Behavioural principles for updating guidance to minimise population transmission

To maximise community support and adherence, all updates to guidance must be initiated in a safe and credible manner. This will require detailed planning and preparation, testing and feedback from and to the community, clear instructions, appropriate support, attention to issues of equity, transparency, opportunity and capability. Key principles relevant to potential guidance updates are listed below, with further detail on following pages.

Many of these principles are based on consensus best practice for developing engaging and effective interventions[1], and implementation science[2]. For example, the recommendation to redesign spaces to enable change is based on theory and evidence showing that environmental restructuring is a powerful driver of behaviour and can automatically support better adherence[3] to public health behaviours.

Behavioural Principles
1. Initiating changes
1.1 Provide credible rationale for changes to guidance
1.2 Assess effects of guidance changes on behaviour and transmission

2. Engaging all sectors of society
2.1 Co-create solutions to implement guidance
2.2 Allow time for sector planning
2.3 Give feedback about the effects of guidance changes

3. Enabling changes
3.1. Provide precise guidance
3.2. Harness organisational structures and processes
3.3. Redesign shared indoor and outdoor spaces to enable changes

1. Initiating changes

1.1. Provide a credible rationale for guidance and changes to guidance.

- **Communicate the need for sustained, multi-faceted infection control**. Members of the community need to understand why infection needs to be controlled for a prolonged period and that this will involve complex and changing combinations of many different measures to minimise transmission. It is important to ensure that everyone is aware that changing restrictions on some activities is not a signal that the risk from coronavirus is over and that it is safe to resume other activities or to reduce protective behaviours. A better understanding of how infection transmission rates can be controlled will help community members implement the measures that will be required, and enable community members to appreciate how these actions can contribute to reducing both deaths and the need for further activity restriction.

- **Provide transparent, detailed explanations of why each change to guidance is being made.** Explain how guidance and changes to guidance are informed by analyses of current behaviour and predicted or observed effects on transmission as well as wider considerations such as social good and feasibility. For example, it is important to explain why selected activities are safer to resume, or must be resumed for other important reasons (such as to reduce harm to vulnerable people), compared with other activities. Equally, if restrictions on activity are to be re-imposed there should be clear explanation of why particular restrictions have been selected (e.g. due to evidence of transmission pathways or infection vulnerabilities), or particular areas targeted (e.g. in the case of localised outbreaks). Transparent reporting of the evidence and advice on which these judgements are based will increase credibility[4, 5, 6].

1.2   Assess the effects of guidance changes on behaviour and transmission

- **The effects of changes to guidance on behaviour and infection rates should be carefully monitored by a range of reliable and sensitive measures.** This will allow appropriate modifications to the changes to be rapidly implemented if there is an unpredicted increase in risky behaviour or infection rates. Close monitoring of each phase of changes will also provide reassurance and encouragement to the community[7,8,9] (see 2.3) and data on the effects on behaviour and infection rates that can be used for planning future phases of epidemic management.

- **Reductions in restrictions on activity should only be introduced when safe to do so.** This should be based on advice from SAGE. This proviso will allow for the inevitable lag between changes in behaviour and any observation of higher risk behaviour or increasing infection rates, ensuring that changes can be modified as required in time to restore infection control before infection rates become too high.

2. Engaging all sectors of society

2. 1 Co-create solutions to safely resuming activity.

- **Members of different sectors and the community can help identify opportunities, challenges and solutions to resuming activity safely** and should be involved from an early stage. Community stakeholders and representatives (for example, workplace, school and religious communities, councils, and charities) can play an active role in anticipating, reporting, and managing potential barriers to implementing activity changes or infection control[10]. Wherever possible this should draw on existing networks particularly those already constructed through the Local Resilience Forums, Strategic Coordination Groups and Civil Contingency Units who have already established good links to a range of community based groups (e.g. Voluntary Sector organisations, Faith organisations, Schools and Universities, etc). Engaging with a

wide range of stakeholders who will be affected by changes will help Government understand their diverse perspectives and address their concerns prior to making changes.[11, 12, 13] Engaging with these groups will provide the reassurance needed to encourage resumption of appropriate activities.

2.2 **Allow time for sector planning.**
- **Phase in changes to activities.** This will enable people and organisations to implement them effectively and safely, rather than simply resuming activity in habitual ways that do not minimise infection transmission.
- **Where possible, plan and communicate the timing of updates to guidance.** Members of the community need to know which activity restrictions are likely to be removed or to be maintained long-term so that they can plan for this, for example by alterations to their family or working arrangements. Abrupt alterations in activity restrictions can be disruptive and difficult for groups to implement and could lead to perceptions of poor management of the pandemic. Providing advance notice and time to plan enables people and organisations to implement them effectively and safely, rather than simply resuming activity in habitual ways that do not minimise transmission. If it is not possible to communicate changes in advance, then explain why decisions cannot be made and the conditions needed before an update can be given; the public can appreciate scientific uncertainties[14].

2.3. **Feedback assessment of effects of changes.**

- **Transparent and reliable measures of the effects of changes to activity should be used to inform organizations and members of the community about the impact on behaviour and transmission.** Regular feedback of these measurements will reinforce the effectiveness of the changes being made if they show effectiveness at minimising transmission[15] or help justify further changes if they do not. The community must be assured that behaviour and infection rates will continue to be monitored by a wide range of measures to detect and quickly address any increase in risky behaviour or infection rates - and also to identify opportunities for further resumption of activity if infection rates remain well controlled.

3. Enabling changes
3.1. **Provide precise guidance.**
- **Detailed advice should continue to be provided on how individuals and organisations can maximise adherence to key behaviours to reduce transmission** (see SPI-B communications group guidance on how this should be communicated). This advice should build on, supplement and reinforce existing public health advice, campaigns and interventions promoting key behaviours that reduce transmission (such as handwashing, use and disposal of tissues when sneezing or coughing, avoiding touching face, cleaning or avoiding touching all potentially contaminated surfaces, ventilating shared spaces and using face masks or coverings where advised). Guidance should be reformulated to be behaviourally specific: who needs to do what (precisely) and why (explain the rationale) and communicated through channels that provide personalised advice and account for individual circumstances. Advice should be tailored to groups that are likely to be least adherent with respect to specific behaviours and contexts, so that they feel that the guidance speaks to them.[16, 17, 18]
- **Perceived inconsistencies in messaging and enforcement will erode credibility and support for government policies and guidance**[19], and so it is important that all

individuals and organisations implement the guidance appropriately but do not go beyond the guidance (for example, by suggesting or enforcing measures that are not part of the official guidance).

3.2. **Harness organisational structures and processes**.
- **Minimising transmission when resuming activity outside the home must be supported by organisational structures, policies and processes.** For example, existing Health and Safety regulations and enforcement processes can be harnessed to achieve better infection control across the wide variety of workplace settings. This would involve using personal and workplace risk assessments to evaluate transmission risks to everyone in the workplace and then identify, implement and monitor appropriate methods of reducing these (e.g. better provision of PPE; staggered shifts/alternating work days to avoid overcrowding at work and when travelling to work; maximising protection and distancing in communal areas). This strategy can be implemented through employers and trade unions, drawing on existing leadership[20], and reinforced by helplines to enable employers and employees to report any problems and seek advice and help for better implementation. These procedures could be used as the basis for evaluating which workplaces could safely reopen. Existing organisational structures and processes can be used in a similar way for other settings, for example by using Local Resilience Forums to assess infection control in public spaces.

3.3. Redesign shared indoor and outdoor spaces to enable changes

It will be necessary to re-design shared spaces outside of the home to enable key behaviours to minimise transmission including *i.* physical distancing, *ii.* minimal touching of surfaces and *iii.* frequent handwashing. If the majority of transmission occurs indoors, public transport and buildings should be a particular focus for such re-design.[21] Indoor spaces that may require re-design include schools, workplaces (factories and offices), public transport (buses, trains, coaches, trams, taxis), shops, places of worship, cafes, restaurants and bars. Outdoor spaces include streets (pavements and roads) and parks.

As examples, types of interventions might include:
i. *Physical distancing*: removing seats from use; floor markings of suitable distances; reducing density of use with one-way systems and temporal management; use of screens.[22, 23]

ii. *Minimising touch of surfaces*: operating systems for moving around spaces or accessing services using contactless methods or body parts other than fingers *eg* doors handles operated by arms; gates that are fixed open; cues to use touch screens with finger knuckles.[24]

iii. *Frequent handwashing*
Widespread availability of contactless handwashing or sanitising facilities *eg* at entrances and exits to buildings including stations.[25]

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