

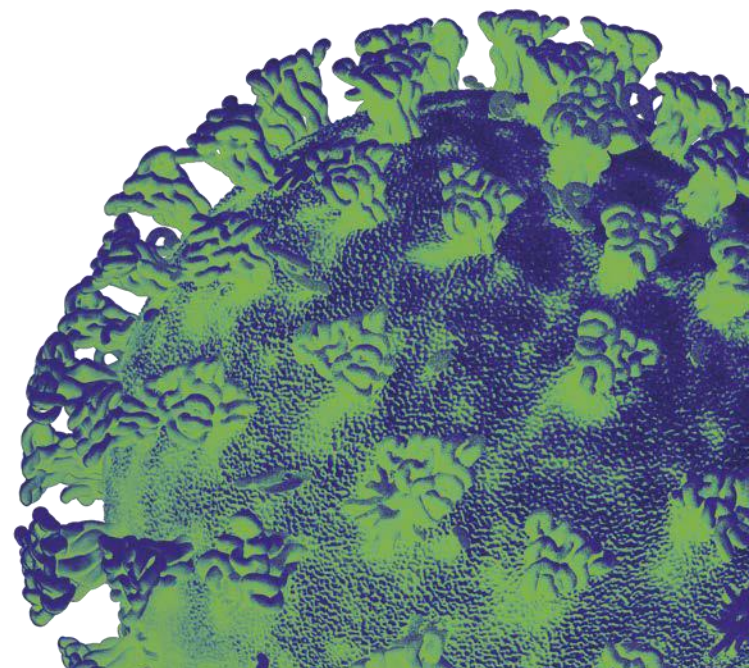
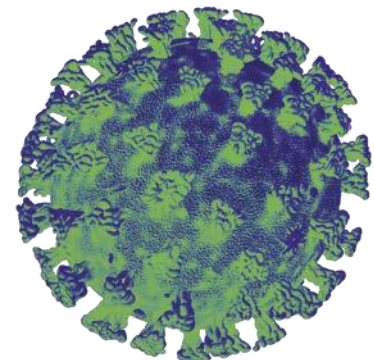
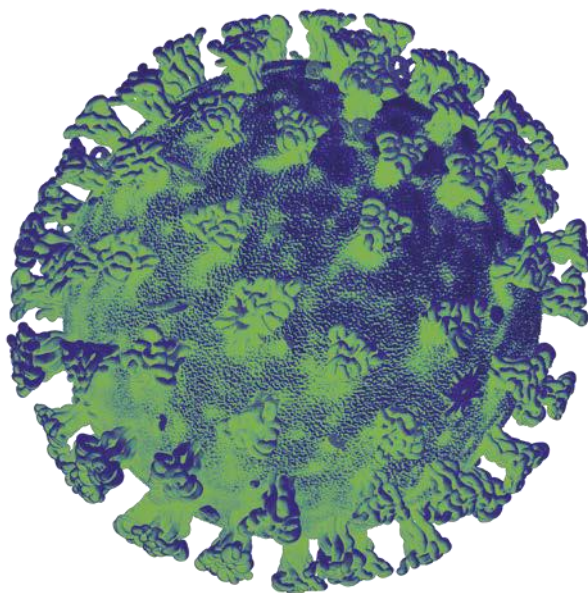


Llywodraeth Cymru
Welsh Government

Technical Advisory Group

Living safely with COVID-19 in Wales: risk communication and behavioural science perspectives

March 2022



Living safely with COVID-19 in Wales: risk communication and behavioural science perspectives

The purpose of this paper is to set out the core risk communication and behavioural recommendations to help protect against COVID-19 and other communicable diseases, both in the immediate and longer-term future.

The intended audience is wide, including those working on disease prevention policies and their implementation, as well as communications specialists, citizens and organisations, all of whom continue to play a part in keeping Wales safe.

1. Executive summary

The combination of behaviour change and mitigations such as testing and self-isolation is estimated to reduce transmission by 20 to 45% (SPI-M-O), with the potential for transmission to rise as behaviours revert to pre-pandemic norms and the removal of mitigations. In all circumstances, it remains critical that behavioural considerations are acknowledged and continue to inform the response in the coming months and the recovery beyond, particularly through tailoring responses to address behavioural barriers and enablers in clearly identified population groups. As such, the three key aims of this paper are to provide behavioural and risk communication recommendations for Wales on: (1) immediate support and actions as mandatory regulations are lifted; (2) addressing inequalities created or exacerbated by the pandemic; and (3) longer-term approaches to optimising behaviours in the event of future challenges.

Recommendations

- **Communication:** explicit recognition of the positive collective response to the pandemic in Wales should continue to underpin messaging, consistent with research evidence from previous emergencies related to high levels of trust in government and the successful Keep Wales Safe brand.
- **Behavioural Frames:** consideration should be given to a simple COVID Stable/Urgent messaging frame (binary) around whether heightened (proportionate) deliberative action and protective behaviours are required. Behavioural decision-support frameworks can be used to support behaviours during different states.
- **Risk Communication:** open acknowledgement of the uncertainty of COVID-19 in an endemic state, recognising the way ahead will be unpredictable (e.g. likelihood of further Variants of Concern and waning immunity) but balanced by a narrative of hope in order to motivate the public, including clarity on the effectiveness of the 'commonly adopted personal protective behaviours' of: isolating when symptomatic; using a face covering in enclosed public spaces, regular hand hygiene, maximising ventilation and getting vaccinated.

- **Inequality:** COVID-19 has highlighted and often exacerbated inequalities that exist in Wales; a requirement that future policies and initiatives should routinely include consideration of the extent to which they will help to deliver a fairer and more collective society, which will in turn strengthen future population responses to challenges and crises.
- **Longer-term approaches:** consideration should be given to embedding educational approaches in the population to support better risk-based decisions. This would have wider impacts (e.g. climate crisis and health behaviours).
- **Future Capacity and Capability:** behavioural science support will be required to address these elements, including: collection and analysis of data (qualitative and quantitative insights); identification of important behaviours in priority groups; diagnosis of barriers and enablers to address these behaviours; and design, testing, implementation and evaluation of evidence-informed interventions.

2. Introduction

The effective communication of risk, associated mitigating actions, and widespread adoption of personal protective behaviours have been central to controlling the pandemic. The Risk Communication and Behavioural Insights (RCBI) TAG sub-group has provided advice at key points in the Welsh Government response to the COVID-19 pandemic, including the period following the autumn 2020 firebreak¹, the easing of protective measures in spring 2021² and the move to alert level 0 in summer 2021³. This advice drew on a range of valuable sources, notably the work of SPI-B, the behavioural sub-group of SAGE⁴. SPI-B were commissioned by the UK Government Cabinet Office to provide advice on the behavioural implications of removing the remaining protective measures in place in England in February 2022. Their advice is summarised in Appendix A.

Building on this work, the following sets it in the context of previous RCBI sub-group advice to Welsh Government around the communication of risk and associated mitigating actions, and the use of behavioural insights to optimise protection of public health in Wales, and should be read alongside the Welsh Government transition plan⁵.

It is important to recognise and acknowledge the direct and indirect harm caused by COVID-19, alongside the scientific effort that has given us effective vaccines (weakening the link between infection and severe disease), the hard work of people across society, including those in the NHS, and the individual and collective efforts of people in Wales in protecting communities by adapting their behaviours for the greater good.

¹ [Technical Advisory Group: behavioural insights to support a post fire break Wales | GOV.WALES](#)

² [Technical Advisory Group: statement on priority considerations relating to personal protective behaviours to inform decisions on easing of restrictions in Spring 2021 | GOV.WALES](#)

³ [Technical Advisory Group: sustaining COVID-safe behaviours in Wales \[HTML\] | GOV.WALES](#)

⁴ [Independent Scientific Pandemic Insights Group on Behaviours \(SPI-B\) - GOV.UK \(www.gov.uk\)](#)

⁵ [Wales' long-term COVID-19 transition from pandemic to endemic | GOV.WALES](#)

As indicated, SPI-M-O⁶ note the combined effect of behaviour change and mitigations such as testing and self-isolation is estimated to reduce transmission by 20–45%, with the potential for transmission to rise as behaviours revert to pre-pandemic norms and the removal of mitigations. As such, the three key aims of this paper are to provide behavioural and risk communication recommendations for Wales on: (1) immediate support and actions as mandatory regulations are lifted; (2) addressing inequalities created or exacerbated by the pandemic; and (3) longer-term approaches to optimising behaviours in the event of future challenges.

3. Aim 1: Immediate support and actions to facilitate collective responsibility as mandatory regulations are lifted

3.1 Behavioural insights to promote COVID-safe behaviours

Writing in *Science* in 1919, Major George Soper noted three key factors which prevented society overcoming Spanish Flu: (1) that humans are very much social animals; (2) that there is a low level of risk literacy in the population; and (3) that behaviour is often unconsciously driven and hence a continuous risk to transmission⁷. Behavioural science advice throughout the COVID-19 pandemic has consistently highlighted that maximising adherence to protective behaviours requires effective support (practical, social and financial), targeted as necessary to groups in society, recognising the need to address pre-existing inequalities and those exacerbated by the pandemic. If the longer-term vision is to sustain (at least some of) these ‘new’ behaviours to achieve potential health and wellbeing benefits beyond COVID-19, an approach that normalises them, and makes them as effortless as possible, attractive, evidently beneficial and routine is needed⁸. Maintenance of a wide range of enabling mechanisms (from environmental to financial) remains critical as society moves away from a legislative focus towards an approach requiring risk informed decision-making by the population.

People tend to categorise evidence into binary form even when it is presented as continuous data⁹ – known as the binary bias. Whilst this can oversimplify a situation and promote partisan attitudes, it can also aid behaviour change in providing clear cues as to when certain behaviours are required or not. As such, a simple, readily understood binary framework is most likely to support sustained protective behaviours when most needed⁹, especially given the public confusion following complex messaging (e.g. ‘alert fatigue’¹⁰). The COVID Stable/Urgent binary formulation of risk is already part of the draft Welsh communication strategy. In this case, the ‘**COVID Stable**’ state represents the baseline ‘new normal’ with clear explanation and facilitation of already existent everyday protective behaviours (e.g. using LFTs when symptomatic, isolating when positive, wearing masks in dense

⁶ [SPI-M-O: Consensus statement on COVID-19, 2 February 2022 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/spi-m-o-consensus-statement-on-covid-19)

⁷ Soper G. A. (1919). The lessons of the pandemic. *Science* 49, 501–506.

⁸ [Behaviour change: guides for national and local government and partners - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/behaviour-change-guides-for-national-and-local-government-and-partners)

⁹ Fisher M., Keil F.C. The Binary Bias: A Systematic Distortion in the Integration of Information. *Psychological Science*. 2018;29(11):1846-1858. doi:10.1177/0956797618792256.

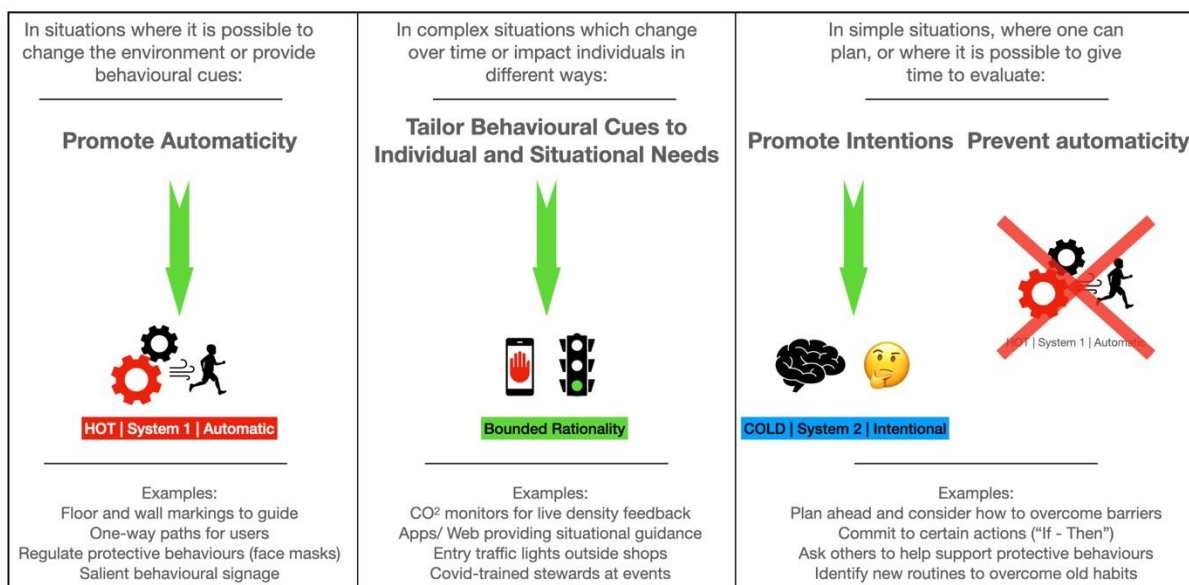
¹⁰ [The public aren't complacent, they're confused—how the UK government created “alert fatigue” - The BMJ](https://www.bmj.com/content/366/bmj.n1111)

populated indoor spaces). This is in contrast to the ‘**COVID Urgent**’ state where increased deliberate/effortful actions and adoption of more thorough personal protective behaviours are required. Clearly recognisable, evidence-informed changes to physical environments could support such shifts and states. A binary approach should clearly indicate times when risk is increased and health behaviours (e.g. mask wearing, distancing) should be intentionally/automatically engaged in, but also times when people may consider the risk to be lower and behave accordingly. It is important to highlight that the binary approach should be used to guide risk perception for the public and more detailed behavioural guidance is needed in COVID Urgent situations (e.g. The COVID Code³).

TAG advice³ has previously set out a behaviourally informed framework for promoting the maintenance of protective behaviours (see figure below), elements of which would require resource. This framework can be applied to both ‘COVID Urgent’ and ‘COVID Stable’ states in defining clear and appropriate responses in different circumstances. It can also identify when specific environmental facilitators are needed. The framework attempts to address the gap between intentions and subsequent behaviours, recognising there will be situations where the physical environment could be adapted or behavioural cues introduced (**promoting automaticity**) and situations where time is available to allow people to evaluate **promoting intentions** (e.g. planning ahead to overcome barriers likely to add friction). Such a framework is dynamic and enabling interventions can be adapted to changing circumstances (e.g. different automatic triggers in Stable versus Urgent states).

This framework accounts for the social-norming and salience-based influencers of human behaviour in complex environments; people being significantly influenced by the behaviour of others and by novel and salient behavioural cues. In other words, we follow social and cultural norms (e.g. keeping our distance if reminded, wearing masks if others are), and we can be attracted by salient cues (e.g. a well signposted supply of free masks at shop entrances).

Situational Behavioural Support



Key recommendations to enable people to maintain the behaviours with the greatest potential to protect themselves and those around them in both the COVID-Urgent and COVID-Stable state include:

- Continuing to think creatively about environmental adaptations that promote automaticity, in order to enable and/or reinforce habit formation (e.g. hand washing facilities or sanitiser at venue entrance points, provision of face coverings and use of effective ventilation technology).
- Promoting situation-specific preparedness planning (e.g. planning ahead where feasible to facilitate self-isolation, having a face covering available when leaving the house, self-isolating when experiencing COVID-19 symptoms).
- Enhancing self-efficacy about preventive behaviours – confirming that ‘the everyday’ actions *are* effective; how people successfully organised and adjusted previously and by providing information, prompts, and modelling protective behaviours in communications.
- Exploring the relative value of approaches such as individual-based decision triggers for personal protective behaviours (e.g. wearing a mask if symptomatic) compared to alerts, delivered by, for example, Public Health Wales, based on case numbers, outbreaks or seasonality (eventually).

3.2 Risk communication to promote COVID-safe behaviours

Effective risk communication has underpinned the response to COVID-19 in Wales and will continue to play a critical role in the months ahead, including the national Keep Wales Safe Campaign¹¹. As noted below, SPI-B raise the issue of shifting the communications focus from central government to the NHS and other health bodies. However, at a strategic level, the consistently high levels of reported confidence in the Government’s handling of the pandemic in Wales¹², and the potential to continue the multi-faceted multi-agency response suggest that a collaborative approach with consistent messaging involving Welsh Government, Public Health Wales, health boards and local government would be most effective for Wales.

In taking this collaborative approach forward, a set of evidence-informed principles for effective risk communication are set out below¹³.

¹¹ [Together we'll keep Wales safe | GOV.WALES](#)

¹² [Survey of public views on the coronavirus \(COVID-19\) | GOV.WALES](#)

¹³ The principles are underpinned by an extensive literature but core sources include: Fischhoff B., Kadavy J. (2011). Risk: A Very Short Introduction. Oxford: Oxford University Press (perceptions); [Credibility and trust in risk communication | SpringerLink](#) (trust); and [Chalara and the Social Amplification of Risk - GOV.UK \(www.gov.uk\)](#) (amplification and scanning for consequences).

Underpinning principles for effective risk communication

1. Risk communication should always be thought of as a two-way process, never assuming it is simply a matter of an expert talking to impart their wisdom to an uninformed public. Communicating with rather than to people matters.
2. For any risk communication, there are multiple audiences (e.g. young, old, minority ethnic communities, Welsh speakers etc.). Culture and societal context matter greatly in message reception.
3. It is important to understand the perspective of target audiences through empirical work and before attempting to devise messages. Experts should not assume their frame of reference as expert will be the same as others. Better understanding of people's own mental models to the decision problem they face should be explored, focusing communication efforts on what they really need to know, filling in gaps, countering misleading beliefs and reinforcing correct knowledge as appropriate.
4. Risk is about consequence and chance, with lay perception often anchored around beliefs about outcome (e.g. I might die) rather than about probabilities (e.g. the chance of dying). If need be, the focus of activity could be on the piece of the puzzle that is not salient. Other characteristics (voluntariness of exposure, degree of personal control etc.) can also drive perceptions in unanticipated ways.
5. While people can understand and make reasonable judgements about risk, it can need careful framing (e.g. avoiding the common mistake of using technical jargon that is unlikely to be understood, using concrete frequencies rather than abstract probabilities and avoiding spurious risk comparisons).
6. Where there is genuine uncertainty about an aspect of risk it is best to state this, alongside what is being done to resolve this uncertainty (see also principle 8 below).
7. It is crucial to test messages, or indeed co-design/produce them in advance for comprehension amongst intended audiences and continue to monitor impacts for unintended consequences. It has been said 'Not testing messages before putting them out is a kind of public health malpractice'¹⁴.
8. In communicating, always strive for trust and transparency. Community champions and role-models support fostering trust which involves demonstrating to the audience: competence; objectivity; fairness; consistency; and good faith.
9. Given the possibility of unintended social amplification and attenuation processes that are hard to control (e.g. social media and disinformation, prominent persons making untimely and unwise statements, etc.), care should be taken to keep abreast of the totality of what is happening in the risk communication landscape. It is important to ask periodically 'why did we get to where we are now?'

¹⁴ [Bulletin of the World Health Organization \(who.int\)](https://www.who.int/bulletin)

4. Aim 2: Reducing inequalities

What started out as a health crisis has become a crisis of inequalities. There are many reasons to promote a fairer society¹⁵ and the successful Keep Wales Safe campaign has harnessed the sense of collective responsibility, and greater trust in government¹⁶. The longer-term response to COVID-19 can help build a more equal Wales. Steps could include the following:

- Addressing the inequalities created or exacerbated by the pandemic. This should include a continued focus on the possible harms to others (especially vulnerable others) by individuals not adhering to the protective behaviours advised in the future. This is consistent with wider public messaging (e.g. tobacco use and drink driving).
- Providing ongoing financial support to assist the most vulnerable in self-isolating when unwell, including those on low incomes, without sick pay, in precarious employment and unable to work from home. This could include support to individuals and businesses, as appropriate.
- Systematically considering how COVID-19 protective measures have exacerbated inequalities and forming a response plan to address and resolve these in a timely and sustainable manner.
- Reforming sick pay to support better healthy workplace behaviours, addressing organisational culture such as presenteeism¹⁷ and integrating this with existing pilot initiatives such as Universal Basic Income.

5. Aim 3: Longer-term approaches to optimising behaviours in the event of future challenges

The longer-term response to, and learning from, COVID-19 can help prepare the population for future challenges in the short and medium to longer-term. Steps could include the following:

- There is a need to support those experiencing “Long COVID” and to acknowledge the longer-term impacts of COVID-19¹⁸. These are complex and include psychological impacts such as the mental health impact following ventilation on ICU, high levels of bereavement as well as impacts on health and wellbeing.

¹⁵ Wilkinson R., Pickett K. (2009) *The Spirit Level: Why more equal societies almost always do better*. London: Penguin.

¹⁶ [Covid-19: What we have learnt from behavioural science during the pandemic so far that can help prepare us for the future | The BMJ](#)

¹⁷ Presenteeism is most commonly defined as people who attend their place of work despite being unwell. See [A systematic review of infectious illness Presenteeism: prevalence, reasons and risk factors | BMC Public Health | Full Text \(biomedcentral.com\)](#)

¹⁸ [Prevalence of ongoing symptoms following coronavirus \(COVID-19\) infection in the UK - Office for National Statistics \(ons.gov.uk\)](#)

- Addressing the culture of workplace presenteeism in order to reduce the risk of disease transmission and increase health and wellbeing more generally.
- Retaining the extremely high levels of uptake of COVID-19 vaccinations, for (any) future vaccination rounds, and taking learning into combination vaccine rounds (with influenza vaccines) and wider vaccination uptake.
- Building capacity and capability in behavioural science in Wales in order to maximise the opportunities for developing robust, behaviourally informed interventions (policies, services and communications) to improve wellbeing, such as those set out above. This improvement would also help increase preparedness and the effectiveness of responses to challenges of our VUCA¹⁹ (volatile, uncertain, complex and ambiguous) world, such as the climate crisis, and our commitment to the Wellbeing of Future Generations act.
- More broadly, embedding ‘risk literacy’ as part of the curriculum in schools, and in other settings. This could have the additional advantages of supporting children and teenagers in learning to reduce risky behaviours and grow into adults who can make better risk-based decisions.

6. Summary Recommendations

- Principles: Explicit recognition of the communitarian or collective response to the pandemic in Wales should continue to underpin messaging, consistent with research evidence from previous emergencies²⁰ and the successful Keep Wales Safe brand.
- Behavioural Insights: Consideration should be given to a simple COVID Stable/Urgent messaging frame (binary) around whether heightened (proportionate) deliberative action and protective behaviours are required. Behavioural decision-support frameworks can be used to support behaviours in differing states.
- Risk Communication: Open acknowledgement of the uncertainty of COVID-19 in an endemic state, recognising the way ahead will be unpredictable (e.g. likelihood of further Variants of Concern and waning immunity) but balanced by a narrative of hope in order to motivate the public²¹, including clarity on the effectiveness of the ‘commonly adopted personal protective behaviours’ of: isolating when symptomatic; using a face covering in enclosed public spaces,

¹⁹ [COVID-19's Uncomfortable Revelations About Agile and Sustainable Organizations in a VUCA World - Christopher G. Worley, Claudy Jules, 2020 \(sagepub.com\)](#)

²⁰ [Public behaviour in response to the COVID-19 pandemic: understanding the role of group processes | BJPsych Open | Cambridge Core](#)

²¹ [Communicate hope to motivate the public during the COVID-19 pandemic | Scientific Reports \(nature.com\)](#)

regular hand hygiene, maximising ventilation and ‘getting all your vaccinations’.

- **Inequality:** COVID has highlighted and often exacerbated inequalities that exist in Wales; a requirement that future policies and initiatives should include consideration and delivery of a fairer and more collective society which will in turn strengthen future population responses to challenges and crises.
- **Longer-term:** A consideration should be given to embedding educational approaches in the population to support better risk-based decisions. This would have wider impacts (e.g. climate crisis and health behaviours).
- **Future Capacity and Capability:** Behavioural science support will be required to address these elements, including: collection and analysis of data (qualitative and quantitative insights); identification of important behaviours in priority groups; diagnosis of barriers and enablers to address these behaviours; and design, testing, implementation and evaluation of evidence-informed interventions.

Appendix A. Recent SPI-B advice on lifting protective measures

SPI-B were commissioned by the UK Government Cabinet Office to provide advice on the behavioural implications of removing the remaining protective measures in place in England in February 2022. The key themes to emerge are summarised below under two headings²²:

Recognising and reducing inequalities

- Policy makers will need to recognise maintenance of protective behaviours will be harder for some as the legislative and normative environment changes, and it will be important to mitigate the potential economic and social harms to clinically vulnerable/disadvantaged/minority groups, including testing provision.
- Removing free access to testing will create challenges for confirming infectiousness, with unequal outcomes, including increased anxiety among some groups, notably those clinically extremely vulnerable. Furthermore, there is the potential for such a move to signal that it is acceptable to work and mix socially when symptomatic. Different risks and risk appetites in the population should be recognised and action taken to minimise the potential for stigma and division.
- The removal of the legal requirement to self-isolate will likely result in further ambiguity about the need for adherence, with disproportionate impacts on, for example, the vulnerable and those least able to stay at home, in the absence of financial, practical and emotional support.

Communication plans and promoting collective responsibility

- Messaging should emphasise the importance of continued adherence to specific personal protective behaviours and critically, the rationale behind these behaviours and what benefits will result. There should be an emphasis on voluntary adherence as a contribution to collective wellbeing, as well as the continuing risks for specific groups.
- The relaxing of protective measures provides the opportunity to develop a new narrative, recognising loss and trauma alongside the desire to return to a degree of normality.
- Multiple channels and trusted messengers will remain important in COVID-19 communications, building on the high levels of trust and confidence in health professionals and scientists in particular. This should be accompanied by a shift in responsibility for communication activity to public health and NHS agencies but retaining input across government departments to ensure consistency.

²² [SPI-B: Social and behavioural impacts for lifting remaining restrictions, 10 February 2022 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/spi-b-social-and-behavioural-impacts-for-lifting-remaining-restrictions)

- Adherence to protective behaviours can be promoted by ensuring institutions and environments are supportive. Organisations (e.g. workplaces) should be encouraged and enabled to decide on and enact proportionate measures in consultation with local public health staff, including tackling the culture of presenteeism, sick pay and enabling safe working environments, such as installing effective ventilation.