



Current level of influenza activity: Low

Influenza activity trend: Decreasing

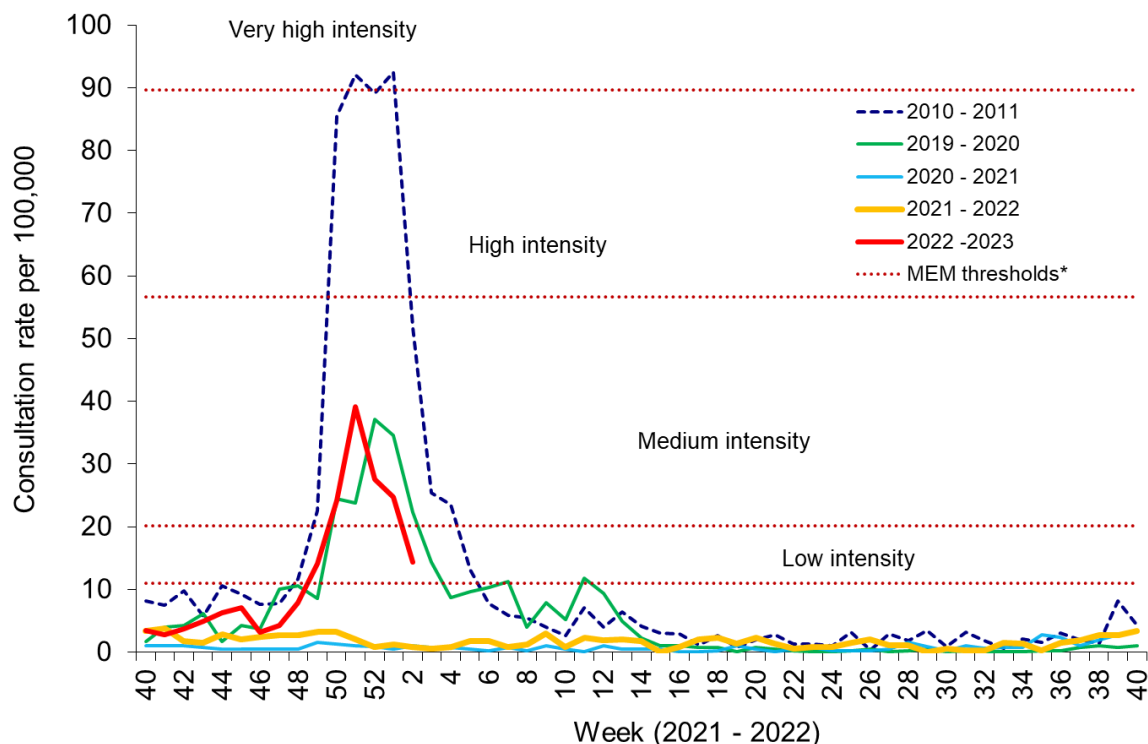
Confirmed influenza cases since 2022 week 40: 7239 (2937 influenza A(H3N2), 1573 influenza A(H1N1)pdm09, 2578 influenza A(not subtyped) and 151 influenza B)

During Week 02 (ending 15/01/2023) there were 174 cases of influenza (a decrease from the previous week), with a further 13 cases from previous weeks. Influenza continues to circulate in Wales. COVID-19 cases also continue to be detected in symptomatic patients in hospitals and in the community. RSV incidence in children under five years of age has decreased and is currently at low levels (compared to the 10 seasons leading up to 2020). SARS-CoV-2, rhinovirus, RSV are the most commonly detected causes of Acute Respiratory Infection (ARI).

- The **Sentinel GP consultation rate for influenza-like illness (ILI)** in Wales during week 02, was 14.3 consultations per 100,000 practice population (Table 1). This is a decrease compared to the previous week (24.7 consultations per 100,000, Figure 1). Consultation rates were highest in those aged 45 to 64 years.
- The **Sentinel GP consultation rate for Acute Respiratory Infections (ARI)** was 264.4 per 100,000 practice population during Week 02 (Table 2 and Figure 3). Weekly consultations for both Lower Respiratory Tract Infections and Upper Respiratory Tract Infections decreased 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 02 decreased to 21.2% (Figure 9).
- During Week 02 2023, 1,531 specimens received multiplex respiratory panel testing mainly from patients attending hospitals. These results do not include samples tested solely for SARS-CoV-2. There were **109** samples positive for influenza of which 28 were A(H1N1), 66 were A(H3N2), 9 were A(not typed), and 6 were influenza B. Overall influenza positivity was 7.1% across all age groups; 6.9% in those aged 18 years and over; and 7.8% in those aged under 18 years. In addition, there were 140 SARS-CoV-2, 140 rhinovirus, 133 RSV, 93 adenovirus, 72 human metapneumovirus, 62 seasonal coronavirus, 19 enterovirus, and 17 parainfluenza positive samples (Figure 5). Additionally, 1,164 samples from patients were tested for influenza, RSV and SARS-CoV-2 only, many of these tests may be associated with screening activities rather than diagnostic testing for patients presenting with ARI symptoms. Of these 1,748 samples, 157 were positive for SARS-CoV-2, 53 were positive for influenza A, 47 were positive for RSV and 6 for influenza B (Figure 6). Furthermore, 76 respiratory specimens were tested from patients in intensive care units (ICU) of which two were positive for influenza (two A(H3N2)) (Figure 7).
- There were 63 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 02. Of the 63 samples, 6 tested positive for influenza (three A(H3N2), two A(H1N1), and one Influenza B), one for a seasonal coronavirus, two for SARS-CoV2, two for RSV, three for human metapneumovirus, one for adenovirus, six for rhinovirus, two for parainfluenza and one for bocavirus (as at 18/01/2023) (Figure 4).
- **Confirmed RSV case incidence in children aged under five has substantially decreased compared to previous weeks and is now at low intensity levels.** In week 2 there were 16.7 confirmed cases per 100,000 in this age group (Figure 7).
- The 7-day rolling sum of cases hospitalised within 28 days of an influenza positive test result in the community (or up to two days post-admission) decreased to 55 during week 02 2023, from 102 cases in week 01 (figure 10).
- During Week 02 2023, 15 **ARI outbreaks** were reported to the Public Health Wales Health Protection team. Of the 15 outbreaks, all were reported as COVID-19. Of these 15 **ARI outbreaks**, 14 were reported in residential care homes and one in community or other settings.
- According to [EuroMoMo](#) analysis, all-cause deaths in Wales were not significantly in excess during week 01.

Respiratory infection activity in Wales

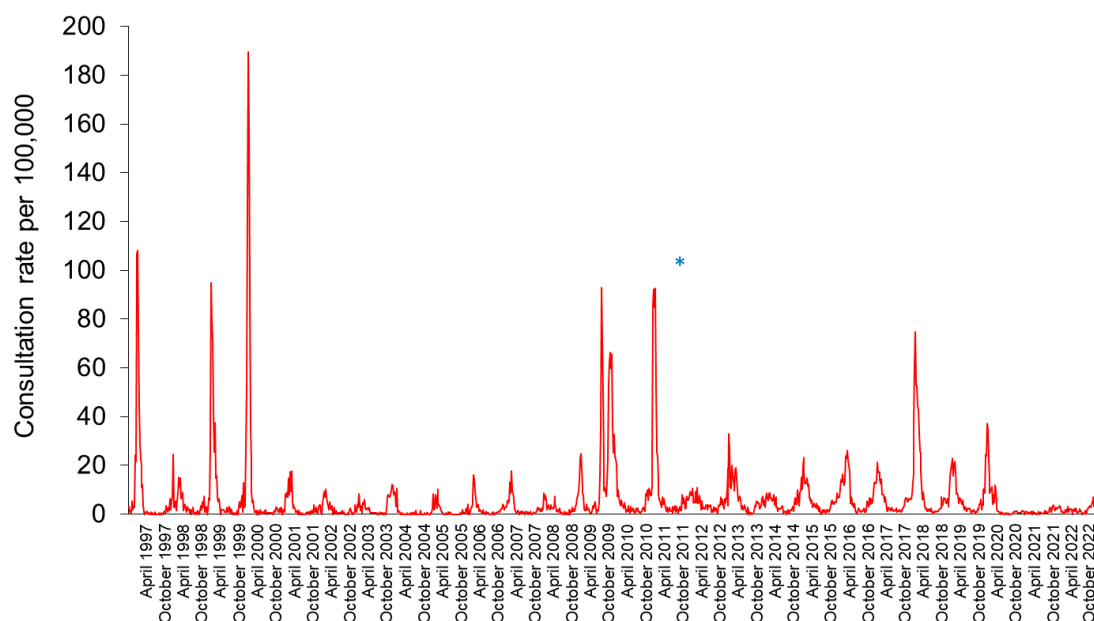
Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 15/01/2023).



* 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 48 1996 – week 02 2023).



* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 49 – week 02 2023 (as of 15/01/2023).

Age group	49	50	51	52	1	2
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	13.5	13.5	9.1	8.9	13.9	0.0
5 - 14	6.7	40.3	30.6	11.9	4.6	2.4
15 - 24	17.4	47.8	25.6	30.6	11.2	6.8
25 - 34	19.3	38.7	74.6	39.9	47.6	16.2
35 - 44	19.1	38.2	85.2	42.7	23.6	12.1
45 - 64	18.3	11.9	25.2	25.8	31.3	26.2
65 - 74	8.7	8.7	26.9	23.3	11.2	4.6
75+	2.2	2.2	24.4	23.7	36.8	21.3
Total	14.1	24.2	39.1	27.5	24.7	14.3

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 49 – week 02 2023 (as of 15/01/2023).

Age group	49	50	51	52	1	2
< 1	2704.4	2823.1	3542.8	1909.8	1623.4	1222.3
1 - 4	2742.4	2292.3	2386.8	1000.5	632.8	667.3
5 - 14	1035.9	1009.0	1135.2	385.2	215.2	214.9
15 - 24	308.6	406.4	329.6	206.0	266.0	175.4
25 - 34	301.5	371.1	501.8	296.5	297.5	219.3
35 - 44	317.7	382.4	585.9	341.5	280.9	221.5
45 - 64	239.2	306.1	430.8	312.1	310.8	245.3
65 - 74	212.4	372.9	439.0	340.6	343.3	285.6
75+	266.1	355.2	466.5	364.8	468.5	331.2
Total	459.9	514.8	622.7	355.7	332.4	264.4

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 02 2022 – week 02 2023 (as of 15/01/2023).

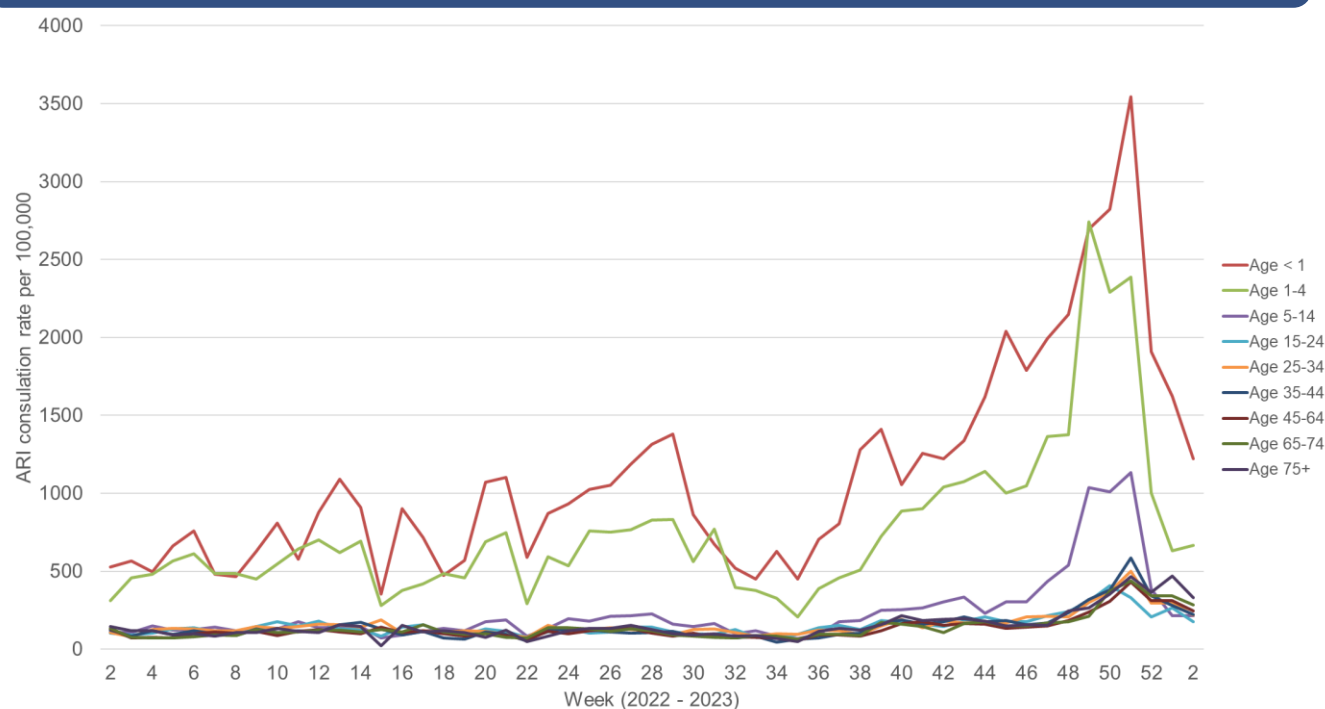
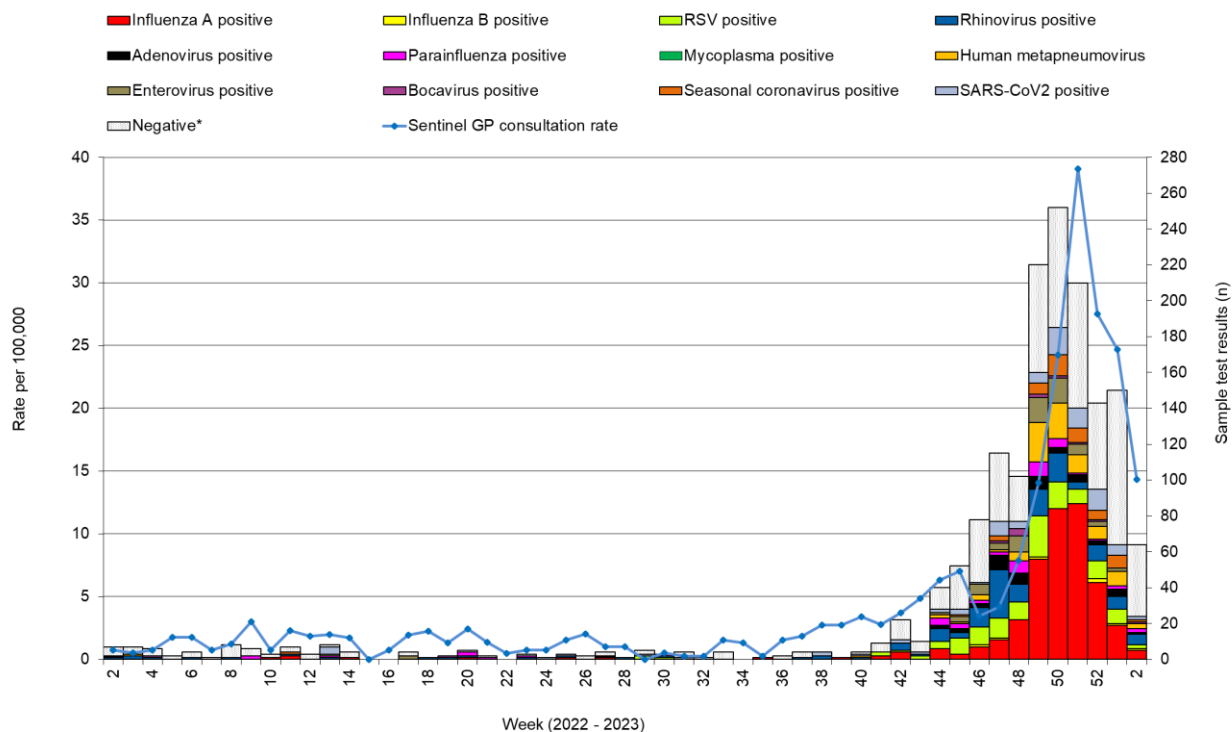
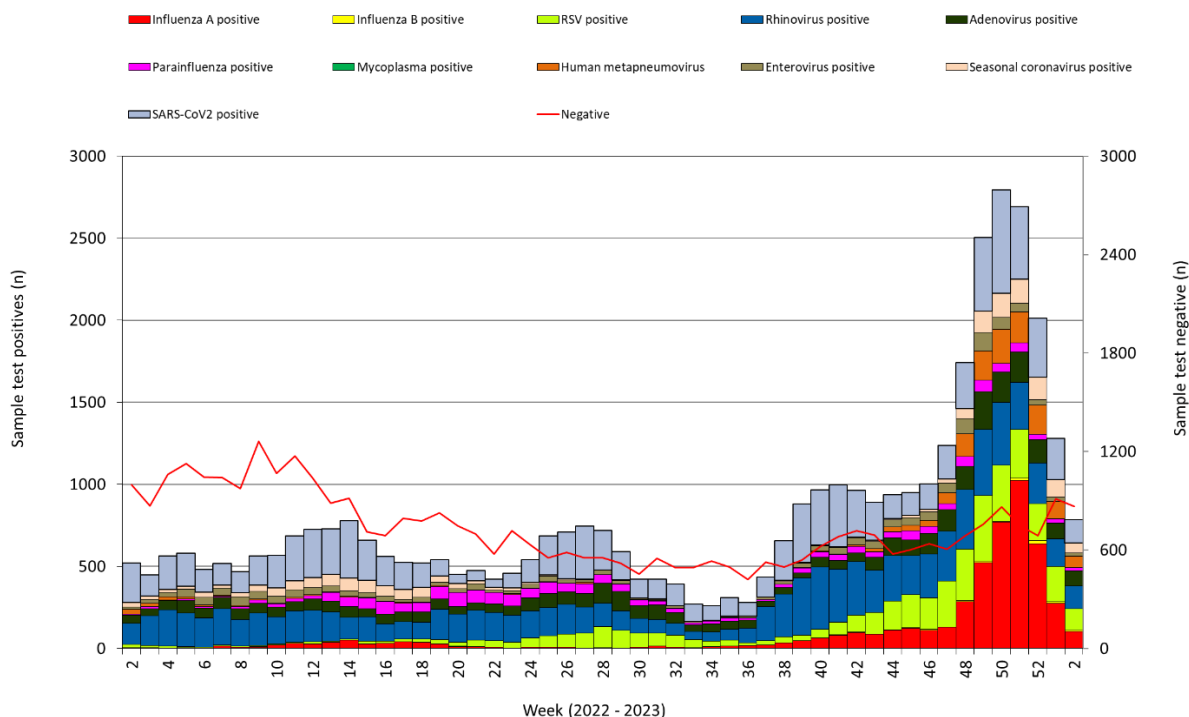


Figure 4. Specimens submitted for virological testing by sentinel GPs as of 15/01/2023, by week of sample collection, week 02 2022 to week 02 2023.



* 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.

Figure 5. Specimens submitted for virological testing for hospital patients and non-sentinel GPs as of 15/01/2023 by week of sample collection, week 02 2022 to week 02 2023.



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. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 15/01/2023 by week of sample collection, week 02 2022 to week 02 2023.

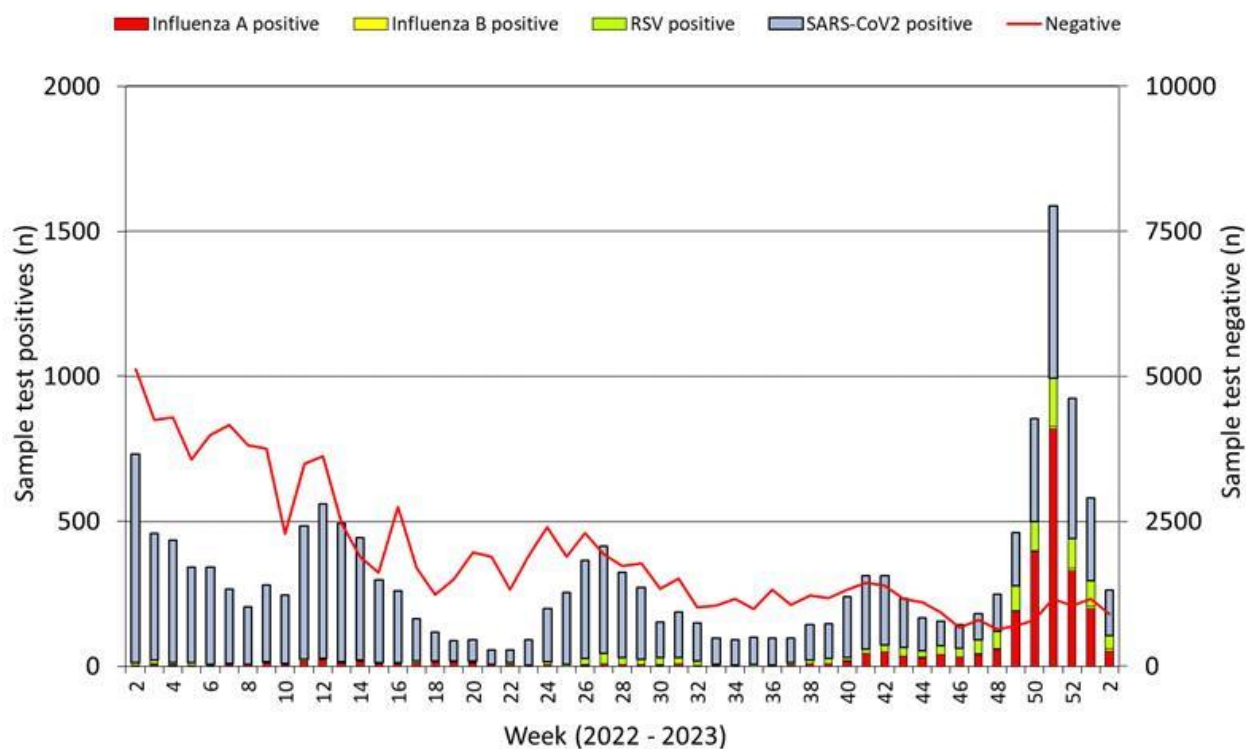
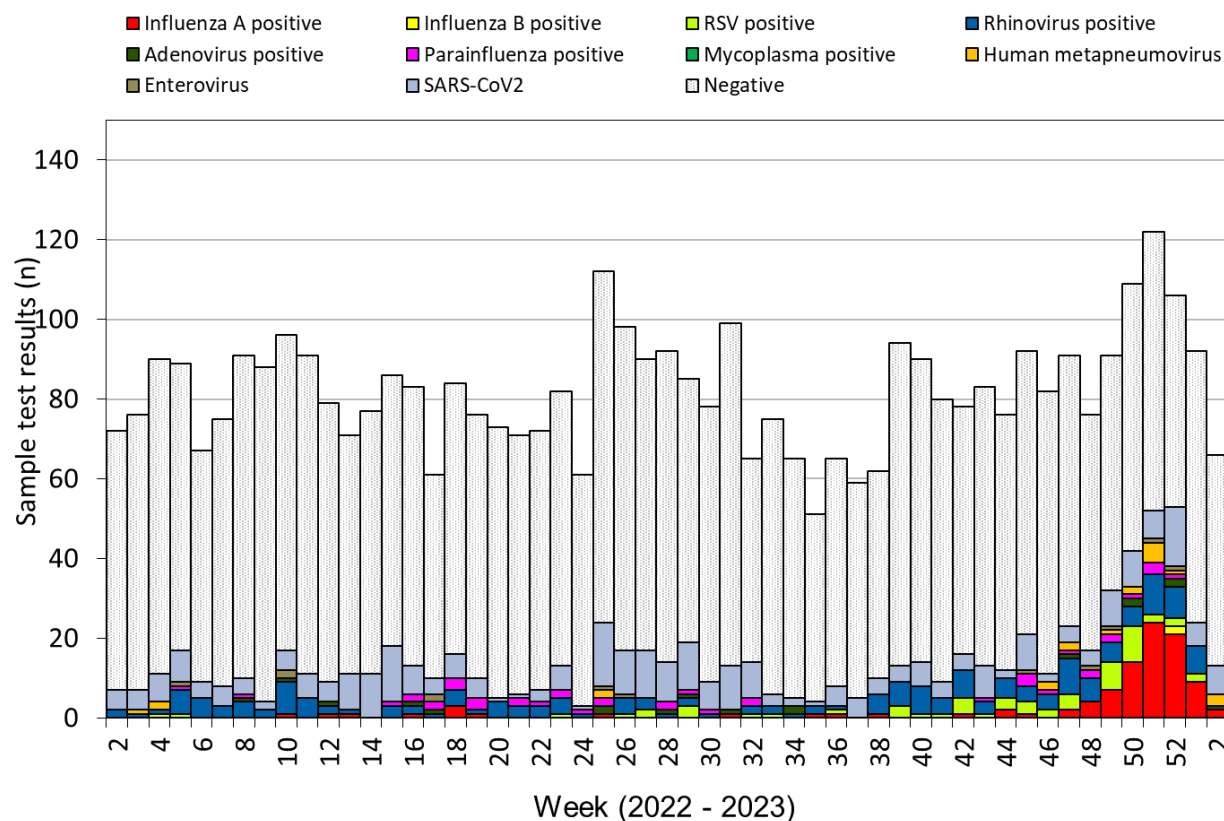
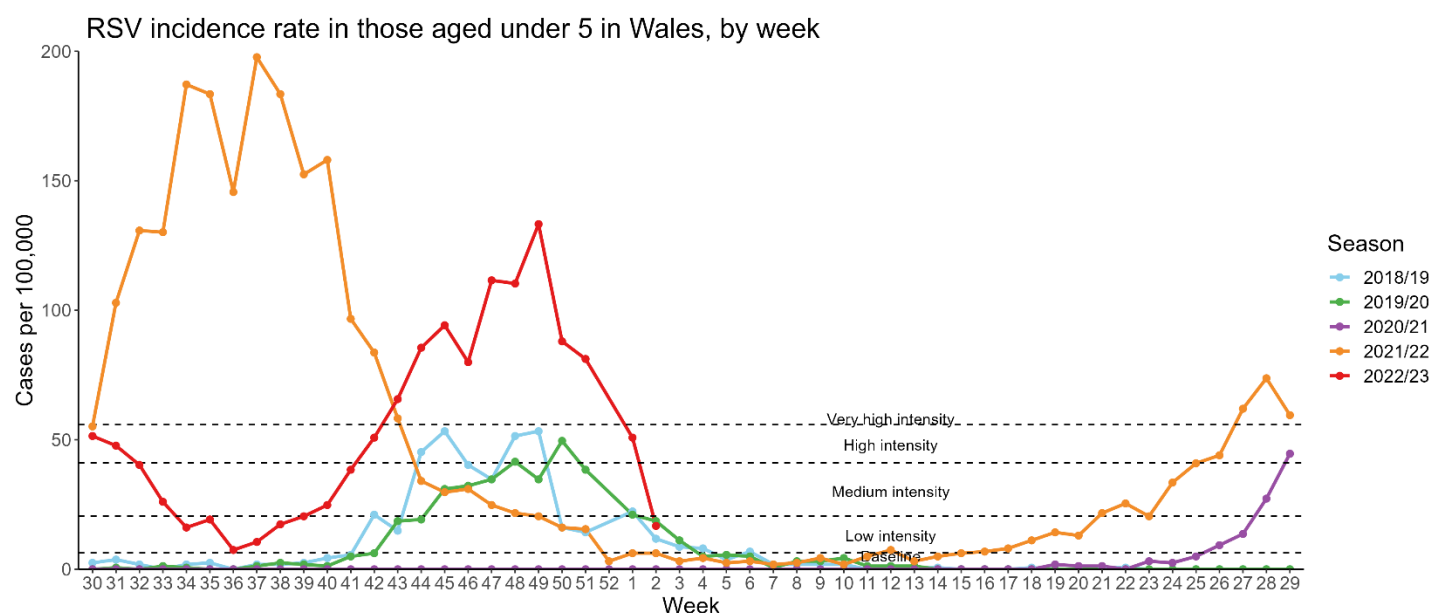


Figure 7. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 15 2022 to Week 02 2023.



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.

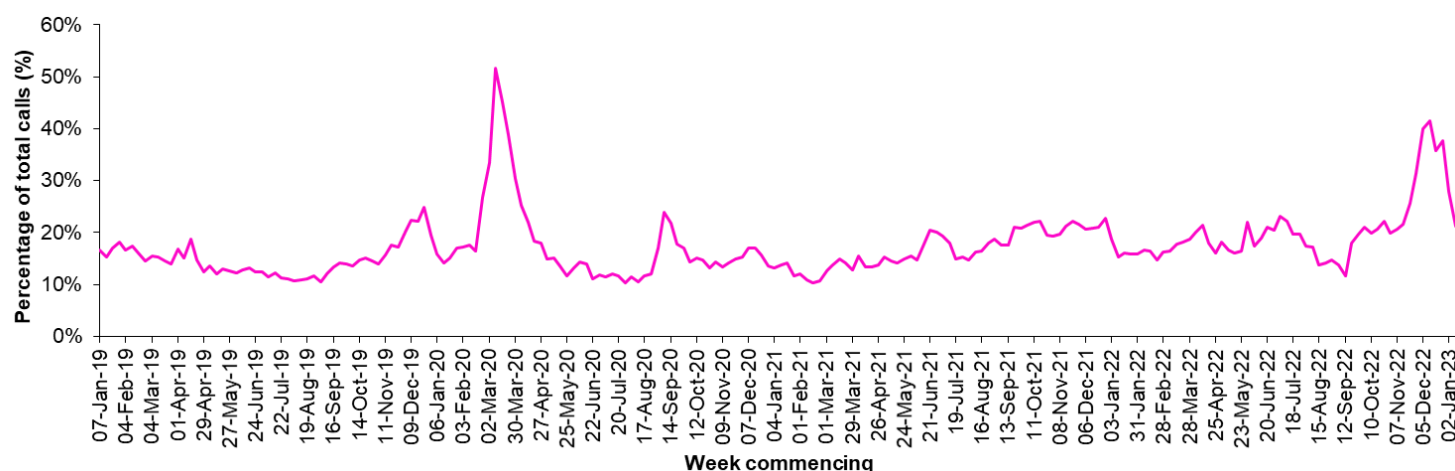
Figure 8. RSV incidence rate per 100,000 population aged under five years, week 30 2018 to Week 01 2023.



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

Calls to NHS Direct Wales

Figure 9. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 02 2019 - Week 02 2023 (as of 15/01/2023).



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.

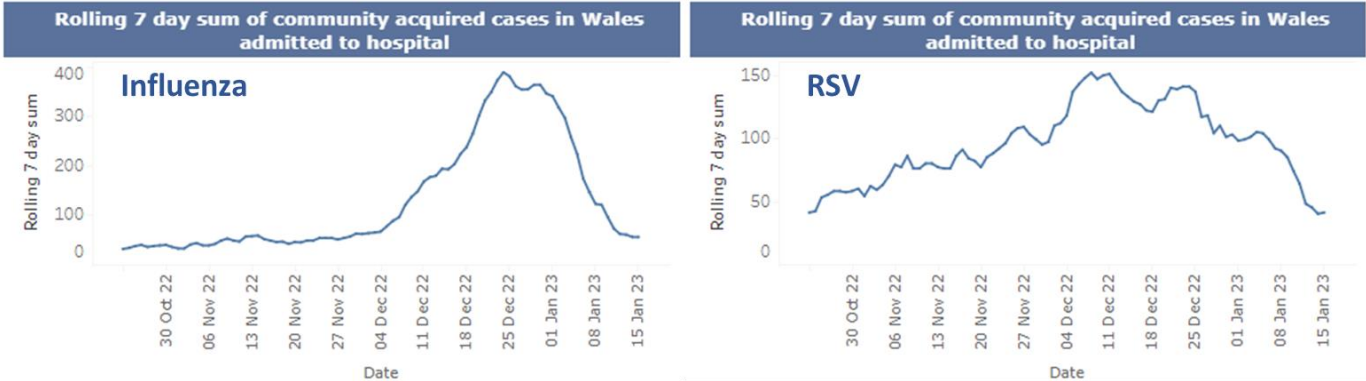
Influenza Vaccine Uptake in Wales

Table 3. Uptake of influenza immunisations in GP Practice patients in Wales 2022/23 (as of 10/01/2023).

Influenza immunisation uptake in the 2022/23 season	
People aged 65y and older	74.9%
People younger than 65y in a clinical risk group	41.6%
Children aged two & three years	40.9%
Children aged between four & ten years	61.0%
Children aged between 11 & 15 years	50.2%
Total NHS staff	41.6%
NHS staff with direct patient contact	41.3%

Uptake in other eligible groups will be available in the coming weeks.
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/>

Figure 10. Seven day rolling sum of cases hospitalised in Wales within 28 days of an influenza or RSV positive test result in the community (or up to 2 days post-admission), as of 15/01/2023).



Influenza activity – UK and international summary

- As of week 1, GP ILI consultations increased in Northern Ireland to 17.7 per 100,000. The weekly ILI GP consultation rate in England reported through the RCGP system increased to 21.1 per 100,000.
- During week 1, 919 samples tested positive for influenza were reported in England (including 274 A(H3), 27 A(H1N1)pdm09, 618 A(not subtyped) and 80 influenza B). Overall influenza positivity decreased to 12.2% in week 52. UK summary data are available from the [UKHSA Influenza and COVID-19 Surveillance Report](#).
- The WHO and the European Centre for Disease Prevention and Control (ECDC) reported in its weekly influenza update, that during week 1, two countries reported baseline activity, eight countries reported low-intensity, five reported medium-intensity, 13 reported medium intensity, 12 reported high-intensity, and two reported very-high intensity. From the 31 countries reporting, two reported no activity, one reported sporadic spread, three reported local spread, four reported regional spread, and 27 reported widespread activity (across the Region). During week 1, 852 of (25%) 3,424 samples from patients presenting to all sentinel primary care centres with ILI or ARI symptoms were tested positive for influenza. This is a decrease from the previous week and remains above the threshold for epidemic activity (10%). Of sentinel specimens that tested positive for influenza for the season to date, 88% were influenza A (52% H3, and 48% A(H1N1)pdm09) and 12% were influenza B. **Source:** Flu News Europe: <http://www.flunewseurope.org/>
- The WHO reported on 09/01/2023, based on data up to 25/12/2022, that globally, influenza remains elevated due to activity in the Northern Hemisphere with influenza A predominating with a slightly larger proportion of with A(H3N2) viruses detected among the subtypes
- In the temperate zones of the southern hemisphere, overall influenza decreased. The majority of activity was reported in Chile, and Argentina where positivity decreased to low to low levels but remained above average levels for this time of year.. RSV activity in South Africa remains low.
- In tropical South America, influenza detections of predominantly A(H3N2) virus decreased. Influenza positivity remained at a moderate level in Ecuador and SARI activity decreased but remained at moderate levels. SARI cases remain above the epidemic threshold Colombia. SARS-CoV-2 increased in several countries.
- In Western Africa, influenza activity remained low, although influenza B/Victoria and A(H3N2) detections were sporadically reported by Burkina Faso and Senegal. Guinea reported B/Victoria lineage and A(H1N1)pdm09 In Middle Africa, all seasonal subtypes were reported in the Democratic Republic of Congo.
- In Southern Asia, influenza detections of predominately A(H3N2) viruses decreased mainly due to a decrease in activity reported in Iran. Influenza In Afghanistan and Pakistan reported an increase of A(H1N1)pdm09. South-East Asia, influenza activity decreased apart from Malaysia. Influenza B/Victoria lineage viruses predominated in Lao People's Democratic Republic and the Philippines. Whereas A(H3N2) viruses predominated in Singapore and Thailand.
- In Eastern Africa, all seasonal subtypes were detected with A(H1N1)pdm09 predominant. A(H1N1)pdm09 increased in Ethiopia and Mauritius. Elsewhere, detections were stable amongst reporting countries. Influenza epidemics continued in the French territories. Increased activity was reported in most except Mayotte where influenza activity decreased.
- In South East Asia, detections of predominantly influenza B reported from Malaysia remain elevated but remain low in other parts of the region. Lao People's Democratic Republic and the Philippines reported influenza activity by the Influenza B/Victoria virus lineage. Whilst, A(H3N2) predominated in Singapore and Thailand.
- In Central Asia, specifically in Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan influenza activity increased remains relatively high of predominantly influenza B viruses and A(H1N1)pdm09.
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 12/01/2023), during the time period from 12/12/2022 – 25/12/2022, National Influenza Centres and other national influenza laboratories from 131 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 604,408 specimens during that time period, of which 121,935 were positive for influenza viruses 117,840 (96.6%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 10,108 (43.5%) were influenza A(H1N1)pdm09 and 113,123 (56.5%) were influenza A(H3N2)) and 525 (100%) influenza B (of the 525 characterised influenza B viruses, all belonged to the B-Victoria lineage). **Source:** FluNet: <https://www.who.int/tools/flunet>

Update on influenza activity in North America

- The USA Centers for Disease Control and Prevention (CDC) report that seasonal influenza activity is at high levels, although it appeared to decline in most areas across the country during week 01 (ending 07/01/2023). Nationally, 8,281 (8.6%) out of 96,123 specimens tested positive for influenza in week 01 in clinical laboratories nationwide, of these positives, 8,169 (98.6%) were influenza A and 112 (0.7%) were influenza B. Further characterisation has been carried out on 6,724 specimens by public health laboratories, and 743 samples tested positive for influenza; 130 influenza A(H1N1)pdm09 (28.4%), 328 influenza A(H3N2) (71.6%), 346 influenza A(not subtyped) and 7 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 1, influenza activity along with most surveillance indicators declined from the peak that occurred in week 47 and is now below pre pandemic levels and is within the expected levels for this time of the year. During week1, 1,749 influenza detections were reported: 1,721 influenza A (predominantly A(H3N2) at 77%), and 28 influenza B. The percentage of ILI visits reduced to 1.7% in week 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 RSV positivity rate and detections both decreased in the week beginning 07/01/2023.

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

COVID-19 – UK and international summary

- As of 04/01/2023, there were 17 new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. There were 26 suspected COVID-19 deaths with a date of death in the most recent 7-day reporting period, reported to Public Health Wales. There were 25 COVID-19 death registrations in the last reporting period reported by ONS. 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 09/01/2023 WHO reported three laboratory-confirmed cases of locally acquired Middle East Respiratory Syndrome coronavirus (MERS-CoV) in the Kingdom of Saudi Arabia from 29/12/2021 to 09/01/2023. This follows on from two laboratory-confirmed cases in Oman reported on 19/01/2023 and 1 (including 1 death) reported from Qatar between 22/03/2022 to 03/04/2022. Since the beginning of 2022 and as of 09/01/2023 there have been six reported cases of MERS-CoV, with an additional case reported from 29/12/2022. As of 19/01/2023, 2,610 laboratory confirmed cases of human infection with MERS-CoV, including 945 associated deaths, from across the globe have officially been reported to WHO since 2012.

Source: WHO Global Alert and Response website: <https://www.who.int/emergencies/disease-outbreak-news>

- The majority of the MERS cases continue to be reported from Middle Eastern countries within the Arabian Peninsula, and specifically from 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 (12/11/2022 – 05/10/2022) reports that there have been no publicly available reports from China or other countries on influenza A(H7N9) in recent months. Since February 2013, a total of 1,568 laboratory-confirmed cases of human infection with avian influenza A(H7N9), including at least 616 deaths, have been reported to the global influenza programme:

<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-2022-to-2023-season>

Scotland seasonal respiratory surveillance:

<https://beta.isdscotland.org/find-publications-and-data/population-health/covid-19/weekly-national-seasonal-respiratory-report/>

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

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

surveillance.requests@wales.nhs.uk