

Current level of influenza activity: *Low*

Influenza activity trend: *Increasing*

Confirmed influenza cases since 2021 week 40: 568 (259 influenza A(H3N2), 30 influenza A(H1N1)pdm09, 231 influenza A(not subtyped) and 48 influenza B).

Key points – Wales

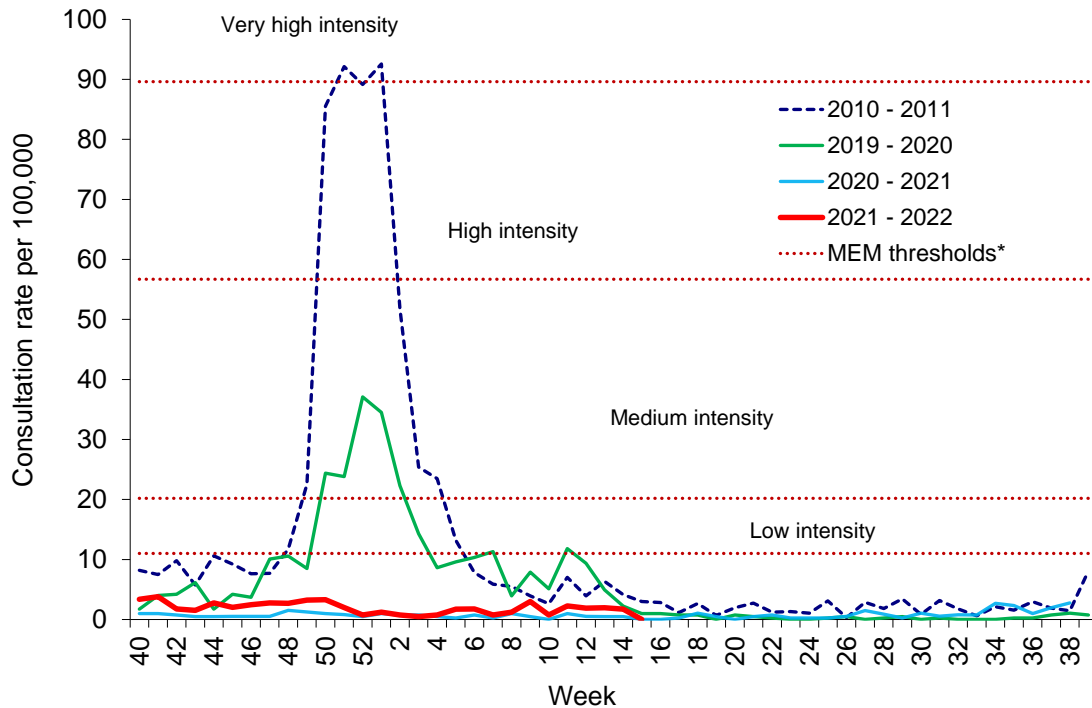
Confirmed influenza case numbers have increased during April, and include a number of community cases confirmed in sentinel GPs. These increases indicate the start of late seasonal activity, at low levels.

During Week 16 (ending 24/04/2022) there were 40 cases of influenza confirmed. COVID-19 cases continue to be detected in symptomatic patients in hospital and in the community. Rhinovirus and parainfluenza 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 15 (latest data available) was 0.0 consultations per 100,000 practice population (Table 1). This decreased compared to the previous week (1.7 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 Respiratory Infections (ARI)** was 125.3 per 100,000 practice population during Week 15 (latest data available), this is a decrease compared to the previous week (156.1 per 100,000) (Table 2). Weekly consultations decreased for Lower Respiratory Tract Infections and 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 16 decreased to 18.0% (Figure 8).
- During Week 16, 1,151 specimens received multiplex respiratory panel testing mainly from patients attending hospitals. These results do not include samples tested solely for SARS-CoV2. There were 32 influenza (23 influenza A(H3N2), six influenza A(H1N1)pdm09 and three influenza A(not typed)), 14 RSV, 178 SARS-CoV2, 109 rhinoviruses, 75 parainfluenza, 59 adenoviruses, 25 enteroviruses and three human metapneumoviruses detected in Week 16 (Figure 4). Additionally, 3,029 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 3,029 samples, eight were positive for influenza (all untyped influenza A), five were positive for RSV and 248 were positive for SARS-CoV2 (Figure 5). 82 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 no surveillance samples from patients with ILI collected by **sentinel GPs** during Week 16 (as at 27/04/2022).
- **Confirmed RSV case incidence in children aged under 5 remained stable, and remains at the threshold that would usually indicate baseline levels of circulation.** In week 16 there were 5.9 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 16, 49 **ARI outbreaks** were reported to the Public Health Wales Health Protection team, all were reported as COVID-19 outbreaks. 45 were in residential homes, one was in a hospital and three were in a community, mixed or other setting.
- According to [EuroMoMo](#) analysis, all-cause deaths in Wales were not significantly in excess during week 15.

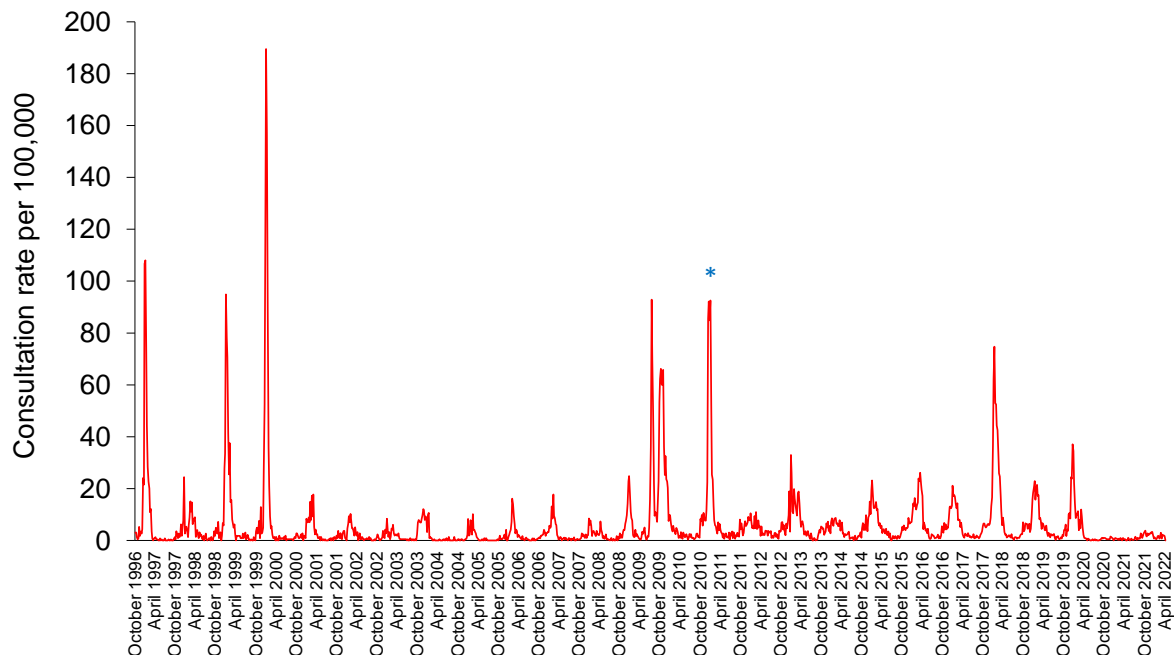
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 17/04/2022) - [latest data available].



* 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 15 2022) - [latest data available].



* Reporting changed to Audit+ surveillance system

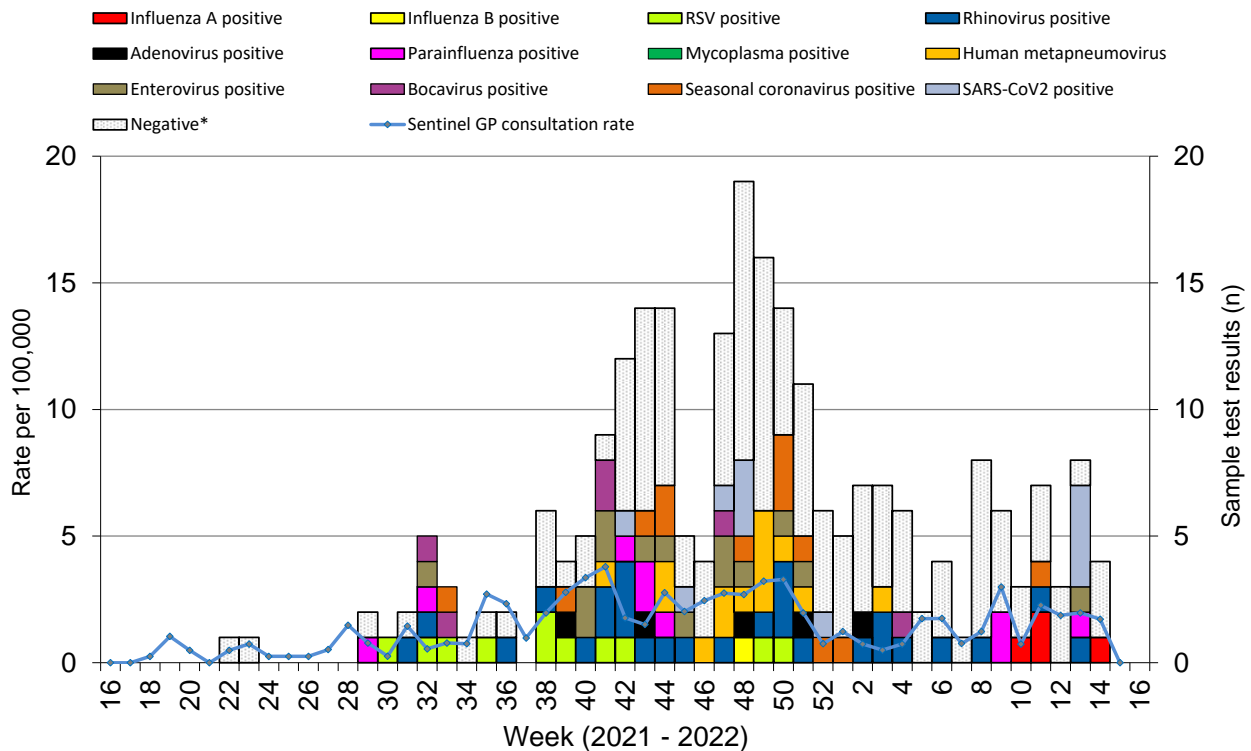
Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 10 – week 15 2022 (as of 17/04/2022) - [latest data available].

Age group	10	11	12	13	14	15
< 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	2.3	0.0	2.3	2.7	0.0
15 - 24	0.0	2.3	7.1	2.2	2.5	0.0
25 - 34	3.9	0.0	0.0	1.9	0.0	0.0
35 - 44	2.0	0.0	0.0	2.0	0.0	0.0
45 - 64	0.0	4.8	3.0	2.8	2.2	0.0
65 - 74	0.0	2.2	2.4	2.2	5.1	0.0
75+	0.0	2.4	0.0	0.0	0.0	0.0
Total	0.7	2.3	1.9	2.0	1.7	0.0

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 10 – week 15 2022 (as of 17/04/2022) - [latest data available].

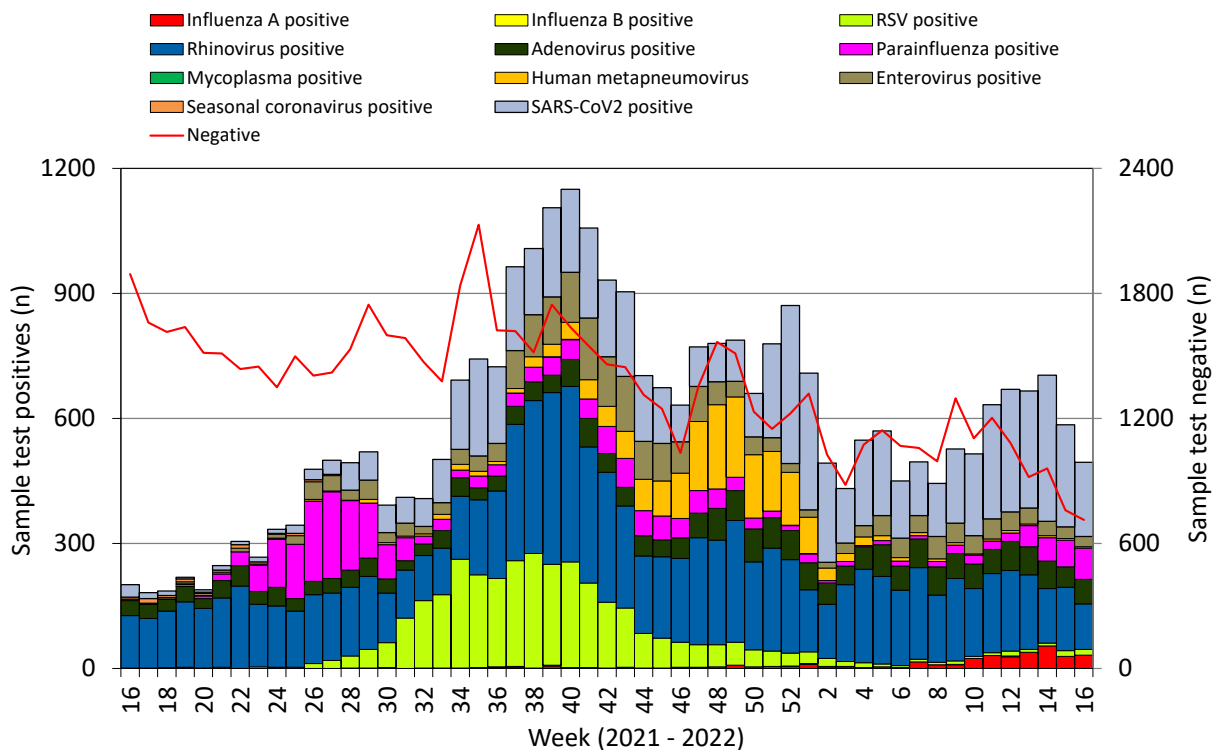
Age group	10	11	12	13	14	15
< 1	823.1	590.6	900.3	1110.4	916.4	367.7
1 - 4	544.5	640.7	696.5	619.1	684.6	287.8
5 - 14	131.5	180.4	138.6	138.3	146.4	74.8
15 - 24	179.0	153.8	184.8	132.6	126.7	89.3
25 - 34	136.1	147.6	161.0	159.4	140.0	193.7
35 - 44	109.1	121.1	116.4	162.3	176.0	134.2
45 - 64	89.7	113.9	128.1	110.0	98.6	143.8
65 - 74	106.4	111.2	124.3	121.6	109.4	128.2
75+	138.5	116.1	110.6	161.1	149.0	22.1
Total	141.9	153.4	162.9	161.4	156.1	125.3

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 24/04/2022, by week of sample collection, week 16 2021 to week 16 2022.



* Tested negative for influenza, adenovirus, rhinovirus, RSV, parainfluenza, mycoplasma, human metapneumovirus, enterovirus, bocavirus and coronaviruses. Samples which test positive for more than one 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 24/04/2022 by week of sample collection, week 16 2021 to week 16 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 24/04/2022 by week of sample collection, week 16 2021 to week 16 2022.

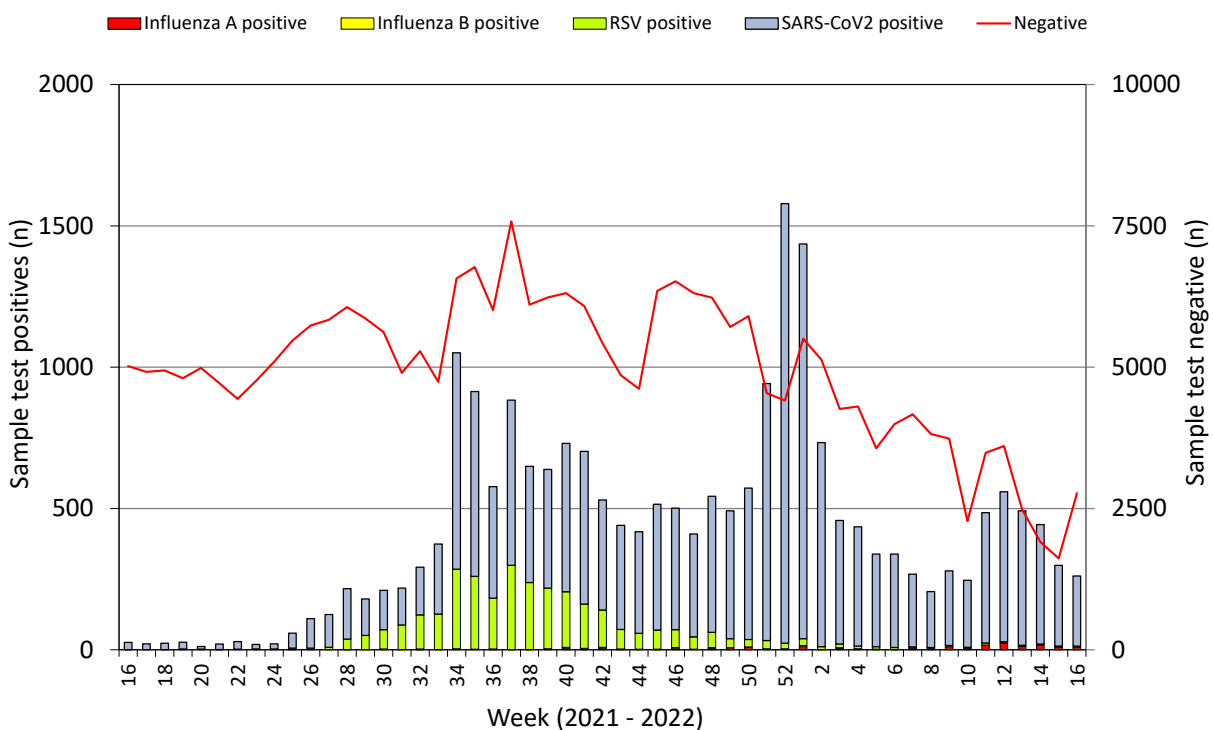
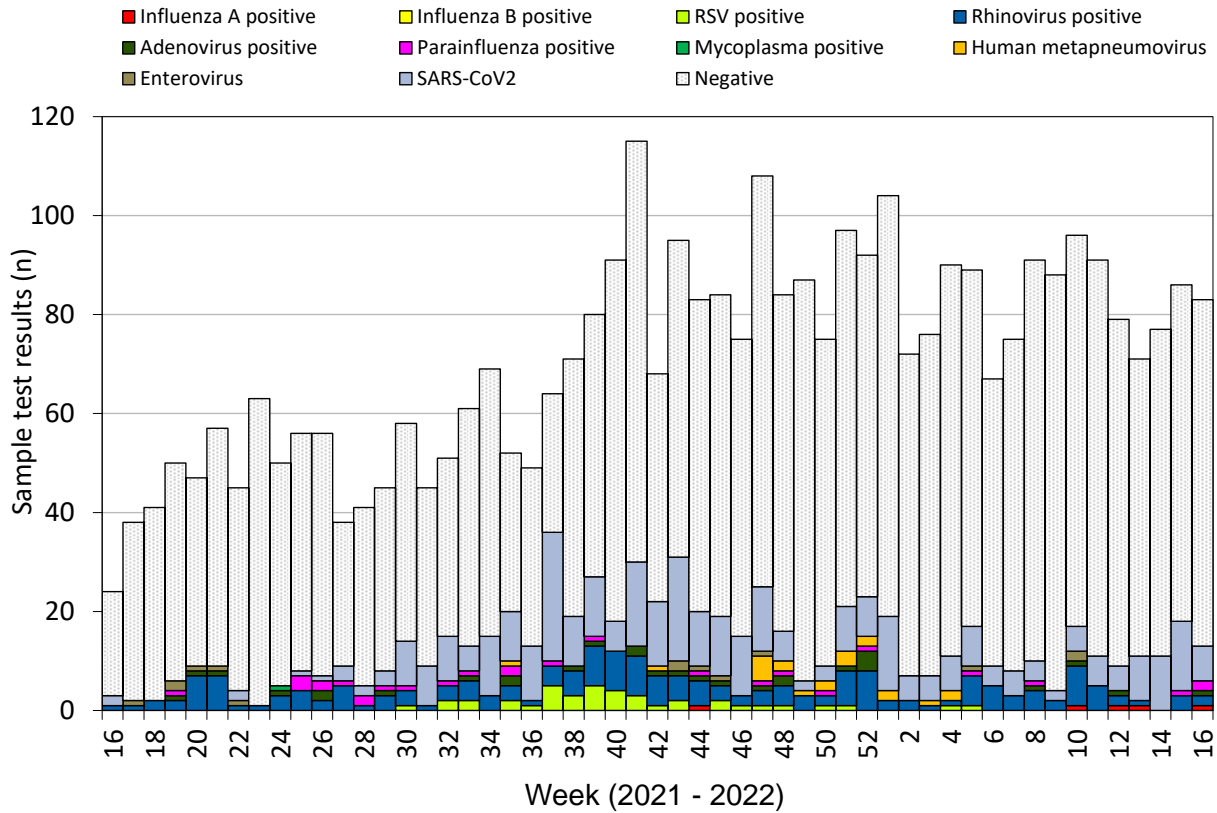
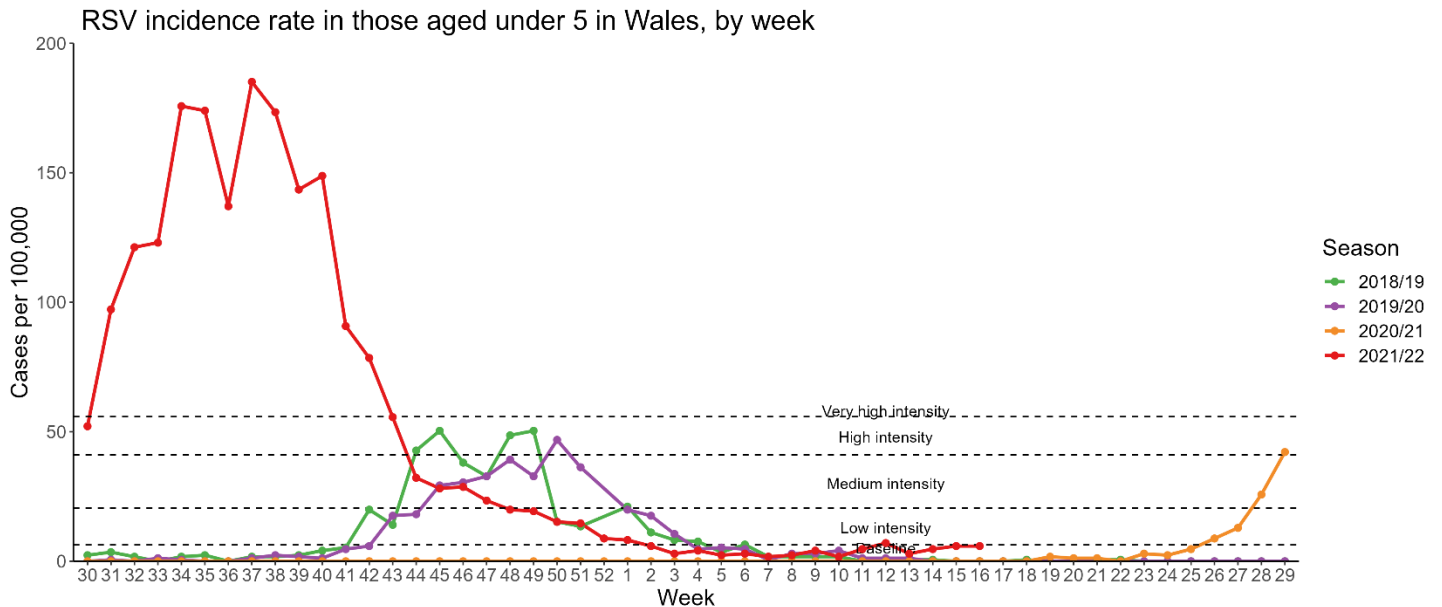


Figure 6. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 16 2021 to Week 16 2022.



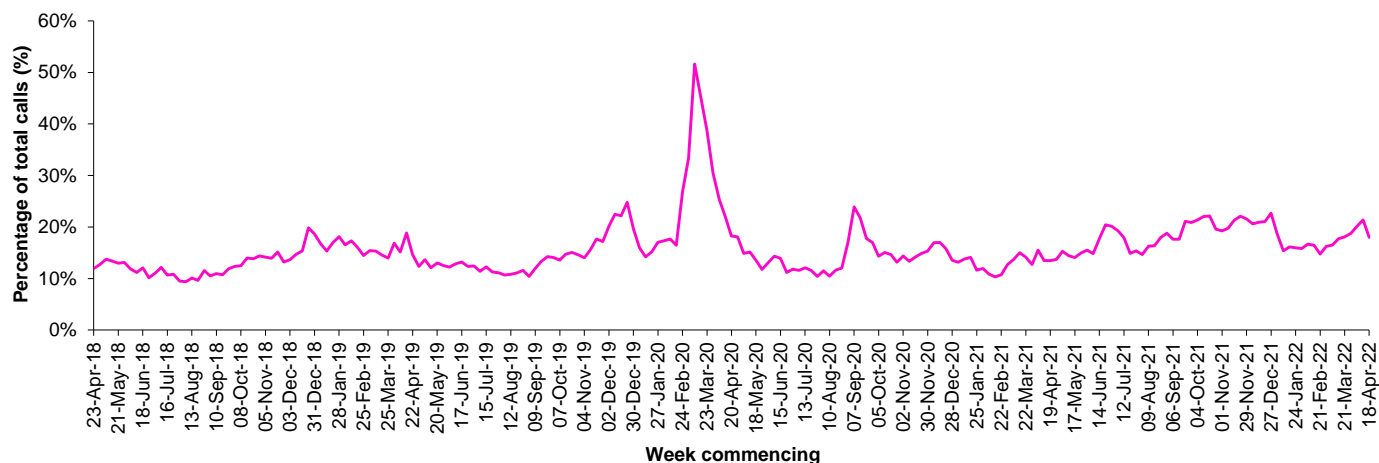
This chart summarises respiratory panel test data and does not include data for patients tested SOLELY for SARS-CoV2. Samples which test positive for more than one pathogen will appear more than once in the chart.

Figure 7. RSV incidence rate per 100,000 population aged under five years, week 30 2017 to Week 16 2022.



Calls to NHS Direct Wales

Figure 8. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 16 2018 - Week 16 2022 (as of 24/04/2022).



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 19/04/2022).

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	47.6%
Children aged four to ten years*	68.7%
Children aged 11 to 15 years*	58.2%
NHS staff	56.0%
NHS staff who have direct patient contact	57.2%

* 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 15, community and syndromic influenza indicators remain low in the UK. GP ILI consultations increased in Northern Ireland to 0.9 per 100,000, but decreased in Scotland to 0.8 per 100,000 - all still remain well below the baseline intensity thresholds. The weekly ILI GP consultation rate in England reported through the RCGP system decreased to 1.4 per 100,000, well below the MEM threshold for baseline activity (12.2 per 100,000). During week 15, 190 of the 5,957 samples tested positive for influenza (including 72 influenza A(H3N2), eight influenza A(H1N1)pdm09, 106 influenza A(not subtyped) and four 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 15, influenza activity continues to be reported throughout the WHO European Region. During week 15, a total of 1,129 sentinel specimens were tested for influenza, 286 of which were positive, 276 influenza A (177 influenza A(H3N2), 17 influenza A(H1N1)pdm09 and 82 influenza A(not subtyped)) and 10 influenza B.

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

- The WHO reported on 18/04/2022 that globally, influenza activity remained low but has increased. In the temperate zones of the northern hemisphere, influenza activity increased or remained, except in East Asia where detection decreased. In the temperate zones of the southern hemisphere, influenza activity remained low overall. In North America, influenza virus detections increased in recent weeks but remained low. In Europe, influenza activity has stabilised with influenza A(H3N2) predominant. In Central Asia, a single influenza B was reported in Krygystan. In East Asia, influenza activity appeared to decrease in China and remained low in the rest of the subregion. In Northern Africa, increasing detections of influenza A(H3N2) were reported in Tunisia. 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 in most countries, with influenza A(H3N2) predominant.
- Based on FluNet reporting (as of 14/04/2022), during the time period from 21/03/2022 – 03/04/2022, National Influenza Centres and other national influenza laboratories from 113 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 351,420 specimens during that time period, 36,312 were positive for influenza viruses, of which 35,040 were typed as influenza A (of the subtyped influenza A viruses, 275 were influenza A(H1N1)pdm09 and 4,682 were influenza A(H3N2)) and 1,272 influenza B (of the characterised influenza B viruses one belonged to B-Yamagata lineage and 1,005 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 15 (ending 16/04/2022) influenza activity varies by region in the United States, activity is highest in the northeast, south-central and mountain regions. Nationally, 4,014 (8.9%) out of 45,179 specimens have tested positive for influenza in week 15, of these positives 3,995 (99.5%) were influenza A and 19 (0.5%) were influenza B. Further characterisation has been carried out on 11,811 specimens by public health laboratories, and 442 samples tested positive for influenza, 441 influenza A (321 influenza A(H3N2) and 120 influenza A(not subtyped)) and one influenza B.

Source: CDC Weekly US Influenza Surveillance Report: <http://www.cdc.gov/flu/weekly/>

- The Public Health Agency of Canada reported that during week 15, influenza activity has increased in recent weeks. The percentage of visits to healthcare professionals that were due to ILI was 1.2% in week 15. The percentage of tests positive for influenza was 3.8% during week 15.

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 continued to see 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 27/04/2022 is 872,108 with 184 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 7,348 with 14 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 13 was 9,964. 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 26/04/2022, there have been 21,994,809 reported confirmed cases of COVID-19 in the UK, of which 131,054 were newly reported in the previous 7 days. The total deaths within 28 days of a positive test was 174,144 with 2,266 reported in the previous 7 days. Latest UK data is available from: <https://coronavirus.data.gov.uk/>
- As at 26/04/2022, WHO have reported 508,041,253 confirmed COVID-19 cases globally, with 379,0841 reported in the previous 24 hours. There have been 6,224,220 deaths, of which 2,718 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 07/04/2022 WHO reported six additional case of Middle East Respiratory Syndrome coronavirus (MERS-CoV). Globally, 2,585 laboratory confirmed cases of human infection with MERS-CoV, including 891 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 (02/03/2022 to 07/04/2022) 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