

# COVID-19 and Fresh Air Ventilation

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**C5PLUS**  
Indoor Environmental  
Science and Technology

C5 PLUS LTD.  
Suite 850 - 639 5th Ave SW  
Calgary, AB T2P 0M9  
+1 403 215 0040  
+1 800 807 6122

**Quick Summary:** Increasing fresh air ventilation in the workplace is probably a good way to help protect occupants from contracting COVID-19.



*“... the [COVID-19] virus is transmitted primarily through respiratory droplets ... bringing in more outdoor air in buildings with heating and ventilation systems ... helps dilute airborne contaminants, making infection less likely.”*

Dr. Joseph G. Allen  
Director, Healthy Buildings Program  
Harvard T.H. Chan School of Public Health

A single-minded focus on disinfecting surfaces overlooks a simple way to potentially diminish the spread of the COVID-19 virus in buildings. Both Harvard University<sup>1</sup> and the US Occupational Safety and Health Administration<sup>2</sup> are recommending increasing fresh air ventilation as a mitigation strategy.

These are the facts:

- The virus spreads mainly from person-to-person ... in the form of *respiratory droplets* produced when an infected person coughs or sneezes.<sup>3</sup>
- There is new evidence to indicate the virus can remain airborne for several hours, especially in poorly ventilated spaces.<sup>4</sup>
- There is a great deal of evidence to indicated increased fresh air ventilation reduces occupant sickness even in normal times.<sup>5</sup>

These are a good reasons to increase fresh air ventilation at least for the duration of this pandemic, and there's little reason not to do so (any marginal cost of increased energy is a false economy in the first place).<sup>5</sup>

For further information, please contact:

Curt LaMontagne  
Principal Consultant, C5 PLUS LTD.  
curt.lamontagne@c5plus.com  
+1 403 770 0215

<sup>1</sup> <https://www.nytimes.com/2020/03/04/opinion/coronavirus-buildings.htm>

<sup>2</sup> <https://www.osha.gov/Publications/OSHA3990.pdf>

<sup>3</sup> <https://www.cdc.gov/coronavirus/2019-ncov/prepare/transmission.html>

<sup>4</sup> <https://www.nejm.org/doi/10.1056/NEJMc2004973>

<sup>5</sup> <https://www.youtube.com/watch?v=yAk0kWHqiVU>