

## Options for increasing adherence to social distancing measures

22<sup>nd</sup> March 2020

### Question addressed

*What are the options for increasing adherence to the social distancing measures?*

This paper addresses the two social distancing measures that are seen as most important at present:

1. General social distancing by everyone.
2. Shielding for vulnerable people for at least 12 weeks.

The methodology for evaluating the options is given in Appendix A.

The options set out below are not mutually exclusive. In fact, there is evidence that greatest behaviour change impact is achieved by interventions that operate at many levels simultaneously and consistently (1). There are nine broad ways of achieving behaviour change: **Education, Persuasion, Incentivisation, Coercion, Enablement, Training, Restriction, Environmental restructuring, and Modelling** (2, 3). We have focused on those that are most relevant for this task and where there is evidence to draw on.

### 1. General social distancing by everyone

#### Government guidance (4):

*'Everyone should try to follow the following measures as much as is practicable.*

1. *Avoid contact with someone who is displaying symptoms of coronavirus (COVID-19). These symptoms include high temperature and/or new and continuous cough.*
2. *Avoid non-essential use of public transport when possible.*
3. *Work from home, where possible. Your employer should support you to do this. Please refer to employer guidance for more information.*
4. *Avoid large and small gatherings in public spaces, noting that pubs, restaurants, leisure centres and similar venues are currently shut as infections spread easily in closed spaces where people gather together.*
5. *Avoid gatherings with friends and family. Keep in touch using remote technology such as phone, internet, and social media.*
6. *Use telephone or online services to contact your GP or other essential services.*

*We strongly advise you to follow the above measures as much as you can and to significantly limit your face-to-face interaction with friends and family if possible, particularly if you: are over 70, have an underlying health condition, are pregnant.'*

#### Options (See Appendix B for summary of option evaluations)

##### Education

1. *Specificity:* The guidance currently lacks clarity and specificity with regards to recommended behaviours. For example, instead of the phrase 'try to', it should just say 'do'. Phrases such as 'as much as is practicable', 'non-essential', 'significantly limit', and 'gathering' are open to wide differences in interpretation. This can lead to confusion about exactly what people are being required to do (e.g. gathering outside or going for walks). **Guidance now needs to 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 including SMS messaging and an interactive website (5-7).**

##### Persuasion

2. *Perceived threat:* A substantial number of people still do not feel sufficiently personally threatened; it could be that they are reassured by the low death rate in their demographic group (8), although levels of concern may be rising (9). Having a good understanding of the risk has been found to be positively associated with adoption of COVID-19 social distancing measures in Hong Kong (10). **The perceived level of personal threat needs to be increased among those who are complacent, using hard-hitting**

**emotional messaging. To be effective this must also empower people by making clear the actions they can take to reduce the threat (11).**

3. *Responsibility to others:* There seems to be insufficient understanding of, or feelings of responsibility about, people's role in transmitting the infection to others. This may have resulted in part from messaging around the low level of risk to most people and talk of the desirability of building 'herd immunity'. **Messaging needs to emphasise and explain the duty to protect others (12, 13).**
4. *Positive messaging around actions:* People need to see self-protective actions in positive terms and feel confident that they will be effective. Individuals also need to understand that the survival of the severely ill will be increased by the capacity of the health care system, which in turn will be increased by reducing the rise in infections now. **Messaging about actions need to be framed positively in terms of protecting oneself and the community, and increase confidence that they will be effective (14).**
5. *Tailoring:* Some people will be more persuaded by appeals to play by the rules, some by duty to the community, and some to personal risk (13). All these different approaches are needed. The messaging also needs to take account of the realities of different people's lives. **Messaging needs to take account of the different motivational levers and circumstances of different people (15).**

### Incentivisation

6. *Social approval:* Social approval can be a powerful source of reward. Not only can this be provided directly by highlighting examples of good practice and providing strong social encouragement and approval in communications; members of the community can be encouraged to provide it to each other. This can have a beneficial spill-over effect of promoting social cohesion (15). **Communication strategies should provide social approval for desired behaviours and promote social approval within the community.**

### Coercion

7. *Compulsion:* Experience with UK enforcement legislation such as compulsory seat belt use suggests that, with adequate preparation, rapid change can be achieved (16). Some other countries have introduced mandatory self-isolation on a wide scale without evidence of major public unrest and a large majority of the UK's population appear to be supportive of more coercive measures. For example, 64% adults in Great Britain said they would support putting London under a 'lock down' (17). However, data from Italy and South Korea suggest that for aggressive protective measures to be effective, special attention should be devoted to those population groups that are more at risk (18). In addition, communities need to be engaged to minimise risk of negative effects. **Consideration should be given to enacting legislation, with community involvement, to compel key social distancing measures.**
8. *Social disapproval:* Social disapproval from one's community can play an important role in preventing anti-social behaviour or discouraging failure to enact pro-social behaviour (15). However, this needs to be carefully managed to avoid victimisation, scapegoating and misdirected criticism. It needs to be accompanied by clear messaging and promotion of strong collective identity. **Consideration should be given to use of social disapproval but with a strong caveat around unwanted negative consequences.**

### Enablement

9. *Community resourcing:* People are being asked to give up valued activities and access to resources for an extended period. These need to be compensated for by ensuring that people have access to opportunities for social contact and rewarding activities that can be undertaken in the home, and to resources such as food. **Adequately resourced community infrastructure and mobilisation needs to be developed rapidly and with coverage across all communities (6, 15).**
10. *Reducing inequity:* Adherence to these measures is likely to be undermined by perceived inequity in their impact on different sections of the population, especially those who are already disadvantaged, e.g. those in rented accommodation and those working in precarious employment. Reducing costs of phone calls, data downloads etc. by 'responsibility deals' or government subsidies should be considered.



Sections of the population who are particularly adversely affected need to be identified and steps taken to mitigate the adverse impact on their lives (19, 20).

## 2. Shielding vulnerable people for at least 12 weeks

### Government guidance (21):

*'If you have a vulnerable person living with you:*

- 1. Minimise as much as possible the time any vulnerable family members spend in shared spaces such as kitchens, bathrooms and sitting areas, and keep shared spaces well ventilated.*
- 2. Aim to keep 2 metres (3 steps) away from vulnerable people you live with and encourage them to sleep in a different bed where possible. If they can, they should use a separate bathroom from the rest of the household. Make sure they use separate towels from the other people in your house, both for drying themselves after bathing or showering and for hand-hygiene purposes.*
- 3. If you do share a toilet and bathroom with a vulnerable person, it is important that you clean them every time you use them (for example, wiping surfaces you have come into contact with). Another tip is to consider drawing up a rota for bathing, with the vulnerable person using the facilities first.*
- 4. If you share a kitchen with a vulnerable person, avoid using it while they are present. If they can, they should take their meals back to their room to eat. If you have one, use a dishwasher to clean and dry the family's used crockery and cutlery. If this is not possible, wash them using your usual washing up liquid and warm water and dry them thoroughly. If the vulnerable person is using their own utensils, remember to use a separate tea towel for drying these.*

*We understand that it will be difficult for some people to separate themselves from others at home. You should do your very best to follow this guidance and everyone in your household should regularly wash their hands, avoid touching their face, and clean frequently touched surfaces.'*

### Options: (See Appendix C for summary of option evaluations)

#### Education

- 1. Specificity and structuring:* The guidance is vague and is not behaviourally specific. For example, it uses the phrase 'as much as possible' which is ambiguous and undermines the message. The phrase 'aim to' is too weak – the guidance should promote action not aims. Use of the term 'avoid' is weaker than 'do not'. Key parts of messaging are missing. For example, it says 'clean' and 'wipe' but does not state that this needs to be with disinfectant. It uses the term 'regularly' but does not specify the situations when this should occur. It talks about 'touching the face' when what is crucial is to avoid touching the 'T-Zone' – mouth, nose and eyes. The structure can be improved to help people to understand what actions need to be undertaken where and when. **Guidance needs to be behaviourally specific and structured: who needs to do what (precisely), where (e.g. in what rooms) and why (explain the rationale) (5).**
- 2. Tailoring:* Much of the guidance is contingent on the person's living circumstances but the tailoring could be clearer so that people can easily see what applies to them and are not distracted by content that is not relevant. **Guidance should be structured to make clear which parts are relevant to whom. This could be done through an interactive website where people can put in personal details (e.g. key worker, live with someone vulnerable, husband just developed a cough) and receive tailored guidance (6, 15).**
- 3. Audience:* The guidance is directed exclusively to those living with vulnerable people. It needs to be extended to the vulnerable people themselves so that they understand what measures need to be taken, and why, and so that they are motivated to accept the necessary changes, inconvenience and restrictions. They also need to be active partners in decisions made in the household so that following the guidance is a collaborative process. A third key audience is employers of vulnerable people. Vulnerable people need to be justifiably confident that they can self-isolate without financial penalty. **Guidance should be directed to all members of the household, including the vulnerable people themselves and any employers recognising the need for partnership (20).**

#### Enablement

- 4. Support:* This is complex guidance that is difficult for many people to understand, remember and follow. There needs to be more specific information, education and practical support. This could potentially be done by trained community support volunteers, by targeted media campaigns, social media and user-
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friendly interactive apps and websites. **Community support, targeted media campaigns, apps and websites are needed to assist households with vulnerable people to establish new living arrangements and routines and adhere to them (15, 20).**

**Caveats**

Much of the evidence that has been drawn on is very recent and has not been subject to peer review. In some cases, the source is a SPI-B paper that involves expert opinion. This report has been put together rapidly and been subject to limited scrutiny and review.

SAGE Note

*This paper was prepared by SAGE's behavioural science sub-group SPI-B, for discussion at SAGE #18 on 23<sup>rd</sup> March 2020.*

**Appendix A: Methodology**

Options were canvassed considering what other countries have done, analysis of the problems encountered in the UK and suggestions for mitigation. These were evaluated using a set of criteria specifically developed to evaluate behaviour change interventions. The criteria go under the acronym, APEASE (Acceptability, Practicability, Effectiveness, Affordability, Spill-over effects, Equity) (2, 3). An initial judgement of each option was made for each criterion using a combination of evidence, first principles and reasoning. The options were discussed and revised and final version entered into an APEASE grid – see Appendix B and C. This was based on a rapid assessment, guided as far as possible by evidence. The report was drafted by two members of the SPI-B panel and nine further members commented, following which the report was revised.

**Appendix B: APEASE evaluation grid for options to rapidly increase general social distancing**

Option	Evaluation criteria (APEASE)					
	Acceptability	Practicability	Effectiveness	Affordability	Spill-over effects	Equity
1. Provide clear, precise, credible guidance about specific behaviours	HIGH	HIGH	HIGH IF ACCOMPANIED BY OTHER OPTIONS	HIGH	POSITIVE	UNCERTAIN
2. Use media to increase sense of personal threat	HIGH	HIGH	HIGH IF ACCOMPANIED BY OTHER OPTIONS	HIGH	COULD BE NEGATIVE	UNCERTAIN
3. Use media to increase sense of responsibility to others	HIGH	HIGH	HIGH IF ACCOMPANIED BY OTHER OPTIONS	HIGH	POSITIVE	UNCERTAIN
4. Use media to promote positive messaging around actions	HIGH	HIGH	HIGH IF ACCOMPANIED BY OTHER OPTIONS	HIGH	POSITIVE	UNCERTAIN
5. Tailor messaging	HIGH	HIGH	HIGH IF ACCOMPANIED BY OTHER OPTIONS	HIGH	UNCERTAIN	UNCERTAIN
6. Use and promote social approval for desired behaviours	HIGH	HIGH	COULD BE HIGH	HIGH	POSITIVE	UNCERTAIN
7. Consider enacting legislation to compel required behaviours	COULD BE HIGH IF EQUITY ISSUES ADDRESSED	DEPENDS ON TIMESCALE	COULD BE HIGH IF ACCEPTABLE AND ENFORCED	UNCERTAIN DEPENDING ON LEVEL OF ENFORCEMENT	COULD BE NEGATIVE	COULD BE NEGATIVE
8. Consider use of social disapproval for failure to comply	UNCERTAIN	HIGH	COULD BE HIGH IF ACCOMPANIED BY OTHER MEASURES	HIGH	COULD BE NEGATIVE	COULD BE NEGATIVE
9. Develop and mobilise adequately resources community infrastructure	HIGH	VARIABLE	HIGH	MODERATE	POSITIVE	POSITIVE
10. Provide financial and material resources to mitigate effects of measures on equity	HIGH	VARIABLE	HIGH	UNCERTAIN	POSITIVE	POSITIVE

**Appendix C: APEASE evaluation grid for options to rapidly increase shielding of vulnerable people**

APEASE evaluation grid

Option	Evaluation criteria (APEASE)					
	Acceptability	Practicability	Effectiveness	Affordability	Spill-over effects	Equity
1. Provide clear structured, specific guidance	HIGH	HIGH	HIGH IF ACCOMPANIED BY OTHER OPTIONS	HIGH	POSITIVE	UNCERTAIN
2. Clearly tailor guidance to make clear who needs to do what	HIGH	HIGH	HIGH IF ACCOMPANIED BY OTHER OPTIONS	HIGH	POSITIVE	UNCERTAIN
3. Expand the guidance to include vulnerable adults and employers	HIGH	HIGH	HIGH IF ACCOMPANIED BY OTHER OPTIONS	HIGH	POSITIVE	UNCERTAIN
4. Provide community support, targeted media campaigns, apps and websites to help people follow the guidance	HIGH	HIGH	HIGH	HIGH	POSITIVE	POSITIVE



## References

1. National Institute for Health and Care Excellence. Behaviour Change: General Approaches <https://www.nice.org.uk/Guidance/PH6>. 2007.
2. Michie S, Van Stralen MM, West R. The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation science*. 2011;6(1):42.
3. Michie S, Atkins L, West R. The behaviour change wheel: a guide to designing interventions. London: Silverback Publishing; 2014.
4. Public Health England. Gov.UK guidance on social distancing <https://www.gov.uk/government/publications/covid-19-guidance-on-social-distancing-and-for-vulnerable-people/guidance-on-social-distancing-for-everyone-in-the-uk-and-protecting-older-people-and-vulnerable-adults>. 2020.
5. Michie SF, Johnston M. Understanding guideline implementation: the contribution of psychology. *British Medical Journal*. 2005.
6. Scientific Pandemic Influenza behaviour Advisory Committee (SPI-B). Insights on self-isolation and household isolation. 2020 9th March.
7. Carter H, Drury J, Rubin GJ, Williams R, Amlôt R. Applying crowd psychology to develop recommendations for the management of mass decontamination. *Health security*. 2015;13(1):45-53.
8. IPSOS MORI. Personal communication 12-15 March. 2020.
9. Atchison C, Bowman L, Eaton J, Imai N, Redd R, Pristera P, et al. Report 10: Public Response to UK Government Recommendations on COVID-19: Population Survey, 17-18 March 2020 <https://www.imperial.ac.uk/media/imperial-college/medicine/sph/ide/gida-fellowships/Imperial-College-COVID19-Population-Survey-20-03-2020.pdf>. 2020.
10. Dowd J. Demographic science aids in understanding the spread and fatality rates of COVID-19 <https://www.medrxiv.org/content/10.1101/2020.03.15.20036293v1>. Preprint. 2020.
11. Peters GJ, Ruiter RA, Kok G. Threatening communication: a critical re-analysis and a revised meta-analytic test of fear appeal theory. *Health psychology review*. 2013;7(Suppl 1):S8-s31.
12. Everett J, Colombatto C, Chituc C, Brady J, Crockett M. The Effectiveness of Moral Messages on Public Health Behavioral Intentions During the COVID-19 Pandemic. . *PsyArXiv* 2020.
13. Haidt J. *The righteous mind: Why good people are divided by politics and religion*: Vintage; 2012.
14. Gallagher KM, Updegraff JA. Health message framing effects on attitudes, intentions, and behavior: a meta-analytic review. *Annals of behavioral medicine : a publication of the Society of Behavioral Medicine*. 2012;43(1):101-16.
15. Lunn P, Belton C, Lavin C, McGowan F, Timmons S, Robertson D. Using behavioural science to help fight the Corona virus <https://www.esri.ie/publications/using-behavioural-science-to-help-fight-the-coronavirus>. Economic and Social Research Institute; 2020.
16. Vasudevan V, Nambisan SS, Singh AK, Pearl T. Effectiveness of media and enforcement campaigns in increasing seat belt usage rates in a state with a secondary seat belt law. *Traffic injury prevention*. 2009;10(4):330-9.
17. Y-Gov Channel 5 News Survey 19th March. <https://yougov.co.uk/topics/health/survey-results/daily/2020/03/19/74171/2>. 2020.
18. Kwok KO. Community responses during the early phase of the COVID-19 epidemic 1 in Hong Kong: risk perception, information exposure and preventive measures. Preprint <https://www.medrxiv.org/content/medrxiv/early/2020/02/27/2020022620028217fullpdf>. 2020.
19. Scientific Pandemic Influenza behaviour Advisory Committee (SPI-B). Insights on combined behavioural and social interventions. 2020 4th March.
20. Scientific Pandemic Influenza behaviour Advisory Committee (SPI-B). The role of behavioural science in the coronavirus outbreak. 2020 14 March.
21. Public Health England. Guidance of shielding vulnerable adults <https://www.gov.uk/government/publications/covid-19-stay-at-home-guidance/stay-at-home-guidance-for-households-with-possible-coronavirus-covid-19-infection>. 2020.