



RSC Communicable and Respiratory Disease Report for England

Key Statistics:

Week Number/Year..... 39/2020
 Week Starting - Ending..... 16/09/2020 - 22/09/2020
 No. of Practices..... 381
 Population..... 3,912,160

National (England)

- **Acute Bronchitis** : increased from 20.5 in week 38 to 22.3 in week 39.
- **Asthma** : decreased from 10.3 in week 38 to 10.0 in week 39.
- **Common Cold** : decreased from 33.7 in week 38 to 30.2 in week 39.
- **Influenza-like illness** : was unchanged at 1.8 in week 38 and 1.8 in week 39.
- **Respiratory System Diseases** : decreased from 146.1 in week 38 to 138.6 in week 39.
- **COVID-19** : decreased from 21.5 in week 38 to 15.5 in week 39.

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

- **Acute Bronchitis** : increased from 8.7 in week 38 to 9.4 in week 39 in the London region, increased from 33.6 in week 38 to 36.9 in week 39 in the North region, increased from 15.2 in week 38 to 17.0 in week 39 in the South region, and increased from 23.2 in week 38 to 23.4 in week 39 in the Midlands And East region.
- **Asthma** : decreased from 8.5 in week 38 to 9.4 in week 39 in the London region, decreased from 13.9 in week 38 to 13.4 in week 39 in the North region, was unchanged at 8.3 in week 38 and 8.3 in week 39 in the South region, and decreased from 10.6 in week 38 to 9.2 in week 39 in the Midlands And East region.
- **Common Cold** : decreased from 52.2 in week 38 to 49.8 in week 39 in the London region, decreased from 36.0 in week 38 to 32.5 in week 39 in the North region, decreased from 26.0 in week 38 to 22.4 in week 39 in the South region, and decreased from 30.2 in week 38 to 26.4 in week 39 in the Midlands And East region.
- **Influenza-like illness** : increased from 2.0 in week 38 and 2.1 in week 39 in the London region, increased from 1.8 in week 38 to 2.1 in week 39 in the North region, decreased from 1.4 in week 38 to 0.9 in week 39 in the South region, and increased from 2.4 in week 38 to 3.4 in week 39 in the Midlands And East region.
- **Respiratory System Diseases** : decreased from 142.5 in week 38 to 140.3 in week 39 in the London region, decreased from 182.2 in week 38 to 171.8 in week 39 in the North region, decreased from 124.4 in week 38 to 116.6 in week 39 in the South region, and decreased from 140.6 in week 38 to 135.4 in week 39 in the Midlands And East region.
- **COVID-19** : decreased from 10.6 in week 38 to 8.4 in week 39 in the London region, decreased from 48.1 in week 38 to 37.6 in week 39 in the North region, decreased from 6.6 in week 38 to 3.5 in week 39 in the South region, and decreased from 23.4 in week 38 to 15.1 in week 39 in the Midlands And East region.

Comment:

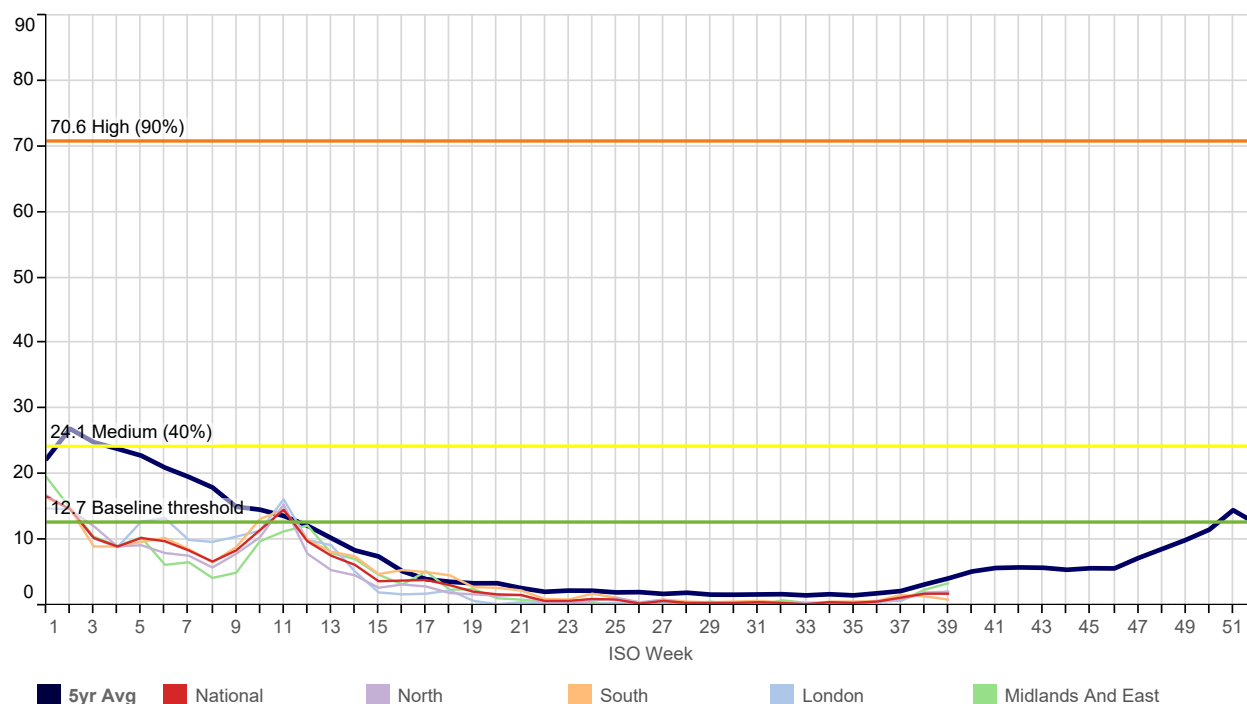
Overall presentations of respiratory diseases have decreased a little this week, and remain below seasonal levels for this time of year. However, the underlying trend is upwards with the return to school. Similarly, the underlying trend in COVID-19 incidence has been upwards since week 31, however delays in practices receiving results means recent data are an underestimate of COVID-19 incidence.

This report includes a virology update.

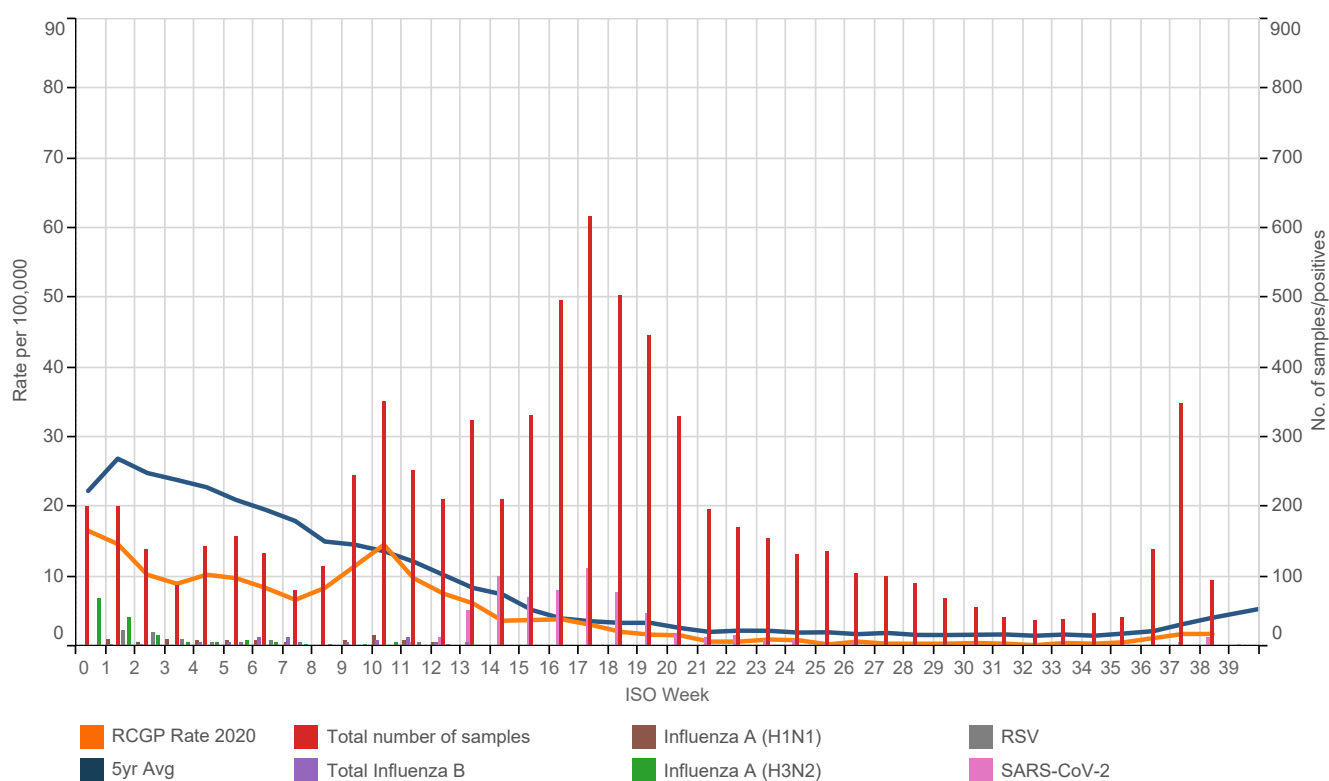
Summer Focus 2020

Please see page 15 for explanatory notes on the data.

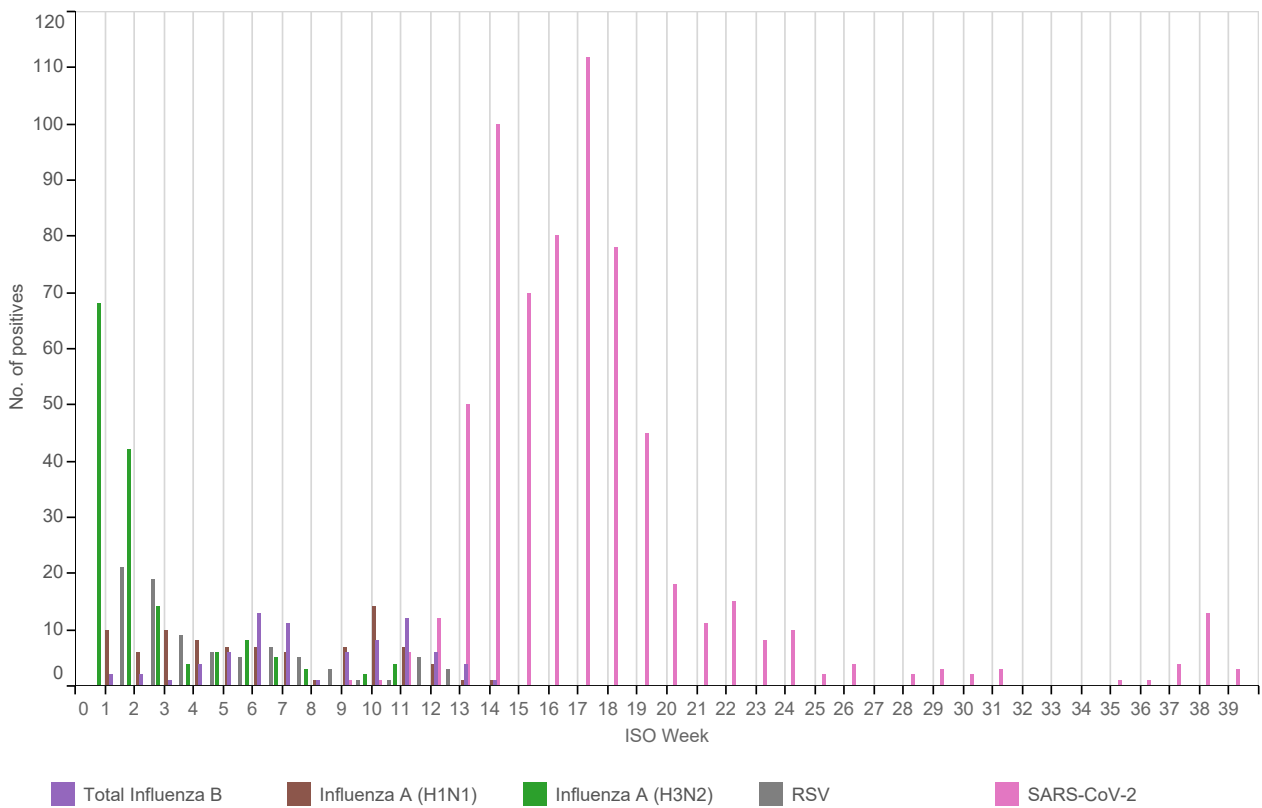
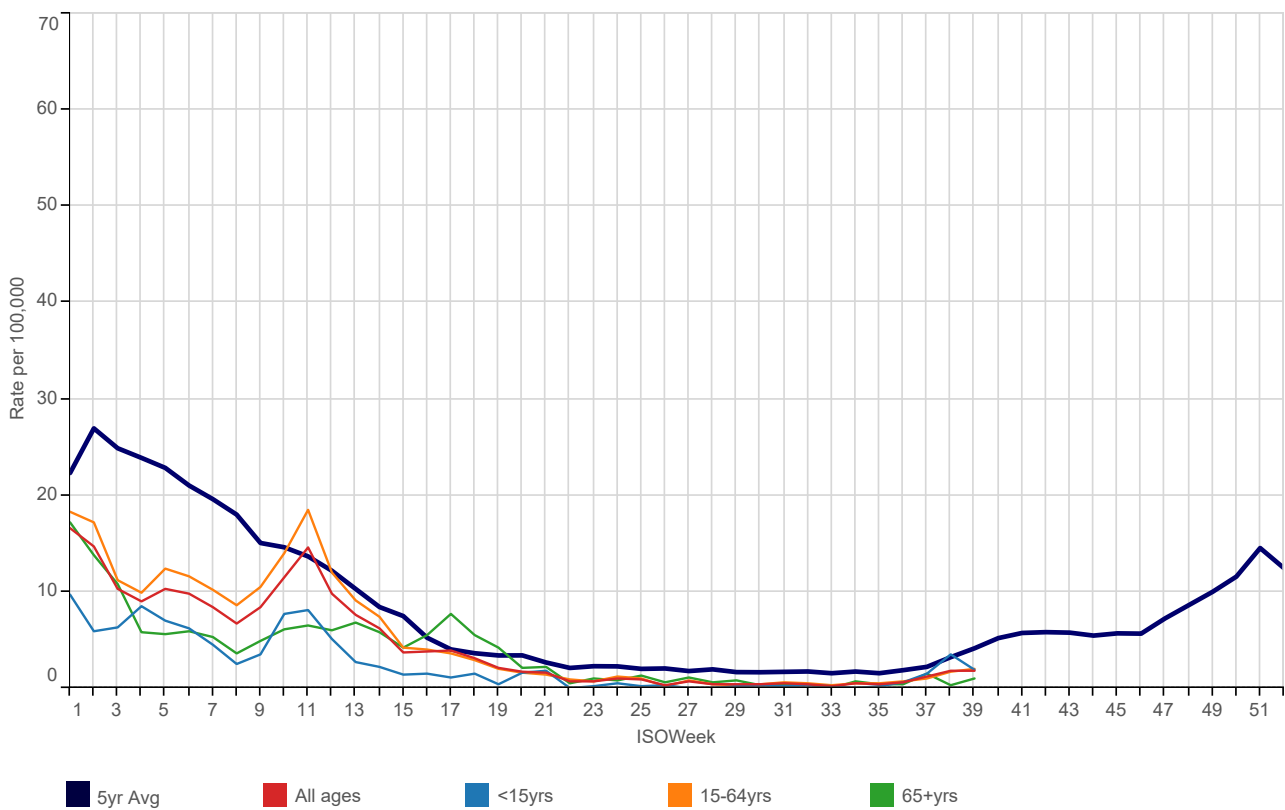
(A) Influenza-like illness: national incidence rate summer 2020 by region*

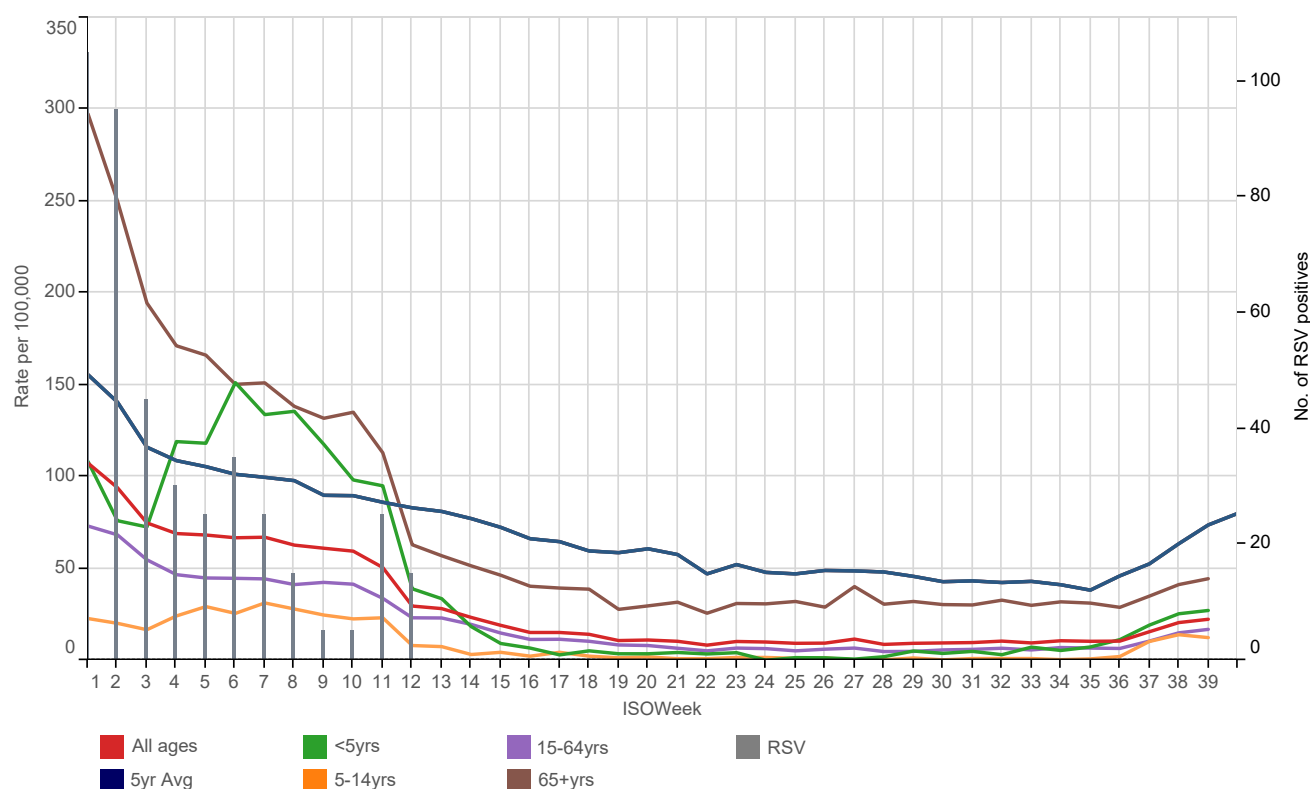


(B) RCGP/PHE RSV, Influenza and SARS-CoV-2 Virology Swab Surveillance 2020*

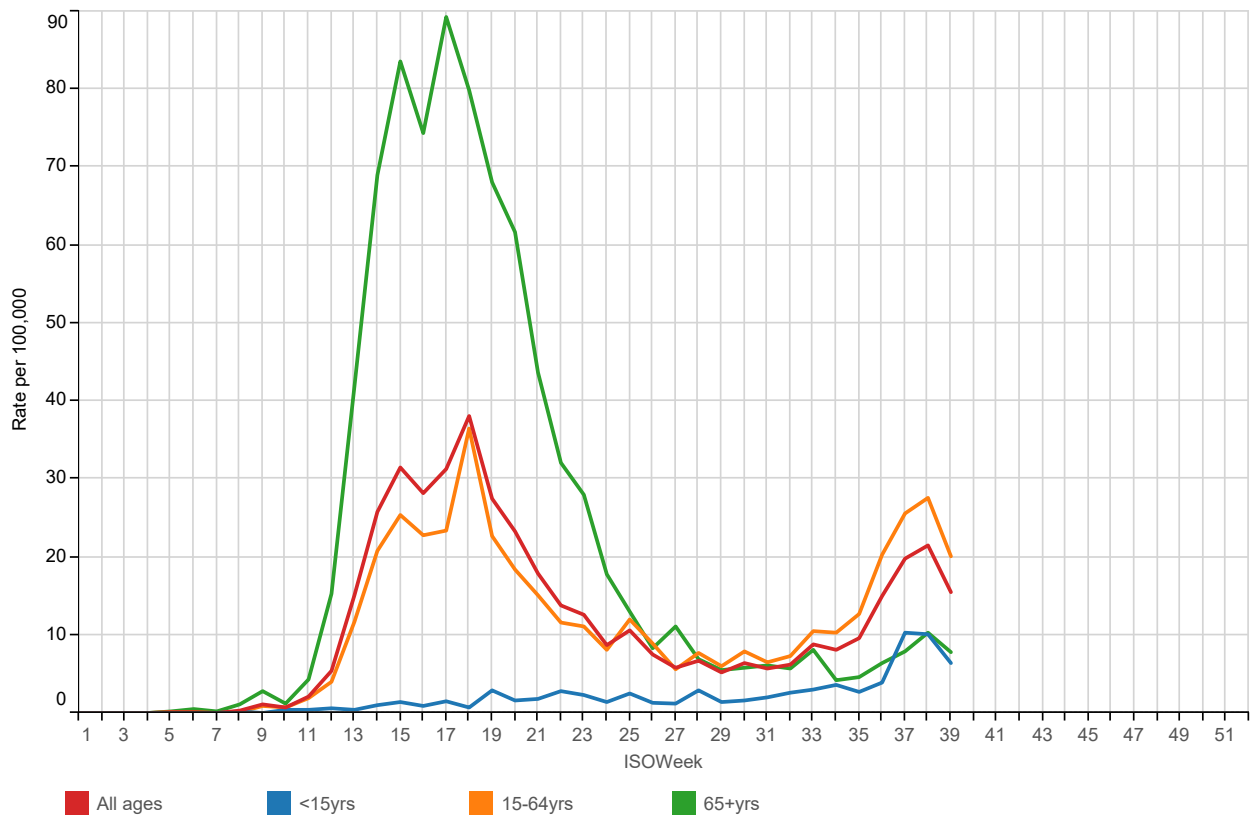
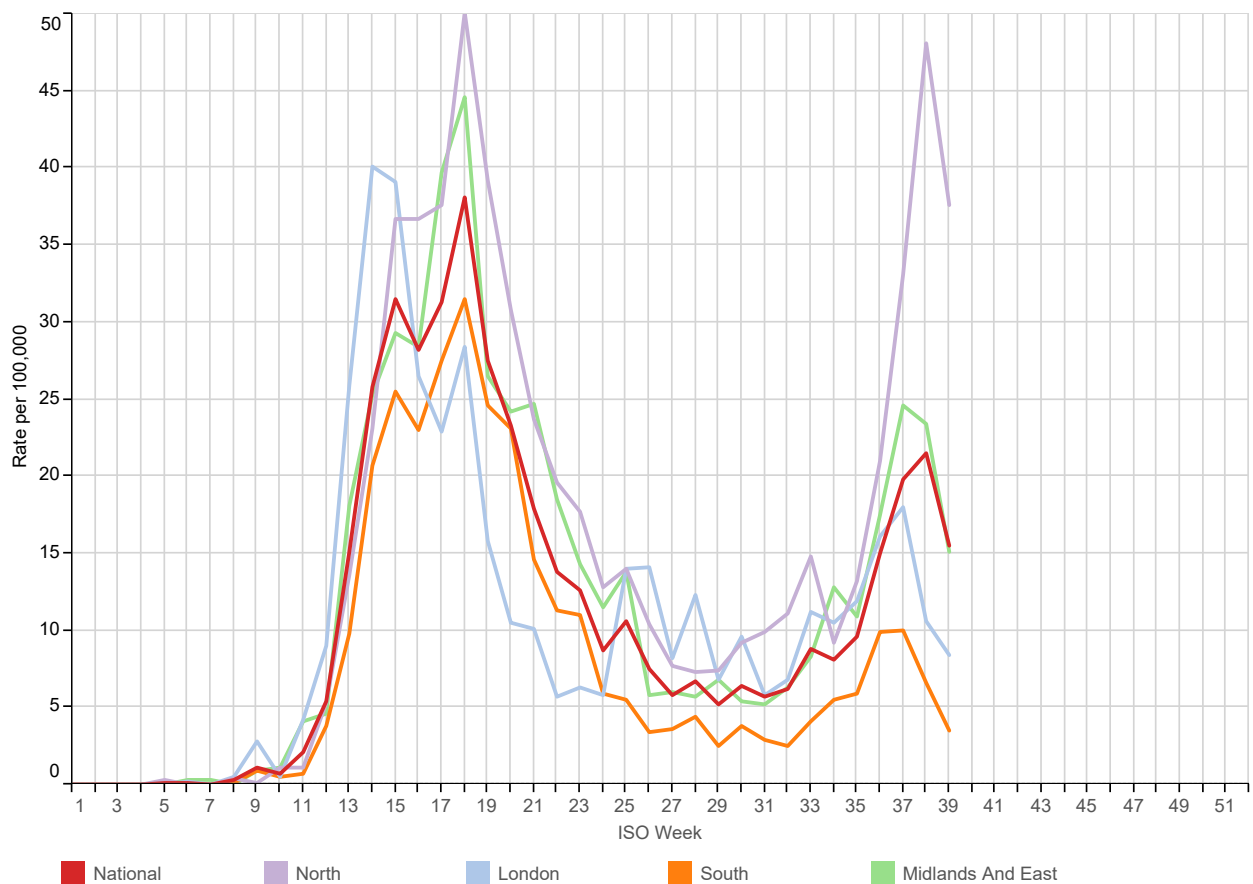


* The rolling average line (blue) is based on 5 year historic RCGP RSC level (Graph A). The weekly virology samples displayed are offset from the ISO Week (Graphs B & C).

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

(E) Acute Bronchitis: national incidence rate 2020 by age group***Weekly Influenza-like illness and Acute Bronchitis incidence rates per 100,000 persons**

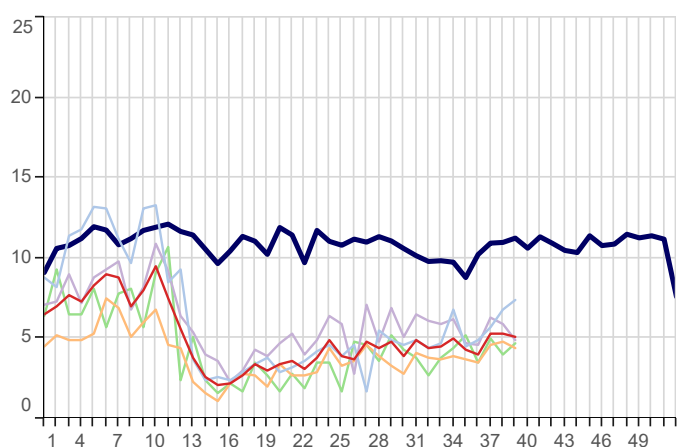
Influenza-like illness		Bronchitis	Influenza-like illness		Bronchitis
<1yr	2.9	90.9	London	2.1	9.4
<5yrs	1.8	27.1	North	2.1	36.9
5-14yrs	1.9	12.3	South	0.9	17.0
15-24yrs	2.5	8.7	Midlands And East	3.4	23.4
25-44yrs	2.0	15.4	National	1.8	22.3
45-64yrs	1.7	21.8			
65-74yrs	1.1	37.6			
75-84yrs	1.3	39.6			
85+yrs	0.0	82.7			
All ages	1.8	22.3			

(F) COVID-19 : national incidence rate 2020 by age group***(G) COVID-19 : national incidence rate 2020 by region***

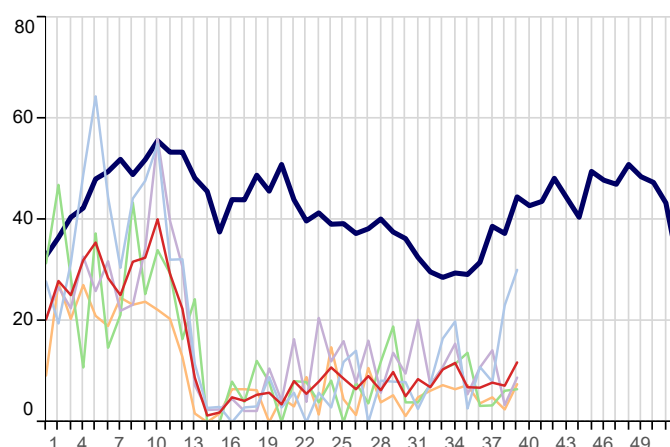
1. Water & Food Borne Disorders:

5yr Avg National London North South Midlands And East

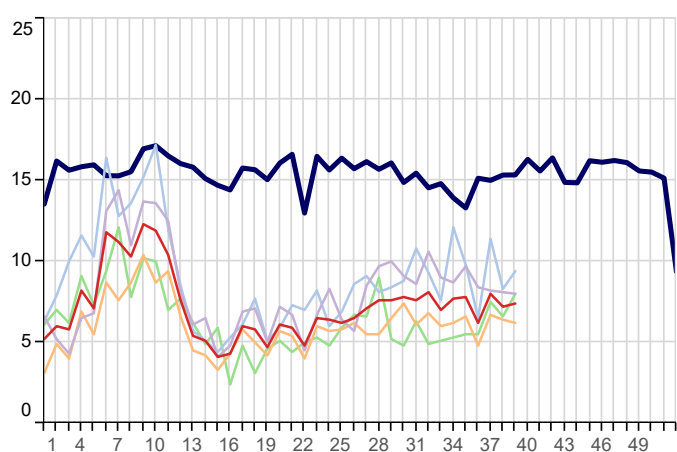
Infectious Intestinal Disease (ICD10: A00-A09)
Weekly incidence (per 100,000 **all ages**) by regions
for 2020 compared with 5 year average



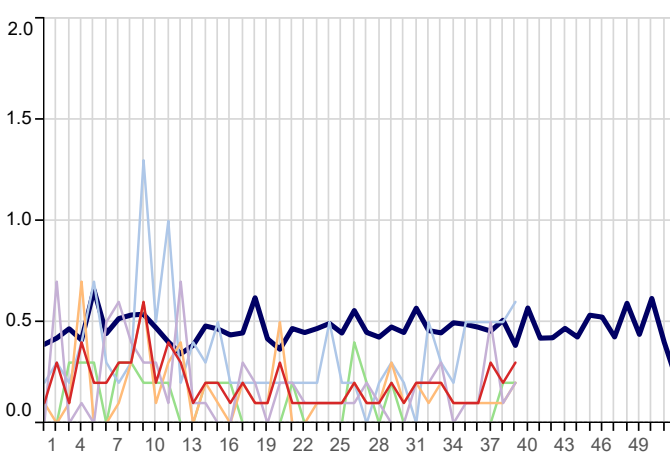
Infectious Intestinal Disease (ICD10: A00-A09)
Weekly incidence (per 100,000 **0-4 years**) by regions
for 2020 compared with 5 year average



Non-Infective Enteritis & Colitis (ICD10: K50-K52)
Weekly incidence (per 100,000 **all ages**) by region
for 2020 compared with 5 year average



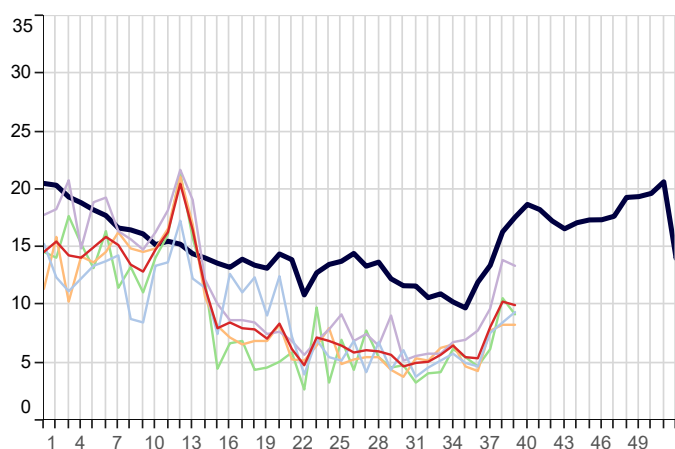
Viral Hepatitis (ICD10: B15-B19)
Weekly incidence (per 100,000 **all ages**) by region
for 2020 compared with 5 year average



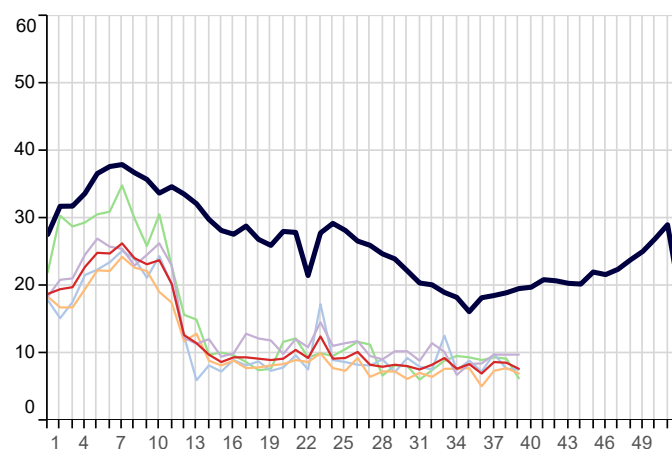
2. Environmentally Sensitive Disorders:

5yr Avg National London North South Midlands And East

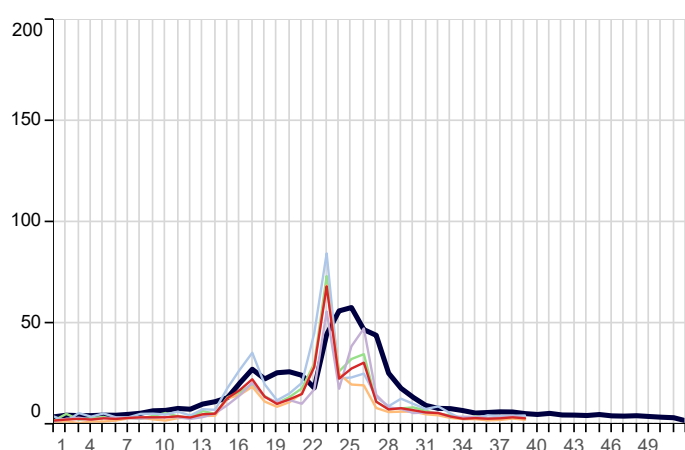
Asthma (ICD10: J45-J46)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



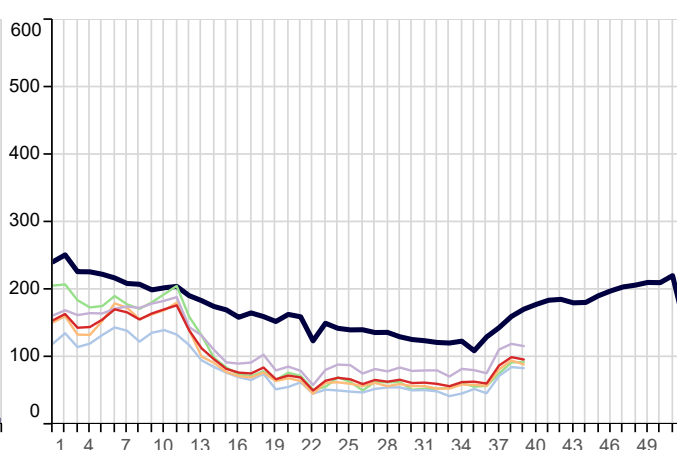
Disorders of Conjunctiva (ICD10: H10-H13)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



Hayfever/Allergic Rhinitis (ICD10: J30)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



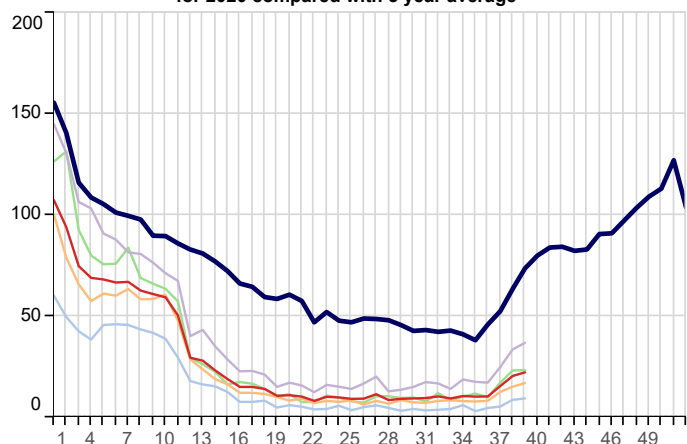
Symptoms involving Respiratory & Chest (ICD10: R05-R07,R09)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



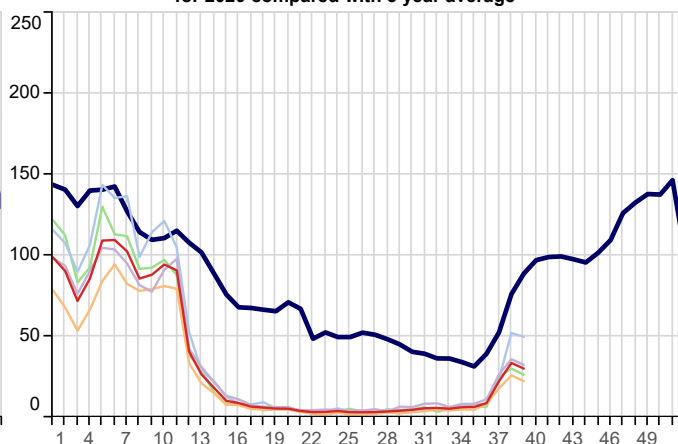
3. Respiratory Infections:

5yr Avg National London North South Midlands And East

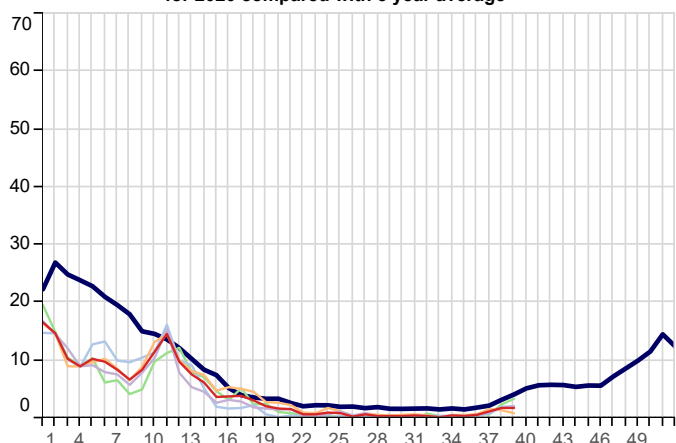
Acute Bronchitis (ICD10: J20-J21,J40)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



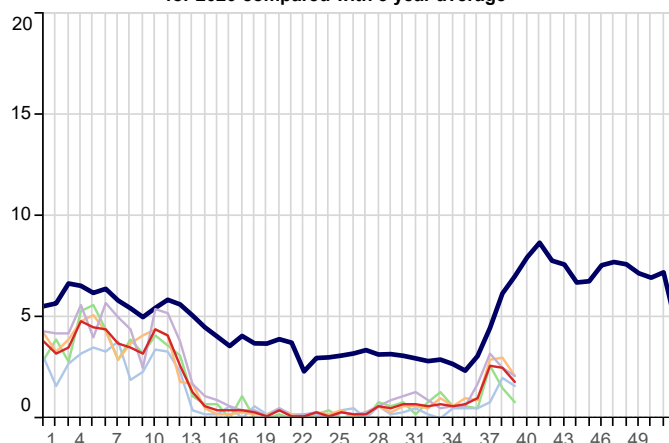
Common Cold (ICD10: J00,J06)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



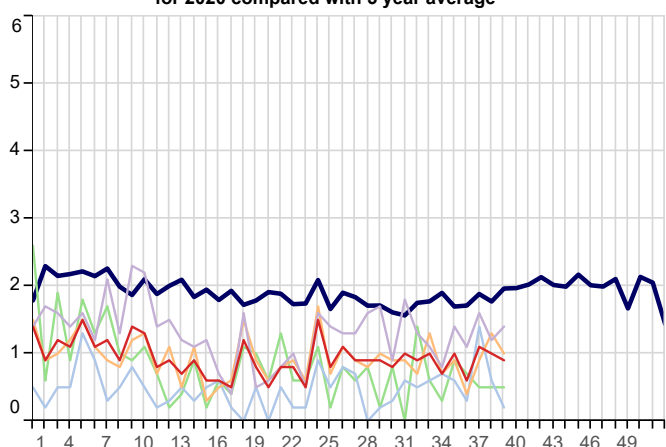
Influenza-like illness (ICD10: J09-J11)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



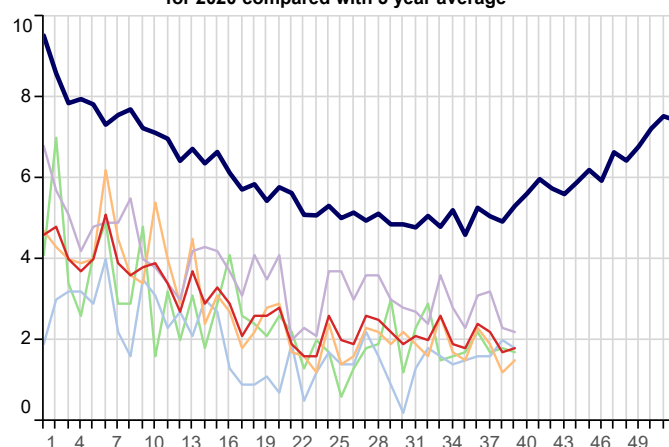
Acute Laryngitis/Tracheitis (ICD10: J04)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



Pleurisy (ICD10: R091)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



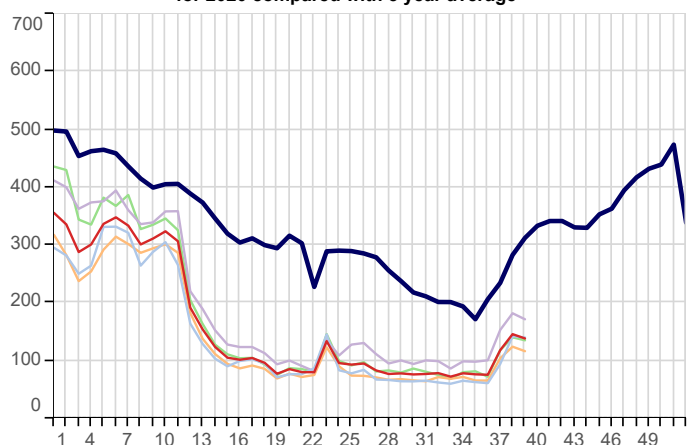
Pneumonia/Pneumonitis (ICD10: J12-J18)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



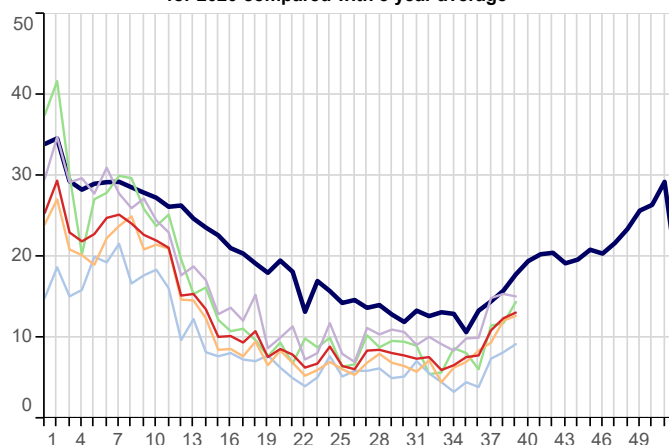
3. Respiratory Infections(Continued):

5yr Avg National London North South Midlands And East

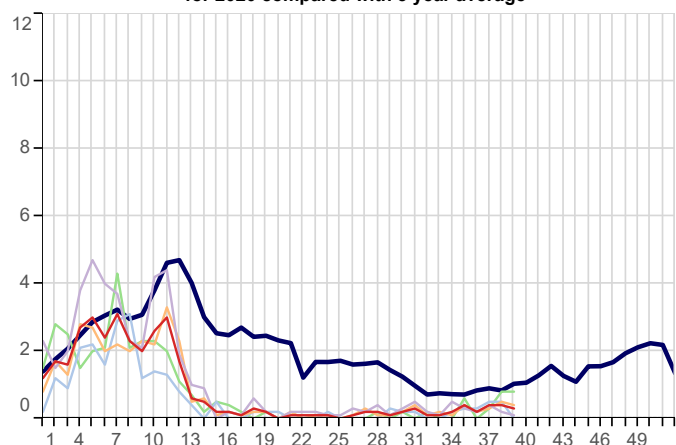
Respiratory System Diseases (ICD10: J00-J99)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



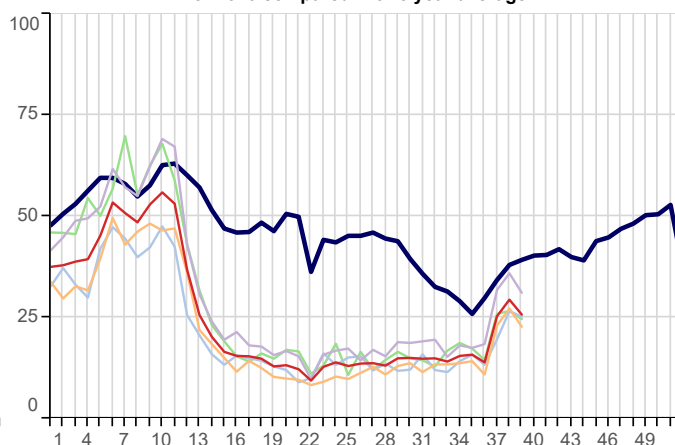
Acute Sinusitis (ICD10: J01)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



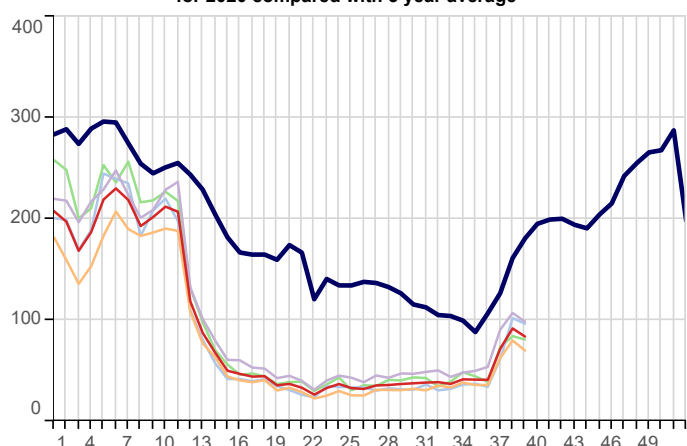
Strep Sore Throat, Scarletina and Peritonsillar Abscess (ICD10: A38,J02,J36)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



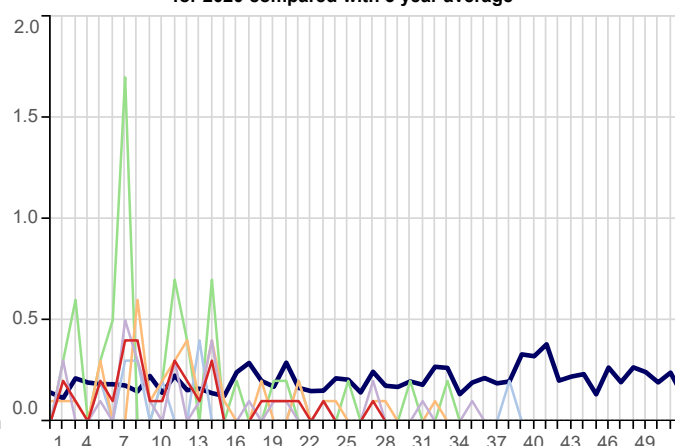
Acute Tonsillitis/Pharyngitis (ICD10: J02-J03)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



Upper Respiratory Tract Infections (URTI)(ICD10: J00-J06)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



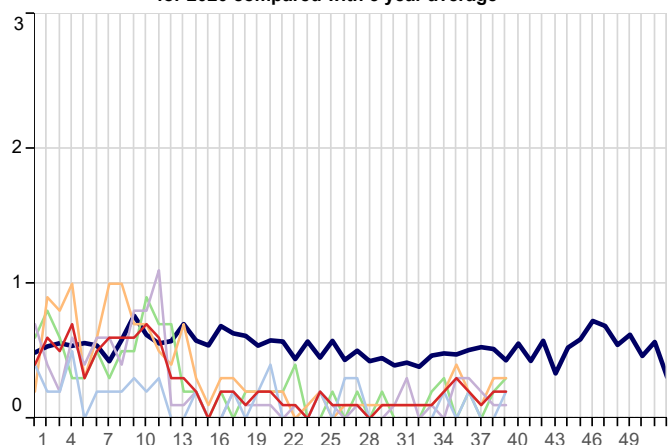
Whooping Cough (ICD10: A37)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



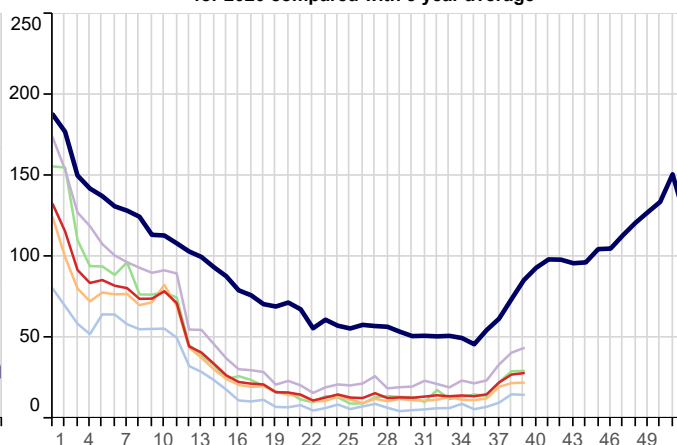
3. Respiratory Infections(Continued):

5yr Avg National London North South Midlands And East

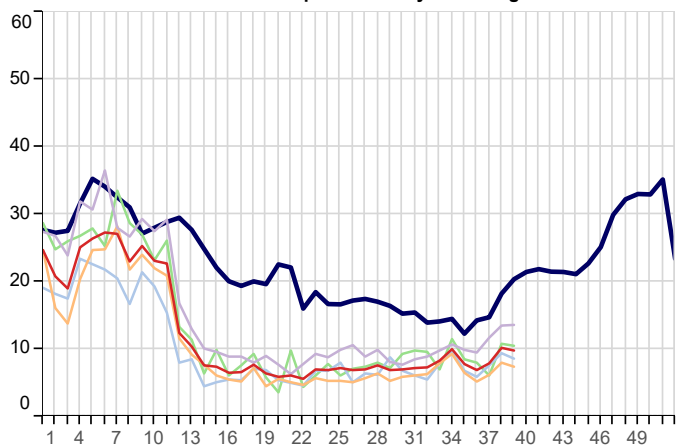
Infectious Mononucleosis (ICD10: B27)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



Lower Respiratory Tract Infections (LRTI)(ICD10: J20-J22)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



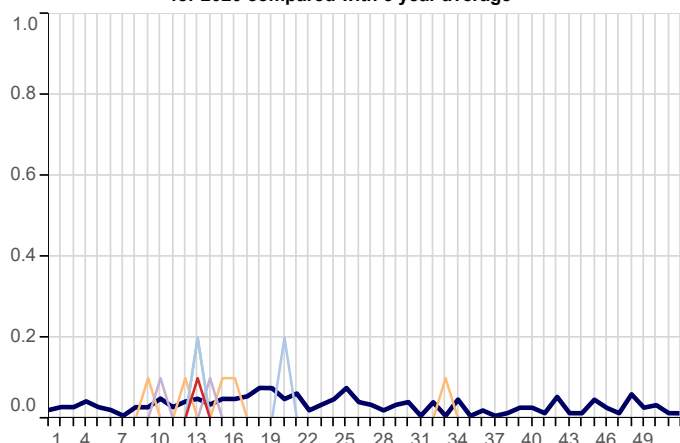
Acute Otitis Media (ICD10: H650-H651,H660,H669)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



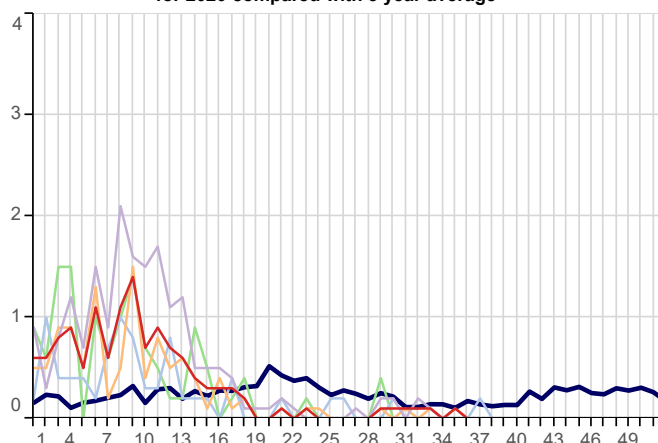
4. Vaccine Sensitive Disorders

5yr Avg National London North South Midlands And East

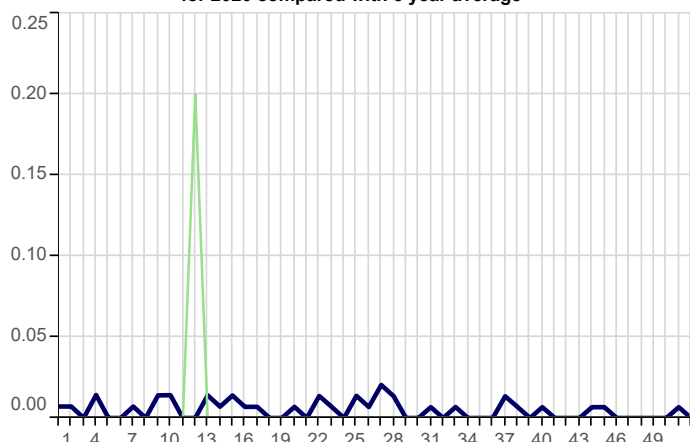
Measles (ICD10: B05)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



Mumps (ICD10: B26)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average

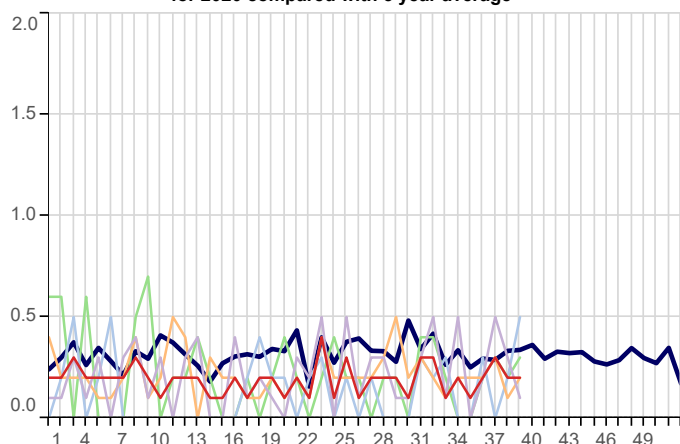


Rubella (ICD10: B06)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average

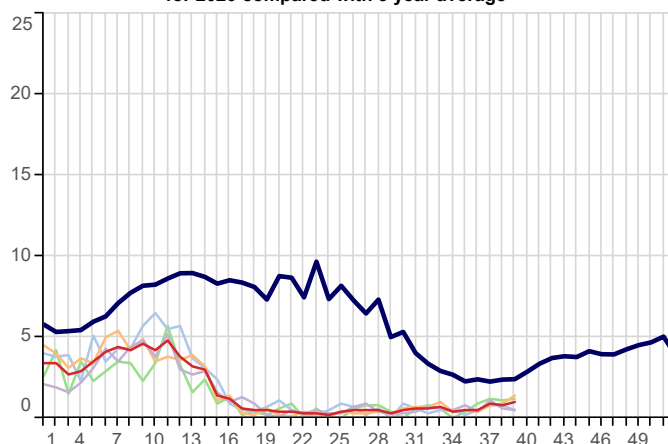


5. Skin Contagions

Bullous Dermatoses (ICD10: L10-L14)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



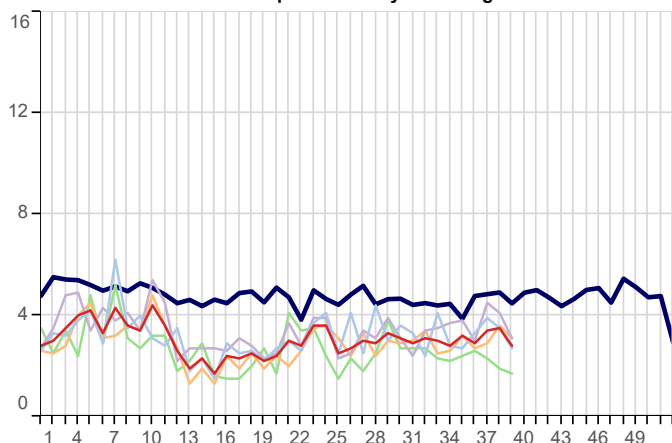
Chickenpox (ICD10: B01)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



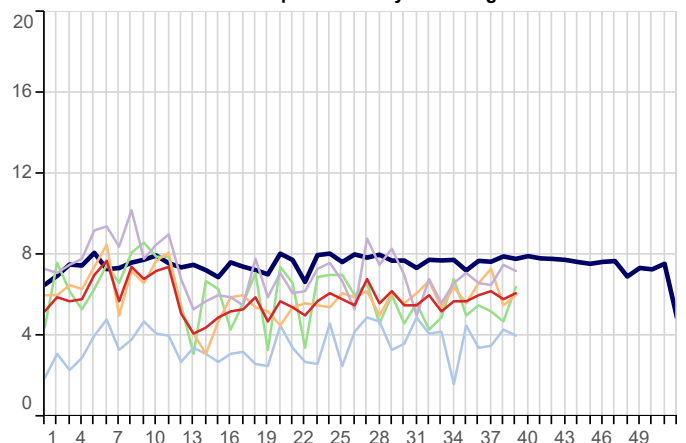
5. Skin Contagions (Continued)

5yr Avg National London North South Midlands And East

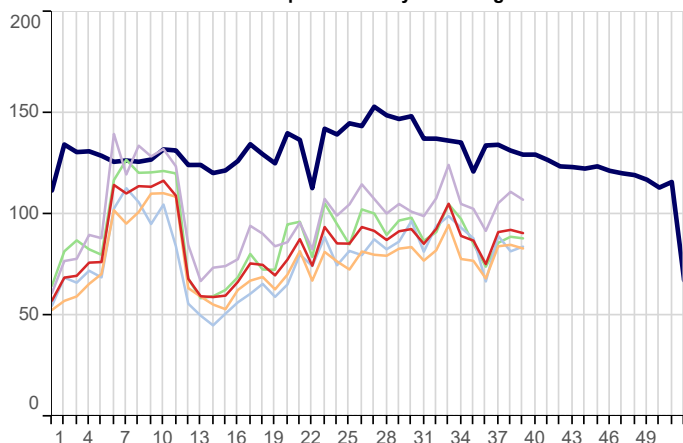
Herpes Simplex (ICD10: B00)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



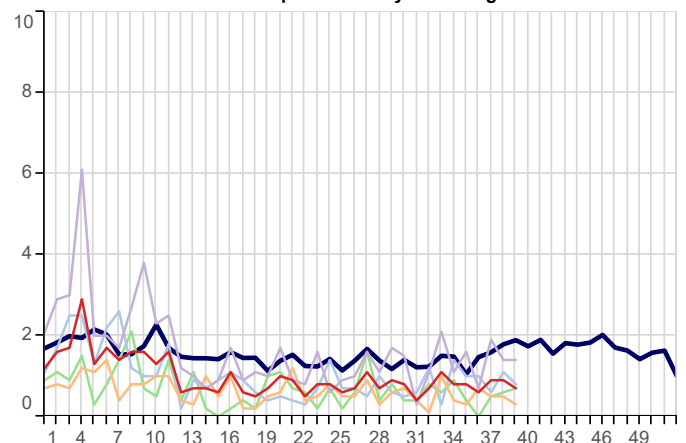
Herpes Zoster (ICD10: B02)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



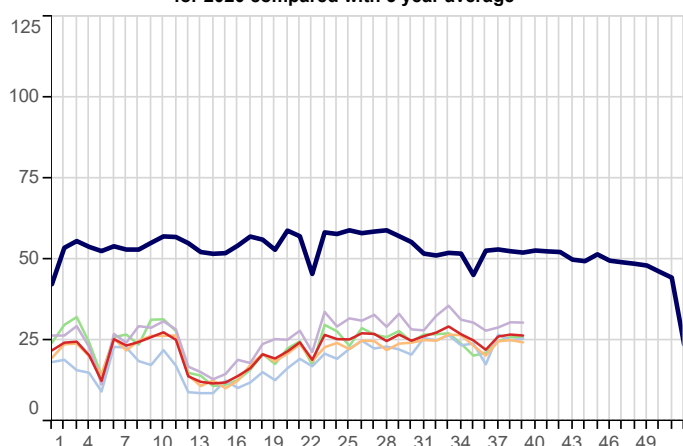
Infections of Skin & Subcutaneous Tissue (ICD10: L00-L08)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



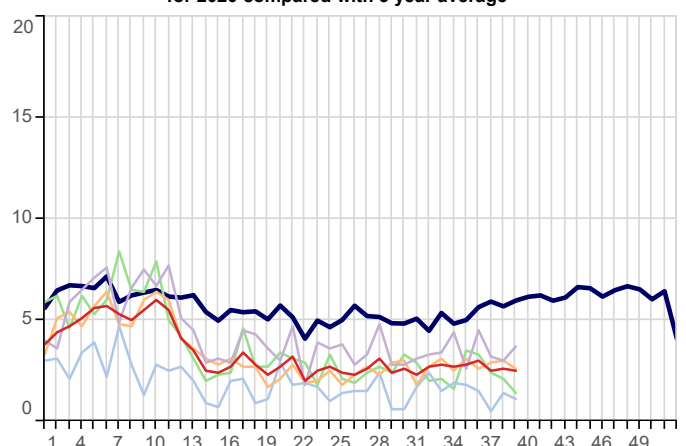
Scabies (ICD10: B86)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



Symptoms involving Skin & Oth Integument Tiss (ICD10: R20-R23)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



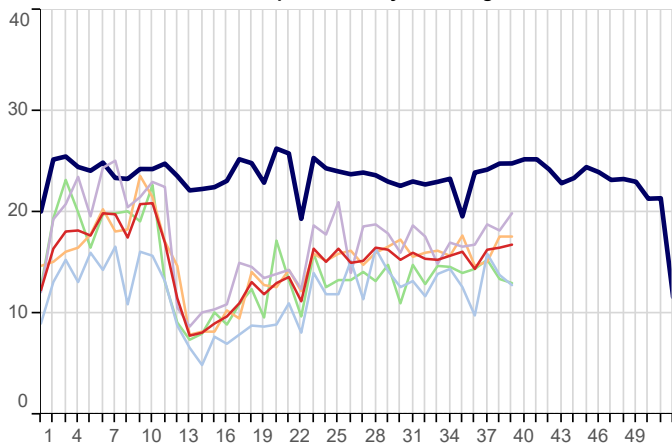
Impetigo (ICD10: L01)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



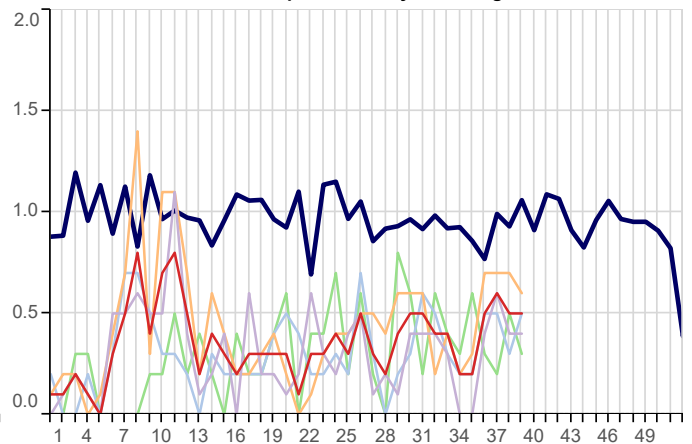
6. Disorders Affecting the Nervous System

5yr Avg National London North South Midlands And East

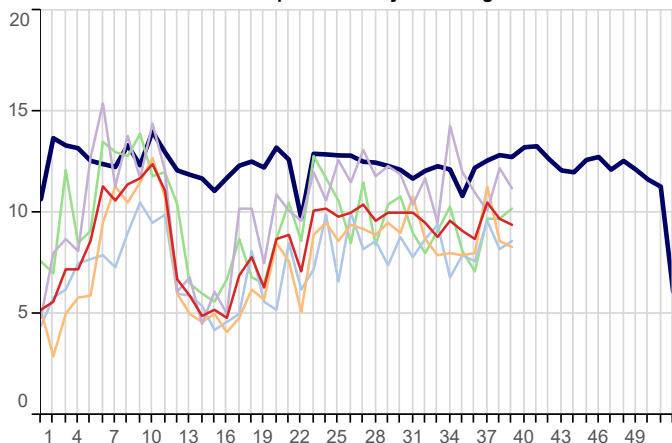
Disorders of The Peripheral Nervous System (ICD10: G50-G64,G70-G72)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



Meningitis/Encephalitis (ICD10: A170-A171,A390,A38-A85,A87,G00-G05)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average

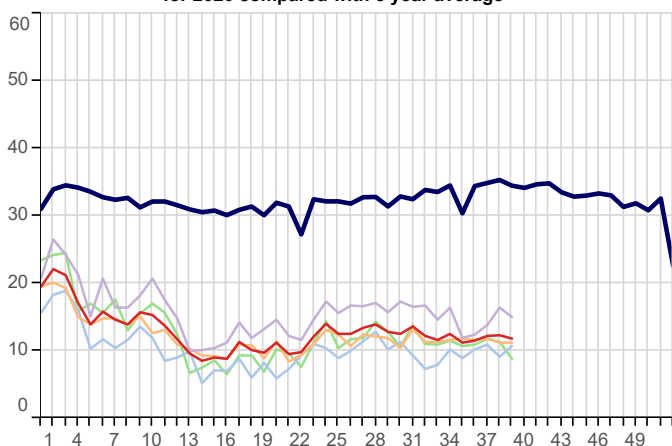


Symptoms Involving Nervous & Musculoskeletal (ICD10: R25-R29)
Weekly incidence (per 100,000 all ages) by region
for 2020 compared with 5 year average



7. Genitourinary System Disorders

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



8. Tabular Summary by Disease

Disease Name	Week beginning Week ending		Offset week 16/09/2020 22/09/2020		14/09/2020 20/09/2020		07/09/2020 13/09/2020		31/08/2020 06/09/2020	
	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer	Rate	Numer
Allergic Rhinitis	3.1	123	3.6	145	3.1	122	2.9	112		
Asthma	10.0	392	10.3	413	8.1	321	5.4	211		
Bronchitis	22.3	874	20.5	824	15.5	618	10.4	406		
Bullous Dermatoses	0.2	9	0.2	7	0.3	12	0.2	9		
Chickenpox	1.0	38	0.8	34	0.9	37	0.5	19		
Common Cold	30.2	1,181	33.7	1,355	22.4	892	8.9	350		
Conjunctival Disorders	7.7	303	8.6	344	8.7	348	7.0	273		
Herpes Simplex	2.8	111	3.5	139	3.4	136	2.9	112		
Herpes Zoster	6.1	239	5.8	231	6.2	245	6.0	233		
Impetigo	2.5	98	2.6	105	2.5	101	3.0	119		
Infectious Mononucleosis	0.2	9	0.2	7	0.1	3	0.2	8		
Influenza-like illness	1.8	70	1.8	71	1.2	46	0.6	25		
Infectious Intestinal Diseases	5.1	199	5.3	214	5.3	211	4.0	157		
Laryngitis and Tracheitis	1.8	72	2.5	99	2.6	103	1.0	38		
Lower Respiratory Tract Infections	28.1	1,099	27.2	1,091	22.3	887	15.0	586		
Measles	0.0	0	0.0	0	0.0	0	0.0	0		
Meningitis and Encephalitis	0.5	19	0.5	21	0.6	23	0.5	20		
Mumps	0.0	0	0.0	0	0.0	1	0.0	0		
Non-infective Enteritis and Colitis	7.4	291	7.2	290	8.0	317	6.2	241		
Otitis Media Acute	9.8	383	10.2	410	7.9	315	6.9	270		
Peripheral Nervous Disease	16.8	657	16.5	662	16.3	648	14.4	565		
Pleurisy	0.9	35	1.0	41	1.1	45	0.6	25		
Pneumonia and Pneumonitis	1.8	69	1.7	70	2.2	86	2.4	94		
Respiratory System Diseases	138.6	5,422	146.1	5,867	118.4	4,714	75.8	2,965		
Rubella	0.0	0	0.0	0	0.0	0	0.0	0		
Scabies	0.7	29	0.9	35	0.9	36	0.6	25		
Sinusitis	13.1	511	12.4	496	10.9	433	7.8	305		
Skin and Subcutaneous Tissue Infections	90.7	3,550	92.3	3,707	91.2	3,630	75.4	2,951		
Strep Throat and Peritonsillar Abscess	0.3	12	0.4	18	0.4	14	0.2	8		
Symptoms involving musculoskeletal	9.4	369	9.7	390	10.5	417	8.7	339		
Symptoms involving Respiratory and Chest	96.5	3,774	100.0	4,013	87.5	3,483	60.9	2,383		
Symptoms involving Skin and Integument Tissues	26.5	1,038	26.8	1,075	26.2	1,045	22.1	865		
Tonsillitis and acute Pharyngitis	25.7	1,007	29.4	1,182	25.3	1,007	13.9	543		
Upper Respiratory Tract Infections	83.8	3,277	91.8	3,687	71.7	2,856	41.0	1,605		
Urinary Tract Infections	11.8	462	12.3	495	12.2	485	11.5	450		
Viral Hepatitis	0.3	10	0.2	7	0.3	11	0.1	5		
Whooping Cough	0.0	0	0.0	1	0.0	0	0.0	0		
Practice Count		381		393		388		376		
Denom		3,912,160		4,014,997		3,981,414		3,914,073		

FURTHER INFORMATION:

About the report

Summer 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 in the Section of Clinical Medicine and Ageing at the University of Surrey.

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 in the Section of Clinical Medicine and Ageing at the University of Surrey. Both Wellbeing data management and the University of Surrey 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

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

University of Surrey
Section of Clinical Medicine and Ageing
Guildford GU2 7XH
Tel: +44 (0)1483 688293
Practice Liaison Team:
practiceenquiries@phc.ox.ac.uk
Tel: +44 (0)1865 617284 / 7198

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

