

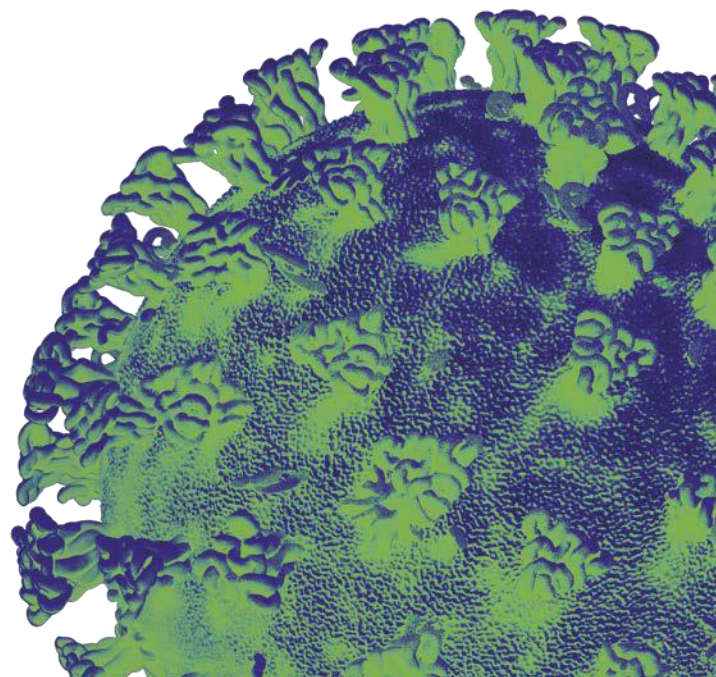
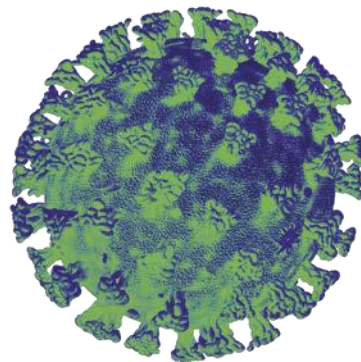
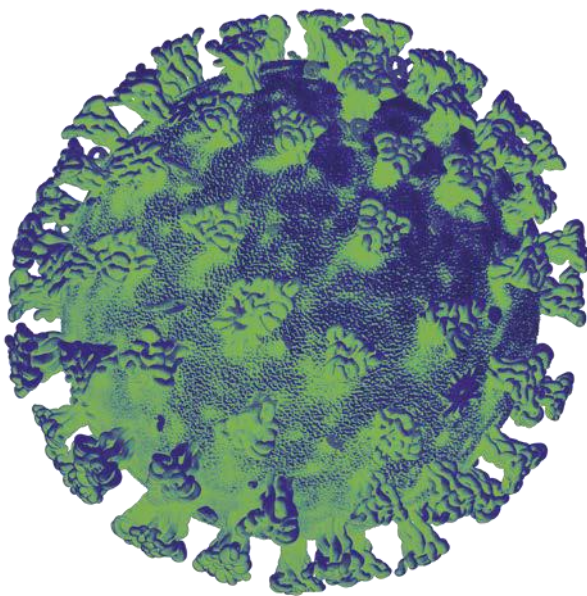


Llywodraeth Cymru
Welsh Government

Technical Advisory Cell

Summary of Advice

12 August 2022



This advice has been drafted based on the available evidence at the time of writing and has been assembled to support policy colleagues and Welsh ministers. The purpose of scientific advice is to provide an overview of what we know from scientific and technical investigations, what we can infer indirectly from the evidence base or by a consensus of expert opinion. This is advice, not Welsh Government policy. Due to the current situation of increasing cases this report will be produced weekly going forward.

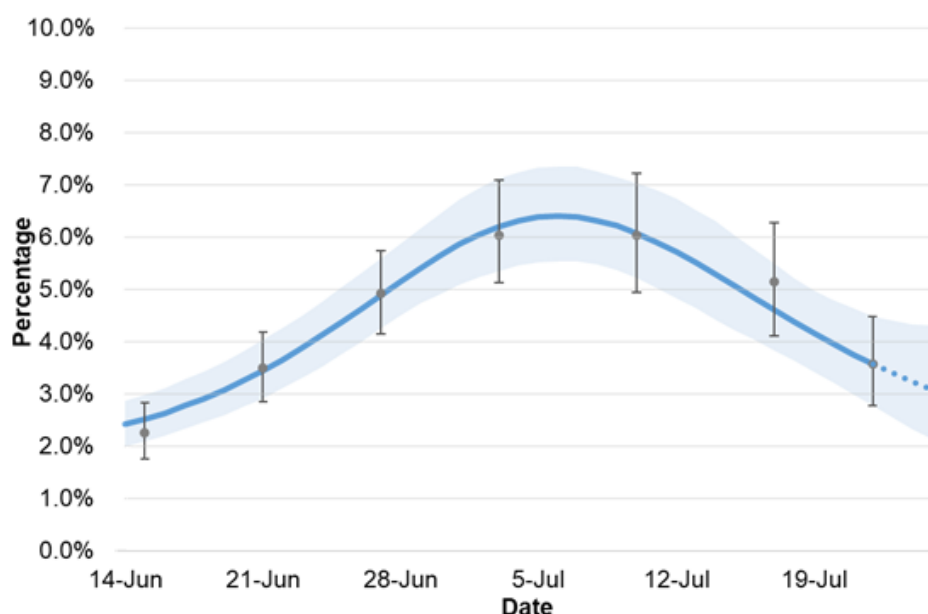
Top Line Summary

- In the latest update, ONS positivity has decreased for the second successive week: from 1 in 19 to 1 in 30 people in Wales. However, ONS analysis of the percentage of people testing positive for COVID-19 by age group reports an uncertain trend across all age groups, with high uncertainty demonstrated by wide confidence intervals.*
- Wastewater surveillance indicates the overall SARS-CoV-2 viral load has decreased across Wales for the third successive week. The signal decreased in 8 regions, increased in 4 regions, and remained level in 2 regions.*
- PHW lateral flow test data in the latest week (01/08/2022 to 07/08/2022) shows the number of reported tests decreased from 51,567 in the previous week to 44,660, whilst the number of positive testing episodes decreased from 4,874 in the previous week to 3,441 in the latest reporting week.*
- As of 9 August 2022, after reaching a peak of 25 admissions per day in mid-July, suspected and confirmed admissions (7-day average) have decreased to around 15 admissions a day.*
- COVID-19 deaths have increased in the last week, to 62 (up from 46 the previous week), following the high prevalence that was observed in late June and early July.*
- ONS antibody data indicates that the 2022 Spring booster has successfully maintained high antibody levels in vulnerable, older populations.*
- The PHW COVID-19 variants update (9 August) noted that in the latest four reporting weeks Omicron BA.5 remained dominant in Wales, accounting for 77.3% of sequenced cases.*
- The latest Medium Term Projections (using data to 29 July) project that NHS pressures will continue to decrease throughout early August, but will level out and slightly increase in mid-August. Note that this slight increase is projected to be short-lived and is not driven by emergence of a new variant, as for all previous peaks, but instead due to modelled immunity waning in the population in the coming weeks.*

1. Wales Situation Update

Infections

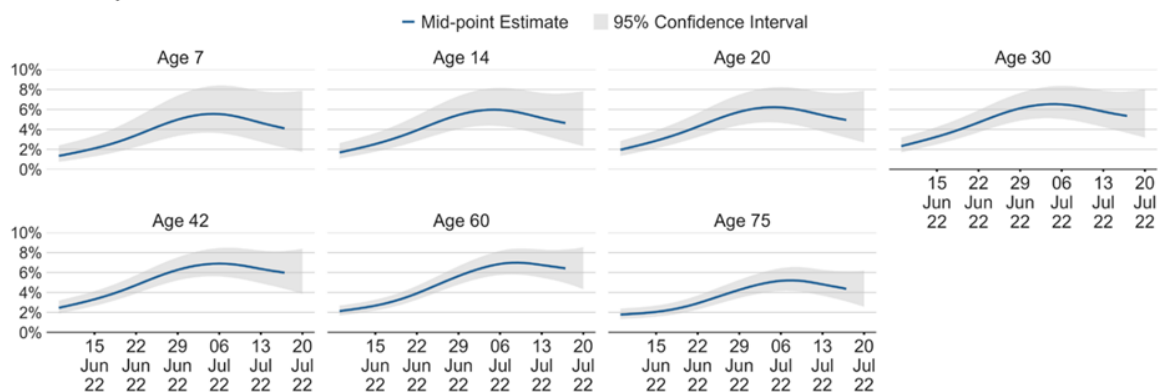
- The trend in the percentage of people testing positive for COVID-19 in Wales has decreased in the week ending 25 July. During this period, it is estimated that 3.58% of the community population had COVID-19 (95% credible interval: 2.78% to 4.48%). Caution should be taken in over-interpreting any small movements and credible intervals are provided to indicate the range within which we may be confident the true figure lies.
- This equates to approximately 1 person in every 30 (95% credible interval: 1 in 35 to 1 in 20), or 108,800 people during this time (95% credible interval: 84,500 to 136,200); down from 1 in 19 in the previous week.



- Although ONS analysis of the percentage of people testing positivity for COVID-19 for Wales reports a decline, high uncertainty (shown by wide confidence intervals) leads to the trends by age group being uncertain for all ages.

Percentage of people testing positive for COVID-19 for reference ages in Wales

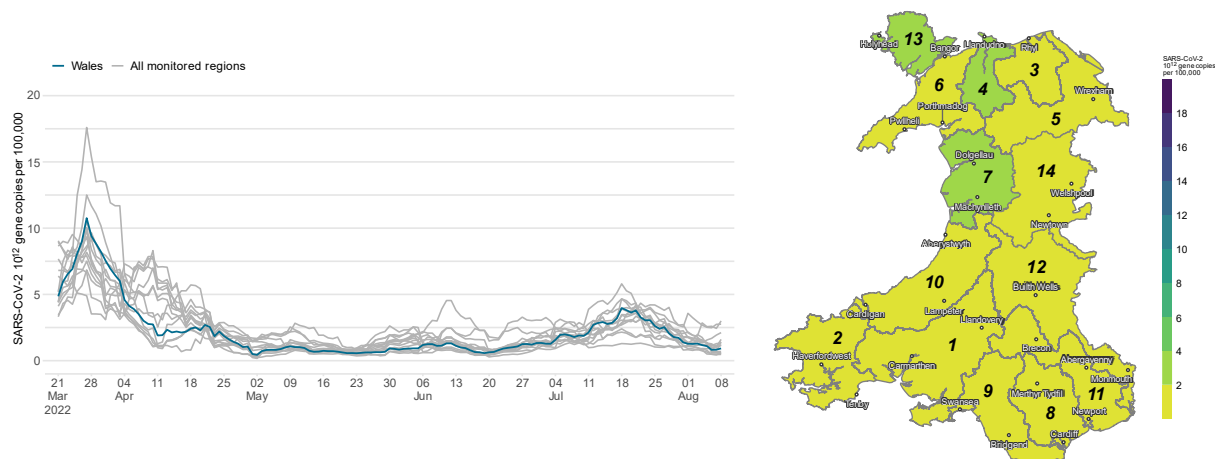
Modelled daily estimates



Estimates in the most recent week have a lower level of certainty due to lab results still being processed for this period.
Data from 09 June 2022 to 20 July 2022

Wastewater surveillance

- [Wastewater surveillance](#) suggests the overall SARS-CoV-2 viral load has decreased across the country in the latest week. The signal decreased in 8 regions, increased in 4 regions, and remained level in 2 regions. Whilst the wastewater signal has decreased, the signal remains still elevated.



- Sequencing of wastewater samples continues to suggest BA.4 and BA.5 are the dominant variants (~80% of sequenced samples). As of 31 July 2022, BA.2.75 has not been detected in Wastewater samples from Wales.

PHW Lateral Flow Testing Surveillance

- From 1 August 2022, free NHS lateral flow tests (LFTs) in Wales are no longer available to members of the public that are showing symptoms of coronavirus or who are visiting someone eligible for new COVID-19 treatments. As a result, testing data will be incomplete and should be interpreted with caution, although it may still be useful to signal wider trends.
- In the latest [reporting week](#) (01/08/2022 to 07/08/2022) the number of LFTs reported decreased from 51,567 in the previous week to 44,660. The number of positive testing episodes decreased from 4,874 in the previous week to 3,441 in the latest reporting week. The episode positivity rate decreased from 14.94% in the previous week to 12.09% in the latest reporting week. The 40-59 age group recorded the highest incidence rate of 155.4 positive testing episodes per 100,000 population. The under 20 age group recorded the highest episode positivity rate of 22.33%.

Deaths

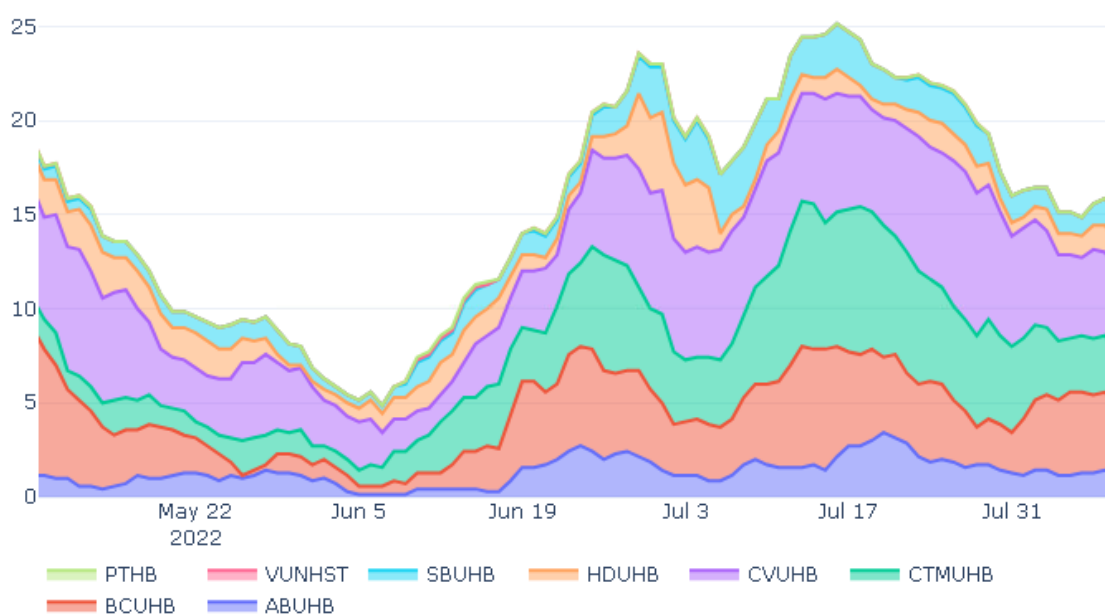
- The most recent PHW [COVID-19 weekly surveillance and epidemiological summary](#) reports that deaths in confirmed COVID-19 cases in hospital, reported by clinicians through PHW mortality rapid surveillance, remain at lower levels compared to previous waves.
- ONS surveillance data indicate that since the start of 2022, the numbers of deaths from any cause have been oscillating around the 2015-2019 five-year average. In the most recent reporting period the numbers were level with the average.

- The Office for National Statistics (ONS) published statistics on 9 August on [provisional weekly deaths](#), including deaths involving COVID-19, for the week ending 29 July 2022. The cumulative number of deaths involving COVID-19 in Wales, occurring throughout the pandemic up to the latest week, was 10,615.
- 660 deaths from all causes were registered in the latest week. This was 29 more than the previous week, and 72 more than the five-year average for 2016-2019 and 2021.
- 62 deaths involving COVID-19 were registered in the latest week. This was 9% of all deaths, and 16 more than the previous week.

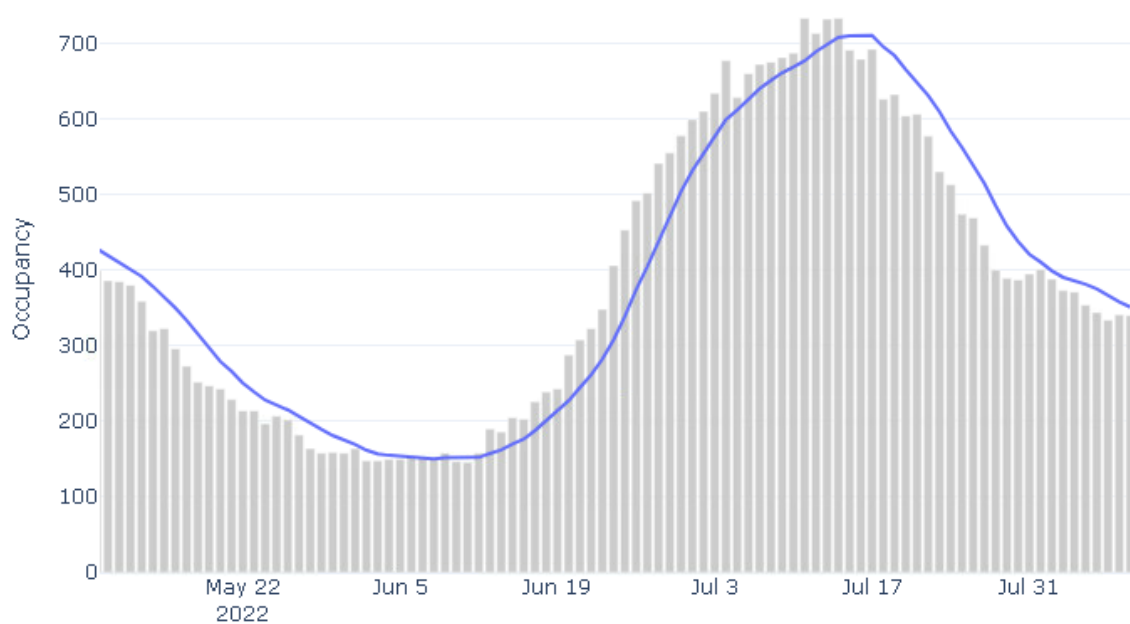
NHS

- As of 9 August 2022, after reaching a peak of 25 admissions per day in mid-July, suspected and confirmed admissions (7-day average) have decreased to around 15 admissions a day.

Hospital admissions of suspected and confirmed COVID-19 positive patients



- Confirmed COVID-19 hospital occupancy in Wales (7-day average) reached a peak of over 700 in mid-July, roughly three quarters of the maximum occupancy peak level in March 2022 when BA.1 was dominant. Since then, occupancy has decreased and as of 9 August 2022, is at a weekly average of around 350 beds.



- The proportion of patients in hospital 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, increased after 10 July but has since stabilised and has been starting to decrease since the start of August¹.

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

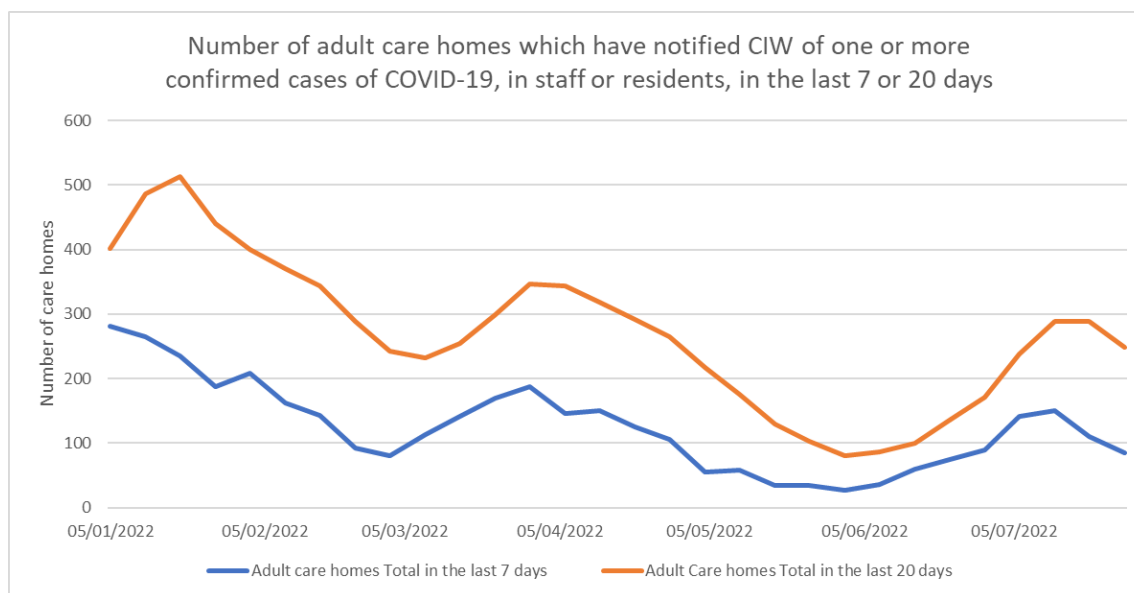


- [NHS staff absence figures](#) up to 8 August 2022 show absence due to self-isolation has remained the same as the previous week at 0.4%, whilst absence due to COVID-19 sickness has decreased to 1%.

¹ [COVID-19 patients in acute hospitals actively treated for COVID-19 in Wales by date \(gov.wales\)](#)

Care homes

- As at 27 July 2022, the number of adult care homes in Wales that have [notified CIW](#) of one or more confirmed cases of COVID-19 in staff or residents in the last 7 days has decreased for the second successive week. The most recent data shows a decrease of 22.7% to 85 compared to 110 in the previous week. This figure for the last 20 days has decreased to 248, down from 289 in the previous week. There are 1,029 adult care homes in total in Wales.



- As at 27 July 2022, the number of notifications of deaths of adult care home residents involving COVID-19 (both confirmed and suspected) in the last 7 days has decreased to 1, compared to 4 in the previous week.
- In total, CIW has been notified of 2,209 care home resident deaths with suspected or confirmed COVID-19 between 1 March 2020 and 27 July 2022. This makes up 13.6% of all adult care home resident reported deaths (16,256) during this period.

Vaccinations

- [The most recent](#) COVID-19 weekly surveillance and epidemiological summary reports that, as of the week ending 27 July 2022, 7,230,971 COVID-19 vaccinations have been given in Wales.
- Uptake of the 2022 Spring booster has been high. As at 27 July 2022, uptake was 85% for those aged 75 years and older, 84% for people living in residential care homes for older adults and 60% of people who are immunosuppressed (the majority of immunosuppressed patients will only recently have been vaccinated with 2021/22 boosters, and will be called to receive a 2022 Spring booster dose when the appropriate interval has elapsed) [The full vaccinations report can be accessed here](#)
- There is evidence that delivery of the 2022 Spring booster has successfully maintained high antibody levels in vulnerable populations. Comparing March and July 2022 antibody levels for 70 – 74 year olds (ineligible by age criteria alone) and 75 – 79 year olds (eligible for 2022 Spring booster), ONS reported that antibody prevalence remained high in 75 – 79 year olds, compared with a decrease in antibody prevalence in 70 – 74 year olds.

Table 1: Modelled percentage of adults (aged 16 years and over) estimated to have antibodies against SARS-CoV-2 (above 179 ng/ml antibody level threshold), ONS

Date	Age group	
	70 – 74 years	75 – 79 years
07 to 13 March 2022	98.2%	97.7%
11 to 17 July 2022	94.3%	98.7%

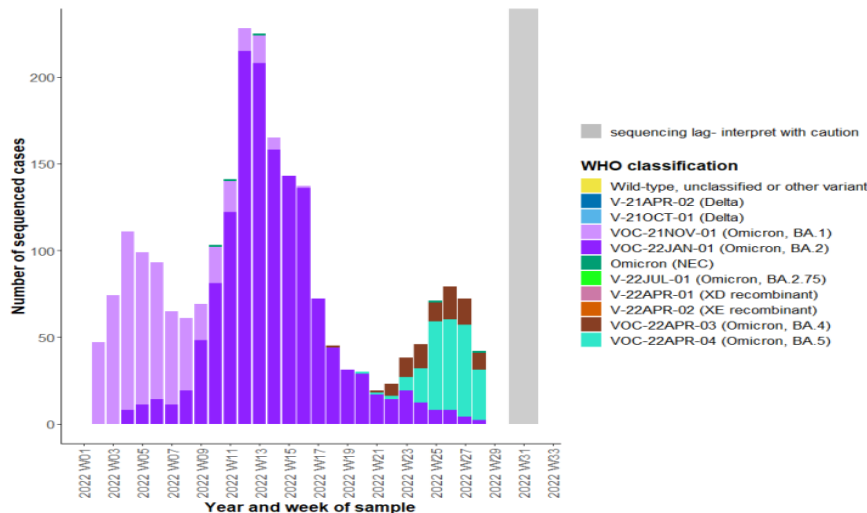
- Vaccine uptake by priority group and age, counting individuals in all groups in which they belong (non de-duplicated) – [PHW Covid-19 Vaccination Tableau](#)

Group	Group size (n)	Received 1st dose (n)	Completed primary course* (n)	Received booster dose** (n)	First dose uptake (%)	Primary course uptake* (%)	Booster dose uptake** (%)
Severely Immunosuppressed	51,566	51,087	48,340	42,052	99.1%	93.7%	81.5%
Care home residents	13,480	13,291	13,214	12,829	98.6%	98.0%	95.2%
Care home worker	37,773	35,877	35,276	29,551	95.0%	93.4%	78.2%
80 years and older	173,503	167,228	166,365	161,867	96.4%	95.9%	93.3%
Health care worker	140,851	137,412	136,068	122,828	97.6%	96.6%	87.2%
Social care worker		44,915	44,581	39,804			
Aged 75-79 years	142,999	138,829	138,233	134,755	97.1%	96.7%	94.2%
Clinically extremely vulnerable aged 16-69..	75,493	72,161	71,309	62,339	95.6%	94.5%	82.6%
Aged 70-74 years	177,028	170,551	169,620	164,461	96.3%	95.8%	92.9%
Aged 65-69 years	182,503	173,548	172,190	165,376	95.1%	94.3%	90.6%
Clinical risk groups aged 5-64 years	350,499	313,818	304,855	263,587	89.5%	87.0%	75.2%
Aged 60-64 years	211,573	197,911	195,766	185,109	93.5%	92.5%	87.5%
Aged 55-59 years	235,438	216,316	213,516	197,806	91.9%	90.7%	84.0%
Aged 50-54 years	227,233	204,555	201,210	181,640	90.0%	88.5%	79.9%
Aged 40-49 years	393,520	335,524	326,520	276,246	85.3%	83.0%	70.2%
Aged 30-39 years	436,187	348,979	332,871	248,898	80.0%	76.3%	57.1%
Aged 18-29 years	490,380	396,835	368,273	250,901	80.9%	75.1%	51.2%
Aged 16-17 years	70,961	54,638	46,539	25,734	77.0%	65.6%	36.3%
Aged 12-15 years	149,097	92,467	74,653		62.0%	50.1%	
Aged 5-11 years	255,380	53,293	18,769		20.9%	7.3%	

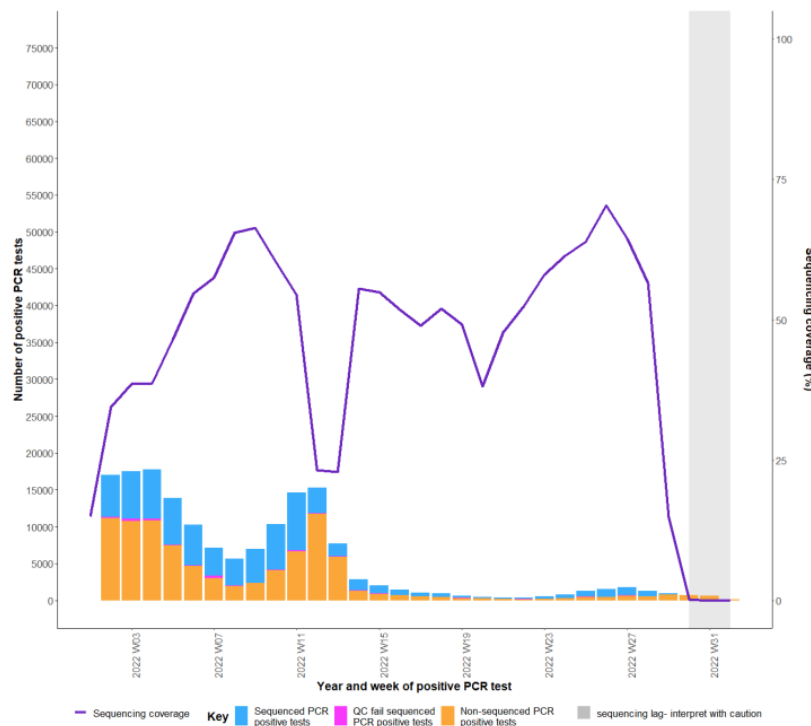
Public Health Wales Variant Surveillance Update, 9 August

- In the latest four reporting weeks (W28-31);

- Omicron (Not Elsewhere Classified) accounted for 2.3% of all sequenced variant cases
- VOC-22JAN-01 (Omicron, BA.2) accounted for 2.5% of all sequenced variant cases
- VOC-22APR-03 (Omicron, BA.4) accounted for 17.9% of all sequenced variant cases
- VOC-22APR-04 (Omicron, BA.5) accounted for 77.3% of all sequenced variant cases



Epicurve of all sequenced variant cases in Wales, data as at 9 August, Genomic Epidemiology Team, CDSC Weekly Wales Variant Summary



Sequencing coverage in Wales as at 9 August, Genomic Epidemiology Team, CDSC Weekly Wales Variant Summary

- (Please note data in the grey shaded region in the above charts is indicative of a lag in sequencing data and should be interpreted with caution as the data is likely to be incomplete.)

Weekly Influenza and Acute Respiratory Infection Report – PHW

- As at 3 August, PHW report that confirmed influenza cases in Wales continue to be seen at low levels, whilst RSV confirmed cases remain at high levels. During Week 30 (ending 31 July 2022) there were 12 confirmed cases of influenza. COVID-19 cases continue to be detected in symptomatic patients in hospital and in the community.
- RSV incidence in children under 5 years of age is currently at levels that would indicate high levels of activity (compared to the 10 seasons leading up to 2020). There was an early start to the RSV season this year. It is possible that higher numbers of cases are being detected this season, in part, due to increased testing activities. Rhinovirus, RSV and adenovirus are the most commonly detected cause of non-COVID-19 Acute Respiratory Infection (ARI), with increasing confirmed cases in recent weeks.
- PEDW data from DHCW, from 13 July showed admissions for bronchiolitis (typically caused by RSV) fluctuating between 0 and 10 per day throughout spring and summer, similar to previous years. The data is subject to delays in coding so may be retrospectively updated to be higher.
- As of 4 August, influenza positivity (Respiratory Datamart) remains very low at 0.5% in week 30 in the UK. 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) have reported that influenza activity across Europe remained at low inter-seasonal levels. Globally, influenza activity continued to decrease, following a peak in March 2022 (based on data up to 10 July 2022).

1. Situation in the UK and international comparators

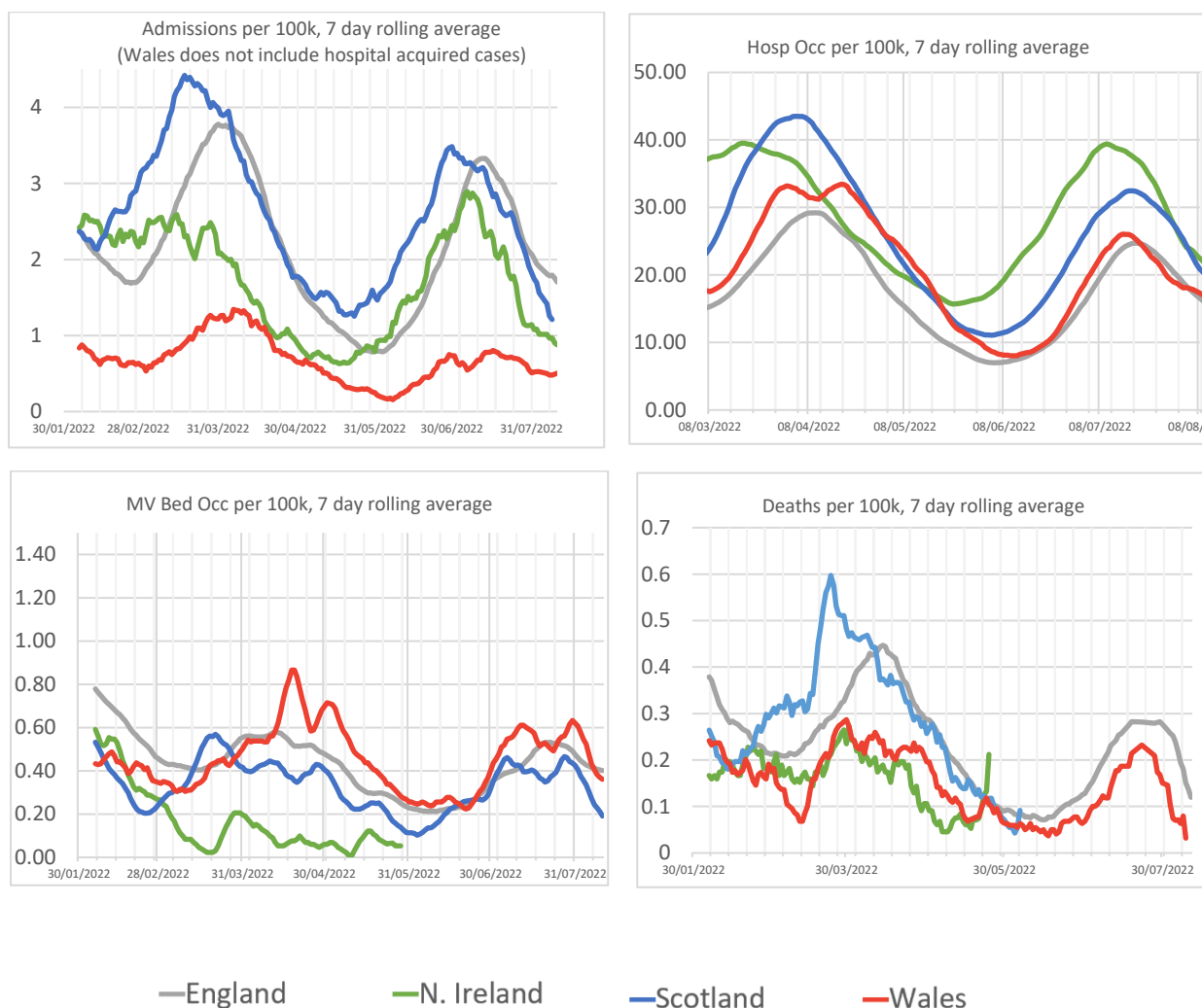
UK Overview

UK COVID-19 dashboard data

- Surveillance data for the four nations is summarised below. (Data source: [UK Summary | Coronavirus \(data.gov.uk\)](#)).
- **Note that this data is classified as management information rather than official statistics and there may be differences in methodology between the nations.** As a result, caution should be taken when interpreting this data. Full documentation is available at [Metrics documentation | Coronavirus in the UK \(data.gov.uk\)](#). Case data is no longer included in this analysis due to the decreased level of community testing reducing this data's value.
- Recent data suggests all UK nations have seen decreases in the number of admissions after reaching a peak in July. Note that Wales admissions

includes suspected cases and does not include hospital acquired infections, so **caution should be taken in comparisons with the other UK nations**.

- In terms of hospital occupancy, the numbers have continued to decrease in all four nations.
- ICU/ Mechanically ventilated bed occupancy has been steadily decreasing in England, Wales and Scotland after reaching a peak in mid to late July. Northern Ireland is not reporting this data.
- The number of deaths also remains very low relative to previous waves. Scotland and Northern Ireland no longer report this data.



UK Infection positivity – ONS Coronavirus Infection Survey, 19 to 25 July 2022 Wales and Northern Ireland, 20 to 26 July 2022 England and Scotland

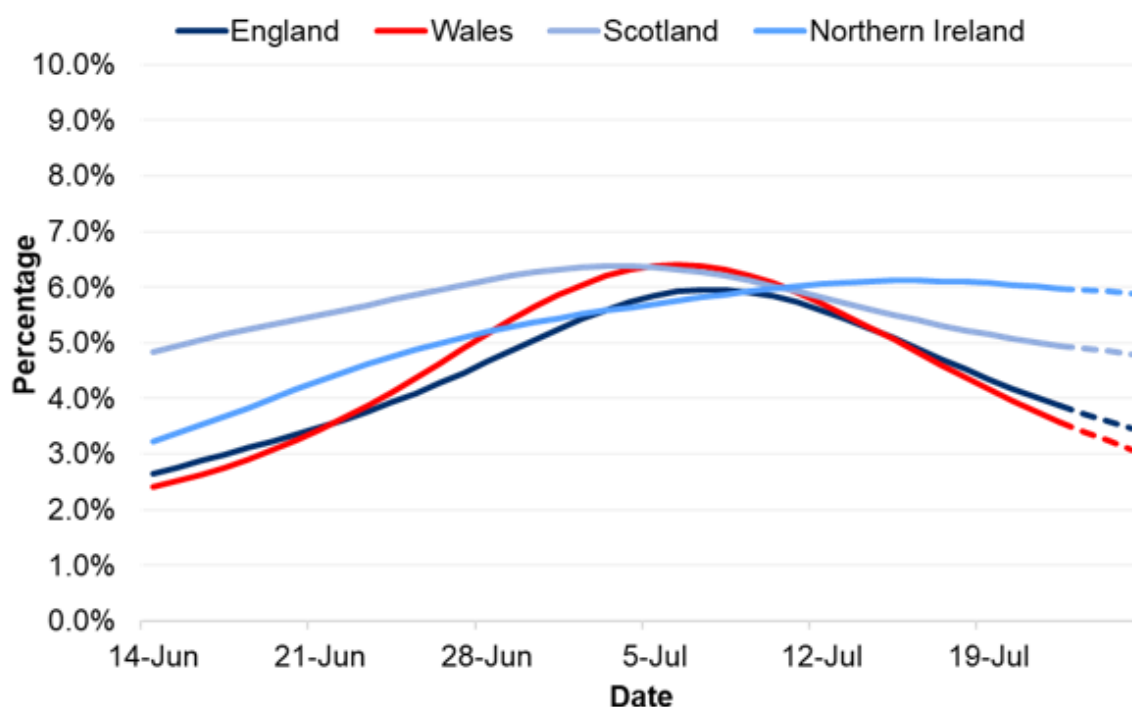
- The percentage of people testing positive for coronavirus (COVID-19) continued to decrease in England, Wales and Scotland; and the trend remained uncertain in Northern Ireland. The estimated percentages of the community population with COVID-19 ranged from 3.58% in Wales to 5.98% in Northern Ireland.

- During the most recent period, it is estimated that around 1 in 30 people in Wales had COVID-19. This compares to around 1 in 25 people in England, around 1 in 17 in Northern Ireland and around 1 in 20 people in Scotland.

Note since these estimates are based on a relatively low number of positive tests, there is some uncertainty and the results should be interpreted with caution.

The ONS Coronavirus Infection Survey is moving to an online data collection method and postal returns for swabs and blood samples. As a result of this change, there will be a pause to the publication of the weekly bulletin on Friday 12 August 2022.

Positivity rates (%) across UK countries since 14 June 2022



Source: Coronavirus (COVID-19) Infection Survey, ONS, 03/08/22

Long Covid

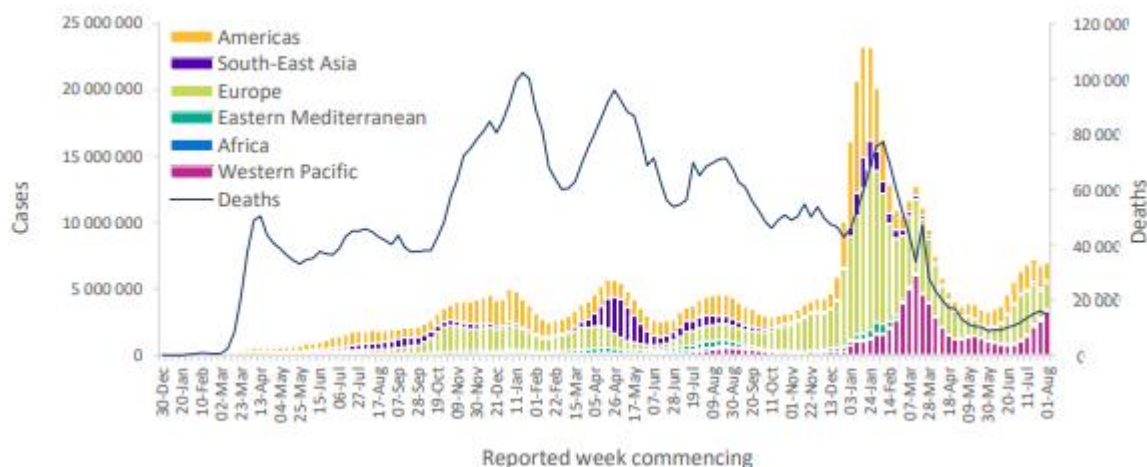
- An estimated 1.8 million people living in private households in the UK (2.8% of the population) were experiencing self-reported long COVID (symptoms continuing for more than four weeks after the first suspected coronavirus (COVID-19) infection that were not explained by something else) as of 2 July 2022. This is a decrease from an estimated 3.0% of the UK population as of 4 June 2022. Of people with self-reported long COVID, 243,000 (14%) first had (or suspected they had) COVID-19 less than 12 weeks previously, 1.4 million people (81%) at least 12 weeks previously, 761,000 (43%) at least one year previously, and 380,000 (21%) at least two years previously.
- Fatigue continued to be the most common symptom reported as part of individuals' experience of long COVID (54% of those with self-reported long

COVID), followed by shortness of breath (31%), loss of smell (23%) and muscle ache (22%).

- Data for Wales showed that an estimated 89,000 people (2.9% of the population) had self-reported long COVID as of 2 July 2022. This is a decrease compared to the previous month (data to 4 June 2022) where an estimated 96,000 (3.1% of the population) people in Wales reported having symptoms. [The full report is available here.](#)

International overview – World Health Organisation update

- The [WHO reports](#) that globally, the number of new weekly cases remained stable during the week of 1 to 7 August 2022, as compared to the previous week, with over 6.9 million new cases reported. The number of new weekly deaths decreased by 9%, with over 14,000 fatalities reported, as compared to the previous week. As of 7 August 2022, 581.8 million confirmed cases and 6.4 million deaths have been reported globally.
- At the regional level, the number of reported new weekly cases increased in the Western Pacific Region (+29%); while the numbers of new cases decreased or remained stable in the African Region (-46%), the Region of the Americas (-22%), the Eastern Mediterranean Region (-22%), the European Region (-7%), and the South-East Asia Region (-3%). The number of new weekly deaths increased in the Eastern Mediterranean Region (+19%), while the numbers decreased or remained stable in the African Region (-73%), the European Region (-15%), the Region of the Americas (-10%), the South-East Asia Region (-1%), and the Western Pacific Region (+4%).



Source: [Weekly Epidemiological Update on COVID-19](#)

- The [WHO reports](#) from 8 July to 8 August 2022, 175 384 sequences were collected and uploaded to GISAID. Among these, 174 089 sequences were Omicron variant of concern (VOC), accounting for 99% of sequences reported globally in the past 30 days.
- A comparison of sequences submitted to GISAID in epidemiological week 30 (24 to 30 July 2022) and week 29 (17 to 23 July 2022) shows that BA.5

Omicron descendent lineages continue to be dominant globally, with an increase in weekly prevalence from 68.9% to 69.7%. Within the same time period, the weekly prevalence of Omicron descendent lineages BA.4, BA.2.12.1 and BA.2 decreased globally: BA.4 decreased from 10.8% to 9.1%, BA.2.12.1 decreased from 2.4% to 1.3% and BA.2 decreased from 1.4% to 1.0%.

3. Variant of Concern update

- Of the Omicron sub-lineages, BA.4 and BA.5 continue to be dominant globally, with their weekly prevalence's increasing to 11.8% (+0.9%) and 69.6% (+5.8%) respectively in the week 17th to the 23rd of July. From 11th July to 24th July, BA.4/BA.5 had a combined prevalence of 95.9% (89.5–99.9% from 11 countries) in Europe. During the same time period the Omicron sub-lineages, BA.2 and BA.2.12.1, continued to decline to 1.5% (-0.5%) and 1.9% (-2.5%) respectively.

The European Centre for Disease Prevention and Control (ECDC) re-classified BA.2.75 as a variant of interest (VOI) on 14th July due to the increasing number of detections in India and globally. As of 8th August, BA.2.75 has been detected in 27 countries, including the UK, however, of the 1,283 international sequences in GISAID, 977 have been uploaded from India. A recent pre-print paper found BA.2.75 did not display greater immune evasion than BA.5 in serum samples.

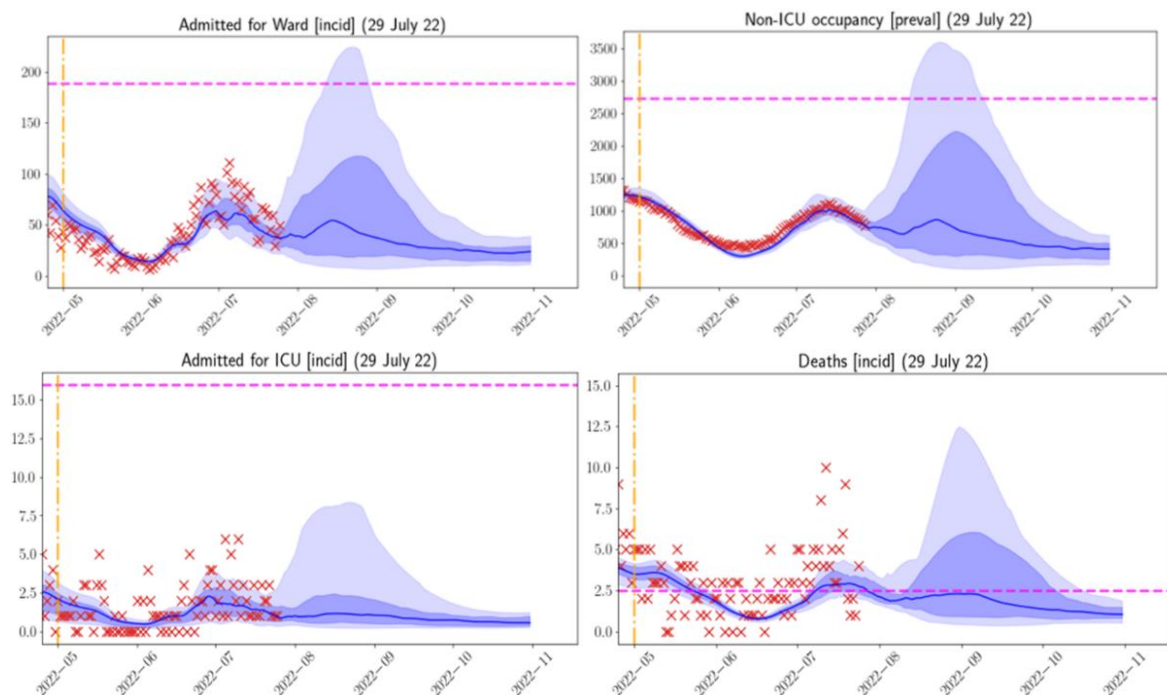
4. COVID-19 Medium Term Projections

- Swansea University (SU) regularly produces medium-term projections (MTPs) for Wales. The SU projections are also combined with other models to go into a consensus MTP for admissions and deaths which is agreed every two weeks by the UKHSA Epidemiological Modelling Review Group (EMRG), which has taken over from COVID-M-O in agreeing these MTPs.
- The SU projections are typically more up to date but may be less robust as they are based on one model only. Both MTPs are based on projecting forward from current data and do not explicitly factor in policy changes, changes in testing, changes in behaviour, or rapid changes in vaccinations.
- These MTPs for COVID-19 hospitalisations and deaths are not forecasts or predictions. They represent a scenario in which the trajectory of the epidemic continues to follow the trends that were seen in data available at the time.

Swansea University MTPs, data as at 29 July

- In the charts below, red crosses represent actual Omicron data, which the model is fitted to, while the blue line represents the central modelling estimate. The blue ribbon represents the confidence intervals, with the darker blue ribbon indicating the 25th to 75th percentiles, and the 95% confidence limits in the lighter ribbon. The pink dotted line represents pre-Omicron peaks.
- Although NHS pressures are currently decreasing, MTPs project that this will level out and see a slight increase in mid-August. Note that this is not driven by emergence of a new variant, as for all previous peaks, but instead due to waning immunity in the population.

- Significant uncertainty is projected, and the upper bound could be interpreted as showing worst-case waning immunity, or a scenario where a new variant emerges.
- Hospital admissions have decreased in recent weeks, but are projected to level out and increase slightly around mid-August before falling again, though there is a fair amount of uncertainty (confidence intervals are wide).
- Bed occupancy levels are closely following the MTP projections, which project levels have passed the peak but may start to increase again in mid to late August – this trend is fairly uncertain, however.
- ICU occupancy is slightly higher than the MTP projection, but are expected to remain at a low plateau. ICU admissions and deaths continue to fluctuate at low levels.



UKHSA EMRG Consensus MTPs, 2 August

- The most recent combined projections suggest that admissions will steadily decrease in the coming months. This is driven by the Imperial and Manchester models showing a decreasing trend. As above, the Swansea model suggests that admissions will increase slightly in mid-August with great uncertainty, causing the consensus confidence intervals to be relatively wide.

