

Independent SAGE statement on 2m vs 1m social distance guidance in indoor settings

*The Government's Scientific Advisory Group for Emergencies (SAGE) has considered all the public health evidence, including laboratory-based studies, in coming to its recommendation that reducing social distancing from 2 metres (approximately 6 feet) to 1 metre (approximately 3 feet) is not appropriate at this stage in the Covid-19 pandemic with current levels of infection. Moreover, as we detail here, there are additional behavioural reasons to be concerned at such a reduction. **As of now, and until there is compelling evidence to the contrary, Independent SAGE advises against any reduction in social distancing in indoor settings.***

As with all decisions during the pandemic, the issue is about balancing risks - in this case between the benefits of social interaction and increasing the operating flexibility of businesses, schools etc. and the hazards of transmitting infection. We also know that transmission indoors is much more likely than transmission outdoors. Since the Government's proposed reduction to 1 metre (3 feet) is motivated by opening up indoor spaces such as schools, offices, shops, restaurants, pubs, cinemas, and so on, we concentrate on the risks of reducing physical ('social') distancing guidelines indoors.

The basic principle is that the closer the contact and the greater the length of time of contact between people, the greater the risk of virus transmission – especially in indoor environments¹. Indoor environments, for instance, account for over 97% of “super-spreading” events across the world². However, this risk will be reduced if very few people in the community have the virus, which would be reflected in a very low rate of new infections over several weeks. The risk is further reduced if there is a system in place that finds people as soon as they get symptoms and asks their contacts to stay at home for two weeks so that they cannot infect other people. This is called a Find, Test, Trace, Isolate and Support (FTTIS) system. Therefore, for it to be safe and sensible to allow people to be much closer together indoors, firstly, the daily number of new cases in England should be consistently far fewer than 1,000, and decreasing, and secondly, the FTTIS system in England needs to be fully operational and demonstrate that almost all new symptomatic cases of COVID-19 are being identified and their contacts traced and asked to isolate. We note that new confirmed cases are still over 1,000 a day in the UK³ and the test and trace systems are commonly acknowledged as not yet fit for purpose.

There is every reason to believe that reducing the minimum distance between people to 1 metre will, in practice, mean that people stop using distancing as a way to protect themselves and others. This is because, in normal circumstances, social interaction happens at a physical distance of about 1 metre.⁴ Because people's bodies are always moving, rather than static (e.g., as they lean into conversation⁵), a starting distance of 1 metre between people is very likely to quickly become less. Additionally, people use their bodies as well as voices to interact

(by gesticulating, mirroring postures, brief touches, leaning towards each other).⁶ This means that a 1 metre instead of 2 metre distance between people increases the chance that the normal gesturing and touching that accompanies interaction⁷ will produce contact, as well as increasing the risk associated with transmission via droplets produced while speaking.⁸ Finally, we know that people's ability to perceive distance accurately is influenced by many factors^{9,10}, meaning that the 2 metre guidance results in many only achieving about 1 metre. Thus, if the guidance were to change from 2 metres to 1 metre, the interpretation would in all likelihood remove distancing as a protective measure.

Greater risk of transmission at 1 metre is likely even with suggested mitigating measures such as the use of face coverings and better ventilation of indoor areas. While these can help, it will not always

be practical to use them – for instance, people are unlikely to use face coverings in bars and restaurants and open windows are not practical in winter. Face coverings also inhibit normal communication - important in teaching, and service environments, and inhibit communication for those who rely on lip reading and facial expression to communicate. In addition, these measures help with, but do not overcome, the risks associated with longer interactions – so they are likely to be helpful on a short bus ride to work but less helpful in a two-hour meeting with a work team in a small room.

What is more, those who are unable to work at home and will be most affected by the shift to a 1 metre rule in workplaces are most likely to be members of vulnerable groups who are already more at risk from infection and death (e.g., Black and Minority Ethnic communities, key workers, and precarious contractual workers).^{11,12} As a consequence, reducing distancing will make these populations less safe, running the danger of making already stark health inequalities much worse. This is compounded by the fact that structural discrimination in workplaces and fewer rights for contractual workers are likely to make it difficult for them to push for their right to protective measures against COVID-19 infection.^{13,14,15,16}

We note that the Government has chosen to circumvent the recommendation of the Scientific Advisory Group in Emergencies (SAGE) not to reduce social distancing by commissioning their own review alongside economic advice. The most recently published SAGE review of the question clearly recommends that two metres is the safest distance for indoor spaces at the current phase of the UK pandemic, which is not comparable to the lower rates of incidence of Covid-19 to places such as Singapore and France where distances have been reduced.¹⁷ The report also makes it clear that this distance should be reduced only in unusual circumstances, and, if it is, it must be accompanied by multiple, strong mitigating measures and clear messaging and enforcement of these. Significantly SAGE also emphasises that we still know too little about super-spreading events, the aerosol dispersion of droplets and in general the processes of infection in indoor environments to be fully confident in the scientific basis for a reduction in the 2 metre rule. Given this, it is crucial that the government's SAGE and other Ministries immediately publish all the evidence that underpins its advice including in its meetings this past week. This includes data available on the potential impact of environmental

conditions (e.g., indoors versus outdoors); types of environments opened (e.g. shops vs restaurants); role of indoor ventilation and air conditioning) and individual behaviour (e.g. use of face coverings, side-by-side versus face-to-face positioning, hand cleansing and eye/nose/mouth touching). This would allow the public, businesses and other organisations to make informed decisions about how to best balance the risks with their individual and collective behaviour, policies and practices if the Government were to abandon the 2 metre guidance.

¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/892043/S0484_Transmission_of_SARS-CoV-2_and_Mitigating_Measures.pdf ²

<https://medium.com/@codecodekoe/covid-19-superspreading-events-database-4c0a7aa2342b> ³

<https://www.worldometers.info/coronavirus/country/uk/> ⁴ Sorokowska, A., Sorokowski, P., Hilpert, P.,

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<https://doi.org/10.1177/0022022117698039> ⁵ Argyle, M. (1969). *Social interaction*. London: Methuen. ⁶

Goodwin, C. (1986). Gestures as a resource for the organization of mutual orientation. *Semiotica*, 62(1-2), 29–50. <https://doi.org/10.1515/semi.1986.62.1-2.29>

⁷ Cekaite, A., & Mondada, L. (eds.) (2020). *Touch in social interaction: Touch, language, and body*. Taylor and Francis. <https://doi.org/10.4324/9781003026631>. ⁸ Asadi, S., Wexler, A.S., Cappa, C.D. et al. (2019).

Aerosol emission and superemission during human speech increase with voice loudness. *Scientific Reports*, 9, 2348. <https://doi.org/10.1038/s41598-019-38808-z> ⁹ Proffitt, D. R. (2013). An embodied

approach to perception: By what units are visual perceptions scaled? *Perspectives on Psychological Science*, 8(4), 474–483. <https://doi.org/10.1177/1745691613489837> ¹⁰ Hunley, S.B., & Lourenco, S.F.

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¹¹<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsinvolvingcovid19bylocalareasanddeprivation/deathsoccurringbetween1marchand17april>

¹²<https://www.ons.gov.uk/releases/covid19relateddeathsbyoccupationenglandandwalesdeathsregistereduptoandinclusing20thapril2020>

¹³https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/8923

76 /COVID_stakeholder_engagement_synthesis_beyond_the_data.pdf¹⁴ MacEachen, E., Kosny, A., Ståhl, C., et al. (2016). Systematic review of qualitative literature on occupational health and safety legislation and regulatory enforcement planning and implementation. *Scandinavian Journal of Work, Environment & Health*, 42(1), 3-16. doi:10.5271/sjweh.3529¹⁵ DeBruin, D., Liaschenko, J., & Marshall, M.F. (2012). Social justice in pandemic preparedness. *American Journal of Public Health*, 102 (4), 586-591. doi:10.2105/AJPH.2011.300483. ¹⁶ Watterson, A. (2020). COVID-19 in the UK and occupational health and safety: Predictable not inevitable failures by government, and trade union and nongovernmental organization responses. *New Solutions: A Journal of Environmental and Occupational Health Policy*. <https://doi.org/10.1177/1048291120929763> .

¹⁷https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/892043/S0484_Transmission_of_SARS-CoV-2_and_Mitigating_Measures.pdf