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



Wednesday 8th September 2021 (covering week 35 2021)

Current level of influenza activity: Baseline activity

Influenza activity trend: Stable

Confirmed influenza cases since 2020 week 40: 60 (11 influenza A(H3N2), 26 influenza A(not subtyped) and 23

influenza B).

Key points - Wales

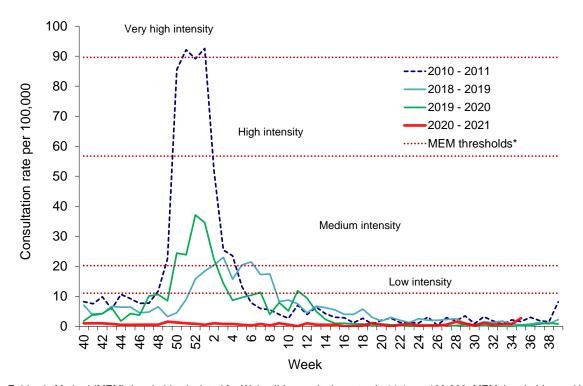
Surveillance indicators suggest that RSV is circulating in Wales and influenza is not.

During Week 35 (ending 05/09/2021) there has been a decrease in the number of confirmed cases of Respiratory Synctial Virus (RSV) in children aged under 5 years across Wales. This week incidence of confirmed RSV cases has decreased but remains above the threshold that would normally indicate very high intensity seasonal activity, although testing levels are also higher currently than in previous seasons. 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. Four influenza cases were confirmed during week 35. COVID-19 cases continue to be detected in symptomatic patients in hospital and in the community. RSV and rhinovirus are the most commonly detected cause of non-COVID-19 Acute Respiratory Infection (ARI).

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 35 was 2.7 consultations per 100,000 practice population (Table 1). This increased compared to the previous week (0.8 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 104.1 per 100,00 practice population during Week 35, this is a decrease compared to the previous week (104.6 per 100,000) (Table 2). Weekly consultations for Upper Respiratory Tract Infections increased and Lower Respiratory Tract Infections decreased compared to the previous week. The age-group specific consultation rate for ARI during Week 35 was highest in under one year olds (1002.7 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 35 increased to 18.8% (Figure 8).
- During Week 35, 2,089 specimens received multiplex respiratory panel testing, mainly from patients attending hospitals. These results do not include samples tested solely for SARS-CoV2. There was one influenza B, 221 RSV, 216 rhinoviruses, 29 adenoviruses, 28 parainfluenza and 11 human metapneumoviruses detected in Week 35 (Figure 4). Additionally, 5,239 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 5,239 samples, three were positive for influenza (not further typed), 260 were positive for RSV and 600 were positive for SARS-CoV2 (Figure 5). Fifty 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
- No surveillance samples from patients with ILI were collected by sentinel GPs during Week 35 (as at 08/09/2021).
- Confirmed RSV case numbers in children aged under 5 decreased this week after increases recent weeks. Activity has exceeded the threshold that would usually indicate very high levels of circulation. In Week 35 there were 171.6 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 per 100,000.
- During Week 35, 56 **ARI outbreaks** were reported to the Public Health Wales Health Protection team, all were reported as COVID-19 outbreaks. Forty-seven were in residential homes, two were in hospitals, one was in a school/nursery setting and six were in a community, mixed or other setting.
- According to EuroMoMo analysis, all-cause deaths in Wales were not significantly in excess during week 34 (latest data).

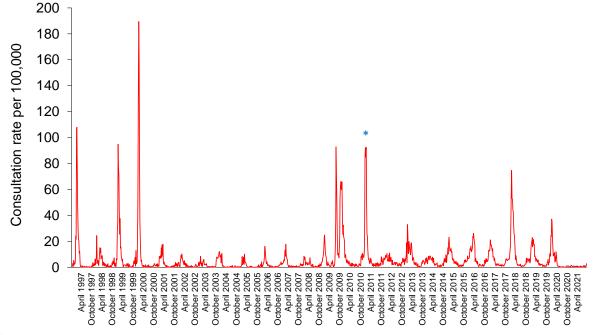
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 05/09/2021).



^{*} 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 35 2021).



^{*} Reporting changed to Audit+ surveillance system

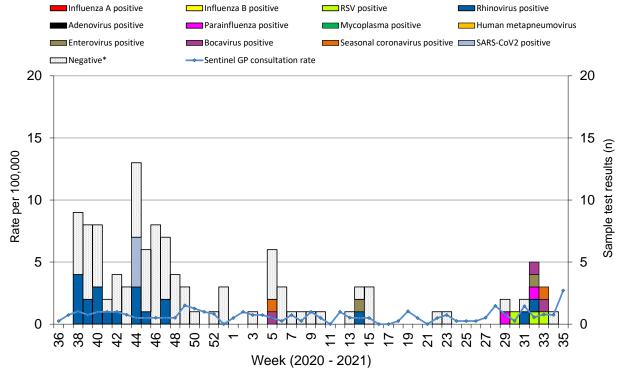
Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 30- Week 35 2021 (as of 05/09/2021).

Age						
group	30	31	32	33	34	35
< 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	0.0	0.0	0.0	2.2
25 - 34	0.0	4.2	0.0	4.2	0.0	2.0
35 - 44	0.0	0.0	0.0	2.1	0.0	2.0
45 - 64	1.0	1.0	1.0	0.0	2.8	7.4
65 - 74	0.0	0.0	0.0	0.0	0.0	0.0
75+	0.0	3.1	2.6	0.0	0.0	0.0
Total	0.3	1.0	0.6	0.8	0.8	2.7

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 30 – Week 35 2021 (as of 05/09/2021).

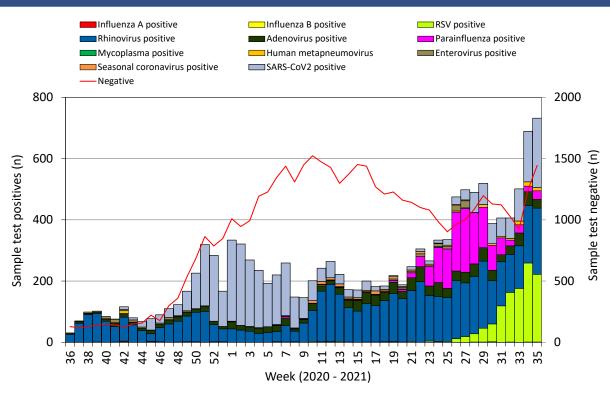
Age						
group	30	31	32	33	34	35
< 1	517.2	367.1	568.7	1030.1	1119.5	1002.7
1 - 4	244.2	411.2	420.7	404.1	514.5	536.3
5 - 14	45.8	27.9	48.2	27.3	41.3	65.7
15 - 24	59.9	95.9	75.1	95.8	131.3	134.3
25 - 34	65.9	94.7	74.3	41.8	88.7	98.0
35 - 44	56.6	54.0	38.3	50.5	84.2	74.3
45 - 64	47.1	63.4	68.8	64.7	78.5	72.1
65 - 74	36.4	56.7	49.1	56.1	57.7	60.1
75+	79.7	59.7	71.5	83.5	86.7	67.8
Total	65.1	80.0	79.4	80.5	104.6	104.1

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 05/09/2021, by week of sample collection, week 36 2020 to Week 35 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 05/09/2021 by week of sample collection, week 36 2020 to Week 35 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 05/09/2021 by week of sample collection, week 46 2020 to Week 35 2021.

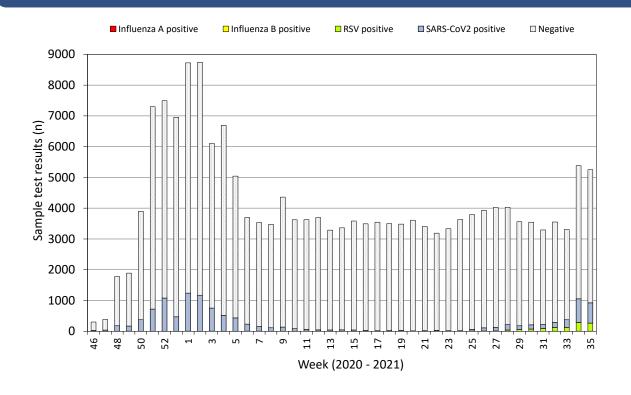
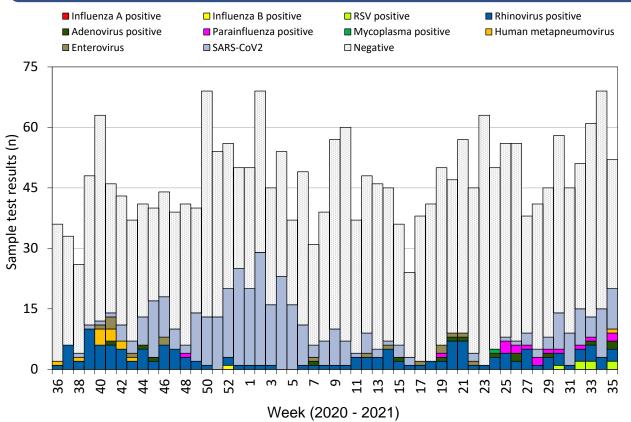
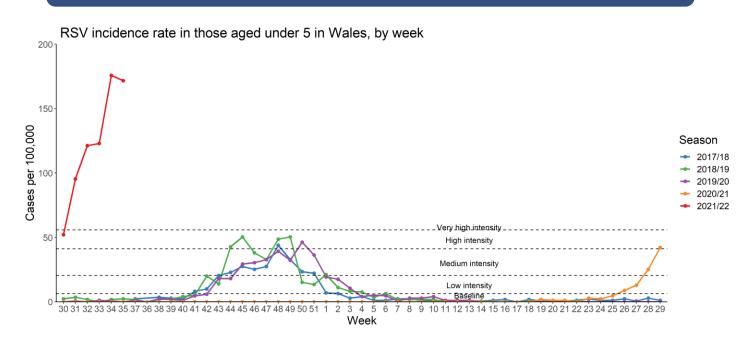


Figure 6. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 36 2020 to Week 35 2021.



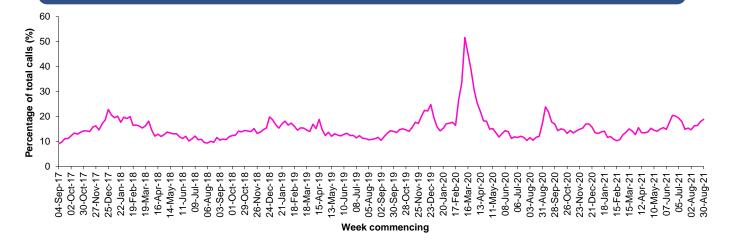
This chart summarises respiratory panel test data and does not include data for patients tested SOLEY for SARS-CoV2.

Figure 7. RSV incidence rate per 100,000 population aged under five years, week 30 2017 to Week 35 2021.



Calls to NHS Direct Wales

Figure 8. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 35 2017 - Week 35 2021 (as of 05/09/2021).



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 33, the majority of community and syndromic influenza indicators remained low in the UK. GP ILI consultations increased in Scotland to 0.5 per 100,000 and decreased inNorthern Ireland 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 remained stable at 1.0 per 100,000, well below the MEM threshold for baseline activity (12.2 per 100,000).
- During week 34, one of the 2,350 respiratory test results reported through Public Health England's DataMart scheme tested positive for influenza. 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 29-32, influenza activity remained at inter-seasonal levels across the WHO European Region.
 Source: Flu News Europe: http://www.flunewseurope.org/
- The WHO reported on 30/08/2021 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, sporadic influenza A and B detections were reported from Mexico. In tropical South America, no influenza detections were reported. In tropical Africa, influenza detections were reported in some countries in Western and Eastern Africa. In Southern Asia, influenza detections of predominantly influenza A(H3N2) were reported from India and Nepal. In South East Asia, an influenza A(H3N2) was reported from the Timor-Leste. Worldwide, influenza A detections accounted for the majority of the low numbers of detections reported.
- Based on FluNet reporting (as of 27/08/2021), during the time period from 02/08/2021 15/08/2021, National Influenza Centres and other national influenza laboratories from 81 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 215,281 specimens during that time period, 1,424 were positive for influenza viruses, of which 927 were typed as influenza A (of the subtyped influenza A viruses, 55 were influenza A(H1N1)pdm09 and 830 were influenza A(H3N2)) and 497 influenza B (of the characterised influenza B viruses none belonged to the B-Yamagata lineage and 455 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 29/08/2021, influenza-like illness activity (ILI) has remained low, community ILI activity remains very low for this time of year. There have been no influenza viruses detected this season to date, rhinovirus remains the most commonly detected virus. parainfluenza 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 29/08/2021), influenza-like illness (ILI) activity in the community remains at low levels, a gradual decrease in activity has been seen since June 2021. To date, the majority of nationally reported laboratory-confirmed influenza cases were influenza A (64.4%).

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. Flu activity is at low levels.

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 08/09/2021 is 298,979, with 2,669 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 5,712, with 10 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 33 was 7,995. 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 08/09/2021, there have been 7,094,592 reported confirmed cases of COVID-19 in the UK, of which 38,975 were newly reported in the previous 24 hours. The total deaths within 28 days of a positive test was 133,674, with 191 reported in the previous 24 hours. Latest UK data is available from: https://coronavirus.data.gov.uk/
- As at 07/09/2021, WHO have reported 221,134,742 confirmed COVID-19 cases globally, with 355,094 reported in the previous 24 hours. There have been 4,574,089 deaths, of which 5,499 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 17/08/2021 WHO reported four additional cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV), including one associated death. Globally, 2,578 laboratory confirmed cases of human infection with MERS-CoV, including 888 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 (22/05/2021 to 22/06/2021) 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-22-june-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