The CDC guidelines for social distancing in schools are based on distorted science: neither three feet nor six feet distancing is safe

Part one of a series. Read part two

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Back in September 2020, *Politico* wrote on the issue of schools and infection rates: “The data on how coronavirus is spreading at schools and colleges is inconsistent, erratic—and sometimes purposely kept out of the public’s reach.”

It has been stated repeatedly and proven on numerous occasions that children are more likely than adults to display little or no symptoms, while being capable of infecting others, including their relatives and families. More recent studies have identified schools and students attending them as contributing to community transmissions.

The recent extensive contact tracing studies, including modeling analysis of mitigation measures, have never been discussed or mentioned by the Centers for Disease Control and Prevention (CDC) in addressing critiques of its stance in favor of school reopenings. The CDC has cherry-picked every study that will corroborate the foregone conclusion that schools are safe, while ignoring the growing evidence of the role of asymptomatic transmission by children in propelling the coronavirus throughout communities.

In fact, there has never been any concerted effort by public health departments of state or federal governments to conduct a thorough and comprehensive, methodical and prospective study of the relationship between schools, children and the community spread of the coronavirus, despite the urgency for this data to inform the public and make science-driven public health policies.

Such an endeavor would entail systematic weekly surveillance of students and staff with PCR (polymerase chain reaction tests detect genetic material from a specific organism, such as a virus) testing and contact tracing in urban, rural and suburban school districts across the country, like the surveillance being conducted in the UK by the Office of National Statistics (ONS).

Such a wealth of analytical data, if made publicly available, would assist communities in understanding the relationship between their activities and the state of the pandemic. Such detailed broad-based data would go far in addressing necessary policy decisions vital to parents and teachers alike.

As Irwin Redlener, director of the Pandemic Resource and Response Initiative at Columbia University, noted in the fall of last year, “We’re going to have thousands and thousands of local experiences, which will not be comparable, and I’m afraid we’re going to have a lot of anecdotes and no useful data.”

One such “anecdote” is the notorious Wisconsin study, previously analyzed by this writer on the WSWS, which was limited to 17 schools in a rural district in that state, with class sizes ranging from 11 to 20 students, every student and teacher equipped with a three-layer mask, and constant monitoring of social distancing and mask-wearing and weekly reports to health officials. This study, conducted last fall, which in no way replicated the conditions faced in a typical urban or suburban school setting, was trumpeted as proof that schools were safe environments for children and staff alike.

The lack of robust and accurate national data based on real-world experience has been central to the back-to-school crisis. The current ill-advised guidelines, based on poorly designed studies motivated by political expediency, with the goal of having schools reopen and packed to the hilt with students, are dangerous and even criminal.

CDC Director Dr. Rochelle Walensky’s testimony on March 17 before the House Energy and Commerce Oversight Subcommittee, under pressure from financial sectors to change the six-foot policy, only further confirmed that science remains a casualty of reactionary politics, under the Democrats as much as under Trump. “As soon as our guidance came out, it became very clear that six feet was among the things that was keeping schools closed, and in that context, science evolves,” she said.

Despite repeated acknowledgments by every national and international agency, including the CDC, that the SARS-CoV-2 virus is an airborne pathogen, making even six-foot social distancing rules problematic, the CDC, with the approval of Republican and Democratic officials, now claims “less [distance] is more.” Walensky’s “evolution” to a three-foot rule will allow many more schools to open for full-time in-person classes with more students packed into each classroom.

The media and mainstream news came out fawning over these developments, claiming that science had righted a devastating wrong—children kept from attending classes were being permanently scarred and injured. However, what has been lacking in these media hosannas was any serious or frank discussion on the strength of the evidence from the studies cited by the CDC to change its guidelines.

It is instructive to consider the three studies that were so critical to their decisions.

Elementary schools in Salt Lake County**, Utah**

Like the Wisconsin study, this study's dominant bias stems from an invitation to the CDC by the Utah Department of Health to investigate SARS-CoV-2 transmission across 20 elementary schools in Salt Lake County, Utah. These reflect controlled conditions where the school district and the county had prepared for such an intervention, with students and staff being informed and consenting to testing and contact tracing.

They provide no real-world context to what transpires in the over 13,000 school districts throughout the country where testing is limited to symptomatic individuals, and tracing is happenstance. The Salt Lake County study is similar to many of the CDC's arsenal of case studies, such as the Georgia overnight camp study, that raise critical questions for developing ongoing nationally based community surveillance. Schools are but one chain in the links that make up the whole of society. A pandemic is not confined to a group of people or location. It takes advantage of any weakness a community cedes to the virus.

The focus of the study was limited to one school district over a short period from December 3, 2020, to January 31, 2021, with schools closed for two weeks for holidays in the course of the study period and when cases of COVID-19 in January were rapidly declining. This poses many difficulties on its generalizability. In this context, it was not surprising that outbreaks did not occur.

However, the study intended to show that schools that employed strict mitigation measures had low secondary attack rates where a primary COVID-19 case infects another in a high community transmission setting, in this case, schools. It should be noted that Utah had implemented pandemic emergency measures in November in response to the surge that inundated the state in October.

By the end of the holidays (schools were closed on December 21 and only resumed classes on January 4), COVID-19 cases were rapidly declining in Utah, consistent with the rest of the country. Epidemiologically, schools and communities work in a dichotomous relationship.

With 1,214 staff and 10,171 students, 81 percent were attending school. Out of 51 coronavirus cases detected, 40 students (0.4 percent) and 11 staff (0.9 percent), 12 secondary cases were identified among their contacts, of which only five were determined to be originating at the school, giving a very low attack rate of 0.7 percent.

A critical finding in this study, used in changing CDC distancing guidelines in school, was that though the Salt Lake County elementary school district upheld a six-foot social distancing policy, the median distance between students' seats was just three feet. We will review the implications of this finding in the third study conducted in Massachusetts public schools.

But first, we will proceed to the New Jersey study conducted by the CDC and published in its Morbidity and Mortality Weekly Report (MMWR) on March 19, 2021, two days after Dr. Walensky's testimony.

Comprehensive mitigation strategy at a New Jersey school

This study is typical of the disconnect between the CDC's idyllic expectations and real-world conditions. They report on a New Jersey Grades 9-12 boarding school with 520 full-time residents, 255 commuter students and 405 faculty and staff.

The comprehensive mitigation strategies employed included universal masking, the wearing of personal Bluetooth tracking devices, testing, upgrading (including fitting MERV 13 filters) of their HVAC units to improve ventilation, six-feet distancing, contact tracing and following appropriate quarantine or isolation protocols. Additionally, they mandated twice-weekly testing. All students and staff had to quarantine for two weeks and had to provide documentation of a negative PCR testing result within seven to 10 days before campus arrival.

Among the staff, there were a total of 19 positive tests (five percent), while eight students (one percent) received confirmation of a COVID-19 infection. The CDC reported that there were only two cases confirmed as in-school transmission. Twenty-five of 27 cases were thought to have occurred off-campus after exposure with family members or friends. The CDC report noted compliance was high with these protocols.

The report then goes on to conclude that comprehensive mitigation strategies are effective and noted that "recent analysis of schools across Europe found relatively low levels of school-related transmission."

First, the experience of a boarding school, where airborne precautions and comprehensive testing and tracing were being conducted, is hardly similar to the situation facing the majority of public schools in the US, where lack of funding, dilapidated HVAC units, low universal masking enforcement, and no testing and tracing are the norm.

Secondly, the reference to "across Europe" is false. The study cited in *The Lancet* looked at a cross-section of infection clusters and outbreaks in England from June to July 2020 following symptomatic cases. This was also a period in the UK's experience with the pandemic when daily cases were at their lowest levels. We will review the data from the UK Office of National Statistics later.

However, there were no discussions on the issue of three-feet versus six-feet social distancing mentioned in the report. The primary purpose of including this particular study in their repertoire of three studies was to show that when cases in New Jersey began to climb in November, the strict and thorough efforts by this boarding school helped mitigate infections. Yet, the report then admits that the financial means to implement such extensive measures "might be less feasible in other settings because of costs."

To be continued