

Current level of influenza activity: *Baseline activity*

Influenza activity trend: *Stable*

Confirmed influenza cases since 2021 week 40: 7 (1 influenza A(H3N2), 4 influenza A(not subtyped) and 2 influenza B).

Key points – Wales

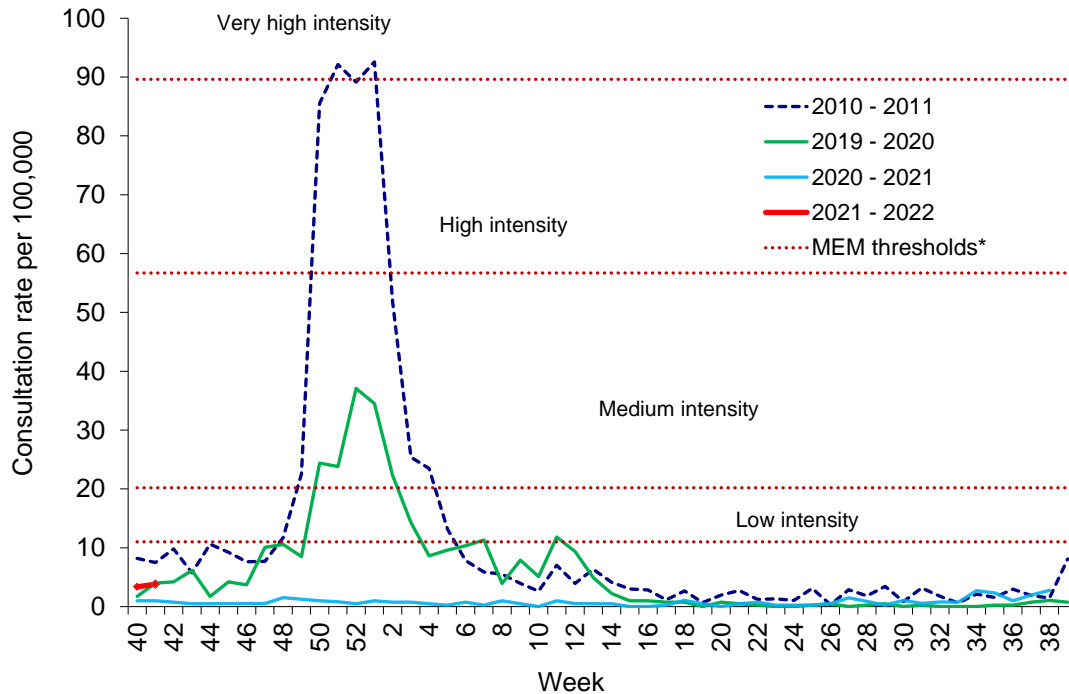
Surveillance indicators suggest that RSV is circulating in Wales and influenza is not.

During Week 41 (ending 17/10/2021) there has been a decrease in the number of confirmed cases of Respiratory Syncytial Virus (RSV) in children aged under 5 years across Wales, compared to the previous week. This week, incidence of confirmed RSV cases remains above the threshold that would normally indicate very high intensity seasonal activity, although testing levels are also currently higher than in previous seasons. RSV did not circulate over the 2020-21 winter. The current increase in cases began earlier than the usual RSV season in Wales and it is unclear whether it will follow the usual epidemic pattern for RSV. One influenza case was confirmed during week 41. 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 41 was 3.8 consultations per 100,000 practice population (Table 1). This increased compared to the previous week (3.4 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 Respiratory Infections (ARI)** was 198.6 per 100,000 practice population during Week 41, this is an increase compared to the previous week (196.0 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 41 was highest in under one year olds (1,514.1 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 41 increased to 22.1% (Figure 8).
- During Week 41, 2,402 specimens received multiplex respiratory panel testing (with 531 also receiving subsequent enterovirus PCR testing), mainly from patients attending hospitals. These results do not include samples tested solely for SARS-CoV2. There were 201 RSV, 470 rhinoviruses, 123 enterovirus, 68 adenoviruses, 48 parainfluenza and 46 human metapneumoviruses detected in Week 41 (Figure 4). Additionally, 7,010 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 7,010 samples, one was positive for influenza B, 159 were positive for RSV and 542 were positive for SARS-CoV2 (Figure 5). One-hundred and thirteen 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 were eight surveillance samples from patients with ILI collected by **sentinel GPs** during Week 41 (as at 20/10/2021), one tested positive for both RSV and bocavirus, two for rhinovirus, two for enterovirus, one for bocavirus, one for human metapneumovirus, and one was negative for all routinely tested respiratory pathogen.
- **Confirmed RSV cases in children aged under 5 decreased this week, remaining above the threshold that would usually indicate very high levels of circulation.** In week 41 there were 90.8 confirmed cases per 100,000 in this age group (Figure 7). The 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 40 (latest data available), 42 **ARI outbreaks** were reported to the Public Health Wales Health Protection team, all were reported as COVID-19 outbreaks. Twenty-eight were in residential homes, five were in hospitals, two were in schools and seven were in a community, mixed or other settings.
- According to **EuroMoMo** analysis, all-cause deaths in Wales were not significantly in excess during week 40 (latest data).

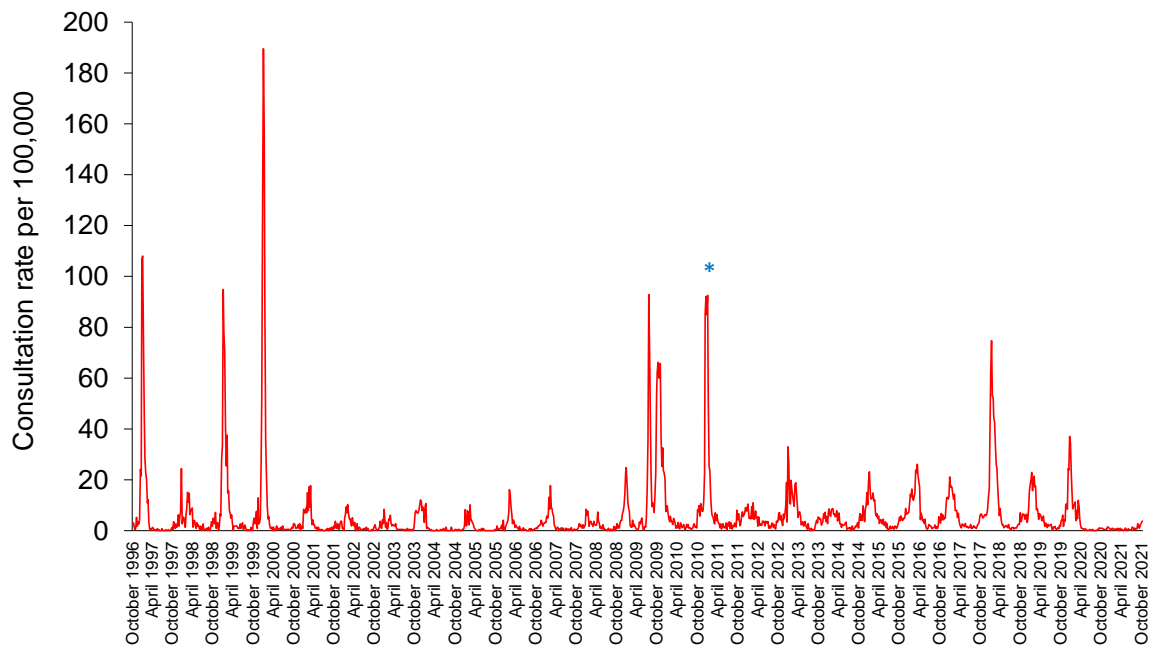
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 17/10/2021).



* 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 41 2021).



* Reporting changed to Audit+ surveillance system

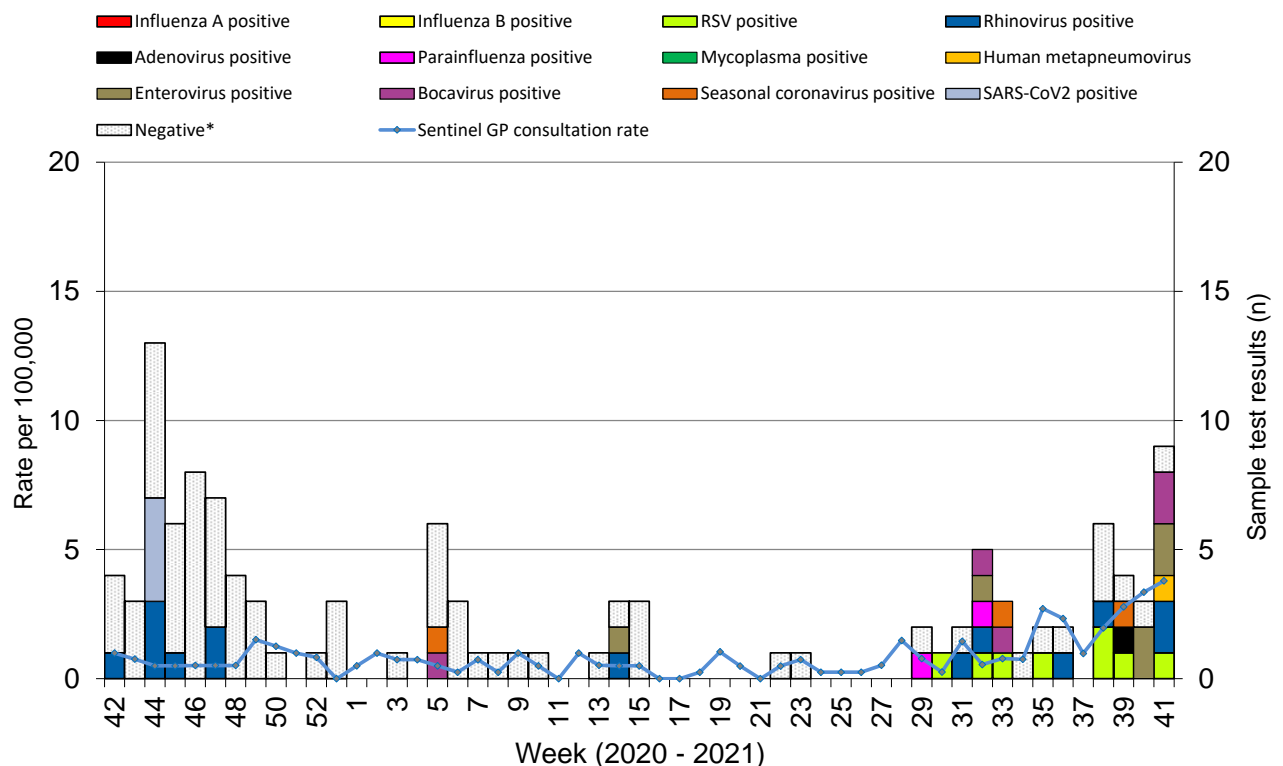
Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 36 – Week 41 2021 (as of 17/10/2021).

Age group	36	37	38	39	40	41
< 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	2.3	2.4	0.0	0.0
15 - 24	2.4	2.2	0.0	4.6	7.0	15.9
25 - 34	4.1	2.0	3.9	2.0	4.1	4.0
35 - 44	4.2	2.0	4.0	8.2	4.2	4.1
45 - 64	2.9	0.9	2.8	2.9	2.9	2.9
65 - 74	0.0	0.0	0.0	0.0	2.3	0.0
75+	2.5	0.0	0.0	0.0	4.9	2.4
Total	2.3	1.0	2.0	2.8	3.4	3.8

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 36 – Week 41 2021 (as of 17/10/2021).

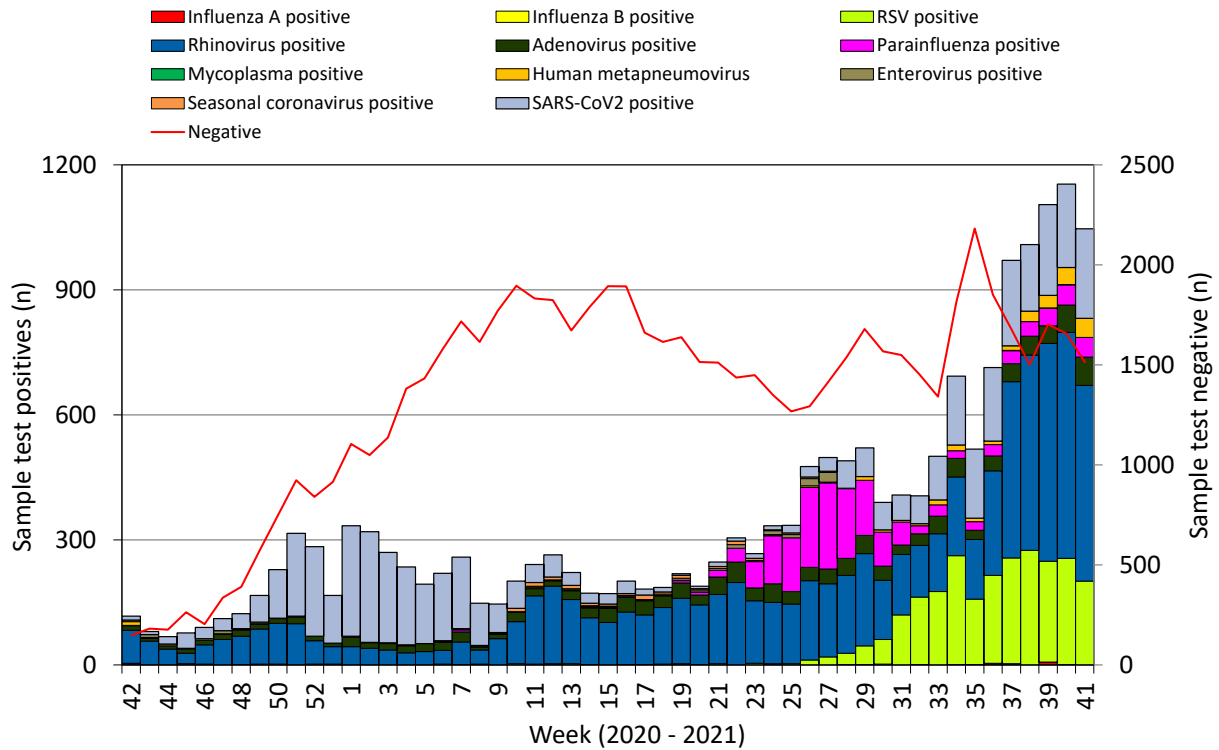
Age group	36	37	38	39	40	41
< 1	946.7	894.0	1556.8	1461.6	1420.2	1514.1
1 - 4	487.7	642.7	783.6	746.0	986.8	975.6
5 - 14	107.2	144.8	183.5	202.0	218.0	204.1
15 - 24	192.5	203.8	165.1	223.2	239.2	247.3
25 - 34	121.1	121.0	113.2	142.2	146.9	133.8
35 - 44	92.8	108.7	124.6	132.5	155.6	175.0
45 - 64	92.4	72.7	104.9	96.9	145.4	132.1
65 - 74	81.5	92.4	98.8	92.8	94.9	134.9
75+	110.4	104.8	104.9	117.3	108.0	119.5
Total	130.4	138.3	158.7	168.2	196.0	198.6

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 17/10/2021, by week of sample collection, week 42 2020 to Week 41 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 17/10/2021 by week of sample collection, week 42 2020 to Week 41 2021.



This chart summarises respiratory panel test data and does not include data for patients tested SOLELY 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. **Data for additional enterovirus testing subsequent the multiplex respiratory panel test are not currently included in the chart, but during week 41 a total of 531 samples tested for enterovirus of which 123 were positive.**

Figure 5. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 17/10/2021 by week of sample collection, week 46 2020 to Week 41 2021.

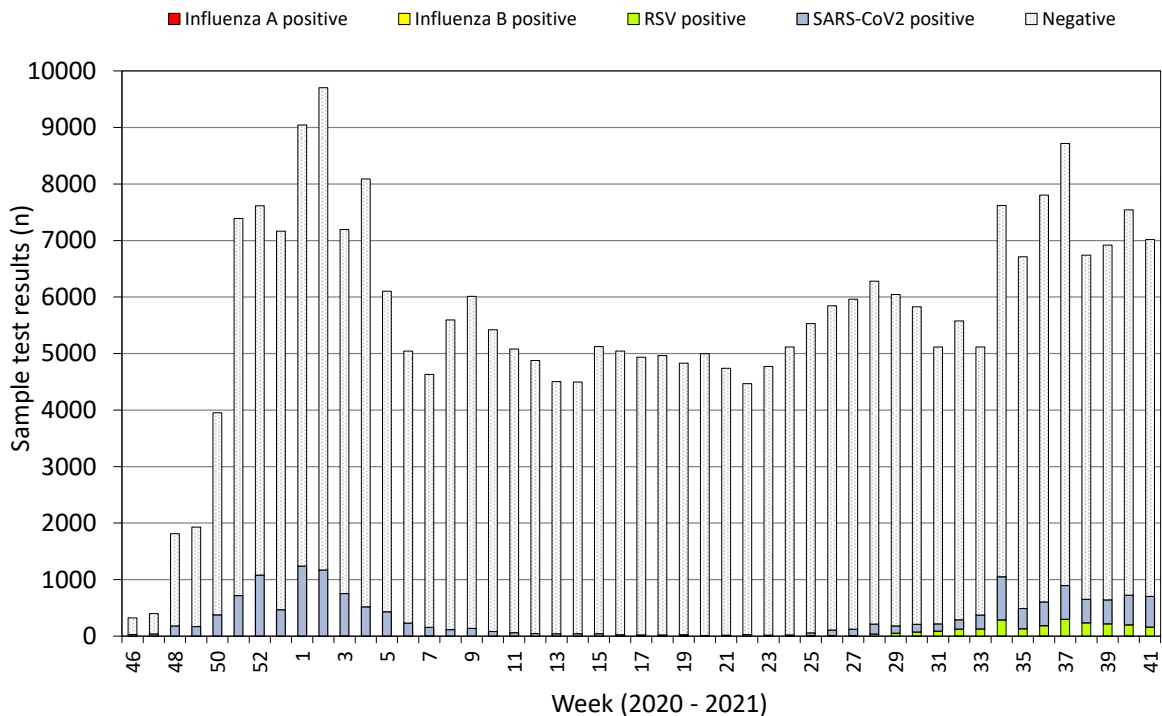
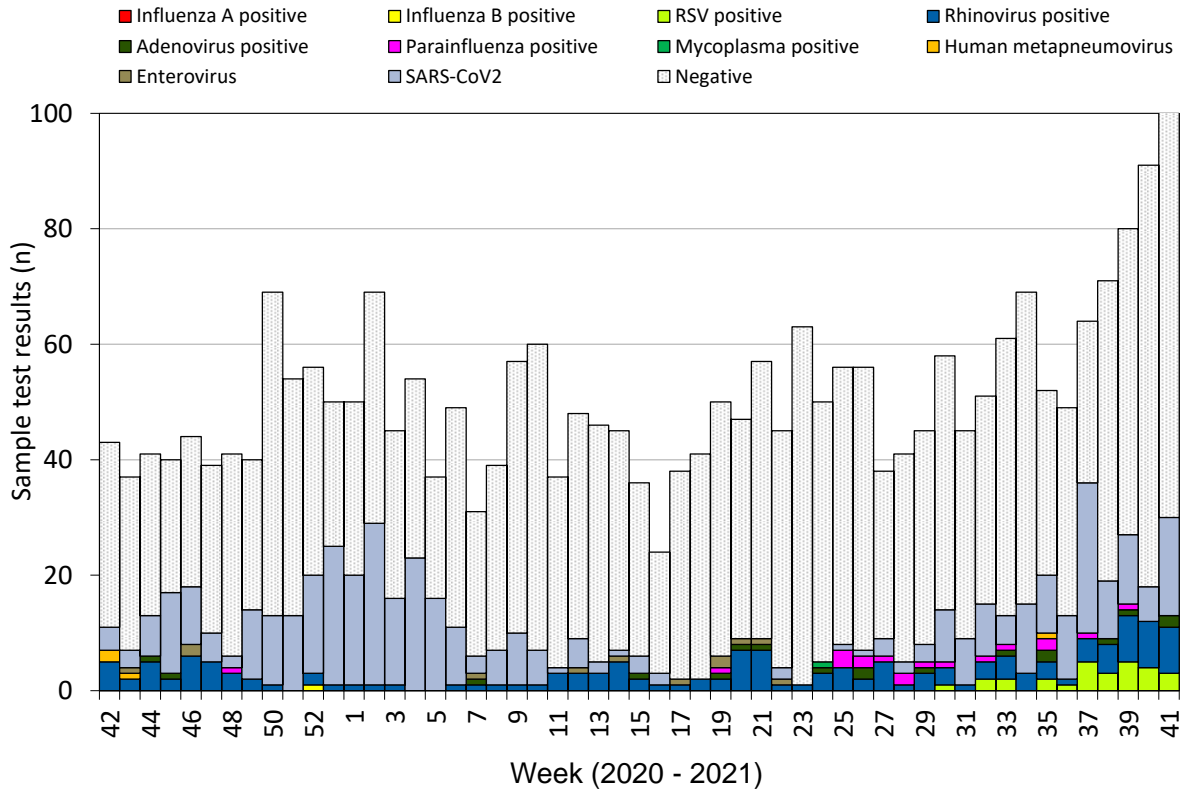
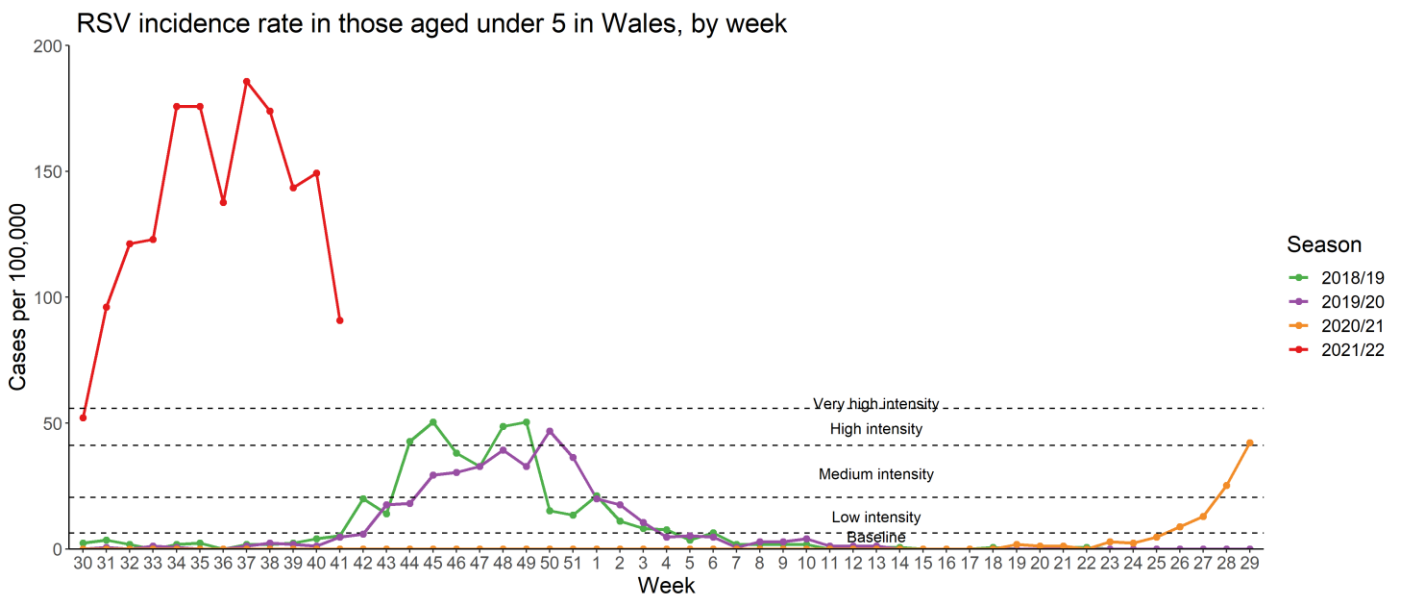


Figure 6. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 42 2020 to Week 41 2021.



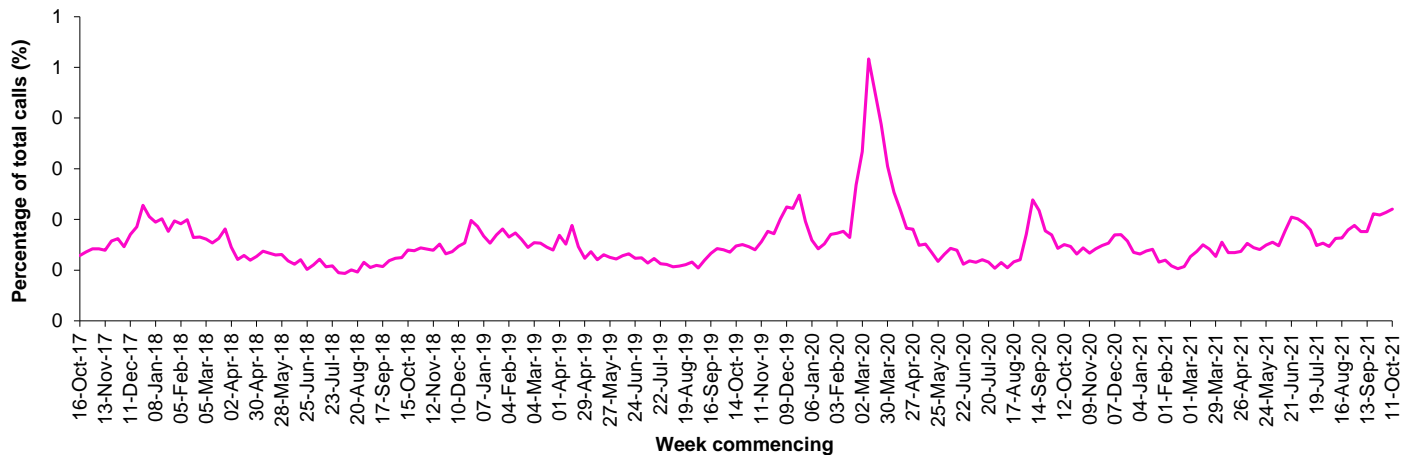
This chart summarises respiratory panel test data and does not include data for patients tested SOLELY for SARS-CoV2. **Data for additional enterovirus testing subsequent the multiplex respiratory panel test are also not currently included.**

Figure 7. RSV incidence rate per 100,000 population aged under five years, week 30 2017 to Week 41 2021.



Calls to NHS Direct Wales

Figure 8. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 42 2017 - Week 41 2021 (as of 17/10/2021).



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 40, the majority of community and syndromic influenza indicators remain low in the UK. GP ILI consultations increased in Northern Ireland to 1.5 per 100,000 and remained stable in Scotland at 0.8 per 100,000, well below the baseline intensity thresholds. The weekly ILI GP consultation rate in England reported through the RCGP system increased to 3.3 per 100,000, well below the MEM threshold for baseline activity (12.2 per 100,000). During week 40, 15 of the 2,347 samples tested positive for influenza (including 8 influenza A(H3), 4 influenza A(not subtyped) and 3 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 40, influenza activity was low throughout the WHO European Region.

Source: Flu News Europe: <http://www.flunewseurope.org/>

- The WHO reported on 11/10/2021 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 B virus detections were reported in some countries. In tropical South America, no influenza detections were reported. In tropical Africa, influenza detections of predominantly influenza A were reported in some countries in Western, Middle and Eastern Africa. In Southern Asia, influenza detections of predominantly influenza B continued to be reported across some countries. In South East Asia, sporadic influenza B detections were reported in the Philippines. Worldwide, influenza B(Victoria) viruses predominated.
- Based on FluNet reporting (as of 08/10/2021), during the time period from 13/09/2021 – 26/09/2021, National Influenza Centres and other national influenza laboratories from 88 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 272,316 specimens during that time period, 2,022 were positive for influenza viruses, of which 640 were typed as influenza A (of the subtyped influenza A viruses, 88 were influenza A(H1N1)pdm09 and 470 were influenza A(H3N2)) and 1,382 influenza B (of the characterised influenza B viruses 1,213 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 01/10/2021, 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.
- **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 10/10/2021), influenza-like illness (ILI) activity in the community remains at low levels, a decrease in activity has been seen since June 2021. To date, the majority of nationally reported laboratory-confirmed influenza cases were influenza A (68.2%).

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 20/10/2021 is 408,294 with 3,450 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 6,050 with 13 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 39 was 8,326. 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 20/10/2021, there have been 8,589,737 reported confirmed cases of COVID-19 in the UK, of which 49,139 were newly reported in the previous 24 hours. The total deaths within 28 days of a positive test was 139,031, with 179 reported in the previous 24 hours. Latest UK data is available from: <https://coronavirus.data.gov.uk/>
- As at 19/10/2021, WHO have reported 240,940,937 confirmed COVID-19 cases globally, with 325,875 reported in the previous 24 hours. There have been 4,903,911 deaths, of which 5,201 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 (23/06/2021 to 08/08/2021) 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.who.int/teams/global-influenza-programme/avian-influenza/monthly-risk-assessment-summary> 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