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

Wednesday 05th July 2023 (covering Week 26 2023)

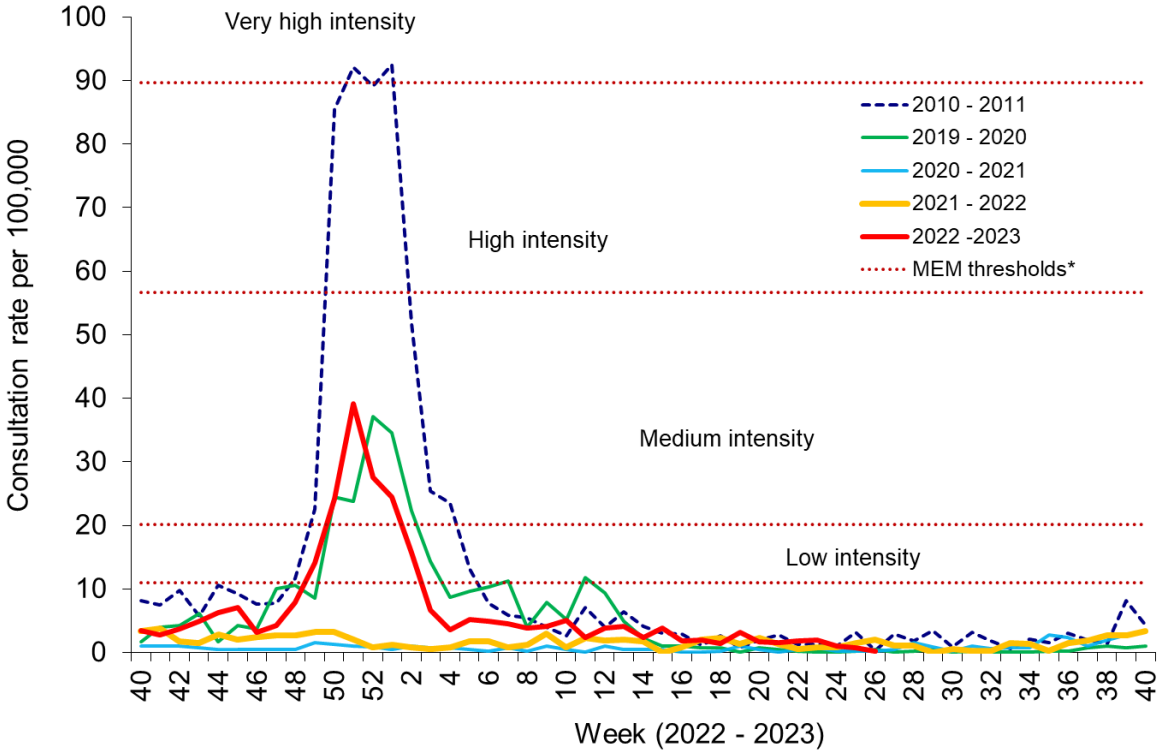
Current level of influenza activity: Baseline
Influenza activity trend: Stable
Confirmed influenza cases since 2022 Week 40: **7833** *(3056 influenza A(H3N2), 1623 influenza A(H1N1)pdm09, 2669 influenza A(not subtyped) and 485 influenza B)*

During Week 26 (ending 02/07/2023) there were two cases of influenza, with a further six cases reported late from previous weeks. 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 rate in children younger than 5 remains below the baseline threshold this week. 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 26, was 0.3 consultations per 100,000 practice population (Table 1). This is a decrease compared to the previous Week (0.8 consultations per 100,000. Figure 1).
- The **Sentinel GP consultation rate for Acute Respiratory Infections (ARI)** was 94.4 per 100,000 practice population during Week 26 (Table 2 and Figure 3). This is a decrease compared to the previous week (102.8 per 100,000). Weekly consultations for Lower Respiratory Tract Infections (at 27.4 per 100,000) and Upper Respiratory Tract Infections (67.8 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 26 decreased to 13.4% (Figure 12).
- During Week 26, 882 specimens received multiplex respiratory panel testing, from patients attending hospitals. These results do not include samples tested solely for SARS-CoV-2. **Two samples tested positive for influenza, and both were influenza B.** Overall influenza positivity decreased to 0.2% across all age groups. In addition, there were 125 rhinovirus, 57 adenovirus, 35 parainfluenza, 51 SARS-CoV2, 24 enterovirus, four seasonal coronaviruses, six RSV and one mycoplasma positive samples (Figure 5). Additionally, 114 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 114 samples, six were positive for SARS-CoV-2 and one for RSV (Figure 7). Furthermore, during week 26, 46 respiratory specimens were tested from patients in intensive care units (ICU) of which none were positive for influenza (Figure 8).
- There were 12 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 26. Of the 12 samples, one tested positive for rhinovirus, one for parainfluenza, and two for enterovirus (as at 05/07/2023) (Figure 4).
- From all samples where influenza subtyping information was available during week 26 (specimens receiving multiplex respiratory panel testing, from patients attending hospitals, and surveillance samples collected by sentinel GPs and community pharmacies) both were influenza B (Figure 6).
- **Confirmed RSV case incidence in children aged under 5 remains at baseline levels.** In week 26 there were 3.1 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 zero and one respectively during Week 26 (figures 10 & 11).
- During week 26, one **ARI outbreak** was reported to the Public Health Wales Health Protection team. This outbreak was reported as COVID-19 in a residential setting.
- According to **EuroMoMo** analysis, all-cause deaths in Wales were not in excess during week 25.

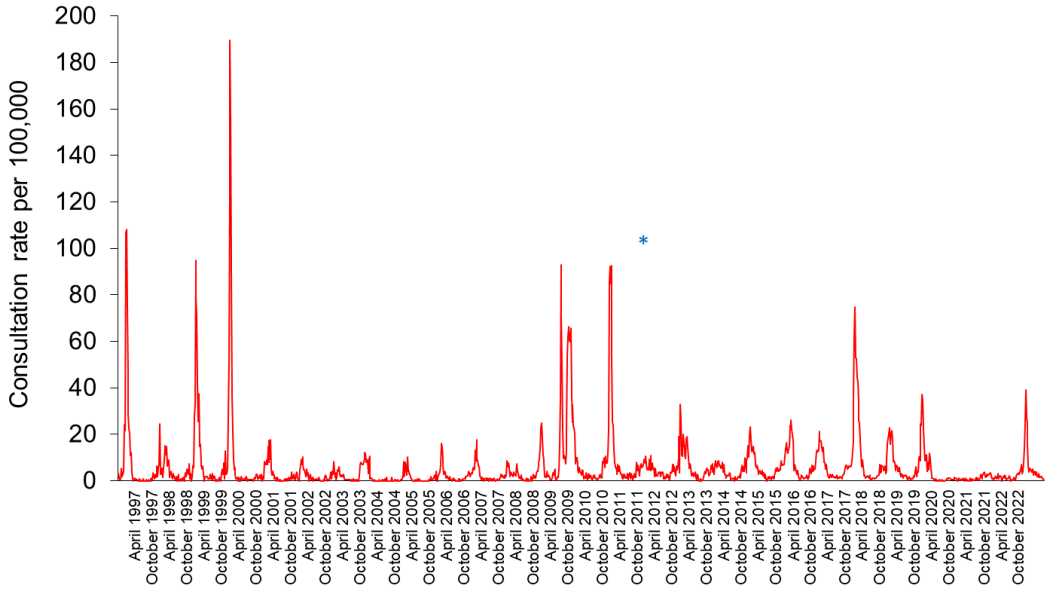
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 02/07/2023)



* 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 26 2023)



* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 21– Week 26 2023 (as of 02/07/2023)

Age group	21	22	23	24	25	26
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	0.0	6.7	0.0	0.0
5 - 14	4.9	0.0	0.0	0.0	0.0	0.0
15 - 24	0.0	8.8	0.0	0.0	0.0	0.0
25 - 34	0.0	0.0	3.8	1.9	2.1	0.0
35 - 44	2.0	3.8	3.7	0.0	0.0	0.0
45 - 64	2.9	0.0	1.8	0.9	2.0	1.0
65 - 74	0.0	2.2	0.0	0.0	0.0	0.0
75+	0.0	0.0	4.4	2.2	0.0	0.0
Total	**1.6**	**1.7**	**1.9**	**1.0**	**0.8**	**0.3**

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 21 – Week 26 2023 (as of 02/07/2023)

Age group	21	22	23	24	25	26
< 1	768.7	720.2	813.0	487.8	363.9	560.6
1 - 4	616.0	343.6	309.2	416.7	446.6	338.0
5 - 14	201.5	95.7	144.9	162.7	130.2	132.5
15 - 24	108.8	65.9	102.0	110.7	106.4	116.8
25 - 34	122.3	72.5	96.1	94.1	89.3	71.6
35 - 44	87.1	80.3	78.5	78.5	72.4	71.6
45 - 64	105.7	73.7	82.9	70.9	78.6	63.2
65 - 74	116.8	77.1	87.5	100.6	68.9	61.9
75+	123.5	94.6	104.1	119.6	86.4	84.8
Total	**141.8**	**92.9**	**109.2**	**113.3**	**102.8**	**94.4**

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 26 2022 – Week 26 2023 (as of 02/07/2023).

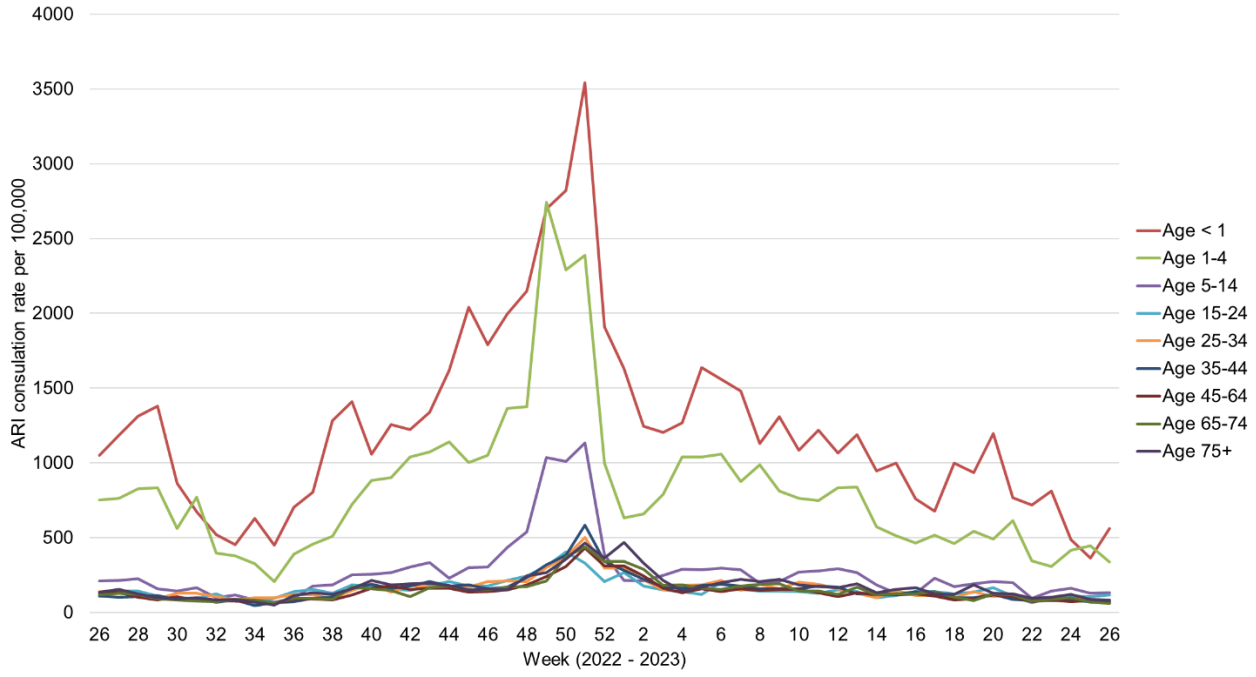
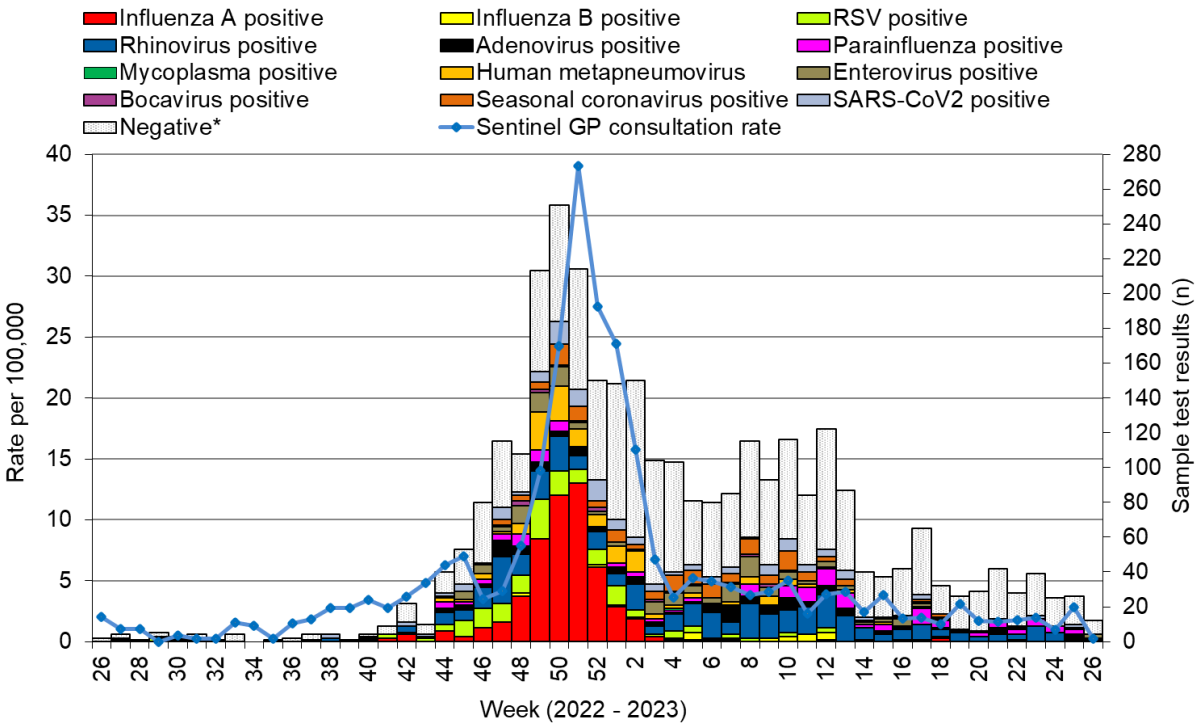
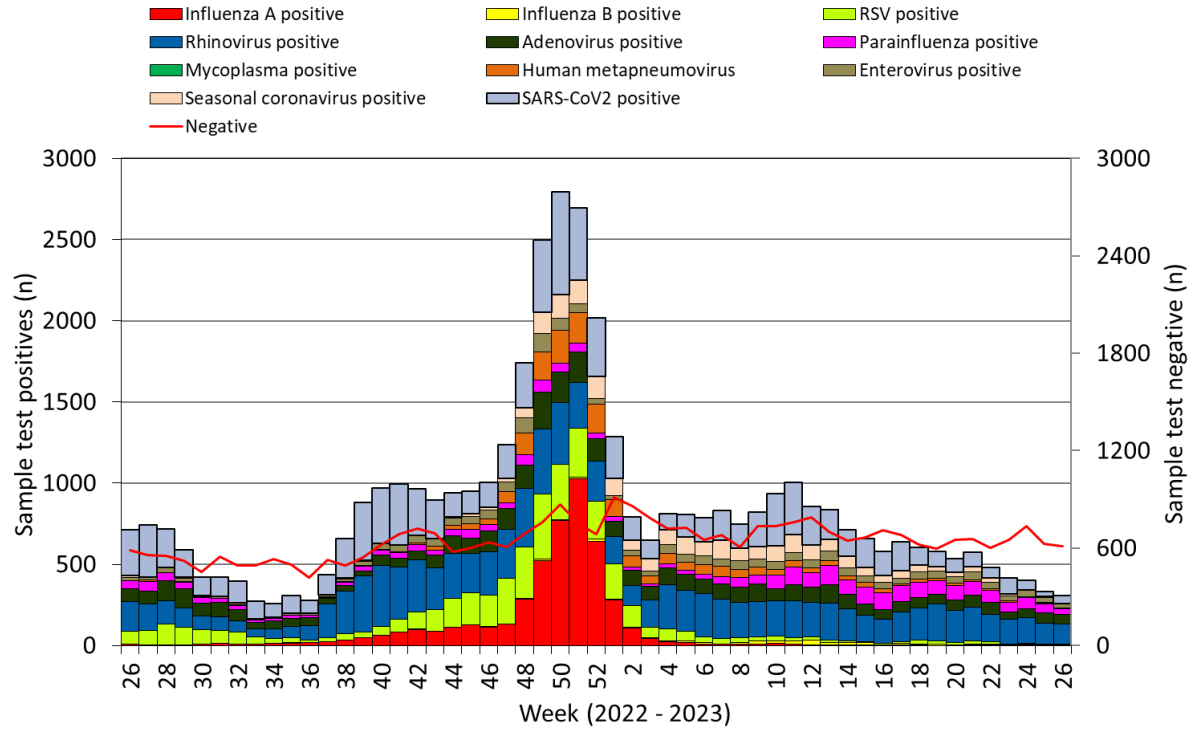


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 02/07/2023, by week of sample collection, Week 26 2022 to Week 26 2023.



* 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 02/07/2023 by week of sample collection, Week 26 2022 to Week 26 2023.



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 02/07/2023 by week of sample collection, Week 40 2022 to Week 26 2023.

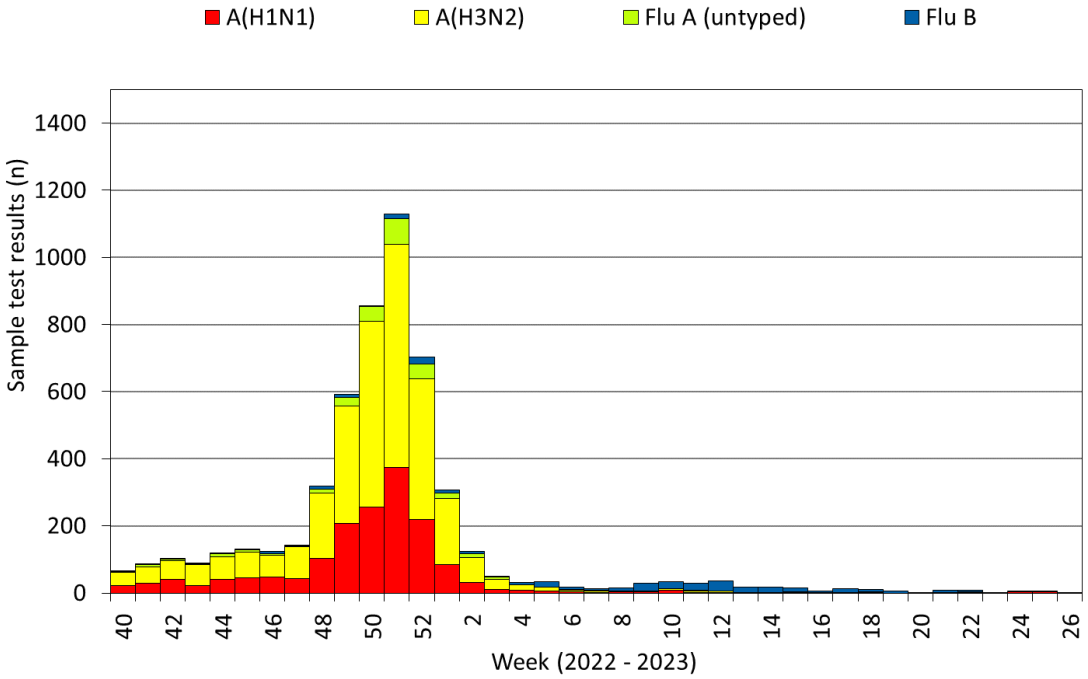


Figure 7. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 02/07/2023 by week of sample collection, Week 26 2022 to Week 26 2023.

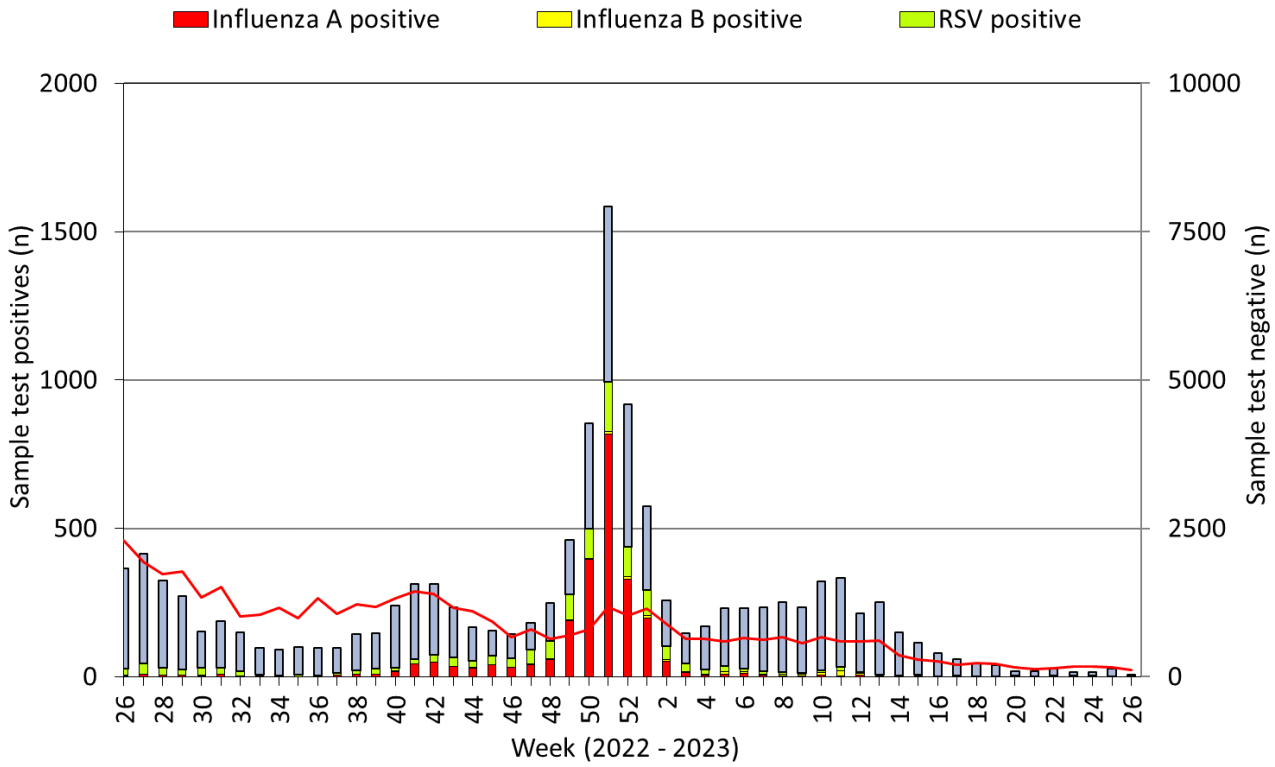
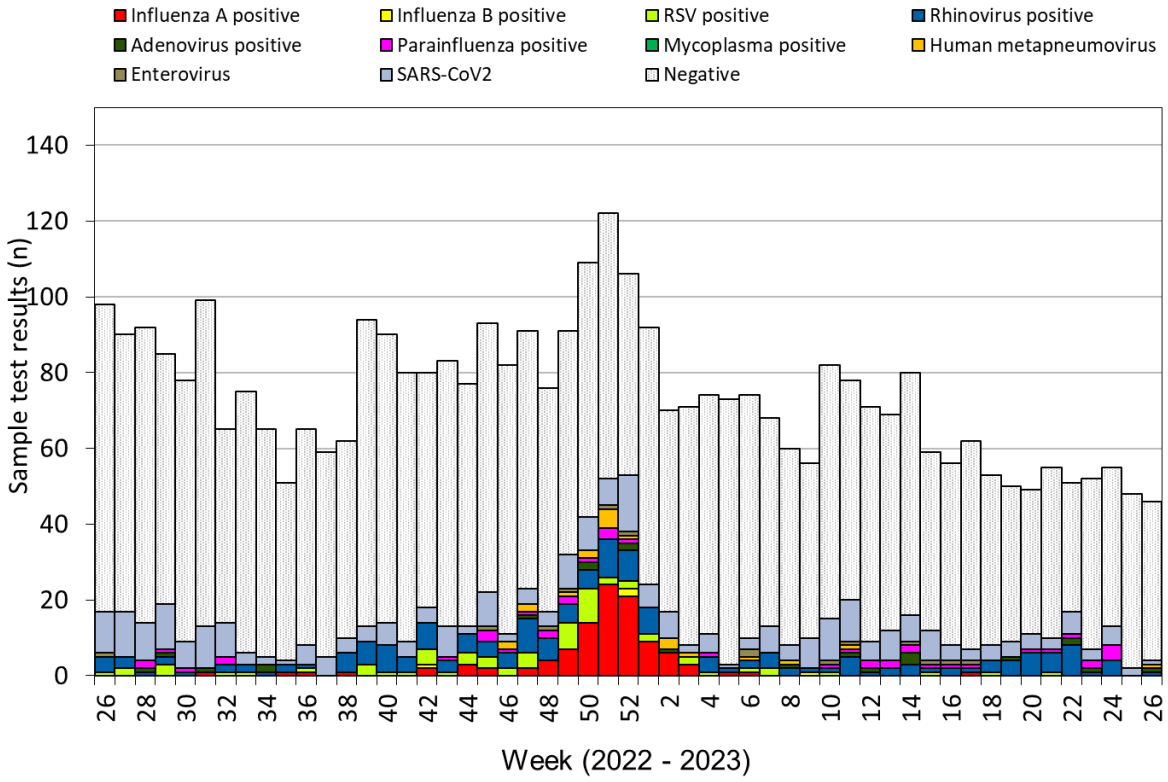
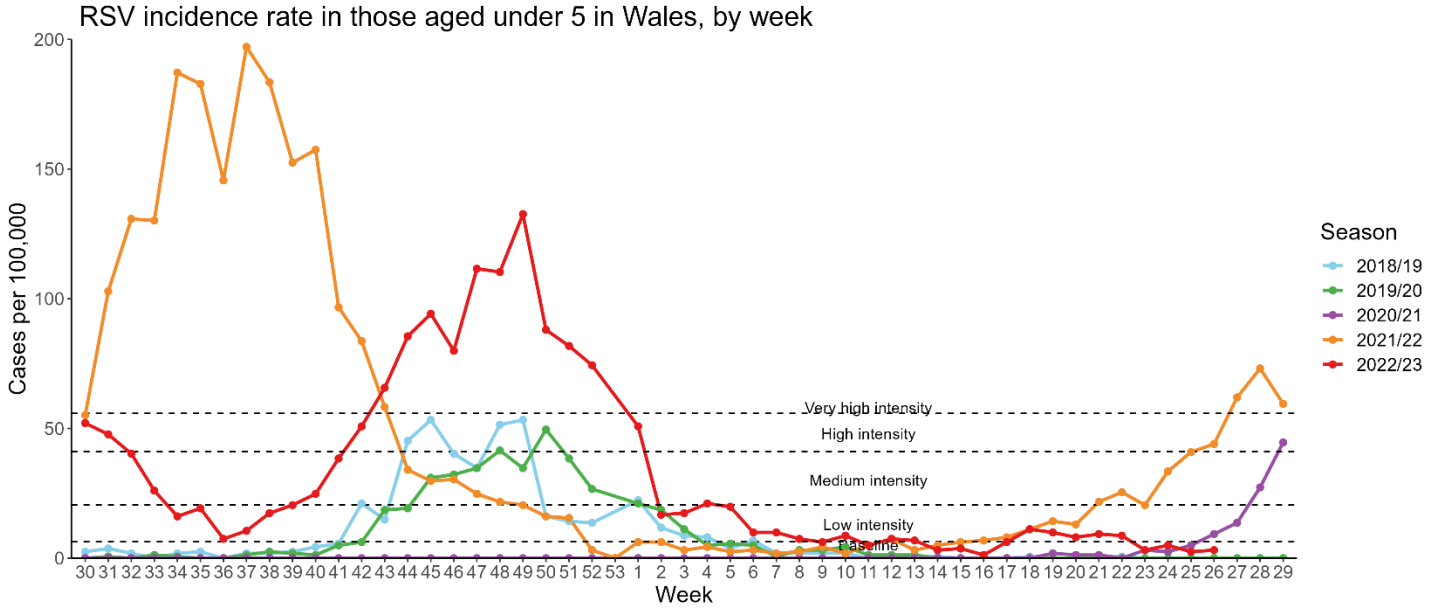


Figure 8. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 26 2022 to Week 26 2023.



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 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 2018 to Week 26 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 02/07/2023

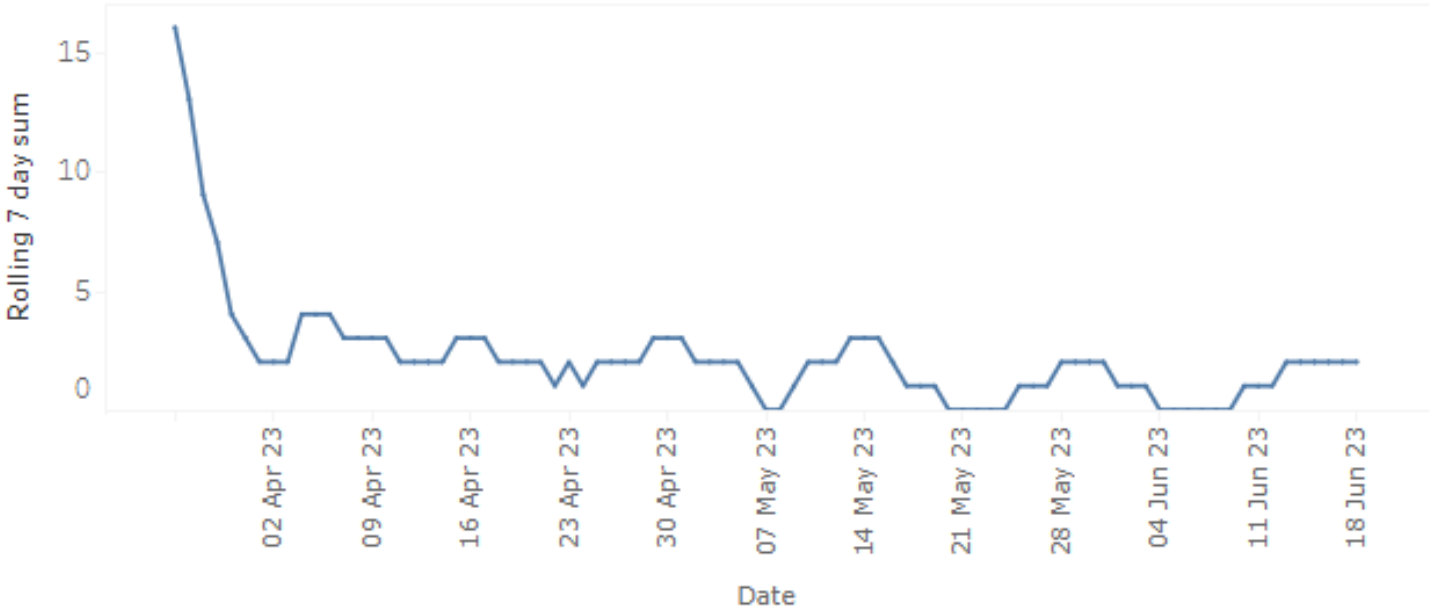
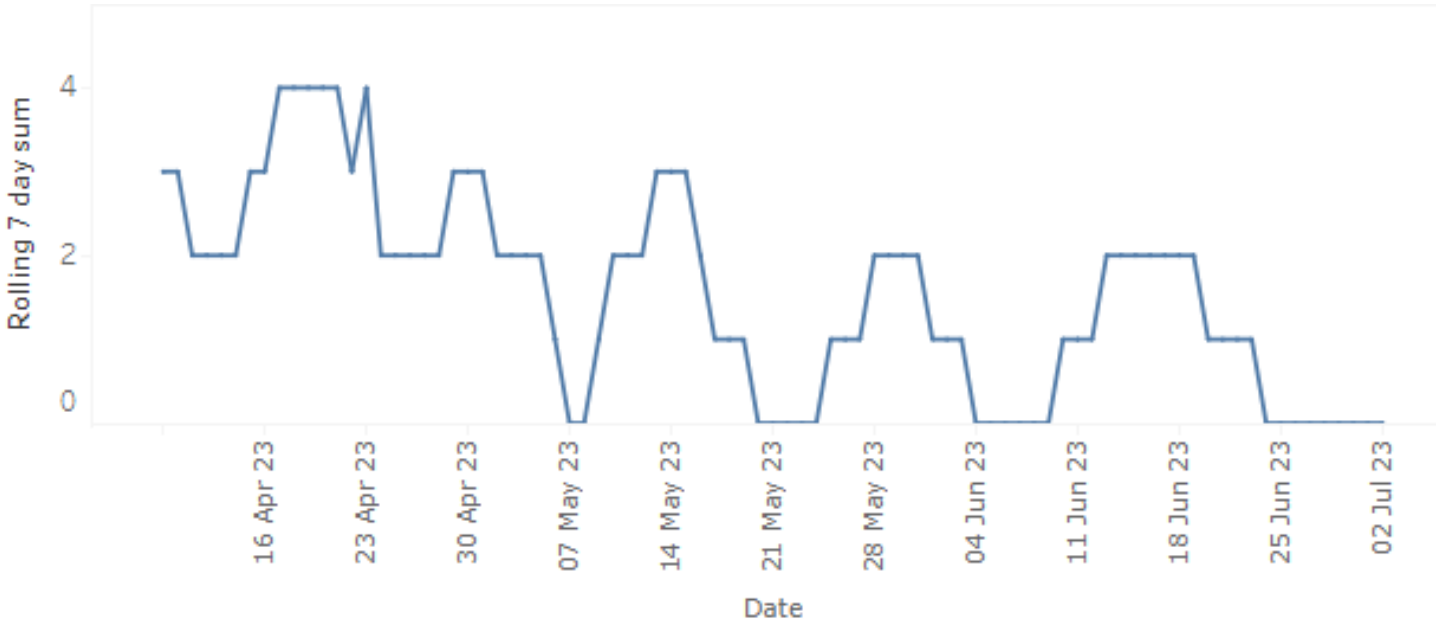
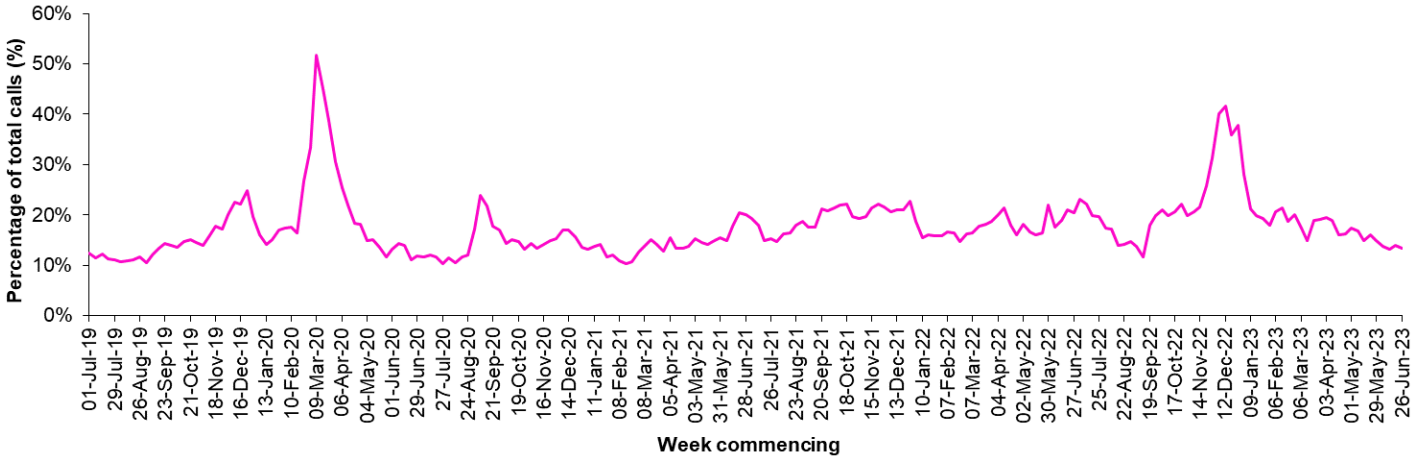


Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 02/07/2023



Calls to NHS Direct Wales

Figure 12. Influenza related calls to NHS Direct Wales[1] (as a percentage of total calls) from Week 26 2019 - Week 26 2023 (as of 02/07/2023).



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

Influenza activity – UK and international summary

- As of Week 24, GP ILI consultations decreased to 0.9 per 100,000, in England.
- During Week 24, 10 samples testing positive for influenza were reported in England (seven A(not subtyped) and three influenza B). Overall influenza positivity remained low and stable at 0.4% in Week 24. 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) have entered a monthly reporting cycle for influenza and reported that activity across Europe remained at interseasonal levels during weeks 21-25. **Source:** Flu News Europe: http://www.flunewseurope.org/

- The WHO reported on 26/06/2023, based on data up to 11/06/2023 that globally, influenza detections remain low, but in the southern hemisphere some countries reported variable changes in influenza detections while detections in some countries have peaked.
- In the countries of North America, Influenza indicators were mostly at low levels typically observed between influenza seasons. Influenza B predominated in Canada and influenza A and B co-circulated in the United States of America (USA)
- In the temperate zones of the southern hemisphere, influenza activity appeared to decrease mainly due to a reduction in detections in detections in Chile. Variable activity was seen throughout the region with influenza activity increasing in Argentina, Paraguay, and Uruguay.
- In tropical South America, influenza detections decreased overall during this reporting period with detections of predominately A(H1N1(pdm09) and B viruses. Detections in Bolivia and Brazil decreased to below the seasonal threshold.
- In Tropical Central America and the Caribbean influenza activity remains low with influenza B predominant in the Caribbean and Influenza B predominant across the subregion. In the counties of Central America, increased detection of influenza was observed in El Salvador, Guatemala, Honduras, Nicaragua, and Panama.
- In Western Africa, influenza detections of predominately influenza A(H1N1(pdm09 were low in reporting countries.
- In Middle Africa, Influenza B detections of Influenza B were reported in Gabon in recent weeks.
- In Southern Asia, influenza activity remained stable in most reporting countries. Detection of mainly A(H1N1(pdm09) were reported in Cambodia, Laos People's Democratic Republic and Thailand.
- Influenza activity in South-East Asia was stable, with Malaysia continuing to report both influenza A subtypes. All seasonal subtypes were detected in Singapore. Influenza A(H1N1(pdm09) and Influenza A(H3N2) co-circulated in Malaysia and Singapore whilst increased detections of A(H1N1(pdm09) were reported in the Philippines.
- 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 27/06/2023), during the period from 29/05/2023 – 11/06/2023 National Influenza Centres and other national influenza laboratories from 108 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 262,237 specimens during that period, of which 6,709 were positive for influenza viruses, 4,221 (62.9%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 2,009 (73.6%) were influenza A(H1N1)pdm09 and 719 (26.4%) were influenza A(H3N2). Of the 6,709 samples tested positive for influenza viruses, 2,448 tested positive for Influenza B (37.1%). **Source:** Flu Net: https://www.who.int/tools/flunet

Australia and New Zealand update

- In New Zealand, during the week ending 25/06/2023, community influenza-like illness activity (ILI) GP consultations increased to 17.62 per 100,000. The SARI hospitalisation rate decreased and remains at low levels.
  Source: Institute of Environmental Science & Research, New Zealand

- In Australia, according to the latest available update (fortnight ending 25/06/2023), influenza-like illness (ILI) activity in the community increased to 7.6 per 100,000 this reporting period. To date, the majority of nationally reported laboratory-confirmed influenza cases were influenza A (69%). **Source:** Australian Influenza Surveillance Report and Activity Updates.

Respiratory syncytial virus (RSV) in New Zealand

- In New Zealand, the RSV positivity rate was 33.8% in the week ending 25/06/2023, which is an increase from the previous week (20.2%).
  Source: Institute of Environmental Science & Research, New Zealand

COVID-19 – UK and international summary

- As of 28/06/2023, there were 1.7 new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. There were seven suspected COVID-19 death with a date of death in the most recent 7-day reporting period, reported to Public Health Wales. There were seven 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/fluvaccine/

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