

Health Agencies Update

Another Explanation for Why Cloth Masks Reduce COVID-19 Severity

It's not just the mask, it's the humidity created inside the mask that helps protect against severe COVID-19, a recent [study](#) by National Institutes of Health (NIH) researchers suggests.

The use of cloth masks has been linked with decreased disease severity, which is surprising considering such masks aren't good at filtering out the smallest aerosol particles that can reach the lower respiratory tract, the researchers wrote.

They tested 4 types of masks: an N95 respirator, a 3-ply disposable surgical mask, a 2-ply cotton-polyester mask, and a heavy cotton mask. Volunteers breathed into a sealed steel box, and the scientists then measured the humidity level inside it.

With no mask, the water vapor of exhaled breath filled the box, increasing humidity. But when the volunteers wore any of the 4 types of masks, humidity levels in the box declined because the masks trapped most of the water vapor in their exhaled breath. The researchers noted that the volunteers' faces fit tightly against high-density foam rubber surrounding the opening in the box, eliminating leakage around the masks' edges.

Increased humidity of inhaled air hydrates the respiratory epithelium, which is known to benefit the immune system. It also promotes the removal of mucus, and potentially harmful particles within it, from the lungs. High humidity can also enhance production of interferons that fight viruses.

"High levels of humidity have been shown to mitigate severity of the flu, and it may be applicable to severity of COVID-19 through a similar mechanism," coauthor Adriaan Bax, PhD, a biophysicist at the National Institute of Diabetes and Digestive and Kidney Diseases, said in a [statement](#).

VA Nursing Homes' History of Infection Control Shortcomings

Virtually all nursing homes owned and operated by the Department of Veterans Affairs (VA) were cited for infection control deficiencies during the 5 fiscal years before the novel coronavirus pandemic, according

to a recent Government Accountability Office (GAO) [report](#).

The VA runs 134 nursing homes, called community living centers (CLCs). Approximately 9000 veterans per day received care in a VA CLC during fiscal year 2019, according to the GAO. Several news stories about veterans' care in CLCs prompted the new report.

The VA uses a contractor to conduct unannounced inspections of CLCs, usually annually. The GAO analysis of VA data from fiscal years 2015 to 2019 found that 95% of the 135 CLCs operating during that period were cited in at least 1 year for an infection prevention and control deficiency, and 30% were cited in at least 3 consecutive fiscal years. Each year, from 46% to 70% of inspected CLCs received such citations.

In the GAO's review of inspection records, it identified repeated instances of the same infection prevention and control deficiencies. In one CLC, for example, inspectors identified 9 times in fiscal years 2018 and 2019 when staff didn't use proper precautions, such as wearing personal protective equipment (PPE) or washing their hands, while working with residents known to be at high risk of infection. In another CLC during the same years, inspectors observed nursing staff without appropriate PPE while they administered medications to a resident who tested positive for methicillin-resistant *Staphylococcus aureus*.

"Ensuring the quality of nursing home care provided to veterans residing in CLCs—and in all nursing homes—has become even more critical with the emergence of [COVID-19]," the GAO report noted. "[T]he health and safety of the nation's nursing home residents—who are often in frail health and living in close proximity to one another—has been a concern, in particular for the disabled and elderly veterans living in CLCs."

HHS Expands Number of People Who Can Vaccinate Against COVID-19

The US Department of Health and Human Services (HHS) recently added more catego-



Water vapor in exhaled breath creates humidity inside face masks, helping to protect against severe COVID-19.

ries of individuals qualified to prescribe, dispense, and administer COVID-19 vaccines.

An [amendment](#) to the Declaration under the [Public Readiness and Emergency Preparedness \(PREP\) Act](#) authorizes health care professionals to provide COVID-19 vaccination services in any state or territory, not just the one in which they're licensed. The same applies to any physician, registered nurse, or practical nurse whose license or certification expired within the past 5 years, as long as it had been active and in good standing.

For all such health care professionals, Centers for Disease Control and Prevention COVID-19 vaccine training is required. If they aren't currently practicing or their license or certification is expired, they can administer vaccines only after observation by a practicing health care professional to confirm their competency.

The amendment preempts state and local restrictions on who can administer COVID-19 vaccines.

"As vaccine supply is made more widely available over the coming months, having additional vaccinators at the ready will help providers and state health departments meet the demand for vaccine and protect their communities more quickly," HHS Acting Secretary Norris Cochran said in a [statement](#). — Rita Rubin, MA

Note: Source references are available through embedded hyperlinks in the article text online.