

February 21, 2021

Dear St. Raphael school community,

I am writing to provide clarity on a matter following a presentation made by Pinchin, an environmental engineering consulting firm, at the February 18, 2021 Board meeting. We have heard from many St. Raphael community members that they do not feel the school is safe due to a comment made about CO2 levels. While the comment was intended to note that CO2 levels is a good indicator of whether adequate air changes are occurring to help mitigate virus transmission, we recognize this may have caused some confusion and worry among our school community.

The school remains safe. Please note that the engineering firm noted that the CO2 readings at St. Raphael never reached a level that would be deemed unsafe for staff and students. In fact, at non-mechanically ventilated schools like St. Raphael, any potential lack of ventilation was effectively offset by the installation of portable HEPA filter units which are beneficial in improving the air quality in schools. ***All classrooms at St. Raphael's have medical grade portable HEPA air filter units installed.***

Based on the feedback received from the St. Raphael school community, we have put together the attached ***FAQ document*** to answer questions we have received related to school safety, CO2 levels, and what has been done to support better air flow at the school.

The safety and well-being of our staff and students remains paramount. Our Superintendent of Environmental Support Services will be at the school tomorrow to ensure our HEPA units are continuing to support optimal air flow in the school. Please be assured that we have done everything possible to ensure the school remains safe for staff and students.

Sincerely,

Rania Zaccak-DiFelice, Principal

cc: Shawna Campbell, Superintendent
Maria Rizzo, Trustee

Frequently Asked Questions Air Quality at St. Raphael

1) Should I be worried about the air quality at St. Raphael?

The air quality at St. Raphael is at a safe level. The TCDSB has never observed any air quality measurements that would suggest that air quality at St. Raphael is unsafe. Measurements observed by Pinchin, the engineering firm that led the air quality study at St. Raphael, are well below all safety limits set by the Ministry of Labour.

2) Are students or staff at increased risk of contracting COVID-19 as result of the air quality at St Raphael?

No. The air quality at St. Raphael remains safe. The TCDSB has installed medical grade HEPA air filter units to help filter small particulates, including the coronavirus, if present, from the air in classrooms at St. Raphael. In addition, staff and students are required to wear masks, which serve as source control to prevent respiratory droplets when people sneeze and cough from circulating in the air.

3) Why did the Air Quality Study measure CO2 concentration levels in classrooms?

The air quality study used CO₂ as an alternate measurement to understand the amount of air change per hour (ACH) in a classroom. The goal of the study was to determine if a school was getting at least 4 air changes per hour. Based on the result, Pinchin estimated that St. Raphael is getting a total of 4.1 air changes per hour in each classroom using a combination of natural air ventilation and HEPA air filters. Anything above 4 air changes per hour in a classroom is considered good.

4) What were the CO2 measurements at St. Raphael?

The Air Quality Study measured CO₂ levels in 7 different rooms. The total time spent above the study's target CO₂ levels in any one classroom ranged from 0 minutes to 270 minutes over the course of a one-month study. 270 minutes represents just 4% of classroom time in 1 month. At no time were CO₂ levels in classrooms measured to be unsafe.

5) Why did the Air Quality study say the CO2 levels were above "the limit" at St. Raphael?

The study set an upper target of 1200 parts per million (ppm) of CO₂ based on recommendations from the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). The ASHRAE standard is focused on the ideal standard for building occupants. The Ontario Ministry of Labour's limit for CO₂ safety is based on extended daily exposure (typically 8 hours) of over 5,000 ppm of CO₂. Measurements at St. Raphael did not pass the ideal levels for a short period of time but did not come anywhere close to upper limits for safety. TCDSB has installed HEPA air purifier to further improve ventilation.

6) What has the TCDSB done to enhance air quality in response to COVID-19 at TCDSB schools? At St. Raphael?

The TCDSB has installed medical grade HEPA air filters in all classrooms at St. Raphael and ensured that any available mechanical ventilation is working as effectively as possible. In addition, staff have visited this school this weekend to ensure all systems are effective. Going forward, the TCDSB will be reviewing guidelines for windows and the use of portal HEPA air filters to ensure each school is maximizing ventilation.

7) How has provincial and federal funding been used to improve air quality in TCDSB schools? What about at St. Raphael?

TCDSB received approximately \$33.9 million in additional funding from the Federal and Provincial government this year. TCDSB has invested an additional \$20.4 million from its own reserves bringing us to a total of \$54.4 million to use towards COVID-19 initiatives. These funds have been used to make many improvements including air quality in schools. To improve air quality, we have reduced class sizes, purchased/installed medical grade HEPA air filters, and hired more HVAC technicians. We are also repairing existing ventilation systems, running air systems for longer periods of time throughout the day and piloting outdoor classroom spaces.

St. Raphael has benefited from all these investments.

