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

**Wednesday 15th September 2021 (covering week 36 2021)**

**Current level of influenza activity:** *Baseline activity*
**Influenza activity trend:** *Stable*
**Confirmed influenza cases since 2020 week 40**: **68** *(11 influenza A(H3N2), 31 influenza A(not subtyped) and 26 influenza B).*

**Key points – Wales**

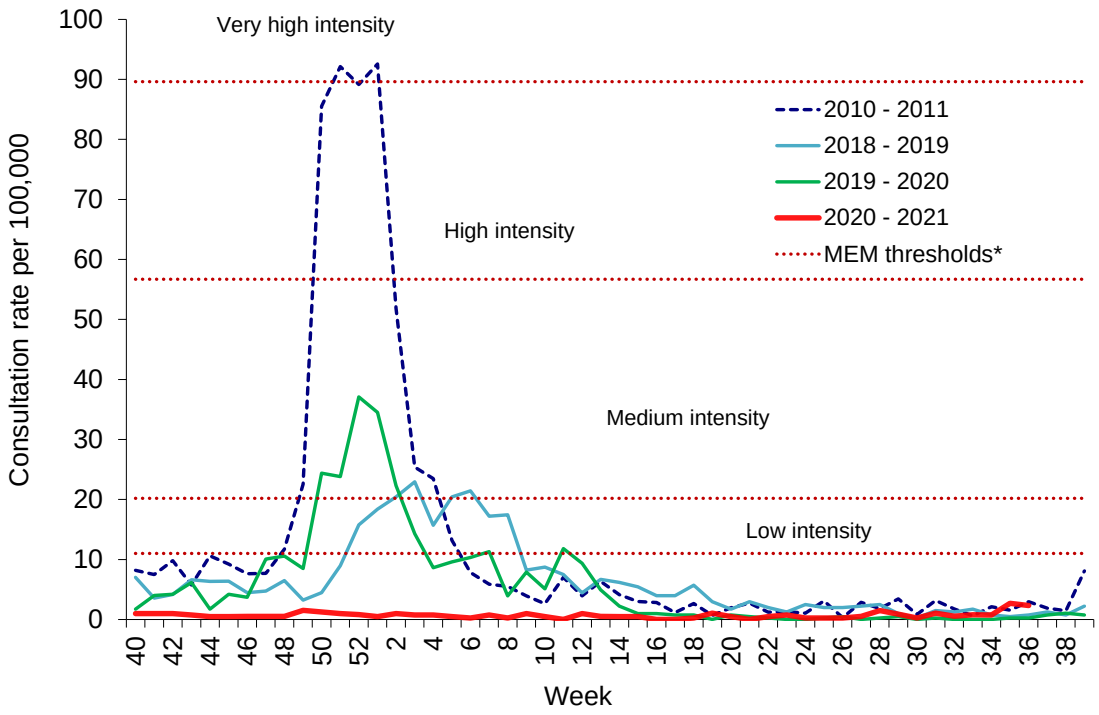
**Surveillance indicators suggest that RSV is circulating in Wales and influenza is not.**

**During Week 36 (ending 12/09/2021) 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. Eight influenza cases were confirmed during week 36. 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 36 was 2.3 consultations per 100,000 practice population (Table 1). This decreased compared to the previous week (2.7 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 130.4 per 100,00 practice population during Week 36, this is an increase compared to the previous week (104.1 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 36 was highest in under one year olds (946.7 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 36 decreased to 17.6% (Figure 8).
- During Week 36, 1,681 specimens received multiplex respiratory panel testing, mainly from patients attending hospitals. These results do not include samples tested solely for SARS-CoV2. There were two influenza A, 207 RSV, 252 rhinoviruses, 36 adenoviruses, 27 parainfluenza and eight human metapneumoviruses detected in Week 36 (Figure 4). Additionally, 4,554 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 4,554 samples, three were positive for influenza A, three were positive for influenza B, 260 were positive for RSV and 402 were positive for SARS-CoV2 (Figure 5). Forty-nine 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**
- Two surveillance samples from patients with ILI were collected by **sentinel GPs** during Week 36 (as at 15/09/2021), one sample was positive for rhinovirus and one sample was negative for all routinely tested respiratory pathogens.
- **Confirmed RSV case numbers in children aged under 5 decreased this week after increases in recent weeks. Activity has exceeded the threshold that would usually indicate very high levels of circulation.** In Week 36 there were 135.9 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 36, 60 **ARI outbreaks** were reported to the Public Health Wales Health Protection team, all were reported as COVID-19 outbreaks. Fifty were in residential homes, seven were in hospitals, two were in a school/nursery setting and 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 34 (latest data).

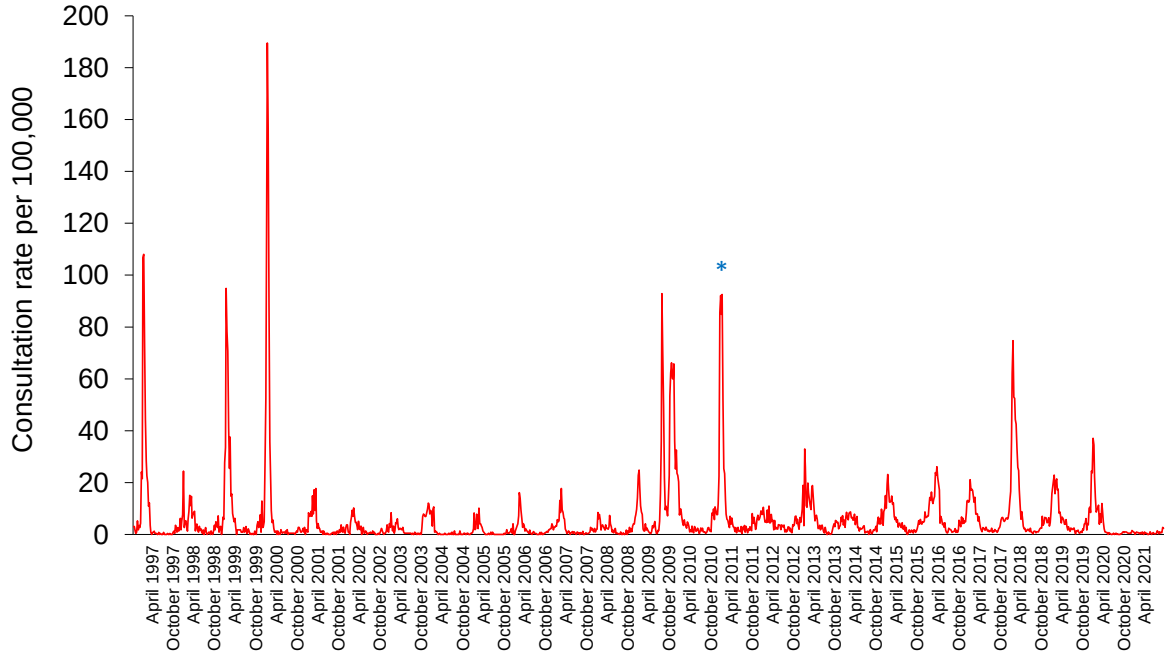
## Respiratory infection activity in Wales

**Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 12/09/2021).**




* 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 36 2021).**




* Reporting changed to Audit+ surveillance system

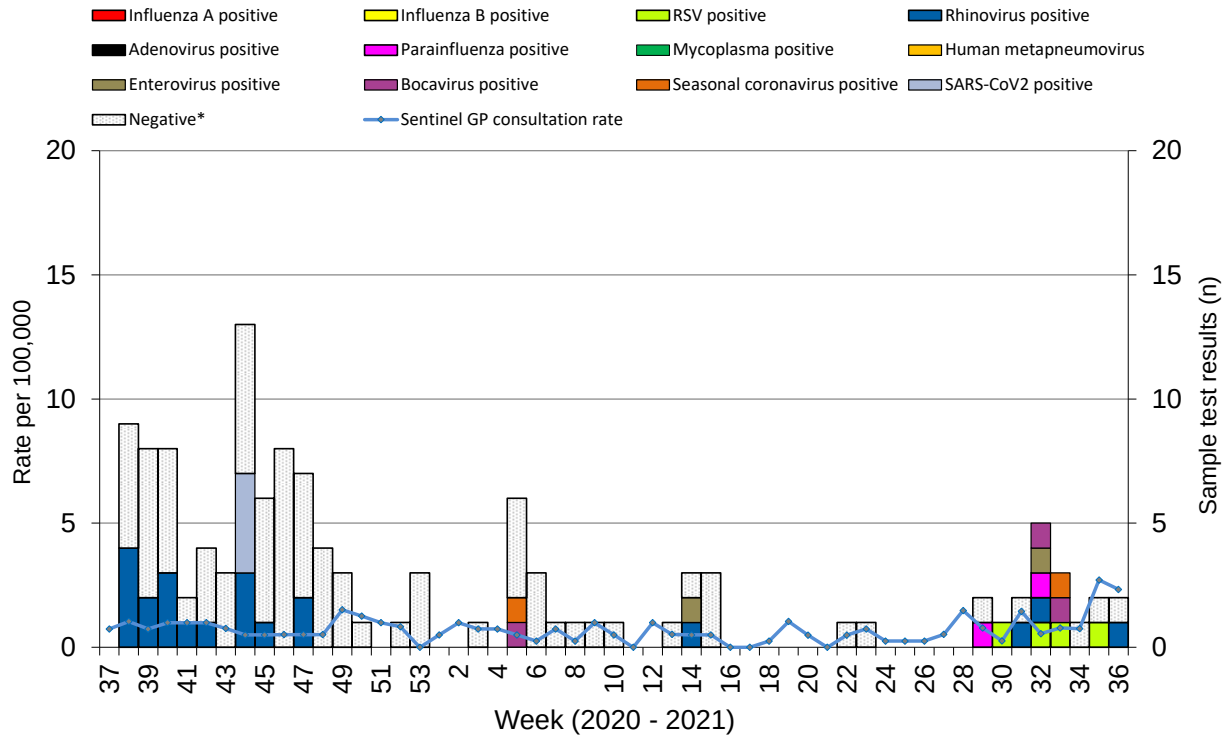
**Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 31– Week 36 2021 (as of 12/09/2021).**

| Age group | 31 | 32 | 33 | 34 | 35 | 36 |
|---|---|---|---|---|---|---|
| **< 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 | 2.2 | 2.4 |
| **25 - 34** | 4.2 | 0.0 | 4.2 | 0.0 | 2.0 | 4.1 |
| **35 - 44** | 0.0 | 0.0 | 2.1 | 0.0 | 2.0 | 4.2 |
| **45 - 64** | 1.0 | 1.0 | 0.0 | 2.8 | 7.4 | 2.9 |
| **65 - 74** | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| **75+** | 3.1 | 2.6 | 0.0 | 0.0 | 0.0 | 2.5 |
| **Total** | **1.0** | **0.6** | **0.8** | **0.8** | **2.7** | **2.3** |

**Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 31 – Week 36 2021 (as of 12/09/2021).**

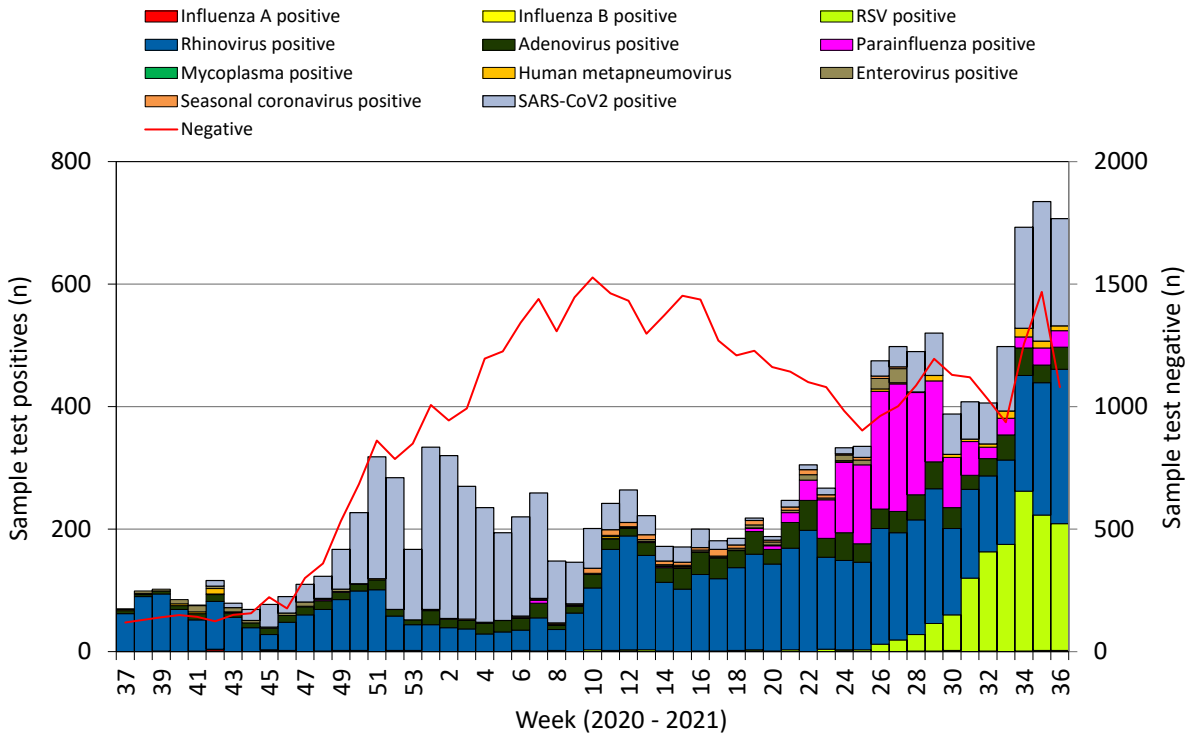
| Age group | 31 | 32 | 33 | 34 | 35 | 36 |
|---|---|---|---|---|---|---|
| **< 1** | 367.1 | 568.7 | 1030.1 | 1119.5 | 1002.7 | 946.7 |
| **1 - 4** | 411.2 | 420.7 | 404.1 | 514.5 | 536.3 | 487.7 |
| **5 - 14** | 27.9 | 48.2 | 27.3 | 41.3 | 65.7 | 107.2 |
| **15 - 24** | 95.9 | 75.1 | 95.8 | 131.3 | 134.3 | 192.5 |
| **25 - 34** | 94.7 | 74.3 | 41.8 | 88.7 | 98.0 | 121.1 |
| **35 - 44** | 54.0 | 38.3 | 50.5 | 84.2 | 74.3 | 92.8 |
| **45 - 64** | 63.4 | 68.8 | 64.7 | 78.5 | 72.1 | 92.4 |
| **65 - 74** | 56.7 | 49.1 | 56.1 | 57.7 | 60.1 | 81.5 |
| **75+** | 59.7 | 71.5 | 83.5 | 86.7 | 67.8 | 110.4 |
| **Total** | **80.0** | **79.4** | **80.5** | **104.6** | **104.1** | **130.4** |

**Figure 3. Specimens submitted for virological testing by sentinel GPs as of 12/09/2021, by week of sample collection, week 37 2020 to Week 36 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 12/09/2021 by week of sample collection, week 37 2020 to Week 36 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 12/09/2021 by week of sample collection, week 46 2020 to Week 36 2021.**

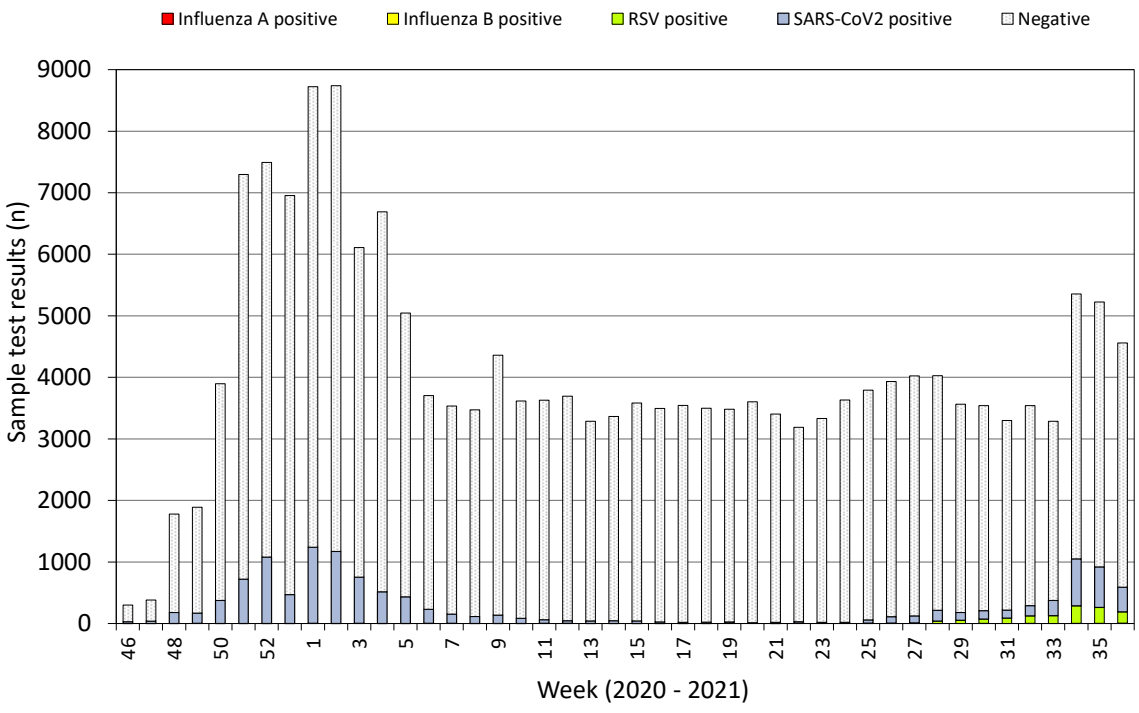
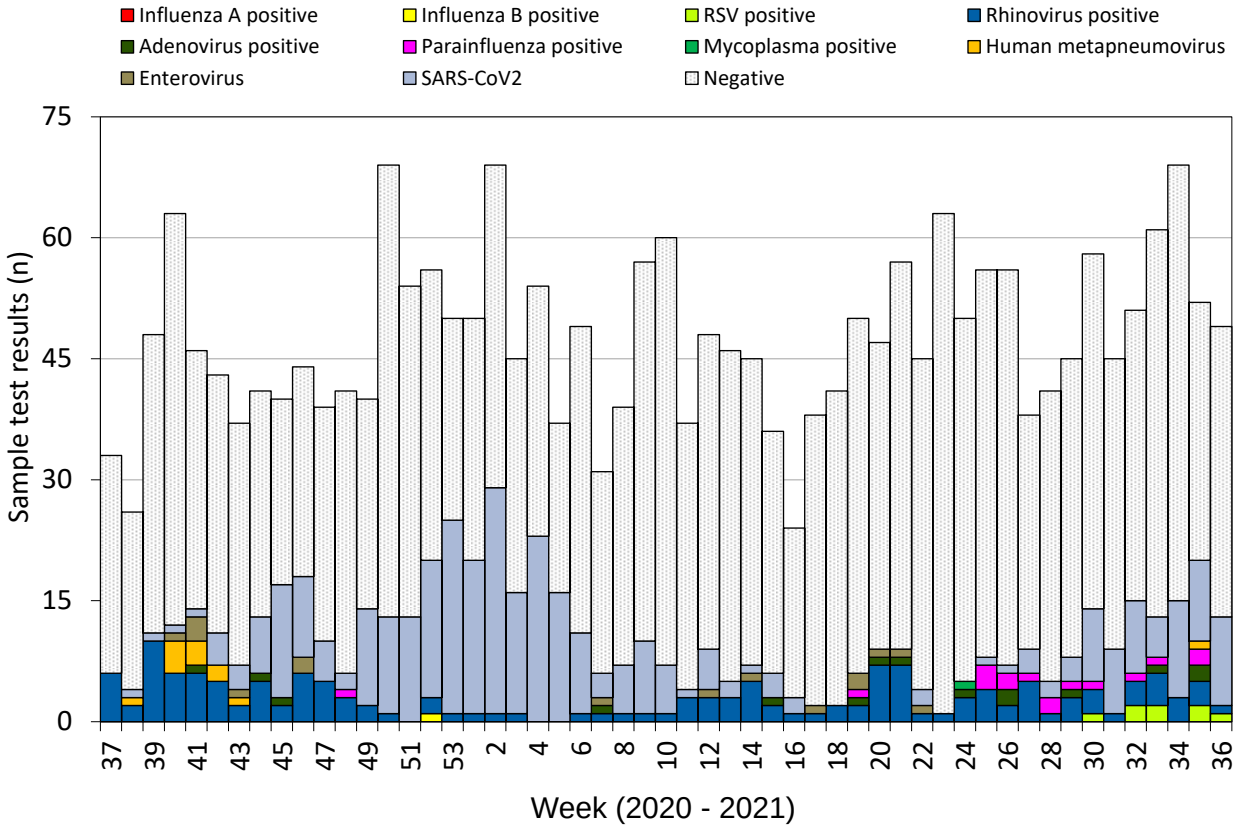
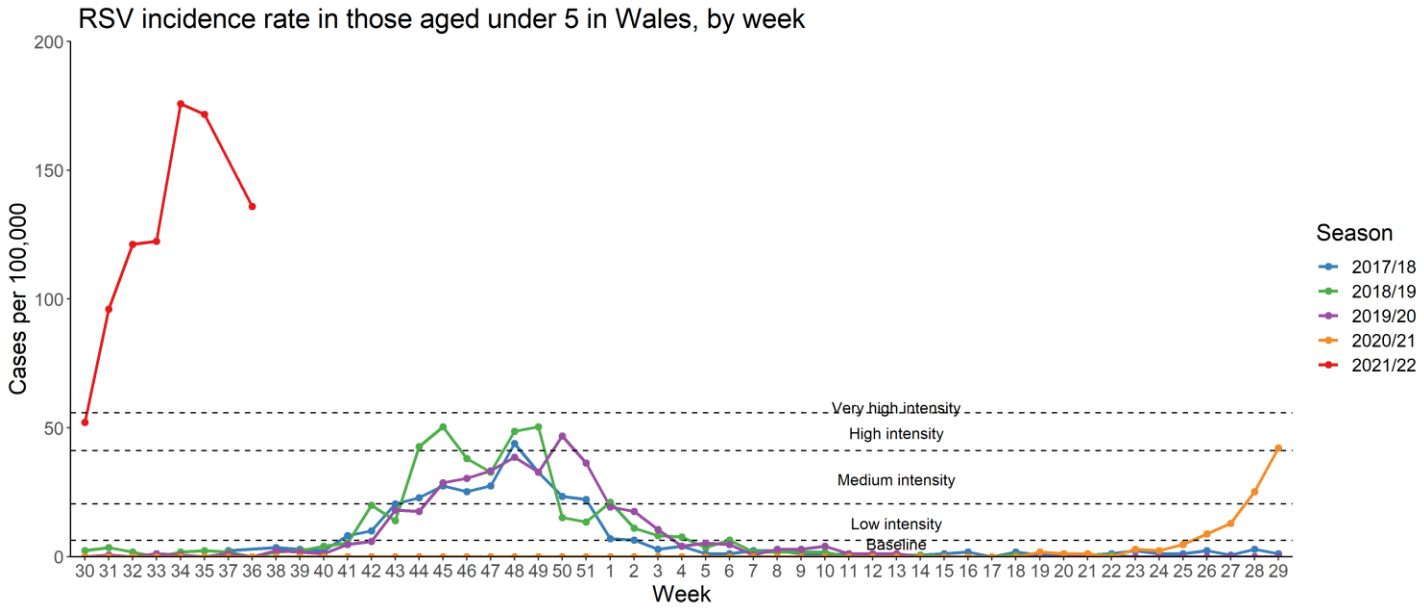


**Figure 6. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 37 2020 to Week 36 2021.**



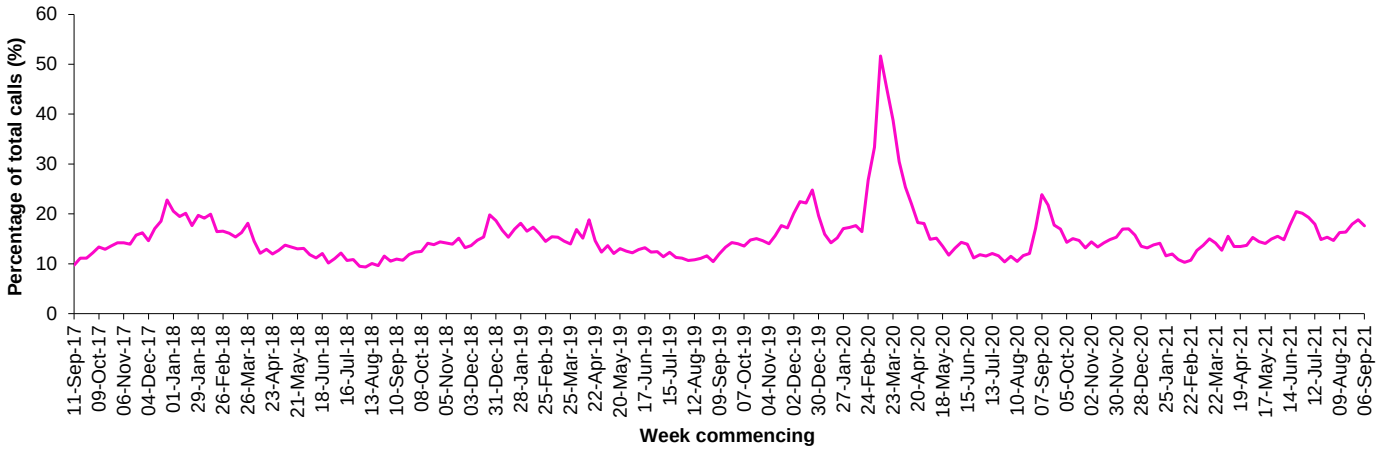

This chart summarises respiratory panel test data and does not include data for patients tested SOLEY for SARS-CoV2.

**Figure 7. RSV incidence rate per 100,000 population aged under five years, week 30 2017 to Week 36 2021.**



## Calls to NHS Direct Wales

**Figure 8. Influenza related calls to NHS Direct Wales[1] (as a percentage of total calls) from week 36 2017 - Week 36 2021 (as of 12/09/2021).**




***[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 35, the majority of community and syndromic influenza indicators remained low in the UK. GP ILI consultations increased in Scotland to 0.7 per 100,000 and remained stable 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 decreased to 0.8 per 100,000, well below the MEM threshold for baseline activity (12.2 per 100,000).
- During week 35, none of the 2,107 respiratory test results reported through Public Health England's DataMart scheme tested positive for influenza. UK summary data are available from the Public Health England 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 13/09/2021 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/Victoria lineage virus 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, Middle and Eastern Africa. In Southern Asia, influenza detections of predominantly influenza A(H3N2) continued to increase in India and Nepal. In South East Asia, no influenza detections were reported. Worldwide, influenza A and B viruses were detected in similar numbers.
- Based on FluNet reporting (as of 13/09/2021), during the time period from 23/08/2021 – 05/09/2021, National Influenza Centres and other national influenza laboratories from 79 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 251,292 specimens during that time period, 1,538 were positive for influenza viruses, of which 792 were typed as influenza A (of the subtyped influenza A viruses, 54 were influenza A(H1N1)pdm09 and 696 were influenza A(H3N2)) and 746 influenza B (of the characterised influenza B viruses four belonged to the B-Yamagata lineage and 688 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 03/09/2021, 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 15/09/2021 is 314,590, with 2,298 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 5,770, 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 34 was 8,013. 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 14/09/2021, there have been 7,282,810 reported confirmed cases of COVID-19 in the UK, of which 26,628 were newly reported in the previous 24 hours. The total deaths within 28 days of a positive test was 134,446, with 185 reported in the previous 24 hours. Latest UK data is available from: https://coronavirus.data.gov.uk/
- As at 14/09/2021, WHO have reported 225,024,781 confirmed COVID-19 cases globally, with 451,361 reported in the previous 24 hours. There have been 4,636,153 deaths, of which 7,848 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/publications/m/item/influenza-at-the-human-animal-interface-summary-and-assessment-8-august-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**