## Mask Mandates Cut COVID-19 Spread in Schools, Studies Find



Mask requirements still offer one of the strongest tools to prevent COVID-19 outbreaks in schools, say new studies.

The findings come from the Centers for Disease Control and Prevention and from a nationwide study

published this morning in the journal Pediatrics. They land as the latest pandemic wave recedes, federal masking guidelines begin to relax, and education leaders work toward more flexible approaches to masking for staff and students.

But the data offer the strongest evidence to date on the effectiveness of masking in curbing COVID spread in schools, regardless of whether or not students are vaccinated.

In the Pediatrics study, Duke University researchers in the ongoing ABC Science Collaborative

—which tracks pandemic mitigation efforts in schools —analyzed masking policies and infection rates in 61 districts, more than 3,000 schools, and more than 1.1 million students and adults in nine states. For the first time, the national study looked at mitigation from July through December 2021, during the delta wave and the start of the omicron waves of the pandemic.

Schools that required universal masking for adults and students saw 72 percent fewer secondary infections—in which students infected with COVID-19 in the community spread the virus to others in school—than did schools that had no mask requirements or partial masking. Once school size, vaccination rates, and other characteristics were taken into account, schools with universal masking had nearly 90 percent lower infection rates.

Moreover, about half of the students and staff in the study had completed vaccination against COVID-19 by the end of the study, and Duke researchers found universal masking policies were associated with fewer infections even among those who were already vaccinated.

As of March 7, just over 26 percent of U.S. children ages 5 to 11 have been fully vaccinated, as have less than 58 percent of those ages 12 to 17, according to the latest CDC data

"Masking is clearly warranted as a bridge to vaccination," said Dr. Danny Benjamin, co-chair of the ABC Science Collaborative and distinguished professor in pediatrics at Duke University School of Medicine. "This isn't going to be the only pandemic of our lives, right? And this is not the last [COVID-19] variant. So when the next variant or the next pandemic comes along, not only can people make decisions now about whether or not to mask, but they can make decisions about whether or not to put masks back on and when to do that."

In North Carolina, Dr. Benjamin noted, schools have started to implement more-nuanced masking policies this February and March as omicron cases fell and vaccination rates slowly rise.

"[Masking] does not have to be a yes/no decision," he said. "It can be, OK, we're gonna take steps toward this."

The Duke University study comes on the heels of similar findings released Tuesday by the Centers for Disease Control and Prevention, based on a smaller study of school masking policies in Arkansas

public schools from late August to mid-October of last year, during the delta surge but before vaccinations were available for children ages 5-11.

During the study, 30 percent of K-12 Arkansas districts required all students and staff to wear masks, while 48 percent had no mask requirements. Researchers compared the coronavirus infection rates during those months of the delta surge to each other and to 21 percent of the districts that had partial masking policies. Schools with partial masking required them only for specific staff or student groups (by grade or vaccination status, for example); in specific settings (such as in classrooms but not gym); or during certain conditions, such as when students could not stay 6 feet apart indoors. Across all of the districts, student and staff vaccination rates rose about 5 percentage points, to 18.6 percent, over the course of the study.

The Arkansas districts with universal masking had 23 percent fewer COVID-19 infections among students and staff during the delta wave than did districts that had no mask requirements. There was no significant difference in infections between districts with partial or no masking policies.

Moreover, for districts that adopted a mask mandate during the delta wave, the infection rates dropped significantly a week after masks began to be worn. As the delta wave receded, the infections declined significantly faster among students and staff in those districts than in their larger communities, by about 375 cases for every 100,000 people.

## Schools weighing community options

While mask policies have prompted significant backlash from parents and educators concerned about students' comfort and social development, masking has proven less burdensome than school closures. That's both because many children have struggled to learn at the same pace via remote instruction as in person, and because children have spread COVID-19 less than expected when wearing masks.

"Once you get into a point like we are right now, where everyone [ages] 5 and up has access to a vaccine, where hospitals and schools and support systems in the community are functioning, masking becomes a decision based on what's in the best interest of the community and the trust between the school system and the families. And so school systems can have a discussion as far as what's right for them."

In fact, the need to keep school campuses open seems to be the biggest driver of keeping faces covered, according to new policy data from the American Enterprise Institute's Return to Learn

. School districts that offered less in-person Tracker instruction last year than average were nearly four times more likely to require universal masking than schools that opened in person for longer periods of in 2020-21.

While community infection rates are considered the most critical benchmark for deciding whether to require masks in schools, AEI researcher Nat Malkus found communities' experience and political culture were stronger predictors of districts' masking policies.

Only 3 percent of students in communities with high transmission rates (as defined by the CDC) attended districts that require universal masking as of the end of February, and another 5 percent attended mask-optional districts. By contrast, nearly half of students in low-risk communities attended districts with universal masking.

Passions outside of health or education still play a role, Malkus found. While 53 percent of counties that voted for Joe Biden in the last presidential election had district mask mandates, only 18 percent of counties that went for Donald Trump required school masking.

However, Benjamin said school leaders should consider more-nuanced mask policies that work with other mitigation efforts as they move forward.

"When you are going to the trouble to mask and you are in a high-community transmission [rate], and you've got an extremely infectious variant like omicron," he said, "then if you want to prevent infection at school, the kids should also be eating outside—much like we do in the hospital system."

Benjamin predicted that school districts may continue to require temporary mask-wearing during particularly bad flu seasons, or if there are severe staff shortages caused by future COVID-19 strains.

"In the U.S., there's quite a bit of masking fatigue, so I think it's less likely for folks to pick up masking again, unless there's really a compelling reason to do so," he said.

"You know, I've got four kids of my own," Benjamin said. "Two of them are under a [school] mask mandate. That's perfectly fine with me. Two of them are not, and they're vaccinated—and that's also fine with me. I really think that this is a time for school districts to look at what's important to them and to their communities and make an informed decision. Hopefully the data will help take some of the very, very strong emotions around masking and maybe lessen those a bit."