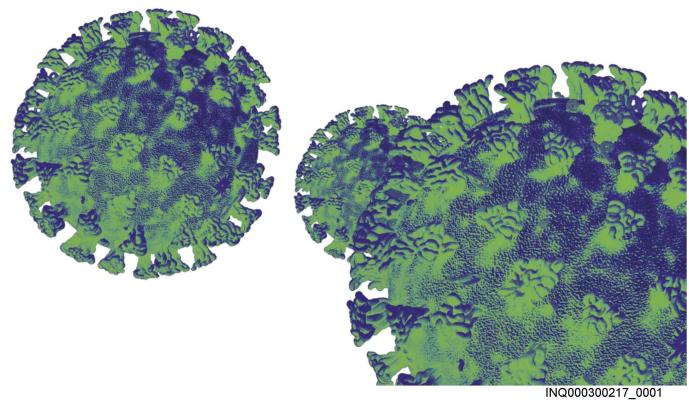
Welsh Government Science Evidence Advice

Impact of COVID-19 Protections in Wales November 2022

OGL © Crown copyright 2020



Impact of COVID-19 Protections in Wales November 2022

Summary

This report outlines an initial assessment of the impact of protections that were implemented in Wales to manage the COVID-19 pandemic. Comparisons have been made to the North East and South West of England, where possible, since these regions were considered the most similar to Wales in terms of population distribution and deprivation, or geographic location. This report considers data up to July 2022.

The main findings are:

 COVID-19 protections reduced direct harms from COVID-19 in Wales by reducing transmission, and by extension reduced hospitalisations, deaths and pressure on the NHS by dampening the maximum peak height of hospitalisations, reducing the risk of NHS Wales being overwhelmed from sudden surges in hospitalisations.

Wales' confirmed COVID-19 case rates decreased following the firebreak lockdown in October 2020, whilst cases continued to increase in North East and South West England. In summer 2021, England eased COVID-19 restrictions earlier than Wales, and after England restrictions were lifted, case rates were notably lower in Wales compared with England.

Throughout the pandemic, prevalence in Wales (estimated from the Office for National Statistics (ONS) covid infection survey) showed similar patterns to PCR-confirmed case rates and followed a similar trend upon implementation of the firebreak lockdown in Wales in October 2020, with Wales prevalence falling in the two weeks after firebreak implementation. In contrast, prevalence continued to rise in North East and South West England for a short time after, until the impact of England's tightened restrictions in November dampened transmission and prevalence in these regions of England.

Shortly after each COVID-19 lockdown was implemented, hospital admissions reached a peak and started decreasing. The vaccination programme was launched in early December 2020. Admissions reached their highest level in January 2021 shortly after vaccination launch, before a significant proportion of the population had been vaccinated. Ever since, although infection rates have exceeded January 2021 levels in successive waves, hospital admissions have never returned to levels seen in January 2021, showing success of protection offered by vaccination on reducing hospitalisations and protecting vulnerable populations in Wales.

 COVID-19 'lockdown' protections, which resulted in reduced NHS Wales activity, increased the number of patient pathways waiting to start treatment. The number of patient pathways waiting 36 weeks or longer to start treatment increased sharply from 28,294 in March 2020 to 231,022 in November 2020, increasing further to 253,177 in March 2022.

- 3. COVID-19 protections, such as Government messaging and advice, reduced emergency department attendance during wave peaks and increased NHS 111 calls in Wales. Generally, A&E attendance fell during wave peaks, whilst NHS Direct 111 calls increased during wave peaks. The number of A&E attendances had begun to fall in the week prior to warnings from the government, likely due to the public trying to reduce their risk of infection.
- 4. COVID-19 self-isolation protections increased NHS Wales staff absence and hence made it more difficult for the NHS to deliver services. However, self-isolation protections in the community population would also have reduced COVID-19 infections, hospital admissions and bed occupancy compared to levels that would have been reached without self-isolation measures in place. Therefore, although self-isolation protections increased NHS staff absence rates, protections prevented greater volumes of people being admitted to hospital for COVID-19 treatment, which would have otherwise led to greater NHS staff numbers being required to treat COVID-19 patients. Infection prevention and control (IPC) measures including personal protective equipment (PPE) will have made a difference, but this is not considered explicitly here.

NHS staff absence in Wales for any reason was highest in April 2020 during the first COVID-19 wave at over 12%. Absence due to COVID-19 sickness reached similar levels (2.0%-2.5%) in all peaks. Absence due to self-isolation generally decreased over time, driven downwards in 2022 after self-isolation protections were relaxed successively in Dec-21, Jan-22 and Mar-22. In April 2020, ~40% of all staff absence was due to self-isolation. By May 2022, only 8% was due to self-isolation.

- 5. COVID-19 protections had a negative impact on mental health and wellbeing. More individuals worried 'a lot' about their own mental health and wellbeing during periods of high COVID-19 protections. The Wellbeing of Wales: 2021 report states that around a third of adults reported that their mental health was worse than before the pandemic. It also states that worry about mental health and wellbeing was greater in residents of more deprived communities, females and younger age groups. Conversely, the National Survey for Wales reported lower levels of loneliness in 2020-21 than the year before, as well as increased feelings of community cohesion. When Alert Level 4 restrictions were imposed in December 2020, the percentage of survey respondents reporting 'never' feeling lonely decreased from 70% to 58%. Happiness increased and anxiety decreased between spring 2020 and summer 2020 as COVID-19 protections (especially regarding social mixing) eased. In May 2021, people in the lowest income bracket were more likely to report negative impacts to personal wellbeing than people in the highest income bracket.
- 6. COVID-19 self-isolation protections increased student school absence, disproportionately affecting pupils eligible for free school meals. Over 26% of pupils are estimated to have missed more than a week of face-to-face learning due to a known COVID-19 related reason since September 2021. In July 2021, 8.6% of pupils were absent due to a known COVID-19 related reason. By July 2022, this had

reduced to 1.3%. In January 2022, absence was 8.8% higher for pupils eligible for free school meals than for those not eligible for free school meals.

- 7. COVID-19 protections like the furlough scheme had a positive impact maintaining employment levels in 2020, but increased the number of people claiming state benefits. Employment (16-64 years) decreased from 74.5% in June 2020 to 72.0% in September 2020. Unemployment (16+ years) increased from 2.7% in June 2020 to 4.6% in September 2020. This coincided with the wind down of the furlough scheme between July 2020 and September 2020. The number of people claiming Universal Credit sharply increased in spring 2020 and, despite eventual removal of all COVID-19 protection measures, levels have remained high.
- 8. COVID-19 protections like lockdowns had a negative impact on the UK economy as measured by Gross Value Added index, which decreased sharply in spring 2020 and in winter 2020/2021 during tightened COVID-19 protections.

Business sentiment began to be affected from very early 2020, due to news emerging from Wuhan, China. The World Health Organisation (WHO) declared a Public Health Emergency on 30 January 2020. This coincided with low UK GVA index values for January and February 2020, compared with the same months in previous years. Monthly GVA statistics are not available for Wales.

UK stringency was associated with a positive relationship with COVID-19 cases, driven by politicians' analysis and warning of an impending COVID-19 wave. Stringency initially followed cases data closely. The relationship between stringency and cases weakened after vaccination rollout. This reflects a change in risk appetite since -although there were more cases, - harms were reduced significantly by vaccination.

- 9. **COVID-19 protections increased educational inequalities.** In summer 2021, learners eligible for free school meals (FSM) achieved grades 0.29 of a grade lower than learners not eligible for FSM, an increase of 0.08 of a grade since 2019. Since FSM learners are more likely to come from low income households or more deprived communities, this indicates COVID-19 protections have indirectly impacted FSM learners more.
- 10. COVID-19 protections increased employment inequalities. In 2020, unemployment increased more for those aged 16-24 years than for 25+ years. Workers under 24 years or over 65 years were more likely to have ever been furloughed (30%), compared with workers aged 35 to 44 (23%). Single working parents and disabled workers were more likely to be furloughed. The Resolution Foundation reported that furloughed workers in the UK were six times more likely to be out of work in October 2021 following the end of furlough. Hence disabled workers and single working parents may have been disproportionately impacted by the end of the furlough scheme.
- 11. Although the COVID-19 pandemic has exacerbated many pre-existing health inequalities, COVID-19 protections may have decreased COVID-19 hospitalisation health inequalities. Although the COVID-19 hospitalisation rate increased between March and April 2020, the hospitalisation inequality reduced. In March 2020, people Science Evidence Advice Impact of COVID-19 protections in Wales DRAFT -NOT WELSH GOVERNMENT POLICY

in the most deprived quintile were 1.5 times more likely to be hospitalised for COVID-19, compared with 1.2 times in April 2020. This suggests that COVID-19 protections were successful at reducing hospitalisation inequalities by deprivation.

Similarly, between March 2020 and August 2020, when many non-pharmaceutical interventions were in place to protect the Welsh population, the COVID-19 admission rate in the most deprived quintile was 1.2 times that of the least deprived quintile. In contrast, between September 2021 and February 2022, when COVID-19 protections were less stringent, the COVID-19 admission rate in the most deprived quintile was 1.7 times that of the least deprived quintile.

The increase in health inequality of hospitalisation by deprivation may suggest that COVID-19 protections employed more heavily in the first 6 months of the pandemic were successful at mitigating the disproportionate COVID-19 hospitalisation impact on deprived populations in Wales.

In conclusion COVID-19 protections reduced mortality and severity of illness during the first waves of the pandemic and reduced transmission during later waves. However, there have been consequences to these restrictions with regards to education losses, disruption to health care, economic losses, and increased inequalities. When COVID-19 first became classed as a pandemic very little was known about the virus and how it was transmitted. The vaccine was quickly developed and rolled out in the UK. Lessons learnt from the COVID-19 pandemic will help inform how best to tackle any future pandemics.

Contents

Summary	1
Introduction	6
Definitions	6
Impact of COVID-19 Protections in Wales	8
Impact of COVID-19 protections on direct harms arising from SARS-CoV2 infections	8
Cases	8
Infections	9
Hospitalisations	11
Deaths	12
Effectiveness of face masks	13
Impact of COVID-19 protections on indirect COVID-19 harms arising from increased pressure on health and social care services	14
Delays to routine screening and vaccination and immunisation programmes	14
Delayed management or treatment of long-term conditions	14
NHS Wales staff absence	20
Impact of COVID-19 protections on the population	22
Impact of protections on parents and carers	24
Impact of protections on early years and school-aged children	25
Impact of protections on education	27
Impact of protections on psychological wellbeing	29
Psychological effects on care staff and care-home residents	33
Impact of protections on physical health	34
Impact of protections on the environment	36
Impact of COVID-19 protections on the economy	38
Employment	38
Full-time working, part-time working, employee pay and hours	40
Changing profile of the economically inactive	41
Reduced business income	43
Impact of COVID-19 protections on societal inequalities	46
Education	46
Crime	47
Unemployment and income	47
Mortality	48
Mortality, care homes	50
Hospitalisations	52
Long COVID	53

Access to healthcare	54
Conclusion	55
Annex: Summary Table	56
Annex: Non-Pharmaceutical Interventions List by Date	62
Annex: Gross Value Added, Gross Domestic Product and changes to restrictions like affect businesses	•
GVA/GDP	93
List of changes to restrictions likely to affect business	93
Annex: Care Home COVID-19 Response Strategy	100
Annex: Links/work to reference in report	102
TAC publications:	102
TAC non-published papers/work:	102
PHW publications:	103
ONS publications:	104

Introduction

Throughout the COVID-19 pandemic in Wales, both the UK and Welsh Government have passed laws and issued guidance intending to protect the public from the spread of COVID-19. This paper collates and summarises work carried out to examine the impact of the protections implemented in Wales throughout the COVID-19 pandemic. The protections considered in this paper, both pharmaceutical and non-pharmaceutical interventions (NPIs), include requiring face masks in public places, implementing a full stay at home order ('lockdown'), pharmaceutical interventions from medical improvements and new therapies and introduction of COVID-19 vaccines.

This paper brings together evidence produced since the start of the pandemic in Wales (March 2020) by organisations including the Welsh Government Technical Advisory Cell and Technical Advisory Group, UK Health Standards Agency, Public Health Wales, Welsh Government's Knowledge and Analytical Service, SPI-M-O and SAGE, Wales COVID-19 Evidence Centre and the Office for National Statistics, among others. There is a huge amount of evidence that has been generated on the impact of protections and we make no claims that this document is complete, but is an attempt to synthesise as much evidence as possible.

Within this paper, analysis has been carried out by the Science Evidence Advice (SEA) division to analyse the impact that implementations of COVID-19 protections had on various aspects of the Welsh population (e.g., health, healthcare services, education, economy and inequalities). This analysis has been structured around the identified five harms of COVID-19.¹ It is extremely challenging to attribute the causes behind observed changes in measures, in large part due to the multifaceted and complex nature of the pandemic, but it is useful to compare the differences before and after changes in COVID-19 health protection interventions. Future work using more complex methods such as synthetic controls, difference-in-difference, and interrupted time series, may produce more robust results.²

Different COVID-19 protections were implemented in different ways and at different times in different areas of the UK. Therefore, other areas of the UK have been used as comparators within this analysis, where appropriate, to ascertain possible causality of interventions and compare the effectiveness of different COVID-19 responses. North East and South West England were identified as regions of the UK most similar to Wales and suitable for use as proxy counterfactuals. These comparators were selected at launch of this work before analysis was undertaken to maintain a transparent and unbiased approach. North East England has a mixture of rural and urban areas, and deprived and affluent areas, and was regarded as a similar region (a statistical neighbour) to Wales before the pandemic. South West England is geographically close to Wales and is the most similar region to Wales in terms of having lots of small conurbations (although no English region has as high a proportion of the population in small towns as Wales).

Definitions

Early on in the pandemic, the protective measures implemented by the Government to protect the population of Wales from the spread of COVID-19 were often referred to as 'restrictions'. Following advice from behavioural experts, the term used was changed to 'population protections' since this is what the Government was aiming to do, protect rather than restrict, and it was better received by the public when referred to this way. Other terms

¹ technical-advisory-group-5-harms-arising-from-covid-19 0.pdf (gov.wales)

https://www.annualreviews.org/doi/10.1146/annurev-publhealth-031816-044327 Science Evidence Advice – Impact of COVID-19 protections in Wales DRAFT -NOT WELSH GOVERNMENT POLICY

used throughout the pandemic have been 'lockdowns' and 'non-pharmaceutical interventions' (NPIs). In popular discourse, 'lockdown' is often used to refer to a broad range of interventions, whereas in this paper, specific protections will be referred to where possible.

In this paper, the term 'protections' has been used throughout. However, all of the above terms may be used interchangeably at different points depending on the timing and source of the evidence.

To measure the impact of the protections, we consider the impact on each of the harms which have been referred to throughout the pandemic as the five harms arising from COVID-19 ('the 5 harms')³:

- 1. Harm directly arising from SARS-CoV2 infections;
- 2. Indirect COVID-19 harms due to surge pressures on the health and social care system and changes to healthcare activity, such as cancellation or postponement of elective surgeries and other non-urgent treatments (e.g. harm from cessation of screening services) and delayed management of long-term conditions.
- **3.** Harms arising from population based health protection measures (e.g. lockdown) such as, educational harm, psychological harm and isolation from shielding and other measures.
- **4.** Economic harms such as unemployment and reduced business income arising both from COVID-19 directly and population control measures, like lockdown.
- **5.** Harms arising from the way COVID-19 has exacerbated existing, or introduced new, inequalities in our society.

In this paper we will focus on the harms outlined above; however, there are some outcomes of the COVID-19 pandemic protections which have had a positive impact on the health of the general population. As outlined in a BMJ article some of these include reductions in air pollution and fewer car collisions, leading to a decrease in emergency admissions and fatalities from this cause.⁴ The National Survey for Wales also found that people's sense of community within their local areas had improved in 2021 to 2022 compared to 2018 to 2019 on all measures of community. Sense of community increased from 52% to 64% and the measure of treating each other with respect increased from 76% to 82%.⁵

-

³ technical-advisory-group-5-harms-arising-from-covid-19_0.pdf (gov.wales)

⁴ The positive effects of covid-19 | The BMJ

⁵ National Survey for Wales headline results: April 2021 to March 2022 | GOV.WALES Science Evidence Advice – Impact of COVID-19 protections in Wales DRAFT -NOT WELSH GOVERNMENT POLICY

Impact of COVID-19 Protections in Wales

Impact of COVID-19 protections on direct harms arising from SARS-CoV2 infections

Cases

Figure 1 shows the rolling 7-day average of new cases reported in Wales, with the dates that some of the key protections were implemented.

Figure 1. Rolling 7-day average of new cases reported in Wales.

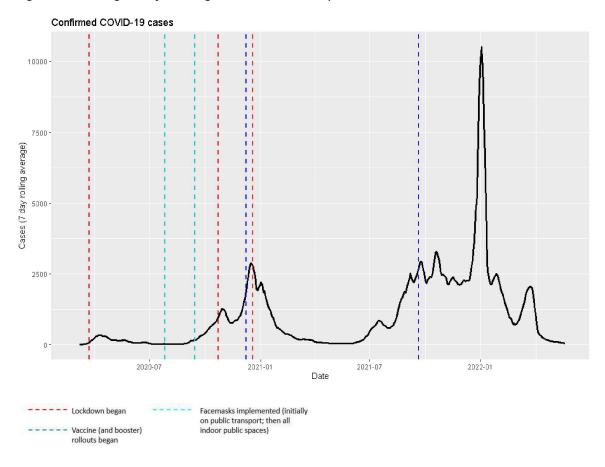


Figure 2 shows the rolling 7-day average of new cases per 100,000 people in Wales, compared to the North East and South West of England. Shortly after the firebreak lockdown was implemented in Wales in October 2020 (the second dashed red line), cases dropped following a peak, while they continued to rise in the England regions. Shortly after Wales implemented their firebreak lockdown, England went into a lockdown, and the cases in the North East and South West followed a trend similar to what had been observed in Wales upon firebreak implementation.

Confirmed COVID-19 cases compared with English regions 400 Cases (rolling 7 day average per 100,000 300 -Region North East England South West England 100 2022-01 Date -- Lockdown began Facemasks implemented (initially on public transport; then all indoor public spaces) -- Vaccine (and booster) rollouts began

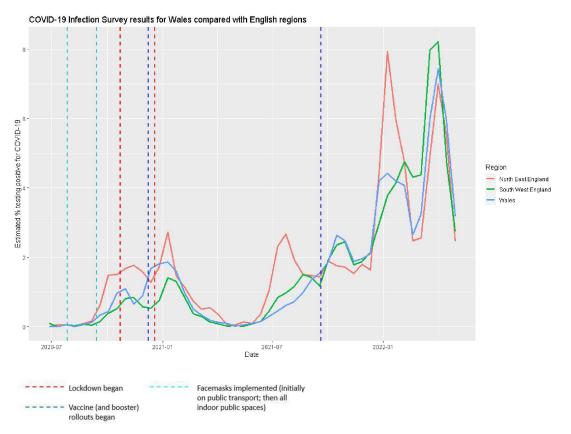
Figure 2. Rolling 7-day average of new cases per 100,000 people in Wales, compared to the North East and South West of England.

Infections

Figure 3 shows the ONS COVID-19 Infection Survey (CIS) results for Wales, alongside that of North East and South West England. The CIS started reporting data for Wales from around July 2020, so data was not available in the first wave.

For sake of comparison, the non-overlapping 14-day weighted estimates of the percentage of the population testing positive for COVID-19 were used, and data points were mapped to the seventh day in each 14 -day period. The chart starts from the end of June 2020, when the CIS commenced in Wales. As with the confirmed cases, estimated prevalence in Wales dropped sharply following the commencement of the October 2020 firebreak lockdown, whilst infection rates in the North East and South West of England continued to rise.

Figure 3. Non-overlapping 14-day weighted estimates of the percentage of the population testing positive for COVID-19 in Wales, North East England, and South West England.



In April 2022, ONS published analysis estimating the cumulative incidence of the people having at least one episode of COVID-19 infection in the four UK nations up to 11 February 2022. This analysis uses data from the Coronavirus Infection Survey, which began on 27 April 2020. In the below chart (Figure 4) the rate of change in cumulative incidence is shown with the orange shading represents times where Wales was placed under lockdowns or restrictions.

The survey began on different dates in the four UK nations so the results are for different time periods. ONS estimated that as on 11 of February 2022, cumulatively, 70.69% of the English population had tested positive for COVID-19. In comparison, ONS estimated that 56.05% of the Welsh population had tested positive between 30 June 2020 and 11 February 2022. In the period 27 July 2020 to 11 February, ONS estimated that 72.02% of the population of Northern Ireland had tested positive. In the period 22 September 2020 to 11 February 2022, it was estimated that 51.48% of the population of Scotland had tested positive.

Using England's cumulative incidence as a proxy for Wales' cumulative incidence between 27 April 2020 and 29 June 2020, the cumulative incidence estimate for Wales increases slightly to 57.41% as at 11 February 2022. This suggests that, compared to the English population, the Welsh population had a lower cumulative incidence for COVID-19 between 30th of June 2020 and the 11th of February 2022. The figure for Wales may be lower in part because of the stricter restrictions generally imposed over the pandemic, although it may

mean that more of the population is susceptible to infection in future, since previous infection, as well as vaccination, reduces the chance of future infection. Cumulative incidence may be lower in Wales due to other reasons like differences in population behaviours, and more people living in rural areas. It is worth noting that restrictions in Wales were not always more stringent than in England. For instance, Wales mandated face coverings later than England and, at times, Wales allowed bigger household bubbles to mix than England. The result also coincides with the finding that excess deaths were around 20% lower in Wales than in England, although much of this difference was concentrated in the first waves of COVID-19, which peaked before the ONS Coronavirus Infection Survey began reporting in England on 27 April 2020.6

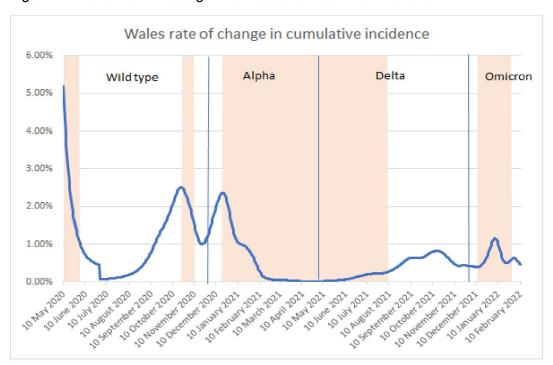


Figure 4. Wales rate of change in cumulative incidence over time.

Hospitalisations

Figure 5 shows the rolling 7-day average of daily hospital admissions reported in Wales who tested positive for COVID-19, with the dates that some of the key protections were implemented.

.

⁶ https://gov.wales/sites/default/files/publications/2022-03/technical-advisory-group-examining-deaths-in-wales-associated-with-covid-19-30-march-2022.pdf
Science Evidence Advice – Impact of COVID-19 protections in Wales
DRAFT -NOT WELSH GOVERNMENT POLICY

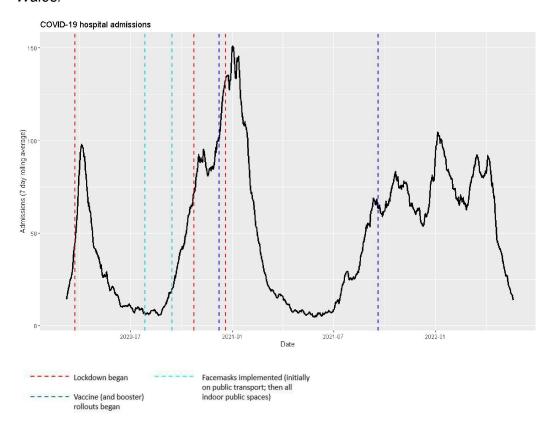


Figure 5. 7-day average of daily covid-19 positive hospital admissions reported in Wales.

Deaths

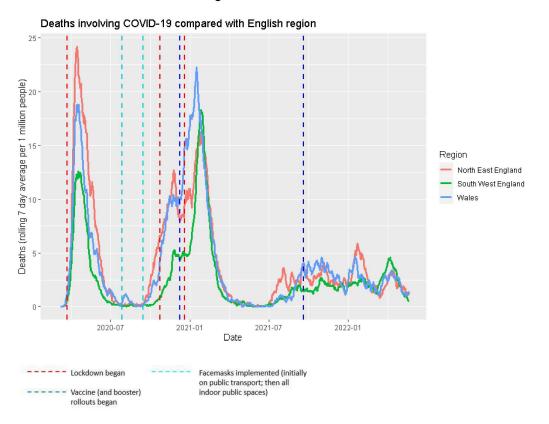
Periods of high infection rates led to periods of higher death rates throughout the pandemic. The impact of the October 2020 firebreak in Wales can be observed in the ONS and PHW deaths data. It was found that some people had a higher mortality risk than others due to characteristics. Research using the QCOVID risk prediction algorithm found that individuals who died from COVID-19 during the first period were more likely to be male (674, 56.5%), aged 70 years and older (976, 81.9%) or to have pre-existing conditions including diabetes, chronic kidney disease, obesity, and cardio-pulmonary disease. It was concluded in this research that the QCOVID algorithm developed in England can be used for public health risk management for the adult Welsh population and QCOVID has since been implemented in Wales.

Around two weeks after implementation of the October 2020 firebreak (as expected, since it takes time for people infected with COVID-19 to become seriously ill and die from COVID-19), ONS recorded deaths in Wales plateaued. Hence implementation of COVID-19 protections, such as lockdowns, is consistent with a positive impact on deaths. Comparing Wales to the similar regions of North East and South West England, the plateau following the firebreak in Wales happened a couple of weeks later in the English regions, consistent with the English firebreak lockdown starting later. Deaths in Wales, North East England and

⁷ Validating the QCOVID risk prediction algorithm for risk of mortality from COVID-19 in the adult population in Wales, UK | International Journal of Population Data Science (ijpds.org)
Science Evidence Advice – Impact of COVID-19 protections in Wales
DRAFT -NOT WELSH GOVERNMENT POLICY

South West England all rebounded following the plateau, with Wales' deaths peaking highest and earliest. Wales' firebreak lockdown was 2 weeks long, compared with England's 4 week lockdown in November 2020.

Figure 6. Deaths from covid (rolling 7 day average per million population) in Wales, North East and South West England.



Effectiveness of face masks

The Wales COVID-19 Evidence Centre (WC19EC) conducted a rapid review of the evidence surrounding the impact of face masks on reducing the transmission of SARS-CoV-2, either by source control (containing droplets and stopping them from reaching susceptible people) or by wearer protection (preventing inhalation of droplets present in the air)⁸. They reviewed a mix of review-based articles, systematic reviews and rapid reviews, mainly from early in the pandemic and from a range of countries including Asia, Europe, and North America. While the reviewed studies do have limitations, the WC19EC concludes that there is a growing evidence base suggesting that mask wearing is associated with a reduction in transmission at both the individual and population levels. One of the higher quality studies does suggest that the impact may be rather modest, however.

⁸ RR00007_Wales_COVID-19_Evidence_Centre-Rapid_Review_Face_coverings_27th-July_2021.pdf (primecentre.wales)

Science Evidence Advice – Impact of COVID-19 protections in Wales DRAFT -NOT WELSH GOVERNMENT POLICY

Impact of COVID-19 protections on indirect COVID-19 harms arising from increased pressure on health and social care services

During the first wave of the pandemic, as information was emerging daily about SARS-CoV-2 virus the UK Government took the approach to issue a UK wide lockdown. This approach was taken to reduce transmission as mush as possible, during a period where the variant of SARS-CoV-2 caused severe symptoms resulting in hospital admission to high dependency units for a high proportion of those who contracted it. During this period there was no vaccine programme, and little was known about the virus compared to today.

Delays to routine screening and vaccination and immunisation programmes

School immunisation sessions for older children were suspended after the closure of schools on 20 March 2020, affecting routine Td/IPV, MenACWY and HPV vaccination, and opportunistic MMR catch-up. A phased return to schools began on 29 June 2020, with full reopening on 1 September 2020. All secondary schools and colleges moved to online learning from the 14 December 2020. Wales entered alert level 4 and a second full lockdown on the 20 December 2020. A phased return to school began on 22 February 2021 with younger children returning first and a full reopening of all schools from 12 April 2021.

PHW reported in February 2022 (data up to the end of December 2021):

Of all the teenage vaccines, uptake of the HPV vaccine appears to be the most impacted by school interruptions during the pandemic. Uptake of the second dose in the 2019-20 school year 8 (2020-21 school year 9), the first cohort to include routine HPV vaccination for boys, remains at 81%; with uptake of two doses 42% compared to 38% reported last quarter. Catch-up activities for this cohort will need to continue for school year 10. MMR coverage in teenagers remains stable.⁹

In March 2020, cervical screening was paused due to the COVID-19 pandemic. Screening invitations resumed from June 2020. Testing figures returned to pre-lockdown levels in January 2021 (tested in October 2020). A high number of invites were sent in June 2021 with the aim of addressing the backlog of eligible females not previously invited during 2020 due to the pandemic.¹⁰

Delayed management or treatment of long-term conditions

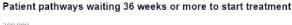
The number of patient pathways waiting 36 weeks or longer to start treatment increased sharply from 28,294 in March 2020 to 231,022 in November 2020, following implementation of stay-at-home measures and reduction in NHS activities, including postponement of non-urgent clinic appointments and treatment. The number of patient pathways waiting 36 weeks or more increased further during 2021 and 2022 to 253,177 in March 2022. WCEC have reviewed evidence for the effectiveness of interventions (including exercise, education, psychological, smoking cessation and multi-component interventions) to support patients on surgical waiting lists in Wales. ¹¹ Exercise, psychological and smoking pre-operative interventions were found to have some benefit although, generally, their effectiveness cannot be measured against surgical outcomes.

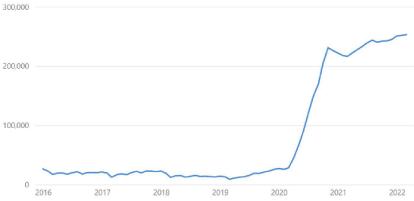
⁹ PHW cover report Feb 95 [WP] (wales.nhs.uk)

¹⁰ COVID19 Recovery Profile v1s.knit (shinyapps.io)

¹¹ Rapid review of the effectiveness of innovations to support patients on elective surgical waiting lists | Health Care Research Wales (healthandcareresearchwales.org)
Science Evidence Advice – Impact of COVID-19 protections in Wales
DRAFT -NOT WELSH GOVERNMENT POLICY

Figure 7. Patient pathways waiting over 36 weeks, Wales.





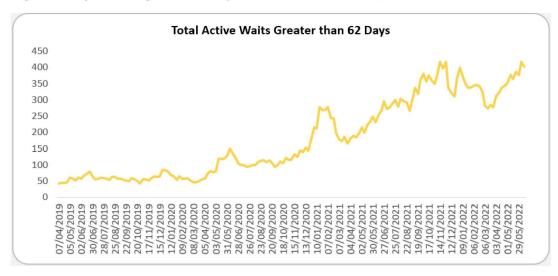
Source: Digital Health and Care Wales (DHCW) - Data for patient pathways waiting to start treatment can be found on <u>StatsWales</u>

Data covering period: January 2016 - March 2022.

Source: KAS COVID-19 in Wales Interactive Dashboard, Welsh Government, 13 June 2022

The volume of gynaecological cancer patients on the NHS waitlist for more than 62 days (known as the "backlog") has increased from 52 on 1 March 2020 to 402 on 12 June 2022 (Figure 8). Compared to 13 June 2021, the waitlist has increased by 1.6-fold from 254. The waitlist volumes reached a peak on 7 June 2020, then started to decrease. This coincided with resumption of cervical screening activities.

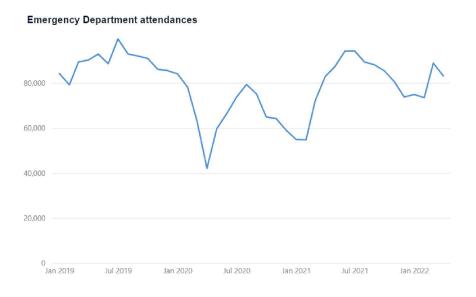
Figure 8: Gynaecological cancer patient waitlist volumes, Wales



Source: NHS Wales Delivery Unit Cancer Dashboard, 20 June 2022

The number of attendances to the Emergency Department in Wales was 63,123 in March 2020 and was 83,106 in April 2022. Attendance generally decreased during periods of high COVID-19 infection rates, e.g. during spring 2020, winter 2020/2021 and winter 2021/2022, when patients were advised to seek treatment and advice via NHS 111 and stay away from Emergency Departments unless in need of urgent treatment. Accordingly, the number of NHS Direct 111 calls per day increased during spring 2020 and winter 2020/2021 which may indicate increased activity for COVID-19 as well as for other emergency care and advice. It is also possible people may have chosen to stay away from Emergency Departments for fear of COVID-19 exposure risk during COVID-19 wave peaks, as well the possibility of overall lower incidences of non-COVID-19 illnesses or accidents as restrictions meaning people spent more time at home.

Figure 9. Emergency department attendances per month, Wales.



Source: Digital Health and Care Wales (DHCW) - Data for Emergency Department attendances can be found on <u>StatsWales</u>

Data covering period January 2019 - April 2022.

Source: KAS COVID-19 in Wales Interactive Dashboard, Welsh Government, 13 June 2022

Mar 2020

NHS Direct 111 calls per day (7 day rolling average)

6000

4000

2000

1000

Jul 2020

Figure 10. Trend in NHS Direct calls per day (7 day rolling average) in Wales.

Source: Welsh Ambulance Service, TAC COVID-19 Dashboard, Welsh Government, 01 June 2022

Nov 2020

Sep 2020

Cancer pathway waiting times have generally increased in Wales during the COVID-19 pandemic. The median number of days from diagnosis to treatment and median number of days from suspicion to treatment have generally increased since January 2021.

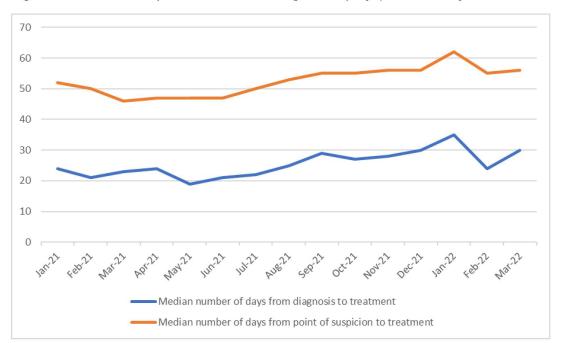


Figure 11. Median suspected cancer waiting times (days) in Wales by month.

Source: Suspected cancer pathway waiting times: interactive dashboard | GOV.WALES Science Evidence Advice – Impact of COVID-19 protections in Wales

DRAFT -NOT WELSH GOVERNMENT POLICY

The volume of cancer patients on the NHS Wales waitlist for more than 62 days (known as the "backlog") has increased by 8.9-fold, from 483 on 1 March 2020 to 4,277 on 12 June 2022 (Figure 12). Compared to 13 June 2021, the waitlist has increased by 1.8-fold from 2,325. The number of patients on the waitlist increased sharply during COVID-19 waves in spring 2020, early 2021 and early 2022. This reflects NHS Wales pressures during periods of high COVID-19 infection and hospitalisation rates. The waitlist volume decreased following each peak, evidencing NHS efforts to reduce the waitlist as COVID-19 pressures decrease. The volume reduced to levels similar to immediately before the peak, with the exception of the spring 2020 wave. During this time, NHS Wales activities were most greatly restricted, with non-urgent activities paused and a period of transition whilst the ability to host appointments via telephone and video was set-up. Since this was necessary largely due to COVID-19 protections put in place requiring people to stay at home during lockdowns, this indicates that lockdown protections negatively impacted and increased waiting times for cancer patients.

Figure 13 shows the waitlist volume by stage. It shows that the greatest increase has been for patients at the diagnostic stage, suggesting that the COVID-19 pandemic has had greatest impact on diagnosis of cancer and length of time for patients to wait for diagnosis and to start treatment, as opposed to having had a large negative impact on patients undergoing cancer treatment.

Total Active Waits Greater than 62 Days 5,000 4,500 4,000 3,500 3,000 2,500 2,000 1,500 1,000 500 0 /10/2019 /11/2019 /12/2019 /01/2020 /02/2020 /03/2020 /04/2020 /05/2020 /05/2020 /08/2020 /09/2020 /10/2020 /11/2020 /12/2020 /04/2021 /05/2021 03/2021 01/202 /02/202 100

Figure 12. Cancer patient waitlist volumes, Wales

Source: NHS Wales Delivery Unit Cancer Dashboard, 20 June 2022

Total Active Waits Greater than 62 Days by Stage 3,000 2,500 2,000 1,500 1.000 500 09/02/2020 08/03/2020 05/04/2020 31/05/2020 28/06/2020 23/08/2020 07/04/2019 05/05/2019 /05/2020 28/07/2019 /08/2019 /09/2019 20/10/2019 17/11/2019 15/12/2019 12/01/2020 26/07/2020 18/10/2020 15/11/2020 /02/2021 /03/2021 /07/2021 /08/2021 02/06/2019 04/04/2021 10/01/2021 02/05/2021 30/05/2021 /06/2023 19/09/2023 17/10/2021 14/11/2021 12/12/2021 /01/2022 -500

Figure 13. Cancer patient waitlist volumes by stage, Wales

The volume of lower gastrointestinal cancer patients on the NHS Wales waitlist for more than 62 days (known as the "backlog") has increased from 69 on 1 March 2020 to 1,073 on 12 June 2022 (Figure 14). Compared to 13 June 2021, the waitlist has increased by 1.7-fold from 637. The lower gastrointestinal cancer patient waitlist has followed a similar trend to the overall cancer patient waitlist.

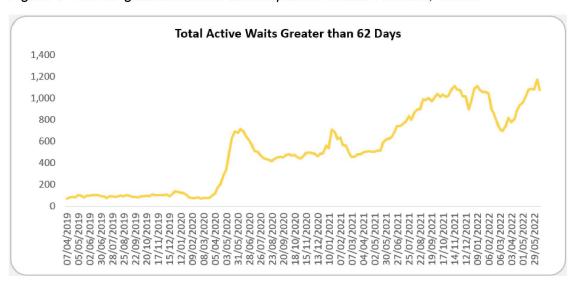


Figure 14. Lower gastrointestinal cancer patient waitlist volumes, Wales

Source: NHS Wales Delivery Unit Cancer Dashboard, 20 June 2022

The volume of breast cancer patients on the NHS Wales waitlist for more than 62 days (known as the "backlog") has increased from 10 on 1 March 2020 to 311 on 12 June 2022 (Figure 15). Compared to 13 June 2021, the waitlist has increased by 2.4-fold from 139. In contrast to the overall cancer patient waitlist, the number of breast cancer patients on the waitlist didn't see such large increases in spring 2020 or early 2021. Instead, the greatest increase in waitlist volumes occurred in early 2022. Wales was not in lockdown during this period, although infection rates sharply increased to record levels at this time. This suggests

that COVID-19 protections, such as lockdowns, were not the driving factors for increases to breast cancer waitlist volumes. Instead, the increase could be due to high NHS staff absence rates observed in Wales in early 2022.

A study which focused on female breast, colorectal and non-small cell lung cancer noted with over a thousand fewer cases diagnosed across three common cancers during 2020, the research suggests there could be large numbers of undiagnosed cancer patients due to the ongoing pandemic, societal mitigations and health service reconfiguration in response.¹²

Figure 15: Breast cancer patient waitlist volumes. Wales

Source: NHS Wales Delivery Unit Cancer Dashboard, 20 June 2022

NHS Wales staff absence

NHS Wales staff absence for any reason (and for a COVID-19-related reason) was highest in April 2020 during the first wave of the COVID-19 pandemic (Figure 16) compared with the rest of the pandemic. The percentage of staff absent due to COVID-19 sickness was ~2.5% in April 2020. Although the percentage of staff absent due to COVID-19 sickness returned to April 2020 levels in January 2021 and January 2022, absence due to self-isolation remained significantly lower in January 2021 and January 2022 than compared with April 2020. In 2022, a greater proportion of staff absence was due to direct COVID-19 sickness than self-isolation. This reflects changes in non-pharmaceutical intervention measures throughout the pandemic.

Since 22 December 2021, those identified as being a close contact of a COVID-19 case have not had to automatically self-isolate, e.g. if they were fully vaccinated. At the end of January 2022, Welsh Government announced that people who tested positive for COVID-19 could reduce self-isolation from seven days to five full days if people had two negative lateral flow tests on days 5 and 6, independent of vaccination status. From 28 March 2022, the legal requirement to self-isolate if testing positive was removed, but Welsh Government

¹² Impact of the SARS-CoV-2 pandemic on female breast, colorectal and non-small cell lung cancer incidence, stage and healthcare pathway to diagnosis during 2020 in Wales, UK, using a national cancer clinical record system | British Journal of Cancer (nature.com)

¹³ Self-isolation period reduced | GOV.WALES

Science Evidence Advice – Impact of COVID-19 protections in Wales DRAFT -NOT WELSH GOVERNMENT POLICY

continued to advise that people should self-isolate if showing symptoms or testing positive. This relaxation of self-isolation requirements has reduced the percentage of NHS Wales staff absent due to self-isolation significantly during 2022.

Although a significant proportion of staff absence in April 2020 was due to COVID-19 sickness (~20% of all staff absences), a large proportion of sickness absence was due to self-isolation (~40% of all staff absences), as shown in Figure 17. By week ending 30 May 2022, although 13% of staff absence was due to COVID-19 sickness, only 8% was due to self-isolation. This means that in April 2020, around 60% of staff absence was related to COVID-19 sickness or self-isolation. In contrast, by May 2022, only around 20% of staff absence was related to COVID-19 (either sickness or self-isolation).

Welsh Health Boards were required to draft local COVID-19 Operational Plans for Q2 by 30 June 2020. These plans included requirements for organisations to consider team deployment to minimise impact on a whole team or service by a member of staff testing positive for COVID-19, and new guidance on infection prevention and control, including environmental factors and social distancing. NHS Wales staff absence due to self-isolation decreased in August 2020, which may suggest that, after a time delay for implementation of these plans, these changes contributed to reducing self-isolation volumes.¹⁴

During March 2021, there were several announcements by the Health Minister for Wales which may have contributed to the reduction in NHS Wales staff absence for self-isolation observed during April 2021. For example, the announcement of a framework for testing hospital patients in Wales to prevent COVID-19 from entering hospitals undetected and relaxation of advice to clinically extremely vulnerable individuals following shielding measures.¹⁵

Hence, NPIs increased NHS Wales staff absence during the COVID-19 pandemic. During April 2020, when NHS Wales staff absence was highest, COVID-19 testing was not widespread and so people who would have self-isolated if they had known they were a contact of a COVID-19 case, or were infected and did not realise, may have not been self-isolating and staff unknowingly ill with COVID-19 may have taken sickness absence but recorded it as "other sickness". In contrast, by January 2021 testing was widespread and so captured a greater proportion of people required to self-isolate, dampening transmission. The effect of NPIs at reducing NHS Wales staff absence can be observed in that total staff absence in January 2021 was lower compared with spring 2020.

¹⁴ NHS Wales COVID-19 Operating Framework: quarter 2 2020 to 2021 | GOV.WALES

¹⁵ Coronavirus timeline: Welsh and UK governments' response (senedd.wales)
Science Evidence Advice – Impact of COVID-19 protections in Wales
DRAFT -NOT WELSH GOVERNMENT POLICY

Percentage of NHS Wales staff absent by reason

14.0

12.0

10.0

8.0

6.0

4.0

2.0

Absent due to COVID-19 sickness

Absent due to self-isolation

Total absent for any reason

Figure 16. Trend in percentage of NHS Wales staff absent by reason, by date.

Source: NHS staff absence and self-isolation rate, by date (gov.wales)

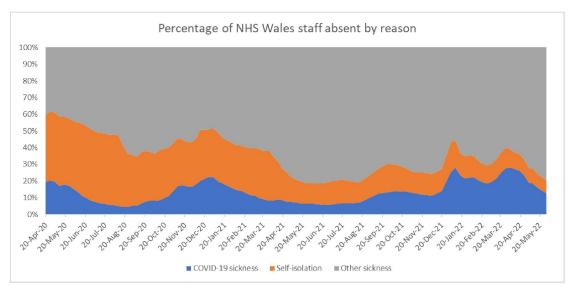


Figure 17. Proportion of NHS staff absences by reason and date in Wales.

Impact of COVID-19 protections on the population

Birth rates

Figures from the ONS on the birth rate in England and Wales state there were 613,936 live births in England and Wales in 2020, which is a decrease of 4.1% from 2019 figures¹⁶. Figures from 2021 showed an increase in live births in England and Wales of 1.8%

¹⁶ Live births - Office for National Statistics (ons.gov.uk)
Science Evidence Advice – Impact of COVID-19 protections in Wales
DRAFT -NOT WELSH GOVERNMENT POLICY

(624,828), but this figure is still below the 2019 figure of 640,370. There is a long-term trend of decreasing live births, which was seen before the COVID-19 pandemic. There has been a year on year decrease in live birth rates in England and Wales since 2015. There is data from Scotland suggesting birth rates decreased in more deprived groups, and increased in more affluent groups.¹⁷

Impact on physical activity of pregnant women with gestational diabetes

A study using an online survey of 553 women in the UK with gestational diabetes found sedentary time increased for 79% of the women during the pandemic. Before the pandemic almost half of the women (47%) were meeting the physical activity guidelines during their pregnancy. This dropped to 23% during the COVID-19 pandemic. Fear of leaving the house due to COVID-19 was the most commonly reported reason for the decline in physical activity¹⁸. The authors note some limitations such as reliance on recall of respondents' physical activity levels pre-pandemic, and their sample being predominately white, with higher level of education.

Impact on mental health of pregnant and postpartum women

A Belgium study of women over 18 years old, ranging from women who were pregnant pre and during the pandemic, and women who were post-partum pre and during the pandemic were asked to complete an online questionnaire, which included the Generalized Anxiety Disorder 2-item (GAD-2) scale¹⁹. Pre-pandemic was defined as before February 3rd 2020 and during pandemic was defined as after March 13th 2020. Women were excluded from taking part if they had illness or life-threatening conditions requiring intensive medical support. Mothers with children with congenital anomalies, severe pathology, or life-threatening diseases were also excluded from the online questionnaire.

Data from 1,145 participants was analysed. No significant differences were found amongst the pregnant women when comparing those who were pregnant pre versus during COVID-19. A significant difference was found amongst the postpartum sample pre versus during COVID-19. Women who were postpartum during the pandemic had lower levels of anxiety than those who were postpartum pre-pandemic. When controlling for confounders, the authors found a small main positive effect of having an infant during the pandemic. This effect was significantly larger for women with (a history of) perinatal psychological problems and postpartum depression. Findings suggest that less external stimuli and pressures caused by lockdown restrictions may have had a positive effect on the emotional wellbeing of postpartum women. There are limitations to the sample, as it consisted of primarily white educated females, who were in a relationship at the time of responding. There was also no information regarding the extent of exposure to adverse consequences from COVID-19. The sample relied on self-report information and self-selection. The postpartum during pandemic sample was small, compared to postpartum pre-pandemic.

¹⁷ LoCo (Lockdown Cohort)-effect: why the LoCo may have better life prospects than previous and subsequent birth cohorts | European Journal of Public Health | Oxford Academic (oup.com)

¹⁸ Impact of COVID-19 on physical activity of pregnant women with gestational diabetes

¹⁹ Psychological health of postpartum women

Impact of protections on parents and carers

During the UK period of lockdown schools were closed March 2020, with schools opening briefly in June 2020, before closing again in December 2020. Schools reopened as a phased return in February 2021, with a full reopening in April 2021. During school closures from December 2020 school-aged children continued their education from home via online lessons. For working parents this meant juggling working responsibilities whilst their children were home learning.

A COVID-19 web survey was added to a national, longitudinal cohort study, the UK Household Longitudinal Study (UKHLS) in April 2020²⁰. Adults aged 16 years old and over who were taking part in the UKHLS were invited to complete the additional COVID-19 survey. Compared to people without children, parents reported on average a much larger decline (versus pre-lockdown) in their general mental health at the time of the survey. When exploring results from the GHQ-12 (Short General Health Questionnaire), the overall increase was from 11·5 in 2018-19 to 12·6 in April 2020. However, when adjusting for time trends and examining particular groups there was an increase in GHQ-12 scores of 1.45 for parents, but only an increase of 0.33 for people without children.

Findings from the Co-SPACE study by Shum et al., 2020 also demonstrated parental stress and depression rose during the first lockdown (when most children were home schooled)²¹. Parental stress and depression reduced when lockdown restrictions eased in the summer but rose again when new national restrictions were put in place November and December 2020. Parents of children 10 years old or younger reported particularly high levels of stress when restrictions were highest. Further evidence from the UK also showed parents of school-age children had increased feelings of social isolation and loneliness over six weeks from 29th of May to the 11th of July 2020 during the lockdown²². Evidence from Canada found parents of children under 18 years old reported worse mental health as a result of the pandemic²³.

Data from ONS comparing employment in the period 28 March to 26 April 2020 against previous data from 2014/15 found that in 2020 parents were nearly twice as likely to be furloughed compared to those without children²⁴. Thirty percent of parents employed that had home schooled their children when schools were closed due to the pandemic agreed it was adversely affecting their job. A higher proportion of mothers agreed home schooling was negatively affecting their overall wellbeing (1 in 3) compared to fathers where 1 in 5 felt home schooling negatively affected their overall wellbeing²⁵. This data also showed an imbalance in the caring responsibilities of men and women. Women spent over an hour and quarter more a day looking after children compared to men.

²⁰ Mental health before and during the COVID-19 pandemic (longitudinal probability sample survey)

²¹ A report from the longitudinal Co-SPACE study (Shum et al., 2020)

²² COVID-19 lockdown impacting the mental health of parents in the UK (cross-sectional online survey)

²³ Impacts of the COVID-19 pandemic on family mental health in Canada (national cross-sectional study)

²⁴ Parenting under lockdown (ONS)

²⁵ Personal and economic well-being in Great Britain - Office for National Statistics (ons.gov.uk)

Impact of protections on early years and school-aged children

The 2019 to 2020 and the 2020 to 2021 National Child Measurement Programme (NCMP) data collections were both impacted by the COVID-19 pandemic. The 2019 to 2020 NCMP stopped in March 2020 when schools were required to close. The start of data collection for the 2020 to 2021 NCMP was delayed until March 202126. In order to provide data for 2020/21, local authorities were asked to collect a nationally representative sample of data. Around 300,000 children (25% of previous full measurement years) were measured, but the sample was not fully representative of the child population. Therefore, weighting was applied to the analysis to make it comparable to previous years of NCMP data. The findings showed an increase in child obesity in 2020/21, which was the largest increase seen in the NCMP since the programme began collection in 2006/07. The prevalence of obesity rose 4.7 percentage points in Reception (age 4-5 years) boys and 4.4 percentage points in Reception girls. There was an increase of 5.6 percentage points in Year 6 (age 10-11 years) boys and 3.3 percentage points in Year 6 girls. Year 6 boys experienced the largest increases in obesity and severe obesity. Inequalities were highlighted in the data, with the largest increases in obesity and severe obesity occurring in the most deprived areas of England, demonstrating the disparities in child obesity have worsened during the pandemic. Disparities in ethnic groups have also increased, with ethnic groups that previously had the highest obesity prevalence experiencing the largest increases. Given the interruptions to data collection for the NCMP due to the pandemic and the change to children's' lifestyles due to restrictions more data is required to ascertain if the increases in obesity seen in recent data will be prevalent in the long-term.

The Co-Space study collected data monthly from over 9,000 parents/carers of 4-16 year-olds and from over 1,300 adolescents (11-16 year-olds) during the pandemic in 2020²⁷. The study included participants from Wales, though the representation was small (around 3.7% of parents/carers in report 11 were living in Wales). Results from the study suggest participating children's mental health worsened during lockdowns and school closures, peaking in June 2020 and February 2021, and improved as restrictions eased. This pattern was observed for symptom scores as well as rates of possible/probable mental health disorder which reflect treatment need. Children from families earning less than £16,000 annually were more likely than their peers to have persistently poorer mental health symptoms assessed during the first lockdown.

Primary school aged children between 4 and 10 years old were more likely than secondary school aged children between 11 and 16 years old to have persistently poorer or worsening behavioural and concentration symptoms, assessed during the first lockdown. The study did have under-representation from minority ethnic families and less affluent families.

In April 2020- March 2021 there was a 37% increase in child mental health service referrals, and a 59% increase in referrals for child eating disorder issues, compared with the previous year²⁸. These annual figures show that high referral rates in recent months are not just

Science Evidence Advice – Impact of COVID-19 protections in Wales

DRAFT -NOT WELSH GOVERNMENT POLICY

 $^{^{26}}$ NCMP changes in the prevalence of child obesity between 2019 to 2020 and 2020 to 2021 - GOV.UK (www.gov.uk)

²⁷ The Co-SPACE study (Oxford Health NHS Foundation Trust)

²⁸ Children's Mental Health and the COVID-19 Pandemic (parliament.uk)

making up for families delaying seeking help early in the pandemic but reflect greater demand for child mental services since the pandemic.

The Mental Health of Children and Young People in England 2020 found increased prevalence in mental health problems in July 2020 compared with 2017, particularly for attentional difficulties among younger boys (aged 5–10 years)²⁹. Children with a probable mental health disorder in July 2020 were more than twice as likely to live in a household that had fallen behind with payments during the pandemic, compared to their peers.

Findings from a UK-based longitudinal online survey using the Strengths and Difficulties Questionnaire (SDQ) found increases in parent-reported symptoms of behavioural and attentional difficulties between March 2020 and March 2021, a period when most UK children were not physically attending school and restrictions were at their highest³⁰. Symptoms followed patterns according to restrictions. Symptoms increased throughout the first national lockdown (March–June 2020), decreased and stabilised as restrictions eased, increased again from January 2021, when a further national lockdown was introduced, and then decreased again when most children returned to school in March 2021. Both parent-reported and adolescent-reported symptoms were the highest during periods where levels of restrictions were high, and schools were closed to most children.

442 children took part from more than 2,300 families in a survey of children from the Norwegian Family Dynamics study during school closures resulting from the pandemic³¹. The median age of children was 11 years old. The children reported feeling less sad, scared/uneasy, angry and unsafe compared to before the government initiated the schools closures. However, the children felt more lonely and had more difficulty concentrating and sleeping at night compared to before the government initiated the schools closures. Older children who reported family stress and instability or reported that they missed their friends were more negatively impacted than those not reporting those things.

In comparison Sweden who did not issue any lockdowns during the time period of the pandemic still saw a significant decreases in psychosocial of well-being of middle school children aged between 9 and 11 years old, though the level of emotional problems was unchanged³².

When exploring the impact of lockdown on children's mental health, average trends can mask considerable variation between individuals. The OxWell School Survey 2020 which asked 19,000, 8 to 18 year olds from 237 schools in 6 counties in England about the impact of the Covid-19 pandemic on the wellbeing of young people during the school closure period of May to July 2020³³. (19,000 8-18 year-olds) found that across all ages 25-41% of children said they felt happier during lockdown. It found that children who had previously accessed mental health support were more likely than their peers to report a deterioration in their wellbeing during lockdown, as well as depression and anxiety. It found that children who

²⁹ Mental Health of Children and Young People in England, 2020 (survey, NHS Digital)

 $^{^{30}}$ Young people's mental health during the COVID-19 pandemic

³¹ The impact of school closure and social isolation on children in vulnerable families during COVID-19: a focus on children's reactions | SpringerLink

 $^{^{32}}$ Swedish middle school students' psychosocial well-being during the COVID-19 pandemic longitudinal study 33 the OxWell School Survey 2020

experienced food poverty were more likely than their peers to report a deterioration in their wellbeing during lockdown, and to have depression or anxiety.

Impact of protections on education

Registration for early years education in England remained fairly high during the pandemic as shown in Tables 1 and 2³⁴.

Table 1. Education provision for children under 5 years old, 15-hour entitlement, by age, England.

Time period	2_year_olds as % of 2018	3_year_olds as % of 2018	4_year_olds as % of 2018
2018	100%	100%	100%
2019	96%	100%	99%
2020	93%	99%	99%
2021	80%	91%	97%
2022	87%	93%	96%

Table 2. Education provision for children under 5 years old, 30-hour entitlement, by age, England.

Time period	3_year_olds as % of 2018	4_year_olds as % of 2018
2018	100%	100%
2019	109%	114%
2020	115%	120%
2021	109%	116%
2022	115%	122%

However (and similar to older school children) attendance was impacted especially in the first year of the pandemic. The Health Foundation made the following statements about education loss for pupils in England³⁵. They estimated by the end of the 2020/21 spring term that primary school children had lost 2-2.3 months of reading progress and 3.1 to 3.6 months of progress in maths. Year 8 pupils (12-13 years old) had lost 1.6 and year 9 pupils (13-14 year olds) had lost 2 months of reading progress. The attainment gap between disadvantaged pupils and their peers has grown during the pandemic. Since summer 2021

³⁴ Education provision: children under 5 years of age (explore-education-statistics.service.gov.uk)

³⁵ The continuing impact of COVID-19 on health and inequalities - The Health Foundation Science Evidence Advice – Impact of COVID-19 protections in Wales DRAFT -NOT WELSH GOVERNMENT POLICY

there has been some recovery in learning, but overall, pupils are not performing as well in reading and maths as pre-pandemic cohorts.

An article written for BBC Wales News listed several negative impacts of the pandemic on education³⁶. Compared to pre-pandemic levels school absence more than doubled. For secondary school pupils, 16.3% of pupils were absent during 2021-22, compared to 6.2% of pupils in 2018-19. For primary school pupils, 11% of pupils were absent during 2021-22, compared to 5.4% of pupils in 2018-19. Absences of pupils from poorer backgrounds was higher with nearly 18% of children absent who are entitled to free school meals, compared to 11.8% of pupils not entitled to free school meals. Alongside restrictions and school closures, COVID-19 itself had a direct impact on absences in 2021-22, with 69.1% of pupils missing at least half a day's schooling due to Covid-19 reasons.

The school starters study aimed to explore the impact of the disruption caused by the pandemic on children's transition and adjustment to Reception classes across England. Data was collected from 53 schools in England between October 2020 and January 2021. Findings showed that 76% of schools reported children needed more support when entering school in Autumn 2020 than previous school years³⁷. Communication and language development; personal, social and emotional development; and literacy were all cited as particular areas of concern by schools. 56% of parents were concerned about their children starting school following the lockdown. However, once the school year had started most parents (85%) reported that children had settled well, and they were no longer concerned about their child's ability to cope.

The Institute for Fiscal Studies (IFS) published an article on the 1st February 2021 highlighting pupils across the UK have lost at least half a year of usual in person schooling due to the pandemic³⁸. They highlighted that evidence available suggested that the loss of schooling would lead to lower educational progress and skills. The educational losses would be particularly large for disadvantaged pupils. The IFS estimated a potential lifetime loss in earnings of £350bn in relation to missed education. The IFS also estimated that if efforts by schools, teachers, children, parents and charities allowed to mitigate for 75% of this effect, the total lifetime earning loss would still be £90bn.

During most of the COVID-19 pandemic, pupils have been required to self-isolate upon infection or close contact with a confirmed COVID-19 case, reducing the number of face-to-face teaching days experienced by pupils. As at 1 July 2022, it is estimated that 26.1% of pupils have missed more than a week of face-to-face learning due to a known COVID-19 related reason since 6 September 2021 and 86.1% of pupils have missed more than a week for any reason.³⁹ In the week to 16 July 2021, 8.6% of pupils were absent due to a known COVID-19 related reason.⁴⁰ By the week of 27 June to 1 July 2022, this had reduced to 1.3%.⁴¹

³⁶ Covid: Wales' school absences double since pandemic - BBC News

³⁷ The School Starters study (April_2021)

³⁸ Costs of lost schooling could amount to hundreds of billions in the long-run | Institute for Fiscal Studies (ifs.org.uk)

³⁹ Attendance of pupils in maintained schools: 6 September 2021 to 1 July 2022 | GOV.WALES

⁴⁰ Pupils present in maintained schools: 7 September 2020 to 23 July 2021 | GOV.WALES

⁴¹ Attendance of pupils in maintained schools: 6 September 2021 to 1 July 2022 | GOV.WALES Science Evidence Advice – Impact of COVID-19 protections in Wales DRAFT -NOT WELSH GOVERNMENT POLICY

Pupils present by day, 7 September 2020 onwards Attendance of pupils by day, 6 September 2021 onwards 90 80 70 cent of pupils present 100 90 60 50 40 80 70 30 20 10 60 Percentage Per 50 40 07-Sep 07-Dec 22-Ma 30 Source: Schools in Wales 20 (a) Schools open to all pupils from 14 September 2020 (b) All secondary schools in Wales moved to online remote learning for the last week of 10 (c) Air secondary sections in water invest to online terinde learning term before Christmas. Many primary schools also closed during the before Christmas (14 to 18 December 2020).

(c) Schools closed to most pupils from 4 January 2021. 0 06-Sep 15-Nov 24-Jan 28-Mar 20-Jun (d) A phased return of Foundation Phase pupils began on 22 February 2021. Date (e) From 15 March 2021, all remaining primary school children and children in qualification years were able to return to learning on site.

Figure 18. Percentage of pupils present in school, 2020/21 and 2021/22 school years.

Evidence from a Welsh study of education in children aged 3 to 13 suggests that COVID-19 protections, including disruptions and restrictions in education, had a negative effect on children's learning as well as their mental and physical wellbeing. These may have also introduced or exacerbated existing inequalities, with children living in poverty being most affected through lack of regular meals, conditions triggering stress and anxiety in the home, limited opportunities to access digital resources for learning, or limited access to outside space for physical activity. Younger children, and those from disadvantaged communities have been most affected in terms of learning and levels of achievement. Children with disabilities were particularly affected by decreased activity. However, the evidence found is weak and lacks recent and long term data.⁴²

Source: Schools in Wales

A further study of the disruption to learning amongst 16 to 19 year olds also found that students from disadvantaged and vulnerable groups were most affected and looked at ways in which students could be supported for example increasing one to one or small group support, extra maths and English lessons and increasing learning hours or providing catch up session in school holidays⁴³.

Impact of protections on psychological wellbeing

(f) From 12 April 2021, all remaining pupils were able to return to learning on site

Data from the Public Engagement Survey on Health and Wellbeing during Coronavirus Measures for Wales show that a greater proportion of respondents reported worrying 'a lot' about their own mental health and wellbeing during periods of high restrictions (peaking at 26% in May 2020; 30% in January 2021). The percentage of respondents reporting 'never' feeling lonely decreased from 70% in the week ending 20 December 2020 to 58% in the week ending 10 January 2021, which coincided with the level 4 restrictions imposed from

What is the impact of educational and other restrictions during the COVID-19 pandemic on children aged 3-13 years? | Health Care Research Wales (healthandcareresearchwales.org)
 A rapid review of strategies to support learning and wellbeing among 16-19 year old learners who have experienced significant disruption in their education as a result of the COVID-19 pandemic | Health Care Research Wales (healthandcareresearchwales.org)

midnight on 19 December 2020. This evidences a negative impact on wellbeing and loneliness from coronavirus restriction measures.⁴⁴

Based on all six measures of the De Jong Gierveld loneliness scale (which covers both emotional and social loneliness), the percentage of people in Wales found to be lonely varied little in the three years: 2019-20 15%; 2020-21 13%; 2021-22 13%. One measure saw a big rise, however: 19% of people said they missed having people around them in 2019-20, compared with 57% in 2020-21 and still at 39% in 2021-22.

Table 3. Responses to the six measures of the De Jong Gierveld loneliness scale

Six questions relating to the De Jong Gierveld loneliness scale (which covers both emotional and social loneliness) 2020-21 2021-22 2019-20 Miss having people around (%) 19 57 39 More or less 17 14 14 No 64 29 47 Have plenty of people to rely on (%) 79 78 69 Yes More or less 21 14 14 10 8 No Often feel rejected (%) 7 5 В 8 More or less 6 6 No 84 89 88 Experience a general sense of emptiness (%) 10 10 10 More or less 12 11 10 No 78 79 80 Feel close to enough people (%) 75 85 85 More or less 17 10 9 No 8 5 6 Can trust many people completely (%) 59 67 Yes 67 More or less 26 21 20 12 15 14 People feeling lonely - derived from 2019-20 2020-21 2021-22 responses to the 6 questions. (%) Not lonely (0) 33 17 29 51 71 58 Sometimes lonely (1-3) Lonelu (4-6) 15 13 13 Source: National Survey for Wales. Sample size range (valid responses): 10,900 to 11,450 15,750 12,500 to 12,550

ONS analysis in Figure 19 shows that happiness generally increased and anxiety generally decreased from the week ending 30 March 2020 to summer 2020, when coronavirus restrictions were eased. Happiness fell and anxiety increased in January 2021, which coincides with increased restrictions during the winter 2020/2021 wave, before improving throughout 2021. These negative wellbeing impacts may relate to the coronavirus

COVID10 Recovery Profile

⁴⁴ COVID19_Recovery_Profile_v1s.knit (shinyapps.io)

restrictions⁴⁵ although they may also relate to economic worries: claimants (Alternative claimant count as percentage of Economically active) are also shown for context.

The ONS Personal Wellbeing in the UK survey found that, in the period between April 2020 to March 2021 (which is notably during the COVID-19 pandemic), average ratings of anxiety increased in Wales and the South West of England compared with the previous period but ratings did not increase in the North East of England. Similarly, average ratings of happiness and of feeling that the things done in life are worthwhile declined in Wales and the South West of England in the period, but did not decline in the North East of England.⁴⁶

PHW analysis, using data from November 2020 to January 2021, found that the top two challenges contacts thought they would face during self-isolation were suffering from anxiety or mental health problems (11.7%) and looking after children (11.2%). For women and young people aged 18-29, the top concern was anxiety or mental health problems. For ethnic minority groups, and those aged 30-49, the top concern was looking after children. Women, young people, ethnic minority communities and contacts living alone were shown to be more likely to experience challenges during self-isolation. Using data between September and October 2020, the five most commonly reported challenges experienced by contacts during self-isolation were: wanting to see family (66.7%), wanting to see friends (60.6%), a lack of exercise (58.6%), loneliness (31.2%) and mental health difficulties (24.6%).

Survey data from ONS suggests people on low incomes have been negatively impacted by COVID-19 more than people on high incomes. As of May 2021, those in the lowest income bracket (up to £10,000 per annum) were more likely to report negative impacts to personal wellbeing in comparison with higher brackets; such as the coronavirus pandemic making their mental health worse (18%) and feeling stressed or anxious (32%).⁴⁸

National Survey for Wales analysis showed that the percentage of survey respondents reporting high levels of anxiety increased from 20.4% in 2019-20, to 22.9% in May 2020. Anxiety levels reduced to 19.0% in July 2020, when COVID-19 restrictions were relaxed due to low prevalence, before increasing during autumn 2020 and winter 2020-21 to 24.0%.

⁴⁵ Total population estimates on personal and economic well-being across time - Office for National Statistics (ons.gov.uk)

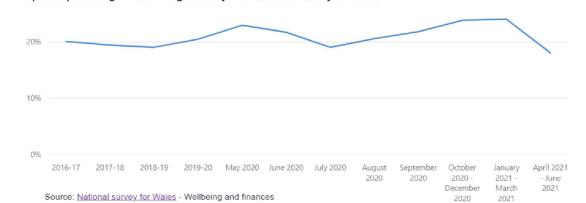
⁴⁶ Personal well-being in the UK - Office for National Statistics (ons.gov.uk)

⁴⁷ https://phw.nhs.wales/publications/publications1/self-isolation-confidence-adherence-and-challenges-behavioural-insights-from-contacts-of-cases-of-covid-19-starting-and-completing-self-isolation-in-wales/

⁴⁸ Personal and economic well-being in Great Britain - Office for National Statistics (ons.gov.uk)

Figure 19. Trend in proportion of the population reporting high anxiety in National Survey for Wales.

Reported percentage levels of high anxiety from National Survey for Wales



The National Survey for Wales also asks questions around loneliness, using the De Jong Gierveld scale. In 2019-20, based on all six measures, 15% of people in Wales were found to be lonely⁴⁹. Perhaps surprisingly, this fell to 13% in 2020-21. However, there is a marked variation in the percentage of people who say they feel lonely in each of the individual measures. In 2019-20, 36% of people said they missed having people around them compared with 71% in 2020-21. Conversely, fewer people felt rejected in 2020-21 and more respondents said they had enough people they felt close to.⁵⁰ The National Survey for Wales also identified a positive change in community cohesion in 2020-21, when 69% of people had a sense of community, compared with 52% in 2018-19. This fell slightly to 64% in 2021-2022.⁵¹ For all National Survey for Wales results, comparisons between the 2020-21 survey and previous years must be done with caution due to the changes in methodology.

The percentage of respondents from the Survey of Public Views on the Coronavirus who rated the threat level posed to them personally by COVID-19 as 'high' or 'very high' peaked at 44% in April 2020 and fluctuated around 33% throughout summer 2020 before increasing to 39% in January 2021 during the second COVID-19 wave. During the first half of 2021, perceptions of COVID-19 as a personal threat to individuals decreased to around 23%, coinciding with the vaccination programme rollout and easing of COVID-19 protections. Perceptions of COVID-19 as a personal threat to individuals decreased further in 2022 to around 20% by May 2022, coinciding with further releasing of the remaining COVID-19 protections, such as reduced PCR testing and cessation of face mask wearing in indoor and healthcare settings, see Figure 21.

⁴⁹ Loneliness (National Survey for Wales): April 2019 to March 2020 | GOV.WALES

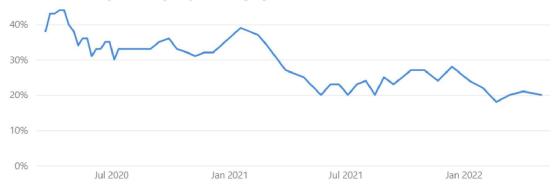
⁵⁰ National Survey for Wales: results viewer | GOV.WALES

⁵¹ Wellbeing of Wales: 2021 | GOV.WALES

Science Evidence Advice – Impact of COVID-19 protections in Wales DRAFT -NOT WELSH GOVERNMENT POLICY

Figure 20. Trend in perceived threat posed by COVID-19. Data for Wales.

Perceived threat posed to you personally by COVID-19



Source: Welsh Government - <u>Survey of public views on the coronavirus (COVID-19)</u>
Data covering period: 19 March 2020 - 02 May 2022.

Psychological effects on care staff and care-home residents

The Wales COVID-19 Evidence Centre published a Rapid Review on infection control and prevention measures and consequential adverse outcomes for care home residents and staff. ⁵² Reported findings highlighted cognition, mental wellbeing and behaviour of care home residents were negatively affected during COVID-19 restrictions. Increased IPC procedures during the COVID-19 pandemic increased stress and burden among care staff because of increased workload and dilemmas between adhering well to IPC procedures and providing the best care for the care recipients.

The House of Commons Committee reported that the NHS Confederation presented evidence that the pandemic impacted the mental wellbeing of the workforce. Factors included increased workload and working hours, intensity of working in a different environment, impact of the heroes narrative, emotional strain from seeing large numbers of patients dying, anxiety about their own and loved ones' health and infection risk, guilt experienced by those shielding or working from home and worries about being able to provide high-quality care. NHS Providers emphasised that COVID-19 had exacerbated existing challenges around workforce, burnout and resilience.⁵³

Nestor et al., (2021) found that nursing and healthcare staff working exclusively in elderly care settings reported stress and anxiety due to constantly changing IPC protocols (specifically related to PPE) with little to no explanation of the rationale driving the protocol

⁵² RR00018 Wales COVID-

¹⁹_Evidence_Centre_Rapid_Review_Infection_control_and_prevention_measures_care_homes_Nov ember-2021.pdf (primecentre.wales)

⁵³ Workforce burnout and resilience in the NHS and social care (parliament.uk)

changes. Constantly changing IPC protocols was ranked 4th highest of 17 workplace stressors.⁵⁴

A study in the Netherlands reported that staff described experiencing emotions of guilt and injustice when implementing IPC measures to reduce social contact, such as restricted visitation. Elderly care practitioners observed loneliness, depressive symptoms, decreased intake, increased somatic symptoms, physical deterioration and, in psychogeriatric residents', rapid cognitive decline and changes in neuropsychiatric symptoms including agitation and aggression as a result of the restrictions in visitations⁵⁵

A study in Belgium reported that, from interviews with residents in June 2020, nursing home residents experienced losses of freedom, social life, autonomy, and recreational activities that deprived them of their basic psychological needs following the introduction of IPC measures such as isolation, social distancing and reduced or paused visitation. These losses of freedom impacted on mental wellbeing, and residents expressed feelings of depression, anxiety, frustration and decreased meaning and quality of life.⁵⁶

Suarez-Gonzalez et al., (2021) (review of 15 papers, examining a total of 6,442 people with dementia) identified that IPC measures to limit social contact, such as lockdowns and confinement measures brought about by the COVID pandemic, damaged cognitive and psychological health and functional abilities.

A 2021 study in the UK investigating the potential impact of changes to care home staff and visitor testing protocols reported that rapid testing had the potential to enable connections, reopen care homes to visitors and to gradually lift restrictions. It reported that the restoration of visits by GPs and other healthcare professionals with increased healthcare support for residents, and healthcare advice for care home staff, was seen as a potential positive outcome.⁵⁷

Impact of protections on physical health

Mobility in parks increased sharply in July 2020 following relaxation of 'stay local' COVID-19 protections. Park mobility decreased sharply in late September 2020 following tightening of local COVID-19 protections due to increasing prevalence. After Wales entered a 2-week firebreak on 23 October 2020, mobility in parks, retail and recreation decreased sharply. Park mobility increase in May 2021, following Wales' move to Alert Level 2 and increased number of people permitted to attend organised outdoor activities.⁵⁸

⁵⁴ Assessing the impact of COVID-19 on healthcare staff at a combined elderly care and specialist palliative care facility: A cross-sectional study - Sarah Nestor, Colm O' Tuathaigh, Tony O' Brien, 2021 (sagepub.com)

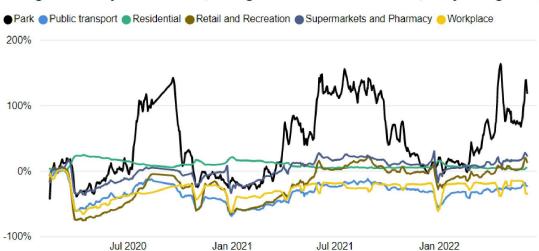
⁵⁵ Dilemmas With Restrictive Visiting Policies in Dutch Nursing Homes During the COVID-19 Pandemic: A Qualitative Analysis of an Open-Ended Questionnaire With Elderly Care Physicians -ScienceDirect

⁵⁶ How to bring residents' psychosocial well-being to the heart of the fight against Covid-19 in Belgian nursing homes—A qualitative study | PLOS ONE

⁵⁷ Enhanced lateral flow testing strategies in care homes are associated with poor adherence and were insufficient to prevent COVID-19 outbreaks: results from a mixed methods implementation study | Age and Ageing | Oxford Academic (oup.com)

⁵⁸ Coronavirus control plan: alert levels in Wales | GOV.WALES
Science Evidence Advice – Impact of COVID-19 protections in Wales
DRAFT -NOT WELSH GOVERNMENT POLICY

Figure 21. Change in mobility from baseline, Welsh local authorities, 7 day rolling average.



Change in mobility from baseline, average of Welsh local authorities, 7-day rolling average

Source: Google COVID-19 Community Mobility Reports

A survey by Girl Guiding UK found 59% of girls aged 4-10 surveyed reported missing play time at school through the pandemic⁵⁹. 33% of girls surveyed said they felt sad most of the time during lockdown. According to Sport England, 47% of children and young people aged 5-16 in England took part in 60 minutes of physical activity per day before the pandemic, reducing to 45% in subsequent years (2019-20 and 2020-21)⁶⁰. Amongst adults, Sport England found that 70.2% of those aged 16 to 34 in England were active 150+ minutes per week in 2018-19 but this fell to 67.6% in 2019-20 and 66.5% in 2020-21⁶¹.

A cross-sectional longitudinal survey exploring the UK population's activities during the pandemic found habits changed during the period of UK lockdown⁶². The survey assessed the frequency and mode of doing the activities (online or in-person) across sixteen selected activity groups, as defined by the UK National Time Use Survey. The first survey, April 2020, was taken by 3,240 participants and the last survey in July 2021 by 1,036. There were 4 more surveys conducted between those two dates. The results show that cultural activities, spending time with others, and travelling, were the activities with the largest proportions of frequency and mode changes. Respondents tended to do cultural activities, get active, and perform group activities less frequently, and accessed activities online. March to October 2020 showed the most significant shift from accessing activities in-person to online.

⁵⁹ Girls tell us how they've been affected by Covid-19 crisis | Girlguiding

⁶⁰ https://sportengland-production-files.s3.eu-west-2.amazonaws.com/s3fs-public/2021-

^{12/}Active%20Lives%20Children%20and%20Young%20People%20Survey%20Academic%20Year%202020-21%20Report.pdf?VersionId=3jpdwfbsWB4PNtKJGxwbyu5Y2nuRFMBV

⁶¹ Active Lives Adult Survey November 2020-21 Report (sportengland-production-files.s3.eu-west-2.amazonaws.com)

⁶² To Zoom or not to Zoom: A longitudinal study of UK population's activities during the COVID-19 pandemic | PLOS ONE

Science Evidence Advice – Impact of COVID-19 protections in Wales DRAFT -NOT WELSH GOVERNMENT POLICY

Following the UK's 'Freedom Day' on July 19th 2021, respondents stated they engaged in cultural activities and group activities at a significantly lower frequency than before the pandemic. Additionally, more than half of respondents accessed many activities, such as spending time with others, shopping, work and studying, online or in a hybrid way in July 2021. The authors highlight respondents were predominantly female (83.4%), 62% of respondents were aged over 55 years, and most had a high-level of education, with around 47% with bachelor's degree. Most of the participants were living in Southern England, with the highest proportion of respondents in the Southeast (22.5%), London (13.5%) and Southwest (10.5%).

Impact of protections on the environment

Kirli et al. (2021) examined UK electricity demand before 'stay at home' protections were in place (week commencing 2 March 2020) and compared with when lockdown protections were in place (week commencing 23 March 2020). Average load decreased between these dates due to commercial users (e.g. factories and businesses) shutting down. This decrease reflected the reduction in the size of the economy (as referenced in other section). There remains an environmental effect, due to the Renewable Energy Share (RES): there is a decrease in reliance on generation by other energy types when demand is lower. RES increased from 25% at the start of March 2020 to 33% in the early March 2020 lockdown period.

The number of government measures introduced during the COVID-19 pandemic in the UK and Wales led to dramatic shifts in numbers of people working from home or on furlough at different stages in the pandemic. Capturing the impact on the environment will support future policy and considerations of the impact of flexible working patterns and commuting behaviours on well-being⁶³⁶⁴

Environmental effects such as global temperatures are rising at an unprecedented rate, driven by a build-up of greenhouse gases in the atmosphere. These harmful gases can have devastating impacts for human health and wellbeing.⁶⁵

Findings from a Rapid Review (RR) conducted by the Wales COVID-19 Evidence Centre (WCEC) suggested that working from home reduced greenhouse gas emissions compared to office work with travel by car. This RR also suggests that there is a smaller benefit for working from home compared to office work by train. ⁶⁶ Therefore, Welsh Government COVID-19 protections policy for working from home where possible had a positive impact on greenhouse gas emissions, and by extension had a beneficial impact on the health of the Welsh population.

⁶⁴ Climate and health: applying All Our Health - GOV.UK (www.gov.uk)

⁶⁵ Climate and health: applying All Our Health - GOV.UK (www.gov.uk)

⁶⁶ WCEC, RR00031, What impact have COVID-19 induced changes in working practice had on greenhouse gas emissions? A rapid review

Science Evidence Advice – Impact of COVID-19 protections in Wales DRAFT -NOT WELSH GOVERNMENT POLICY

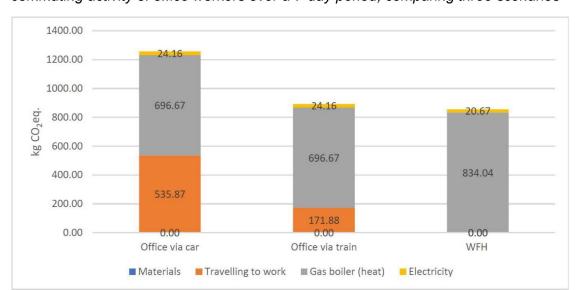


Figure 22: Greenhouse gas emissions associated with the energy use and commuting activity of office workers over a 7-day period, comparing three scenarios

Source: WCEC, RR00031, What impact have COVID-19 induced changes in working practice had on greenhouse gas emissions? A rapid review

Ricardo (2020) published a report for Welsh Government to consider the impacts of COVID-19 on air quality. Headline findings were that from the 16th of March 2020 (the start of recommended social distancing) NOx and NO2 levels decreased by an estimated 49% and 36% respectively. These decreases occurred during daytime and were consistent with a reduction in road traffic. Ozone increased, by an average of 18%. This was due to the reduced concentrations of NOx, which typically scavenges ozone. It is possible that some of these improvements in the external environment may have been matched by more time spent indoors: DEFRA Air Quality Expert Group (2020) commented that restrictions on leaving the house may have led to prolonged exposure to PM2.5 and volatile organic compounds within the home, resulting from domestic tasks including cooking and cleaning. The effect may be lessened for those working from home in normal times (with no restrictions on leaving the house) though probably not eliminated.67,68

Kylili et al. (2020) calculated, by means of a theoretical study based on university workers, the benefit of decreased travel when home working to be a 51% decrease in carbon emissions.⁶⁹

Beno (2021) reported a study in which Austrian employees were surveyed at four points in 2020, before and after the start of the pandemic. This reported that a third of employees who did not work from home before COVID-19, may continue to work from home. A third of employees reducing their travel carbon dioxide emissions by around 50% would result in a

⁶⁷ Analysis of COVID-19 lockdown on UK local air pollution (ricardo.com)

^{68 2007010844} Estimation_of_Changes_in_Air_Pollution_During_COVID-

¹⁹_outbreak_in_the_UK.pdf (defra.gov.uk)

⁶⁹ Full article: The role of Remote Working in smart cities: lessons learnt from COVID-19 pandemic (tandfonline.com)

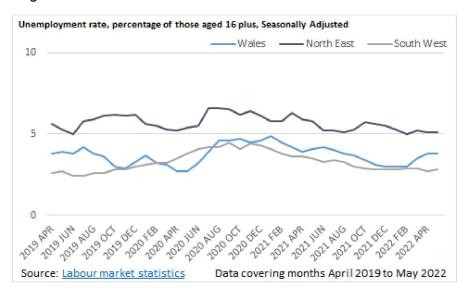
one-sixth reduction in travel carbon dioxide emissions amongst a large proportion of society.⁷⁰

Impact of COVID-19 protections on the economy Employment

COVID-19 protections like the furlough scheme had a positive impact maintaining employment levels in 2020, but increased the number of people claiming state benefits.

Employment (16-64 years) decreased from 74.0% in January 2020 to 72.0% in August 2020. Unemployment (16+ years) increased from 2.7% in April/May 2020 to 4.9% in January 2021. This coincided with the wind down of the furlough scheme between July 2020 and September 2020. North East England and South West England are also shown for comparison.

Figure 23. Unemployment rates in Wales, North East England and South West England.



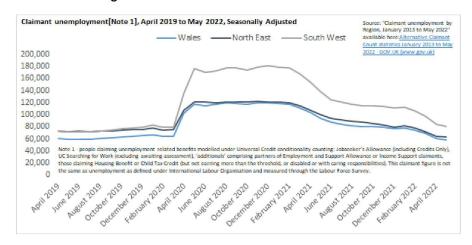
Claimant unemployment, whether on JSA, Universal Credit (UC) or "Additionals", rose for Wales from a February 2020 figure of 63,982 to a December 2020 figure of 119,802. By May 2022 it had fallen to even under the February 2020 level: 58,760. North East England and South West England are also shown for comparison.

DRAFT -NOT WELSH GOVERNMENT POLICY

INQ000300217_0040

⁷⁰ Frontiers | Data on an Austrian Company's Productivity in the Pre-Covid-19 Era, During the Lockdown and After Its Easing: To Work Remotely or Not? (frontiersin.org)
Science Evidence Advice – Impact of COVID-19 protections in Wales

Figure 24. Trend in unemployment claimants in Wales, North East England and South East England.



The number of people claiming UC sharply increased in spring 2020 and, despite relaxation of COVID-19 protections, levels have remained high.

Figure 25. Universal Credit – Number of people claiming in Wales.



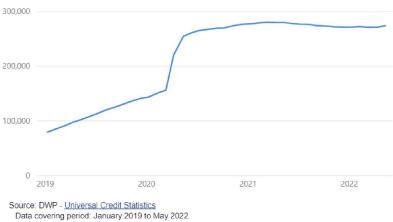
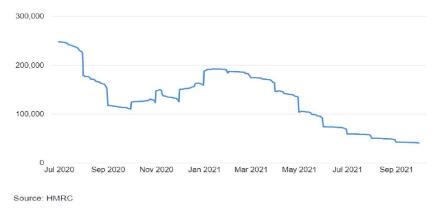


Figure 26. Daily number of employments on furlough supported by the Coronavirus Job Retention Scheme (CJRS).

Daily figures for the number of employments on furlough supported by the Coronavirus Job Retention Scheme (CJRS)



Full-time working, part-time working, employee pay and hours

By mid-pandemic there had been a small shift towards being a full-time employee and away from self-employment. Part-time working also fell a little.

Using data from the Annual Population Survey (the APS is not a stand-alone survey; it uses data combined from 2 waves of the main Labour Force Survey LFS collected on a local sample boost) it is possible to compare Wales' full-time and part-time employment prepandemic (financial year 2019-20) versus mid-pandemic (the year 2021).

Full-time remained similar, part-time fell slightly, employment fell only very slightly:

Table 4. Wales APS data on employment pre and post pandemic

All(employees, self-employed, other)							
Wales, source:				Ratio mid-pandemic			
APS	full-time	part-time	Total	to pre-pandemic			
Apr 2019-Mar 2020	1,055,400	398,300	1,453,700				
ratio	72.6%	27.4%					
Jan 2021-Dec 2021	1,060,600	384,100	1,444,700	99.4%			
ratio	73.4%	26.6%					

There was a more noticeable shift from self-employment, particularly full-time self-employment.

Table 5. Wales APS data on self-employment pre and post pandemic

employees, self-employed

Wales, source: full-time APS part-time pre: Employee 904,000 335,000 pre: Self-employed 148,800 56,600 mid: Employee 323,300 927,000 mid:Self-employed 132,800 56,300 Ratios mid-pandemic to pre-pandemic Employee 102.5% 96.5% Self-employed 89.2% 99.5%

Using data from the Annual Survey of Hours and Earnings (ASHE is based on a 1% sample of employee jobs taken from HM Revenue and Customs PAYE records) it is possible to compare Wales' full-time and part-time median pay for employees. For this purpose, prepandemic refers to the ASHE survey dispatched to those surveyed in April 2019 and midpandemic refers to the ASHE survey dispatched to those surveyed in April 2021.

Table 6. Wales ASHE full-time and part-time median pay for employees

Wales,		
source: ASHE full-	time pa	rt-time
median weekly pa	ay (gross, £), e	mployees
April 2019	540	197
April 2021	571	216
median he	ours, employee	es
April 2019	37.5	19.6
April 2021	37.5	20
median hourly pay (gross, £, by div	iding above)
April 2019	14.40	10.07
April 2021	15.22	10.82
% increase	105.7%	107.4%

Changing profile of the economically inactive

ONS has provided a count for 50 to 64-year-olds who are inactive using data from the Labour Force Survey (LFS). (The survey is sent out in April - for example the sample size during April to June 2021 was 87,904 individuals in 39,799 households).

The UK rate of economic inactivity amongst the 50-64 age group had been falling by about 0.5% per year until 2019 when 25.5% of that age group were inactive.

It then rose during the pandemic: 2020 26.0%; 2021 26.3%; 2022 26.5% - only varying a little as a percentage, perhaps taking the economically active in that age group back to the 2017 level. However, this masks an increase of over 7% in the *number* of 50 to 64-year-olds

who were economically inactive, approximately the reverse of what was seen in the 35-49 age group:

Table 7. ONS Labour Force Survey UK economic inactivity levels, all genders

Bource: ONS analysis of La	abour Force Survey		Economic inactivity leve	s, all genders, UK (Thousands)		
Age	2019	2020	2021 2022 (all 2022 su	bgroups are by subtraction and a seasonal adjustment)	Difference (2022 versus 2019)	Difference as % of 2019 inactives
16 to 64	8,619	8,609	8,806	8,748	129	1.5%
50-64	3,245	3,342	3,417	3,476	231	7.1%
35-49	1,657; 3,717	1,624	1,521	1,527	-130	-7.9%
16-34 (by subtraction)	(estimated)	3 644	3.867	3.745	28	0.8%

A breakdown is available for the 2020 and 2021 50-64 population who were economically inactive (Other includes students, those waiting results of a job application, those who don't need or want employment):

Table 8. ONS Labour Force Survey UK economic labour market status of people aged 50-64 years

UK, Source: ONS analysis of La	bour Force Su	rvey	Economic labour market status of people a	ges 50-64
Age 50-64	2020	2021	Difference (2021 versus 2020) Difference as	% of 2020 inactives
Inactive, of which:	3,342	3,417	76	2.3%
Sick or disabled	1,227	1,260	33	2.7%
Retired	1,107	1,201	93	8.4%
Looking after home or family	466	450	-16	-3.4%
Other	541	506	-35	-6.5%

When selecting the sub-group for economically inactive that applies to them the respondent is invited to give *one* response. Why was there was such an increase in 'Retired'? Could it be that those amongst the 'Sick or disabled' (long-term or temporary health conditions) who could afford to retire were inclined to do so? If so, the category 'Retired' may conceal an underlying reason of 'Sick or disabled'.

This conclusion may be suggested by looking at the next age group down (35-49 year olds), for whom retirement is not an option. Actually economic activity increased in that age group. But the difference between the increase of 'Sick or disabled' versus the overall drop in economically inactive in that age group is greater than the difference between the increase of 'Retired' amongst the 50-64 age group economically inactive versus the overall rise in economically inactive in the 50-64 age group:

Table 9. ONS Labour Force Survey UK economic labour market status of people aged 35-49 years

UK, Source: ONS analysis of La	bour Force Su	rvey	Economic labour market statu	is of people ages 35-49
Age 35-49	2020	2021	Difference (2021 versus 2020)	Difference as % of 2020 inactives
Inactive, of which:	1,624	1,521	-103	-6.3%
Sick or disabled	555	582	27	4.8%
('Retired' not selectable by this a	age group)			
Looking after home or family	753	676	-77	-10.2%
Other	310	256	-54	-17.5%

This is suggestive of sickness or disablement as a driver of economic inactivity in the time of the pandemic.

There are certain factors which may be driving sickness or disablement such as long COVID; pre-existing conditions that were below the threshold of 'Sick or disabled' that were then exacerbated by catching COVID-19; increases in health conditions other than long COVID, resulting from increases in NHS waiting lists; increases in mental health conditions

as a result of the pandemic; and changing perceptions of the acceptability of a 'Sick or disabled' response post-pandemic, leading to more responses of 'Sick or disabled'.

Reduced business income

A list of restrictions likely to affect businesses appears in the Annex: Gross Value Added, Gross Domestic Product and changes to restrictions likely to affect businesses.

The effect of the COVID-19 pandemic on the economy can be observed in the UK GVA index, which sharply decreased in spring 2020 during the first lockdown and decreased during winter 2020/2021 during the COVID-19 surge when COVID-19 protections were tightened and lockdowns were implemented.

Figure 27. Gross Value Added in Wales: Monthly chained volume index.



Source: Monthly gross domestic product by gross value added - Office for National Statistics (ons.gov.uk)

Data for Wales and English regions is only available Quarterly and to Q3 2021 but shows similar patterns.

GVA: Quarterly chained volume index -North East South West 104.0 99.0 94.0 89.0 Source: Quarterly regional labour 84.0 productivity, gross value added, hours and jobs - Office for National Statistics (ons.gov.uk) 79.0 74.0 2020 Q1 2020 Q2 2020 Q3 2020 Q4 2021 Q1 2021 Q2 2021 Q3

Figure 30. Gross Value Added in Wales: Quarterly chained volume index.

Business sentiment began to be affected very early in 2020, based on news coming out of Wuhan, China. The WHO (World Health Organization) declared a Public Health Emergency of International Concern (PHEIC) on 30 January 2020. The novel coronavirus was referred to as COVID-19 from 11 February 2020.

This early effect on the economy, due to business sentiment and global economic effects, is suggested by the low UK GVA indices for January and February 2020, compared with the same months in previous years.

Table 10: UK GVA

Month	2017	2018	2019	2020
	(2016=100)	(2017=100)	(2018=100)	(2019=100)
January	101.8	103.3	101.0	100.34
February	101.6	103.0	101.3	99.86
March	101.8	103.1	101.4	92.35
April	101.8	103.3	101.0	74.90

Source: Monthly gross domestic product by gross value added - Office for National Statistics (ons.gov.uk)

Wales figures are only actually available quarterly. By applying the UK ratio to the Wales quarterly figures it is possible to estimate Wales GVAs for January and February 2020, but since the estimate is dependent on GVA for the whole quarter, the estimates are likely to be too high or too low.

Table 11: Wales GVA estimates

Month	2020 (2019=100)
January	97.47
February	97.00
March	89.70
April	78.76

The impact of protections on business income in the March 2020 to May 2020 period can be compared with GVA changes, as well as inferring the impact from the mitigations put in place.

Box 1: Timeline of measures affecting business income in the first wave

March 2020

Measures that negatively affect business income: self-isolation; travel ban; work from home; stay at home; social distancing; ban on gatherings of more than 2 people; forced closure of non-essential shops, community spaces cafes, pubs, bars, restaurants, nightclubs, theatres, cinemas, gyms and leisure centres; holiday parks, caravan parks, campsites, amusement arcades and indoor play centres, tourist hotspots.

UK announced mitigation: £12 billion package of support (UK budget); coronavirus job retention scheme (the furlough scheme); self-employed income support scheme; annual leave carry over.

Wales announced mitigation: Retail, leisure and hospitality businesses with a rateable value of £51,000 or less with receive 100% reduction in business rates. Pubs with a rateable value between £51,000 and £100,000 with receive a £5,000 reduction. £500 million Economic Resilience Fund.

April 2020

Measures negatively affect business income: businesses required to take all reasonable steps to ensure the two metre social distancing rule is maintained between people on their premises.

May 2020

Measures negatively affect business income: entering the UK from overseas quarantine.

June 2020 onwards

The impact of protections on business income from June 2020 cannot usefully be compared with GVA changes. It may be of interest to contrast impact with mitigations put in place.

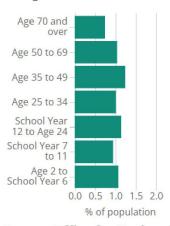
Impact of COVID-19 protections on societal inequalities Education

Children are less likely to become seriously ill with COVID-19 than older adults, so direct COVID-19 harms are lower in this age group.⁷¹

Figure 28. Covid infections, hospital admissions and deaths for all age groups of UK population January/ February 2021.

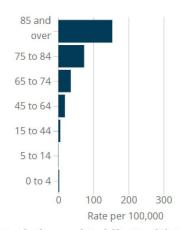
Infections

Estimated percentage of the population testing positive for the coronavirus (COVID-19) on nose and throat swabs, week ending 6 Feb 2021



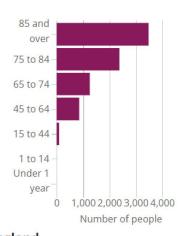
Hospital admissions

Overall COVID-19 positive hospital admission rates per 100,000, week ending 7 Feb 2021



Deaths

Number of deaths involving the coronavirus (COVID-19) by age group, England, registered week ending 29 Jan 2021



Source: Office for National Statistics and Public Health England

Although self-isolation may dampen transmission in the wider population, there will be significant impacts on children's learning and development, with impacts being greater for children with additional learning needs, from disadvantaged backgrounds, or younger learners who are less able to cope with learning from home. Hence, repeated isolation periods would exacerbate both these impacts and inherent inequalities.

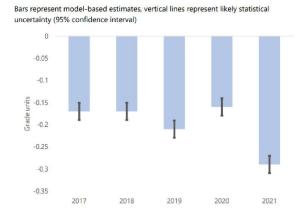
Qualifications Wales analysis reported that in Summer 2021, learners eligible for FSM achieved grades 0.29 of a grade lower than learners who were not eligible for FSM. This difference was larger in 2021 compared with previous years. In 2019, the gap was 0.21 of a grade. Since learners eligible for FSM are more likely to come from low income households or more deprived communities, this indicates that learners from more deprived communities may have experienced greater impact on education during the COVID-19 pandemic than less deprived communities. Education has been identified as a determinant of health. ONS analysis in 2017 showed a graded relationship between the level of qualifications and health, with adults with no qualifications being the least likely to report their general health as either

⁷¹ Coronavirus (COVID-19) weekly insights - Office for National Statistics (ons.gov.uk)

⁷² equalities-analysis-of-general-qualifications-in-summer-2021.pdf (qualificationswales.org)

"very good" or "good". 73 Hence a disproportionate impact on learners from more deprived communities could exacerbate existing health inequalities in the long-term.

Figure 29: Core model free school meals effect (eligible FSM learners relative to ineligible FSM learners)



Source: equalities-analysis-of-general-qualifications-in-summer-2021.pdf (qualificationswales.org)

Crime

The COVID-19 pandemic and related lockdown restrictions resulted in fluctuations in the level of crime in England and Wales. For police recorded crime, comparing October to December 2020 with the same period the previous year, total offences were 9% lower (1.4 million), theft offences were 27% lower (354,746) and knife-enabled crime was 16% lower (11,041). Total police recorded crime decreased in the year ending December 2020 by 8% to approximately 5.6 million offences, driven by falls during the periods of national lockdown, particularly April to June 2020 and mainly theft offences.

Since restrictions were lifted following the third national lockdown in early 2021, police recorded crime data show indications that certain offence types are returning to or exceeding the levels seen before the pandemic. While violence and sexual offences recorded by the police have exceeded pre-pandemic levels, theft offences and robbery remain at a lower level despite increases over the last nine months. The overall crime in the year to December 2021 increased driven by a 54% increase in fraud and computer misuse offences, possibly because these crimes were not impacted by lockdown restrictions.

Unemployment and income

The UK unemployment rate increased from 4% in January to March 2020 to a peak of 5.2% in October to December 2020, before returning to pre-pandemic levels in late 2021. Young people (16-24 years) have been disproportionately affected by the COVID-19 pandemic, with the unemployment rate increasing throughout 2020 by more than that observed for those aged 25 and over.⁷⁴ Since high unemployment rates are associated with increased risk of

⁷³ An overview of lifestyles and wider characteristics linked to Healthy Life Expectancy in England - Office for National Statistics (ons.gov.uk)

⁷⁴ Employment in the UK - Office for National Statistics (ons.gov.uk)
Science Evidence Advice – Impact of COVID-19 protections in Wales
DRAFT -NOT WELSH GOVERNMENT POLICY

developing chronic health conditions, the percentage of adults with chronic health conditions or long-standing illness would be expected to increase gradually following a period of high unemployment caused by COVID-19. A PHW report in October 2020 estimated that an increase in the unemployment rate in Wales from 3.8% in 2019 to 7% in 2020 would lead to an increase in the percentage of the population suffering from long-standing illness from 46.4% to 50.3% in 2022/23.⁷⁵

ONS analysis shows that the proportion of people who have ever been furloughed was higher (30%) for workers aged under 24 years and over 65 years, compared with 23% of workers aged 35 to 44 years. Single working parents were particularly affected, with 31% furloughed, compared with 24% of workers living as a couple with dependent children. Asian workers were 3.8% less likely to be furloughed compared with White workers. More disabled workers were furloughed than non-disabled worked (28% versus 26%), but this difference was not significant once personal and job characteristics were accounted for. A greater proportion of furloughed disabled workers were furloughed for more than three months when compared with furloughed non-disabled workers (51% versus 42%).⁷⁶

The Resolution Foundation reported that furloughed workers were six times more likely to be out of work in October 2021 following the end of the Coronavirus Job Retention Scheme than those employed normally.⁷⁷ It is hence possible that disabled workers may have been disproportionately impacted by the end of the furlough scheme compared with non-disabled workers.

DWP's Households Below Average Income statistics for the UK reported that between Financial Year Ending (FYE) 2020 and FYE 2021, the percentage of the population in low household income has decreased because median household income decreased (by 1.7% before housing costs and by 1.4% after housing costs), but individuals with lower incomes have seen their incomes rise. Since the COVID-19 pandemic started in March 2020, this indicates that the decrease in median household income was caused by the pandemic. However, the Gini coefficient, ranging from 0% (low) to 100% (high), measuring income inequality reduced slightly by 1% for median household income before and after housing costs. It should be noted that none of these changes were statistically significant and carry additional uncertainty due to changes in survey data collection and reduced data volumes arising from the COVID-19 pandemic. Additionally, due to increased uncertainty, reliable estimates for Wales are not available.^{78,79}

Mortality

Figure 30 shows that COVID-19 has had a disproportionate effect on older people. COVID-19 mortality generally increases with age. This was consistently observed in the first 15 months of the COVID-19 pandemic, with 59% of deaths involving COVID-19 in people aged 80 years and over in Wales between March 2020 and May 2021, despite accounting for only 6% of the Wales population. Similarly, 84% of deaths involving COVID-19 were in people aged 70 years and over, despite accounting for only 15% of the population. In contrast, only

⁷⁵ PowerPoint Presentation (nhs.wales)

⁷⁶ An overview of workers who were furloughed in the UK - Office for National Statistics (ons.gov.uk)

⁷⁷ Post-furlough blues • Resolution Foundation

⁷⁸ Households below average income: an analysis of the income distribution FYE 1995 to FYE 2021 - GOV.UK (www.gov.uk)

⁷⁹ Measures of poverty: April 2020 to March 2021 | GOV.WALES

2% of deaths involving COVID-19 were in people aged below 50 years in Wales between March 2020 and May 2021, despite accounting for 59% of the Wales population.^{80,81}

The COVID-19 vaccination programme launched in December 2020, with priority initially focused on older age groups. By 15 April 2021, 65% of people aged 70 and over in Wales had received 2 vaccine doses compared with 12% of people aged 20-59. Hence part of the impact that vaccine protection had on COVID-19 mortality in older age groups can be observed by comparing COVID-19 mortality from before the vaccine rollout (Sep-Nov 2020) with after the vaccine rollout (Mar-May 2021). Of all deaths involving COVID-19, the percentage of those deaths occurring in people aged 70 years and over reduced from 86% between September 2020 and November 2020, to 76% between March 2021 and May 2021.

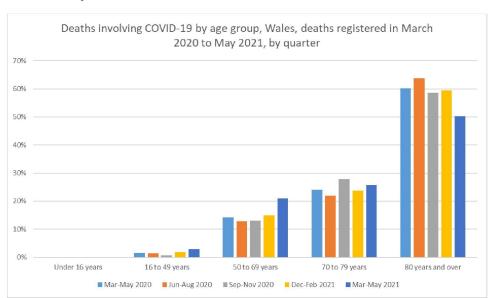


Figure 30. Deaths involving COVID-19 in Wales by age group and quarter March 2020 to May 2021

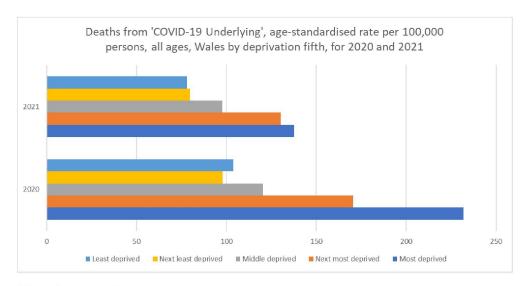
Figure 31 shows that the age-standardised death rate from underlying COVID-19 causes increased with increasing population deprivation in 2020 and 2021. Comparing the age-standardised death rate for the "Most deprived" and "Least deprived" populations, the health inequalities in mortality rates from COVID-19 reduced between 2020 and 2021. Between March 2020 and December 2020, the age-standardised death rate from underlying COVID-19 causes for the most deprived quintile was 2.2 times that of the least deprived quintile. However, between January 2021 and December 2021, the death rate for the most deprived quintile was 1.8 times that of the least deprived quintile, suggesting a reduction in deprivation health inequality in 2021, possibly due to COVID-19 vaccination protection, improved understanding of COVID-19 disease and increased availability of COVID-19 treatments, compared with 2020 when generally more COVID-19 protections were in place.

⁸⁰ Deaths involving the coronavirus (COVID-19) by age group, Wales, deaths registered in March 2020 to May 2021 - Office for National Statistics (ons.gov.uk)

⁸¹ Estimates of the population for the UK, England and Wales, Scotland and Northern Ireland - Office for National Statistics (ons.gov.uk)

Science Evidence Advice – Impact of COVID-19 protections in Wales DRAFT -NOT WELSH GOVERNMENT POLICY

Figure 32. Deaths from 'COVID-19 underlying' in Wales age standardised rate per 100,000 person, all ages by deprivation fifth for 2020 and 2021



Mortality, care homes

The number of deaths in care homes increased significantly in 2020 with research showing substantial excess mortality and substantial reduction in survival in care home residents 23 March 2020 and 14 June 2020, when compared to previous years and after adjustment for age, sex, deprivation and hospital frailty risk score. There was a 20.3% increase in the number of deaths of care home residents in 2020 compared with 2019 (8,236 and 6,849 deaths respectively). 83

There is evidence that there was a high proportion of asymptomatic transmission in adult care homes early in 2020. For example, Graham et al. (2020) (confirmed by other studies internationally) based on testing and re-testing 394 residents of four London care homes that experienced large outbreaks and found that 43% of the confirmed cases were asymptomatic at the time of the test.⁸⁴

Background information on care homes' COVID-19 response strategy is in Annex: Care Home COVID-19 Response Strategy.

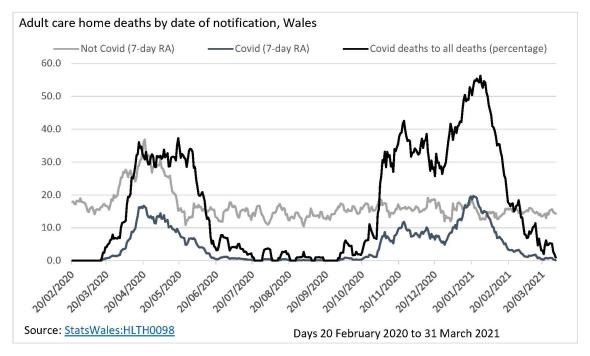
Figure 33 shows that COVID deaths in care homes in the early pandemic were nevertheless lower than those around Christmas 2020.

⁸² The Impact of COVID-19 on Adjusted Mortality Risk in Care Homes for Older Adults in Wales, United Kingdom: A retrospective population-based cohort study for mortality in 2016-2020 | medRxiv

Beaths in the care sector, England and Wales - Office for National Statistics (ons.gov.uk)
 SARS-CoV-2 infection, clinical features and outcome of COVID-19 in United Kingdom nursing homes | medRxiv

Science Evidence Advice – Impact of COVID-19 protections in Wales DRAFT -NOT WELSH GOVERNMENT POLICY

Figure 33. Number of adult care home deaths by date of notification, February 2020 to March 2021.



COVID-19 deaths in care homes started to rise again at the start of November 2020, at a time when the Alpha variant had started circulating but six or more weeks before the Alpha variant became the dominant variant. The pattern seems to follow the pattern of infections in society, suggesting the care-home COVID regime was not capable of keeping COVID out of care homes in spite of the many regulations in place and their negative impact on staff and residents (see Impact of protections on psychology section).

Issues with testing regimes were apparent, even when lateral flow tests became readily available. A study conducted in England (Tulloch et al., 2021) revealed difficulties in implementing biweekly staff testing within already over-burdened care homes. Factors influencing adherence included excessive work burden, procedural and socio-economic factors, cognitive overload and the emotional impact of testing. To achieve protocol adherence, staff would need to sacrifice essential care duties. Rapid lateral flow tests were performed, but protocol adherence was poor, with 8.6% of staff achieving protocol adherence of >75% and 25.3% achieving ≥50%.

Figure 34 shows later care home deaths from April 2021. Vaccination played an increasingly important part in the period shown, reflected in a minority of deaths being COVID deaths even at the highest. The pattern seems to follow the pattern of infections in society, suggesting the care-home COVID regime was not capable of keeping COVID out of care homes in spite of the many regulations in place and their negative impact on staff and residents (see Impact of protections on psychology section).

Adult care home deaths by date of notification, Wales - Not Covid (7-day RA) Covid (7-day RA) Covid deaths to all deaths (percentage) 25.0 20.0 10.0 5.0 01/11/2021 01/2/2021 01/01/2022 01/02/2022 01/06/2022 01/08/2022 01/09/2021 01/10/2021 01/03/2022 01/04/2022 01/05/2022 01/07/2022 Source: StatsWales:HLTH0098 Days 01 April 2021 to 31 July 2022

Figure 34. Number of adult care home deaths by date of notification in Wales, April 2021 to July 2022.

Hospitalisations

Figure 35 shows that the age-standardised rate for admissions to hospital for COVID-19 positive patients increased with increasing population deprivation throughout the COVID-19 pandemic. In the first 12 months of the pandemic, the age-standardised COVID-19 admission rate in the most deprived quintile was 1.4 times that of the least deprived quintile. In the second 12 months of the pandemic, the age-standardised COVID-19 admission rate in the most deprived quintile was 1.7 times that of the least deprived quintile.

Between March 2020 – August 2020 when many non-pharmaceutical interventions were in place to protect the Welsh population, the COVID-19 admission rate in the most deprived quintile was 1.2 times that of the least deprived quintile. In contrast, between September 2021 – February 2022, when COVID-19 protections were less stringent, the COVID-19 admission rate in the most deprived quintile was 1.7 times that of the least deprived quintile. The increase in health inequality of hospitalisation by deprivation may suggest that COVID-19 protections employed more heavily in the first 6 months of the pandemic were successful at mitigating the disproportionate COVID-19 hospitalisation impact on deprived populations in Wales.

Hospital COVID-19 admissions, age-standardised rate per 100,000 persons, all ages, Wales by deprivation fifth, March 2020 to February 2022 Mar-Feb 2022 Mar-Feb 2021 100 200 300 400 500 600 700 800 1000 Next least deprived ■ Middle deprived Next most deprived ■ Most deprived ■ Most deprived

Figure 35. COVID-19 hospital admissions by WIMD quintile, March 2020-February 2021, and March 2021 to February 2022.

Figure 36 shows that, although the COVID-19 hospitalisation rate increased in April 2020 compared with March 2020 due to the first wave of infections which peaked in mid-April 2020, the hospitalisation inequality reduced in April compared with March. Compared with the least deprived quintile, people in the most deprived quintile in Wales were 1.5 times more likely to be hospitalised for COVID-19 in March 2020 compared with 1.2 times in April 2020. This suggests that lockdown interventions were successful at reducing hospitalisation inequalities by deprivation.

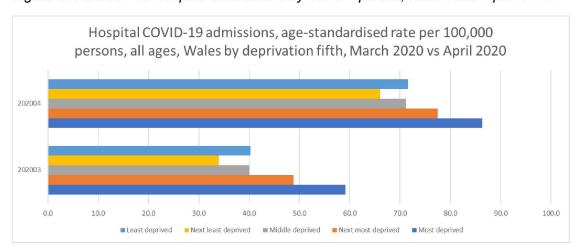


Figure 36. COVID-19 hospital admissions by WIMD quintile, March and April 2020.

Long COVID

ONS reported that as of 1 May 2022, 3.16% of the Welsh population were experiencing self-reported long COVID and 0.82% of the Welsh population reported that their ability to undertake day-to-day activities was 'limited a lot'. Prevalence of self-reported long COVID in the UK was greatest in older age groups (especially in people aged 50 to 69 years), females, people living in more deprived areas, those working in health and social care or teaching and education, and those with another activity-limiting health condition or disability. Hence, the

COVID-19 pandemic has exacerbated existing health inequalities, with long COVID disproportionately affecting the above groups.⁸⁵

Access to healthcare

The COVID-19 pandemic has led to unequal healthcare disruptions which could contribute to maintenance or widening of existing health inequalities if unaddressed. Evidence from 12 UK population-based longitudinal studies reported disruptions to healthcare services from March 2020 to January 2021.⁸⁶ Females (Odd Ratio (OR): 1.27), older people (OR: 1.39, 65-75 years vs 45-54 years), ethnic minorities excluding White minorities (OR: 1.19, vs White) and those in a more disadvantaged social class (OR: 1.17, manual/routine vs managerial/professional) were more likely to report healthcare disruptions.

The PHW 'Cost of Health Inequality to the NHS in Wales' report, using Digital Health and Care Wales data from April 2018 to March 2019, found there are wider differences in hospital service use between people living in the most deprived areas and those living in the least deprived areas for A&E attendances, followed by emergency and maternity inpatient admissions. There is a clear social gradient for emergency and maternity inpatient admissions, and for A&E attendances, with higher service use in the more deprived quintiles. We can see this by looking at slices of data from different points in the pandemic. For the week ending 28 February 2020, people in the most deprived quintile were 1.5 times more likely to attend emergency departments than people in the least deprived quintile. This inequality increased to 1.6 for the week ending 10 April 2020, suggesting that inequality increased during the first wave of the pandemic. However, for the week ending 31 December 2021 the gap had returned to 1.5.88

PHW weekly hospital admissions data showed the age-standardised rate per 100,000 for emergency admissions reduced by around 50% from 238 (week ending 28 February 2020) to 118 (week ending 10 April 2020). Although the emergency admissions rate increased to around 200 per 100,000 by August 2020, emergency admissions have remained below prepandemic levels with the rate at 207 for the week ending 26 November 2021. People in the most deprived quintile have higher age-standardised emergency and elective admission rates per 100,000 compared with those in the least deprived quintile. For the week ending 28 February 2020, people in the most deprived quintile were 1.6 times more likely to have an emergency admission than people in the least deprived quintile. This inequality increased to 1.7 for the week ending 10 April 2020, suggesting that inequality increased during the first wave. However, although emergency admission rates remain below pre-pandemic levels, for the week ending 26 November 2021 the gap had reduced to 1.5.89

DRAFT -NOT WELSH GOVERNMENT POLICY

⁸⁵ Prevalence of ongoing symptoms following coronavirus (COVID-19) infection in the UK - Office for National Statistics (ons.gov.uk)

⁸⁶ Inequalities in healthcare disruptions during the Covid-19 pandemic: Evidence from 12 UK population-based longitudinal studies | medRxiv

⁸⁷ PowerPoint Presentation (nhs.wales)

⁸⁸ COVID19 Recovery Profile v1s.knit (shinyapps.io)

⁸⁹ COVID19 Recovery Profile v1s.knit (shinyapps.io)

Science Evidence Advice - Impact of COVID-19 protections in Wales

Conclusion

COVID-19 protections reduced direct harms from COVID-19 by reducing transmission, and by extension reduced hospitalisations, deaths and pressure on NHS Wales by dampening the maximum peak height of hospitalisations, mitigating against the NHS being overwhelmed from sudden surges in hospitalisations.

COVID-19 'lockdown' protections and indirect harms such as delays to patient discharges to care homes due to outbreaks in care homes, which resulted in reduced NHS Wales activity, increased the number of patient pathways waiting to start treatment. COVID-19 protections such as messaging and advice reduced emergency department attendance during wave peaks and increased NHS 111 calls.

COVID-19 self-isolation protections increased NHS Wales staff absence and hence made it more difficult for the NHS to deliver services. However, this would have been counterbalanced by COVID-19 protections (including self-isolation) in the Wales population reducing COVID-19 transmission and infections, reducing NHS admissions and bed occupancy, which would have otherwise led to greater NHS Wales staff numbers being required to treat COVID-19 patients.

COVID-19 self-isolation protections increased student school absence, disproportionately affecting pupils eligible for free school meals. COVID-19 protections had a negative impact on mental health, wellbeing and loneliness. COVID-19 protections like the furlough scheme had a positive impact maintaining employment levels in 2020, but increased the number of people claiming state benefits. COVID-19 protections like lockdowns had a negative impact on the UK Gross Value Added index, which decreased sharply in spring 2020 and in winter 2020/2021 during tightened COVID-19 protections.

COVID-19 protections increased education and employment inequalities. Although the COVID-19 pandemic has exacerbated many pre-existing health inequalities, COVID-19 protections may have decreased COVID-19 hospitalisation health inequalities.

COVID-19 protections reduced mortality and severity of illness during the first waves of the pandemic and reduced transmission during later waves. However, there have been consequences to these restrictions with regards to education losses, disruption to health care, economic losses and increased inequalities. Lessons learnt from the COVID-19 pandemic will help inform how best to tackle any future pandemics. A recent Delphi survey convened to explore recommendations to end the COVID-19 public health threat found the panellists nearly unanimously agreed on and prioritised whole-of-society and whole-of-government approaches⁹⁰. The panellists also prioritised recommendations for effective communication with the public and developing technologies (e.g., vaccines).

INQ000300217 0058

⁹⁰ A multinational Delphi consensus to end the COVID-19 public health threat | Nature Science Evidence Advice – Impact of COVID-19 protections in Wales DRAFT -NOT WELSH GOVERNMENT POLICY

Annex: Summary Table

Protection	Date	Area implemented	Links (by topic area) – 5 Harms	Summary
Lockdown (school closures, work place closures, stay home order) [Include link to what was included in lockdown here]	16/03/2020 to 08/05/2020. Easing 29/05/2020 to 03/10/2020. 11/12/2020 to 29/01/2021 (but easing 25/12/2020 Christmas Day). Easing 05/02/2021 to 07/08/2021. Omicron tightening of restrictions (not full lockdown) followed by Easing 14/01/2022 to 18/04/2022.	Wales	From TAG 109: The potential risks and benefits of removing restrictions in a phased approach to mitigate the impact of harms from COVID-19 in Wales_[all] From TAG 116: Health and economic impacts of missed primary and secondary education due to the COVID-19 pandemic in Wales_[3,4] Harms from measures e.g. educational/psychological/shielding: From TAG 45: TAG contribution for 21 day review of measures [2] From TAG 53: Interdisciplinary Task & Finish Group on the role of children in transmission: Risks associated with the reopening of education settings in September [2] From TAG 116: Identifying, quantifying and measuring the harms arising from the COVID-19 restrictions to children and young people in Wales_[2] From TAG 120: Identifying, quantifying and measuring the harms arising from the COVID-19 restrictions to children and young people in Wales, [2] Economic Coronavirus (COVID-19) and its effects on household consumption, UK - Office for National Statistics_[4]	
Face coverings	09/06/2020 13/07/2020 27/07/2020 26/08/2020		From TAG 59: Health Technology Wales Rapid Summary: Face coverings to reduce COVID-19 transmission_[1]	

	14/09/2020 23/11/2020 19/06/2021 14/07/2021 29/11/2021 Easing 28/02/2022 Easing 28/03/2022		Technical Advisory Group: use of face coverings in childcare and educational settings for Under 18s GOV.WALES_[3] From TAG 113: Review of face coverings in occupational settings [4]	
Local lockdowns	21/08/2020 08/09/2020 10/09/2020 16/09/2020 21/09/2020 25/09/2020 27/09/2020 29/09/2020 09/10/2020	Caerphilly Caerphilly RCT; Merthyr RCT Merthyr; Bridgend; Blaenau; Caerphilly; Newport Llanelli; Cardiff; Swansea Newport; Torfaen; Vale Conwy; Denbighshire; Flintshire; Wrexham Bangor	Technical Advisory Group: effectiveness of non-pharmaceutical interventions in the Local Health Protection Zones and the Firebreak in Wales GOV.WALES impact-of-european-measures-to-ease-lockdown-restrictions-on-r-value-summary-of-advice.pdf (gov.wales)	
TTP	08/06/2020 18/08/2020 08/10/2020 13/11/2020 21/11/2020 27/11/2020 30/11/2020 24/02/2021 01/03/2021 10/03/2021		Technical Advisory Group: modelling the Impact of Test, Trace and Protect (TTP) on COVID-19 transmissions in Wales [HTML] GOV.WALES_[1]	

	T		
	16/04/2021		
	01/06/2021		
	02/06/2021		
	07/08/2021		
	02/09/2021		
	09/12/2021		
	01/04/2022		
Improvement in hospital	17/06/2020Dexamethasone		
treatments (e.g.			
Remdesivir)	06/07/2020 Remdesivir		
l			
	08/12/2021Molnupiravir		
I	14/02/2022		
	nirmatrelvir/ritonavir		
	(Paxlovid)		
Ozone generators	30/08/2021		
		Technical Advisory Group: evidence review of ozone generators	
		including appropriateness as mitigation in classrooms	
		GOV.WALES	
School closures	20/03/2020 and remain		
Scribbi diosules	closed until 29/06/2020		
	1		
	when one-third of pupils in		
	school at any one time until		
I	end of academic year		
I	which was extended by 1		
1	week		
	Now academic year		
I	New academic year		
	phasing 03/09/2020 (to 14/09/2020)		
I	14/09/2020)		
	02-06/11/2020 pupils Year		
	Nine and up extra week of		
	half term		
	Trail term]

	Cacandani ashaala			
	Secondary schools teaching online 14- 18/12/2020. Primary and special schools are 'encouraged' to remain open. January-2021 online learning - schoolchildren aged between three and seven phased return to school from 22/02/2021. Primary school children and years 10 and 12 (secondary qualification years) return to face-to-face lessons from 15 March. Years 7, 8 and 9 'check-in with teachers' only. 12/04/2021 all schools			
1	return			
Firebreak	Friday 23 October 2021 to Monday 9 November 2021	Wales	From TAG 85: Evidence review of schools post firebreak From TAG 89: Impact of Autumn interventions across the Four Nations [1] Technical Advisory Group: evidence review on children and young people under 18 in preschool, school or college following the firebreak GOV.WALES_[2] From TAG 84: Mobility during firebreak data [2]	
Other/combo/all/general			https://phw.nhs.wales/publications/publications1/health-of-individuals-with-lived-experience-of-homelessness-in-wales-during-the-covid-19-pandemic-report/	

Coronavirus and the social impacts on the countries and regions of Britain - Office for National Statistics

From TAG 79: Summary of data related to NPIs

From TAG 110: Impacts of the COVID-19 pandemic on air quality in Wales

From TAG 114: Modelling the current Welsh Test, Trace, Protect (TTP) system

From TAG 120: Vulnerable children and young person harms slides

technical-advisory-group-examining-deaths-in-wales-associated-with-covid-19-30-march-2022.pdf (gov.wales) [1]

Technical Advisory Group: the potential risks and benefits of removing restrictions in a phased approach to mitigate the impact of harms from COVID-19 in Wales | GOV.WALES [1]

https://phw.nhs.wales/publications/publications1/self-isolation-confidence-adherence-and-challenges-behavioural-insights-from-contacts-of-cases-of-covid-19-starting-and-completing-self-isolation-in-wales/ [1]

https://phw.nhs.wales/publications/publications1/economic-consequences-of-covid-19-pandemic-on-longstanding-illnesses-lsi-for-wales/ [4]

https://phw.nhs.wales/publications/publications1/covid-19-related-deaths-in-wales-amongst-people-with-learning-disabilities-from-1st-march-to-19th-november-2020/ [1]

https://phw.nhs.wales/publications/publications1/placing-health-equity-at-the-heart-of-the-covid-19-sustainable-response-and-recovery-building-prosperous-lives-for-all-in-wales/ [5]

https://phw.nhs.wales/publications/publications1/children-and-young-peoples-mental-well-being-during-the-covid-19-pandemic-research-brief/ [3]

https://phw.nhs.wales/publications/publications1/voices-of-carers-during-the-covid-19-pandemic-messages-for-the-future-of-unpaid-caring-in-wales/ [2]

https://phw.nhs.wales/publications/publications1/rising-to-the-triple-challenge-of-brexit-covid-19-and-climate-change-for-health-well-being-and-equity-in-wales/ [5]

Coronavirus (COVID-19) related deaths by ethnic group, England and Wales - Office for National Statistics (ons.gov.uk) [1,5]

Coronavirus (COVID-19) related deaths by religious group, England and Wales - Office for National Statistics (ons.gov.uk) [1,5]

Deaths involving COVID-19, England and Wales - Office for National Statistics (ons.gov.uk) [1,5]

Coronavirus and deaths of homeless people, England and Wales: deaths registered up to 26 June 2020 - Office for National Statistics (ons.gov.uk)

From TAG 113: Examining deaths in Wales associated with COVID-19

From TAG 146: Examining deaths in Wales associated with COVID-19, 2nd update

From TAG 74: Suicide risk and prevention during the COVID-19 pandemic_[3]

https://phw.nhs.wales/publications/publications1/covid-19-and-employment-changes-in-wales-insights-for-policy-young-people-

employment-and-health-prepared-for-public-health-wales-by-beaufort-research/ https://phw.nhs.wales/publications/publications1/who-are-most-vulnerable-to-employment-changes-during-the-covid-19-pandemic-key-findings-from-a-national-survey/
Coronavirus and crime in England and Wales - Office for National Statistics (ons.gov.uk)_[3,5] Coronavirus and housing indicators in England and Wales - Office for National Statistics (ons.gov.uk)_[3,5]

Annex: Non-Pharmaceutical Interventions List by Date

Start date	Summary	Category 1	Category 2
13/03/202	MHSS announces that all non-urgent outpatient appointments and operations will be suspended at hospitals in Wales, in a bid to delay the spread of the coronavirus pandemic.[4]	NHS delivery	
16/03/202 0	Work from home where possible	Lockdown	
17/03/202 0	Announcement of reduction in business rates for small businesses. Retail, leisure and hospitality businesses with a rateable value of £51,000 or less receive 100% reduction. Pubs with a rateable value between £51,000 and £100,000 receive a £5,000 reduction.	Economy	Wales
18/03/202 0	Regulations come into force which provide for "the imposition of proportionate restrictions" on individuals where it's suspected that they may have coronavirus (similar regulations were made in England in February).	Lockdown	

20/03/202 0	Schools across Wales close for statutory provision of education by 20 March 2020. (Schools are open to children who are vulnerable and children of key workers who cannot be cared for at home).	Lockdown	Education
20/03/202 0	Coronavirus Job Retention Scheme announced (employers able to contact HMRC for a grant to cover 80% of the salary of retained workers. Backdated to 1 March 2020).	Lockdown	UK
21/03/202 0	Closure of cafes, pubs, bars, restaurants, nightclubs, theatres, cinemas, gyms and leisure centres. Closure of businesses selling food or drink for consumption on the premises.	Lockdown	Eng&Wale s
23/03/202	With the UK death toll hitting 335 deaths and 16 in Wales, Boris Johnson announced a nationwide 'Stay at Home' order would come into effect as of midnight and it would be reviewed every 3 weeks. [6] This would become known as the UK lockdown.	Lockdown	UK
24/03/202 0	Closure of caravan parks, campsites and tourist hotspots. Closure of certain public footpaths and land.	Lockdown	Wales
24/03/202 0	Shielding: guidance for those who are identified as extremely vulnerable. Information on the delivery of medicine and food and what to do if you're living with somebody who is vulnerable.	Lockdown	Wales
26/03/202 0	Police powers to enforce social distancing. People not complying can be directed to return home or be removed from where they are and returned home and can be issued with a fixed penalty notice.	Lockdown	Eng&Wale s
26/03/202 0	Announcement of Income support scheme for self-employed people who have been adversely affected by coronavirus.	Lockdown	UK
26/03/202 0	Regulations allowing workers who cannot reasonably take annual leave due to the coronavirus to carry over their holiday into the next two leave years.	Lockdown	Eng,Sco,W ales
26/03/202 0	Regulations to relax local authority duties relating to assessing and meeting needs for care and support. Local authorities now only have to meet needs in the most serious cases where someone is at risk of abuse or neglect.	Lockdown	Wales
27/03/202 0	Public paths and land closures including Snowdon, Pen y Fan and sections of the Pembrokeshire coast.	Lockdown	Wales

27/03/202 0	Announcement of Principality Stadium (Cardiff) temporary hospital.	NHS delivery	Wales
28/03/202 0	Announcement of a new coronavirus testing plan for Wales.	NHS delivery	Wales
28/03/202 0	Regulations allowing statutory sick pay to be paid from the first day of an employee's absence due to the coronavirus. This includes those who are unable to work due to having coronavirus symptoms and those in the household of someone with the symptoms.	Lockdown	Eng,Sco,W ales
29/03/202 0	Declaration of threat to public health (enables Welsh Ministers to use Coronavirus Act 2020 to prohibit or restrict events or gatherings, close premises, impose restrictions on persons entering or remaining inside premises).	Lockdown	Wales
30/03/202 0	Regulations allowing a local authority to undertake development on its land in response to the coronavirus emergency without needing to obtain planning permission.	NHS delivery	Wales
30/03/202 0	Announcement of £500million Economic Resilience fund.	Lockdown	Wales
02/04/202 0	Video consultation service (all GP practices)	NHS delivery	Wales
02/04/202	New guidance on Personal Protective Equipment (PPE) published.	NHS delivery	UK
07/04/202 0	Regulations obliging businesses to take all reasonable steps to ensure two metre social distancing between people on their premises. Also regulations clarifying the arrangements for funerals and crematoriums.	Lockdown	Wales
08/04/202 0	FM confirms the Welsh Government will extend the lockdown beyond the initial three-week period for Wales.[9]	Lockdown	

12/04/202 0	Further investment to roll out video consultation service to secondary and community care (including mental health services).	NHS delivery	Wales
13/04/202 0	Announcement of £40million to support adult social care services.	NHS delivery	Wales
16/04/202 0	Regulations extending statutory sick pay to include those who are extremely vulnerable and at high risk of severe illness from the coronavirus and are advised to stay at home for 12 weeks.	Lockdown	Eng,Sco,W ales
19/04/202 0	Announcement of £6.3 million to support hospices.	NHS delivery	Wales
24/04/202 0	Revisions to stay at home regulations: people with certain health conditions or disabilities can leave home to exercise more than once a day.	Lockdown	
27/04/202 0	Announcement of COVID-19 Death in Service Scheme for NHS and social care workers (one-off sum of £60,000 regardless of individual workers' salaries). To apply retrospectively from the 25 March 2020.	NHS delivery	Wales
28/04/202 0	Announcement of opening of testing centres (Llandudno 29 April, Carmarthen 30 April).	NHS delivery	Wales
01/05/202 0	Announcement of £500 extra payment for social care staff.	NHS delivery	Wales
08/05/202 0	FM extends the lockdown restrictions for a further three weeks but with some minor changes. People are allowed to exercise outside more than once a day and councils can plan for the reopening of libraries and tips. Some garden centres can also reopen.[22]	Lockdown	
18/05/202 0	Start of home coronavirus testing via online booking service, prioritised towards keyworkers over members of the public according to capacity.	NHS delivery	UK
22/05/202 0	14 days self-isolation for anyone entering the UK, with some limited exemptions. (A Wales regulation was introduced later on 8 June. It is not clear what if any clarification that brought).	Internation al travel	UK

29/05/202 0	*FM announces an easing of the lockdown restrictions for Wales from Monday 1 June, that will allow the members of two households to meet up outdoors. Non-essential retailers are urged to use the next three weeks to "prepare safeguarding".[29]	Easing	Lockdown
01/06/202 0	Easing of lockdown rules for those shielding at home: exercise outside unlimited times per day; may meet up outside with people from another household, but must maintain social distancing rules and must not go into another person's home.[30]	Easing	Shielding
01/06/202 0	Stay at home advice changed to stay local: people should remain local, using "five miles as a guide" but this is "a flexible concept which can vary depending on people's circumstances".	Easing	Lockdown
08/06/202 0	Anyone who tests positive for coronavirus will be contacted by a contact tracer and asked to provide details of everyone they have been in close contact with. Those close contacts will be contacted and asked to self-isolate for 14 days. Contact tracing will be supported by a new online system so people will have the option to provide the details of contacts online.	NHS delivery	Testing
09/06/202 0	MHSS announces that people in Wales will be asked to wear three-layer face covering in situations where social distancing is not possible, such as on public transport.[34]	Face covering	
22/06/202 0	All non-essential retail business, childcare facilities, the housing market can re-open; private prayer in places of worship can take place. Travel outside on a person's local area is allowed on compassionate grounds.	Easing	Lockdown
22/06/202 0	WG lifts its restrictions on wedding and civil partnership ceremonies, allowing them to take place again, but the ban on social gatherings remains.[40]	Mixing	Household
26/06/202 0	New guidance for meat processing and food production plants on preventing and managing outbreaks of coronavirus issued.	Lockdown	Wales
29/06/202 0	Schools reopen in Wales.[46] They will be open for all pupils, but only a third of students will be in school at any one time. The summer term is also extended by a week.[32]	Easing	Education
29/06/202 0	WG announces that two households in Wales can form what is termed an "extended household" from 6 July, enabling them to meet up indoors and stay overnight; the extended household measure also includes people who are shielding.[45]	Mixing	Household

02/07/202 0	WG announces that pubs, bars, cafes and restaurants can open outdoors from 13 July.[49]	Easing	Hospitality
03/07/202	UKG published a list of 59 countries for which quarantine will not apply when arriving back in England as from 10 July. They include Greece, France, Belgium and Spain, but Portugal and the United States are among those not on the list. These changes do not apply to Scotland, Wales or Northern Ireland, where quarantine restrictions remain in place for all arrivals from outside the UK.[50]	Internation al travel	UK
06/07/202 0	Wales lifts its "stay local" restrictions, meaning there are no limits on travel.[54] From this date outdoor attractions were permitted to reopen, and two households permitted to meet up indoors.[51]	Easing	Local travel
09/07/202 0	Education Minister announces £29 million funding to 'recruit, recover and raise standards' in Welsh schools.	Education	Wales
10/07/202 0	The amended regulations to exempt those travelling from a list of countries from quarantine requirements accepted and comes into force in Wales.	Internation al travel	Wales
11/07/202 0	The date that bookings for self-contained holiday accommodation can be accepted (to help with the pattern of Saturday-to-Saturday bookings).	Easing	Hospitality
13/07/202 0	<u>Hairdressers and barbers reopen in Wales.[61]</u> outdoor areas of pubs and restaurants; outdoor cinemas; most indoor visitor attractions; places of worship	Easing	
13/07/202 0	FM announces that the wearing of face coverings will become compulsory on public transport in Wales from 27 July.[63]	Face covering	
16/07/202 0	CMO confirms the 130,000 people shielding in Wales will no longer need to do so from 16 August.[68]	Easing	Shielding
20/07/202	Playgrounds, outdoor gyms and funfairs are allowed to reopen under the latest easing of lockdown measures.[72]	Easing	Lockdown
22/07/202 0	Announcement of £50 million additional funding for universities and colleges - £27 million will be provided to higher education institutions, with £23 million to support students in further education colleges and sixth forms.	Education	Wales

23/07/202 0	WG announces that pregnant women can take a partner to antenatal appointments.[77]	NHS delivery	
25/07/202 0	Campsites with shared facilities are allowed to reopen.[81] Also underground attractions.	Easing	Leisure
26/07/202 0	People arriving from Spain (including its islands) will need to self-isolate for 14 days (in response to an increased prevalence of coronavirus in parts of that country).	Internation al travel	
27/07/202 0	Beauty salons, tattooists, nail bars, spas, tanning shops, [82] museums and art galleries, cinemas are permitted to reopen. [83] Driving lessons can also resume. [84] Full reopening of the housing market.	Easing	
27/07/202 0	The wearing of face coverings becomes mandatory on public transport in Wales.[85]	Face covering	
27/07/202 0	WG scraps a law requiring remote work where possible, meaning it is no longer a criminal offence to not do so, but people are still advised to work remotely if they have the option.[86]	Mixing	Household
30/07/202 0	Self-isolation period extended from 7 to 10 days for people who are symptomatic or have a positive test result.	NHS delivery	
03/08/202	Pubs and restaurants re-open indoors, also bowling alleys, bingo halls and auction houses. Restrictions on meeting outdoors relaxed so that up to 30 people can meet outside provided social distancing is adhered to. Under 11s no need to social distance.	Easing	Leisure
05/08/202 0	Announcement of £800 million Welsh NHS stabilisation package (to prepare for the anticipated challenges that winter will bring).	NHS Delivery	Wales
10/08/202 0	Swimming pools, spas, gyms, leisure centres and children's indoor play areas re-open.	Easing	Leisure
08/08/202 0	Wales becomes the first part of the UK to place quarantine restrictions on travellers arriving into the UK from Belgium, the Bahamas and Andorra, with the new rules coming into effect from midnight; they come into force at 4am on 8 August for the rest of the UK.[95]	Internation al travel	

10/08/202 0	Gyms, swimming pools and soft play areas reopen in Wales.[97]	Easing	Leisure
14/08/202	People arriving from Aruba, France, Malta, Monaco, the Netherlands and Turks and Caicos will need to self-isolate for 14 days.	Internation al travel	
14/08/202 0	WG postpones the easing of rules for meeting up indoors from 15 August to 22 August; from then four households can form an extended bubble and meet up indoors providing the conditions "remain stable". Up to 30 people may attend an indoor meal following a wedding or funeral from the same date. New powers are also announced requiring hospitality businesses to collect customers' details for contact tracing purposes from 17 August.[103]	Mixing	Household
16/08/202 0	The shielding programme ends in Wales; it is the last part of the UK to end its shielding programme.[105]	Easing	Shielding
17/08/202 0	'Essential travel' restriction on public transport lifted.	Easing	Wales
17/08/202 0	Announcement of £260 million support package for local authorities in Wales (to help cover increased costs, manage loss of income pressures, and fund additional cleaning requirements for schools).	Local Authority	Wales
18/08/202 0	Announcement of £32 million funding to improve coronavirus testing performance.	NHS delivery	Testing
21/08/202 0	FM announces that small-scale outdoor theatres and sporting events involving audience of up to 100 will be trialled, with three events to initially take place.[108]	Leisure	
21/08/202	Residents of Caerphilly County Borough Council are made subject to the first local lockdown in Wales, which takes effect from 6pm on 8 September. Health Minister MHSS announces that mass testing has indicated community spread in the area, with the Minister blaming the rise on individuals socializing in homes. As a result of the new measures, those within Caerphilly Council will have to wear face coverings in indoor public spaces, extended household arrangements will be ended, and travel restrictions will be in place to prevent travel outside of Caerphilly without a "good reason".[129]	Lockdown	Local

22/08/202 0	Four households can join together to form a single, extended household; a meal following a wedding, civil partnership or funeral will be allowed for up to 30 people indoors if social distancing can be maintained. Some limited outdoor events for up to 100 people will be piloted.	Mixing	Household
22/08/202 0	People arriving from Austria, Croatia and Trinidad and Tobago will need to self-isolate for 14 days. The quarantine requirement for travellers from Portugal is removed.	Internation al travel	
26/08/202 0	Recommendation that face coverings are worn by those over 11 years in indoor settings in which social distancing cannot be maintained including schools and school transport. Schools will be required to carry out risk assessments of their estates to determine whether face coverings should be recommended for their staff and young people in communal areas.	Education	Face covering
27/08/202 0	Fines for organisers of unlicensed music events where there are more than 30 people attending increased.	Mixing	Wales
28/08/202 0	Indoor visits to care homes, hospices and secure accommodation for children and young people can resume (it is for each institution to decide exactly when they begin these visits again).	Easing	Wales
29/08/202 0	People arriving from Czech Republic, Jamaica and Switzerland will need to self-isolate for 14 days. The quarantine requirement for travellers from Cuba and Singapore is removed.	Internation al travel	
03/09/202 0	Phased reopening of schools	Education	Wales
03/09/202 0	People arriving from mainland Portugal, Gibraltar, French Polynesia and the Greek islands of Mykonos, Zakynthos, Lesvos, Paros and Antiparos and Crete will need to self-isolate for 14 days.	Internation al travel	Wales
04/09/202 0	Announcement of opening of Caerphilly (leisure centre) testing centre.	NHS delivery	Wales
08/09/202 0	People not allowed to enter or leave the Caerphilly County Borough Council area without reasonable excuse; over 11s will be required to wear face coverings in shops; meeting indoors with other people and extended households will not be allowed.	Lockdown	Local
10/09/202 0	People arriving from the Greek islands of Santorini, Serifos and Tinos will need to self-isolate for 14 days.	Internation al travel	Wales

10/09/202 0	Rhondda Cynon Taff and Merthyr Tydfil - employers should encourage staff to work from home where possible.	Lockdown	Local
12/09/202 0	People arriving from Hungary and Reunion will need to self-isolate for 14 days. The quarantine requirement for travellers from Sweden is removed.	Internation al travel	Wales
14/09/202 0	Full reopening of schools	Education	Wales
14/09/202 0	WG announces that the wearing of face coverings in shops and most indoor spaces (not pubs or restaurants) will become compulsory from 14 September, and that indoor meetings of more than six people will be banned.[137] The six (this does not include children under 11) must be from the same exclusive household group/bubble. The rule of six does not apply to outdoor meetings in Wales.	Face covering	
14/09/202 0	Announcement of £33 million funding for a 400 extra bed facility next to the University Hospital of Wales in Cardiff (following the decommissioning of the Dragon's Heart hospital at the Principality Stadium)	NHS delivery	Local
16/09/202 0	Rhondda Cynon Taf is placed under lockdown restrictions, effective from 18:00 BST on 17 September. From then, people living in the area are not permitted to leave without a valid reason, such as travelling to work or for education, and licensed premises must close at 23:00 BST. ^[145]	Lockdown	Local
17/09/202 0	Announcement of £14 million sport and leisure recovery fund, to be delivered by Sport Wales.	Leisure	Wales
19/09/202 0	Hospital and care home visits are suspended in Bridgend, Merthyr Tydfil and Rhondda Cynon Taf because of concerns about rising COVID-19 cases in those areas.[151]	NHS delivery	
21/09/202 0	Lockdown restrictions are announced for Merthyr Tydfil, Bridgend, Blaenau Gwent and Newport; and extended to Caerphilly at the same time, with effect from 18:00 on 22 September; people in those areas will not be permitted to leave, while licensed premises must close by 23:00. [154] People will only be able to meet outdoors and not meet inside with members of their extended household.	Lockdown	Local

22/09/202	In a pre-recorded television address, First Minister FM announces fresh restrictions amid rising COVID-19 cases, bringing Wales into line with England. Pubs, restaurants and bars must stop serving at 10pm (close at 10:20pm) from Thursday 24 September, and offer table service only, while off licences and supermarkets must stop serving alcohol at that time. Drakeford also advises people against unnecessary travel.[155]	Hospitality	Local travel
23/09/202 0	FM says there is no case to extend lockdown measures to other areas of Wales, and that measures already announced need time to work.[156]	Easing	Lockdown
24/09/202 0	People aged 16 and over can download the NHS COVID-19 app	NHS Delivery	Eng&Wal es
25/09/202 0	Lockdown measures are introduced for Llanelli, Cardiff and Swansea, with the measures taking effect in Llanelli at 18:00 on 26 September, and Cardiff and Swansea at 18:00 on 27 September. Do not leave or enter the area without a reasonable excuse; people can't meet indoors with anyone they don't live with including their extended household.	Lockdown	Local
27/09/202 0	Lockdown measures are announced for Neath Port Talbot, Torfaen and Vale of Glamorgan, beginning at 18:00BST on 28 September. This means two thirds of Wales's population are subject to lockdown measures. Do not leave or enter the area without a reasonable excuse; people can't meet indoors with anyone they don't live with including their extended household.	Lockdown	Local
28/09/202 0	Economy Minister Ken Skates announces £140m of government grants to help businesses affected by local lockdowns. ^[165]	Lockdown	Local
29/09/202	Lockdown restrictions are announced for Conwy, Denbighshire, Flintshire, and Wrexham, taking effect from 18:00BST on 1 October; people cannot enter or leave these areas unless for a valid reason such as work or education. ^[166]	Lockdown	Local
02/10/202 0	WG announces that people living alone in areas subject to lockdown restrictions may meet one other household indoors.[172]	Easing	Lockdown
03/10/202 0	Ice rink (only rink is in Cardiff) reopens.	Easing	Lockdown

06/10/202 0	Announcement of £320 million COVID-19 reconstruction funding to be invested in 8 priority areas over the next 6 months.	Economy	Wales
08/10/202 0	Testing Sites: one opened in September in Pontypridd near the University of South Wales; will open this month near universities in Swansea, Cardiff, Bangor and Aberystwyth.	Education	Testing
09/10/202 0	Lockdown restrictions are announced for Bangor, beginning at 18:00BST on 10 October. ^[188]	Lockdown	Local
16/10/202 0	Wales introduces a travel ban on people from COVID hotspots in other parts of the UK, beginning from 6pm.[199]	Local travel	
19/10/202 0	WG announces a "short, sharp" lockdown from Friday 23 October to Monday 9 November. Universities remain open (though many are already more remote learning). Pubs, restaurants and hotels will close and people will be told to stay at home. The "firebreak" (otherwise "circuit break") measures are timed to coincide with the autumn half term. However, schools will return on Monday 2 November for pupils up to Year Eight.[202]	Lockdown	Firebreak
20/10/202 0	Announcement of doubling the third phase of its Economic Resilience Fund, making nearly £300 million available to support businesses that continue to be affected by COVID-19.	Economy	Wales
20/10/202	Announcement of £1m to help Wales' unpaid carers cope with the financial pressures of COVID-19. Open to carers across Wales, the Carers Support Fund will see grants of up to £300 made available for a range of essentials, including; food, household items such as furniture or white goods, or electronics such as a laptop for access to support and services. The Fund will be available up to 31 March 2021.	Economy	Wales
23/10/202 0	Wales begins its 17-day firebreak lockdown in a bid to slow the rise in COVID cases and hospital admissions.[211]	Lockdown	Firebreak
29/10/202 0	Announcement of £12.5m funding to support vulnerable children and families. It will support a range of services for children and families whose lives have been affected by the ongoing coronavirus pandemic.	Economy	Wales

30/10/202 0	Those on low incomes can apply for a £500 payment if they're unable to work from home and would lose income due to self-isolating. Also a new statutory sick pay enhancement scheme for social care staff to increase the statutory sick pay to their normal wages if they need to self-isolate.	Economy	Wales
02/11/202	FM announces that two households will be able to form a support bubble once the firebreak ends on 9 November. Travel restrictions will also be lifted, but people will not be allowed to leave the country.[229]	Mixing	Household
03/11/202	FM announces that groups of four people from different households will be able to meet in pubs, bars and restaurants when the firebreak ends. Larger groups from one household will be allowed to eat together, but people are asked to do so in the smallest groups possible.[231]	Easing	Firebreak
04/11/202	Announcement of nearly £3 million to support the most vulnerable mental health service users. Support will be available for those looking for work, permanent accommodation, or who may be struggling with mental health or substance misuse problems.	Economy	Wales
09/11/202 0	Wales's 17-day firebreak lockdown comes to an end. Non-essential shops are allowed to reopen, along with restaurants, pubs and gyms. Two households can again form a bubble, while four people from separate households can meet up indoors or outdoors. Travel is permitted anywhere within Wales.[239]	Easing	Firebreak
13/11/202 0	Announcement of £15.7 million to increase the number of contact tracing staff.	NHS Delivery	Testing
16/11/202 0	People on low incomes who have coronavirus or have been told to self-isolate by the NHS Wales Test Trace Protect service are now able to apply for a £500 payment. The scheme is open to anyone receiving Universal Credit and other specified benefits. There will also be a discretionary element for those who do not meet the criteria but who face financial hardship as a result of self-isolating. People will be able to apply for the self-isolation payment via their local authority website from 16 November 2020 and payments will be backdated to 23 October 2020. A new top-up payment has also been introduced for people working in social care, to raise statutory sick pay to the level of their normal wages if they have to take time off because of coronavirus or because they have been in close contact with someone who has coronavirus.	Economy	Wales

21/11/202	Merthyr Tydfil COVID-19 first mass testing of a whole area in Wales. All residents and workers will be offered repeat COVID-19 testing from 21 November 2020 to help find more positive cases and break the chains of transmission. The first site will open at Merthyr Tydfil leisure centre with further sites due to open throughout the county borough later in November. Lateral Flow Devices (LFDs) used for the first time in Wales.	Testing	
23/11/202 0	Announcement of £3 million to procure, install and lease 100 temporary 'pods' at care homes to facilitate visits over the winter months.	NHS Delivery	Wales
23/11/202	Revised guidance on face coverings in schools and colleges. Face coverings should be worn: in all areas outside the classroom by staff and learners in secondary schools and colleges; on dedicated school and college transport for learners in year 7 and up; by visitors to all schools and colleges, including parents and carers dropping off and picking up children. (Policy for face coverings in classrooms unchanged).	Education	Face covering
27/11/202 0	FM announces that pubs, restaurants and bars will be subject to tougher COVID restrictions in the weeks preceding Christmas, coming into force on Friday 4 December, though exact details are to be finalised.[259]	Hospitality	
27/11/202 0	Mass COVID testing is to be rolled out to a second area of Wales, with people living and working in the lower Cynon valley area being tested.[260]	Testing	
30/11/202 0	COVID-19 LFD screening for visitors to a small number of care homes, with a wider roll-out from the week commencing 14 December 2020.	NHS Delivery	Testing
30/11/202 0	'Baseline' hospital visiting guidance: visiting in maternity services will be based on a risk assessment; some people may need a support worker or interpreter.	NHS Delivery	Wales
01/12/202 0	Free flu vaccination extended to anyone aged 50 or over. Those eligible should expect to be contacted by their GP practice or can contact their local pharmacy to arrange a vaccination.	NHS Delivery	Wales
03/12/202	WG announces that travel will be permitted between Wales and parts of England and Scotland that are in tiers one and two from Friday 4 December.[270] Travel between Wales and areas of the UK with high rates of coronavirus will not be allowed from 6pm on 4 December 2020, prohibiting travel to and from tier three areas in England; level three and four areas in Scotland and the whole of	Local travel	Lockdown

	Northern Ireland (which is currently in lockdown). People in Wales 'strongly advised' not to travel to other parts of the UK with lower levels. There are no restrictions on travel within Wales.		
03/12/202 0	Video consultation service expanded to include virtual group clinics for outpatients across primary, secondary and community care. The virtual group clinics will deliver care to groups of people with similar health needs, including diabetes, musculoskeletal conditions, rheumatology and dermatology.	NHS Delivery	Wales
04/12/202 0	The hospitality sector alcohol ban comes into force at 6pm: pubs, restaurants and cafes will not be permitted to sell alcohol from Friday 4 December, and must close at 6pm After 6pm they will be able to provide takeaway services. Indoor entertainment and visitor attractions must also close.	Hospitality	
04/12/202 0	Announcement on Economic Resilience Fund, making a further £340 million available to support hospitality and tourism businesses affected by the changes to the regulations.	Economy	Wales
04/12/202 0	FM announces that the first COVID vaccinations will begin on Tuesday 8 December.[272]	Vaccinatio n	
07/12/202 0	Low income £500 payment extended to parents and carers on low incomes with children who are self-isolating because of a coronavirus outbreak in their school or childcare setting.	Economy	Wales
08/12/202 0	WG's Technical Advisory Group have said the number of people dying of COVID-19 far exceeds the worst case scenario projected in a forecast made by Swansea University.[273]	Modelling	
08/12/202 0	Health boards start administering Pfizer-BioNTech COVID-19 vaccine (a cold-stored vaccine) to care home staff, people aged over 80, and frontline health and social care workers who are most at risk.	Vaccinatio n	
09/12/202 0	Self-isolation period: a person required to isolate as a result of having had close contact with someone who has tested positive for coronavirus must isolate for 10 days instead of 14. International travellers also to isolate for 10 days instead of 14.	NHS delivery	
10/12/202 0	Education Minister Kirsty Williams announces that all secondary schools and further education colleges will move teaching online from Monday 14 December (primary and special schools are 'encouraged' to remain open). The move is criticised by the Children's Commissioner for Wales as being disruptive to education. ^[278]	Education	

11/12/202 0	Announcing that outdoor attractions must close from Monday 14 December, FM warns that a post-Christmas lockdown will come into force if COVID cases do not fall in Wales.[281] Including funfairs. Trampoline parks and indoor skating parks must also close.	Lockdown	
16/12/202 0	Pfizer-BioNTech COVID-19 vaccine to care homes in proximity to hospital pharmacies. Care home in Betsi Cadwaladr University Health Board will be the first.	Vaccinatio n	
16/12/202 0	WG announce plans to introduce their own rules concerning the relaxation of COVID regulations over Christmas. While rules will still be relaxed for five days, unlike the rest of the UK, only two households, plus a single person living alone, will be permitted to meet up between 23 and 27 December.[291]	Easing	Household
16/12/202 0	First Minister FM announces a new lockdown for Wales, beginning on 28 December. Non-essential shops and close contact services will be required to close from close of trading on Christmas Eve, with pubs and restaurants required to close from 6pm on Christmas Day.[292]	Lockdown	
17/12/202 0	Announcement of additional £110 million support package for businesses affected by the alert level 4 restrictions.	Economy	Wales
19/12/202 0	Following urgent talks with ministers over a new strain of COVID-19, First Minister FM announces that the whole of Wales will be placed under lockdown from midnight, with festive plans cancelled for all but Christmas Day.[298]	Lockdown	
22/12/202 0	Clinically extremely vulnerable (previously 'shielding') advised to no longer attend school or work outside the home.	Lockdown	Wales
25/12/202 0	Up to two households, plus a single person living alone, can form an exclusive 'bubble' to meet at home, at a place of worship or an outdoor public place. (Existing, more restrictive, rules on hospitality and meeting in other venues will be maintained).	Easing	
28/12/202 0	Tighter restrictions on household mixing, staying-at-home, holiday accommodation and travel	Lockdown	

31/12/202 0	WG confirms it has a flexible policy with regard to the return of schools at the beginning of the winter term; some schools will fully return by 6 January, with others doing so by 11 January, depending on the area.[313]	Easing	Education
31/12/202 0	WG announces it has set aside £180m to help tourism in Wales to recover from the financial impact of the pandemic.[49]	Economy	
31/12/202 0	Education Minister Kirsty Williams announces that all schools and colleges will remain closed and move to online learning until 18 January. Schools and colleges will remain open for children of critical workers and vulnerable learners, as well as for learners who need to complete essential exams or assessments.	Education	
31/12/202 0	On the topic of restrictions, Drakeford says he does not "see much headroom for change" and that Wales is likely to remain in lockdown for the rest of January.[7]	Lockdown	
31/12/202 0	First Minister FM announces that new laws will be introduced to protect supermarket shoppers and staff, which will include the erection of signs reminding people to socially distance. The announcement comes after "significant evidence" the virus is spreading in supermarkets.[30]	Transmiss ion	
11/01/202 1	Students invited to return to campus over a four week period, beginning 11 January 2020, Healthcare students prioritised for early return. Phased return to in-person teaching, lateral-flow tests for students returning to their university accommodation.	Education	Wales
18/01/202 1	Inbound international passengers have to provide a negative coronavirus test result up to 72 hours before departing the country they're in.	Internation al travel	
18/01/202 1	Announcement of additional £40m for universities to support students facing financial hardship, helping those most affected by the pandemic with expenses such as accommodation costs, access to online learning, costs incurred due to self-isolation.	Education	Wales
20/01/202 0	Bilingual COVID-19 recovery app. App users will be able to record their symptoms, track their progress and learn to manage their condition at home with support.	NHS delivery	Wales
21/01/202 1	Announcement of a further £0.25m to help Wales' unpaid carers cope with the financial pressures of COVID-19.	Economy	Wales

26/01/202 1	Announcement of £25m to support the move to digital services across the Welsh NHS.	NHS Delivery	Wales
29/01/202 1	First Minister FM extends the Alert level four lockdown for a further three weeks, but announces that from the following day two people from different households may meet up outside for exercise. Drakeford also suggests primary age schoolchildren may be able to return to the classroom following the February half-term.[62]	Lockdown	
01/02/202	Announcement of £9.4m to support children and young people's mental health and wellbeing. £4 million of this will be used improve access to emotional and mental health support in schools and £5.4 million will be for Child and Adolescent Mental Health Services (CAMHS) for young people who need more intensive support	NHS Delivery	Wales
01/02/202 1	WG confirms that anyone in Wales asked to self-isolate by the NHS COVID-19 app can apply for £500.[67]	Isolation	Behaviours
03/02/202 1	Announcement of free PPE for all licensed taxi and private hire vehicle drivers including Uber drivers.	Economy	Wales
05/02/202 1	Education Minister Kirsty Williams confirms that schoolchildren aged between three and seven will return to school from 22 February, along with some older pupils on vocational courses. ^[72]	Easing	Education
11/02/202 1	As Wales enjoys a weekend of mild, sunny weather, police are patrolling beauty spots to ensure people continue to adhere to the restrictions. ^[114] Local authorities close a number of beach car parks at the request of police as the weekend progresses. ^[115]	Event	
11/02/202 1	WG says it is set to become the first of the Home Nations to offer everyone in the top four priority groups their first vaccination.[89]	Vaccinatio n	
15/02/202 1	People cannot travel directly to Wales from a 'red list country'. Travellers from red list countries will only be able to enter Wales via a designated port of entry (in England or Scotland) and after isolating for 10 days in a nearby managed quarantine facility. Travellers arriving in Wales from amber list countries will need to isolate for 10 days and book a COVID-19 test on day 2 and day 8 of their isolation period.	Internation al travel	Wales

17/02/202 1	Self-Isolation Support Payment scheme open to applications from people with a personal income of less than £500 per week and those on Basic Statutory Sick Pay who have been asked to self-isolate by the Test, Trace, Protect service, the NHS COVID-19 App or by their child's education setting.	Economy	Wales
20/02/202 1	Four people from two different households will be able to meet outdoors for socially distanced, local exercise (not in private gardens)	Easing	Lockdown
22/02/202 1	Phased return to face to face learning for 3–7 year olds	Education	Wales
22/02/202 1	Offer of regular, twice weekly, lateral flow tests (LFTs) at home to years 11 to 13 and to all further education college learners and those on work-based apprenticeship and traineeship programmes.	Education	Wales
24/02/202 1	Scheme for workplaces to carry out testing and set up their own test sites extended to public and private organisations with more than 50 employees.	Testing	Wales
01/03/202 1	Licensed wedding venues may re-open but only to perform wedding and civil partnership ceremonies; arrangements will be made for more elite athletes to resume training and playing.	Easing	Lockdown
01/03/202 1	Targeted community testing begins in parts of Bridgend, Merthyr Tydfil and Rhondda Cynon Taf	Testing	Local
01/03/202 1	Announcement of £682 million to support local council COVID-19 efforts including £206.5 million for the Local Government Hardship Fund and funding to extend the Discretionary Assistance Fund, to support apprenticeships, and to maintain vital public transport provision.	Local Authority	Wales
08/03/202 1	COVID case rates and positivity rates have now dropped below the level they were at the point when lockdown measures were triggered.[126]	Easing	Lockdown

10/03/202	Announcement of an extra £50 million to allow health boards to extend contact tracing over the summer.	NHS delivery	Testing
12/03/202	First Minister FM announces an easing of lockdown restrictions, with four people from two separate households allowed to meet up outdoors from the following day and a replacement of the stay at home order with a stay local order, along with the reopening of hairdressers from Monday 15 March. Primary school children and those in secondary qualification years will also return to face-to-face lessons from 15 March. Further easing of measures will see garden centres reopen from 22 March, self-contained holiday accommodation reopening from 27 March and non-essential retail reopening from 12 April.[132] However, although self-contained tourism is allowed to reopen, Drakeford warns that future reopenings will be halted if tourist operators are found to be booking reservations from people living outside Wales.[133]	Easing	Lockdown
12/03/202 1	Announcement of a further £150 million to support Welsh businesses. The additional support will help businesses in the hospitality, tourism, leisure and non-essential retail sectors that pay non-domestic rates and will operate as a top up to the Restrictions Business Fund.	Economy	Wales
13/03/202	Stay-at-home restrictions replaced by stay local - people can leave their homes and travel within their local area, usually within 5 miles (with some flexibility). Up to 4 people from 2 households can meet in their local area outdoors, including in gardens (children under 11 and carers do not count towards this limit); outdoor sports facilities can reopen (a maximum of 4 people from 2 households).	Easing	Lockdown
13/03/202 1	Routine indoor visiting to care homes by a single, designated visitor resume	Easing	Lockdown
15/03/202 1	Hairdressers and barbers can reopen by appointment only.	Easing	Lockdown
15/03/202 1	All primary pupils and those in qualifications years will return to school. Schools will have the flexibility to bring in year 10 and 12 pupils and more learners will return to colleges. Secondary	Education	Wales

	schools to provide learners in years 7, 8 and 9 with the opportunity of a check-in with teachers, focussed on support for wellbeing and readiness for a full return to school after the Easter holidays.		
17/03/202 1	One-off bonus payment equivalent to £735 per person for NHS and social care staff to recognise their contribution during the COVID-19 pandemic. After deductions (to cover the basic rate of tax and national insurance contributions) most people will receive £500.	NHS delivery	Wales
22/03/202 1	Restrictions on the sale of non-essential items lifted for those shops which are currently open. Garden centres will also reopen.	Easing	Lockdown
22/03/202 1	Announcement of £100 million in funding to help health and social care services in Wales to recover from the pandemic.	NHS delivery	Wales
22/03/202	Announcement of £1.5 million to enable polling stations (Senedd election) to be made COVID-19-secure. The additional funding is being provided to cover the range of extra staff and equipment required to ensure the protection of staff and public health.	Economy	
27/03/202 1	Wales becomes the first UK nation to lift travel restrictions within its borders as the "stay local" rule is ended. Self-contained tourist accommodation, such as cottages and some hotels, permitted one-household bookings. [151][152] Organised children's activities outdoors restart, libraries reopen. Six people can meet outdoors.	Easing	Local travel
01/04/202	Advice to the clinically extremely vulnerable to follow shielding measures paused	Easing	Lockdown
08/04/202	WG moves the easing of some lockdown measures forward by a week due to a drop in COVID cases. Consequently, outdoor weddings involving up to 30 people will be allowed from 26 April rather than 3 May, while the reopening of gyms and leisure centres is moved forward from 10 May to 3 May. Two households will also be able to form an extended bubble from 3 May, this also having been moved forward a week.[177]	Easing	Lockdown
12/04/202 1	Non-essential retail and close contact services are allowed to resume, while people from Wales are allowed to travel to other parts of the UK.[181]	Easing	Local travel

12/04/202 1	All learners return to on-site learning	Education	Wales
16/04/202 1	Those who cannot work from home can collect rapid testing kits from testing sites	Testing	Wales
24/04/202	First Minister FM announces the further easing of COVID-19 rules, allowing six people from six separate households to meet up outdoors from Saturday 24 April, and outdoor hospitality from Monday 26 April.[191]	Easing	Household
26/04/202	Pubs, restaurants and cafes are reopened, allowing up to six people to meet in an outdoor hospitality setting. Zoos, theme parks and other outdoor attractions are also reopened, while wedding and funeral receptions can have up to 30 attendees in an outdoor setting. Outdoor swimming pools, organised outdoor activities for up to 30 people. [199][200]	Easing	Hospitality
03/05/202	Gyms, swimming pools and community centres reopen, while three households can meet up indoors when a member of one of those households lives alone.[205] Children's indoor activities and organised indoor activities for up to 15 people can begin again.	Leisure	Household
11/05/202 1	First Minister FM confirms that up to six people from six separate households will be able to meet up indoors in pubs, cafes and restaurants from Monday 17 May. Extra financial support for hospitality sector companies affected by the COVID-19 crisis is also announced.[211] (businesses still affected by the coronavirus restrictions will be able to claim up to £25,000 in support to meet ongoing costs through to the end of June 2021)	Hospitality	Household
11/05/202 1	Announcement of pilot test events that will take place over the coming weeks.	Easing	Hospitality
17/05/202 1	Re-opening of indoor hospitality. Indoor entertainment venues can re-open and an increased number of people can attend organised indoor and outdoor activities.	Easing	Hospitality
17/05/202 1	International travel resumes under green (no quarantine on return), amber, red classification.	Internation al travel	

20/05/202 1	Announcement of £100m health and care system investment (new equipment, staff, technology and ways of working).	NHS Delivery	Wales
24/05/202 1	Certificate of vaccination can be requested if - have had both doses of a COVID-19 vaccine, urgently need to travel to a country which requires vaccine certification, not able to either quarantine or provide tests to meet the country's entry requirements.	Internation al travel	Wales
27/05/202 1	WG confirms that live music events can return with immediate effect, but for live performances rather than nightclubs. Venues will need to undergo a safety assessment in line with hospitality and performing guidance.[235]	Easing	Leisure
01/06/202 1	Wales's Test, Trace, Protect scheme is extended to March 2022 to help tackle new variants of the virus. ^[241]	Testing	
02/06/202 1	Announcement of a further £32 million investment in the Test, Trace, Protect service.	NHS delivery	Testing
03/06/202 1	WG announces that groups of up to 30 can meet outdoors from Monday 7 June and outdoor events can restart, while extended households can expand to include a third from the same day.[244]	Easing	Household
08/06/202 1	Portugal (including Madeira and the Azores) moves to the amber list, meaning returning travellers will need to self-isolate. Afghanistan, Sudan, Sri Lanka, Bahrain, Trinidad and Tobago, Costa Rica, and Egypt have been added to the red list.	Internation al travel	
11/06/202 1	New North Wales Hubs offering a range of support to people who need to self-isolate and to those hardest hit by the pandemic	Testing	
18/06/202 1	First Minister FM confirms the lifting of COVID-19 restrictions in Wales will be postponed for four weeks, and warns the country is at the start of a third wave of COVID-19. During the four weeks a further 500,000 vaccinations are planned, mostly second doses.[260]	Easing	Lockdown
19/06/202 1	WG announces that congregations will be allowed to sing in churches and other places of worship providing they wear masks while doing so. Chanting and the playing of musical instruments is also permitted again.[261]	Leisure	Face covering

21/06/202	The rules for comedy clubs and music venues are brought into line with those for the hospitality sector, allowing groups of six people to attend performances. Numbers at wedding and funeral receptions are also relaxed, with the number of attendees dependent on the venue.[263]	Easing	Leisure
24/06/202 1	Malta, Madeira, the Balearic Islands, several UK overseas territories, and Caribbean islands including Barbados added to the green list for international travel. Eritrea, Haiti, Dominican Republic, Mongolia, Tunisia and Uganda added to the red list.	Internation al travel	
25/06/202 1	Digital NHS COVID Pass - proof of vaccination on phone, tablet or laptop for those needing to travel urgently and meet the vaccine requirements relevant to the country they are travelling to	Internation al travel	
30/06/202 1	Announcement of £10 million Tenancy Hardship Grant - to support people who have fallen behind on their rent by more than eight weeks between 1 March 2020 and 30 June 2021.	Economy	Wales
09/07/202 1	WG announces that the wearing of facemasks will no longer be mandatory in schools from September.[282]	Easing	Education
13/07/202 1	Self-Isolation Support Payment scheme extended to March 2022.	Economy	Wales
14/07/202 1	WG announces that most COVID restrictions will be lifted on 7 August. The rules regarding the numbers of people allowed to meet up indoors and outdoors will be scrapped, but face coverings will still be required in most indoor settings, including pubs, restaurants and schools.[289]	Easing	Face covering
17/07/202 1	COVID rules are relaxed to allow up to six people to meet up in an indoor private setting, while the number of people allowed to meet up outdoors increases. Indoor organised events involving up to 1,200 people are also permitted, with 1,000 seated and 200 standing.[296] Ice rinks can re-open. Limits on the number of people who can gather outdoors removed. Face coverings remain a legal requirement in indoors public places with the exception of education settings and hospitality.	Easing	Household
19/07/202 1	Fully vaccinated adults returning from amber list countries, and under-18s, will no longer need to self-isolate. They will still need to take tests pre-departure and on day two following their arrival in the UK.	Internation al travel	Wales

22/07/202	Easing of restrictions for care homes - residents no longer need to isolate on return from an overnight stay and entertainers will be permitted in indoor areas of the home to enable residents to resume the activities they enjoy.	NHS delivery	Wales
29/07/202 1	The Welsh Government announces that fully vaccinated people who are close contacts of someone testing positive for COVID-19 will no longer be required to self-isolate from Saturday 7 August. Under 18s will also be exempt. [306]	Isolation	Vaccinatio n
02/08/202 1	Travellers from the EU and US who have been fully-vaccinated can visit the UK without having to self-isolate on arrival.	Internation al travel	Wales
05/08/202 1	WG confirms that the majority of Wales's COVID restrictions will be lifted on Saturday 7 August. This will mean an end to rules on the numbers of people who can meet indoors, the reopening of nightclubs, and social distancing laws for workplaces will end. But the wearing of masks will remain compulsory.[311]	Easing	Hospitality
05/08/202 1	Wales announces the adoption of travel international travel changes in line with those announced for England the previous day, and that will take effect from Sunday 8 August.[312]	Internation al travel	
07/08/202 1	Adults who have been fully-vaccinated will no longer have to self-isolate if they are identified as close contacts of someone with coronavirus. Children and young people under 18 will also be exempt from the need to self-isolate if they are identified as close contacts of a positive case. (Contact tracers will now 'warn and inform' fully-vaccinated individuals if they are identified as close contacts).	Testing	Wales
07/08/202 1	With some exceptions, such as compulsory mask wearing in certain settings, most remaining pandemic related restrictions conclude in Wales.[314] No legal limits on the number of people who can meet, including indoors, and all businesses will be able to open.	Easing	
07/08/202 1	Grants for people on low pay and living in Wales who are asked to self-isolate rises from £500 to £750.[315]	Isolation	Behaviours
19/08/202 1	Announcement of additional funding of £551m for health and social services in Wales. Includes £411m for ongoing costs of dealing with the pandemic and £140m for recovery and tackling waiting times.	NHS delivery	Wales

30/08/202	The Welsh Government announces a £6million technology fund aimed at stopping the spread of	Education	Transmissi
1	COVID-19 in schools, colleges and universities, which will seem them pay for 30,000 carbon		on
	dioxide sensors and (£3.31m) 1,800 ozone disinfecting machines developed by Swansea University. [338] At least one for every school, college and university in Wales.		
	Offiversity. At least one for every school, college and university in wales.		
02/09/202	Figures released for the Test, Trace, Protect contact-tracing system show that less than half of those	Testing	
1	who test positive for COVID-19 are reached within 24 hours. ^[343]		
14/09/202	Announcement of £48 million COVID-19 recovery fund to support social care in Wales. £40 million is	Local	Wales
1	allocated to local authorities to help the social care sector meet the ongoing challenges caused by	authority	
	the pandemic. A further £8 million will fund a number of specific priorities, including extending the		
	carers support fund; tackling loneliness in older people; investing in the social care workforce's		
	wellbeing and in residential services for care-experienced children.		
17/09/202	The Welsh Government announces the introduction of vaccine passports for nightclubs and large	Certificatio	
1	scale events in Wales from 11 October. ^[361]	n	
21/09/202	People returning to Wales from overseas will be able to book PCR tests with a wider choice of test	Internation	Wales
1	providers.	al travel	
22/09/202	Eight destinations are removed from red list, including Turkey and Pakistan.	Internation	Wales
1		al travel	
27/00/202	Manage are and analyzed lists and represent the requirement for the departure testing for these	Intornation	Wales
27/09/202	Merge green and amber travel lists and remove the requirement for pre-departure testing for those fully vaccinated.	Internation al travel	vvaies
J		ai iiavei	
28/09/202	WG confirms 5 October as the start date for its COVID pass scheme for large events, and	Certificatio	
1	announces that it will be a criminal offence to fake a lateral flow test for a COVID pass.[378]	n	
04/10/202	Fully vaccinated travellers coming from non-red list countries will be able to replace day 2 PCR tests	Internation	Wales
1	with cheaper lateral flow tests, and no longer need to take pre-departure tests.	al travel	
11/10/202	Adults in Wales will need to show an NHS COVID Pass to enter nightclubs and events including:	Certificatio	Wales
1	indoor, non-seated events for more than 500 people; outdoor non-seated events for more than 4,000	n	
	people; any event with more than 10,000 people in attendance. The NHS COVID Pass will be used		

	to show that someone is fully-vaccinated, or that they've had a negative lateral flow test result within the last 48 hours.		
11/10/202 1	Vaccinated staff working in special educational provision who are identified as a contact will be required to receive a negative PCR test before attending work and then undertake daily lateral flow tests.	Education	Wales
	Secondary school and college students with household member who has tested positive for COVID-19 - recommendation to undertake lateral flow testing every day for seven days. This is in addition to the existing recommendation of PCR tests on Day 2 and Day 8.		
	Removal of recommendation for children under 5 years of age without symptoms to test.		
21/10/202 1	Announcement of additional £42m funding for social care.	NHS delivery	Wales
29/10/202 1	First Minister FM announces new measures to tackle COVID-19 in Wales, which has the highest rates. The COVID pass scheme will be extended to cinemas, theatres and concert halls from 15 November, while anyone living with a person who tests positive for COVID-19 will be required to self-isolate until they can obtain a negative PCR test. Drakeford says that further measures will be considered if cases remain high.[406]	Certificatio n	
31/10/202 1	Fully vaccinated adults and the majority of under 18s who have travelled from countries which are not on the red list will be able to take a lateral flow test (instead of the current requirement for a PCR test) on or before day two of their arrival into the UK.	Internation al travel	Wales
01/11/202 1	Remove the remaining seven countries from the red list for international travel and add an additional 35 countries to the list of countries whose vaccinations and certifications we recognise for international travel.	Internation al travel	Wales
22/11/202 1	World Health Organisation (WHO) Emergency Use Listing (Sinopharm, Sinovax and Covaxin) vaccinated in a country issuing recognised vaccine certificates will only need to take a day two test (this can be a lateral flow test) following arrival.	Internation al travel	Wales

28/11/202 1 29/11/202 1 30/11/202	Angola, Malawi, Mozambique and Zambia (are also linked to the Omicron variant B.1.1.529) move to the red list First Minister FM announces changes to COVID-19 rules for secondary schools requiring pupils to wear face coverings in classrooms. The changes go further than England, where they are only required in communal areas.[427] Staff and learners in colleges and universities should wear face coverings while indoors where physical distancing cannot be maintained. Fully-vaccinated travellers, including under 18s, will need to self-isolate and take a PCR test before	Internation al travel Education	Wales Face covering
1	wear face coverings in classrooms. The changes go further than England, where they are only required in communal areas.[427] Staff and learners in colleges and universities should wear face coverings while indoors where physical distancing cannot be maintained.	Education	
20/44/202	Fully-vaccinated travellers, including under 18s, will need to self-isolate and take a PCR test before		
1	or on day two. Once someone has received a negative test result they can leave isolation.	Internation al travel	Wales
	(Non-vaccinated travellers continue to take a PCR test at days two and eight and self-isolate for 10 days).		
06/12/202 1	A 48 hour pre-departure testing requirement is being reintroduced for all travellers. Nigeria moved to the travel red list.	Internation al travel	Wales
09/12/202 1	WG urges everyone to take a lateral flow test before going out to places like the shops, the pub or to see others.[442]	Testing	
10/12/202 1	First Minister FM announces COVID-19 rules will be reviewed on a weekly basis in response to the emergence of the Omicron variant.[443]	Event	
14/12/202 1	Removal of all 11 countries from the red list.	Internation al travel	Wales
16/12/202 1	First Minister FM announces the closure of nightclubs in Wales from 27 December as a result of the spread of the Omicron variant.[453]	Leisure	
20/12/202 1	Announcement of £3 million Spectator Sports Fund available to support clubs and sporting venues affected by new measures for indoor and outdoor sporting events.	Leisure	

21/12/202	WG announces the levy of fines on employees and employers if people are not remote working without a good reason, effective from Monday 27 December. Workers will receive a £60 fixed penalty fine while employers will receive a £1,000 fine for each breach of the rules.[460]	Mixing	Household
23/12/202 1	Announcement of £120 million for sectors impacted by the move to alert level 2 including events, nightclubs, hospitality, leisure, tourism businesses, and retail.	Leisure	Wales
23/12/202	Close contact fully vaccinated adults, children aged 5-18 and vaccine clinical trial participants identified will not need to isolate. They should take lateral flow tests for 7 days as a precautionary measure.	Isolation	
26/12/202 1	Team sports - up to 50 spectators will be able to gather outdoors, in addition to those taking part. Also for events involving children and young people under 18.	Leisure	Wales
30/12/202	Wales moves forward by several days its plans to cut the self-isolation period of anyone testing positive for COVID from ten to seven days. A negative test will be required before the self-isolation period can be ended, with the changes coming into effect from New Year's Eve rather than 5 January 2022 as originally planned.[469] Should take a lateral flow test on day 6 and another test 24 hours later.	Isolation	
05/01/202 2	Removal of requirement for fully vaccinated travellers and under 18s to take a pre-departure test and a day 2 PCR test on arrival. A lateral flow test can be taken instead at day 2. The requirements for non-vaccinated travellers remain unchanged.	Isolation	
14/01/202	First Minister FM confirms that most COVID-19 restrictions in Wales will be lifted over the next two weeks if cases continue to fall and as Wales moves to Alert Level Zero.[20] An immediate change is that the number of people allowed to attend outdoor events rises from 50 to 500	Easing	Outdoor
21/01/202 2	Wales scraps limits on the number of people who can attend sporting events, ^[24] and lifts the rule of six requirements for pubs and restaurants operating outdoors. ^[25]	Easing	Household
26/01/202 2	Announcement of more than £4.5 million to support a national framework (to be used by health boards) to investigate and learn from hospital-acquired COVID-19 infections	NHS delivery	Wales

28/01/202	Wales cuts the period of self-isolation following a positive COVID-19 test to five full days (subject to two negative lateral flow tests), bringing it into line with rules in England and Northern Ireland. Other changes include the reopening of nightclubs, an end to the rule of six requirement in pubs and restaurants and the scrapping of social distancing requirements. Financial support through the Self-Isolation Support Scheme will revert to the original payment rate of £500 in recognition of the shorter isolation period.	Isolation	Hospitality
10/02/202	First Minister FM confirms that falling COVID-19 case rates means that rules can begin to be lifted, with COVID passes no longer required for entertainment venues, nightclubs and large events from 18 February, and the facemask mandate for schools and most public places, such as cinemas, museums and places of worship, lifted from 28 February. Schools will then decide their own policy on face coverings, while requirements for them on public transport, and in shops, hairdressers, salons and health and social care could disappear as early as March.[41]	Easing	Certificatio n
15/02/202 2	Wales becomes the first of the UK's constituent countries to announce plans to offer COVID vaccinations to children aged between five and eleven.[45]	Vaccinatio n	Education
17/02/202 2	WG announces the scrapping of COVID passes for large events in Wales, and venues such as nightclubs and cinemas, theatres. From the following day.[47]	Easing	Certificatio n
28/02/202 0	Face coverings (adults and children aged 11 and over) still required in health and social care settings, shops and public transport but removed for other indoor places.	Easing	Face covering
28/03/202	The planned lifting of COVID measures announced on 24 March goes ahead.[57] From this date face coverings will no longer be a legal requirement in shops and on public transport, but will continue to be required in health and care settings. Companies will also need to continue making workplace risk assessments. All rules were scheduled to expire on 28 March, but the remaining measures have been extended for three weeks, with a review planned for 14 April.[55] The £500 self-isolation payment will continue to be available until June.	Easing	Face covering
01/04/202	PCR tests will no longer be used for symptomatic testing. Instead, lateral flow tests will be available to order free online for people with symptoms.	Testing	Wales

18/04/202	Businesses/organisations no longer be required to undertake specific coronavirus risk assessments.	Easing	Economy
2	Local authority powers to close or control premises/events expire. Face coverings must still be worn	700	
	in health and social care settings.		

Annex: Gross Value Added, Gross Domestic Product and changes to restrictions likely to affect businesses

GVA/GDP

For the UK and the four nations a monthly Gross Value Added (GVA) relative to 2019 reference year = 100 can be obtained:

- it is directly available at the UK level.
- it can be obtained for Northern Ireland, Scotland and Wales by expanding the Quarterly GVA figure.
- it can be obtained in the same way for a few of the relevant quarters for England (2020 Q1; 2020 Q2; 2020 Q3).
- another 3 England guarters can be obtained using the percentage Quarterly GDP change based on GVA: 2020 Q4; 2021 Q1; 2021 Q2
- the remaining 2 England quarters of interest (2021 Q3; 2021 Q4) can be estimated using data for England's regions weighted by GDP of the regions in 2019 (Statista)

Expand Quarterly to Monthly GVA in the 4 nations by using the Quarterly figure for the mid-month of the 3 and estimating the months either side to be that central month varied in the same proportion as seen at the UK level GVA.

There is also OECD data available (Woloszko, N. (2020), "Tracking activity in real time with Google Trends", OECD Economics Department Working Papers, No. 1634, OECD Publishing, Paris, https://dx.doi.org/10.1787/6b9c7518-en.) which provides estimates of weekly UK GDP.

List of changes to restrictions likely to affect business

Date	Changes to COVID-19 protections likely to affect businesses
11 March 2020	The UK budget included the announcement of a £12 billion package of support.
16 March 2020	Measures likely to affect business income in the UK:
	 If anybody in a household has a new continuous cough or high temperature the whole household should self-isolate for 14 days.
	 All non-essential contact and unnecessary travel should stop, and people should start to work from home where possible.
	 Social distancing is particularly important for people over 70 years old, pregnant women and those with some health conditions.
	Emergency workers no longer provided for mass gatherings.

17 March 2020	 Announcement of support for small businesses in Wales: Retail, leisure and hospitality businesses with a rateable value of £51,000 or less with receive 100% reduction in business rates. pubs with a rateable value between £51,000 and £100,000 with receive a £5,000 reduction.
20 March 2020	Announcement of coronavirus job retention scheme (the furlough scheme).
	Forced closure of cafes, pubs, bars, restaurants, nightclubs, theatres, cinemas, gyms and leisure centres.
23 March 2020	Welsh Government announces holiday parks, caravan parks, campsites, amusement arcades and indoor play centres closed. Tourist hotspots closed to visitors (closure of certain public footpaths and land).
	Requirement to stay at home except for very limited purposes. Non-essential shops and community spaces close, gatherings of more than two people in public prohibited.
26 March 2020	UK income support scheme for self-employed people who have been adversely affected by the coronavirus. Workers who cannot reasonably take annual leave due to the coronavirus can carry over holiday into the next two years.
27 March 2020	Closure of public paths and land including Snowdon, Pen y Fan and sections of the Pembrokeshire coast.
30 March 2020	Announcement of new £500 million Economic Resilience Fund to provide additional support to the Welsh economy, businesses and charities.
7 April 2020	Wales businesses required to take all reasonable steps to ensure the two metre social distancing rule is maintained between people on their premises.
22 May 2020	Residents and visitors entering the UK from overseas must self-isolate for 14 days to prevent the further spread of coronavirus. (There are a number of exemptions).
Relaxation of restri	ctions in Wales:
29 May 2020	'Stay at home' message changed to 'stay local'. Non-essential retail businesses should use the next three weeks to begin to prepare to reopen.
22 June 2020	all non-essential retail business, childcare facilities. Partial reopening of the housing market.
6 July 2020	'Stay local' lifted: people are allowed travel within Wales and into Wales. Outdoor visitor attractions can open.
10 July 2020	Those travelling from a list of countries are exempted from quarantine requirements.
11 July 2020	Self-contained holiday accommodation without shared facilities can reopen.
13 July 2020	Hairdressers, outdoor areas of bars, pubs and restaurants, outdoor cinemas, most indoor visitor attractions, and places
	of worship reopen.
20 July 2020	Playgrounds and outdoor gyms. Also funfairs (indoors and outdoors).

25 July 2020	Tourist accommodation with shared facilities, such as camping sites and all hotels. Underground attractions can also reopen.
27 July 2020	Close contact services such as beauty salons, indoor cinemas and museums. Full reopening of the housing market.
3 August 2020	Pubs and restaurants re-open indoors, also bowling alleys, bingo halls and auction houses. Restrictions on meeting outdoors also relaxed so that up to 30 people can meet outside provided social distancing is adhered to.
10 August 2020	Swimming pools, spas, gyms, leisure centres and children's indoor play areas re-open.
16 August 2020	People who were shielding no longer need to do so.
17 August 2020	Public transport 'essential travel' restriction lifted.
22 August 2020	The quarantine requirement for travellers from Portugal is removed.
	Four households able to join together to form a single, extended household (to visit someone else's home indoors or to
	visit a business or premises indoors, such as a pub or restaurant); a meal following a wedding, civil partnership or funeral allowed for up to 30 people indoors if social distancing can be maintained.
29 August 2020	The quarantine requirement for travellers from Cuba and Singapore is removed.
Partially overlapping 26 July 2020	with the relaxation period, restrictions were tightened: Quarantine reintroduced for travellers from Spain (including its islands).
27 July 2020	Mandatory to wear a three layer face covering on public transport including taxis – this may adversely affect taxi incomes.
14 August 2020	Quarantine reintroduced for travellers from Aruba, France, Malta, Monaco, the Netherlands and Turks and Caicos.
22 August 2020	Quarantine reintroduced for travellers from Austria, Croatia and Trinidad and Tobago.
27 August 2020	Higher fines for the organisers of unlicensed music events where there are more than 30 people attending.
29 August 2020	Quarantine reintroduced for travellers from Czech Republic, Jamaica and Switzerland.
For Autumn and Wir	nter 2020, changes to COVID-19 restrictions were generally likely to make the business environment more difficult:
4 September 2020	Quarantine reintroduced for travellers from mainland Portugal, Gibraltar, French Polynesia and the Greek islands of
	Mykonos, Zakynthos, Lesvos, Paros and Antiparos and Crete.
8 September 2020	Caerphilly local - 'stay local'; over 11s required to wear face coverings in shops; no meeting indoors.
10 September 2020	Merthyr and Rhondda Cynon Taf local - 'work from home'.
	Quarantine reintroduced for travellers from Greek islands of Santorini, Serifos and Tinos.
12 September 2020	Quarantine introduced for travellers from Hungary and Reunion.
	Sweden removed from quarantine.

14 September	A maximum of six people from the same household group/bubble can meet indoors at any one time (this does not
2020	include children under 11); residents over the age of 11 (apart from those who are exempt) will be required to wear
	face coverings in indoor public spaces such as shops.
17 September	Rhondda Cynon Taf local - 'stay local'; people will not be able to meet members of their extended household indoors or
2020	form an extended household; all licensed premises must close at 11pm.
	Announcement of £14 million sport and leisure recovery fund.
22 September	Caerphilly, Blaenau Gwent, Bridgend, Merthyr Tydfil and Newport local - 'stay local'; people will not be able to meet
2020	inside with members of their extended household; licensed premises will have to close at 11pm.
24 September	Llanelli local - 'stay local'; people will not be able to meet inside with members of their extended household.
2020	
27 September	Cardiff and Swansea local - 'stay local'; people will not be able to meet inside with members of their extended
2020	household.
28 September	Neath Port Talbot, Torfaen and the Vale of Glamorgan local - 'stay local'; people will not be able to meet inside with
2020	members of their extended household.
1 October 2020	Denbighshire, Flintshire, Conwy and Wrexham local - 'stay local'; people will not be able to meet inside with members
	of their extended household.
6 October 2020	Announcement of £320 million COVID-19 reconstruction package, to be invested in projects and schemes in priority
	areas.
9 October 2020	Bangor local - 'stay local'; people will not be able to meet inside with members of their extended household.
16 October 2020	Coronavirus high-prevalence areas of England, Scotland and Northern Ireland banned from travelling to Wales.
20 October 2020	Announcement of doubling of third phase of Economic Resilience Fund, making nearly £300 million available to
	support businesses that continue to be affected by COVID-19.
	Announcement of £1m to help Wales' unpaid carers cope with the financial pressures of COVID-19.
23 October 2020 to	'Firebreak' - 'stay at home'; bars, restaurants and most shops close. Primary schools and childcare settings will remain
9 November 2020	open.
29 October 2020	Announcement of £12.5m to support vulnerable children and families.
30 November 2020	Announcement of further £340m via the Economic Resilience Fund including specific support to hospitality and tourism
	businesses.
4 December 2020	Pubs, bars, restaurants and cafes will have to close by 6pm and will not be allowed to serve alcohol. After 6pm they will
	only be able to provide takeaway services. Indoor entertainment and visitor attractions must also close.

	Prohibition on travel to and from tier three areas in England, level three and four areas in Scotland and the whole of
	Northern Ireland. (There are no restrictions on travel within Wales).
14 December 2020	All outdoor attractions in Wales, including funfairs, trampoline parks and indoor skating parks must close.
16 December 2020	Announcement of additional £110 million support package for businesses.
20 December 2020	Non-essential retail, close contact services and leisure and fitness centres will close. Tighter restrictions on household
	mixing, staying-at-home, holiday accommodation and travel.
	A number of countries, including France, announced they are restricting travel from the UK.
25 December 2020	Two households to form a Christmas 'bubble' Christmas Day only.
18 January 2021	Passengers from all international destinations will have to provide a negative coronavirus test result up to 72 hours
	before departing the country they're in.
29 January 2021	Announcement of £200 million support package for non-essential retail, hospitality, leisure and tourism.
15 February 2021	Travellers from red list countries will only be able to enter Wales via a designated port of entry (in England or Scotland)
	and after isolating in a managed quarantine facility. Travellers from amber list countries will need to isolate and book a
	COVID-19 test on day 2 and day 8 of their isolation period.
Relaxation of restric	tions in Wales:
1 March 2021	Licensed wedding venues may re-open but only to perform wedding and civil partnership ceremonies; arrangements
	will be made for more elite athletes to resume training and playing.
12 March 2021	Announcement of a further £150 million to support Welsh businesses to deal with the continued impact of the
	coronavirus pandemic.
13 March 2021	Stay-at-home replaced by 'stay local'. Up to 4 people from 2 households can meet in their local area outdoors,
	including in gardens (children under 11 and carers do not count towards this limit); outdoor sports facilities can reopen
	(a maximum of 4 people from 2 households), and indoor care home visits can resume for one designated visitor.
15 March 2021	Hairdressers and barbers can reopen by appointment only.
22 March 2021	Restrictions on the sale of non-essential items will be lifted for those shops which are currently open. Garden centres
	will also reopen.
27 March 2021	'Stay local' lifted to allow people to travel within Wales; self-contained holiday accommodation re-open for one
	household; organised children's activities outdoors restart; libraries reopen.
12 April 2021	All non-essential retail (shops and close contact services) reopen; travel allowed out of Wales to the rest of the British
	Isles.
24 April 2021	Any six people will be able to meet outdoors.

26 April 2021	Reopen outdoor attractions (including outdoor swimming pools) and outdoor hospitality including cafes, pubs and restaurants. Organised outdoor activities for up to 30 people and wedding receptions for up to 30 people can take place.
3 May 2021	Gyms and leisure centres can reopen, extended households will be possible, children's indoor activities and organised indoor activities for up to 15 people can begin again.
11 May 2021	Announcement that businesses still affected by the coronavirus restrictions will be able to claim up to £25,000 in support to meet ongoing costs.
17 May 2021	Six people from six different households will be able meet indoors in cafes, pubs and restaurants. Indoor entertainment venues can re-open and an increased number of people can attend organised indoor and outdoor activities.
24 May 2021	International travel resumes. Countries will be given a classification (green, amber or red).
7 June 2021	Availability of vaccination certificate for those having had both doses of a COVID-19 vaccine; urgently need to travel to a country which requires vaccine certification; not able to either quarantine or provide tests to meet the country's entry requirements.
8 June 2021	Afghanistan, Sudan, Sri Lanka, Bahrain, Trinidad and Tobago, Costa Rica, and Egypt added to the red list. Portugal (including Madeira and the Azores) moves to the amber list (returning travellers need to self-isolate).
24 June 2021	Eritrea, Haiti, Dominican Republic, Mongolia, Tunisia and Uganda added to the red list for international travel. Malta, Madeira, the Balearic Islands, several UK overseas territories, Caribbean islands including Barbados are added to the green list.
17 July 2021	Up to six people can meet indoors in private homes and holiday accommodation; organised indoor events for up to 1,000 seated or 200 standing can take place; ice rinks can re-open. Limits on the number of people who can gather outdoors will be removed.
19 July 2021	Fully vaccinated adults returning from amber list countries, and under-18s, will no longer need to self-isolate. They will still need to take tests pre-departure and on day two following their arrival in the UK.
22 July 2021	Care home residents no longer need to isolate on return from an overnight stay and entertainers will be permitted in indoor areas of the home.
2 August 2021	Travellers from the EU and US who have been fully-vaccinated can visit the UK without having to self-isolate on arrival.
7 August 2021	No legal limits on the number of people who can meet, including indoors, and all businesses will be able to open.
22 September 2021	Eight destinations are removed from Red list, including Turkey and Pakistan.
27 September 2021	Green and Amber travel lists merged. Remove the requirement for pre-departure testing for those fully vaccinated.
4 October 2021	Fully vaccinated travellers from non-red list countries will be able to replace day 2 PCR tests with cheaper lateral flow tests.
11 October 2021	Removal of further countries from the Red list.

31 October 2021	All adults in Wales who are fully vaccinated, and the majority of under 18s, who have travelled from countries which are not on the red list, will be able to take a lateral flow test (instead of the current requirement for a PCR test), on or before	
1 November 2021	day two of their arrival into the UK. Removal of remaining seven countries from the Red list for international travel. An additional 35 countries added to the list of countries whose vaccinations and certifications are recognised for international travel.	
22 November 2021	People who received vaccines with World Health Organisation (WHO) Emergency Use Listing status in a country issuing recognised vaccine certificates will only need to take a day two test (this can be a lateral flow test). The vaccines which currently have WHO Emergency Use Listing status are Sinopharm, Sinovax and Covaxin.	
Partially overlapping	with the relaxation period, protections were tightened:	
11 October 2021	Adults in Wales will need to show an NHS COVID Pass to enter nightclubs and events including: indoor, non-seated events for more than 500 people; outdoor non-seated events for more than 4,000 people; any event with more than 10,000 people in attendance. The NHS COVID Pass will be used to show that someone is fully-vaccinated, or that they've had a negative lateral flow test result within the last 48 hours.	
15 November 2021	Use of the NHS COVID pass extended to cinemas, theatres and concert halls.	
26 November 2021	Travellers from Botswana, Eswatini, Lesotho, Namibia, South Africa and Zimbabwe will not be permitted to enter Wales but must enter through a port of entry in England or Scotland and go into a managed quarantine facility for 10 days. They must also take post-arrival PCR tests on day 2 and day 8.	
28 November 2021	Angola, Malawi, Mozambique and Zambia move to the Red list.	
30 November 2021	All fully-vaccinated travellers arriving in Wales, including under 18s, will need to self-isolate and take a PCR test before or on day two.	
6 December 2021	A 48 hour pre-departure testing requirement is reintroduced for all travellers. Nigeria moves onto the travel Red list.	
14 December 2021	Removal of all 11 countries from the Red list.	
20 December 2021	New measures for indoor and outdoor sporting events. £3 million Spectator Sports Fund available to support clubs and sporting venues affected by the measures.	
23 December 2021	Announcement of £120 million support package for sectors including events, nightclubs, hospitality, leisure, tourism businesses, and retail.	
26 December 2021	A general requirement of 2m social distancing in all premises open to the public and workplaces, where reasonable. The rule of 6 will apply to gatherings in regulated premises, such as hospitality, cinemas and theatres. Team sports - up to 50 spectators will be able to gather outdoors, in addition to those taking part. There is also an exception for events involving children and young people under 18.	
Relaxation of protect	Relaxation of protections in Wales:	

5 January 2022	Remove the requirement for fully vaccinated travellers and under 18s to take a pre-departure test and a day 2 PCR test when arriving in the UK (a lateral flow test can be taken instead at day 2). The requirements for non-vaccinated travellers remain unchanged.
15 January 2022	Up to 500 people can be present at an outdoor event.
21 January 2022	Outdoor activities resume.
28 January 2022	Indoor activities and premises resume.
11 February 2022	Changes to testing requirements for travellers arriving in Wales.
18 February 2022	COVID Pass no longer be needed for large events and nightclubs, cinemas, and theatres.
28 February 2022	Adults and children aged 11 and over will no longer be required to wear face coverings in indoor places except health and social care settings, shops and public transport.
28 March 2022	Face coverings no longer required in retail settings and on public transport. Self-isolation no longer a legal requirement.
18 April 2022	Businesses/organisations no longer be required to undertake specific coronavirus risk assessments.
30 May 2022	The wearing of face masks no longer legally required in Welsh health and social care services (the ending of the last of Wales' COVID-19 rules).

Annex: Care Home COVID-19 Response Strategy

Changes to care homes' strategy have been summarised from the full report on Itccovid.org.

On 2 April 2020 new guidance intended for care homes (Admission and Care of Residents during COVID-19 Incident in a Care Home) recommended providing care in isolation for residents discharged from hospitals with a positive COVID-19 test. However, it overlooked the potential risk from asymptomatic transmission by establishing that if a resident had no symptoms of COVID-19 upon discharge, the care home should provide care as normal.

On 22 April 2020 in Wales (15 April 2020 in England), new guidelines recognised the importance of asymptomatic transmission, committing to test all admissions to care homes, whether symptomatic or not, starting with patients discharged from hospitals, Isolating all admitted residents whether symptomatic or asymptomatic and those waiting for a test result.

Care home staff were added to the list of essential workers and so could apply for a test if they had symptoms. They could also apply for a test if a member of their household presented COVID-19 symptoms (these provisions came in while testing capacity and eligibility for the whole population were very restricted). However, there are opportunity costs of testing regimes. Consequently, these took some time to roll out. A series of Freedom of Information Requests show that most Health Boards in Wales tested between 29% and 60% of discharged patients in the second half of April. One Health Board tested as little as 6.8%.

From 2 May 2020, all residents and staff in care homes with outbreaks or those with at least 50 beds were being tested. From 16 May 2020 tests were available to all care home staff and residents. Only on 18 June 2020 was it announced that all registered adult care homes had been offered testing and that testing was almost complete.

On 3 August 2020 Wales rolled out the regular testing (retesting) that started in England on 6 July 2020. Retesting involved testing all residents every 28 days and staff every week.

By August 2020 staff and residents of care homes were receiving regular coronavirus testing whether or not they had symptoms. (At this time the rest of the population were being tested if they had symptoms but pre-symptomatic and asymptomatic cases were specifically excluded).

From 28 August 2020, indoor visits to care homes, hospices and secure accommodation for children and young people could resume (each institution to decide exactly when they begin these visits again).

From 19 September 2020, hospital and care home visits were suspended in Bridgend, Merthyr Tydfil and Rhondda Cynon Taf because of concerns about rising COVID-19 cases in those areas.

From 16 November 2020, a new top-up payment was introduced for people working in social care to raise statutory sick pay to the level of their normal wages if they have to take time off because of coronavirus or because they have been in close contact with someone who has coronavirus.

On 23 November 2020, there was an announcement of £3 million to procure, install and lease 100 temporary 'pods' at care homes to facilitate visits over the winter months.

From 30 November 2020, there was Covid-19 LFD screening for visitors to a small number of care homes, with a wider roll-out from the week commencing 14 December 2020.

From 8 December 2020, health boards started administering Pfizer-BioNTech COVID-19 vaccine (a cold-stored vaccine) to care home staff, people aged over 80, and frontline health and social care workers who are most at risk.

From 9 December 2020, the self-isolation period (a person required to isolate as a result of having had close contact with someone who has tested positive for coronavirus) reduced from 14 to 10 days.

From 13 March 2021, routine indoor visiting to care homes by a single, designated visitor resume.

From 22 July 2021, restrictions ease for care homes - residents no longer need to isolate on return from an overnight stay and entertainers are permitted in indoor areas of the home to enable residents to resume the activities they enjoy.

On 14 September 2021, there was an announcement of £48 million COVID-19 recovery fund to support social care in Wales. £40 million was allocated to local authorities to help the social care sector meet the ongoing challenges caused by the pandemic. A further £8 million was announced to fund a number of specific priorities, including extending the carers support fund; tackling loneliness in older people; investing in the social care workforce's wellbeing and in residential services for care-experienced children.

On 21 October 2021, there was an announcement of an additional £42m funding for social care.

From 18 April 2022, businesses and organisations were no longer required to undertake specific coronavirus risk assessments. Face coverings were still required to be worn in health and social care settings.

Annex: Links/work to reference in report

TAC publications:

- Technical Advisory Group: examining deaths in Wales associated with COVID-19 30 March 2022 | GOV.WALES
- Technical Advisory Group: evidence review of ozone generators including appropriateness as mitigation in classrooms | GOV.WALES
- Technical Advisory Group: modelling the Impact of Test, Trace, Protect (TTP) on COVID-19 transmissions in Wales | GOV.WALES
- Technical Advisory Group: use of face coverings in childcare and educational settings for Under 18s | GOV.WALES
- Technical Advisory Group: the potential risks and benefits of removing restrictions in a phased approach to mitigate the impact of harms from COVID-19 in Wales | GOV.WALES
- Technical Advisory Group: effectiveness of non-pharmaceutical interventions in the Local Health Protection Zones and the Firebreak in Wales | GOV.WALES
- Technical Advisory Group: summary of evidence on costs and benefits and potential mitigations for measures to address COVID-19 in Wales | GOV.WALES
- Technical Advisory Group: evidence review on children and young people under 18 in preschool, school or college following the firebreak | GOV.WALES
- Technical Advisory Cell: Impact of European measures to ease lockdown restrictions on R values summary briefing | GOV.WALES

TAC non-published papers/work:

• From TAG 45: TAG contribution for 21 day review of measures

- From TAG 53: Interdisciplinary Task & Finish Group on the role of children in transmission: Risks associated with the reopening of education settings in September
- From TAG 59: Health Technology Wales Rapid Summary: Face coverings to reduce COVID-19 transmission
- From TAG 74: Suicide risk and prevention during the COVID-19 pandemic
- From TAG 79: Summary of data related to NPIs
- From TAG 84: Mobility during firebreak data
- From TAG 85: Evidence review of schools post firebreak
- From TAG 89: Impact of Autumn interventions across the Four Nations
- From TAG 109: The potential risks and benefits of removing restrictions in a phased approach to mitigate the impact of harms from COVID-19 in Wales
- From TAG 110: Impacts of the COVID-19 pandemic on air quality in Wales
- From TAG 113: Review of face coverings in occupational settings
- From TAG 113: Examining deaths in Wales associated with COVID-19
- From TAG 114: Modelling the current Welsh Test, Trace, Protect (TTP) system
- From TAG 116: Identifying, quantifying and measuring the harms arising from the COVID-19 restrictions to children and young people in Wales
- From TAG 116: Health and economic impacts of missed primary and secondary education due to the COVID-19 pandemic in Wales
- From TAG 120: Vulnerable children and young person harms slides
- From TAG 120: Identifying, quantifying and measuring the harms arising from the COVID-19 restrictions to children and young people in Wales, update
- From TAG 146: Examining deaths in Wales associated with COVID-19, 2nd update

PHW publications:

https://phw.nhs.wales/publications/publications1/self-isolation-confidence-adherence-and-challenges-behavioural-insights-from-contacts-of-cases-of-covid-19-starting-and-completing-self-isolation-in-wales/

https://phw.nhs.wales/publications/publications1/economic-consequences-of-covid-19-pandemic-on-longstanding-illnesses-lsi-for-wales/

https://phw.nhs.wales/publications/publications1/covid-19-related-deaths-in-wales-amongst-people-with-learning-disabilities-from-1st-march-to-19th-november-2020/

https://phw.nhs.wales/publications/publications1/placing-health-equity-at-the-heart-of-the-covid-19-sustainable-response-and-recovery-building-prosperous-lives-for-all-in-wales/

https://phw.nhs.wales/publications/publications1/children-and-young-peoples-mental-well-being-during-the-covid-19-pandemic-research-brief/

https://phw.nhs.wales/publications/publications1/voices-of-carers-during-the-covid-19-pandemic-messages-for-the-future-of-unpaid-caring-in-wales/

https://phw.nhs.wales/publications/publications1/rising-to-the-triple-challenge-of-brexit-covid-19-and-climate-change-for-health-well-being-and-equity-in-wales/

https://phw.nhs.wales/publications/publications1/health-of-individuals-with-lived-experience-of-homelessness-in-wales-during-the-covid-19-pandemic-report/

ONS publications:

Coronavirus (COVID-19) and its effects on household consumption, UK - Office for National Statistics

Coronavirus and the social impacts on the countries and regions of Britain - Office for National Statistics

Coronavirus and crime in England and Wales - Office for National Statistics (ons.gov.uk)

Coronavirus (COVID-19) related deaths by ethnic group, England and Wales - Office for National Statistics (ons.gov.uk)

Coronavirus (COVID-19) related deaths by religious group, England and Wales - Office for National Statistics (ons.gov.uk)

Coronavirus and housing indicators in England and Wales - Office for National Statistics (ons.gov.uk)

Deaths involving COVID-19, England and Wales - Office for National Statistics (ons.gov.uk)

Coronavirus and deaths of homeless people, England and Wales: deaths registered up to 26 June 2020 - Office for National Statistics (ons.gov.uk)

Coronavirus and housing indicators in England and Wales - Office for National Statistics (ons.gov.uk)