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TESTIMONY IN SUPPORT OF SAFE SCHOOLS INDOOR AIR ACT (HB686)

Submitted by the University of Maryland Center for Sustainability in the Built Environment (City@UMD)
to the Maryland House Environment and Transportation Committee

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

I am grateful for the opportunity to submit the written testimony as an expert in the field of ventilation in public spaces, such as schools, and associated risk of airborne transmission of diseases, such as SARS-CoV-2. My name is Jelena Srebric and I work in the field of building ventilation since 1997 when my first project, sponsored by the American Society of Heating Ventilating and Air Conditioning Engineers (ASHRAE), looked at better ways to deliver ventilation to a berating zone of building occupants, such as ASHARE 1009-RP. I have also led large teams that did significant large-sale field measurements of ventilation and self-reported or laboratory-confirmed Acute Respiratory Infections (ARIs) in public spaces, such as big box retail stores such as ASHARE 1596-RP. This particular study found reduced rate of absenteeism due to ARIs for retails workers in big box stores with higher ventilation rates. This study was a follow up to findings that my colleague, William Fisk, published for a school study done by the Lawrence Berkeley National Laboratory.

As a result of these extensive scientific work, experiences, and associated scientific publications, I authored/co-authored chapters on ventilation and indoor environmental quality for both the American Society of Mechanical Engineers (ASME - Chapter 64) and ASHARE - Chapter 34 handbooks. These two handbook chapters are widely used by both practitioners and scientist in the building ventilation industry. The implementation of recommendations in these chapter, and associated ASHARE Standard 62.1 on Ventilation for Acceptable Indoor Air Quality, suggest use of measurements in indoor environments to address specific pollutants harmful to human health. Specifically, the standard use CO₂ measurements as a proxy for indoor environmental quality. This method has been successfully used to identify inadequate ventilation by our scientists for both influenza and SARS-CoV-2. We closely worked with the School of Music at the University of Maryland as well as the International Coalition for Performing Arts since 2020 to assess and reduce risk of SARS-CoV-2 to students and children in music programs. Our datasets and recommendations were used by both school administrators and facility management in hundreds of different institutions to modify their operations and ventilation to maintain safe operation during the pandemic. Beyond the press coverage, our team of scientist received the AATS (American Academy of Teachers of Singing) Award for COVID-19 response in 2021.

As a scientist, who has a quarter century of experience in in the field of ventilation, indoor environmental quality, and prevention of airborne disease transmission, I strongly support HB0686 because it will give an opportunity to school administrators and facility management to maintain and operate safe and healthy environments for school children in Maryland. Your efforts in passing this bill will be rewarded with measurable better learning and health outcomes for school children in our state.

Respectfully Submitted, Jelena Srebric, Ph.D. MIT
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