

OFFICIAL SENSITIVE

COVID-19 Wales Situational Report

Please note: testing policy, behavioural and reporting changes over the festive period remain likely to affect some trends and so should be interpreted with caution.

COVID-19 Intelligence Cell: 13
January 2022

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COVID-19 Situation Report Summary

Key points to note

Wales moved to Alert Level 2 on 26 December 2021.

Overall cases of COVID-19 and test positivity are decreasing across Wales, following a rapid rise in Omicron cases. Changes to testing policy after 6 January that those who receive a positive lateral flow test result are no longer required to take a follow-up PCR test, along with behavioural changes such as return to school, may impact case and test positivity data and so **extra caution should be taken in interpreting recent trends**, before data feeds are given time to stabilise.

The UKHSA consensus estimate of the reproduction number for Wales is between 1.1 and 1.5 and a doubling time of 7 to 31 days to flat (as at 13 January 2022). PHW's Rt estimate is 0.75 with a halving time of 33 days (12 January 2022). *Source, PHW.*

The number of beds occupied with COVID-19 related patients fluctuates; however since late December 2021, the number of COVID-19 related hospitalisations has increased to levels comparable to early March 2021. As at 12 January 2022, there were 1,189 COVID-19 related patients (Suspected, Confirmed and Recovering) occupying a hospital bed (+229 compared to previous week), of which 912 were confirmed. As at 12 January 2022, there were 30 patients with Suspected or Confirmed COVID-19 in critical care beds in Wales, 132 lower than the maximum COVID-19 position of approximately 164. **There is the potential for significant harm in the community (and our hospitals) for people with non-COVID illnesses or injuries. Omicron levels have led to health boards having to postpone significant levels of routine elective activity in early 2022 which may exceed the direct harm from COVID-19 at this point in time.**

The 7-day rolling sum of COVID-19 deaths have increased to 61, an increase of 23 since the previous 7-day period, according to the most recent PHW data (8 January). These figures are limited to reports to PHW of death of a patient in Welsh hospitals or care home residents where COVID-19 has been confirmed with a laboratory test and the clinician suspects this was a causative factor in death and so the true number may be higher.








As at 11 January 2022, Wales has had 26,024 (+11,158 compared to previous week) confirmed cases of the Omicron variant, 90,796 (+1,066) confirmed cases of Delta and 14,791 (+545) confirmed cases of AY4.2 VUI-21OCT-01. No other variants of concern were confirmed by genomic sequencing in Wales. *Source: PHW.*

As at 12 January 2022, a total of 6,642,436 doses of COVID-19 vaccine were given in Wales and recorded in the COVID-19 Welsh Immunisation System. 2,499,123 have received at least one dose, 2,332,336 have received at least two doses, 1,758,311 have received a booster dose, 52,666 have received a 3 dose primary course recommended for severely immunosuppressed individuals. *Source: PHW.*

Key indicators

COVID-19 cases and test positivity are showing signs of decreases. Admissions and prevalence have increased since the previous week.

Please note that the arrows represent a change in comparison for the last week.

	Current value (08/01/22)	Change since previous week (01/01/22 – 08/01/22 unless stated otherwise)	
		Percentage change	Value change
Confirmed case rate (rolling 7 day sum per 100k)	1,488	-33%	 (-749)
Confirmed case rate for over 60s (rolling 7 day sum per 100k)	824	-7%	 (-61)
Test positivity (7 day RA)	44.6%	-14.1%	 (-7.3 percentage points)
Population estimated to have COVID-19 (prevalence) ¹	5.56%	+7%	 (+0.36 percentage points)
NHS COVID-19 Admissions ²	73	+1%	 (+1)
ONS deaths (7 day sum) ³	25	-4%	 (-1)
PHW deaths (7 day sum)	61	+61%	 (+23)

Footnotes

1. Latest Covid Infection Survey data is taken from 31 December 2021 to 6 January 2022
2. Seven day rolling average to the current date of confirmed COVID-19 admissions
3. Latest ONS deaths data is to 31 December 2021 (rather than 8 January 2022) for the current value. Data to 24 December 2021 is used for the change since previous week.

Data as at 12:00PM 12 January 2022 unless otherwise specified.

What is the current status of the epidemic?

Note: testing policy, behavioural and reporting changes over the festive period remain likely to affect some trends and so should be interpreted with caution.

The UKHSA consensus estimate of the reproduction number for Wales is between **1.1 and 1.5** and a **doubling time of 7 to 31 days to flat** (as at 13 January 2021). **PHW's estimate of Rt** (more timely data but limited by variation in testing), **is estimated to be 0.75 for Wales with a halving time of 33 days (12 January 2022)**. The central Rt estimate is highest for the Swansea Bay University Health Board and Powys Health Boards at 0.8. *Source: JBC/PHW.*

7-day cumulative case incidence in Wales is 1483 per 100,000 population and test positivity is at 44.6%.

Case incidence is decreasing in all of the 22 local authorities. Case incidence is above the national average per 100,00 population for 12 local authorities. Local authorities with the highest case incidence are Neath Port Talbot (1893), Blaenau Gwent 1756) and Caerphilly (1672) per 100,000 population, respectively.

As at 8 January 2022, case incidence is slightly decreasing in most age groups, remaining highest in 20-29 year-olds.

The second table below provides estimates of doubling and halving times based on PHW COVID-19 positive test data. In this table, doubling times are positive, whilst halving times are negative. The 95% confidence intervals are showing in brackets after the central estimate. An asterisk (*) means that there are small numbers and estimates should be treated with caution. Local health board level estimates of Rt and halving times will be unstable when incidence is low.

Table 1: Cases per 100,000 population (7 day period ending 8 January 2022)

Local Authority	Health Board	Number	% of All Wales Total	Case Incidence per 100,000	Change from previous week	Proportion of tests positive (%)
Neath Port Talbot	SBUHB	2713	5.8%	1893.0	-23% ↓	47.5%
Blaenau Gwent	ABUHB	1227	2.6%	1756.3	-41% ↓	43.1%
Caerphilly	ABUHB	3027	6.5%	1671.7	-30% ↓	45.2%
Swansea	SBUHB	4098	8.8%	1659.2	-29% ↓	47.7%
Rhondda Cynon Taf	CTMUHB	3999	8.6%	1657.5	-43% ↓	46.1%
Bridgend	CTMUHB	2396	5.1%	1629.4	-32% ↓	45.6%
Wrexham	BCUHB	2208	4.7%	1624.0	-21% ↓	46.8%
Merthyr Tydfil	CTMUHB	967	2.1%	1603.0	-45% ↓	43.4%
Newport	ABUHB	2452	5.2%	1585.2	-32% ↓	43.4%
Conwy	BCUHB	1855	4.0%	1582.7	-35% ↓	46.1%
Carmarthenshire	HDUHB	2885	6.2%	1528.3	-21% ↓	42.3%
Flintshire	BCUHB	2381	5.1%	1525.3	-33% ↓	46.4%
Isle of Anglesey	BCUHB	1001	2.1%	1429.1	-27% ↓	48.3%
Torfaen	ABUHB	1301	2.8%	1384.6	-46% ↓	40.2%
Cardiff	CVUHB	5064	10.8%	1380.2	-34% ↓	45.7%
Denbighshire	BCUHB	1313	2.8%	1372.1	-33% ↓	40.9%
Powys	PTHB	1708	3.7%	1289.7	-24% ↓	44.0%
Vale of Glamorgan	CVUHB	1654	3.5%	1238.1	-43% ↓	41.1%
Pembrokeshire	HDUHB	1527	3.3%	1213.7	-26% ↓	43.1%
Gwynedd	BCUHB	1407	3.0%	1129.6	-42% ↓	44.2%
Ceredigion	HDUHB	687	1.5%	945.0	-48% ↓	38.9%
Monmouthshire	ABUHB	889	1.9%	939.8	-35% ↓	36.1%
Total	Total	46759	100.0%	1483.1	-33% ↓	44.6%

Figure 1: Cases per 100k (PHW Data) (7 day rolling sum to 7 January 2022)

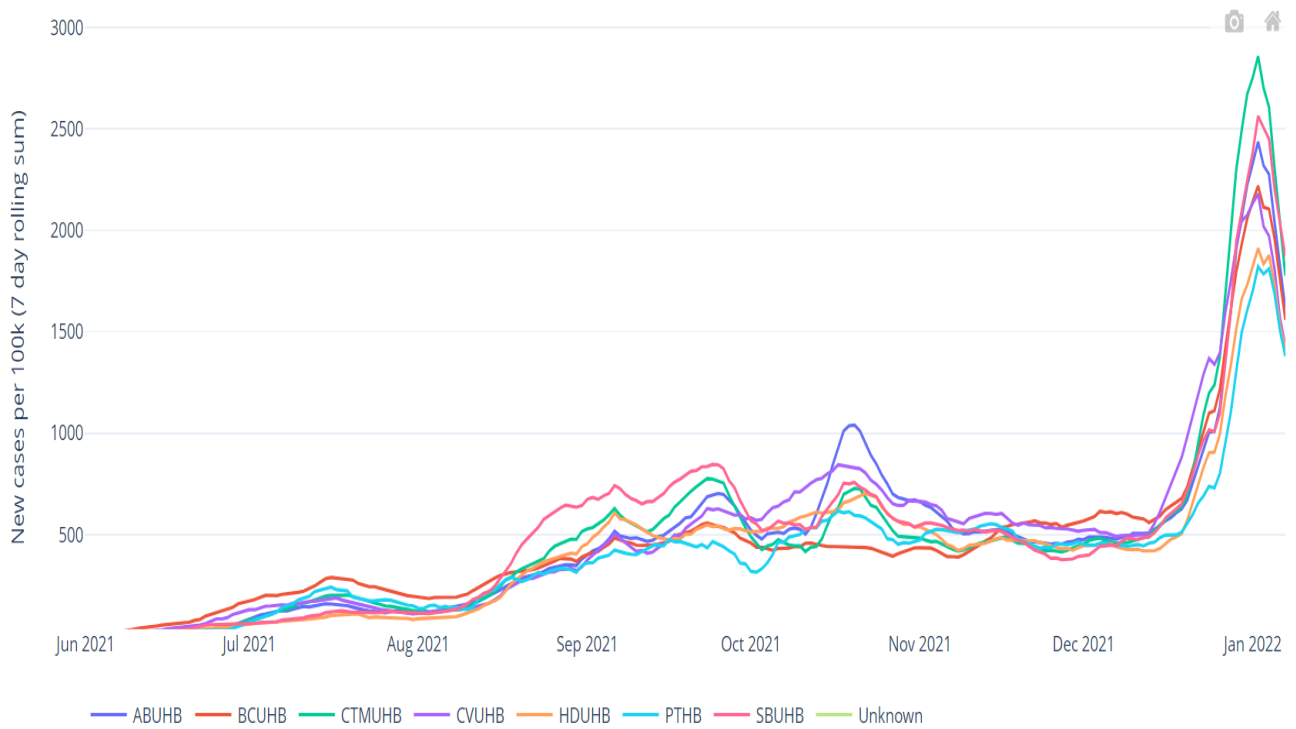


Figure 2: Cases per 100k by age (PHW Data) (7 day rolling sum to 8 January 2022)

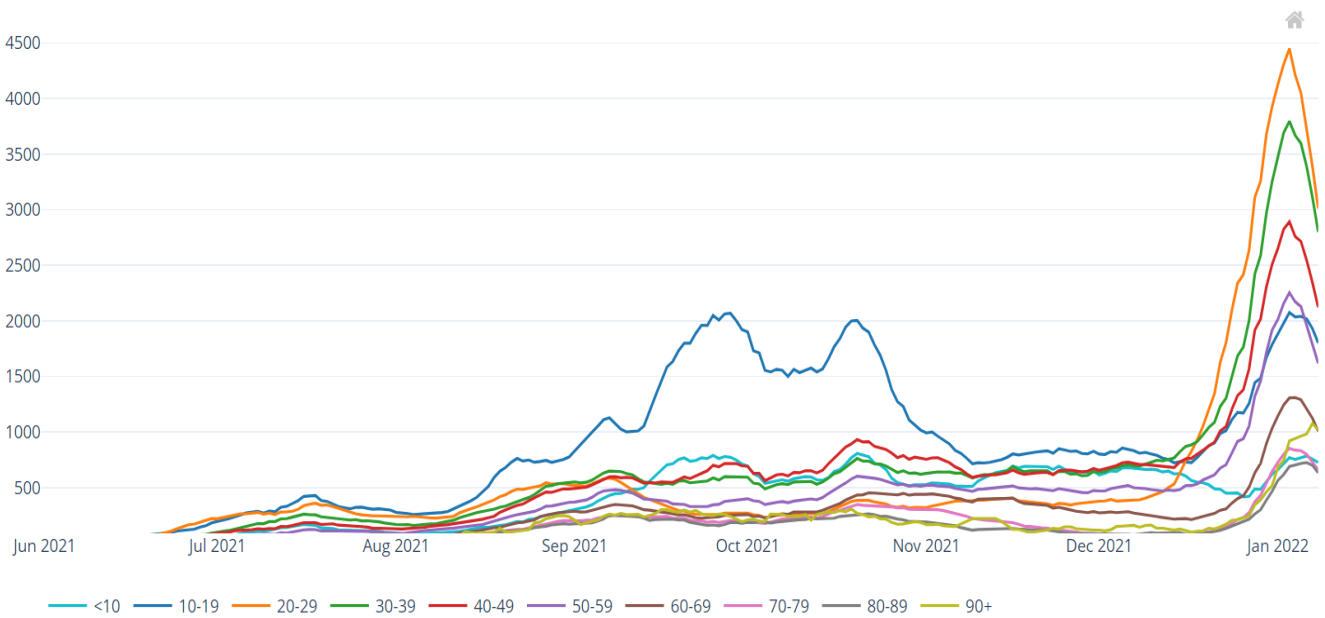


Table 2: Reproduction number and doubling time (PHW methodology) PHW data by Local Health Board (12 January 2022 estimate)

Local Health Board	All Wales	Swansea Bay UHB	CTM UHB	Aneurin Bevan UHB	Cardiff & Vale UHB	Hywel Dda UHB*	Powys THB*	Betsi Cadwaladr UHB
Rt (cases)	0.75 (0.7 to 0.75)	0.8 (0.75 to 0.8)	0.7 (0.65 to 0.7)	0.7 (0.7 to 0.75)	0.7 (0.7 to 0.75)	0.8 (0.75 to 0.8)*	0.8 (0.75 to 0.85)*	0.75 (0.75 to 0.75)
Doubling time (days)	33 (7 to --12)	2444 (8 to --8) DOUBLING	21 (6 to --16)	33 (7 to --12)	26 (7 to --14)	64 (9 to --10)*	72 (7 to --9) DOUBLING	32 (7 to --14)

What is the situation with the NHS and social care?

Whilst early operational data suggests admissions to hospital of suspected and confirmed COVID-19 patients may be stabilising/reducing, the onset of Omicron has seen a significant increase in COVID-related patients, with **1189 occupying a hospital bed** on the 11th January 2022. **Confirmed cases accounted for 912** of the total occupied beds, however numbers have increased across all patient types (confirmed, suspected and recovering patients).

There are **30 patients with suspected or confirmed COVID-19 in critical care beds in Wales**. This is **134 lower than the maximum COVID-19 position of approximately 164**. The total number of patients in critical care for both COVID-19 and non-COVID-19 stands at 168, 16 more than the 152 baseline number of critical care beds available before the COVID-19 pandemic.

Non-COVID-19 urgent & emergency pressures continue to result in high levels of total hospital bed occupancy. However, in contrast to previous waves, the number of incidental COVID-19 cases has increased significantly with, early operational data indicating that only **40% of these patients were admitted primarily due to COVID-10**.

Staff sickness absence rates are currently just over 3% higher than pre-covid rates. Medically fit for discharge numbers remain a challenge with nearly 1000 still occupying a secondary care hospital bed, constraining flow throughout the health and care system. Omicron levels have also led to health boards having to postpone significant levels of routine elective activity in early 2022 which may exceed the direct harm from COVID-19 at this point in time.

The latest National Situation Background Assessment Recommendation (SBAR; 12 December 2021 to 9 January 2022) reports a significant increase in the number of care homes associated with outbreaks. IMTs reported 94 care homes with an outbreak attributed to COVID-19, compared with 34 homes reported in the previous reporting period. In the

main the majority of cases are reported in staff and where residents are affected symptoms are currently reported as mild or asymptomatic. Care homes currently remain resilient. Data should be viewed with caution as during this time reporting was by exception. *Data Source: National SBAR.*

Figure 3: Covid-19 Confirmed Hospital occupancy (7 day rolling average)

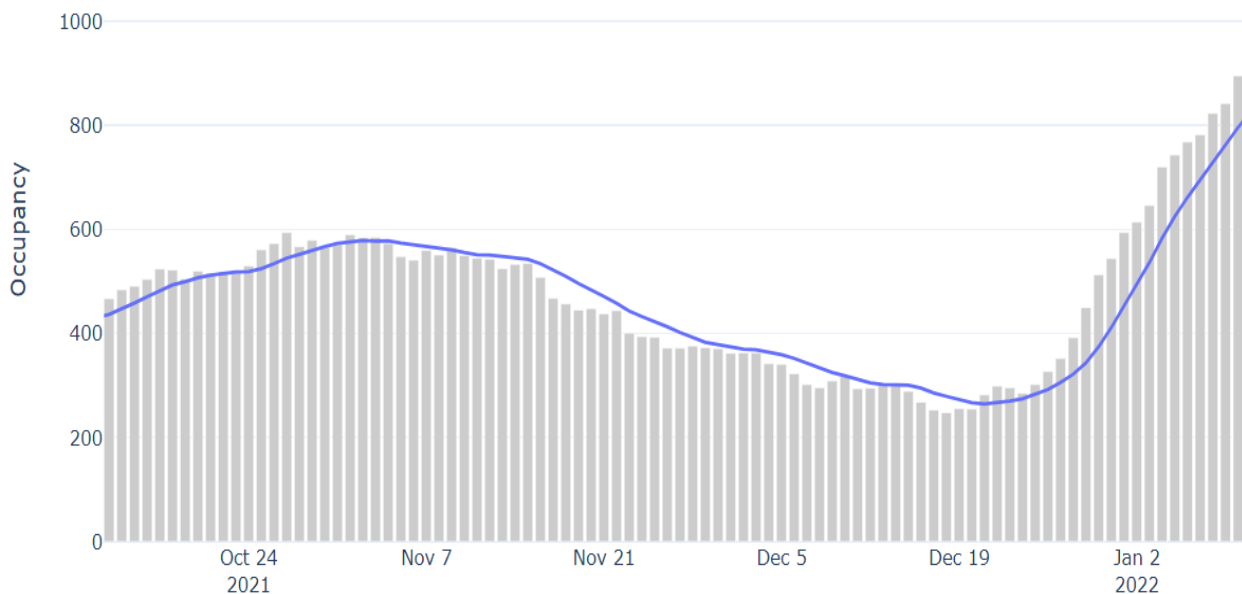


Figure 4: Hospital bed occupancy for suspected and confirmed COVID-19 positive patients (7 day rolling average)

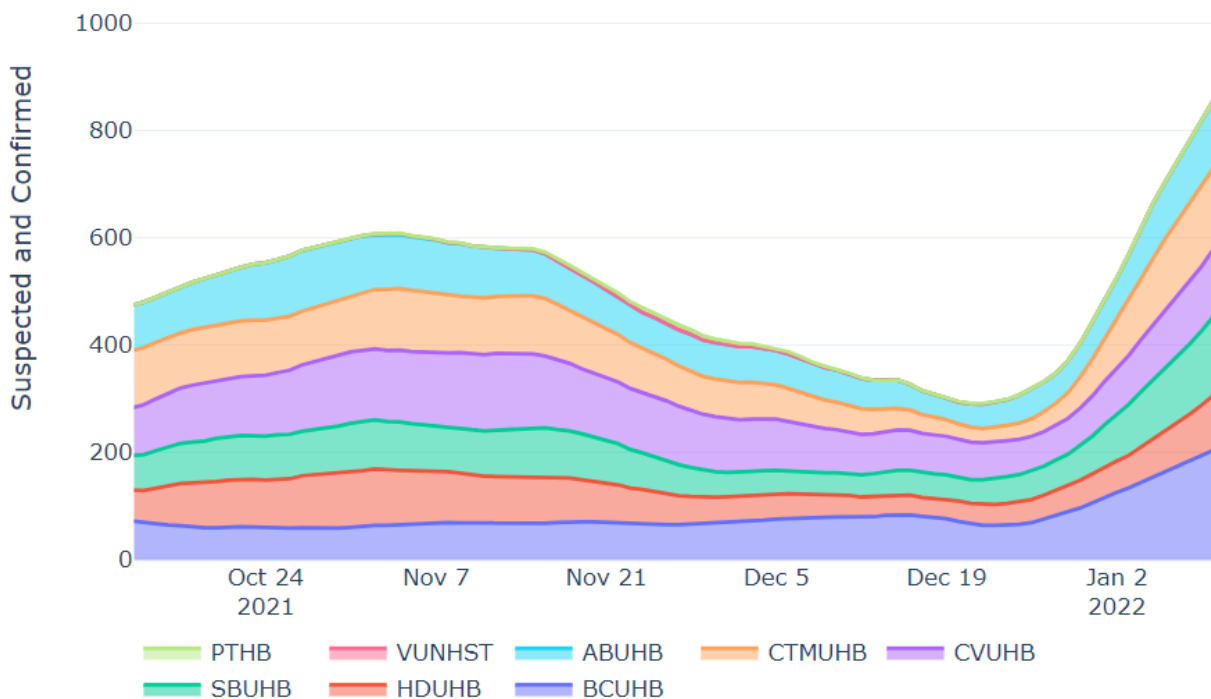


Figure 5: Invasive ventilated bed occupancy for suspected and confirmed COVID-19 positive patients (7 day rolling average)

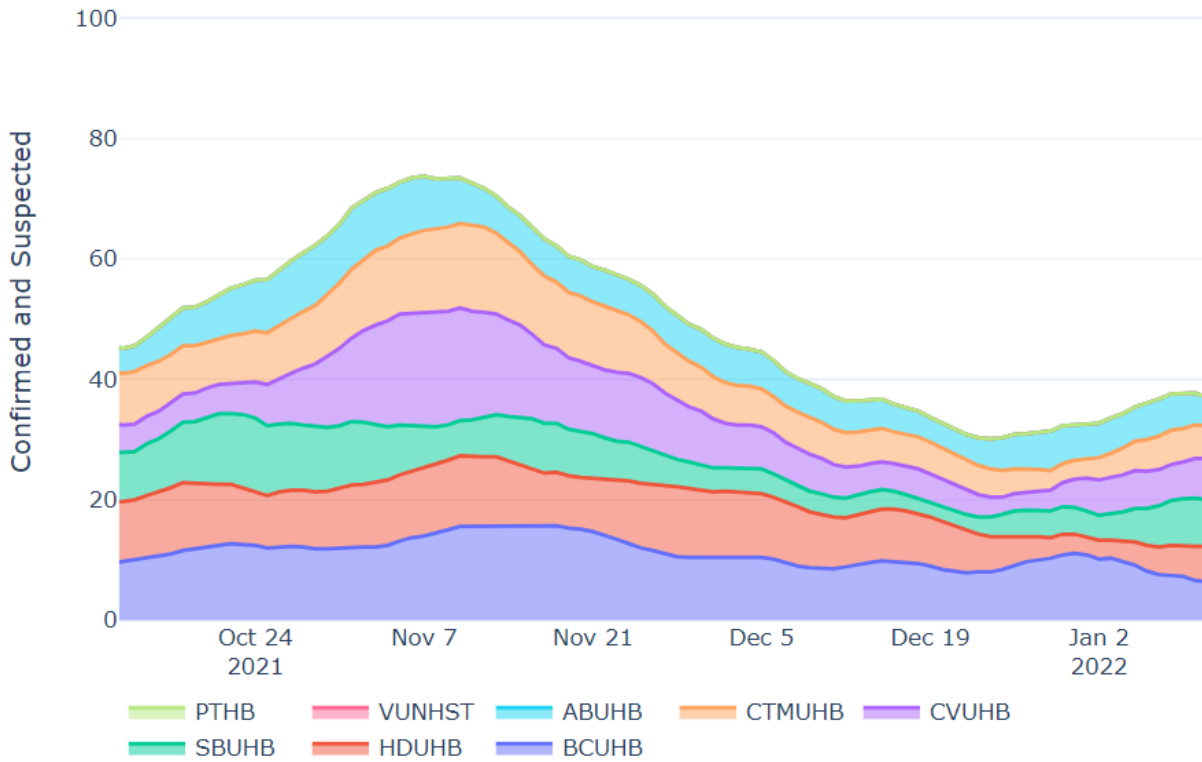
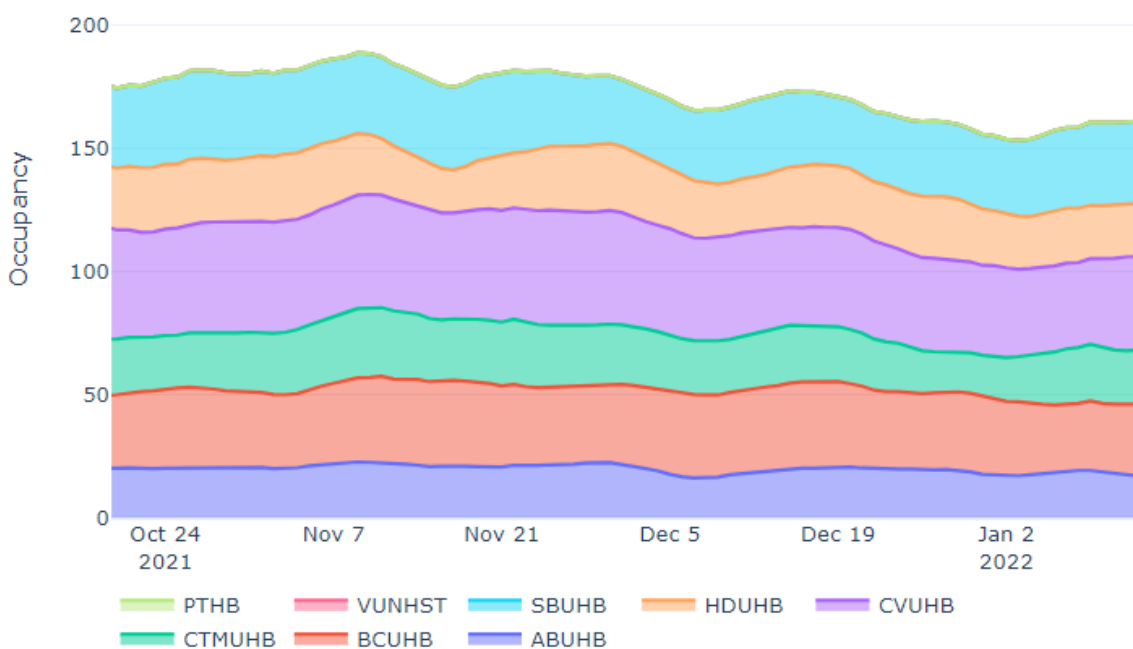


Figure 6: Overall Invasive Ventilating Bed Occupancy (7 day rolling average)



What is the situation with education, children and young adults?

Not all schools had returned from the holiday break over this reporting period- as a result the impact of this return in terms of case rates and workforce pressures is still emerging. IMT's report that the additional planning days were welcomed by schools and utilised to shape local implementation of the revised Framework approach.

School attendance

An average of 79.6% of all pupils were in attendance in school on the 6 January and 7 January 2022, down from 80.6% in the week before Christmas. Data for the latest two weeks is provisional.

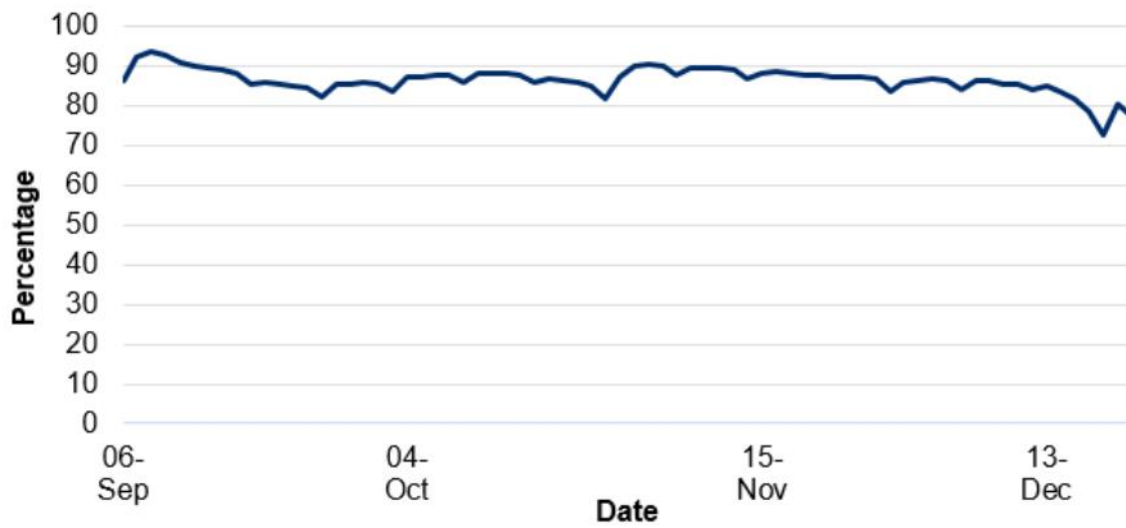
In the same time period, 10.8% of pupils were absent due to a known COVID-19 related reason with an average of 8.5% of all primary and 14.3% of all secondary pupils absent for this reason. *Source: Stats Wales, Schools in Wales*

Schools

The latest National Situation Background Assessment Recommendation (NSBAR) for the week 20-26 September has reported 85* new clusters compared to 105 the previous week. Community transmission remains widespread so whilst there is some evidence of in-school transmission, the majority are still likely associated with social interaction outside the school setting, household transmission and extra-curricular activities.

Figure 7: Attendance of pupils in maintained schools by day from 6 September 2021 onwards

Attendance of pupils by day, 6 September 2021 onwards



Source: Schools in Wales

Figure 8: Rolling 3 days average of new C-19 cases in school aged children or staff linked to schools by Health Board and date of test result up to 11 January 2022

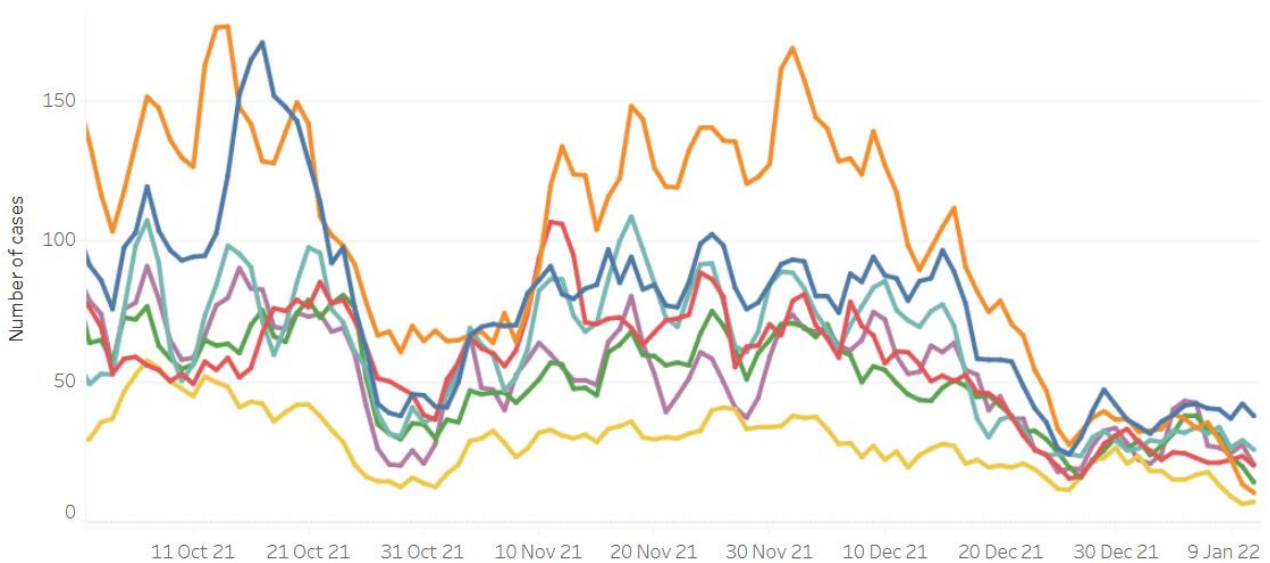


Figure 9: Absence due to C-19 by day and phase

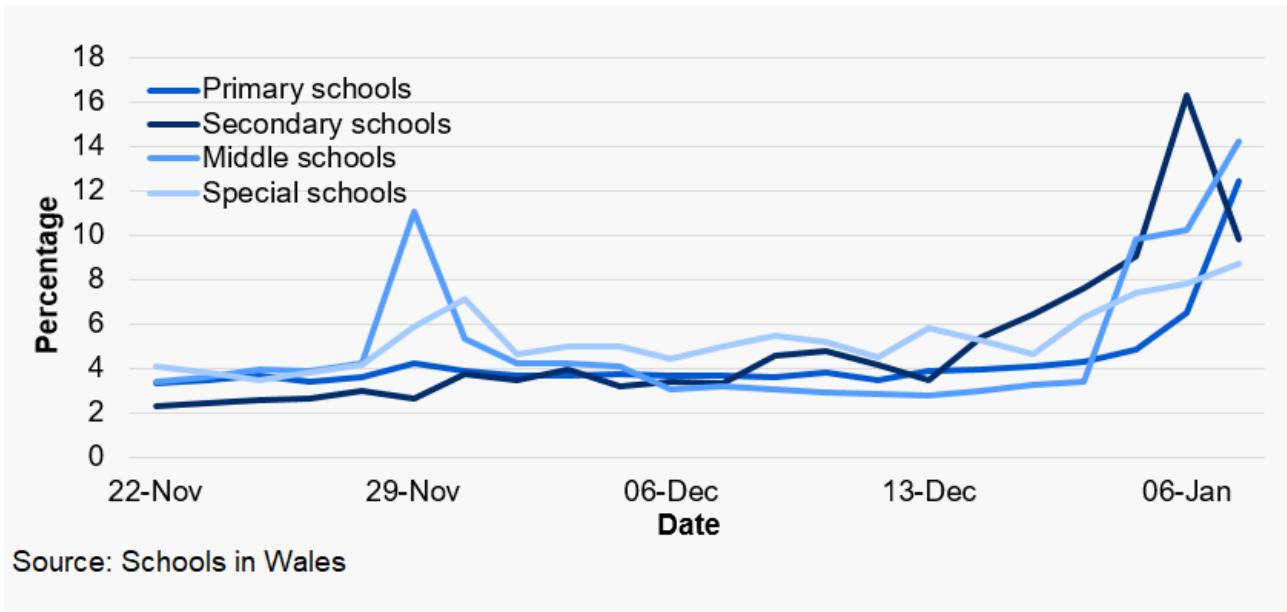
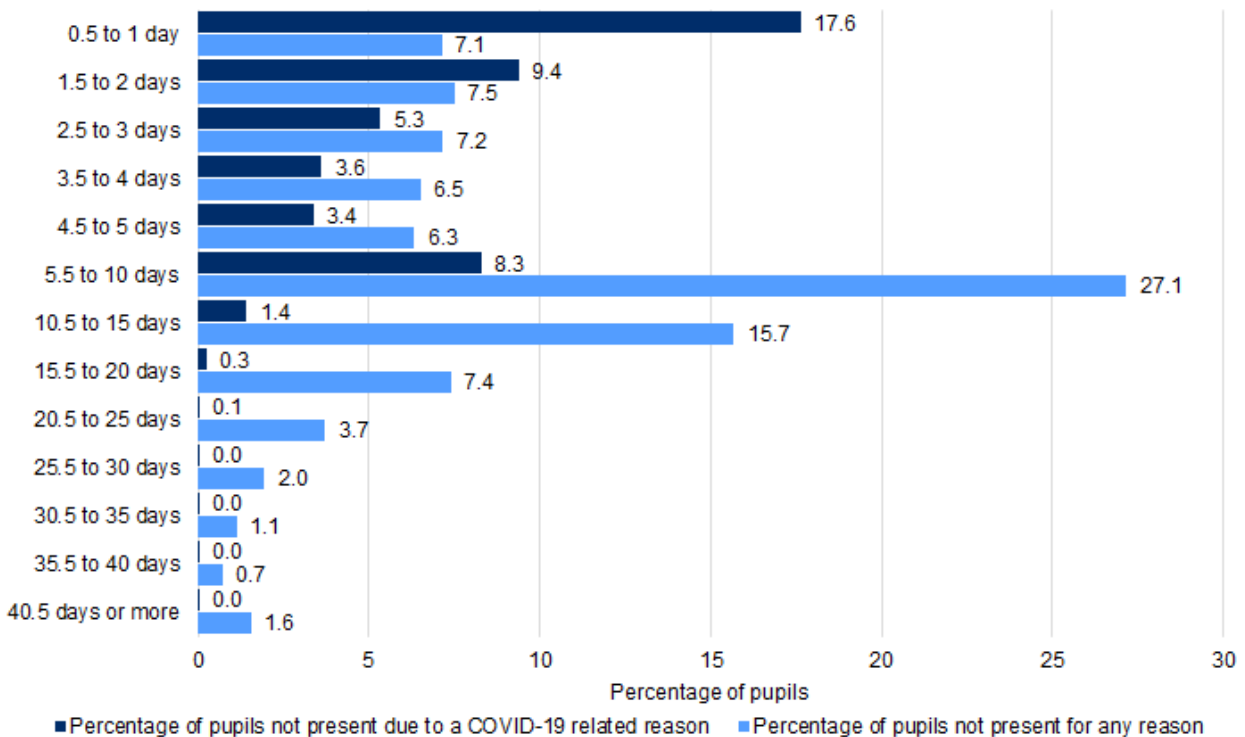


Figure 10: percentage of pupils by number of days missed due to C-19 related reason and all reasons



Wastewater Monitoring for Covid-19 (Pilot)

In the week ending 7 January 2022 the mean normalised COVID-19 signal is showing an early sign of decreasing across both North and South Wales. This could indicate a slowing, plateau or reduction in the rate of Covid-19 infections within the monitored catchments.

In North Wales, the wastewater signal appears to have levelled off, and may be declining. Recent variability in the signal mean this is not definite. In South Wales, the signal indicates the beginning of a decline.

South Wales sites have a broadly consistent decline across the sites. However, Barry, Bridgend and Newport are still showing level or increasing changes since last week

For this period, Holyhead, Llangefni, Llandudno, Flint and Wrexham in North Wales, and Carmarthen, Merthyr Tydfil, Barry, Cardiff and Abergavenny in South Wales are on the watchlist.

Sites on the watchlist include: Rhyl, Newport and Bridgend

Wastewater signal is an unbiased indicator because it is not dependent on testing policy and behaviour. The characteristics of the individual sewerage systems could have an impact on the signal being seen. Positive case data and wastewater signal can differ as wastewater can give an indication of the prevalence of Covid-19 in asymptomatic groups not subject to PCR testing, as well as other sources of SARS-CoV-2 infection. Wastewater SARS-CoV-2 signal data below limit of detection recorded as zero. The wastewater data for individual WwTW sites, normalised and unnormalised are inherently noisy.

The Chester WwTW will no longer be monitored as the programme is upscaling monitoring sites within Wales and moving toward composite sampling at those locations.

Figure 11: Wastewater Treatment Works (WwTW) featured in this report.



Figure 12: Weekly comparison of North and all-Wales mean normalised SARS-CoV-2 signal. All-Wales mean signal (dashed line) and South Wales mean signal (solid line). Data to 7 January 2022

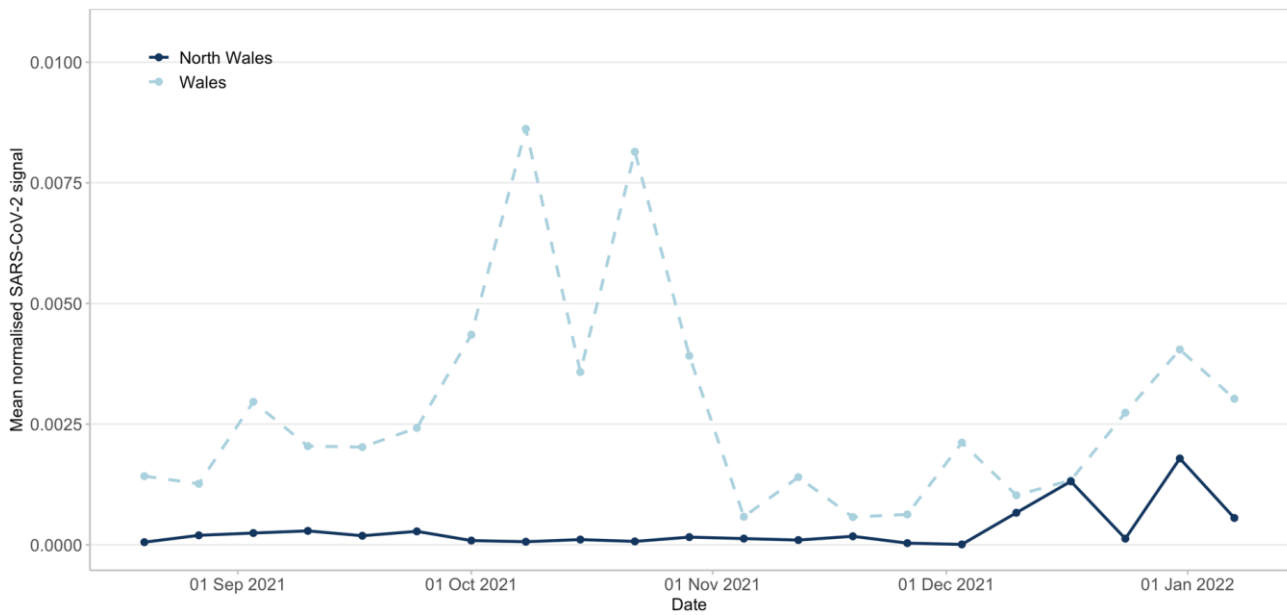
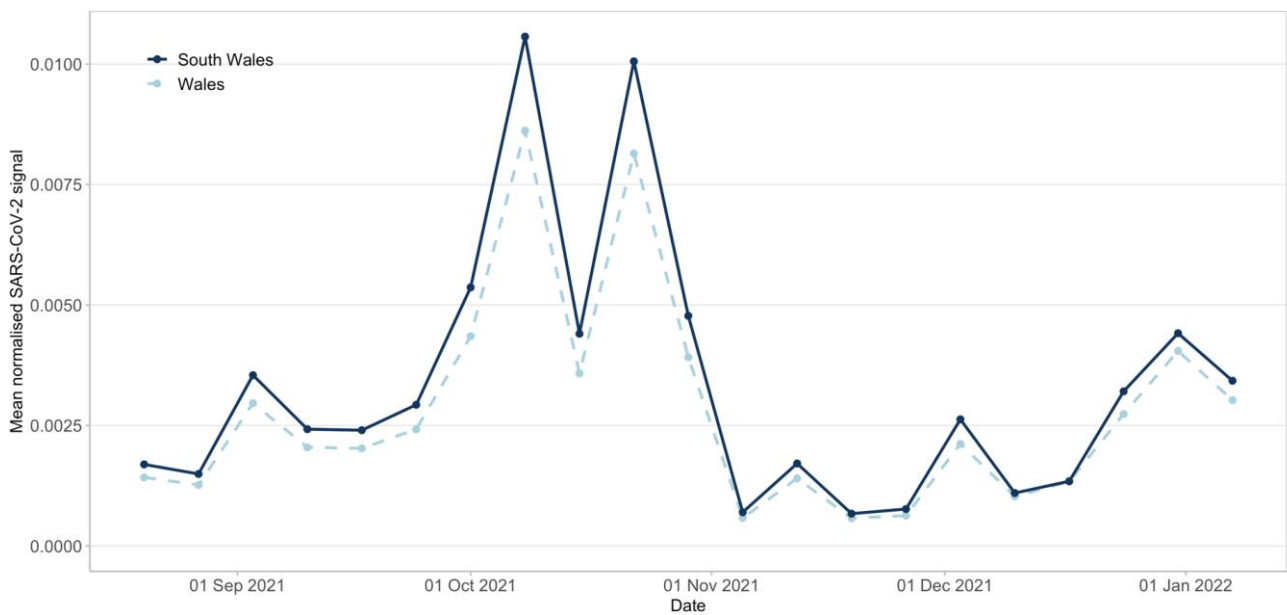


Figure 13: Weekly comparison of South and all-Wales mean normalised SARS-CoV-2 signal. All-Wales mean signal (dashed line) and South Wales mean signal (solid line). Data to 7 January 2022.



What is the situation with arriving travellers?

There have been 351 positive travellers (2.01% positivity), compared to 138 for the previous week (1.16% positivity).

Travellers visiting Spain provide the highest numbers testing positive on return, with 112 to date for the period (2.45% positivity) - compared to 27 positives for the previous week (1.06% positivity).

93.1% of travellers declared that they were fully vaccinated in an approved country program, compared to 93.4% the previous week.

17,427 PLF submissions, compared to 11,947 for the previous week – an increase of 45.9%

All age groups saw an increase in traveller numbers compared to the previous week.

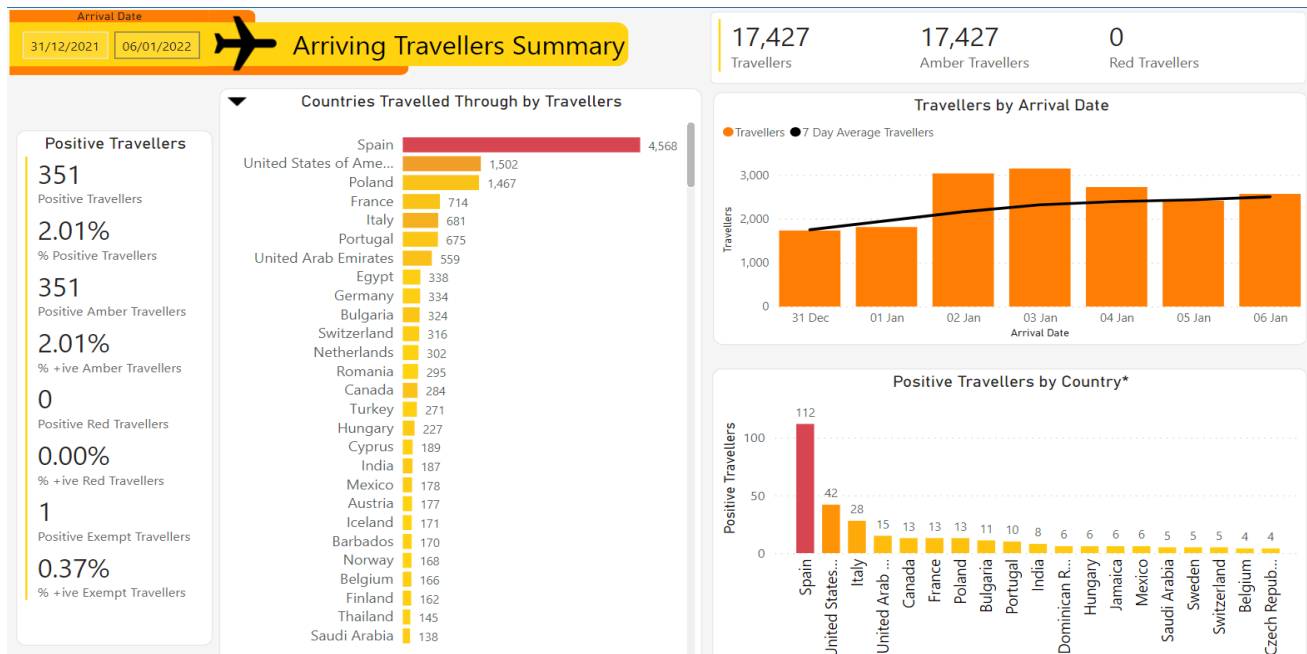
Travellers booking NHS tests rose to 5% for the week (3% overall in December)

Red: 70 (107 last week)

Amber: 20,492 (18,771 last week)

Green: 3,774 (3,915 last week)

Date Source: Home Office [Wales Travel Rules](#)



Note: Travellers may have travelled through more than one country on their journey.

Figure 14: Positive travellers timeline

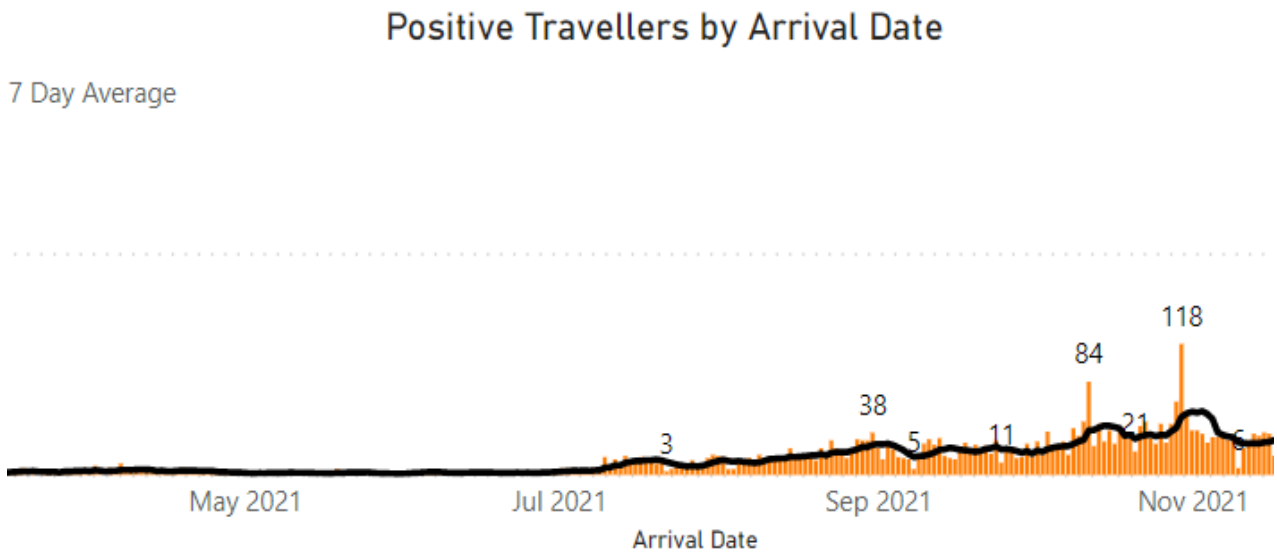


Figure 15: Positive travellers this week by country

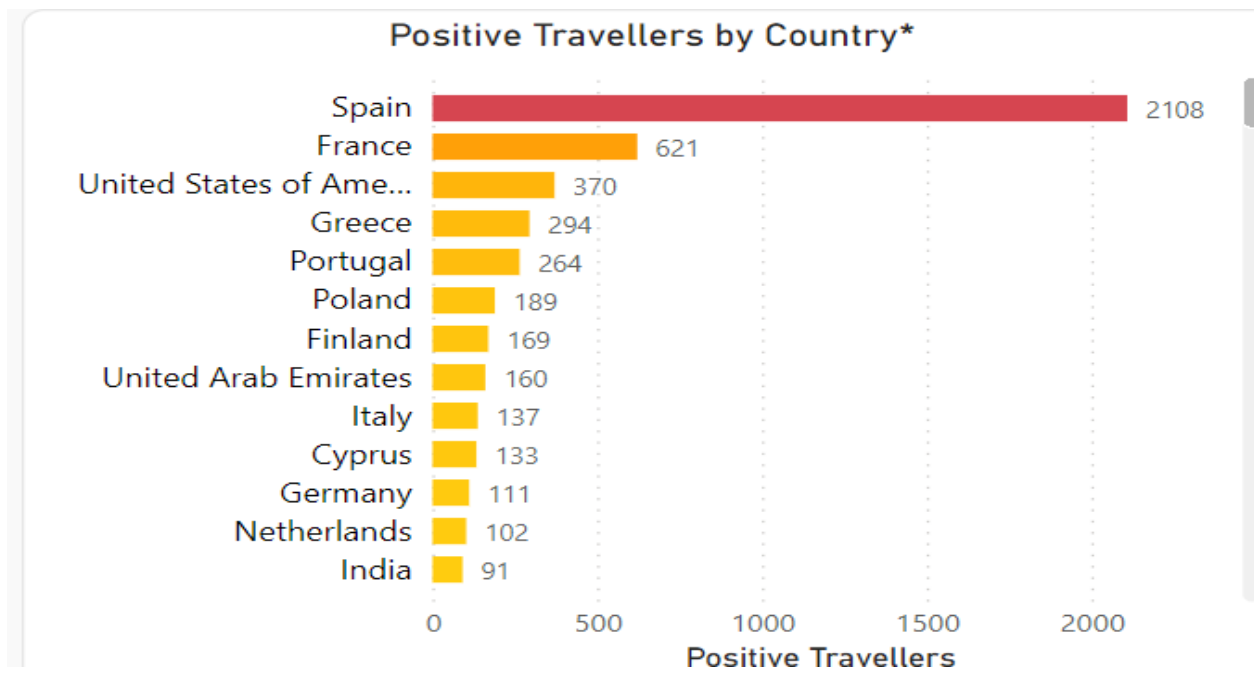
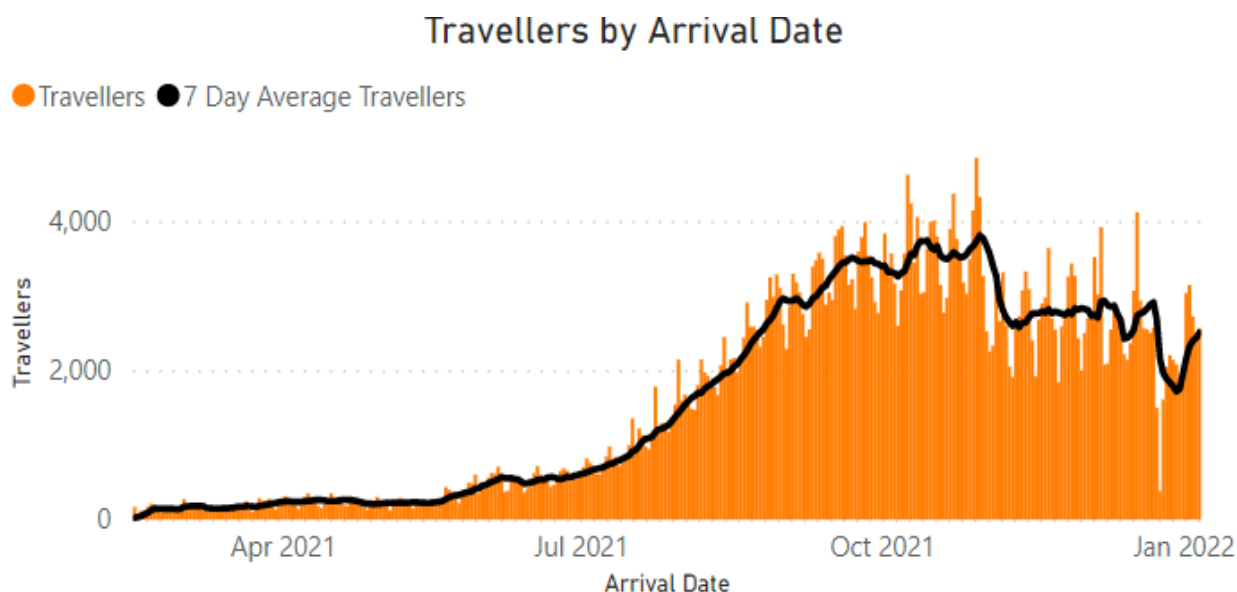


Figure 16: Arriving travellers timeline



Please note that the data provided by the Home Office is derived from Passenger Locator Forms (PLF) which are self-completed by travellers. As such, data may contain inaccuracies. Due to the limitations associated with data capture and legislation, some minor discrepancies may be present in the data. Countries with 10 or less travellers have been included in the overall positive traveller total, but excluded from the Green/Amber/Red positive traveller breakdown totals for personal identifiable information purposes.

Mobility data and UK Comparison

The latest mobility data shows an **increase** in **'Retail and recreation'**, **'Supermarkets and pharmacy'**, **Workplaces** and **'Public Transport'** categories. There are **decreases** in all other categories including **'Residential** (people spending time at home)' and **Commutes** in the latest week compared to the previous week.

The baseline for much of the data is during January to February 2020 and changes are relative to that period. It is not possible to determine if mobility is higher/lower than would have been expected prior to the pandemic as data for 2019 or earlier years is not published.

Coronavirus (Covid-19) Infection Survey results, 14 January

For the week 31 December 2021 to 06 January 2022, the ONS Coronavirus infection Survey, which provides an **unbiased estimate of levels of infection unaffected by changes to testing**, estimates the percentage of people testing positive has **increased** across Wales, England, Northern Ireland and Scotland in the most recent week.

ONS estimates that **169,100 of the community population in Wales** had COVID-19 during this period (95% credible interval: 148,700 to 190,600), equating to around **1 in 20 people**. This compares to around **1 in 15 people in England**, and around 1 in 20* in Scotland and Northern Ireland.

*Please note that the reference week for Scotland runs from 1 to 7 January 2022.

Source: [Office for National Statistics COVID-19 Infection Survey](#)

Figure 17: Mobility data by location of trip – Average of Welsh local authorities

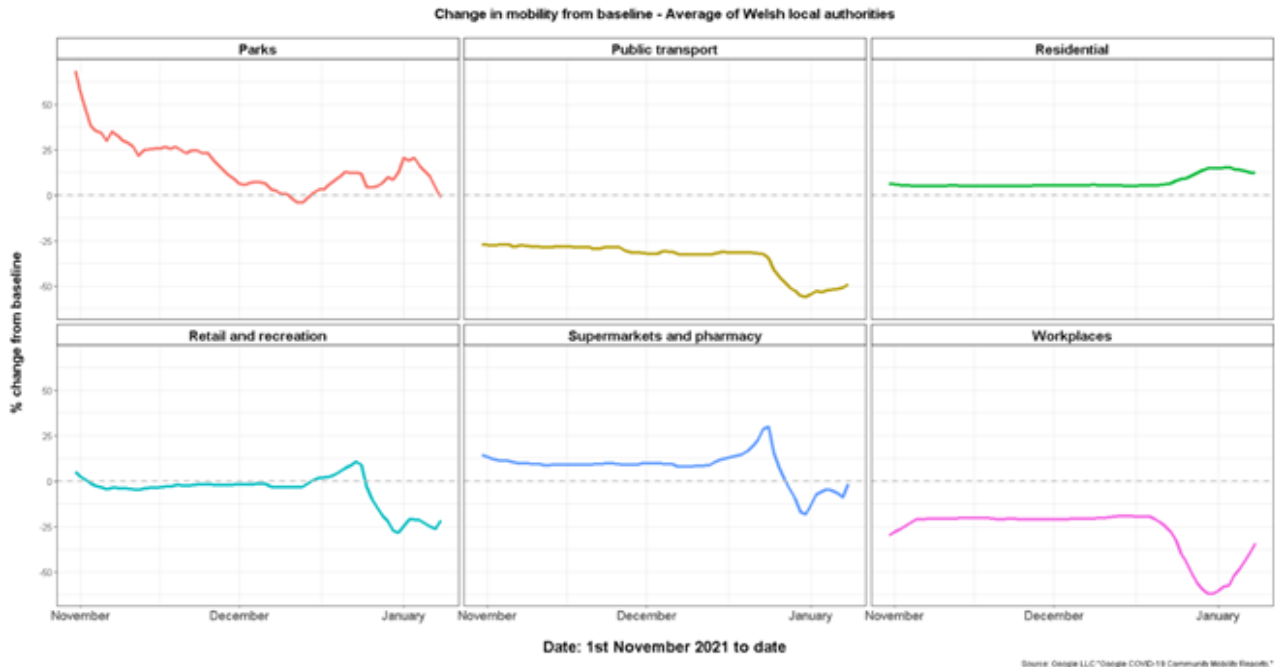
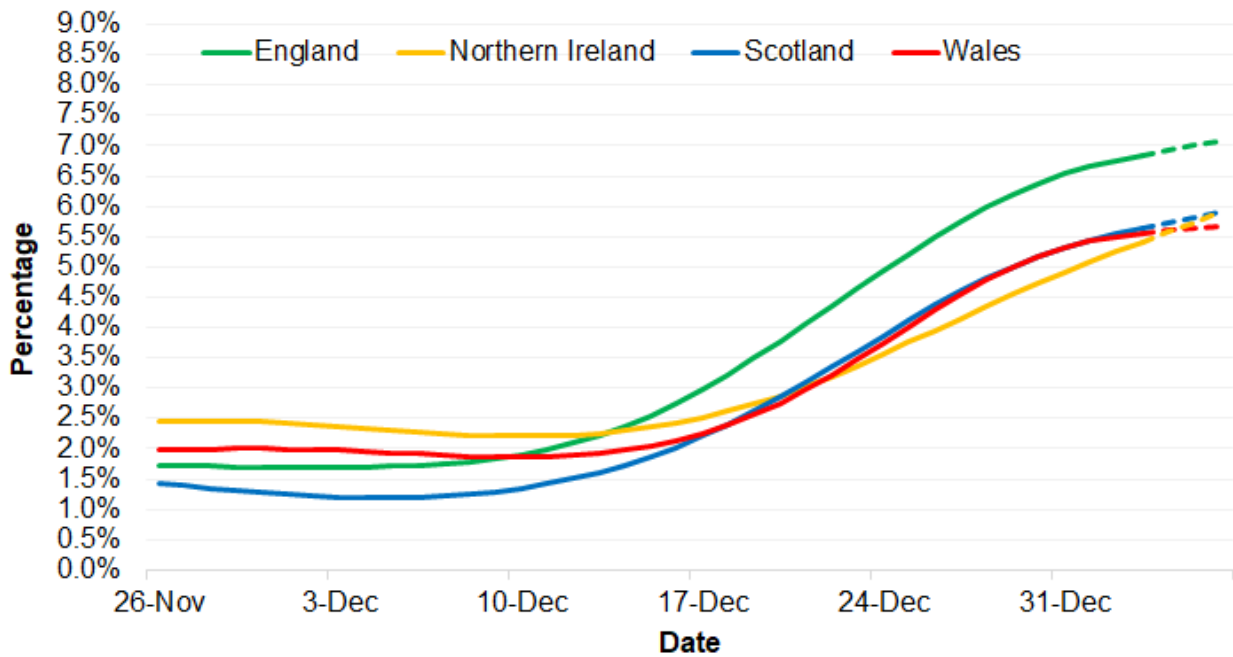


Figure 18: Positivity rates (%) across UK nations up to 6 January 2022



Vaccine and Immunity Status

The COVID-19 vaccination rollout of first and second doses has slowed in Wales. As at 9 December 2021, 91% of people aged 12 and over had received at least one COVID-19 vaccine in Wales. Of people aged 12 and over, 6% had exactly one vaccine dose, 20% had exactly two doses, and 64% have also had a third dose or booster, so 85% have had at least 2 doses.

Between 20 December 2021 and 23 December 2021, the ONS COVID-19 Infection Survey estimated that 96.8% of the community population aged 16 and over in Wales tested positive for COVID-19 antibodies.

As at 8 January 2022, it is estimated that 73% of people aged 12 and over in Wales had some immunity against COVID-19 infection. The lower and higher estimates of immunity are 65% and 81% of people aged 12 and over in Wales. If no vaccines had been administered, it is estimated that 19% of people aged 16 and over would be immune. **Note that this assumes that immunity from vaccine and infection wanes after 9 months.**

It is currently estimated that over 80% (but may be closer to 90%) of the population, spread evenly across Wales, must be immune to COVID-19 before population immunity effects would be observed.¹ Note that the immunity estimate of 73% is for individuals aged 12 and over, not the total Wales population, and varies across age groups.

Source: [ONS COVID-19 Infection Survey](#), [PHW](#), [SPI-M](#), Swansea University modelling

TAG advice on the Delta variant, published 18 June 2021

Note: The lower, central and higher immunity estimates use cautious, central and optimistic vaccine efficacy from SAGE (27/08/21) and immunity-following-natural-infection assumptions, and do not yet account for any additional immunity gained from a third dose or booster.

Figure 19: Vaccination and antibody status of individuals aged 12+ in Wales

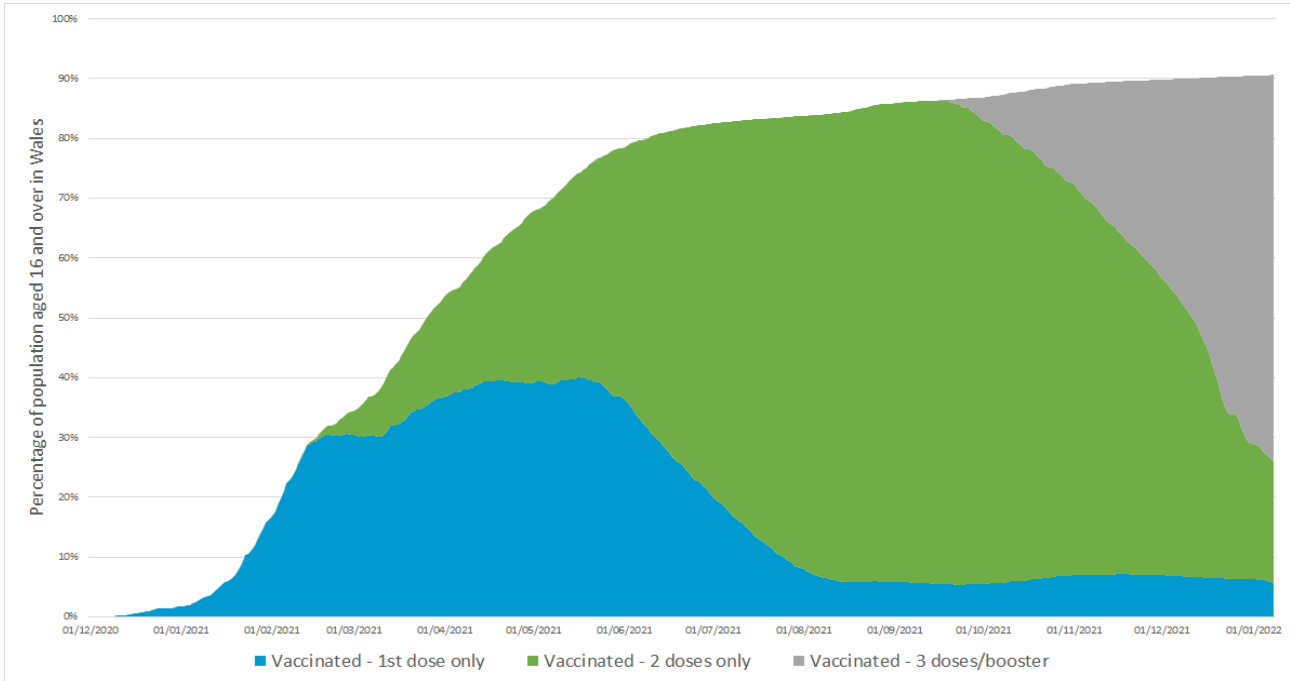
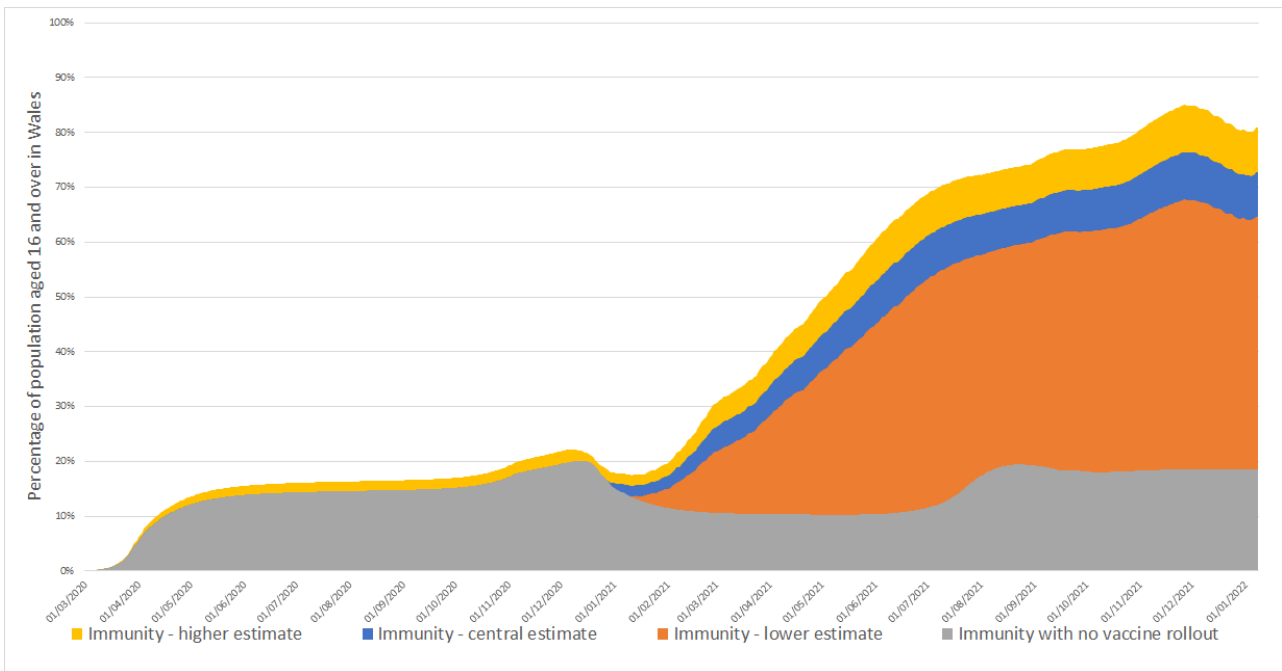


Figure 20: Immunity estimates and antibody status of individuals aged 12+ in Wales



What does the situation look like going forward?

Based on the current rates observed with current restrictions:

- **Cases (right) – the probability of incidence reaching greater than 500 per 100,000 between 9 – 15 January and 16 – 22 January is above 80% for 20 local authority across the first time period and is above 80% for 13 local authorities across the latter period.** *Source: Imperial College London*
- **Hospitalisations per day (bottom right) - projected to increase from around 150 to around 200 per day, before falling to around 70 per day over the next three weeks (note confidence intervals).** *Source: Modelled medium term projections, SAGE/SPI-M, 12 January 2022*
- **Number of deaths per day (bottom left) - due to an insufficient number of projections, SPIM-O has been unable to produce consensus projections for deaths in Wales and Northern Ireland this week.**

These projections are based on current trends and will not fully reflect the impact of policy or behavioural changes over the past two to three weeks. The projections include the impact of vaccines, but cannot capture any future increases in transmission resulting from new variants. They are not forecasts or predictions.

Figure 21: Probability of greater than 500 per 100,000 cases by local authority

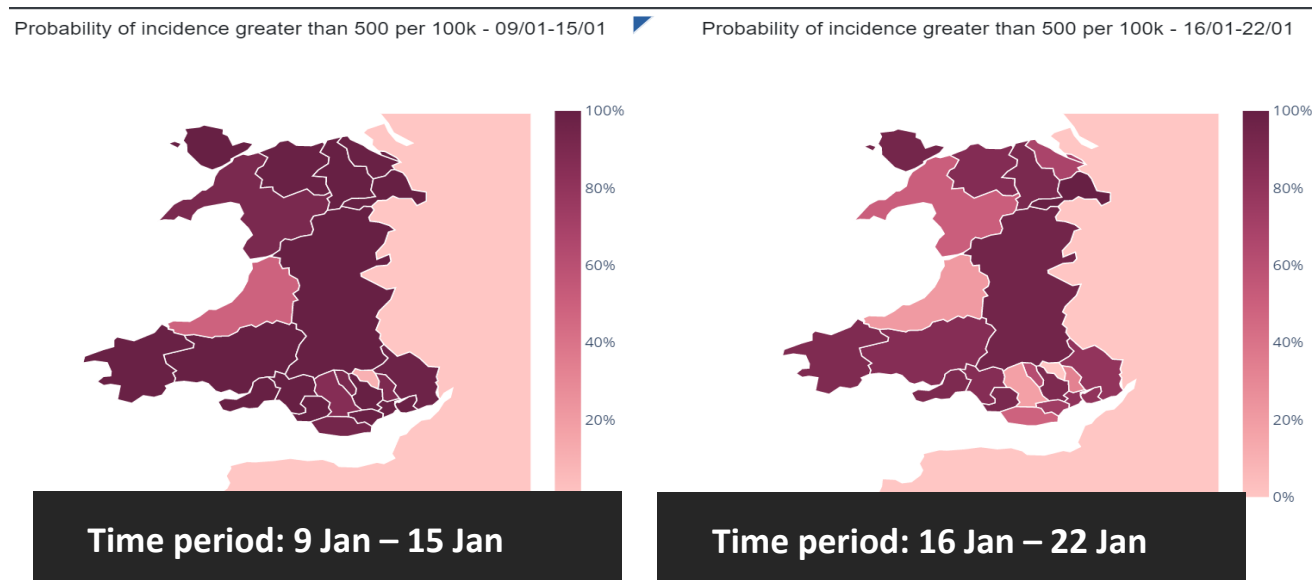
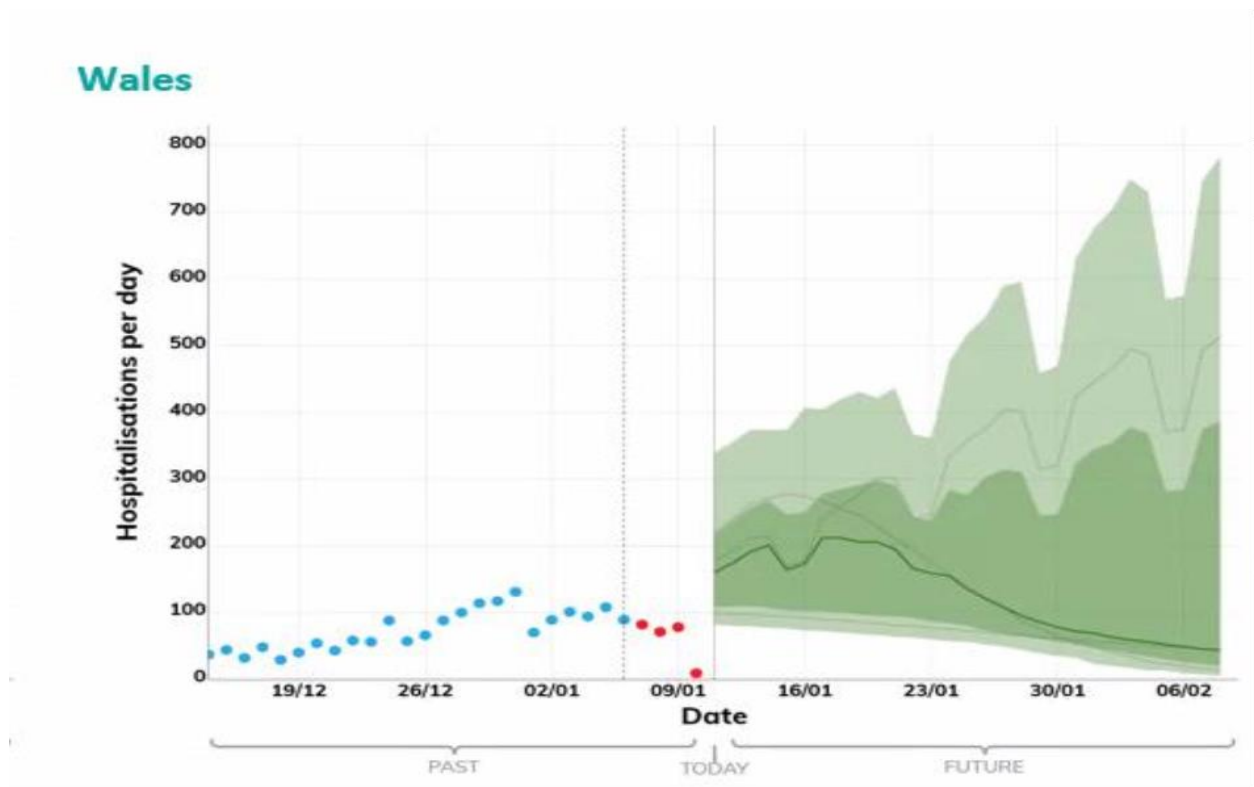


Figure 22: SPI-M projection of Hospitalisations per day from period 9 Jan – 6 Feb 2022



Key risks and sources

Key risks

Area	Assessment
Transmission, incidence and prevalence	<p>Overall cases of COVID-19 and test positivity are decreasing across Wales, following a rapid rise in Omicron cases.</p> <p>Changes to testing policy after 6 January that those who receive a positive lateral flow test result are no longer required to take a follow-up PCR test may impact case and test positivity data and so extra caution should be taken in interpreting recent trends.</p>
NHS Capacity	<p>COVID-19 pressure on the NHS fluctuates. However, since late December, the number of COVID-19 related hospitalisations has increased to levels comparable to early March 2021. There is the potential for significant harm in the community (and our hospitals) for people with non-COVID illnesses or injuries, Omicron levels have led to health boards having to postpone significant levels of routine elective activity in early 2022 which may exceed the direct harm from COVID-19 at this point in time.</p>
Mortality	<p>COVID-19 deaths have increased according to PHW data but are relatively low compared to previous waves in the most recent week.</p>
Variants	<p>As at 11 January 2022, Wales has had 25,024 (+11,158 compared to previous week) confirmed cases of the Omicron variant, 90,796 (+1,066) confirmed cases of Delta and 14,791 (+545) confirmed cases of confirmed cases of AY4.2 VUI-21OCT-01. No other variants of concern were confirmed by genomic sequencing in Wales. <i>Source: PHW</i></p>
Immunity and Vaccines	<p>As at 12 January 2022, a total of 6,642,436 doses of COVID-19 vaccine were given in Wales and recorded in the COVID-19 Welsh Immunisation System. 2,499,123 have received at least one dose. 2,332,336 have received at least 2 doses, 1,758,311 have received a booster dose, 52,666 have received a 3 dose primary course recommended for severely immunosuppressed individuals.</p>
International	<p>The proportion of travellers testing positive increased slightly, with numbers remained relatively low.</p>

Key Sources for this update

Technical Advisory Cell brief:

<https://gov.wales/advice-coronavirus-technical-advisory-cell>

COVID Infection Survey results:

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