

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

Wednesday 24th January 2024 (covering Week 03 2024)



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Current level of influenza activity: Low

Influenza activity trend: **Increasing**

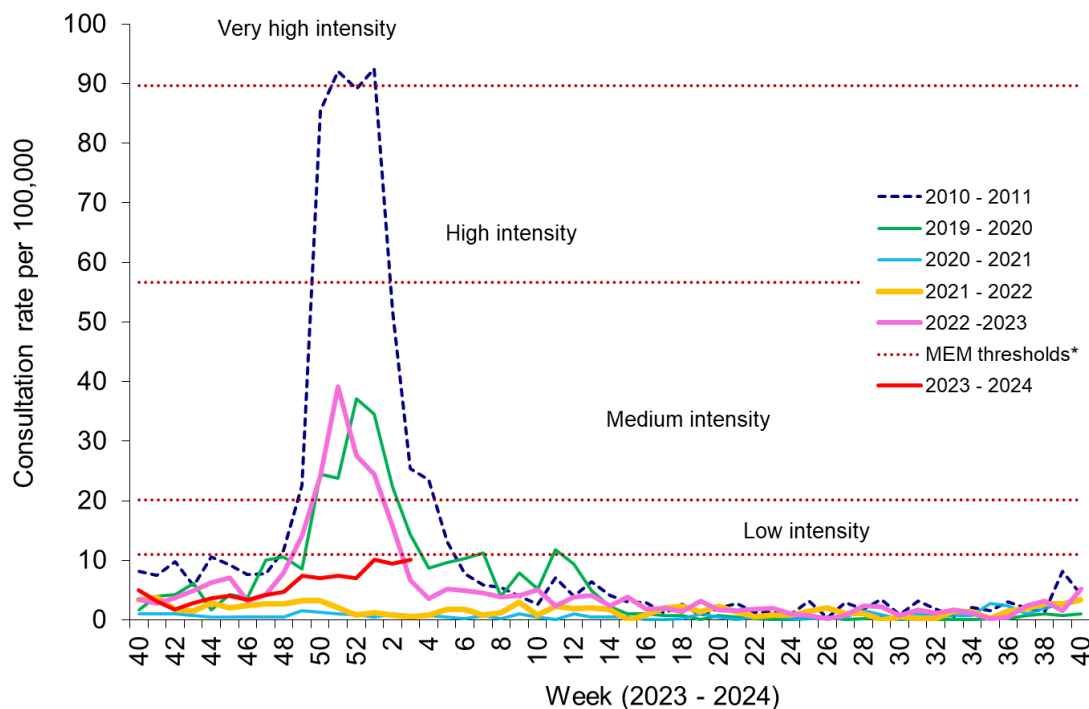
Confirmed influenza cases since 2023 Week 40: 1534 (192 influenza A(H3N2), 415 influenza A(H1N1)pdm09, 829 influenza A untyped and 98 influenza B)

During Week 3 (ending 21/01/2024) there were 251 cases of influenza confirmed, with six cases from previous weeks. Influenza is circulating. COVID-19 cases have also increased in recent weeks. RSV activity in children under 5 years has decreased to low intensity levels. Additionally, recent weeks have seen increases in rhinovirus, human metapneumovirus and *Mycoplasma* detections.

- The **Sentinel GP consultation rate for influenza-like illness (ILI)** in Wales during Week 3, was 10.0 consultations per 100,000 practice population (Table 1). The rate increased compared to the previous week (9.4 consultations per 100,000. Figure 1).
- The **Sentinel GP consultation rate for Acute Respiratory Infections (ARI)** was 239.9 per 100,000 practice population during Week 3 (Table 2 and Figure 3). This is a decrease compared to the previous week (251.7 per 100,000). During week 3, Lower Respiratory Tract Infections decreased to 91.8 per 100,000 and Upper Respiratory Tract Infections increased to 145.2 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 3 decreased to 21.4% (Figure 13).
- During Week 3, 1,209 specimens received multiplex respiratory panel testing from patients attending hospitals. **130 tested positive for influenza (53 for influenza A(not subtyped), 51 for influenza A(H1N1), 23 for influenza A(H3) and three for influenza B).** Overall influenza test-positivity increased to 10.8%, to 14.8% in those aged under 18 and decreased to 8.6% in those aged over 18. In addition, there were: 155 SARS-CoV2, 141 rhinovirus, 57 mycoplasma, 53 hMPV, 49 adenovirus, 41 RSV, 40 parainfluenza, 38 seasonal coronaviruses and 17 enterovirus positive samples (Figure 5). Additionally, 688 samples from patients were tested for influenza, RSV and SARS-CoV-2 only. Of the 688 samples there were 111 positives for SARS-CoV-2, **94 influenza A**, 19 for RSV, and **four influenza B**. (Figure 7). Furthermore, during week 3, 66 respiratory specimens were tested from patients in intensive care units (ICU) of which one was positive for influenza (influenza A(not subtyped))(Figure 8).
- There were 184 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 3. Of the 184 samples, 20 tested positive for mycoplasma, 18 rhinovirus, **16 influenza A(H1N1)**, 11 parainfluenza, 11 Sars-CoV2, eight adenovirus, eight seasonal coronaviruses, six RSV, six hMPV, **three influenza A(H3)**, two c. pneumoniae, **one influenza B** and one enterovirus (as at 24/01/2024) (Figure 4).
- From all samples where influenza subtyping information was available during week 3, 28 were influenza A(H3), 67 influenza A(H1N1), four were influenza B (Figure 6) and 57 influenza A(not subtyped).
- **Confirmed RSV case incidence in children aged under 5 further slightly increased in the most recent week but remains at low intensity levels (compared to historic levels before 2021).** In week 3 there were 14.9 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 53 and 19 respectively during Week 3 (Figures 10 & 11) and 70 for SARS-CoV-2 during week 3 (Figure 12).
- During week 3, **10 ARI outbreaks** were reported to the Public Health Wales Health Protection team. Nine outbreaks were reported as COVID-19 and one as influenza. All ten outbreaks were in residential homes.
- According to [EuroMoMo](#) analysis, all-cause deaths in Wales were not in excess during week 2.
- As at 16/01/2024, uptake of influenza vaccination was 71.1% in adults aged 65 years and older, 37.2% in those aged 6 months to 64 years at clinical risk, 41.3% in two- and three-year-old children, 61.3% in children aged four to 10 years and 48.7% in children aged 11 to 15 years (Table 3).

Respiratory infection activity in Wales

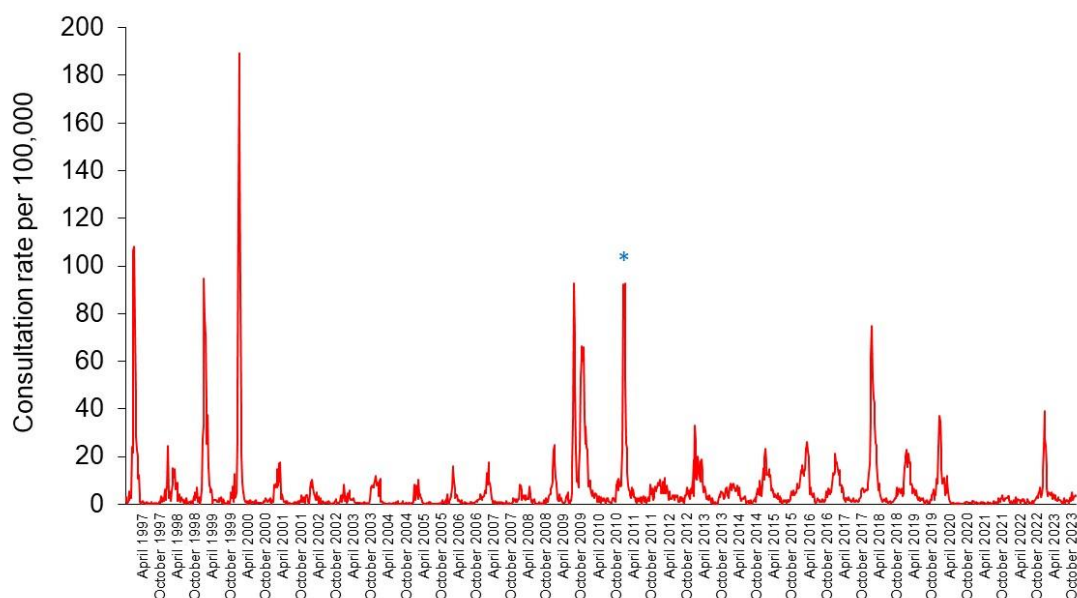
Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 21/01/2024)



* The Moving Epidemic Method (MEM) threshold calculated for Wales ILI consultation rates is 11.1 per 100,000. MEM thresholds used in this chart are based on influenza from 2010-11 to 2018-19 seasons. Caution should be used when comparing consultation rates from March 2020 onwards to previous periods due to the changes in health-seeking behaviours brought about by the COVID-19 pandemic.

**Clinical consultations for ILI seasons are monitored from W40 to W40, the most recent data is presented in red.

Figure 2. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (Week 50 1996 – Week 3 2024)



* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 50 2023 – Week 3 2024 (as of 21/01/2024)

Age group	50	51	52	1	2	3
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	0.0	0.0	7.1	0.0
5 - 14	4.6	9.2	0.0	4.6	9.2	5.4
15 - 24	2.2	11.1	8.9	6.6	8.9	10.2
25 - 34	10.0	6.0	8.0	16.0	8.0	7.1
35 - 44	19.2	11.5	11.5	17.2	15.3	22.5
45 - 64	6.8	7.6	5.7	11.3	8.5	10.9
65 - 74	4.6	4.5	9.0	6.7	9.0	10.2
75+	2.3	4.5	8.9	8.9	8.9	5.0
Total	7.1	7.4	7.0	10.2	9.4	10.0

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 50 2023 – Week 3 2024 (as of 21/01/2024)

Age group	50	51	52	1	2	3
< 1	1837.7	1681.9	1086.2	1554.4	1000.0	573.3
1 - 4	1021.0	1001.3	712.2	494.1	538.0	861.6
5 - 14	475.4	354.2	216.2	241.6	269.2	332.5
15 - 24	170.5	155.0	110.7	225.9	194.8	128.6
25 - 34	223.6	202.1	150.1	198.2	206.2	189.6
35 - 44	243.6	223.9	204.8	256.2	240.7	214.4
45 - 64	205.9	188.1	155.0	223.1	225.0	198.7
65 - 74	215.6	195.0	210.7	262.2	232.9	219.3
75+	291.8	272.3	189.7	325.2	298.5	260.0
Total	289.8	258.0	198.7	261.4	251.7	239.9

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

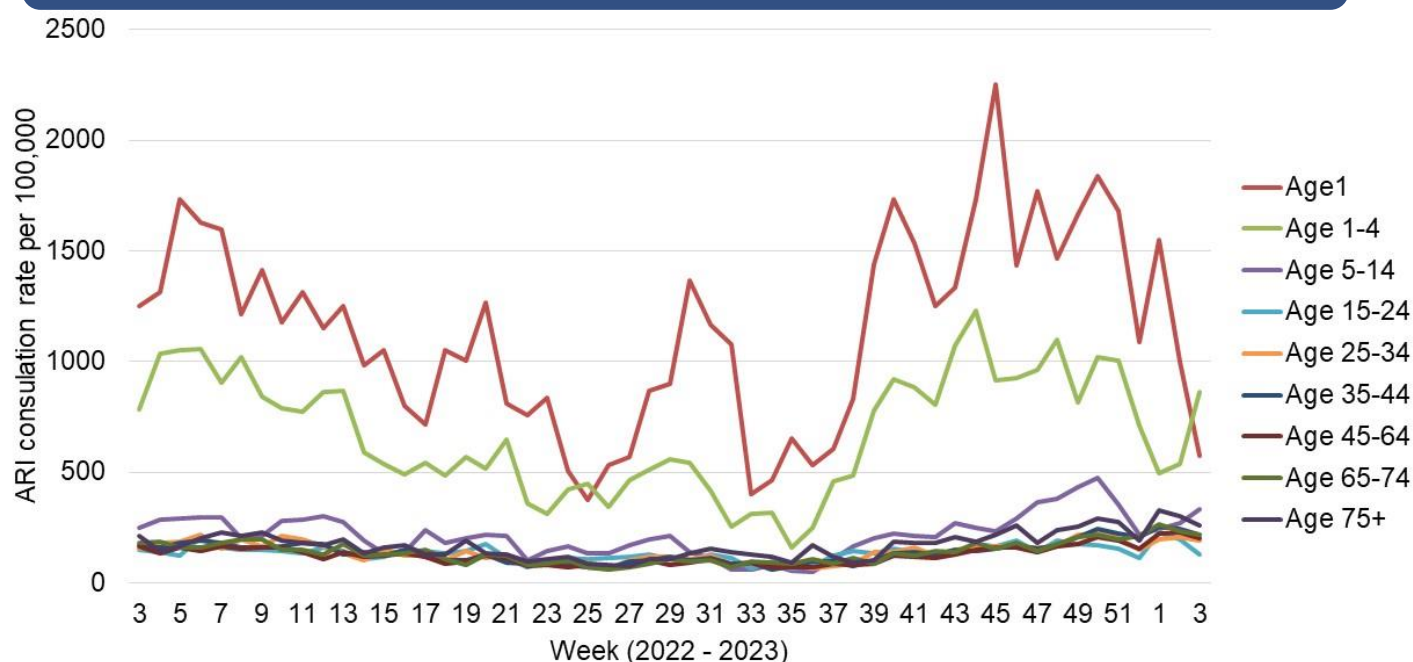
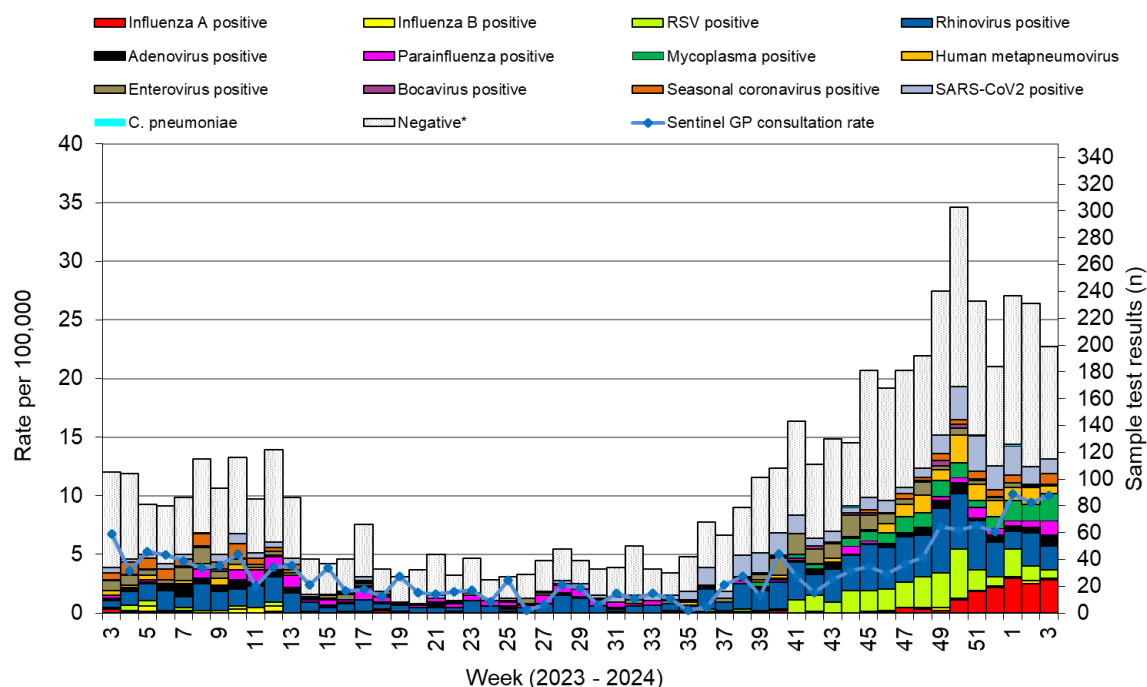
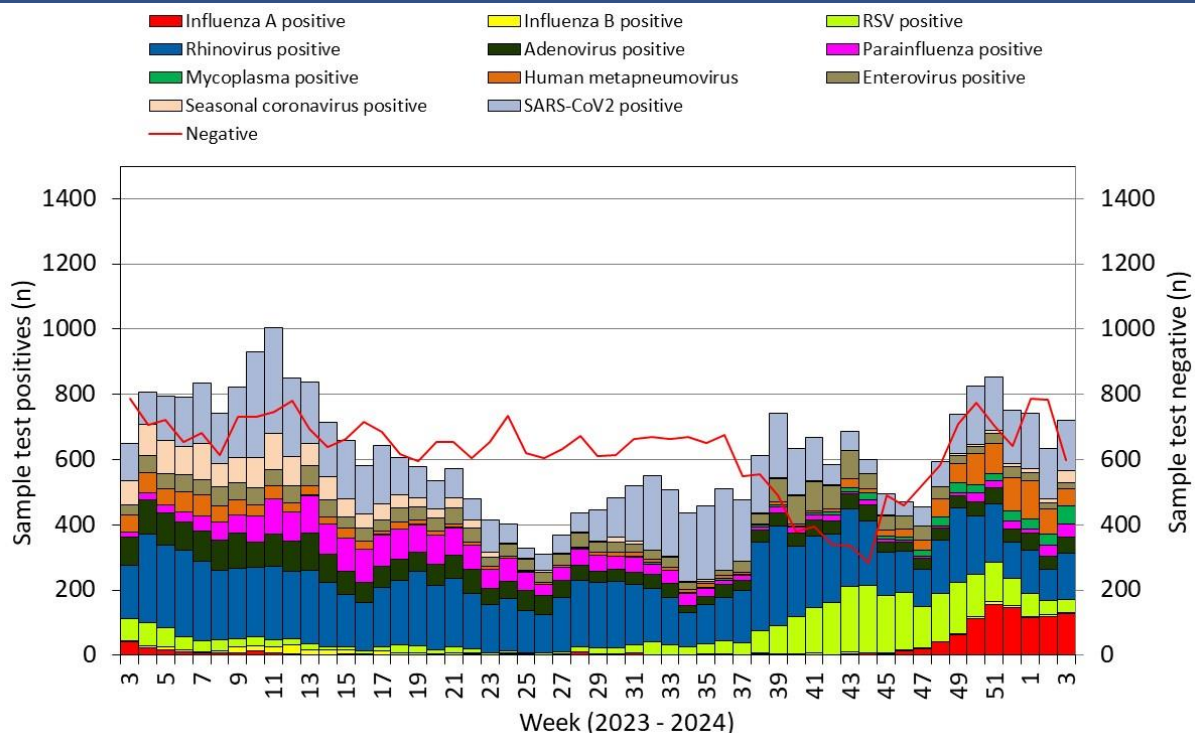


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 21/01/2024, by week of sample collection, Week 3 2023 to Week 3 2024.



* 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 21/01/2024 by week of sample collection, Week 3 2023 to Week 3 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 21/01/2024 by week of sample collection, Week 3 2023 to Week 3 2024.

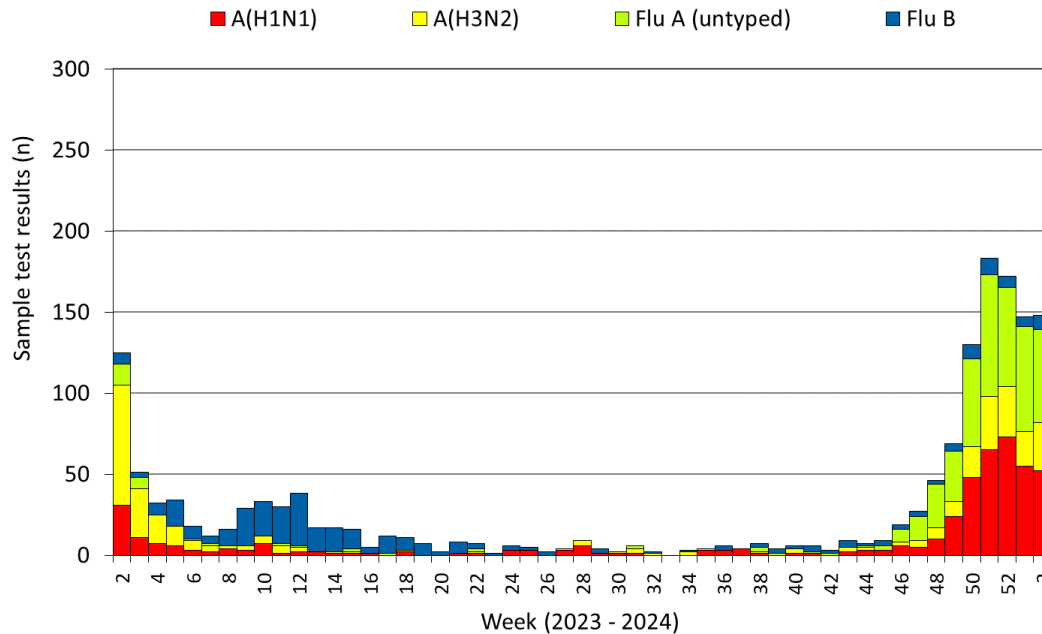


Figure 7. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 21/01/2024 by week of sample collection, Week 3 2023 to Week 3 2024.

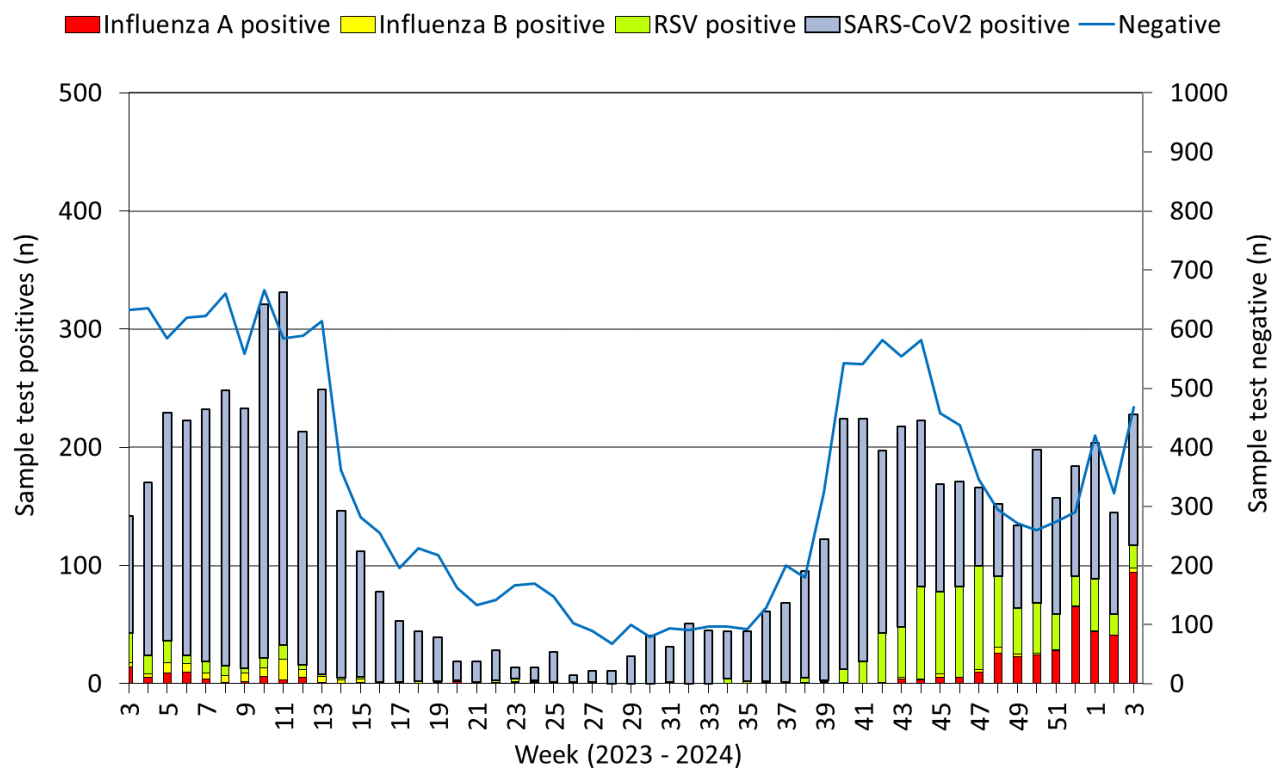
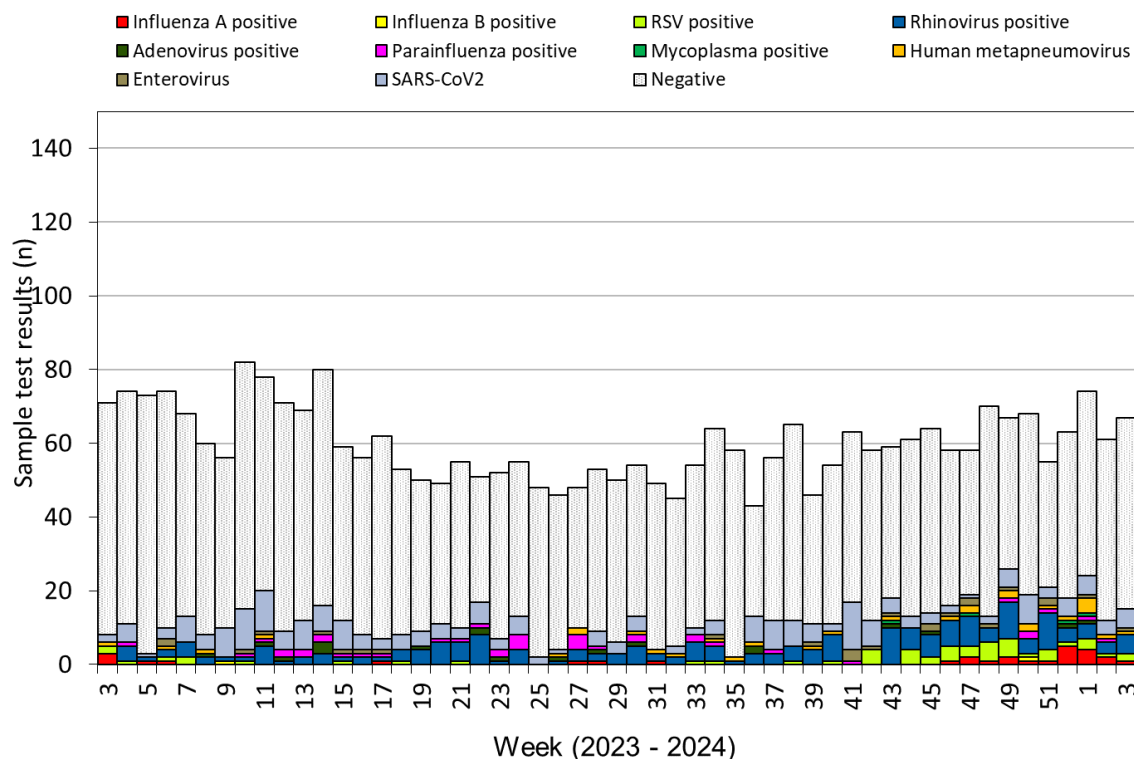
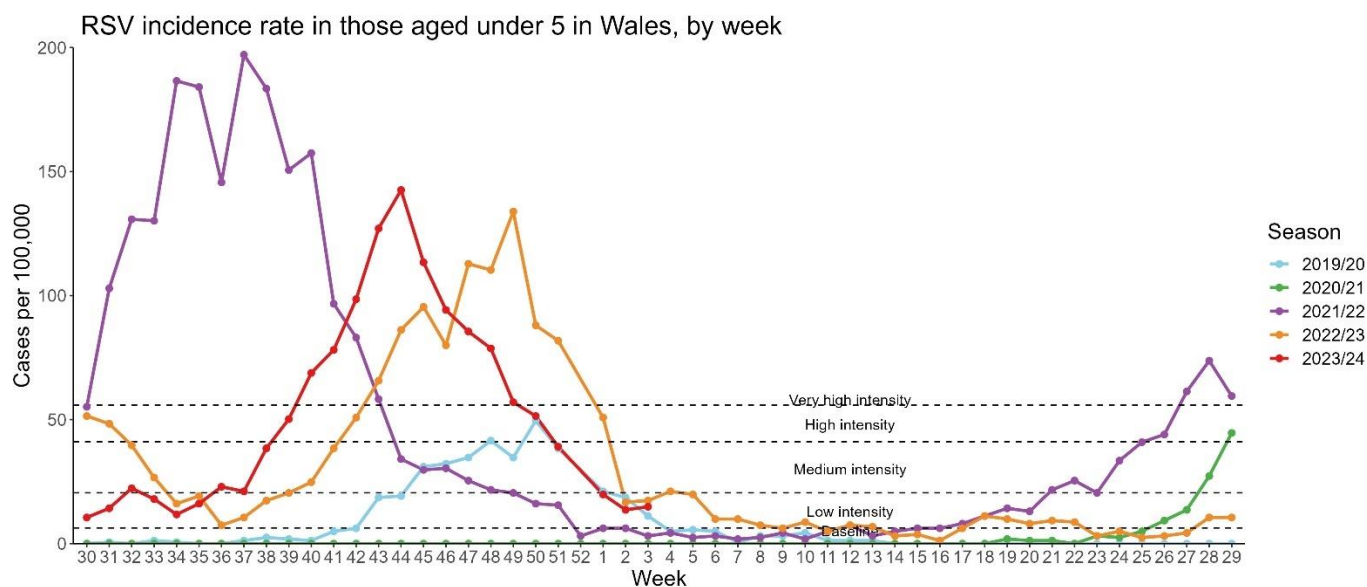


Figure 8. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 3 2023 to Week 3 2024.



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 3 2024.



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

ARI – Hospital admissions

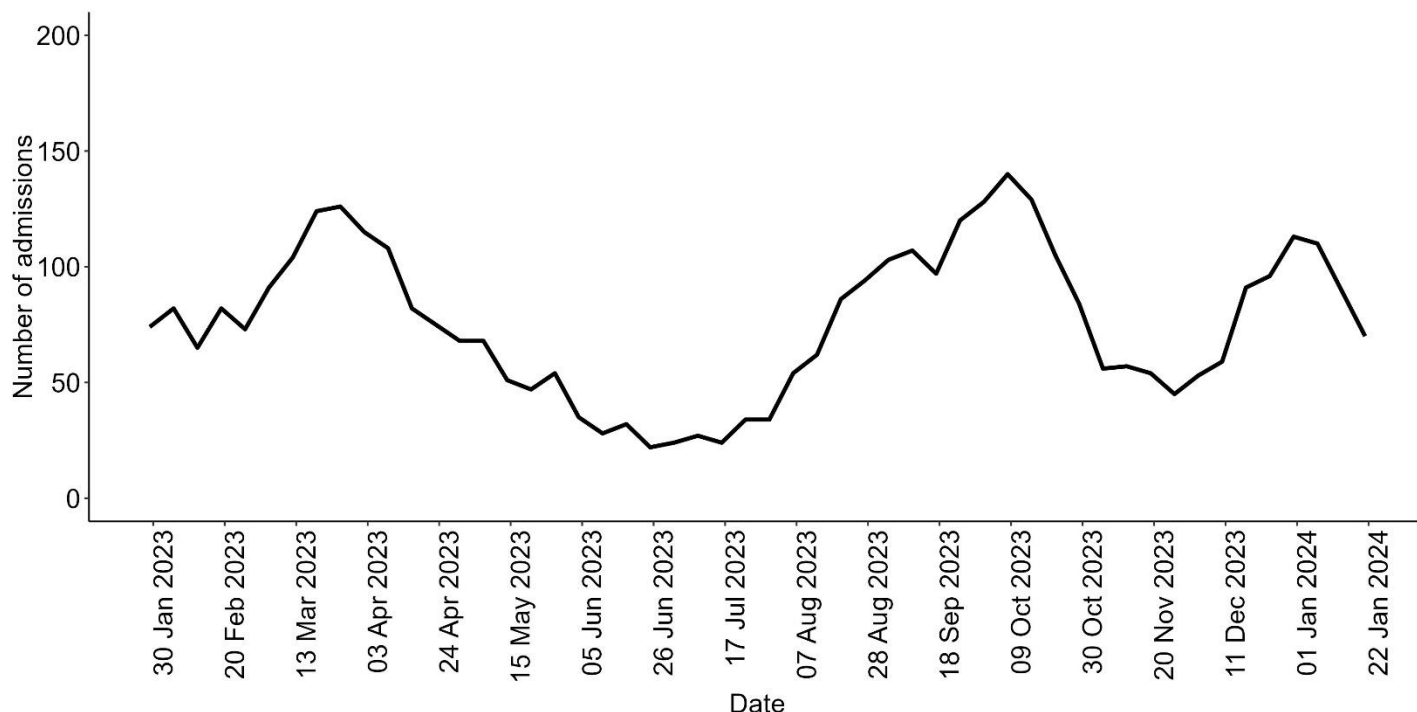
Figure 10. Seven day rolling sum of cases hospitalised in Wales within 28 days of an influenza positive test result in the community (or up to 2 days post-admission), as of 21/01/2024.



Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 21/01/2024.

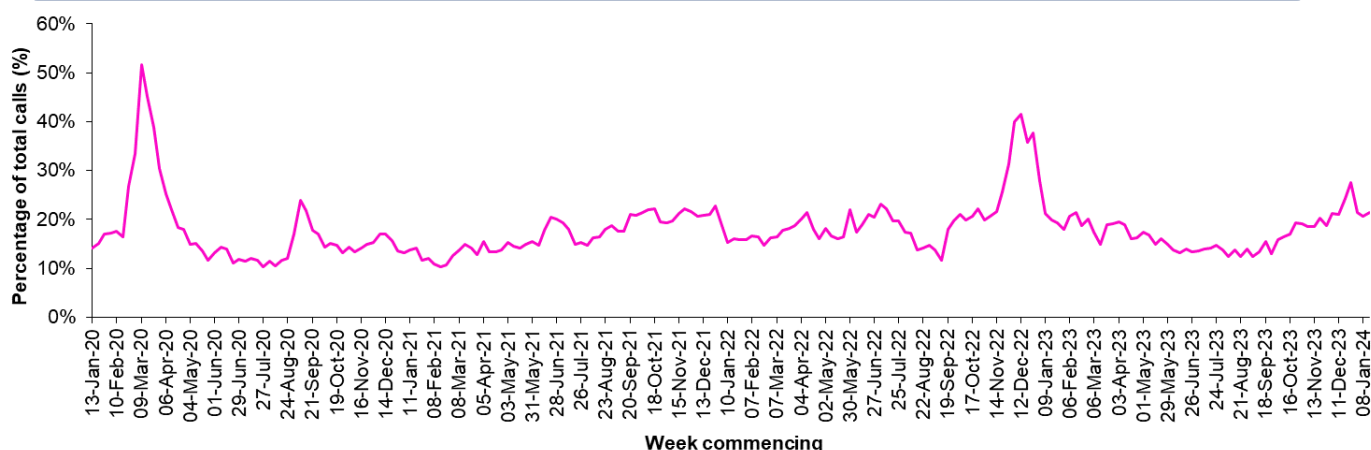


Figure 12. Seven day rolling sum of cases hospitalised in Wales within 28 days of an Covid-19 positive test result in the community (or up to 2 days post-admission), as of 21/01/2024.



Calls to NHS Direct Wales

Figure 13. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from Week 3 2020 - Week 3 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 16/01/2024).

Influenza immunisation uptake in the 2023/24 season	
People aged 65y and older	71.1%
People younger than 65y in a clinical risk group	37.2%
Children aged two & three years	41.3%
Children aged between four & ten years	61.3%
Children aged between 11 & 15 years	48.7%
Total NHS staff	33.8%
NHS staff with direct patient contact	33.5%

The end of season report Influenza in Wales 2019/20 is available to download and contains a full breakdown of vaccination uptake amongst eligible groups.
Link to report: <https://phw.nhs.wales/topics/immunisation-and-vaccines/flu vaccine/annual-influenza-surveillance-and-influenza-vaccination-uptake-reports/>

Influenza activity – UK and international summary

- As of Week 2, GP ILI consultations increased to 8.0 per 100,000 in England. In week 2, consultations decreased to 8.2 per 100,000 in Scotland and is now at low intensity levels.
- During Week 2, 740 samples testing positive for influenza were reported in England (549 influenza A(not subtyped), 148 influenza A(H3N2), 25 influenza A(H1N1)pdm09) and 18 were influenza B). Overall influenza positivity increased to 10.0% in England and to 12.8% in Scotland.
- In England, RSV hospitalisations in the under 5-year-olds decreased to 4.5 per 100,000 in week 2. In Scotland, RSV hospitalisations in the under 1-year olds were 47.0 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 2, that influenza positivity remains elevated above the 10% positivity epidemic threshold. Of 38 countries and areas reporting on influenza intensity, one reported very high intensity, five reported high intensity, 14 reported medium intensity, 13 reported low intensity and the remainder reported baseline intensity. Of the 38 countries and areas reporting on geographic spread of influenza viruses within a country or area, 25 reported widespread, six reported regional, five reported sporadic, one reported local activity and one reported no activity. As of week 2, there were 1,017 confirmed influenza virus infection detections reported from sentinel primary care. All were type A viruses (80% influenza A(H1N1)pdm09 and 20% influenza A(H3)).

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

- The WHO reported on 08/01/2024, based on data up to 24/12/2023 that globally, influenza detections increased due to increases in parts of the Northern Hemisphere, including parts of Europe and Central Asia, and North America.
- In the countries of North America, influenza detections increased, and activity was above the seasonal baseline expected for this time of the year. Influenza A(H1N1)pdm09 viruses were predominant. Hospitalisations have also increased.
- In Europe and Central Asia, in the most recent week, influenza activity increased sharply and has exceeded the 10% epidemic threshold. Influenza A(H1N1) predominated in primary care whilst A(H3N2) in secondary care.
- In East Asia, influenza activity continued to increase mainly due to activity in China and the Republic of Korea, with detections of influenza A(H3) predominant followed by a smaller number of influenza B.
- In Western Asia, influenza activity continued to increase in some countries of the Arab Peninsula and remained low in other reporting countries except for Lebanon that reported increased influenza A(H1N1) detections.
- In the Central American and Caribbean countries, influenza activity remained moderate in the Caribbean with detections of influenza A(H1N1)pdm09 predominant and in Central of primarily influenza B predominant.
- In the temperate zones of the southern hemisphere, indicators of influenza activity were low or below seasonal threshold.
- In tropical Africa, influenza detections further decreased in Western Africa but cases continued to be detected in some countries in Eastern and Middle Africa. Influenza A(H3N2) viruses were predominant. SARS-CoV-2 remained increased in the United Republic of Tanzania.
- In Southern Asia, influenza activity driven predominantly by both influenza A(H1N1)pdm09 and A(H3N2) was stable overall. Pakistan reported an increase in influenza A(H3N2).
- In South-East Asia, influenza activity driven predominantly by all seasonal subtypes remained stable overall.
- In Northern Africa, cases of predominately A(H1N1)pdm09 increased in Algeria, but were low in other 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 05/01/2024), during the period from 11/12/2023 – 24/12/2023 National Influenza Centres and other national influenza laboratories from 117 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 585,784 specimens during that period, of which 100,299 were positive for influenza viruses, 86,897 (86.6%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 11,109 (27.3%) were influenza A(H1N1)pdm09 and 29,546 (72.7%) were influenza A(H3N2). Of the 100,299 samples testing positive for influenza viruses, 13,402 tested positive for Influenza B (13.4%). **Source:** Flu Net: <https://www.who.int/tools/fluNet>

Update on influenza activity in North America

- The USA Centers for Disease Control and Prevention (CDC) report that influenza activity levels remain elevated in most parts of the country during week 2 (ending 13/01/2024). Nationally, 13,006 (13.7%) out of 94,815 specimens have tested positive for influenza in week 2 in clinical laboratories nationwide, of these positive samples, 10,330 (79.4%) were influenza A and 2,676 (20.6%) were influenza B. Further characterisation has been carried out on 2,779 specimens by public health laboratories, and 591 samples tested positive for influenza; 193 influenza A(H1N1)pdm09, 71 influenza A(H3N2), 327 influenza A(not subtyped) and 136 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 2, influenza activity decreased but remains at elevated levels. During week 2, 4,646 influenza detections were reported: 4,427 influenza A, and 219 influenza B. The percentage of ILI visits was 2.8%. **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 13/01/2024.

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

COVID-19 – UK and international summary

- As of 10/01/2024, there were 8.1 new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. There were three suspected COVID-19 deaths with a date of death in the most recent 7-day reporting period, reported to Public Health Wales. There were 20 COVID-19 death registrations recorded in ONS data for the latest data period reported Latest COVID-19 data from Public Health Wales is available from: <https://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/>
- The latest UKHSA COVID-19 data summary is available from: <https://coronavirus.data.gov.uk/>
- WHO situation updates on COVID-19 are available from: <https://covid19.who.int/>

Middle East respiratory syndrome coronavirus (MERS-CoV) – latest update from WHO and ECDC

- Since the beginning of 2023 and as of 10 January 2024, two MERS-CoV cases have been reported by United Arab Emirates and Saudi Arabia. In total, 2,617 laboratory-confirmed cases of locally acquired Middle East Respiratory Syndrome coronavirus (MERS-CoV) worldwide, including 947 deaths. WHO Global Alert and Response website: <https://www.who.int/emergencies/disease-outbreak-news>
- Rapid risk assessments of the situation from ECDC, which contain epidemiological updates and advice for travellers and healthcare workers, are available from: <https://ecdc.europa.eu/en/middle-east-respiratory-syndrome-coronavirus>
- Further updates and advice for healthcare workers and travellers are available from WHO: <http://www.who.int/emergencies/mers-cov/en/> and from NaTHNaC: <https://travelhealthpro.org.uk/news/237/mers-cov-update-travelhealthpro-country-pages>

Human infection with avian influenza A(H7N9), China

- The latest WHO Influenza at Human-Animal Interface summary reports that there have been no publicly available reports from China or other countries on influenza A(H7N9) in recent months, but overall risk assessments are unchanged. Previous reports are available from: <https://www.who.int/teams/global-influenza-programme/avian-influenza/monthly-risk-assessment-summary>
The risk of international spread of avian influenza A(H7N9) is considered to be low at present. However, it is important that clinicians are aware of the possibility of human infection with animal influenza, in persons presenting with severe acute respiratory disease, while travelling or soon after returning from an area where avian influenza is a concern. WHO Global Alert & Response updates: <https://www.who.int/emergencies/disease-outbreak-news>

Links:

Public Health Wales influenza surveillance webpage:

<http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=25480>

Public Health Wales COVID-19 data dashboard:

<https://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/>

Public Health Wales interactive report on hospitalisations in influenza and RSV cases:

<https://public.tableau.com/app/profile/public.health.wales.health.protection/viz/ARI-Hospitaladmissionsdashboard/ARIHospitaladmissionsdashboard?publish=yes>

GP Sentinel Surveillance of Infections Scheme:

<http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=27918>

NICE influenza antiviral usage guidance:

<http://www.nice.org.uk/Guidance/TA158>

England influenza and COVID-19 surveillance:

<https://www.gov.uk/government/statistics/national-flu-and-covid-19-surveillance-reports-2023-to-2024-season>

Scotland seasonal respiratory surveillance:

<https://www.publichealthscotland.scot/publications>

Northern Ireland influenza surveillance:

<https://www.publichealth.hscni.net/directorate-public-health/health-protection/seasonal-influenza>

European Centre for Communicable Disease:

<http://ecdc.europa.eu/>

European influenza information:

<http://flunewseurope.org/>

Advice on influenza immunisation

<https://phw.nhs.wales/topics/immunisation-and-vaccines/flu vaccine/>

Advice on influenza immunisation (for intranet users)

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

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

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