

Current level of influenza activity: Baseline

Influenza activity trend: Decreasing

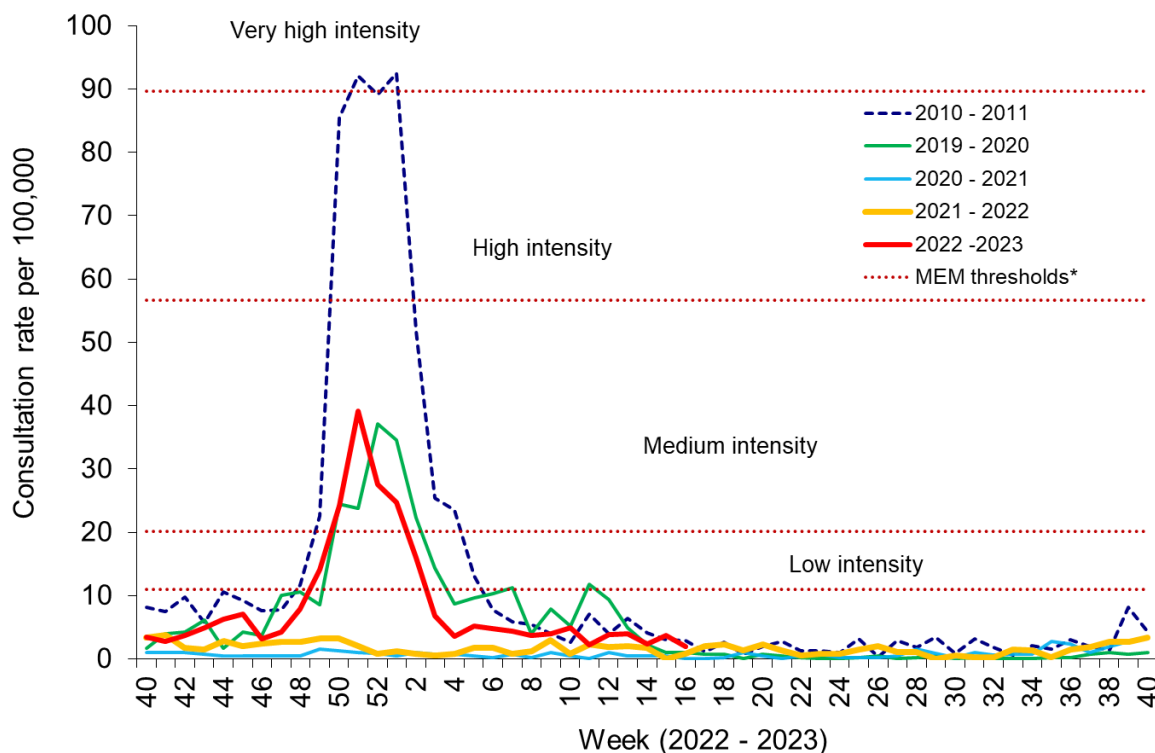
Confirmed influenza cases since 2022 Week 40: 7756 (3049 influenza A(H3N2), 1625 influenza A(H1N1)pdm09, 2654 influenza A(not subtyped) and 428 influenza B)

During Week 16 (ending 23/04/2023) there were 6 cases of influenza. 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 baseline levels. SARS-CoV-2, rhinovirus, parainfluenza, adenovirus and seasonal coronaviruses 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 16, was 2.0 consultations per 100,000 practice population (Table 1). This is a decrease compared to the previous Week (3.7 consultations per 100,000, Figure 1).
- The **Sentinel GP consultation rate for Acute Respiratory Infections (ARI)** was 144.3 per 100,000 practice population during Week 16 (Table 2 and Figure 3). This is a decrease compared to the previous week (149.3 per 100,000). Weekly consultations for Lower Respiratory Tract Infections (at 49.98 per 100,000) and Upper Respiratory Tract Infections (96.08 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 15 decreased to 18.8% (Figure 9) (latest data available).
- During Week 16, 1,218 specimens received multiplex respiratory panel testing, from patients attending hospitals. These results do not include samples tested solely for SARS-CoV-2. There were **4 samples positive for influenza**, of which one was A(H1N1)pdm09, and three were influenza B. Overall influenza positivity decreased to 0.3% across all age groups; decreased to 0.2% in those aged 18 years and over; and decreased to 0.6% in those aged under 18 years. In addition, there were 162 rhinovirus, 145 SARS-CoV2, 103 parainfluenza, 61 adenovirus, 42 seasonal coronaviruses, 26 enterovirus, 25 HMPV, and nine RSV positive samples (Figure 5). Additionally, 365 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 365 samples, 81 were positive for SARS-CoV-2 and two for influenza B (Figure 6). Furthermore, during Week 16, 56 respiratory specimens were tested from patients in intensive care units (ICU) of which none were positive for influenza (Figure 7).
- There were 22 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 16. Of the 22 samples, two tested positive for rhinovirus and enterovirus and one for Sars-CoV2, seasonal coronavirus and adenovirus (as at 26/04/2023) (Figure 4).
- **In Week 15 there were 1.2 confirmed RSV cases per 100,000 in those aged under five years (Figure 7).** This was a decrease from the previous week, and activity remains at baseline 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) decreased to one during Week 15 (from three during the previous week. The 7-day rolling sum of cases hospitalised within 28 days of an RSV positive test result in the community (or up to two days post-admission) increased to three during week 15, from two in the previous week (Figures 10 & 11).
- During week 16, nine **ARI outbreaks** were reported to the Public Health Wales Health Protection team. All nine outbreaks were reported as COVID-19. All nine **ARI outbreaks** were reported in residential care homes
- According to [EuroMoMo](#) analysis, all-cause deaths in Wales were not in excess during week 16.

Respiratory infection activity in Wales

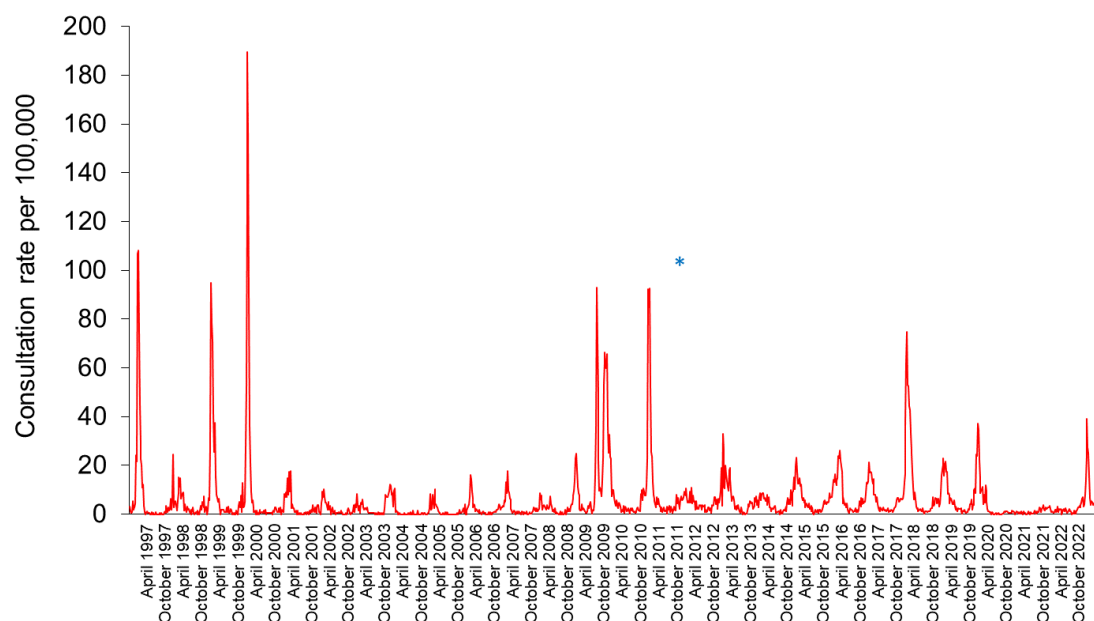
Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 23/04/2023)



* 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 16 2023)



* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 11 – Week 16 2023 (as of 23/04/2023)

Age group	11	12	13	14	15	16
< 1	33.9	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	0.0	6.5	0.0	0.0
5 - 14	0.0	4.7	8.6	0.0	0.0	0.0
15 - 24	0.0	2.2	8.4	4.2	2.1	0.0
25 - 34	5.9	4.0	5.5	1.9	3.7	2.2
35 - 44	0.0	7.9	3.6	3.6	7.3	4.4
45 - 64	2.8	3.8	1.8	2.7	7.1	2.2
65 - 74	0.0	0.0	0.0	0.0	0.0	2.6
75+	4.5	4.6	4.3	2.1	2.1	2.6
Total	2.2	3.8	4.0	2.3	3.7	2.0

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 11 – Week 16 2023 (as of 23/04/2023)

Age group	11	12	13	14	15	16
< 1	1255.1	1100.4	1196.9	944.9	1007.9	771.0
1 - 4	746.5	834.0	838.8	572.2	520.2	392.2
5 - 14	276.7	293.9	267.3	183.2	131.5	130.8
15 - 24	128.7	152.6	140.3	100.5	115.1	136.7
25 - 34	187.9	160.0	127.4	99.7	149.6	113.1
35 - 44	175.0	169.2	125.3	132.6	121.7	138.6
45 - 64	133.8	105.4	131.8	115.9	118.5	120.4
65 - 74	142.4	122.6	168.1	117.7	126.1	117.3
75+	174.5	165.8	191.7	132.1	157.6	168.9
Total	196.0	187.8	189.8	146.0	149.3	144.3

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 16 2022 – Week 16 2023 (as of 23/04/2023).

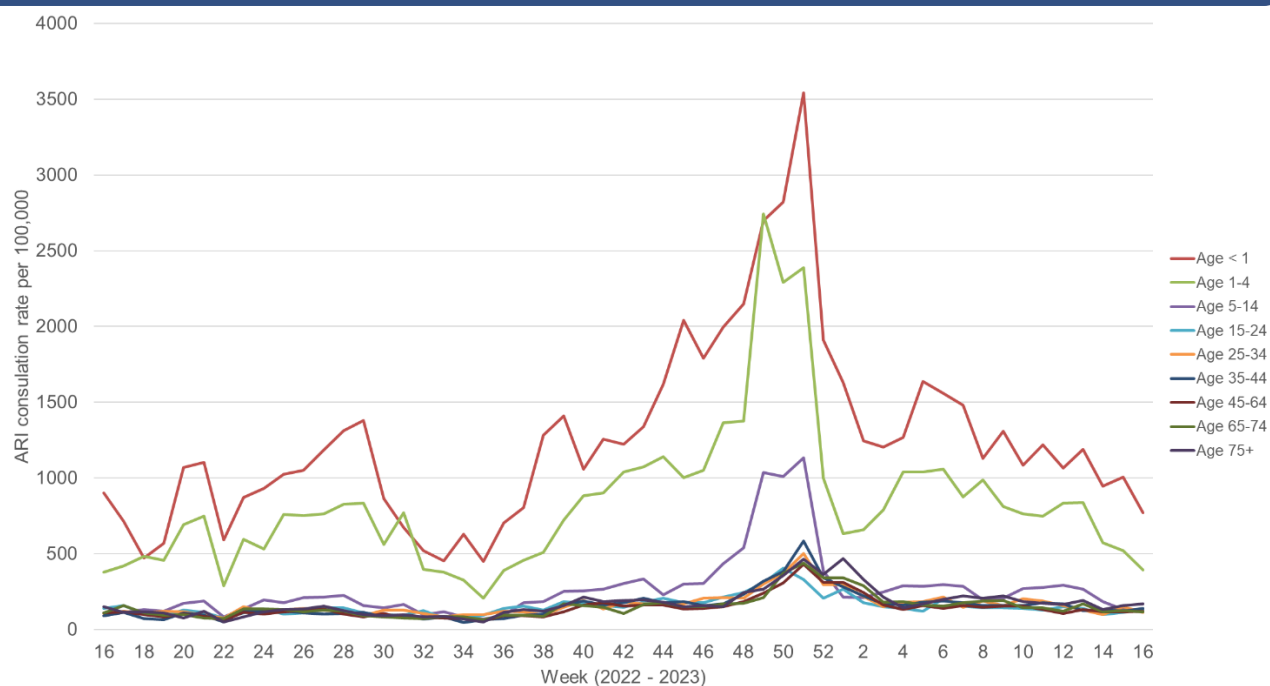
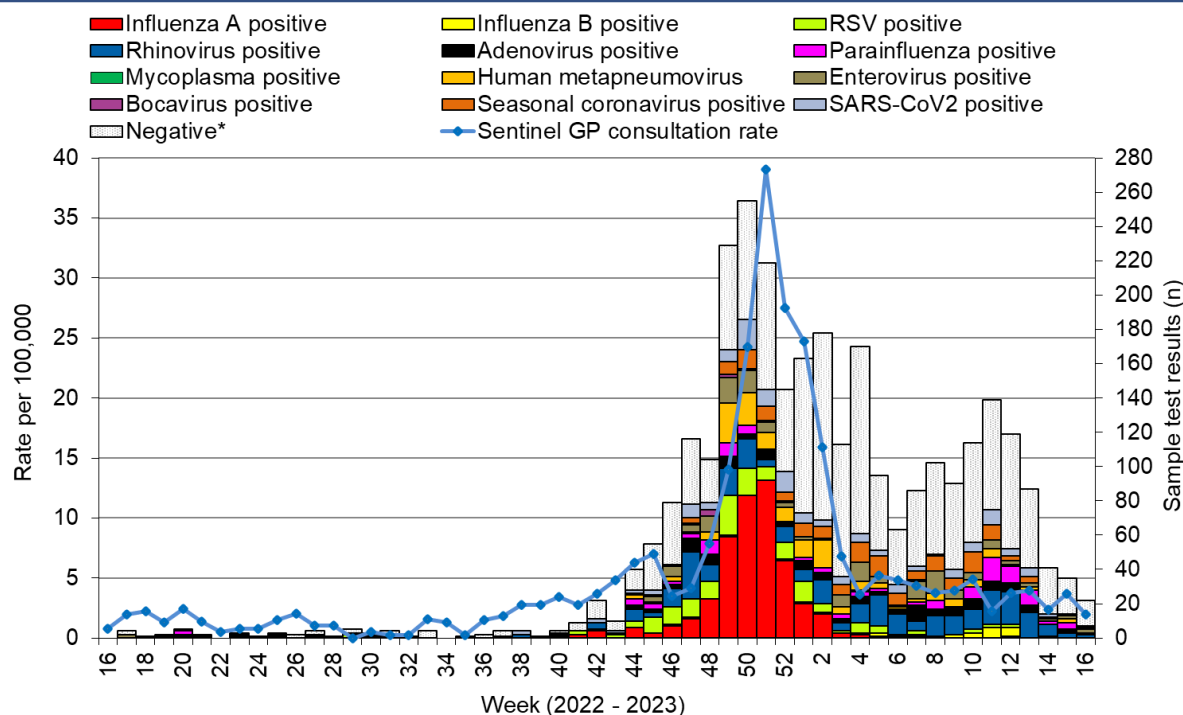
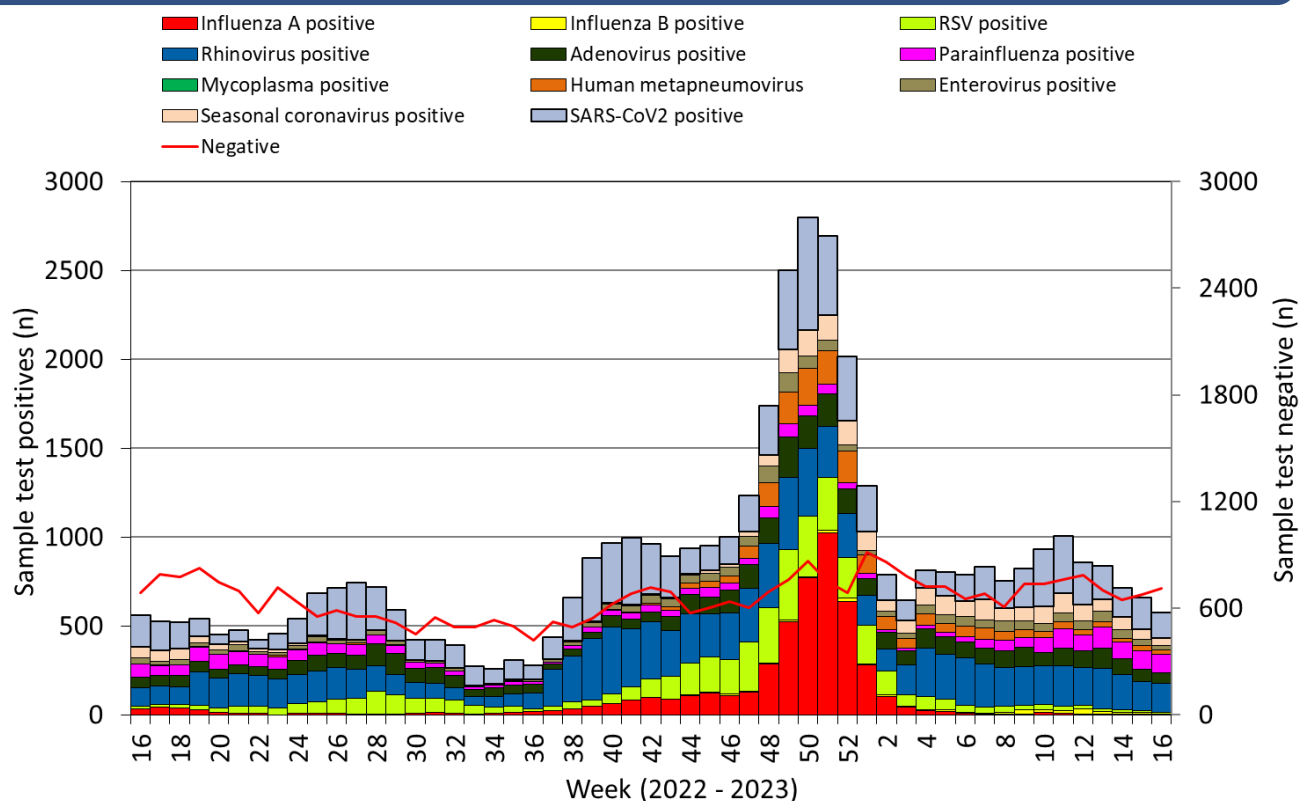


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 23/04/2023, by week of sample collection, Week 16 2022 to Week 16 2023.



* 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 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 23/04/2023 by week of sample collection, Week 16 2022 to Week 16 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. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 23/04/2023 by week of sample collection, Week 16 2022 to Week 16 2023.

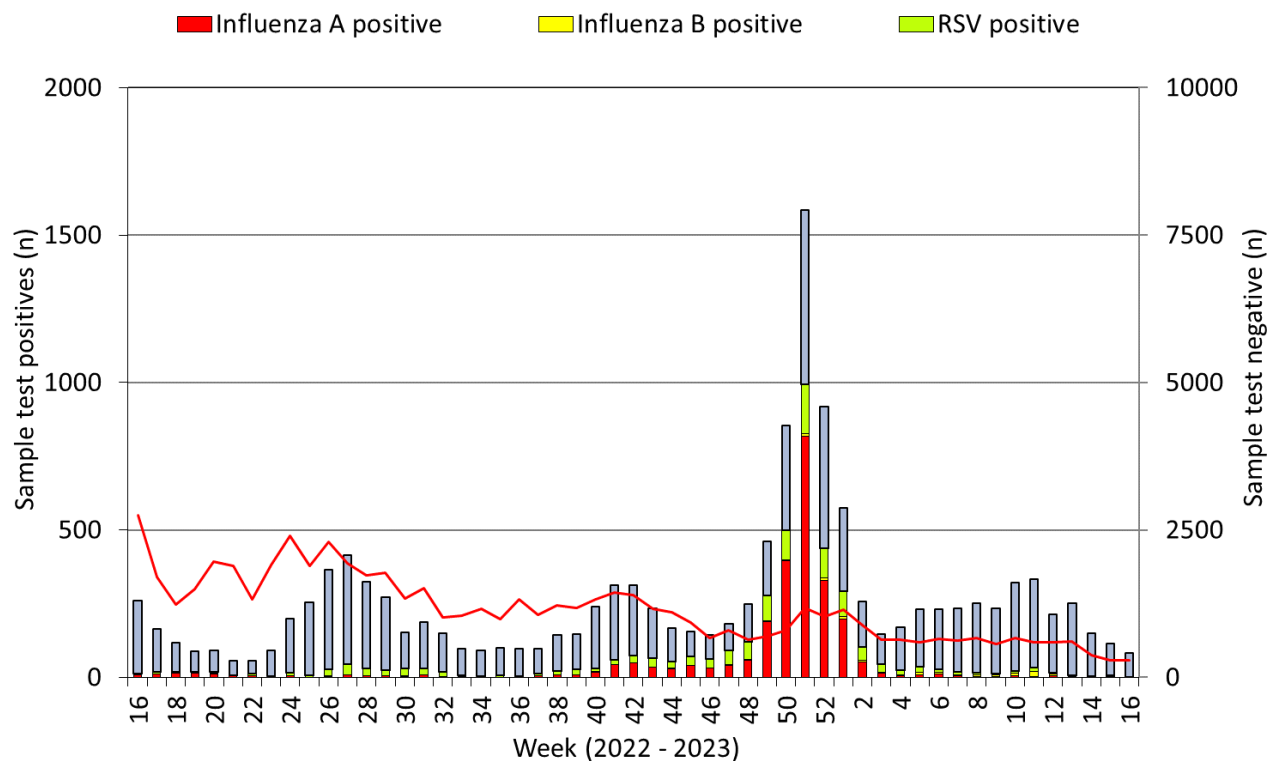
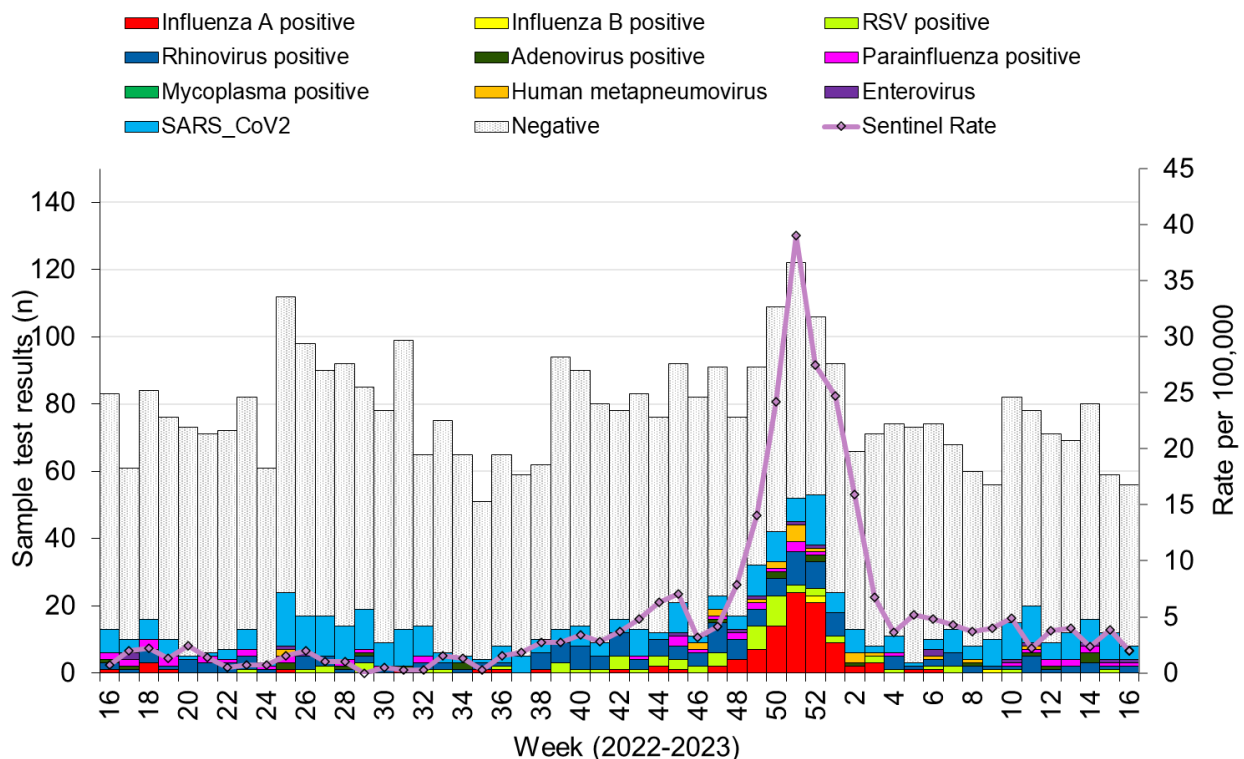
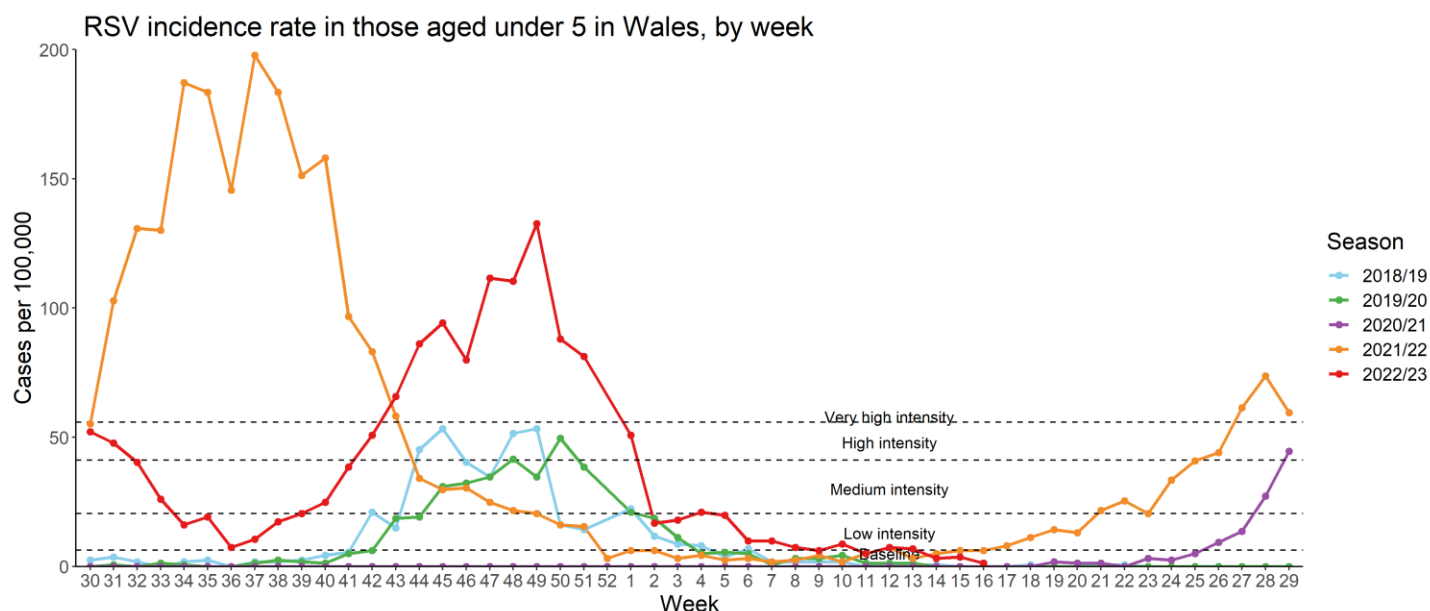


Figure 7. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 16 2022 to Week 16 2023.



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.

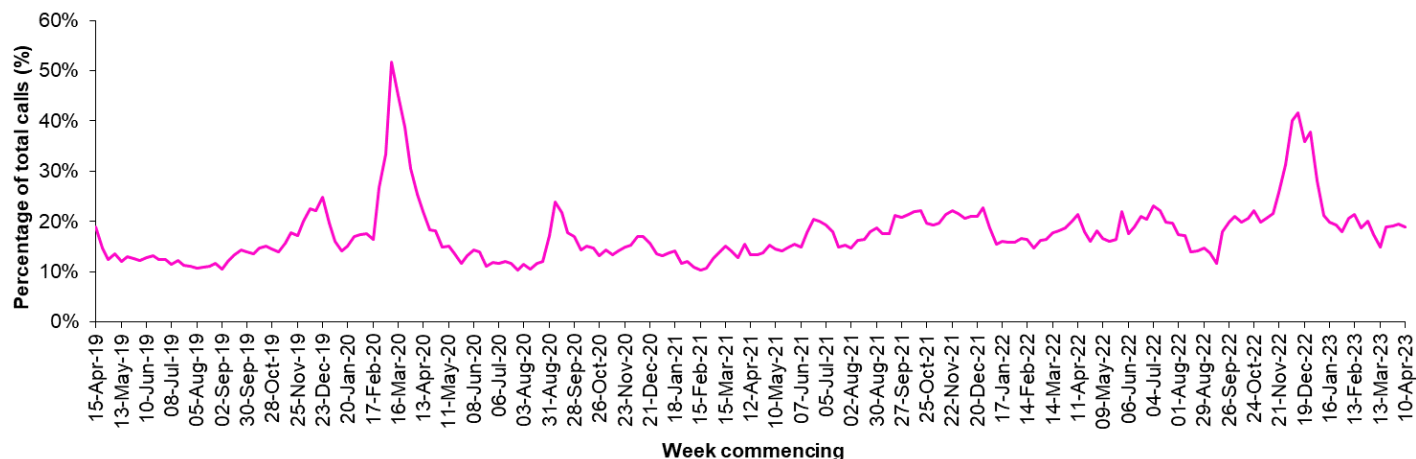
Figure 8. RSV incidence rate per 100,000 population aged under five years, week 30 2018 to Week 16 2023.



*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 15 2019 - Week 15 2023 (as of 16/04/2023).



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 23/04/2023.

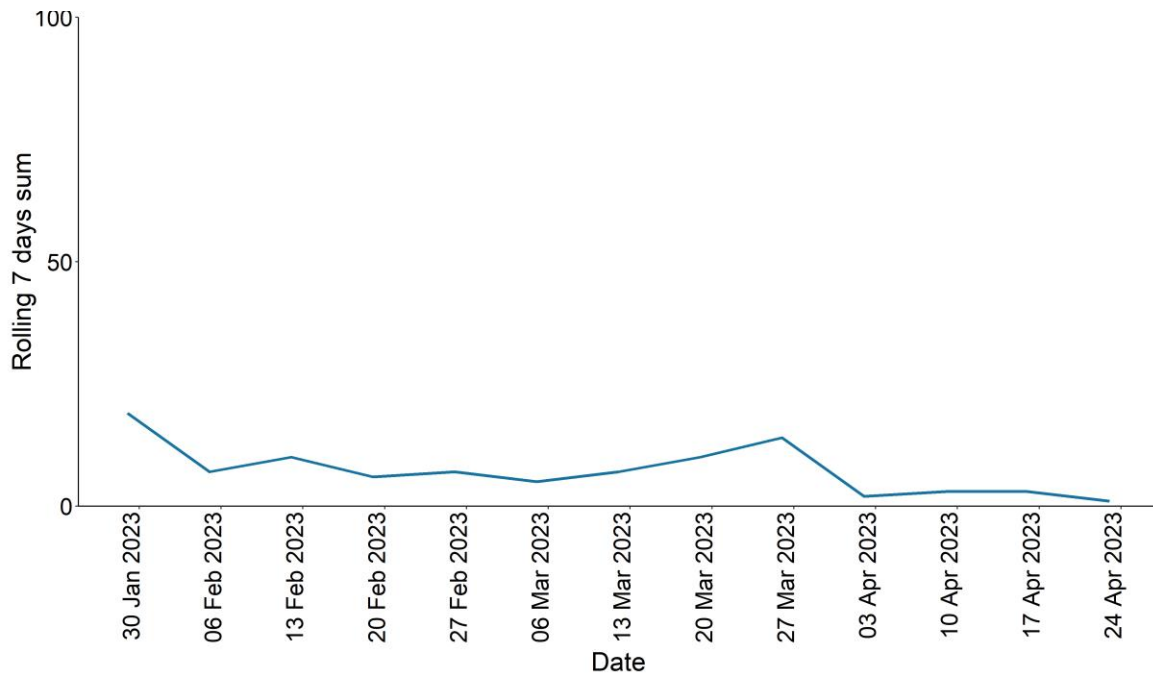
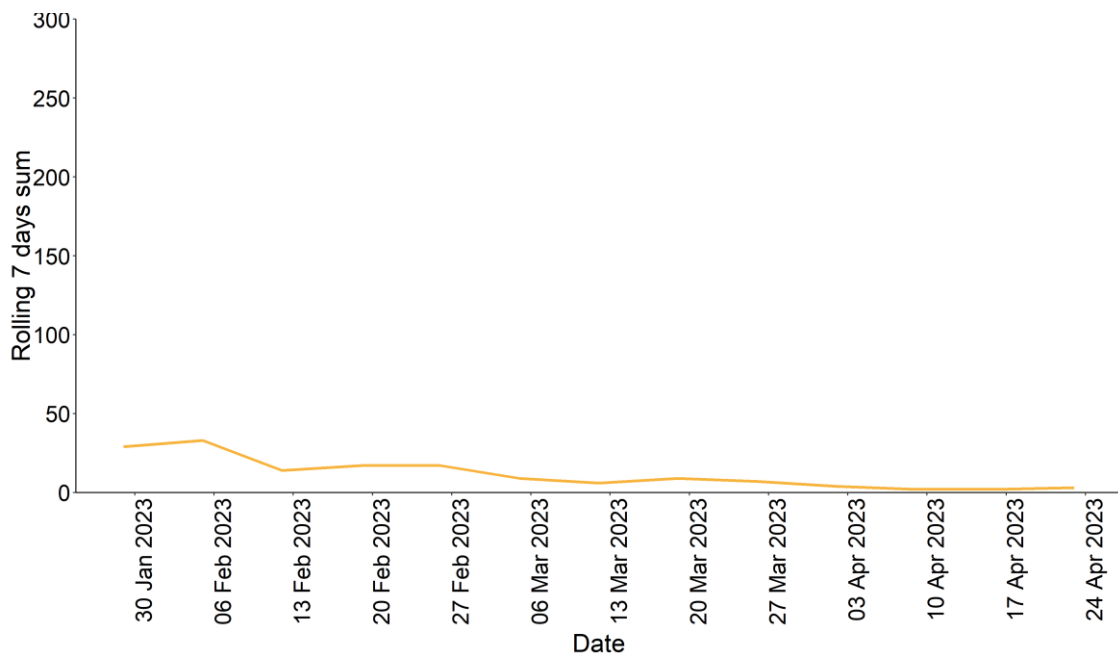


Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 23/04/2023.



Influenza Vaccine Uptake in Wales

Table 3. Uptake of influenza immunisations in GP Practice patients in Wales 2022/23 (as of 18/04/2023).

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 15, GP ILI consultations decreased in Northern Ireland to 1.5 per 100,000, decreased in England to 1.6 per 100,000 and increased in Scotland to 3.4 per 100,000.
 - During Week 15, 59 samples testing positive for influenza were reported in England (nine A(not subtyped), one influenza A(H1N1)pdm09 and 49 influenza B). Overall influenza positivity remained low and stable at 1.1% in Week 15. 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 15, 12 countries reported baseline activity, 20 countries reported low-intensity and six reported medium-intensity. From the 37 countries reporting, two reported no activity, 11 reported sporadic spread, six reported local spread, five reported regional spread, and 13 reported widespread activity (across the Region). During Week 15, 176 (10%) 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, 71% were influenza A (64% H3, and 36% A(H1N1)pdm09) and 29% were influenza B. **Source:** Flu News Europe: <http://www.flunewseurope.org/>
 - The WHO reported on 17/04/2023, based on data up to 02/04/2023, that globally, influenza has decreased following 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 or stable across most European countries apart from Norway and Lithuania where very slight increases were reported.
 - In the temperate zones of the southern hemisphere, influenza activity remained low however activity increased in Chile of influenza A(H1N1)pdm09) with a cocirculation of both influenza A(H3N2) and Influenza B and positivity rose above the epidemic threshold. Australia reported a rise in influenza A and some detections but remains low overall. SARI decreased in New Zealand and returned to below baseline levels, however influenza SARI rate and ILI increased above baseline. ILI activity also increased across the Pacific Islands. Influenza activity remained at interseasonal levels in South Africa and RSV detection rate in children under 5 years rose to very high levels.
 - In tropical Central and South America, influenza detections remained low across the subregion with all seasonal subtypes detected. Of the influenza detected, B/Victoria virus was predominant. Increasing trends were reported in Brazil and Peru however activity remained low.
 - In Western Africa, influenza A(H1N1)pdm09 detections predominated. Increasing levels of the A(H1N1)pdm09 were detected in Guinea and elevated levels were detected in Niger. Activity was lower elsewhere with Burkina Faso reporting decreasing detections. In Middle Africa, sporadic influenza B/Victoria activity was reported in Cameroon.
 - In Southern Asia, influenza activity remained low with influenza A(H3N2) and B/Victoria lineage viruses predominating.
 - In Northern Africa, influenza activity was at very low levels across reporting countries.
 - In Central Asia, sporadic influenza detections were reported in Kazakhstan (influenza A(H1N1)pdm09) and Tajikistan.
- 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 18/04/2023), during the period from 20/03/2023 – 02/04/2023, National Influenza Centres and other national influenza laboratories from 120 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 381,110 specimens during that period, of which 40,010 were positive for influenza viruses, 30,057 (75.12%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 18,779 (70.42%) were influenza A(H1N1)pdm09 and 7,890 (29.58%) were influenza A(H3N2). Of the 46,911 samples tested positive for influenza viruses, 9,953 tested positive for Influenza B (24.88%) and of the characterised B viruses, 1163 (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 14 (ending 15/04/2023). Nationally, 253 (1.0%) out of 44,819 specimens, tested positive for influenza in clinical laboratories nationwide during week 15. Of these, 203 (44.8%) were influenza A and 250 (55.2%) were influenza B. Further testing has been carried out on 4,416 specimens by public health laboratories, with 37 samples testing positive for influenza; 12 influenza A(H1N1)pdm09 (92.3%), one influenza A(H3N2) (7.7%), nine samples where subtyping was not performed, and 15 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 14-15, influenza activity has increased slightly but remains at interseasonal levels. During Week 15, 578 influenza detections were reported: 139 influenza A and 439 influenza B. The percentage of ILI visits has decreased to at 0.4% in week 15 and is below typical levels for this time of year.

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 15/04/2023.

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

COVID-19 – UK and international summary

- As of 20/04/2023, there were nine new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. There were six suspected COVID-19 deaths with a date of death in the most recent 7-day reporting period, reported to Public Health Wales. There were 28 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>
- As of 11/04/2023 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