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



Wednesday 4th August 2021 (covering week 30 2021)

Current level of influenza activity: Baseline activity

Influenza activity trend: Stable

Confirmed influenza cases since 2020 week 40: 43 (11 influenza A(H3N2), 16 influenza A(not subtyped) and 16

influenza B).

Key points - Wales

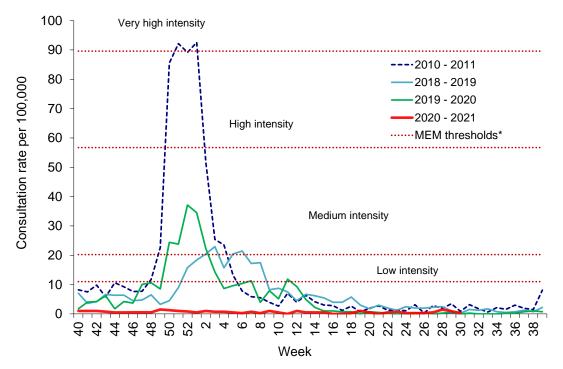
Surveillance indicators suggest that RSV is circulating in Wales and influenza is not.

During week 30 (ending 01/08/2021) there has been a continued increase in numbers of confirmed cases of Respiratory Synctial Virus (RSV) in children aged under 5 years, mainly in north Wales. This week activity remained above the threshold that would normally indicate high intensity seasonal activity. RSV did not circulate over the 2020-21 winter. The current increase in cases is earlier than the usual RSV season in Wales and it is unclear whether it will follow the usual epidemic pattern for RSV, there is potential for higher than usual numbers of cases this year. Two influenza cases were confirmed during week 30; one influenza A(H3) and one influenza B. COVID-19 cases continue to be detected in symptomatic patients in hospital and in the community, however there have been decreases within the most recent weeks. Rhinovirus, RSV and parainfluenza are the most commonly detected cause of non-COVID-19 Acute Respiratory Infection (ARI), parainfluenza (type 3) cases have decreased following a recent peak in activity, particularly in children.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 30 was 0.3 consultations per 100,000 practice population (Table 1). This is a decrease compared to the previous week (0.9 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 65.0 per 100,000 practice population during week 30, this is a decrease compared to the previous week (67.8 per 100,000) (Table 2). Weekly consultations for Upper Respiratory Tract Infections and Lower Respiratory Tract Infections increased compared to the previous week. The age-group specific consultation rate for ARI during week 30 was highest in under one year olds (517.2 per 100,000 practice population). In recent weeks ARI consultations have increased in children aged under 5 years.
- The percentage of calls to **NHS Direct Wales** which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) during week 30 increased to 15.4% (Figure 8).
- During week 30, 1,420 specimens received respiratory panel testing, mainly from patients attending hospitals with ARI symptoms. These results do not include samples tested solely for SARS-CoV2. There was one influenza A, one influenza B, 59 RSV, 142 rhinoviruses, 82 parainfluenza, 34 adenoviruses and five human metapneumoviruses detected in week 30 (Figure 4). Additionally, 3,607 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 3,607 samples, three were positive for influenza, 68 were positive for RSV and 140 were positive for SARS-CoV2 (Figure 5). Fifty-eight 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
- One surveillance sample from patients with ILI was collected by sentinel GPs during week 30 (as at 28/07/2021), the sample was positive for RSV B.
- Confirmed RSV case numbers in children aged under 5 continue to increase. Activity has exceeded the threshold that would usually indicate high levels of circulation. In week 30 there were 52.1 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 per 100,000.
- During week 30, 45 **ARI outbreaks** were reported to the Public Health Wales Health Protection team, all were reported as COVID-19 outbreaks. Thirty-two were in residential homes, three were in a school/nursery settings, three were in a hospital and seven were in a community, mixed or other setting.
- According to EuroMoMo analysis, all-cause deaths in Wales were not significantly in excess during week 29 (latest data).

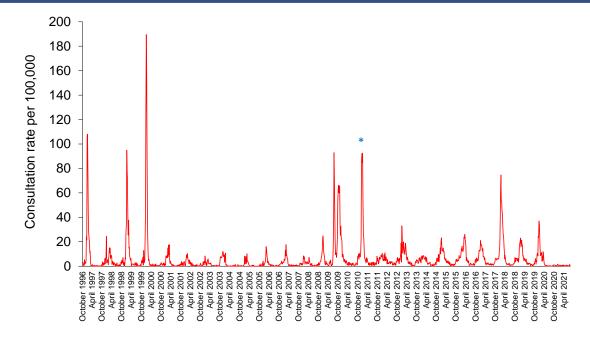
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 01/08/2021).



^{*} 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 30 2021).



^{*} Reporting changed to Audit+ surveillance system

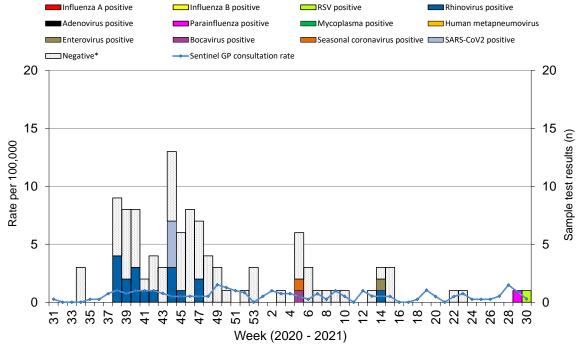
Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 24- week 30 2021 (as of 01/08/2021).

Age						
group	25	26	27	28	29	30
< 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	2.3	4.5	0.0	0.0
25 - 34	0.0	0.0	0.0	0.0	0.0	0.0
35 - 44	0.0	2.0	2.1	0.0	2.4	0.0
45 - 64	0.0	0.0	0.0	0.0	0.0	1.1
65 - 74	2.2	0.0	0.0	2.2	2.6	0.0
75+	0.0	0.0	0.0	7.1	2.9	0.0
Total	0.3	0.3	0.5	1.5	0.9	0.3

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 24 – week 30 2021 (as of 01/08/2021).

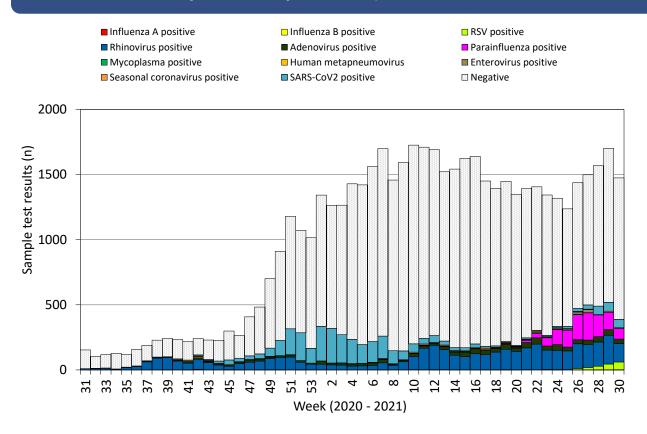
Age	25	26	27	28	29	30
group	23	20		20	29	30
< 1	1342.3	665.8	684.4	818.8	567.3	517.2
1 - 4	942.3	500.5	430.1	531.8	432.4	244.2
5 - 14	94.8	55.1	47.1	83.7	16.4	45.8
15 - 24	79.3	38.2	41.2	105.8	74.8	59.9
25 - 34	62.0	45.6	38.2	88.3	40.5	65.9
35 - 44	61.7	30.6	30.8	63.2	51.0	56.6
45 - 64	53.3	24.4	23.5	68.4	43.1	47.1
65 - 74	57.5	30.4	19.1	52.6	47.4	36.4
75+	39.0	33.5	24.0	80.6	86.2	79.7
Total	105.0	57.0	50.8	99.0	67.8	65.1

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 04/08/2021, by week of sample collection, week 31 2020 to week 30 2021.



^{*} Tested negative for influenza, adenovirus, rhinovirus, RSV, parainfluenza, mycoplasma, human metapneumovirus, enterovirus, bocavirus and coronaviruses.

Figure 4. Specimens submitted for virological testing for hospital patients and non-sentinel GPs as of 04/08/2021 by week of sample collection, week 31 2020 to week 30 2021.



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.

Figure 5. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 04/08/2021 by week of sample collection, week 46 2020 to week 30 2021.

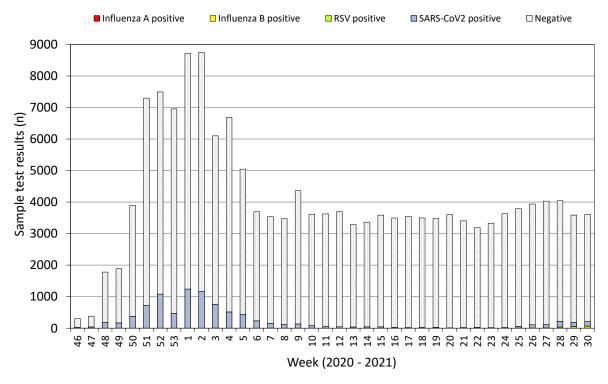
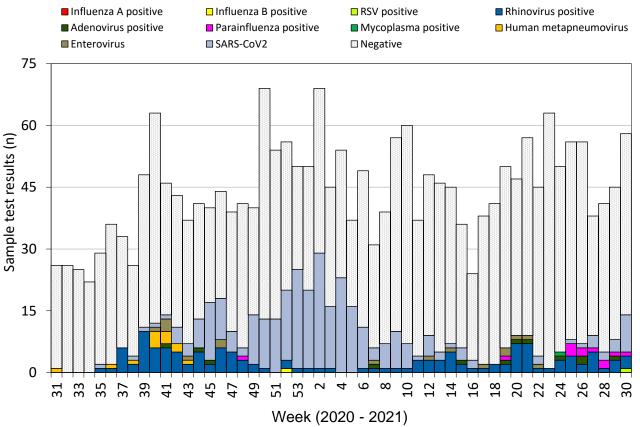
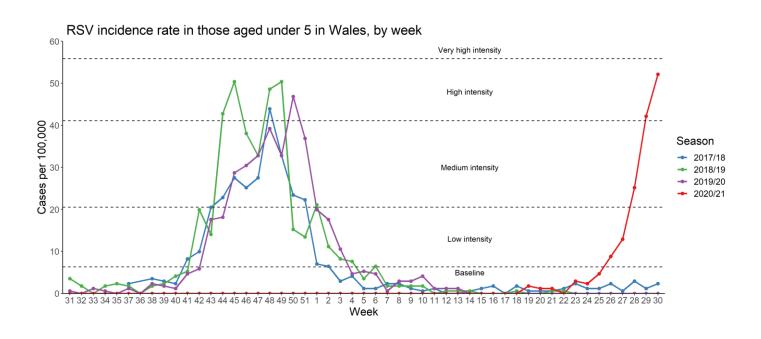


Figure 6. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 31 2020 to week 30 2021.



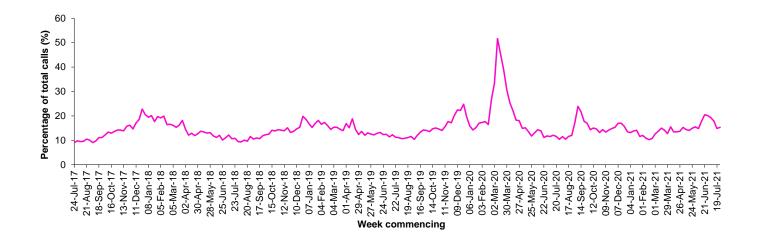
This chart summarises respiratory panel test data and does not include data for patients tested SOLEY for SARS-CoV2.

Figure 7. RSV incidence rate per 100,000 population aged under five years, week 31 2017 to week 30 2021.



Calls to NHS Direct Wales

Figure 8. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 31 2017 - week 30 2021 (as of 04/08/2021).



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 2020/21 (as of 23/03/2021).

Influenza immunisation uptake in the 2020/21 season					
People aged 65y and older	76.5%				
People younger than 65y in a clinical risk group	51.0%				
Children aged two & three years	56.3%				
Children aged four to ten years*	72.4%				
NHS staff	63.4%				
NHS staff who have direct patient contact	65.2%				

^{*} 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 29, the majority of community and syndromic influenza indicators remained low in the UK. GP ILI consultations decreased in Northern Ireland to 0.8 per 100,000 and increased in Scotland to 0.5 per 100,000, well below the baseline intensity thresholds. The weekly ILI GP consultation rate in England reported through the RCGP system remained stable at 0.7 per 100,000, well below the MEM threshold for baseline activity (12.2 per 100,000).
- During week 28, one of the 2,191 respiratory test results reported through Public Health England's DataMart scheme tested positive for influenz B. UK summary data are available from the <u>Public Health England</u> National Influenza and COVID-19 Surveillance Report.
- The WHO and the European Centre for Disease Prevention and Control (ECDC) reported that during weeks 25-28, influenza activity remained at inter-seasonal levels across the WHO European Region.
 Source: Flu News Europe: http://www.flunewseurope.org/
- The WHO reported on 19/07/2021 that globally, despite continued or even increased testing in some countries, influenza activity remained at lower levels than expected for this time of year. In the temperate zone of the northern hemisphere, influenza activity remained at inter-seasonal levels. In the temperate zones of the southern hemisphere, influenza activity remained at inter-seasonal levels. In the Caribbean and Central American countries, there were no influenza detections reported. In tropical South America, no influenza detections were reported. In tropical Africa, a few influenza detections were reported in some countries in Western and Eastern Africa. In Southern Asia, a few influenza detections were reported from India, Nepal and Pakistan. In South East Asia, a few influenza detections were reported from the Philippines. Worldwide, influenza B accounted for the majority of the very low numbers of detections reported.
- Based on FluNet reporting (as of 16/07/2021), during the time period from 21/06/2021 04/07/2021,
 National Influenza Centres and other national influenza laboratories from 80 countries, areas or territories
 reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System
 laboratories tested more than 156,034 specimens during that time period, 631 were positive for influenza
 viruses, of which 143 were typed as influenza A (of the subtyped influenza A viruses, 74 were influenza
 A(H1N1)pdm09 and 51 were influenza A(H3N2)) and 488 influenza B (of the characterised influenza B
 viruses two belonged to the B-Yamagata lineage and 402 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 25/07/2021, the GP influenza-like illness activity (ILI)
consultation rates have decreased. There have been no influenza viruses detected this season to date,
rhinovirus has been the most commonly detected virus. RSV was the virus most commonly detected
through SARI surveillance in the past week.

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 18/07/2021), influenza-like illness (ILI) activity in the community remains at low levels, a grdual decrease in activity has been seen since June 2021. To date, the majority of nationally reported laboratory-confirmed influenza cases were influenza A (69.9%).

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 has reported an out of season increase in RSV activity, with an increase in sample positivity since early March 2021.

Source: CDC RSV national trends

https://www.cdc.gov/surveillance/nrevss/rsv/natl-trend.html

Coronavirus disease 2019 (COVID-19) - UK and international summary

- The number of confirmed cases in Wales reported as at 04/08/2021 is 243,857, with 608 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 5,620, with four 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 2021 week 28 was 7,905. Latest COVID-19 data from Public Health Wales is available from: https://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/ Public Health Wales produce a daily statement on COVID-19, available from: https://covid19-phwstatement.nhs.wales/
- As at 03/08/2021, there have been 5,923,820 reported confirmed cases of COVID-19 in the UK, of which 21,691 were newly reported in the previous 24 hours. The total deaths within 28 days of a positive test was 129,881, with 138 reported in the previous 24 hours. Latest UK data is available from: https://coronavirus.data.gov.uk/
- As at 03/08/2021, WHO have reported 198,778,175 confirmed COVID-19 cases globally, with 424,716 reported in the previous 24 hours. There have been 4,235,559 deaths, of which 7,766 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 14/04/2021 WHO reported seven additional cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV), including three associated deaths. Globally, 2,574 laboratory confirmed cases of human infection with MERS-CoV, including 886 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 (16/04/2021 to 21/05/2021) reports that no new cases of avian influenza A(H7N9) were reported. Since February 2013, a total of 1,568 laboratoryconfirmed cases of human infection with avian influenza A(H7N9), including at least 616 deaths, have been reported:
 - https://www.who.int/publications/m/item/influenza-at-the-human-animal-interface-summary-and-assessment-21may-2021
 - 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