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



Wednesday 22nd June 2022 (covering week 24 2022)

Current level of influenza activity: Low

Influenza activity trend: Stable

Confirmed influenza cases since 2021 week 40: 791 (386 influenza A(H3N2), 50 influenza A(H1N1)pdm09, 303

influenza A(not subtyped) and 52 influenza B).

Key points - Wales

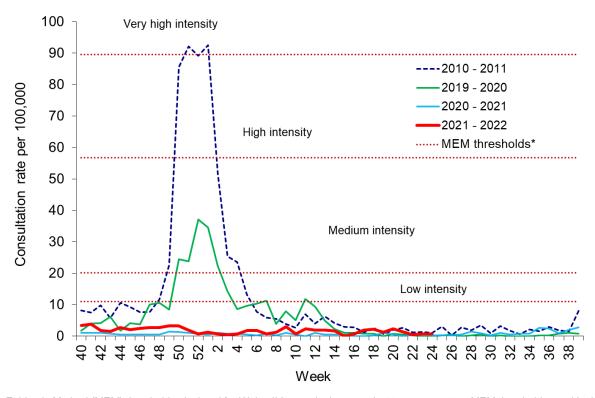
Confirmed influenza case numbers have decreased in recent weeks, while RSV confirmed cases have increased, this is unusually earlier than would be expected for the RSV season in Wales.

During Week 24 (ending 19/06/2022) there were 13 cases of influenza. COVID-19 cases continue to be detected in symptomatic patients in hospital and in the community. There has been an earlier than usual start of seasonal RSV activity, with current incidence in children under 5 years of age at levels that would indicate medium levels of activity compared to the previous 10 years. Rhinovirus and parainfluenza are the most commonly detected cause of non-COVID-19 Acute Respiratory Infection (ARI), with increasing confirmed cases in recent weeks.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 24 was 0.8 consultations per 100,000 practice population (Table 1). This increased compared to the previous week (0.7 consultations per 100,000) and remains well below 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 Respitatory Infections (ARI) was 150.3 per 100,00 practice
 population during Week 24, this is an increase compared to the previous week (146.4 per 100,000) (Table 2).
 Weekly consultations increased for Lower Respiratory Tract Infections and for 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 24 increased to 19% (Figure 8).
- During Week 24, 1,077 specimens received multiplex respiratory panel testing mainly from patients attending hospitals. These results do not include samples tested solely for SARS-CoV2. There were nine influenza (two A(H1N1), six A(H3N2) and one A (untyped)), 56 RSV, 135 SARS-CoV2, 170 rhinoviruses, 57 parainfluenza, 78 adenoviruses, 14 enteroviruses and five human metapneumoviruses detected in Week 24 (Figure 4). Additionally, 2,624 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 2,624 samples, four were positive for untyped influenza A, ten were positive for RSV and 189 were positive for SARS-CoV2 (Figure 5). 61 respiratory specimens were tested from patients in intensive care units (ICU) and none were positive for influenza (Figure 6). For the latest COVID-19/ SARS-CoV2 surveillance data please see the PHW daily dashboard
- There was one surveillance sample from patients with ILI collected by **sentinel GPs** during Week 24 (as at 22/06/2022), which sample was positive for SARS-CoV2.
- Confirmed RSV case incidence in children aged under 5 increased, and is now at medium levels. In week 24 there were 31.6 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 24, 14 ARI outbreaks were reported to the Public Health Wales Health Protection team, thirteen
 were reported as COVID-19 outbreaks and one as Pulmonary Tuberculosis. Thirtheen outbreaks were in
 residential homes and one was in a community, mixed or other setting.
- According to <u>EuroMoMo</u> analysis, all-cause deaths in Wales were not significantly in excess during week 23.

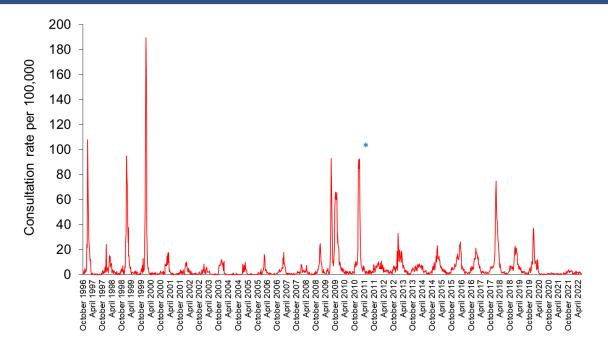
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 19/06/2022).



^{*} 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.

Figure 2. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (week 48 1996 – week 24 2022).



^{*} Reporting changed to Audit+ surveillance system

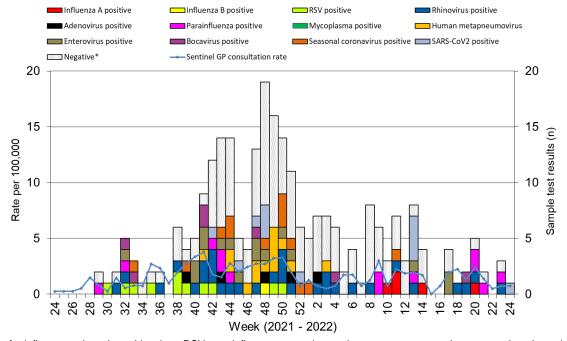
Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 19 – week 24 2022 (as of 19/06/2022).

Age						
group	19	20	21	22	23	24
< 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	0.0	2.5	0.0	0.0	0.0
15 - 24	4.7	2.3	0.0	0.0	0.0	0.0
25 - 34	0.0	10.3	2.2	0.0	2.0	4.0
35 - 44	2.1	4.2	2.2	0.0	2.0	0.0
45 - 64	1.0	0.0	2.1	2.0	1.0	1.0
65 - 74	2.3	0.0	0.0	0.0	0.0	0.0
75+	0.0	2.4	0.0	0.0	0.0	0.0
Total	1.3	2.3	1.4	0.5	0.7	8.0

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 19 – week 24 2022 (as of 19/06/2022).

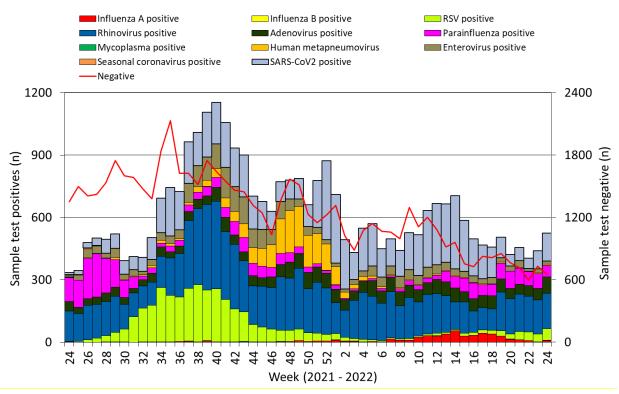
Age						
group	19	20	21	22	23	24
< 1	563.5	1056.8	1098.9	560.6	810.4	960.0
1 - 4	453.6	684.7	740.3	290.7	584.8	533.3
5 - 14	119.8	175.0	186.9	90.9	137.4	198.9
15 - 24	90.9	130.6	114.8	84.7	116.1	134.1
25 - 34	119.8	115.6	93.7	80.3	153.9	119.1
35 - 44	64.9	110.9	96.7	57.0	133.1	126.4
45 - 64	82.0	100.5	87.7	66.4	113.8	100.9
65 - 74	93.8	98.4	77.3	76.9	138.7	142.0
75+	110.9	79.5	124.4	53.4	86.6	123.5
Total	111.3	141.1	137.3	83.1	146.4	150.3

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 19/06/2022, by week of sample collection, week 24 2021 to week 24 2022.



^{*} 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.

Figure 4. Specimens submitted for virological testing for hospital patients and non-sentinel GPs as of 19/06/2022 by week of sample collection, week 24 2021 to week 24 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 on pathogen will appear more than once in the chart.

Figure 5. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 19/06/2022 by week of sample collection, week 24 2021 to week 24 2022.

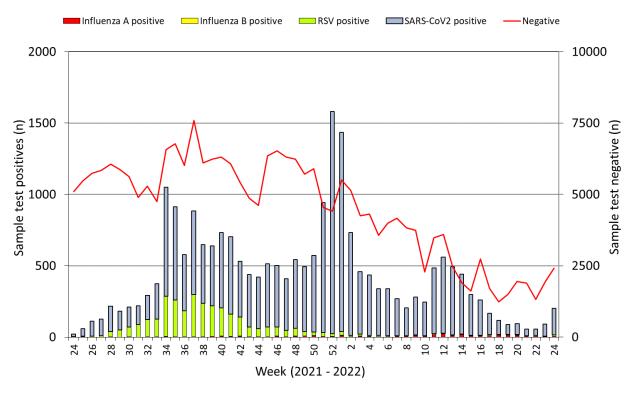
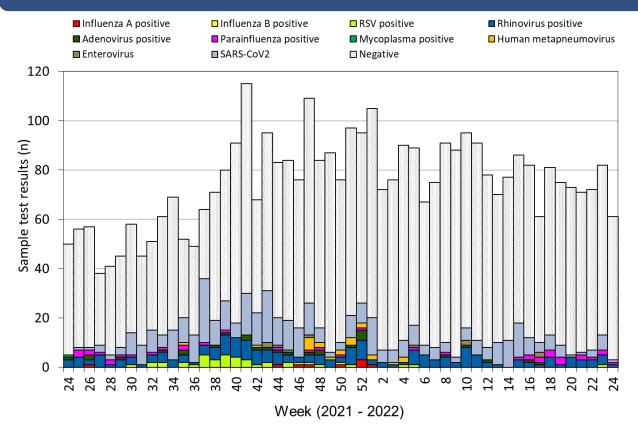
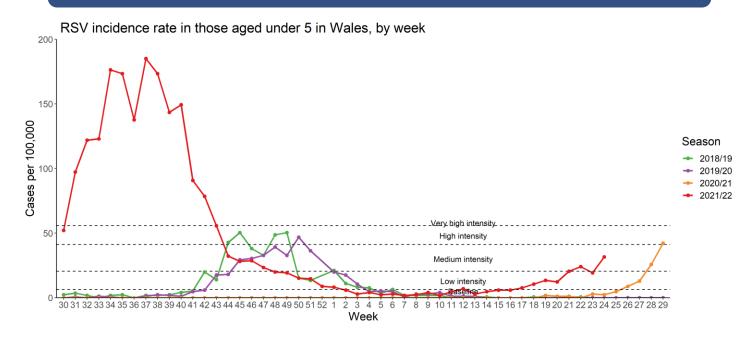


Figure 6. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 24 2021 to Week 24 2022.



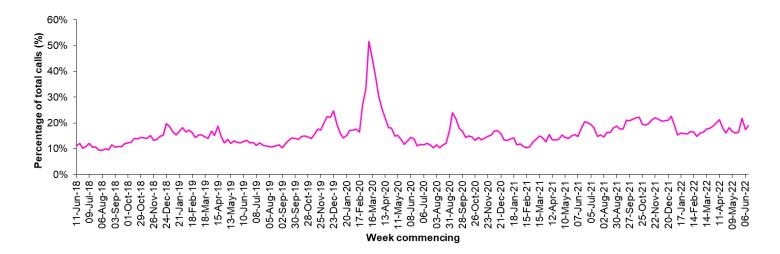
This chart summarises respiratory panel test data and does not include data for patients tested SOLEY for SARS-CoV2. Samples which test positive for more than on pathogen will appear more than once in the chart.

Figure 7. RSV incidence rate per 100,000 population aged under five years, week 30 2017 to Week 24 2022.



Calls to NHS Direct Wales

Figure 8. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 24 2018 - Week 24 2022 (as of 19/06/2022).



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 (ie 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, school children and NHS staff in Wales 2021/22 (as of 26/04/2022).

Influenza immunisation uptake in the 2021/22 season				
People aged 65y and older	78.0%			
People younger than 65y in a clinical risk group	48.2%			
Children aged two & three years	47.6%			
Children aged four to ten years*	68.7%			
Children aged 11 to 15 years*	58.2%			
NHS staff	56.0%			
NHS staff who have direct patient contact	57.2%			

^{*} In school sessions carried out so far.

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: http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=55714

Influenza activity – UK and international summary

- As of week 23, community and syndromic influenza indicators remain low in the UK. GP ILI consultations increased in Northern Ireland to 1.1 per 100,000 and in Scotland to 2.8 per 100,000 well below the baseline intensity thresholds. The weekly ILI GP consultation rate in England reported through the RCGP system increased to 1.3 per 100,000, well below the MEM threshold for baseline activity (12.2 per 100,000).
- During week 23, 48 samples tested positive for influenza (including 9 influenza A(H3N2), 4 influenza A(H1N1)pdm09, 34 influenza A(not subtyped) and one influenza B). 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 that during week 20, influenza activity continues to be reported in some countries in the WHO European Region. During week 20, a total of 1,034 sentinel specimens were tested for influenza, 77 of which were positive, 72 influenza A (60 influenza A(H3), two influenza A(H1)pdm09 and 10 influenza A(not subtyped)) and five influenza B.
 Source: Flu News Europe: http://www.flunewseurope.org/
- The WHO reported on 13/06/2022 that globally, influenza activity continued to decrease, following a peak in March 2022. In the temperate zones of the southern hemisphere, overall influenza activity increased slightly in recent weeks. Detections of influenza A and respiratory syncytial virus (RSV) sharply increased in some regions of Australia. Influenza detections continued to increase in South Africa though the detections rate was at low levels. In temperate South America, influenza activity of predominately influenza A(H3N2) decreased in Argentina and Paraguay but increased in Chile and Uruguay. In the Caribbean and Central American countries, low influenza activity was reported with influenza A(H3N2) predominant. In tropical South America, low influenza activity was reported with influenza virus detections were at low levels overall. In North America, influenza activity continued to decrease. In Europe, influenza activity continues to decline, with influenza A(H3N2) predominant. In Northern Africa, Tunisia reported a single influenza B detection. In Western Asia, there was an increase in influenza, specifically in Qatar.
- Based on FluNet reporting (as of 10/06/2022), during the time period from 16/05/2022 29/05/2022, National Influenza Centres and other national influenza laboratories from 112 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 247,215 specimens during that time period, 14,614 were positive for influenza viruses, of which 14,322 were typed as influenza A (of the subtyped influenza A viruses, 154 were influenza A(H1N1)pdm09 and 3,311 were influenza A(H3N2)) and 292 influenza B (of the characterised influenza B viruses none belonged to B-Yamagata lineage and 66 belonged to the B-Victoria lineage).

Source: WHO influenza update: https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates/current-influenza-update

Australia and New Zealand update

• In New Zealand, during the week ending 10/06/2022, community influenza-like illness activity (ILI) activity is increasing and remains elevated, activity remains high for this time of year. Through seasonal sentinel community influenza surveillance, 32 influenza cases were identified at sentinel practices during the week ending 12/06/2022.

Source: Institute of Environmental Science & Research, New Zealand https://www.esr.cri.nz/our-services/consultancy/flu-surveillance-and-research

• In Australia, according to the latest available update (fortnight ending 05/06/2021), influenza-like illness (ILI) activity in the community this year has increased since March 2022. To date, the majority of nationally reported laboratory-confirmed influenza cases were influenza A (90.0%).

Source: Australian Influenza Surveillance Report and Activity Updates.

https://www1.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm#current

Respiratory syncytial virus (RSV) in North America

The USA CDC reported an out of season increase in RSV activity in 2021, beginning in March. Since then
cases decreased, although with signs of an increasing trend again in the most recent weeks.
 Source: CDC RSV national trends: https://www.cdc.gov/surveillance/nrevss/rsv/natl-trend.html

COVID-19 – UK and international summary

- As of 15/06/2022, the new positive PCR episodes for the most recent 7-day reporting period were 13 per 100,000 population. There were 12 suspected COVID-19 deaths with a date of death in the most recent 7-day reporting period reported to Public Health Wales. There were 12 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/
- As at 21/06/2022, there have been 22,239,475 reported confirmed cases of COVID-19 in the UK, of which 57,637 were newly reported in the previous 7 days. The total deaths within 28 days of a positive test was 177,977. Latest UK data is available from: https://coronavirus.data.gov.uk/
- As at 21/06/2022, WHO have reported 537,591,764 confirmed COVID-19 cases globally, with 307,400 reported in the previous 24 hours. There have been 6,319,395 deaths, of which 759 were reported in the previous 24 hours. Daily WHO situation updates 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). Globally, 2,591 laboratory confirmed cases of human infection with MERS-CoV, including 894 associated deaths, 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 the Middle East, 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 (08/04/2022 to 13/05/2022) 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: https://www.sho.int/teams/global-influenza-programme/avian-influenza/monthly-risk-assessment-summary https://www.fao.org/ag/againfo/programmes/en/empres/H7N9/Situation_update.html
- 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

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://public.tableau.com/profile/public.health.wales.health.protection#!/vizhome/RapidCOVID-19virology-Public/Headlinesummary

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

Wales influenza information:

https://phw.nhs.wales/topics/flu/

England influenza and COVID-19 surveillance:

https://www.gov.uk/government/statistics/national-flu-and-covid-19-surveillance-reports

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 (for NHS Wales users)

http://nww.immunisation.wales.nhs.uk/home

For further information on this report, please email Public Health Wales using: surveillance.requests@wales.nhs.uk