

UPDATED AND REVISED COVID-19 GUIDANCE FOR THE HWRSD SUPERINTENDENT

Approved by Unanimous Vote of the Hamilton Board of Health – 10 Dec 2020

During August, September and October at the request of the HWRSD Superintendent, the Hamilton and Wenham Boards of Health developed and revised several times metrics to serve as guidance for the Superintendent in deciding on a learning mode for the schools. We started that metrics development process without any benefit of medical or scientific guidance.

The medical and scientific communities and we ourselves have learned much in just the past few months. The most important finding for purposes of guidance on learning mode in the HWRSD is that outbreaks of infection in schools are rare, even when community transmission is increasing, and there seems to be little correlation between community transmission and in-school cases (please read the scientific paper at the end of this document).

Based on all of our experience during this school semester and careful consideration of all of the data at our disposal, here is the data and information we will review to make a recommendation to the Superintendent on school learning mode:

- Cases within a school or that have possible school connections and staffing implications, and trends
- In-school mitigation strategy data, and trends
- Accessibly to testing by students and staff
- Capacity for contact tracing in schools

- Hamilton cases (7-day average and 14-day average), and trends
- Wenham cases (7-day average and 14-day average), and trends
- Combined Hamilton and Wenham (7-day average and 14-day average), and trends
- Characterization of cases, i.e., clustered, members of same household, Gordon College students, Gordon-Conwell Theological Seminary campus, etc...
- Surrounding community cases (7-day average and 14-day average), and trends
- Local (Beverly and Salem) hospital census case data, and trends
- Capacity for contact tracing in community

- **The Updates to Guidance on Interpreting DPH COVID-19 Health Metrics dated November 6, 2020.** With the recent update by the Department of Public Health (DPH) to the weekly color-coded designation for communities in the Commonwealth, the Department of Elementary and Secondary Education (DESE) is issuing updated guidance on interpreting these metrics for school settings. This replaces the guidance on *Interpreting DPH COVID-19 Health Metrics* issued on August 11, 2020.

We will have no definitive thresholds or specific numerical metrics that trigger a decision one way or another, but the trends will be as important as the data itself in the evaluation. So rather than make decisions based on thresholds, instead we will review all of the above data and trends and make a recommendation based on our best judgement, considering all of the above.

This document continues on the next page with a paper that was downloaded from the Harvard Global Health Institute webpage and coauthored by its Director.

The Case for Open Schools in a Pandemic - *By Dr. Ashish K. Jha, Dean, and Sameer Nair-Desai, Research Assistant, Brown University School of Public Health*

As the worst wave yet of the COVID-19 pandemic sweeps across the nation, the data on schools is becoming clear: most schools can and should stay open, particularly for younger children (K through 8).

The benefits of in-person education

Despite the best efforts of education districts, there is no doubt that remote instruction generates large learning gaps and links to higher rates of mental illness, while depriving children of formative social and peer relationships. This is especially true in disadvantaged communities and vulnerable populations. The losses from extended school closings will likely be felt for generations to come. Schools are essential to the future of our nation, and integral to our economy.

Evidence supporting school openings

The case for schools being open, particularly in K-8 systems of education, rests on two key questions: whether schools drive transmission in the community and whether high community transmission rates lead to large spread of the virus within schools. The latest data has failed to find any compelling evidence that in-person schooling leads to meaningful increases in infections in the community. There is also a lack of evidence suggesting spread within schools, especially in schools with strong mitigation measures. And not for a lack of trying: studies focused on examining the spread of the virus within schools have consistently found little compelling evidence.

Two important resources collecting data from schools across the nation are a dashboard compiled by the National Education Association, and Brown University economist Emily Oster's COVID-19 School Dashboard. According to the NEA's dashboard, which captures 5,803 schools, only six states have recorded more than a thousand cumulative school cases (K-12) since July of this year. Idaho, the state with the most cases, recorded 4,462 new cases since July 16th. This represents only 7% of new cases in this window. In Michigan, 409 new cases were reported according to the NEA. This is only 0.2% of new cases in this window. Michigan's own state data mirrors this trend. Since Michigan last updated its data on 10/12, staff cases have been roughly 0.17% of new cases, while student cases are near 0.43%. In Florida, the NEA reports 2,128 new cases since July 15th. This represents only 0.40% of new cases.

One database, eight million students

While the NEA tabulates state case counts, the COVID-19 School Dashboard queries schools around the nation on case counts and infection rates for both students and staff, records which mitigation strategies they employ, and tabulates school-wide demographics. The project currently captures over eight million students, out of which nearly four million attend school in-person. Since August, the percentage of schools which reported cluster outbreaks (more than five cases) has hovered around 2%. The percentage of students confirmed or assumed COVID-19 positive in the sample is less than 0.25%, and the percent of confirmed or assumed positive staff is only 0.37%.

Suggestive evidence from case studies around the United States also indicate weak associations between re-openings and higher transmission. Local studies of re-openings in smaller municipalities have found no correlations between re-openings and spikes in infection. Charlotte School District began

reopening their schools to over 15,000 students on August 31st. Since then, school infection rates have remained lower than 0.50%. More notably, community cases did not spike immediately following these re-openings in late August. Manatee School District reopened even earlier, in mid-August. Their most recent school infection rates hover around 0.60%. In New York state, schools began to reopen in mid-September. Community spread has remained stable during the phased re-openings in Bronx, Manhattan, and Richmond counties. After reopening all of its public schools, New York City school infection rates remain stable at around 0.20%.

School outbreaks? They usually start in the community

This evidence is not limited to the United States alone. In global settings, school re-openings accompanied by strong mitigation measures have resulted in a transition to in-person education without large spikes in infections. Two meta-analyses of scientific papers relating to global re-openings found no associations between re-openings and case spikes within schools, nor could they link subsequent community outbreaks back to school openings. The WHO recently confirmed that only a few large outbreaks have been linked to schools, most of which began in the community. Another meta-analysis found children younger than 20 were nearly 44% less likely than their older counterparts to risk secondary infection. Most of these effects came from those aged ten years or younger. Furthermore, according to a wide range of scientific papers, both susceptibility and infectivity increase with age. The WHO cites secondary and high schools as the prime nodes of outbreaks, noting children under 10 are particularly resilient to contagion.

Many of the key arguments against school being open during outbreaks rest on the fact that we don't have robust data suggesting schools are safe. In other words, opponents of school openings suggest we simply do not know enough at this point to make informed policy decisions and it is safer to keep kids at home, despite its enormously high social, economic, and health costs. While this was a valid argument over the summer when we lacked any real data on whether schools could be open safely, that is no longer the case.

Schools are essential. We should treat them as such

The evidence from our raw data and from case studies around the nation suggest schools can be managed safely and effectively in a pandemic. Moreover, we think the time has come to treat schools as the societally essential functions that they are. They are essential for the well-being of children and essential to the economy. Educators need to be supported as essential workers. Schools should be exempted from closure requirements but be equipped with capacities for infection control so that they can function safely even when community spread levels increase.

Key infection control measures in schools, then, need to include mask requirements for students and staff, proper hygiene (handwashing), ventilation improvements and consistent testing of symptomatic individuals and tracing of contacts. In the case of cluster outbreaks, mandatory quarantines for infected individuals and their contacts need to be enforced.

It is clear from the data and experiences of individual school districts that opening schools in a pandemic with infection control measures in place does not lead to increased transmission of the virus. In many ways, schools can be the safest place to be for children during a pandemic.