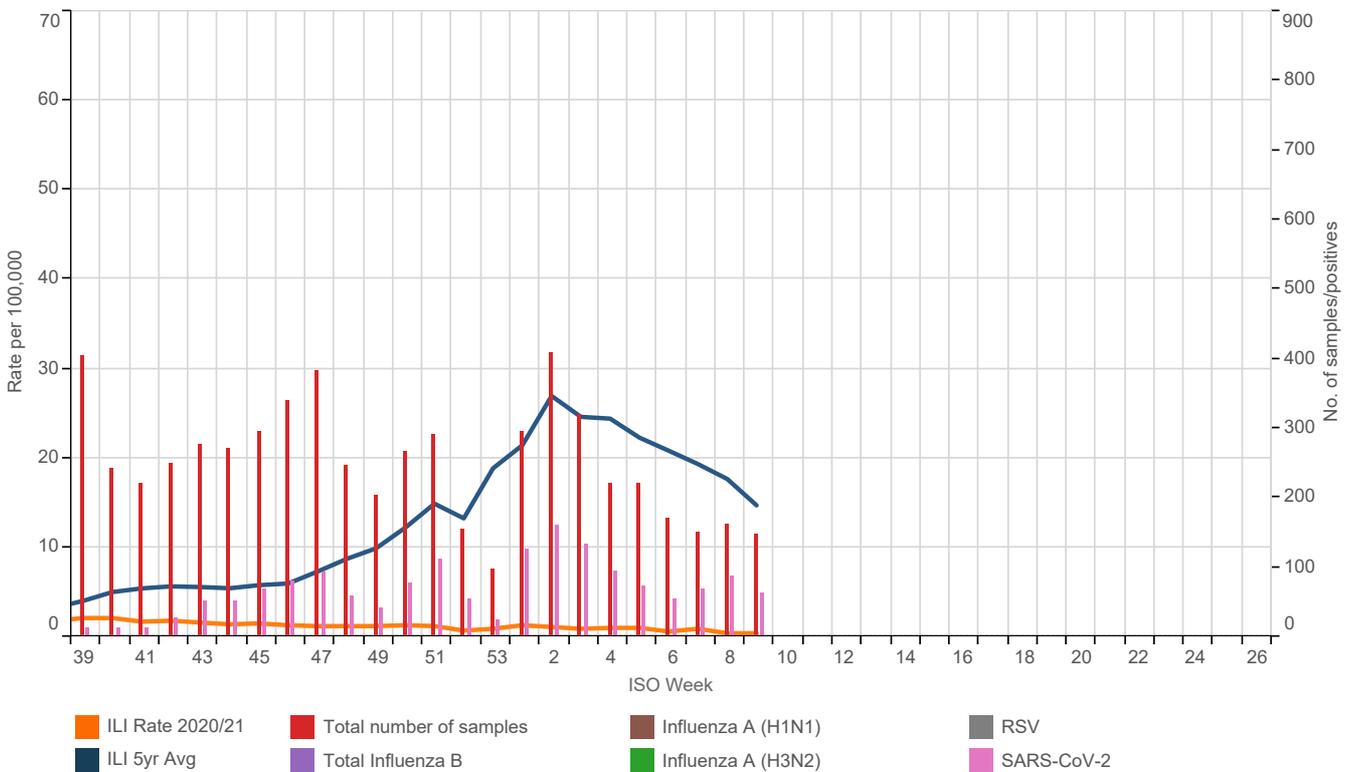
* The rolling average line(blue) is based on 5 year historic RCGP RSC level (Graph A). The weekly virology samples displayed are offset from the ISO Week by -0.6 (Graphs B & C).

(C) RCGP/PHE RSV, Influenza and SARS-CoV-2 Virology Swab Surveillance 2020/21 by viral strain*
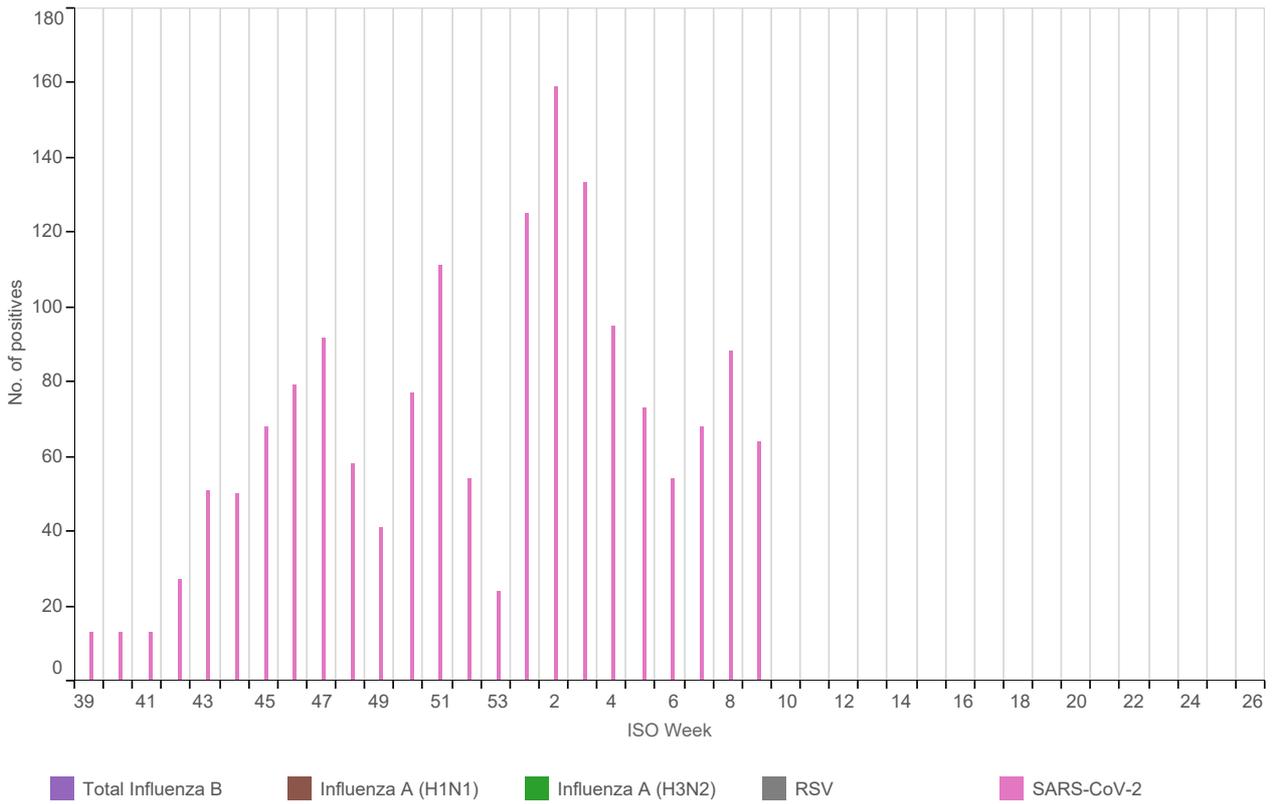
(D) Influenza-like illness: national incidence rate 2020/21 by age group*
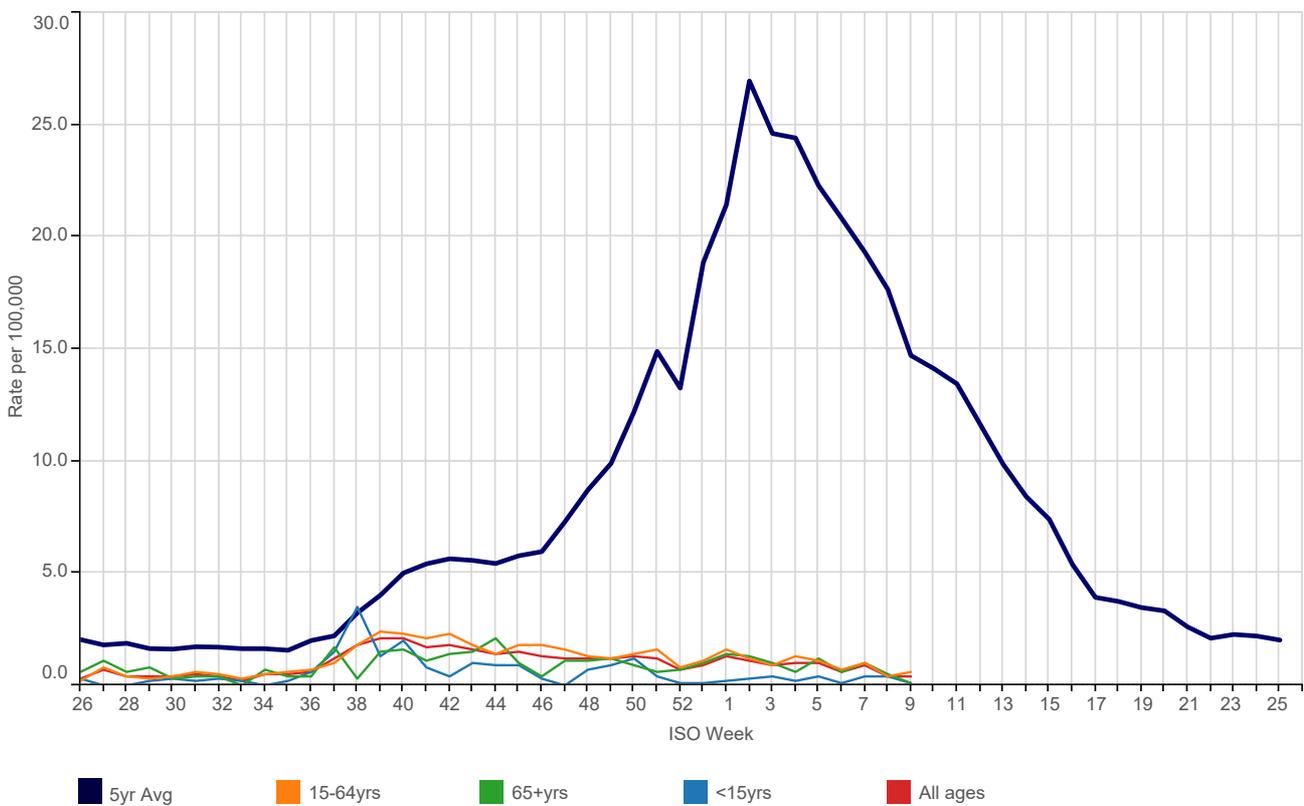
(E) Influenza-like illness: national incidence rate 2020/21 by age group*

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

Table 1	40	41	42	43	44	45	46	47	48	49	50	51	52	53	1	2	3	4
<15yrs	2.0	0.8	0.4	1.0	0.9	0.9	0.3	0.0	0.7	0.9	1.2	0.4	0.1	0.1	0.2	0.3	0.4	0.2
15-64yrs	2.3	2.1	2.3	1.8	1.4	1.8	1.8	1.6	1.3	1.2	1.4	1.6	0.8	1.1	1.6	1.2	0.9	1.3
65+yrs	1.6	1.1	1.4	1.5	2.1	1.0	0.4	1.1	1.1	1.2	0.9	0.6	0.7	1.0	1.4	1.3	1.0	0.6
All ages	2.1	1.7	1.8	1.6	1.4	1.5	1.3	1.2	1.2	1.2	1.3	1.2	0.7	0.9	1.3	1.1	0.9	1.0

	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
<15yrs	0.4	0.1	0.4	0.4	0.1													
15-64yrs	1.1	0.7	1.0	0.4	0.6													
65+yrs	1.2	0.6	1.0	0.5	0.1													
All ages	1.0	0.6	0.9	0.4	0.4													

Table 2	Below Threshold[1]	Threshold to Medium[2]	Medium to High[3]	High to Very High[4]	Above Very High[5]
All Ages	<12.2	12.2 to <21.6	21.6 to <61.3	61.3 to <97.3	97.3+
<15yrs	<10.7	10.7 to <17.6	17.6 to <47.7	47.7 to <74.1	74.1+
15-64yrs	<15.0	15.0 to <26.1	26.1 to <63.4	63.4 to <93.8	93.8+
65+yrs	<11.5	11.5 to <16.5	16.5 to <37.8	37.8 to <54.5	54.5+

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: national incidence rate 2020/21 by age group*

Legend: All ages, <5yrs, 5-14yrs, 15-64yrs, 65+yrs, RSV, 5yr Avg
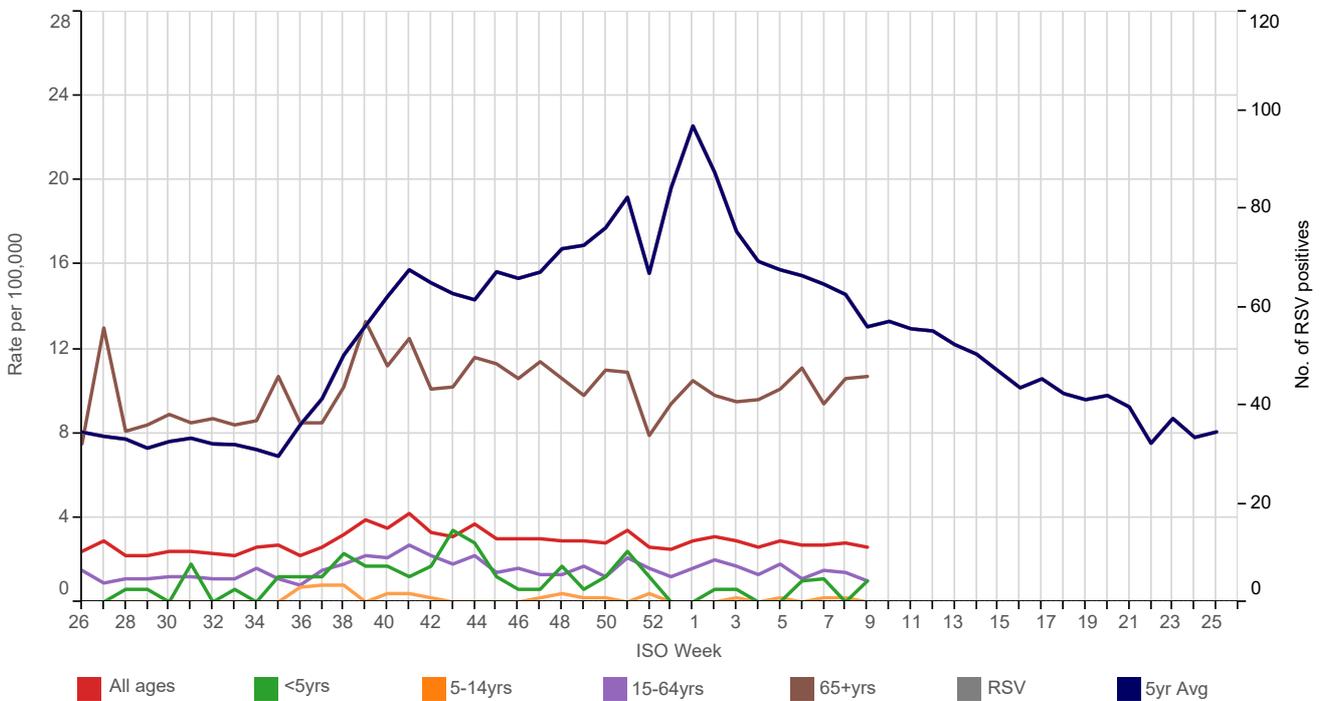
Weekly Influenza-like illness and Acute Bronchitis incidence rates per 100,000 persons

	Influenza-like illness	Bronchitis		Influenza-like illness	Bronchitis
<1yr	2.6	0.0	London	0.2	0.8
1-4yrs	0.0	1.0	North	0.7	4.4
5-14yrs	0.0	0.0	South	0.2	2.1
15-24yrs	0.6	0.0	Midlands And East	0.6	2.5
25-44yrs	0.4	0.4	National	0.4	2.6
45-64yrs	0.8	2.1			
65-74yrs	0.2	10.9			
75-84yrs	0.0	9.3			
85+yrs	0.0	13.8			
All ages	0.4	2.6			

(G) COVID-19 : national incidence rate 2020/21 by age group*

■ All ages	■ <15yrs	■ 15-64yrs	■ 65+yrs
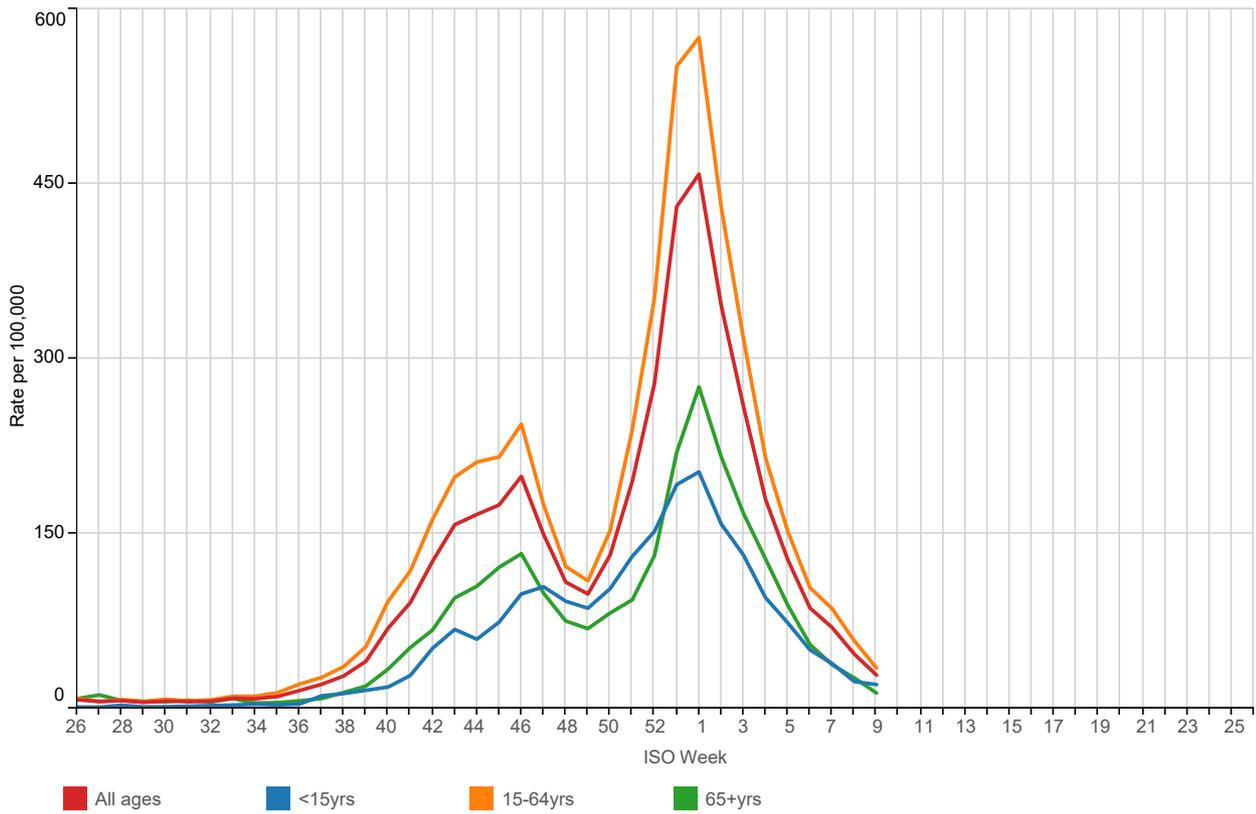
(H) COVID-19 : national incidence rate 2020/21 by region*

|				
■ National	■ North	■ London	■ South	■ Midlands And East
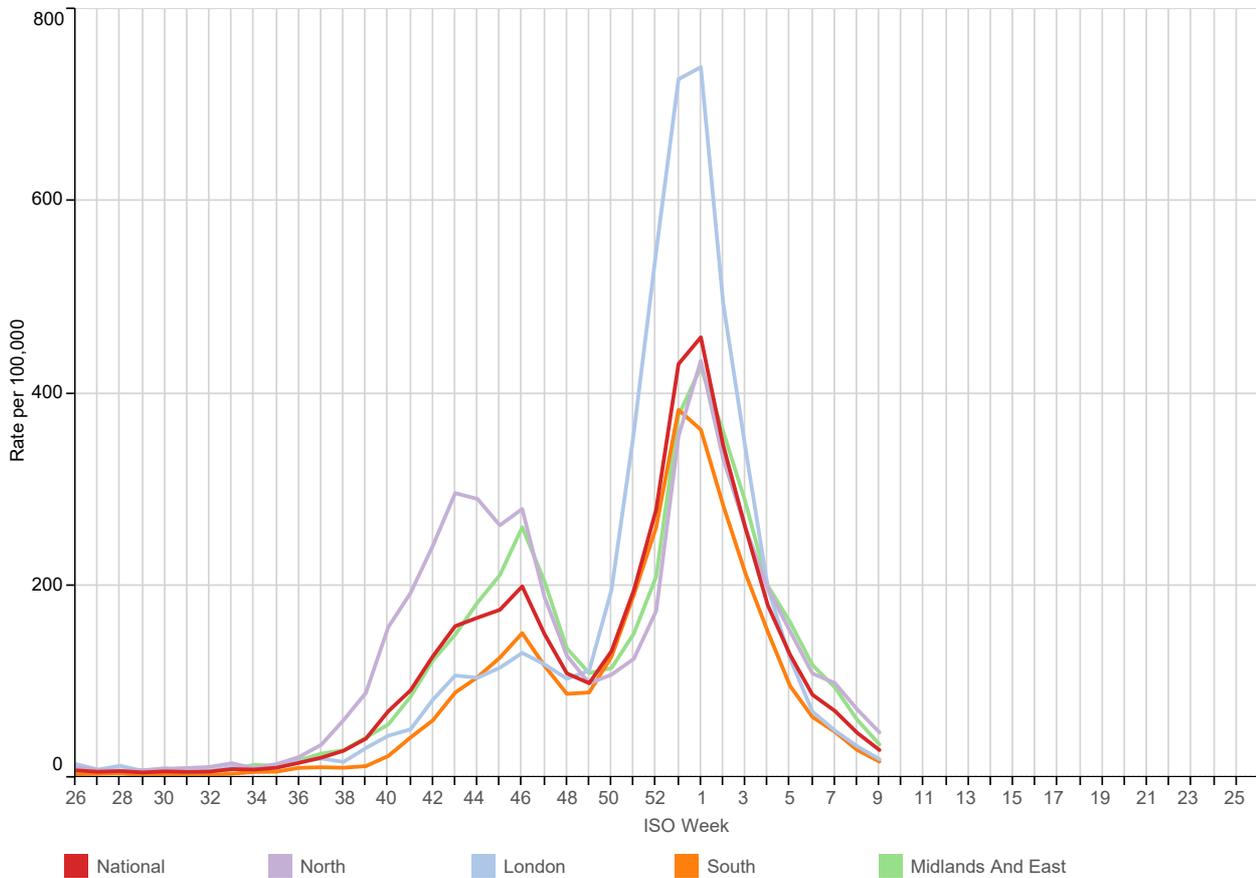
1. Water & Food Borne Disorders:

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

Infectious Intestinal Disease (ICD10: A00-A09)
Weekly incidence (per 100,000 all ages) by regions
for 2020/21 compared with 5 year average
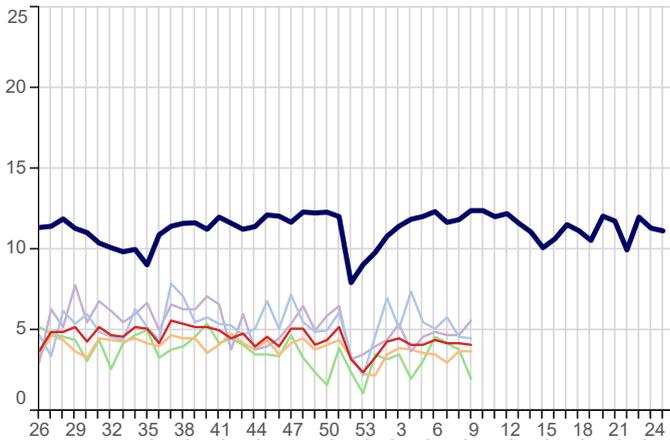
Infectious Intestinal Disease (ICD10: A00-A09)
Weekly incidence (per 100,000 0-4 years) by regions
for 2020/21 compared with 5 year average
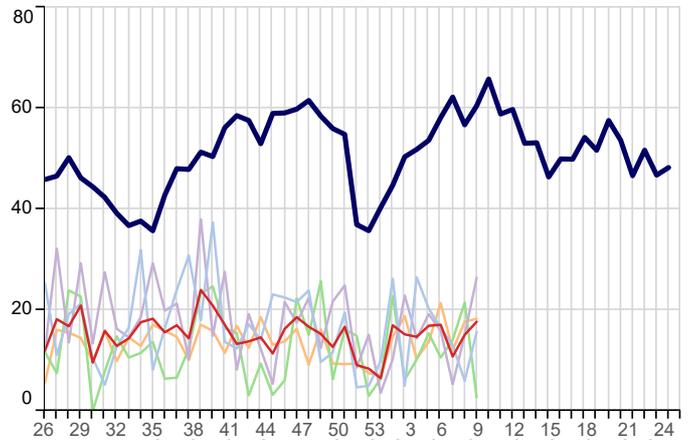
Non-Infective Enteritis & Colitis (ICD10: K50-K52)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
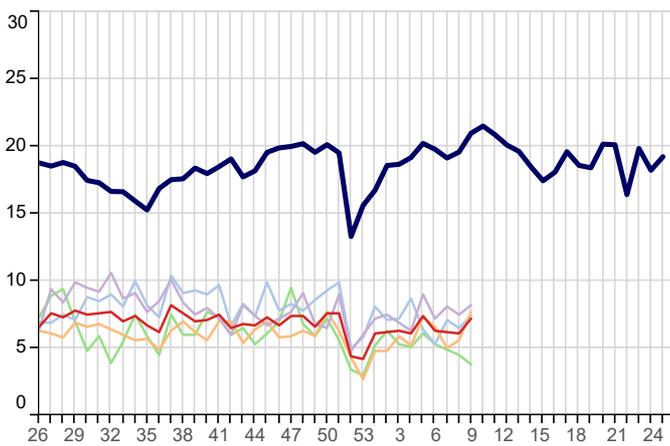
Viral Hepatitis (ICD10: B15-B19)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
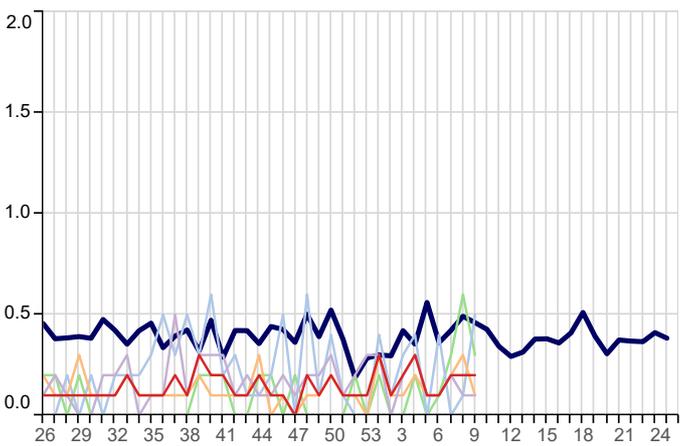
2. Environmentally Sensitive Disorders:

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

### Asthma (ICD10: J45-J46)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
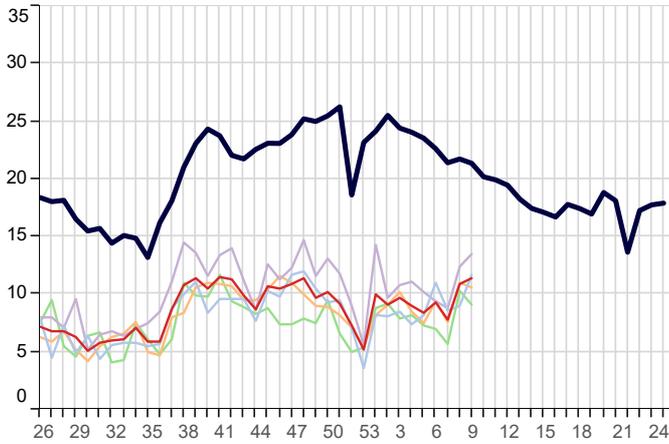
### Disorders of Conjunctiva (ICD10: H10-H13)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
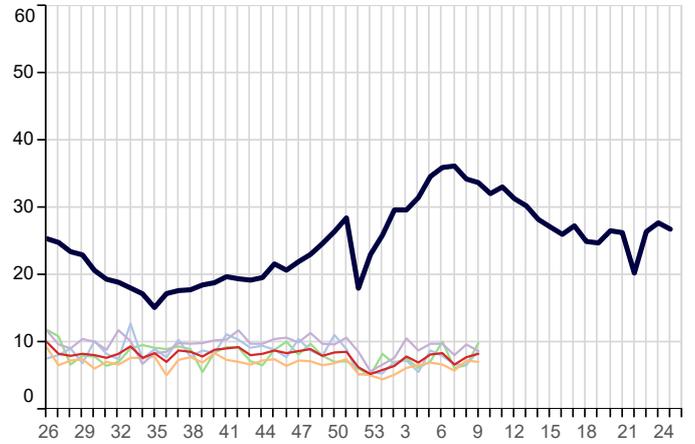
Hayfever/Allergic Rhinitis (ICD10: J30)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
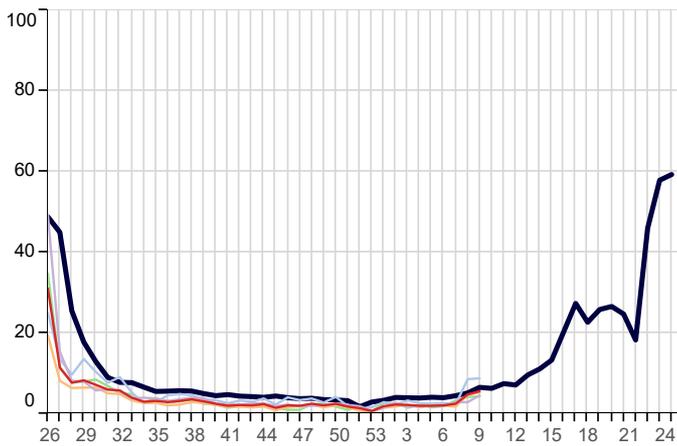
Symptoms involving Respiratory & Chest (ICD10: R05-R07,R09)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
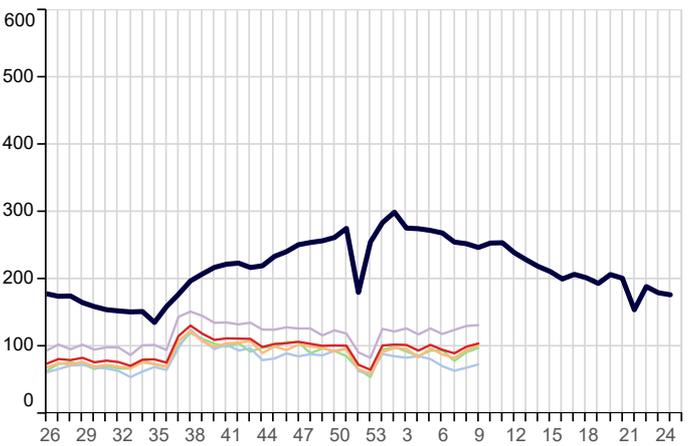
3. Respiratory Infections:

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

Acute Bronchitis (ICD10: J20-J21,J40)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
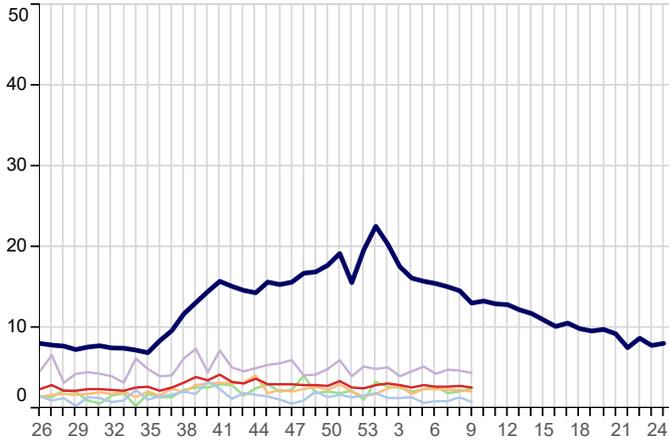
Common Cold (ICD10: J00,J06)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
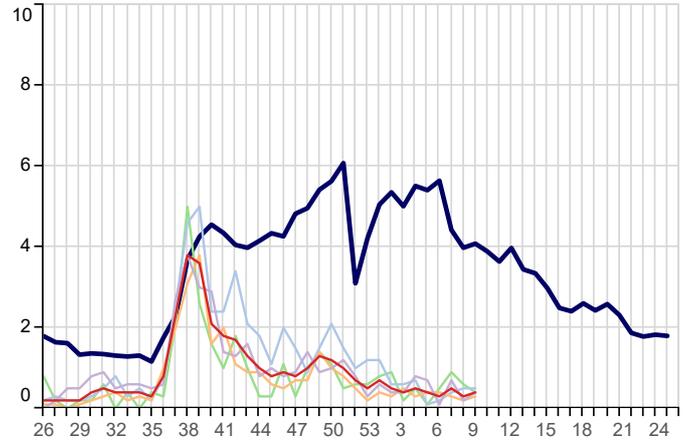
Influenza-like illness (ICD10: J09-J11)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
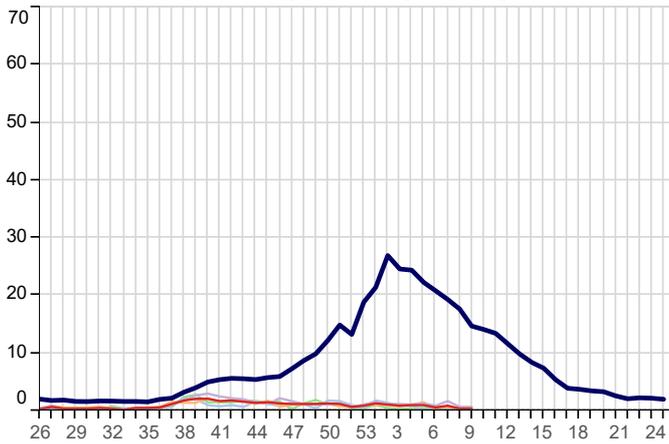
Acute Laryngitis/Tracheitis (ICD10: J04)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
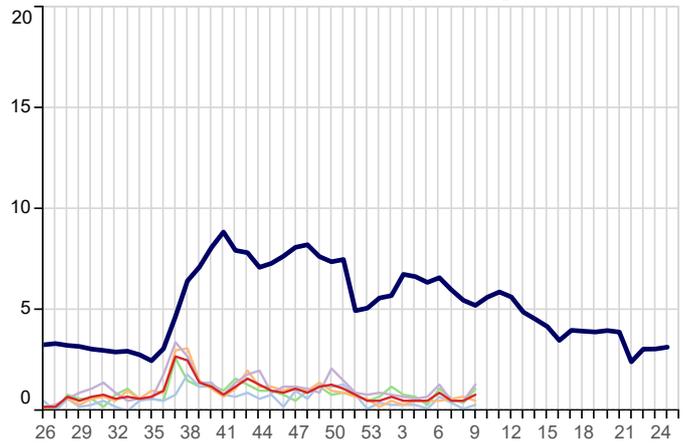
Pleurisy (ICD10: R091)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
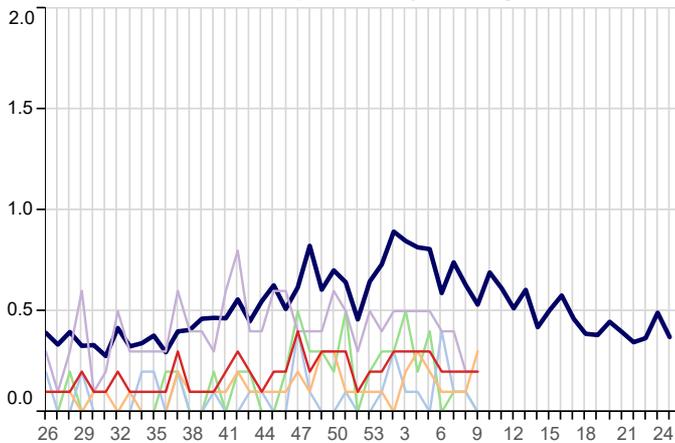
Pneumonia/Pneumonitis (ICD10: J12-J18)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
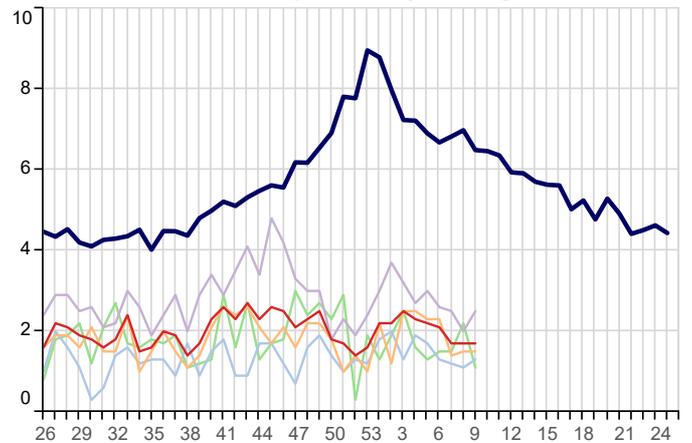
3. Respiratory Infections(Continued):

**Legend:** ■ 5yr Avg ■ National ■ London ■ North ■ South ■ Midlands And East

Respiratory System Diseases (ICD10: J00-J99)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
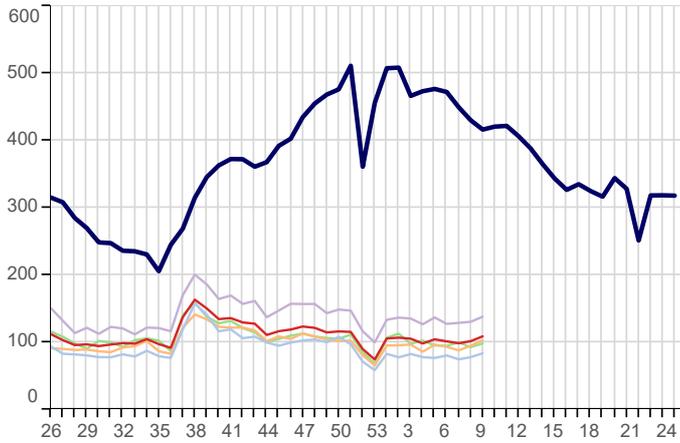
Acute Sinusitis (ICD10: J01)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
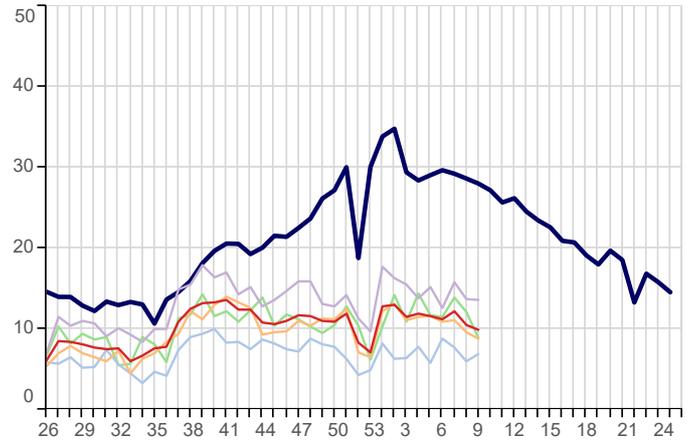
Strep Sore Throat, Scarlatina and Peritonsillar Abscess (ICD10: A38,J020,J36)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
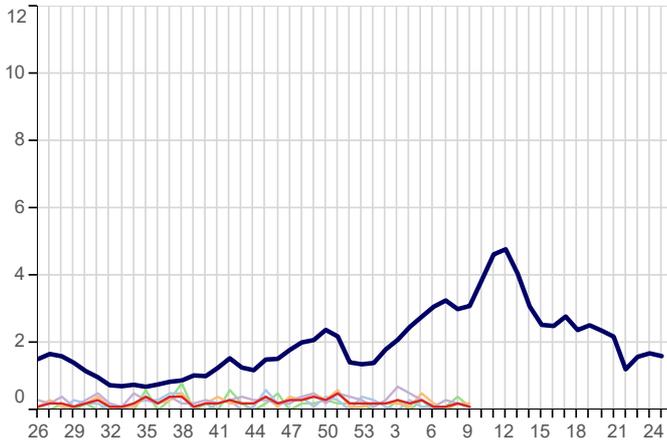
Acute Tonsillitis/Pharyngitis (ICD10: J02-J03)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
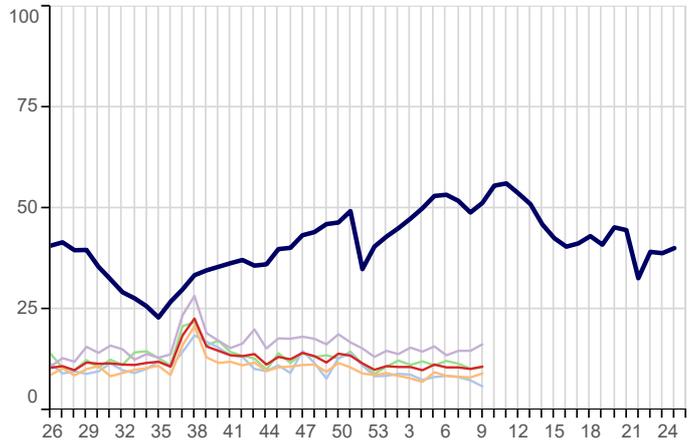
Upper Respiratory Tract Infections (URTI)(ICD10: J00-J06)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
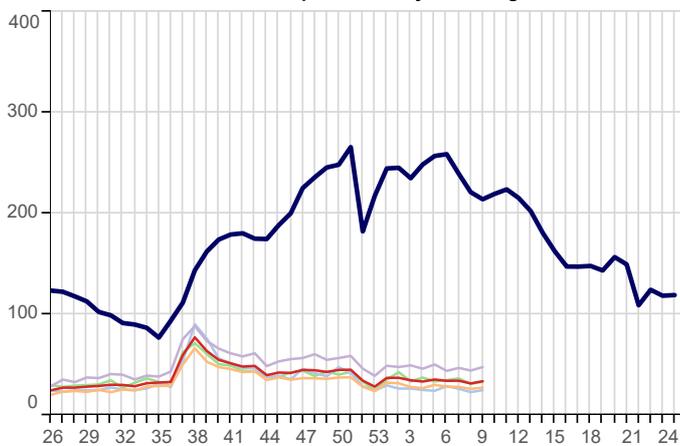
Whooping Cough (ICD10: A37)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
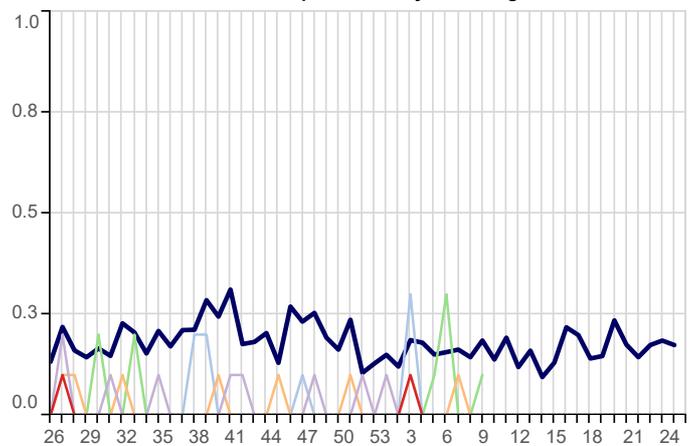
3. Respiratory Infections(Continued):

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

Infectious Mononucleosis (ICD10: B27)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
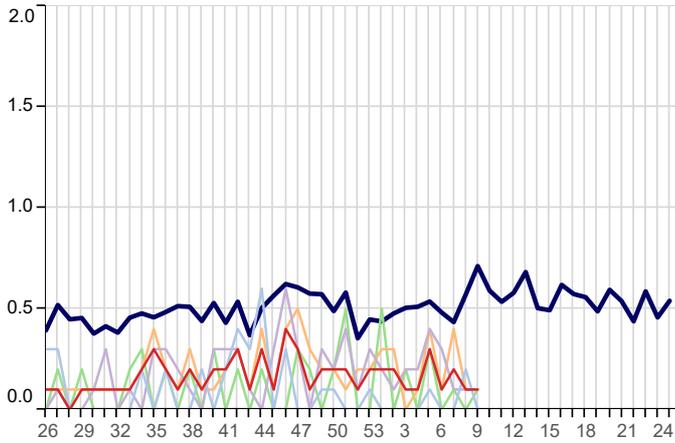
Lower Respiratory Tract Infections (LRTI)(ICD10: J20-J22)
Weekly incidence (per 100,000 all ages) by region
**for 2020/21 compared with 5 year average**
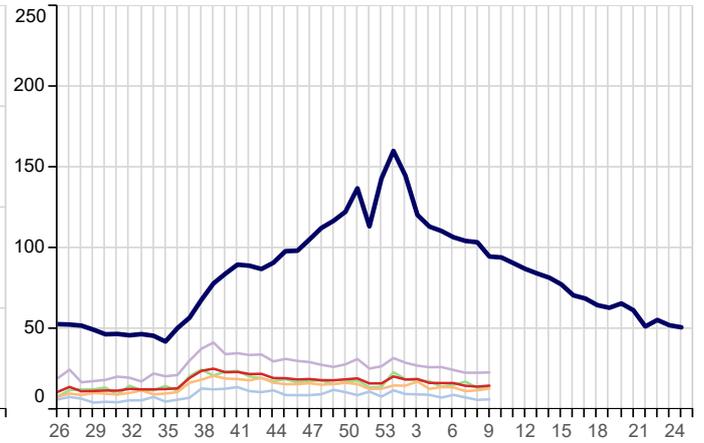
Acute Otitis Media (ICD10: H650-H651,H660,H669)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
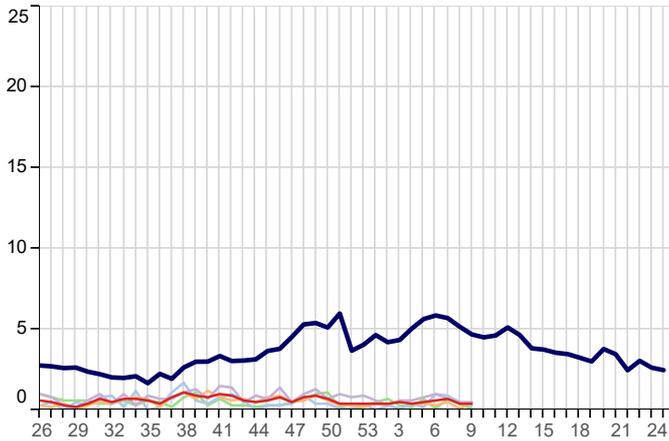
4. Vaccine Sensitive Disorders

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

Measles (ICD10: B05)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
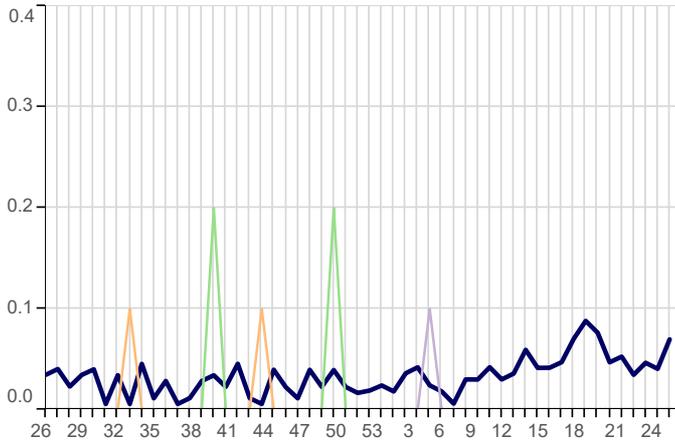
Mumps (ICD10: B26)
Weekly incidence (per 100,000 all ages) by region
**for 2020/21 compared with 5 year average**
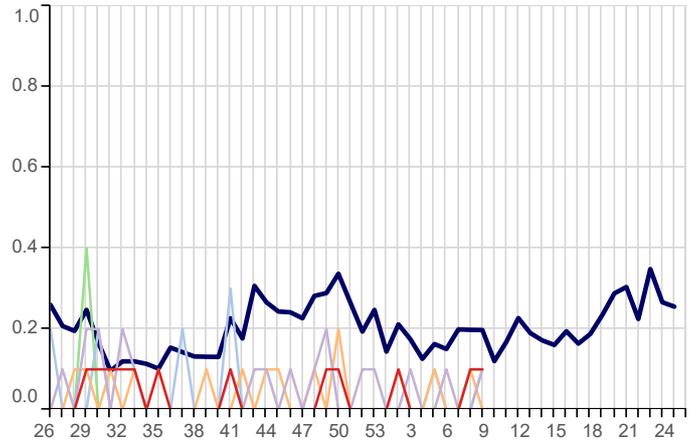
Rubella (ICD10: B06)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
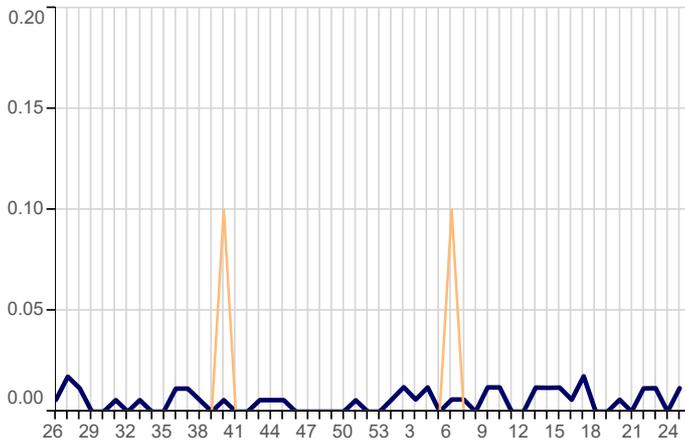
5. Skin Contagions

Bullous Dermatoses (ICD10: L10-L14)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
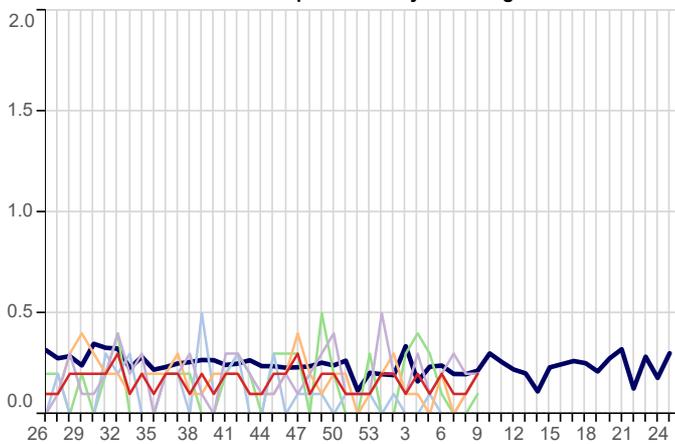
Chickenpox (ICD10: B01)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
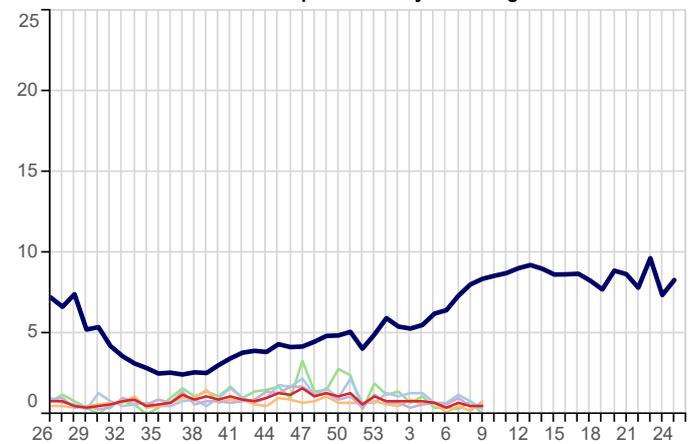
5. Skin Contagions (Continued)

5yr Avg — **National** — London — North — South — Midlands And East

Herpes Simplex (ICD10: B00)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
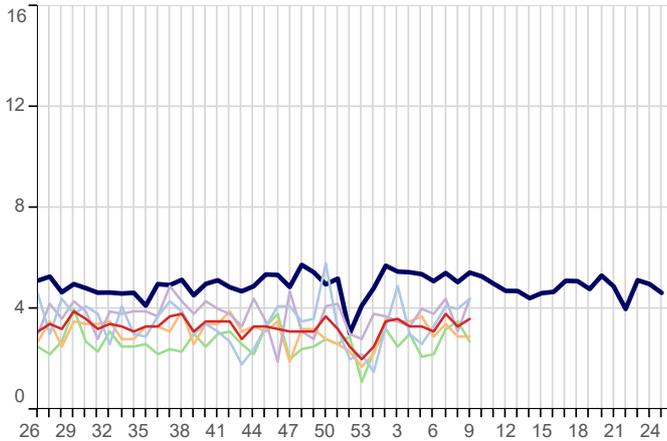
Herpes Zoster (ICD10: B02)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
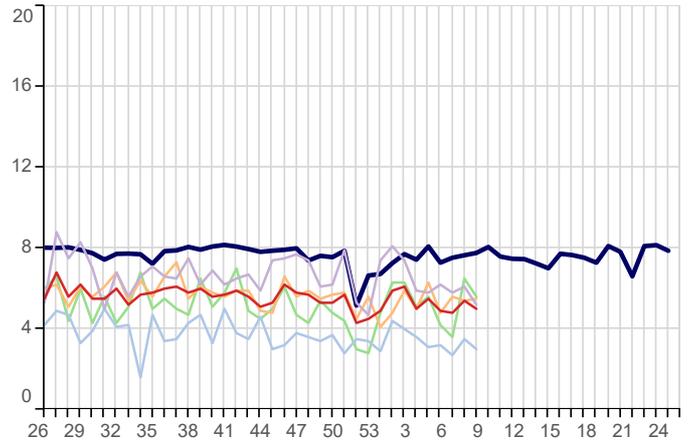
Infections of Skin & Subcutaneous Tissue (ICD10: L00-L08)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
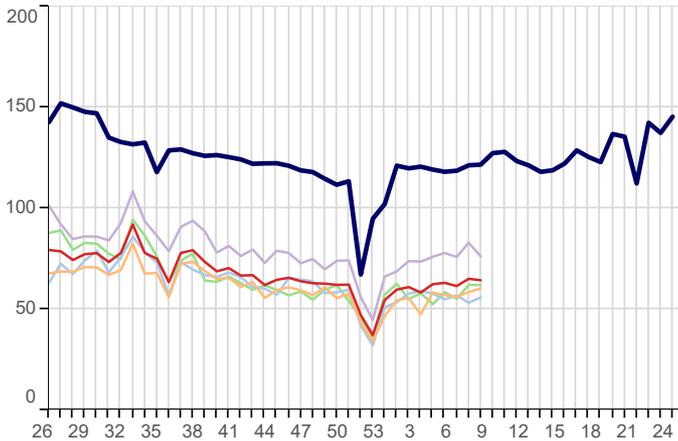
Scabies (ICD10: B86)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
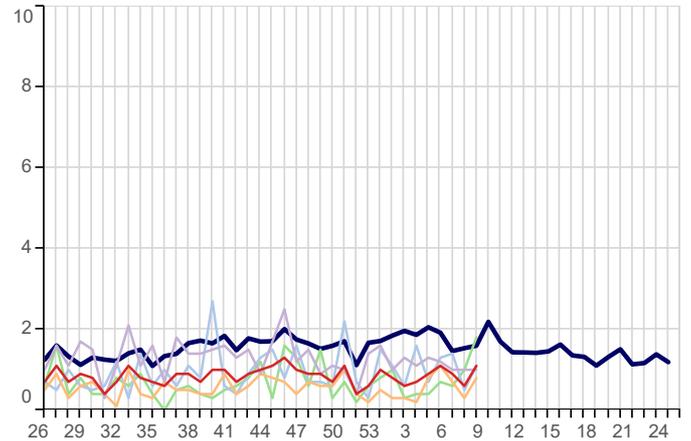
### Symptoms involving Skin & Oth Integument Tiss (ICD10: R20-R23)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
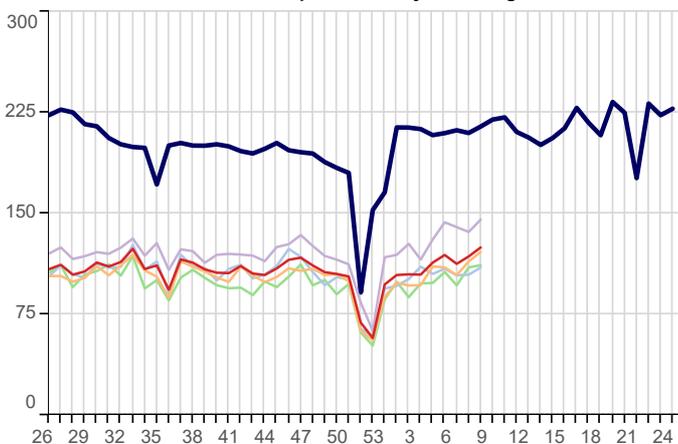
Impetigo (ICD10: L01)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
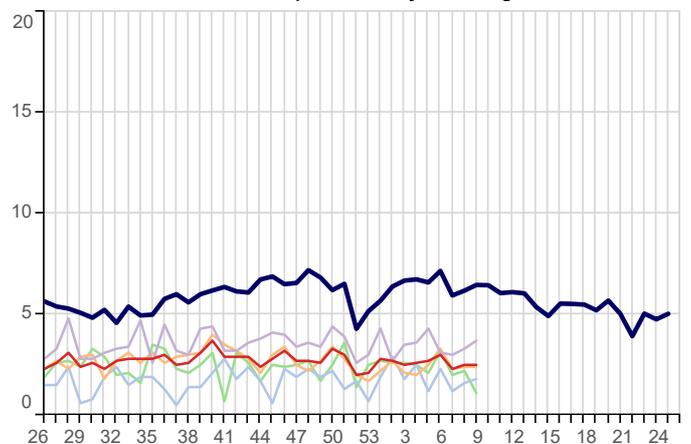
6. Disorders Affecting the Nervous System

5yr Avg **National** **London** **North** **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 2020/21 compared with 5 year average
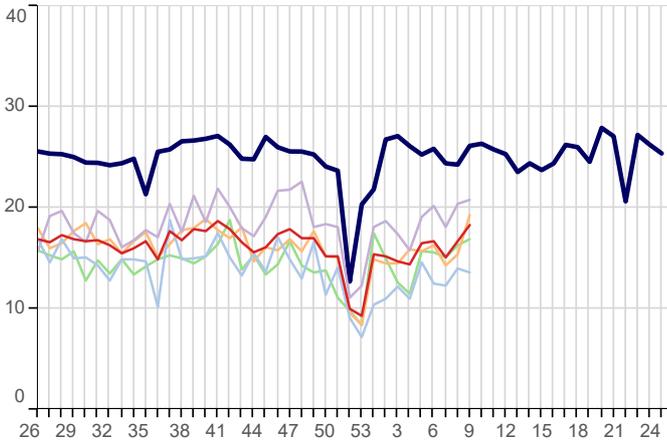
Meningitis/Encephalitis(ICD10: A170-A171,A390,A38-A85,A87,G00-G05)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
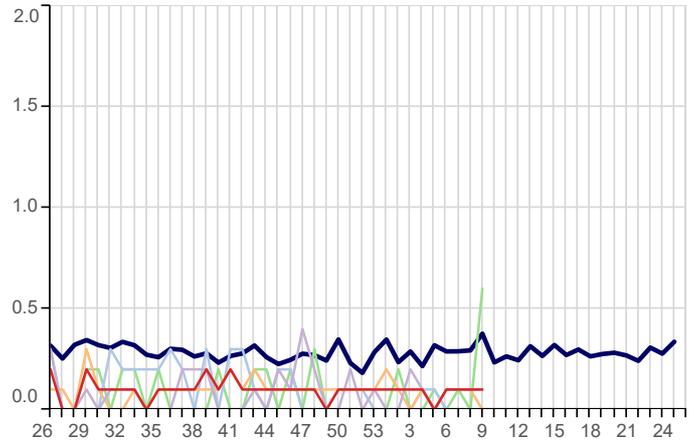
Symptoms Involving Nervous & Musculoskeletal (ICD10: R25-R29)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
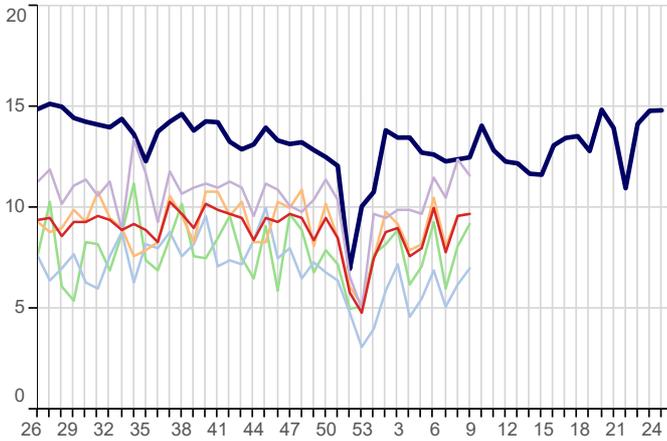
7. Genitourinary System Disorders

Urinary Tract Infection/Cystitis (ICD10: N30,N390)
Weekly incidence (per 100,000 all ages) by region
for 2020/21 compared with 5 year average
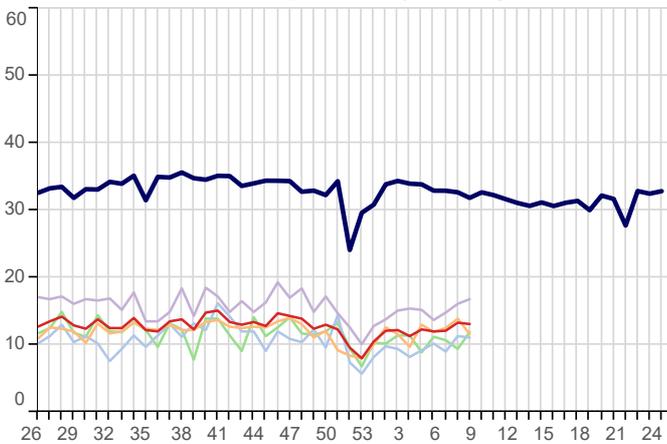
8. Tabular Summary by Disease

| Week beginning Week ending	01/03/2021 07/03/2021		22/02/2021 28/02/2021		15/02/2021 21/02/2021		08/02/2021 14/02/2021	
Disease Name	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer
Allergic Rhinitis	5.6	262	4.8	216	2.5	102	2.1	96
Asthma	11.4	533	10.9	488	7.8	322	9.3	425
Bronchitis	2.6	120	2.8	125	2.7	110	2.7	124
Bullous Dermatoses	0.2	10	0.1	5	0.1	3	0.2	8
Chickenpox	0.5	25	0.5	23	0.7	30	0.4	19
Common Cold	0.4	19	0.3	14	0.5	22	0.3	14
Conjunctival Disorders	8.3	388	7.8	348	6.7	275	8.4	384
Herpes Simplex	3.6	166	3.3	146	3.8	156	3.1	143
Herpes Zoster	5.0	231	5.4	243	4.8	198	4.9	222
Impetigo	2.5	115	2.5	111	2.3	93	3.0	139
Infectious Mononucleosis	0.1	3	0.1	4	0.2	8	0.1	5
Influenza-like illness	0.4	19	0.4	18	0.9	36	0.6	26
Infectious Intestinal Diseases	4.1	192	4.2	187	4.2	173	4.4	201
Laryngitis and Tracheitis	0.8	37	0.5	21	0.5	22	0.9	40
Lower Respiratory Tract Infections	14.9	695	14.3	638	14.8	613	16.5	752
Measles	0.0	0	0.0	0	0.0	0	0.0	0
Meningitis and Encephalitis	0.1	5	0.1	3	0.1	3	0.1	3
Mumps	0.1	3	0.1	3	0.0	0	0.0	2
Non-infective Enteritis and Colitis	7.2	335	6.1	273	6.2	258	6.3	289
Otitis Media Acute	0.4	19	0.4	16	0.7	27	0.6	28
Peripheral Nervous Disease	18.3	853	16.7	748	15.1	624	16.7	762
Pleurisy	0.2	8	0.2	7	0.2	8	0.2	11
Pneumonia and Pneumonitis	1.7	79	1.7	76	1.7	69	2.1	96
Respiratory System Diseases	109.1	5,085	101.9	4,555	98.8	4,081	101.6	4,642
Rubella	0.0	0	0.0	0	0.0	0	0.0	1
Scabies	1.1	50	0.6	29	0.9	37	1.1	51
Sinusitis	9.9	460	10.5	470	12.2	504	11.2	510
Skin and Subcutaneous Tissue Infections	64.4	3,000	65.1	2,913	61.5	2,540	63.1	2,882
Strep Throat and Peritonsillar Abscess	0.1	6	0.2	10	0.1	4	0.1	6
Symptoms involving musculoskeletal	9.7	452	9.6	428	7.8	324	10.0	455
Symptoms involving Respiratory and Chest	104.6	4,875	99.8	4,461	90.0	3,719	95.2	4,352
Symptoms involving Skin and Integument Tissues	124.8	5,816	118.1	5,283	112.6	4,652	119.2	5,449
Tonsillitis and acute Pharyngitis	10.8	504	10.2	456	10.6	436	10.6	485
Upper Respiratory Tract Infections	33.8	1,575	31.6	1,414	34.3	1,419	34.2	1,563
Urinary Tract Infections	13.1	609	13.3	596	12.1	502	12.0	549
Viral Hepatitis	0.2	9	0.2	11	0.2	7	0.1	6
Whooping Cough	0.0	1	0.0	0	0.0	1	0.0	2
Practice Count		**479**		**459**		**426**		**469**
Denom		**4,661,274**		**4,471,830**		**4,131,800**		**4,570,483**

FURTHER INFORMATION:

About the report

Winter focus

The first two pages of data within this report focus on Influenza-like illness and COVID-19, in order to provide information about seasonal influenza and early warnings of any epidemic.

Rate calculation

Each weekly incidence rate is presented per 100,000 population. All presentations are for males and females, and for all age groups, unless otherwise stated.

The denominator used for this report is taken from our most recent extract of data from GP practice systems, and includes all patients currently registered with eligible practices. The denominator varies week-on-week as patients register and deregister; it may also be the case that all patients from an individual practice are excluded because of problems with the data extraction from that practice in a specific week. As stated above, patients who have withheld consent for data-sharing are excluded.

In addition to the national rate, we present data for the four NHS England regions: North; Midlands and East; South; and London.

Five-year averages

Weekly rates are set against the five-year average, calculated from data for the calendar years 2014-2018. 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. MEM works by identifying seasonal epidemic peaks and then calculates thresholds and intensity levels based on the pre and post epidemic values. This allows us to report the severity of ILI against multiple thresholds, rather than a simple comparison with the five-year average as the wide variation in ILI year on year, especially during the seasonal peak, makes the average less representative.

In addition to the All Ages thresholds, we have also calculated thresholds for three age bands: those aged under 15, 15-64 year olds and those aged 65 and over. ILI incidence rates vary among different age groups, and the age-specific thresholds allow us to highlight epidemics where ILI disproportionately affects a particular age group.

This methodology is used by the European Centre for Disease Prevention and Control to standardise reporting of influenza activity across Europe, and is also in use by Public Health England. 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. For ease of graphical representation, the final threshold (Very High) is not included in Graph A, page 2, but it is part of Table 3, page 3.

Both the *all-ages* thresholds and the *age-specific* thresholds are shown in Table 2, page 3. Ten years of data were used for *all-ages* and *age-specific* thresholds calculation (winter seasons 2006/07- 2016/17 excluding 2009/10).

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 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 Wellbeing data management 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 Wellbeing 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 Public Health England. The bulletin can be found at the following URL:

https://www.gov.uk/government/publications/syndromic-surveillance-summary

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:

RCGP Research & Surveillance Centre
CIRC, First floor
30 Euston Square
London NW1 2FB
Tel: +44 (0)203 188 7690

Director: Professor Simon de Lusignan
MedicalDirectorRSC@rcgp.org.uk

University of Oxford
Nuffield Department of Primary Care Health
Sciences
Eagle House
7 Walton Well Road
Oxford OX2 6ED