

Study shows face masks strongly associated with reducing healthcare workers' risk of acquiring COVID-19

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A study published in the *Journal of Occupational and Environmental Medicine* from researchers at Henry Ford Health System has found that Henry Ford's early implementation of a universal mask policy in the

COVID-19 pandemic was associated with reducing the risk of healthcare workers at Henry Ford acquiring COVID-19.

Through retrospective analysis of an internal hospital quality metric reporting analytics database that was not associated with [electronic medical records](#), researchers discovered a correlation between the implementation of Henry Ford's universal mask policy and a significant drop in the rate at which its Healthcare workers tested positive for SARS-CoV-2. As COVID-19 diagnoses and hospitalizations across the State of Michigan continued to rise through late March 2020, the cases among Henry Ford's [healthcare workers](#) began to fall. By the time the first peak in COVID-19 cases occurred in the [general population](#), the rate of cases among Henry Ford healthcare workers was already trending downward.

"This research reinforces the fact that mask wearing is effective in reducing the risk of acquiring COVID-19 and validated our decision early on to implement the universal mask policy, not only to protect our [team members](#), but also to ensure they are able to care for members of the community who had contracted COVID-19," said Steven Kalkanis, M.D., CEO of Henry Ford Medical Group. "At Henry Ford Health System, our universal mask policy issued on March 26, 2020 ensured all staff, both clinical and non-clinical, received surgical or procedural [masks](#) and mandated that staff wear a mask at work while also following all other personal protective equipment requirements. Our hope is that the findings of this study continue to encourage members of the community to wear a mask in line with [Centers for Disease Control and Prevention](#) recommendations."

Healthcare workers have a threefold increased risk of reporting testing positive for SARS-CoV-2, the virus that causes COVID-19, compared to the general population, according to a study published in [Lancet Public Health](#). As of March 22, 2021, the [Centers for Disease Control and Prevention \(CDC\)](#) has reported more than 450,000 SARS-CoV-2

infections among healthcare workers in the U.S. since the onset of the pandemic, and nearly 1,500 COVID-19 related deaths among healthcare workers.

From March 12 - August 10, 2020, 19.2% of healthcare workers at Henry Ford were symptomatic for COVID-19 and underwent SARS-CoV-2 testing. Before March 28-30—the single changepoint in the data when the rate of new cases began to trend downward—the odds of a tested healthcare worker having a positive SARS-CoV-2 test result doubled every 4.5—7.5 days. After March 30, the odds of a tested healthcare [worker](#) having a positive result reduced by half every 10.5—13.5 days.

"This effort would not have been possible without the leadership of our executive team, including our president and CEO Wright Lassiter, III, Dr. Steven Kalkanis, chief clinical officer Dr. Adnan Munkarah, and chief operating officer Bob Riney," said Dee Dee Wang, M.D., Director of Structural Heart Imaging at Henry Ford Hospital and principal investigator of the study. "At a time when much was unknown about the novel [coronavirus](#), this initiative truly helped keep our healthcare workers safe. I would also like to acknowledge Dr. Betty Chu, our associate chief clinical officer and chief quality officer; Dr. William O'Neill, director of our Center for Structural Heart Disease; Dr. Geehan Suleyman, medical director of Infection Control; Dr. Marcus Zervos, chief of our Infectious Disease division; and so many others who were instrumental in the creation and successful implementation of our universal mask policy."

With the arrival of COVID-variants in the community, even with COVID-19 vaccines now being rolled out, [healthcare](#) workers and community members should remain vigilant and continue to wear a mask in accordance with CDC recommendations.

More information: Dee Dee Wang et al, Association between Implementation of a Universal Face Mask Policy for Healthcare Workers in a Health Care System & SARS-CoV-2 positivity testing rate in Healthcare Workers, *Journal of Occupational & Environmental Medicine* (2021). [DOI: 10.1097/JOM.0000000000002174](https://doi.org/10.1097/JOM.0000000000002174)

Provided by Henry Ford Health System

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