

In Their Own Words: Why Health Experts Say Elementary Schools Should Open

With proper safety measures, doctors and scientists said in a survey, the benefits outweigh the risks.



By Margot Sanger-Katz and Claire Cain Miller

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Students at the Child Center of N.Y. in Corona, Queens, last month. Naima Green for The New York Times

Scientists and doctors who study infectious disease in children largely agreed, in a recent New York Times survey about school openings, that elementary school students should be able to attend in-person school now. With safety measures like masking and opening windows, the benefits outweigh the risks, the majority of the 175 respondents said.

In some ways, they were more supportive of broad reopening than the Centers for Disease Control and Prevention was in recently published guidelines. But the experts pointed to the large share of schools in the United States and worldwide that have opened with minimal in-school spread while using such precautions.

Below are a representative range of their comments on key topics, including the risks to children of being out of school; the risks to teachers of being in school; whether vaccines are necessary before opening schools; how to achieve distance in crowded classrooms; what kind of ventilation is needed; and whether their own children's school districts got it right.

In addition to their daily work on Covid-19, most of the experts had school-aged children themselves, half of whom were attending in-person school.

They also discussed whether the new variants could change even the best-laid school opening plans. "There will be a lot of unknowns with novel variants," said Pia MacDonald, an infectious disease epidemiologist at RTI International, a research group. "We need to plan to expect them and to develop strategies to manage school with these new threats."

What do you wish more people understood in the debate over school reopenings?

Most of the respondents work in academic research, and about a quarter work as health care providers. We asked them what their expertise taught them that they felt others needed to understand. Over all, they said that data suggests that with precautions, particularly masks, the risk of in-school transmission is low for both children and adults.

"We need to rely on science and not emotions to make these decisions. Expert guidance can get our children back to school safely. Keeping them out of school will result in irreparable harm to their education, particularly for minority children and those from lower socioeconomic backgrounds."

Archana Chatterjee, Dean, Chicago Medical School

"It will never be — and never has been — 100 percent risk-free to return to school. We know a lot more than we did last spring about how to prevent transmission, and vaccination is on the rise. There are significant deleterious effects on children who are learning remotely, and that needs to get equal attention."

Allison Bartlett, Associate Professor of Pediatric Infectious Diseases, University of Chicago Medicine

"I wish that school reopening wasn't subject to such politicization and fear, and that decisions could be made based on data and facts. Data would suggest that children, particularly younger children, can safely go to school, and that neither the children nor the teachers are at particularly higher risk."

Anne Blaschke, Associate Professor of Pediatrics and Pediatric Infectious Diseases, University of Utah

"There is some risk in everything we do. Teachers are not at higher risk than other essential workers."

David Rosen, Assistant Professor of Pediatric Infectious Diseases, Washington University in St. Louis

"Closing schools can benefit adults but mainly hurts children. Surely we should close casinos and bars and ban international travel before we close schools."

Joan Robinson, Professor and Director, Division of Pediatric Infectious Diseases, University of Alberta

"I am an infectious diseases physician, respiratory virus researcher, pediatric hospitalist and mother of two. I have taken care of children with Covid-19 and seen its devastating complications. I have engaged in this work while taking care of the academic and social-emotional needs of my children. I had to make the difficult choice to abandon the public school system, of which I was a strong proponent. My children needed to be in school. I needed them to be in school. I knew this could be done safely. I wish the same for everyone else."

Suchitra Rao, Associate Professor, Pediatrics, University of Colorado School of Medicine; Pediatrician, Infectious Disease, Children's Hospital, Colorado

"I wish people trusted the science. I wish people trusted the medical professionals and public health experts who have dedicated their careers to taking on these exact issues of school reopening. The science is clear. Kids are suffering. Families are suffering, trying to navigate as workers, parents, teachers, psychologists and social workers, all simultaneously."

Mitul Kapadia, Associate Clinical Professor, University of California, San Francisco; Director, Pediatric Physiologist, Benioff Children's Hospital

"This is a debate like climate change: The science and data are clear that we can reopen schools safely and successfully. However, media and the unions have fostered uncertainty and fear. We should all find a way to do right by our children with innovation and creativity, but above all, science."

Kim Newell Green, Pediatrician; Associate Clinical Professor, University of California, San Francisco

“The mental health crisis caused by school closing will be a worse pandemic than Covid.”

Uzma Hasan, Division Director Pediatric Infectious Diseases, Saint Barnabas Medical Center

“Education is absolutely essential for child health and development. Young children are not a driving force in community spread of Covid; non-masked, non-distanced adults gathering indoors are.”

Brian Campfield, Assistant Professor of Pediatrics, University of Pittsburgh School of Medicine

Do you think your local school district made the right decision about opening?

About 85 percent of the experts who lived in places where schools were open full time said their district had made the right call. Just one-third of those in places where schools were still closed said that had been the right choice.

“I believe our schools could have opened earlier in a limited fashion with appropriate mitigation efforts, rather than continuing to await vaccines for teachers.”

James H. Conway, Professor of Pediatrics, Division of Pediatric Infectious Diseases, University of Wisconsin-Madison

“Initially, yes. They decided to do a hybrid model. But now with clear data that transmission is not as high in schools as in the community, I think they should open for full in-person education.”

Sheila Nolan, Chief of Pediatric Infectious Diseases, Maria Fareri Children’s Hospital/Westchester Medical Center

“As a mother of two, I have personally observed the huge difference in my kids’ mental, physical and social well-being since our schools safely reopened with medical professionals, including me, on the reopening committee. We have identified no in-school transmission, despite strict protocols and extensive testing. In fact, we saw a dramatic increase in cases among students and staff over the holiday break.”

Megan Ranney, Director, Brown-Lifespan Center for Digital Health

“My school district delayed any kind of in-person learning way after many other districts in my state had opened. An overabundance of caution probably exacerbated social isolation and the other deleterious effects on children -- many students simply never logged on. We could have reopened relatively safely much earlier than we did.”

Gregg Gonsalves, Assistant Professor, Epidemiology of Microbial Diseases, Yale School of Public Health

“Absolutely not. School closure in Spring 2020 was the right decision. We now know schools can open safely. We see it in private and parochial schools all over San Francisco. We see it in public schools all over the state, country and world. Fear is guiding decisions even against the guidance and recommendations from the medical and public health community. Absolutely not!”

Mitul Kapadia, Associate Clinical Professor, University of California, San Francisco; Director, Pediatric Physiatrist, Benioff Children’s Hospital

“This issue has been politicized, and the unions have inappropriately focused on fear and misinformation. San Francisco public schools could have been successfully reopened in August had the district, unions and others come together to support children.”

Kim Newell Green, Pediatrician; Associate Clinical Professor, University of California, San Francisco

“In Philadelphia, public schools have been fully closed since March 2020 while private schools have been open since September 2020, thus exacerbating existing disparities.”

Mayssa Abuali, Pediatrics Attending, Einstein Medical Center Philadelphia

“School reopening decisions have been decentralized and deferred to local school boards that generally do not have expertise in public health and safety, leading to prioritization of perceived safety and comfort over what the data actually show to be safe.”

Jayme Congdon, Assistant Professor of Pediatrics, University of California, San Francisco

Other than the virus, what is your biggest concern about children’s well-being during closures?

The group expressed great concern that other aspects of child health and well-being had been neglected during the pandemic, with the potential for dire long-term consequences.

“Food insecurity. Socialization. Depression. Isolation.”

Andrew Janowski, Assistant Professor of Pediatrics at Washington University School of Medicine in St. Louis; Pediatric Infectious Disease Specialist

“While parents can testify to this on a household level, there are many studies now confirming that children are suffering academically, emotionally, socially and physically by not being in school. They've essentially lost a year of peer interactions, and the long-term consequences may not be fully realized for years.”

Kristin Moffitt, Infectious Diseases Physician at Boston Children's Hospital; Assistant Professor of Pediatrics, Harvard Medical School

“Child abuse.”

Sruti Nadimpalli, Pediatrician; Clinical Assistant Professor, Pediatrics, Infectious Diseases, Stanford University

“They suffer socially when they are not in school. They suffer intellectually learning remotely. It puts pressure on working parents. It denies students access to a school lunch that may be their only nutritious meal all day. There are so many downsides to closing schools that have nothing to do with the virus.”

Saul Hymes, Assistant Professor of Clinical Pediatrics, Stony Brook University Renaissance School of Medicine

“The impact is far worse for children of color and those living in poverty, increasing already devastating racial and economic disparities in educational outcomes and potential for future careers and income. It is unconscionable to continue to prioritize the opening of in-person dining and bars over children's education.”

Rebecca Same, Pediatrician; Assistant Professor, Washington University School of Medicine in St. Louis

“Worsening educational disparities, which I'd like to see creative solutions to address, like year-round school or mandatory summer school.”

Leana Wen, Visiting Professor of Health Policy and Management, George Washington University

“Distance-based learning deprives children of meaningful and developmentally appropriate interactions with peers, adults and the broader community.”

Pia MacDonald, Infectious Disease Epidemiologist, RTI International

“Childhood education and development. That should be goal No. 1.”

John V. Williams, Professor of Pediatrics, University of Pittsburgh School of Medicine; Chief, Infectious Diseases, UPMC Children's Hospital of Pittsburgh

“I am concerned about children's overall mental and physical health. Not just the impact of being away from peers and less physically active, but the stress of parents losing jobs, families without adequate food and loss of monitoring for signs of abuse.”

Taylor Heald-Sargent, Assistant Professor of Pediatrics, Infectious Diseases, Northwestern University; Attending Physician, Infectious Diseases, Lurie Children's Hospital

“We are going to have a lost generation — a set of children who will fall behind educationally, with deficits that could affect their entire life course.”

Gregg Gonsalves, Assistant Professor, Epidemiology of Microbial Diseases, Yale School of Public Health

“Not only do children need academic instruction, but schools also provide the socialization, peer support and emotional development that is critical to a child's growth. School closure has led to a wave of mental health problems in children, with disparate numbers in those in minority racial and ethnic groups.”

Suchitra Rao, Associate Professor, Pediatrics, University of Colorado School of Medicine; Pediatrician, Infectious Disease, Children's Hospital, Colorado

“My biggest concern is the massive fault lines of equity — socio-economically, racially, developmentally, disability-focused — that have widened even more this past year. I worry how we will be able to give these kids an opportunity to catch up.”

Mitul Kapadia, Associate Clinical Professor, University of California, San Francisco; Director, Pediatric Physiatrist, Benioff Children's Hospital

“We are witnessing a significant public health crisis in our children, who are experiencing unprecedented mental illness and physical ailments during this time. This would be mitigated, if not completely alleviated, by in-person schooling.”

Kim Newell Green, Pediatrician; Associate Clinical Professor, University of California, San Francisco

“Categorically closing schools has caused more harm to children than Covid has.”

Sameer J. Patel, Associate Professor of Pediatrics (Infectious Diseases), Northwestern University; Attending Physician, Lurie Children's Hospital of Chicago

“Obesity, depression, anxiety, regression. Kids going hungry.”

Uzma Hasan, Division Director Pediatric Infectious Diseases, Saint Barnabas Medical Center

“Social networks for older children are critically important, and school closures and quarantines may have much greater negative effects in these age groups.”

Anthony Flores, Associate Professor, University of Texas Health Science Center at Houston/McGovern Medical School

“Less detection of child abuse and likely increased risk due to worsening child behavior and parent or caregiver frustration with the ongoing situation.”

Alison Tribble, Assistant Professor of Pediatrics, Pediatric Infectious Diseases, C.S. Mott Children’s Hospital, University of Michigan

“Children are incredibly adaptive. However, there is no question that many groups are being adversely affected in their academics, general nutrition, psychological health.”

Sarmistha B. Hauger, Pediatric Infectious Diseases, Dell Children’s Medical Center, Austin, Texas

“We are seeing alarming rates of anxiety, depression and suicidal behavior. It is also increasing educational disparities and leaving a generation of learners behind.”

Allison Eckard, Professor of Pediatrics, Division Chief of Pediatric Infectious Diseases, Medical University of South Carolina

“Social isolation is damaging the children and making life extremely difficult for parents.”

Chad Sanborn, Pediatric Infectious Disease Specialist, Palm Beach Children’s Hospital

Should vaccinations of a certain group — such as teachers, parents or students — be a precondition to school openings?

The experts felt strongly that, while vaccines were important, they shouldn’t be required of any population for schools to open as long as other precautions were followed to keep both teachers and students safe. (This, along with much of what the panel said, aligns with new federal government recommendations for opening schools. Like the C.D.C., the panel thought more precautions were necessary before older students could return, because they are likelier to spread the virus.) Many recommended prioritizing teachers for vaccines, along with frontline workers.

“Many studies have demonstrated that transmission in congregate settings for children can be eliminated with masking, distancing and hand washing, even in the absence of vaccines.”

Sallie Permar, Chair of Pediatrics and Pediatrician-in-Chief, Weill Cornell Medical School/NewYork Presbyterian

“Teachers should be prioritized for vaccination, but it need not be a precondition for opening. There is growing research that shows that non-pharmacological interventions — masks, plexiglass, distancing, ventilation -- are more than sufficient to keep school infection rates quite low.”

Saul Hymes, Assistant Professor of Clinical Pediatrics, Stony Brook University Renaissance School of Medicine

“Teachers may have a fear that they are at risk in the classroom. This is not backed up by the data. Teaching is one of the safest essential occupations.”

David Rosen, Assistant Professor of Pediatric Infectious Diseases, Washington University in St. Louis

“There are many teachers who are hesitant about being back in school for in-person learning. Vaccines should be offered to them, especially if they are in areas of high community transmission and other mitigation measures may not be in place.”

Leana Wen, Visiting Professor of Health Policy and Management, George Washington University

“While I would not make vaccination a required precondition to reopening schools, I think we should place an extremely high priority on providing immunization for teachers and other school personnel.”

Gregory Storch, Professor, Pediatrics, Washington University School of Medicine in St. Louis

“The evidence is clear that schools can and have opened safely without vaccinations. However, teachers who commit to in-person learning should be prioritized for vaccinations when available.”

Mitul Kapadia, Associate Clinical Professor, University of California, San Francisco; Director, Pediatric Physiatrist, Benioff Children’s Hospital

“Teachers and school staff should receive a Covid vaccine. Once a Covid vaccine is available for children, it should be required for school entry.”

Theresa Barton, Associate Professor of Pediatrics, University of Texas Health Science Center San Antonio

“They should be required once groups are eligible, but school should not be delayed if they are not yet eligible, if precautions are in place.”

Daniel Blatt, Assistant Professor-Pediatric Infectious Diseases, University of Louisville

How important is ensuring adequate ventilation in the school, such as with open windows or air filters?

Many of the experts agreed that ventilation in school buildings — along with masks and distancing — was important to minimize the spread of the virus. But they specified that good airflow did not require major renovations or expensive air filters; it could be achieved with open windows, box fans and outdoor classes.

“Of all interventions, rapid air exchange with good filtration can probably accomplish the most in preventing transmission, in some cases even more than masking.”

Saul Hymes, Assistant Professor of Clinical Pediatrics, Stony Brook University Renaissance School of Medicine

“HEPA filters and other air filtration systems are beneficial, but may not be feasible in many public schools. Air exchange and circulation can be enhanced in more inexpensive ways with open windows, outdoor classrooms or tents.”

Suchitra Rao, Associate Professor, Pediatrics, University of Colorado School of Medicine; Pediatrician, Infectious Disease, Children’s Hospital, Colorado

“Keeping doors open is important. New HVAC systems are not important.”

Jeanne Noble, Director of Covid Response, University of California, San Francisco, Medical Center Emergency Department; Associate Professor of Emergency Medicine, U.C.S.F.

“This is nice if it is possible, but is less important than masking and distancing.”

Matthew Kronman, Associate Professor of Pediatric Infectious Diseases, University of Washington

“Probably this is an underappreciated need. Ventilation can make a major difference in spread of this virus.”

Paul Spearman, Director, Division of Infectious Diseases, Cincinnati Children’s Hospital

How important is it to divide students into small, fixed cohorts who attend school on alternating schedules?

Many school districts have been splitting classes in half and bringing each half back part-time, to minimize exposure to the virus. The experts said such strategies could be helpful in situations where it was impossible to maintain distance, and for contact tracing. But many urged other solutions instead.

“This is only important if appropriate distancing cannot be achieved with larger cohorts.”

Saul Hymes, Assistant Professor of Clinical Pediatrics, Stony Brook University Renaissance School of Medicine

“There is no data that these fixed cohorts are any better for public health. What are the kids doing when they are not in school? They are being exposed to others in the community who could have Covid. Instead, we should keep all kids in school every day where we can ensure proper mitigations.”

David Rosen, Assistant Professor of Pediatric Infectious Diseases, Washington University in St. Louis

“This depends very much on facilities. Small and fixed is key. Part-time may not be.”

Kim Newell Green, Pediatrician; Associate Clinical Professor, University of California, San Francisco

“Other creative solutions, like the use of open-air classrooms, should be considered to allow the full cohort of students to return.”

Vandana Madhavan, Clinical Director, Pediatric Infectious Disease, Massachusetts General Hospital

“This is important to reduce the number of kids who need to quarantine if there is an exposure, but not as important as masking and distancing.”

Isaac Thomsen, Associate Professor, Pediatric Infectious Diseases, Vanderbilt University Medical Center

How much distance should schools require between students, assuming they are masked?

Even though most respondents said it was not crucial that classes be divided in half, most preferred a standard of six feet of distance between children in classrooms — which can be impossible to achieve with full classes. This is an example of how opening schools requires creativity and weighing various risks: Many said the six-foot standard could be relaxed in situations where ventilation was good, and especially among younger children, who are less likely to spread Covid-19.

“Schools should attempt six feet, and if successful in opening school with mitigation policies in place, can move on to try three feet.”

Sahera Dirajjal-Fargo, Assistant Professor, Pediatrics, Case Western Reserve University Medical School; Pediatric Infectious Disease Specialist

“There isn’t really a lot of evidence for six feet versus three feet, and the masks are much more important than the distance. Three feet would allow much more capacity in schools.”

John V. Williams, Professor of Pediatrics, University of Pittsburgh School of Medicine; Chief, Infectious Diseases, UPMC Children’s Hospital of Pittsburgh

“This issue requires an individualized approach. For example, in a building with very good ventilation, there may be a higher tolerance for closer spacing.”

Gregory Storch, Professor, Pediatrics, Washington University School of Medicine in St. Louis

“With other precautions in place, for younger kids of elementary age, three feet is sufficient, as the evidence has shown. Older kids still should try to maintain six feet.”

Mitul Kapadia, Associate Clinical Professor, University of California, San Francisco; Director, Pediatric Physiatrist, Benioff Children’s Hospital

“If the area is properly ventilated, perhaps a smaller distance would be acceptable. Ventilation is the key.”

Sarmistha B. Hauger, Pediatric Infectious Diseases, Dell Children’s Medical Center, Austin, Texas

How worried are you that new variants could disrupt plans for in-person school this spring and fall?

The emergence of Covid-19 variants around the world has raised fears that the current evidence about school safety may no longer apply. Over all, the experts in our survey said the variants could interfere with school opening plans. But few thought they were sure to cause substantial problems, in part because of the current rollout of effective vaccines.

“There is the potential that variants could cause major problems, almost like we’re starting the pandemic over again, but it’s too soon to really say that. We might not have much time left to get this pandemic over with -- we need widespread vaccine uptake right now before it’s too late.”

Jessica Ericson, Assistant Professor of Pediatrics Division of Infectious Diseases; Pediatric Infectious Disease Specialist, Penn State Children’s Hospital

“I think this is more based on fear from the teaching and general communities. With increased vaccinations that also protect us from these variants, schools should still be able to reopen safely.”

Mitul Kapadia, Associate Clinical Professor, University of California, San Francisco; Director, Pediatric Physiatrist, Benioff Children’s Hospital

“I am worried about our inability to translate these concerns intelligibly to families and teachers’ unions; I am worried that pseudoscientific hysteria over mutant viruses will keep schools closed until the end of 2021.”

Shom Dasgupta-Tsinikas, Physician Specialist, L.A. County Department of Public Health

“I worry both about actual spread of virus -- and the fear of worsening spread. Both could be quite harmful and impact school reopening.”

Alison Tribble, Assistant Professor of Pediatrics, Pediatric Infectious Diseases, C.S. Mott Children’s Hospital, University of Michigan

“The new variants have the potential to increase the risk of transmissions that occur at school. We need to stay vigilant to this possibility and continue to monitor the case transmission risk in the classroom.”

Allison Eckard, Professor of Pediatrics, Division Chief of Pediatric Infectious Diseases, Medical University of South Carolina

At a pre-K class in Sunnyside, Queens, last month. James Estrin/The New York Times