

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

Wednesday 10th April 2024 (covering Week 14 2024)



GIG
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Wales

Current level of influenza activity: Low

Influenza activity trend: **Decreasing**

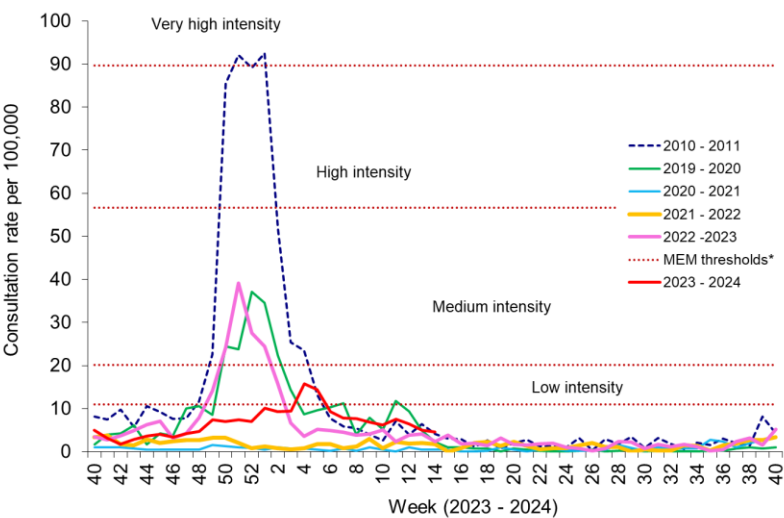
Confirmed influenza cases since 2023 Week 40: 4281 (469 influenza A(H3N2), 991 influenza A(H1N1)pdm09, 2344 influenza A untyped and 477 influenza B)

During Week 14 (ending 07/04/2024) there were 97 cases of influenza confirmed, with three cases from previous weeks. Influenza is still circulating. COVID-19 cases have decreased in recent weeks. RSV activity in children under 5 years remains at baseline intensity levels. Additionally, recent weeks have seen increases in mycoplasma, rhinovirus, adenovirus, and parainfluenza.

- The **Sentinel GP consultation rate for influenza-like illness (ILI)** in Wales during Week 14, was 4.6 consultations per 100,000 practice population (Table 1). The rate decreased compared to the previous week (5.0 consultations per 100,000. Figure 1).
- The **Sentinel GP consultation rate for Acute Respiratory Infections (ARI)** was 192.3 per 100,000 practice population during Week 14 (Table 2 and Figure 3). This is an increase compared to the previous week (171.1 per 100,000). During week 14, Lower Respiratory Tract Infections increased to 83.5 per 100,000 and Upper Respiratory Tract Infections increased to 113.0 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 14 remained stable at 22.3% (Figure 13).
- During Week 14, 1,224 specimens received multiplex respiratory panel testing from patients attending hospitals. **62 tested positive for influenza (35 influenza A(not subtyped), 10 influenza A(H1N1), 3 influenza A(H3) and 14 influenza B)**. Overall influenza test-positivity remained stable at 5.1%. In those aged under 18 positivity decreased to 4.3% from 5.4%, and in those aged over 18 it increased to 5.5% from 5.0%. In addition, there were: 146 rhinovirus, 75 adenovirus, 73 parainfluenza (PIV), 58 mycoplasma, 49 hMPV, 48 SARS-CoV2, 26 seasonal coronaviruses, 12 enterovirus, and seven RSV positive samples (Figure 5). Additionally, 350 samples from patients were tested for influenza, RSV and SARS-CoV-2 only. Of these 350 samples there were **16 influenza A, 16 influenza B**, 34 for SARS-CoV-2, and two RSV. (Figure 7). Furthermore, during week 14, 52 respiratory specimens were tested from patients in intensive care units (ICU) of which one was positive for influenza (influenza A(H1N1))(Figure 8).
- There were 33 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 14. Of the 28 samples, **three tested positive for influenza A (three influenza A(H1N1))**, nine mycoplasma, four RSV, four parainfluenza, one adenovirus, one enterovirus, one seasonal coronavirus and one SARS-CoV2 as at 10/04/2024) (Figure 4).
- From all samples where influenza subtyping information was immediately available during week 14, three were influenza A(H3), 13 influenza A(H1N1), 14 were influenza B and 35 influenza A(not subtyped) (Figure 6). *Additional typing is carried out on all confirmed influenza A samples where typing results are not available from first-line testing, the additional information from these tests will be added to case totals after the end of the season.*
- **Confirmed RSV case incidence in children aged under 5 decreased in the most recent week and is now at baseline intensity levels (compared to historic levels before 2021)**. In week 14 there were 3.7 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 20 and 4 respectively during Week 14 (Figures 10 & 11) and 22 for SARS-CoV-2 during week 14 (Figure 12).
- During week 14, two **ARI outbreaks** were reported to the Public Health Wales Health Protection team. Both outbreaks were reported as COVID-19 and were in residential homes.
- According to [EuroMoMo](#) analysis, all-cause deaths in Wales were not in excess during week 13.
- As at 26/03/2024, uptake of influenza vaccination was 72.4% in adults aged 65 years and older, 39.0% in those aged 6 months to 64 years at clinical risk, 42.9% in two- and three-year-old children, 61.9% in children aged four to 10 years and 49.8% in children aged 11 to 15 years (Table 3).

Respiratory infection activity in Wales

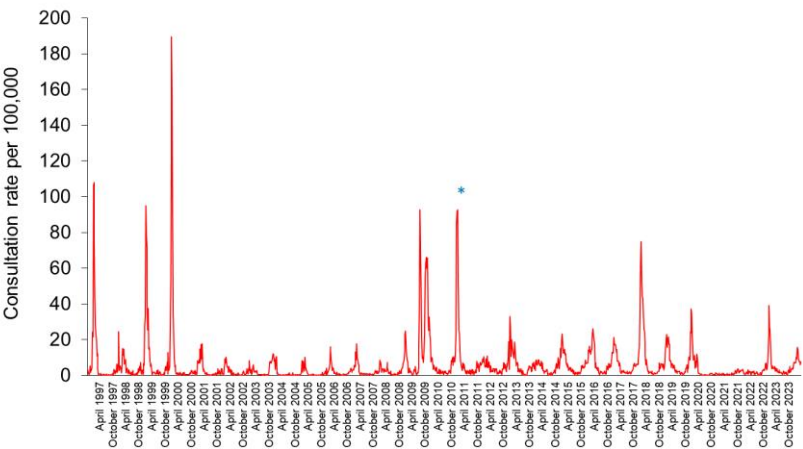
Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 08/04/2024).



* 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 14 2024).



* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 9 – Week 14 2024 (as of 08/04/2024).

Age group	9	10	11	12	13	14
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	6.7	0.0	0.0	0.0	6.8
5 - 14	2.2	2.2	4.6	2.4	0.0	0.0
15 - 24	6.4	6.4	4.4	2.2	4.4	4.3
25 - 34	7.6	15.1	13.7	16.2	6.0	5.8
35 - 44	9.0	9.0	13.1	11.6	9.6	9.2
45 - 64	11.7	4.5	4.6	6.7	5.7	7.3
65 - 74	0.0	4.3	2.2	2.3	2.2	0.0
75+	6.4	2.1	4.3	4.5	6.7	0.0
Total	6.9	6.1	6.3	6.5	5.0	4.6

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 9 – Week 14 2024 (as of 08/04/2024).

Age group	9	10	11	12	13	14
< 1	1670.5	1506.2	1277.0	1625.4	701.0	1098.2
1 - 4	831.8	1174.0	1093.5	893.2	556.2	586.0
5 - 14	416.6	449.5	486.7	497.8	236.4	249.7
15 - 24	182.1	190.4	190.4	192.6	155.4	139.9
25 - 34	189.2	194.5	219.0	234.2	139.7	149.5
35 - 44	211.6	177.0	198.6	214.7	149.1	183.4
45 - 64	180.4	167.7	197.5	178.5	130.7	155.1
65 - 74	134.5	177.0	185.6	158.1	140.0	163.1
75+	221.5	180.4	248.3	185.0	157.4	216.5
Total	244.3	252.6	274.2	259.5	171.1	192.3

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 14 2023 – Week 14 2024.

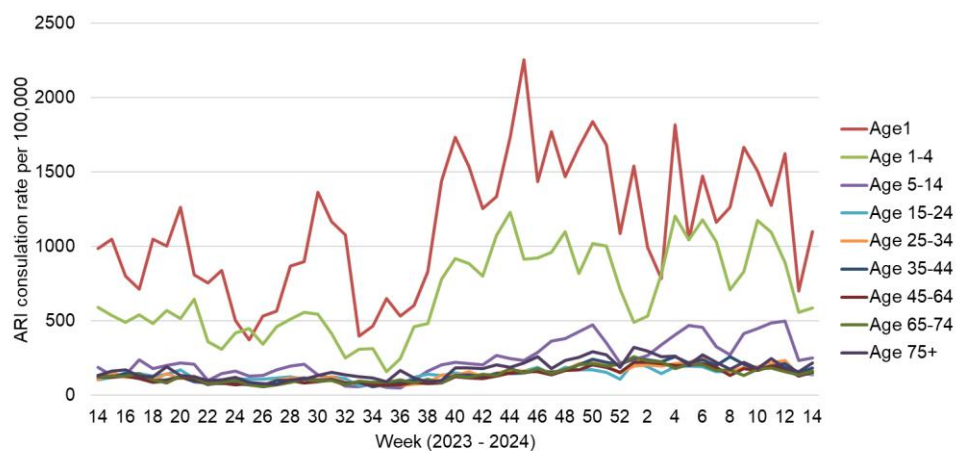
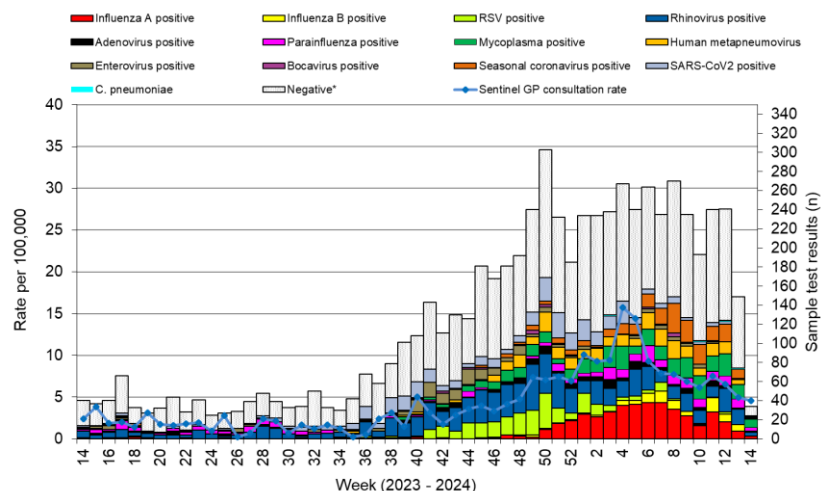
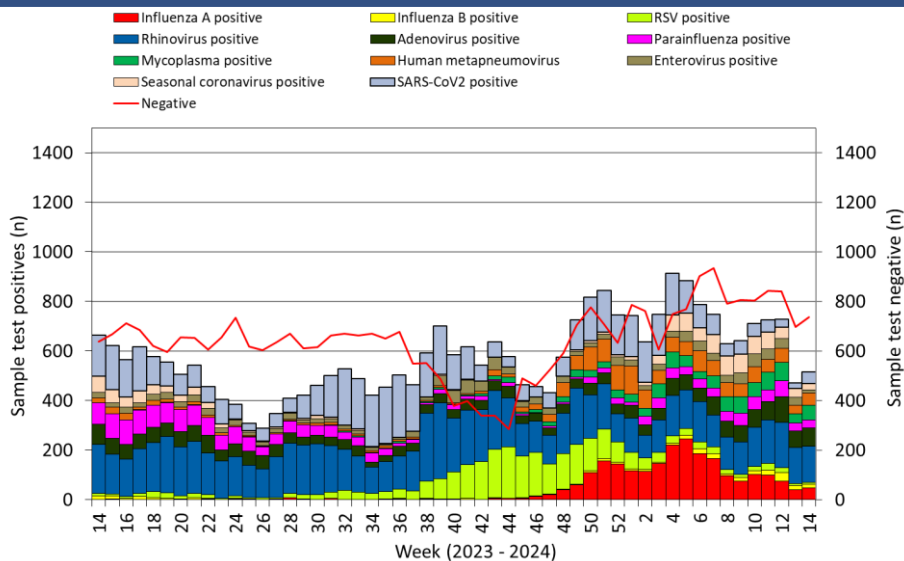


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 10/04/2024, by week of sample collection, Week 14 2023 to Week 14 2024.



* 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. Additionally, week 13 includes Bank Holiday Friday, where general practices would have been closed.

Figure 5. Specimens submitted for virological testing for hospital patients and non-sentinel GPs as of 08/04/2024 by week of sample collection, Week 14 2023 to Week 14 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 24/03/2024 by week of sample collection, Week 14 2023 to Week 14 2024.

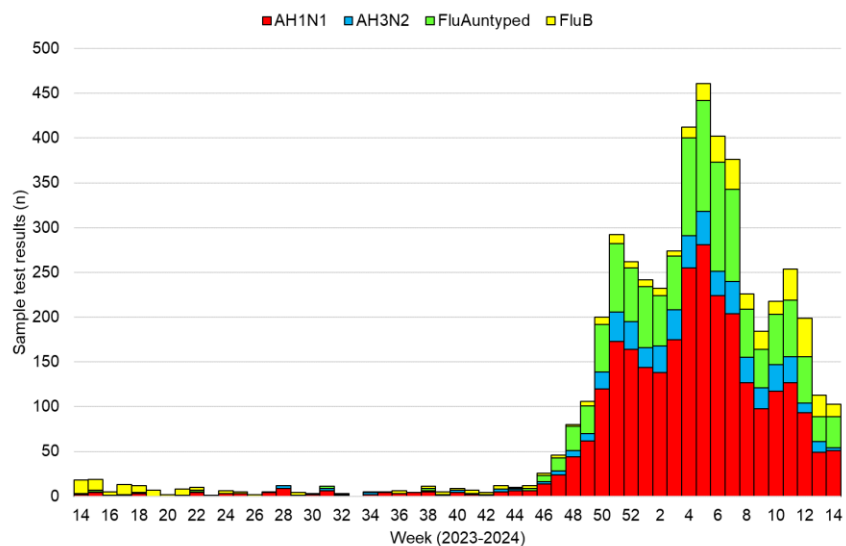


Figure 7. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 08/04/2024 by week of sample collection, Week 14 2023 to Week 14 2024.

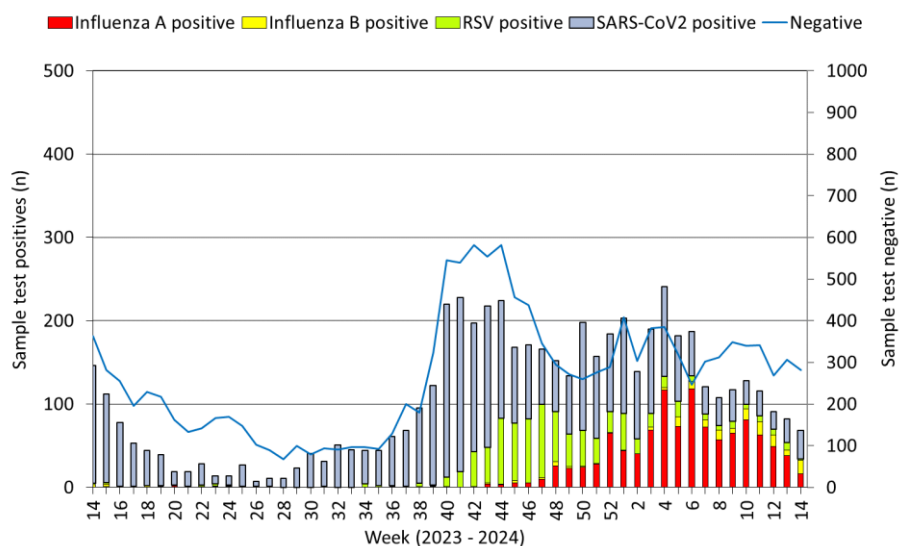
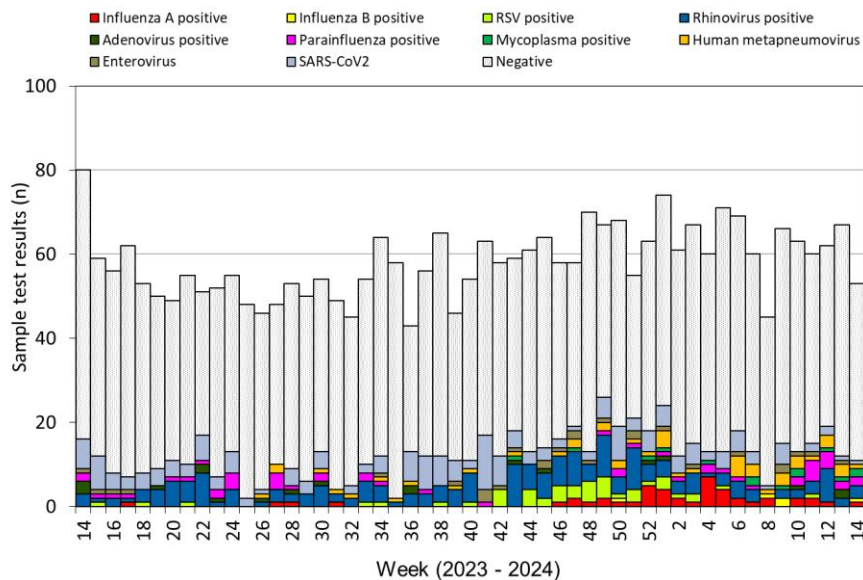
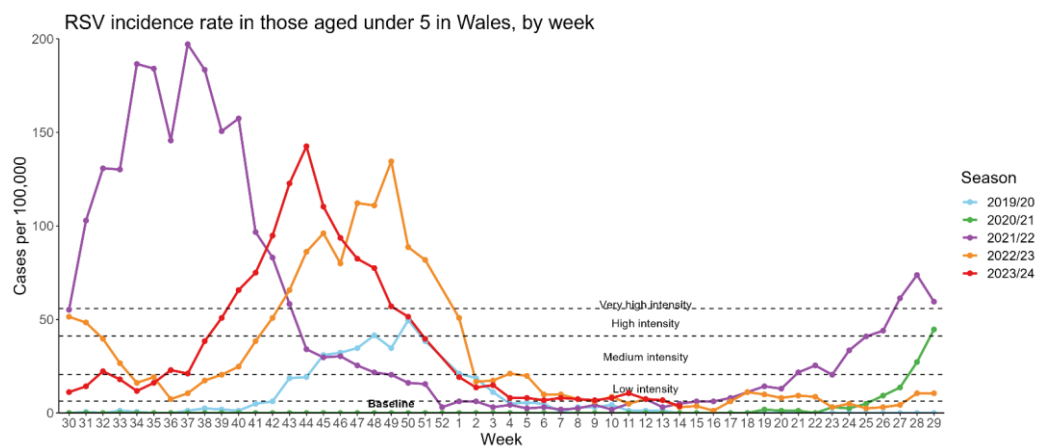


Figure 8. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 14 2023 to Week 14 2024.



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 14 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 07/04/2024.

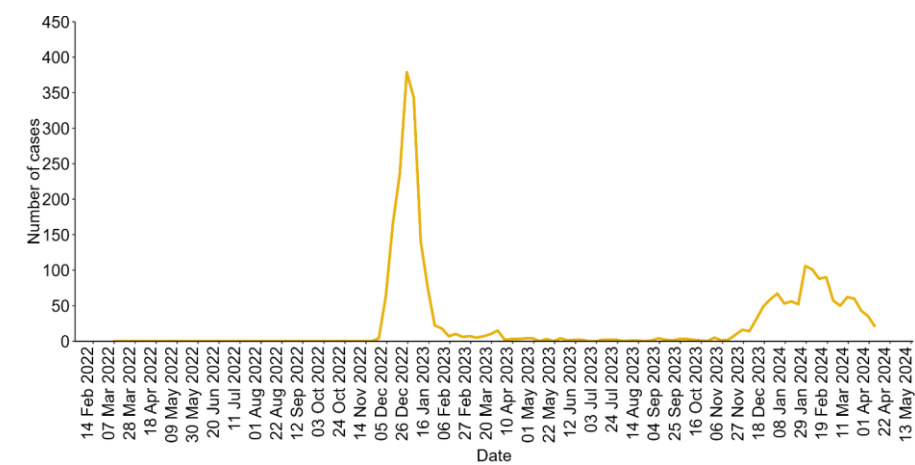


Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 07/04/2024.

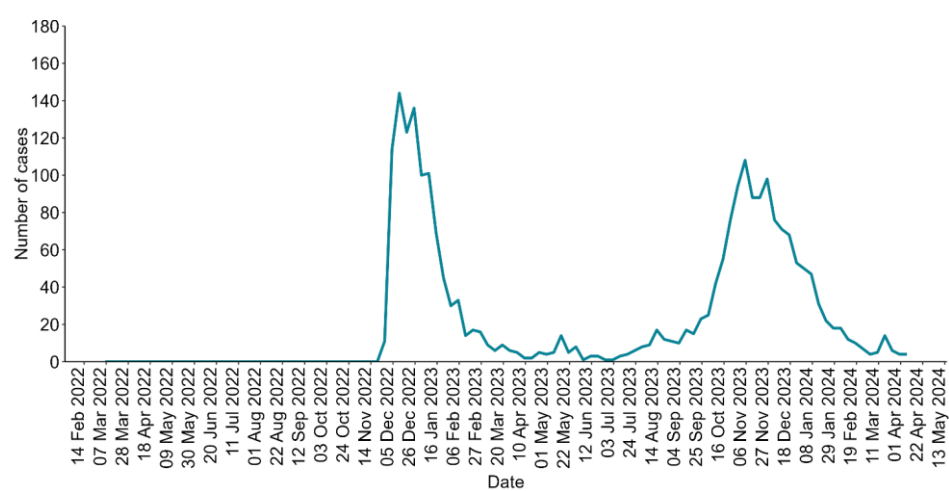
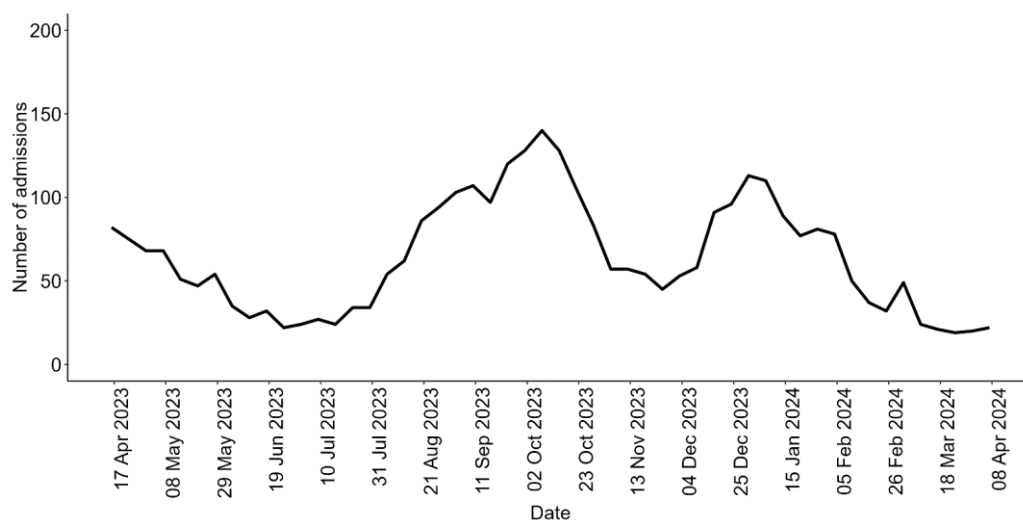
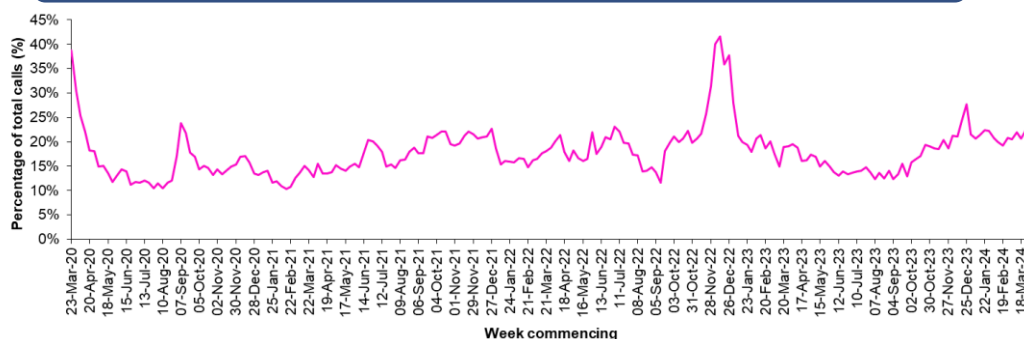


Figure 12. Seven day rolling sum of cases hospitalised in Wales within 28 days of an Covid-19 positive test result in the community (or up to 2 days post-admission), as of 07/04/2024.



Calls to NHS Direct Wales

Figure 13. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from Week 14 2020 - Week 14 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 26/03/2024).

Influenza immunisation uptake in the 2023/24 season	
People aged 65y and older	72.4%
People younger than 65y in a clinical risk group	39.0%
Children aged two & three years	42.9%
Children aged between four & ten years	61.9%
Children aged between 11 & 15 years	49.8%
Total NHS staff	36.7%
NHS staff with direct patient contact	36.4%

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 13, GP ILI consultations decreased to 3.4 per 100,000 in England. In week 13, GP ILI consultations decreased to 7.0 per 100,000 in Scotland.
- During Week 13, 5,798 samples testing positive for influenza were reported in England of which 210 were positive for influenza (114 influenza A(not subtyped), 41 influenza A(H3N2), four influenza A(H1N1)pdm09, and 51 influenza B). Overall influenza positivity decreased to 3.6% in England in week 13 and to 7.6% in Scotland in week 13.
- UK summary data are available from the [UKHSA Influenza and COVID-19 Surveillance Report](#) and [COVID-19 & Respiratory Surveillance \(shinyapps.io\)](#)
- The WHO and the European Centre for Disease Prevention and Control (ECDC) reported during week 13, that influenza positivity remains elevated above the 10% positivity epidemic threshold but continues to decrease towards the 10% threshold. Of the 37 countries and areas reporting on influenza intensity, one reported high intensity, eight reported medium intensity, 16 reported low intensity and the remainder reported baseline intensity. Of the 36 countries and areas reporting on geographic spread of influenza viruses within a country or area, 12 reported widespread, 10 reported regional, three reported local, nine reported sporadic and the remainder reported no activity. As of week 13, there were 335 confirmed influenza virus infection detections reported from sentinel primary care 73% of which were influenza B viruses.
Source: European Respiratory Virus Surveillance Summary (ERVISS): <https://erviss.org/>
- The WHO reported on 03/04/2024, based on data up to 24/03/2024 that in the northern hemisphere, influenza activity continued to decline in most countries in the northern hemisphere. Influenza A(H1N1) and B viruses predominated. In the Southern hemisphere, influenza activity remained low, with a mix of influenza A and B viruses detected. Some countries in South America reported elevated activity with influenza A predominating.
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 02/04/2024), during the period from 19/02/2024 – 03/03/2023 National Influenza Centres and other national influenza laboratories from 140 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 603,883 specimens during that period, of which 86,324 were positive for influenza viruses, 55,285 (64.04%) were typed as influenza A (of the subtyped influenza A viruses, 6,767 (44.9%) were influenza A(H1N1)pdm09 and 8,304 (55.1%) were influenza A(H3N2). Of the 86,324 samples testing positive for influenza viruses, 31,039 tested positive for Influenza B (35.96%). **Source:** Flu Net: <https://www.who.int/tools/flunet>

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Update on influenza activity in North America

- The USA Centers for Disease Control and Prevention (CDC) report that influenza activity levels remain elevated nationally but is decreasing (ending 30/03/2024). Nationally, 6,293 specimens have tested positive for influenza during week 13 in clinical laboratories nationwide, of these positive samples, 3,081 (49%) were influenza A and 3,212 (51%) were influenza B. Further characterisation has been carried out on 1,785 specimens by public health laboratories, 329 samples tested positive for influenza; 69 influenza A(H1N1)pdm09, 69 influenza A(H3N2), 63 influenza A(not subtyped) and 128 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 13, influenza activity remained similar compared to the previous week. During week 13, 2,529 influenza detections were reported: 715 influenza A, and 1,814 influenza B. The percentage of ILI visits was 2.3%. **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 slightly decreased in the week beginning 30/03/2024.
Source: CDC RSV national trends: <https://www.cdc.gov/surveillance/nrevss/rsv/natl-trend.html>

COVID-19 – UK and international summary

- As of 04/04/2024, there were 1.5 new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. 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 01 February 2024, a total of 2200 human cases have been reported, including 858 deaths. Overall, human infections of MERS-CoV have been reported from 27 countries, in all six WHO regions. Of the 2609 MERS-CoV cases and 939 deaths reported globally, 84% and 91%, respectively, have been reported from KSA, including these newly reported cases and deaths. (Figure 2). Since 2019, no MERS-CoV cases have been reported from countries outside the Middle East. WHO Global Alert and Response website: <https://www.who.int/emergencies/disease-outbreak-news>
- Since the 05 February and as of 12 February 2024, four new MERS-CoV cases, including two fatalities have been reported by Saudi Arabia.
- 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