Why It's (Mostly) Safe to Reopen the Schools

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Every American has a stake in the ongoing debate over how, when and if to reopen schools this fall. Last spring's pandemic-driven closures affected 62 million pre-primary, primary and secondary school students, not to mention their parents.

With the arrival of the school year, the temperature of the debate has risen. The second-largest teachers union, the American Federation of Teachers, is preparing for its members to go on strike if schools reopen without their assent. President Trump has expressed a desire to "cut off funding" for schools that don't reopen. It doesn't help that the debate is taking place during the 2020 presidential campaign and a late-summer rise in coronavirus-related cases, hospitalizations and deaths.

The good news is that amid the heated rhetoric—and the genuine fear—the accumulating scientific evidence and real-world experience is reasonably consistent. We do have a path to reopening schools this fall, especially for our youngest children. For older children, the story is also encouraging but less definitive.

We must start with the fact that school closures cause significant damage to children—damage that videoconferences cannot repair.

In Boston, the city reported last spring that more than one in five public school children who participated in virtual learning dropped out. Low-income children, in particular, are less likely to have high-speed internet access at home and often lack the extracurricular educational opportunities that wealthier parents can provide. School closures also increase food insecurity, because 30 million children receive free or reduced-price meals through the National School Lunch Program.

Children may be increasingly physically insecure as well. In a paper published this May in the online social-science journal SSRN, researchers found that Covid-19 school closures have led to a 27% decline in reports of child abuse. Because school personnel are often the first people to notice maltreatment, a decline in reported cases is possibly a sign that more child abuse is going undetected.





A teacher joins a July 7 protest in Orlando, Fla., against the state's announced plans to reopen all schools in August.

Photo: Joe Burbank/Orlando Sentinel/Tribune News Service/Getty Images

The American Academy of Pediatrics has <u>succinctly and forcefully</u> <u>summarized</u> the case for reopening: "The importance of in-person learning is well-documented, and there is already evidence of the negative impacts on children because of school closures in the spring of 2020. Lengthy time away from school and associated interruption of supportive services often results in social isolation, making 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. This, in turn, places children and adolescents at considerable risk of morbidity and, in some cases, mortality."

Nor are children the only ones adversely affected by school closures. According to the Pew Research Center, in June, the unemployment rate for women was 20% higher than for men, in part because of their much higher level of participation in the education sector. And many mothers have been forced out of the workforce due to their inability to find child care.

Fortunately, while the harm caused by school closures is obvious, the risk to children of severe Covid-19 illness or death is very low. While there are 45 million children in prekindergarten, kindergarten,

elementary or middle school, as of July 29, only 28 Americans ages 1–15 have died of the coronavirus, according to the Centers for Disease Control and Prevention. Though 28 is not zero, it is a number worth putting in context. For example, in 2016, 190 children ages 1–14 died of influenza or pneumonia, 625 died of homicide, 1,257 died of cancer and 2,895 died of unintentional injuries like car accidents, according to the National Center for Health Statistics.

The most important question for school reopenings, then, is not the risk to children from Covid-19 but rather the risk to adults—parents, teachers and school staff. Every parent and teacher has had the experience of catching whatever bug was circulating among their children in school. Could the same be true of the novel coronavirus?

Here we can learn a great deal from the experience of other industrialized countries. Iceland, the Netherlands, Belgium, Denmark, Norway, Austria, Germany, Finland, France and Sweden reopened schools in April and May, and their experience has been largely positive. Every European country that reopened schools in the spring plans to start the fall school year on time.

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These countries have taken several different approaches to reopening. Denmark, the first country to reopen schools, announced its plan on April 6, just as Covid-19 cases were peaking there and elsewhere in Europe. Kindergartens and elementary schools reopened the following week in order to help working parents; children over 12 followed a month later. The Netherlands announced its plan in mid-April and also took a staggered approach when it began opening in May. Germany had similar timing but started with older students, on the premise that adolescents would

be more likely to adhere to distancing and hand-washing guidelines. Sweden has kept its schools open throughout the pandemic for those under 16 and reopened high schools and colleges in mid-June.

The results, thus far, have been pretty consistent across these countries. Denmark trod carefully, requiring children to stay 2 meters apart wherever possible. Children were grouped into "bubbles" of 12 and were required to wash their hands every two hours but not to wear masks. It worked. Denmark's case and mortality counts continued to decline after reopening schools, according to data from the European CDC, leading Peter Andersen of the Danish Serum Institute to conclude that "you cannot see any negative effects from the reopening of schools."



Third-graders return to their Oslo, Norway, classroom on April 27, the first day elementary schools reopened to students aged 6-10 as part of a staggered reopening strategy.

Photo: HEIKO JUNGE/NTB Scanpix/Agence France-Presse/Getty Images

The Netherlands imposed neither distancing nor masking requirements when it reopened schools in May, and Covid-19 cases and deaths continued to decline there as well. In a study of 54 families with Covid-19 by the Dutch National Institute for Public Health and the Environment, no child under 12 was found to be the "index" patient—that is, the first patient in the family. These results, the institute concluded, "confirm the impression that children do not play a significant role in the transmission of the virus."

A similar study by Icelandic researchers across the entire country's population was published in June in the New England Journal of Medicine, with similar results. Kári Stefánsson, one of the leaders of the research group, said, "We have not found a single instance of a child infecting parents."

After Germany's Covid-19 caseload peaked on March 28, Angela Merkel's government carefully reopened schools in May, with class sizes cut in half, one-way hallways, staggered breaks, masks for teachers and free twice-weekly Covid-19 tests for students and teachers. Some schools required masks in hallways and bathrooms but not when seated at desks. A study of 2,045 students and teachers in the German state of Saxony, by researchers at the Technical University of Dresden, found only 12 positive cases of Covid-19. "The dynamics of virus spreading have been overestimated....[and] schools did not become hot spots after

reopening," the university wrote. Reinhard Berner, chief of the department of pediatrics at the university's hospital, said, "We are going into the summer vacation of 2020 with an immunity status that is no different from that in March 2020," adding that "children may even act as a brake on infection."

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France announced its reopening plans on April 21, three weeks after its new cases peaked, and opened schools gradually over the course of May and June, with mask requirements for high-school students but not younger children. Attendance was voluntary. A study by researchers at Institut Pasteur of students ages 6–11 found that "there was no evidence of onwards transmission from children in the school setting." Notably, the study was conducted in Crépy-en-Valois, a town north of Paris that had seen an outbreak originating with two high-school teachers that spread to adolescent students. France's success with reopening led the government to reduce its distancing mandate from four square meters between students to one linear meter and to make attendance mandatory for primary and middle schools.

Sweden, famously, has taken a unique approach to the pandemic, barring large gatherings but keeping its businesses and schools open, without strict distancing and mask requirements. Finland took a more conventional approach to lockdowns. Yet a <u>study</u> by Swedish and Finnish health authorities found nearly identical infection rates of 5 per 10,000 in children ages 1–19. Surveying the broad experience in their countries, the health authorities concluded that "Finland has not shown children to be contributing much in terms of transmission" to adults, and in Sweden there was "no

increased risk for teachers."

Schools are racing to make plans for the academic year even as Covid-19 cases surge in the U.S. WSJ's Daniela Hernandez explores how kids are affected by the virus and if it's possible to reopen schools safely. Photo illustration: Laura Kammermann

Skeptics argue that the European experience isn't useful for the U.S. because America's performance during the pandemic has been so much worse. They point to the fact that the U.S. reports higher case counts per capita than many other countries. But comparing case counts across countries is problematic, due to variations in testing volume, reporting methodologies and the age mix of those infected. Take France and Germany. The shapes of the Covid-19 case curves in each are remarkably similar, with comparable peaks at the end of March and start of April, troughs of under 10 cases per million in early July and an uptick in recent weeks. But as of August 3, France's mortality rate from Covid-19 was 464 per million residents, more than four times higher than Germany's, at 109 deaths per million.

Indeed, France, the Netherlands, Sweden and Belgium all have mortality rates from Covid-19 that are similar to—or worse than—the U.S., according to data compiled by the Foundation for Research on Equal Opportunity. And each of those European countries has successfully reopened schools.

The most notable counterpoints to the European experience have come from Israel and South Korea. In Jerusalem, an outbreak occurred at a high school, infecting over 100 students and 15 staff members. The primary cause was a heat wave, during which the government exempted teachers and students from wearing masks. Schools closed windows, even in cramped rooms, to reduce

temperatures.

A study of 5,706 South Korean index patients <u>published</u> in the journal Emerging Infectious Diseases suggested that children ages 10–19 may transmit Covid-19 at rates comparable to those of adults. In 231 relatives of 124 such index children, 43 of the relatives tested positive: a rate of 19%. By contrast, only 5% of the relatives of children under 10 tested positive. These figures compared with positive rates of 12% to 18% in the relatives of adult index patients.

The totality of the evidence makes clear the compelling case for reopening schools for younger children. "It is extremely difficult to find any instance anywhere in the world...of a child [under 15] transmitting to a teacher in school," observes Mark Woolhouse, an epidemiologist at the University of Edinburgh. The experience of school reopenings has been positive in countries that started with the youngest children, like the Netherlands, and those that started with the oldest children, like Germany. It has been positive in countries that mandated strict physical distancing in schools, like Denmark, and also in countries that did not, like Sweden. And it has been positive in countries where the pandemic has been as deadly as in the U.S. and also in countries where it has not.





Graduating high-school students took their final standardized exams in a closed school in Dresden, Germany, on April 20. It was the only school activity allowed until some regular classes resumed on May 4.

Photo: Robert Michael/DPA/ZUMA Press

The case for reopening high schools, however, is less definitive and requires more caution. The Israeli experience, along with a recent outbreak at a Georgia summer camp, suggest that while high-schoolers themselves are at little risk of severe illness or death from Covid-19, they are capable of serving as reservoirs of the virus and of transmission to adults, particularly when infection rates are high.

And in all age groups, we must still take seriously the risk that teachers and school staff will transmit the coronavirus to each other, as we would in any other workplace or gathering space. This is especially true where transmission is substantial and uncontrolled, as defined by the CDC. In places like New York City, where many schools are located in cramped and antiquated buildings with poor ventilation, safety may remain a concern. Older teachers and those with underlying health conditions that make them more susceptible to Covid-19 should remain home and receive paid medical leave.

It is inevitable that we will see cases of Covid-19 in schools, especially among adolescents and adults, for the same reasons we see them in the broader community. Remember that school-aged children represent nearly one-fifth of the U.S. population. It will be

essential for schools that do reopen to set realistic expectations and plan for problems. Infected individuals and their close contacts need to stay home. Schools that cluster groups of students in identical class schedules should fare better. Leaders should keep an eye out for schools where adherence to public health guidelines is poor and step in to help where needed.

One way to keep schools safe is temperature sensors. Many public health experts have cast doubt on the effectiveness of temperature sensors, because people can spread Covid-19 without an elevated body temperature. But in most places, conventional lab tests are unavailable for asymptomatic individuals. Even where lab tests are widely available, results can take up to a week to deliver. Contactless temperature sensors, by contrast, are reusable, easy to buy and able to deliver results in less than one second. Schools should require parents to check and log their kids' temperatures before sending them to school and to keep them at home if they are showing any Covid-like symptoms. Temperature checks should also become part of daily attendance routines at schools, serving as an early warning system for potential outbreaks.

High schools should consider beginning with a staggered model, as New York City is attempting, in which subgroups of students attend school at different times, supplemented with virtual learning. This is far from ideal, especially for lower-income students, but there is enough evidence regarding transmission from adolescents to adults to warrant a careful autumn.

Policy makers could help solve this problem by enabling lowincome students and their parents to form microschools, or "pods," which serve as a kind of middle ground between home schooling and traditional school. Parents with means are banding together in small groups and hosting for-hire teachers in their living rooms and are finding that this 18th-century technique is far superior to learning on a computer screen.

Microschools need not be reserved for the wealthy and healthy. Both Congress and state legislatures can fund Education Savings Accounts, and realign school funding formulas, so that low-income parents can band together just as high-earners are doing. Microschools require no overhead and very little infrastructure, enabling parents to pay good teachers well. Their diversity and variety can help us discover new ways for children to learn. And they just might give us a way to build something beneficial and lasting out of this exceptionally trying year.

Mr. Roy is president of the Foundation for Research on Equal Opportunity and the co-author (with Dan Lips, Preston Cooper, Lanhee Chen and Bob Kocher) of the foundation's report, "Reopening America's Schools and Colleges During Covid-19."

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Is it safe for U.S. schools to be reopening now? Join the conversation below.

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