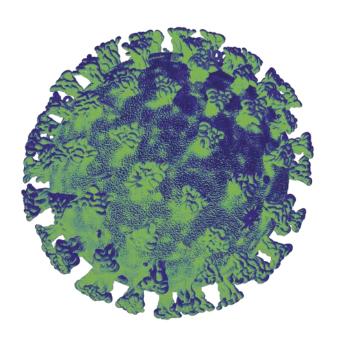
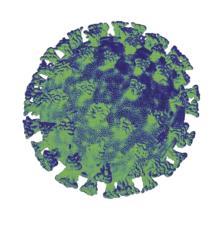
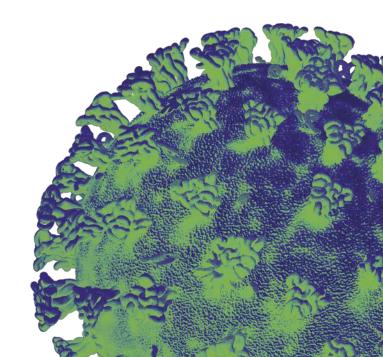


Science Evidence Advice (SEA)

Summary of Advice 10 February 2023







Top Line Summary

- There are inconsistencies in the COVID-19 data this week with some indicators trending upwards and other decreasing in Wales. In England several indicators suggest an increase in infections compared to recent weeks.
- Deaths related to COVID-19 remain at low levels in Wales.
- Influenza continues to circulate in Wales, although activity is decreasing.
 UKHSA reports that influenza positivity and confirmed outbreaks, hospital and ICU admissions are stable.
- RSV activity has stabilised between low and medium levels of intensity.
- Numbers of invasive Group A streptococcal (Strep A) infections have decreased to normal seasonal levels but remain high in comparison to the previous years.

SEA ADVICE ONLY

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1. Wales COVID-19 Situation Update

- There are inconsistencies in the data this week with some indicators trending upwards and other decreasing in Wales. In England several indicators suggest an increase in COVID-19 infections compared to recent weeks.
- Hospital bed occupancy and hospital admissions have seen small increases in a number of Health Boards in Wales.
- Deaths related to COVID-19 remain at low levels in Wales.
- XBB.1.5 and CH.1.1 and associated sublineages continue to show growth advantage. It is likely that the growth of both variants are contributing to the current increase.

1.1. ONS Coronavirus Infection Survey

The ONS Coronavirus Infection Survey¹ reports that at the midpoint of the most recent week (25 to 31 January 2023), the trend in the percentage of people testing positive was uncertain in Wales and Scotland, however rates decreased over two weeks.

The percentage of people testing positive increased in England in the most recent week and decreased in Northern Ireland.

The estimated percentages of the community population with COVID-19 ranged from 1.19% in Wales to 1.56% in England and Scotland.

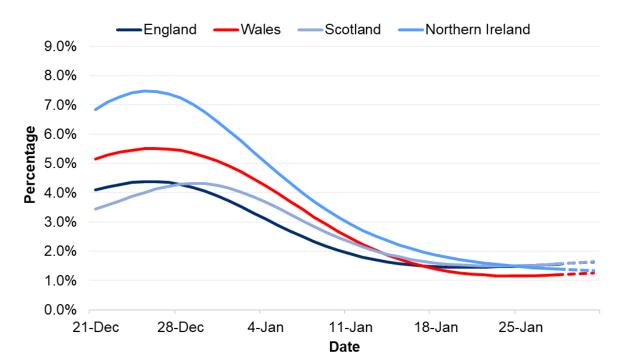


Figure 1 - Positivity rates (%) across UK countries since 21 December 2022

Source: Coronavirus (COVID-19) Infection Survey, ONS, 08/02/23

In Wales, the estimated number of people testing positive for COVID-19 was 36,600 people (95% credible interval: 28,100 to 47,400), equating to 1.19% of the population, or around 1 in 85 people.

In England, the estimated number of people testing positive for COVID-19 was 874,700 people (95% credible interval: 822,500 to 927,700), equating to 1.56% of the population, or around 1 in 65 people.

In Scotland, the estimated number of people testing positive for COVID-19 was 82,300 people (95% credible interval: 66,000 to 100,300), equating to 1.56% of the population, or around 1 in 65 people.

https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/coronaviruscovid19infectionsurveypilot/previousReleases

In Northern Ireland, the estimated number of people testing positive for COVID-19 was 25,500 people (95% credible interval: 18,000 to 34,200), equating to 1.39% of the population, or around 1 in 70 people.

1.2. Wastewater surveillance

<u>Wastewater surveillance</u>² suggests the overall SARS-CoV-2 viral load has increased across the country. However, the signal decreased at Cleddau and Pembrokeshire Coastal Rivers and Ynys Môn.

Figure 2 - National (blue lines) and Regions (grey lines) wastewater signal for COVID-19 in Wales.

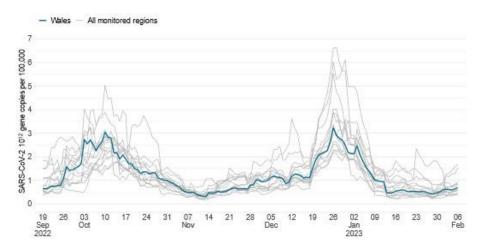
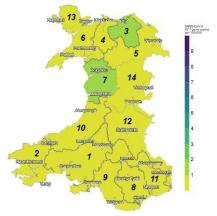


Figure 3 - National Heat Map showing Regional Mean Wastewater Signal



1.3. PHW Cases (PCR & LFD Testing)

PHW most recent epidemiological reports from 08 February 2023 <u>reports</u>³ that the overall COVID-19 infections have decreased compared to the previous week in Wales. However, this is not consistent across all indicators.

PHW report that the weekly number of confirmed case admissions to hospital and the number of cases who are inpatients have decreased.

The all-Wales incidence as estimated using testing data available to PHW suggests that confirmed PCR cases continue to remain stable, and the adjusted case episode rates (PCR +LFD episodes) have stabilised.

LFT positivity has increased and now stands at 21% compared with 16% in the previous week.

The incidence rate remains highest in the 40-59 age groups.

² Wastewater monitoring reports: coronavirus | GOV.WALES

 $[\]underline{\text{https://public.tableau.com/app/profile/public.health.wales.health.protection/viz/PHWVirologyDashboar} \\ \underline{\text{d-Reportsandnotes_16535581718100/Notesondatainterpretationandreports}}$

1.4. Deaths

ONS published statistics on 7 February on <u>provisional weekly deaths</u> ⁴, including deaths involving COVID-19, for the week ending 27 January 2023.

33 deaths involving COVID-19 were registered in the latest week. This was 4.0% of all deaths, and 36 less than the previous week.

<u>PHW reports</u> that deaths in confirmed COVID-19 cases in hospital, reported by clinicians through PHW mortality rapid surveillance, remain at lower levels compared to previous waves.

816 deaths from all causes were registered in the latest week. This was 158 less than the previous week and is 18 less than the five-year average for 2017-19 and 2021, 2022.

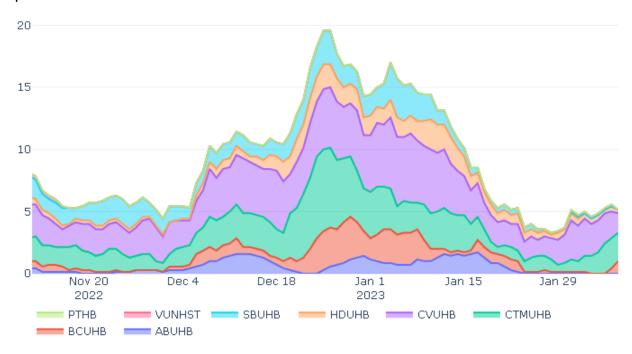
⁴ Deaths registered weekly in England and Wales, provisional - Office for National Statistics (ons.gov.uk)

1.5. NHS

As of 7 February 2023, hospital admissions of suspected and confirmed COVID-19 positive patients are at approximately 5 admissions per day.

Admissions have started to slightly increase.

Figure 4 - Hospital admissions of suspected and confirmed COVID-19 positive patients



As of 7 February 2023, the 7-day average of hospital bed occupancy of confirmed COVID-19 patients was 206 beds.

Hospital bed occupancy of confirmed COVID-19 patients had been decreasing since 26 December 2022, when there was a 7-day average of 644 beds occupied, but it is now increasing slightly.

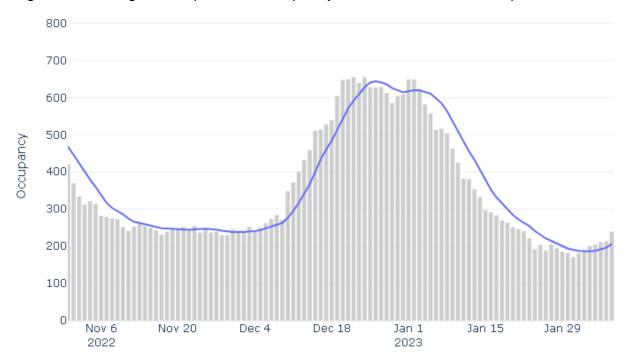
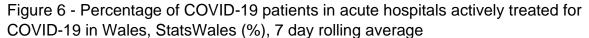
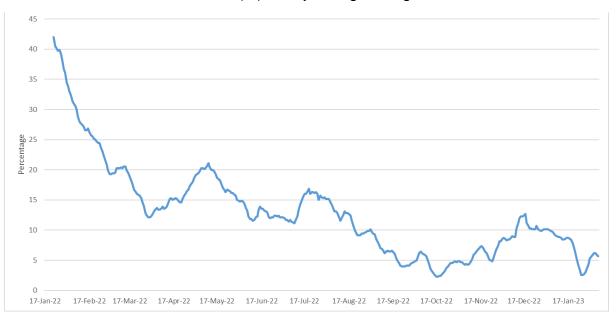


Figure 5 - Average of hospital bed occupancy of confirmed COVID-19 patients

The proportion of patients in hospital⁵ with COVID-19 who are being actively treated for COVID-19, as opposed to testing positive for COVID-19 but being primarily treated for other reasons, decreased to around 3% towards the end of January and has since increased to around 6%.

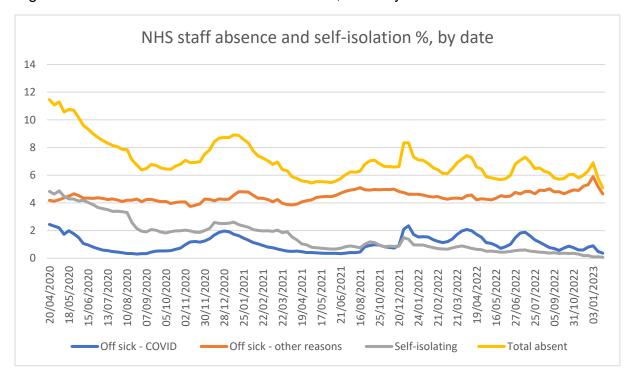




⁵ statswales.gov.wales

As of 30 January 2023, <u>NHS staff absence due to self-isolation</u>⁶ has remained the same as the period ending 16 January 2023, at 0.1%. Absence due to COVID-19 sickness has decreased from 0.5% to 0.4%.

Figure 7 NHS staff absence and self-isolation, January 2023



⁶ statswales.gov.wales

1.6. Vaccines

Neutralisation data suggest that vaccine effectiveness (VE) may be further reduced for CH.1.1 and XBB.1.5 when compared to BQ.1. Analyses of incremental VE against hospitalisation have been run but sequenced hospitalised case numbers remain too low for robust estimates. Current central estimates for CH.1.1. are lower than for BQ.1 but have a high level of uncertainty; there is insufficient data to estimate VE against XBB.1.5.

The Autumn COVID-19 vaccine booster campaign is under way, as outlined in the tables below:

Cumulative number of COVID-19 Autumn 22/23 vaccine doses given, by week. Uptake, based on Wales residents, uses indicative denominator 1,606,188

| Week ending | Number of doses | Uptake |
|-------------|-----------------|--------|
| 2022-09-04 | 23,147 | 1.4% |
| 2022-09-11 | 90,855 | 5.7% |
| 2022-09-18 | 155,060 | 9.7% |
| 2022-09-25 | 231,560 | 14.4% |
| 2022-10-02 | 326,972 | 20.4% |
| 2022-10-09 | 426,922 | 26.6% |
| 2022-10-16 | 542,585 | 33.8% |
| 2022-10-23 | 643,465 | 40.1% |
| 2022-10-30 | 733,808 | 45.7% |
| 2022-11-06 | 806,267 | 50.2% |
| 2022-11-13 | 880,328 | 54.8% |
| 2022-11-20 | 940,782 | 58.6% |
| 2022-11-27 | 990,992 | 61.7% |
| 2022-12-04 | 1,030,897 | 64.2% |
| 2022-12-11 | 1,060,386 | 66.0% |
| 2022-12-18 | 1,080,713 | 67.3% |
| 2022-12-25 | 1,088,983 | 67.8% |
| 2023-01-01 | 1,092,916 | 68.0% |
| 2023-01-08 | 1,099,688 | 68.5% |
| 2023-01-15 | 1,106,966 | 68.9% |
| 2023-01-22 | 1,114,053 | 69.4% |
| 2023-01-29 | 1,119,793 | 69.7% |

Source: Public Health Wales

Number of COVID-19 Autumn 22/23 booster vaccines given by age and risk group

| Risk group | Denominator *(n) | Immunised (n) - 22/23 Booster | Uptake(%) - 22/23 Booster |
|--------------------------|---------------------|----------------------------------|------------------------------|
| Severely | | | |
| Immunosuppressed | 50,179 | 38,338 | 76.4 |
| Residents in a care home | | | |
| for older adults* | 13,446 | 11,932 | 88.7 |
| Staff working in care | | | |
| homes for older adults** | 37,593 | 15,507 | 41.2 |
| Health care staff** | | | |
| | 141,594 | 79,931 | 56.5 |
| Social care staff** | | | |
| | | 23,345 | |
| All adults aged 65 years | | | |
| and older | 703,772 | 577,625 | 82.1 |
| All adults aged 50 to 64 | | | |
| years | 683,369 | 403,090 | 59 |
| Aged 5 to 49 years in a | | | |
| clinical risk group | 219,047 | 73,305 | 33.5 |

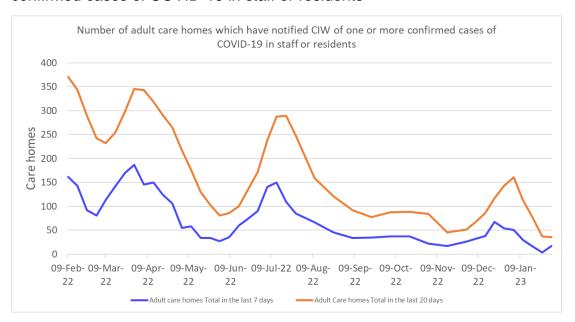
Source: Public Health Wales

An individual will be counted more than once if they are in more than one risk group. Denominator data is taken from WIS and based on Wales residents, with the exception of care home workers, healthcare workers and social care workers where denominators are based on those working in Wales. From 2 February 2022, all age groups are based on age as at 31 March 2023. Quality of recording of staff priority groups is variable and incomplete, these figures are provided provisionally and should be interpreted with caution. Care home residents have been identified by matching address as recorded in the Welsh Demographic Service (WDS) to a Care Inspectorate Wales list of registered Care Homes.

1.7. Care homes

As of 1 February 2023, the number of adult care homes in Wales that have <u>notified</u> <u>CIW</u> ⁷ of one or more confirmed cases of COVID-19 in staff or residents in the last 7 days has increased since the previous week, to 17 notifying, from 4 notifying. This figure for the last 20 days is at 36 (period ending 1 February 2023), from 37 (period ending 25 January 2023). In Wales there are 1,016 adult care homes in total.

Figure 8 - Number of adult care homes which have notified CIW of one or more confirmed cases of COVID-19 in staff or residents



As of 1 February 2023, the <u>number of notifications to CIW of deaths of adult care</u> <u>home residents involving COVID-19</u> 8 (both confirmed and suspected) in the last 7 days has remained the same as the previous week, with 2 deaths reported.

In total, CIW has been notified of 2,288 care home resident deaths with suspected or confirmed COVID-19 between 1 March 2020 and 1 February 2023. This makes up 11% of all adult care home resident reported deaths (20,020) during this period.

⁷ statswales.gov.wales

⁸ statswales.gov.wales

1.8. Schools

As of 8 February 2023, the average attendance for this academic year to date is 89.3%.

The latest week is 30 January to 3 February 2023, the week before is the 23 to 27 January 2023.

An average of 89.7% of half-day school sessions were recorded as present for pupils aged 5 to 15 over the latest week, down from 91.1% the week before. Data for the latest week is provisional.

An average of 6.8% of half-day school sessions were recorded as authorised absence for pupils aged 5 to 15 over the latest week, up from 6.1% the week before.

An average of 3.5% of half-day school sessions were recorded as unauthorised absence for pupils aged 5 to 15 over the latest week, up from 2.8% the week before.

There has been no difference in the attendance rate by gender for the academic year to date, 89.4% for boys and 89.2% for girls.

The attendance rate by year group for the academic year to date has been highest for pupils in Years 3, 4 and 5 (91.4%) and lowest for pupils in Year 11 (85.0%).

The attendance rate for the academic year to date has been higher for pupils not eligible for free school meals (91.2%) than pupils who are eligible for free school meals (83.9%).

The most common reason for absence for the academic year to date has been illness, with 53.6% of sessions missed being for this reason. The full report is available here ⁹

⁹ Attendance of pupils in maintained schools | GOV.WALES

1.9. Long Covid

It is estimated 2.0 million people living in private households in the UK (3.0% of the population) were experiencing self-reported long COVID (symptoms continuing for more than four weeks after the first confirmed or suspected coronavirus (COVID-19) infection that were not explained by something else) as of 2 January 2023.

In the same period in Wales, it was estimated that 95,000 people self-reported long COVID (3.1% of the Welsh population). This is an estimated decrease of 16,000 people since the four week period ending 4 December 2022. The full report is available here ¹⁰ and the next release is scheduled for 2 March 2023.

¹⁰ Prevalence of ongoing symptoms following coronavirus (COVID-19) infection in the UK - Office for National Statistics (ons.gov.uk)

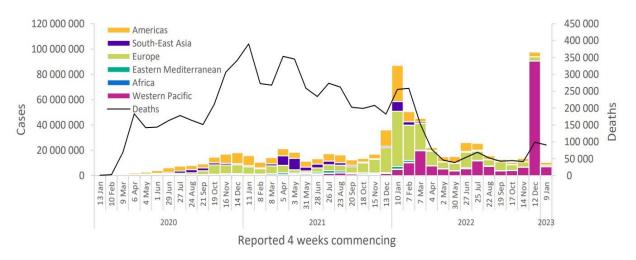
1.10. International overview – World Health Organisation update

The WHO reports ¹¹ that globally, nearly 10.5 million new cases and over 90 000 deaths were reported in the last 28 days (9 January to 5 February 2023), a decrease of 89% and 8%, respectively, compared to the previous 28 days.

Epidemiological trends in the previous 28 days have been dominated by a large wave of cases and deaths in the Western Pacific Region, notably in China.

As of 5 February 2023, over 754 million confirmed cases and over 6.8 million deaths have been reported globally.

Figure 9 - COVID-19 cases reported weekly by WHO Region, and global deaths, as of 5 February 2023



Source: WHO Weekly Epidemiological Update on COVID-19

The highest numbers of new 28-day cases were reported from China (3 485 265 new cases; -96%), Japan (2 429 215 new cases; -42%), the United States of America (1 328 654 new cases; -27%), the Republic of Korea (736 811 new cases; -59%), and Brazil (389 444 new cases; -59%).

The highest numbers of new 28-day deaths were reported from China (40 812 new deaths; -11%), the United States of America (15 294 new deaths; +40%), Japan (9874 new deaths; +28%), the United Kingdom (2671 new deaths; -32%), and Brazil (2566 new deaths; -37%).

¹¹ https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports

1.11. European Centre for Disease Prevention and Control (ECDC)

As of the week ending 05 February 2023, <u>ECDC reports ¹²</u> that the COVID-19 epidemiological situation in the EU/EEA remained stable.

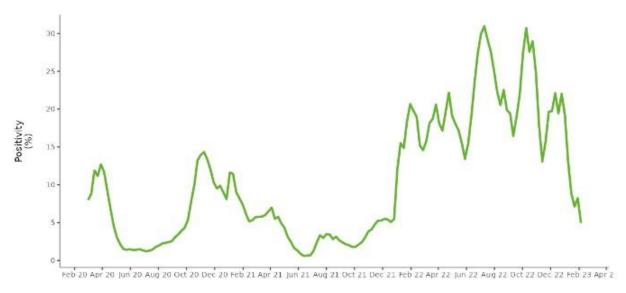
Following the substantial increases in transmission and severe outcomes observed during December 2022, in both the general population and long-term care facilities, pooled rates of case notification (all-age and among those aged 65 years and above), hospital, ICU admission and COVID-19-related deaths remained at the lowest levels observed in the past 12 months.

Despite the stable epidemiological situation, severe COVID-19 disease continues to burden healthcare systems in the EU/EEA.

The rate of COVID-19 patients in hospitals and ICUs in the EU/EEA were 28% and 19%, respectively, of the maximum reported levels during the pandemic.

887 COVID-19-related deaths were reported from 27 EU/EEA countries.

Figure 10 - EU/EEA weekly test positivity, 09 February 2023



ECDC. Figure produced 9 February 2023 Source: Pooled data from Member States (n = 28 for week 5)

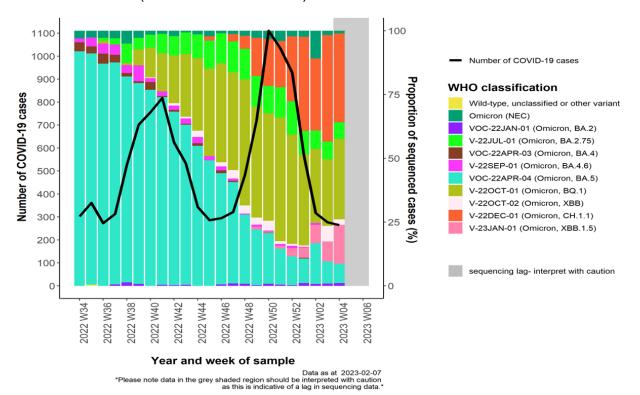
Data source: https://www.ecdc.europa.eu/en/covid-19/country-overviews

¹² COVID-19 situation updates (europa.eu)

1.12. Variant of Concern update

As of 7 February 2023, PHW report ¹³ that in the last four reporting weeks, V-22DEC-01 (Omicron, CH.1.1) has been the most dominant variant in Wales, accounting for 34.5% of all sequenced cases.

Figure 11 – Proportion of sequenced cases typed as each variant in the past six months in Wales (Data as at 7 Feb 2023)



Source: Public Health Wales COVID-19 genomic surveillance

As of 7 February 2023 there have been 57,114 cases of VOC-21NOV-01 (Omicron, BA.1), 29,273 cases of VOC-22JAN-01 (Omicron, BA.2), 1,192 cases of VOC22APR-03 (Omicron, BA.4), 7,406 cases of VOC-22APR-04 (Omicron, BA.5), 1,788 cases of V-22OCT-01 (Omicron, BQ.1), 652 cases of V-22DEC-01 (Omicron, CH.1.1) and 74 cases of V-23JAN-01 (Omicron XBB.1.5) confirmed in Wales.

UKHSA reports ¹⁴ that XBB.1.5 and CH.1.1 (and associated sublineages) continue to show growth advantage in England in all models. It is likely that the growth of both variants are contributing to the current increase in COVID-19 incidence and that they will continue to increase overall transmission as they become more prevalent.

As of 8 February 2023, WHO reports that among the Omicron VOC, BA.5 and its descendent lineages are still dominant globally, but have declined in relative prevalence. In epidemiological week 3 (16 to 22 January 2023), they accounted for

¹⁴ https://www.gov.uk/government/publications/investigation-of-sars-cov-2-variants-technical-briefings

https://public.tableau.com/app/profile/public.health.wales.health.protection/viz/PHWVirologyDashboard-Reportsandnotes_16535581718100/Notesondatainterpretationandreports

53.9% prevalence (with 8393 sequences) of all submitted sequences to GISAID, a trend that is declining as compared to week 51 (19 to 25 December 2022, 74.2% prevalence with 46 718 sequences).

During the same reporting period, the prevalence of BA.2 and its descendent lineages remained stable (12.6% as compared to 11.9% in week 51). In week 3, 2023, pooled recombinant variant sequences rose to a prevalence of 24.6% (with 3823 sequences) from 8.8% (with 5563 sequences) in week 51, 2022.

The majority of these recombinant variants are XBB.1.5 sequences (17.7% in week 3) and are reported from the United States of America. Unassigned sequences (presumably Omicron) account for 8.7% of sequences submitted to GISAID in week 3. BA.1, BA.3 and BA.4 variants and their descendent lineages all account for <1% prevalence.

As of 13 January 2023, <u>ECDC reports</u> ¹⁵ that while there are currently no vaccine effectiveness (VE) estimates for XBB.1.5, the available vaccines still remain effective against severe disease due to previous and current Omicron variants dominant in the EU, even though there is some evidence of waning over time.

There are currently no signals that the infection severity of XBB.1.5 is different than that of previously circulating Omicron sub-lineages. Regarding therapeutics, no specific data exist on the effectiveness of therapeutics.

¹⁵ECDC assesses risk to the EU/EEA associated with Omicron XBB1.5 sub-lineage (europa.eu)

2. Influenza Situation Update

- As of 08 February 2023, influenza continues to circulate in Wales, although activity is decreasing.
- UKHSA reports that influenza positivity and confirmed outbreaks, hospital and ICU admissions are stable. The highest number of incidents continue to be in care homes.
- In <u>Europe</u> 33 of 38 countries or areas reported high or medium intensity and/or widespread activity indicating substantial seasonal influenza virus circulation.

2.1. Weekly Influenza and Acute Respiratory Infection Report – PHW

As of 08 February 2023, PHW report ¹⁶ that influenza continues to circulate in Wales, although activity is decreasing. During week 4 (ending 05/02/2023), there were 50 cases of influenza (this is an increase from the previous week).

The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 5, was 5.2 consultations per 100,000 practice population. This is an increase compared to the previous week.

Consultation rates were highest in those aged 35 to 44 years.

The Sentinel GP consultation rate for Acute Respiratory Infections (ARI) was 210.7 per 100,000 practice population during week 5.

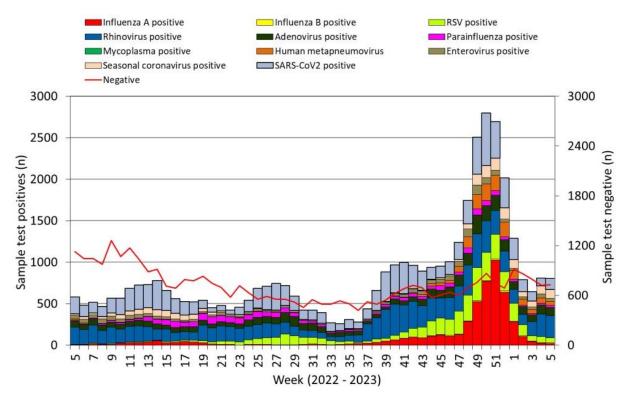
The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache, and sore throat) during week 5 decreased to 17.9%.

Figure 12 - Uptake of influenza immunisations in GP Practice patients in Wales

| People aged 65y and older | 77.3% |
|--|-------|
| People younger than 65y in a clinical risk group | 47.2% |
| Children aged two & three years | 46.6% |
| Children aged between four & ten years | 67.0% |
| Children aged between 11 & 15 years | 57.1% |
| Total NHS staff | 54.1% |
| NHS staff with direct patient contact | 55.3% |

¹⁶ Weekly Influenza and Acute Respiratory Infection Report - Public Health Wales (nhs.wales)

Figure 13 - Specimens submitted for virological testing for hospital patients and non-sentinel GPs



Data Source: PHW Weekly Influenza & Acute Respiratory Infection Surveillance

2.2. UKHSA Weekly national influenza surveillance report

As of 9 February 2023, <u>UKHSA reports</u> ¹⁷, influenza positivity decreased to 2.7% compared with 3.3%. The highest positivity was seen in those aged 15 to 44 years old at 5.3%, a decrease from 7.3%.

Through primary care surveillance, the influenza-like-illness consultations indicator remained stable compared with the previous week and within the baseline activity level range.

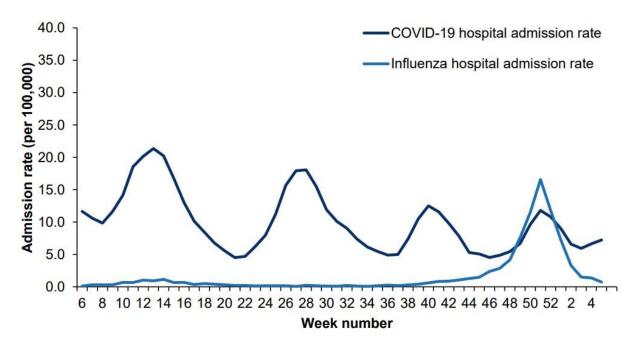
The overall number of reported influenza confirmed outbreaks remained stable. The highest number of incidents continue to be in care homes, with 4 influenza confirmed outbreaks occurring in England.

Influenza hospital admissions decreased in week 5 compared with the previous week.

Influenza admissions were highest in the 85 years and over age group. Influenza ICU admissions remained stable in week 5 within the baseline range of activity.

Emergency department attendances for influenza-like illness remained stable.

Figure 14 - Weekly overall hospital admission rates of new COVID-19 and influenza positive cases per 100k population, England



¹⁷ https://www.gov.uk/government/statistics/national-flu-and-covid-19-surveillance-reports-2022-to-2023-season

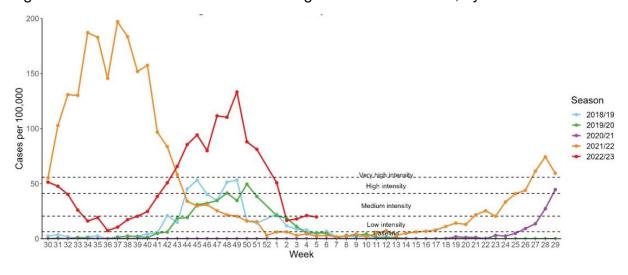
3. Respiratory Syncytial Virus (RSV) and Invasive Group A Streptococcal Situation

- RSV incidence in children under five years of age has decreased and currently between low and medium levels of intensity.
- UKHSA reports that the overall positivity and hospitalisation rate for RSV continued to decrease.
- Scarlet fever and iGAS notifications have decreased to more normal seasonal levels, although scarlet fever is still slightly above these levels.

As of 08 February 2023, PHW report that confirmed RSV case incidence in children aged under five remains at low levels.

There were 51 surveillance samples from patients with ILI symptoms collected by sentinel GPs and community pharmacies during Week 05. Of the 51 samples ten tested positive for rhinovirus, nine seasonal coronaviruses, four enterovirus, three for RSV, two Human Metapneumovirus, two SARS-CoV2, two influenza B, one influenza A(H1), one Parainfluenza and 21 were negative.

Figure 15 - RSV Incidence rate in those aged under 5 in Wales, by week



3.1. Incidence data for Strep A and Scarlet Fever

As of 05 February, PHW report that scarlet fever and iGAS notifications have decreased to more normal seasonal levels, although scarlet fever is still slightly above these.

PHW report that there have been a total of 102 cases of iGAS confirmed in Wales since 1st September 2022. Of these individuals, 69 are aged 15 years or older and 33 are aged under 15 years.

Figure 16 - PHW Scarlet Fever Notifications per 100k, 05 February 2023

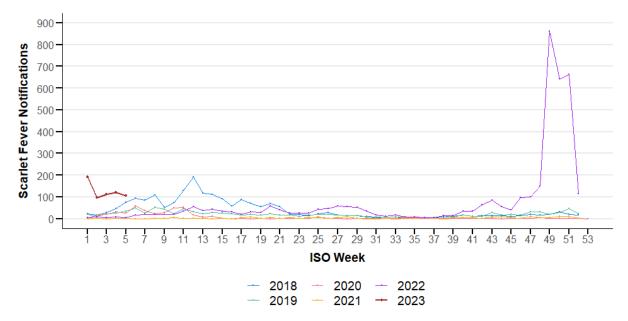


Figure 17 - PHW Lab Confirmed Invasive group A streptococcal infections, 05 February 2023

