

Public Health Wales CDSC

Weekly Influenza & Acute Respiratory Infection Surveillance Report

Wednesday 31st January 2024 (covering Week 04 2024)



GIG
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Cymru
Public Health
Wales

Current level of influenza activity: Low

Influenza activity trend: **Increasing**

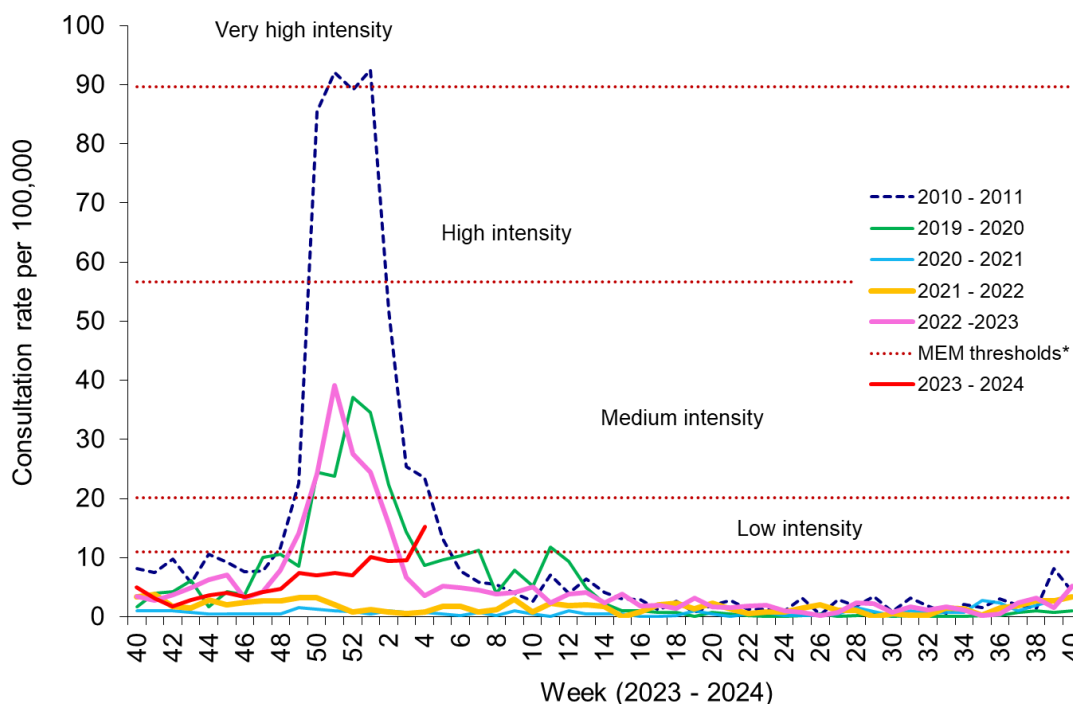
Confirmed influenza cases since 2023 Week 40: 1911 (222 influenza A(H3N2), 513 influenza A(H1N1)pdm09, 1063 influenza A untyped and 113 influenza B)

During Week 4 (ending 28/01/2024) there were 367 cases of influenza confirmed, with 10 cases from previous weeks. Influenza is circulating. COVID-19 cases were stable in the most recent weeks. RSV activity in children under 5 years has decreased to low intensity levels. Additionally, recent weeks have seen increases in rhinovirus, human metapneumovirus and *Mycoplasma* detections.

- The **Sentinel GP consultation rate for influenza-like illness (ILI)** in Wales during Week 4, was 15.2 consultations per 100,000 practice population (Table 1). The rate increased compared to the previous week (9.5 consultations per 100,000. Figure 1).
- The **Sentinel GP consultation rate for Acute Respiratory Infections (ARI)** was 285.3 per 100,000 practice population during Week 4 (Table 2 and Figure 3). This is an increase compared to the previous week (254.0 per 100,000). During week 4, Lower Respiratory Tract Infections increased to 102.6 per 100,000 and Upper Respiratory Tract Infections increased to 184.3 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 4 increased to 22.3% (Figure 13).
- During Week 4, 1,477 specimens received multiplex respiratory panel testing from patients attending hospitals. **185 tested positive for influenza (85 influenza A(not subtyped), 71 influenza A(H1N1), 21 influenza A(H3) and eight influenza B)**. Overall influenza test-positivity increased to 12.5%, to 17.4% in those aged under 18 and to 10.2% in those aged over 18. In addition, there were: 177 rhinovirus, 162 SARS-CoV2, 69 adenovirus, 65 parainfluenza, 65 seasonal coronaviruses, 63 mycoplasma, 60 hMPV, 27 RSV, and 18 enterovirus positive samples (Figure 5). Additionally, 741 samples from patients were tested for influenza, RSV and SARS-CoV-2 only. Of the 741 samples there were 119 positives for SARS-CoV-2, **162 influenza A**, 16 RSV, and **three influenza B**. (Figure 7). Furthermore, during week 4, 60 respiratory specimens were tested from patients in intensive care units (ICU) of which seven were positive for **influenza (five influenza A(not subtyped), one influenza A(H3), and one influenza A(H1N1))** (Figure 8).
- There were 176 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 4. Of the 176 samples, **22 tested positive for influenza A(12 influenza A(H1N1), four influenza A(H3), and six influenza A(not subtyped))**, 16 Sars-CoV2, 14 mycoplasma, 11 hMPV, 10 rhinovirus, 9 seasonal coronaviruses, six parainfluenza, four RSV, **three influenza B** one adenovirus, one enterovirus and one c. pneumoniae (as at 31/01/2024) (Figure 4).
- From all samples where influenza subtyping information was available during week 4, 25 were influenza A(H3), 83 influenza A(H1N1), 11 were influenza B (Figure 6) and 91 influenza A(not subtyped).
- **Confirmed RSV case incidence in children aged under 5 further slightly increased in the most recent week but remains at low intensity levels (compared to historic levels before 2021)**. In week 4 there were 8.1 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 32 respectively during Week 4 (Figures 10 & 11) and 74 for SARS-CoV-2 during week 4 (Figure 12).
- During week 4, **12 ARI outbreaks** were reported to the Public Health Wales Health Protection team. Nine outbreaks were reported as COVID-19, one as whooping cough and one as influenza. Nine outbreaks were in residential home and three were in schools/nurseries.
- According to [EuroMoMo](#) analysis, all-cause deaths in Wales were not in excess during week 3.
- As at 23/01/2024, uptake of influenza vaccination was 71.2% in adults aged 65 years and older, 37.6% in those aged 6 months to 64 years at clinical risk, 41.6% in two- and three-year-old children, 61.3% in children aged four to 10 years and 48.7% in children aged 11 to 15 years (Table 3).

Respiratory infection activity in Wales

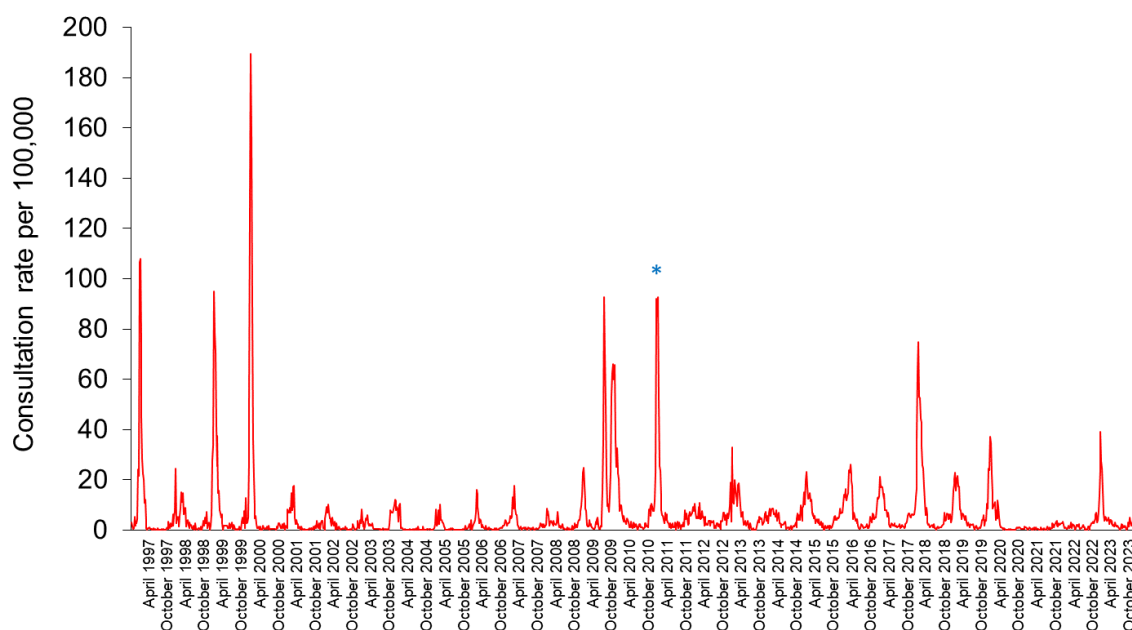
Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 28/01/2024)



* 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 4 2024)



* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 51 2023 – Week 4 2024 (as of 28/01/2024)

Age group	51	52	1	2	3	4
< 1	0.0	0.0	0.0	0.0	0.0	38.8
1 - 4	0.0	0.0	0.0	7.1	0.0	16.0
5 - 14	9.2	0.0	4.6	9.2	4.4	7.7
15 - 24	11.1	8.9	6.6	8.9	8.6	9.8
25 - 34	6.0	8.0	16.0	8.0	7.7	22.3
35 - 44	11.5	11.5	17.2	15.3	22.0	17.1
45 - 64	7.6	5.7	11.3	8.5	10.9	22.1
65 - 74	4.5	9.0	6.7	9.0	8.6	12.4
75+	4.5	8.9	8.9	8.9	4.3	2.5
Total	7.4	7.0	10.2	9.4	9.5	15.2

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 51 2023 – Week 4 2024 (as of 28/01/2024)

Age group	51	52	1	2	3	4
< 1	1681.9	1086.2	1554.4	1000.0	785.1	1783.6
1 - 4	1001.3	712.2	494.1	538.0	819.1	1204.6
5 - 14	354.2	216.2	241.6	269.2	343.6	409.5
15 - 24	155.0	110.7	225.9	194.8	149.6	193.6
25 - 34	202.1	150.1	198.2	206.2	198.9	218.4
35 - 44	223.9	204.8	256.2	240.7	230.8	261.2
45 - 64	188.1	155.0	223.1	225.0	217.4	209.3
65 - 74	195.0	210.7	262.2	232.9	226.1	182.8
75+	272.3	189.7	325.2	298.5	261.5	261.2
Total	258.0	198.7	261.4	251.7	254.0	285.3

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 4 2023 – Week 4 2024

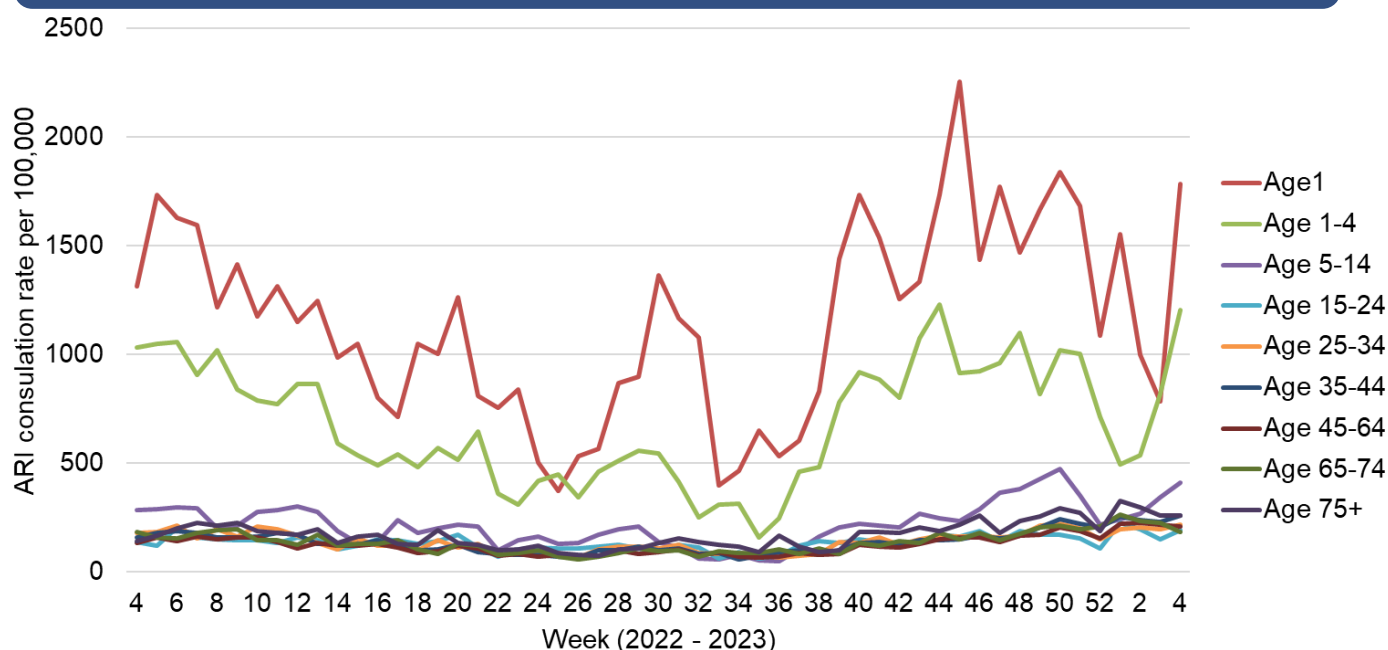
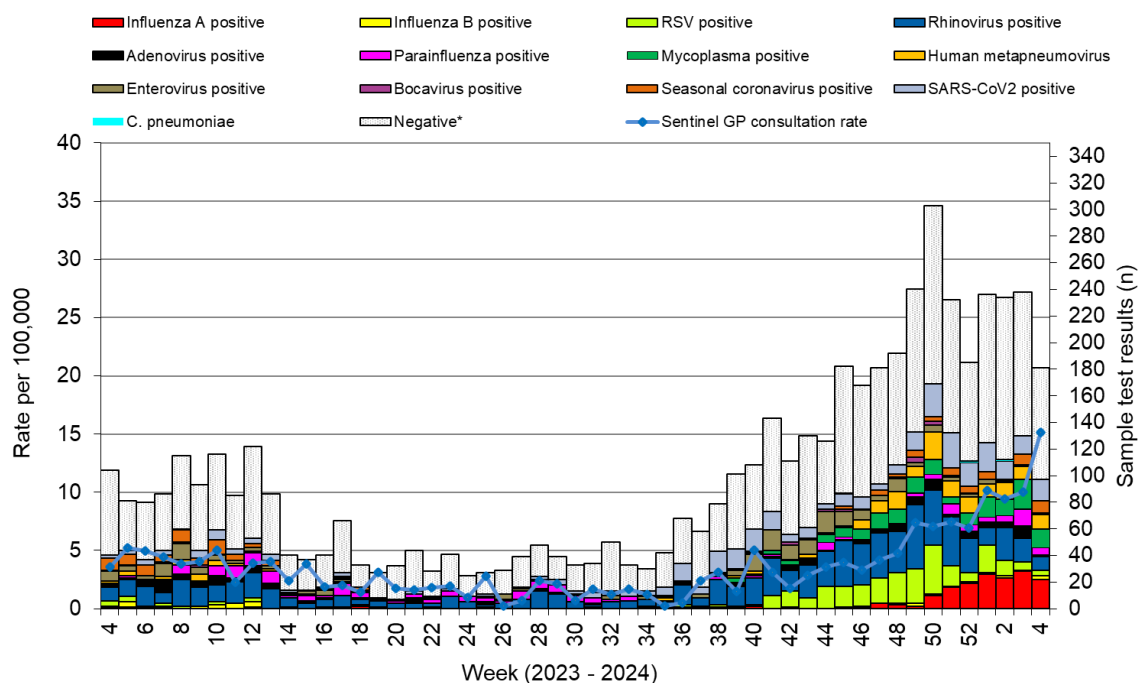
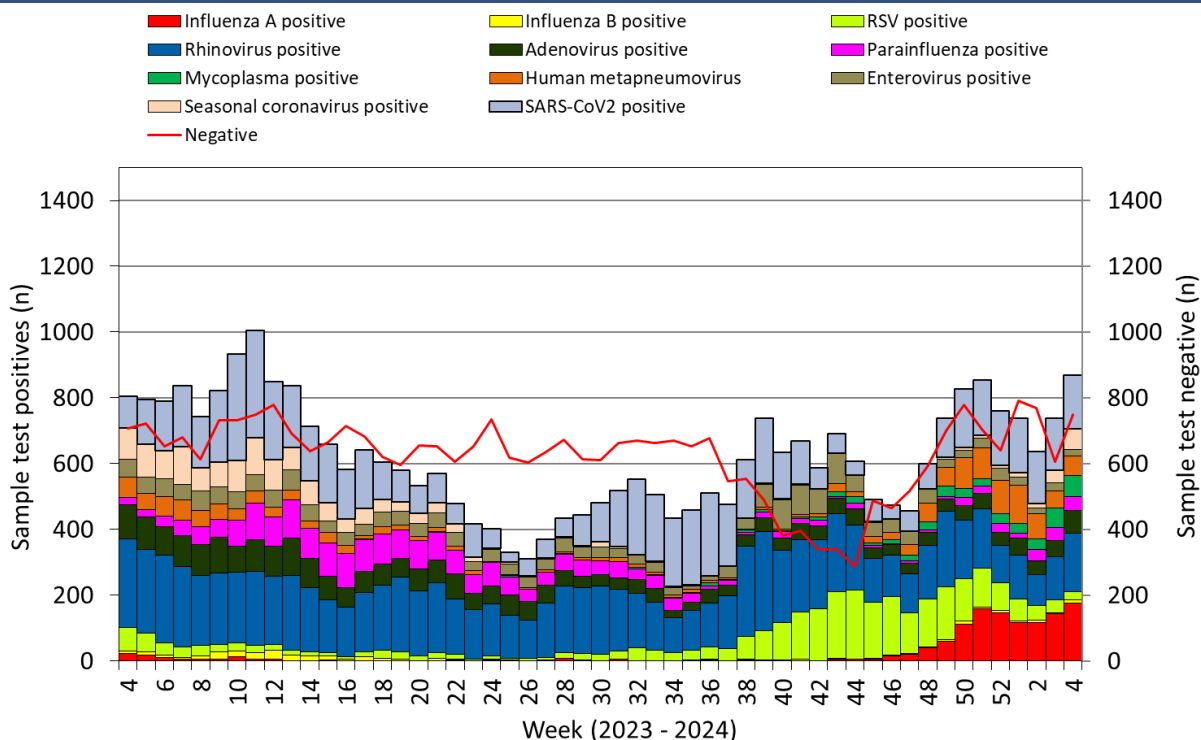


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 28/01/2024, by week of sample collection, Week 4 2023 to Week 4 2024.



* 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 28/01/2024 by week of sample collection, Week 4 2023 to Week 4 2024.



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 28/01/2024 by week of sample collection, Week 4 2023 to Week 4 2024.

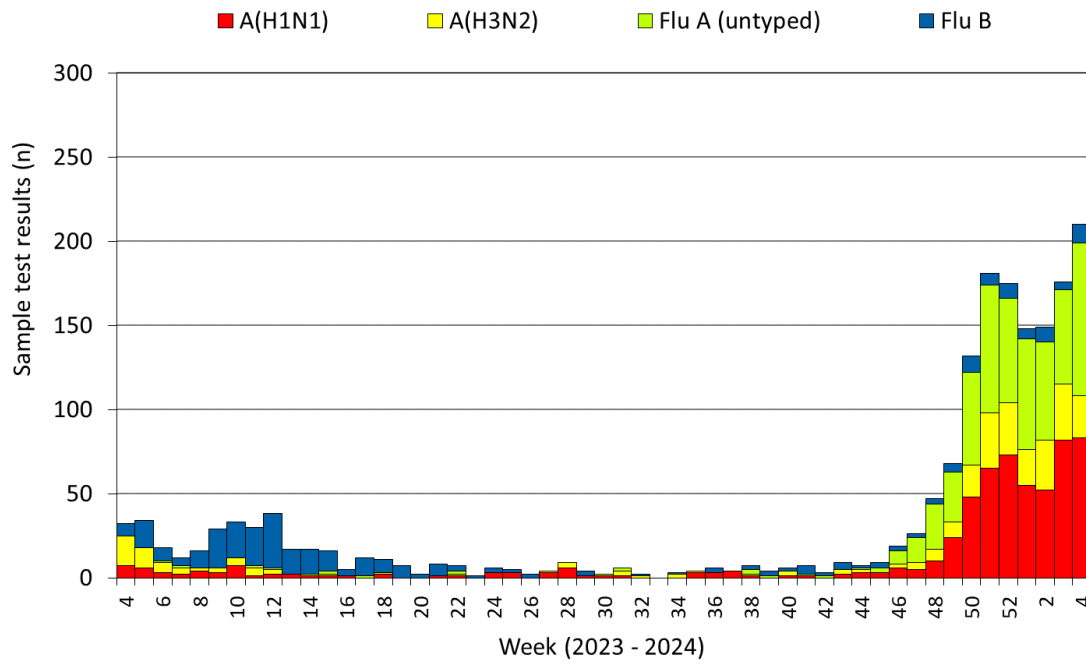


Figure 7. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 28/01/2024 by week of sample collection, Week 4 2023 to Week 4 2024.

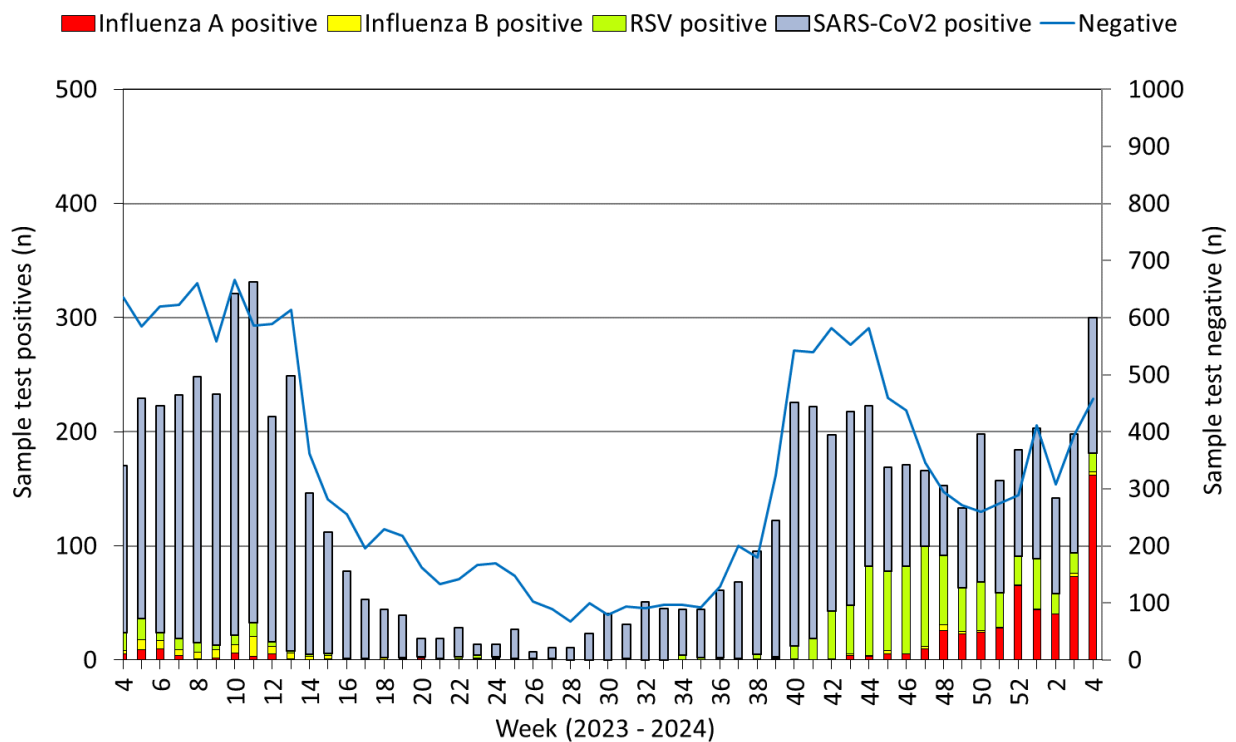
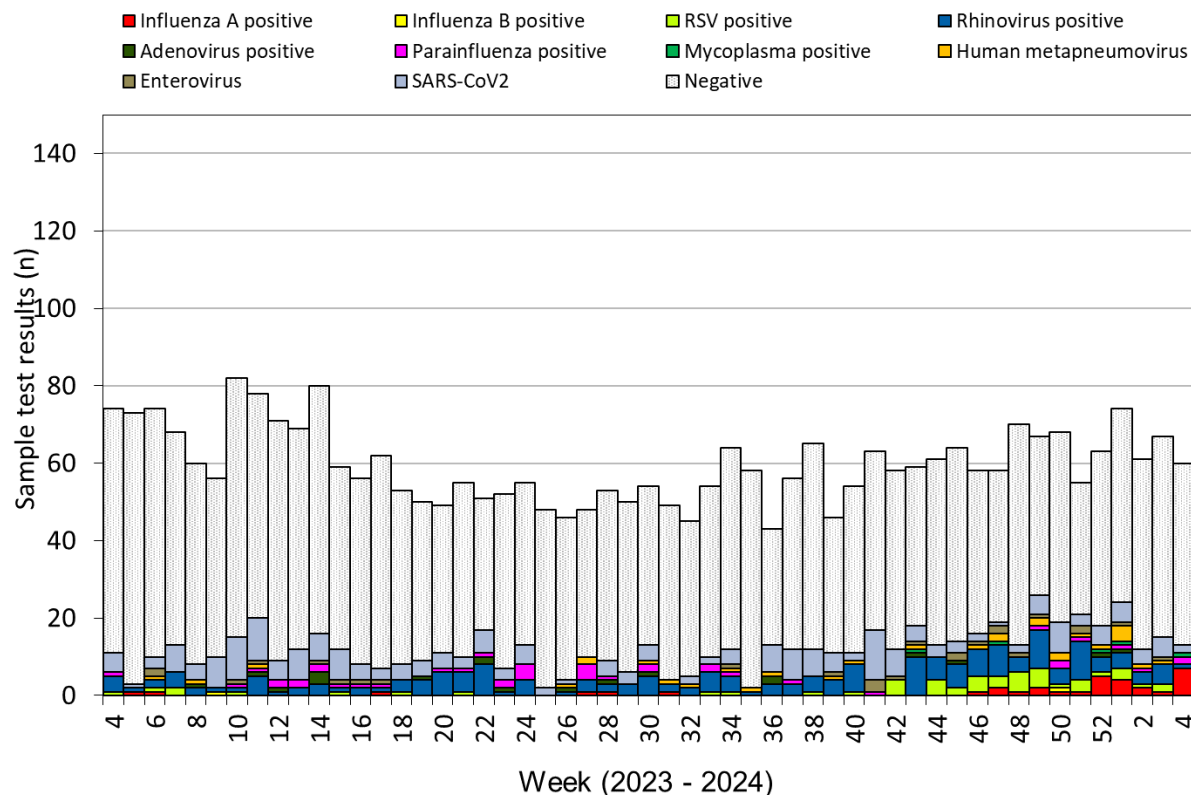
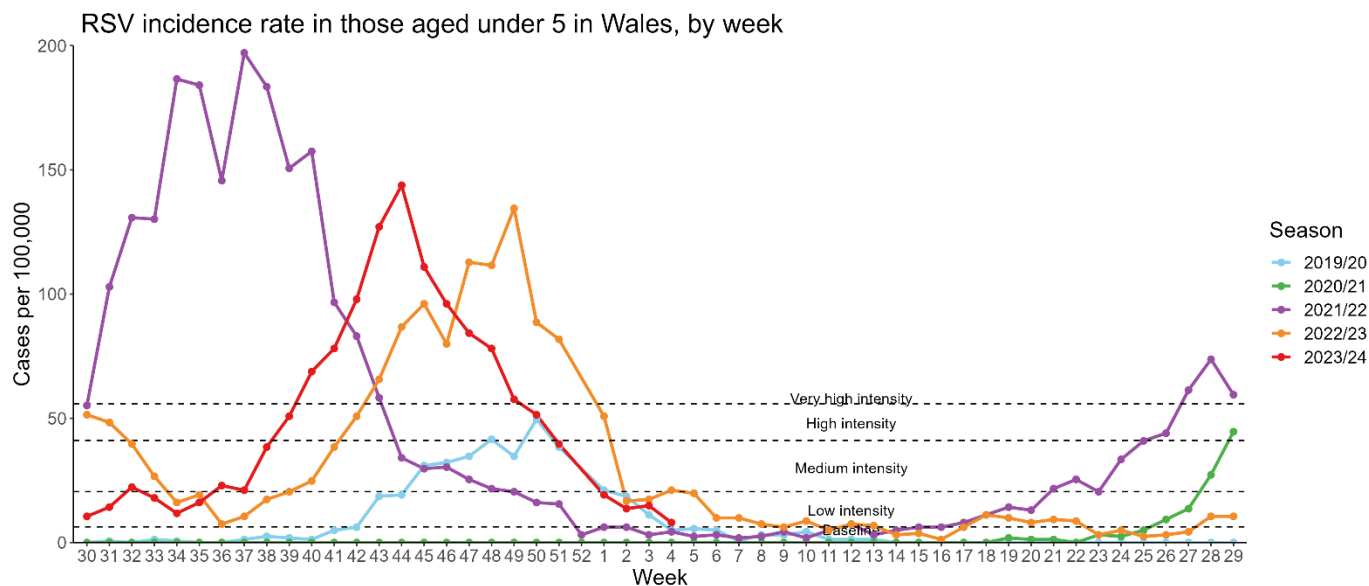


Figure 8. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 4 2023 to Week 4 2024.



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 4 2024.



*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 28/01/2024.

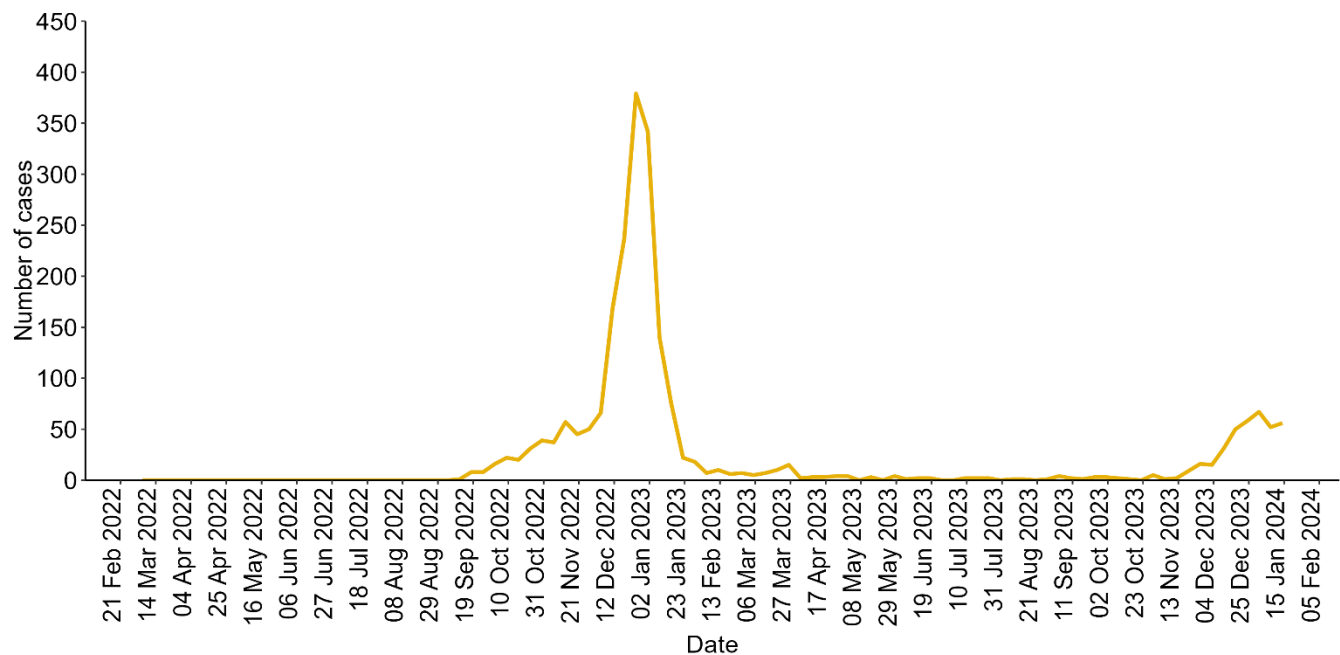


Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 28/01/2024.

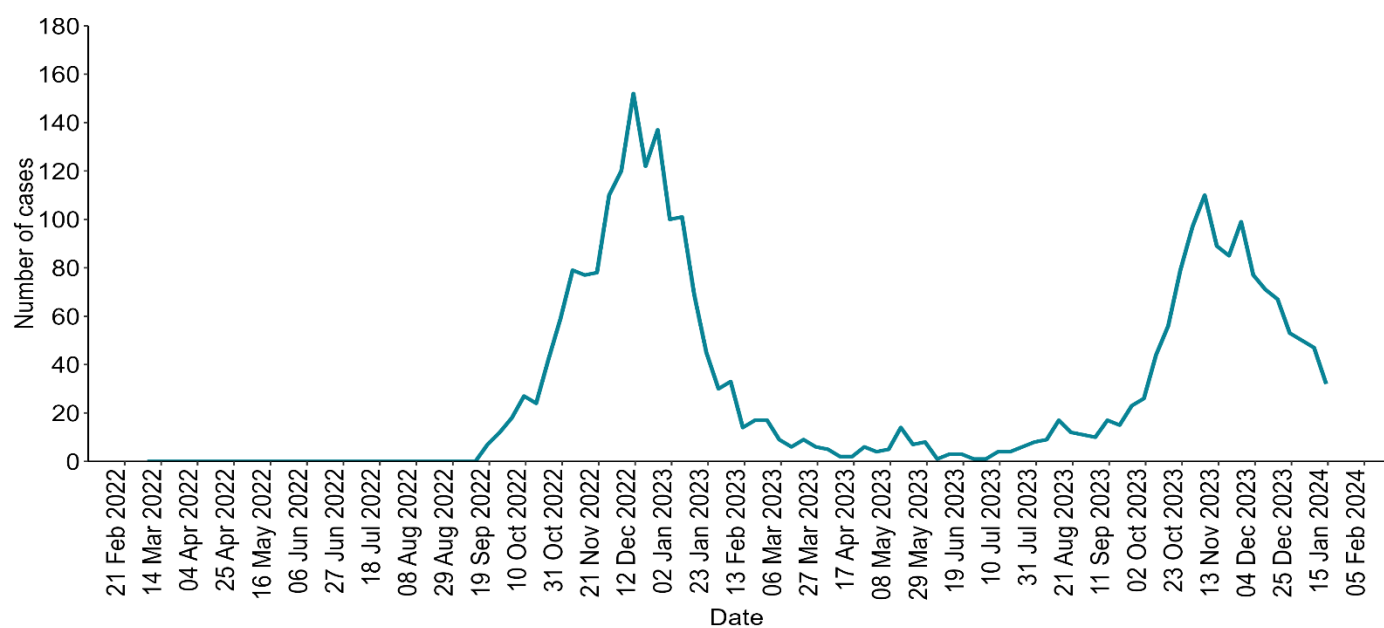
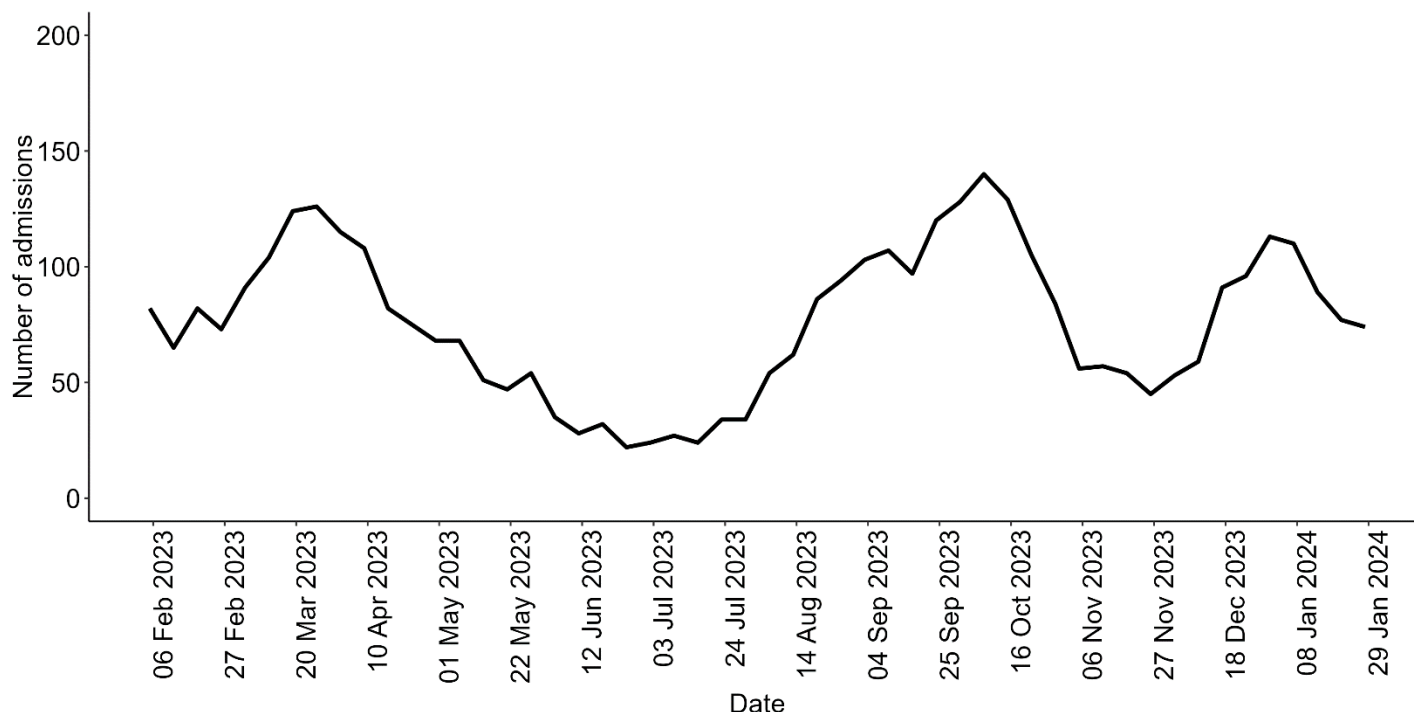
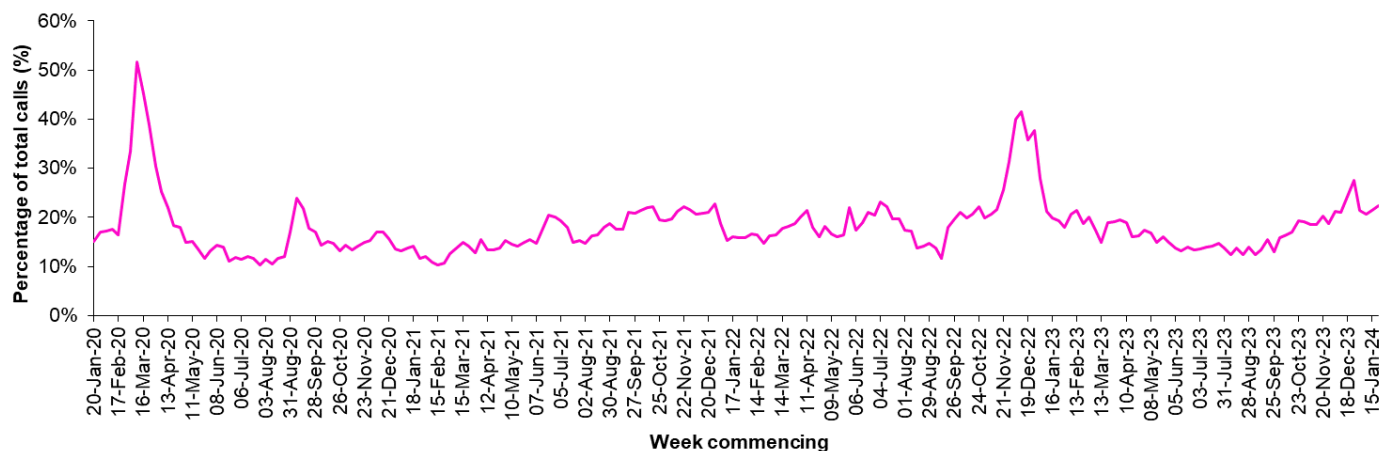


Figure 12. Seven day rolling sum of cases hospitalised in Wales within 28 days of an Covid-19 positive test result in the community (or up to 2 days post-admission), as of 28/01/2024.



Calls to NHS Direct Wales

Figure 13. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from Week 4 2020 - Week 4 2024.



¹ 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 23/01/2024).

Influenza immunisation uptake in the 2023/24 season	
People aged 65y and older	71.2%
People younger than 65y in a clinical risk group	37.6%
Children aged two & three years	41.6%
Children aged between four & ten years	61.3%
Children aged between 11 & 15 years	48.7%
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 3, GP ILI consultations decreased slightly to 7.5 per 100,000 in England. In week 3, consultations were 9.9 per 100,000 in Scotland.
- During Week 3, 899 samples testing positive for influenza were reported in England (655 influenza A(not subtyped), 183 influenza A(H3N2), 46 influenza A(H1N1)pdm09) and 15 were influenza B). Overall influenza positivity increased to 13.0% in England and to 14.0% in Scotland.
- In England, RSV hospitalisations in the under 5-year-olds decreased to 2.5 per 100,000 in week 3. In Scotland, RSV hospitalisations in the under 1-year olds were 44.9 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 during week 3, that influenza positivity remains elevated above the 10% positivity epidemic threshold at 27% compared to 26% in the previous week. Of 41 countries and areas reporting on influenza intensity, one reported very high intensity, eight reported high intensity, 17 reported medium intensity, 10 reported low intensity and the remainder reported baseline intensity. Of the 40 countries and areas reporting on geographic spread of influenza viruses within a country or area, 30 reported widespread, five reported regional, three reported sporadic, 1 reported local activity and one reported no activity. As of week 3, there were 1,379 confirmed influenza virus infection detections reported from sentinel primary care. 97% were type A viruses (73% influenza A(H1N1)pdm09 and 27% influenza A(H3)).

Source: European Respiratory Virus Surveillance Summary (ERVISS): <https://erviss.org/>

- The WHO reported on 22/01/2024, based on data up to 07/01/2024 that globally, influenza detections decreased although some countries in the northern hemisphere continued to report increased activity.
- In the countries of North America, influenza detections remained elevated, as expected for this time of the year. Influenza A(H1N1)pdm09 viruses were predominant.
- In Europe and Central Asia, influenza activity increased above 10% positivity epidemic threshold which saw the influenza season begin in week 51. Influenza A virus detections were predominant.
- In Northern Africa, influenza detections of predominantly influenza A(H1N1) continued to increase, with elevated and increased activity in Algeria and Tunisia. Egypt reported that detections decreased.
- In East Asia, influenza activity remained elevated but decreased overall due to decreases in China and the Republic of Korea.
- In Western Asia, influenza activity across all seasonal subtypes decreased overall. Influenza A viruses increased in Georgia, Lebanon, and Turkey.
- In the Central American and Caribbean countries, influenza activity increased in the Caribbean and decreased in Central America.
- In Tropical South America, influenza Activity decreased with few detections of influenza A and B viruses reported in most countries.
- In the temperate zones of the southern hemisphere, indicators of influenza activity were low or below seasonal threshold.
- In tropical Africa, influenza detections remained low in western and middle Africa and decreased in Eastern Africa.
- In Southern Asia, influenza activity decreased but remained elevated in some countries with increasing proportion of influenza B and A(H3N2).
- In South-East Asia, influenza activity driven predominantly by all seasonal subtypes decreased but remained elevated.
- In the temperate zones of the southern hemisphere, influenza activity was reported at low level below the 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 25/01/2024), during the period from 25/12/2023 – 07/01/2024 National Influenza Centres and other national influenza laboratories from 112 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 523,975 specimens during that period, of which 67,212 were positive for influenza viruses, 56,303 (84.2%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 8163 (27%) were influenza A(H1N1)pdm09 and 22,045 (73%) were influenza A(H3N2). Of the 67,212 samples testing positive for influenza viruses, 10,609 tested positive for Influenza B (15.8%). **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 remain elevated in most parts of the country during week 3 (ending 20/01/2024). Nationally, 12,194 (14.2%) out of 85,664 specimens have tested positive for influenza in week 3 in clinical laboratories nationwide, of these positive samples, 9,509 (78%) were influenza A and 2,685 (22%) were influenza B. Further characterisation has been carried out on 2,238 specimens by public health laboratories, and 699 samples tested positive for influenza; 264 influenza A(H1N1)pdm09, 106 influenza A(H3N2), 211 influenza A(not subtyped) and 118 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 3, influenza activity decreased or remained similar compared to the previous week. During week 3, 3,859 influenza detections were reported: 3,590 influenza A, and 269 influenza B. The percentage of ILI visits was 1.4%. **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 20/01/2024.

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

COVID-19 – UK and international summary

- As of 24/01/2024, there were 8.0 new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. There were five suspected COVID-19 deaths with a date of death in the most recent 7-day reporting period, reported to Public Health Wales. There were 18 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

- Since the beginning of 2023 and as of 10 January 2024, two MERS-CoV cases have been reported by United Arab Emirates and Saudi Arabia. In total, 2,617 laboratory-confirmed cases of locally acquired Middle East Respiratory Syndrome coronavirus (MERS-CoV) worldwide, including 947 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:

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