

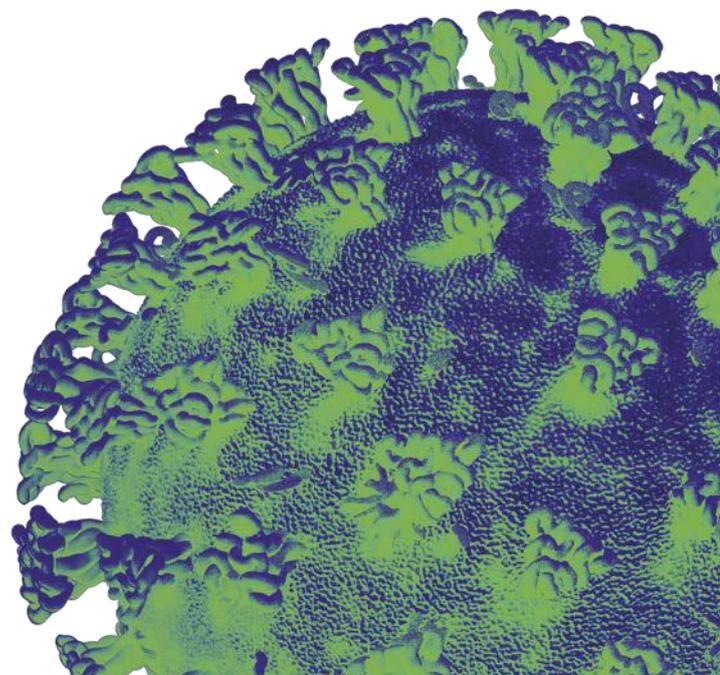
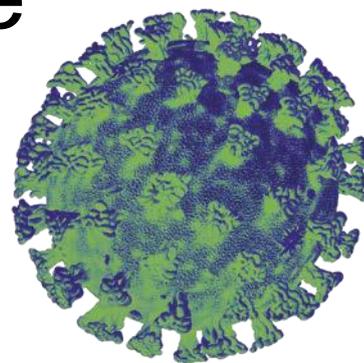
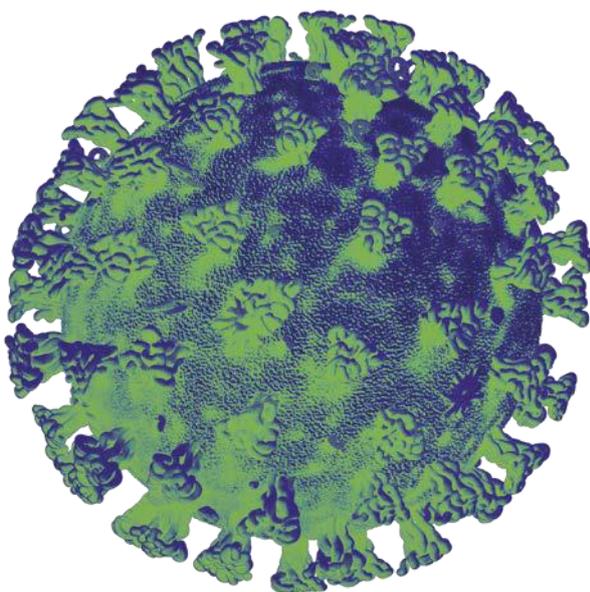


Llywodraeth Cymru  
Welsh Government

# Science Evidence Advice (SEA)

## Summary of Advice

23 September 2022



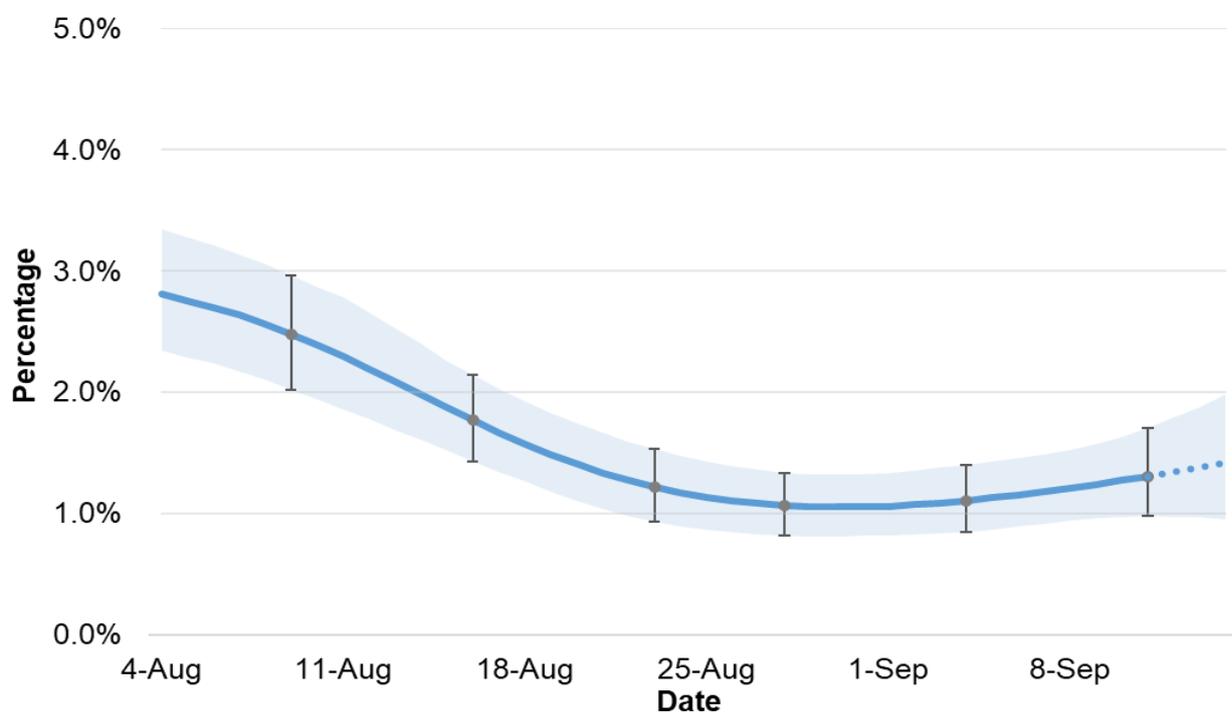
## Top Line Summary

- *In the latest ONS positivity update, the percentage of people testing positive for COVID-19 in Wales has started to increase. It is estimated that around 1 in 75 people in Wales had COVID-19. While the positivity rate has also increased in England, it has decreased in Scotland and Northern Ireland*
- *Wastewater surveillance indicates the overall SARS-CoV-2 viral load has increased across the country. The signal remained level in 3 regions, increased in 9 regions and decreased in 2 regions.*
- *PHW lateral flow test data in the latest week (12/09/2022 to 18/09/2022) shows the number of reported tests decreased from 27,420 in the previous week to 19,369 in the latest reporting week. The number of positive testing episodes increased from 1,634 in the previous week to 1,968 in the latest reporting week.*
- *As of 20 September 2022, hospital admissions of suspected and confirmed COVID-19 positive patients had increased to approximately 10 admissions per day.*
- *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 indicates that since the start of 2022, the numbers of deaths from any cause have been oscillating around the 5-year average.*
- *The PHW COVID-19 variants update (21 September) notes that in the latest four reporting weeks Omicron BA.5 remained dominant in Wales, accounting for 92% of sequenced cases.*
- *The latest Medium-Term Projections (using data to 16 September) suggest that NHS pressures are fairly stable, though significant uncertainty is projected.*

## 1. Wales Situation Update

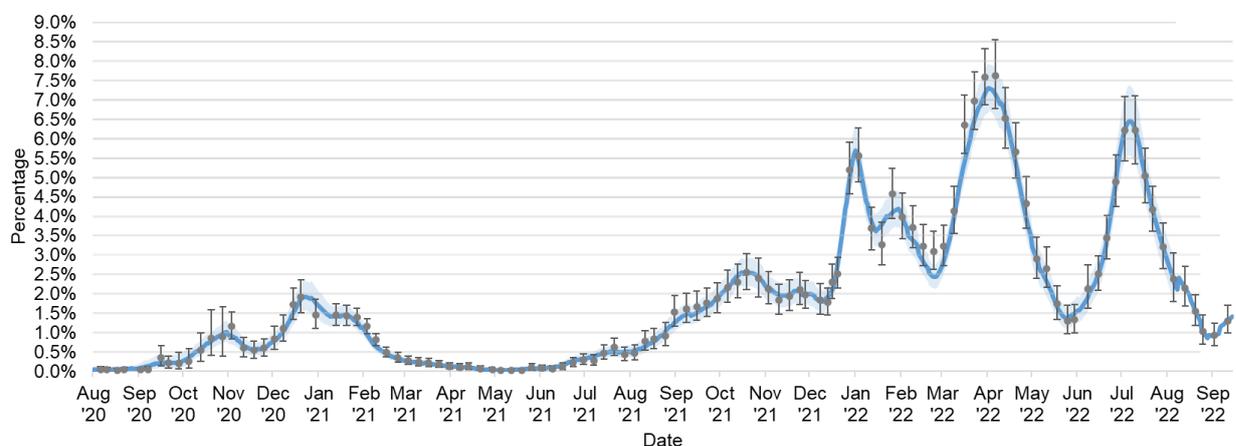
### Infections

- According to the [ONS Coronavirus Infection survey](#), for the week 8 to 14 September 2022 the percentage of people testing positive for COVID-19 in Wales has increased. It is estimated that 1.31% of the community population had COVID-19 (95% credible interval: 0.98% to 1.71%). This equates to approximately 1 person in every 75 (95% credible interval: 1 in 100 to 1 in 60), or 39,700 people during this time (95% credible interval: 29,800 to 51,900).
- Caution should be taken in over-interpreting small movements - credible intervals are provided to indicate the range within which we may be confident the true figure lies.



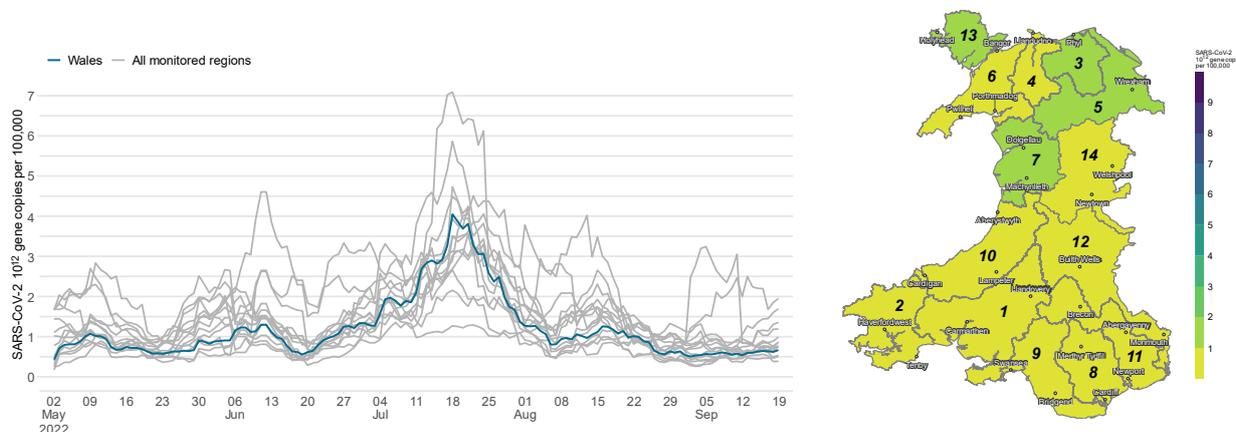
### Wales, estimated % testing positive for Covid 19 since August 2020

Source: Coronavirus (COVID-19) Infection Survey, ONS, 21/09/22



## Wastewater surveillance

- [Wastewater surveillance](#) suggests the overall SARS-CoV-2 viral load has increased across the country. However, the signal remained level at Carmarthen Bay and the Gower, Meirionnydd and Teifi and North Ceredigion, and decreased at Tawe to Cadoxton and Wye.



## PHW Lateral Flow Testing Surveillance

- *As of 1 August 2022, free NHS lateral flow tests (LFTs) in Wales have not been available to members of the public 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](#) (12/09/2022 to 18/09/2022) the number of LFTs reported decreased from 27,420 in the previous week to 19,369 in the latest reporting week. The number of positive testing episodes increased from 1,634 in the previous week to 1,968 in the latest reporting week.
- The episode positivity rate increased from 8.47% in the previous week to 14.20% in the latest reporting week. The 40-59 age group recorded the highest incidence rate of 86.5 positive testing episodes per 100,000 population. The Under 20 age group recorded the highest episode positivity rate of 39.85%.

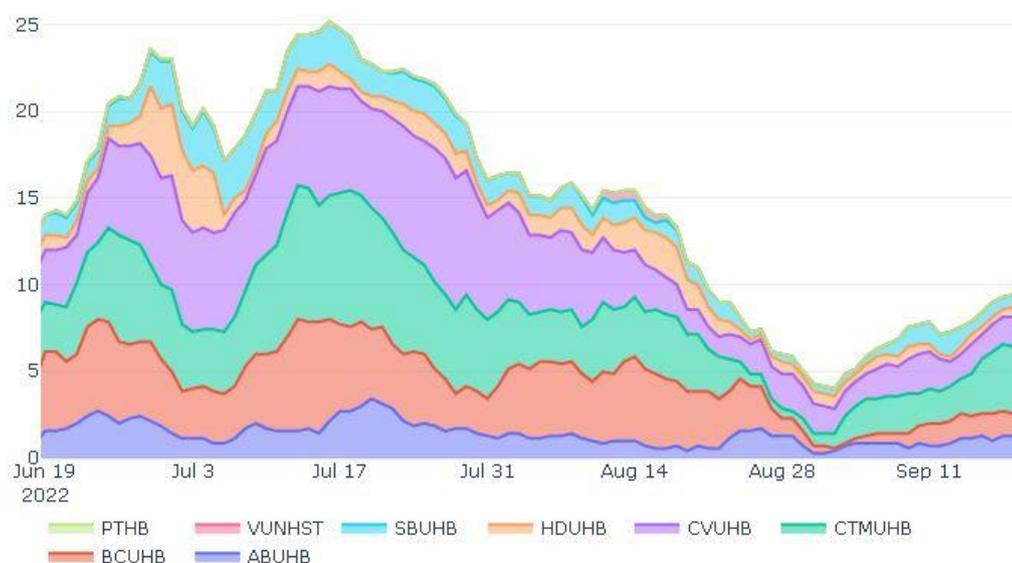
## Deaths

- 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.
- The Office for National Statistics (ONS) published statistics on 21 September on [provisional weekly deaths](#), including deaths involving COVID-19, for the week ending 9 September 2022. The cumulative number of deaths involving COVID-19 in Wales, occurring throughout the pandemic up to the latest week, was 10,794.
- 666 deaths from all causes were registered in the latest week. This was 114 more than the previous week (although the previous week's registrations were likely impacted by the August bank holiday), and 78 more than the five-year average for 2016-2019 and 2021.
- 24 deaths involving COVID-19 were registered in the latest week. This was 3.6% of all deaths, and 7 more than the previous week, although as above, the previous week included the August bank holiday, which may have impacted registrations.

## NHS

- As of 20 September 2022, hospital admissions of suspected and confirmed COVID-19 positive patients increased to approximately 10 admissions per day.

Hospital admissions of suspected and confirmed COVID-19 positive patients



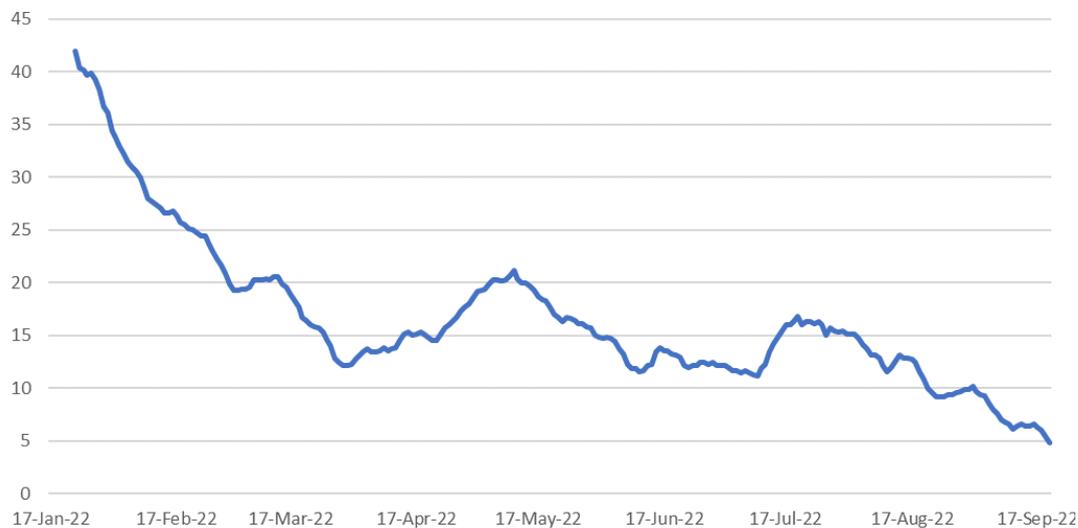
- As of 20 September 2022, the 7-day average was 216 beds. Confirmed COVID-19 hospital occupancy in Wales (7-day average) reached a peak of over 700 in mid-July 2022, roughly three quarters of the maximum occupancy

peak level in March 2022 when BA.2 was dominant.



- 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, has been generally decreasing since mid-July.

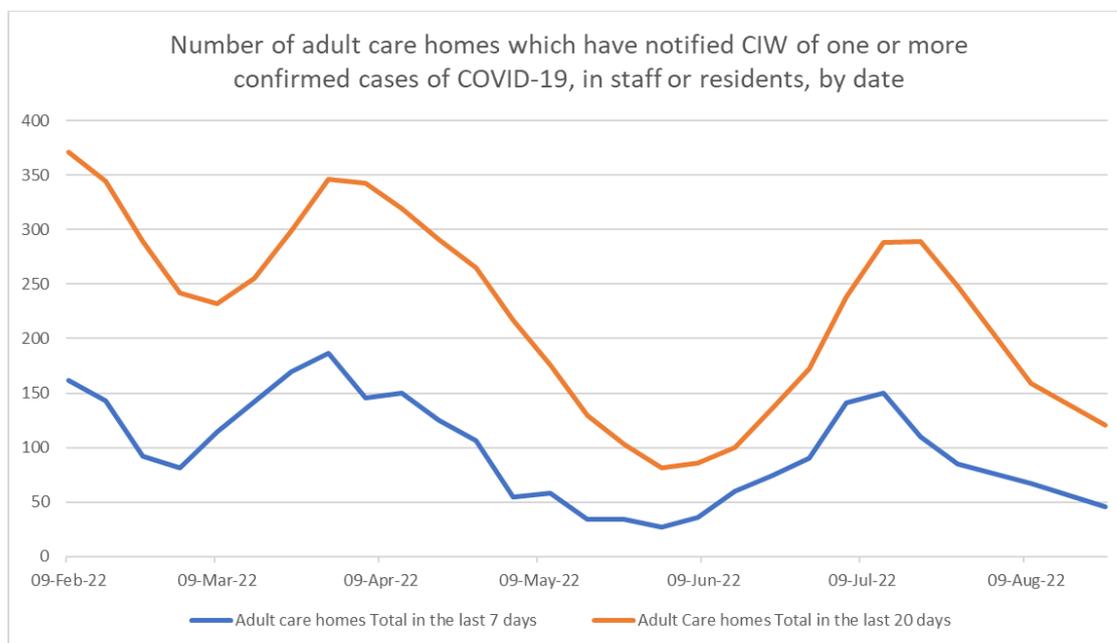
Percentage of COVID-19 patients in acute hospitals actively treated for COVID-19 in Wales, StatsWales (%) (7 day rolling average)



- [NHS staff absence figures](#) up to 20 September 2022 show absence due to self-isolation has decreased compared with the period ending 5 September 2022 to 5.7%, whilst absence due to COVID-19 sickness has decreased to 0.6%.

## Care homes

- As of 13 September 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 continued to decrease. The most recent data shows a steady decrease of 26% to 34 care homes, compared to 46 in the previous week. This figure for the last 20 days has decreased to 92, down from 121 in the previous week. In Wales there are 1,029 adult care homes in total.



- As of 7 September 2022, the [number of notifications to CIW of deaths of adult care home residents involving COVID-19](#) (both confirmed and suspected) in the last 7 days has increased slightly to 5, compared to 2 in the previous week.
- In total, CIW has been notified of 2,226 care home resident deaths with suspected or confirmed COVID-19 between 1 March 2020 and 7 September 2022. This makes up 13.1% of all adult care home resident reported deaths (16,962) during this period.

## Weekly Influenza and Acute Respiratory Infection Report – PHW

- As at week ending 18 September, [PHW](#) report that confirmed influenza cases continue to be seen at low levels. Similarly, RSV confirmed cases are at low levels. During Week 37 (ending 18/09/2022) there were 28 cases of influenza (an increase from the previous week), with one further case reported late from samples in a preceding week. COVID-19 cases continue to be detected in symptomatic patients in hospitals and in the community. RSV incidence in children under 5 years of age is currently at levels that would indicate low levels of activity (compared to the 10 seasons leading up to 2020).
- Rhinovirus, adenovirus and RSV are the most commonly detected causes of non-COVID-19 Acute Respiratory Infection (ARI). Rhinovirus cases have markedly increased during Week 37. The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) during Week 37 decreased to 11.7%. Confirmed RSV case incidence in children aged under 5 has slightly increased but remains at low intensity levels and above the baseline threshold. Community and syndromic influenza indicators remain low in the UK. GP (Influenza-like Illness) ILI consultations increased in Scotland to 1.3 per 100,000 and remained the same in Northern Ireland at 0.8 per 100,000. This is well below the baseline intensity threshold.
- The WHO and the European Centre for Disease Prevention and Control (ECDC) have entered a monthly reporting cycle for influenza and reported that activity across Europe remained at interseasonal levels during weeks 31-35. As at 19 September 2022, the [WHO reports](#) that globally, influenza activity remained low. Generally, activity has decreased or remained low in most countries this period.

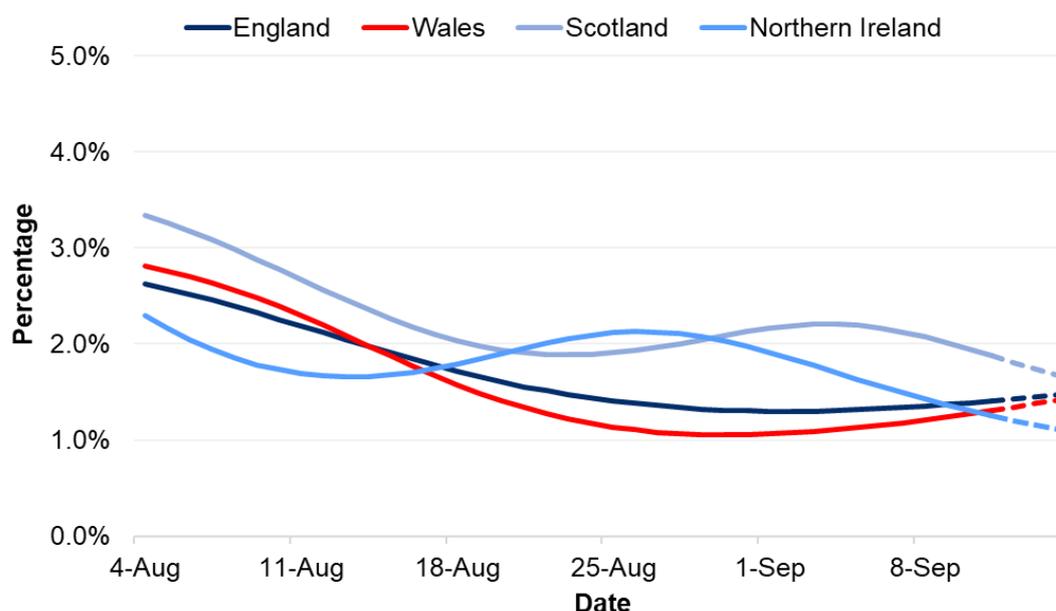
## 2. Situation in the UK and international comparators

### UK Infection positivity – ONS Coronavirus Infection Survey, 8 to 14 September 2022

- The ONS Coronavirus Infection Survey reports that at the midpoint of the most recent week (8 to 14 September 2022), the positivity rate had increased in Wales and England. The percentage of people testing positive for coronavirus (COVID-19) increased in England and Wales and decreased in Northern Ireland and Scotland.
- In Wales, the estimated number of people testing positive for COVID-19 was 39,700 (95% credible interval: 29,800 to 51,900), equating to 1.31% of the population, or around 1 in 75 people.
- In England, the estimated number of people testing positive for COVID-19 was 766,500 (95% credible interval: 714,800 to 822,400), equating to 1.41% of the population, or around 1 in 70 people.
- In Northern Ireland, the estimated number of people testing positive for COVID-19 was 22,900 (95% credible interval: 15,000 to 32,800), equating to 1.25% of the population, or around 1 in 80 people.
- In Scotland, the estimated number of people testing positive for COVID-19 was 98,800 (95% credible interval: 80,300 to 119,100), equating to 1.88% of the population, or around 1 in 55 people.

*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. In April 2022 the survey moved to an online data collection method, with postal returns for swabs and blood samples.*

### Positivity rates (%) across UK countries 8 to 14 September 2022

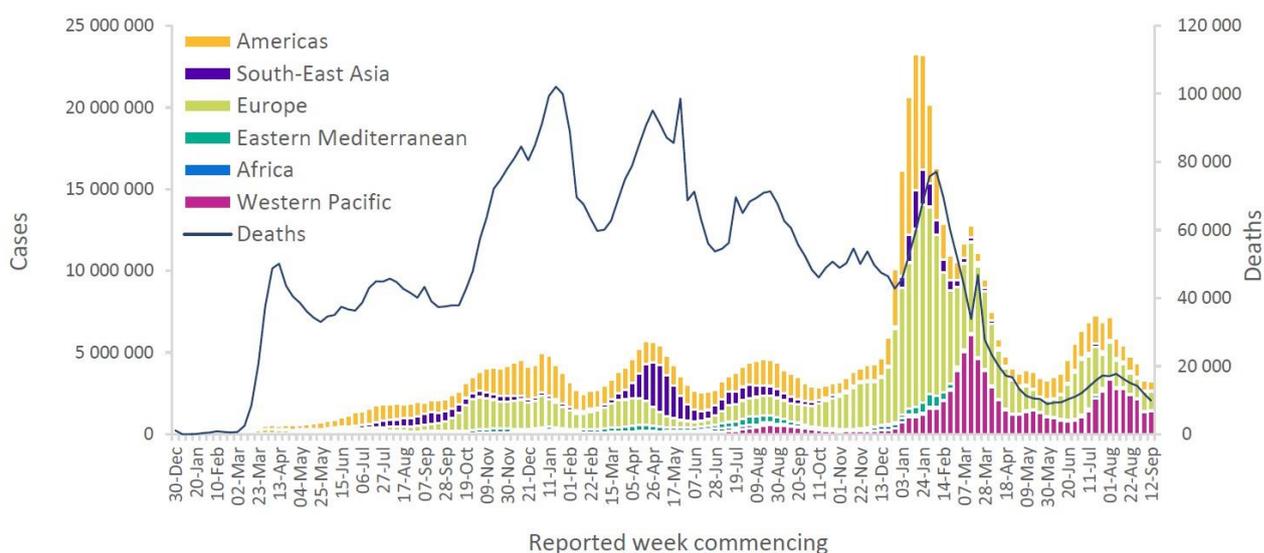


## Long Covid

- As previously reported, an estimated 2.0 million people living in private households in the UK (3.1% 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 31 July 2022.
- Data for Wales showed that an estimated 99,000 people (3.1% of the population) had self-reported long COVID as of 31 July 2022. [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 12 to 18 September 2022 as compared to the previous week, with over 3.2 million new cases reported (Figure 1, Table 1). The number of new weekly deaths decreased by 17% as compared to the previous week, with over 9800 fatalities reported. As of 18 September 2022, over 609 million confirmed cases and over 6.5 million deaths have been reported globally.
- The number of newly reported weekly cases decreased or remained stable across all six WHO regions: the African Region (-35%), the Eastern Mediterranean Region (-14%), the Region of the Americas (-12%), the South-East Asia Region (-8%), the European Region (-1%) and the Western Pacific Region (+3%). The number of new weekly deaths decreased across all six regions: the Eastern Mediterranean Region (-46%), the African Region (-27%), the Western Pacific Region (-27%), the European Region (-22%), the South-East Asia Region (-6%) and the Region of the Americas (-5%).



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

- As at 22 September 2022, [ECDC reports](#) that the epidemiological picture suggests the increasing transmission observed in the last two weeks in some countries is becoming more widespread and also affecting the population aged 65 years and above. Similarly, it is causing some reported impact on hospital/ICU indicators. Changes in population mixing following the summer break are likely to be the main driver of these increases, with no indication that they are caused by changes in the distribution of circulating variants.
- The pooled EU/EEA notification rate of COVID-19 cases among people aged 65+ years fell by 3% compared with the previous week, indicating that the sustained decreasing trend observed in recent weeks is slowing down. This is driven by recent increases in 13 of the 26 countries reporting data on this

indicator: up from five countries reporting increases the previous week. Increases in overall (all-age) notification rates were also reported by 13 countries, compared to five the previous week.

- The observed epidemiology is consistent with the forecasts of cases, hospital admissions and deaths from the [European COVID-19 Forecast Hub](#). In the two weeks to week 39, increasing trends in cases are forecast for eight of 30 countries, and increasing trends in hospital admissions for four of nine countries reporting these data.

### 3. Variant of Concern update

[PHW report](#) the weekly summary of the total number of COVID-19 variants of concern (VOC) in Wales. (Data correct as at: 20 Sep 2022)

Variant	Lineage	Alternate names	30 day cases*	Total cases	Change
All cases			1,040	133,292	+220
VOC-22JAN-01	BA.2	BA.2	2	29,185	+5
VOC-22APR-03	BA.4	-	37	1,244	+14
VOC-22APR-04	BA.5	-	666	4,612	+251
V-22JUL-01	BA.2.75	-	2	4	
Not elsewhere classified	B.1.1.529	B1.1.1529, BA.3, genotyped cases	333	41,081	-50

Source: [Public Health Wales COVID-19 genomic surveillance](#)

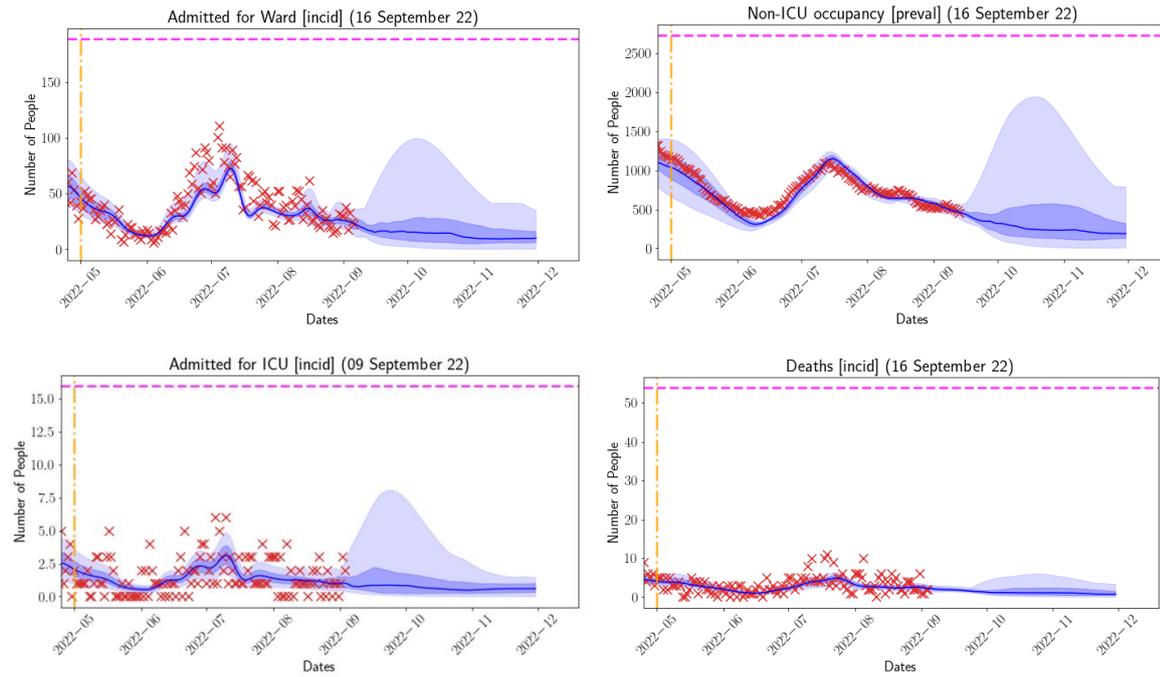
- The [WHO reports](#) that as of epidemiological week 35 (29 August to 4 September 2022), the pooled descendent lineages of BA.5 (BA.5.X) show the highest relative global prevalence of 76.6%, followed by BA.4.X with 7.5% prevalence. During the same period, BA.3.X, BA.2.X (excluding BA.2.75) and BA.1.X have declined in global prevalence to less than 1%. Globally, from 19 August to 19 September 2022, 120 617 SARS-CoV-2 sequences were shared through GISAID. Among these, 119 458 sequences were of the Omicron variant of concern (VOC), accounting for 99.0% of sequences reported globally in the past 30 days. As the number of submitted sequences continues to decline, interpretation of trends should be made with due caution.
- These variants are being monitored and assessed by WHO based on criteria of genetic constellations of mutations, and/or indications of a rise in prevalence in a geographic location, as well as any evidence of phenotypic changes. All of these lineages have different additional mutations, yet the majority do not warrant concern, either based on current knowledge of relevant genetic sites, or based on very low sequence circulation over several weeks.
- Global prevalence of BA.2.75 is low (1.26% as of week 35) but has been rising over recent weeks. As of epidemiological week 35, a total of 48 countries have been reporting its detection; the majority of the reported sequences are from India. One of its descendent lineages, BA.2.75.2, has three additional spike mutations

#### 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 16 September

- In the charts below, red crosses represent actual Omicron data, which the model is fitted to – fit is weighted to data points after the vertical orange line to represent the characteristics of emergent strains. 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.
- The latest projections suggest that NHS pressures are fairly stable, although with significant uncertainty.
- Hospital admissions are projected to continue to decrease in the short term before reaching a low plateau, although there is a fair amount of uncertainty (confidence intervals are wide).
- Bed occupancy is closely following the projections, which project that occupancy has peaked and will continue decreasing – this trend is uncertain.
- ICU occupancy is also closely following the projections and is expected to remain at a low plateau. ICU admissions and deaths continue to fluctuate at low levels.



### UKHSA EMRG Consensus MTPs

Swansea University (SU) projections are usually 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). Once again there was an insufficient number of models available so a combined projection could not be produced. This may become the standard method unless more models come on board that include Wales.