

## Medical News &amp; Perspectives

## School Superintendents Confront COVID-19—“There Are No Good Options for Next Year”

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If Susan Enfield, EdD, had a nickel for every time someone in recent weeks told her they wouldn't want her job, she'd be a wealthy woman.

Enfield is the superintendent of Highline Public Schools, which serves more than 17 000 students in suburban Seattle. She's been losing sleep over how to prevent those students—who haven't been inside a classroom since March 12—from falling further behind academically, given that the coronavirus disease 2019 (COVID-19) pandemic shows no sign of waning, let alone ending, by the time school resumes September 3.

“There are no good options for next year,” Enfield said in an interview. “There is no scenario in the fall that doesn't break your heart.”

Her counterparts around the country face the same dilemma: how to minimize the spread of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in schools and in the community while ensuring that students are well-prepared for future success.

“If you talk to any pediatrician...we are getting inundated by calls from school districts,” said general and behavioral developmental pediatrician Nathaniel Beers, MD, who helped craft the American Academy of Pediatrics' (AAP) [school reopening guidelines](#). Some of the school districts' most common questions center around whether they should test for SARS-CoV-2 and whether it's okay to resume sports, he said. Beers, president of the [HSC Health Care System](#), has the unusual perspective of a pediatrician who spent more than 7 years working for the District of Columbia Public Schools, the last 15 months as chief operating officer.

The superintendents recognize that students who are at a disadvantage to begin with—they're struggling academically, their families lack the technology needed to learn remotely, their parents can't afford to stay home with them, their siblings, and, sometimes, their grandparents—are also the ones most affected when classrooms close.



“We all did the best we could over March, April, May, June, but we're going to have to do better in the fall if this is a long-term scenario,” Enfield said.

For many students, school serves as far more than a place to learn reading, writing, and arithmetic and to socialize with friends. School might be their only stable environment, the place where they receive so-called wraparound services such as free meals and health care.

“Schools have always been integral in providing care to people, particularly in disadvantaged communities,” said pediatric ophthalmologist Megan Collins, MD, MPH, codirector of the [Johns Hopkins Consortium for School-Based Health Solutions](#). For example, she said, schools help students manage chronic diseases such as asthma and diabetes.

And in the City of Baltimore, all public school students, from prekindergarten through 8th grade, receive vision screenings through the [Vision for Baltimore](#) program. “We do everything at the school,” from the screening to eye examinations to the selection and dispensing of eyeglasses, and it's all free, said Collins, one of the program's leaders. “A quarter of kids have eye prob-

lems,” she noted. “It's a simple solution to deliver those services in school settings.”

Besides interrupting supportive services, school closures have made it difficult for schools “to identify and address important learning deficits as well as child and adolescent physical or sexual abuse, substance use, depression, and suicidal ideation,” the AAP school reopening guidelines state. In addition, the AAP noted, “there has been substantial impact on food security and physical activity for children and families.”

As 2 UK bioethicists observed in a recent [article](#), children have not suffered as much from COVID-19's direct effects as older adults, but school closings have adversely affected their health and welfare.

“If we think about it solely from the perspective of children, they should all be back in school in the fall,” said Ruth Faden, PhD, MPH, founder of the Johns Hopkins Berman Institute of Bioethics, which, with Collins' consortium and the Johns Hopkins schools of education, medicine, and public health, created the eSchool+ Initiative as a resource for schools during the pandemic. “All of our children need to be in school. Some children need to be in school even more than others.”

### Are Students SARS-CoV-2 Spreaders?

By March 31, schools had shut their doors to approximately 1.6 billion students worldwide—91.3% of all those enrolled—from early childhood education through the doctoral level, according to the United Nations Educational, Scientific and Cultural Organisation (UNESCO). Some US schools were still open then, but 193 countries had closed all their schools, according to UNESCO.

Although scattered cases of [multisystem inflammatory syndrome in children](#) linked with SARS-CoV-2 infection are concerning, the main question about schools reopening in the fall is whether returning students could increase community COVID-19 rates, Faden said.

After all, it's known that children with mild or no symptoms transmit other respiratory viral infections such as influenza and measles, Australian researchers explained in a recent [brief communication](#). Asymptomatic child carriers were a major source of poliovirus transmission during epidemics of that disease, the authors pointed out.

"Kids shed much more influenza virus, and they do that for much longer periods of times than adults," Vanderbilt University infectious disease specialist William Schaffner, MD, said. Whether the same holds true for SARS-CoV-2 has not yet been ascertained, he said. "Children have been remarkably less affected than adults. The question is still open whether children become infected without symptoms and are extensive transmitters of this infection."

In its late February [report](#), the China-World Health Organization Joint Mission said it had not learned of any SARS-CoV-2 transmission from a child to an adult, the Australian researchers noted. And a [review](#) published March 30, which was not peer-reviewed, found that of 31 COVID-19 family clusters from the US and 4 other countries, a child was the index case in only 3, and in all 3 the child had symptoms.

Although months have passed and thousands more cases have been reported since then, Schaffner said that currently "the thought is this is being most transmitted adult to adult." One possible explanation for that pattern is that the virus is less likely to gain a toehold in the upper airway of children, Schaffner said.

"In order for any human being to shed the virus, the virus has to be inhaled and then attached to the cells in the upper airway," he said. "That's exactly what influenza does."

But SARS-CoV-2 might not be able to attach to the cells in children's upper airways because the receptor by which it infects adults is not fully developed. "That's our favorite explanation at the moment" for why children seem to be less likely to become infected with SARS-CoV-2, Schaffner said.

### Educated Guesses

Although President Donald Trump [tweeted](#) on May 24 that "schools in our country should be opened ASAP," a majority of US voters are not comfortable with the thought of reopening kindergarten through 12th grade (K-12) classrooms, according to a Politico/Morning Consult [poll](#) conducted June 19 through June 21.

However, the AAP's [school reopening guidelines](#) state that the organization "strongly advocates that all policy considerations for the coming school year should start with a goal of having students physically present in school."

As of July 1, 43 states and territories had released school reopening plans, according to the [School Reopening Plan Tracker](#) maintained by the Johns Hopkins Berman Institute of Bioethics. Although superintendents are planning for students to return to the classroom, they acknowledge that school will look far different than it did before the pandemic.

In New Jersey, a 104-page June 26 [report](#) from Governor Phil Murphy and the state Department of Education noted the importance of elementary schools working with child care providers because more families may need outside care if school schedules are modified.

In Illinois, Governor J. B. Pritzker on June 23 released 63 pages of [guidelines](#) for K-12 schools as well as higher education institutions to safely resume in-person instruction for the upcoming school year. The Illinois Emergency Management Agency will provide pre-K-12 school districts with 2.5 million cloth face masks, enough for every student and staff member.

In South Carolina, a task force called AccelerateED on June 22 published a 92-page [guidance](#) on reopening pre-K-12 public schools. Because the course of the pandemic cannot be predicted, school districts must develop 3 alternate plans for the coming year: traditional, in-classroom learning; a hybrid of in-classroom and distance learning; and full distance learning, according to the task force.

But as the states, the AAP, and the Centers for Disease Control and Prevention emphasize, their guidelines are just that, guidelines, and school districts need to consult with local health officials on how to proceed, which could change dramatically by the start of the academic year.

One thing that is clear is that little is clear. "We're all doing a whole series of experiments," Schaffner said. "The K-12 folks are making it up, as are universities."

### School Days in the Time of COVID-19

What Enfield calls "the best of the bad options in front of us" has students in her district spend only 2 days per week in the classroom. Half would go to school Monday and Tuesday, the other half Thursday and Friday. Wednesday would be a planning day for teachers and a cleaning and disinfecting day for custodians. Students would watch lessons from home and then engage with their teachers on the material in school, she said.

Cities in her school district will have to use [CARES Act Coronavirus Relief Fund](#) dollars to provide Wi-Fi to students whose families can't afford it, Enfield said. "We estimate we've got upward of 2500 students' homes where they don't have reliable internet connections. Without it, they're going to lose instruction 3 days a week."

Even when students are in the classroom, it will be far from business as usual.

"Everybody in grade school from kindergarten and up is trying to figure out how to do fewer activities with all of the kids together," Schaffner said. "They will be working in smaller groups that will be separated."

The CDC [recommends](#) that schools "space seating/desks at least 6 feet apart when feasible," but the AAP guidelines note that in many schools, that much distancing is feasible only by limiting the number of students in the classroom. Forcing elementary school students to spend part of their day or week online just to maintain 6 feet of social distancing in the classroom might not be worth the small benefit in COVID-19 risk reduction, according to the AAP. Besides, evidence suggests that spacing students as close as 3 feet apart might be nearly as beneficial as 6 feet, particularly if they're wearing face masks and have no symptoms, the AAP notes.

Maintaining a 6-foot distance probably has a greater impact on COVID-19 risk reduction among high school students,

according to the AAP. The data suggest that, compared with elementary school students, older adolescents are more likely to spread COVID-19 as well as contract it and develop complications, Beers explained.

Given what is known about SARS-CoV-2 transmission, it's more important for adults in schools to maintain social distancing, especially around other adults, the AAP says. Teachers, not students, should move to different classrooms each period if possible, the AAP says.

It recommends that teachers and other school staff meet virtually instead of in-person. Recently, as a result of attending an in-person meeting, more than 40 principals in California's Santa Clara Unified School District had to quarantine because 1 attendee, who was asymptomatic, tested positive for SARS-CoV-2, according to [news reports](#).

For students of all ages, the AAP recommends holding classes outside when possible, especially physical education and chorus, because exercise and singing increase exhalation.

Schools should close communal spaces such as cafeterias and playgrounds with shared equipment if possible, according to the CDC. Instead, students should eat meals in their classroom, and they, and school staff, should be encouraged to bring water from home instead of using water fountains, the agency says.

Buses present another challenge. If possible, the same students should sit together every day, the AAP says. If there are too many students on the bus to maintain a distance of 6 feet between them, face coverings should be worn.

### Rational Expectations

Guidelines are one thing; practical considerations are another. Is it reasonable to expect elementary school students to wear a mask all day, or high school students to avoid contact with friends cohorting in different classrooms during the day?

"Certainly, what you're seeing around the world is this conversation about what's a rational expectation for a child based on [their] developmental level," Beers said.

Some districts have discussed [checking students' temperatures](#) when they arrive at school. "Symptom screening is a helpful tool, and it probably will keep some sick students out of school," said Catherine Rasberry, PhD,

a health scientist in the CDC's Division of Adolescent and School Health.

But since a large portion of infected children are thought to be asymptomatic, symptom screening alone won't keep SARS-CoV-2 out of the classroom entirely, Rasberry acknowledged. "You have to layer a whole bunch of separate strategies."

That's why the CDC has developed 4 "buckets" of strategies schools can use to mitigate the spread of COVID-19, she said. One bucket consists of promoting behaviors to reduce spread, such as staying home when sick and proper handwashing. A second bucket includes strategies to maintain healthy environments, such as staggering arrival and drop-off times to minimize contact between students who aren't in the same classroom; and a third bucket includes strategies to protect staff and students at higher risk of severe COVID-19. A fourth bucket includes steps to take when staff or students get sick.

Although many people support testing symptomatic students or staff members for SARS-CoV-2, the value of widescale testing in schools is debatable, Beers said. "Testing has to serve a purpose. Sticking a swab in the back of someone's nose as vigorously as you need to get an accurate test is not something that's done lightly."

Questions about testing, scheduling, and seating arrangements aren't the only ones swirling throughout the pre-K-12 landscape. Uncertainties also surround extracurricular activities, particularly sports.

"The outdoor sports, field hockey for the girls and lacrosse for boys, don't have as much contact as football does," Schaffner noted. "Everybody's looking at these things and trying to figure out how much they can do as safely as possible in the context of the strong social and cultural traditions we have in this country."

### School Staff on the Front Line

Enfield's best-case [scenario](#) for her school district depends on having enough teachers, custodians, bus drivers, and other staff willing to go to work.

"There are definitely concerns about our ability to staff if a significant number of people feel they can't or don't want to return," she said. "We've already had some custodians say, 'I'm not coming back to work with kids in the building.'"

In addition, Enfield said, 30% of her district's bus drivers are older than 60 years, so their age alone puts them at a higher risk of severe COVID-19. "There are people for whom working from home isn't a viable alternative," she said.

As Collins said, "When we talk about frontline workers, I think we really need to emphasize teachers in schools and administrators much more than we do."

Estimating how many of those frontline workers will return presents another challenge for superintendents. "Given current teacher shortages in many parts of the country, a sudden drop in the teaching workforce could be catastrophic, especially as the economic fallout from the pandemic threatens mass layoffs," Collins and Faden noted in a recent [opinion piece](#).

In a [USA TODAY/Ipsos online poll](#) conducted May 18 through May 21, 1 in 5 teachers said they were unlikely to return to the classroom if their school reopened in the fall.

"For K through 12, we need these teachers desperately," Faden told *JAMA*. But, she said, it would be unethical to require teachers who have a higher risk of serious COVID-19 complications to return.

About 10% of those teaching grades 1 through 12 are older than 61 years, Faden and Collins noted in their opinion piece, and, Faden said, it's unknown how many have medical conditions such as asthma or diabetes that increase their risk of serious COVID-19 if they become infected.

"The bottom line is there's going to be some reasonable chunk of teachers who, for their own personal health risks, should not be in congregate settings," Faden said. Anecdotal, Collins said, she's heard many reports of older teachers opting to retire instead of returning to the classroom because of COVID-19.

School superintendents plan for the worst and hope for the best, Enfield said. "Those of us in public education get up every day believing that the impossible is possible. I think we're eternal optimists."

However, she emphasized, "let's not make any mistake. It (the pandemic) will have a devastating impact for some (students). That is a very hard reality for those of us in public education to accept." ■

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