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SARS-CoV-2 Reduction in Shared Indoor Air

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In Reply

In response to our recent Viewpoint[1] on air quality interventions to reduce SARS-CoV-2 transmission, Mr Srikrishna and colleagues note that a clear target for air changes per hour in non–health care settings would be helpful. Although we are not aware of COVID-19 outbreaks resulting from SARS-CoV-2 exposure in spaces ventilated with 5 to 6 air changes per hour or less, there are minimal data available on this association to date.[2] Further study is needed to determine the effectiveness of various air changes per hour under different circumstances. For some scenarios, higher air changes per hour might be needed to prevent transmission. For example, the CDC recommends at least 12 air changes per hour for hospital airborne infection isolation rooms and for some other patient care areas in health care settings.[3]

Drs Bueno de Mesquita and Sokas emphasize the potential benefits of GUV in inactivating SARS-CoV-2.We agree with them that “engineering controls for indoor air may be as important for public health as improving water safety.” We emphasized in our Viewpoint[1] how structural interventions (including air-handling system upgrades, use of air filters with higher minimum efficiency reporting value ratings in heating, ventilation, and air conditioning systems, and GUV) can protect more people without requiring repeated individual actions. As we described, the optimal set of interventions will vary by setting and situation based on consideration of effectiveness, equity, cost, and feasibility. The good news is that an increasing number of interventions have proven effective in reducing SARS-CoV-2 transmission through shared indoor air.[1,4,5] Some can be implemented with minimal costs, and funding is available to help businesses, nonprofit organizations, the public sector, and schools invest in more extensive structural improvements.[6]

References

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