

Current level of influenza activity: Baseline

Influenza activity trend: Stable

Confirmed influenza cases since 2022 Week 40: 7811 (3056 influenza A(H3N2), 1615 influenza A(H1N1)pdm09, 2666 influenza A(not subtyped) and 474 influenza B)

During Week 22 (ending 05/06/2023) 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, adenovirus, parainfluenza, SARS-CoV-2, and enterovirus are the most commonly detected causes of Acute Respiratory Infection (ARI).

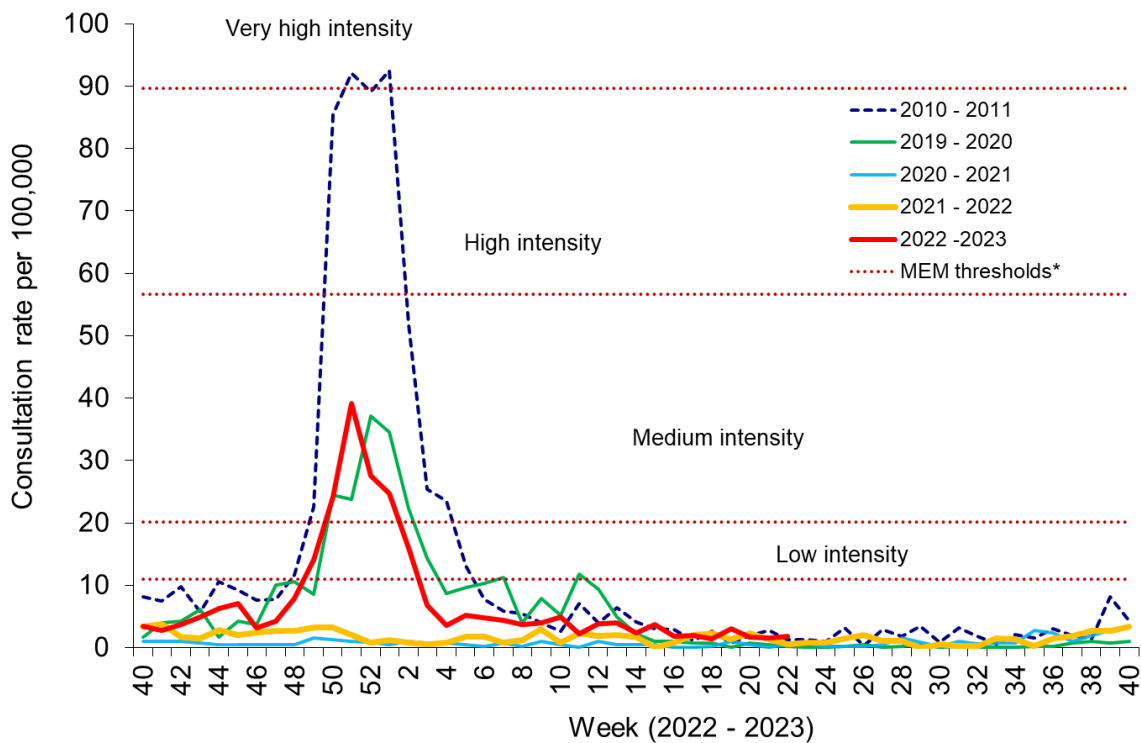
- The **Sentinel GP consultation rate for influenza-like illness (ILI)** in Wales during Week 22, was 1.8 consultations per 100,000 practice population (Table 1). This is an increase compared to the previous Week (1.6 consultations per 100,000. Figure 1).
- The **Sentinel GP consultation rate for Acute Respiratory Infections (ARI)** was 96.9 per 100,000 practice population during Week 22 (Table 2 and Figure 3). This is a decrease compared to the previous week (147.7 per 100,000). Weekly consultations for Lower Respiratory Tract Infections (at 40.46 per 100,000) and Upper Respiratory Tract Infections (58.99 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 22 decreased to 15.0% (Figure 12).
- During Week 22, 1,014 specimens received multiplex respiratory panel testing, from patients attending hospitals. These results do not include samples tested solely for SARS-CoV-2. There were **six samples positive for influenza**, of which two were influenza B, two influenza A(not typed), one influenza A(H3) and one for influenza A(H1N1)pdm09). Overall influenza positivity decreased to 0.2% across all age groups; to 0.6% in those aged 18 years and over; and increased slightly to 0.6% in those aged under 18 years. In addition, there were 183 rhinovirus, 75 adenovirus, 73 parainfluenza, 65 SARS-CoV2, 28 enterovirus, 25 seasonal coronaviruses, 14 RSV, and 11 hMPV positive samples (Figure 5). Additionally, 178 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 178 samples, 24 were positive for SARS-CoV-2, three for RSV and one for influenza B (Figure 7). Furthermore, during week 22, 50 respiratory specimens were tested from patients in intensive care units (ICU) of which none were positive for influenza (Figure 8).
- There were six surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 22. Of the six samples, one tested positive for parainfluenza (as at 06/06/2023) (Figure 4).
- From all samples where influenza subtyping information was available during week 22 (specimens receiving multiplex respiratory panel testing, from patients attending hospitals, and surveillance samples collected by sentinel GPs and community pharmacies), two were influenza A untyped, two influenza B, one Influenza A(H1N1) and influenza A(H3)(Figure 6).
- **Confirmed RSV case incidence in children aged under 5 is at low intensity levels but remains stable this week.** In week 21 there were 8.7 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 zero and one respectively during Week 22 (figures 10 & 11).

- During week 22, one **ARI outbreak** was reported to the Public Health Wales Health Protection team. The outbreak was reported as COVID-19 in a residential care home.
- According to [EuroMoMo](#) analysis, all-cause deaths in Wales were not in excess during week 21.

Respiratory infection activity in Wales

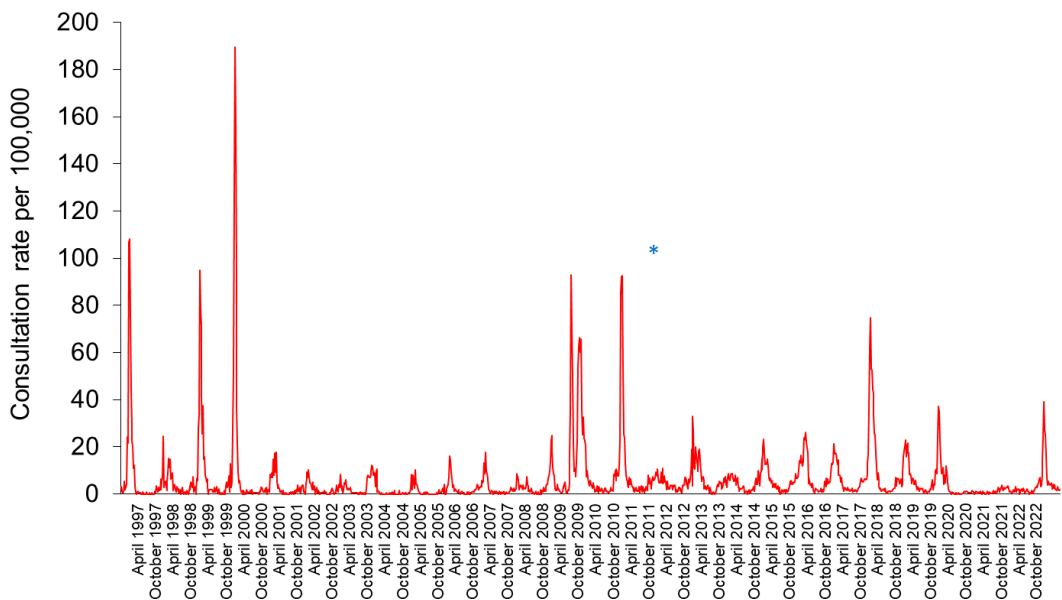
Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 04/06/2023)



* 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 22 2023)



* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 17 – Week 22 2023 (as of 04/06/2023)

Age group	17	18	19	20	21	22
< 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	2.1	2.1	0.0	4.9	0.0
15 - 24	2.1	0.0	6.2	6.4	0.0	9.4
25 - 34	0.0	1.8	7.3	0.0	0.0	0.0
35 - 44	3.7	3.6	3.6	1.8	2.0	4.1
45 - 64	3.6	0.9	1.8	1.8	2.9	0.0
65 - 74	2.2	2.1	0.0	2.2	0.0	2.3
75+	0.0	0.0	2.1	0.0	0.0	0.0
Total	1.9	1.4	3.0	1.7	1.6	1.8

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 17 – Week 22 2023 (as of 04/06/2023)

Age group	17	18	19	20	21	22
< 1	677.6	997.2	934.9	1195.5	761.7	646.9
1 - 4	515.7	461.4	544.7	492.5	616.6	368.5
5 - 14	229.2	174.5	193.7	207.6	201.3	101.7
15 - 24	138.7	124.4	134.7	165.2	108.6	70.0
25 - 34	114.9	96.9	139.0	106.5	122.1	80.1
35 - 44	114.6	98.3	100.1	120.8	87.1	85.1
45 - 64	110.0	83.3	92.9	116.4	105.7	77.2
65 - 74	141.4	102.0	79.1	125.1	116.8	77.3
75+	123.5	122.0	185.1	128.9	123.7	96.8
Total	151.1	128.0	146.0	154.8	147.7	96.9

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 22 2022 – Week 22 2023 (as of 04/06/2023).

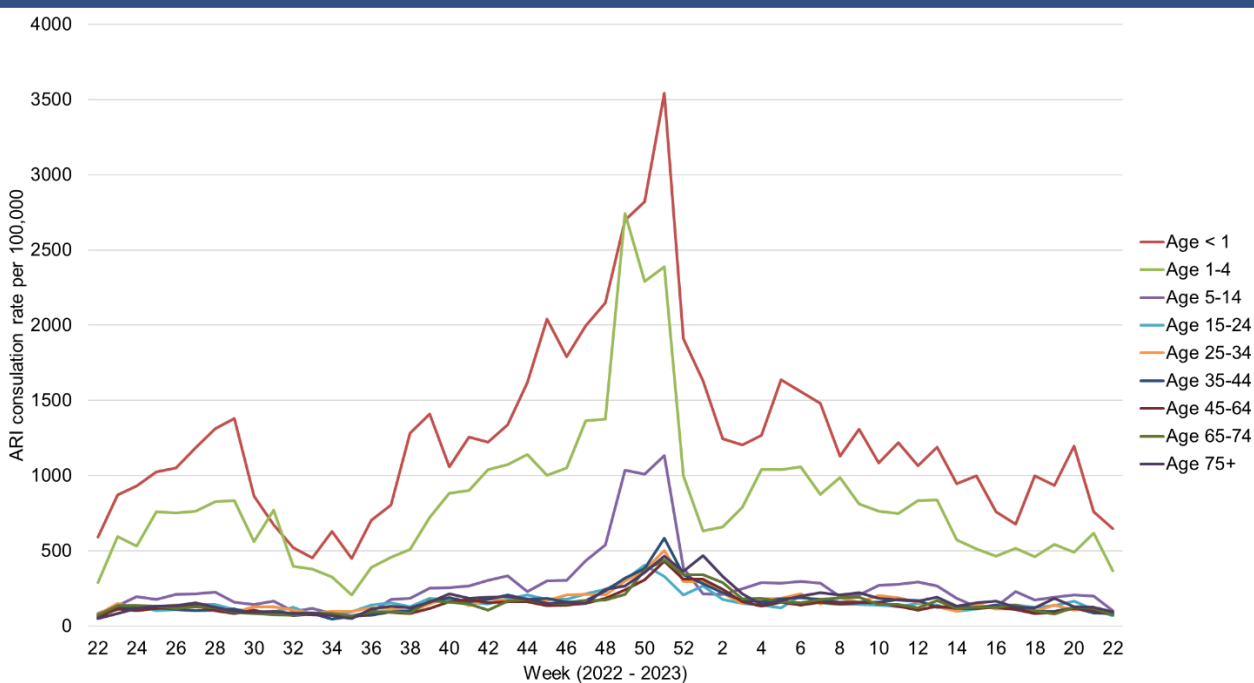
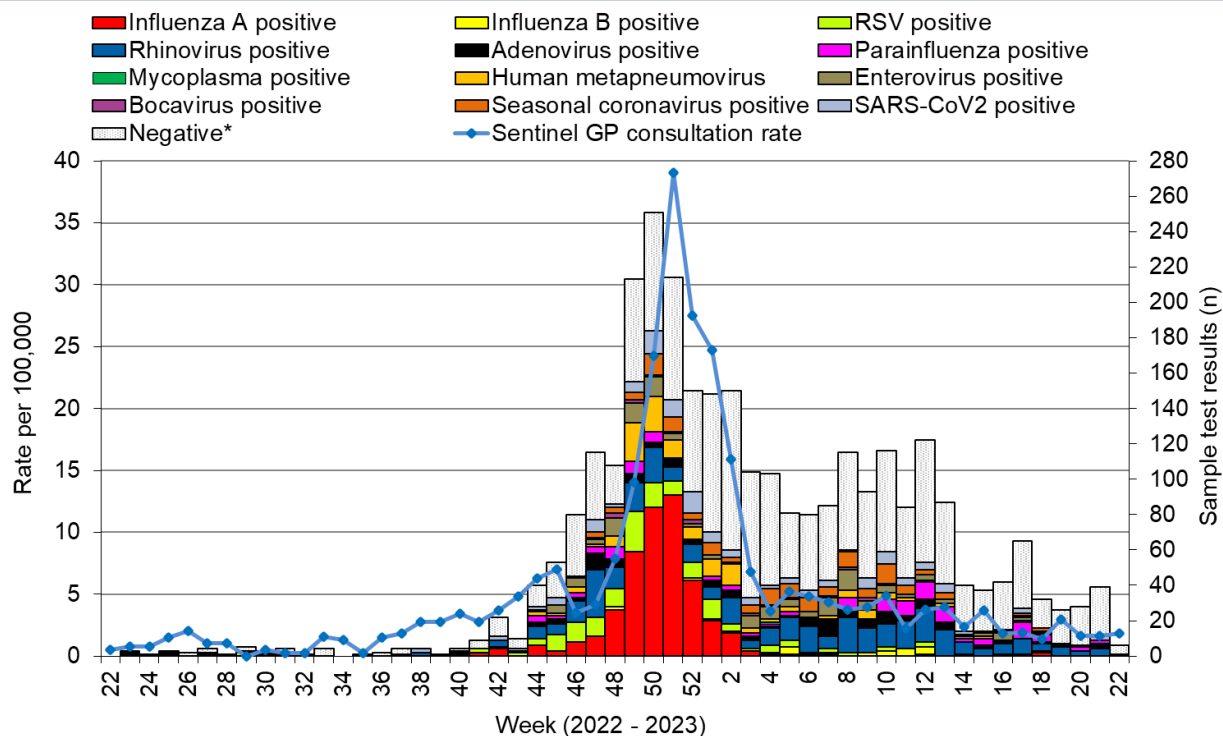
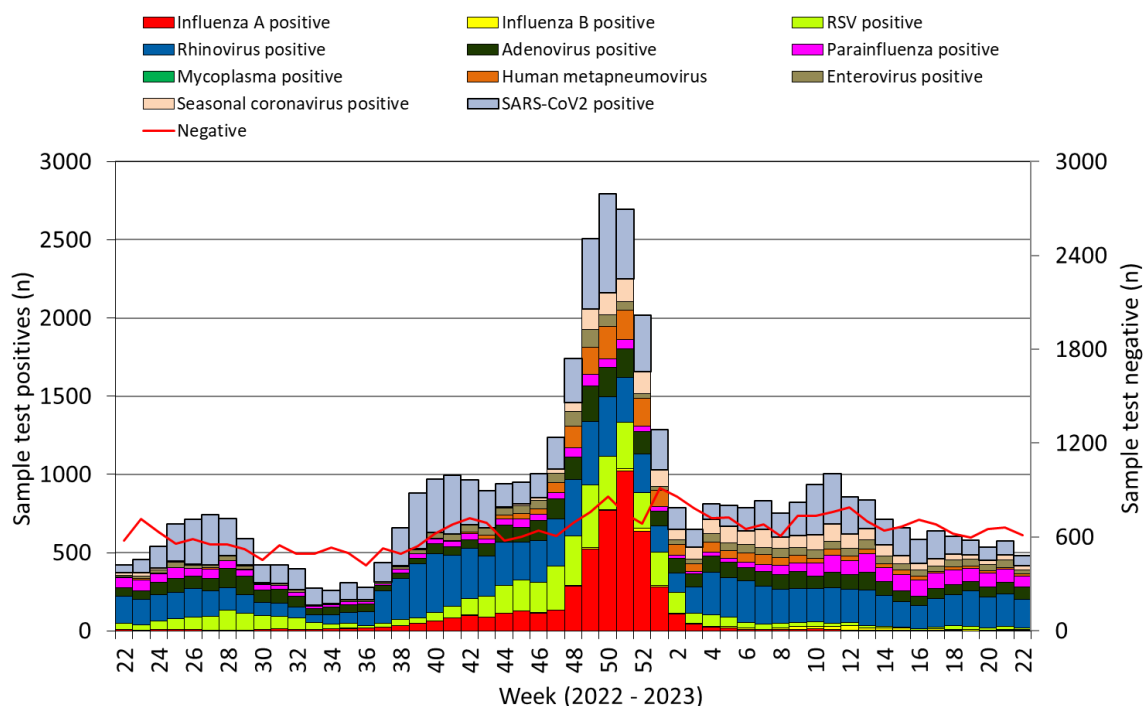


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 04/06/2023, by week of sample collection, Week 22 2022 to Week 22 2023.



* 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 04/06/2023 by week of sample collection, Week 22 2022 to Week 22 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 04/06/2023 by week of sample collection, Week 40 2022 to Week 22 2023.

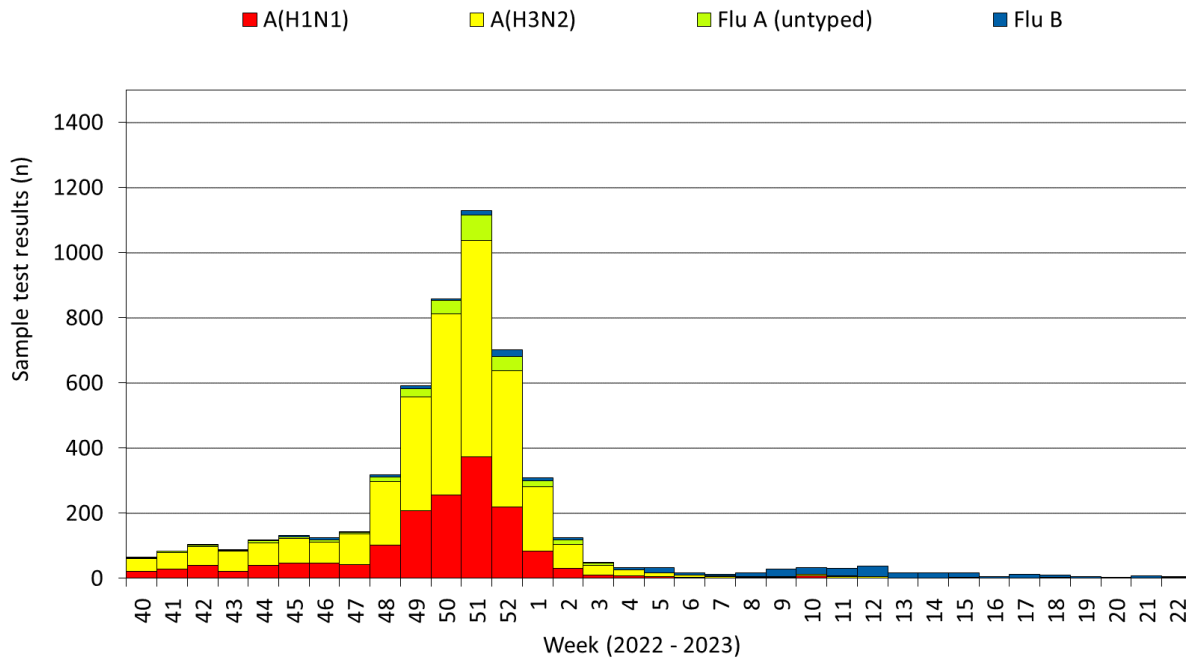


Figure 7. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 04/06/2023 by week of sample collection, Week 22 2022 to Week 22 2023.

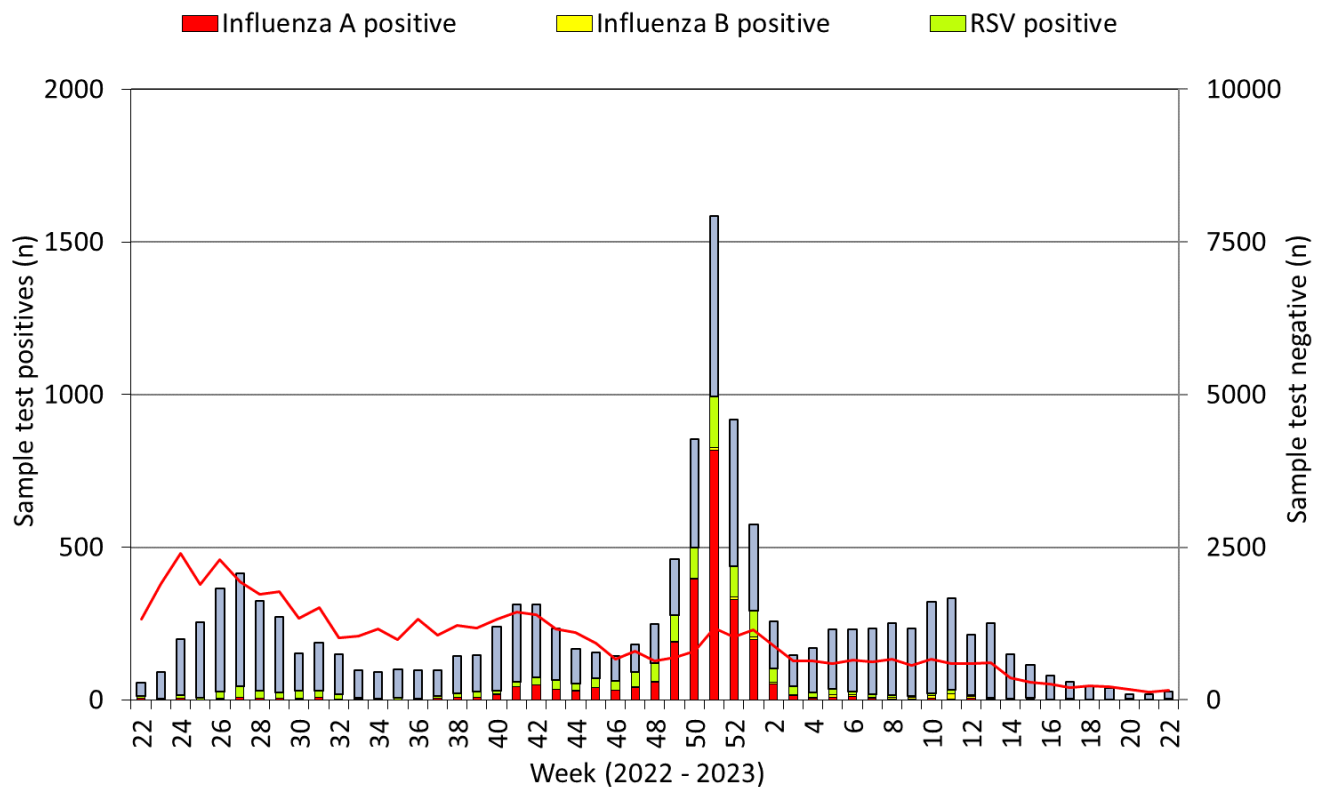
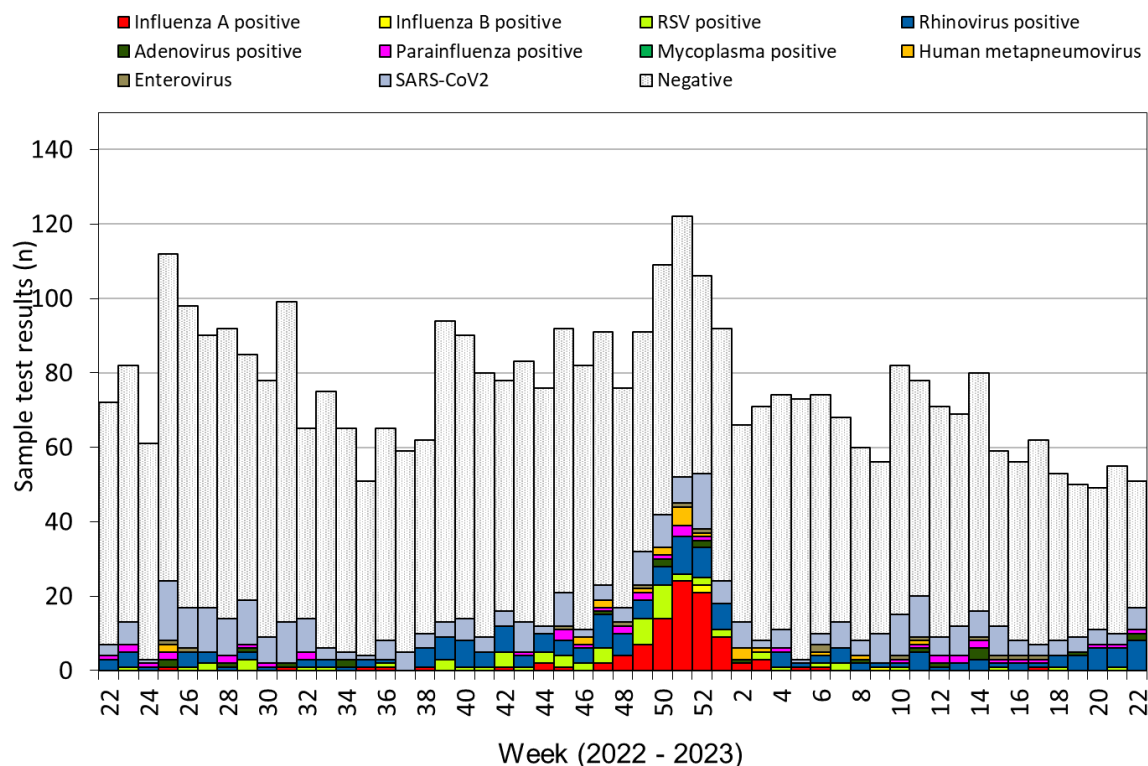
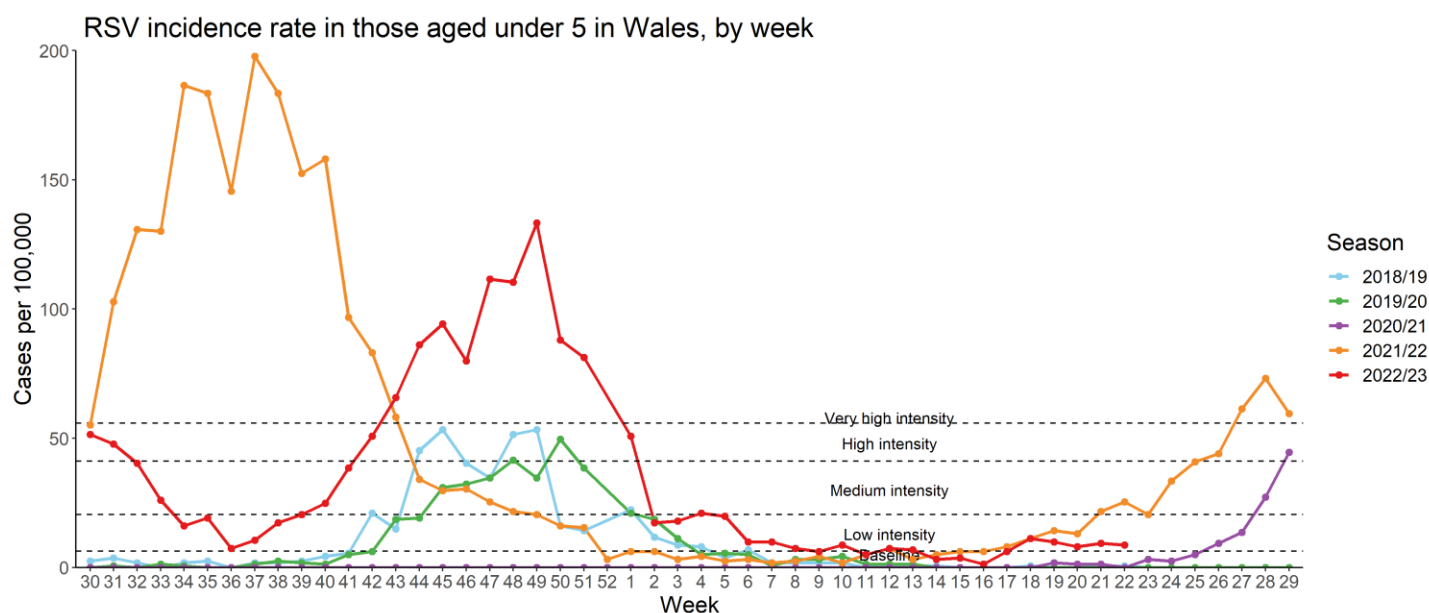


Figure 8. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 22 2022 to Week 22 2023.



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 22 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 04/06/2023.

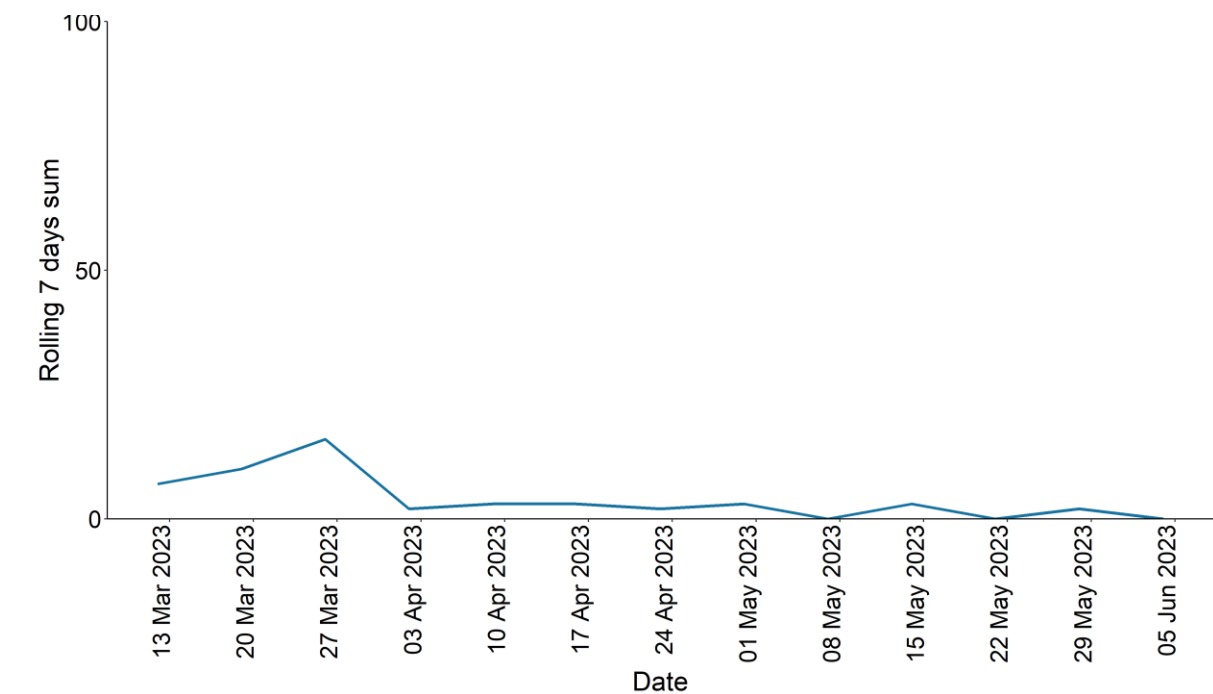
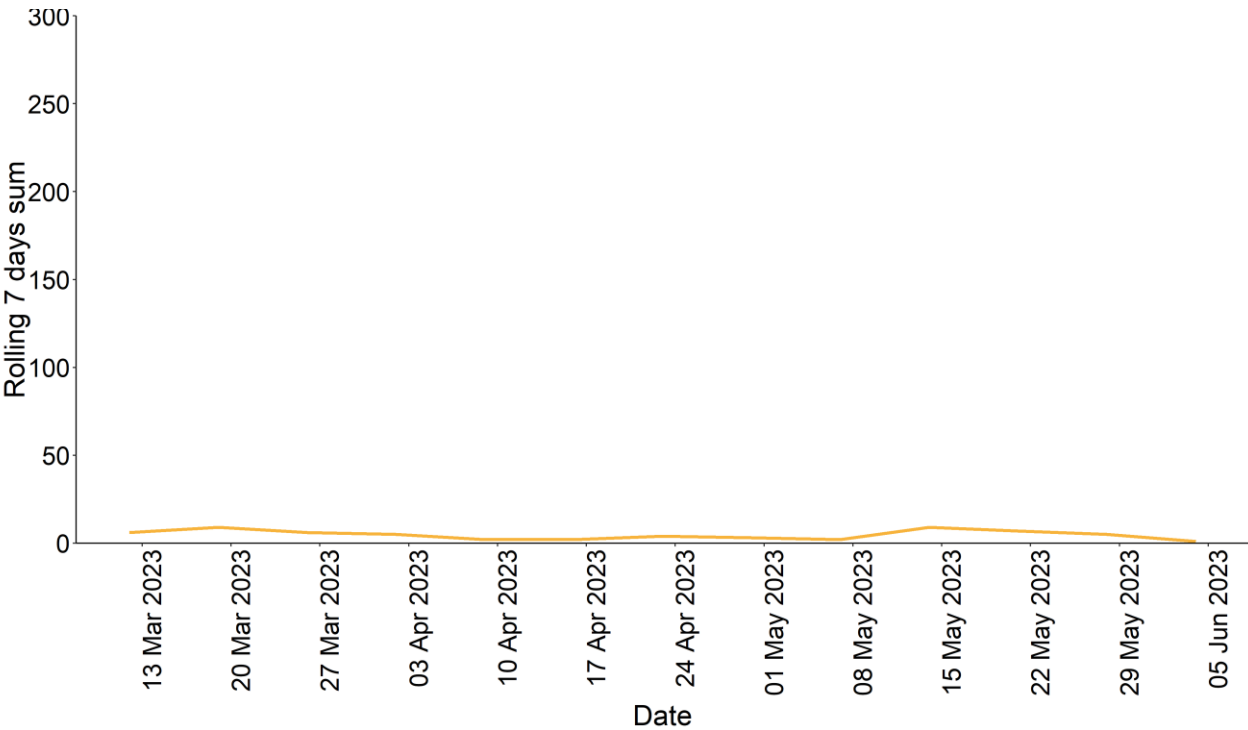
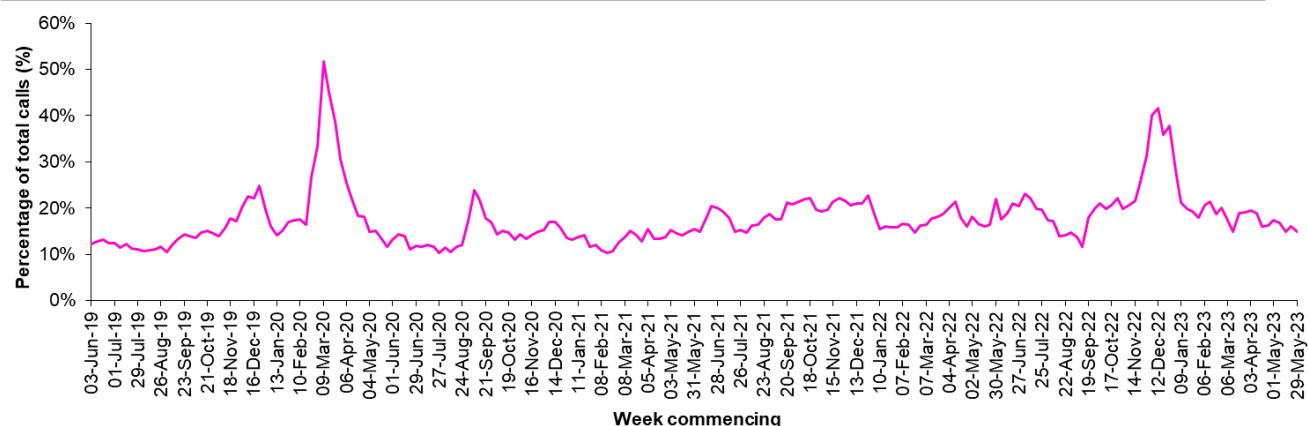


Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 04/06/2023



Calls to NHS Direct Wales

Figure 12. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from Week 22 2019 - Week 22 2023 (as of 04/06/2023).



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 20 (latest data available), GP ILI consultations increased in Northern Ireland to 1.1 per 100,000, and decreased in England to 1.4 per 100,000 and in Scotland to 1.4 per 100,000.
- During Week 20 (latest data available), 16 samples testing positive for influenza were reported in England (two A(not subtyped), and 14 influenza B). Overall influenza positivity remained low and stable at 0.4% in Week 20. 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 20 (latest data available), 24 countries reported baseline activity and 15 countries reported low intensity. From the 38 countries reporting, 13 reported no activity, 17 reported sporadic spread, two reported local spread, four reported regional spread, and four reported widespread activity (across the Region). During Week 20, 35 (2%) 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 29/05/2023, based on data up to 14/05/2023 (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 the United States of America (USA).
- In the temperate zones of the southern hemisphere, influenza activity remained low however influenza has increased in Australia, Chile and surveillance indicates that the start of the pneumonia season has begun in South Africa. Influenza A, primarily A (H1N1)pdm09) viruses were predominant in these countries.
- 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 remains at low levels in Brazil with influenza B and A(H1N1)pdm09) co-circulating.
- In Tropical Central America and the Caribbean influenza activity increased but remains low with influenza B predominant in the Caribbean and Influenza A(H1N1)pdm09) predominant in Central America. Influenza activity increased to moderate levels in Mexico and Jamaica. All seasonal subtypes are still being reported in Guatemala. Influenza B increased and was predominant in El Salvador.
- In Western Africa, influenza activity decreased and were low in reporting countries. Influenza A(H1N1)pdm09 detections predominated in Ghana, Togo, Cote D'Ivoire.
- In Middle Africa, influenza detections were low in reporting countries.
- In Southern Asia, influenza activity remained low with all seasonal subtypes detected. Influenza decreased on most countries except for Sri Lanka.
- Influenza activity in South-East Asia was stable, with Malaysia continuing to report both influenza A subtypes. All seasonal subtypes were detected in Singapore.
- 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 01/06/2023), during the period from 01/05/2023 – 14/05/2023 (latest data available), National Influenza Centres and other national influenza laboratories from 115 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 319,245 specimens during that period, of which 13,436 were positive for influenza viruses, 9548(71.06%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 4,997 (68.79%) were influenza A(H1N1)pdm09 and 2,267 (31.21%) were influenza A(H3N2). Of the 13,436 samples tested positive for influenza viruses, 3,888 tested positive for Influenza B (28.94%). **Source:** Flu Net: <https://www.who.int/tools/flunet>

Australia and New Zealand update

- In New Zealand, during the week ending 28/05/2023, community influenza-like illness activity (ILI) GP consultations increased to 13.33 per 100,000. The SARI hospitalisation rate increased but remains at low levels.
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 19.8% in the week ending 28/05/2023, which is a decrease from the previous week (17.3%).
Source: [Institute of Environmental Science & Research, New Zealand](#)

COVID-19 – UK and international summary

- As of 01/06/2023, there were three new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. There were five suspected COVID-19 deaths with a date of death in the most recent 7-day reporting period, reported to Public Health Wales. There were 26 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 05/03/2023 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