

Current level of influenza activity: *Baseline activity*

Influenza activity trend: *Increasing*

Confirmed influenza cases since 2021 week 40: 385 (148 influenza A(H3N2), nine influenza A(H1N1)pdm09, 182 influenza A(not subtyped) and 46 influenza B).

Key points – Wales

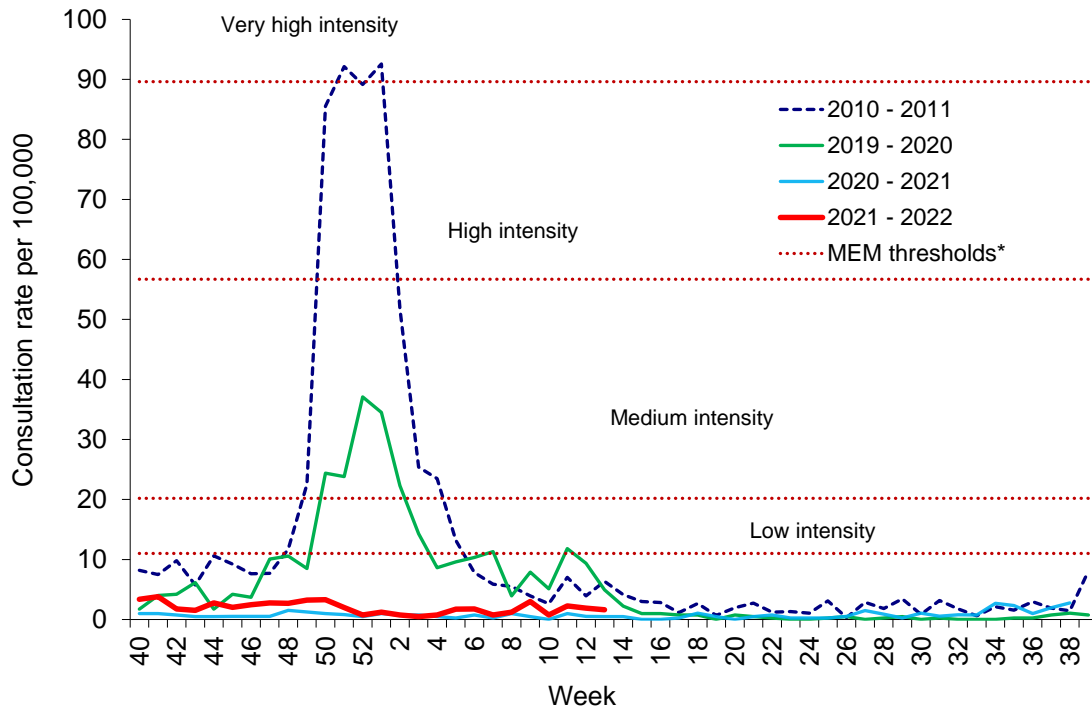
Surveillance indicators suggest that although influenza is not circulating widely, confirmed case numbers have increased in recent weeks.

During Week 13 (ending 03/04/2022) there were 47 cases of influenza confirmed with a further two cases reported late from samples in a preceding week. Confirmed cases of Respiratory Syncytial Virus (RSV) in children aged under 5 years decreased to baseline levels this week. COVID-19 cases continue to be detected in symptomatic patients in hospital and in the community. Rhinovirus and adenovirus are the most commonly detected cause of non-COVID-19 Acute Respiratory Infection (ARI), with increasing confirmed cases in recent weeks.

- The **Sentinel GP consultation rate for influenza-like illness (ILI)** in Wales during week 13 was 1.6 consultations per 100,000 practice population (Table 1). This decreased compared to the previous week (1.9 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 Respiratory Infections (ARI)** was 169.1 per 100,000 practice population during Week 13, this is an increase compared to the previous week (162.9 per 100,000) (Table 2). Weekly consultations increased for Lower Respiratory Tract Infections and decreased for 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 13 increased to 18.8% (Figure 8).
- During Week 13, 1,499 specimens received multiplex respiratory panel testing mainly from patients attending hospitals. These results do not include samples tested solely for SARS-CoV2. There were 34 influenza (28 influenza A(H3N2), five influenza A(H1N1)pdm09 and one influenza A(not typed)), seven RSV, 277 SARS-CoV2, 177 rhinoviruses, 67 adenoviruses, 52 parainfluenza, 38 enteroviruses and four human metapneumoviruses detected in Week 13 (Figure 4). Additionally, 3,010 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 3,010 samples, 12 were positive for influenza (all untyped influenza A), four were positive for RSV and 480 were positive for SARS-CoV2 (Figure 5). Seventy respiratory specimens were tested from patients in intensive care units (ICU) and one was positive for influenza (Figure 6). For the latest COVID-19/ SARS-CoV2 surveillance data please see the [PHW daily dashboard](#)
- There were five surveillance samples from patients with ILI collected by **sentinel GPs** during Week 13 (as at 07/04/2022), one sample was positive for parainfluenza, three samples were positive for SARS-CoV2 and one sample was negative for all routinely tested respiratory pathogens.
- **Confirmed RSV case incidence in children aged under 5 decreased, and is now at the threshold that would usually indicate baseline levels of circulation.** In week 13 there were 2.9 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 confirmed cases per 100,000.
- During Week 13, 50 **ARI outbreaks** were reported to the Public Health Wales Health Protection team, all were reported as COVID-19 outbreaks. One was in a hospital, 44 were in residential homes, one was in a school and four were in a community, mixed or other setting.
- According to [EuroMoMo](#) analysis, all-cause deaths in Wales were not significantly in excess during week 13.

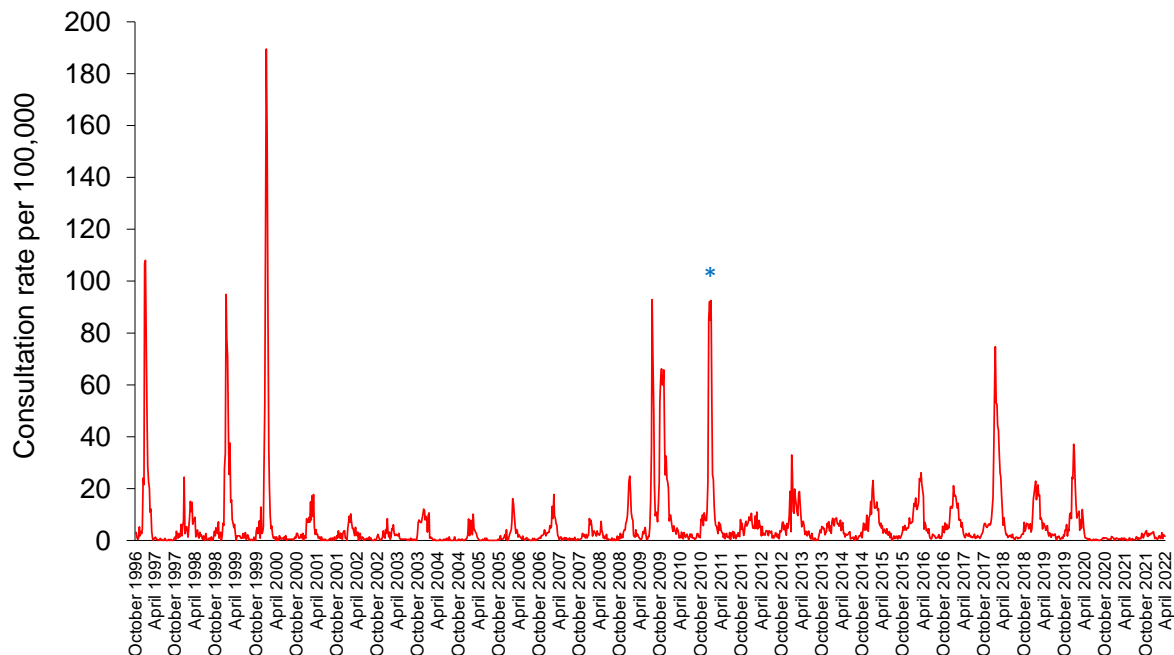
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 03/04/2022).



* 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 13 2022).



* Reporting changed to Audit+ surveillance system

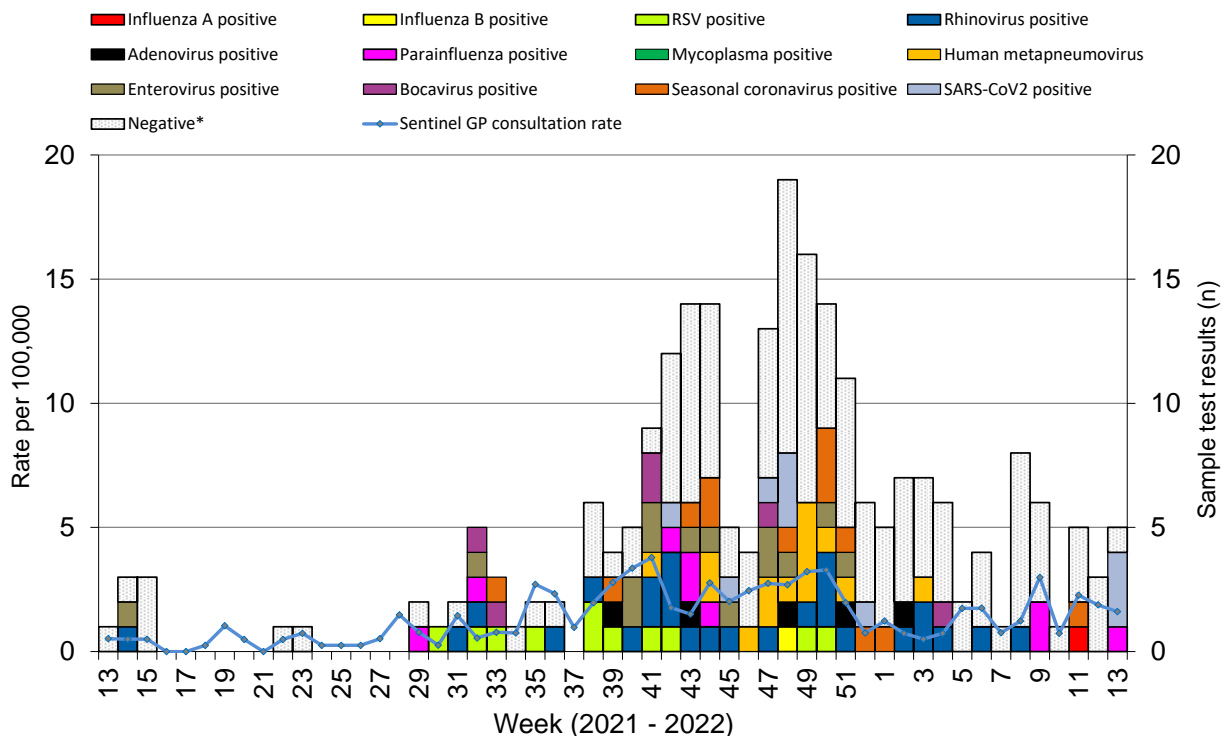
Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 08 – week 13 2022 (as of 03/04/2022).

| Age group | 8 | 9 | 10 | 11 | 12 | 13 |
|--------------|------------|------------|------------|------------|------------|------------|
| < 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 | 2.3 | 0.0 | 2.5 |
| 15 - 24 | 0.0 | 2.2 | 0.0 | 2.3 | 7.1 | 2.4 |
| 25 - 34 | 5.8 | 2.0 | 3.9 | 0.0 | 0.0 | 2.1 |
| 35 - 44 | 0.0 | 4.0 | 2.0 | 0.0 | 0.0 | 0.0 |
| 45 - 64 | 0.9 | 3.8 | 0.0 | 4.8 | 3.0 | 2.0 |
| 65 - 74 | 0.0 | 4.4 | 0.0 | 2.2 | 2.4 | 2.4 |
| 75+ | 2.3 | 4.7 | 0.0 | 2.4 | 0.0 | 0.0 |
| Total | 1.2 | 3.0 | 0.7 | 2.3 | 1.9 | 1.6 |

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 08 – week 13 2022 (as of 03/04/2022).

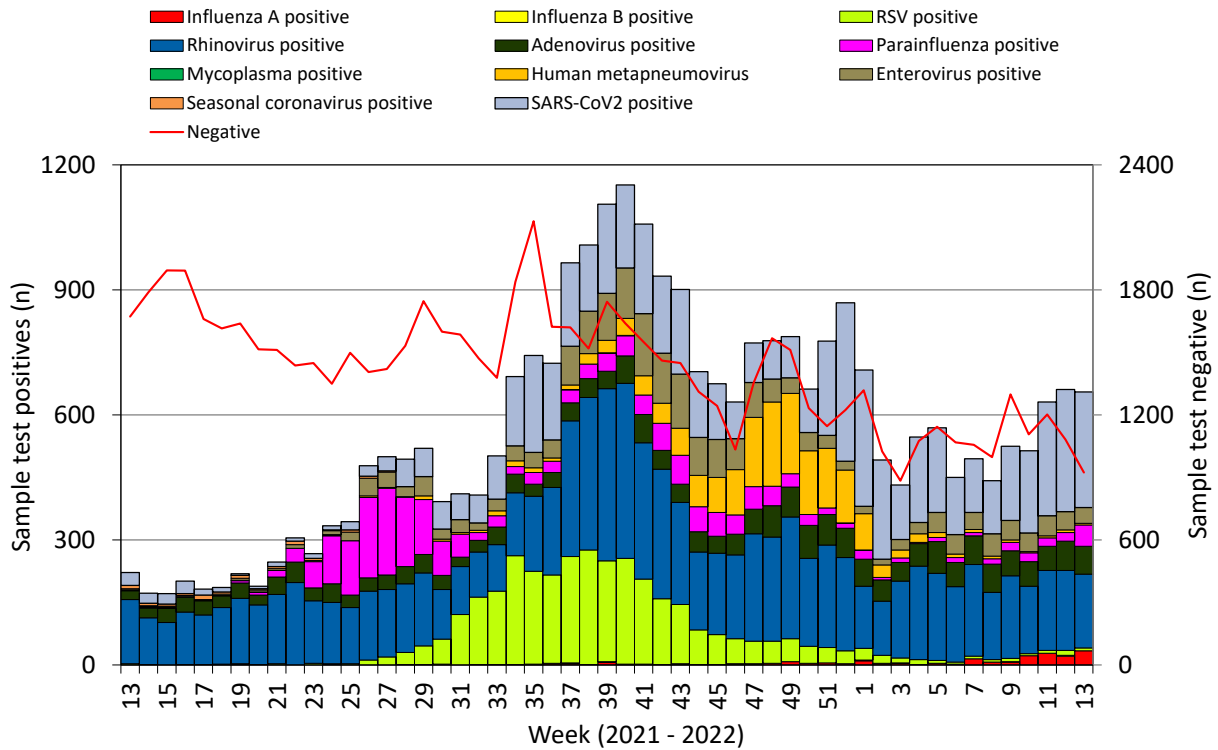
| Age group | 8 | 9 | 10 | 11 | 12 | 13 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| < 1 | 486.4 | 640.0 | 823.1 | 590.6 | 900.3 | 1142.7 |
| 1 - 4 | 499.0 | 449.3 | 544.5 | 640.7 | 696.5 | 667.2 |
| 5 - 14 | 123.7 | 117.1 | 131.5 | 180.4 | 138.6 | 136.1 |
| 15 - 24 | 117.5 | 147.6 | 179.0 | 153.8 | 184.8 | 130.3 |
| 25 - 34 | 123.9 | 145.4 | 136.1 | 147.6 | 161.0 | 171.5 |
| 35 - 44 | 91.8 | 134.6 | 109.1 | 121.1 | 116.4 | 170.3 |
| 45 - 64 | 105.0 | 115.4 | 89.7 | 113.9 | 128.1 | 118.0 |
| 65 - 74 | 91.0 | 127.6 | 106.4 | 111.2 | 124.3 | 129.1 |
| 75+ | 111.3 | 109.9 | 138.5 | 116.1 | 110.6 | 167.2 |
| Total | 125.5 | 142.4 | 141.9 | 153.4 | 162.9 | 169.1 |

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 03/04/2022, by week of sample collection, week 13 2021 to week 13 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 03/04/2022 by week of sample collection, week 13 2021 to week 13 2022.



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. Samples which test positive for more than one 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 03/04/2022 by week of sample collection, week 13 2021 to week 13 2022.

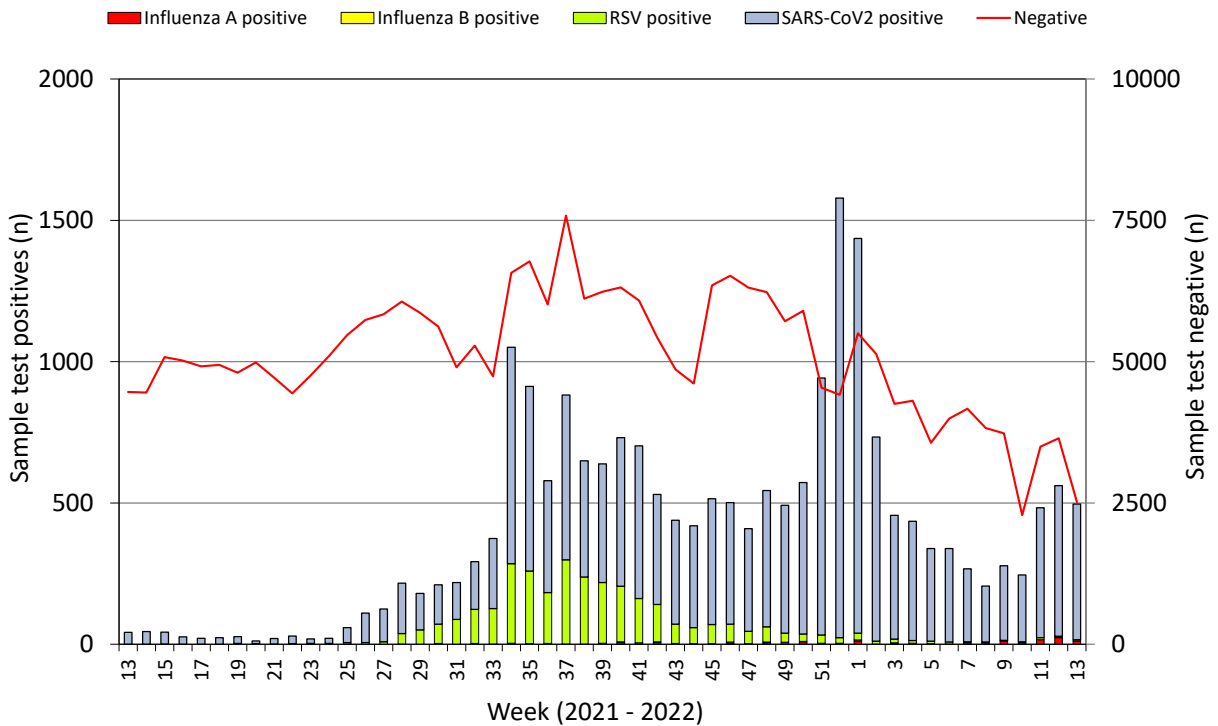
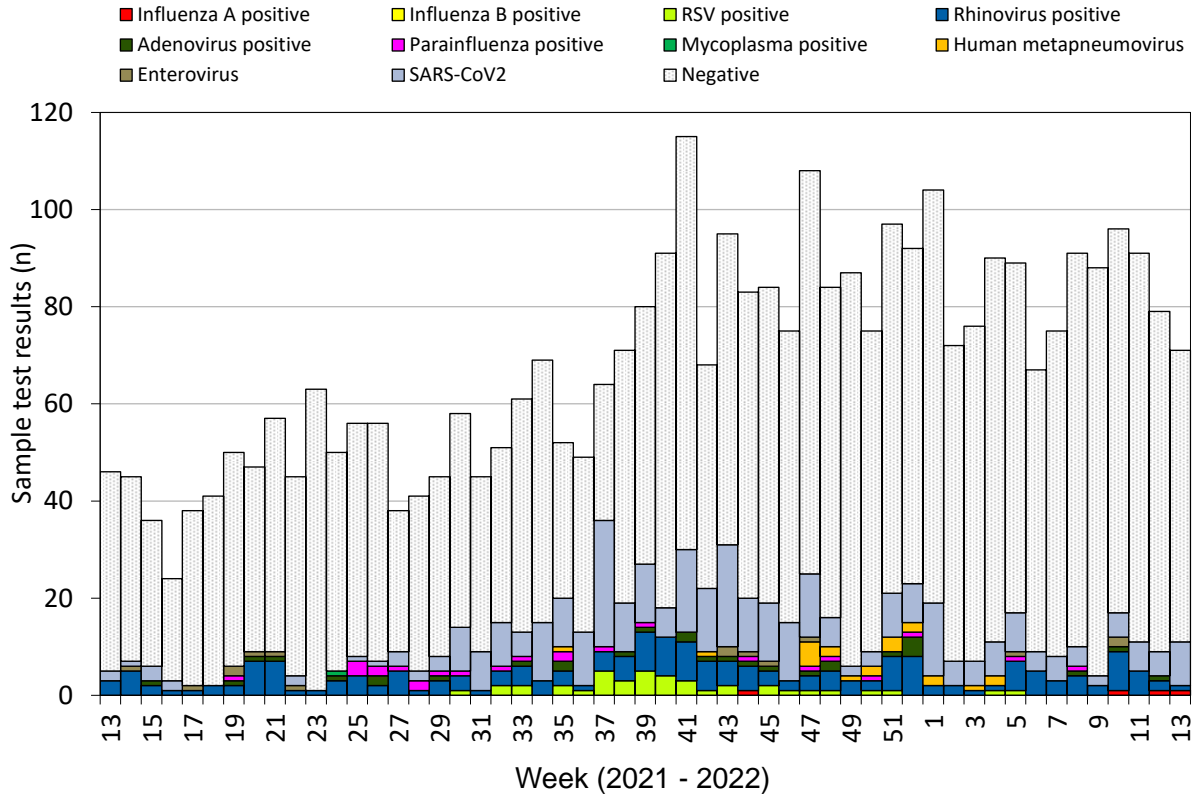
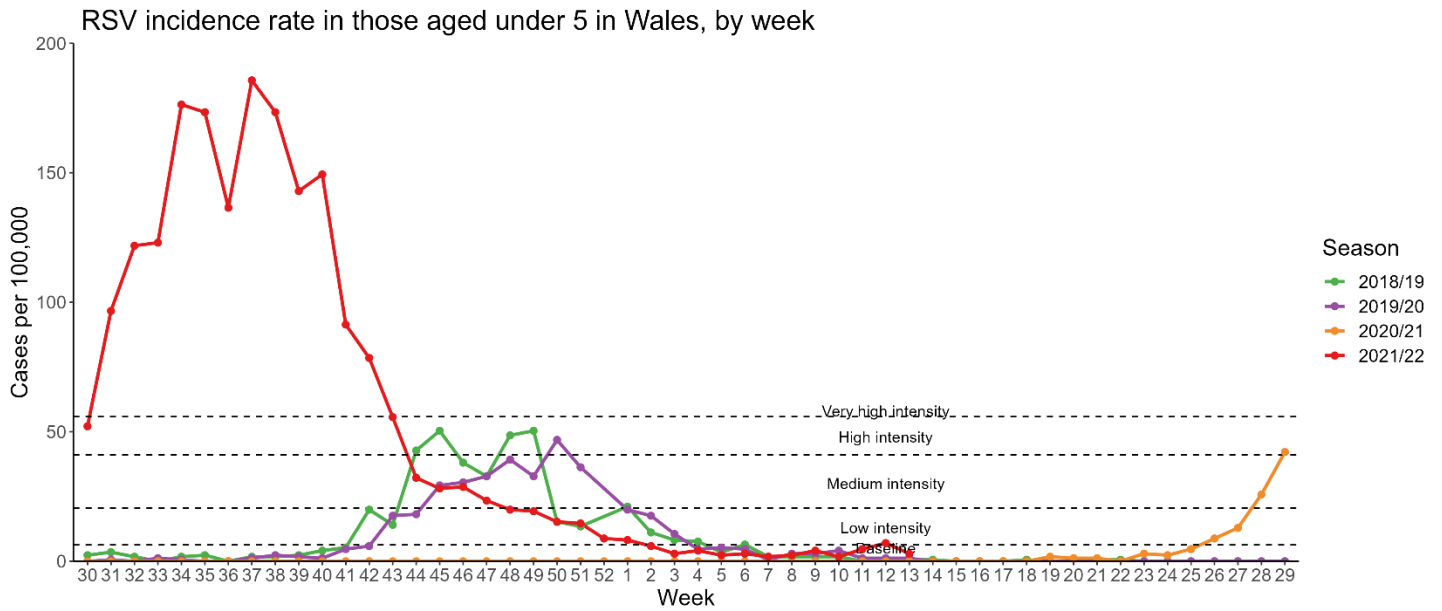


Figure 6. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 13 2021 to Week 13 2022.



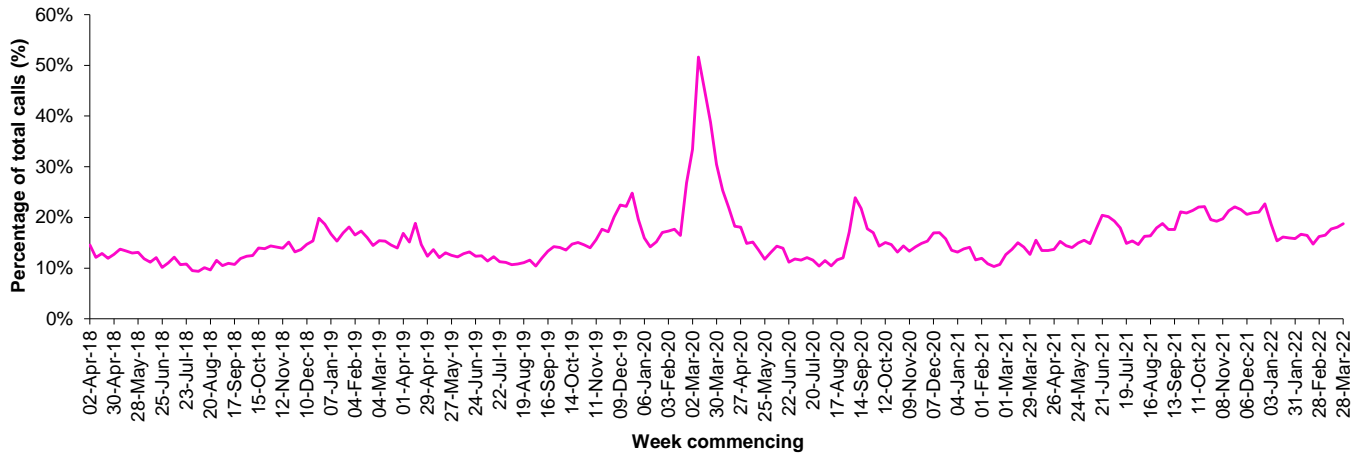
This chart summarises respiratory panel test data and does not include data for patients tested SOLELY for SARS-CoV2. Samples which test positive for more than one pathogen will appear more than once in the chart.

Figure 7. RSV incidence rate per 100,000 population aged under five years, week 30 2017 to Week 13 2022.



Calls to NHS Direct Wales

Figure 8. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 14 2018 - Week 13 2022 (as of 03/04/2022).



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 29/03/2022).

| 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 | 47.7% |
| Children aged four to ten years* | 68.0% |
| Children aged 11 to 15 years* | 60.3% |
| NHS staff | 55.6% |
| NHS staff who have direct patient contact | 57.1% |

* 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 12, community and syndromic influenza indicators remain low but increasing in the UK. GP ILI consultations increased in Northern Ireland to 1.3 per 100,000 but decreased in Scotland to 1.4 per 100,000 - remaining well below the baseline intensity thresholds. The weekly ILI GP consultation rate in England reported through the RCGP system increased to 2.0 per 100,000, well below the MEM threshold for baseline activity (12.2 per 100,000). During week 12, 206 of the 6,259 samples tested positive for influenza (including 66 influenza A(H3N2), 19 influenza A(H1N1)pdm09, 119 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 12, influenza activity continues to be reported throughout the WHO European Region. During week 12, a total of 1,724 sentinel specimens were tested for influenza, 451 of which were positive, 442 influenza A (303 influenza A(H3), 23 influenza A(H1)pdm09 and 116 influenza A(not subtyped)) and nine influenza B.
Source: Flu News Europe: <http://www.flunewseurope.org/>
- The WHO reported on 21/03/2022 that globally, influenza activity remained low and decreased. In the temperate zones of the northern hemisphere, influenza activity increased or remained stable with detections of mainly influenza A(H3N2) and influenza B/Victoria lineage reported. In the temperate zones of the southern hemisphere, influenza activity remained low overall. In North America, influenza virus detections increased in recent weeks. In Europe, influenza activity appeared to increase again. In East Asia, influenza activity increased in China and remained low in the rest of the subregion. In Northern Africa, influenza detections of influenza A(H3N2) continued to be reported. In Western Asia, influenza activity was low across reporting countries. In the Caribbean and Central American countries, influenza detections were predominantly influenza A(H3N2) and activity remained low. In tropical South America, low influenza activity was reported with influenza A(H3N2) predominant. In tropical Africa, influenza activity was reported mainly from Eastern Africa. In Southern Asia, influenza virus detections were at low levels. In South-East Asia, influenza detections were at low levels with influenza A(H3N2) predominant.
- Based on FluNet reporting (as of 18/03/2022), during the time period from 21/02/2022 – 06/03/2022, National Influenza Centres and other national influenza laboratories from 117 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 367,148 specimens during that time period, 17,423 were positive for influenza viruses, of which 12,922 were typed as influenza A (of the subtyped influenza A viruses, 337 were influenza A(H1N1)pdm09 and 2,475 were influenza A(H3N2)) and 4,501 influenza B (of the characterised influenza B viruses none belonged to B-Yamagata lineage and 4,371 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 12 (ending 26/03/2022) influenza activity is increasing in some parts of the United States. Nationally, 2,947 (6.5%) out of 45,280 specimens have tested positive for influenza in week 12, of these positives 2,947 (99.2%) were influenza A and 23 (0.8%) were influenza B. Further characterisation has been carried out on 12,629 specimens by public health laboratories, and 339 samples tested positive for influenza, all influenza A (220 influenza A(H3N2) and 119 influenza A(not subtyped)).
Source: CDC Weekly US Influenza Surveillance Report: <http://www.cdc.gov/flu/weekly/>
- The Public Health Agency of Canada reported that during week 10, influenza activity remains low for this time of year. The percentage of visits to healthcare professionals that were due to ILI was 1.0% in week 10. The percentage of tests positive for influenza was 0.1% during week 10.
Source: Public Health Agency of Canada: <https://www.canada.ca/en/public-health/services/diseases/flu-influenza/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 seen 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 06/04/2022 is 867,254 with 394 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 7,202 with 16 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 2022 week 11 was 9,856. 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 05/04/2022, there have been 21,410,035 reported confirmed cases of COVID-19 in the UK, of which 425,303 were newly reported in the previous 7 days. The total deaths within 28 days of a positive test was 166,148 with 1,174 reported in the previous 7 days. Latest UK data is available from: <https://coronavirus.data.gov.uk/>
- As at 05/04/2022, WHO have reported 490,853,129 confirmed COVID-19 cases globally, with 872,868 reported in the previous 24 hours. There have been 6,155,344 deaths, of which 16,079 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 13/12/2021 WHO reported an additional case of Middle East Respiratory Syndrome coronavirus (MERS-CoV). Globally, 2,583 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 (22/01/2022 to 01/03/2022) 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.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