Public Health Wales CDSC Weekly Influenza & Acute Respiratory Infection Surveillance Report

Wednesday 25h September 2024 (covering Week 38 2024)

GIG CYMRU NHS WALES | Iechyd Cyhoeddus Cymru Public Health Wales

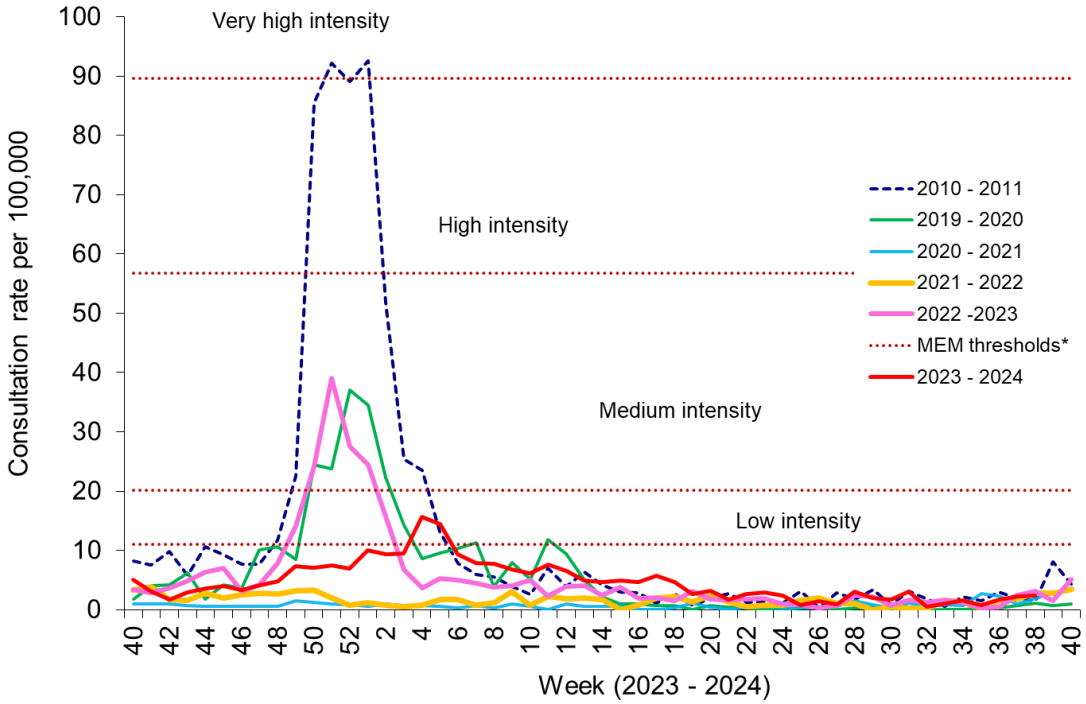
Current level of influenza activity: Low
Influenza activity trend: Stable
Confirmed influenza cases since 2023 Week 40: **4737** *(534 influenza A(H3N2), 1040 influenza A(H1N1)pdm09, 2555 influenza A untyped and 608 influenza B)*

During Week 38 (ending 22/09/2024) there were 15 cases of influenza confirmed. Influenza is not currently circulating in Wales. RSV incidence in children under 5 remains at low intensity levels.

- The **Sentinel GP consultation rate for influenza-like illness (ILI)** in Wales during Week 38, was 2.4 consultations per 100,000 practice population (Table 1). The rate decreased compared to the previous week (2.3 consultations per 100,000. Figure 1).
- The **Sentinel GP consultation rate for Acute Respiratory Infections (ARI)** was 125.6 per 100,000 practice population during Week 38 (Table 2 and Figure 3). This is an increase compared to the previous week (105.8 per 100,000). During week 38, Lower Respiratory Tract Infections increased to 47.5 per 100,000 and Upper Respiratory Tract Infections increased to 78.7 per 100,000 compared to the previous week.
- During Week 38, 1010 specimens received multiplex respiratory panel testing from patients attending hospitals. **Eight tested positive for influenza (one influenza A(H3N2) one influenza A(H1N1), four influenza A(untyped), and two influenza B).** Overall influenza test-positivity decreased to 0.8% from 1.1%. In those aged under 18 positivity increased to 1.1% from 0.5%, and in those aged over 18 decreased to 0.6% from 1.0%. In addition, there were: 190 rhinovirus, 125 SARS-CoV-2, 42 enterovirus, 38 adenovirus, 14 parainfluenza, 11 RSV, nine mycoplasma, six human metapneumovirus, and two season coronavirus positive samples (Figure 5). Additionally, 387 samples from patients were tested for influenza, RSV and SARS-CoV-2 only. Of these 387 samples there were **six influenza A,** two RSV and 109 SARS-CoV-2 positive samples (Figure 7). Furthermore, during week 38, 53 respiratory specimens were tested from patients in intensive care units (ICU) of which none were positive for influenza (Figure 8).
- There were 72 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 38. Of the 72 samples, six tested positive rhinovirus, seven for enterovirus, seven for SARS-CoV-2, three for parainfluenza, two for adenovirus, **one for influenza A(H3)**, one for RSV, one for bocavirus, and one for C. pneumoniae as at 25/09/2024 (Figure 4).
- From all samples where influenza subtyping information was immediately available during week 38, one was influenza A(H1N1), two influenza A(H3N2), four influenza A(untyped) and two influenza B (Figure 6). *Additional typing is carried out on all confirmed influenza A samples where typing results are not available from first-line testing, the additional information from these tests will be added to case totals after the end of the season.*
- **Confirmed RSV case incidence in children aged under 5 decreased to 6.8 per 100,000 and is at low intensity levels**. The baseline MEM threshold of 6.3 per 100,000 (the baseline MEM threshold is used to identify the start of RSV seasons in Wales compared to levels before 2021, 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 two and one respectively during Week 38 (Figures 10 & 11) and 71 for SARS-CoV-2 during week 38 (Figure 12).
- During week 38, two **ARI outbreaks** were reported to the Public Health Wales Health Protection Team of which two were SARS-CoV-2. Both outbreaks were in residential care homes.
- According to **EuroMoMo** analysis, all-cause deaths in Wales were not in excess during week 37.
- As at 23/04/2024, uptake of influenza vaccination was 72.5% in adults aged 65 years and older, 39.1% in those. aged 6 months to 64 years at clinical risk, 42.8% in two and three-year-old children, 61.9% in children aged four to 10 years and 49.7% in children aged 11 to 15 years (Table 3) (latest data available).

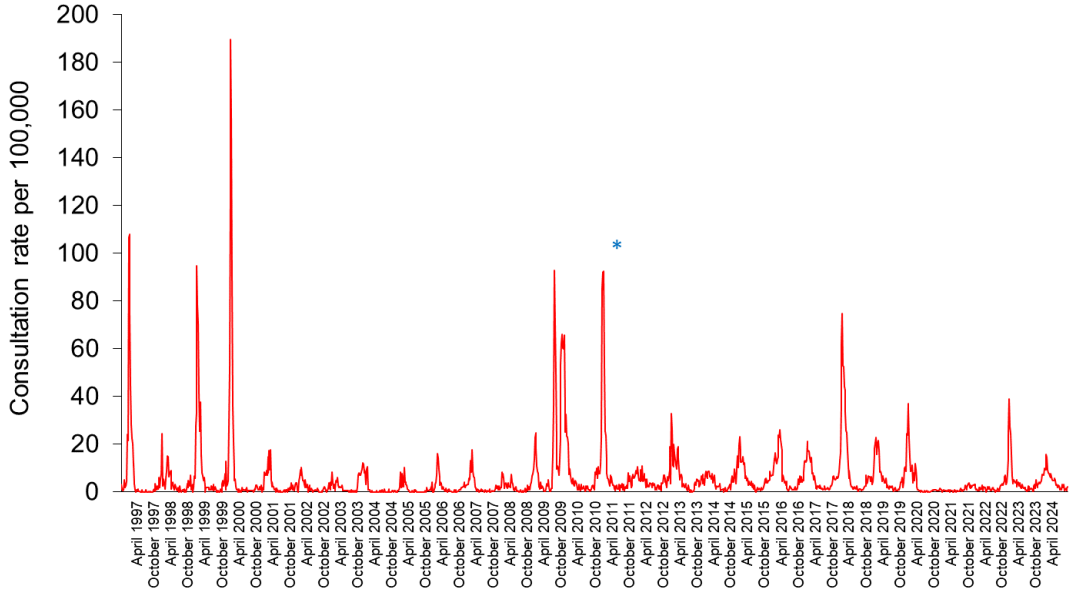
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 22/09/2024)



* 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 50 1996 – Week 38 2024)



* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 33– Week 38 2024 (as of 22/09/2024).

Age group	33	34	35	36	37	38
< 1	0.0	0.0	32.3	0.0	0.0	0.0
1 - 4	0.0	0.0	0.0	0.0	28.8	0.0
5 - 14	0.0	0.0	0.0	0.0	0.0	0.0
15 - 24	0.0	0.0	0.0	6.4	2.2	8.0
25 - 34	6.3	2.1	0.0	0.0	4.0	2.5
35 - 44	0.0	2.0	0.0	3.6	3.8	4.7
45 - 64	0.0	2.0	0.0	0.9	0.0	2.3
65 - 74	0.0	4.7	2.2	2.1	0.0	0.0
75+	2.2	0.0	2.1	0.0	0.0	0.0
Total	**1.0**	**1.6**	**0.7**	**1.7**	**2.3**	**2.4**

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 33 – Week 38 2024 (as of 22/09/2024).

Age group	33	34	35	36	37	38
< 1	393.6	355.1	354.8	413.2	637.8	678.0
1 - 4	258.4	198.9	240.2	277.0	346.0	481.4
5 - 14	66.5	62.4	58.2	81.5	125.6	168.4
15 - 24	55.9	82.1	88.6	97.5	96.1	117.2
25 - 34	63.2	67.9	53.9	79.6	78.3	103.2
35 - 44	56.0	46.9	38.3	88.0	84.4	92.3
45 - 64	75.9	55.4	55.0	73.0	76.7	86.5
65 - 74	61.8	73.4	62.9	74.4	91.8	109.6
75+	111.0	75.7	68.2	102.3	124.0	121.7
Total	**79.5**	**71.0**	**67.8**	**92.5**	**105.8**	**125.6**

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 38 2023 – Week 38 2024.

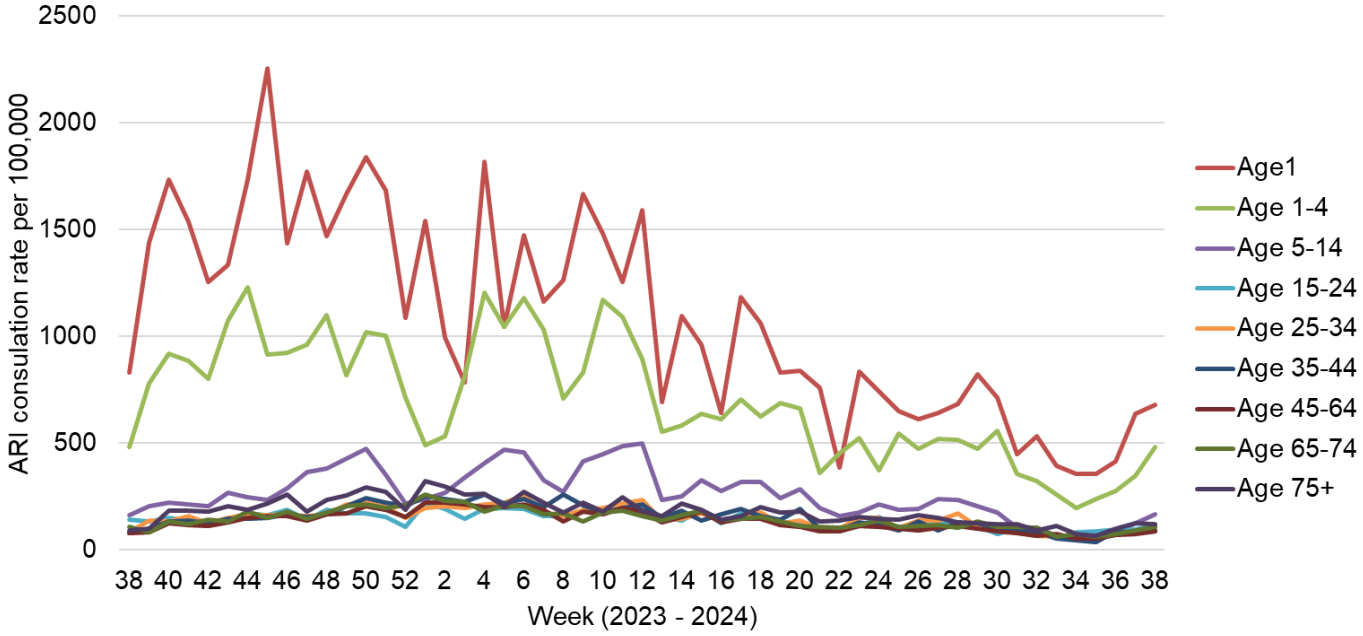
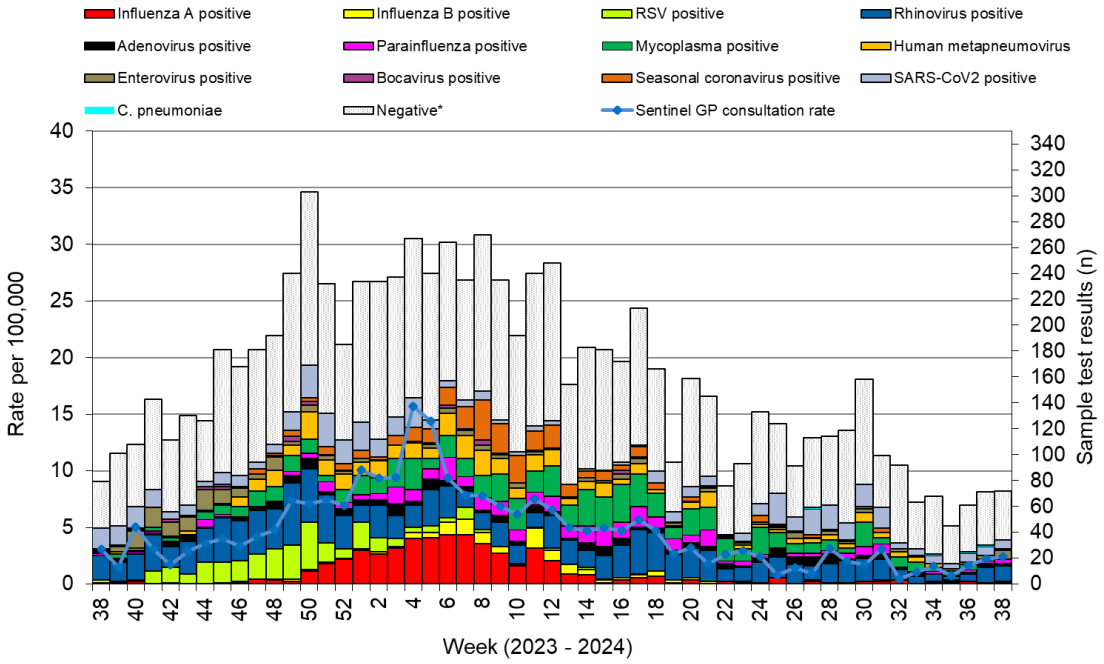
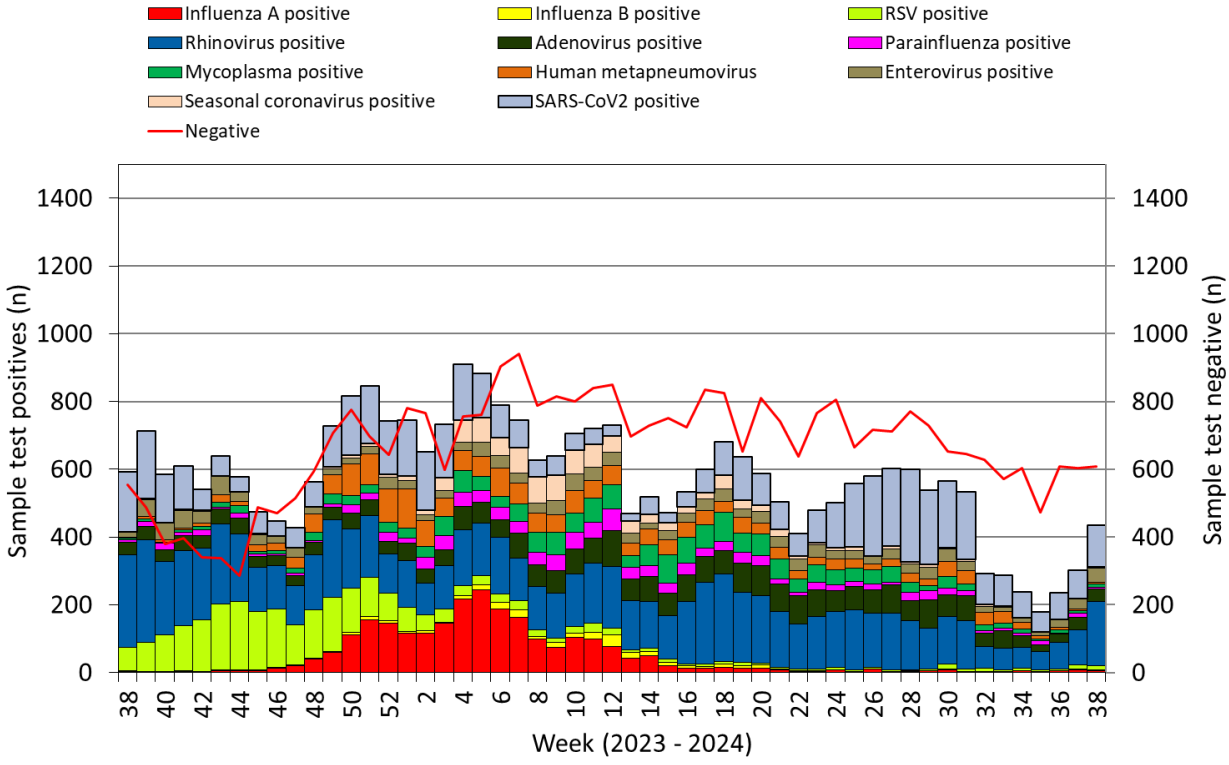


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 22/09/2024, by week of sample collection, Week 38 2023 to Week 38 2024.



* Tested negative for influenza, adenovirus, rhinovirus, RSV, parainfluenza, mycoplasma, human metapneumovirus, enterovirus, bocavirus and coronaviruses. Samples which test positive for more than on pathogen will appear more than once in the chart. **Results for the latest 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 22/09/2024 by week of sample collection, Week 38 2023 to Week 38 2024.



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 on 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 22/09/2024 by week of sample collection, Week 38 2023 to Week 38 2024.

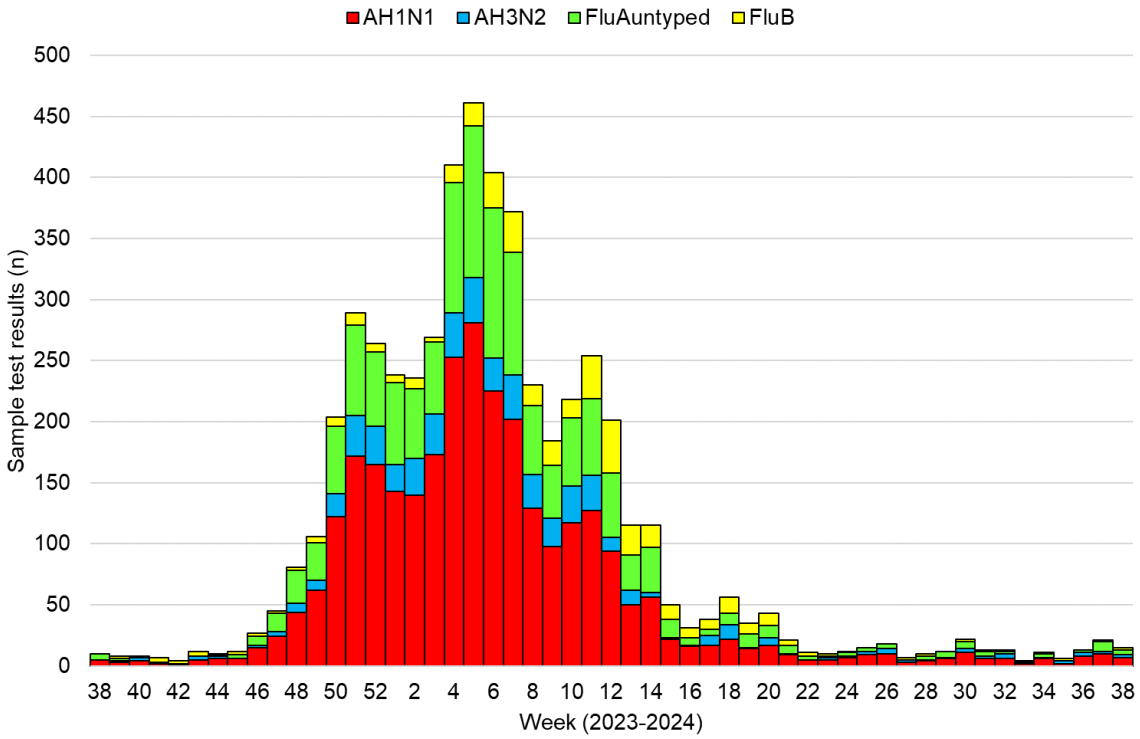


Figure 7. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 22/09/2024 by week of sample collection, Week 38 2023 to Week 38 2024.

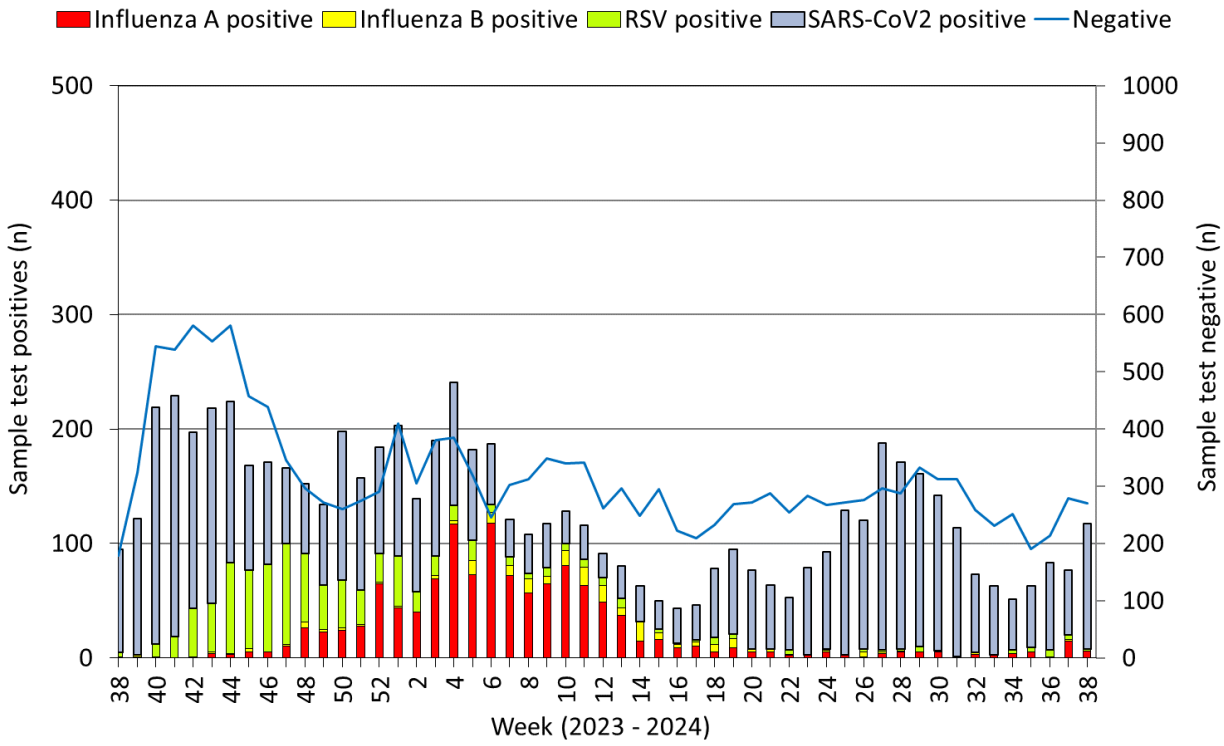
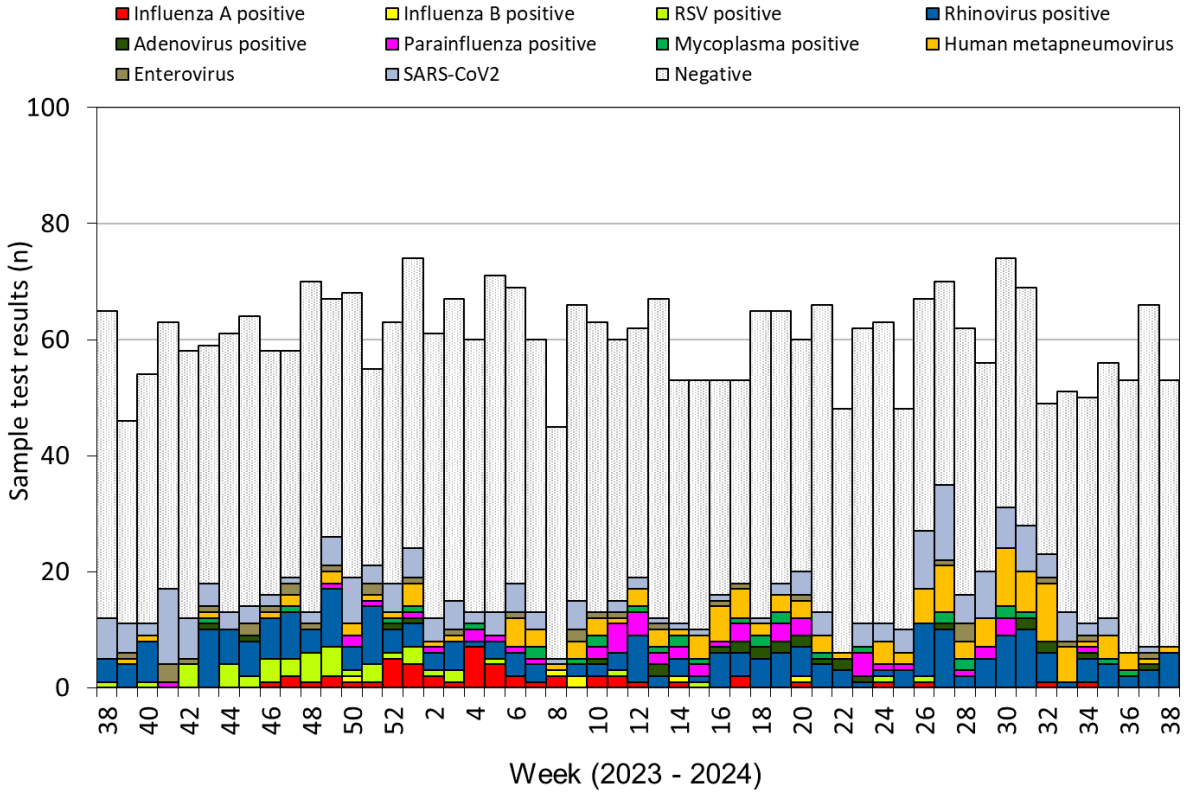
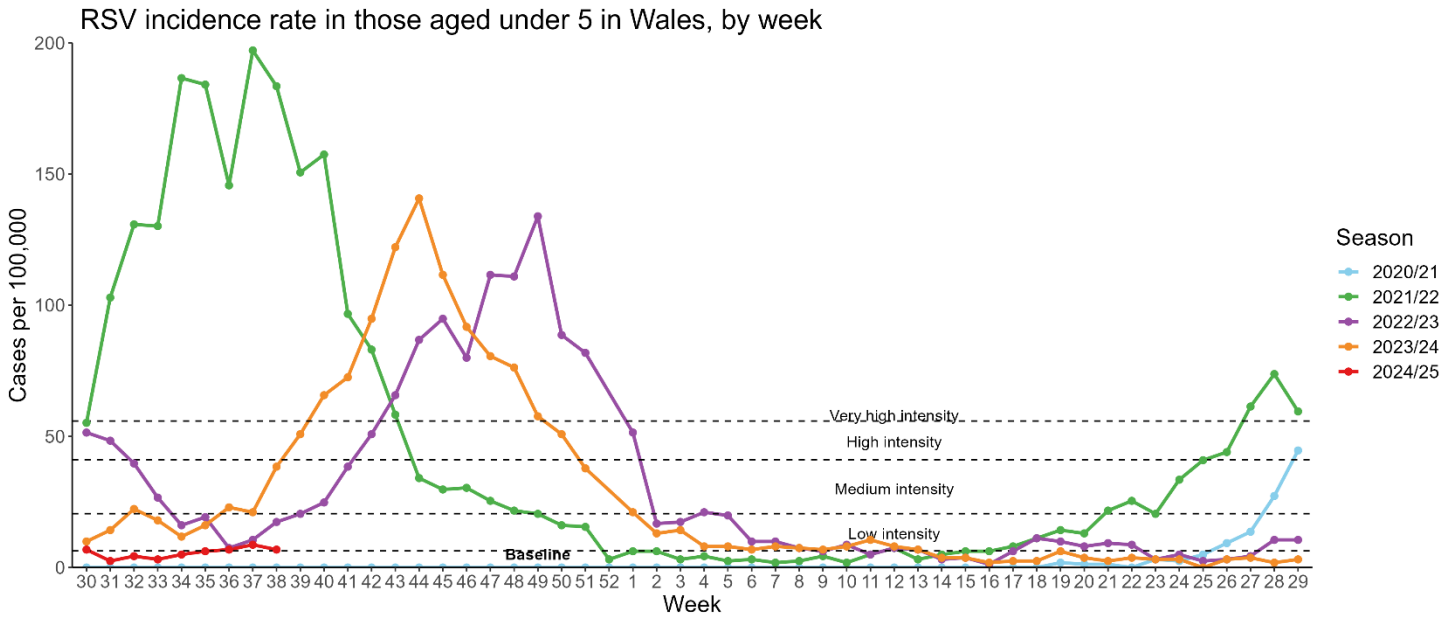


Figure 8. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 38 2023 to Week 38 2024.



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

Figure 9. RSV incidence rate per 100,000 population aged under five years, week 30 2020 to Week 38 2024.



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 22/09/2024.

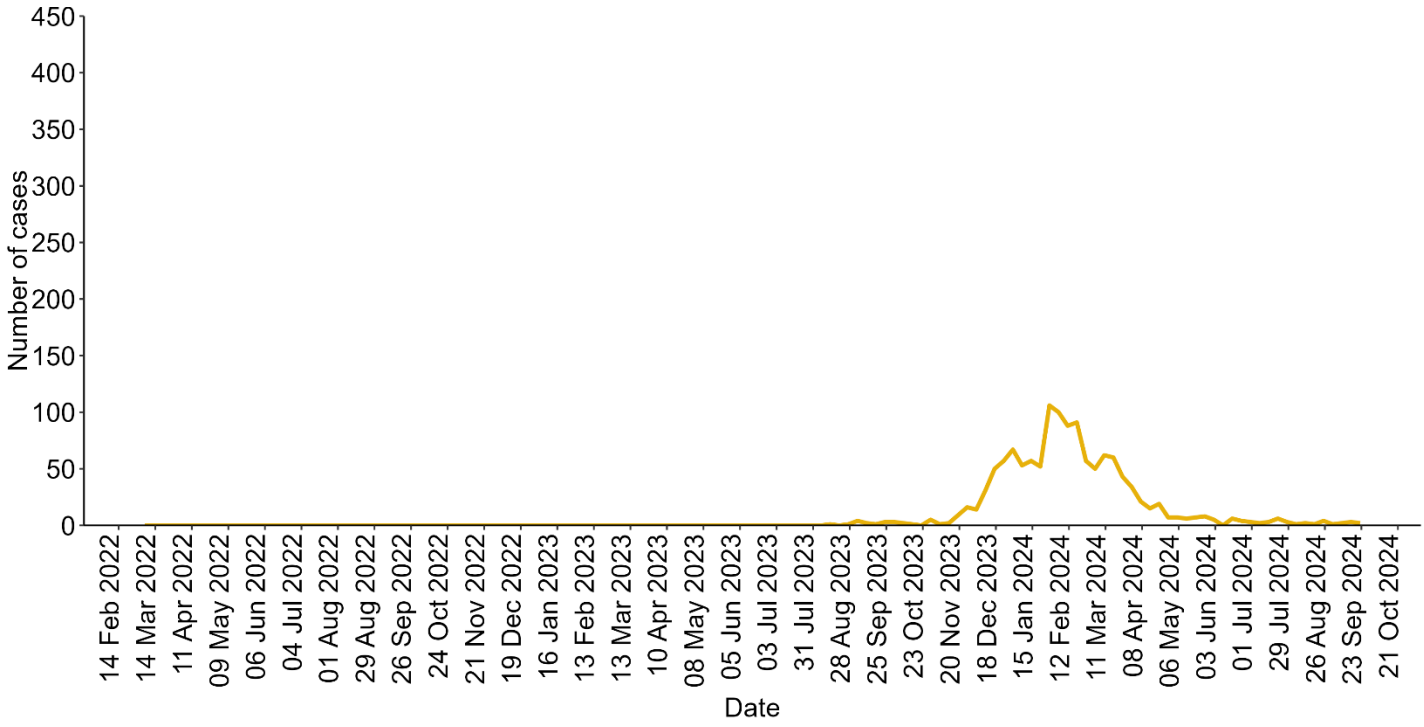


Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 22/09/2024.

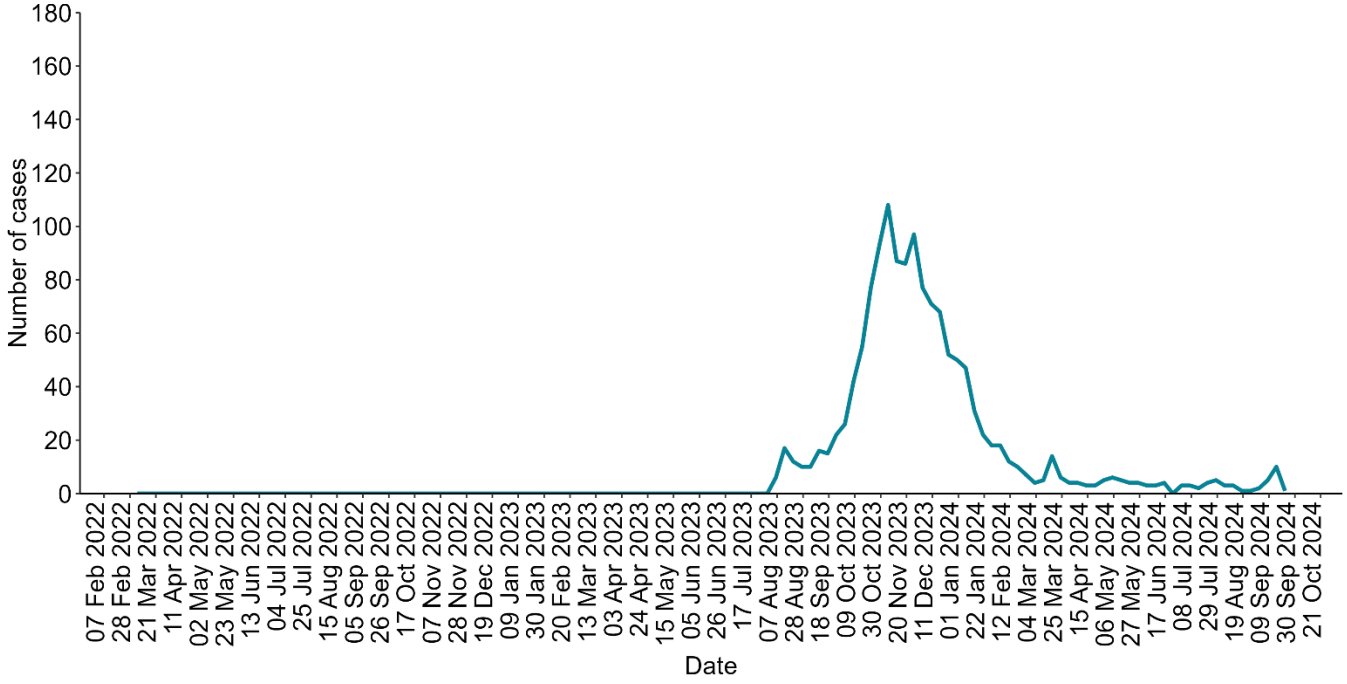
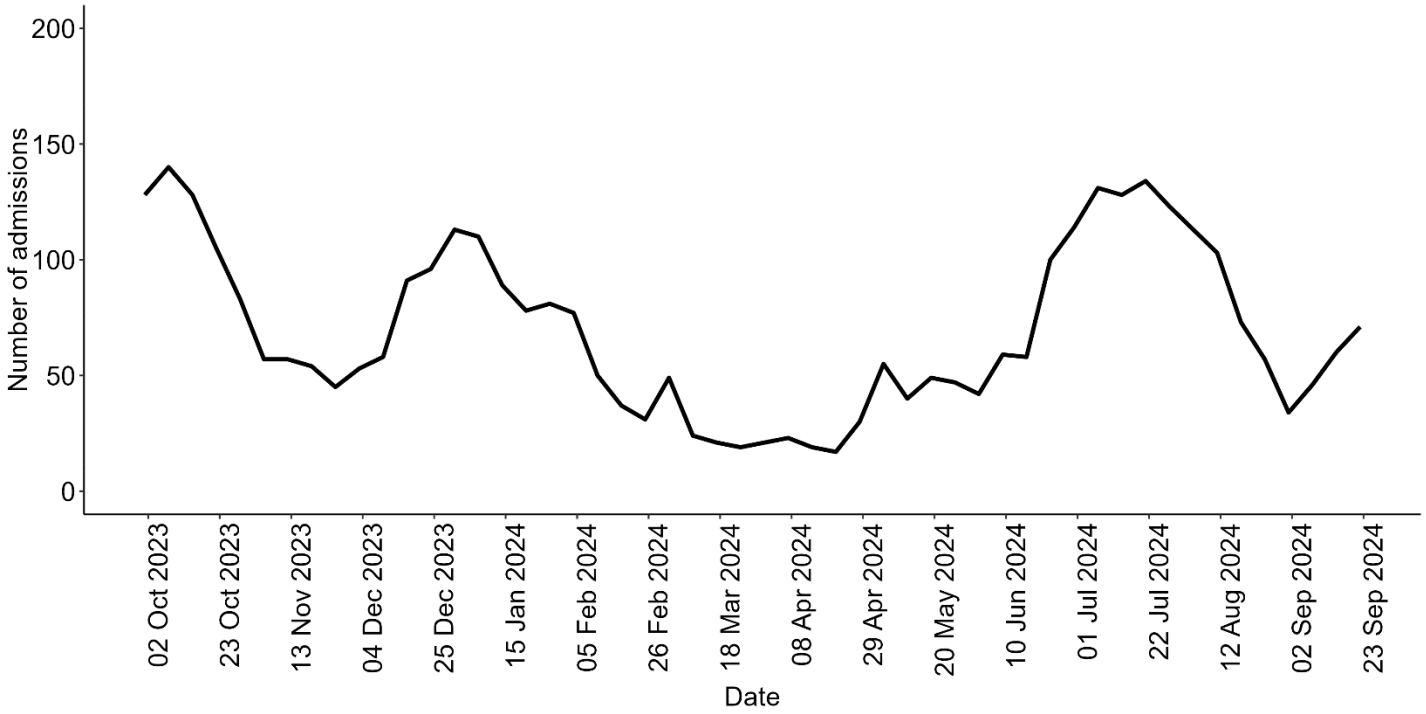
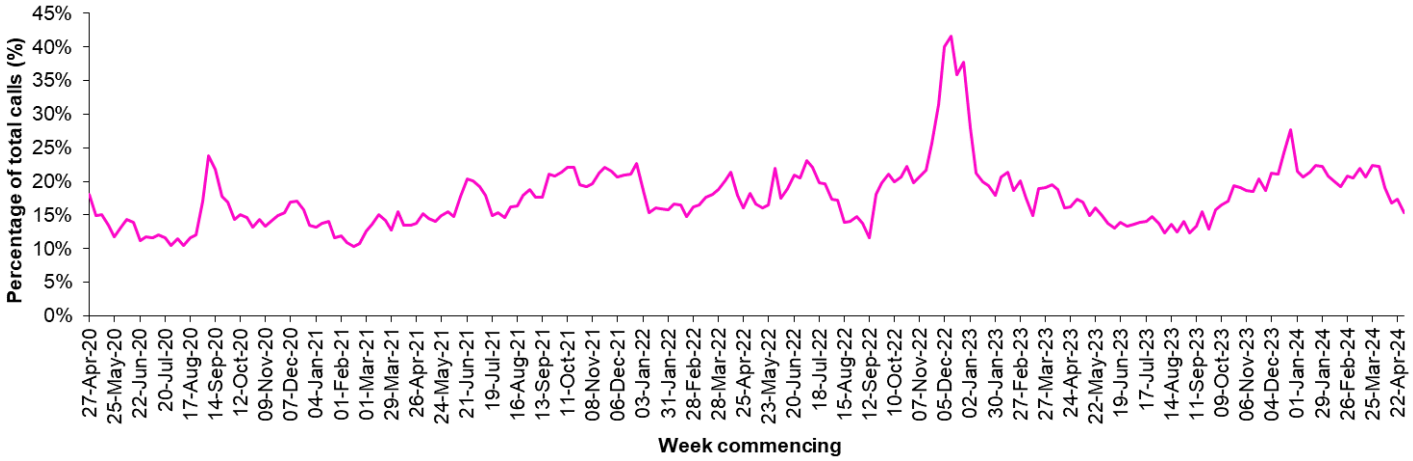


Figure 12. Seven day rolling sum of cases hospitalised in Wales within 28 days of a Covid-19 positive test result in the community (or up to 2 days post-admission), as of 22/09/2024.



Calls to NHS Direct Wales

Figure 13. Influenza related calls to NHS Direct Wales[1] (as a percentage of total calls) from Week 18 2020 - Week 18 2024 (latest data available).



[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 2023/24 (as of 23/04/2024) (latest data available).

Influenza immunisation uptake in the 2023/24 season	
People aged 65y and older	72.5%
People younger than 65y in a clinical risk group	39.1%
Children aged two & three years	42.8%
Children aged between four & ten years	61.9%
Children aged between 11 & 15 years	49.7%
Total NHS staff	40.8%
NHS staff with direct patient contact	40.5%

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/fluvaccine/annual-influenza-surveillance-and-influenza-vaccination-uptake-reports/

Influenza activity – UK and international summary

- As of Week 37, GP ILI consultations increased to 2.0 per 100,000 in Scotland.
- During Week 36, 3,302 samples testing positive for influenza were reported in England of which 37 were positive for influenza (9 influenza A(not subtyped), 21 influenza A(H3N2), 3 influenza A(H1N1) and 4 influenza B. Overall influenza positivity slightly increased 1.1% in England in week 36 and decreased to 2.2% in Scotland in week 37.
- UK summary data are available from the UKHSA Influenza and COVID-19 Surveillance Report and COVID-19 & Respiratory Surveillance (shinyapps.io)

- The WHO and the European Centre for Disease Prevention and Control (ECDC) reported during week 37, that influenza positivity is below the 10% positivity epidemic threshold at 1%. Of the 24 countries and areas reporting on influenza intensity, none reported medium intensity or higher. Of the 23 countries and areas reporting on geographic spread of influenza viruses within a country or area, two reported widespread or regional distribution. There were 20 confirmed influenza virus infection detections reported from sentinel primary care.
  Source: European Respiratory Virus Surveillance Summary (ERVISS): https://erviss.org/

- The WHO reported on 18/09/2024, based on data up to 08/09/2024 that in the Northern hemisphere elevated activity continued to be reported in countries in Western Africa (A(H3) and influenza B), Middle Africa (H3 viruses), Southern Asia(A(H1N1), Southeast Asia(A(H1N1) and Western Asia (A(H1N1 and B viruses), Central America and the Caribbean (H3 viruses). In the Southern hemisphere, influenza activity continues to be elevated in some areas of Tropical South America, South American, South Africa and Eastern Africa. **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 21/06/2024), during the period from 13/05/2024 – 26/05/2024 National Influenza Centres and other national influenza laboratories from 131 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 354,429 specimens during that period, of which 20,741 were positive for influenza viruses, 17,211 (83.0%) were typed as influenza A (of the subtyped influenza A viruses, 6,275 (63.5%) were influenza A(H1N1)pdm09 and 3,604 (36.5%) were influenza A(H3N2). Of the 354,429 samples testing positive for influenza viruses, 3,530 tested positive for Influenza B (17.0%). **Source:** Flu Net: https://www.who.int/tools/flunet

Australia and New Zealand update

- In New Zealand, during the week ending 15/09/2024, community influenza-like illness activity (ILI) activity in the community decreased. Through seasonal sentinel community influenza surveillance, three influenza cases were identified at sentinel practices during the week ending 15/09/2024.
  Source: Institute of Environmental Science & Research, New Zealand
  https://www.esr.cri.nz/digital-library/respiratory-illness-dashboard/

- In Australia, according to the latest available update (fortnight ending 08/09/2024), influenza-like illness (ILI) activity in the community this year has decreased. To date, the majority of nationally reported laboratory-confirmed influenza cases were influenza A.
  Source: Australian Influenza Surveillance Report and Activity Updates.
  https://www.health.gov.au/resources/collections/australian-respiratory-surveillance-reports-2024?language=en

Respiratory syncytial virus (RSV) in North America

- The USA CDC reported that the RSV positivity rate increased in week 37.
  Source: CDC RSV national trends: National Respiratory and Enteric Virus Surveillance System | CDC

COVID-19 – UK and international summary

- As of 18/09/2024, there were 4.4 new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. 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

- WHO was notified of three new MERS cases between 10 and 17 April 2024 by the Ministry of Health of the Kingdom of Saudi Arabia.
- Since 10 April and as of 17 April 2024, three new MERS-CoV cases, have been reported by Saudi Arabia. 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

The WHO has published an updated assessment of recent influenza A(H5N1) virus events in animals and people. Currently, the global public health risk of influenza A(H5N1) viruses to be low, while the risk of infection for occupationally exposed persons is low to moderate, depending on the risk mitigation measures in place. Transmission between animals continues to occur and, to date, a limited number of human infections have been reported.14 August 2024: https://www.who.int/publications/m/item/updated-joint-fao-who-woah-assessment-of-recent-influenza-a(h5n1)-virus-events-in-animals-and-people

Other updates on zoonotic influenza infections and risks to humans are available from the WHO Global Alert & Response website: 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-2023-to-2024-season

Scotland seasonal respiratory surveillance:
https://www.publichealthscotland.scot/publications

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/fluvaccine/

Advice on influenza immunisation (for intranet users)
Influenza (sharepoint.com)

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