
House Bill HB686
Public Schools – Health and Safety – Carbon Dioxide Monitoring in Classrooms
(Safe School Indoor Air Act)
Environment and Transportation - Feb. 25, 2022 - SUPPORT

Mr. Chairman Barve and Respected Members of the House Environment and Transportation Committee:

Free State PTA represents over 34,000 volunteer members and families in over 500 public schools. Free State PTA is composed of families, students, teachers, administrators, and business as well as community leaders devoted to the educational success of children and family engagement in Maryland. As the state's premier and largest child advocacy organization, Free State PTA is a powerful voice for all children, a relevant resource for families, schools and communities and a strong advocate for public education.

Free State PTA is in full support of HB686, which establishes the Safe School Indoor Air Program in the Maryland Department of the Environment (MDE) to improve indoor air quality in public school classrooms. The program requires local Boards of Education to develop a policy and implementation plan to monitor carbon dioxide levels in each classroom, remediate when there is an elevated level of carbon dioxide at 2000 ppm (parts per million) in a defined space, and to publicly share the data that is collected.

Carbon Dioxide (CO₂) monitoring provides a measure of how much air is being exhaled and rebreathed by others in indoor spaces—it's essentially a proxy for ventilation. Benefits of improving indoor air quality in schools encompass improved learning and overall health. Scientists have directly linked increased ventilation to higher test scores, reduced spread of infectious diseases including SARS-CoV-2¹, and minimized absences.² Increasing ventilation reduces indoor air pollutants that are triggers for chronic respiratory diseases such as asthma and lowers the risk of acute infection to many airborne illnesses. These health co-benefits contribute to lower absenteeism and increased learning opportunities.

Free State Legislative priorities include maintaining or modernizing HVAC systems so that the school environment is properly cooled, heated, kept mold free, and offers mitigation from airborne disease such as Covid-19 and publicly releasing data on HVAC capabilities and performance. National PTA also supports³ “ensur(ing) that school heating, ventilation, and air conditioning operation and maintenance plans comply with the highest current standards supplied by accepted experts.” Measuring CO₂, reporting results, and mitigating elevated levels aligns with these important priorities. Also, the Interagency Commission on School Construction gives guidance to schools that a healthy CO₂ level is 1200 PPM⁴, the first action level defined in this bill.

The Covid-19 pandemic has demonstrated how important healthy air quality is to children, staff, and their family's health. The effort and expense of this effort will be far outweighed by the benefits of reducing sick days⁵ and improving academic performance by having healthy air to breathe in our Maryland schools.

Therefore, we urge a favorable report for HB686.

Respectfully,
Marla Posey-Moss
Marla Posey-Moss, President
Free State Parent Teacher Association
president.fsptamd@gmail.com

¹ Zhang, J. (2020). [Integrating IAQ control strategies to reduce the risk of asymptomatic SARS CoV-2 infections in classrooms and open plan offices](#). *Science and Technology for the Built Environment*, *Sci Technol Built Environ*. 26:(8),1013-1018, DOI: [10.1080/23744731.2020.1794499](https://doi.org/10.1080/23744731.2020.1794499).

² US EPA. Evidence from Scientific Literature about Improved Academic Performance.

<https://www.epa.gov/iaq-schools/evidence-scientific-literature-about-improved-academic-performance>. Updated September 29, 2021.

³ <https://www.pta.org/home/advocacy/ptas-positions/Individual-PTA-Resolutions/Resolution-on-Indoor-Air-Quality>

⁴ https://earlychildhood.marylandpublicschools.org/system/files/filedepot/3/covid_guidance_full_080420.pdf

⁵ <https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-12-770>

The mission of PTA is to make every child's potential a reality by
engaging and empowering families and communities to advocate for all children.