

PUBLISHED LITERATURE SHOWING THE EFFECTIVENESS OF MASKS AND MASK MANDATES FOR REDUCTION IN COVID-19 TRANSMISSION

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Gallaway et al., Trends in COVID-19 incidence after implementation of mitigation measures — Arizona, January 22–August 7, 2020. *MMWR*. October 9, 2020. V69, No. 40.

“The number of COVID-19 cases stabilized and began to decrease approximately 2 weeks after local officials began mandating mask wearing (throughout several counties and cities) and enhanced sanitation practices.”

Guy Jr., et al., Association of state-issued mask mandates and allowing on-premises restaurant dining with county level COVID-19 Case and Death Growth Rates, United States March 1 – December 31, 2020. *MMWR*, March 12, 2021, V70, No. 10.

“Mask mandates were associated with statistically significant decreases in county-level daily COVID-19 case and death growth rates within 20 days of implementation.”

Joo et al., Decline in COVID-19 hospitalization growth rates associated with statewide mask mandates – 10 states, March – October 2020. *MMWR*. February 12, 2021, V70, No.6.

“Findings from this study suggest that statewide mask mandates were associated with statistically significant declines in weekly COVID-19 hospitalization growth rates for adults aged 40–64 years <3 weeks after the week that the mandate was implemented, and for adults aged 18–64 years ≥3 weeks after the implementation week.”

Leffler et al., Association of Country-wide Coronavirus mortality with demographics, testing, lockdowns, and public wearing of masks. *Am J Tropical Medicine and Hygiene*. 103(6), 2020, 2400-2411.

“In countries with cultural norms or government policies supporting mask-wearing, per capita coronavirus mortality increased on average by just 16.2% each week, as compared with 61.9% each week in the remaining countries.”

Liang et al., Efficacy of face mask in preventing respiratory virus transmission: A systematic review and meta-analysis. *Travel Medicine and Infectious Disease*. 36 (2020) 101751.

“Masks had a protective effect against influenza viruses (OR=0.55), SARS (OR=0.26), and SARS-CoV-2 (OR=0.04). This study adds additional evidence of the enhanced protective value of masks...”

Lyu W, Wehby GL. Community use of face masks and COVID-19: Evidence from a natural experiment of state mandates in the US. *Health Affairs*. 39(8), 1419-1425; 2020.

“The study provides evidence that US states mandating the use of face masks in public had a greater decline in daily COVID-19 growth rates after issuing these mandates compared with states that did not issue mandates.”

Mitze et al., Face masks considerably reduce COVID-19 cases in Germany. PNAS [Proceedings of the National Academy of Science], December 3, 2020, PNAS 2020 Vol. 117 No. 51 e2015954117.

“...we conclude that 20 d after becoming mandatory face masks have reduced the number of new infections by around 45%. As economic costs are close to zero compared to other public health measures, masks seem to be a cost-effective means to combat COVID-19.”

Rader et al., Mask wearing and control of SARS-CoV-2 transmission in the USA: a cross sectional study. Lancet Digital Health, 2021, 3:e148-57.

“a 10% increase in self-reported mask wearing was associated with an increased odds of transmission control (OR 3.53, CI 2.03-6.43).”

FG NOTE: THE ODDS RATIO ABOVE UNITY IS FOR TRANSMISSION CONTROL, NOT TRANSMISSION ITSELF. ODDS RATIO VALUES ABOVE UNITY INDICATE A REDUCTION IN TRANSMISSION (GREATER ODDS OF CONTROL ARE DESIREABLE.)

Van Dyke et al., Trends in County-Level COVID-19 Incidence in Counties With and Without a Mask Mandate — Kansas, June 1–August 23, 2020. MMWR, November 27, 2020. V69, No. 47.

“After implementation of mask mandates in 24 Kansas counties, the increasing trend in COVID-19 incidence reversed. Although rates were considerably higher in mandated counties than in nonmandated counties by the executive order, rates in mandated counties declined markedly after July 3, [the mandate date] compared with those in nonmandated counties. Kansas counties that had mask mandates in place appear to have mitigated the transmission of COVID-19, whereas counties that did not have mask mandates continued to experience increases in cases.”

Scott et al. The introduction of a mandatory mask policy was associated with significantly reduced COVID-19 cases in a major metropolitan city. PLoS ONE 16(7):2021. e0253510.

“The mandatory mask use policy substantially increased public use of masks and was associated with a significant decline in new COVID-19 cases after introduction of the policy. This study strongly supports the use of masks for controlling epidemics in the broader community.”

Wang et al., Association Between Universal Masking in a Health Care System and SARS-CoV-2 Positivity Among Health Care Workers. JAMA August 18, 2020 Volume 324, Number 7.

“Universal masking at MGB [Mass General Brigham Hospital System] was associated with a significantly lower rate of SARS-CoV-2 positivity among health care workers.”