

Wayne State University

COVID-19 Medical Myth Infographics

Open Source Medicine

3-30-2021

Masks and Carbon Dioxide

Rohan Patel *Wayne State University School Of Medicine*, hf8696@wayne.edu

Maham Ahmed Wayne State University School Of Medicine, gt6167@wayne.edu

Patrick Dery Wayne State University School Of Medicine, fv1442@wayne.edu

Samantha Katz Wayne State University School Of Medicine, hg0048@wayne.edu

Jacqueline Townshend Wayne State University School Of Medicine, hf8576@wayne.edu

See next page for additional authors

Creative Commons License:

This work is licensed under a No Rights Reserved license.

Recommended Citation

Patel, Rohan; Ahmed, Maham; Dery, Patrick; Katz, Samantha; Townshend, Jacqueline; and Rosenbaum, Alex, "Masks and Carbon Dioxide" (2021). *COVID-19 Medical Myth Infographics*. 29. https://digitalcommons.wayne.edu/covidinfographics/29

This Infographic is brought to you for free and open access by the Open Source Medicine at DigitalCommons@WayneState. It has been accepted for inclusion in COVID-19 Medical Myth Infographics by an authorized administrator of DigitalCommons@WayneState.

Masks and Carbon Dioxide

Follow this and additional works at: https://digitalcommons.wayne.edu/covidinfographics

Part of the <u>Curriculum and Instruction Commons</u>, <u>Medical Education Commons</u>, and the <u>Public Health</u> <u>Commons</u>

Authors

Rohan Patel, Maham Ahmed, Patrick Dery, Samantha Katz, Jacqueline Townshend, and Alex Rosenbaum

MASKS AND CARBON DIOXIDE

Rumors surrounding the dangers of masks increasing blood CO2 levels are false and harmful to public health. Unless explicitly directed by your doctor, everyone should wear a mask at all times in public. Here's why:

by Rohan Patel, Maham Ahmed, Patrick Dery, Samantha Katz, Jacqueline Townshend, Alex Rosenbaum

1



2 WEARING YOUR MASK DOESN'T MEAN MORE CARBON DIOXIDE

Carbon Dioxide and Oxygen can easily pass through the holes in your mask but Covid-19 cannot -- it is trapped in large droplets



WEARING A MASK MIGHT FEEL UNCOMFORABLE

Your breath makes the air behind the mask hot and humid, but this does not impact your ability to breath.





WHY YOU SHOULD BE WEARING YOUR MASK

Wearing a mask is about protecting not only yourself, but also other people. Cough droplets can spread as far as 6 meters, and sneeze droplets as far as 8. These droplets can reamin in the air for as long as 10 whole minutes!

You don't throw up your hands if you think a mask is not 100 percent effective. Nobody's taking a cholesterol medicine because they're going to prevent a heart attack 100 percent of the time, but you're reducing your risk substantially.

-Dr. Peter Ching-Hong, MD

Risk of virus spread: Very high

Risk of virus spread: Low

Li Y, Tokura H, Guo YP, et al. Effects of wearing N95 and surgical facemasks on heart rate, thermal stress and subjective sensations. Int Arch Occup Environ Health. 2005;78(6):501-509. doi:10.1007/s00420-004-0584-4 Roberge RJ, Kim JH, Benson SM. Absence of consequential changes in physiological, thermal and subjective responses from wearing a surgical mask. Respir Physiol Neurobiol. 2012;181(1):29-35. doi:10.1016/j.resp.2012.01.010

Roberge RJ, Coca A, Williams WJ, Powell JB, Palmiero AJ. Physiological impact of the N95 filtering facepiece respirator on healthcare workers. Respir Care. 2010;55(5):569-577.