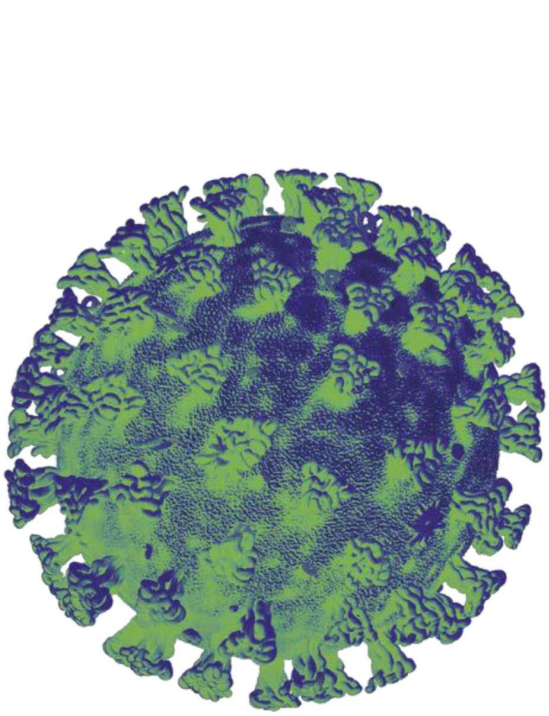
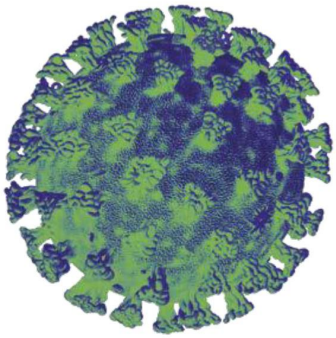
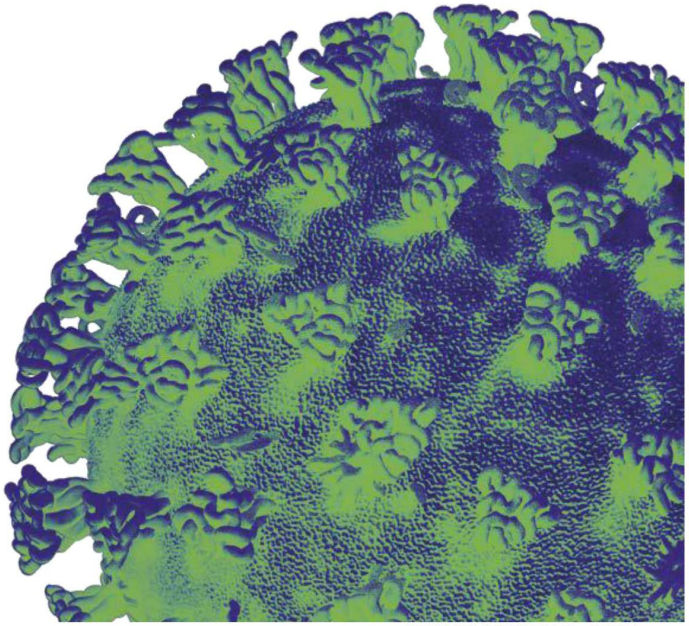
Technical Advisory Group

Advice to Cabinet for the weekly COVID-19 review

15th December 2021







This advice has been drafted based on the available evidence at time of writing and has been assembled at 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. This is advice, not Welsh government policy. As a result of the rapidly developing situation regarding Omicron there is still considerable uncertainty and confidence intervals are wide.

Summary

- The available evidence shows there are high background levels of Delta and a rapidly rising wave of Omicron (High confidence)
- The introduction of Alert level 4 protective measures for two weeks by 27 December would have a material effect on reducing the peak of cases (high confidence).
- The introduction of Alert levels below Alert level 4 are not likely to have a significant enough effect on the peak of Omicron cases to prevent material harm to care services (medium confidence).
- If Alert level 4 cannot be introduced, the population will be more likely to protect themselves by isolating where required if they have access to financial and social support. Simple messages of risk and appropriate protective behaviours will be more effective than complex regulations (high confidence).

Background

Cases of the Omicron variant are doubling every 1-3 days in the UK, and initial observations show consistency with the course of the epidemic observed in South Africa.

Modelling scenarios show that there is a high likelihood of a period in early 2022 of critical pressure on the NHS, social care and society comparable to or higher than Winter 2020/21, driven by a significant wave of Omicron infections.

While there is consensus, informed by the rapid growth rate of Omicron, that this variant poses an urgent and material risk to public health, there is not consensus on the scale of the impact in terms of severe outcomes, where there is still uncertainty and wide confidence intervals. If Omicron is less severe than Delta, even by a significant amount, there would still be high numbers of hospitalisations if growth rates remain very high. SPI-M estimates that at current growth rates, the severity of omicron would need to be less than one tenth that of delta to avoid hospitalisation levels similar to January 2021.

It is agreed that if severe outcomes measured by hospital admissions are shown to follow cases, then there would be a higher confidence in the need for the strongest possible preventative measures.

There is broad consensus that waiting for such evidence to be observed in Wales is likely to involve going beyond the point where strong preventions would have a material impact on the immediate peak. This is due to the short doubling time of Omicron.

There is consensus that increasing the proportion of the population protected by vaccines, including timely boosting to counter the effect of waning, is likely to reduce the long term burden of severe disease and death.

There is low confidence that less stringent measures would have a significant reducing effect on the approaching Omicron peak, but they would have some dampening effect.

There is high confidence that population behaviours are already changing to take Omicron risks into account.

Packages of less stringent measures such as those at lower alert levels will have some effect, but the effect may not be noticeable during the coming peak. Even if these measures are introduced immediately, there may not be time to fully ascertain whether they are sufficient before decisions are needed on further action.

It is not advisable to start off with 'light-touch' mitigations, as by the time it becomes clear that stronger restrictions are required, much of the following weeks of harm will already be 'in the pipeline' (high confidence).

The effectiveness of these mitigations will be dependent on the speed of introduction and the understanding and behavioural response of the population. Measures will have a greater effect when introduced earlier, communicated clearly, including why they are necessary, with higher levels of stringency and wide geographical coverage, ideally unilaterally at a UK level (high confidence).

It remains unclear whether Omicron infection could lead to an increased prevalence of 'Long Covid' or other long-term complications when compared to Delta. However, it remains important to consider that a general increase in the number of infections may lead to increased numbers of people living with long-term effects of Covid-19, which would impact on both individuals and services.

Buying time for booster vaccinations to have an effect (1-2 weeks) will prevent harm, as will increasing uptake of the vaccination and booster offer.

1. Wales situation

See the Covid Situation Report

2. Omicron Variant of Concern - Update

- As stated in previous advice, NERVTAG[1], the ECDC[2] and the WHO[3] have all recommended that introduction of the **Omicron (B.1.1.529)** variant 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 immune escape properties call for a precautionary approach and timely and urgently reinforced implementation of non-pharmaceutical interventions are strongly advised.

- The situation with the Omicron variant is developing very rapidly in the UK and initial data is consistent with the course of the epidemic observed in South Africa. Omicron cases are rising rapidly in England, with the official UKHSA figure as at December 14 at 20,131, of which 5,006 confirmed, 699 highly probable, though the true number of infections is likely to be much higher, as there is evidence of community transmission with a growth rate higher than any previous variant of concern. A summary of UK Omicron case numbers is published by UKHSA.

- Omicron has a large growth advantage over Delta, likely in large part due to its ability to evade our existing immunity acquired through either vaccination or previous infection. Left unchecked, this will result in exponential growth in infections. Exponential growth in Omicron cases (using S-gene target-failure (SGTF) as an effective proxy indicator) is characterised by a 2-3 day doubling time (0.35/day) Rt= 3.7 (3.3-4.2)[3]. SGTF data is mainly from pillar 2 lighthouse labs so mainly indicates community prevalence. These estimates should be treated with caution as prevalence varies in different parts of the UK and differences in SGTF coverage of clinical settings may cause delay or reduce estimation of the scale of Omicron cases. Despite these limitations in the SGTF data, the rapid rate of increase means it is highly likely there are currently thousands of new Omicron infections per day in the UK.

- A small proportion of Omicron cases are in people who recently travelled abroad (any country) or had a known contact with a traveller, suggesting that current trends are driven by ongoing community transmission and secondly that travel restrictions have been effective in interrupting the importation of infections.

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[1] NERVTAG note B.1.1.529 extraordinary meeting_20211126_FINAL.pdf | Powered by Box

[2] 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)

[3] Enhancing Readiness for Omicron (B.1.1.529): Technical Brief and Priority Actions for Member States (who.int)

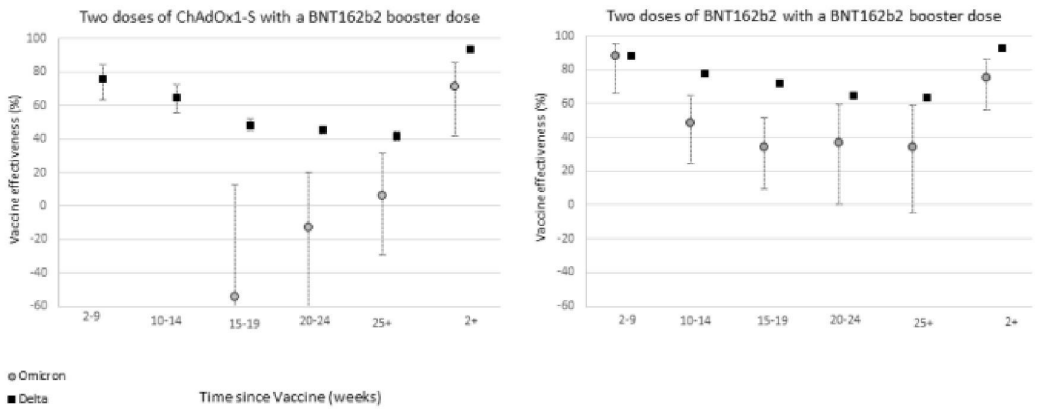
- Analysis of transmission in residential households in England by UKHSA (121 Omicron, 72,882 Delta) suggests that an adjusted odds ratio of secondary attack rate in a household of 3.2 for Omicron compared to Delta (95%CI: 2.0-5.0). 19% of Omicron cases resulted in household outbreaks vs 8.5% of Delta cases. It is currently difficult to determine whether this increased transmission is driven by immune evasion and/or higher transmissibility.

- UKHSA analysis using NHS–E contact tracing data suggests household secondary attack rates/ the risk of a close contact becoming a secondary case is 2-fold higher for Omicron (21.6%) vs Delta (10.7%)[3]. Some of this effect may be due to increased efforts to test contacts of Omicron cases. However, given the known data issues around the festive period and potential disruption to test-seeking behaviours[4], it is possible the scale of cases and hospitalisations over this period will be difficult to accurately track.

- The vaccine effectiveness drop off for Omicron is much greater than previously seen for any variant of concern (VOC), suggesting a level of immune evasion that could result in a surge in 'breakthrough' infections. However, boosters appear to mitigate much of this, returning vaccine effectiveness to pre-booster levels. Preliminary UKHSA data of vaccine effectiveness (VE) against symptomatic infection, based on real-world surveillance data, shows a significant reduction in VE for Omicron vs Delta, with almost total immune escape for 2 doses of AstraZeneca and 30% vaccine effectiveness for two doses of Pfizer. However boosters appear to increase VE to 70-75% once they have been given time to have an effect (1-2 weeks).

Figure 7: Vaccine effectiveness against symptomatic diseases by period after dose 1 and dose 2 for Delta (black squares) and Omicron (grey circles) for (A) recipients of 2 doses of AstraZeneca vaccine as the primary course and a Pfizer as a booster[1] and (B) recipients of 2 doses of Pfizer vaccine as the primary course and a Pfizer as a booster

Supplementary data are not available for this figure.



[1] The early observations for 2 doses of AstraZeneca are particularly likely to be unreliable as they are based on relative small numbers and are likely to reflect an older population and a population with more co-morbidities than those given the Pfizer vaccine, and this may explain the negative point estimates.

[4] S0911_SAGE69_201115_SPI-M-O_-_Notes_on_Festive_Period.pdf (publishing.service.gov.uk)

- This VE data should be interpreted with some caution due to low numbers & some residual uncontrolled biases. The relative severity of omicron compared to delta remains unknown; however even a marked decrease in severity is unlikely to offset the impact of a larger susceptible pool, which will also be impacted by the number of people protected by booster vaccination. It is too early to measure protection against severe disease, but with earlier variants protection against hospitalisation & death has been largely preserved and there is no reason to think this does not hold for the Omicron variant.

3. Modelling

- SPI-M-O has considered a range of scenarios from three academic groups who modelled the impact of omicron transmission on trajectories of infections, hospitalisations, and deaths. Despite making different assumptions about the trade-off between immune escape and transmissibility, the modelled scenarios have qualitatively similar results. Any wave of significant infection, almost irrespective of immune escape, will spill over into hospitalisations, and ultimately deaths. All groups suggest there is the potential for a very substantial peak of infections (much larger than occurred during January 2021) with up to 1,000 hospital admissions per day by the end of the year.

- For the forthcoming wave to remain below 1,000 to 2,000 total hospital admissions per day without intervention, low immune escape and very high protection from boosters are required. Unmitigated scenarios with assumptions that lie close to the centre of the parameter space explored by modelling groups, and in line with current estimates for omicron growth advantage, have a minimum of 5,000 hospital admissions per day at the peak with many scenarios significantly worse during the first few months of 2022.

- SPI-M estimate that to prevent a wave of hospitalisations similar to those seen in Spring 2020 and January 2021, without the need to slow growth with interventions, the severity of omicron would need to be less than one tenth that of delta. Given these unmitigated modelled scenarios, it is highly likely that very stringent measures would be required to control growth and keep R close to or below 1. The scale of hospitalisations in these scenarios would almost certainly lead to unsustainable pressure on health and care settings.

- These expected large waves of hospitalisations do include the impact of booster vaccinations and their roll out to the whole adult population. In the absence of any other mitigations, omicron spreads so fast through the population that individuals are infected before boosters can be offered and elicit an immune response in all adults (assuming an average roll out of three million booster doses per week).

- SPI-M have considered a reintroduction of control measures. In all cases, a significant reduction in transmission (similar in scale to the national lockdown implemented in January 2021 and the “pingdemic” in July 2021) is required to keep hospitalisations below the height of previous peaks. Earlier intervention also reduces the wave of hospitalisations. This is particularly the case with short infection doubling times such as those currently observed.

- The London School of Hygiene and Tropical Medicine has published modelling of an Omicron wave for England, assuming a policy of compulsory mask wearing in shops and on public transport from 30th November 2021, as well as introducing "Plan B" measures from 12th December 2021. Due to a lack of data, it is assumed Omicron has the same severity as Delta. If Omicron exhibits lower severity than Delta, this would decrease the projected number of severe outcomes in our model.
- Under these control measures, a most optimistic scenario (low vaccine escape + high booster efficacy) projects peak daily hospital admissions of 2,400 (95% projection interval: 1,700–3,600) in England occurring in January 2022. Our most pessimistic scenario (high vaccine escape and low booster efficacy) projects peak hospital admissions of approximately twice the size of the January 2021 peak.
- Modelling of returns to previous stages of the UK government's "roadmap out of lockdown" from Spring–Summer 2021, which consisted of 5 steps, from "step 0" to "step 4", with step 0 being the most stringent is also included. In the most optimistic scenario, less-stringent measures are projected to keep hospital admissions substantially below the January 2021 peak. In the most pessimistic scenario, the model projects that the same less-stringent measures do not keep hospital admissions below the January 2021 peak, but more stringent measures have a stronger impact.
- This paper projects peak daily hospital admissions of 2,400 in England for the most optimistic scenario (roughly 120 for Wales if we are 5% of England) or double the January 2021 peak for most pessimistic (which would be roughly 320 for Wales). The relationship between peak admissions and occupancy will depend on average length of stay and the shape of the epi curve – we can assume that occupancy will peak at roughly 10 times peak admissions but it may be lower than this.

4. Socio-economic considerations

Advice from the TAG Socio-economic harms subgroup

- The TAC socioeconomic harms group were asked for any guiding principles that should be used when considering the re-imposition of restrictions, considering how to minimise and mitigate socioeconomic harms and avoid increasing inequality. The group has produced reports previously on harms and mitigations[5][6], much of which is still relevant.
- It is not possible to estimate or quantify precisely the effects of individual NPI's or specific restrictions from a socio-economic perspective. There are a number of reasons for this, but prominent amongst them is the consideration that in the circumstances of a pandemic people would alter their behaviour even in the

[5] Technical Advisory Group: summary of evidence on costs and benefits and potential mitigations for measures to address COVID-19 in Wales | GOV.WALES

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

CMEAG Wales 2020 Coronavirus: ethical values and principles for healthcare delivery framework | GOV.WALES

absence of restrictions and there is no objective way to determine exactly what forms this alteration would take. We recognise that decisions may also need to be taken quickly and with imperfect information.

- While Covid harms can increase exponentially without restrictions, it is important to remember that social and economic harms of societal restrictions are often non-linear as well and existing health inequities are likely to be further exacerbated as; school age children and young people may not achieve their academic or social developmental stages including qualifications, businesses may go bankrupt, those in precarious employment may plunge into debt, older people, the disabled, and young children may become socially isolated or excluded, they may severely impact people's mental wellbeing, the vulnerable could face an increased risk of harm or neglect, and people nearing the end of life may miss out on seeing relatives one last time.
- These are the principles recommended as important to consider in terms of the socioeconomic harms of restrictions;
    - Consider the incremental impacts of any measures, using an integrated impact assessment, considering all material impacts where possible, in a qualitative way, if not possible to quantify.
    - Measures should be proportionate and consider the balance of direct and indirect harms and benefits including on mental wellbeing that may arise, especially to all citizens with protected characteristics, using the Covid -19 statement of values and principles
    - Consult where possible and give people and businesses prior notice before implementing restrictions (as far as it can be achieved recognising circumstances can and do change very quickly).
    - Give certainty around the amount of time that restrictions would be in place.
    - Give priority to education institutions remaining open particularly for priority cohorts (including maintaining childcare provision).
    - Think about mitigations - and a package of financial support for businesses and individuals (recognising budgetary and operational limitations).
    - Consider the equity impacts of any measures, including impacts on particular disadvantaged groups, using equality impact assessments.
    - How key messages are communicated is also important including the inclusivity of languages in order to minimise confusion so people are clear on what the restrictions are and what they mean for them, to maintain the principle of equity.
- Evidence from previous waves of the pandemic has demonstrated the critical importance of comprehensive financial support (particularly through the furlough and business support schemes) on a scale that would be difficult probably impossible - for the Welsh Government to provide on a sustained basis from its own resources, without large scale additional funding from the UK Government. There would also be operational considerations for example, if we were to provide employment support similar to furlough, we would have to make payments to businesses directly and trust that they would pass onto staff.

- In recognising the significant effects on children and young people and the pandemics longer term impact on their future prospects and mental wellbeing particularly of those already disadvantaged students, if there is further disruption to education, perhaps as a collateral effect of the illness or isolation of staff or students, an expanded programme of remediation, targeted particularly at the most disadvantaged students, will be essential.
- In considering the re-imposition of restrictions, reflection upon how to minimise and mitigate socioeconomic harms needs to ensure a comprehensive package of mitigations are in place that are proportionate to the likely socio-economic harms and are grounded in evidence of what works.
- In assessing the relative weight to be given to the socio-economic harms summarised above a life course approach should be used to ensure that the overall balance of benefits and burdens is considered for individuals, not simply health system benefits. A comparison should be made against the potential health benefits expected to result from any new restrictions, against the impacts of the wider determinants of health as well as different population groups. In particular, an assessment of whether those restrictions are likely to succeed in generating long lasting health and wider wellbeing benefits (through for example creating the time needed for vaccine development) rather than simply resulting in a short delay to illness or death from Covid is crucial. In this context the potentially negative health and wellbeing impacts of a Staying at Home and Social Distancing Policy (commonly referred to as 'Lockdown') on the population of Wales in the short, medium and long term should also be considered.

5. Behavioural considerations

- While there is evidence of a gradual decline in adherence to protective measures since the move to Alert Level 0 earlier in the year, self-reported data continue to demonstrate a reasonably high degree of adherence[7]. At the same time, confidence in Welsh Government's handling of the pandemic has remained at a consistently high level over the past 20 months. With the emergence of the Omicron variant and discussion as to whether additional protective measures are required, attention turns to consideration of the likelihood of adherence to those measures now deemed necessary as well as those already in place.
- SPI-B has previously presented advice[8] on maintaining or reintroducing protective measures in autumn 2021. This advice noted the different context in which interventions would be reintroduced, further complicated by the Omicron variant but concluded from their analysis of European countries there was no

[7] See for example Survey of public views on the coronavirus (COVID-19) | GOV.WALES, Coronavirus and the social impacts on Great Britain - Office for National Statistics (ons.gov.uk) REPORTS | COVID Social Study

[8] 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)

evidence of a decline in effectiveness (using various metrics) when reintroduced for a second or third time (medium confidence).

- The notion of behavioural fatigue has been challenged, with evidence of observed reductions in adherence just as likely to be the result of confusing, rapidly changing guidance (alert fatigue[9]) or a lack of financial or practical support[10]. After a sustained period of time with protective measures of some form in place, with the distinct possibility of these continuing and/or being enhanced in the coming months, it is now more important than at any time in the pandemic to ensure an approach to interventions and messaging is consistent with the behavioural science evidence available.
- Drawing on and adapting previous advice as necessary, including that from TAG[11] and SPI-B[12], key principles that should support the approach in the coming months include:
    - There should be an emphasis on the protective/pro-social actions that people should take to navigate through an Omicron related wave of infections and beyond, irrespective of the chosen policy option/s. As far as is possible, the actions should be framed as enabling people to live their lives while considering and responding to the associated risks they face. However, this is not to suggest an approach based on personal responsibility alone.
    - Rather, achieving and maintaining the desired behaviours at population level to minimise the risk of infection will require a society wide approach, including individuals, local communities, organisations, business operators and government. The nature of support that each can offer can take many forms, from financial (e.g. to assist with self-isolation) to social and emotional. The importance of this support should not be underestimated[13]
    - Every opportunity should be taken to reinforce the collective nature of the response in Wales and highlight the efforts the population continues to take to keep themselves and others safe. Normalising such positive behaviours will help to sustain them in the weeks ahead. There may also be value in engaging people to share how *they* are keeping themselves and others safe,

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[9] The public aren't complacent, they're confused—how the UK government created "alert fatigue" - The BMJ

[10] Pandemic fatigue? How adherence to covid-19 regulations has been misrepresented and why it matters | The BMJ

[11] See for example Technical Advisory Group: sustaining COVID-safe behaviours in Wales | GOV.WALES, Technical Advisory Group: using behavioural science to inform policy and practice | GOV.WALES and Technical Advisory Group: behavioural insights to support a post fire break Wales | GOV.WALES

[12] See for example 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)

[13] See for example SPI-B: Impact of financial and other targeted support on rates of self-isolation or quarantine , 16 September 2020 - GOV.UK (www.gov.uk)

to develop positive feedback loops, sitting alongside data confirming the millions of vaccines people have accessed.

- The need for a continued focus on the clarity of messaging is critical, in particular the need for providing not just an explanation of what is expected of people, what each intervention is expected to achieve and why it is scientifically necessary, in order to build intrinsic motivation. Consistency at UK level in messaging and policy responses would be helpful as we enter uncertain times to minimise the scope for confusion, with a likely impact on adherence. There is value in focusing on what is certain – the protective behaviours *work*, in terms of reducing the spread of all variants of the virus.
- Given the current level of uncertainty, it is important that communication activity is transparent but recognises there will be a degree of concern. It is, therefore, important to provide the support needed to balance this concern with how best to navigate through difficult times[14].
- Addressing the intention-action gap (between what individuals plan/intend to do, and the reality) should form an explicit part of the society wide approach in Wales, tailored to the prevailing circumstances. As outlined previously, this will require action from individuals and organisations, such that environments support automatic behaviours (e.g. environmental restructuring, removing/increasing friction as necessary and optimising ventilation of enclosed public spaces), carry through of intentions is promoted (e.g. enabling planning for self-isolation and supporting new/sustained habits and social norms like never leaving home without a face covering or entering a shop without one) and decision support is available (e.g. context specific heuristics such as before mixing socially getting a vaccine as soon as possible).
- Emphasising the combination of the above multiple protective behaviours and other interventions is needed to disrupt transmission of the virus is critical. The COVID Code set out in the Coronavirus Control Plan[15] provides a ready vehicle to address limited cognitive energy, collective action, and multiple steps/actions.
- These generic principles should also be supplemented by time and/or context specific evidence that has been developed previously in the pandemic. For example, detailed advice[16] on risk reduction in relation to celebrations and observances will be highly relevant as we enter the festive period, particularly with the increased likelihood of household mixing.

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[14] Compliance without fear: Individual-level protective behaviour during the first wave of the COVID-19 pandemic - Jørgensen - 2021 - British Journal of Health Psychology - Wiley Online Library

[15] Coronavirus control plan: autumn and winter 2021 update | GOV.WALES

[16] SPI-B: Insights on celebrations and observances during COVID-19, 29 October 2020 - GOV.UK (www.gov.uk)

6. Recommended response

- As discussed above, modelling suggests a significant reduction in transmission driven by stringent measures, such as those in Alert Level 4[17] would be required to keep hospitalisations below the height of previous waves. 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. This is particularly the case when the doubling time for infections is so fast. Given the inherent delays in disease progression and data processing, growth in admissions and deaths would continue for several weeks even after severe curtailment of transmission. With a doubling time of 1 to 3 days, any delay to implementation of measures would only compound this.
- As a result, if the aim is to limit the impact of an Omicron wave from a public health perspective the most stringent measures practically feasible should be imposed as early as possible, noting that alignment at a UK level would be preferable. This will also need to consider end points for restrictions which may factor in whether an Omicron-specific vaccine will be made available. If the R number is substantially above 1 for a long time, there is a risk of high momentum 'overshooting' any acquired immunity threshold which will mean more admissions and deaths than if the virus is spreading more slowly.[18]
- Slowing transmission as soon as possible will reduce the number of people who are infected with Omicron before they are fully vaccinated/boosted. It will also slow the rate at which Omicron overtakes delta and give more time to understand Omicron's severity and its other properties.
- If this is not possible, less stringent interventions such as those at Alert Level 2[19] (including closure of nightclubs, face coverings in all indoor public places and limiting gatherings to 5 people) can also reduce the size of any peak, but, if used in isolation without more stringent interventions, will likely have only relatively little effect over the course of an Omicron wave. This should be supported by both public communications and targeted support to encourage people to actively engage with protective behaviours such as reducing contacts and mixing levels and proactively testing with LFDs before meeting with others, similar to that which would be mandated at higher alert levels.
- These communications should also emphasise, that we expect to see a very large number of illnesses over the course of this wave; booster vaccination will be absolutely critical to protecting oneself and others.
- Given the rapid increase, decision makers will need to consider urgently which measures to introduce to slow the growth of infections, if the aim is to reduce the

[17] Alert level 4: summary | GOV.WALES

[18] The impact of aggressively managing peak incidence - CMMID Modelling Team (publishing.service.gov.uk)

[19] Alert level 2: summary | GOV.WALES

likelihood of unsustainable pressure on the NHS. The effectiveness of these will be dependent on the measures chosen, and also on behavioural responses.

- Behavioural science suggests that measures could be reintroduced with expectation of a similar level of adherence as has been seen in the past, if supported by messaging and policymaking that has clear rationales and are consistent[20]. Consistency across the UK would be very likely to strengthen this messaging. However it is important to consider the impact of behavioural changes that occur around the festive period.

- Nosocomial transmission is likely to be an even greater risk as a result of the more transmissible and reinfection-causing Omicron variant, particularly as hospitalisations increase. Measures will need to be put in place in hospital and care homes including measures to reduce the risk of health and social care workers becoming infected and infecting others, and measures to reduce the risk of transmission between patients. Other vulnerable settings (e.g. care homes and prisons) will also need particular attention. This should include a recommendation that face coverings should be of good quality and meet IPC standards[21].

- The mutations in Omicron that result in a degree of immune escape also mean that the effectiveness of monoclonal antibodies is likely to be markedly reduced, at least for some of the agents (medium confidence).[22]

- Some international reports of 'superspreading' events (some of which include Omicron) also suggest a greater role for airborne transmission than has previously been the case, as it is less likely that Omicron could have spread to as many people as it has at those events by other routes (low confidence). This means that measures to reduce airborne spread such as ventilation, well-fitting masks and distancing or reduced density of people in indoor environments may be even more important.[23]

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[20] 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)
[21] FACE COVERING STANDARDS LINK

[22] NERVTAG: Brief note of the extraordinary meeting of NERVTAG subgroup on SARS-CoV-2 variant B.1.1.529, 25 November 2021 - GOV.UK (www.gov.uk)

[23] SPI-M-O: Consensus Statement on COVID-19, 7 December 2021 - GOV.UK (www.gov.uk)