

Current level of influenza activity: Baseline

Influenza activity trend: Stable

Confirmed influenza cases since 2022 Week 40: 7794 (3054 influenza A(H3N2), 1613 influenza A(H1N1)pdm09, 2664 influenza A(not subtyped) and 463 influenza B)

During Week 20 (ending 21/05/2023) there were six cases of influenza. Overall influenza activity has decreased to baseline levels, but small numbers of cases continue to be detected. COVID-19 cases continue to be detected in patients in hospitals. RSV incidence in children younger than 5 has increased above the baseline threshold in recent weeks, but it is too early to conclude with certainty whether this represents a start to the 2023-24 RSV season in Wales. Rhinovirus, parainfluenza, SARS-CoV-2 and adenovirus are the most commonly detected causes of Acute Respiratory Infection (ARI).

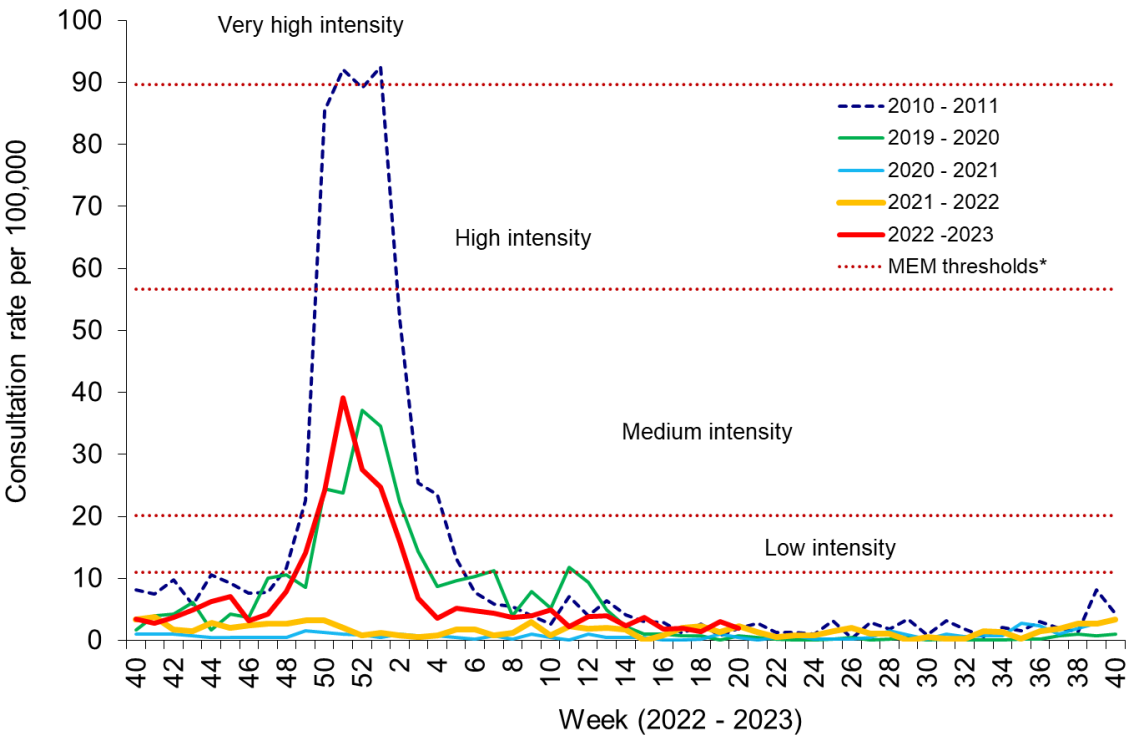
- The **Sentinel GP consultation rate for influenza-like illness (ILI)** in Wales during Week 20, was 2.0 consultations per 100,000 practice population (Table 1). This is a decrease compared to the previous Week (3.0 consultations per 100,000. Figure 1).
- The **Sentinel GP consultation rate for Acute Respiratory Infections (ARI)** was 159.0 per 100,000 practice population during Week 20 (Table 2 and Figure 3). This is an increase compared to the previous week (146.0 per 100,000). Weekly consultations for Lower Respiratory Tract Infections (at 51.88 per 100,000) and Upper Respiratory Tract Infections (109.12 per 100,000) increased 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 20 decreased to 14.9% (Figure 12).
- During Week 20, 1,100 specimens received multiplex respiratory panel testing, from patients attending hospitals. These results do not include samples tested solely for SARS-CoV-2. There were **two samples positive for influenza**, of which all two were influenza B. Overall influenza positivity further decreased to 0.2% across all age groups; to 0.0% in those aged 18 years and over; and to 0.6% in those aged under 18 years. In addition, there were 210 rhinovirus, 87 parainfluenza, 85 SARS-CoV2, 66 adenovirus, 30 seasonal coronaviruses, 27 enterovirus, 15 RSV, and 12 HMPV positive samples (Figure 5). Additionally, 193 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 193 samples, 15 were positive for SARS-CoV-2, two for influenza B and two for influenza A (Figure 7). Furthermore, during week 20, 49 respiratory specimens were tested from patients in intensive care units (ICU) of which none were positive for influenza (Figure 8).
- There were 13 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 20. Of the thirteen samples, two tested positive for rhinovirus and two for parainfluenza (as at 10/05/2023) (Figure 4).
- From all samples where influenza subtyping information was available during week 20 (specimens receiving multiplex respiratory panel testing, from patients attending hospitals, and surveillance samples collected by sentinel GPs and community pharmacies), four were influenza B. Additionally there were two unsubtyped influenza A (Figure 6).
- **Confirmed RSV case incidence in children aged under 5 has decreased but remains at low intensity levels.** In week 20 there were 8.1 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) decreased to 0 and 7 respectively during Week 20 (figures 10 & 11).

- During week 20, three **ARI outbreaks** was reported to the Public Health Wales Health Protection team. All three outbreaks were reported as COVID-19 and all in residential care homes.
- According to [EuroMoMo](#) analysis, all-cause deaths in Wales were not in excess during week 16 (latest data available).

Respiratory infection activity in Wales

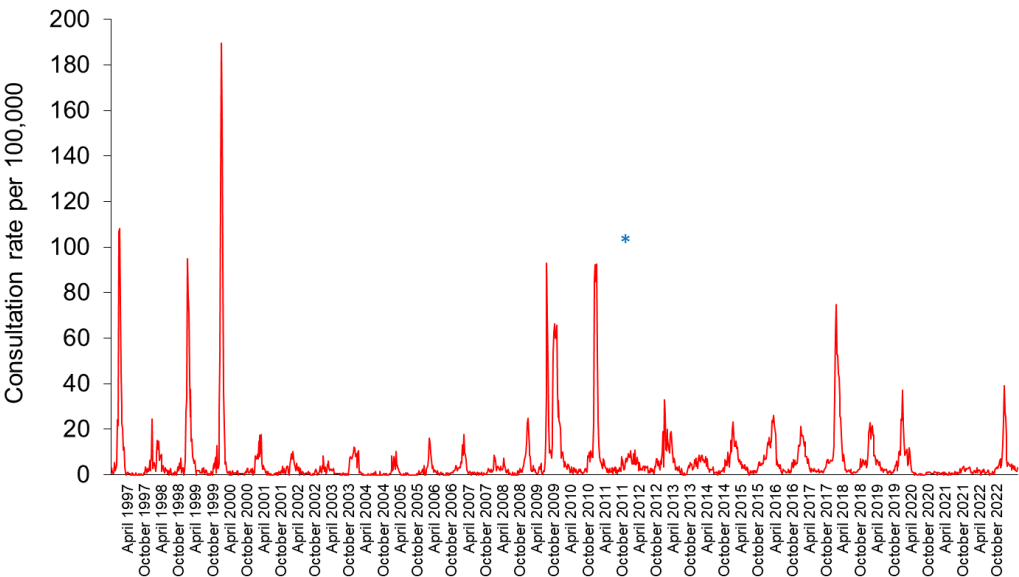
Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 21/05/2023)



* 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 20 2023)



* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 15 – Week 20 2023 (as of 24/05/2023)

Age group	15	16	17	18	19	20
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	0.0	0.0	0.0	0.0
5 - 14	0.0	0.0	0.0	2.1	2.1	0.0
15 - 24	2.1	0.0	2.1	0.0	6.2	7.5
25 - 34	3.7	2.0	0.0	1.8	7.3	0.0
35 - 44	7.2	4.0	3.7	3.6	3.6	2.2
45 - 64	7.0	2.0	3.6	0.9	1.8	2.2
65 - 74	0.0	2.4	2.2	2.1	0.0	2.5
75+	2.1	2.4	0.0	0.0	2.1	0.0
Total	3.7	1.8	1.9	1.4	3.0	2.0

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 15 – Week 20 2023 (as of 24/05/2023)

Age group	15	16	17	18	19	20
< 1	997.8	759.4	677.6	997.2	934.9	1230.3
1 - 4	512.2	465.8	515.7	461.4	544.7	517.4
5 - 14	129.8	130.0	229.2	174.5	193.7	208.0
15 - 24	113.9	141.3	138.7	124.4	134.7	164.9
25 - 34	148.0	114.6	114.9	96.9	139.0	119.6
35 - 44	119.9	140.9	114.6	98.3	100.1	130.8
45 - 64	117.4	126.0	110.0	83.3	92.9	120.4
65 - 74	124.9	125.5	141.4	102.0	79.1	123.4
75+	156.0	164.7	123.5	122.0	185.1	124.6
Total	148.3	149.8	151.1	128.0	146.0	159.0

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 20 2022 – Week 20 2023 (as of 21/05/2023).

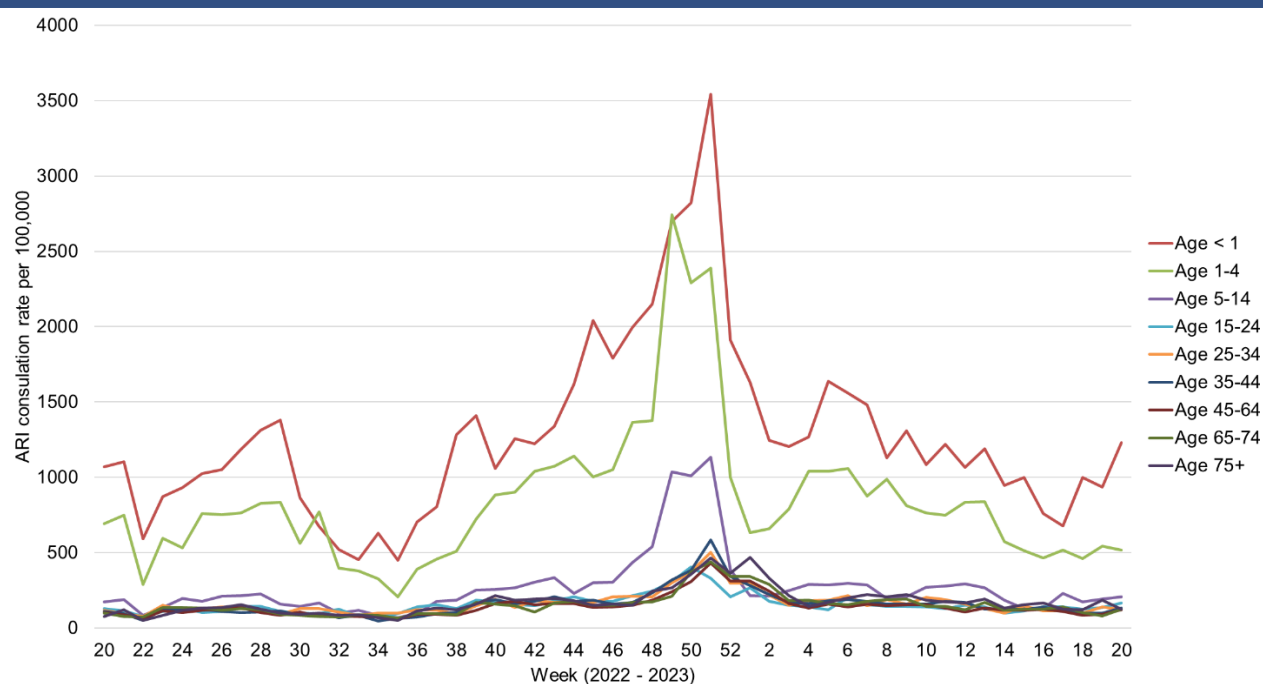
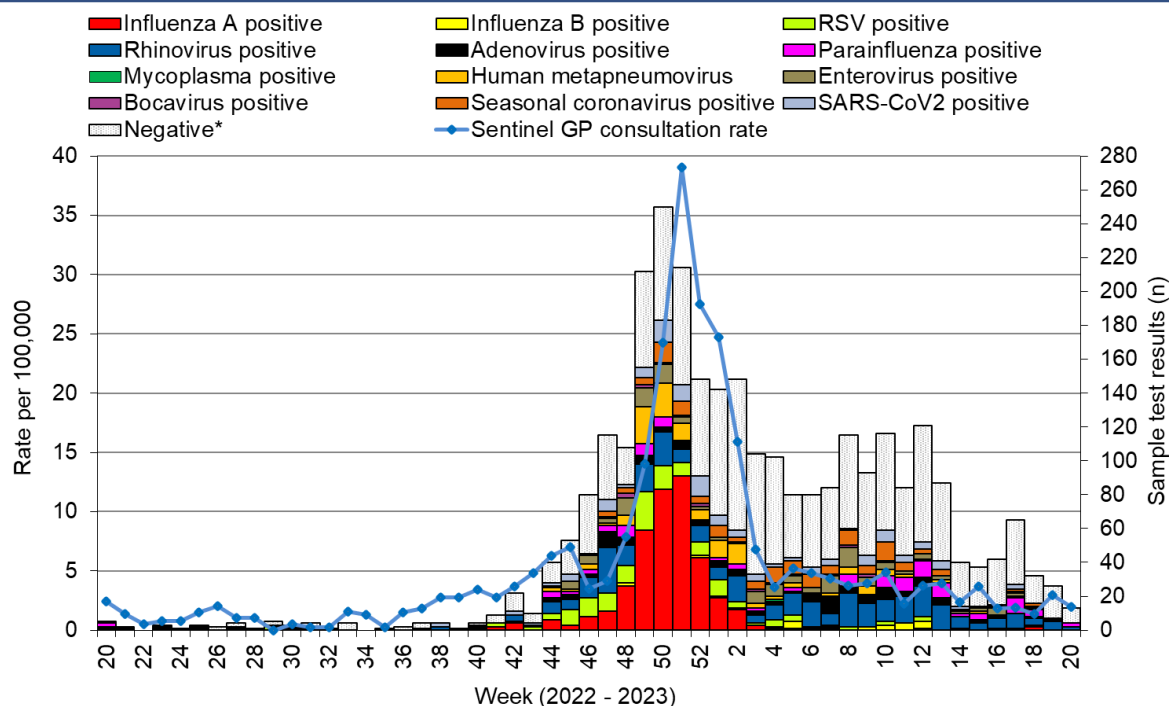
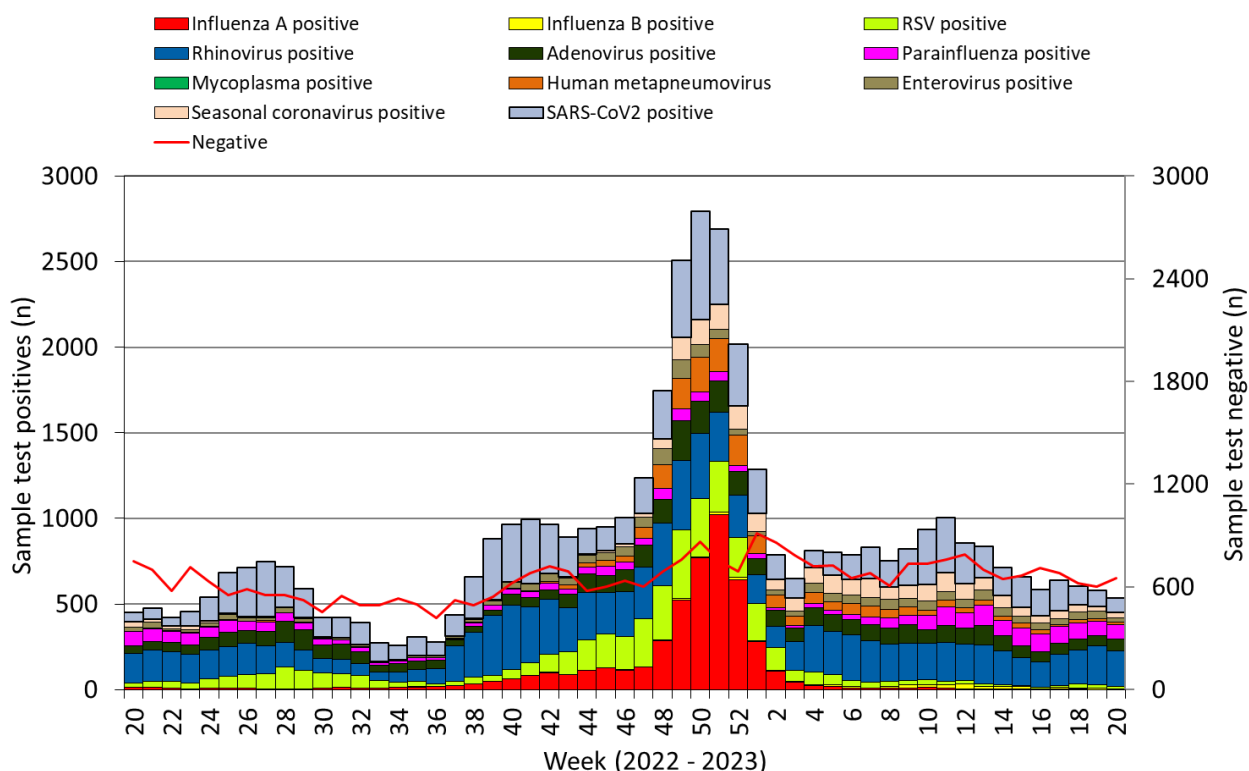


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 21/05/2023, by week of sample collection, Week 20 2022 to Week 20 2023.



* 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 21/05/2023 by week of sample collection, Week 20 2022 to Week 20 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 21/05/2023 by week of sample collection, Week 40 2022 to Week 20 2023.

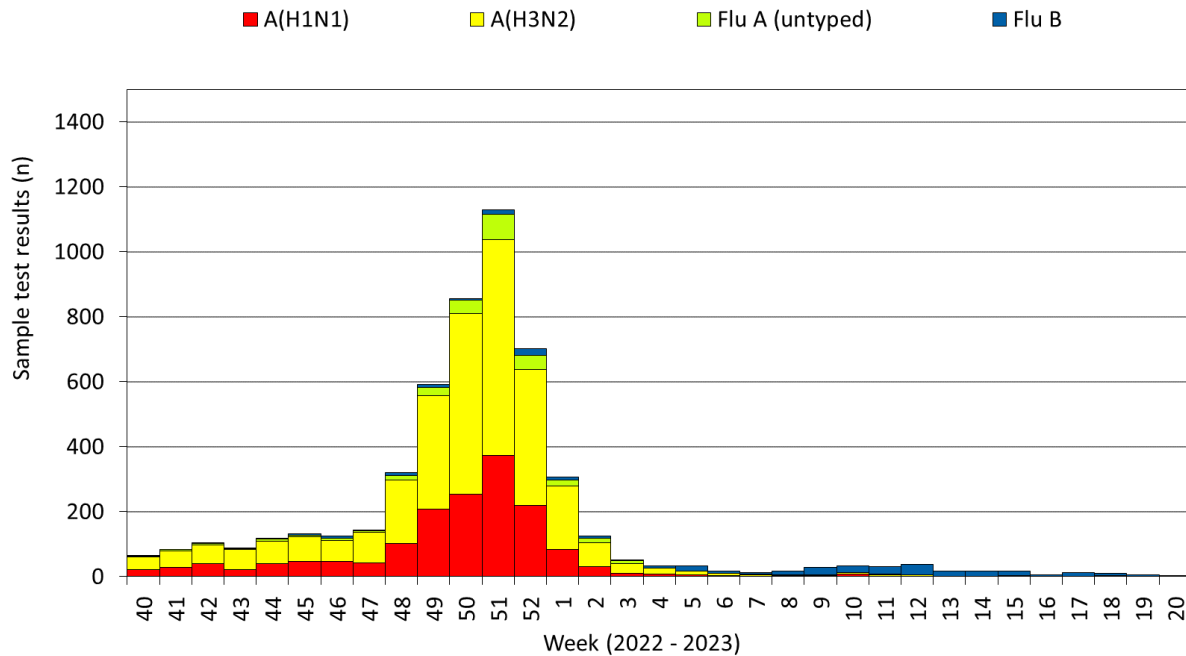


Figure 7. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 21/05/2023 by week of sample collection, Week 20 2022 to Week 20 2023.

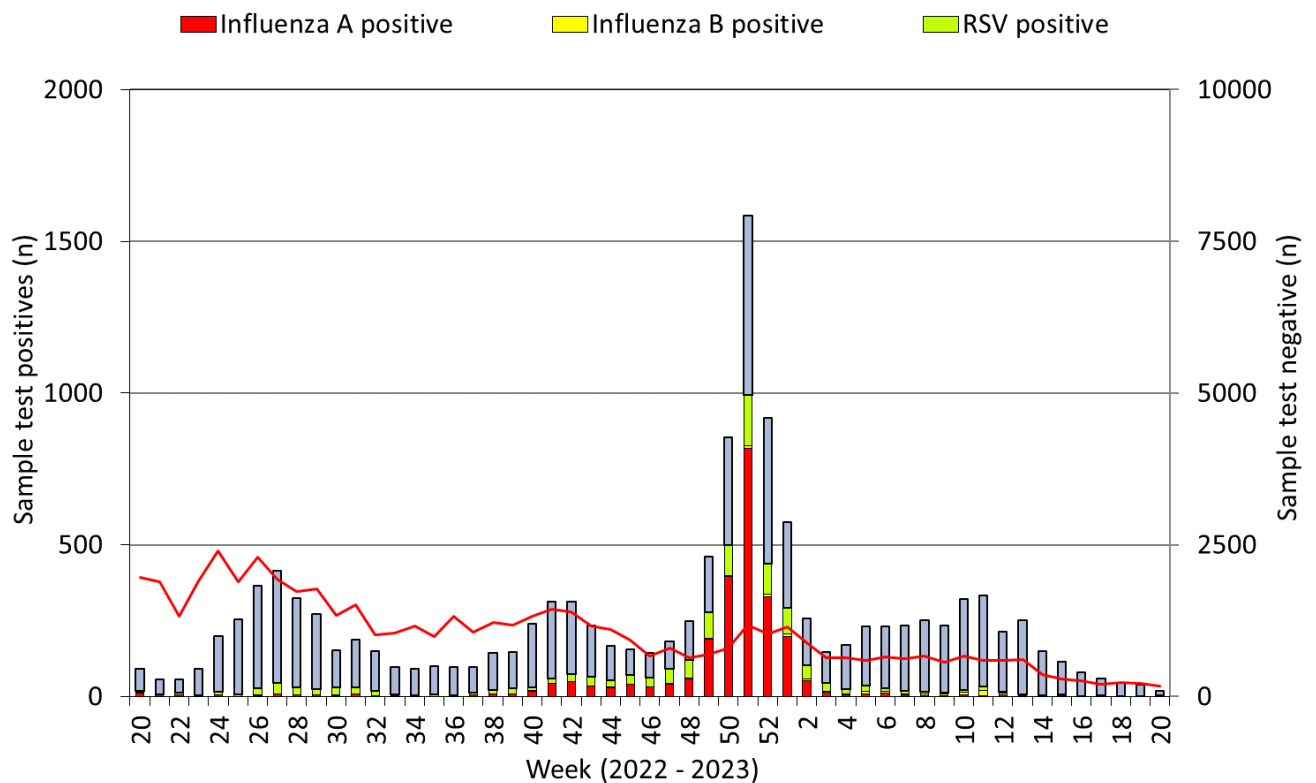
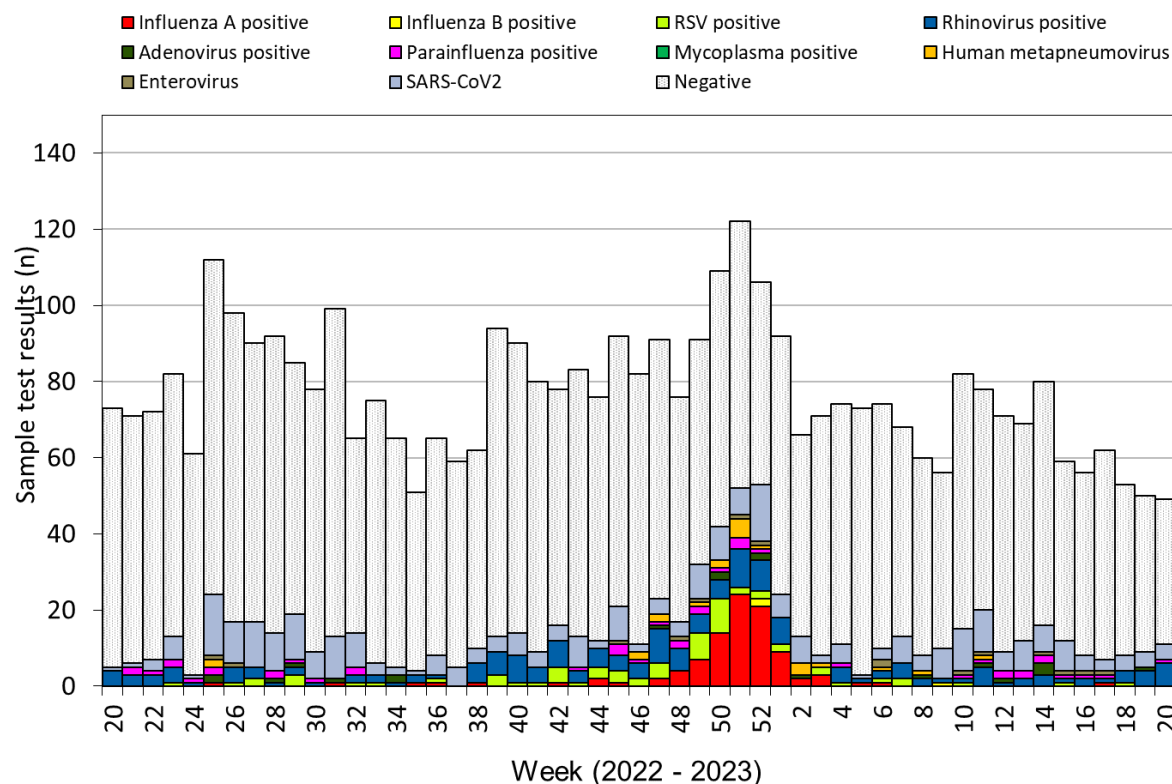
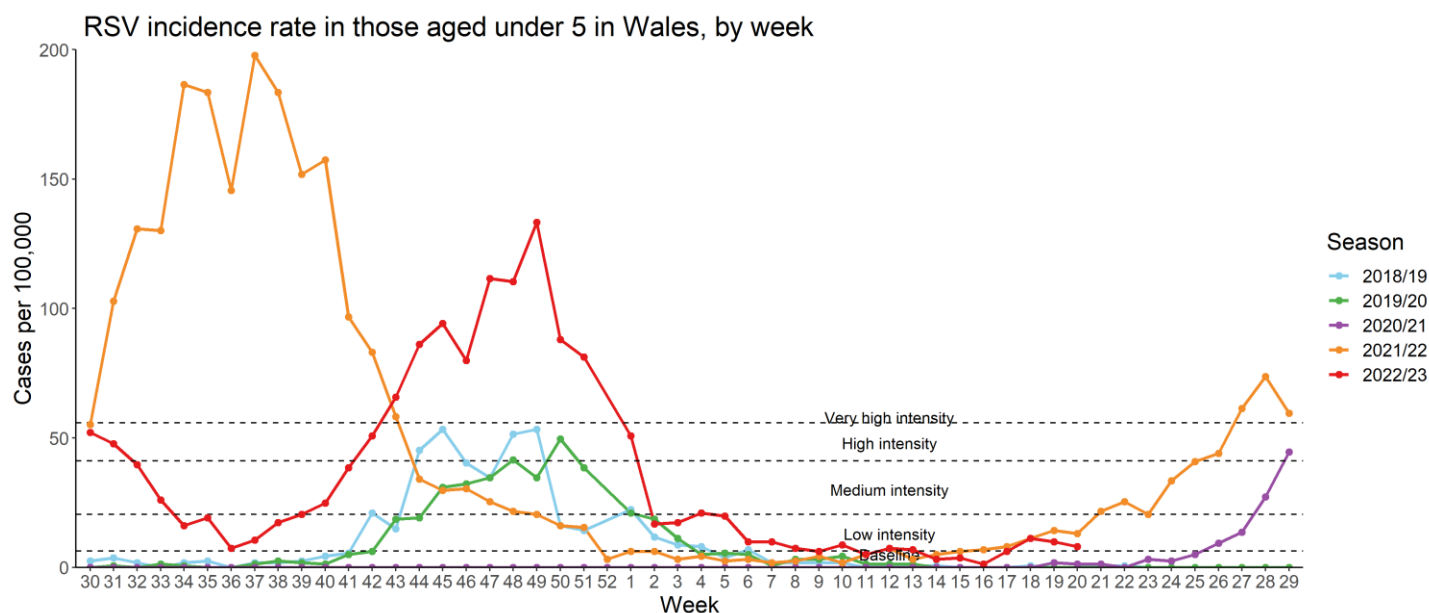


Figure 8. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 20 2022 to Week 20 2023.



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 2018 to Week 20 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 21/05/2023.

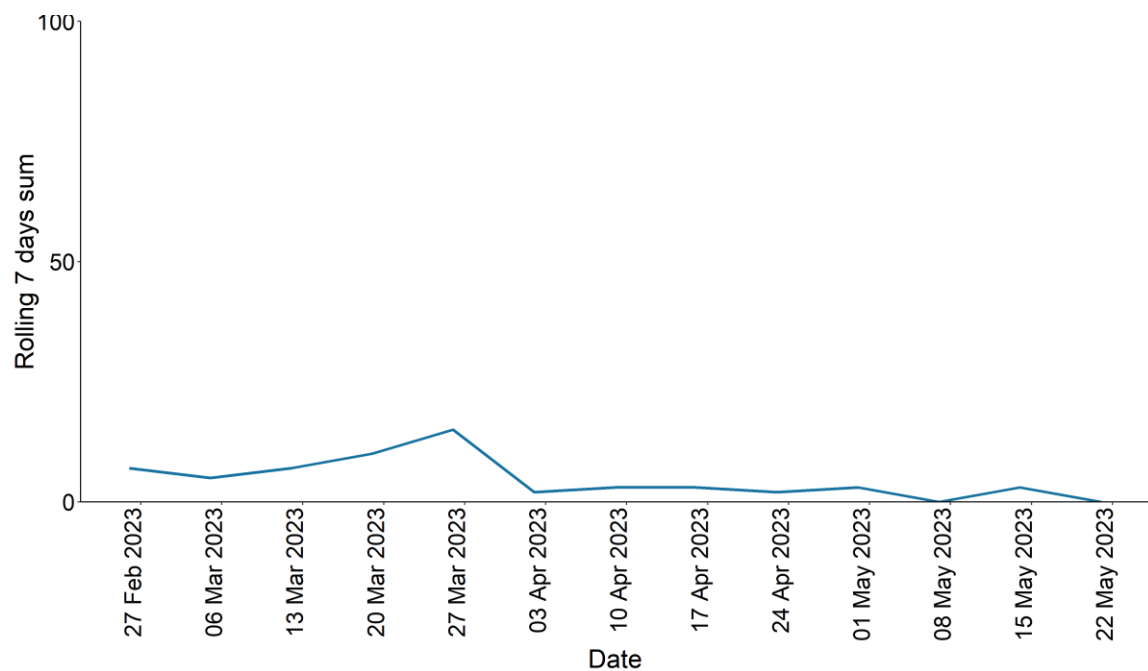
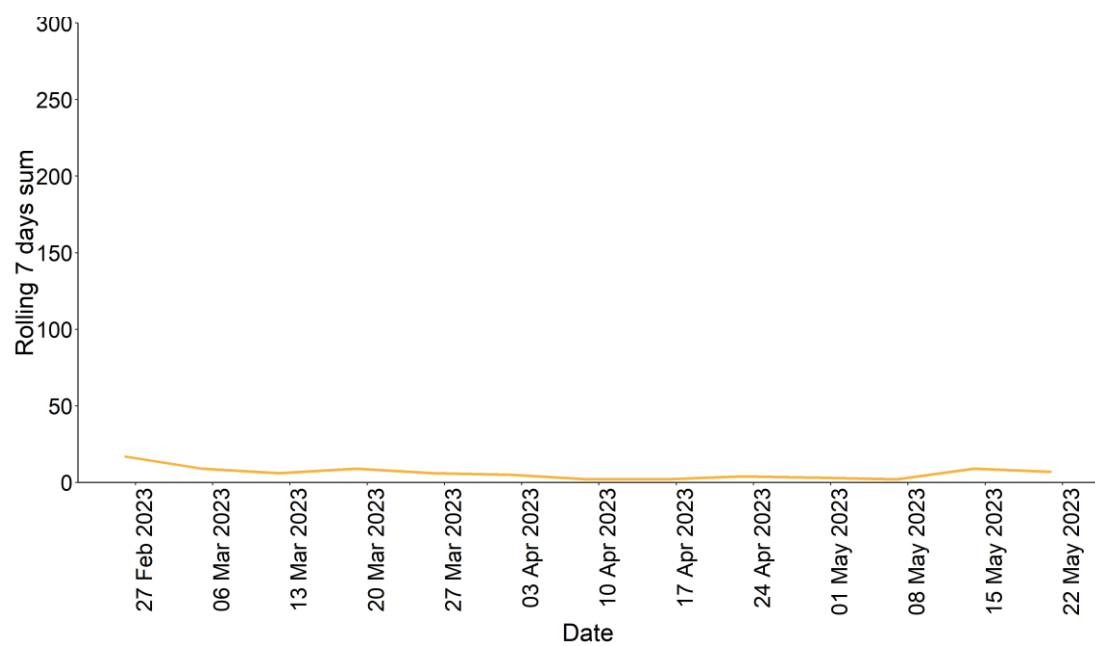
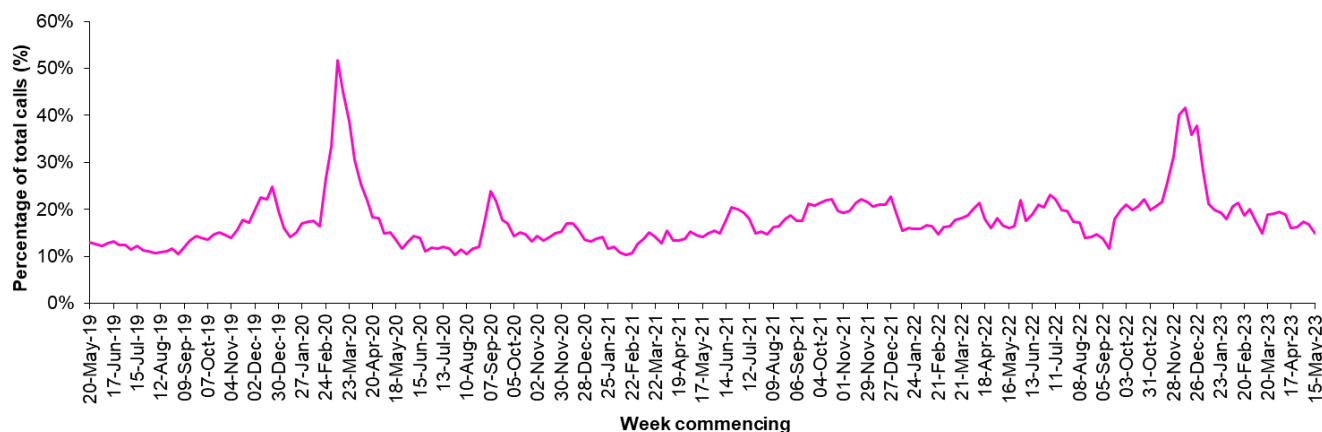


Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 21/05/2023.



Calls to NHS Direct Wales

Figure 12. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from Week 20 2019 - Week 20 2023 (as of 21/05/2023).



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 19, GP ILI consultations decreased in Northern Ireland to 0.9 per 100,000, remained stable in England at 1.5 per 100,000 and increased in Scotland to 2.2 per 100,000.
- During Week 19, 22 samples testing positive for influenza were reported in England (nine A(not subtyped), one influenza A(H3) and 12 influenza B). Overall influenza positivity remained low and stable at 0.5 % in Week 19. 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 19, 19 countries reported baseline activity and 18 countries reported low intensity. From the 36 countries reporting, six reported no activity, 19 reported sporadic spread, two reported local spread, five reported regional spread, and four reported widespread activity (across the Region). During Week 19, 59 (4%) 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 the positivity is now below the threshold for epidemic activity (10%). Of sentinel specimens that tested positive for influenza for the season to date, 70% were influenza A (64% H3, and 36% A(H1N1)pdm09) and 30% were influenza B. **Source:** Flu News Europe: <http://www.flunewseurope.org/>
- The WHO reported on 15/05/2023, based on data up to 30/04/2023 (latest data available), that globally, influenza detections have decreased due to a reduction in detections in the Northern Hemisphere, while some countries in the Southern Hemisphere saw an increase in recent weeks.
- In the countries of North America, Influenza indicators were mostly at low levels typically observed between influenza seasons. Influenza B predominated in Canada and in more recent weeks the United States of America (USA).
- In the temperate zones of the southern hemisphere, influenza activity remained low however activity slightly increased in Chile and Australia and in Pneumonia surveillance in South Africa. In Australia the majority of detections were influenza A with sporadic influenza B detections. Chile reported an increased activity of influenza A(H1N1)pdm09 detections, closely followed by influenza B detections resulting in positivity being above the epidemic threshold and above average levels for this time of year.
- In tropical South America, influenza detections decreased overall during this reporting period however positivity remained at extraordinary levels in Bolivia with increased detections of predominately influenza A(H1N1)pdm09. Influenza activity decreased in Peru and is now below the epidemic threshold. Influenza activity decreased in Brazil with influenza B and A(H1N1)pdm09 co-circulating.
- In Tropical Central America and the Caribbean influenza activity was low for all seasonal subtypes but influenza B was predominant among those detections. Positivity increased to moderate in Belize, with influenza B detection increasing. Influenza activity returned below epidemic level in Guatemala and remained low in Mexico. Jamaica continued to report influenza B detections and positivity remained at moderate levels
- In Western Africa, influenza activity remained low with all seasonal subtypes detected. Influenza A(H1N1)pdm09 detection predominated in Ghana, Togo, Cote D'Ivoire.
- In Middle Africa, low detections of influenza A(H1N1)pdm09 viruses were reported in Cameroon.
- In Southern Asia, influenza activity remained low in all reporting countries with B/Victoria lineage viruses predominating followed by A(H3N2) viruses. Influenza decreased in Bhutan.
- Activity in South-East Asia influenza detections decreased overall, reflecting a decrease in detection in Malaysia where Influenza A(H3) and B were circulating in roughly equal proportions.
- In Northern Africa, no detections were reported among those reporting ongoing testing.
- In Central Asia, no influenza detections were reported despite continued testing.
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 18/05/2023), during the period from 17/04/2023 – 30/04/2023 (latest data available), National Influenza Centres and other national influenza laboratories from 111 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 366,317 specimens during that period, of which 18,330 were positive for influenza viruses, 14,209(77.52%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 8,816 (69.58%) were influenza A(H1N1)pdm09 and 3,854 (30.42%) were influenza A(H3N2). Of the 18,330 samples tested positive for influenza viruses, 4,121 tested positive for Influenza B (22.48%) and of the characterised B viruses, 587 (100%) was B-Victoria lineage. **Source:** Flu Net: <https://www.who.int/tools/flunet>

Australia and New Zealand update

- In New Zealand, during the week ending 14/05/2023, community influenza-like illness activity (ILI) GP consultations increased to 9.42 per 100,000. The SARI hospitalisation rate increased to just above the baseline seasonal threshold into low levels. This is earlier than previous seasons implies an earlier start to the influenza season.

Source: [Institute of Environmental Science & Research, New Zealand](#)

- In Australia, according to the latest available update (fortnight ending 14/05/2023), influenza-like illness (ILI) activity in the community this has increased during this reporting period. To date, the majority of nationally reported laboratory-confirmed influenza cases were influenza A (77%).

Source: [Australian Influenza Surveillance Report and Activity Updates.](#)

Respiratory syncytial virus (RSV) in New Zealand

- In New Zealand, the RSV positivity rate was 20% in the week ending 14/05/2023, which is an increase from the previous week (4.2%).

Source: [Institute of Environmental Science & Research, New Zealand](#)

COVID-19 – UK and international summary

- As of 17/05/2023, there were four new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. There were 10 suspected COVID-19 deaths with a date of death in the most recent 7-day reporting period, reported to Public Health Wales. There were 24 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 nine. WHO Global Alert and Response website: <https://www.who.int/emergencies/disease-outbreak-news>
- As of 03/05/2023 no MERS-COV cases with the date of onset in 2023 have been reported by health authorities worldwide or by the WHO. No new MERS-COV death shave been reported since the 28th February 2023. 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