Updated February 2021 following the second worldwide pandemic wave.

Learning from Other Nations

The COVID-19 School Reopening Dilemma



Prepared by Bruce Bomier, MPH, Board Chair Environmental Resource Council



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I'm waiting for real leadership...
But it's me. It's the biggest decision of my career.

—Jeff Gregorich
School Superintendent

In his 20 years as an athletic referee, school principal, and superintendent for the Hayden-Winkelman school district in Arizona, Superintendent Gregorich's leadership challenge is unprecedented. With over 90% of his district's student body on free or reduced lunch and, obviously, limited access to the internet/ distance-learning options, he faces the professional dilemma of a lifetime. The district has been pressured by federal and state leadership to reopen, while a substantial majority of the public and school faculty believe reopening is unsafe.

Input from how other nations approach this challenge is of value. he European Center for Disease Prevention and Control (ECDC) released a significant report on European schools/COVID-19 on January 20, 2021. Reviews of these findings and the significance regarding American school policy were published on January 26 by the Journal of the American Medical Association (JAMA). These insights are valuable as America's independent school districts come to terms with the COVID-19 challenge and reopening.

The fog is lifting over the confusion regarding the safety of reopening American schools. Risks can be quantified and procedures implemented to provide relative safety, depending upon local community incidence and prevalence and introduction and monitoring of school hygiene-based protocols and procedures.

Following international awareness of the COVID-19 pandemic in March 2020, of America's 14,944 school districts 13,600 reported operational responses. Of the reporting districts 24% reported going fully online and essentially shuttering school facilities. Another 51% partially shuttered, often allowing options of distance learning and only 17% remained fully open for in person instruction.

The response in Europe was conceptually different with a strong focus on remaining open, although the nations used somewhat different public health approaches.

The general European sentiment regarding school openings was perhaps best expressed by Dr. Otto Helve, director of the Finnish Institute for Health:

It is still difficult for me to understand why schools are closed in the United States... Schools are simply not driving the epidemic. The downside to closing would need to be compensated by an extremely good outcome in terms of disease control, and that is not the case.



In June 2020, **Finland's** health authorities concluded that "Finland has

not shown children to be contributing significantly in terms of transmission."

It should be noted that with the autumn 2020 second COVID-19 wave Finland did quarantine around 1/8 of their students whom they felt had exposures that might render them contagious. In the end they found that only 1% exhibited symptoms, although there may have been others who were asymptomatic.

The schools essentially remained open while preserving a focus on distancing, masking, quick response to potential exposures, and a commitment to ensuring wholesome ambient air in classrooms.



In **Denmark**, the maskwearing was implemented, and students were

kept in what officials termed "bubbles," or small groups with limited intergroup interactions. The rigidly enforced distancing involved typically 2 meters, or roughly 6.5 feet, although the distances

varied depending on the setting and activity. The European Centers for Disease Control determined that there were no negative consequences related to opening schools among students, faculty, or the Danish community.



The **Netherlands** reported somewhat similar findings through the Dutch

National Institute for Public Health and Environment. The institute found that in 54 families that had confirmed cases of COVID-19, no child under 12 was the first contaminated individual. Their interpretation signaled that children who had returned to school did not play a "significant" role in transmitting COVID-19.



In Iceland, where schools had reopened in April, published research in

the New England Journal of Medicine reported in June that Iceland officials had not detected "a single instance of a child infecting parents." Hygienic practices including distancing, masks, and enhanced air exchange had been practiced in Iceland.



Germany had a high level of diagnosed COVID-19 cases that peaked in late

March. However, the German government did reopen schools with a series of distancing rules that were strictly enforced. Educators wore masks, educators and students were tested twice weekly, masks were required in hallways and gatherings for students, and special hygiene protocols were put in place in restrooms and other areas. The University of Dresden tested 2045 students in Saxony and found only 12 COVID-19 cases. This was comparable to or a bit below the German national prevalence.

In **France**, schools were reopened toward the end of April 2020 with masked requirements. The required distancing was 2 meters, or around 6.5 feet, but when it became clear that there was limited contamination they reduced the distance to 1 meter, or 3.25 feet. The Pasteur Institute carefully followed a large sample of students from ages 6 to 11 and found that "...there was no evidence of onwards transmission from children in the school setting."



Sweden kept schools open without strict distancing rules throughout

the pandemic for all children under 16 and then opened all high schools and postsecondary schools in mid-June. Interpreting the impact is complicated, since Sweden was one of the few countries that also kept all business and commercial operations open. That country's COVID-19 morbidity rate is 10 times higher than Iceland's and four times higher than Germany's. The higher morbidity connection to minimal public controls and open schools with limited controls is difficult to interpret. It seems possible or even probable that the lack of control and limited national focus on hygiene contributed to a higher incidence and prevalence of the disease. The role school openings played is unknown.



In **South Korea**, after an initial spike in COVID-19 cases second only to the preva-

lence in China, all schools were closed. When schools reopened most students were placed in individual plastic booths, creating physical, but not breathing zone barriers. Masks were not required, so it is probable that students cross-

contaminated. As South Korean schools reopened, there was an immediate spike in adult cases. The Korean Ministry of education responded by quickly closing schools, based on a possibility that school reopening had contributed to the surge in COVID-19 cases.

Schools are reopening in conjunction with testing, masks, distancing, better air exchange and other controls.



In late May, the Israeli government expressed confidence that they

had "beaten" COVID-19 and opened all schools, suggesting — but not enforcing — distancing, enhanced air exchange, and hygiene controls. Shortly after the reopening, a high school in Jerusalem COVID-19 cases mushroomed into what the New York Times called "the largest outbreak in a single school in Israel, possibly the world." Older students apparently contaminated each other, their families, and much of the community.

Classrooms in Israel typically held between 35 and 40 students; in America the average class size is between 17 and 26. The government did not arrange for smaller class sizes or reduced interaction among learning cohorts. They suggested but did not enforce mask-wearing and did not vigorously promote social distancing. There had been suggestions that classroom windows be opened, but when a heat wave hit, students removed their masks and windows were closed to maximize air conditioning comfort. A professor of epidemiology at the Hebrew School of Public Health prophetically warned the schools, "You have (created) ideal circumstances for an outbreak."

It was also discovered that although prom had been canceled in Israel's schools, many students coordinated unsanctioned proms with extensive, close, large-group interaction within confined indoor spaces.

The COVID-19 crisis in Israel manifested itself to the point where the government stepped in, rapidly closing 240 schools and quarantining 22,520 teachers and students. The chairman of Israel's National Security Council described their policy as "a major failure," warning the rest of the world "...not to do what we have done."

The take-away from how other nations handled school openings seems straightforward. Potentially, schools may be able to safely reopen if they

- Follow strict guidelines regarding facility and personal hygiene
- Monitor and respond to individual concerns or symptoms
- Focus on "bubbles" or limited cohorts of student and faculty interaction
- Follow facility hygiene including wipe downs and especially air exchange
- Restrict exposure-oriented activities (music, assemblies, athletics)
- Coordinate with local public health authorities
- Institutionalize monitoring of hygienic conditions and actions

While there was a focus on maintaining open schools with the discovery of a new variant of the SARS-2 virus in Britain and a resurgence of COVID-19 schools temporarily closed in Britain, Austria, Denmark, the Netherlands, and selectively in sections of Germany. This was partially as a result of the University

of Geneva's Institute of global health publishing this study indicating that the new variant may be more likely to impact school children as "spreaders" of contamination within communities. The University of Vienna had also published that there had been a percentage of students, including under the age of 10, that were asymptomatic but still technically infectious.

As Prime Minister Boris Johnson put it when ordering temporary school closure, "the problem is not that schools are unsafe for the children (they may be) vectors for transmission...".

Most of Europe schools remained open or reopened within a few weeks.

Carefully monitoring the result of the schools opening in much of Europe, on January 20, 2021 the European Center for Disease Prevention and Control issued a report entitled, COVID-19 in Children and the Role of School Settings and Transmission. The report made it clear that accumulated data suggests a return to primary or fully in-person instructional delivery could be safely accomplished if it included appropriate procedures.



On January 26 the Journal of American Medical Association published

their review of a composite of American school related research blending in findings from the European CDPC, entitled Data and Policy to Guide Opening Schools Safely to Limit the Spread of SARS-CoV-2.

Essentially the Association's publication determined that there has been little evidence that schools have contributed meaningfully to increase community transmission if safety protocols were

employed. They also focused on schools in Mississippi and North Carolina which had primarily remained open and found transmissions relating to schools, "very rare." Actually, within North Carolina they could identify no cases of student to staff transmission. However, they did identify that there had been some school related activities that increased the risk of transmission. They cited numerous outbreaks among United States high school athletic teams suggesting that contact during competition and even the practices and associated social gatherings increase risks.

It is clear that as schools reopen there must to be some enforced and monitored hygienic guidelines both for occupants and facilities. There also needs to be careful decisions regarding special populations and activities. Yet, the default to long-term school facility closure no longer seems reasonable. High standards for new patterns of operation for schools and especially for the maintenance of facilities will be necessary.

European Center for Disease Prevention and Control

COVID-19 in Children and the Role of School Settings and Transmission

January 20, 2021

www.ecdu.eu-ropa.eu/en/publications-data/children-and-school-settings-covid-19-transmission

Journal of the American Medical Association

Data and Policy to Guide Opening Schools Safely to Limit the Spread of SARS-CoV-2

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The Author

Bruce Bomier, MPH, holds a bachelor's degree in Forensics and a master's degree in Public Health/Epidemiology). He has spent almost 50 years working with health policy and designing public health solutions. He founded a major environmental engineering group, the Institute for Environmental Assessment (IEA), and was appointed by three successive governors to service on Minnesota's Environmental Quality Board. In 2007, Bruce retired from his engineering company to serve as Board Chair of Environmental Resource Council.