

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

Wednesday 21st February 2024 (covering Week 07 2024)



GIG
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Current level of influenza activity: Low

Influenza activity trend: **Increasing**

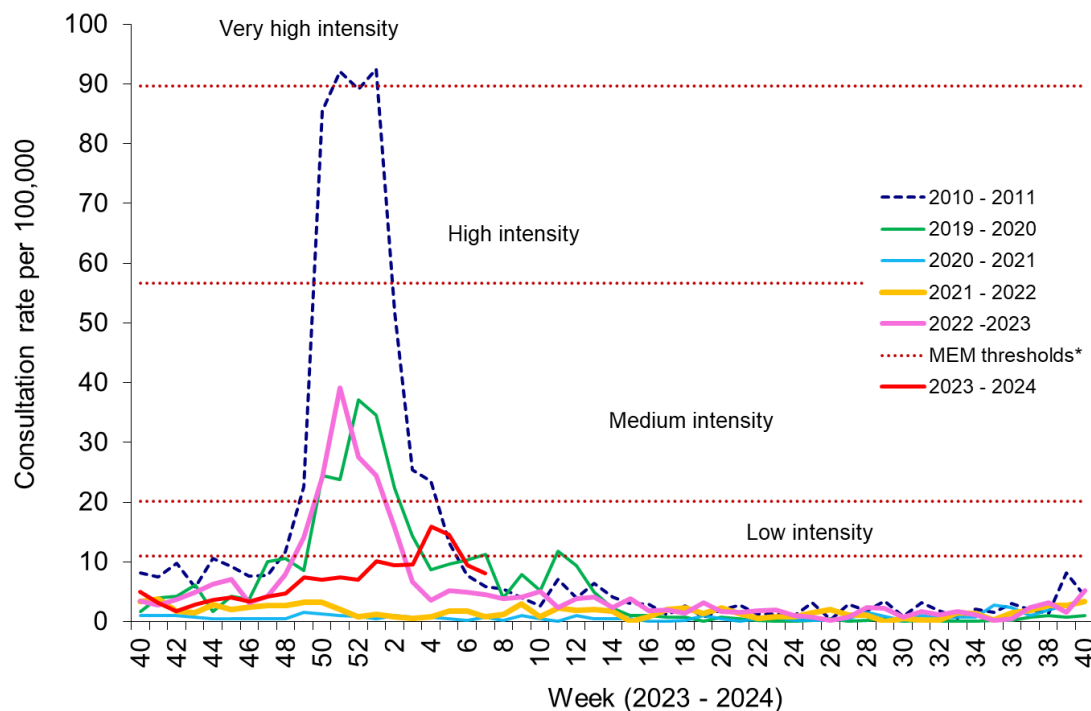
Confirmed influenza cases since 2023 Week 40: 2992 (328 influenza A(H3N2), 796 influenza A(H1N1)pdm09, 1648 influenza A untyped and 220 influenza B)

During Week 7 (ending 18/02/2024) there were 307 cases of influenza confirmed, with 14 cases from previous weeks. Influenza is circulating. COVID-19 cases have slightly decreased in the most recent week. RSV activity in children under 5 years remains at low intensity levels. Additionally, recent weeks have seen increases in rhinovirus, human metapneumovirus, seasonal coronaviruses and *Mycoplasma* detections.

- The **Sentinel GP consultation rate for influenza-like illness (ILI)** in Wales during Week 7, was 8.1 consultations per 100,000 practice population (Table 1). The rate decreased compared to the previous week (9.4 consultations per 100,000. Figure 1).
- The **Sentinel GP consultation rate for Acute Respiratory Infections (ARI)** was 239.3 per 100,000 practice population during Week 7 (Table 2 and Figure 3). This is a decrease compared to the previous week (297.0 per 100,000). During week 7, Lower Respiratory Tract Infections decreased to 90.1 per 100,000 and Upper Respiratory Tract Infections decreased to 149.7 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 7 reduced to 19.9% (Figure 13).
- During Week 7, 1,564 specimens received multiplex respiratory panel testing from patients attending hospitals. **174 tested positive for influenza (90 influenza A(not subtyped), 50 influenza A(H1N1), 15 influenza A(H3) and 19 influenza B)**. Overall influenza test-positivity decreased to 11.1%, decreased to <0.01% in those aged under 18 and to 13.5% in those aged over 18. In addition, there were: 130 rhinovirus, 78 seasonal coronaviruses, 75 SARS-CoV2, 75 adenovirus, 63 parainfluenza, 62 hMPV, 52 mycoplasma, 26 enterovirus and 26 RSV positive samples (Figure 5). Additionally, 479 samples from patients were tested for influenza, RSV and SARS-CoV-2 only. Of the 479 samples there were 38 positives for SARS-CoV-2, **82 influenza A**, eight RSV, and **11 influenza B**. (Figure 7). Furthermore, during week 7, 59 respiratory specimens were tested from patients in intensive care units (ICU) of which one was positive for **influenza (one influenza A(H1N1))**(Figure 8).
- There were 161 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 7. Of the 161 samples, **33 tested positive for influenza A (11 influenza A(H1N1), sixteen influenza A(H3), and seven influenza A(not subtyped))**, 14 hMPV, 14 seasonal coronaviruses, eight rhinovirus, seven RSV, **seven influenza B**, seven mycoplasma, four SARS-CoV2, two enterovirus, and one C. pneumoniae (as at 21/02/2024) (Figure 4).
- From all samples where influenza subtyping information was available during week 7, 31 were influenza A(H3), 61 influenza A(H1N1), 96 were influenza B (Figure 6) and 96 influenza A(not subtyped).
- **Confirmed RSV case incidence in children aged under 5 further increased in the most recent week but remains at low intensity levels (compared to historic levels before 2021)**. In week 6 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 91 and 11 respectively during Week 7 (Figures 10 & 11) and 37 for SARS-CoV-2 during week 7 (Figure 12).
- During week 7, two **ARI outbreaks** were reported to the Public Health Wales Health Protection team. One outbreak was reported as COVID-19 and one as influenza. Both outbreaks were in residential homes.
- According to [EuroMoMo](#) analysis, all-cause deaths in Wales were not in excess during week 6.
- As at 13/02/2024, uptake of influenza vaccination was 71.9% in adults aged 65 years and older, 38.5% in those aged 6 months to 64 years at clinical risk, 42.5% in two- and three-year-old children, 61.8% in children aged four to 10 years and 49.8% in children aged 11 to 15 years (Table 3).

Respiratory infection activity in Wales

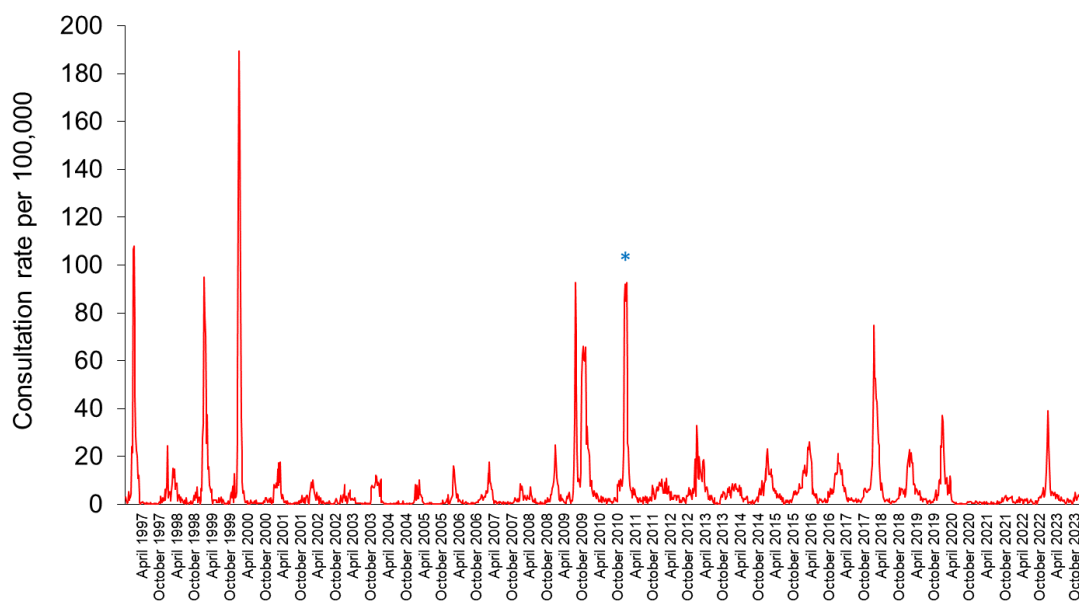
Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 18/02/2024).



* 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 7 2024).



* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 2 – Week 7 2024 (as of 18/02/2024).

Age group	2	3	4	5	6	7
< 1	0.0	0.0	34.5	66.2	0.0	0.0
1 - 4	7.1	0.0	21.2	0.0	14.1	0.0
5 - 14	9.2	4.4	9.2	15.5	4.6	0.0
15 - 24	8.9	8.6	13.3	15.0	6.7	14.5
25 - 34	8.0	7.7	22.0	17.2	14.0	13.2
35 - 44	15.3	22.0	21.0	25.6	19.1	8.4
45 - 64	8.5	10.9	19.9	12.7	7.6	10.3
65 - 74	9.0	8.6	13.4	15.1	2.2	2.4
75+	8.9	4.3	2.2	2.2	11.2	7.1
Total	9.4	9.5	15.9	14.6	9.4	8.1

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 2 – Week 7 2024 (as of 18/02/2024).

Age group	2	3	4	5	6	7
< 1	1000.0	785.1	1827.6	1059.6	1503.0	1257.4
1 - 4	538.0	819.1	1214.6	1055.2	1188.0	1028.1
5 - 14	269.2	343.6	409.6	474.6	462.9	324.2
15 - 24	194.8	149.6	192.7	196.9	195.1	164.0
25 - 34	206.2	198.9	217.9	223.9	258.2	174.2
35 - 44	240.7	230.8	265.2	219.7	240.4	212.9
45 - 64	225.0	217.4	204.3	204.8	214.9	191.6
65 - 74	232.9	226.1	181.4	213.3	206.0	168.7
75+	298.5	261.5	265.2	208.3	274.4	217.0
Total	251.7	254.0	286.1	274.7	297.0	239.3

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 7 2023 – Week 7 2024.

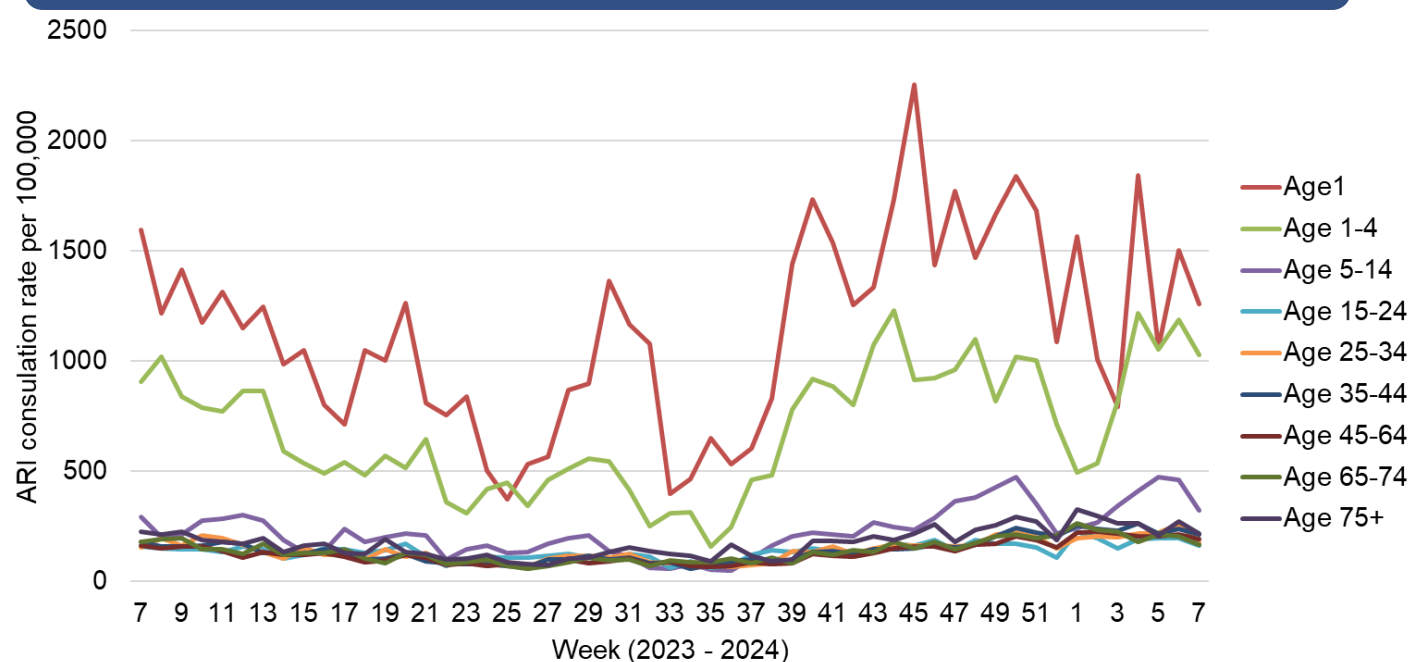
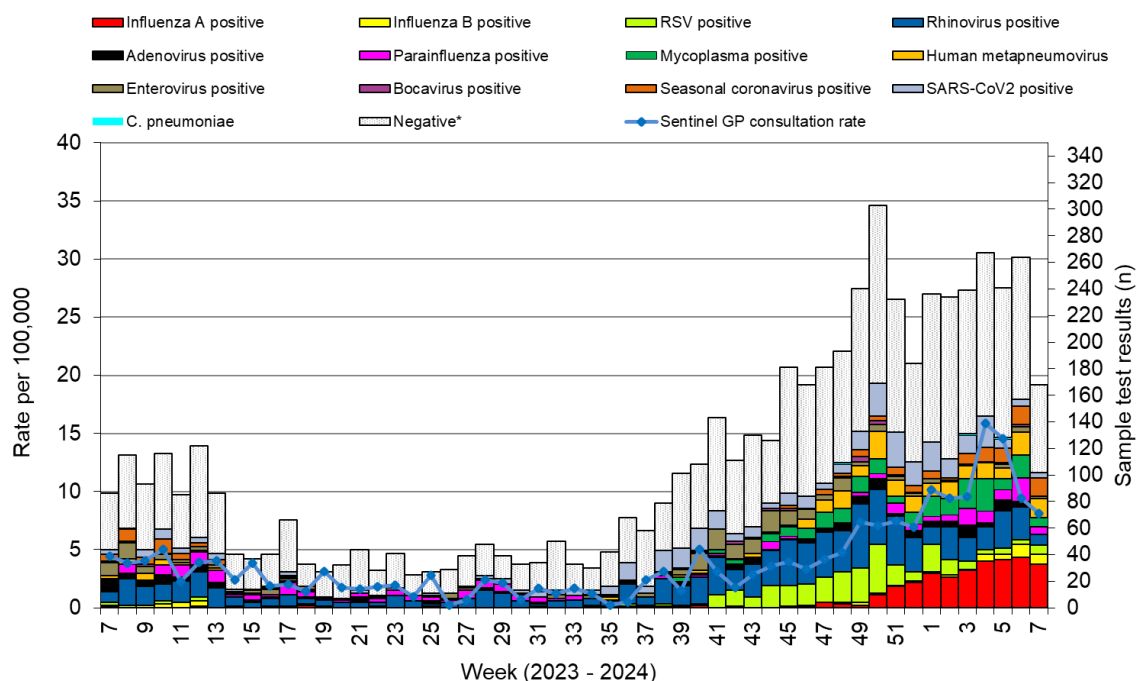
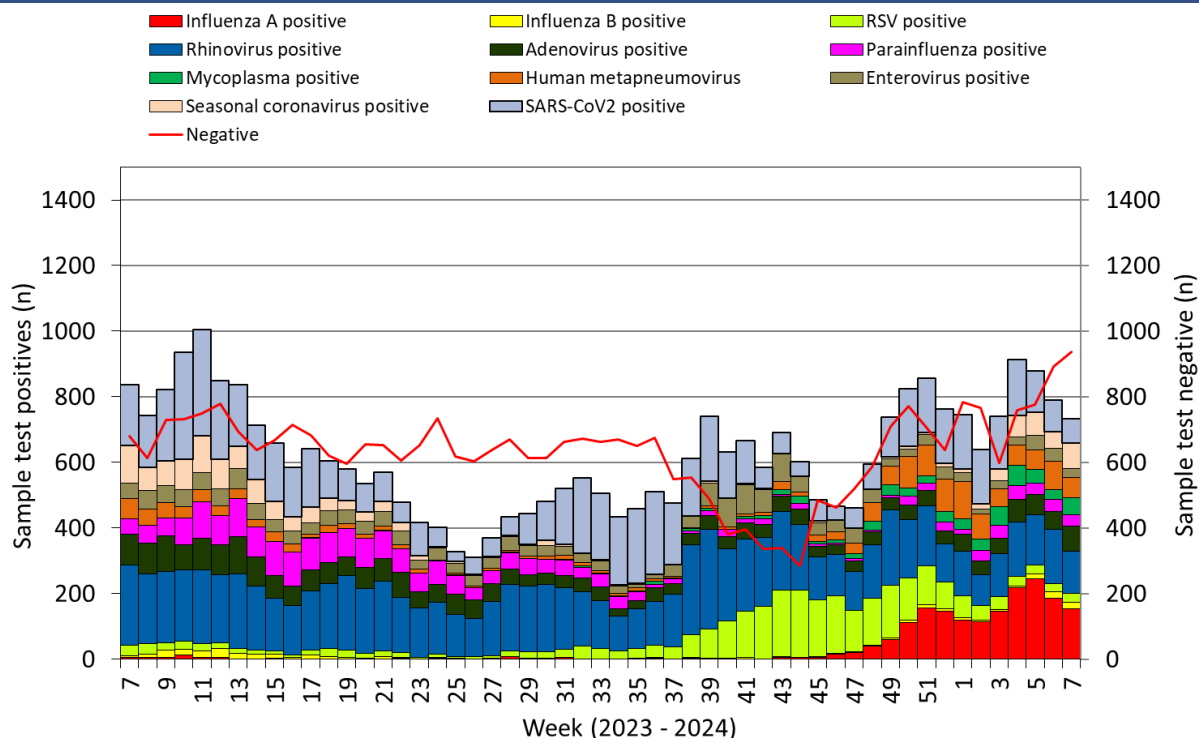


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 18/02/2024, by week of sample collection, Week 7 2023 to Week 7 2024.



* 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 18/02/2024 by week of sample collection, Week 7 2023 to Week 7 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 18/02/2024 by week of sample collection, Week 7 2023 to Week 7 2024.

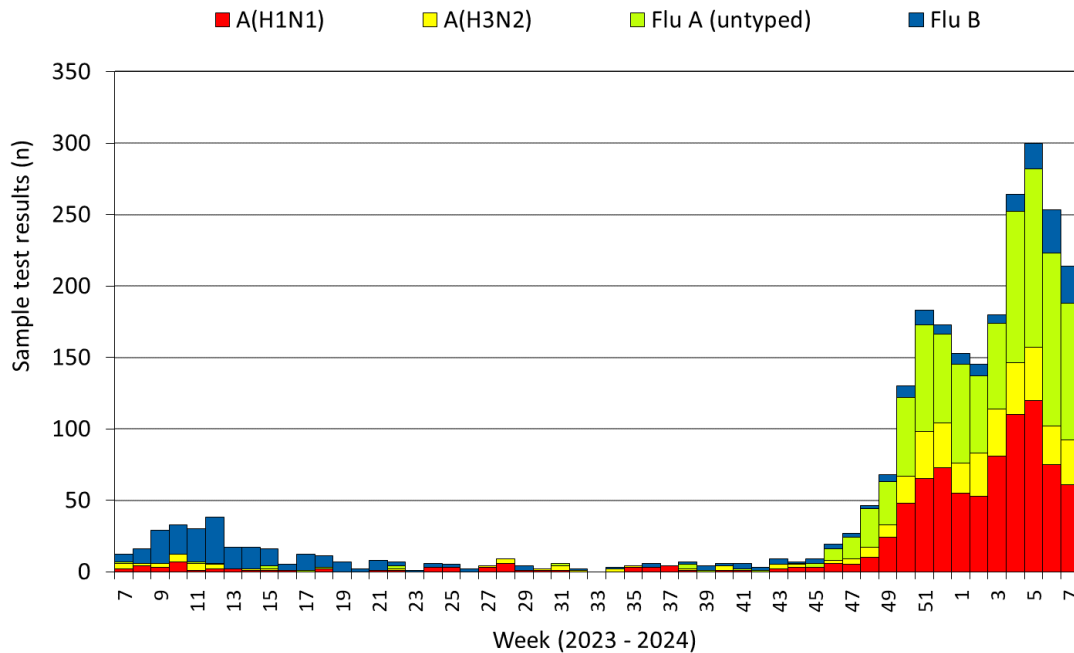


Figure 7. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 18/02/2024 by week of sample collection, Week 7 2023 to Week 7 2024.

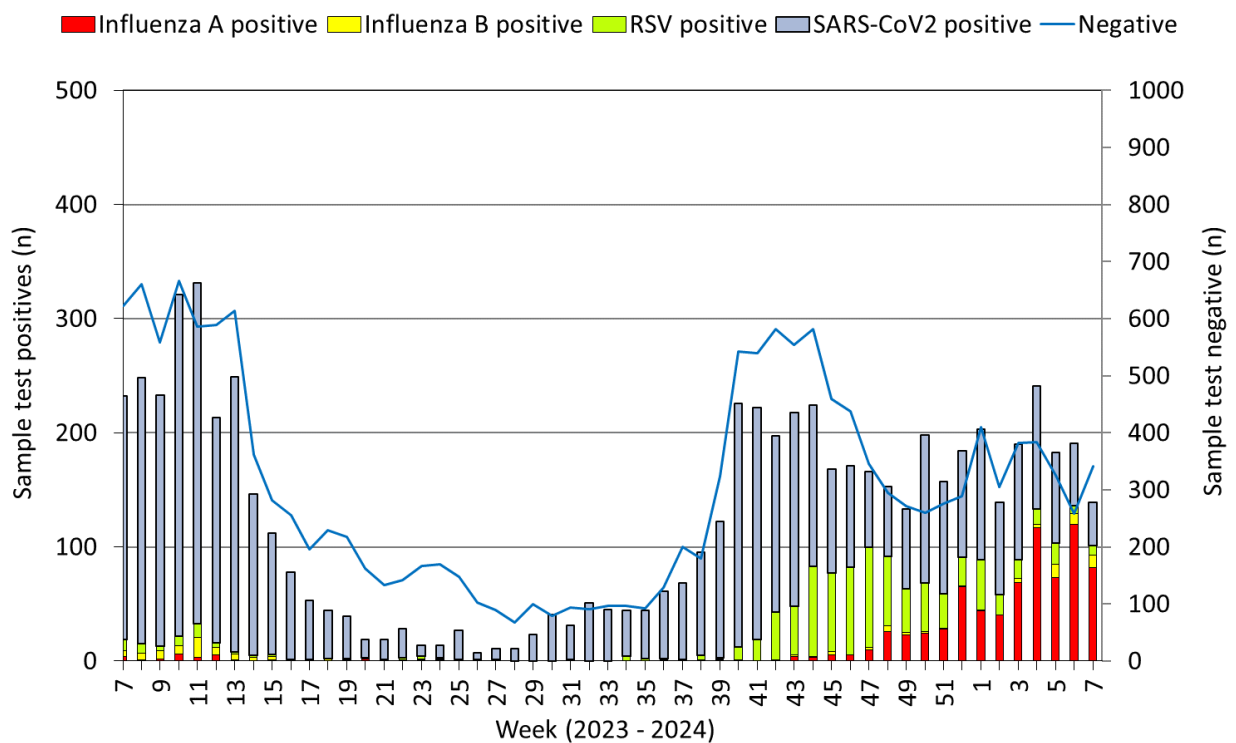
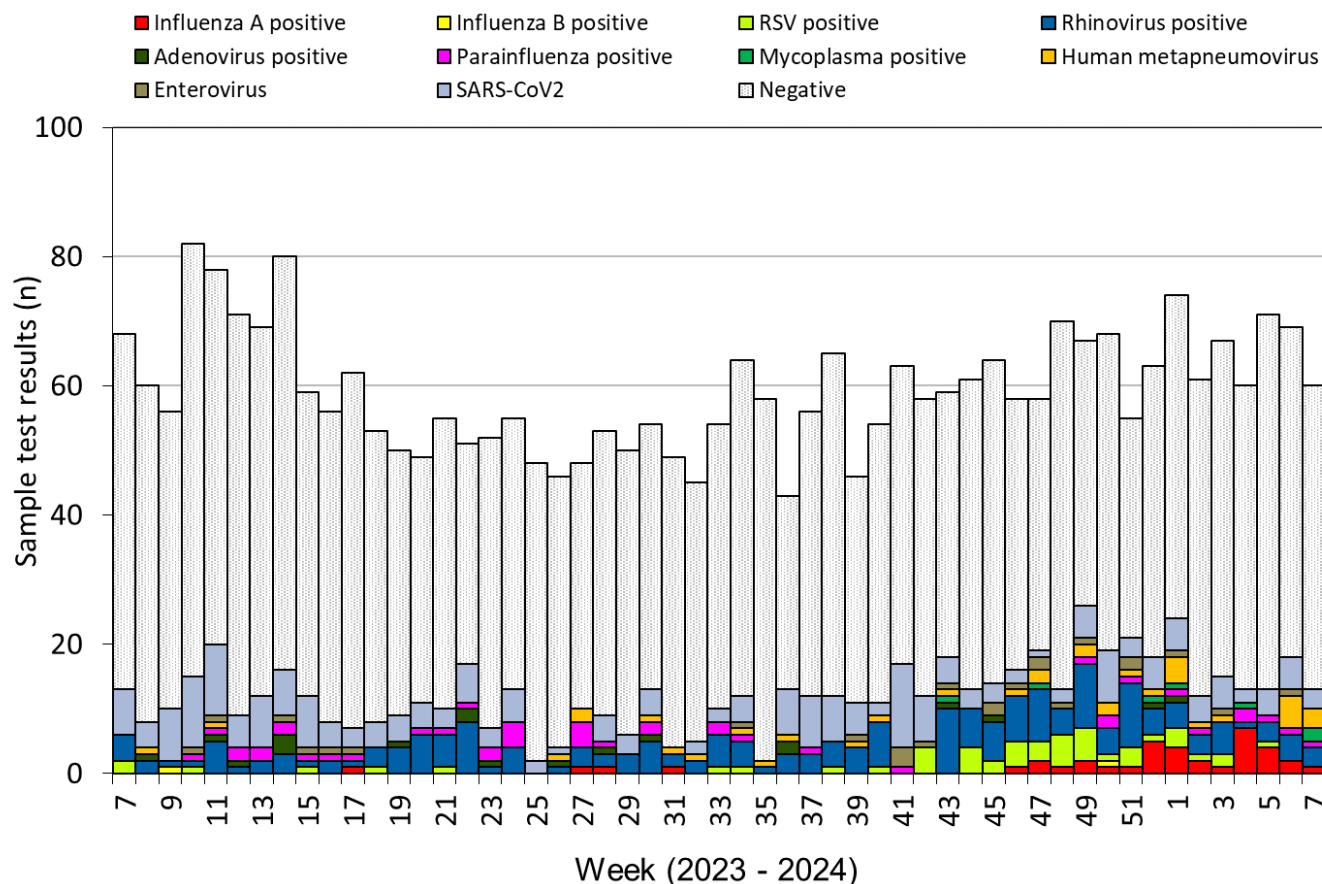
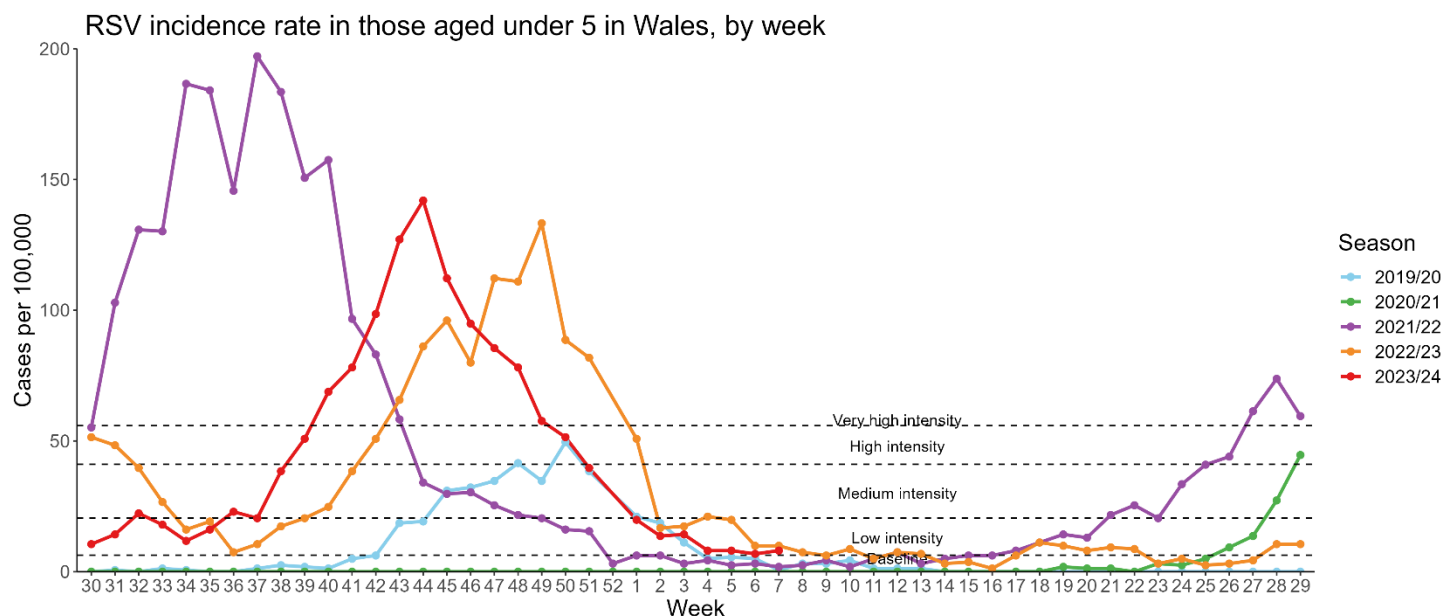


Figure 8. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 7 2023 to Week 7 2024.



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 7 2024.



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 18/02/2024.

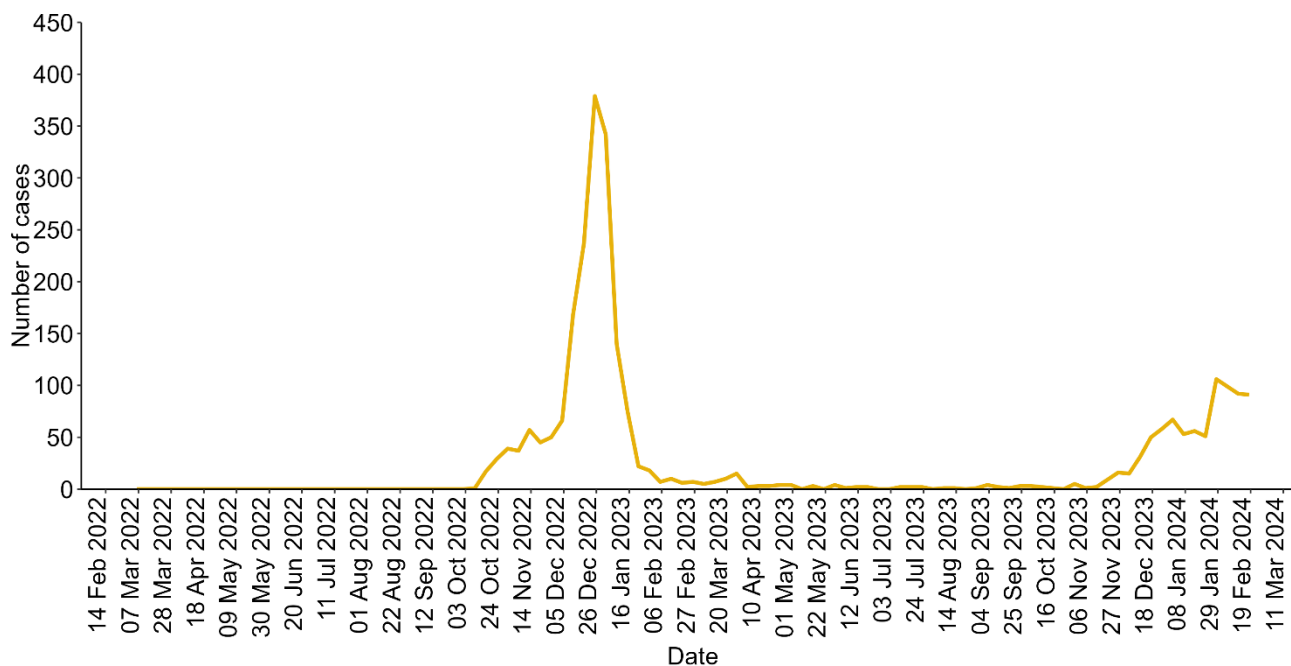


Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 18/02/2024.

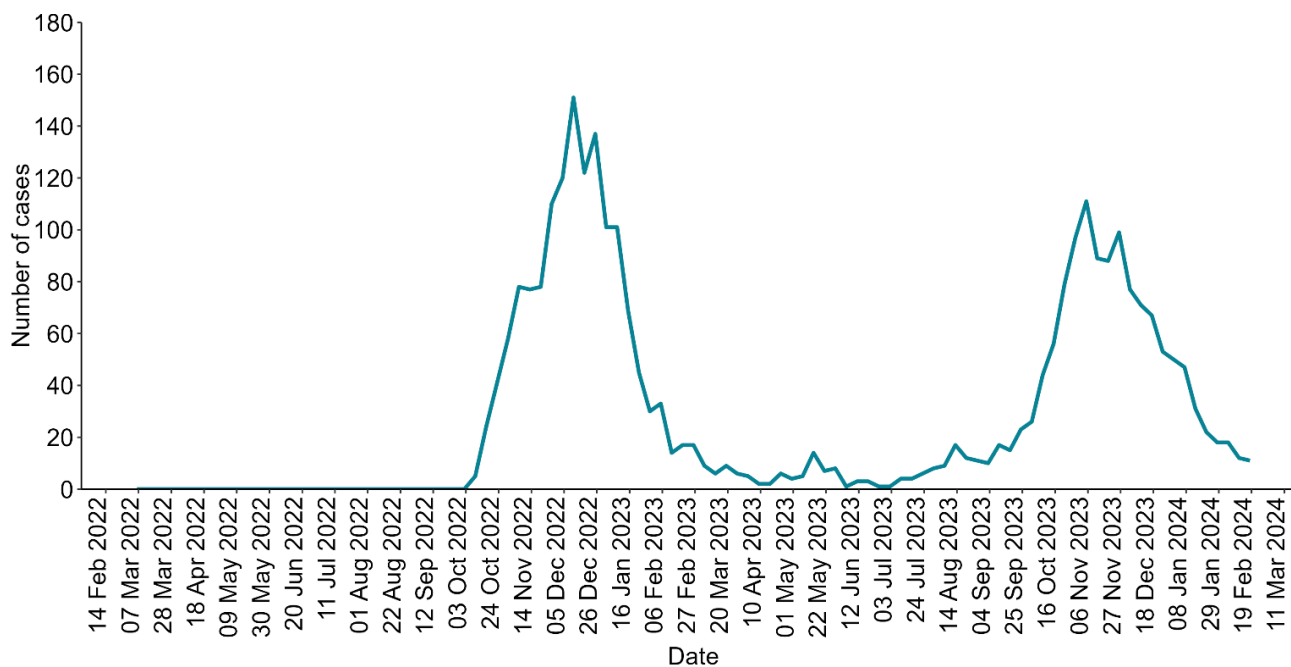
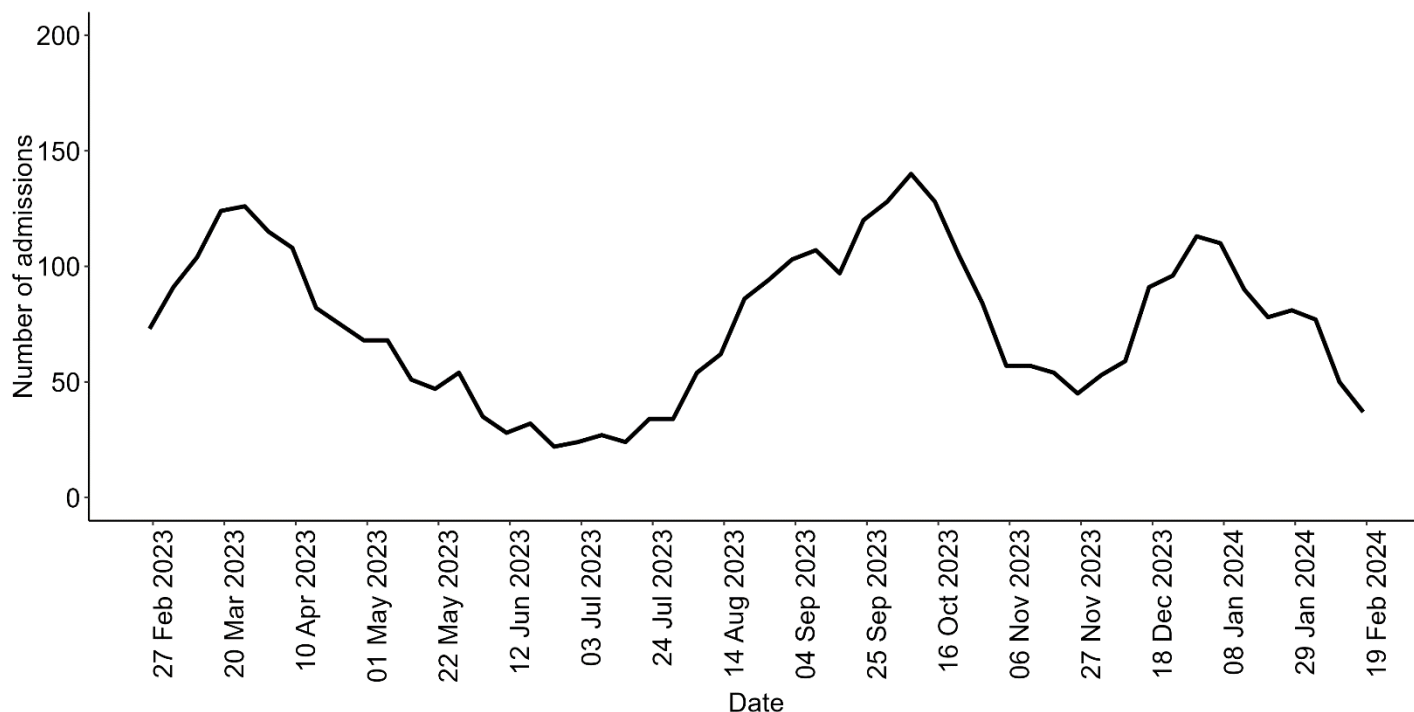
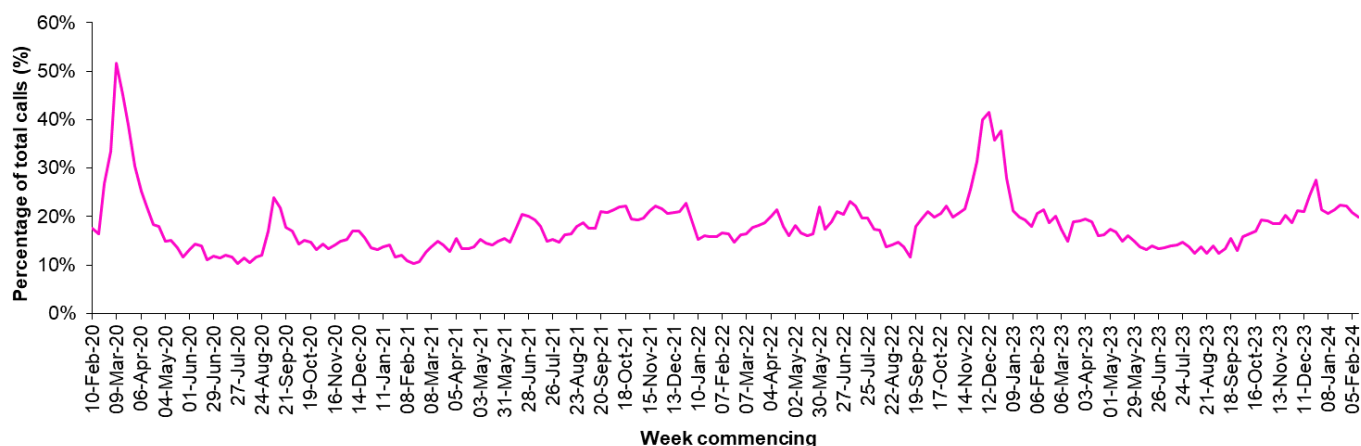


Figure 12. Seven day rolling sum of cases hospitalised in Wales within 28 days of an Covid-19 positive test result in the community (or up to 2 days post-admission), as of 18/02/2024.



Calls to NHS Direct Wales

Figure 13. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from Week 7 2020 - Week 7 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 13/02/2024).

Influenza immunisation uptake in the 2023/24 season	
People aged 65y and older	71.9%
People younger than 65y in a clinical risk group	38.5%
Children aged two & three years	42.5%
Children aged between four & ten years	61.8%
Children aged between 11 & 15 years	49.8%
Total NHS staff	36.3%
NHS staff with direct patient contact	36.1%

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 6, GP ILI consultations decreased slightly to 9.1 per 100,000 in England. In week 6, consultations were 8.9 per 100,000 in Scotland.
- During Week 7, 162 samples testing positive for influenza were reported in England of which 841 were positive for influenza. Overall influenza positivity decreased to 11.5% in England and to 11.1% in Scotland.
- In England, RSV hospitalisations in the under 5-year-olds increased to 3.19 per 100,000 in week 6. In Scotland, RSV hospitalisations in the under 1-year olds were 21.4 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 6, that influenza positivity remains elevated above the 10% positivity epidemic threshold at 27% compared to 30% in the previous week. Of 34 countries and areas reporting on influenza intensity, two reported very high intensity, three reported high intensity, 18 reported medium intensity, 10 reported low intensity and the remainder reported baseline intensity. Of the 34 countries and areas reporting on geographic spread of influenza viruses within a country or area, 27 reported widespread, four reported regional and three reported sporadic. As of week 6, there were 1,227 confirmed influenza virus infection detections reported from sentinel primary care 95% 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 19/02/2024, based on data up to 04/02/2024 that globally, influenza detections remained elevated in most Northern hemisphere countries, although global influenza virus detections decreased.
- In the countries of North America, influenza activity remained elevated but some indicators showed a decreasing trend.
- In Europe and Central Asia, influenza activity remained elevated and above the 10% epidemic threshold, with influenza A(H1N1)pdm09 detections predominant.
- In Northern Africa, influenza detections of predominantly influenza A(H1N1) and A(H3N2) continued to increase in Tunisia but decreased in the other countries.
- In East Asia, influenza activity remained elevated but decreased overall.
- In Western Asia, influenza activity decreased overall, although influenza A virus detections were reported in Armenia, Georgia, Israel, and Türkiye.
- In the Central American and Caribbean countries, influenza activity remained elevated in sentinel surveillance but decreased in non-sentinel surveillance. Influenza A(H1N1) were predominant across both regions.
- In Tropical South America, influenza Activity remained low with few detections of influenza A viruses reported in some 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 most reporting countries with a few exceptions and influenza A(H3N2) viruses predominated.
- In Southern Asia, influenza activity continued to decrease but remained elevated in some countries, with all seasonal subtypes co-circulating.
- In South-East Asia, influenza activity driven by all seasonal subtypes increased in Malaysia and Singapore and remained elevated in Thailand.

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 16/02/2024), during the period from 22/1/2024 – 04/02/2023 National Influenza Centres and other national influenza laboratories from 118 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 581,499 specimens during that period, of which 115,653 were positive for influenza viruses, 91,325 (78.9%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 9,620 (45.1%) were influenza A(H1N1)pdm09 and 11,688 (54.8%) were influenza A(H3N2). Of the 115,653 samples testing positive for influenza viruses, 24,328 tested positive for Influenza B (21.0%). **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 nationally with increases in some parts of the country during week 6 (ending 10/02/2024). Nationally, 15,474 (15.7%) out of 98,553 specimens have tested positive for influenza during week 6 in clinical laboratories nationwide, of these positive samples, 9,563 (61.8%) were influenza A and 5,911 (38.2%) were influenza B. Further characterisation has been carried out on 2,549 specimens by public health laboratories, 766 samples tested positive for influenza; 219 influenza A(H1N1)pdm09, 152 influenza A(H3N2), 218 influenza A(not subtyped) and 177 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 6, influenza activity remained similar compared to the previous week. During week 6, 3,840 influenza detections were reported: 3,302 influenza A, and 538 influenza B. The percentage of ILI visits was 1.7%. **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 10/02/2024.

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

COVID-19 – UK and international summary

- As of 14/02/2024, there were 4.7 new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. There were 11 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

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

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

surveillance.requests@wales.nhs.uk