

Current level of influenza activity: Baseline

Influenza activity trend: Stable

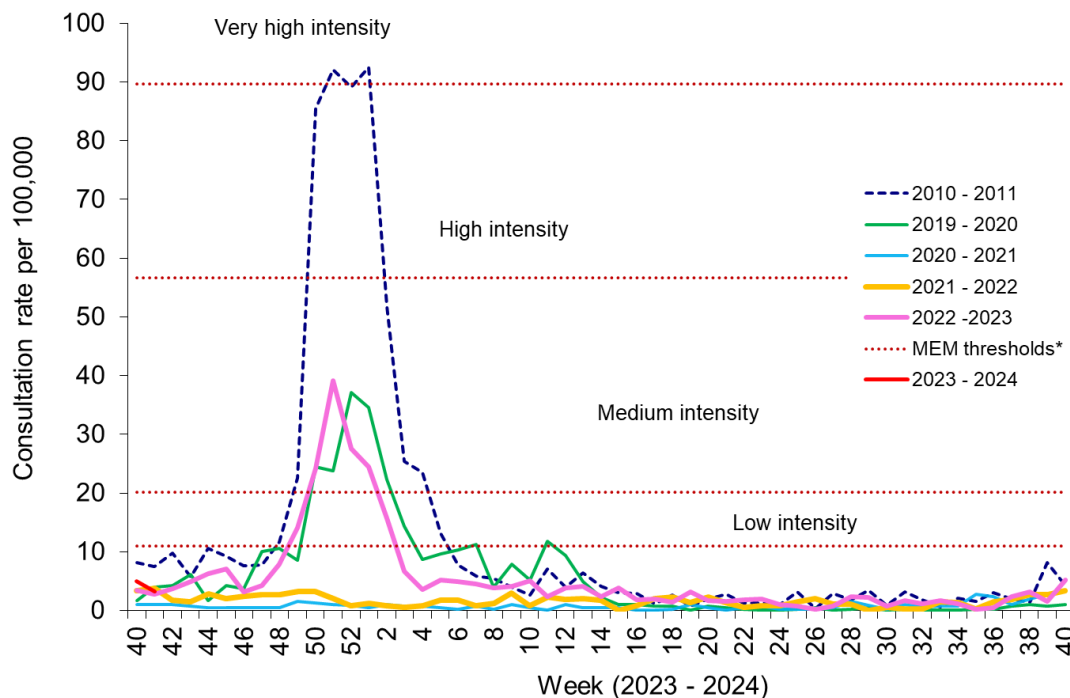
Confirmed influenza cases since 2023 Week 40: 14 (3 influenza A(H3N2), 2 influenza A(H1N1)pdm09, 1 influenza A untyped and 8 influenza B)

During Week 40 (ending 15/10/2023) there were seven cases of influenza. Overall influenza activity remains at baseline levels, but small numbers of cases continue to be detected. COVID-19 cases continue to be detected in patients in hospitals. RSV activity in children under 5 years increased and is now at 'very high' intensity levels. Rhinovirus, SARS-CoV-2, RSV, enterovirus, 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 41, was 3.2 consultations per 100,000 practice population (Table 1). This is a decrease compared to the previous week (5.0 consultations per 100,000. Figure 1).
- The **Sentinel GP consultation rate for Acute Respiratory Infections (ARI)** was 182.6 per 100,000 practice population during Week 41 (Table 2 and Figure 3). This is a decrease compared to the previous week (187.8 per 100,000). Weekly consultations for Lower Respiratory Tract Infections increased (72.0 per 100,000) and Upper Respiratory Tract Infections decreased (114.2 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 41 increased to 16.5% (Figure 13).
- During Week 41, 943 specimens received multiplex respiratory panel testing from patients attending hospitals. These results do not include samples tested solely for SARS-CoV-2. **Seven tested positive for influenza (one influenza A(H1N1), one influenza untyped and five influenza B).** Overall influenza test-positivity increased slightly to 0.7%. In addition, there were: 242 rhinovirus, 144 RSV, 139 Sars-CoV2, 76 enterovirus, 49 adenovirus, 13 parainfluenza, eight human metapneumovirus, six mycoplasma and four seasonal coronavirus positive samples (Figure 5). Additionally, 801 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 801 samples, 197 were positive for SARS-CoV-2, and 19 RSV (Figure 7). Furthermore, during week 41, 67 respiratory specimens were tested from patients in intensive care units (ICU) of which none was positive for influenza (Figure 8).
- There were 118 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 41. Of the 118 samples, 28 tested positive for rhinovirus, 11 for SARS-CoV-2, 10 for enterovirus, seven for RSV, three for mycoplasma, one for adenovirus and one for parainfluenza (as at 18/10/2023) (Figure 4).
- From all samples where influenza subtyping information was available during week 41 (specimens receiving multiplex respiratory panel testing, from patients attending hospitals, and surveillance samples collected by sentinel GPs and community pharmacies) five were influenza B, one was influenza A(H1N1), and one was influenza A untyped (Figure 6).
- **Confirmed RSV case incidence in children aged under 5 increased in the most recent week and is now at very high intensity levels (compared to historic levels before 2021).** In week 41 there were 79.3 confirmed cases per 100,000 in this age group. The provisional MEM threshold in Wales which predicts the start of the annual RSV season in children younger than five years is 6.3 confirmed cases per 100,000 (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 one and 43 respectively during Week 41 (Figures 10 & 11) and 100 for SARS-CoV-2 during week 41 (Figure 12).
- During week 41, 13 **ARI outbreaks** were reported to the Public Health Wales Health Protection team. All outbreaks were reported as COVID-19 and all were in residential homes.
- According to [EuroMoMo](#) analysis, all-cause deaths in Wales were not in excess during week 40.

Respiratory infection activity in Wales

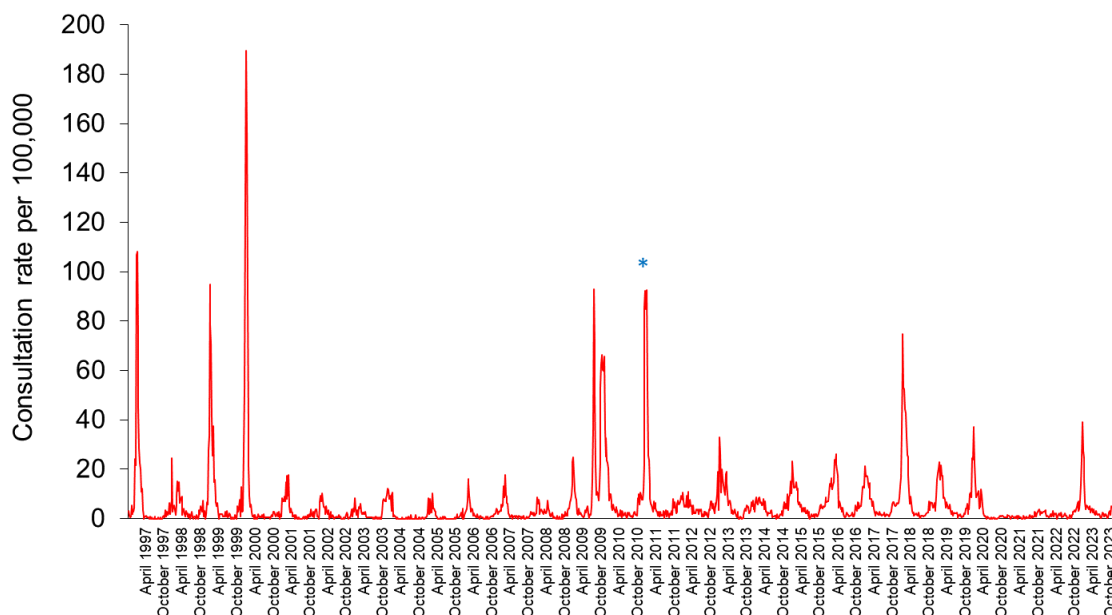
Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 15/10/2023)



* 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 41 2023)



* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 36 – Week 41 2023 (as of 15/10/2023)

Age group	36	37	38	39	40	41
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	6.7	6.9	6.7	0.0
5 - 14	0.0	0.0	0.0	4.6	0.0	0.0
15 - 24	0.0	2.2	2.1	0.0	6.4	4.4
25 - 34	0.0	5.8	3.8	0.0	1.9	4.0
35 - 44	0.0	3.7	1.8	0.0	11.1	1.9
45 - 64	1.8	0.9	6.4	0.9	5.5	5.6
65 - 74	0.0	4.4	0.0	4.4	2.2	2.2
75+	0.0	2.2	2.2	0.0	6.5	2.3
Total	0.5	2.4	3.1	1.5	5.0	3.2

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 36 – Week 41 2023 (as of 15/10/2023)

Age group	36	37	38	39	40	41
< 1	534.2	602.2	831.4	1441.3	1730.5	1411.4
1 - 4	248.0	458.8	482.5	780.2	913.7	885.8
5 - 14	51.0	105.2	164.2	203.2	223.9	210.4
15 - 24	77.3	120.3	140.7	132.5	151.5	136.4
25 - 34	65.1	77.1	84.2	138.1	135.8	161.9
35 - 44	94.2	98.4	77.5	100.8	132.6	141.0
45 - 64	70.1	85.6	79.2	83.8	123.7	117.5
65 - 74	105.6	85.5	109.9	84.0	133.7	120.7
75+	169.0	116.9	90.9	102.4	185.8	184.3
Total	95.9	112.7	120.1	147.9	187.8	182.6

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 41 – Week 41 2023 (as of 15/10/2023)

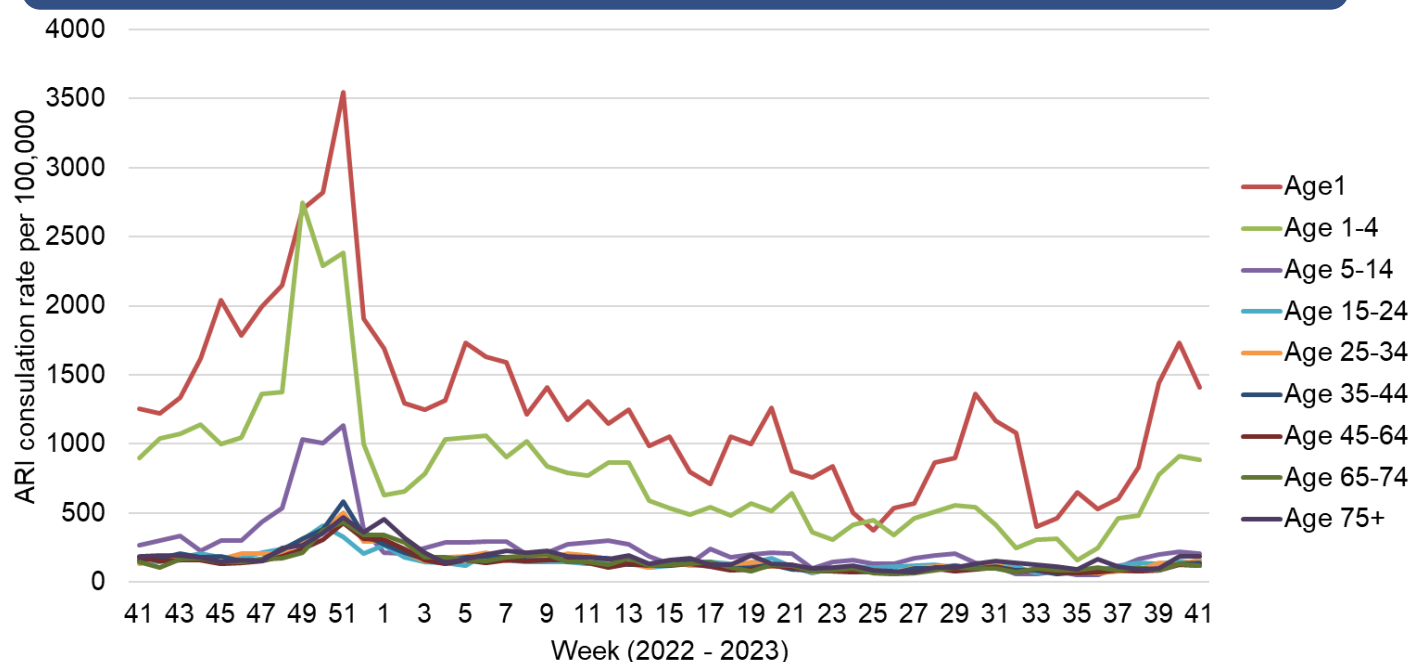
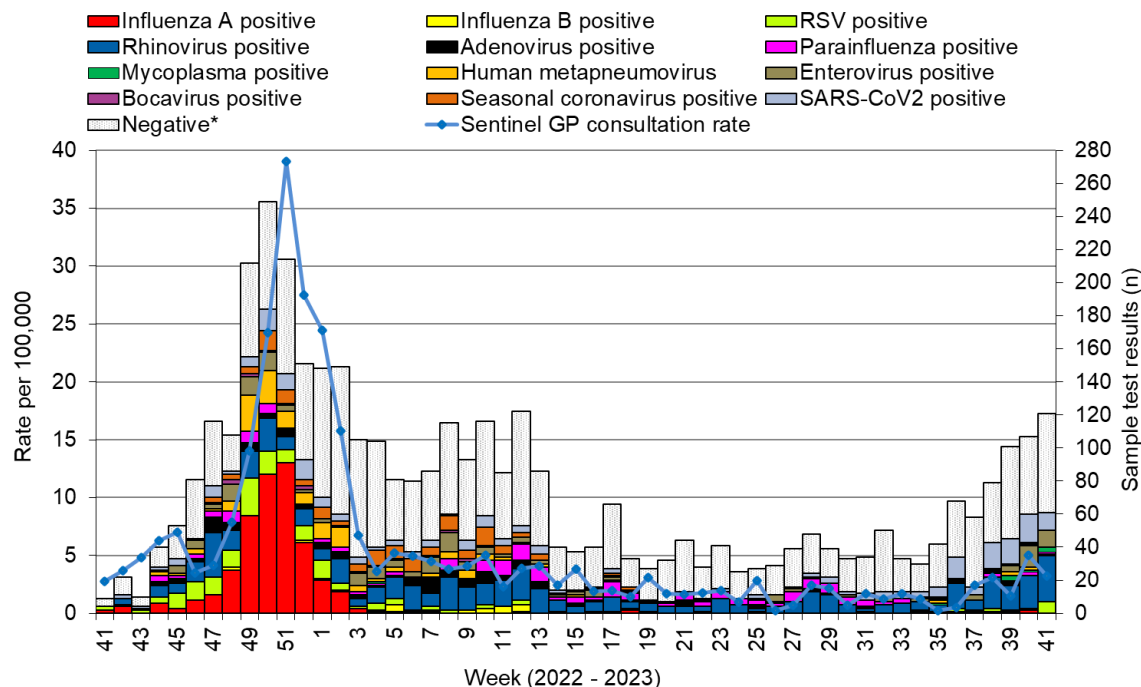
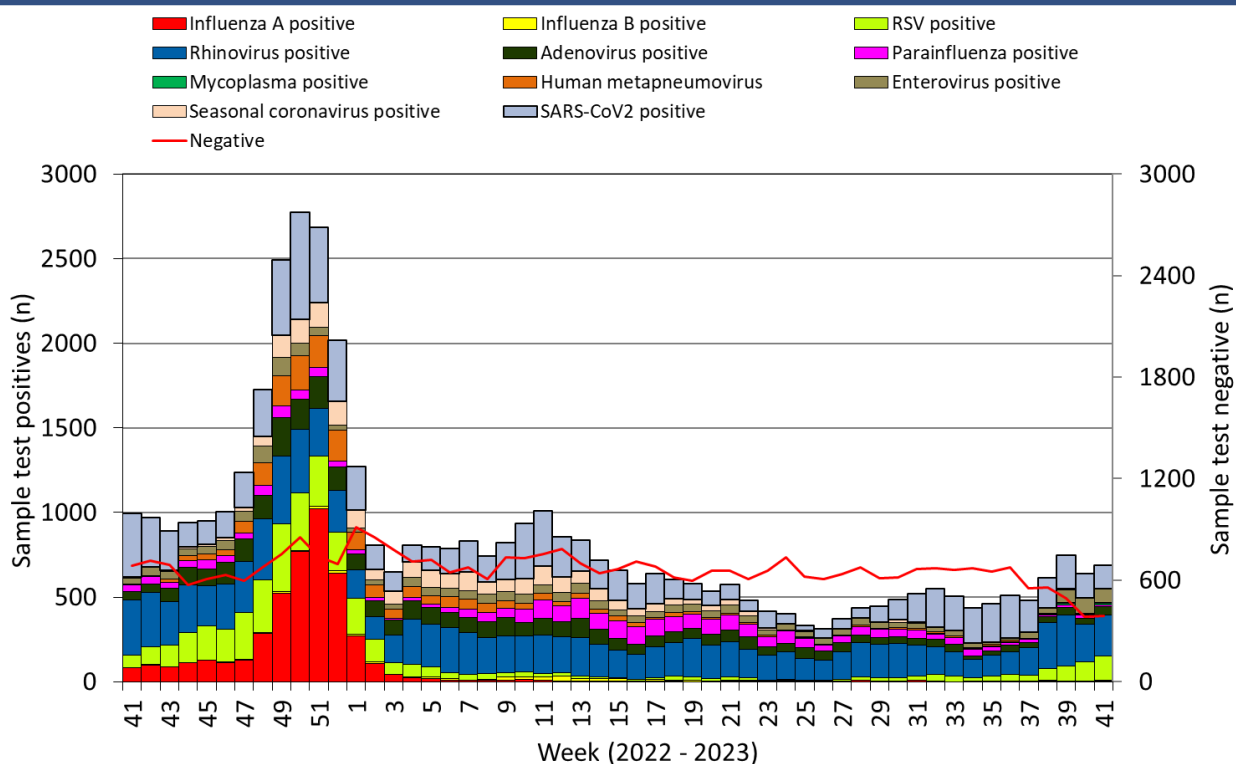


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 15/10/2023, by week of sample collection, Week 41 2022 to Week 41 2023



* 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 15/10/2023 by week of sample collection, Week 41 2022 to Week 41 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 15/10/2023 by week of sample collection, Week 41 2022 to Week 41 2023.

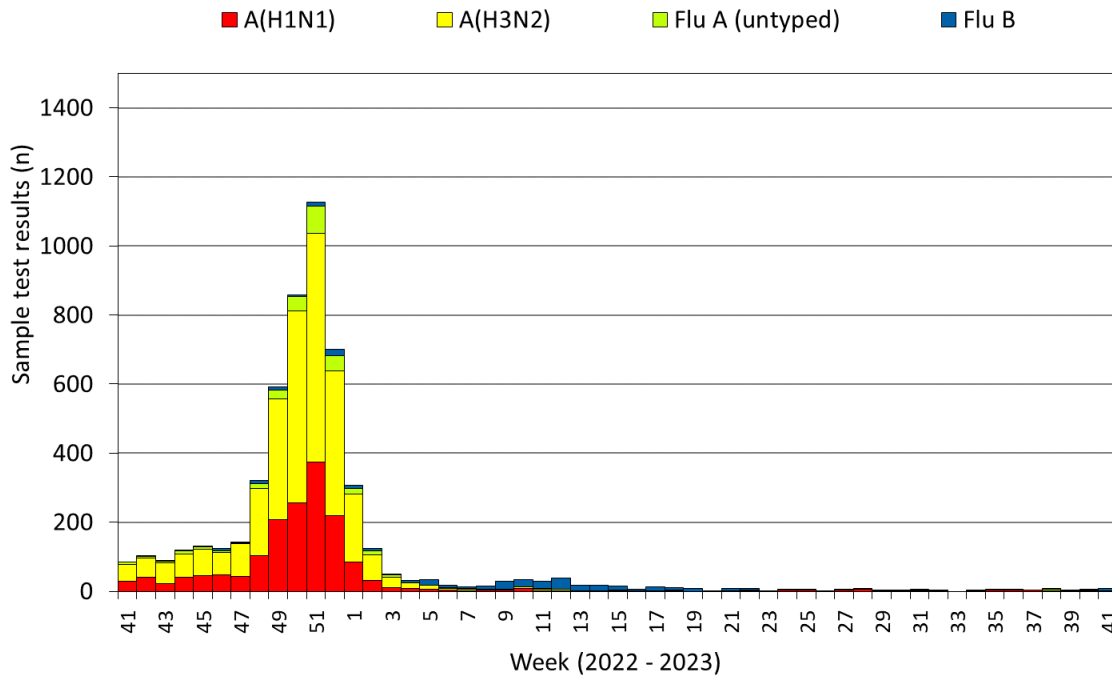


Figure 7. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 15/10/2023 by week of sample collection, Week 41 2022 to Week 41 2023.

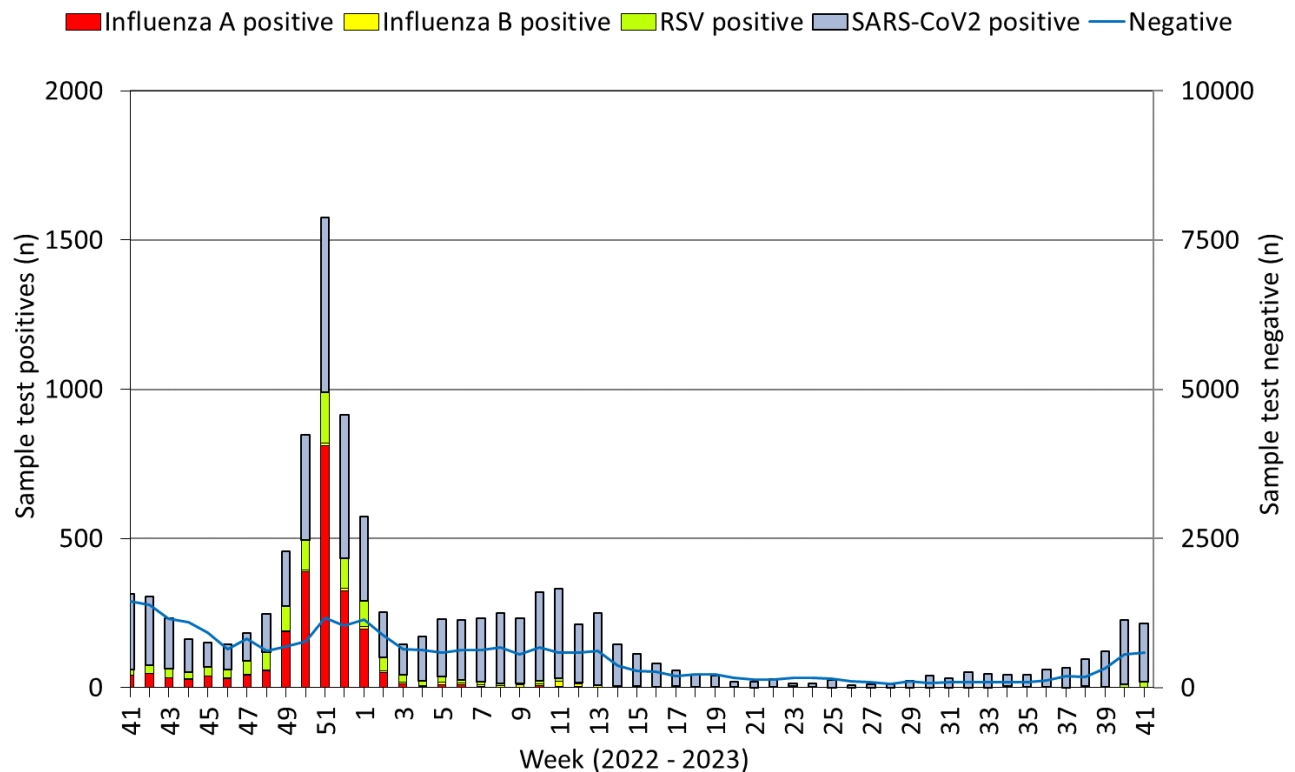
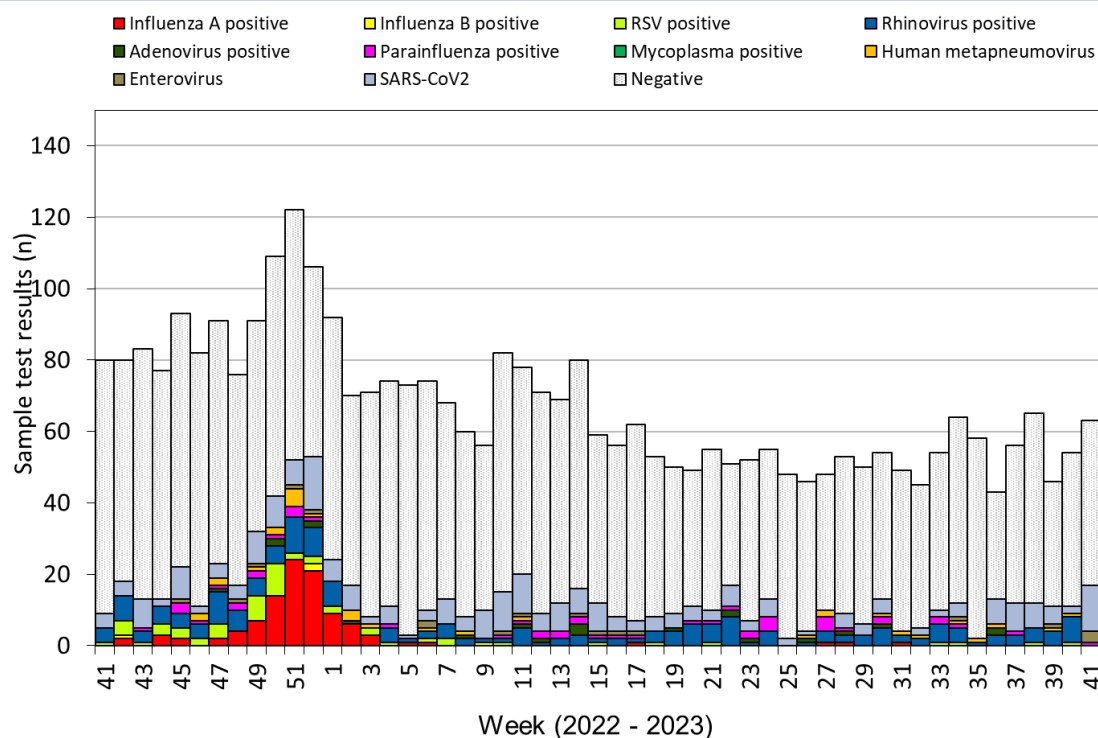
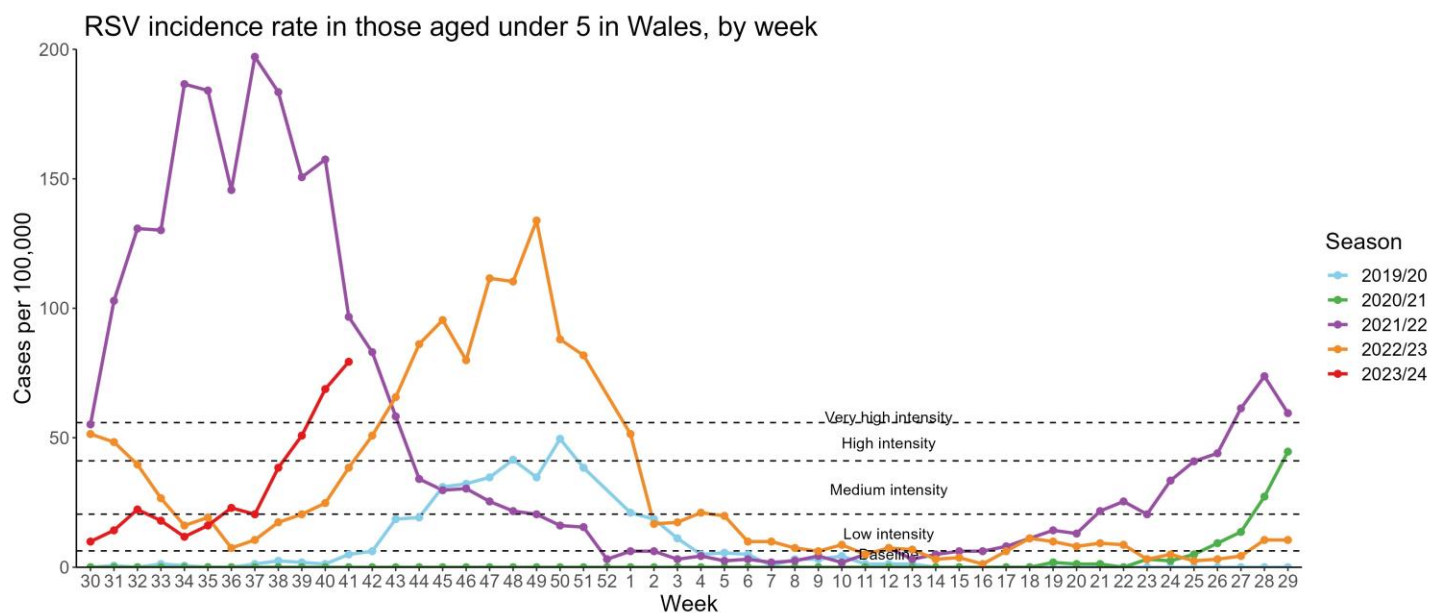


Figure 8. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 41 2022 to Week 41 2023.



This chart summarises respiratory panel test data and does NOT include data for patients tested SOLELY for SARS-CoV2. Samples which test positive for more than one pathogen will appear more than once in the chart.

Figure 9. RSV incidence rate per 100,000 population aged under five years, week 30 2019 to Week 41 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 15/10/2023.

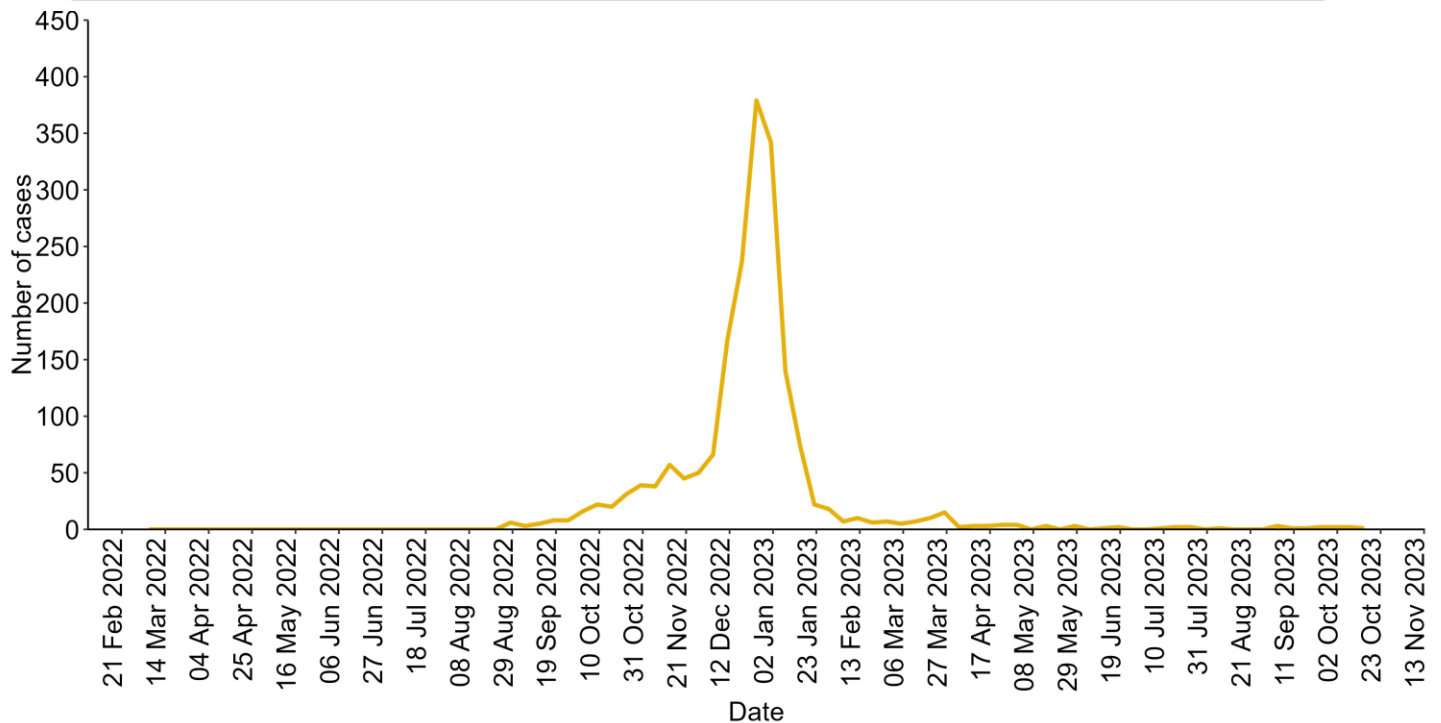


Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 15/10/2023.

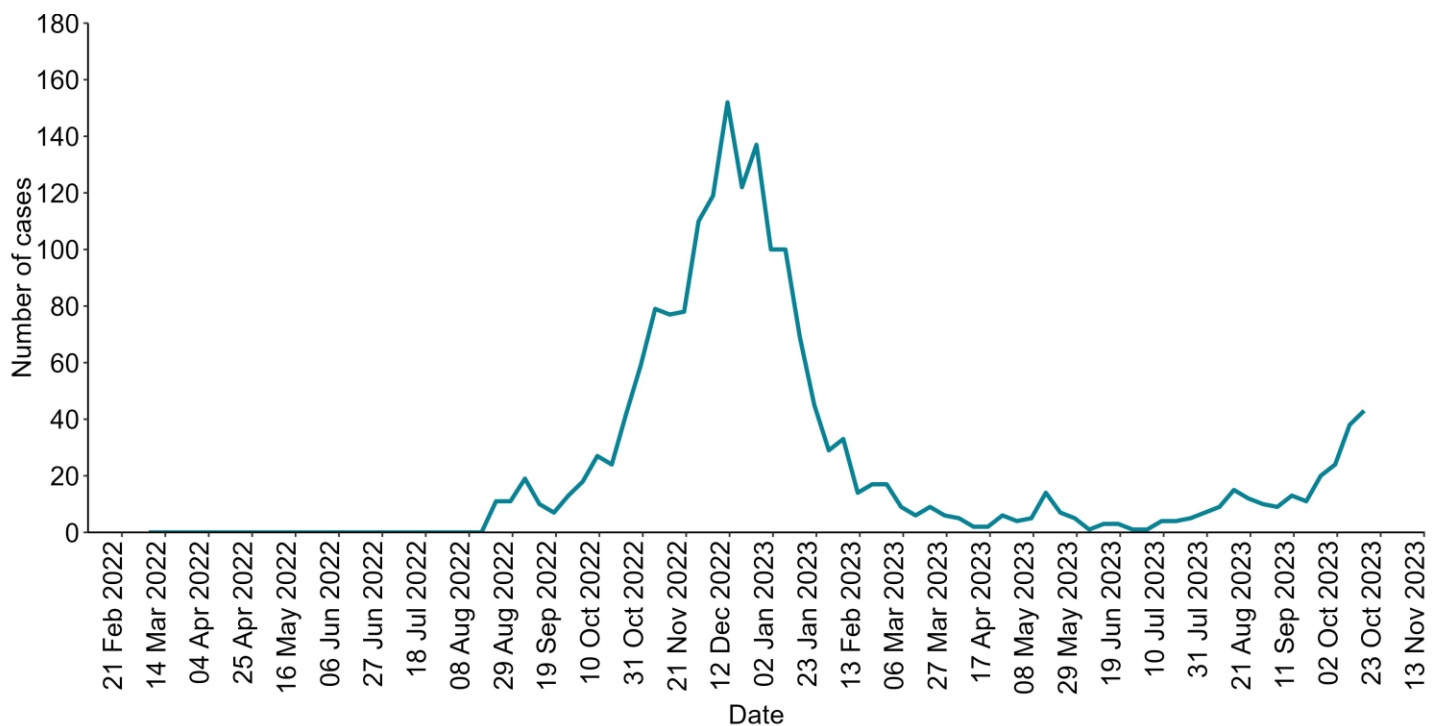
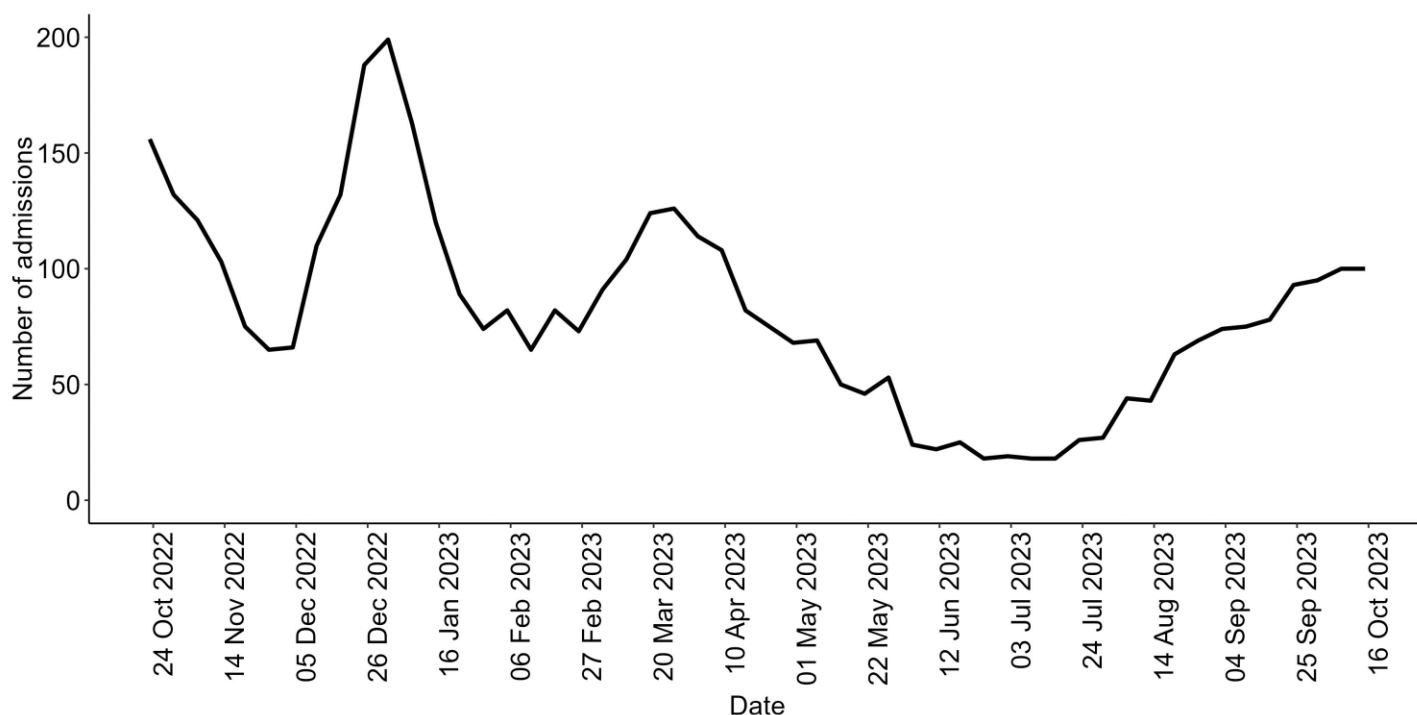
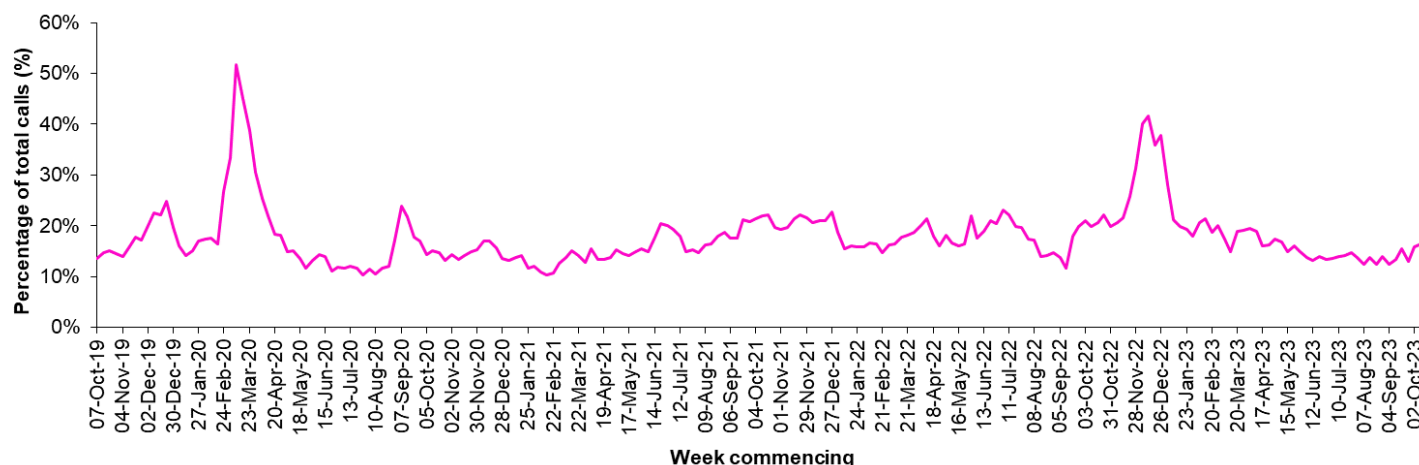


Figure 12. Seven day rolling sum of cases hospitalised in Wales within 28 days of an Covid-19 positive test result in the community (or up to 2 days post-admission), as of 08/10/2023.



Calls to NHS Direct Wales

Figure 13. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from Week 41 2019 - Week 41 2023.



¹ Data supplied by Health Statistics and Analysis Unit, Welsh Government.

Flu related calls are the sum of calls recorded as 'cold/flu', 'cough', 'headache', 'fever' and 'sore throat'. Following changes to the NHS Direct calls system, including the start of the 111 pilot, there has been a change in the way in which denominator data are calculated for this chart, NHS Direct Wales now count the total number of nurse triaged calls (i.e. calls which could have symptom data recorded against them), note that 111 includes out-of-hours calls.

Influenza Vaccine Uptake in Wales

Table 3. Uptake of influenza immunisations in GP Practice patients in Wales 2022/23 (as of 25/04/2023).

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	63.9%
Children aged between 11 & 15 years	54.4%
Total NHS staff	46.2%
NHS staff with direct patient contact	46.7%

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 40, GP ILI consultations increased to 3.5 per 100,000, in England, and decreased to 0.9 per 100,000 in Scotland.
- During Week 40, 48 samples testing positive for influenza were reported in England (29 A(not subtyped), 10 A(H3), three A(H1N1) and six influenza B). Overall influenza positivity slightly increased to 1.4%.
- In England, RSV activity in the under 5 year olds was 6.57 per 100,000. In Scotland, RSV activity in the under 1 year olds was 158.2 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) have entered a monthly reporting cycle for influenza and reported that activity across Europe remained at interseasonal levels during weeks 36-39, with just one country reporting regional influenza activity. **Source:** Flu News Europe: <http://www.flunewseurope.org/>
- The WHO reported on 02/10/2023, based on data up to 07/09/2023 that globally, influenza detections remain low.
- In Oceania influenza activity decreased with influenza A(H1N1)pdm09, influenza A(H3N2) and influenza B viruses all cocirculating.
- In South Africa, influenza activity remained below the seasonal threshold after peaking in early June, although detections of influenza B/Victoria lineage increased in recent weeks.
- In the temperate zones of South America influenza detection remained low overall with influenza A and B viruses co-circulating.
- In the Caribbean countries influenza activity remained low overall.
- In the countries of Central America, influenza activity decreased overall. Influenza B and influenza A(H1N1)pdm09 viruses were predominant.
- In tropical South America, influenza detections of primarily influenza A(H1N1) and influenza B viruses continued to decrease and activity was low.
- In tropical Africa, all seasonal influenza subtypes co-circulated. Influenza detections remained low in Middle and Eastern Africa but increased in some countries in Western Africa.
- In Southern Asia, influenza activity remained low overall except in Bangladesh and Bhutan where activity was elevated but decreasing.
- In South-East Asia, influenza activity remained elevated overall, with continued reporting of predominantly influenza A(H1N1)pdm09 and A(H3N2) virus detections.
- In the temperate zones of the northern hemisphere, indicators of influenza activity were reported at low levels or below seasonal threshold in most reporting countries. Detections were predominantly influenza A(H3N2) followed by influenza A(H1N1)pdm09 and B viruses.
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 09/10/2023), during the period from 04/09/2023 – 17/09/2023 National Influenza Centres and other national influenza laboratories from 107 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 298,993 specimens during that period, of which 7,773 were positive for influenza viruses, 6,247 (80.4%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 1,383 (28.9%) were influenza A(H1N1)pdm09 and 3,407 (71.1%) were influenza A(H3N2). Of the 7,773 samples testing positive for influenza viruses, 1,526 tested positive for Influenza B (19.6%). **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 remained low at national levels during week 40 (ending 07/10/2023). Nationally, 530 (1%) out of 47,296 specimens have tested positive for influenza in week 40 in clinical laboratories nationwide, of these positives 320 (60.4%) were influenza A and 210 (39.6%) were influenza B. Further characterisation has been carried out on 2,246 specimens by public health laboratories, and 33 samples tested positive for influenza; 30 influenza A(H1N1)pdm09, three influenza A(H3N2), 17 influenza A(not subtyped) and eight 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 35-39, influenza activity is stable and at interseasonal levels. During week 39, 118 influenza detections were reported; 99 influenza A, and 19 influenza B. The percentage of ILI visits was 1.1%. **Source:** Public Health Agency of Canada: <https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/weekly-influenza-reports.html>

Respiratory syncytial virus (RSV) in North America

- The USA CDC reported that the RSV positivity rate increased in the week beginning 07/10/2023. **Source:** CDC RSV national trends: <https://www.cdc.gov/surveillance/nrevss/rsv/natl-trend.html>

COVID-19 – UK and international summary

- As of 11/10/2023, there were 12.05 new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. There were four 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 (Week 37 data). 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/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