A Task Force of child health professionals and infectious disease specialists with public health expertise at Children’s Hospital at Dartmouth-Hitchcock (CHaD) has been reviewing the medical literature and monitoring the COVID-19 public health data. We take the full measure of the health and well-being of children, considering developmental, behavioral, mental health and educational aspects in addition to the risk of COVID-19.

We appreciate that regional school districts have decided to start the school year with online only, “hybrid,” or in person (with online option) modes of instruction. We continue to be concerned about the profound harms to children of school closures and concur with the American Academy of Pediatrics (AAP), which “strongly advocates that all policy considerations for the coming school year should start with a goal of having students physically present in school.” We therefore recommend that schools plan to reassess modes of instruction in stepwise fashion at regular intervals.

**AS OF SEPTEMBER 2, 2020, WE ENCOURAGE SCHOOL DISTRICTS TO ADVANCE TOWARD FULL IN-PERSON CLASSROOM EDUCATION WITH APPROPRIATE SAFETY MEASURES FOR MOST STUDENTS WHEN THE LOCAL EPIDEMIOLOGY IS FAVORABLE.**

The New Hampshire Division of Public Health Services has issued Considerations for Transitioning Between School Instructional Models, with a data analytics dashboard to help identify the “least restrictive method of instruction” for NH districts.

For school districts not represented on the NH data analytics dashboard (e.g. in Vermont), favorable epidemiology to advance toward full in-person instruction can be defined as:

- **Statewide** SARS-CoV-2 positive test rate < 5%
  - Positive test rates for New Hampshire and Vermont can be found at covidactnow.org
    - Current VT = 0.4%
- **AND** statewide infection rate < 1.0
  - Infection rates for New Hampshire and Vermont can be found at covidactnow.org
    - Current VT = 0.89
- **AND** county level new case (incidence) average < 3.5/100,000 residents/day (over a week)
  - County level weekly new cases/100,000/day for New Hampshire and Vermont counties can be found at covidactnow.org
    - Current VT statewide = 1.3/100,000/day average over a week
- **AND** county level current active cases (prevalence) < 400 per million residents
  - County level active cases per million for NH, VT, and the entire region can be found on a map at https://accd.vermont.gov/covid-19/restart/cross-state-travel
    - Current VT statewide = 232/million

- If statewide SARS-CoV-2 positive test rates are between 5% and 10%, school districts can remain in their current mode of instruction, pending guidance from public health departments.

- If statewide SARS-CoV-2 positive test rates increase to > 10%, school districts should consider reverting to online instruction only, in consultation with public health departments.
Regardless of metrics above, the New Hampshire Division of Public Health Services and Vermont Department of Health will identify clusters and outbreaks within schools and determine need to revert to temporary online only instruction.

Safety measures should include:

1. **Masks.** We recommend mandatory cloth or medical masks, with no exhalation valves allowed, as they do not filter the exhaled air. At Dartmouth-Hitchcock, if a patient tests positive for SARS-CoV-2 and the patient and any individuals with whom they interact all have been appropriately wearing a mask, then the contacts are considered to be not exposed and we have not required any quarantine. With our mandatory mask policy in place for all staff, patients, and visitors at all Dartmouth-Hitchcock Health facilities, we have experienced minimal transmission within the facilities. The state of NH will require testing or quarantine for similar exposures. Accommodations should be made for those who cannot wear masks due to medical and developmental conditions. Where appropriate, eye protection/face shields in addition to masks should be used by staff where there is a likelihood of exposure to individuals with incomplete adherence to masking.

2. **Physical Distancing.** We agree with the recommendation from the American Academy of Pediatrics for 3-6 foot separation between students. Most of the demonstrated benefit from physical distancing occurs in the first 3 feet. All of the data on 6 foot separation has been in the absence of masks. The most important time for physical separation will be during times when masks are removed, such as snack time and lunch time. It will be important to plan for how this can be done safely.

3. **Stay at home if you are sick.** We recommend at least two checks – at home with a checklist (as well as temperature taking if possible), and then again at first school contact (bus or school entrance) with screening questions and consideration of additional temperature taking when warranted.

4. **Hand washing.** Availability of hand sanitizer in entrances, hallways and classrooms, and focus on frequent hand washing.

There are of course many other layered risk reduction efforts the schools can take, such as reengineering hallways and limiting entrances and gathering spaces, limits on visitors and larger gatherings, and using ventilation and outdoor spaces where possible. More detailed resources for schools and the public are available at our [CHaDKids website](#).

Our recommendation is based on our assessment that the harms of school closure outweigh the very low rate of infection in children, the generally mild severity of illness when they are infected, and the lower likelihood of transmission from children than adults. Some of the evidence that informs our recommendation includes:

**Unlike the flu and many other respiratory viruses, children have been relatively spared from infection and illness due to COVID-19**

An evidence summary on COVID-19 infection in children can be found at [Don’t Forget the Bubbles](#). Their Executive Summary is getting a bit dated (July 17th), but on August 21st the Centers for Disease Control and Prevention (CDC) issued updated [Considerations for Schools](#), which included the statement:

“To be sure, the best available evidence from countries that have reopened schools indicates that COVID-19 poses low risks to school-aged children – at least in areas with low community transmission."

- No deaths have been reported in those <20 years of age in New Hampshire or Vermont.
• In NH, only 167 out 7107 COVID+ cases (2.3%) have been 9 years of age and younger, with an additional 399 in the 10-19 age group (5.5%). This is a total of 566 (7.8%). Thankfully, only 9 have required hospitalization (1.3% of 715 hospitalizations).
• In VT, only 60 out of 1635 COVID + cases (3.7%) have been 9 years of age and younger, with an additional 143 in the 10-19 age group (8.7%), for a total of 203 (12.4%). No (0%) children have required hospitalization.
Children can spread COVID-19, but remain less likely to than adults

- In a recent review of the literature in the journal *Pediatrics*, pediatric infectious disease experts William Raszka and Benjamin Lee from the University of Vermont conclude, “Almost 6 months into the pandemic, accumulating evidence and collective experience argue that children, particularly school-aged children, are far less important drivers of SARS-CoV-2 transmission than adults.”

- A more recent study from South Korea confirms very low rates of out-of-household transmission, such as schools, of SARS-CoV-2 in 0-9 year olds (1.1%) and 10-19 year olds (0.9%). The media highlighted that the risk of in-household transmission from 10-19 year olds is comparable with some older adult age groups, but further analysis of the same data, published later, identified challenges of younger and older children in the same household sharing the same exposure, which inflated the estimate in the 10-19 year olds.

- In countries worldwide that have opened schools, including ones that have experienced in-school outbreaks, there has not been a related increase in community transmission of COVID-19.

We will update this and other recommendations as needed, based on public health data and expertise from DHMC. It should be noted that the vast majority of observed transmission has occurred outside of the hospital environment, and we suspect that the same will be true for schools.

Our success in minimizing the burden of COVID-19 in northern New England has been built on the communities we serve adopting state and CDC guidance on proven methods for decreasing transmission (masks, distancing, handwashing) along with adhering to state requirements on gatherings and travel. Our recommendations assume that this shared commitment to one another will continue.