COVID-19 Wales Situational Report

COVID-19 Intelligence Cell: 03 February 2022

Health Protection Advisory Group: 04 February 2022

Data as at 02 February unless otherwise specified.

Contents

| COVID-19 Situation Report Summary | 2 |
|--|---------|
| Key points to note | 2 |
| Key indicators | 2 |
| What is the current status of the epidemic? | 4 |
| What is the situation with the NHS and social care? | 7 |
| What is the situation with education, children and young adults? | 10 |
| School attendance | 10 |
| Schools | 10 |
| Wastewater Monitoring for Covid-19 (Pilot) | 12 |
| What is the situation with arriving travellers? | 15 |
| Mobility data and UK Comparison | 17 |
| Vaccine and Immunity Status Error! Bookmark not de | efined. |
| What does the situation look like going forward? | 20 |
| Key risks and sources | 22 |
| Key risks | 22 |
| Key Sources for this update | 22 |

COVID-19 Situation Report Summary

Key points to note

Wales moved to Alert Level 0 on 28 January 2022.

Overall cases of COVID-19 and test positivity have increased across Wales. With the return to alert level 0 and easement of restrictions, there is a need to continue monitoring trends.

The UKHSA consensus estimate of the reproduction number (Rt) for Wales is between 0.9 and 1.1 and a doubling time of 35 to 24 days to flat (as at 3 February 2022). PHW's Rt estimate is 1 with a halving time of 32.5 days (02 February 2022). Slide 3, Source: PHW

The number of beds occupied with COVID-19 related patients fluctuates; however numbers have reduced over recent weeks. As at 2 February 2022, there were 1,118 COVID-19 related patients (Suspected, Confirmed and Recovering) occupying a hospital bed (+63 compared to previous week), of which 534 were confirmed. There were 13 patients with Suspected or Confirmed COVID-19 in critical care beds in Wales, 151 lower than the highest recorded figure during the pandemic. 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.

As at 26 January 2022, the 7 day rolling sum of COVID-19 deaths have decreased to 41, a decrease of 36 since the previous 7 day period (19 January). These figures are limited to reports to PHW of a 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 25 January 2022, Wales has had 49,020 (+12,344 compared to previous week) confirmed cases of the Omicron variant, 91,008 (+45) confirmed cases of Delta and 14,967 (+37) confirmed cases of confirmed cases of AY4.2 VUI-21OCT-01. No other variants of concern were confirmed by genomic sequencing in Wales. Source: PHW

As at the week ending 30 January 2022, a total of 6,763,608 doses of COVID-19 vaccine were given in Wales and recorded in the COVID-19 Welsh Immunisation System. 2,510,939 have received at least one dose. 2,367,999 have received at least 2 doses, 1,832,745 have received a booster dose, 51,925 have received a 3 dose primary course recommended for severely immunosuppressed individuals. *Source: PHW*

Key indicators

COVID-19 cases and ONS prevalence estimates are starting to show signs of increases. Admissions and test positivity have decreased in the previous week. Its's difficult to determine whether COVID-19 deaths are increasing or decreasing.

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

| | Current value | Change since previous week (22/01/22 – 29/01/22 unless stated otherwise) | | | |
|---|------------------|--|--------------------------|--|--|
| | (29/01/22) | Percentage change | Value change | | |
| Confirmed case rate (rolling 7 day sum per 100k) | 520 | +2% | (10) | | |
| Confirmed case rate for over 60s (rolling 7 day sum per 100k) | 203 | 0% | (0) | | |
| Test positivity (7 day RA) | 34.6% | -0.1% | (0.0 percentage points) | | |
| Population estimated to have COVID-19 (prevalence) ¹ | 3.27% | +40% | (+1.3 percentage points) | | |
| NHS COVID-19 Admissions ² | 51 | -23% | (-15) | | |
| ONS deaths (7 day sum) ³ | 79 | +3% | (+2) | | |
| PHW deaths (7 day sum) | 42 | -32% | (-20) | | |

Footnotes

- 1. Latest Covid Infection Survey data is taken from 22 December 2021 to 29 January 2022
- 2. Seven day rolling average to the current date of confirmed COVID-19 admissions
- 3. Latest ONS deaths data is to 21 January 2022 (rather than 29 January 2022) for the current value. Data to 14 January 2022 is used for the change since previous week.

Data as at 12:00PM 02 February 2022 unless otherwise specified.

What is the current status of the epidemic?

The UKHSA consensus estimate of the reproduction number for Wales is between 0.9 and 1.1 and a doubling time of 35 to 24 days to flat (as at 3 February 2022). PHW's Rt estimate is 1 with a halving time of 32.5 days (02 February 2022). The central Rt estimate is highest for Powys Health Board at 1.1. *Source: PHW/UKHSA* 7-day cumulative case incidence in Wales is 1483 per 100,000 population and test positivity is at 44.6%.

The 7-day cumulative case incidence in Wales is 551.9 per 100,000 population and test positivity is at 34.6%.

Case incidence is increasing in 17 local authorities and decreasing in 4. Local authorities with the highest case incidence are Newport (927.1), Camarthenshire (694.5), Cardiff (665.0), per 100,000 population, respectively.

As at 03 February 2022, Case incidence is relatively stable in most age groups, currently highest in 30-39 year olds.

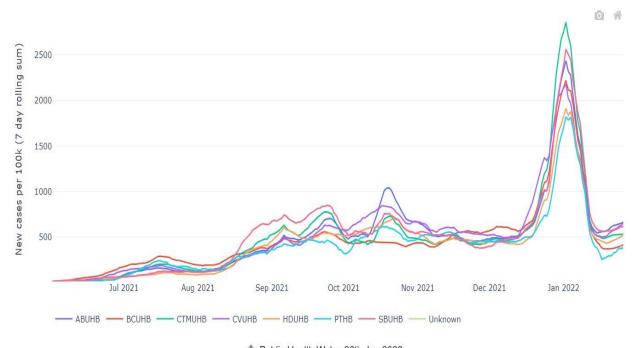
The second table below provides estimates of doubling and halving times based on PHW COVID-19 positive test data. The 95% confidence intervals are shown in brackets after the central estimate. An asterisk (*) means that there are small numbers and estimates should be treated with caution. Local health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

Table 1: Cases per 100,000 population

| Local Authority Health Board | | Number % of All Wales Total | | Case Incidence per 100,000 | Change from previous week | |
|------------------------------|---------|-----------------------------|------------|----------------------------|---------------------------|--|
| Newport | ABUHB | 1434 | 8.2% | 927.1 | 24%↑ | |
| Carmarthenshire | HDUHB | 1311 | 7.5% | 694.5 | 20% † | |
| Cardiff | CVUHB | 2440 | 14.0% | 665.0 | 23% ↑ | |
| Torfaen | ABUHB | 616 | 3.5% | 655.6 | 40%↑ | |
| Swansea | SBUHB | 1586 | 9.1% | 642.1 | 19% ↑ | |
| Vale of Glamorgan | CVUHB | 802 | 4.6% | 600.4 | 48% † | |
| Caerphilly | ABUHB | 1085 | 6.2% | 599.2 | 17% † | |
| Wrexham | BCUHB | 806 | 4.6% | 592.8 | 14% ↑ | |
| Blaenau Gwent | ABUHB | 412 | 2.4% | 589.7 | -4% ↓ | |
| Bridgend | CTMUHB | 837 | 4.8% | 569.2 | 15% ↑ | |
| Merthyr Tydfil | CTMUHB | 339 | 1.9% | 561.9 | -10% ↓ | |
| Neath Port Talbot | SBUHB | 800 | 4.6% | 558.2 | -8% ↓ | |
| Rhondda Cynon Taf | СТМИНВ | 1179 | 6.8% | 488.7 | 7% ↑ | |
| Denbighshire | BCUHB | 450 | 2.6% | 470.2 | 25% ↑ | |
| Pembrokeshire | HDUHB | 526 | 3.0% | 418.1 | 33% † | |
| Conwy | BCUHB | 459 | 2.6% | 391.6 | 6%↑ | |
| Powys | PTHB | 506 | 2.9% | 382.1 | 36% ↑ | |
| Monmouthshire | ABUHB | 360 | 2.1% | 380.6 | -13%↓ | |
| Flintshire | BCUHB | 589 | 3.4% 377.3 | | 19% ↑ | |
| Isle of Anglesey | BCUHB | 241 | 1.4% | 344.1 | -0%↓ | |
| Gwynedd | BCUHB | 344 | 2.0% 276.2 | | 5% ↑ | |
| Ceredigion | HDUHB | 189 | 1.1% | 260.0 | 15% ↑ | |
| Unknown | Unknown | 89 | 0.5% | 120 | 39% ↑ | |
| Total | Total | 17400 | 100.0% | 551.9 | 16% ↑ | |

Figure 1: Cases per 100k (PHW Data)

Cases per 100k (PHW Data) (7 day rolling sum)



Public Health Wales 26th Jan 2022

Figure 2: Cases per 100k by age (PHW Data)

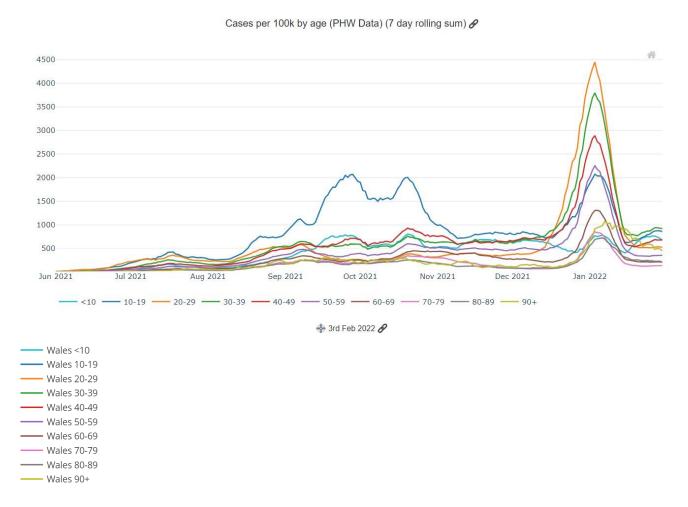


Table 2: Reproduction number and doubling time (PHW methodology) PHW data by Local Health Board

| IHealth | | Swansea Bay UHB | CIM | Bevan | | Dda | Powys THR* | Betsi Cadwaladr UHB |
|---------------|--------------------------|--------------------|--------------------------|--------------------------|------------------------|---------------------------|---------------------------|---------------------------|
| Rt (cases) | 1.0 (1.03 to 1.05) | (0.98 to | 1.0 (0.96 to 1.03) | 1.0 (0.98 to 1.03) | ` | 1.1 (1.03 to 1.11)* | 1.2 (1.10 to 1.27)* | 1.1 (1.05 to 1.12) |
| time | (13 to – | (15 to – | 81 (17 to – 30) | 40 (14 to – 43) | 25 (11 to - 104) | 25 (11 to – 104)* | 13 (7 to - 110) | 25 (12 to – 176) |

What is the situation with the NHS and social care?

Non-COVID-19 urgent & emergency pressures continue to result in high levels of hospital bed occupancy and escalation across hospital sites. Over the latest week, the number of beds occupied with COVID-19 related patients has increased. This was due to an increase in suspected and recovering patients despite a decrease in confirmed patients. As at 2 February 2022, there were 1,118 COVID-19 related patients (confirmed, suspected and recovering) occupying a hospital bed. This compares to 1,055 (63 more occupied beds) on 26 January 2022. Confirmed cases accounted for 534 of the total occupied beds.

As of 2nd February, there are **13 patients with suspected or confirmed COVID-19 in critical care beds in Wales.** This is 151 lower than the highest recorded figure during the pandemic. The total number of patients in critical care for both COVID-19 and non-COVID-19 is 174, 22 more than the 152 baseline number of critical care beds available before the pandemic.

Non-COVID-19 urgent & emergency pressures continue to result in high levels of hospital bed occupancy and escalation across hospital sites. In contrast to previous waves, the number of 'incidental' cases has increased significantly with current operational data indicating that only 30% of these patients actively require treatment for COVID.

Staff sickness absence rates are currently approximately 2.5% solely a result of COVID and isolation, while medically fit for discharge patients remaining a challenge with nearly 1,000 still occupying a secondary care hospital bed. These factors continue to constrain flow through the whole health and care system resulting in extended waits for: ambulance in the community and in emergency departments.

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.

Between 10th and 23rd January there was a significant increase in the number of care homes associated with outbreaks; IMTs reported 256 care homes with an outbreak attributed to Covid 19, compared with 94 homes in the previous reporting period. IMTs report that the majority of cases are in staff; resident cases either have mild symptoms or are asymptomatic with hospitalisations remaining low. In the main, care homes remain resilient although work force issues continue to be challenging for some homes in most regions. Data Source: National SBAR.

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

StatsWales COVID-19 Confirmed Hospital Occupancy (7 day rolling average)

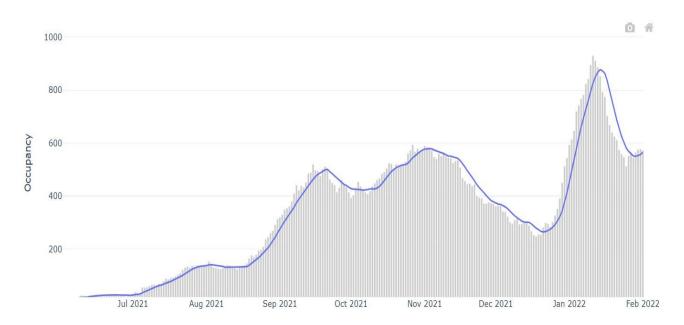


Figure 4: Hospital admission of suspected and confirmed COVID-19 positive patients

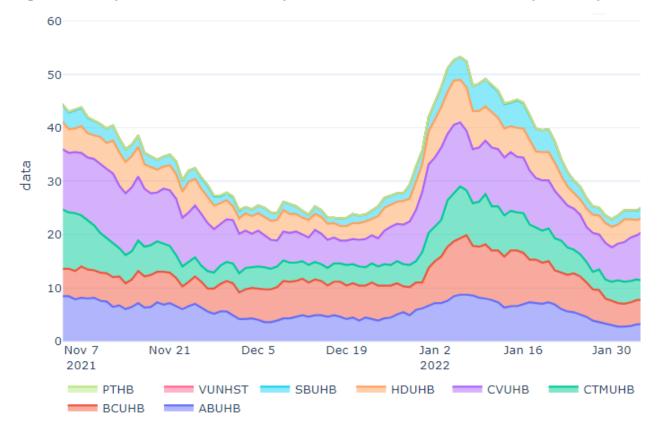


Figure 5: Hospital bed occupancy for suspected and confirmed COVID-19 positive patients (7 day rolling average)

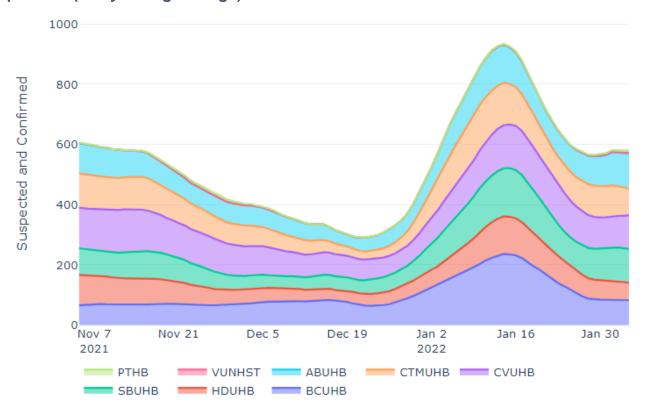
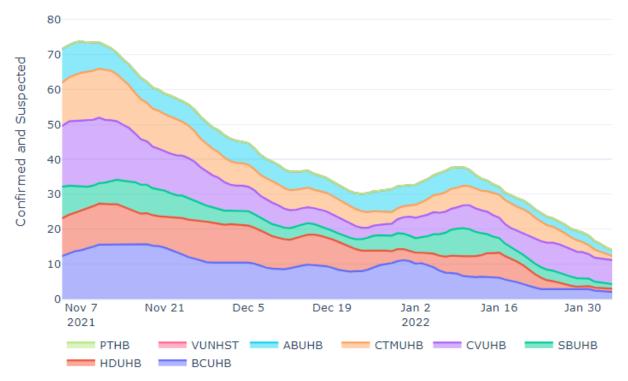


Figure 6: Invasive ventilated bed occupancy for suspected and confirmed COVID-19 positive patients (7 day rolling average)



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

School attendance

An average of 85.4% of all pupils were in attendance in school over the week of 24 January to 28 January 2022, down from 87.8% in the week before. Data for the latest two weeks is provisional.

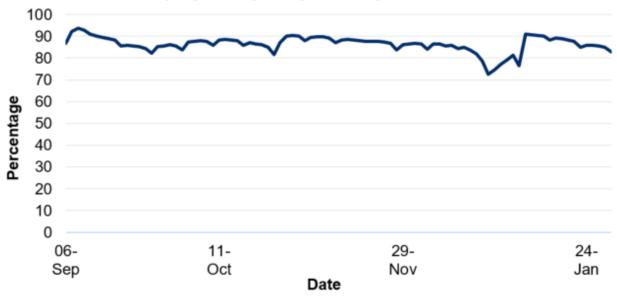
In the same time period, 5.5% of pupils were absent due to a known COVID-19 related reason with an average of 6.8% of all primary and 3.8% of all secondary pupils absent for this reason. Source: Stats Wales, Schools in Wales

Schools

Despite the improving national position, 3 weeks into the new term schools report feeling the impact of increased case rates in children, particularly primary school aged children and this has also resulted in some significant staffing challenges however in the main IMTs report that schools remain resilient and no significant clusters or outbreaks are reported. Source National SBAR

Figure 7: Attendance of pupils in maintained schools by day

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 3 February 2022

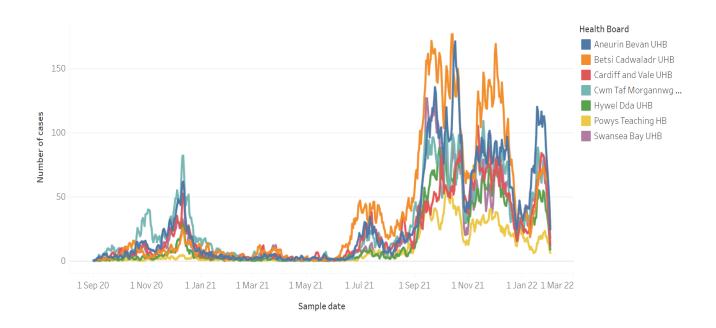


Figure 9: Absence due to C-19 by day and phase

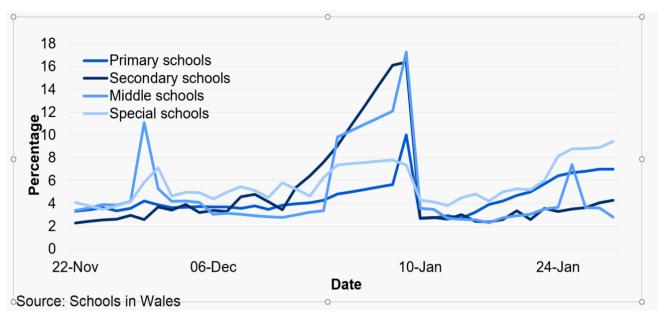
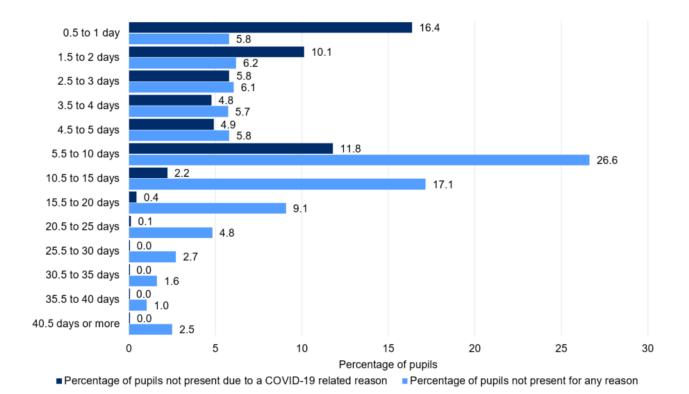


Figure 10: percentage of pupils by number of days missed due to C-19 related reason and all reasons



Wastewater Monitoring for Covid-19 (Pilot)

At a national level, the normalised SARS-CoV-2 wastewater signal has stopped falling, and may be entering a period of stable oscillation.

In North Wales, the wastewater is relatively stable, following a slight increase in recent weeks. Reported COVID-19 cases in the region are also stable. In South Wales, the wastewater signal is showing a slight uptick, following several weeks of consistent decreases. The uptick coincides with a small increase in reported COVID-19 cases in the region.

Comparing last week (ending Jan 28) with the previous week, the North Wales sites have shown a near-consistent decrease in wastewater signal. However, Holyhead has shown a substantial increase, and Llangefni is stable. For South Wales, all sites in the region except Cwmbran show an increase in signal since the last reporting period. Areas of particular concern are Bridgend, Haverfordwest and Llanelli.

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 prevenance 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 31 January 2022

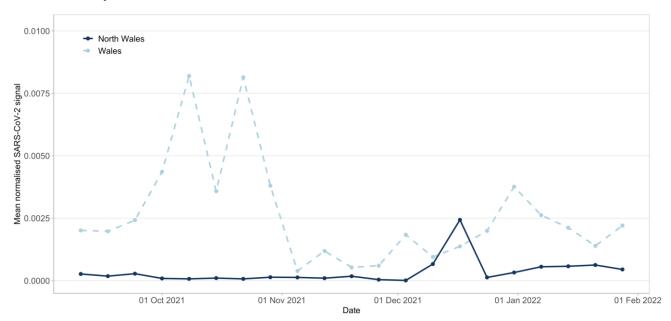


Figure 13: Weekly comparison of South and all-Wales mean normalised SARS-CoV-2 signal. All-Wales mean signal (dashed line) and South Wales mean signal (solid line). Data to 31 January 2022.

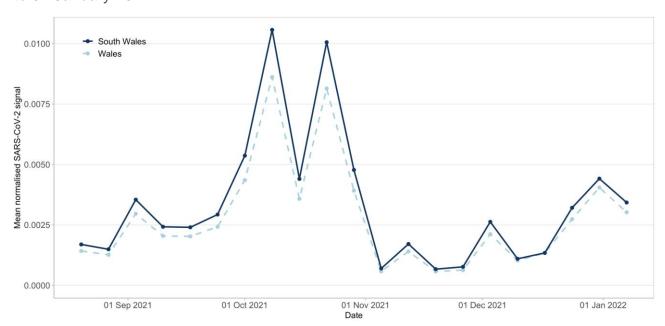
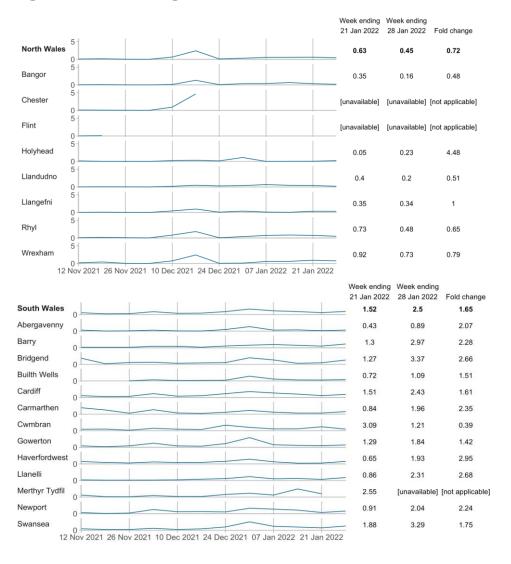


Figure 14: Fold changes in mean normalised SARS-CoV-2, scaled for population



What is the situation with arriving travellers?

There have been 171 positive travellers (1.34% positivity), compared to 153 for the previous week (1.25% positivity) at time of reporting.

Travellers visiting Spain provide the highest numbers testing positive on return, with 34 to date for the period, with a positivity rate of 1.11% - compared to 29 positives (0.94% positivity) the previous week.

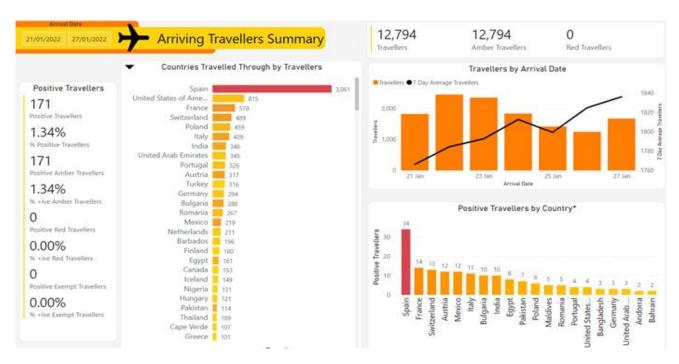
93.1% of travellers declared that they were fully vaccinated in an approved country program, compared to 92.5% the previous week.

12,794 PLF submissions, compared to 12,246 for the previous week – an increase of 4.5%.

All age groups (except 11-17 and 80-89) 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)

Date Source: Home Office Wales Travel Rules



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

Figure 15: Positive travellers timeline

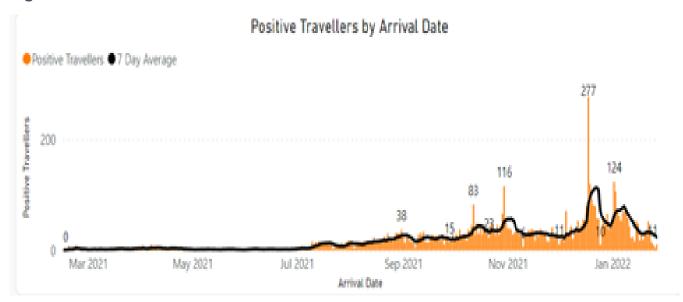


Figure 15: Positive travellers this week by country

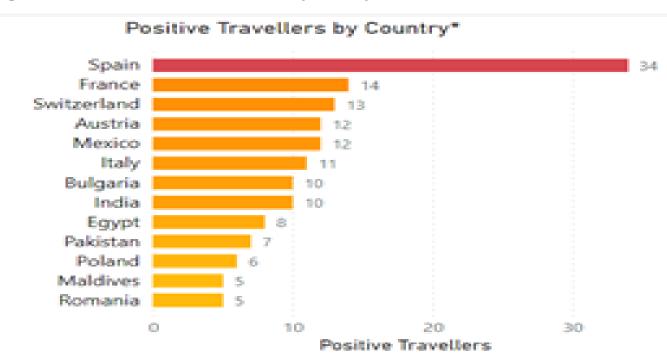
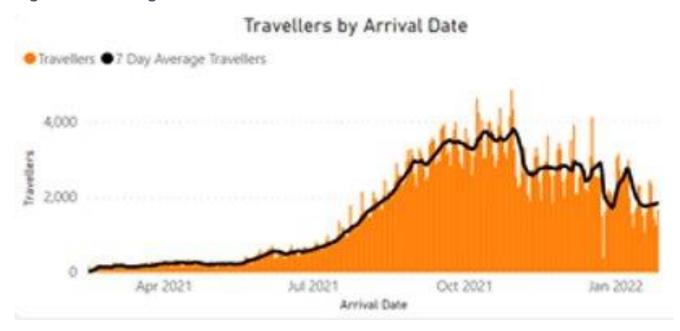


Figure 16: Arriving travellers timeline



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

- Public transport mobility increased by 1.6 percentage points compared to previous week and stands at -33.7 % below the baseline from 35.3% previous week.
- Residential (i.e. people spending time at home) decreased by 0.1 percentage point compared to previous week and stands at 6.5% below the baseline from 6.6% previous week.
- Retail & recreation mobility increased by 1.7 percentage points compared to previous week and stands at -11.4% below the baseline from – 13.1% previous week.
- Supermarkets & pharmacy increased by 0.4 percentage points compared to previous week and stands at 4.1% below the baseline from 3.7% previous week.
- Workplaces increased marginally by 0.2 percentage points compared to previous week and stands at -20.2% below the baseline from 20.4% 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 22 to 29 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 and Northern Ireland, remained high in England, and decreased in Scotland.

ONS estimates that **139,000 of the community population in Wales** had COVID-19 during this period equating to around **1 in 20 people**. This compares to around 1 in 20 people in England, around 1 in 15 Northern Ireland and around 1 in 30 people in Scotland.

Source: Office for National Statistics COVID-19 Infection Survey

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

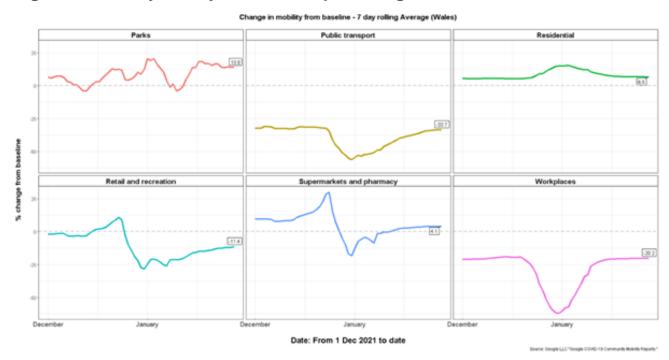
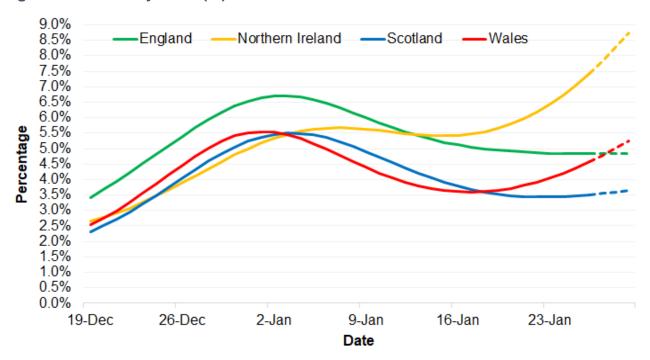


Figure 18: Positivity rates (%) across UK nations



What does the situation look like going forward?

Based on the current rates observed with current restrictions:

- Cases the probability of incidence reaching greater than 500 per 100,000 between 6 12 February and 13 19 February is above 80% for 3 local authorities across the first time period and is above 80% for 1 local authority across the latter period. Source: Imperial College London
- Hospitalisations per day (bottom right) projected to decreasefrom around 70 to around 40 per dayover the next three weeks (note confidence intervals).
 Source: Modelled medium term projections, SAGE/SPI-M, 1 February 2022
- Number of deaths per day 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 or three weeks, nor the potential impact of the Omicron variant. These are not forecasts or predictions.

Figure 19: Probability of greater than 500 per 100,000 cases by local authority

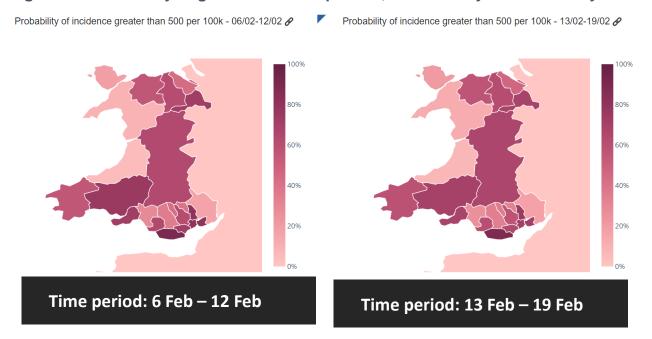
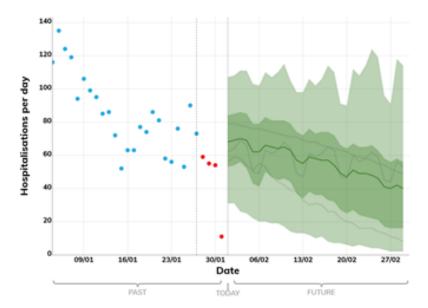


Figure 20: SPI-M projection of Hospitalisations per day as at 1 Feb 2022



Key risks and sources

Key risks

| Area | Assessment | | | | |
|--|--|--|--|--|--|
| Transmission, incidence and prevalence | Overall cases of COVID-19 and test positivity have increased across Wales. | | | | |
| prevalence | With the return to alert level 0 and easement of restrictions, there is a need to continue monitoring trends. | | | | |
| NHS Capacity | COVID-19 pressure on the NHS fluctuates, however the number of beds occupied with Covid-related patients has increased over the latest week. Staff sickness absence rates are currently approximately 2.5% solely a result of COVID and isolation, while medically fit for discharge patients remaining a challenge with nearly 1,000 still occupying a secondary care hospital bed. Flow through the health and care system continues to be constrained and there is the potential for significant harm in the community (and our hospitals) for people with non-COVID illnesses or injuries. | | | | |
| Mortality | As at 26 January 2022, COVID-19 deaths have decreased compared to the most recent week, according to PHW data. | | | | |
| Variants | As at 25 January 2022, Wales has had 49,020 (+12,344 compared to previous week) confirmed cases of the Omicron variant, 91,008 (+45) confirmed cases of Delta and 14,967 (+37) confirmed cases of confirmed cases of AY4.2 VUI-21OCT-01. No other variants of concern were confirmed by genomic sequencing in Wales. Source: PHW | | | | |
| Immunity and Vaccines | As at 1 February 2022, a total of 6,772,387 doses of COVID-19 vaccine were given in Wales and recorded in the COVID-19 Welsh Immunisation System. 2,511,342 have received at least one dose. 2,369,003 have received at least 2 doses, 1,838,189 have received a booster dose, 53,853 have received a 3 dose primary course recommended for severely immunosuppressed individuals. | | | | |
| International | The proportion of travellers testing positive increased slightly, with numbers remaining relatively low. | | | | |

Key Sources for this update

Technical Advisory Cell brief:

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

COVID Infection Survey results:

https://gov.wales/coronavirus-covid-19-infection-survey

Public Health Wales:

https://public.tableau.com/profile/public.health.wales.health.protection#!/vizhome/RapidCO VID-19virology-Public/Headlinesummary

Hospital occupancy:

https://gov.wales/nhs-beds-admissions-and-hospitalisations-during-coronavirus-covid-19-pandemic

Higher Education:

https://gov.wales/positive-coronavirus-cases-reported-higher-education-institutions-wales-27-september-2020-onwards

School attendance:

https://gov.wales/pupils-present-maintained-schools

UKHSA VoC Technical Briefing:

https://www.gov.uk/government/publications/investigation-of-novel-sars-cov-2-variant-variant-of-concern-20201201