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



Wednesday 18th May 2022 (covering week 19 2022)

Current level of influenza activity: Low

Influenza activity trend: Stable

Confirmed influenza cases since 2021 week 40: 718 (351 influenza A(H3N2), 44 influenza A(H1N1)pdm09, 275

influenza A(not subtyped) and 48 influenza B).

Key points - Wales

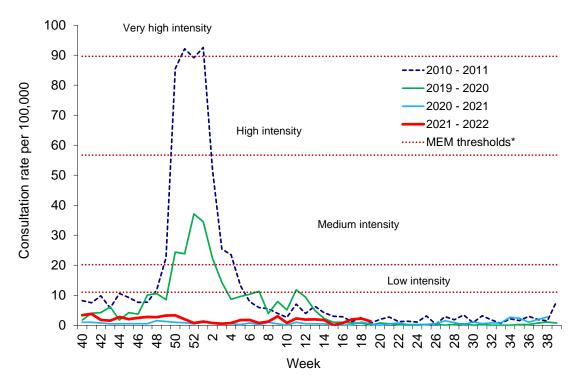
Confirmed influenza case numbers have increased during April, and include a number of community cases confirmed in sentinel GPs. This is later than usual seasonal activity, at low levels.

During Week 19 (ending 15/05/2022) there were 43 cases of influenza confirmed. COVID-19 cases continue to be detected in symptomatic patients in hospital and in the community. Rhinovirus and parainfluenza are the most commonly detected cause of non-COVID-19 Acute Respiratory Infection (ARI), with increasing confirmed cases in recent weeks. There has been a small increase in confirmed cases of RSV activity, this unseasonal activity is currently at low levels.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 19 was 1.3 consultations per 100,000 practice population (Table 1). This decreased compared to the previous week (2.2 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 111.3 per 100,00 practice population during Week 19, this is a decrease compared to the previous week (123.8 per 100,000) (Table 2). Weekly consultations also decreased for Lower Respiratory Tract Infections and 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 19 decreased to 16.7% (Figure 8).
- During Week 19, 1,257 specimens received multiplex respiratory panel testing mainly from patients attending hospitals. These results do not include samples tested solely for SARS-CoV2. There were 28 influenza (23 influenza A(H3N2), five influenza A(H1N1)pdm09), 26 RSV, 98 SARS-CoV2, 192 rhinoviruses, 76 parainfluenza, 63 adenoviruses, 16 enteroviruses and four human metapneumoviruses detected in Week 19 (Figure 4). Additionally, 1,611 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 1,611 samples, 15 were positive for influenza (all untyped influenza A), three were positive for RSV and 71 were positive for SARS-CoV2 (Figure 5). 76 respiratory specimens were tested from patients in intensive care units (ICU) and one was 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 a patient with ILI collected by a **sentinel GP** during Week 19 (as at 18/05/2022), the sample tested positive for both rhinovirus and bocavirus.
- Confirmed RSV case incidence in children aged under 5 increased, but remains at the threshold that would usually indicate low levels of circulation. In week 19 there were 13.5 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 19, 13 ARI outbreaks were reported to the Public Health Wales Health Protection team, all were reported as COVID-19 outbreaks. 12 were in residential homes one was in a community, mixed or other setting.
- According to **EuroMoMo** analysis, all-cause deaths in Wales were not significantly in excess during week 18.

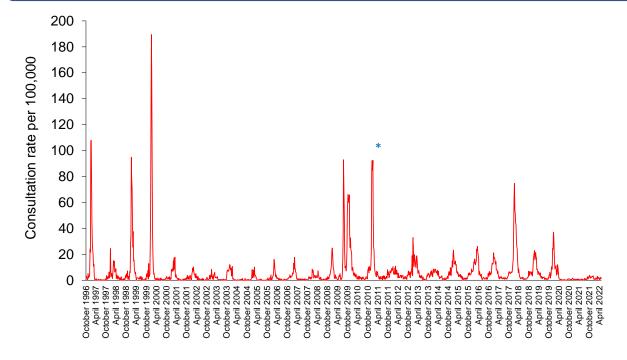
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 15/05/2022).



^{*} 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 19 2022).



^{*} Reporting changed to Audit+ surveillance system

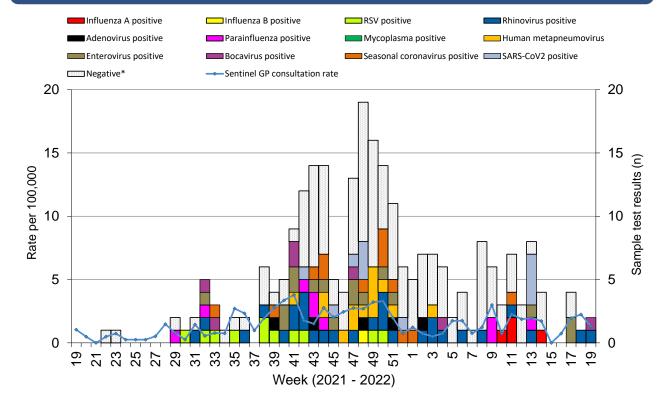
Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 14 – week 19 2022 (as of 15/05/2022).

Age						
group	14	15	16	17	18	19
< 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	2.7	0.0	0.0	0.0	0.0	0.0
15 - 24	2.5	0.0	0.0	6.6	2.2	4.7
25 - 34	0.0	0.0	1.9	1.9	2.0	0.0
35 - 44	0.0	0.0	0.0	2.0	0.0	2.1
45 - 64	2.2	0.0	0.9	0.0	2.8	1.0
65 - 74	5.1	0.0	2.2	2.2	6.6	2.3
75+	0.0	0.0	0.0	4.6	2.3	0.0
Total	1.7	0.0	0.7	2.0	2.2	1.3

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 14 – week 19 2022 (as of 15/05/2022).

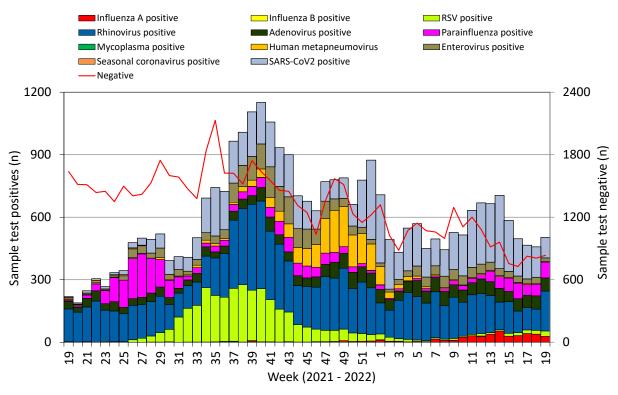
Age						
group	14	15	16	17	18	19
< 1	916.4	367.7	918.3	728.3	475.7	563.1
1 - 4	684.6	287.8	377.9	418.4	484.9	453.2
5 - 14	146.4	74.8	92.9	115.6	135.2	119.9
15 - 24	126.7	89.3	143.8	161.5	109.8	90.9
25 - 34	140.0	193.7	105.0	120.5	109.9	119.8
35 - 44	176.0	134.2	94.8	118.5	75.8	64.9
45 - 64	98.6	143.8	109.1	120.2	101.3	82.0
65 - 74	109.4	128.2	110.8	158.6	110.1	96.7
75+	149.0	22.1	156.0	114.7	120.6	111.0
Total	156.1	125.3	130.2	143.4	123.8	111.3

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 15/05/2022, by week of sample collection, week 19 2021 to week 19 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 15/05/2022 by week of sample collection, week 19 2021 to week 19 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 15/05/2022 by week of sample collection, week 19 2021 to week 19 2022.

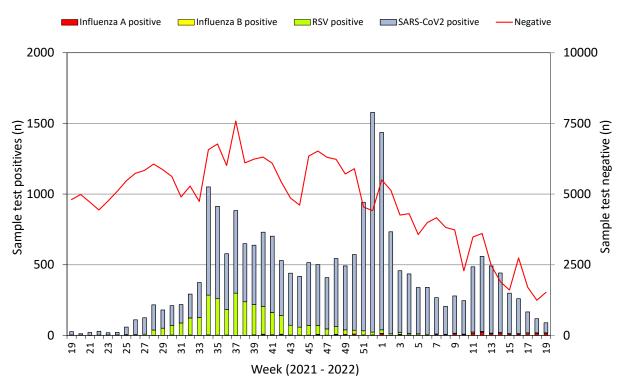
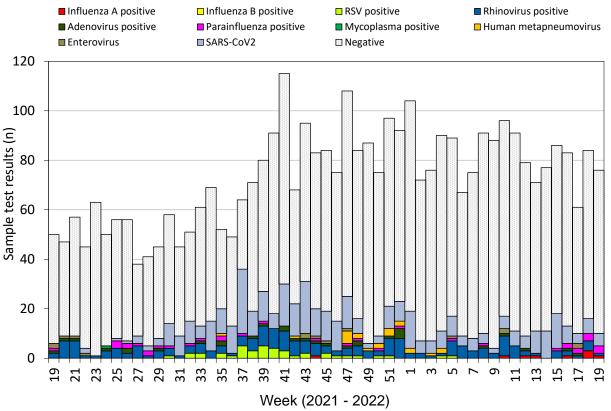
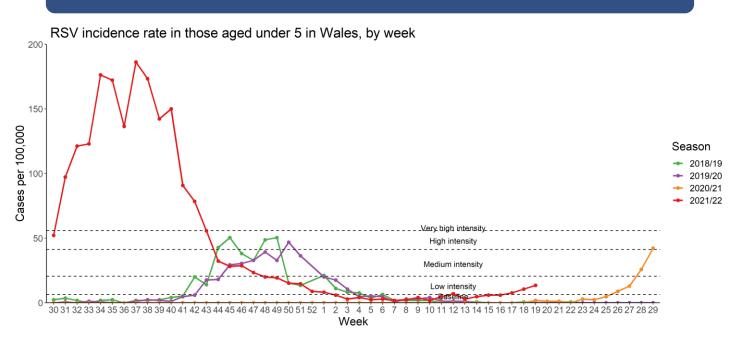


Figure 6. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 19 2021 to Week 19 2022.



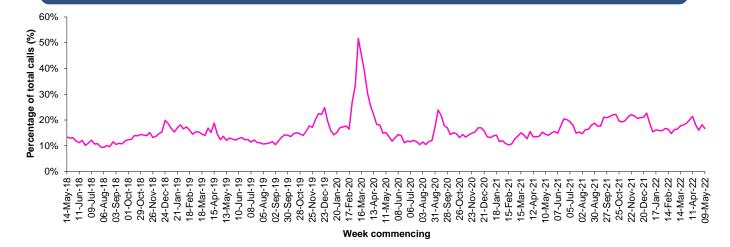
This chart summarises respiratory panel test data and does not include data for patients tested SOLEY for SARS-CoV2. Samples which test positive for more than on pathogen will appear more than once in the chart.

Figure 7. RSV incidence rate per 100,000 population aged under five years, week 30 2017 to Week 19 2022.



Calls to NHS Direct Wales

Figure 8. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 19 2018 - Week 19 2022 (as of 15/05/2022).



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 18, community and syndromic influenza indicators remain low in the UK. GP ILI consultations increased in Northern Ireland to 1.0 per 100,000, and decreased in Scotland to 0.7 per 100,000 well below the baseline intensity thresholds. The weekly ILI GP consultation rate in England reported through the RCGP system increased to 1.2 per 100,000, well below the MEM threshold for baseline activity (12.2 per 100,000).
- During week 18, 113 samples tested positive for influenza (including 39 influenza A(H3N2), four influenza A(H1N1)pdm09, 68 influenza A(not subtyped) and two 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 18, influenza activity continues to be reported in some countries in the WHO European Region. During week 18, a total of 932 sentinel specimens were tested for influenza, 128 of which were positive, 126 influenza A (91 influenza A(H3), 5 influenza A(H1)pdm09 and 30 influenza A(not subtyped)) and twoinfluenza B.
 Source: Flu News Europe: http://www.flunewseurope.org/
- The WHO reported on 02/05/2022 that globally, influenza activity remained low, with a further descrease of activity in some areas. In the temperate zones of the northern hemisphere, influenza activity decreased, except in North America. In the temperate zones of the southern hemisphere, influenza activity remained low overall. In North America, influenza virus detections continued to increase in recent weeks but remained low. In Europe, influenza activity appeared to decline, with influenza A(H3N2) predominant. In Central Asia, sporadic influenza B were reported in Kazakhstan. In East Asia, influenza activity continued to decrease in China, remained elevated in Mongolia, and remained low in the rest of the subregion. In Northern Africa, decreased detections of influenza A(H3N2) were reported in Tunisia. In Western Asia, Georgia reportedincreased detection of influenza A(H3N2). 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 A(H3N2) predominant. In tropical Africa, influenza activity was reported mainly from Eastern Africa. In Southern Asia, influenza virus detections were at low levels overall. In South-East Asia, only Malaysia reported influenza detections.
- Based on FluNet reporting (as of 29/04/2022), during the time period from 04/04/2022 17/04/2022, 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 336,269 specimens during that time period, 33,676 were positive for influenza viruses, of which 33,139 were typed as influenza A (of the subtyped influenza A viruses, 533 were influenza A(H1N1)pdm09 and 5,085 were influenza A(H3N2)) and 537 influenza B (of the characterised influenza B viruses none belonged to B-Yamagata lineage and 337 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

Update on influenza activity in North America

• The USA Centers for Disease Control and Prevention (CDC) report that during week 18 (ending 07/05/2022) influenza activity continues to increase in some areas of the United States. Nationally, 5,017 (8.6%) out of 58,131 specimens have tested positive for influenza in week 18, of these positives 4,979 (99.2%) were influenza A and 38 (0.8%) were influenza B. Further characterisation has been carried out on 12,803 specimens by public health laboratories, and 406 samples tested positive for influenza, all influenza A (287 influenza A(H3N2) and 119 influenza A(not subtyped)).

Source: CDC Weekly US Influenza Surveillance Report: http://www.cdc.gov/flu/weekly/

• The Public Health Agency of Canada reported that during week 18, influenza activity has increased in recent weeks. The percentage of visits to healthcare professionals that were due to ILI was 1.2% in week 18. The percentage of tests positive for influenza was 11.6% during week 18.

Source: Public Health Agency of Canada: https://www.canada.ca/en/public-health/services/diseases/flu-influenza-surveillance/weekly-influenza-reports.html

Respiratory syncytial virus (RSV) in North America

• The USA CDC has reported an out of season increase in RSV activity, with an increase in sample positivity since early March 2021, but has continued to see a downward trend in recent weeks.

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

COVID-19 – UK and international summary

- The number of confirmed cases in Wales reported as at 18/05/2022 is 874,034 with 71 newly reported in the previous 24 hours. The cumulative number of suspected COVID-19 deaths in confirmed cases in hospitals and care homes reported to Public Health Wales is 7,448 with three new deaths reported in the previous 24 hours. The cumulative number of registered deaths in Welsh residents where COVID-19 was mentioned in the death certificate as at 2022 week 17 was 10,212. Latest COVID-19 data from Public Health Wales is available from: https://public.tableau.com/app/profile/public.health.wales.health.protection/viz/RapidCOVID-19virology-Public/Headlinesummary
- As at 18/05/2022, there have been 22,203,799 reported confirmed cases of COVID-19 in the UK, of which 63,296 were newly reported in the previous 7 days. The total deaths within 28 days of a positive test was 177,410 with 986 reported in the previous 7 days. Latest UK data is available from: https://coronavirus.data.gov.uk/
- As at 18/05/2022, WHO have reported 520,102,852 confirmed COVID-19 cases globally, with 374,912 reported in the previous 24 hours. There have been 6,268,956 deaths, of which 675 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 (02/03/2022 to 07/04/2022) 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:
 http://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

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://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