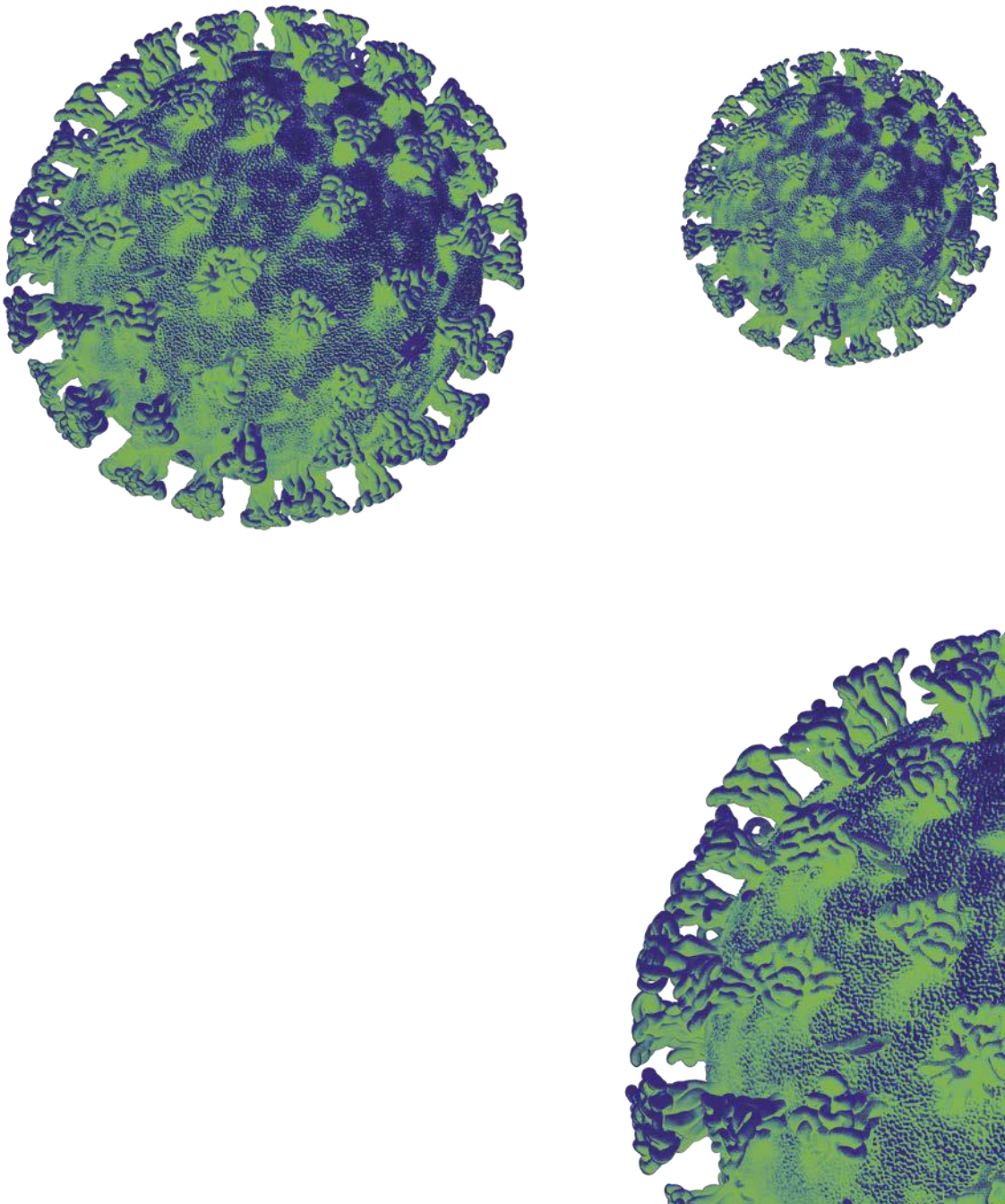
Llywodraeth Cymru
Welsh Government

Science Evidence Advice (SEA)

Summary of Advice
24 February 2023



Top Line Summary

- Influenza continues to circulate in Wales, although at low levels. 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.
- Current upwards trends in data on COVID-19 infections and pressures, when compared to previous waves, suggest that another wave could be imminent. This wave would be likely driven by the increasing trend of XBB.1.5 variants.
- Deaths related to COVID-19 remain at low levels in Wales.

1. Wales COVID-19 Situation Update

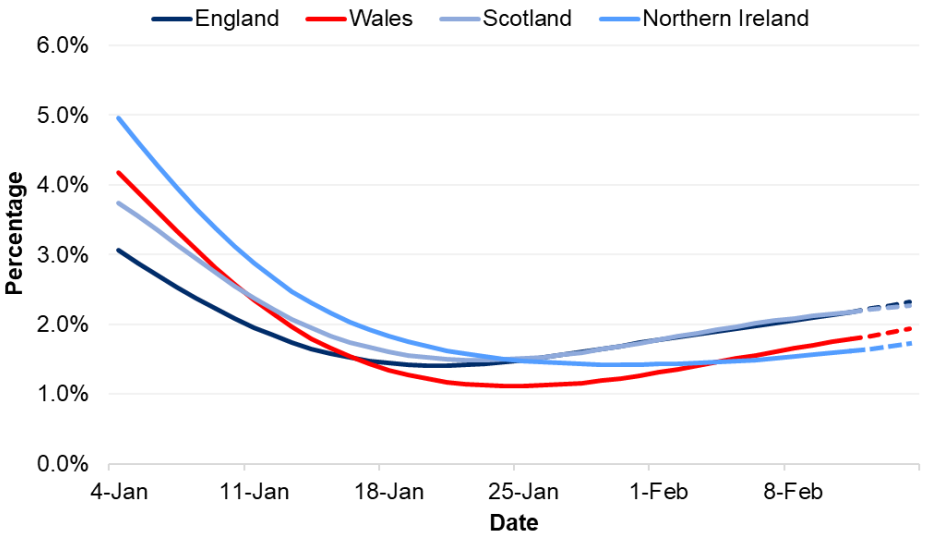
- The majority of COVID-19 indicators in Wales are on an upward trend this week. In England indicators suggest a continued increase in COVID-19 infections in recent weeks.
- COVID-19 hospital bed occupancy and hospital admissions have seen increases in recent weeks in Wales.
- Deaths related to COVID-19 remain at low levels in Wales.
- Data from sequenced cases indicates that CH.1.1 (34.0%) and XBB.1.5 (33.8%) are of similar proportion, representing some 68% of all sequenced cases between Week 4 and Week 7. It is likely that the proportion of XBB.1.5 cases will overtake CH.1.1 in the coming week.

1.1. ONS Coronavirus Infection Survey

The ONS Coronavirus Infection Survey[1] reports that at the midpoint of the most recent week (8 to 14 February 2023), the trend in the percentage of people testing positive increased in Wales, England and Scotland. The trend was uncertain in the most recent week in Northern Ireland.

The estimated percentages of the community population with COVID-19 ranged from 1.62% in Northern Ireland to 2.18% in England and Scotland.

Figure 1 - Positivity rates (%) across UK countries since 4 January 2023



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

In Wales, the estimated number of people testing positive for COVID-19 was 55,300 people (95% credible interval: 43,900 to 67,700), equating to 1.79% of the population, or around 1 in 55 people.

In England, the estimated number of people testing positive for COVID-19 was 1,223,000 people (95% credible interval: 1,163,400 to 1,285,800), equating to 2.18% of the population, or around 1 in 45 people.

In Scotland, the estimated number of people testing positive for COVID-19 was 114,800 people (95% credible interval: 95,400 to 134,800), equating to 2.18% of the population, or around 1 in 45 people.

In Northern Ireland, the estimated number of people testing positive for COVID-19 was 29,700 people (95% credible interval: 21,800 to 38,300), equating to 1.62% of the population, or around 1 in 60 people.

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

1.2. Wastewater surveillance

Wastewater surveillance[2] suggests the overall SARS-CoV-2 viral load has increased across the country. However, the signal decreased at Carmarthen Bay and the Gower, Cleddau and Pembrokeshire Coastal Rivers and Dee, and remained level at Conwy and Meirionnydd.

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

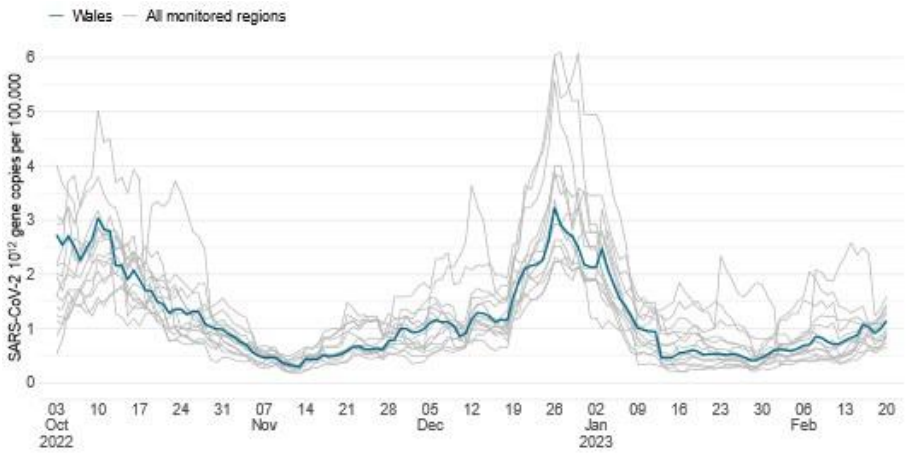
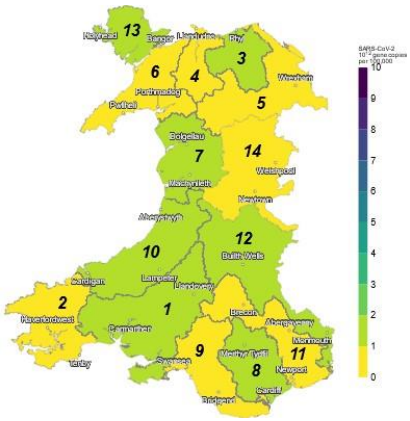


Figure 3 - National Heat Map showing Regional Mean Wastewater Signal



1.3. PHW Cases (PCR & LFD Testing)

PHW most recent epidemiological reports from 22 February 2023 reports[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 has increased slightly and the number of cases who are inpatients have increased.

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 risen very slightly but remains at a low level.

LFT positivity has increased and now stands at 29% compared with 25% in the previous week.

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

[2] Wastewater monitoring reports: coronavirus | GOV.WALES

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

1.4. Deaths

ONS published statistics on 21 February on provisional weekly deaths [4], including deaths involving COVID-19, for the week ending 10 February 2023.

14 deaths involving COVID-19 were registered in the latest week. This was 1.9% of all deaths, and 15 fewer than the previous week.

755 deaths from all causes were registered in the latest week. This was 52 fewer than the previous week and is 24 more than the five-year average for 2017-19 and 2021, 2022.

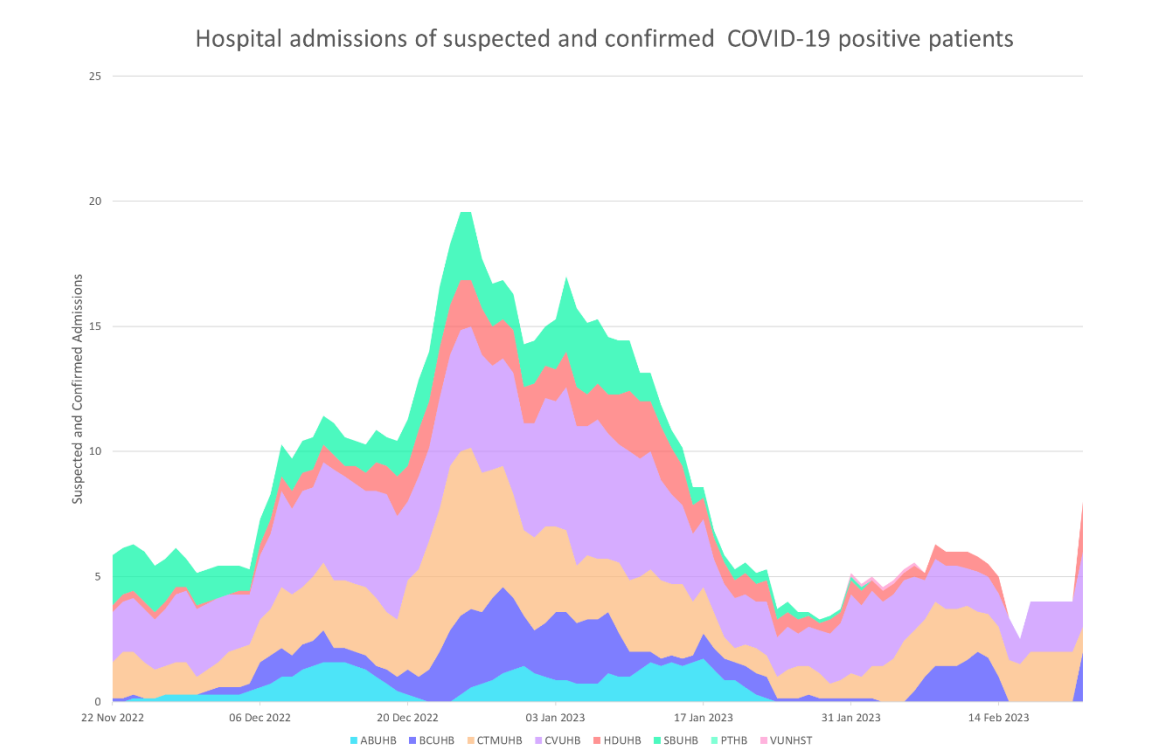
[4] Deaths registered weekly in England and Wales, provisional - Office for National Statistics (ons.gov.uk)

1.5. NHS

As of 10 February, the data reporting frequency for NHS pressures changed from daily to weekly. Subsequently, data are a snapshot as at Wednesday in each week.

As of 22 February 2023, hospital admissions of suspected and confirmed COVID-19 positive patients were at 8 admissions.

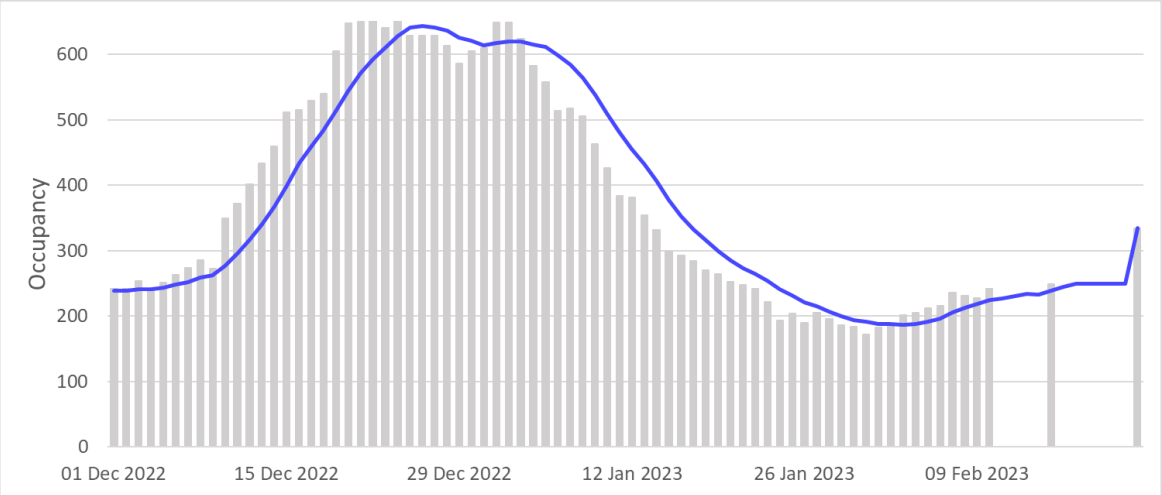
Figure 4 - Hospital admissions of suspected and confirmed COVID-19 positive patients



As at 22 February 2023, the number of hospital bed occupancy of confirmed COVID-19 patients was 334 beds, an increase from 249 beds reported on the previous Wednesday.

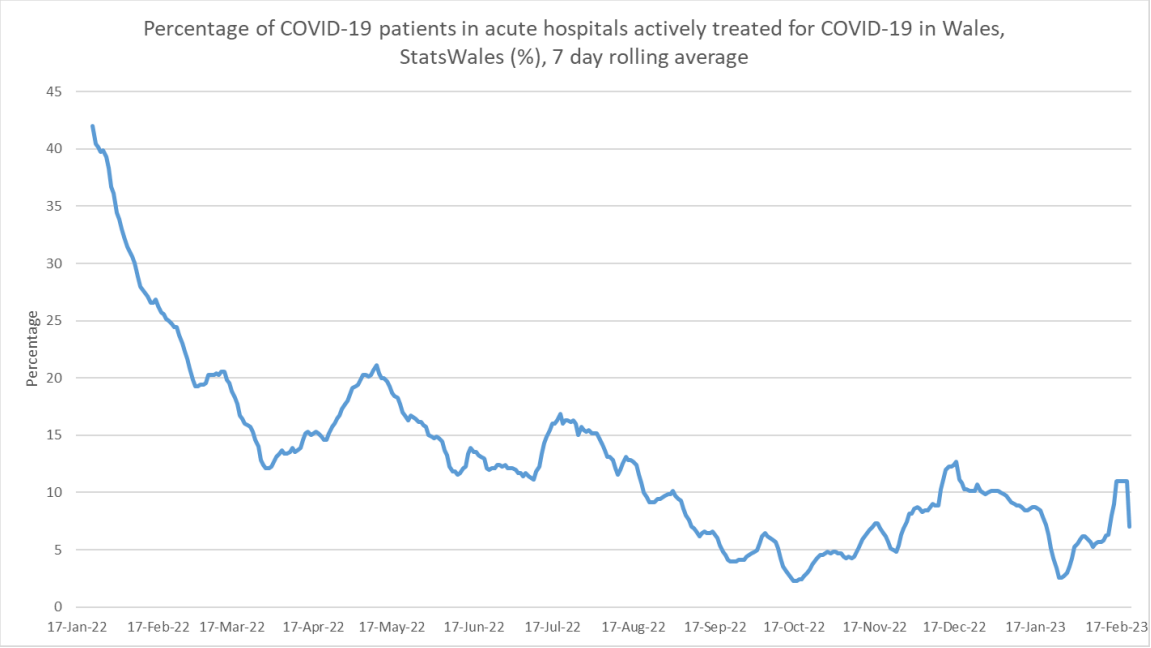
Hospital bed occupancy of confirmed COVID-19 patients had been decreasing since 26 December 2022, when there was a 7-day average of 644 beds occupied, but is now increasing.

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



The proportion of patients in hospital[5] 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 11% on the 15 February. This has reduced to 7% at the snapshot taken on 22 February.

Figure 6 - Percentage of COVID-19 patients in acute hospitals actively treated for COVID-19 in Wales, StatsWales (%), 7 day rolling average

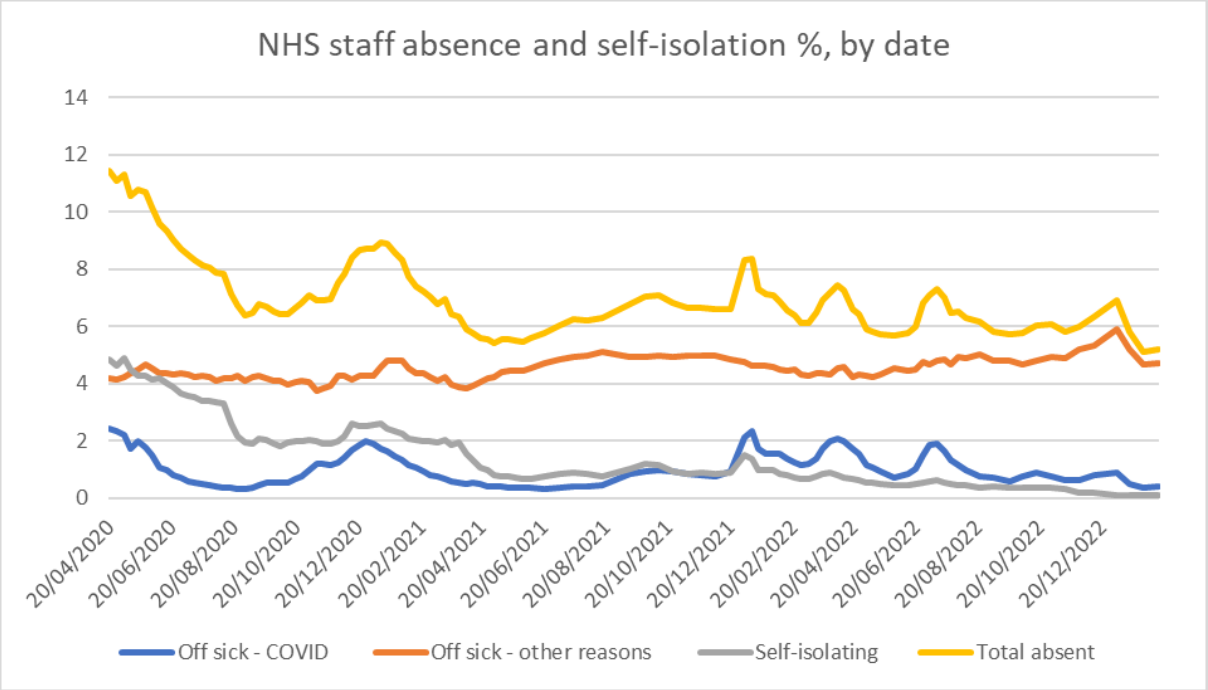


StatsWales is switching to a weekly snapshot figure, rather than daily figures for their COVID-19 NHS outputs. Subsequently, the trends in the most recent data should be interpreted with caution when comparing with historical trends.

[5] statswales.gov.wales

As of 13 February 2023, NHS staff absence due to self-isolation[6] has remained the same as the period ending 30 January 2023, at 0.1%. Absence due to COVID-19 sickness has remained the same at 0.4%.

Figure 7 NHS staff absence and self-isolation, February 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. Between weeks ending 4 September 2022 and 30 October 2022, 733,169 doses of the Autumn COVID-19 booster were given, estimated at 45.7% uptake. The table shows how uptake has risen since then:

Cumulative number of COVID-19 Autumn 22/23 vaccine doses given, by week. Uptake, based on Wales residents, uses indicative denominator 1,604,754

Week ending	Number of doses	Uptake
2022-11-06	805,591	50.2%
2022-11-13	879,616	54.8%
2022-11-20	940,031	58.6%
2022-11-27	990,220	61.7%
2022-12-04	1,030,113	64.2%
2022-12-11	1,059,590	66.0%
2022-12-18	1,079,902	67.3%
2022-12-25	1,088,168	67.8%
2023-01-01	1,092,099	68.1%
2023-01-08	1,098,867	68.5%
2023-01-15	1,106,141	68.9%
2023-01-22	1,113,224	69.4%
2023-01-29	1,118,963	69.7%
2023-02-05	1,122,688	70.0%
2023-02-12	1,126,437	70.2%

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	50,019	38,361	76.7
Residents in a care home for older adults*	13,267	11,787	88.8
Staff working in care homes for older adults**	37,548	15,626	41.6

Health care staff**	141,517	80,397	56.8
Social care staff**		23,405	
All adults aged 65 years and older	702,548	578,657	82.4
All adults aged 50 to 64 years	683,211	406,789	59.5
Aged 5 to 49 years in a clinical risk group	218,995	74,477	34

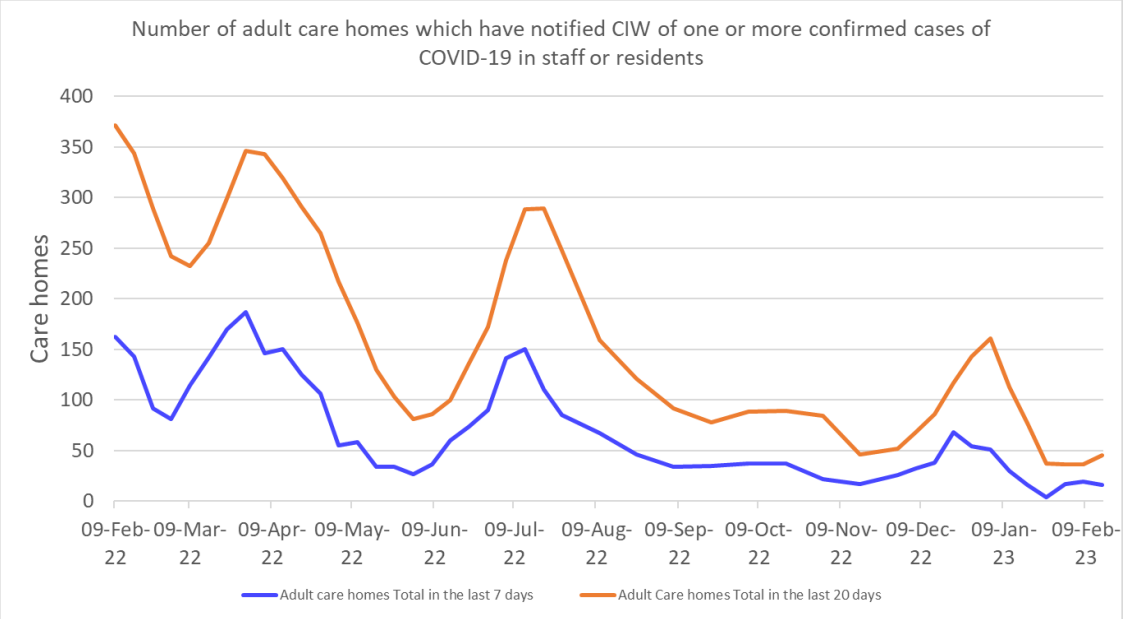
Source: Public Health Wales

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 15 February 2023, the number of adult care homes in Wales that have notified CIW [7] of one or more confirmed cases of COVID-19 in staff or residents in the last 7 days has decreased since the previous week, to 16 notifying, from 19 notifying. This figure for the last 20 days is at 45 (period ending 15 February 2023), from 36 (period ending 8 February 2023). In Wales there are 1,018 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 15 February 2023, the number of notifications to CIW of deaths of adult care home residents involving COVID-19 [8] (both confirmed and suspected) in the last 7 days has remained the same as the previous week, with 3 deaths reported.

In total, CIW has been notified of 2,294 care home resident deaths with suspected or confirmed COVID-19 between 1 March 2020 and 15 February 2023. This makes up 11% of all adult care home resident reported deaths (20,281) during this period.

[7] statswales.gov.wales
[8] statswales.gov.wales

1.8. Schools

The average attendance for this academic year to date is 89.4%.

The latest week is 13 to 17 February 2023, the week before is the 6 to 10 February 2023.

An average of 90.3% of half-day school sessions were recorded as present for pupils aged 5 to 15 over the latest week, down from 90.8% the week before. Data for the latest week is provisional.

An average of 6.4% of half-day school sessions were recorded as authorised absence for pupils aged 5 to 15 over the latest week, up from 6.3% the week before.

An average of 3.3% 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, 89.5% for boys and 89.4% for girls.

The attendance rate by year group for the academic year to date has been highest for pupils in Years 3 and 4 (91.6%) and lowest for pupils in Year 11 (85.1%).

The attendance rate for the academic year to date has been higher for pupils not eligible for free school meals (91.4%) than pupils who are eligible for free school meals (84.0%).

The most common reason for absence for the academic year to date has been illness, with 53.4% of sessions missed being for this reason. The full report is available here.

1.9. Long Covid

As previously reported, 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 [9] and the next release is scheduled for 2 March 2023.

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

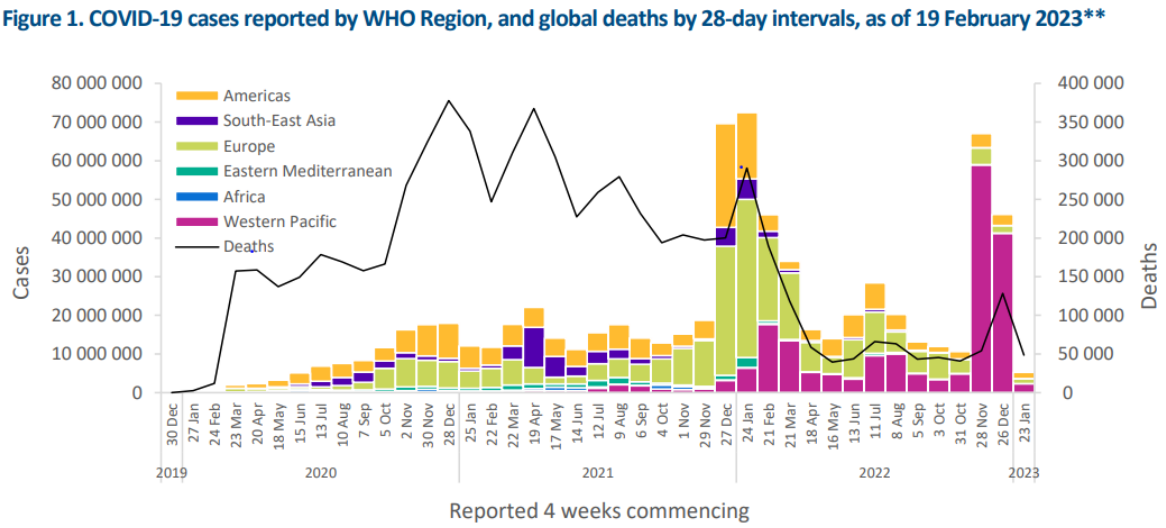
1.10. International overview – World Health Organisation update

The WHO reports [10] that globally, nearly 5.3 million new cases and over 48,000 deaths were reported in the last 28 days (23 January to 19 February 2023), a decrease of 89% and 62%, 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 United States of America.

As of 19 February 2023, over 757 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 19 February 2023



Source: *WHO Weekly Epidemiological Update on COVID-19*

The highest numbers of new 28-day cases were reported from the United States of America (1 113 288 new cases; -31%), Japan (1 095 815 new cases; -71%), China (635 433 new cases; -98%), the Republic of Korea (430 042 new cases; -68%), and Germany (329 229 new cases; -25%).

The highest numbers of new 28-day deaths were reported from the United States of America (13 517 new deaths; +1%), China (9945 new deaths; -86%), Japan (6536 new deaths; -33%), Australia (2179 new deaths; +107%), and the United Kingdom (2063 new deaths; -52%)

[10] 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 7, ending 19 February 2023, ECDC reports[11] that the COVID-19 epidemiological situation in the EU/EEA remained stable.

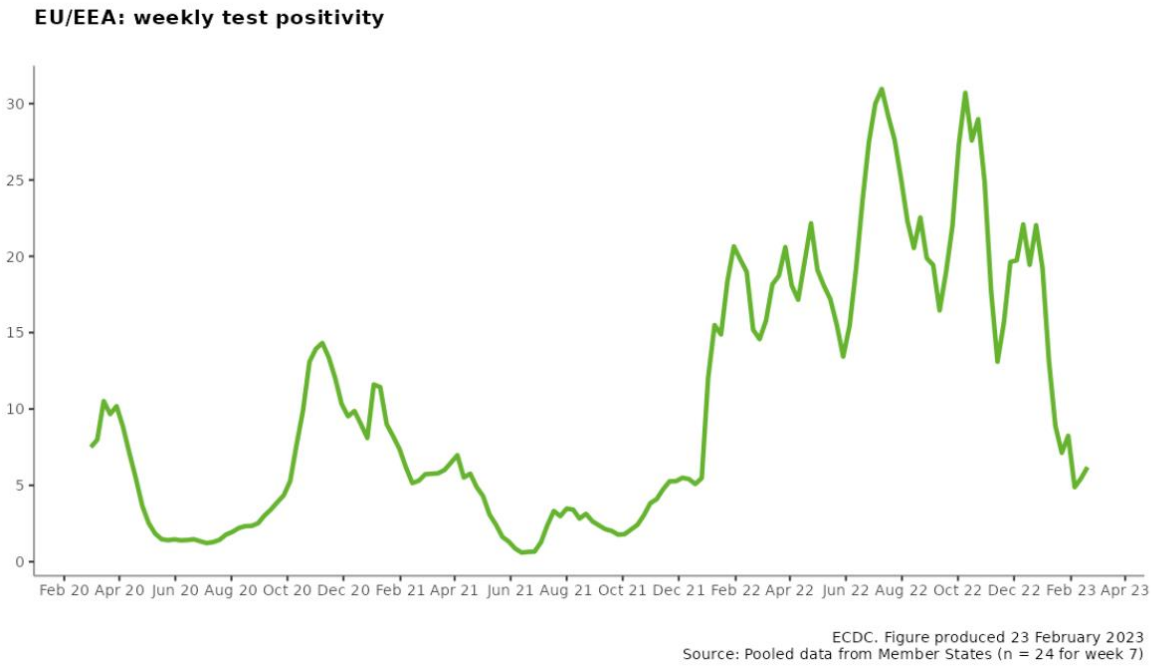
Following the substantial increases in transmission and severe outcomes observed during December 2022, in both the general population and long-term care facilities, pooled rates of case notification (all-age and among those aged 65 years and above), hospital, ICU admission and COVID-19-related deaths remained at low levels observed to data over 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 12% and 9%, respectively, of the maximum reported levels during the pandemic.

658 COVID-19-related deaths were reported from 25 EU/EEA countries.

Figure 10 - EU/EEA weekly test positivity, 23 February 2023



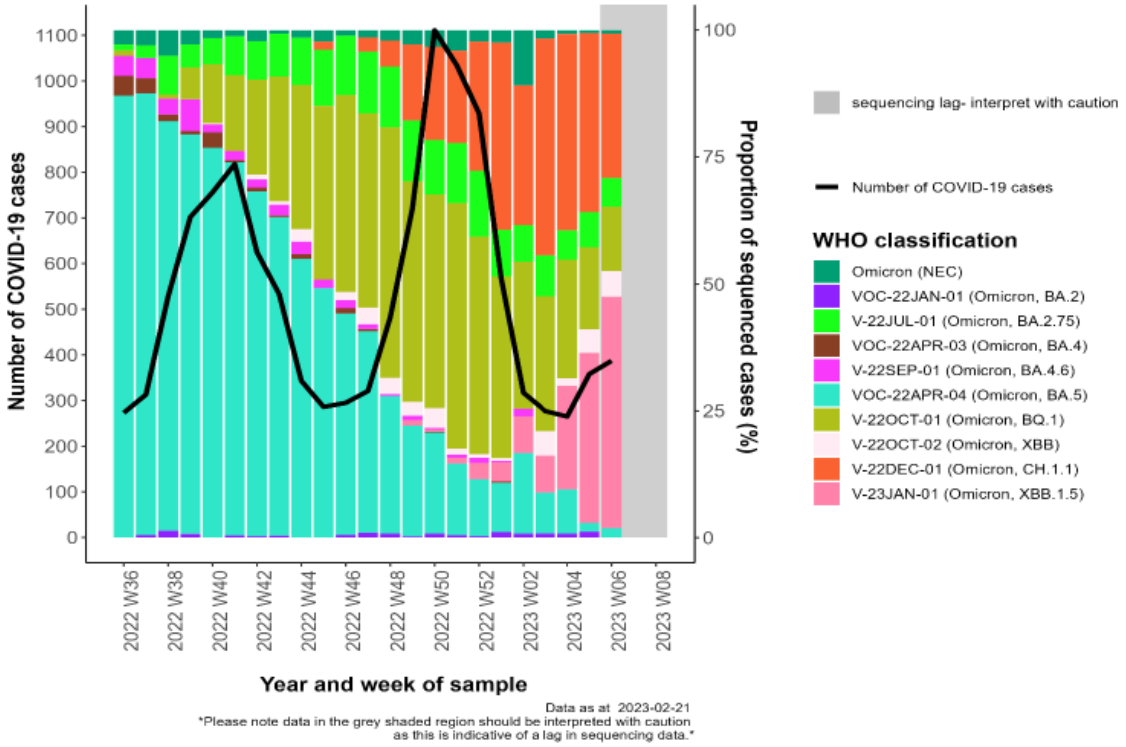
Data source: Weekly COVID-19 country overview (europa.eu)

[11] COVID-19 situation updates (europa.eu)

1.12. Variant of Concern update

As of 21 February 2023, PHW report [12] that in the last four reporting weeks, V-22DEC-01 (Omicron, CH.1.1) has been the most dominant variant in Wales, accounting for 34.0% of all sequenced cases. However, V-23JAN-01 (Omicron, XBB.1.5) accounted for 33.8% of all sequenced variant cases.

Figure 11 – Proportion of sequenced cases typed as each variant in the past six months in Wales (Data as at 21 Feb 2023)



Source: Public Health Wales COVID-19 genomic surveillance

As of 21 February 2023 there have been 57,114 cases of VOC-21NOV-01 (Omicron, BA.1), 29,275 cases of VOC-22JAN-01 (Omicron, BA.2), 1,192 cases of VOC22APR-03 (Omicron, BA.4), 7,417 cases of VOC-22APR-04 (Omicron, BA.5), 1,841 cases of V-22OCT-01 (Omicron, BQ.1), 782 cases of V-22DEC-01 (Omicron, CH.1.1) and 217 cases of V-23JAN-01 (Omicron XBB.1.5) confirmed in Wales.

UKHSA reports [13] 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 22 February 2023, WHO reports that in epidemiological week 5 (30 January to 5 February 2023), Omicron BA.5 and its descendent lineages accounted for 35.3%

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

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

prevalence of all shared sequences (6904 out of 19 556 sequences). However, their share has declined as compared to week 1 (2 to 8 January 2023), when they accounted for 67.1% prevalence (38 575 out of 57 533 sequences).

The decline in BA.5 lineages is probably due to the increase in the proportions of recombinant lineages. Pooled recombinant variant sequences have shown an increase in relative prevalence from 13.8% (7937 sequences) in week 1, 2023 to 38.3% (7494 sequences) in week 5, 2023.

The majority of these recombinant variants in week 5 were XBB.1.5 (29.6% among all sequences). In addition, recombinant variant XBF accounted for 1.8% of all sequences. During the same reporting period, the prevalence of Omicron BA.2 and its descendent lineages remained stable (13.3% as compared to 13.5% in week 1, 2023). Unassigned sequences (all presumably Omicron awaiting descendent lineage assignment) accounted for 12.9% of shared sequences in week 5. Omicron BA.1, BA.3 and BA.4 variants and their descendent lineages all accounted for <1% prevalence.

As of 23 February 2023, ECDC Reports[14] that among the 10 countries with an adequate volume of sequencing or genotyping for weeks 5–6 (30 January to 12 February 2023), the estimated distribution of variants of concern (VOC) or of interest (VOI) was 35.8% (26.3–61.0% from eight countries) for BQ.1, 22.2% (6.0–39.4% from eight countries) for XBB.1.5, 20.2% (9.3–37.8% from nine countries) for BA.2.75, 10.3% (5.7–62.1% from 10 countries) for BA.5, 2.6% (1.1–11.7% from eight countries) for XBB, 1.0% (0.1–22.8% from eight countries) for BA.2 and 0.5% (0.1–1.2%, 31 detections from seven countries) for BA.4.

[14] https://www.ecdc.europa.eu/en/covid-19/country-overviews

2. Influenza Situation Update

- As of 22 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.
- In Europe 18 of 39 countries or areas reported high or medium intensity and 23 of 39 countries reported widespread activity indicating substantial seasonal influenza virus circulation across the Region.

2.1. Weekly Influenza and Acute Respiratory Infection Report – PHW

As of 22 February 2023, PHW report [15] that influenza continues to circulate in Wales, although activity is decreasing. During week 7 (ending 19/02/2023), there were 19 cases of influenza (this is an decrease from the previous week).

The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 7, was 4.5 consultations per 100,000 practice population. This is a decrease compared to the previous week.

Consultation rates were highest in those aged 25 to 34 years.

The Sentinel GP consultation rate for Acute Respiratory Infections (ARI) was 222.3 per 100,000 practice population during week 7.

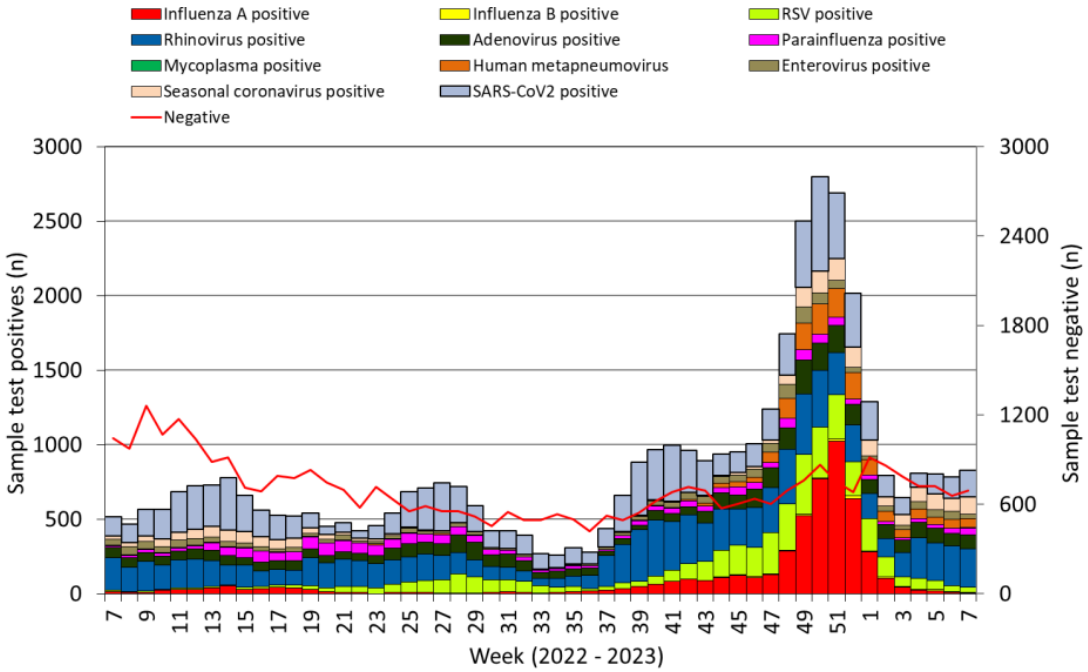
The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache, and sore throat) during week 7 increased to 21.4%.

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

Influenza immunisation uptake in the 2022/23 season	
People aged 65y and older	76.1%
People younger than 65y in a clinical risk group	43.6%
Children aged two & three years	43.7%
Children aged between four & ten years	61.0%
Children aged between 11 & 15 years	50.6%
Total NHS staff	45.2%
NHS staff with direct patient contact	45.4%

[15] 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 23 February 2023, UKHSA reports [16], influenza positivity increased slightly to 2.5% compared with 2.1%. The highest positivity was seen in those aged 15 to 44 years old at 7.6%, an increase from 5.2%.

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

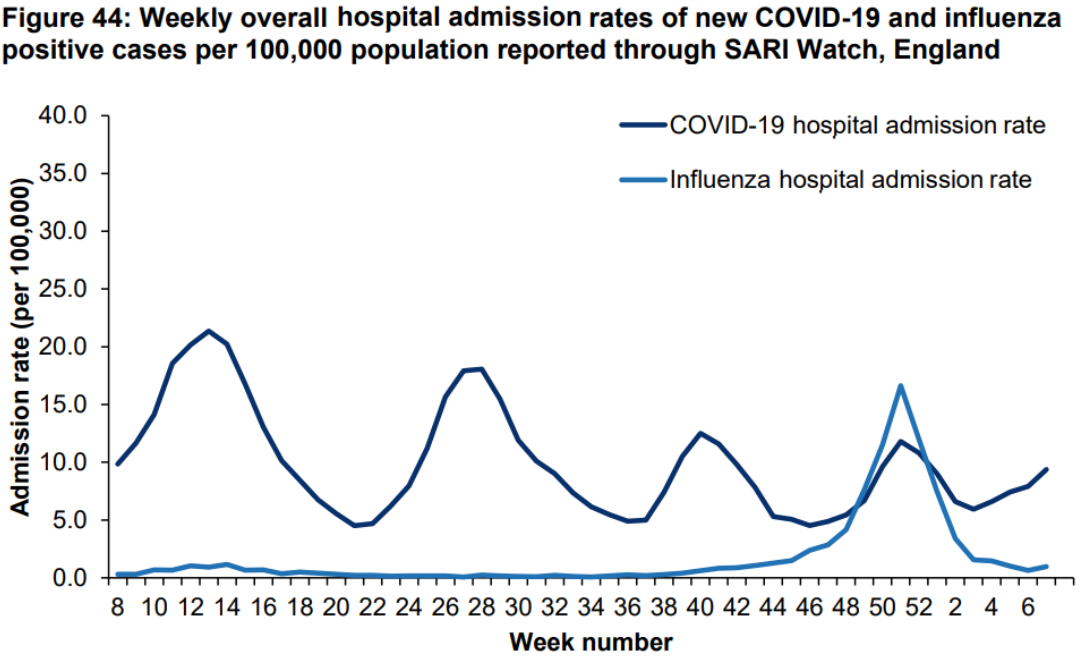
The overall number of reported influenza confirmed outbreaks remained low. Two influenza confirmed outbreaks were reported in England.

Influenza hospital admissions increased slightly in week 7 compared with the previous week.

Influenza admissions were highest in the 85 years and over age group. Influenza ICU admissions remained stable in week 7 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



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

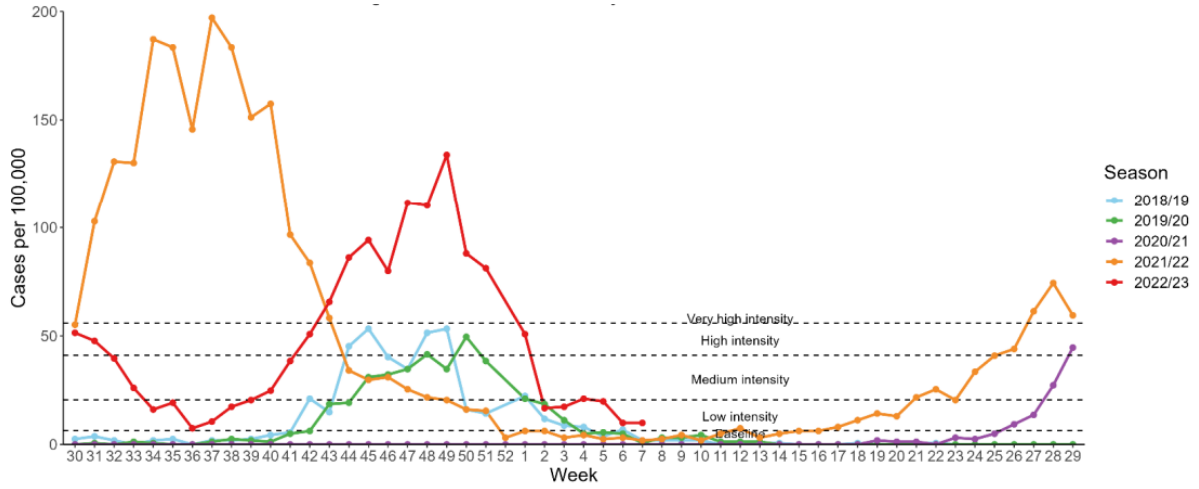
3. Respiratory Syncytial Virus (RSV) and Invasive Group A streptococcal Situation

- RSV incidence in children under five years of age has decreased and currently between low 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 22 February 2023, PHW report that confirmed RSV case incidence in children aged under five remains at low levels.

There were eight surveillance samples from patients with ILI symptoms collected by sentinel GPs and community pharmacies during Week 07. Of the eight samples, one tested positive for seasonal coronaviruses, one for enterovirus, one for Human Metapneumovirus, one for adenovirus, and four 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 23 February, PHW report that scarlet fever and iGAS notifications have decreased to more normal seasonal levels, although scarlet fever is still at a relatively high level of activity.

PHW report that there has been a total of 40 laboratory confirmed iGAS cases reported in 2023 up to and including Week 7. Of those cases, 10 have been in individuals aged under 15 years, whilst 30 have been in individuals aged 15 years and over.

Figure 16 - PHW Scarlet Fever Notifications per 100k, 19 February 2023

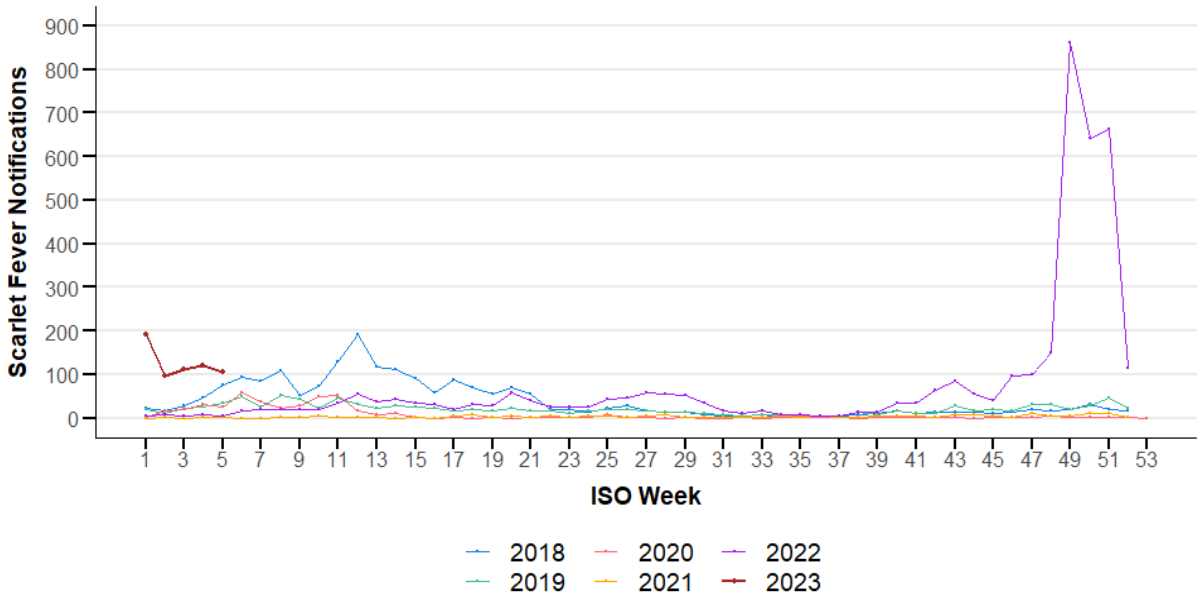


Figure 17 - PHW Lab Confirmed Invasive group A streptococcal infections, 19 February 2023