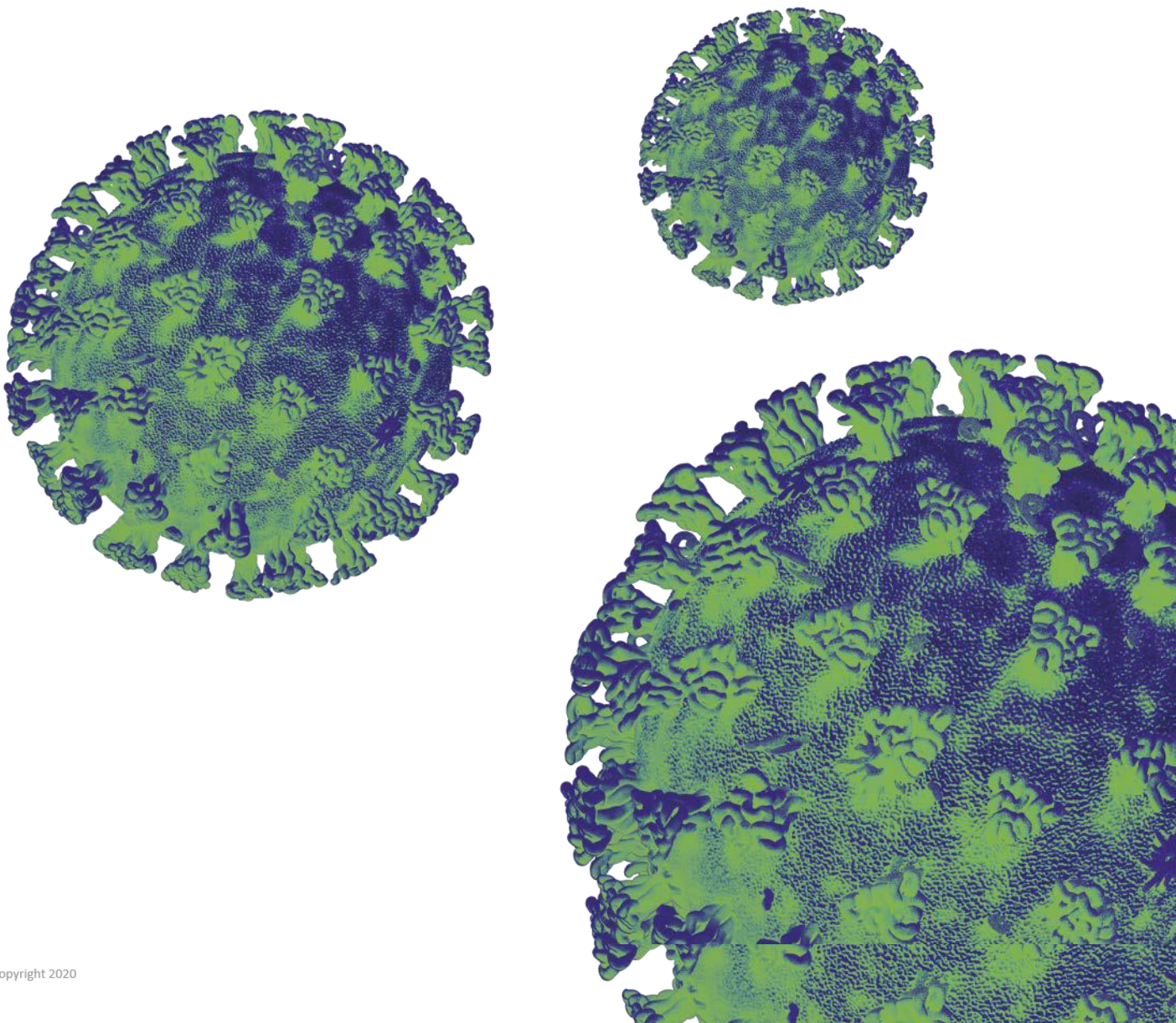




Llywodraeth Cymru  
Welsh Government

# Advice from the Technical Advisory Group and Chief Scientific Advisor for Health 21 Day Review

2<sup>nd</sup> December 2021



This advice has been drafted based on the available evidence at time of writing and has been assembled at considerable pace in order to support policy colleagues and Welsh ministers. The purpose of scientific advice is to provide an overview of what we know from scientific and technical investigations, what we can infer indirectly from the evidence base or by a consensus of expert opinion. The advice is not Welsh government policy; policy formation is separate.

## Summary

The Omicron variant has already been detected in the UK and there are likely to be more cases confirmed in the near future (high confidence).

### **TAG recommends the strengthening and improved adoption of current measures in COVID Stable:**

- Acceleration of the main vaccine and vaccine boosting campaign should be a priority (high confidence)
- Reduction in social contacts should be encouraged, especially through increased working from home wherever it is a viable business option.
- Good face coverings, worn correctly, or a medical exemption, should be a requirement in all indoor spaces where it is reasonable to do. Where it is not reasonable, a COVID pass or evidence of negative LFT from that day should be required.
- The protective value of the COVID pass could be increased by including **both** the requirement of evidence of vaccination (time limited and including boosters) or recovery from recent infection (time limited) **and** recent negative lateral flow test, in a broad array of settings (high confidence).
- There would be benefit from greater encouragement, education and support for the use of lateral flow tests in domestic and social settings – including greater encouragement for those testing positive to also seek a PCR test so that genomic/genotyping analysis can be performed.
- Proactive LFD testing both before and following activities associated with higher risks of exposure (large numbers of individuals, close proximity, indoors etc.) could also be encouraged.

Preparations should be made for the modification of pharmaceutical interventions (i.e. vaccines and monoclonal antibody treatments) to counteract the likely escape vectors of the Omicron variant.

### **TAG recommends that the Welsh Government consider and agree in advance what measures would be introduced if a COVID Urgent situation occurred.**

Measures will have a greater effect when introduced earlier, with higher levels of stringency, and wide geographical coverage (high confidence).

## Background

Whilst the situation for the Delta variant in much of Europe continues to deteriorate, the recent discovery of the newly characterised variant, Omicron, provides a significant challenge. As such, this advice (which was commissioned to consider COVID Stable and COVID Urgent) is significantly influenced by both the current situation in Europe and the potential harmful impact of Omicron in Wales. Due to uncertainty around Omicron or a potential resurgence in the Delta variant, this advice is couched in terms of **'what happens if'** rather than **'this will definitely happen'**. However, given the possibility of significant harm arising from either eventuality it is important to plan and prepare for these **possible** futures.

Whatever eventuality, COVID is not going away. Vaccines and protective measures continue to be effective. Stringent measures have other associated impacts and should be considered carefully in balancing all harms. However, as a basic principle if faced with significant risk of a COVID urgent situation it is better to react with firmer measures early and communicate this clearly (e.g. under what conditions would measures start and stop).

There remain many scientific uncertainties and knowledge gaps with regards to the recently identified Omicron variant. At a high level these include characterisation of the virus in laboratory studies, unbiased estimates of growth and secondary attack rates, transmissibility, severity of illness, protection from prior infection or vaccination, and clear picture of international prevalence<sup>1</sup>. If Omicron evades some of the immune response, or is more transmissible than Delta, these measures should slow ingress of the variant into Wales – this will only work if the measures are understood and adopted by the population and enforced consistently. If Omicron or Delta grows at the same rate as observed in other international comparators, more stringent measures will be required.

Recently SAGE agreed that 'The earlier the measures are introduced/reinforced, the more stringent they are and the wider their geographic coverage the more effective they will be. Even if measures are introduced immediately, there may not be time to fully ascertain whether they are sufficient before decisions are needed on further action. The situation regarding Omicron could develop quickly over the coming weeks and decision-makers may need to act while there is still a high level of uncertainty, including considering the potential need for stringent response measures<sup>2</sup>.'

Further, SAGE agreed that 'Evidence from behavioural insights suggests that measures could be reintroduced with expectation of a similar level of adherence as has been seen in the past, if messaging has a clear rationale and there is coherence between messaging and policy. Early communication of risk and potential decisions would allow people to plan accordingly, and in turn increase levels of adherence.'

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<sup>1</sup> [Update on Omicron \(who.int\)](#)

<sup>2</sup> [SAGE 79 minutes: Coronavirus \(COVID-19\) response, 4 February 2021 - GOV.UK \(www.gov.uk\)](#)

## 1. Wales situation

**The COVID Situation Report should be viewed for a full picture of the COVID situation in Wales.**

Overall cases of COVID-19 and test positivity rates have decreased at a national level in Wales, and COVID-19 pressure on the NHS has seen a steady decrease. The number of weekly deaths has decreased in the most recent two weeks and the vaccination campaign continues to ramp up booster doses.

The most recent UKHSA consensus estimate of the reproduction number for Wales is between 0.8 and 1.0 with doubling time of either halving every 20 days or flat, while PHW's estimate is around 0.96 with a halving time of 53 days, as at 30 November. Note that UKHSA's estimate is typically lagged by 2-3 weeks while PHW, which uses a different methodology, is lagged by around 1 week.

As at 22:00 1 November, PHW data suggests 2,469,217 people have received at least one dose of COVID-19 vaccine, 2,265,776 have received two doses, 42,292 have received a third dose as part of their primary course and 857,502 have received a booster dose. The Welsh Government have agreed the JCVI's recent recommendation that booster vaccines should be expanded to all those aged over 18, prioritised by descending age, and 12 to 15 year olds should be offered a second dose.

The most recent [ONS Coronavirus \(COVID-19\) Infection Survey](#) results, 14 to 20 November, estimates that **1.95%** of the community population had COVID-19 (95% credible interval: 1.26% to 2.36%). This equates to approximately **1 person in every 50** (95% credible interval: 1 in 55 to 1 in 35), **or 59,100 people** during this time (95% credible interval: 47,500 to 71,800). This compares to around 1 in 65 people in England, around 1 in 70 people in Scotland, and around 1 in 50 people in Northern Ireland.

[PHW data](#) suggests flu activity remains stable with seven confirmed influenza cases since the previous week and no evidence of circulation in Wales. Incidence of confirmed Respiratory syncytial virus (RSV) cases has decreased but remains at medium intensity circulation levels, although testing levels are also currently higher than in previous seasons.

## 2. Omicron Variant of Concern - Update from NERVTAG 25 November

- NERVTAG<sup>3</sup>, the ECDC<sup>4</sup> and the WHO<sup>5</sup> have all recommended that introduction of the **Omicron (B.1.1.529)** variant into would likely be **capable of initiating a new wave of infections** and community spread and, therefore, **early and robust actions to prevent introduction and onward transmission are highly recommended**. It cannot be ruled out that this wave would be of a magnitude similar, or even larger, than previous waves. Uncertainties concerning Omicron

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<sup>3</sup> [NERVTAG note B.1.1.529 extraordinary meeting\\_20211126\\_FINAL.pdf | Powered by Box](#)

<sup>4</sup> [Implications of the emergence and spread of the SARS-CoV-2 B.1.1.529 variant of concern \(Omicron\) for the EU/EEA \(europa.eu\)](#)

<sup>5</sup> [Update on Omicron \(who.int\)](#)

immune escape properties call for a precautionary approach and timely and urgently reinforced implementation of non-pharmaceutical interventions are strongly advised.

- Available evidence from South Africa suggests it is highly likely this variant is a 'fit' virus that is undergoing extensive community transmission in SA, and possibly elsewhere. Based on the mutation profile of Omicron, which has an unprecedented number of spike mutations, partial immune escape is likely.
- South Africa's Centre of Mathematical Modelling estimates an R-value of 2.8 for Omicron in Gauteng, where the number of cases has rapidly increased, despite a high level of expected immunity following the recent Delta wave and an ongoing vaccination programme. However, there are likely biases in sampling (over-sampling in areas most affected by Omicron), so the true proportion of cases that are the new variant in this area is uncertain.
- Like the previous Alpha variant, Omicron has a genotype that would lead to failure to detect the S gene target in PCR assays (S gene target failure – SGTF). 100% of SGTF samples sequenced in South Africa have been confirmed as the Omicron variant and there are no other known variants in South Africa with SGTF, suggesting SGTF is a reliable marker for Omicron.
- Actions should be taken to enhance surveillance and early detection of Omicron in the UK and, if necessary, to implement containment measures. Early warning systems should be empowered to detect indicators such as rapid growths in case incidence, test positivity, morbidity and health care system pressure, as well as unusual epidemiological signals through local event-based surveillance. Genomic sequencing remains of critical importance to enable early detection of this variant, monitor epidemiological trends and inform reimplementations, adjustment or reinforcement of NPIs.
- Prospective sampling from all inbound travellers should be increased and positive PCR samples should be sequenced to confirm presence of Omicron. National testing strategies should be updated to include available diagnostic tools for rapid decentralised testing and reporting.
- Although there is not yet any direct experimental evidence of immune escape, the genotype and the epidemiology in SA are highly suggestive that Omicron is a highly divergent variant (by comparison with previous VoCs), that is able to successfully infect previously infected or vaccinated individuals (medium confidence).
- Despite these uncertainties it is currently reasonable to assume existing vaccines offer protection against severe disease and death (medium confidence) and inequalities in vaccine coverage should be urgently addressed to ensure vulnerable groups receive their first and second doses. **Acceleration of the vaccine boosting campaign should be considered**, as it is expected that the booster will re-activate the immune system, giving a stronger resistance to Omicron, as well as helping to control a concurrent Delta wave. Boosters should be prioritised for the most vulnerable and elderly, followed by consideration of a booster dose for all adults 18 years and over at least six months after completion of the primary vaccination series.
- There are currently insufficient data to make any robust comments on disease severity associated with the Omicron variant, although it is possible that vaccine

effectiveness against severe disease could be reduced (low confidence). Preliminary data<sup>6</sup> suggests there are increasing rates of hospitalisation in South Africa, but this may be due to increasing overall numbers of people becoming infected, rather than a result of specific infection with Omicron.

- Regardless of impact on disease severity, **a large wave of infections in the UK as observed in SA, caused by a more transmissible or immune-escaping variant, will be accompanied by an increase in severe cases which could potentially be sufficient to overwhelm NHS capacity and lead to increased morbidity and mortality.**
- Although computational analyses to characterise Omicron are ongoing and are expected in **2-3 weeks**, the multiple mutations observed in the Omicron spike glycoprotein are likely to render many of the currently available monoclonal antibodies ineffective. Therefore preparations should be made for the modification of countermeasures i.e. vaccines and monoclonal antibodies.
- Information related to Omicron and potential implications for the public should be communicated in a timely and transparent manner to build trust and increase acceptance of response interventions. Proactive communication around what is known, what is unknown, and the actions being taken by authorities to build information and reduce risk is highly recommended.

### 3. Behavioural Insights

From a messaging perspective, it will be important to highlight that as the Omicron variant may be more transmissible, current control measures other than stay at home (e.g. not mixing with other households, social distancing, hand washing, ensuring ventilation in homes, use of face coverings and self-isolation when required), will be more important than ever and effective in reducing spread of the new variant. If a greater proportion of the population are able to take more protective actions more often (with enabling support in place), this will prevent further harms arising from the new variant as well as the existing form of the virus (and the flu virus).

While levels of self-reported adherence to personal protective measures remain high in Wales, including physical distancing<sup>7</sup> and use of face coverings<sup>8</sup>, these have been falling in recent weeks to the lowest levels recorded throughout the pandemic. At the same time, the proportions reporting the importance of such measures remains high and it would be an opportune time to make every effort to address this intention-action gap. Similarly, of those in work, the proportion reporting doing so from home has fallen significantly from those levels recorded in spring 2020 and winter 2021, such that this

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<sup>6</sup> [DAILY HOSPITAL SURVEILLANCE \(DATCOV\) REPORT - NICD](#)

<sup>7</sup> [Survey of public views on the coronavirus \(COVID-19\): 19 to 22 November 2021 | GOV.WALES](#)

<sup>8</sup> [Ad-hoc statistical requests: 3 November 2021 | GOV.WALES](#) (Revised ad hoc release planned)

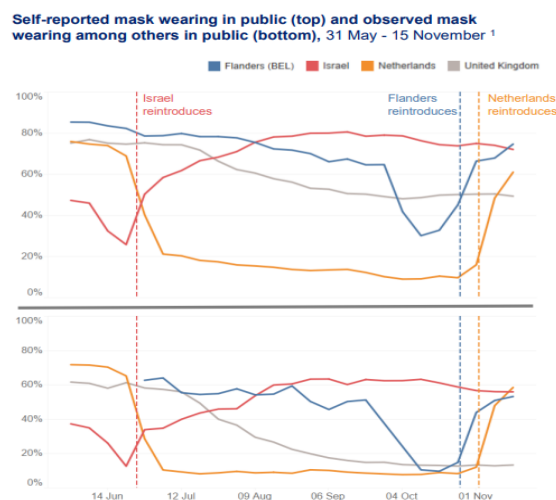
figure is now one in five, having peaked at around half of the working population earlier in the pandemic<sup>9</sup>. Similar trends can be seen elsewhere in the UK<sup>10</sup>.

The most recent IPSOS MORI survey data shows that a number of protective behaviours are at the lowest levels since the survey began. The number of people avoiding non-essential use of public transport is at the lowest since the survey began at 39%. Around half of those polled say they are maintaining 2 meters social distancing when out, with similar numbers for those avoiding crowded places and avoiding close contact with others. Around 30% are avoiding contact with elderly or vulnerable people and around 25% are only leaving home for essential trips.

Support remains high for wearing face coverings in some public spaces, even before Omicron, at between 65 and 72% and requiring people to adhere to 2 meters social distancing in busy indoor spaces was supported by 62% of those polled. 62% also disagree that businesses should be allowed to operate with no mandatory COVID restrictions. The number of people working from home has fallen to the lowest level, from a peak of around 50% to 20% currently, although 21% of those not working from home feel they are unsafe at their place of work.

However levels of self-isolation with symptoms are low (24%) in spite of higher levels of intention to isolate (65%).

Comparison of self-reported and observed mask wearing in public shows a significantly lower adherence to this protective measure in the UK than other countries (source ICJU, figure below).



Advice provided at different stages of the pandemic remains relevant to communication activity in the event of measures in a COVID urgent scenario being introduced, including TAG advice set out in the most recent 21 day review<sup>11</sup>. Briefly, this reiterated the need to: co-produce communications and use trusted messengers;

<sup>9</sup> [Ad-hoc statistical requests: 3 November 2021 | GOV.WALES](#) (Revised ad hoc release planned)

<sup>10</sup> See for example [Coronavirus and the social impacts on Great Britain - Office for National Statistics \(ons.gov.uk\)](#) and [REPORTS | COVID Social Study](#)

<sup>11</sup> [Advice from the Technical Advisory Cell and Chief Scientific Advisor for Health: 21 day review 11 November | GOV.WALES](#)

explain the rationale behind the measures deemed necessary to reduce transmission; emphasise collective efforts and accentuate positive stories; frame messages in terms of personal gains rather than restrictions; and emphasise normalising protective behaviours.

As noted previously, the introduction of additional protective measures would occur in a different context than earlier in the pandemic. While vaccination rates are high and a population wide booster campaign underway, the potential impact of the Omicron variant, alongside the Delta variant, creates uncertainty, while the economic position is different with the end of the Coronavirus Job Retention Scheme. Tailored communication should acknowledge this current uncertainty and highlight the importance of vaccination, whether first, second or booster dose and explain why the measures are thought to be necessary despite high vaccine uptake. In addition, those needing to self-isolate should be supported in doing so, with clear sign-posting to the financial, practical and emotional support available.

On numerous occasions throughout the pandemic SPI-B and TAG have reinforced the importance of communications activity that clearly explains the measure people are being asked to adhere to and crucially, the rationale behind these measures. This is arguably more important than ever at a time of scientific uncertainty.

The principles set out in the COVID Code<sup>12</sup> remain important and in combination will help to limit transmission, including the importance of testing and self-isolating as necessary, working from home where feasible, ventilation, wearing a face covering where required and limiting mixing as far as possible.

As per WG October guidance<sup>13</sup>, face mask effectiveness is strongly influenced by material quality and fit (including covering the nose and mouth). A well-fitted face mask will reduce leakage and particle exposure. Fit modification methods may be associated with greater efficiency. Techniques such as mask knotting and tucking, nylon hosiery overlays or mask braces preliminarily appear to be associated with increased effectiveness. No particular method has been identified as optimal thus far<sup>14</sup>.

There is limited evidence on anticipated levels of adherence following the reintroduction of more stringent protective measures where they have been absent for a period of time. Recent analysis by SPI-B<sup>15</sup> examining 12 behavioural interventions across 30 countries suggested no sign of a decline in the effectiveness of interventions when reintroduced for a second or third time, suggesting that reintroduction could be effective if necessary.

#### **4. Responses under different scenarios**

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<sup>12</sup> <https://gov.wales/technical-advisory-group-sustaining-covid-safe-behaviours-wales-html>

<sup>13</sup> <https://gov.wales/sites/default/files/publications/2021-10/coronavirus-control-plan-autumn-and-winter-2021-update.pdf>

<sup>14</sup> [Face coverings in mitigating transmission of SARS-CoV-2 \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/101111/face-coverings-in-mitigating-transmission-of-sars-cov-2.pdf)

<sup>15</sup> [SPI-B: Behavioural considerations for maintaining or reintroducing behavioural interventions and introducing new measures in autumn 2021, 14 October 2021 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/101111/spi-b-behavioural-considerations-for-maintaining-or-reintroducing-behavioural-interventions-and-introducing-new-measures-in-autumn-2021-14-october-2021-gov.uk)



**a) Rates and COVID related NHS pressures are increasing gradually – possible responses under Covid Stable:**

As stated in previous advice<sup>16</sup>, prior to any potential escalation in NPIs efforts should continue to focus on strengthening public communications and the protective behaviours available at the current alert level in Wales. Interventions are likely to be most effective in combination (the Swiss cheese approach)<sup>17</sup> rather than implemented sequentially. There are no silver bullets, although the most effective tools available continue to be:

- Increasing take up of vaccines for both first and second doses and boosters, incorporating the recently announced JCVI advice<sup>18</sup> to extend the booster programme to those aged 18+ (offered in order of descending age) and a second dose for those aged 12-15<sup>19</sup>.
- Encouraging the working population who have previously been able to work from home to do so where possible.
- Encouraging household contacts of positive cases to isolate until they receive a negative test result and providing social and financial support to enable this.
- Emphasising the Covid-code, including physical distancing from others; wearing a well-fitted mask; meeting outdoors where possible, avoiding poorly ventilated or crowded spaces; keeping hands clean; coughing or sneezing into a bent elbow or tissue; and getting vaccinated when called.

As noted above, evidence from behavioural insights and recent polling data suggests that measures could be reintroduced with expectation of a similar level of adherence as has been seen in the past, if messaging has a clear rationale and there is coherence between messaging and policy. Early communication of risk and potential decisions would allow people to plan accordingly, and in turn increase levels of adherence.

As advised in 2020, it is highly likely there will be a change in contact patterns over the festive period, although the coming Winter will see a very different set of circumstances, with a widely vaccinated population and generally decreasing trends as opposed to increasing (potential introduction of Omicron notwithstanding). While the actual number of average contacts may not increase due to the closure of schools and workplaces during this period, there is likely to be increased mixing across generations and between disparate contact networks, accompanied by activities such as shopping, work parties and long-distance travel.

Increased, 'intelligent' use of lateral flow device (LFD) tests for rapid detection of SARS-CoV-2 viral antigens has a potential role within a wider suite of responses to an emerging threat from the Omicron variant should the decision be made to implement such a response.

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<sup>16</sup> [Advice from Technical Advisory Cell and Chief Scientific Advisor for Health: 21 day 28 October | GOV.WALES](#)

<sup>17</sup> [Technical Advisory Group: sustaining COVID-safe behaviours in Wales \[HTML\] | GOV.WALES](#)

<sup>18,19</sup> [JCVI advice on COVID-19 booster vaccines for those aged 18 to 39 and a second dose for ages 12 to 15 - GOV.UK \(www.gov.uk\)](#)

LFD testing should be seen as ‘complimentary’ to other testing options, rather than in competition with them, with each option have its own balance of strengths and weaknesses. While not without considerable costs at scale, LFDs are relatively inexpensive at the individual test level and are widely available within the community from multiple sources. They can be ordered in advance of need and the test result is available within 30 minutes of sampling. These factors mean that LFDs are well suited to individual-led, self-administered testing as **part of a wider suite of actions** that an individual could take to mitigate – but not eliminate – the risk of transmission associated with activities involving face-to-face social contact. The primary role of risk mitigation measures is to reduce the risk inherent in essential activities; the extent to which they should be used to facilitate non-essential activities is a challenging dilemma, the response to which depends on the wider policy and societal attitude to risk. PCR tests will still be required both in institutional settings and more generally in the community to allow sequencing to be carried out and thus identification of variants of concern such as the Omicron variant. Wastewater surveillance will also be useful to support wider surveillance of SARS-CoV-2 infections.

Proactive LFD testing could be encouraged immediately in advance of social gatherings, especially those involving individuals from multiple social groups (e.g. different households) and including vulnerable individuals at high risk of severe negative clinical outcomes if infected. **Similarly, proactive LFD testing following activities associated with higher risks of exposure (large numbers of individuals, close proximity, indoors etc.) could also be encouraged.**

It is important to understand that the role of LFD testing needs to be considered within the wider context of all testing for the SARS-CoV-2 virus, and that that testing must be coherently integrated within the wider testing for acute respiratory pathogens.

Omicron has already been detected in the UK and there are likely to be more cases confirmed in the near future (high confidence). As previously advised border measures cannot entirely prevent the introduction of variants into the country, although they can be effective reducing the number of introductions (high confidence) and therefore delaying the subsequent wave of infections (low confidence).

A single day 2 PCR test for international arrivals will identify significantly fewer cases compared to two PCR tests spaced apart by a few days due to the tests falling at different points in the potential infection cycle (high confidence)<sup>20</sup>. Daily lateral flow testing is another potentially effective model for identifying infections, although this would not allow variants to be identified without confirmatory PCR tests, which is important with regards to monitoring Omicron.

**Measures will have a greater effect when introduced earlier, with higher levels of stringency, and wide geographical coverage (high confidence).** As with previous waves some settings such as care homes will require targeted consideration. Even if measures are introduced immediately, there may not be time to fully ascertain whether they are sufficient before decisions are needed on further action. The situation could develop quickly over the coming weeks and decision-makers may need to act while there is still a high level of uncertainty, including considering the potential need for stringent response measures.

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<sup>20</sup> [SAGE 79 minutes: Coronavirus \(COVID-19\) response, 4 February 2021 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/sage-79-minutes-coronavirus-covid-19-response-4-february-2021)

Further interventions that are being used internationally that might be introduced if COVID stable continues but with  $R_t$  consistently above 1, leading to gradual but continued increase in COVID-19 admissions include:

- Increase the mitigation value of the COVID pass in high risk public settings, such as by requiring both a time limited vaccination element and evidence of a negative LFT result from that day<sup>21</sup>
- Increase the coverage of COVID pass (e.g. all hospitality, gyms, leisure)
- Reintroduce social distancing or more stringent limitations on density of people
- Restrict the number of people that can gather (e.g. rule of six indoors, 30 outdoors and caps on events to prevent mass gatherings)
- Require that for all public spaces people either wear a mask or present proof of negative test or recent vaccination.

Introducing certain interventions from the above list may lead to a reduction in  $R_t$ . A paper describing the effectiveness of government interventions against COVID-19 in Europe suggests that closing nightclubs reduces  $R_t$  by 12% and limiting gatherings to 30 people leads to a reduction in  $R_t$  of 3%. The other interventions listed above are not referenced within the paper.<sup>22</sup> Therefore, if the introduction of Omicron leads to an  $R_t$  of 2.8, then applying these 2 restrictions may lead to a decrease in  $R_t$  to around 2.4 as shown by the following figure. This would indicate that further restrictions are required to reduce  $R_t$  further to below 1. Note that these estimated reductions in  $R_t$  are taken from studies across Europe so are not specific to Wales. They were also carried out during the second wave mainly before the emergence of the Delta variant. However, the studies across Europe are useful in their breadth because this means they can estimate the effect size for more subtle interventions like face coverings where the effect size may be difficult to estimate at a Wales level, and also can estimate the effect size of NPIs that may often be implemented at the same time by comparing data for countries that have implemented a different suite of NPIs.

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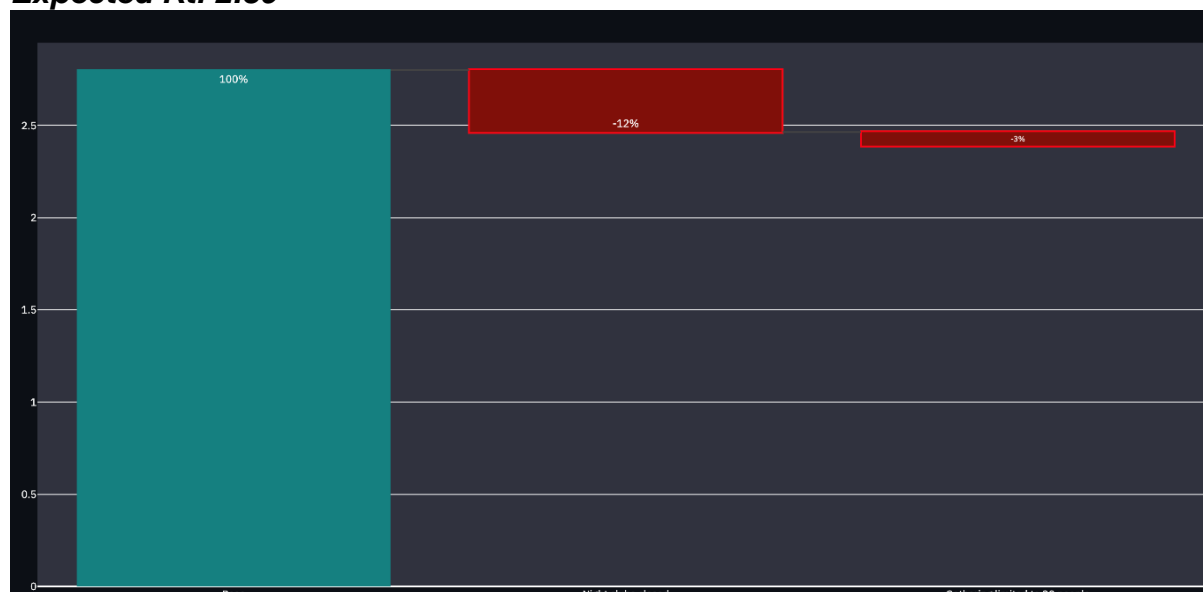
<sup>21</sup> [Coronavirus \(COVID-19\) vaccine certification: evidence paper update - gov.scot \(www.gov.scot\)](https://www.gov.scot/publications/coronavirus-covid-19-vaccine-certification-evidence-paper-update/pages/10.aspx)

<sup>22</sup> [Understanding the effectiveness of government interventions against the resurgence of COVID-19 in Europe | Nature Communications](https://www.nature.com/articles/s41562-021-1111-1)

**Input Rt: 2.8**

**NPIs applied: Nightclubs closed (-12%), Gatherings limited to 30 people (-3%)**

**Expected Rt: 2.39**



The introduction of the requirement for evidence of a negative LFT as an alternative to vaccination is not without risk as unvaccinated individuals will still be more vulnerable in a situation where others may be infectious and able to transmit. However, it addresses issues of human rights and equalities and could reduce the risk of infection in venues at this stage in the pandemic.

Regular testing for both surveillance purposes and to ensure infectious populations are kept out of schools remains important.

**b) Rates and COVID related NHS pressures are increasing significantly – Covid Urgent response required:**

Features from the recent sudden expansion of cases in Gauteng province of South Africa provide a useful guide as to the conditions that would lead to a COVID Urgent situation, despite large differences in terms of the epidemiological situation (South Africa being at a low level of case prevalence following the end of their recent Delta wave, while Wales remains at a high but possibly decreasing level in terms of case numbers). Similarly, if the situation in some EU states is replicated in Wales, whereby sudden and sustained period of growth of Delta is observed this could also lead to a COVID Urgent situation. At the time of writing the former is more likely scenario in the coming weeks.

Evidence of community transmission in the UK (and other countries) of a variant of concern that is likely to lead to a sudden expansion of cases and a rapid increase in hospitalisations should be the first indicator of COVID Urgent (high confidence).

Cases identified through TTP are likely to be an underestimate of true prevalence, therefore early signals of unlinked transmission or unusual epidemiological patterns identified through local health protection teams should be swiftly identified and escalated. In this scenario, evidence of significantly increased transmissibility over Delta, evidence of increased severity of infection or widening of the pool of susceptible

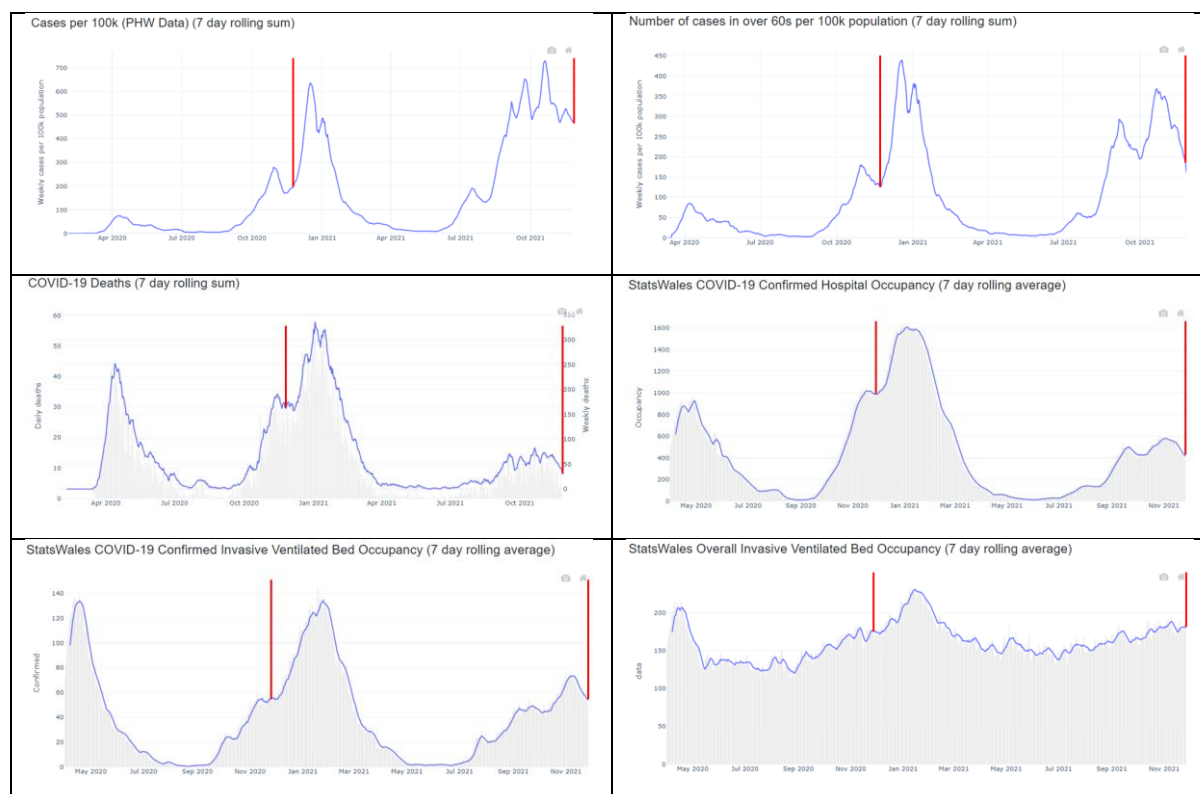
people in Wales through immune response evasion would lead to a COVID Urgent situation in Wales (medium confidence).

**In this scenario, the earlier measures to reduce transmission are introduced, the more stringent they are, and the wider their geographic coverage, the more effective they will be** (high confidence – see previous SAGE advice, including on Plan B).

- As with previous waves of infection, some settings (e.g. care homes) will require particular consideration.
- Even if measures are introduced immediately, there may not be time to fully ascertain whether they are sufficient before decisions are needed on further action. The situation could develop quickly over the coming weeks and decision-makers may need to act while there is still a high level of uncertainty including considering the potential need for more stringent response measures.

As a comparison, restrictions on hospitality were introduced on 4 December 2020 to respond to increasing cases, and lockdown (alert level four) was introduced on 20 December 2020 to avoid the NHS being overwhelmed.

Although case numbers are currently considerably higher than this time last year, as a result of the vaccine COVID-19 hospital occupancy is far below previous levels (currently 413 and decreasing as at November 26, 2021, compared with 970 in November 26, 2020 - increasing to 1500 by the end of December). Covid ICU admissions are at a similar level but on a very different trajectory, with 2020 seeing a rapid increase while 2021 appears to be a steadily decreasing based on data over the previous 2 weeks. Overall ICU pressures however, remain similar, reflecting the chronic and sustained pressure NHS ICU services have been under during the pandemic.



It remains unknown to what extent importation of Omicron will change this picture. Nevertheless, if there were a sudden reversal of the current downward trend, at odds with what would be expected in light of the progress of the booster programme, this should be taken as grounds to urgently consider a move to more stringent measures.

**Papers to read in conjunction with this paper:**

- 1. COVID Situational Report:** [COVID-19 situational reports | GOV.WALES](#)
- 2. TAG Policy Modelling Update 30 November 2021** [Technical Advisory Group: policy modelling update 30 November | GOV.WALES](#)
- 3. Updated advice from the Technical Advisory Group and Chief Scientific Advisor for Health on the evidence for the use of COVID Passes** [Publications | GOV.WALES](#)