

To the Trustees of the Toronto District School Board,

We are a group of parents/guardians/caregivers of students attending Toronto District School Board (TDSB) schools and community members. We are deeply concerned about persistently high levels of illness observed within TDSB schools. Public schools play a central role in our communities. Due to their centrality, public schools serve as hubs for transmission of many infectious diseases to surrounding communities.<sup>1</sup>

We thank Trustee Sara Ehrhardt for her recent *Toronto Star* editorial<sup>2</sup>, and the motion to reduce respiratory viruses<sup>3</sup>, passed August 30, 2023. Unfortunately, it appears that little substantive action has been taken since then, beyond the inclusion of reminders placed at the bottom of weekly newsletters from schools. To our knowledge, there has not been any consistent messaging to the TDSB community about key steps they can take to help protect those who work in and attend TDSB schools. Consequently, the burden of illness amongst students and TDSB staff remains very high.<sup>4,5</sup>

For the health of our children, as well as TDSB staff, we need to reverse this trend. We ask that the TDSB and its Trustees request more robust information and communications from Toronto Public Health (TPH) on how families can reduce the risk of infection from airborne diseases. In particular, we would like to see clear, actionable information on how to improve indoor air quality and how to prevent infections of airborne-transmitted diseases, shared with TDSB families and staff.

COVID-19 is of special concern to us, as there is a large body of evidence to show that this is a serious disease that impacts the whole body, including the nervous system, vascular system, and immune system, and it increases the risk of long term symptoms (Long COVID) and secondary diseases, particularly upon reinfection.<sup>6-11</sup> In particular, there is a growing body of evidence showing that COVID negatively impacts cognitive function, thereby potentially affecting learning outcomes and overall performance.<sup>12</sup>

There is ample research showing that clean air in schools can positively contribute to cognitive function, social and emotional well-being, and overall performance.<sup>13,14</sup> With climate change and the escalating risk of smoke days from wildfires, combined with the risk of airborne diseases, it is clear that clean air must be a priority to protect health and well-being, and ensure optimal learning and working environments, for all TDSB students and staff. Improving indoor air quality will increase our resilience to climate change and future pandemics.

**We urge the TDSB and its Trustees to issue a request to Toronto Public Health (TPH) to provide communications that may be shared with TDSB's students and staff that cover the following:**

- The importance of clean indoor air and how to improve indoor air quality with ventilation and filtration tools, and how CO<sub>2</sub> monitoring can be used to assess ventilation rates;<sup>15</sup>
- Airborne transmission of infectious diseases (e.g. COVID-19, measles, influenzas including H5N1, RSV) and ways to mitigate the risk of infection, including how to improve indoor air quality, and the appropriate use of well-fitted, high-quality masks for protection;<sup>16,17,18</sup>
- Clear and effective communication regarding COVID-19, including the increased risk of long-term symptoms (Long COVID) and secondary disorders, and the need for multiple layers of protection.<sup>6-12,19,20</sup>

Why the focus on clean indoor air? The COVID-19 pandemic has shown us that many diseases besides COVID-19 can be transmitted via infectious aerosols, microscopic particles that are produced whenever we breathe and talk.<sup>16</sup> These collect and concentrate in indoor spaces, particularly in poorly ventilated areas. People are infected when they breathe in these infectious aerosols. The risk of transmission of disease can be greatly reduced by increasing ventilation rates to indoor spaces, while also cleaning the air with filtration, whether it be with a mechanical air purifier or wearing a well-fitted high quality mask.<sup>15,17</sup>

TPH recently released its plan for the 2024-2025 respiratory virus season.<sup>21</sup> This information is not adequate for containing or preventing the spread of diseases that are primarily transmitted through the air. It encourages hand hygiene and coughing into a tissue or sleeve, both of which are ineffective against airborne transmitted diseases. TPH's plan lacks any mention of the nature of airborne transmission of many infectious diseases, how to mitigate the risk of airborne disease transmission of disease, and indoor air quality guidelines. At the same time, TPH's messaging frames COVID-19 as a respiratory illness, in the same category as influenza and RSV. However, the bulk of evidence collected thus far strongly suggests that COVID-19 is far more serious than other respiratory diseases, and because vaccination does not fully protect against infection and reinfection, multiple layers of protection are required.<sup>6-12,19,20,22-24</sup>

Information on the risks of COVID-19 infection can be found on TPH's web pages, on the Public Health Ontario website, as well as on the Health Canada website.<sup>25-27</sup> These public health websites also include information on how to improve ventilation to reduce the risk of COVID-19 infection.<sup>28-30</sup> As far as we know, none of this information has been clearly communicated to TDSB students and staff. This is essential information that would help people to protect themselves from infection.

In addition to educating families on the importance of improved indoor air quality, information on acceptable air quality is especially needed by the facilities managers of TDSB, who have told concerned parents/guardians/caregivers that they are following TPH guidelines. Unfortunately, TPH's guidelines do not include information on what constitutes acceptable air quality that is safe for students and staff to breathe. In the absence of such guidelines and transparent reporting of the improvements that have been made, it is unknown if indoor air quality has been improved in any measurable way.

The Ontario Society of Professional Engineers (OSPE) has provided robust guidance on providing safer indoor air to mitigate airborne disease transmission.<sup>31</sup> In 2023, the American Society for Heating, Refrigeration, and Air-conditioning Engineers (ASHRAE) published Standard 241, which provides guidance on controlling infectious aerosols in various types of indoor spaces.<sup>32</sup> A key component of monitoring indoor air quality is measurement of the concentration of carbon dioxide (CO<sub>2</sub>) in indoor spaces, in order to assess adequacy of ventilation. Both ASHRAE and OSPE have provided guidance on the use of carbon dioxide (CO<sub>2</sub>) monitors to assess ventilation rate.<sup>31,32</sup> We recognize TDSB's limitations in terms of jurisdiction over air quality management and from whom they may take guidance, but we encourage TDSB to go beyond current practice and obtain guidance from OSPE and ASHRAE's Standard 241.

The City of Toronto has an indoor air quality policy for its office-based employees, wherein CO<sub>2</sub> must be maintained below 1000 ppm or less than 700 ppm above outdoor CO<sub>2</sub> concentration.<sup>33</sup> Unfortunately, those guidelines do not currently extend to all Toronto buildings, including our schools. We are aware that many TDSB classrooms do not have acceptable air quality according to the City of Toronto's standards.

We invite any Trustees who are interested in learning more about the association between indoor air quality and health, and ways to improve indoor air quality with available tools, to speak with us at the earliest opportunity. We want to work with you to clean the air in our schools and provide a safer and

healthier environment for all students and education staff. Please contact Louise Hiding [contact information hidden] or Heather Pun [contact information hidden] if you have any questions, and to discuss availability for a meeting.

Yours sincerely,

[257 names redacted for privacy]

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