

# Public Health Wales CDSC Weekly Influenza & Acute Respiratory Infection Surveillance Report

Wednesday 28<sup>th</sup> December 2023 (covering Week 51 2023)



GIG  
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Iechyd Cyhoeddus  
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Public Health  
Wales

Current level of influenza activity: Low

Influenza activity trend: **Increasing**

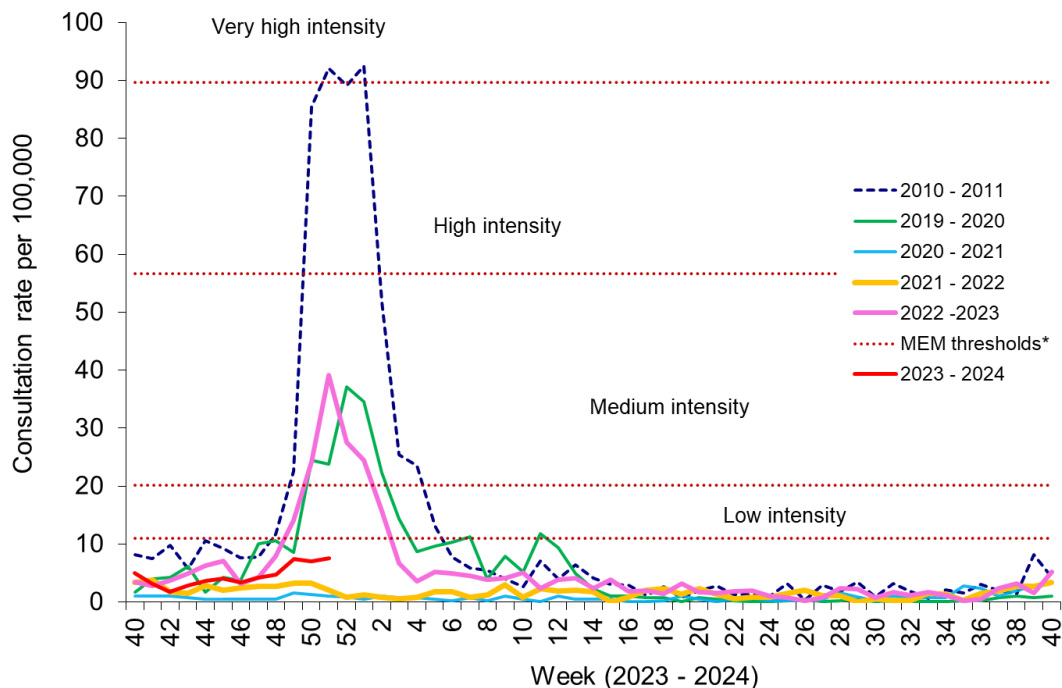
Confirmed influenza cases since 2023 Week 40: 656 (78 influenza A(H3N2), 162 influenza A(H1N1)pdm09, 350 influenza A untyped and 66 influenza B)

During Week 51 (ending 24/12/2023) there were 199 cases of influenza confirmed and eight cases from previous weeks. Influenza is now circulating, with cases confirmed from the sentinel GP network in different regions of Wales for each of the past four weeks, recent increases in overall test positivity and confirmed influenza outbreaks. COVID-19 cases have also increased in recent weeks. RSV activity in children under 5 years decreased to medium intensity levels. Rhinovirus is the most commonly detected Acute Respiratory Infection (ARI), recent weeks have seen increases in human metapneumovirus and *Mycoplasma* detections.

- The **Sentinel GP consultation rate for influenza-like illness (ILI)** in Wales during Week 51, was 7.6 consultations per 100,000 practice population (Table 1). The rate increased compared to the previous week (7.1 consultations per 100,000. Figure 1).
- The **Sentinel GP consultation rate for Acute Respiratory Infections (ARI)** was 270.2 per 100,000 practice population during Week 51 (Table 2 and Figure 3). This is a decreased compared to the previous week (289.8 per 100,000). During week 51 Lower Respiratory Tract Infections increased to 115.7 per 100,000 and Upper Respiratory Tract Infections decreased to 157.1 per 100,000 compared to the previous week.
- The percentage of calls to **NHS Direct Wales** which were 'influenza-related' (cold/flu, cough, fever, headache, and sore throat) during Week 51 increased to 24.2% (Figure 13).
- During Week 51, 1,465 specimens received multiplex respiratory panel testing from patients attending hospitals. **154 tested positive for influenza (62 for influenza A(not subtyped), 57 for influenza A(H1N1), 28 for influenza A(H3) and seven for influenza B).** Overall influenza test-positivity increased to 10.5% across all age groups, increased to 14.0% in those aged under 18 and to 8.8% in those aged over 18. In addition, there were: 186 rhinovirus, 160 SARS-CoV2, 118 RSV, 93 hMPV, 47 adenovirus, 36 parainfluenza, 24 mycoplasma, 25 enterovirus, and eight seasonal coronaviruses positive samples (Figure 5). Additionally, 536 samples from patients were tested for influenza, RSV and SARS-CoV-2 only. Of the 494 samples there were 108 positives for SARS-CoV-2, 31 for RSV, **39** influenza A, and **three** influenza B (Figure 7). Furthermore, during week 51, 56 respiratory specimens were tested from patients in intensive care units (ICU) of which one was positive for influenza A(H1N1)(Figure 8).
- There were 150 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 51. Of the 150 samples, 24 tested positive for rhinovirus, 13 RSV, 17 Sars-CoV2, **six influenza A(untyped)**, 6 hMPV, five mycoplasma, five parainfluenza, three enterovirus, four seasonal coronaviruses, one bocavirus, **three influenza A(H1N1), and one influenza A(H3)** (as at 28/12/2023) (Figure 4).
- From all samples where influenza subtyping information was available during week 51 (specimens receiving multiplex respiratory panel testing, from patients attending hospitals, and surveillance samples collected by sentinel GPs and community pharmacies) 29 were influenza A(H3), 60 influenza A(H1N1) and seven were influenza B (Figure 6). Additionally, there were 68 influenza A(not subtyped).
- **Confirmed RSV case incidence in children aged under 5 further decreased in the most recent week to medium intensity levels (compared to historic levels before 2021).** In week 51 there were 39.7 confirmed cases per 100,000 in this age group (Figure 9).
- The 7-day rolling sums of cases hospitalised within 28 days of an influenza or RSV positive test result in the community (or up to two days post-admission) were 56 and 54 respectively during Week 51 (Figures 10 & 11) and 94 for SARS-CoV-2 during week 51 (Figure 12).
- During week 51, 15 **ARI outbreaks** were reported to the Public Health Wales Health Protection team. Twelve outbreaks were reported as COVID-19, two influenza and one RSV. All 15 outbreaks were in residential homes.
- Data from [EuroMoMo](#) on excesses in all-cause deaths in Wales are not currently available.
- As at 19/12/2023, uptake of influenza vaccination was 70.0% in adults aged 65 years and older, 36.1 % in those aged 6 months to 64 years at clinical risk, 39.6% in two- and three-year-old children, 59.6% in children aged four to 10 years and 47.5% in children aged 11 to 15 years (Table 3).

## Respiratory infection activity in Wales

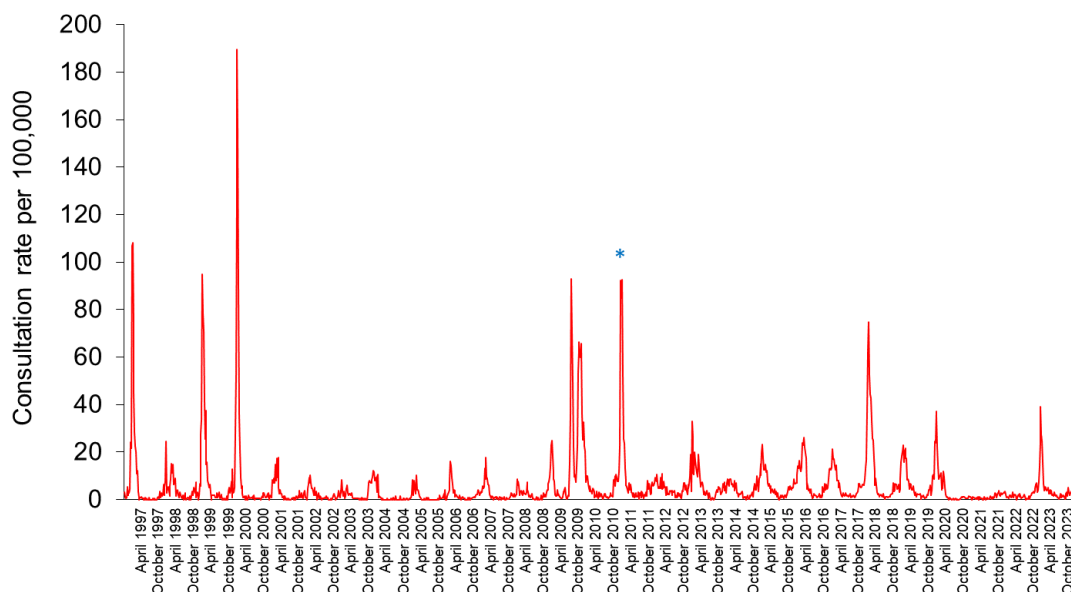
**Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 24/12/2023)**



\* The Moving Epidemic Method (MEM) threshold calculated for Wales ILI consultation rates is 11.1 per 100,000. MEM thresholds used in this chart are based on influenza from 2010-11 to 2018-19 seasons. Caution should be used when comparing consultation rates from March 2020 onwards to previous periods due to the changes in health-seeking behaviours brought about by the COVID-19 pandemic.

\*\*Clinical consultations for ILI seasons are monitored from W40 to W40, the most recent data is presented in red.

**Figure 2. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (Week 50 1996 – Week 51 2023)**



\* Reporting changed to Audit+ surveillance system

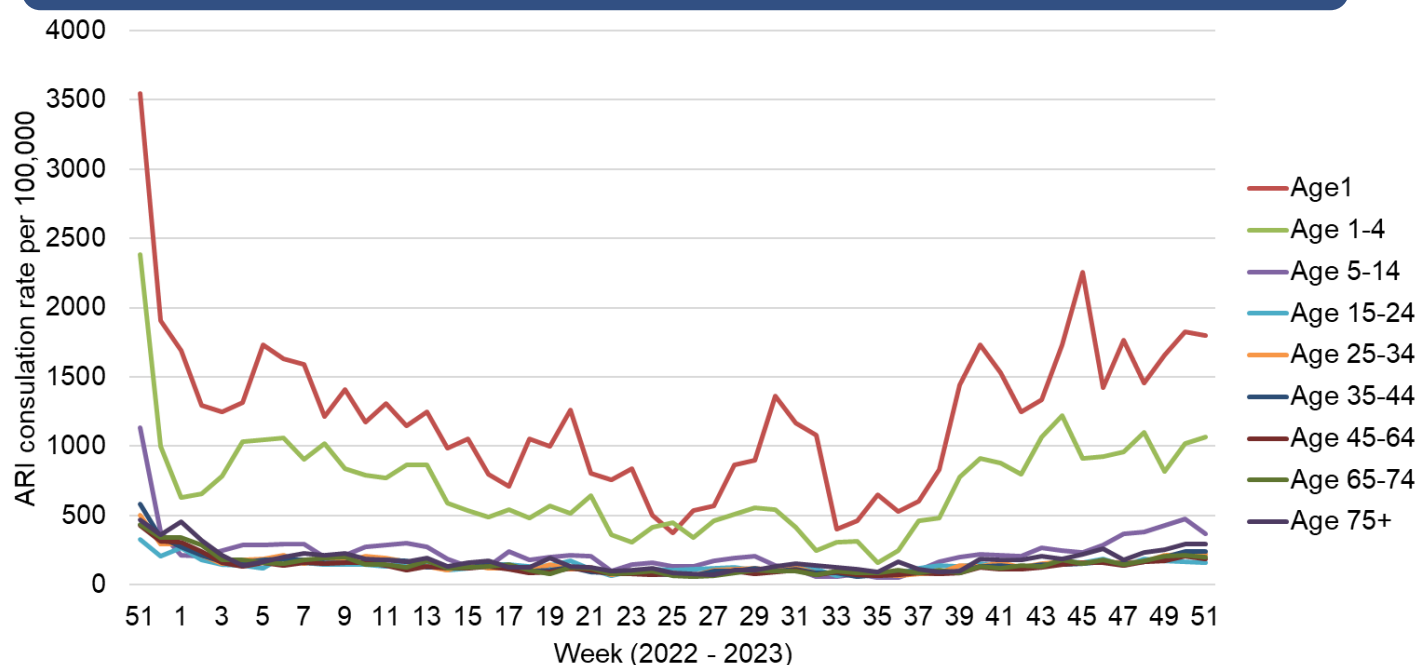
**Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 46 – Week 51 2023 (as of 24/12/2023)**

Age group	46	47	48	49	50	51
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	0.0	0.0	0.0	0.0
5 - 14	0.0	5.2	0.0	4.4	4.6	8.0
15 - 24	4.3	0.0	0.0	4.3	2.2	12.6
25 - 34	1.9	6.7	9.6	15.3	10.0	6.9
35 - 44	9.2	10.8	7.3	7.3	19.2	13.3
45 - 64	4.5	2.1	3.6	10.9	6.8	7.5
65 - 74	0.0	5.0	2.2	4.3	4.6	2.5
75+	2.2	2.5	12.9	2.2	2.3	4.9
<b>Total</b>	<b>3.3</b>	<b>4.2</b>	<b>4.8</b>	<b>7.4</b>	<b>7.1</b>	<b>7.6</b>

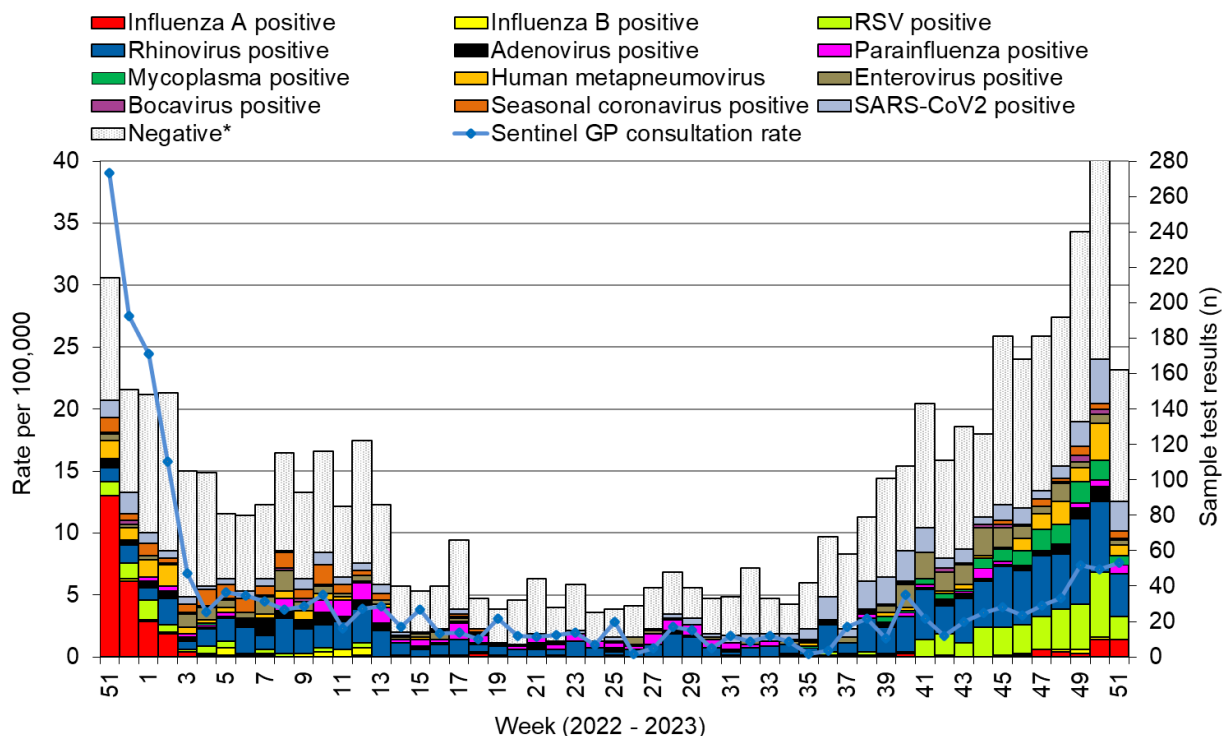
**Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 46 – Week 51 2023 (as of 24/12/2023)**

Age group	46	47	48	49	50	51
< 1	1423.8	1763.3	1459.9	1658.9	1828.9	1799.6
1 - 4	923.1	957.7	1098.8	815.7	1020.6	1068.6
5 - 14	287.9	365.5	380.8	429.5	475.2	366.6
15 - 24	187.7	140.5	188.1	173.2	170.4	163.1
25 - 34	166.2	158.2	166.3	214.1	223.4	218.0
35 - 44	167.1	153.4	167.1	203.8	243.8	243.1
45 - 64	160.9	139.1	166.4	173.6	205.9	189.5
65 - 74	178.9	145.9	174.6	204.8	215.5	202.9
75+	258.1	182.0	236.5	255.8	291.9	294.0
<b>Total</b>	<b>227.8</b>	<b>213.6</b>	<b>242.9</b>	<b>256.0</b>	<b>289.8</b>	<b>270.2</b>

**Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 51 – Week 51 2023**

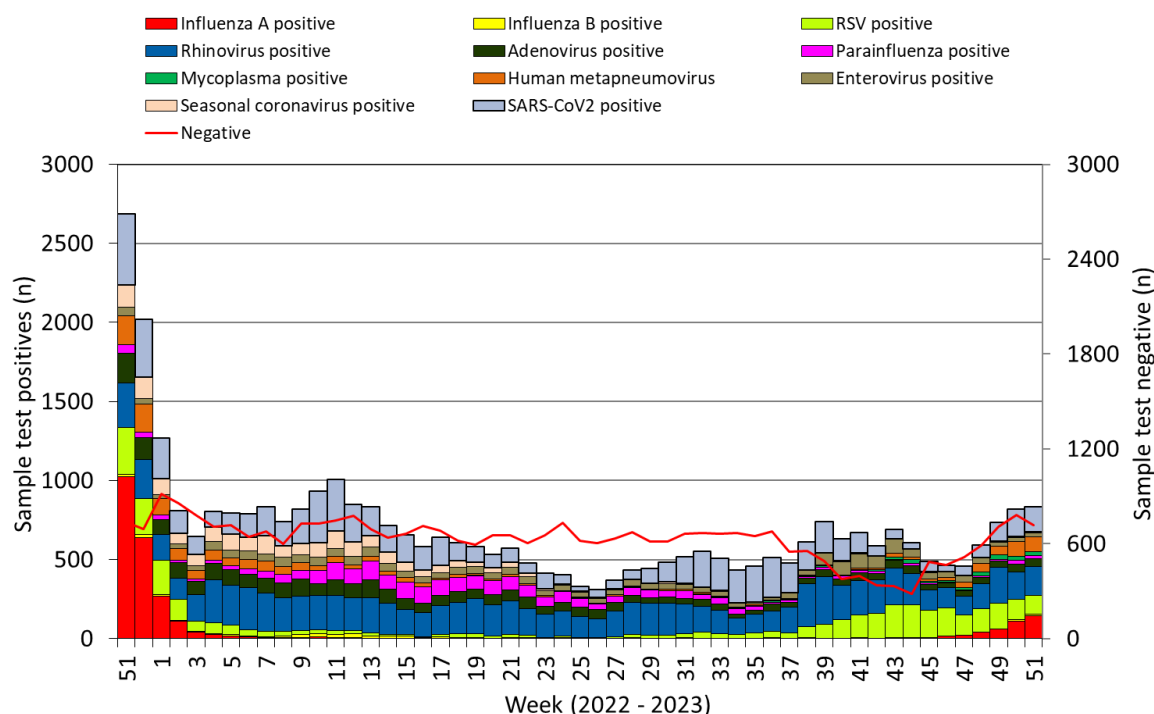


**Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 24/12/2023, by week of sample collection, Week 51 2022 to Week 51 2023**



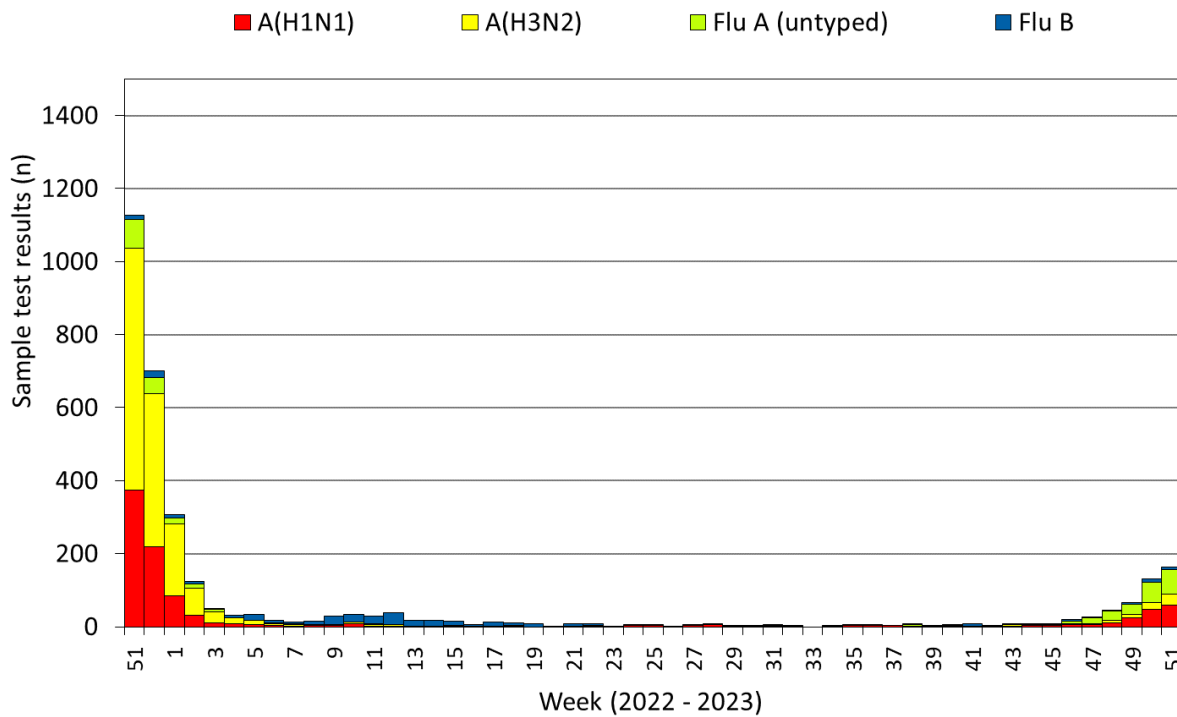
\* Tested negative for influenza, adenovirus, rhinovirus, RSV, parainfluenza, mycoplasma, human metapneumovirus, enterovirus, bocavirus and coronaviruses. Samples which test positive for more than one pathogen will appear more than once in the chart. **Results for the latest week will underestimate activity as not all samples will have been received, tested and authorised at time of writing this report.**

**Figure 5. Specimens submitted for virological testing for hospital patients and non-sentinel GPs as of 24/12/2023 by week of sample collection, Week 51 2022 to Week 51 2023. Data for W51 may be incomplete, due to the Christmas week Bank Holidays**

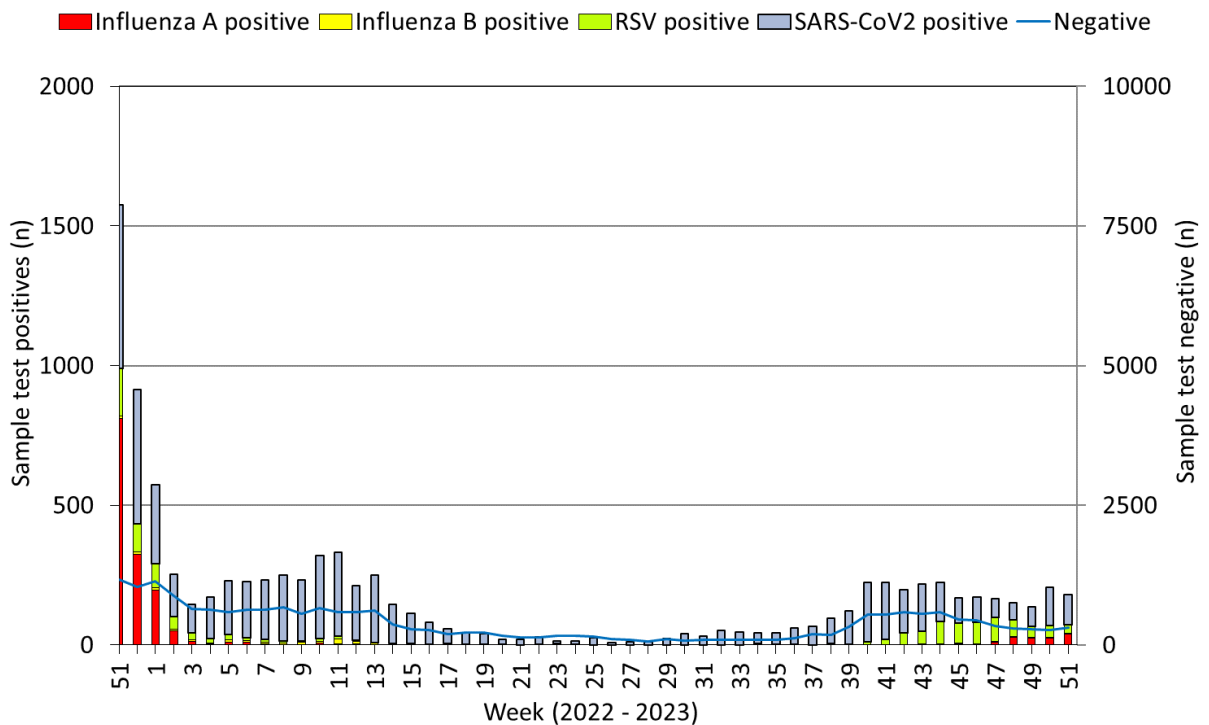


This chart summarises respiratory panel test data and does not include data for patients tested SOLELY for SARS-CoV2. Combined data for tests carried out in Public Health Wales Microbiology: Cardiff laboratory, provided by Public Health Wales Microbiology Cardiff Specialist Virology Centre. This chart summarises individual test results, patients who are positive for multiple infections within a given week will appear multiple times. Samples which test positive for more than one pathogen will appear more than once in the chart.

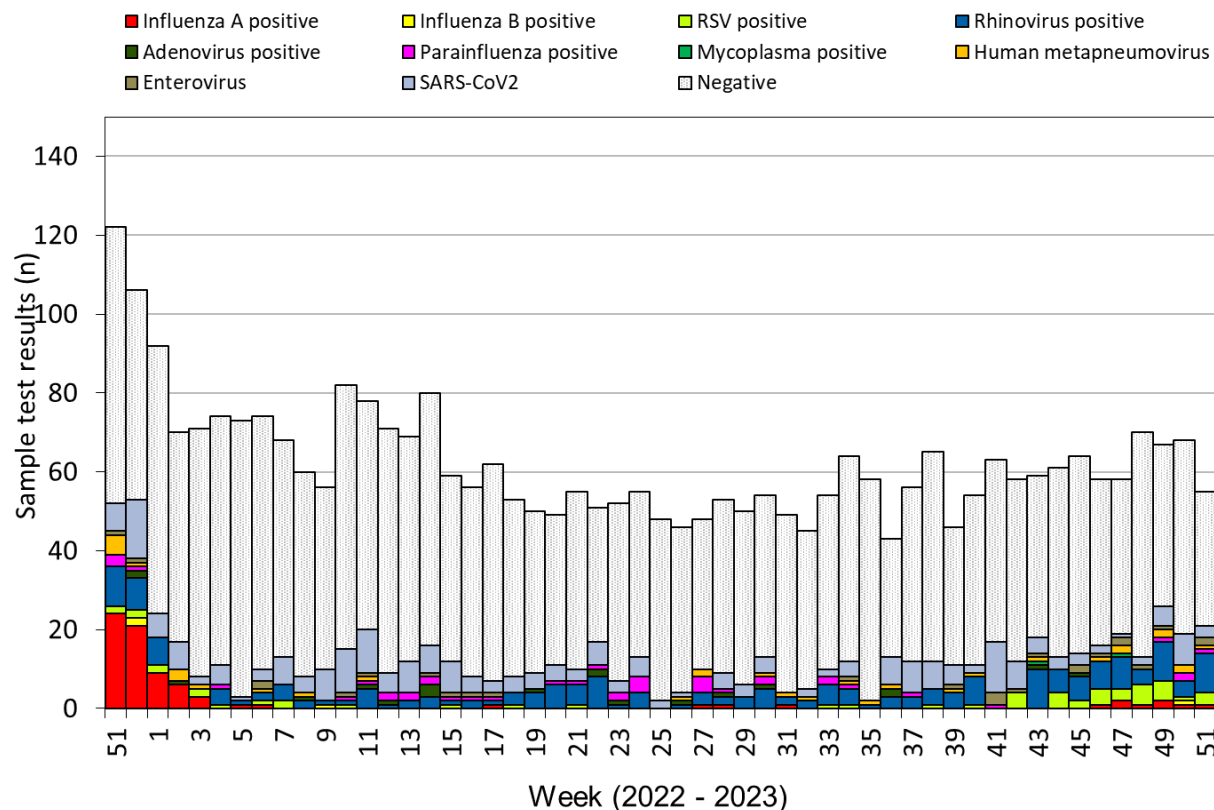
**Figure 6. Flu subtypes based on specimens submitted for virological testing by sentinel GPs and community pharmacies, hospital patients, and non-sentinel GPs, as of 24/12/2023 by week of sample collection, Week 51 2022 to Week 51 2023.**



**Figure 7. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 24/12/2023 by week of sample collection, Week 51 2022 to Week 51 2023.**

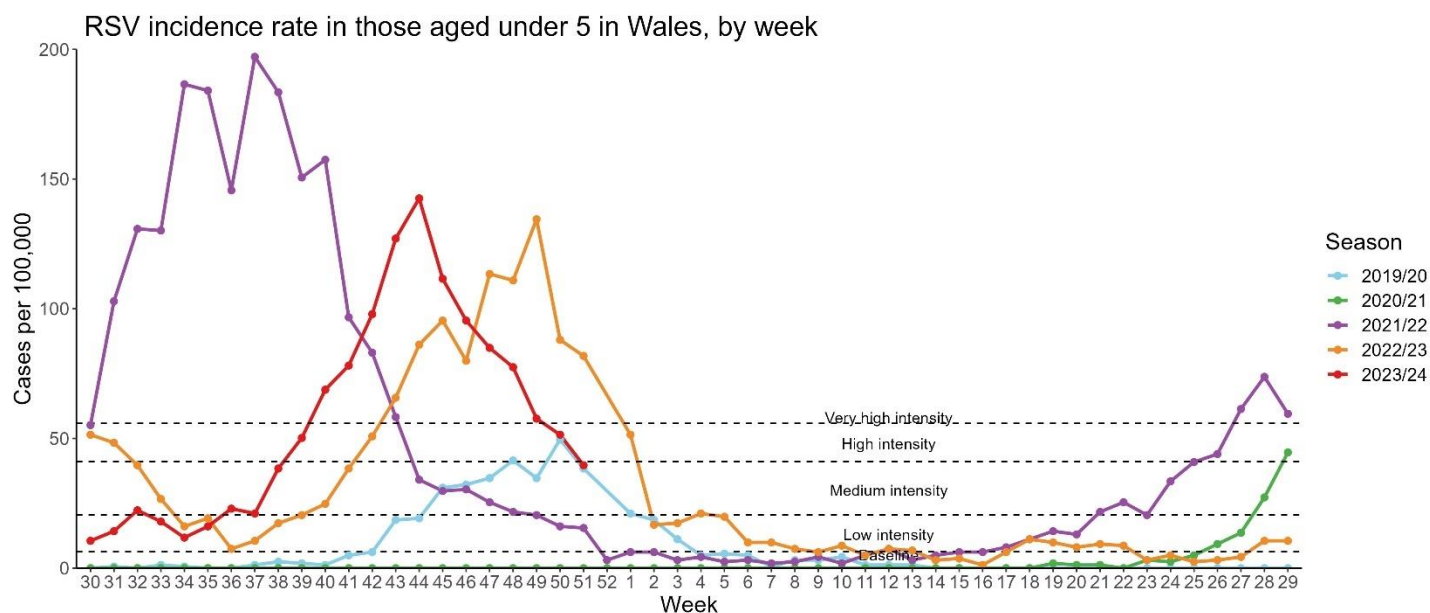


**Figure 8. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 51 2022 to Week 51 2023.**



This chart summarises respiratory panel test data and does NOT include data for patients tested SOLELY for SARS-CoV2. Samples which test positive for more than one pathogen will appear more than once in the chart.

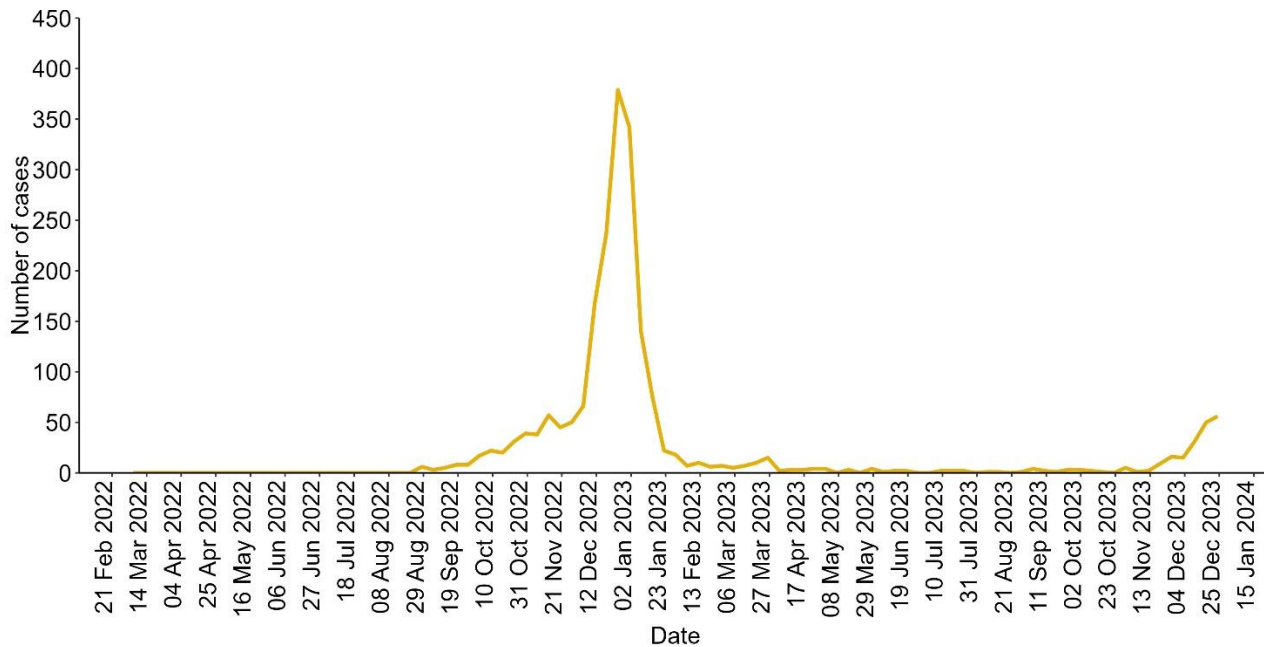
**Figure 9. RSV incidence rate per 100,000 population aged under five years, week 30 2019 to Week 51 2023.**



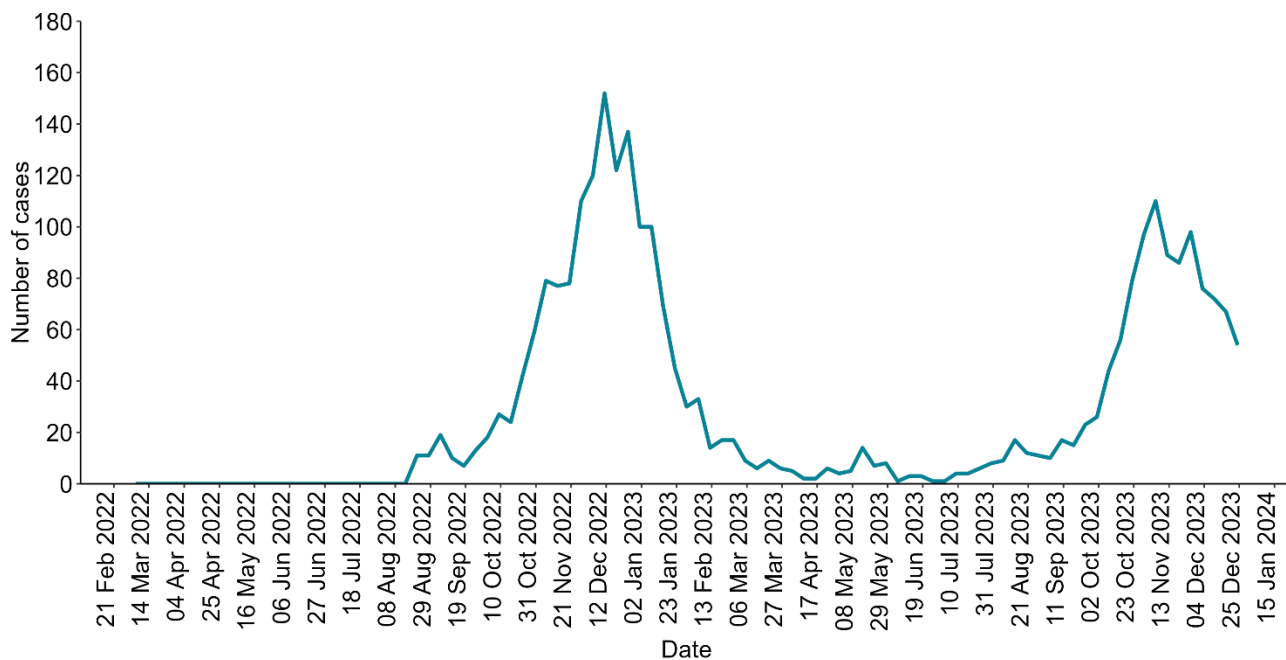
\*RSV seasons are monitored from W30 to W29, the most recent data is presented in red

## ARI – Hospital admissions

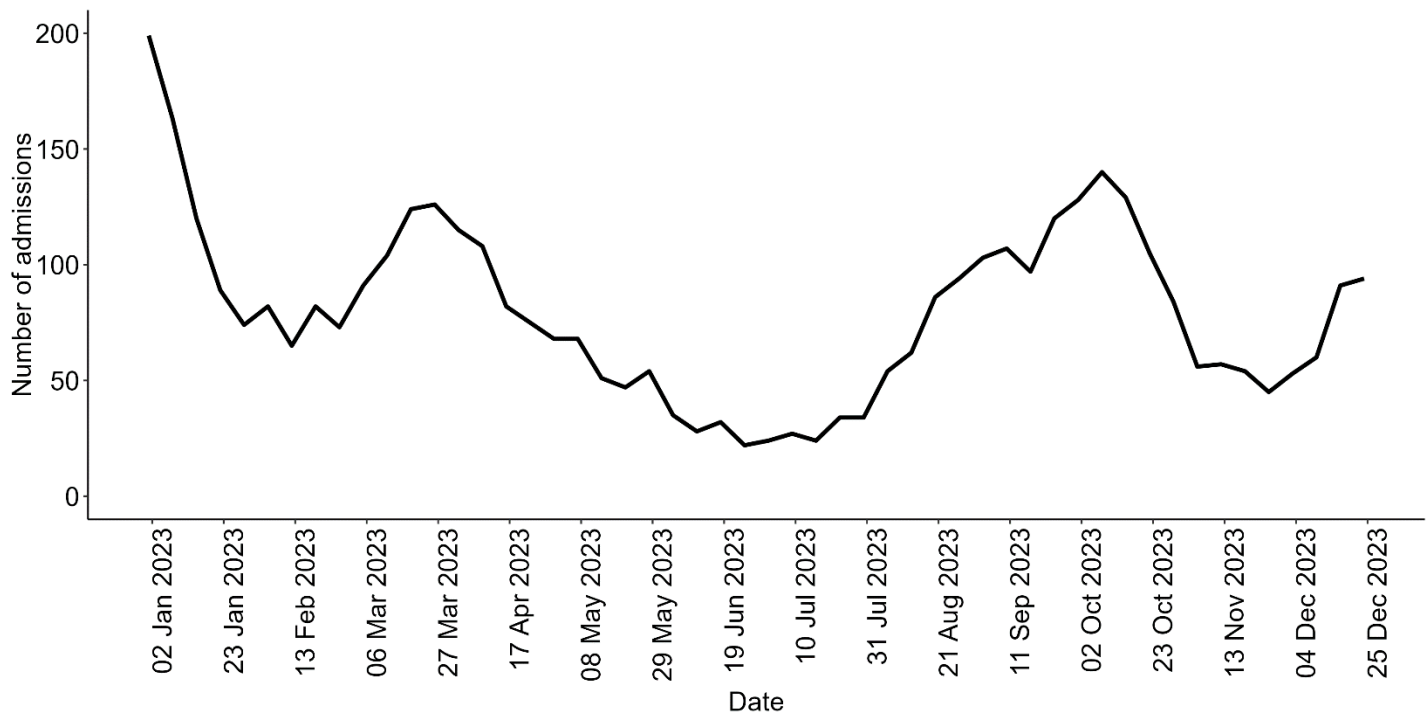
**Figure 10. Seven day rolling sum of cases hospitalised in Wales within 28 days of an influenza positive test result in the community (or up to 2 days post-admission), as of 24/12/2023.**



**Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 24/12/2023.**

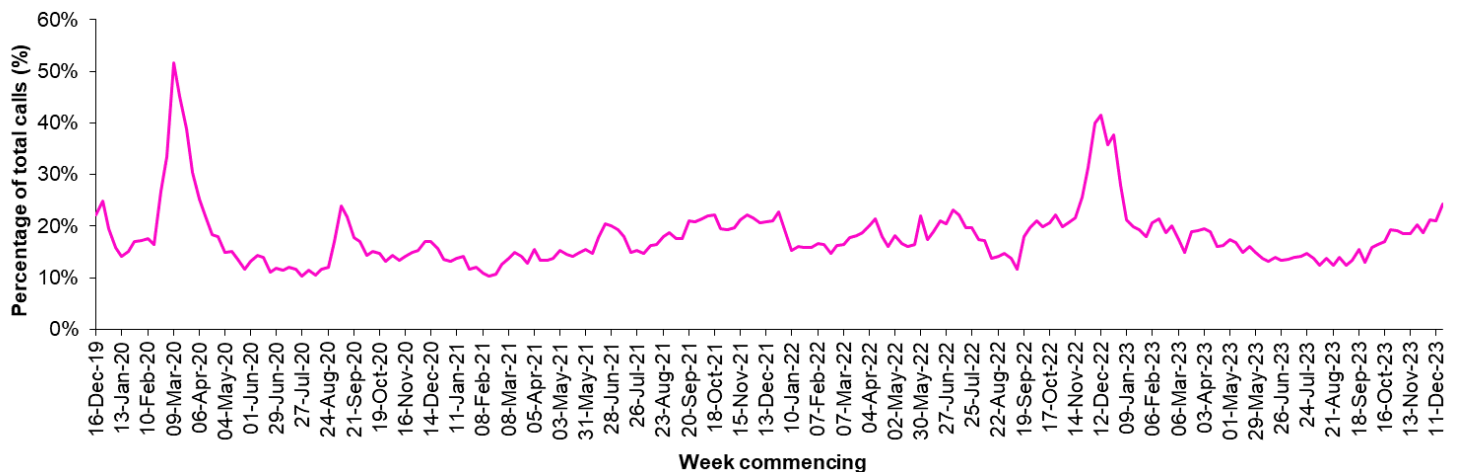


**Figure 12. Seven day rolling sum of cases hospitalised in Wales within 28 days of an Covid-19 positive test result in the community (or up to 2 days post-admission), as of 24/12/2023.**



## Calls to NHS Direct Wales

**Figure 13. Influenza related calls to NHS Direct Wales<sup>1</sup> (as a percentage of total calls) from Week 51 2019 - Week 51 2023.**



<sup>1</sup> Data supplied by Health Statistics and Analysis Unit, Welsh Government.

*Flu related calls are the sum of calls recorded as 'cold/flu', 'cough', 'headache', 'fever' and 'sore throat'. Following changes to the NHS Direct calls system, including the start of the 111 pilot, there has been a change in the way in which denominator data are calculated for this chart, NHS Direct Wales now count the total number of nurse triaged calls (i.e. calls which could have symptom data recorded against them), note that 111 includes out-of-hours calls.*

## Influenza Vaccine Uptake in Wales

**Table 3. Uptake of influenza immunisations in GP Practice patients in Wales 2023/24 (as of 19/12/2023).**

<b>Influenza immunisation uptake in the 2023/24 season</b>	
People aged 65y and older	70.0%
People younger than 65y in a clinical risk group	36.1%
Children aged two & three years	39.6%
Children aged between four & ten years	59.6%
Children aged between 11 & 15 years	47.5%
Total NHS staff	33.8%
NHS staff with direct patient contact	33.5%

The end of season report Influenza in Wales 2019/20 is available to download and contains a full breakdown of vaccination uptake amongst eligible groups.

Link to report: <https://phw.nhs.wales/topics/immunisation-and-vaccines/flu vaccine/annual-influenza-surveillance-and-influenza-vaccination-uptake-reports/>

## Influenza activity – UK and international summary

- As of Week 51, GP ILI consultations increased to 6.3 per 100,000, in England. In week 50, consultations increased to 5.5 per 100,000 in Scotland.
- During Week 50, 563 samples testing positive for influenza were reported in England (444 influenza A(not subtyped), 86 influenza A(H3N2), 21 influenza A(H1N1)pdm09) and 12 were influenza B). Overall influenza positivity increased to 8.9% in England and to 10.6 in Scotland.
- In England, RSV hospitalisations in the under 5-year-olds decreased to 27.2 per 100,000 in week 50. In Scotland, RSV hospitalisations in the under 1-year olds was 138.9 per 100,000. UK summary data are available from the [UKHSA Influenza and COVID-19 Surveillance Report](#) and [Viral respiratory diseases \(including influenza and COVID-19\) in Scotland](#).
- The WHO and the European Centre for Disease Prevention and Control (ECDC) reported that influenza positivity continues to increase and has exceeded the 10% positivity epidemic threshold at regional level. Of 35 countries and areas reporting on influenza intensity, one reported very high intensity, two reported high intensity, 11 reported medium intensity, 13 reported low intensity and the remainder reported baseline intensity. Of 35 countries and areas reporting on geographic spread of influenza viruses within a country or area, 12 reported widespread, eight reported regional, ten reported sporadic, three reported local and the remainder reported no activity. As of week 49, there were 310 confirmed influenza virus infection detections reported from sentinel primary care. 97% were type A viruses (65% influenza A(H1N1)pdm09 and 35% influenza A(H3)).  
**Source:** European Respiratory Virus Surveillance Summary (ERVISS): <https://erviss.org/>
- The WHO reported on 11/12/2023, based on data up to 26/11/2023 that globally, influenza detections increased due to increases in parts of the Northern Hemisphere, including parts of Europe and Central Asia, North America and Eastern and Western Asia.
- In the countries of North America, influenza detections increased, and activity was above the seasonal baselines expected for this time of the year. Influenza A(H1N1)pdm09 viruses were predominant.
- In South Africa, low numbers of influenza B detections were reported but remained below the seasonal threshold.
- In Europe and Central Asia, in the most recent week, influenza activity remained low overall but has been increasing over the last few weeks. Influenza A viruses predominated in primary care sentinel surveillance.
- In East Asia, influenza activity continued to increase mainly due to activity in China and the Republic of Korea, with influenza A(H3N2) and A(H1N1)pdm09 viruses more frequently detected, respectively.
- In Western Asia, influenza activity continued to increase in some countries of the Arab Peninsula and remained low in other reporting countries.
- In the Central American and Caribbean countries, influenza activity remained moderate in the Caribbean with detections of influenza A(H1N1)pdm09 predominant and remained low but increased in Central America with detection of primarily influenza B predominant.
- In the temperate zones of the northern hemisphere, indicators of influenza activity increased and was above the seasonal baseline for this time of year.
- In tropical Africa, influenza detections decreased in Western Africa but increased in Eastern and Middle Africa. Influenza A(H3N2) viruses were predominant but all seasonal influenza subtypes were reported.
- In Southern Asia, influenza activity driven predominantly by influenza A(H1N1)pdm09 decreased overall and mainly due to decreases in Iran (Islamic Republic of) and India.
- In South-East Asia, influenza activity driven predominantly by all seasonal subtypes decreased overall however influenza detections of all seasonal subtypes increased in Cambodia.
- In the temperate zones of the southern hemisphere, indicators of influenza activity were reported at low levels or below seasonal threshold in most reporting countries.

**Source:** WHO influenza update: <https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates/current-influenza-update>

- Based on FluNet reporting (as of 12/12/2023), during the period from 13/11/2023 – 26/11/2023 National Influenza Centres and other national influenza laboratories from 122 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 301,639 specimens during that period, of which 36,530 were positive for influenza viruses, 32,078 (87.8%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 4,861 (18.6%) were influenza A(H1N1)pdm09 and 21,327 (81.4%) were influenza A(H3N2). Of the 36,530 samples testing positive for influenza viruses, 4,861 tested positive for Influenza B (12.2%). **Source:** Flu Net: <https://www.who.int/tools/fluNet>

### Update on influenza activity in North America

- The USA Centers for Disease Control and Prevention (CDC) report that influenza activity levels are elevated in most parts of the country during week 50 (ending 16/12/2023). Nationally, 13,576 (12.8%) out of 105,774 specimens have tested positive for influenza in week 50 in clinical laboratories nationwide, of these positive samples, 11,234 (82.8%) were influenza A and 2,333 (17.2%) were influenza B. Further characterisation has been carried out on 2,974 specimens by public health laboratories, and 1,050 samples tested positive for influenza; 376 influenza A(H1N1)pdm09, 105 influenza A(H3N2), 379 influenza A(not subtyped) and 190 influenza B.

**Source:** CDC Weekly US Influenza Surveillance Report: <http://www.cdc.gov/flu/weekly/>

- The Public Health Agency of Canada reported that during week 49, influenza activity continued to increase but remain within expected levels. During week 49, 4,323 influenza detections were reported: 4,235 influenza A, and 88 influenza B. The percentage of ILI visits was 2.1%. **Source:** Public Health Agency of Canada: <https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/weekly-influenza-reports.html>

### Respiratory syncytial virus (RSV) in North America

- The USA CDC reported that the RSV positivity rate decreased in the week beginning 16/12/2023.

**Source:** CDC RSV national trends: <https://www.cdc.gov/surveillance/nrevss/rsv/natl-trend.html>

### COVID-19 – UK and international summary

- As of 20/12/2023, there were 9.3 new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. There were two suspected COVID-19 deaths with a date of death in the most recent 7-day reporting period, reported to Public Health Wales. There were 13 COVID-19 death registrations recorded in ONS data for the latest data period reported. Latest COVID-19 data from Public Health Wales is available from: <https://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/>
- The latest UKHSA COVID-19 data summary is available from: <https://coronavirus.data.gov.uk/>
- WHO situation updates on COVID-19 are available from: <https://covid19.who.int/>

### Middle East respiratory syndrome coronavirus (MERS-CoV) – latest update from WHO and ECDC

- On the 10/07/2023 WHO were notified by the United Arab Emirates (UAE) of a case of MERS-CoV. In total, 2,605 laboratory-confirmed cases of locally acquired Middle East Respiratory Syndrome coronavirus (MERS-CoV) worldwide, including 937 deaths. WHO Global Alert and Response website: <https://www.who.int/emergencies/disease-outbreak-news>
- Rapid risk assessments of the situation from ECDC, which contain epidemiological updates and advice for travellers and healthcare workers, are available from: <https://ecdc.europa.eu/en/middle-east-respiratory-syndrome-coronavirus>
- Further updates and advice for healthcare workers and travellers are available from WHO: <http://www.who.int/emergencies/mers-cov/en/> and from NaTHNaC: <https://travelhealthpro.org.uk/news/237/mers-cov-update-travelhealthpro-country-pages>

### Human infection with avian influenza A(H7N9), China

- The latest WHO Influenza at Human-Animal Interface summary reports that there have been no publicly available reports from China or other countries on influenza A(H7N9) in recent months, but overall risk assessments are unchanged. Previous reports are available from: <https://www.who.int/teams/global-influenza-programme/avian-influenza/monthly-risk-assessment-summary>  
The risk of international spread of avian influenza A(H7N9) is considered to be low at present. However, it is important that clinicians are aware of the possibility of human infection with animal influenza, in persons presenting with severe acute respiratory disease, while travelling or soon after returning from an area where avian influenza is a concern. WHO Global Alert & Response updates: <https://www.who.int/emergencies/disease-outbreak-news>

## Links:

Public Health Wales influenza surveillance webpage:

<http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=25480>

Public Health Wales COVID-19 data dashboard:

<https://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/>

Public Health Wales interactive report on hospitalisations in influenza and RSV cases:

<https://public.tableau.com/app/profile/public.health.wales.health.protection/viz/ARI-Hospitaladmissionsdashboard/ARIHospitaladmissionsdashboard?publish=yes>

GP Sentinel Surveillance of Infections Scheme:

<http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=27918>

NICE influenza antiviral usage guidance:

<http://www.nice.org.uk/Guidance/TA158>

England influenza and COVID-19 surveillance:

<https://www.gov.uk/government/statistics/national-flu-and-covid-19-surveillance-reports-2023-to-2024-season>

Scotland seasonal respiratory surveillance:

<https://www.publichealthscotland.scot/publications>

Northern Ireland influenza surveillance:

<https://www.publichealth.hscni.net/directorate-public-health/health-protection/seasonal-influenza>

European Centre for Communicable Disease:

<http://ecdc.europa.eu/>

European influenza information:

<http://flunewseurope.org/>

Advice on influenza immunisation

<https://phw.nhs.wales/topics/immunisation-and-vaccines/flu vaccine/>

Advice on influenza immunisation (for intranet users)

[Influenza \(sharepoint.com\)](#)

For further information on this report, please email Public Health Wales using:

[surveillance.requests@wales.nhs.uk](mailto:surveillance.requests@wales.nhs.uk)