

## Review of the Medical Literature

Here are key anchor points to the extensive scientific literature that establishes that wearing surgical masks and respirators (e.g., “N95”) does not reduce the risk of contracting a verified illness:

**Jacobs, J. L. et al. (2009)** “Use of surgical face masks to reduce the incidence of the common cold among health care workers in Japan: A randomized controlled trial,” *American Journal of Infection Control*, Volume 37, Issue 5, 417 – 419. <https://www.ncbi.nlm.nih.gov/pubmed/19216002>

N95-masked health-care workers (HCW) were significantly more likely to experience headaches. Face mask use in HCW was not demonstrated to provide benefit in terms of cold symptoms or getting colds.

**Cowling, B. et al. (2010)** “Face masks to prevent transmission of influenza virus: A systematic review,” *Epidemiology and Infection*, 138(4), 449-456.

<https://www.cambridge.org/core/journals/epidemiology-and-infection/article/face-masks-to-prevent-transmission-of-influenza-virus-a-systematic-review/64D368496EBDE0AFCC6639CCC9D8BC05>

None of the studies reviewed showed a benefit from wearing a mask, in either HCW or community members in households (H). See summary Tables 1 and 2 therein.

**bin-Reza et al. (2012)** “The use of masks and respirators to prevent transmission of influenza: a systematic review of the scientific evidence,” *Influenza and Other Respiratory Viruses* 6(4), 257–267. <https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1750-2659.2011.00307.x>

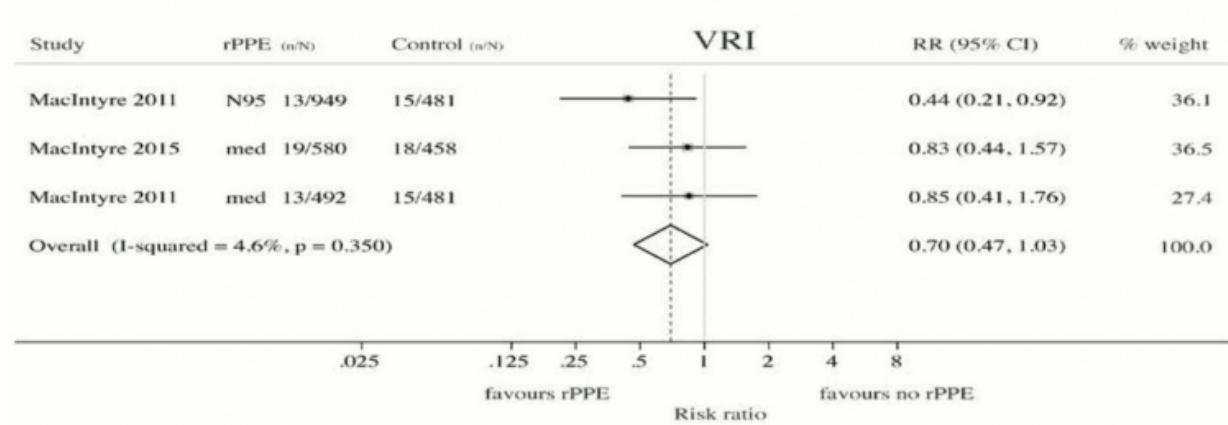
“There were 17 eligible studies. ... None of the studies established a conclusive relationship between mask/respirator use and protection against influenza infection.”

**Smith, J.D. et al. (2016)** “Effectiveness of N95 respirators versus surgical masks in protecting health care workers from acute respiratory infection: a systematic review and meta-analysis,” *CMAJ* Mar 2016 <https://www.cmaj.ca/content/188/8/567>

“We identified six clinical studies . . . In the meta-analysis of the clinical studies, we found no significant difference between N95 respirators and surgical masks in associated risk of (a) laboratory-confirmed respiratory infection, (b) influenza-like illness, or (c) reported work-place absenteeism.”

**Offeddu, V. et al. (2017)** “Effectiveness of Masks and Respirators Against Respiratory Infections in Healthcare Workers: A Systematic Review and Meta-Analysis,” *Clinical Infectious Diseases*, Volume

“Self-reported assessment of clinical outcomes was prone to bias. Evidence of a protective effect of masks or respirators against verified respiratory infection (VRI) was not statistically significant”; as per Fig. 2c therein:



**Radonovich, L.J. et al. (2019)** “N95 Respirators vs Medical Masks for Preventing Influenza Among Health Care Personnel: A Randomized Clinical Trial,” *JAMA*. 2019; 322(9): 824–833.  
<https://jamanetwork.com/journals/jama/fullarticle/2749214>

“Among 2862 randomized participants, 2371 completed the study and accounted for 5180 HCW-seasons. ... Among outpatient health care personnel, N95 respirators vs medical masks as worn by participants in this trial resulted in no significant difference in the incidence of laboratory-confirmed influenza.”

**Long, Y. et al. (2020)** “Effectiveness of N95 respirators versus surgical masks against influenza: A systematic review and meta-analysis,” *J Evid Based Med*. 2020; 1- 9.  
<https://onlinelibrary.wiley.com/doi/epdf/10.1111/jebm.12381>

“A total of six RCTs involving 9,171 participants were included. There were no statistically significant differences in preventing laboratory-confirmed influenza, laboratory-confirmed respiratory viral infections, laboratory-confirmed respiratory infection, and influenza-like illness using N95 respirators and surgical masks. Meta-analysis indicated a protective effect of N95 respirators against laboratory-confirmed bacterial colonization (RR = 0.58, 95% CI 0.43-0.78). The use of N95 respirators compared with surgical masks is not associated with a lower risk of laboratory-confirmed influenza.”

## **Conclusion Regarding That Masks Do Not Work To prevent the transmission of influenza and upper respiratory tract infections.**

No RCT study with verified outcome shows a benefit for HCW or community members in households to wearing a mask or respirator. There is no such study. There are no exceptions.

Likewise, no study exists that shows a benefit from a broad policy to wear masks in public.

Furthermore, if there were any benefit to wearing a mask, because of the blocking power against droplets and aerosol particles, then there should be more benefit from wearing a respirator (N95) compared to a surgical mask, yet several large meta-analyses, and all the RCT, prove that there is no such relative benefit.

Masks and respirators do not work to prevent the transmission of covid 19.

Unverified papers

<https://www.medrxiv.org/content/10.1101/2021.05.18.21257385v1>

"Our findings do not support the hypothesis that SARS-CoV-2 transmission rates decrease with greater public mask use, masks may promote social cohesion as rallying symbols during a pandemic, but risk compensation can also occur" In summary, mask mandates and use were poor predictors of COVID-19 spread in US states. Case growth was independent of mandates at low and high rates of community spread, and mask use did not predict case growth during the Summer or Fall-Winter waves. Strengths of our study include using two mask metrics to evaluate association with COVID-19 growth rates; measuring normalized case growth in mandate and non-mandate states at comparable times to quantify the likely effect of mandates; and deconvolving the effect of mask use by examining case growth in states with variable mask use.

Axe Effectiveness study published 4/20/2021

Astro Zenica 1.3%

Moderna 1.2%

J&J 1.2%

Pfizer 0.84%

[https://www.thelancet.com/journals/lanmic/article/PIIS2666-5247\(21\)00069-0/fulltext](https://www.thelancet.com/journals/lanmic/article/PIIS2666-5247(21)00069-0/fulltext)