

Current level of influenza activity: Baseline

Influenza activity trend: Decreasing

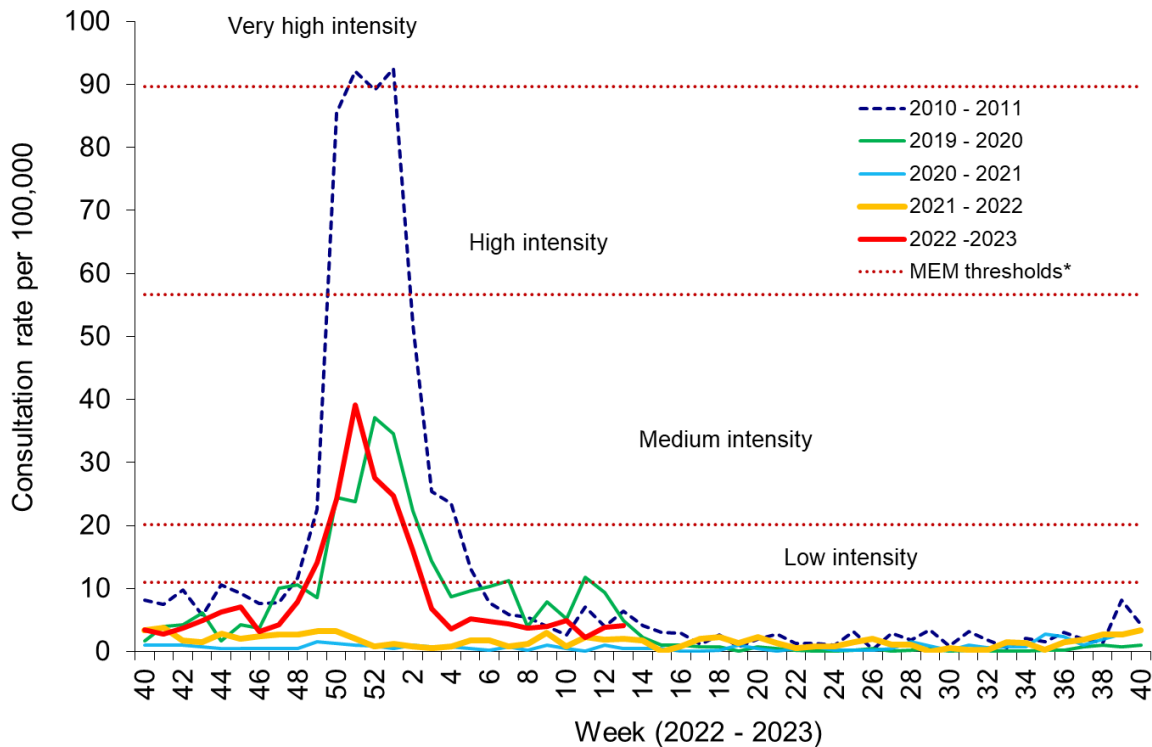
Confirmed influenza cases since 2022 Week 40: 7711 (3047 influenza A(H3N2), 1623 influenza A(H1N1)pdm09, 2651 influenza A(not subtyped) and 390 influenza B)

During Week 13 (ending 02/04/2023) there were 23 cases of influenza, with seven further cases from previous weeks. This is a decrease compared to the previous week. Overall influenza activity has decreased since February, but small numbers of influenza B and influenza A cases continue to be detected. COVID-19 cases continue to be detected in patients in hospitals and in the community. RSV incidence in children under five years of age has decreased from peak levels seen in December and is currently at low intensity levels. SARS-CoV-2, Rhinovirus, parainfluenza, and adenovirus 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 13, was 4.0 consultations per 100,000 practice population (Table 1). This is an increase compared to the previous Week (3.8 consultations per 100,000, Figure 1).
- The **Sentinel GP consultation rate for Acute Respiratory Infections (ARI)** was 191.1 per 100,000 practice population during Week 13 (Table 2 and Figure 3). This is an increase compared to the previous week (187.9 per 100,000). Weekly consultations for Lower Respiratory Tract Infections (at 61.8 per 100,000) increased and Upper Respiratory Tract Infections (131.2 per 100,000) 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 13 increased to 19.1% (Figure 9).
- During Week 13, 1,387 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 **17** samples positive for influenza, of which two were A(H1N1), and 15 were influenza B. Overall influenza positivity decreased to 1.2% across all age groups; 0.5% in those aged 18 years and over; and to 2.6% in those aged under 18 years. In addition, there were 255 rhinovirus, 182 SARS-CoV-2, 116 parainfluenza, 115 adenovirus, 69 seasonal coronaviruses, 31 enterovirus, 29 human metapneumovirus, 17 RSV, and one mycoplasma positive samples (Figure 5). Additionally, 882 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 882 samples, 245 were positive for SARS-CoV-2, five for influenza B, two were positive for RSV and one for influenza A (Figure 6). Furthermore, during Week 13, 69 respiratory specimens were tested from patients in intensive care units (ICU) of which none were positive for influenza (Figure 7).
- There were 51 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 13. Of the 51 samples, ten tested positive for rhinovirus, seven for parainfluenza, three for SARS-CoV-2, two for adenovirus, two for human metapneumovirus, one for enterovirus and one for seasonal coronavirus (as at 05/04/2023) (Figure 4).
- **In Week 13 there were 6.8 confirmed cases per 100,000 in those aged under five years (Figure 7).** This an increase from the previous week and activity is at low intensity levels. The baseline MEM threshold in Wales for RSV activity in children younger than five years is 6.3 confirmed cases per 100,000.
- 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) increased to twelve during Week 12 (latest data available), from nine during the previous week. (Figures 10 & 11).
- During week 13, 20 **ARI outbreaks** were reported to the Public Health Wales Health Protection team. All 20 outbreaks were reported as COVID-19. All 20 **ARI outbreaks** were reported in residential care homes.
- According to [EuroMoMo](#) analysis, all-cause deaths in Wales were not significantly in excess during week 12.

Respiratory infection activity in Wales

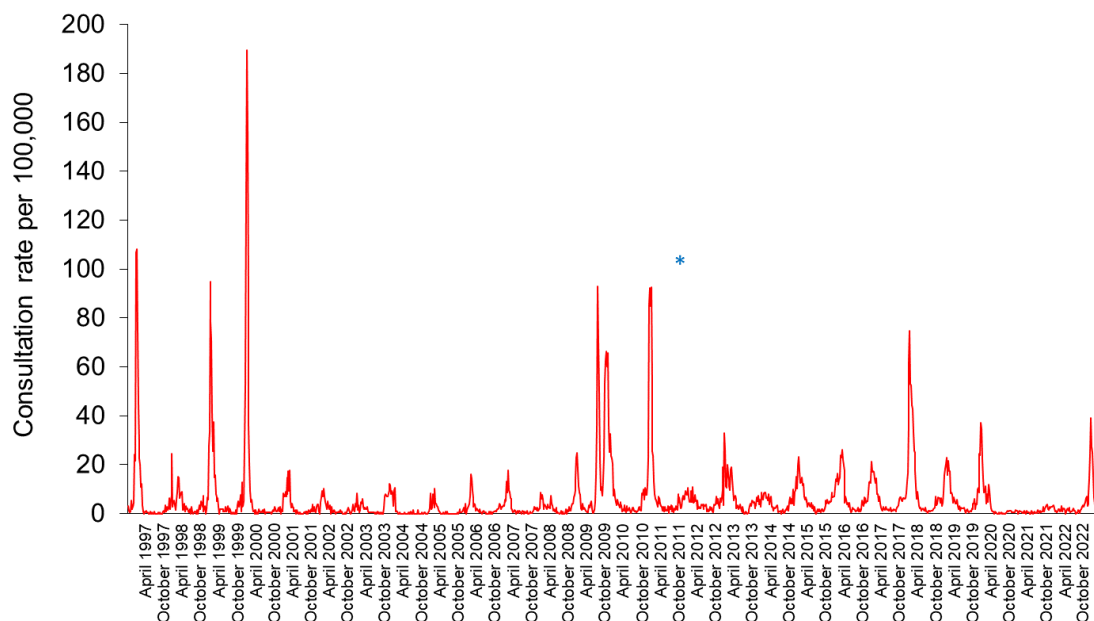
Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 02/04/2023)



* 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 13 2023)



* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 08 – Week 13 2023 (as of 02/04/2023)

Age group	8	9	10	11	12	13
< 1	0	0.0	0	32.9	0.0	0.0
1 - 4	0	6.5	0	0.0	0.0	0.0
5 - 14	0	0.0	2.38	0.0	4.7	8.8
15 - 24	8.38	6.3	4.57	0.0	2.2	8.5
25 - 34	3.7	3.7	0	5.9	4.0	5.7
35 - 44	5.48	1.8	10.11	0.0	7.9	3.7
45 - 64	4.42	5.3	6.82	2.8	3.8	1.8
65 - 74	0	6.3	2.31	0.0	0.0	0.0
75+	4.29	2.1	7.01	4.5	4.6	4.4
Total	3.7	4.0	4.9	2.2	3.8	4.0

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 08 – Week 13 2023 (as of 02/04/2023)

Age group	8	9	10	11	12	13
< 1	1128.1	1309.4	1085.5	1217.9	1067.4	1182.7
1 - 4	988.8	812.5	762.64	747.7	835.3	849.7
5 - 14	196.0	206.7	268.86	276.5	293.7	270.0
15 - 24	144.6	142.4	139.27	128.7	152.6	143.0
25 - 34	188.5	158.8	201.97	188.0	160.0	130.0
35 - 44	157.0	156.8	159.77	175.5	169.7	126.1
45 - 64	146.7	153.8	154.91	133.8	105.4	130.8
65 - 74	189.2	193.4	143.35	142.4	122.7	169.7
75+	208.1	220.7	184.71	175.0	166.3	191.2
Total	207.4	203.4	202.7	196.1	187.9	191.1

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 13 2022 – Week 13 2023 (as of 02/04/2023).

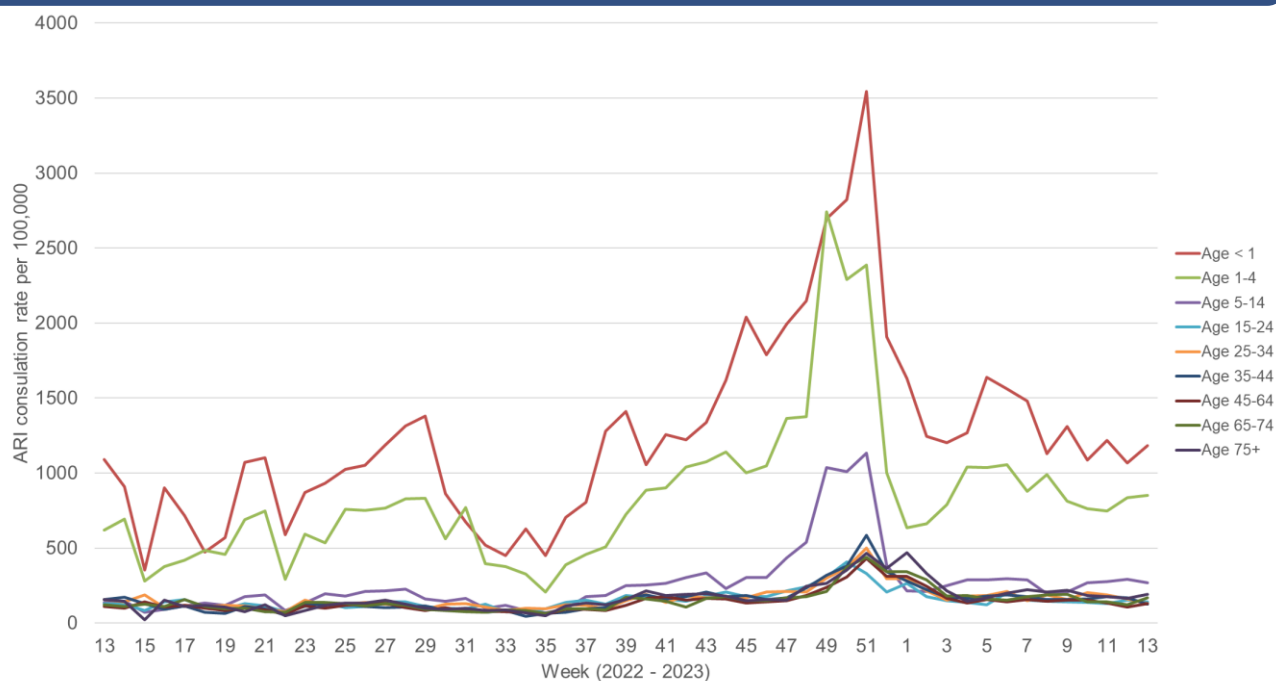
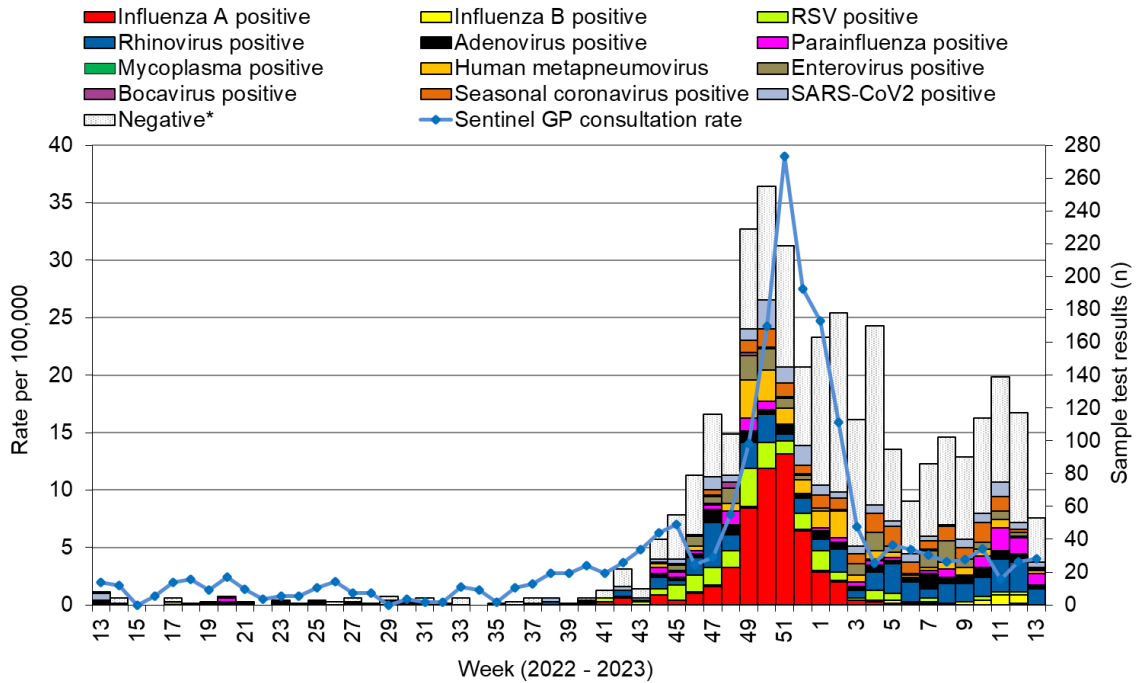
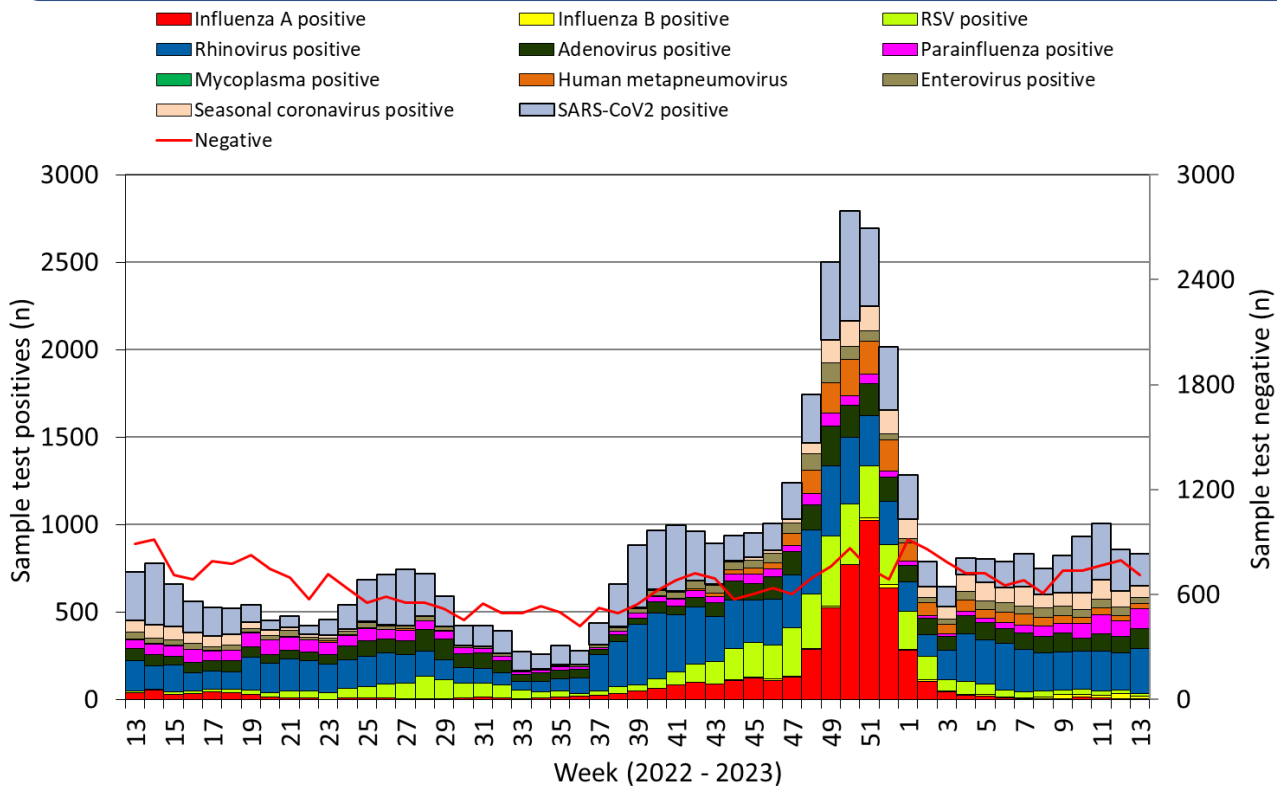


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 02/04/2023, by week of sample collection, Week 14 2022 to Week 14 2023.



* Tested negative for influenza, adenovirus, rhinovirus, RSV, parainfluenza, mycoplasma, human metapneumovirus, enterovirus, bocavirus and coronaviruses. Samples which test positive for more than on pathogen will appear more than once in the chart. **Results for the latest 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 02/04/2023 by week of sample collection, Week 13 2022 to Week 13 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 on 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 02/04/2023 by week of sample collection, Week 13 2022 to Week 13 2023.

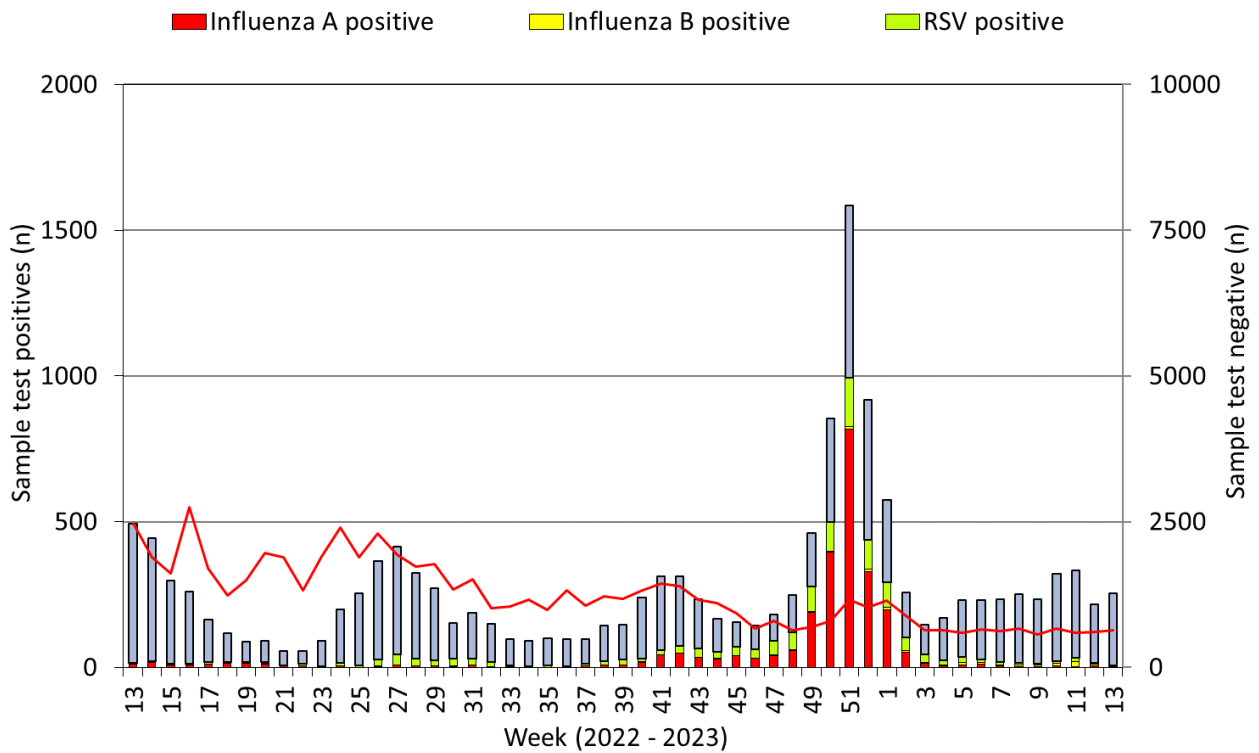
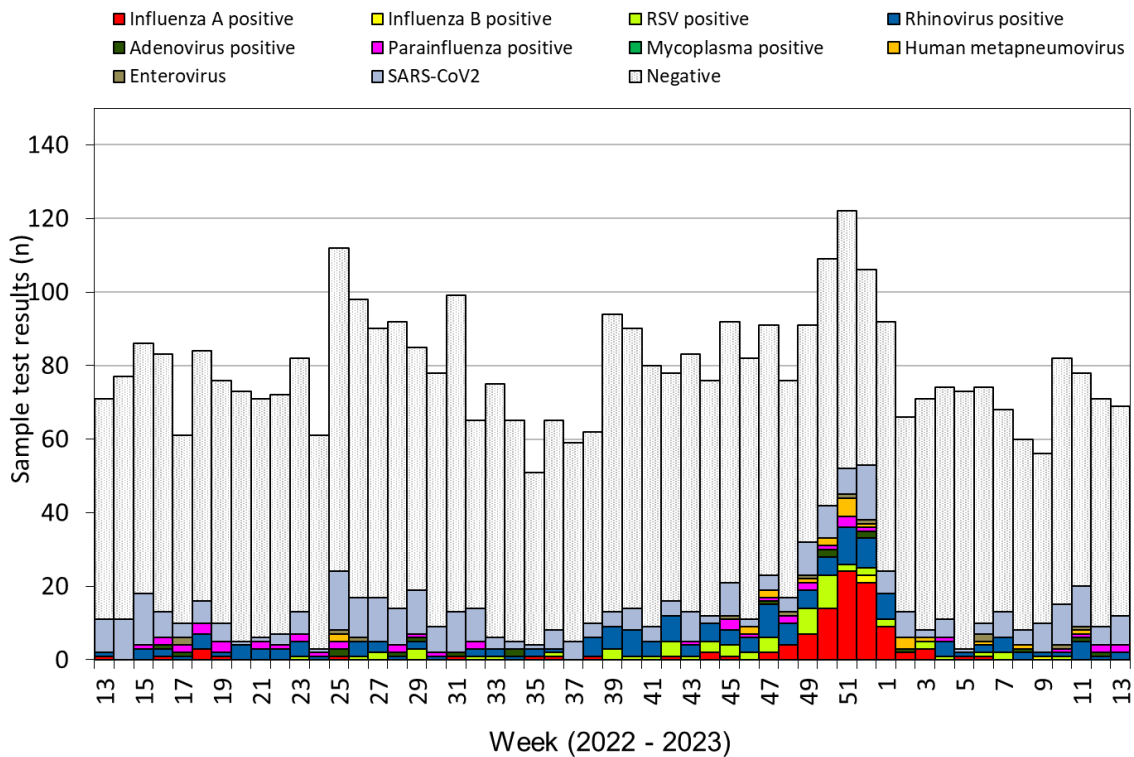
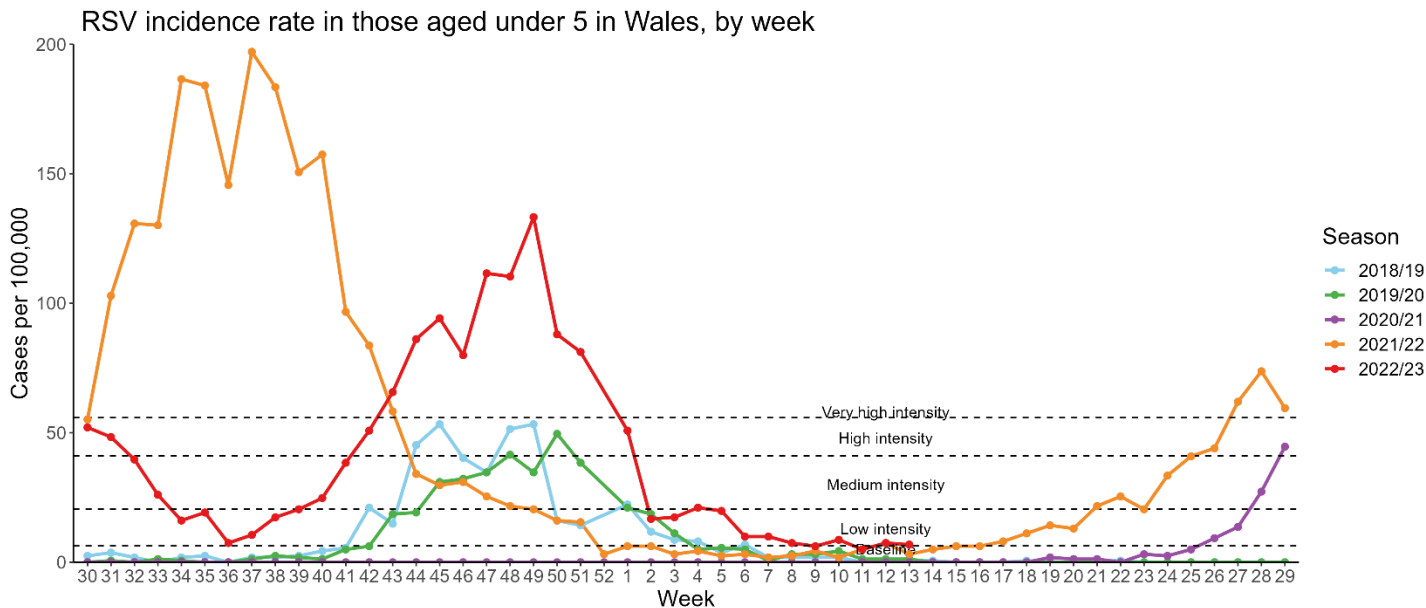


Figure 7. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 13 2022 to Week 13 2023.



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.

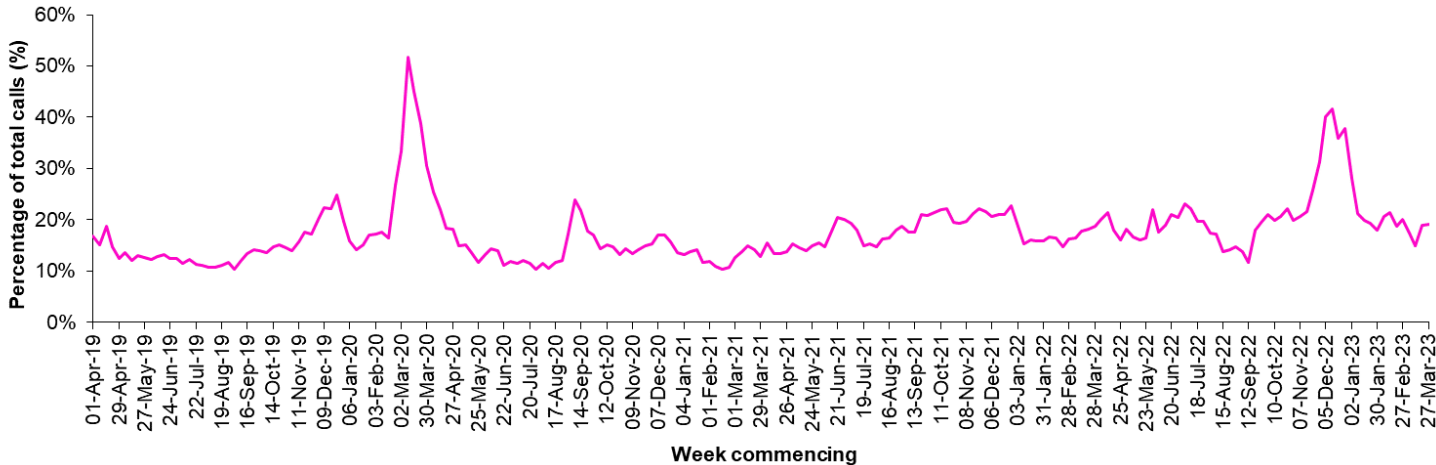
Figure 8. RSV incidence rate per 100,000 population aged under five years, week 30 2018 to Week 13 2023.



*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 13 2019 - Week 13 2023 (as of 02/04/2023).



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.

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 26/03/2023 – latest data available).

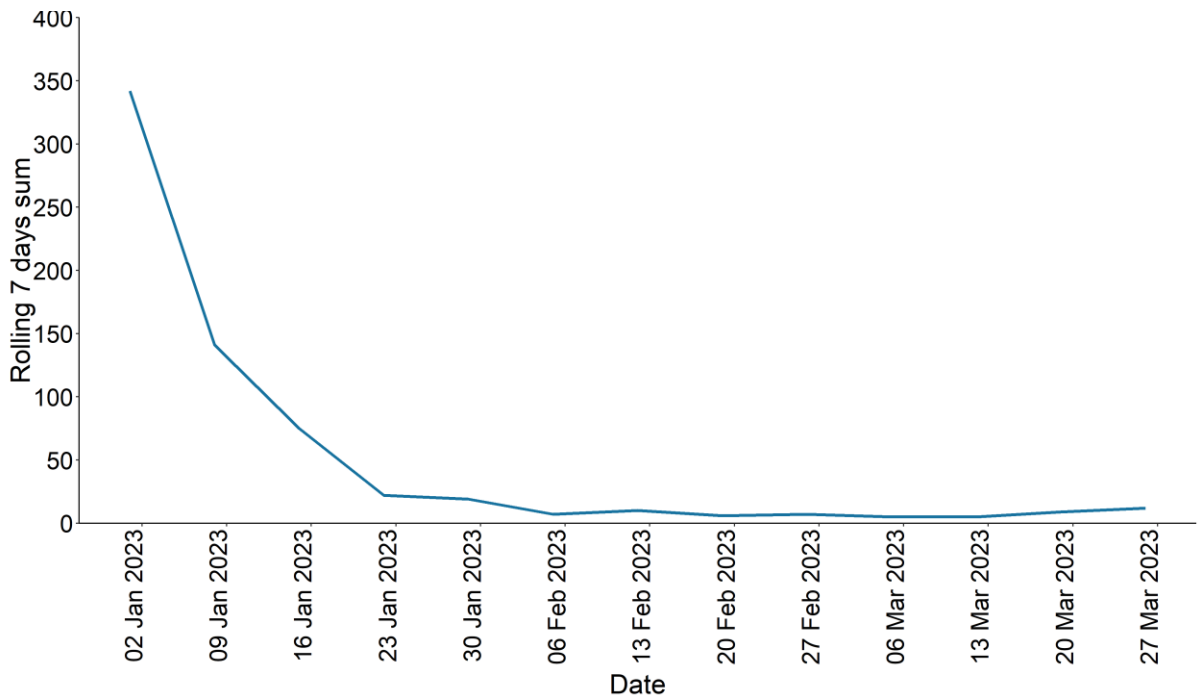
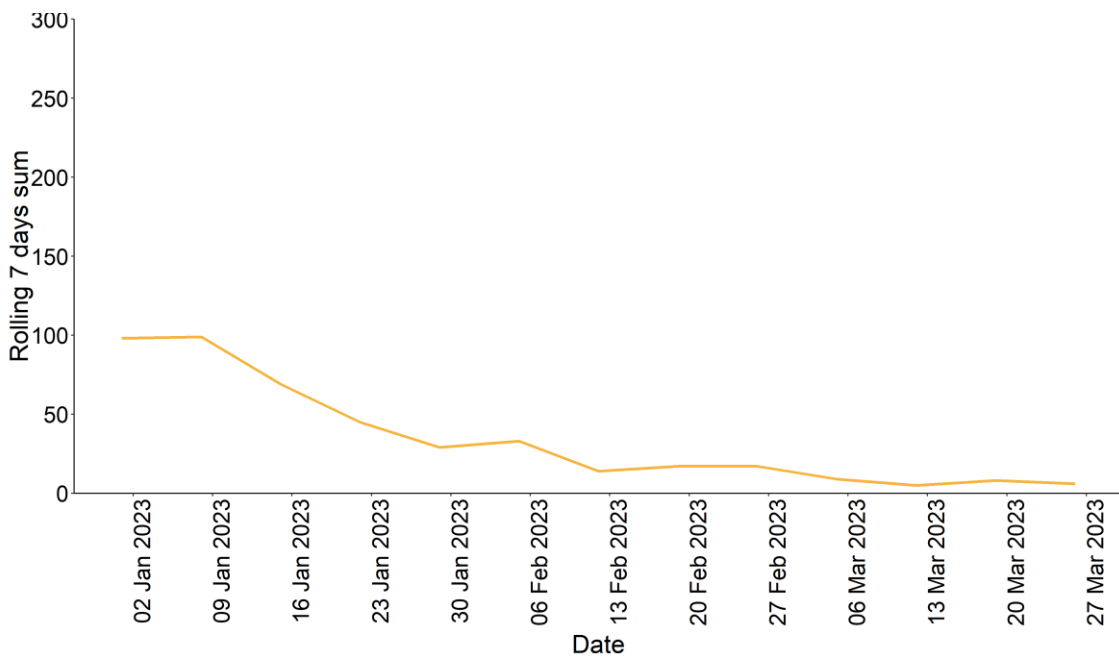


Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 26/03/2023 – latest data available).



Influenza Vaccine Uptake in Wales

Table 3. Uptake of influenza immunisations in GP Practice patients in Wales 2022/23 (as of 28/03/2023).

Influenza immunisation uptake in the 2022/23 season	
People aged 65y and older	76.3%
People younger than 65y in a clinical risk group	44.2%
Children aged two & three years	44.0%
Children aged between four & ten years	62.7%
Children aged between 11 & 15 years	52.4%
Total NHS staff	46.0%
NHS staff with direct patient contact	46.2%

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 12, GP ILI consultations increased in Northern Ireland to 4.3 per 100,000 and in England to 4.3 per 100,000, and decreased in Scotland to 2.1 per 100,000.
- During Week 12, 84 samples testing positive for influenza were reported in England (including 4 A(H3), 8 A(not subtyped) and 72 influenza B). Overall influenza positivity remained low at 1.5% in Week 12. 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 their weekly joint influenza update, that during Week 12, eight countries reported baseline activity, 14 countries reported low-intensity and 15 reported medium-intensity. From the 37 countries reporting, four reported no activity, five reported sporadic spread, three reported local spread, five reported regional spread, and 20 reported widespread activity (across the Region). During Week 12, 664 (22%) of samples from patients presenting to all sentinel primary care centres with ILI or ARI symptoms 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, 18% were influenza A (20% H3, and 80% A(H1N1)pdm09) and 82% were influenza B. As of 15/03/2023 Sweden has reported severe outcomes in children and adolescents with close geographic proximity following laboratory confirmed cases of Influenza B. **Source:** Flu News Europe: <http://www.flunewseurope.org/> and <https://www.ecdc.europa.eu/sites/default/files/documents/communicable-disease-threats-report-week-11-2023.pdf>
- The WHO reported on 03/04/2023, based on data up to 19/03/2023, that globally, influenza has decreased followed a peak in late 2022, with influenza A predominating, with a slightly larger proportion of Influenza A(H3N2) viruses detected among the subtyped influenza A viruses. Since January influenza B and A(H1N1)pdm09 detections increased, however they have started to decrease in the most recent weeks.
- Influenza A(H1N1)pdm09 predominates in the USA, while influenza B predominates in Canada, although influenza indicators are at levels typically observed at this time of year. In Europe, influenza B detections predominated after an initial influenza A wave. Most detections have now decreased across most European countries apart from Denmark, Iceland, Lithuania, Luxembourg and Germany.
- In the temperate zones of the southern hemisphere, influenza remained at interseasonal levels, with both influenza A and B viruses reported. In New Zealand, SARI hospitalisation rate increased in recent weeks and reached the seasonal baseline threshold. RSV increased and was at moderate levels in South Africa. Increased activity of influenza B and influenza A(H1N1)pdm09 was reported in Chile.
- In tropical Central and South America, influenza detections remained low across the subregion. Of the influenza detected, B/Victoria virus was predominant. In Bolivia, influenza activity increased and remained at an extraordinary level and SARI activity decreased but remained at moderate levels.
- In Western Africa, influenza A(H1N1)pdm09 detections predominated and appeared to increase in Burkina Faso and Togo. In Middle Africa, sporadic detections of all influenza subtypes were reported. In Mayotte, due to an increase in ILI emergency visits, an epidemic phase with influenza B virus is indicated.
- In Southern Asia, influenza activity remained low. There was a slight increase in influenza A(H3N2) and influenza B detections in India and Nepal. Influenza like illness detections continue to be elevated in Bangladesh and Nepal. Severe acute respiratory illness rates remained elevated in Bangladesh and Bhutan.
- In Northern Africa, influenza activity was at very low levels across reporting countries.
- In Central Asia, influenza activity decreased overall.
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 04/04/2023), during the period from 06/03/2023 – 19/03/2023, National Influenza Centres and other national influenza laboratories from 115 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 349,552 specimens during that period, of which 46,911 were positive for influenza viruses, 34,346 (73.22%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 20,264 (70.30%) were influenza A(H1N1)pdm09 and 8,560 (29.70%) were influenza A(H3N2). Of the 46,911 samples tested positive for influenza viruses, 12,565 tested positive for Influenza B (26.78%) and of the characterised B viruses, 1479 (100%) was B-Victoria lineage. **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 seasonal influenza activity is at low levels across the country during Week 12 (ending 25/03/2023). Nationally, 626 (0.9%) out of 66,542 specimens, tested positive for influenza in Week 12 in clinical laboratories nationwide. Of these, 386 (61.7%) were influenza A and 240 (38.3%) were influenza B. Further testing has been carried out on 5,686 specimens by public health laboratories, with 64 samples testing positive for influenza; 14 influenza A(H1N1)pdm09 (41.2%), 20 influenza A(H3N2) (58.8%), 9 samples where subtyping was not performed, and 21 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 11, influenza activity remains at low levels typically observed in late spring/early summer. During Week 11, 392 influenza detections were reported: 124 influenza A and 268 influenza B. Influenza are predominant at 68%. The percentage of ILI visits remained stable at 0.8% in week 11.

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 25/03/2023.

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

COVID-19 – UK and international summary

- As of 29/03/2023, there were 15 new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. There were 5 suspected COVID-19 deaths with a date of death in the most recent 7-day reporting period, reported to Public Health Wales. There were 47 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 the 08/02/2023, WHO reported an additional case of MERS. In total, 2,603 laboratory-confirmed cases of locally acquired Middle East Respiratory Syndrome coronavirus (MERS-CoV) worldwide, including 935 deaths. No further cases or deaths were reported during week 9. WHO Global Alert and Response website: <https://www.who.int/emergencies/disease-outbreak-news>
- Most 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 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-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 \(sharepoint.com\)](#)

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

surveillance.requests@wales.nhs.uk