

## **Public Schools of Brookline - Expert Advisory Panel #4 (Public Health, Safety, and Logistics)**

### **Panel Statement on Enhanced Protective Measures During Times of Elevated Community Transmission of COVID-19**

**Final - Adopted by Unanimous Vote on December 11, 2020**

Our panel is composed of Brookline parents with expertise in public health, medicine, occupational health, diagnostics, and operations who are assisting the Public Schools of Brookline (PSB) with the difficult process of re-opening and operations during the COVID-19 pandemic. Below is the summary of our recommendations for **further enhanced** protective measures to reduce risks of in-school transmission during periods of elevated community transmission of COVID-19. For more technical information, other panel statements, and recordings of our meetings, please refer to the Panel 4 section of the [PSB Remote Learning Task Force website.](#)

#### **Advisory Panel 4 Members**

**Dr. Elena Savoia**, Deputy Director, Emergency Preparedness Research Evaluation & Practice (EPREP) Program, Harvard T.H. Chan School of Public Health (co-chair)  
**Mr. David Gacioch**, Partner, McDermott Will & Emery LLP (co-chair)  
**Dr. Sarita Chung**, Emergency Medicine Physician, Boston Children's Hospital; Assistant Professor of Pediatrics and Emergency Medicine, Harvard Medical School  
**Ms. Lan Dennie**, RN, BS, CMAC, Occupational Health Nurse, Fenway Health  
**Dr. Benjamin Linas**, Infectious Diseases Physician, Boston Medical Center; Associate Professor of Medicine and Epidemiology, Boston University.  
**Dr. Nira Pollock**, Associate Medical Director, Infectious Diseases Diagnostic Laboratory, Boston Children's Hospital; Associate Professor of Pathology and Medicine, Harvard Medical School  
**Mr. Boris L. Perlovsky**, Director, Innovation Strategy. Cambridge Innovation Center  
**Dr. Serena Rajabiun**, Assistant Professor of Public Health, University of Massachusetts, Lowell  
**Dr. Vishakha Sabharwal**, Pediatric Infectious Diseases Physician, Boston Medical Center  
**Dr. Benjamin Sommers**, Professor of Health Policy & Economics, Professor of Medicine, Harvard T.H. Chan School of Public Health / Brigham & Women's Hospital  
**Dr. Lakshman Swamy**, Pulmonary/Critical Care physician and Medical Director at MassHealth Payment & Care Delivery Innovation  
**Dr. Jenny Tam**, Senior Staff Scientist, Wyss Institute, Harvard University

**Summary: In this time of elevated levels of community transmission of the virus that causes COVID-19, our panel does *not* believe a full or partial rollback to remote-only school operations is warranted, but we make several recommendations below for enhanced mitigation measures that PSB should consider implementing in order to further reduce the risk of in-school transmission, including increased use of personal protective equipment, maintaining default distancing requirements, tighter cohorting limits, and increased testing.**

In August 2020, our panel recommended the use of [community benchmarks](#) to inform health and safety guidelines for in-person schooling in Brookline. We recommended the use of four measures to monitor community transmission and that, if at any point in time, 2 of the 4 measures were above the critical thresholds (a potential sign of high community transmission), PSB should conduct “an in-depth analysis of the school system’s capability to enhance its mitigation strategies (for instance, moving older students to remote learning, or reducing indoor hours for younger students) and a consideration of halting indoor educational activities until at least 3 of the 4 measures are back in compliance – using a minimum of 7 full calendar days of remote learning to allow time for a correct interpretation of infection trends.”

With the resurgence of community and statewide COVID-19 infection rates, we recommend that in the event that two or more of these thresholds are surpassed, as first occurred in mid-November, the following **further enhanced protective measures** be implemented to further reduce the risk of school-based transmission during such times of **elevated community transmission** -- to remain in effect until at least 3 of the 4 community metrics have been back under our recommended thresholds for more than 7 consecutive days:

- 1) Distancing:** Our panel has recommended a general [distancing guideline](#) of 6 feet, strictly enforced during indoor unmasked time, but with some flexibility permissible to a range of 3 to 6 feet when masks and other protections are in place. ***During periods of elevated community transmission*** (defined above for the purposes of this document), ***we recommend adhering to 6 foot planned distancing as is presently in place in PSB policy, rather than making any reductions.*** As indicated in our original distancing guidelines, this recommendation applies to prolonged periods – and not to transient interactions like walking by a student’s desk, a brief conversation, or passing in the hallway. We also recommend that there should be ***no in-person staff meetings*** (either at school or central PSB offices) during periods of elevated community transmission, with all adult-to-adult contact (other than co-teaching in a single classroom, or a brief conversation) strictly limited to telephone or virtual interactions, given that staff-to-staff contacts are likely to present comparatively higher risks than staff-to-student or student-to-student contacts.
- 2) Ventilation:** Our panel has recommended an eventual [ventilation target](#) of 5 air changes per hour (ACH) for full (pre-pandemic) classroom occupancy, with an acceptable reduced target of 4 ACH during periods of lower density occupancy (such as at present, as a result of 6-foot distancing) and other precautions. In consultation with Dr. Joseph Allen, we do not recommend any changes at this time, but will continue to examine whether any such changes are warranted.

**3) Cohorts:** Current PSB cohorting has been guided primarily by distancing requirements and available space. With higher rates of community transmission, we formalize our previously recommended guidance to PSB that specialists or staff interacting with multiple cohorts of students, regardless of size, wear face shields (in addition to masks), follow strict distancing of no less than 6 feet, and that ventilation systems are enhanced in their classroom. We also recommend that, during times of elevated community transmission, to further reduce risk of transmission, the school administration should make every effort to modify teaching schedules so that ***specialists and staff interacting with full classroom cohorts (including a hybrid "half class") teach in person indoors in no more than one building in a given week and that they do not interact in person indoors with more than 150-200 students within a week.*** This limit is chosen taking into consideration continuum of transmission risk, contact tracing capabilities, and the impact of quarantine measures on ongoing ability to operate schools effectively. Also, in any given case, lower numbers in this range are better, when feasible.

**Suggestions to reduce staff/ student contacts:** We are not experts in operating schools, and we defer to the administrators and teachers who are in deciding how best to implement changes to schedules based on our recommendations. However, to assist in this process, based on our panel conversations, including feedback from administrators and teachers, here are some of the potential alternative approaches that have been discussed:

- i. Restructuring hybrid schedules to reduce weekly in-person, indoor contacts for educators with large student loads, such as art, music, library, PE, and world language teachers--perhaps by concentrating such "specials" into alternating weeks (e.g., a given second grade class gets multiple periods of art this week and multiple periods of music next week, rather than both each week, etc.).
- ii. Converting some current in-person classes to classes taught virtually (synchronously or asynchronously) while in-person students are physically supervised by another staff member--not the teacher--or a parent/community volunteer.
- iii. Move all excess student contacts outdoors--even where that means giving students less effective instruction or just an extra outdoor recess period.
- iv. As a last resort, where schedule, staffing, space, and weather needs compel a given staff member to have excess student contacts indoors, consider showing an educational video to such classes for the entire period, with students remaining masked throughout and the staff member remaining masked, face shielded, and at least six feet away from all students throughout the period (except in case of a true emergency requiring closer distance intervention). In such cases, we would also recommend further enhanced ventilation in such building spaces to meet at least a 5 (and optimally a 6+) air changes per hour target.

**b.** To be clear, however, *the panel does not believe that schools or parts thereof should be converted to all-remote status merely to avoid excess contacts*; we see multiple other ways to appropriately address the issue from a risk perspective while avoiding the significant negative consequences on students and the community more broadly of going all-remote. The goals of these contact limitations are multi-fold: (i) to further reduce transmission risk to each staff member and through the staff member across buildings/cohorts, (ii) to minimize the operational impact of quarantines as more community-acquired cases arise, and (iii) to facilitate contact tracing. Options iii. and iv. above are specifically designed to reduce the risk of transmission from or to the staff member to as close to zero as is possible, and to keep the staff member from being a close contact for quarantine purposes, if other options to avoid excess contacts prove not to be feasible.

**4) Personal Protective Equipment:** Any staff member interacting with multiple cohorts in a given week should maintain strict 6 foot distancing and **wear a face shield** in addition to a mask as much as possible during in-class interactions.

**5) Testing:** We recommend further consideration of options for weekly *screening testing of asymptomatic student-facing teachers/staff*, prioritizing those with interactions with the largest numbers of students, and we are working closely with PSB and Town of Brookline leaders on specific approaches to such testing.

**6) Potential De-Densification or Rollback of In-Person Learning:** Our August statement on community metrics and ongoing meeting discussions also acknowledged the possibility that a phase-down or reduction in in-person schooling may become necessary. In October 2020, the Massachusetts Department of Elementary and Secondary Education (DESE) released [guidance](#) that more closely aligned the state's color-coded metrics for community spread with our own recommendations. DESE's guidance also stated, "*It is increasingly clear that schools are not sources of significant COVID transmission, so long as proper health and safety protocols are followed,*" and therefore, "*Districts are expected to prioritize in-person learning across all color-coded categories, unless there is suspected in-school transmission.*"

In keeping with this state guidance, and our own assessment of the [evidence](#) on COVID risks by age group and with appropriate mitigation steps in place, we offer the following additional recommendations:

- Steps to temporarily return to remote learning should be as limited as possible and based on specific patterns of transmission within a school based on contact tracing data. For example, if there is evidence of transmission confined to a classroom, a temporary return to remote learning likely should be limited to only that classroom. If transmission

occurs across multiple classrooms in a grade, a temporary return to remote learning likely should be limited to that grade. Full school closures, or full district closure, should be the intervention of last resort when there is evidence of recurrent in-school transmission across grades and across schools that cannot be controlled by other means. The rigorous contact tracing being conducted by the Brookline Health Department and PSB's school nursing team helps support this proposed approach.

- Should the Brookline Health Department and/or PSB leadership determine that a larger-scale reduction of in-person schooling is necessary, we recommend doing so in a phased-approach, reversing PSB's initial return-to-school plan. In other words, in such a circumstance, we would recommend first returning older grades (9-12) to remote learning, followed by grades 3-8 if necessary, while maintaining in-person options for "first to return" and high-needs students, BEEP, kindergarten, and grades 1-2.
- It may also be worth exploring different lunch/snack time approaches for at least some groups of students, while ensuring provisions remain for appropriate and equitable nutritional access for all. We plan to consider this issue further and may make supplemental recommendations. PSB should continue to avoid adults eating together as much as possible--keeping minimum 6 ft distance when it has to happen.
- We do **not** think a conversion to fully remote operations is warranted at this time, but will continue to help PSB leaders and stakeholders monitor the situation as it develops.