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



Wednesday 25th May 2022 (covering week 20 2022)

Current level of influenza activity: Low

Influenza activity trend: Stable

Confirmed influenza cases since 2021 week 40: 746 (362 influenza A(H3N2), 46 influenza A(H1N1)pdm09, 286

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

Key points - Wales

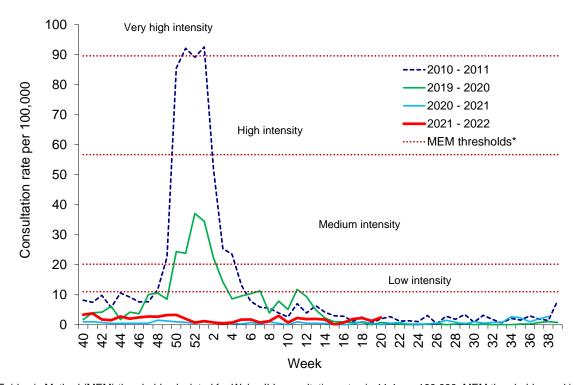
Confirmed influenza case numbers have increased during April, and include a number of community cases confirmed in sentinel GPs. This is later than usual seasonal activity, at low levels.

During Week 20 (ending 22/05/2022) there were 28 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 decrease 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 20 was 2.4 consultations per 100,000 practice population (Table 1). This increased compared to the previous week (1.3 consultations per 100,000) but 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 141.3 per 100,00 practice
 population during Week 20, this is an increase compared to the previous week (111.3 per 100,000) (Table 2).
 Weekly consultations also increased 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 20 decreased to 16.1% (Figure 8).
- During Week 20, 1,114 specimens received multiplex respiratory panel testing mainly from patients attending hospitals. These results do not include samples tested solely for SARS-CoV2. There were 15 influenza (11 influenza A(H3N2), two influenza A(H1N1)pdm09 and two influenza B), 23 RSV, 55 SARS-CoV2, 176 rhinoviruses, 83 parainfluenza, 49 adenoviruses, 19 enteroviruses, one human metapneumovirus an one bocavirus detected in Week 20 (Figure 4). Additionally, 2,061 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 2,061 samples, 13 were positive for influenza (11 untyped influenza A and two influenza B), four were positive for RSV and 76 were positive for SARS-CoV2 (Figure 5). 73 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 a patient with ILI collected by a **sentinel GP** during Week 20 (as at 25/05/2022), the sample was negative for all routinely tested respiratory pathogens.
- Confirmed RSV case incidence in children aged under 5 decreased, and remains at the threshold that would usually indicate low levels of circulation. In week 20 there were 12.3 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 20, 14 ARI outbreaks were reported to the Public Health Wales Health Protection team, all were reported as COVID-19 outbreaks. All 14 outbreaks were in residential homes.
- According to EuroMoMo analysis, all-cause deaths in Wales were not significantly in excess during week 19.

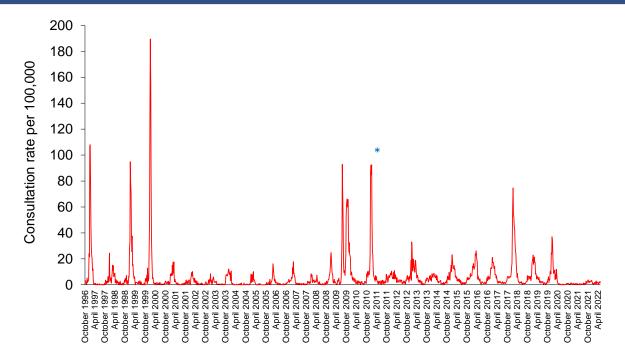
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 22/05/2022).



^{*} 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 20 2022).



^{*} Reporting changed to Audit+ surveillance system

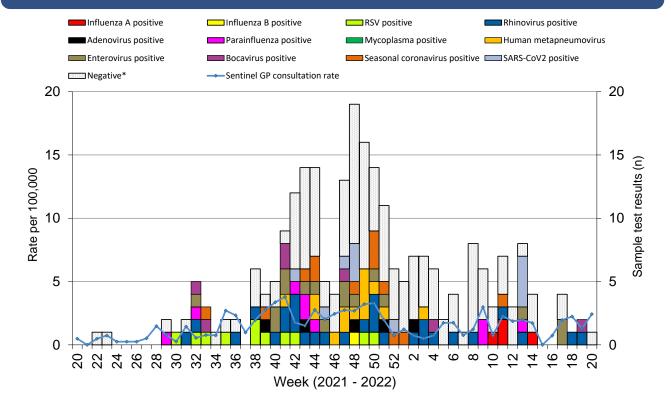
Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 15 – week 20 2022 (as of 22/05/2022).

Age						
group	15	16	17	18	19	20
< 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	0.0	0.0	0.0	0.0
15 - 24	0.0	0.0	6.6	2.2	4.7	2.4
25 - 34	0.0	1.9	1.9	2.0	0.0	10.7
35 - 44	0.0	0.0	2.0	0.0	2.1	4.4
45 - 64	0.0	0.9	0.0	2.8	1.0	0.0
65 - 74	0.0	2.2	2.2	6.6	2.3	0.0
75+	0.0	0.0	4.6	2.3	0.0	2.5
Total	0.0	0.7	2.0	2.2	1.3	2.4

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 15 – week 20 2022 (as of 22/05/2022).

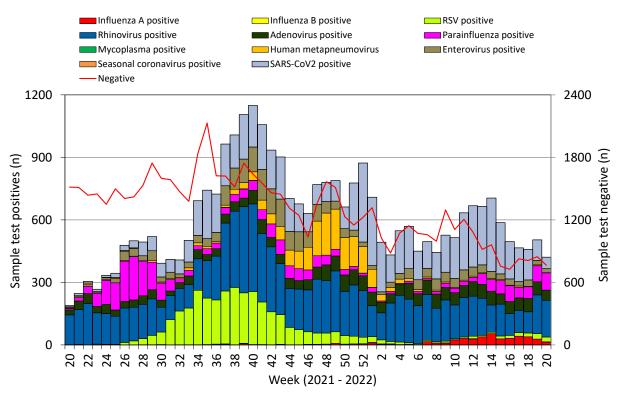
Age						
group	15	16	17	18	19	20
< 1	367.7	918.3	728.3	475.7	563.5	1069.0
1 - 4	287.8	377.9	418.4	484.9	453.6	684.1
5 - 14	74.8	92.9	115.6	135.2	119.8	182.7
15 - 24	89.3	143.8	161.5	109.8	90.9	130.6
25 - 34	193.7	105.0	120.5	109.9	119.8	107.2
35 - 44	134.2	94.8	118.5	75.8	64.9	115.3
45 - 64	143.8	109.1	120.2	101.3	82.0	101.5
65 - 74	128.2	110.8	158.6	110.1	93.8	97.3
75+	22.1	156.0	114.7	120.6	110.9	77.5
Total	125.3	130.2	143.4	123.8	111.3	141.3

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 15/05/2022, by week of sample collection, week 20 2021 to week 20 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 22/05/2022 by week of sample collection, week 20 2021 to week 20 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 22/05/2022 by week of sample collection, week 20 2021 to week 20 2022.

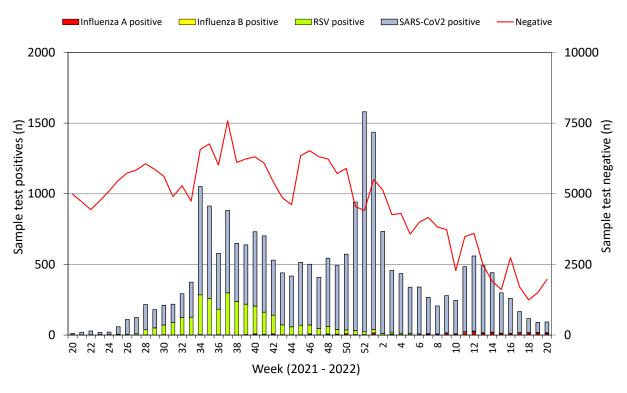
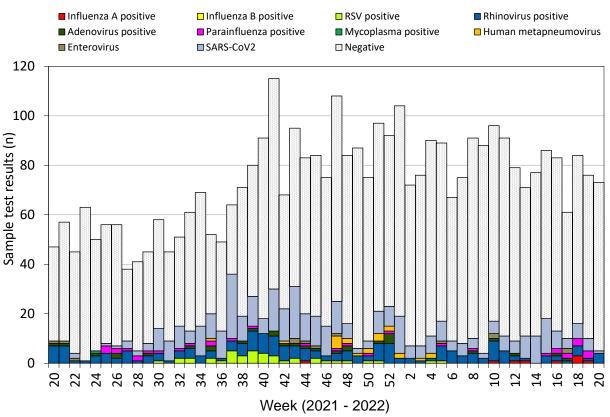
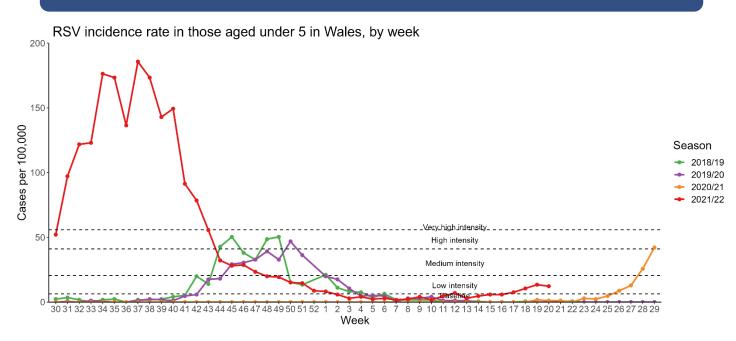


Figure 6. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 20 2021 to Week 20 2022.



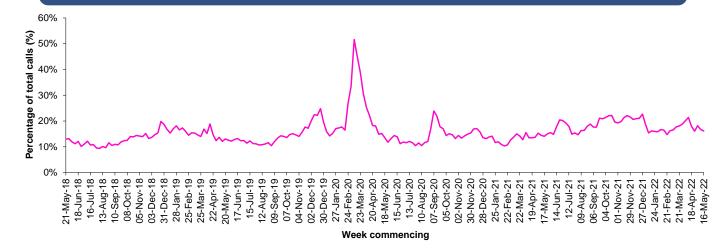
This chart summarises respiratory panel test data and does not include data for patients tested SOLEY for SARS-CoV2. Samples which test positive for more than on pathogen will appear more than once in the chart.

Figure 7. RSV incidence rate per 100,000 population aged under five years, week 30 2017 to Week 20 2022.



Calls to NHS Direct Wales

Figure 8. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 20 2018 - Week 20 2022 (as of 22/05/2022).



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 19, community and syndromic influenza indicators remain low in the UK. GP ILI consultations
 decreased in Northern Ireland to 0.3 per 100,000 and in Scotland to 0.6 per 100,000 well below the baseline
 intensity thresholds. The weekly ILI GP consultation rate in England reported through the RCGP system
 increased to 1.4 per 100,000, well below the MEM threshold for baseline activity (12.2 per 100,000).
- During week 19, 101 samples tested positive for influenza (including 29 influenza A(H3N2), one influenza A(H1N1)pdm09, 69 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 19, influenza activity continues to be reported in some countries in the WHO European Region. During week 19, a total of 892 sentinel specimens were tested for influenza, 85 of which were positive, 83 influenza A (48 influenza A(H3), seven influenza A(H1)pdm09 and 28 influenza A(not subtyped)) and two influenza B.
 Source: Flu News Europe: http://www.flunewseurope.org/
- The WHO reported on 16/05/2022 that globally, influenza activity continued to decrease, following a peak in March 2022. In the temperate zones of the northern hemisphere, influenza activity decreased or remained stable. In the temperate zones of the southern hemisphere, influenza activity remained low overall. In North America, influenza activity was stable and influenza positivity was higher than usual for this time of year. In Europe, influenza activity continues to decline, with influenza A(H3N2) predominant. In Central Asia, a single influenza B detection was reported in Kazakhstan. In East Asia, influenza activity continued to decrease in China, and remained low in the rest of the subregion. In Northern Africa, detections of mainly influenza A(H3N2) were reported in Tunisia, and increasing detections of influenza B were reported in Egypt. In Western Asia, influenza activity was low across most reporting countries. 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 remained low. In Southern Asia, influenza virus detections were at low levels overall. In South-East Asia, low detections of influenza A(H3N2) were reported in Singapore and Timor-Leste.
- Based on FluNet reporting (as of 13/05/2022), during the time period from 18/04/2022 01/05/2022, National Influenza Centres and other national influenza laboratories from 111 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 346,542 specimens during that time period, 27,625 were positive for influenza viruses, of which 27,081 were typed as influenza A (of the subtyped influenza A viruses, 283 were influenza A(H1N1)pdm09 and 4,098 were influenza A(H3N2)) and 544 influenza B (of the characterised influenza B viruses none belonged to B-Yamagata lineage and 257 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 19 (ending 14/05/2022) influenza activity continues to increase in some areas of the United States. Nationally, 4,418 (7.0%) out of 62,961 specimens have tested positive for influenza in week 19, of these positives 4,364 (98.8%) were influenza A and 54 (1.2%) were influenza B. Further characterisation has been carried out on 12,966 specimens by public health laboratories, and 436 samples tested positive for influenza, 433 influenza A (255 influenza A(H3N2), one influenza A(H1N1)pdm09 and 177 influenza A(not subtyped)) and three influenza B.

 Source: CDC Weekly US Influenza Surveillance Report: http://www.cdc.gov/flu/weekly/
- The Public Health Agency of Canada reported that during week 19, influenza activity has reached seasonal thresholds. The percentage of visits to healthcare professionals that were due to ILI was 1.8% in week 19. The percentage of tests positive for influenza was 12.6% during week 19.
 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 25/05/2022 is 874,373 with 51 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 7,467 with one new death 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 18 was 10,260. 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 25/05/2022, there have been 22,238,713 reported confirmed cases of COVID-19 in the UK, of which 43,505 were newly reported in the previous 7 days. The total deaths within 28 days of a positive test was 177,977 with 453 reported in the previous 7 days. Latest UK data is available from: https://coronavirus.data.gov.uk/
- As at 24/05/2022, WHO have reported 523,786,368 confirmed COVID-19 cases globally, with 357,682 reported in the previous 24 hours. There have been 6,279,667 deaths, of which 1,030 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.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

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