



Current level of influenza activity: Baseline

Influenza activity trend: Increasing

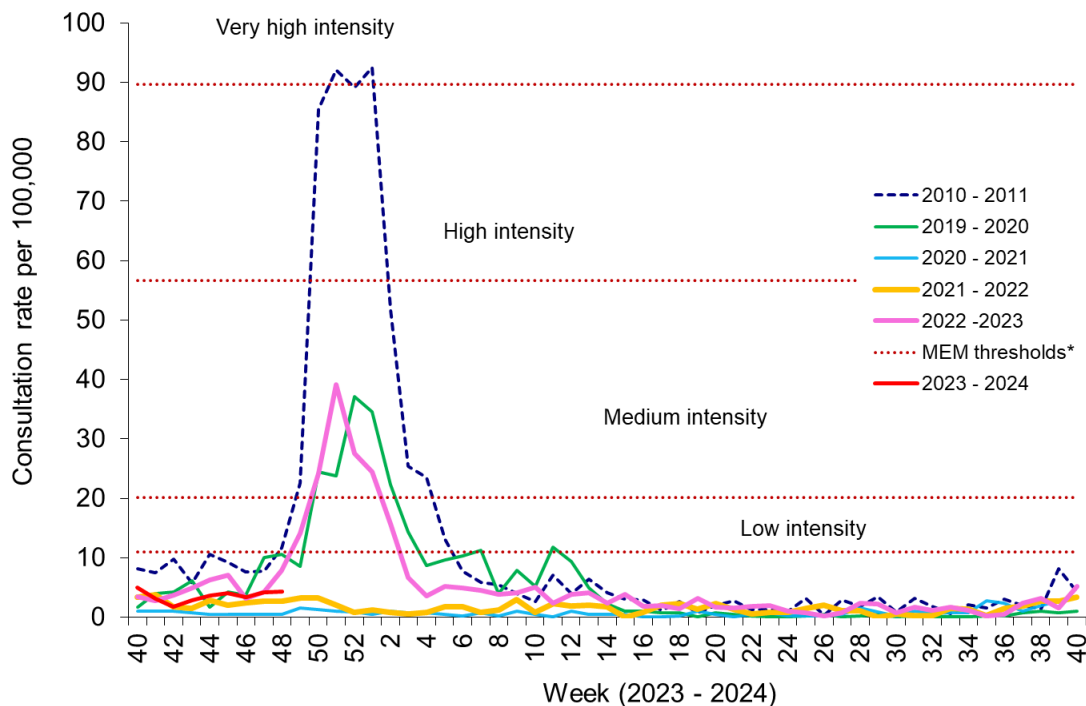
Confirmed influenza cases since 2023 Week 40: 202 (20 influenza A(H3N2), 31 influenza A(H1N1)pdm09, 113 influenza A untyped and 38 influenza B)

During Week 48 (ending 04/12/2023) there were 77 cases of influenza, with further four cases reported from previous weeks. While overall influenza activity remains at baseline levels, there is an upward trend in recent weeks. *On average, influenza seasons in Wales begin around mid-December.* COVID-19 cases have decreased but continue to be detected. RSV activity in children under 5 years decreased but remains at 'very high' intensity levels. Rhinovirus, RSV, SARS-CoV-2, hMPV, enterovirus, and adenovirus are the most commonly detected other causes of Acute Respiratory Infection (ARI).

- The **Sentinel GP consultation rate for influenza-like illness (ILI)** in Wales during Week 48, was 4.3 consultations per 100,000 practice population (Table 1). This is an increase compared to the previous week (4.2 consultations per 100,000. Figure 1) (latest data available).
- The **Sentinel GP consultation rate for Acute Respiratory Infections (ARI)** was 227.1 per 100,000 practice population during Week 48 (Table 2 and Figure 3). This is an increase compared to the previous week (213.6 per 100,000). During week 48 Lower Respiratory Tract Infections increased to 87.88 per 100,000 and Upper Respiratory Tract Infections increased to 140.71 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 48 decreased at 18.7% (Figure 13).
- During Week 48, 1,118 specimens received multiplex respiratory panel testing from patients attending hospitals. **39 tested positive for influenza (26 for influenza A(not subtyped), nine for influenza A(H1N1), four for influenza A(H3) and two for influenza B).** Overall influenza test-positivity increased to 3.7%. In addition, there were: 163 rhinovirus, 144 RSV, 73 SARS-CoV2, 58 hMPV, 43 enterovirus, 40 adenovirus, 27 mycoplasma and 11 parainfluenza positive samples (Figure 5). Additionally, 495 samples from patients were tested for influenza, RSV and SARS-CoV-2 only. Of the 495 samples there were 71 positive for RSV, 65 SARS-CoV-2, **29 influenza A**, and **five influenza B** (Figure 7). Furthermore, during week 48, 67 respiratory specimens were tested from patients in intensive care units (ICU) of which one was positive for influenza A(H1N1(pdm09) (Figure 8).
- There were 154 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 48. Of the 154 samples, 29 tested positive for rhinovirus, 18 RSV, 13 hMPV, 10 mycoplasma, seven enterovirus, five adenovirus, four Sars-CoV2, two seasonal coronavirus, 2 influenza A(H3), one influenza A(H1N1(pdm09), one influenza B, one parainfluenza, and one bocavirus (as at 06/12/2023) (Figure 4).
- From all samples where influenza subtyping information was available during week 48 (specimens receiving multiplex respiratory panel testing, from patients attending hospitals, and surveillance samples collected by sentinel GPs and community pharmacies) 26 were influenza A(not subtyped), six influenza A(H3), 10 influenza A(H1N1) and three were influenza B (Figure 6).
- **Confirmed RSV case incidence in children aged under 5 further decreased in the most recent week but remains at very high intensity levels (compared to historic levels before 2021).** In week 48 there were 83.1 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 14 and 96 respectively during Week 47 (Figures 10 & 11) and 44 for SARS-CoV-2 during week 47 (Figure 12).
- During week 48, three **ARI outbreaks** were reported to the Public Health Wales Health Protection team. All three 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 47.
- As at 21/11/2023, uptake of influenza vaccination was 65.1% in adults aged 65 years and older, 31.0% in those aged 6 months to 64 years at clinical risk, 32.7% in two- and three-year-old children, 60.6% in children aged four to 10 years and 46.6% in children aged 11 to 15 years (Table 3).

Respiratory infection activity in Wales

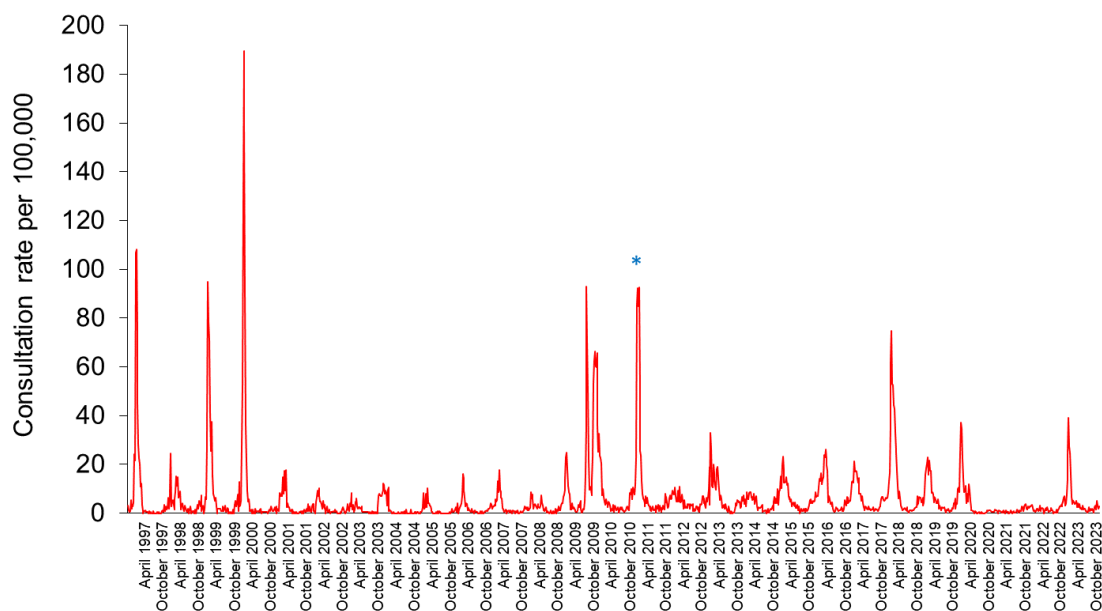
Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 03/12/2023)



* 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 48 1996 – Week 48 2023).



* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 43 – Week 48 2023 (as of 03/12/2023)

Age group	43	44	45	46	47	48
< 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	0.0
5 - 14	0.0	2.2	2.5	0.0	5.2	0.0
15 - 24	0.0	2.1	4.9	4.3	0.0	0.0
25 - 34	7.6	3.8	4.5	1.9	6.7	8.2
35 - 44	5.5	5.5	10.8	9.2	10.8	7.9
45 - 64	3.6	5.5	3.1	4.5	2.1	2.9
65 - 74	2.2	2.2	0.0	0.0	5.0	2.3
75+	0.0	0.0	2.4	2.2	2.5	11.3
Total	2.9	3.6	3.8	3.3	4.2	4.3

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 43 – Week 48 2023 (as of 03/12/2023)

Age group	43	44	45	46	47	48
< 1	1333.3	1733.3	2189.8	1423.8	1759.2	1425.0
1 - 4	1069.1	1223.8	893.5	923.1	957.1	1000.1
5 - 14	269.9	247.8	240.7	287.9	365.8	360.7
15 - 24	138.5	172.6	159.5	187.7	140.3	185.4
25 - 34	150.8	166.0	168.1	166.2	158.1	147.4
35 - 44	146.9	145.1	148.6	167.1	153.4	155.6
45 - 64	129.1	149.1	161.0	160.9	139.1	154.1
65 - 74	135.7	178.8	155.1	178.9	145.9	169.2
75+	204.8	187.6	210.2	258.1	182.0	221.6
Total	201.3	220.9	214.1	227.8	213.6	227.1

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 48 – Week 48 2023

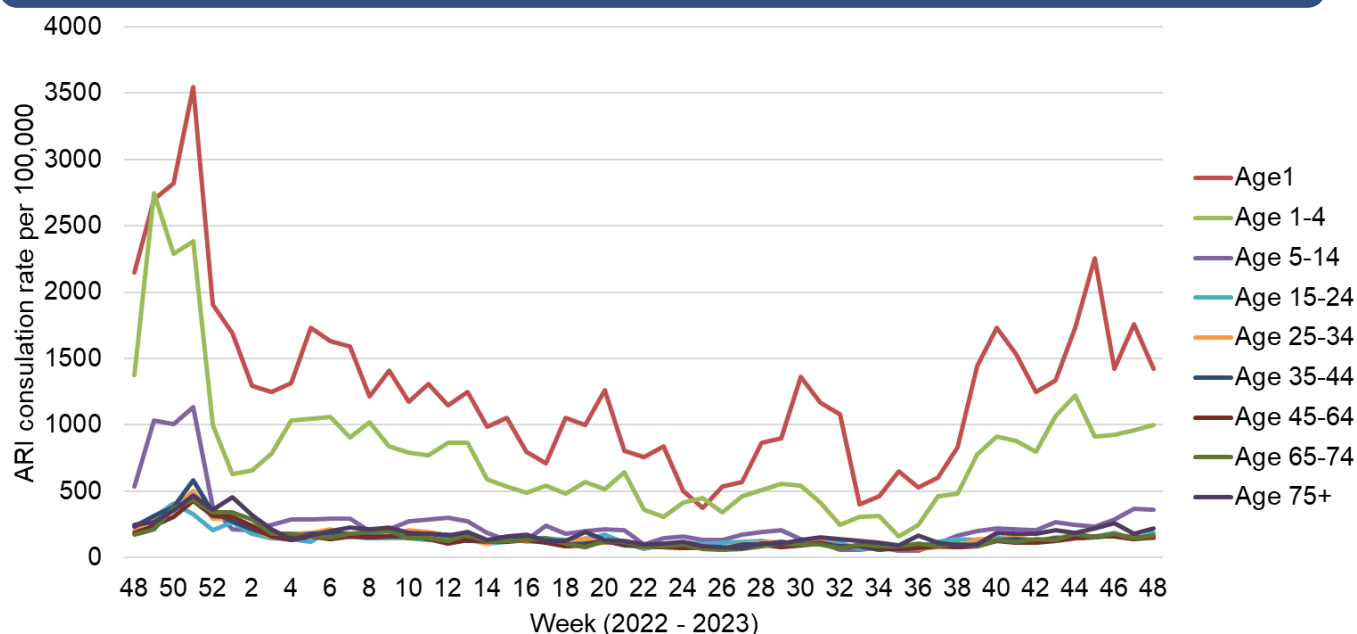
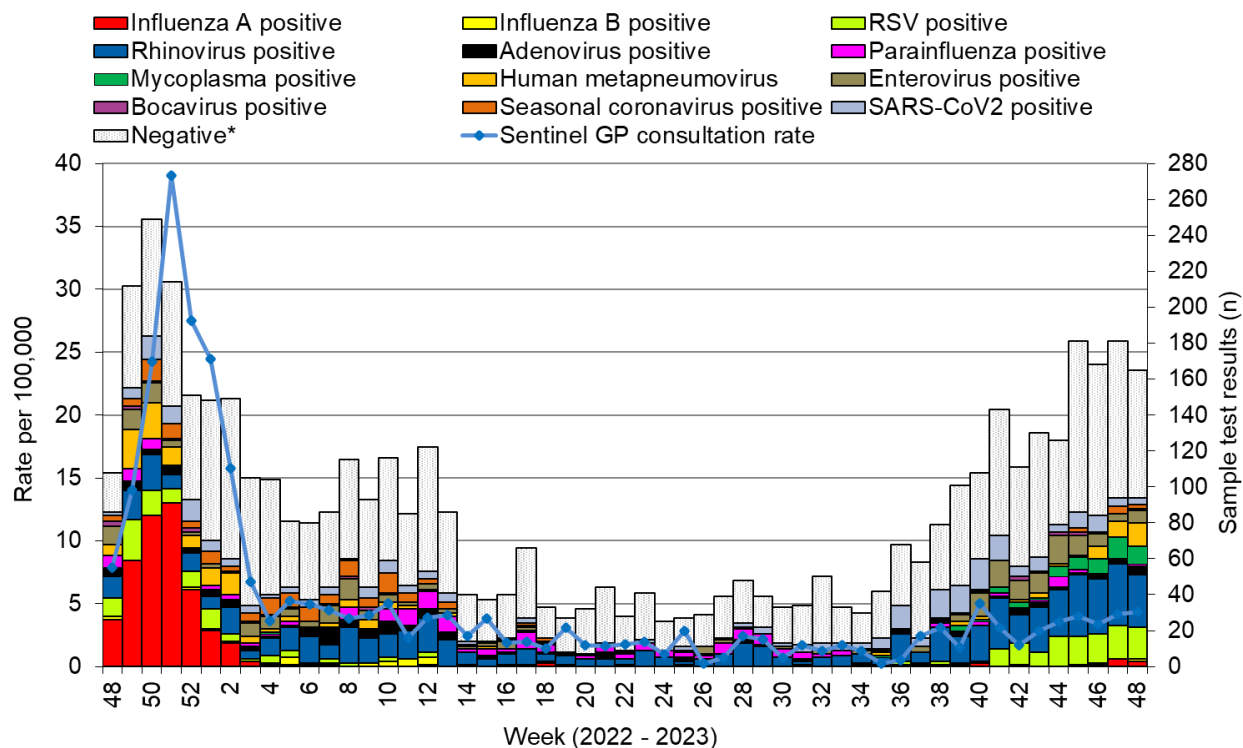
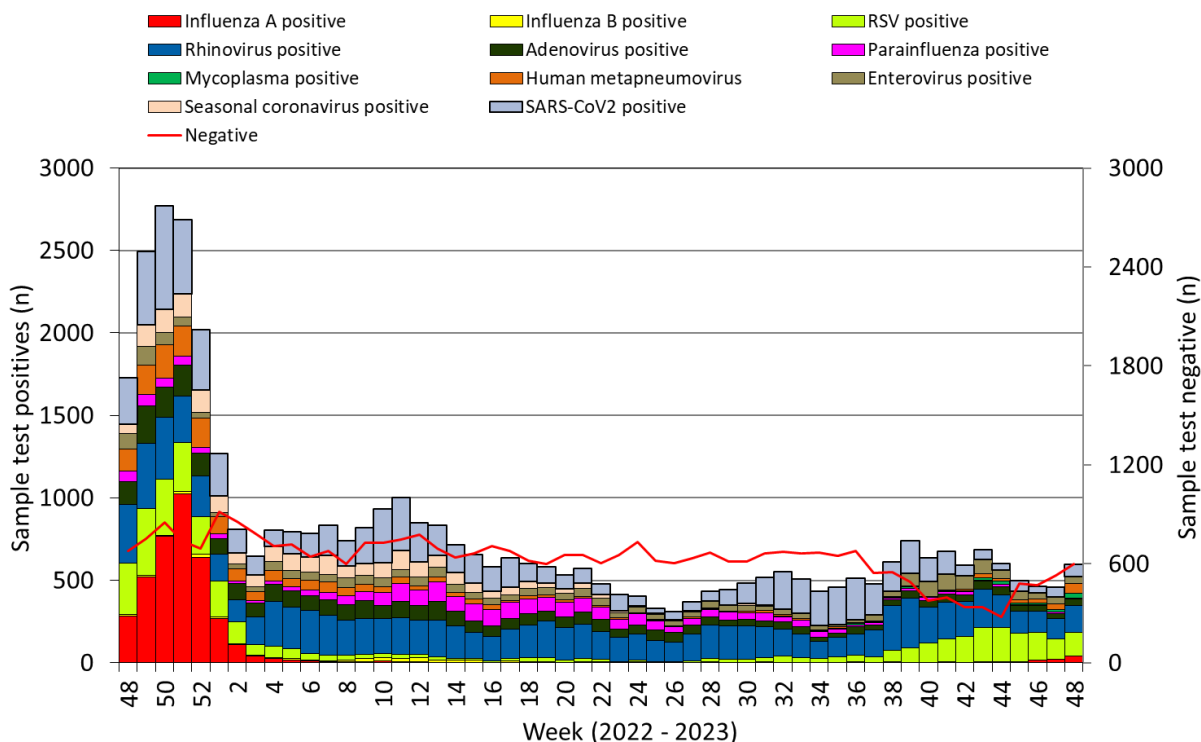


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 03/12/2023, by week of sample collection, Week 48 2022 to Week 48 2023



* 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 03/12/2023 by week of sample collection, Week 48 2022 to Week 48 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. Flu subtypes based on specimens submitted for virological testing by sentinel GPs and community pharmacies, hospital patients, and non-sentinel GPs, as of 03/12/2023 by week of sample collection, Week 48 2022 to Week 48 2023.

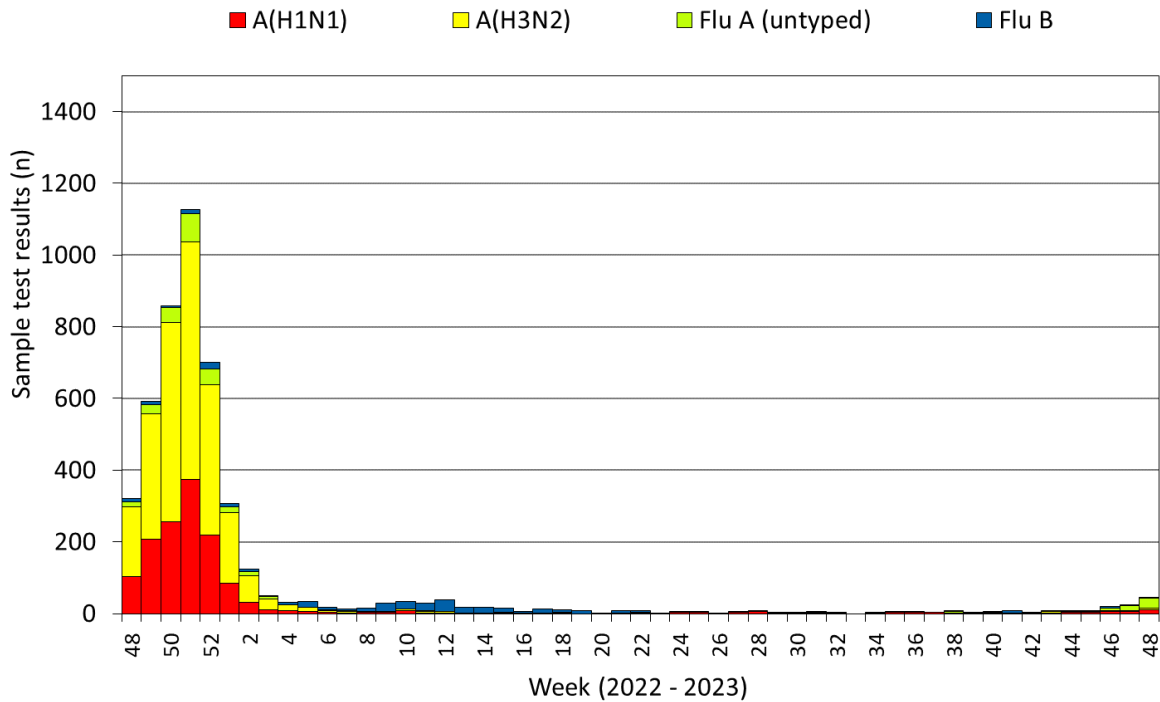


Figure 7. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 03/12/2023 by week of sample collection, Week 48 2022 to Week 48 2023.

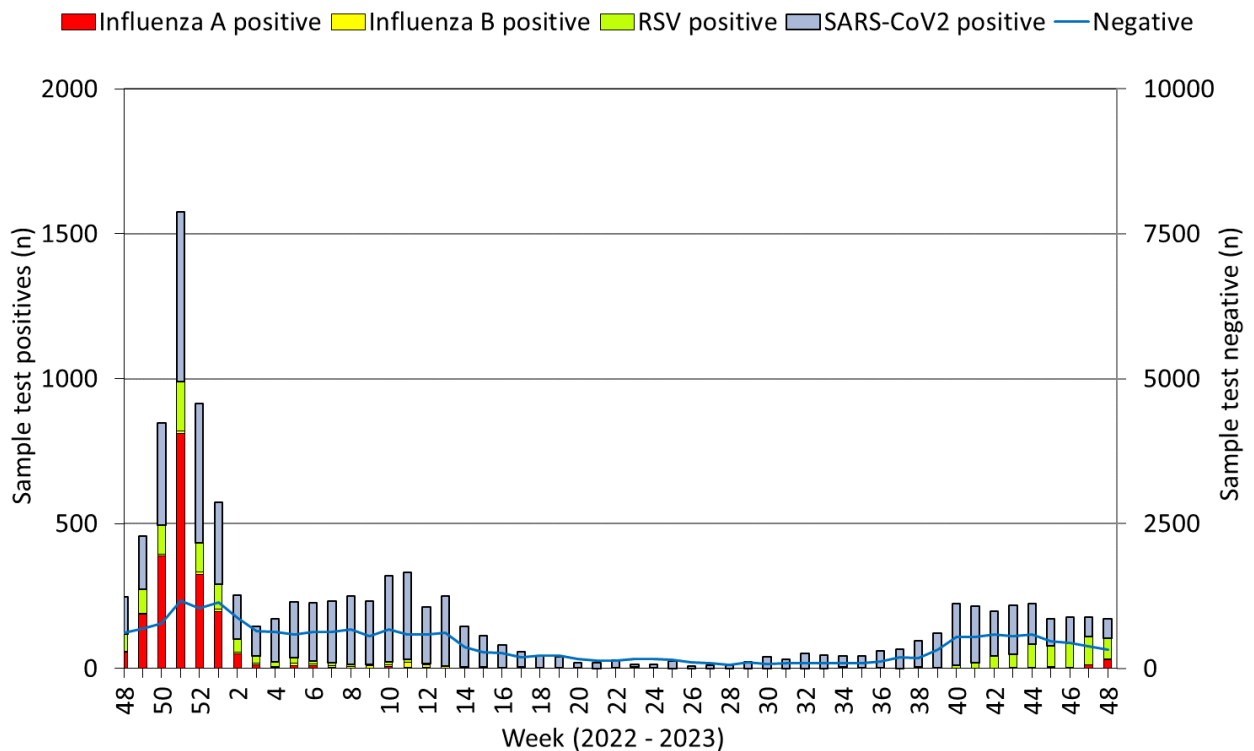
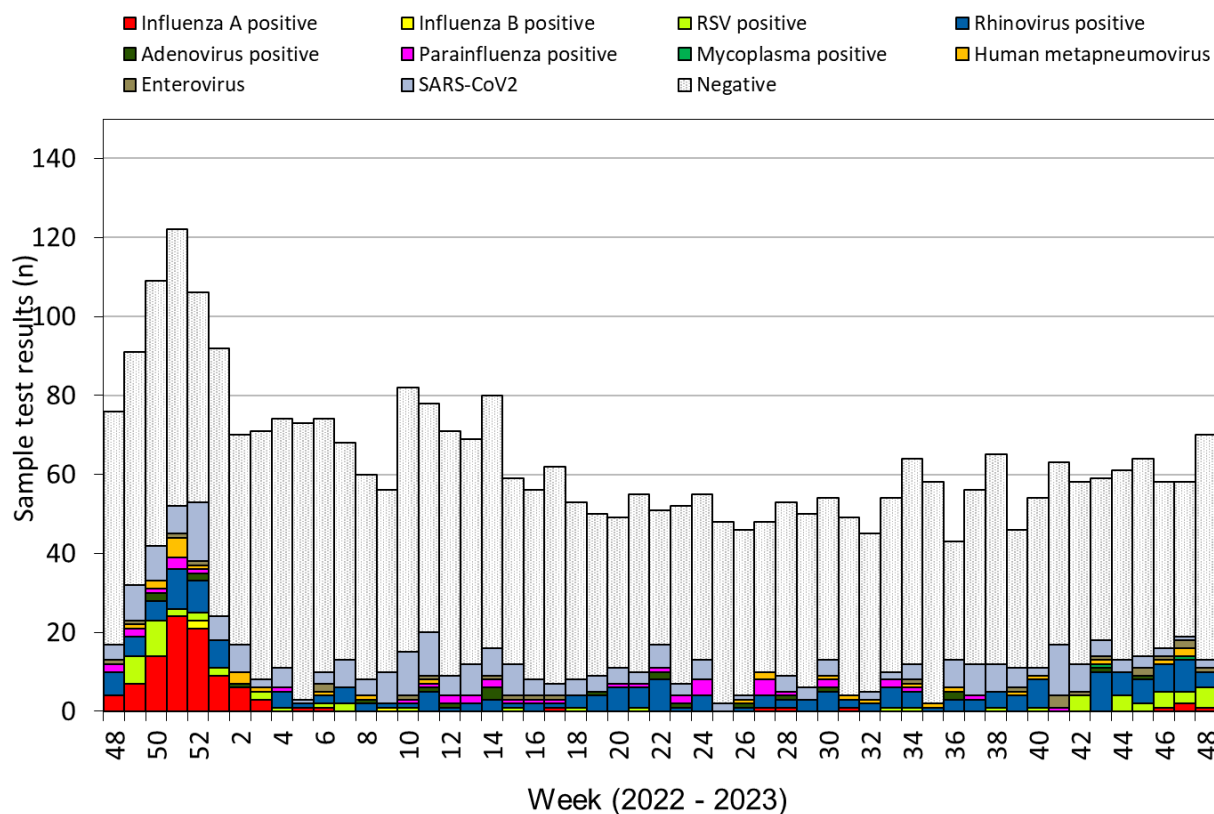
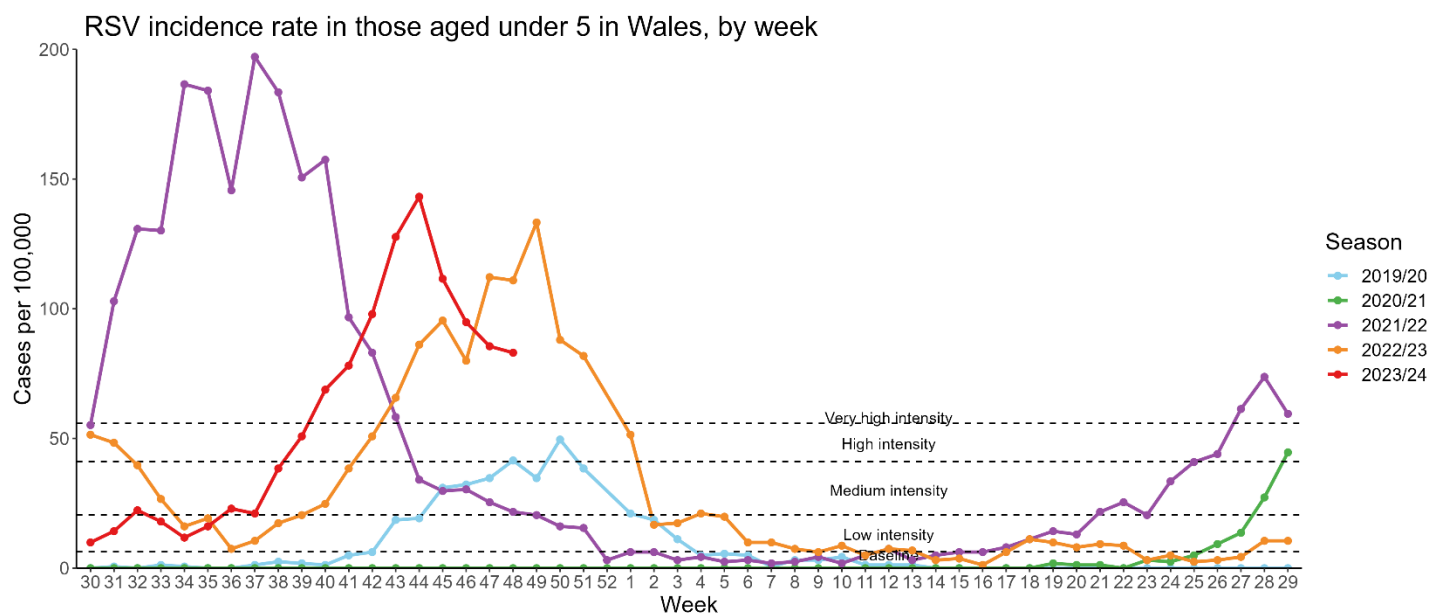


Figure 8. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 48 2022 to Week 48 2023.



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 on 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 48 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 04/12/2023.

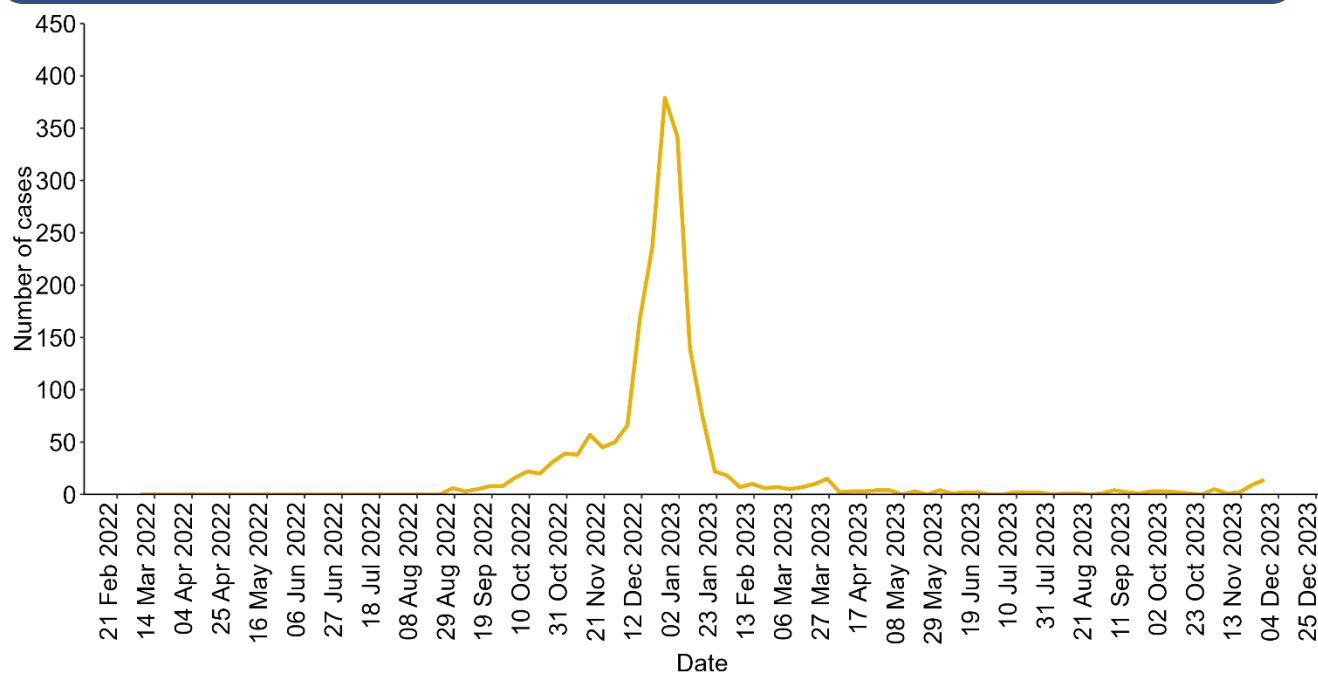


Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 04/12/2023.

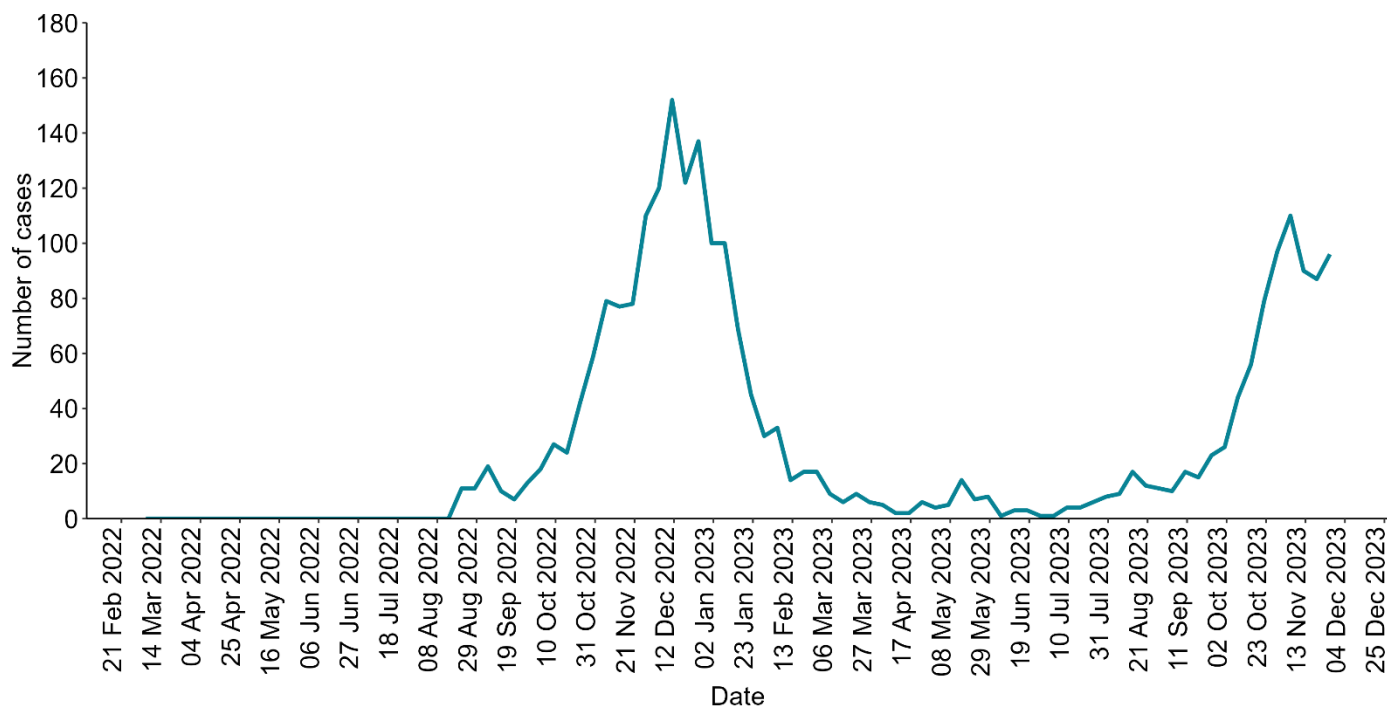
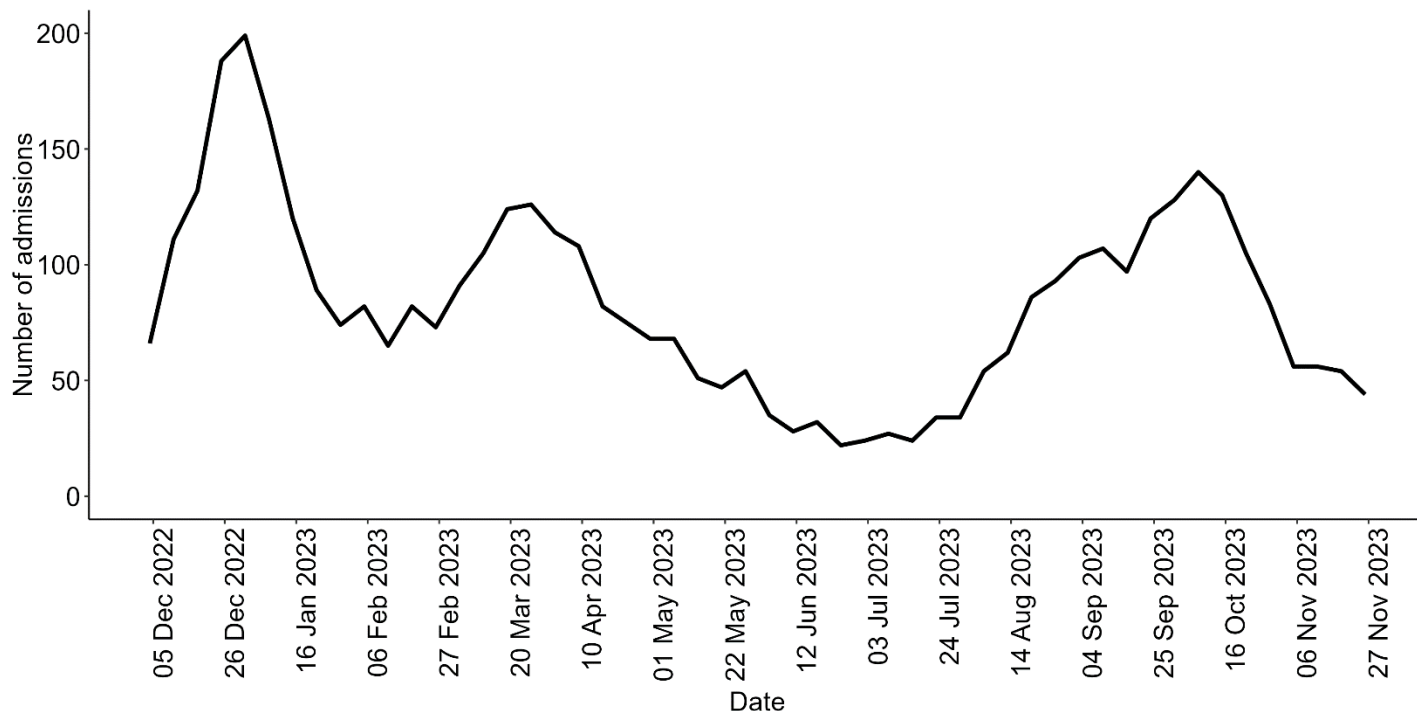
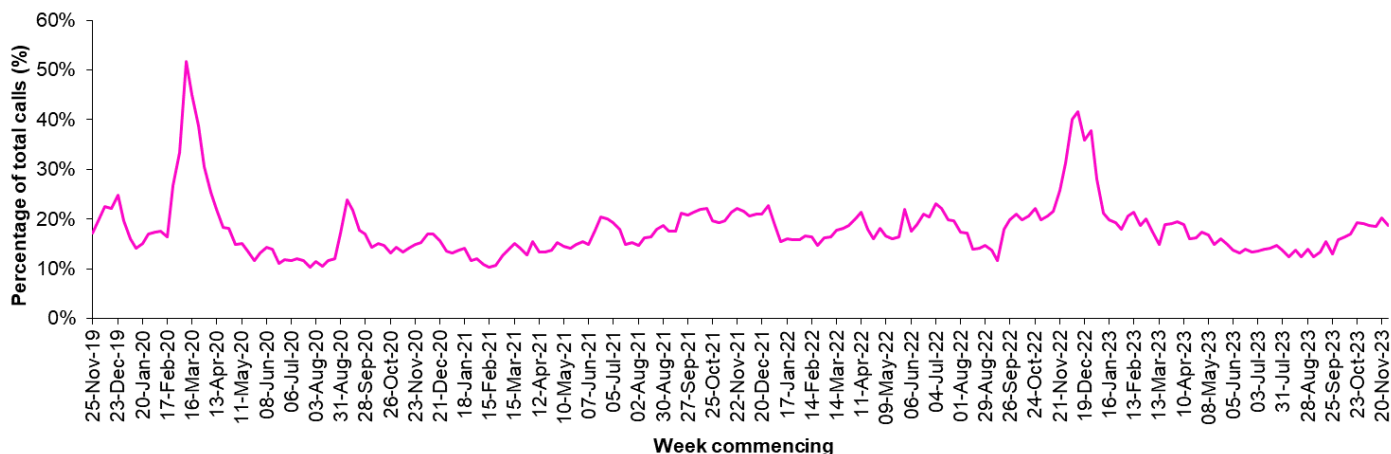


Figure 12. Seven day rolling sum of cases hospitalised in Wales within 28 days of an Covid-19 positive test result in the community (or up to 2 days post-admission), as of 04/12/2023.



Calls to NHS Direct Wales

Figure 13. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from Week 48 2019 - Week 48 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 2023/24 (as of 21/11/2023).

Influenza immunisation uptake in the 2022/23 season	
People aged 65y and older	65.1%
People younger than 65y in a clinical risk group	31.0%
Children aged two & three years	32.7%
Children aged between four & ten years	60.6%
Children aged between 11 & 15 years	46.6%
Total NHS staff	25.8%
NHS staff with direct patient contact	25.0%

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 47, GP ILI consultations increased to 3.8 per 100,000, in England, and to 3.1 per 100,000 in Scotland.
- During Week 47, 89 samples testing positive for influenza were reported in England (60 influenza A(not subtyped), 20 influenza A(H3N2), zero influenza A(H1N1)pdm09) and nine were influenza B). Overall influenza positivity remained stable at 1.9%.
- In England, RSV hospitalisations in the under 5-year-olds increased to 37.5 per 100,000 in week 47. In Scotland, RSV hospitalisations in the under 1-year olds was 258.7 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 is still below seasonal epidemic activity threshold which is set at 10% during week 47. Of 40 countries and areas reporting on influenza intensity, six reported medium intensity, 12 reported low intensity and the remainder reported baseline intensity. Of 40 countries and areas reporting on geographic spread of influenza viruses within a country or area, four reported widespread, five reported regional, 19 reported sporadic, three reported local and the remainder reported no activity. As of week 47, there were 157 confirmed influenza virus infection detections reported from sentinel primary care. 95% were type A viruses (51% influenza A(H1N1)pdm09 and 49% influenza A(H3)).

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

- The WHO reported on 27/11/2023, based on data up to 12/11/2023 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 but remained low or below baseline. Influenza A(H1N1)pdm09 viruses predominated among the detections. 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 below baseline or at low levels in all but three reporting countries, where activity was medium and geographic spread was regional in three reporting countries. Among the influenza detections in primary care sentinel surveillance, influenza A viruses predominated. In the Caribbean countries influenza activity continued to increase slightly with detections influenza A subtypes predominant.
- 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 continued to increase in the Caribbean with detections of predominantly influenza A(H1N1)pdm09 and remained low overall in Central America with detections of predominantly B/Victoria lineage viruses. In the temperate zones of the northern hemisphere, indicators of influenza activity were reported at low levels.
- 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 appeared to have peaked in Iran (Islamic Republic of) and India.
- In South-East Asia, influenza activity driven predominantly by influenza A(H1N1)pdm09 and A(H3N2) decreased overall with detections low in most reporting countries.
- 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 24/11/2023), during the period from 30/10/2023 – 12/11/2023 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 431,756 specimens during that period, of which 25,786 were positive for influenza viruses, 21,711 (83.9%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 4,052 (27.8%) were influenza A(H1N1)pdm09 and 10,533 (72.2%) were influenza A(H3N2). Of the 25,786 samples testing positive

for influenza viruses, 4,165 tested positive for Influenza B (16.1%). **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 continued to increase across most parts of the country during week 47 (ending 25/11/2023). Nationally, 4,336 (6.2%) out of 69,884 specimens have tested positive for influenza in week 47 in clinical laboratories nationwide, of these positives 3,257 (75.1%) were influenza A and 1,079 (24.9%) were influenza B. Further characterisation has been carried out on 1,798 specimens by public health laboratories, and 379 samples tested positive for influenza; 166 influenza A(H1N1)pdm09, 36 influenza A(H3N2), 109 influenza A(not subtyped) and 68 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 47, influenza activity increased and has exceeded the seasonal threshold of 5% positivity. During week 47, 2,143 influenza detections were reported: 2,115 influenza A, and 28 influenza B. The percentage of ILI visits was 1.6%. **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 increased in the week beginning 25/11/2023.
Source: CDC RSV national trends: <https://www.cdc.gov/surveillance/nrevss/rsv/natl-trend.html>

COVID-19 – UK and international summary

- As of 29/11/2023, there were 4.0 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 19 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/ARLhospitaladmissionsdashboard?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/fluvaccine/>

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