



Current level of influenza activity: Low

Influenza activity trend: Increasing

Confirmed influenza cases since 2022 week 42: 400 (160 influenza A(H3N2), 86 influenza A(H1N1)pdm09, 148 influenza A(not subtyped) and 6 influenza B)

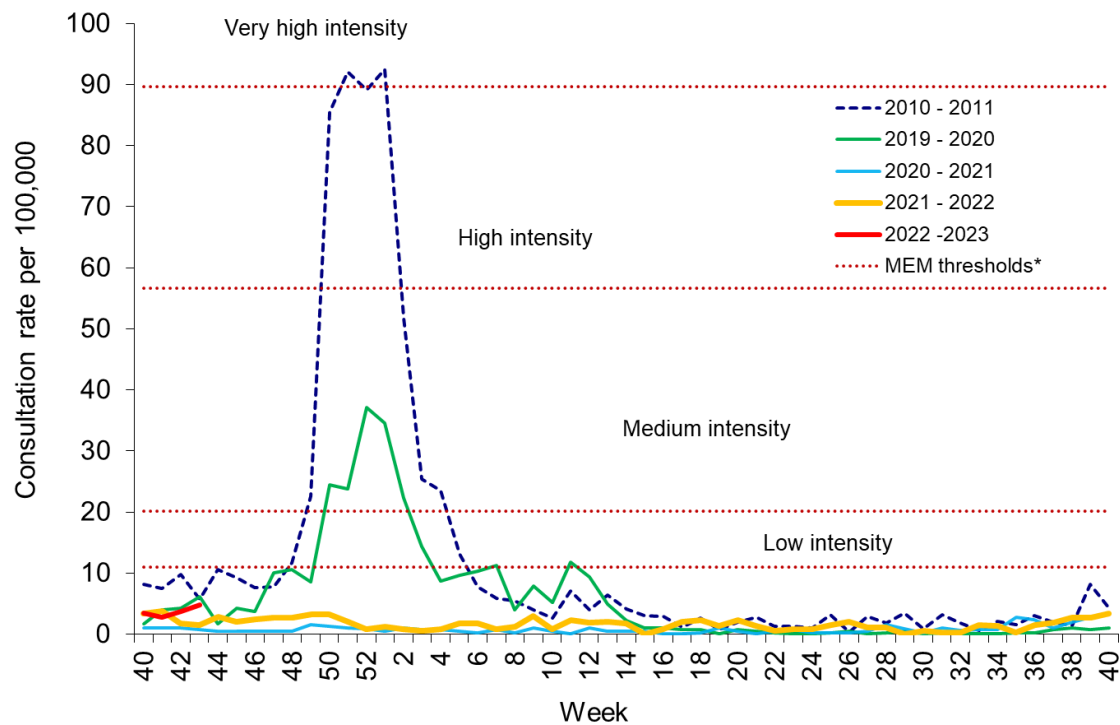
Key points – Wales

Confirmed influenza cases continue to be seen at low levels, whereas RSV confirmed cases are at very high levels. During Week 43 (ending 30/10/2022) there were 96 cases of influenza (a decrease from the previous weeks). COVID-19 cases continue to be detected in symptomatic patients in hospitals and in the community. RSV incidence in children under 5 years of age is currently at levels that would indicate very high levels of activity (compared to the 10 seasons leading up to 2020). Rhinovirus, adenovirus and RSV are the most commonly detected cause of non-COVID-19 Acute Respiratory Infection (ARI).

- The **Sentinel GP consultation rate for influenza-like illness (ILI)** in Wales during week 43, was 4.8 consultations per 100,000 practice population (Table 1). It increased compared to the previous week (3.7 consultations per 100,000) but remains well below the baseline threshold for seasonal influenza activity (11.0 per 100,000 practice population) (Figure 1). 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.
- The **Sentinel GP consultation rate for Acute Respiratory Infections (ARI)** was 236.6 per 100,000 practice population during Week 43, this is an increase compared to the previous week (214.6 per 100,000) (Table 2 and Figure 3). Weekly consultations increased for both Lower Respiratory Tract Infections and Upper Respiratory Tract Infections 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 43 increased to 22.2% (Figure 9).
- During Week 43, 1,462 specimens received multiplex respiratory panel testing mainly from patients attending hospitals. These results do not include samples tested solely for SARS-CoV2. There were 66 influenza (16 A(H1N1), 46 A(H3N2), three A(not typed), and one influenza B), 131 RSV, 34 parainfluenza, 263 rhinoviruses, 21 human metapneumovirus, 80 adenoviruses, 40 enteroviruses, six seasonal coronaviruses and 233 SARS-CoV2 detected in Week 43 (Figure 5). Additionally, 1,411 samples from patients were tested for influenza, RSV and SARS-CoV2 only, many of these tests may be associated with screening activities rather than diagnostic testing for patients presenting with ARI symptoms. Of these 1,411 samples, 30 were positive for influenza A, 31 were positive for RSV and 172 were positive for SARS-CoV2 (Figure 6). Eighty two respiratory specimens were tested from patients in intensive care units (ICU) and none were positive for influenza (Figure 7). For the latest COVID-19/ SARS-CoV2 surveillance data please see the [PHW daily dashboard](#)
- There was one surveillance sample from a patient with ILI collected by a **sentinel GP** during Week 43, which tested negative for all routinely tested respiratory pathogens (as at 02/11/2022) (Figure 4).
- **Confirmed RSV case incidence in children aged under 5 has increased, and is now at very high intensity levels.** In week 43 there were 62.1 confirmed cases per 100,000 in this age group (Figure 7). 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.
- During Week 43, 28 **ARI outbreaks** were reported to the Public Health Wales Health Protection team, 26 of them were reported as COVID-19 and two as influenza A. From the 28 **ARI outbreaks**, 27 were reported in residential care homes and one in community or other settings.
- According to [EuroMoMo](#) analysis, all-cause deaths in Wales were not significantly in excess during week 42.

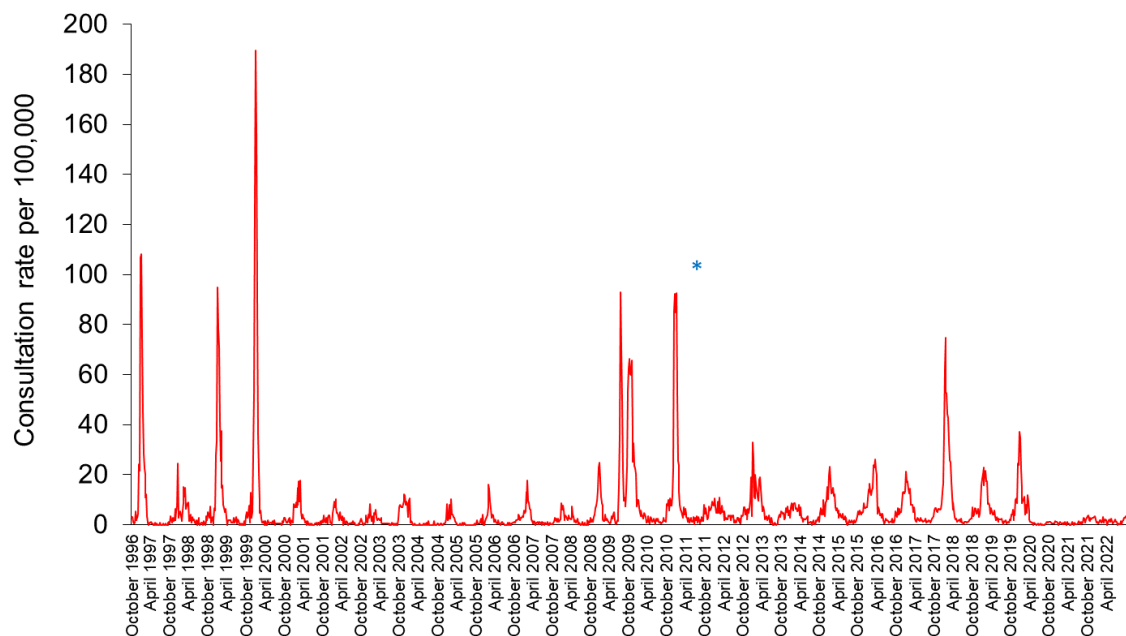
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 30/10/2022).



* 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 43 2022).



* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 38 – week 43 2022 (as of 30/10/2022).

Age group	38	39	40	41	42	43
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	0.0	0.0	13.6	7.1
5 - 14	0.0	4.6	0.0	2.3	4.5	2.3
15 - 24	4.5	0.0	4.3	2.3	0.0	0.0
25 - 34	2.0	2.0	5.8	2.0	2.0	10.0
35 - 44	4.0	0.0	7.7	4.0	5.8	12.1
45 - 64	2.5	5.7	2.8	4.8	3.7	3.8
65 - 74	4.5	2.2	0.0	2.3	4.4	2.2
75+	2.3	2.3	4.5	0.0	2.3	2.3
Total	2.8	2.8	3.4	2.8	3.7	4.8

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 38 – week 43 2022 (as of 30/10/2022).

Age group	38	39	40	41	42	43
< 1	1279.2	1407.1	1048.7	1249.6	1209.7	1311.2
1 - 4	509.1	725.3	886.5	902.9	1043.8	1075.0
5 - 14	185.5	250.4	255.3	265.7	302.7	336.4
15 - 24	127.5	183.5	173.8	160.1	146.7	179.4
25 - 34	95.5	149.2	193.5	136.9	179.4	172.4
35 - 44	103.6	163.4	191.0	162.3	176.5	212.9
45 - 64	82.3	119.2	163.0	178.0	155.0	162.0
65 - 74	86.8	171.4	160.2	145.9	107.0	165.4
75+	122.9	157.6	213.8	184.5	192.1	202.2
Total	132.4	191.7	219.6	210.0	214.6	236.6

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 1 – week 43 2022 (as of 30/10/2022).

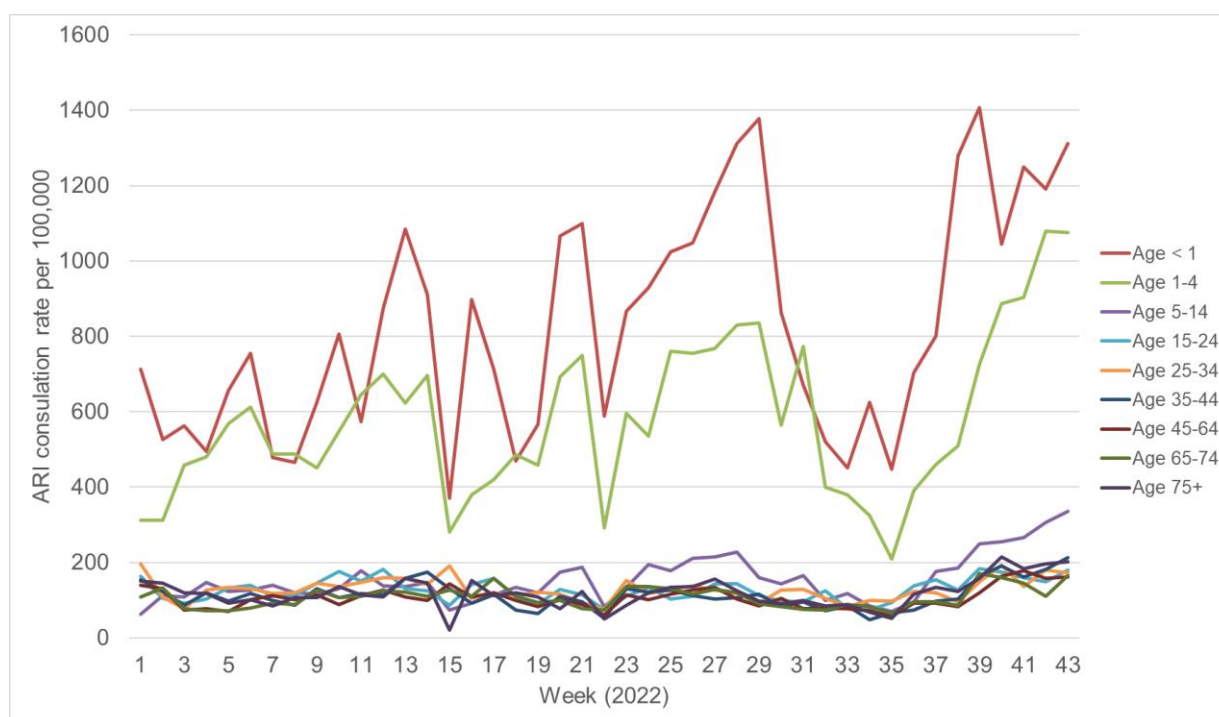
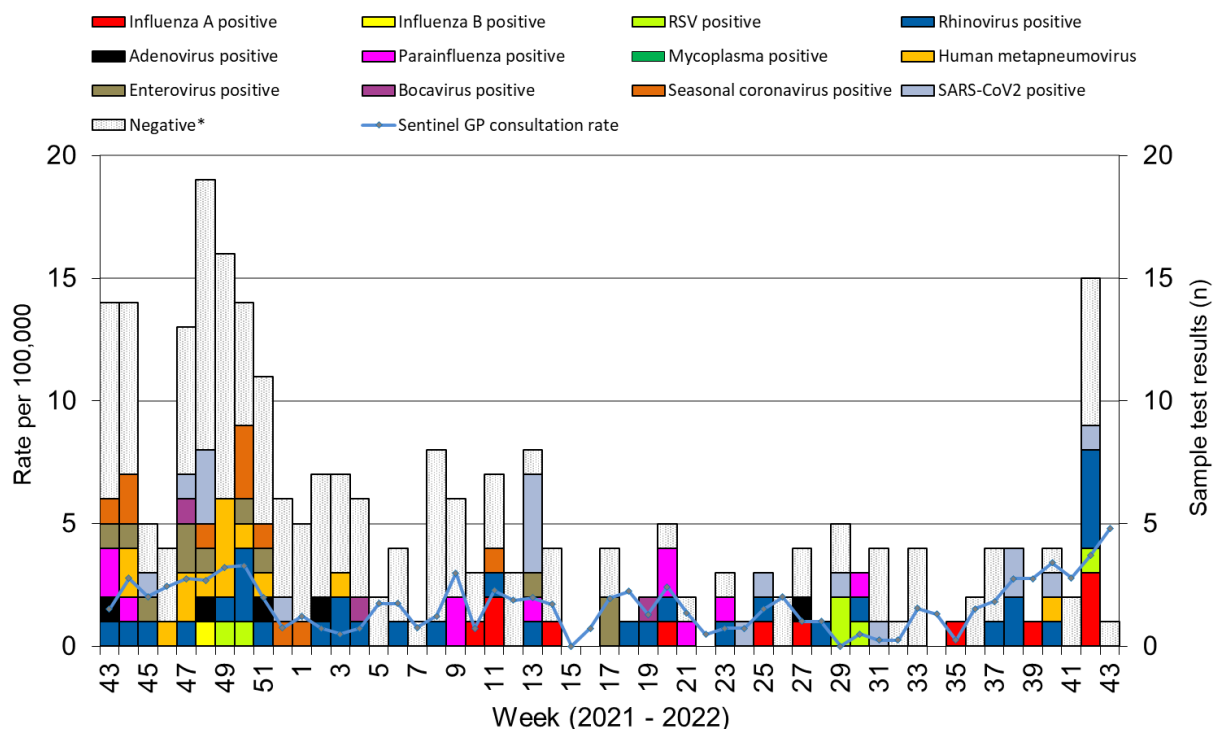
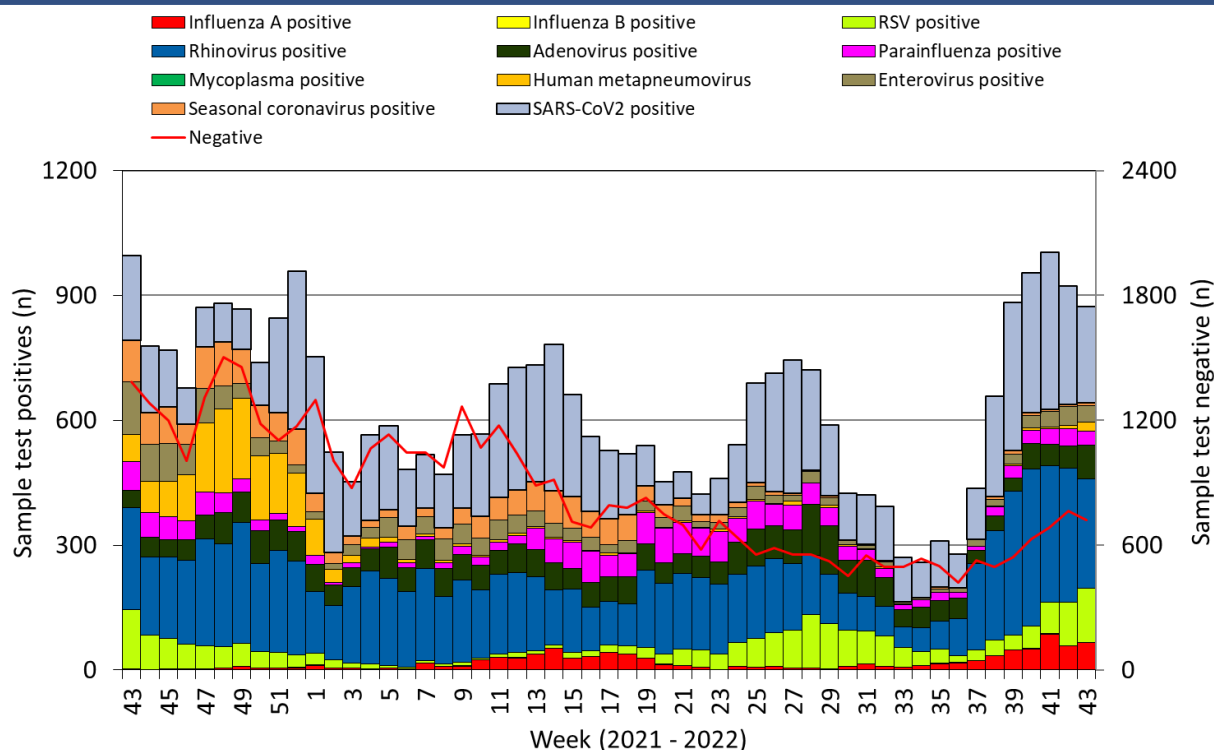


Figure 4. Specimens submitted for virological testing by sentinel GPs as of 30/10/2022, by week of sample collection, week 43 2021 to week 43 2022.



* 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.

Figure 5. Specimens submitted for virological testing for hospital patients and non-sentinel GPs as of 30/10/2022 by week of sample collection, week 43 2021 to week 43 2022.



This chart summarises respiratory panel test data and does not include data for patients tested SOLEY 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. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 30/10/2022 by week of sample collection, week 43 2021 to week 43 2022.

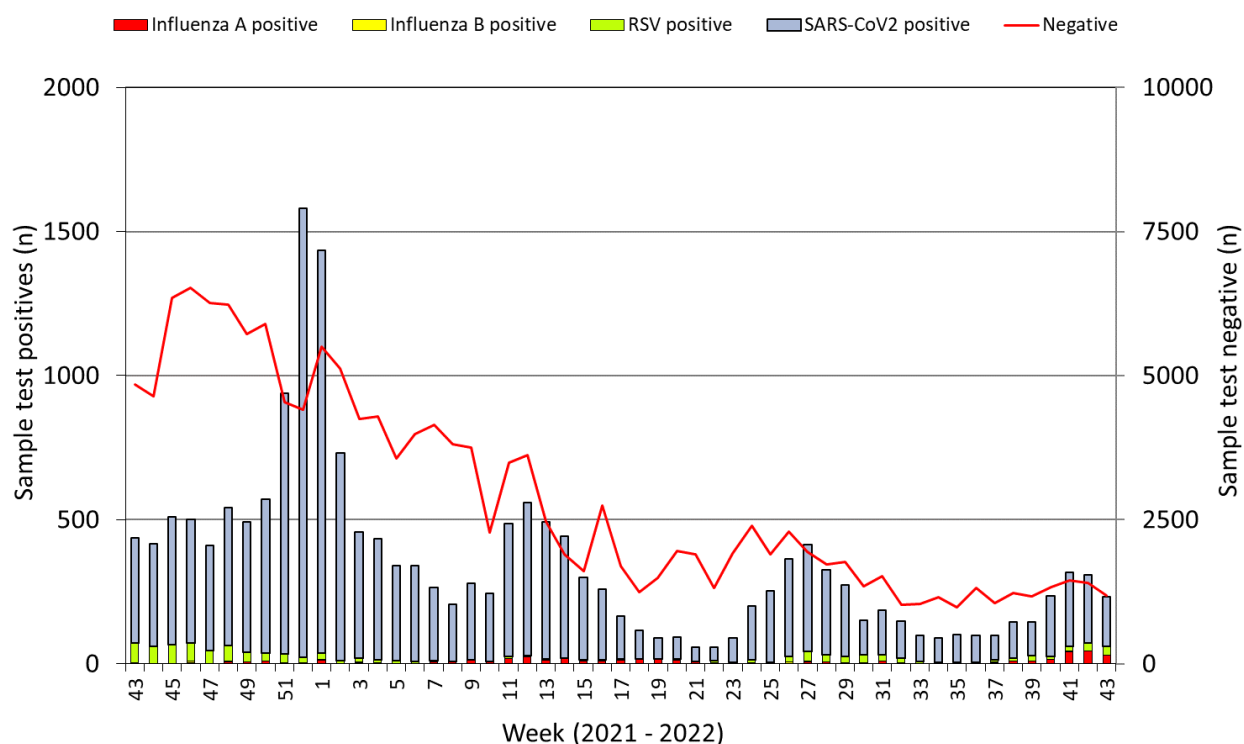
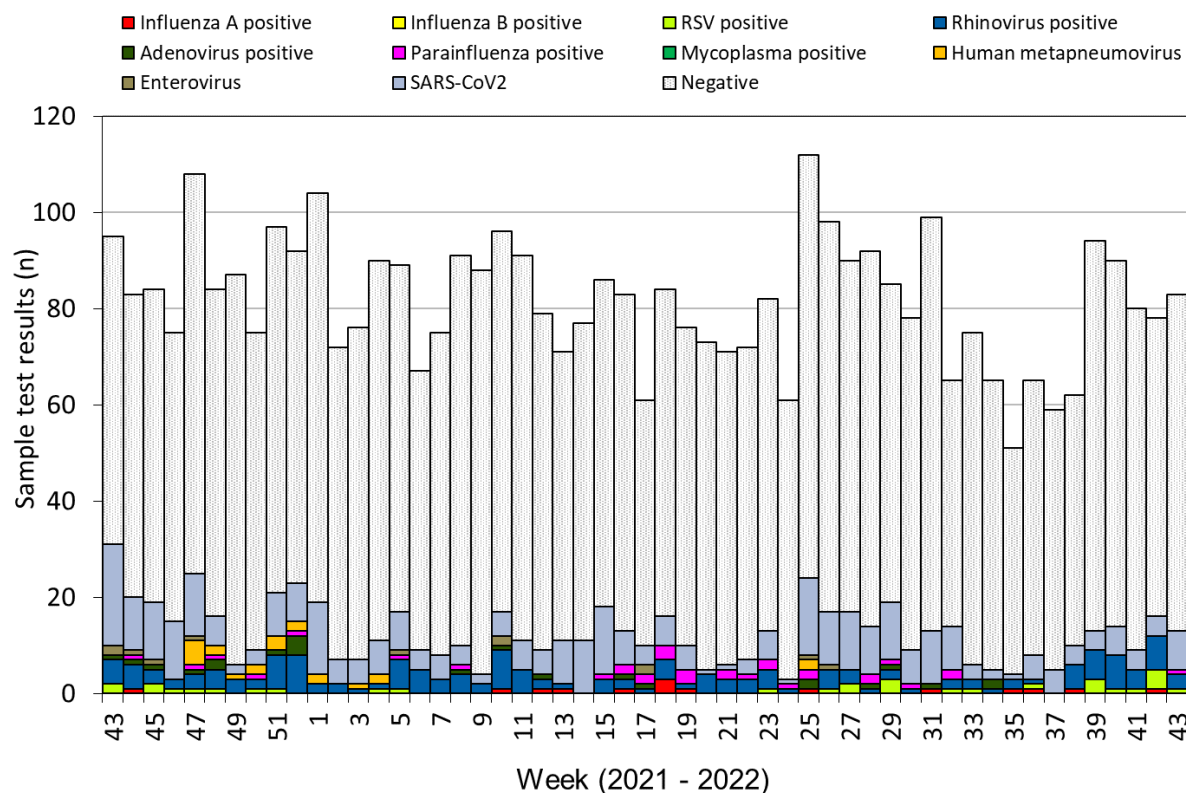
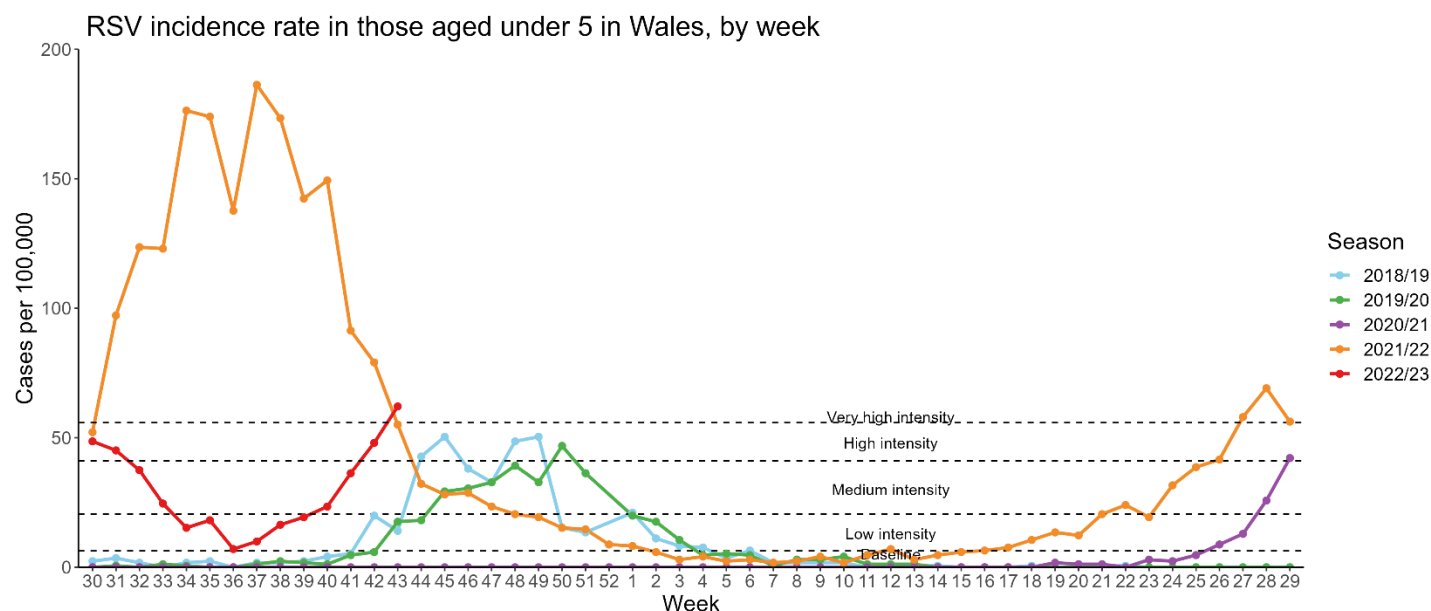


Figure 7. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 43 2021 to Week 43 2022.



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.

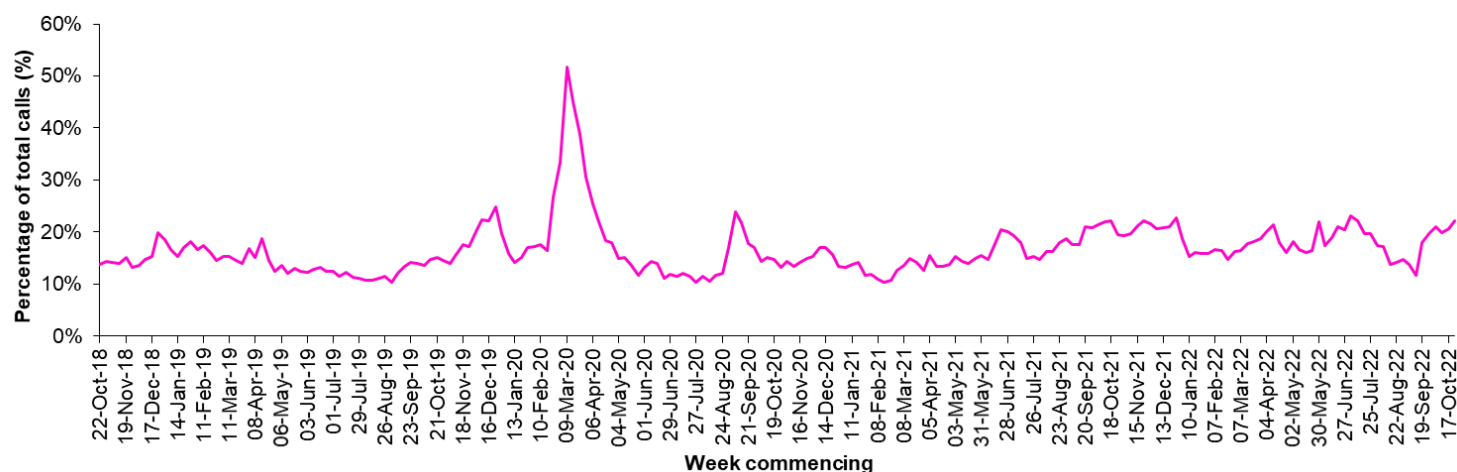
Figure 8. RSV incidence rate per 100,000 population aged under five years, week 30 2018 to Week 43 2022.



*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 43 2018 - Week 43 2022 (as of 30/10/2022).



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 25/10/2022).

Influenza immunisation uptake in the 2022/23 season	
People aged 65y and older	48.2%
People younger than 65y in a clinical risk group	21.2%
Children aged two & three years	15.7%

Uptake in other eligible groups will be available in the coming weeks.

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 42 community and syndromic influenza indicators remained low in the UK. GP ILI consultations increased in Scotland to 3.9 per 100,000, and decreased in Northern Ireland to 1.8 per 100,000 - well below the baseline intensity threshold. The weekly ILI GP consultation rate in England reported through the RCGP system decreased to 3.3 per 100,000, below the MEM threshold for baseline activity (12.2 per 100,000).
- During week 42, 203 samples tested positive for influenza (including 5 A(H1N1)pdm09, 39 A(H3N2), 146 A(not subtyped) and 13 influenza B). Overall influenza positivity is 5.2%. 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 its third weekly analysis of the season 2022-2023. Two countries have reported regional influenza activity. During week 42, 31 out of 40 reporting countries reported baseline-intensity, eight reported low-intensity, and one reported high-intensity (Malta). Seventeen out of 40 reporting countries reported no influenza activity across the region, 17 reported sporadic spread, three reported local spread, one reported regional spread (Germany), and two reported widespread activity (Kazakhstan and Scotland). During week 42, 135 of 2,084 (6%) samples from patients presenting to all sentinel primary care centres with ILI or ARI symptoms were tested positive for influenza. This is an increase of 2% from the previous week, but remains below the threshold for epidemic activity (10%). Above-threshold positivity has been reported in Germany at 16%, Portugal 15%, Kazakhstan 11% and Spain 10%. Of sentinel specimens that tested positive for influenza, 89% were influenza A (86% H3, 14% A(H1N1)pdm09) and 11% were influenza B. **Source:** Flu News Europe: <http://www.flunewseurope.org/>
- The WHO reported on 17/10/2022, based on data up to 02/10/2022, that globally, influenza activity remains low.
- In the temperate zones of the southern hemisphere, overall influenza activity has continued to decrease, with the exception of temperate South America where activity increased. RSV and other respiratory virus activity that had increased in previous weeks appeared to have stabilised or began decreasing in Western Australia.
- In temperate South America, influenza detections increased due to increased activity in Argentina of predominately A(H1N1)pdm09 among subtyped virus. Other countries in the temperate South American region reported mostly A(H3N2), with a slight increase in detections reported in Brazil at subthreshold levels. RSV activity increased in Uruguay and Brazil, with low or decreasing activity reported in other countries in the subregion. In tropical South America, influenza detections of predominantly A(H3N2) virus were reported but remained low.
- In the Caribbean, and Central American countries, low influenza activity, predominately A(H3N2), was reported.
- In tropical Africa, influenza activity remained low with predominantly influenza B/Victoria lineage and A(H3N2) viruses, although detections of A(H1N1)pdm09 were reported in a few countries.
- In Southern Asia, influenza detections of predominantly A(H3N2) viruses, were low or generally decreasing. Detections of A(H1N1)pdm09 and influenza B viruses were also reported. In East Asia, influenza activity of predominantly influenza A(H3N2) remained stable. In Western Asia, influenza detections increased slightly in some countries of the Arab Peninsula. Influenza activity of majority A(H3N2) continued to be reported in South-East Asia with varying trends across countries. Detections of A(H1N1)pdm09 and influenza B viruses were also reported.
- In North America, influenza activity remained low, at levels typically observed at this time of year. Influenza A(H3N2) predominated amongst the few subtyped viruses. In Europe, overall influenza activity remained at inter-seasonal levels, with slight increases in influenza detections and ILI activity in only a few countries. Influenza A viruses predominated among reported detections, A(H3N2) accounting for the majority of subtyped detections. RSV activity remained low overall in the USA and Canada, but detections increased in the USA. **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 24/10/2022), during the time period from 19/09/2022 – 02/10/2022, National Influenza Centres and other national influenza laboratories from 105 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 133,934 specimens during that time period, of which 5,323 were positive for influenza viruses. 4,706 (88.4%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 630 (18.3%) were influenza A(H1N1)pdm09 and 2,808 (81.7%) were influenza A(H3N2)) and 617 (11.6%) influenza B (of the 208 characterised influenza B viruses, all belonged to the B-Victoria lineage). **Source:** FluNet: <https://www.who.int/tools/flunet>

Update on influenza activity in North America

- The USA Centers for Disease Control and Prevention (CDC) report that there have been early increases in seasonal influenza activity in the United States during week 42 (ending 22/10/2022). Nationally, 4,129 (6.2%) out of 66,955 specimens have tested positive for influenza in week 42 in clinical laboratories nationwide, of these positives 4,061 (98.4%) were influenza A and 68 (1.6%) were influenza B. Further characterisation has been carried out on 8,367 specimens by public health laboratories, and 298 samples tested positive for influenza; 43 influenza A(H1N1)pdm09, 126 influenza A(H3N2), 122 influenza A(not subtyped) and seven influenza B.

Source: CDC Weekly US Influenza Surveillance Report: <http://www.cdc.gov/flu/weekly/>

- The Public Health Agency of Canada reported that between weeks 40-41, influenza activity was increasing but remained at interseasonal levels. The percentage of visits to healthcare professionals that were due to ILI was 1.7% in week 41, which is typical of this time of year. During weeks 40-41, 394 influenza detections were confirmed; 380 influenza A (predominantly A(H3N2) at 77%), and 14 influenza B.

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 an out of season increase in RSV activity, beginning in February 2022. This followed out-of-season activity also reported during 2021. RSV positivity rate has increased again in the week beginning 22/10/2022, although the number of detections decreased.

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

COVID-19 – UK and international summary

- As of 26/10/2022, the new positive PCR episodes for the most recent 7-day reporting period were 20 per 100,000 population in Wales. There were 26 suspected COVID-19 deaths with a date of death in the most recent 7-day reporting period, reported to Public Health Wales. There were 40 COVID-19 death registrations in the last reporting period provided 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 28/04/2022 WHO reported an additional case of Middle East Respiratory Syndrome coronavirus (MERS-CoV) in Oman, this follows on from two laboratory-confirmed cases (including 1 death) reported from Qatar between 22/03/2022 to 03/04/2022. Since the beginning of 2022 and as of 03/10/2022 there have been three reported cases of MERS-CoV. As of 15/05/2022, 2,591 laboratory confirmed cases of human infection with MERS-CoV, including 894 associated deaths, from across the globe have officially been reported to WHO since 2012. Source: WHO Global Alert and Response website: <https://www.who.int/emergencies/disease-outbreak-news>
- The majority 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 (31/08/2022 – 05/10/2022) reports that there have been no publicly available reports from China or other countries on influenza A(H7N9) in recent months. Since February 2013, a total of 1,568 laboratory-confirmed cases of human infection with avian influenza A(H7N9), including at least 616 deaths, have been reported to the global influenza programme: <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/>

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