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On Behalf Of:

Committee: Senate Committee On Education

Measure: SB414

I am a parent of three young kids; my oldest goes to our local public school & my younger two will soon. I am submitting support for SB 414 – Relating to school indoor air quality.

What gets measured gets managed. Knowing how much carbon dioxide (CO2) is in the air helps us understand how much of the air in the room is rebreathed from someone else's lungs, versus clean fresh air.

This is why SB 414's inclusion of CO2 monitor requirements in schools is vital. These monitors should not only be in classrooms, but also in cafeterias, gyms, music rooms, libraries, and any other indoor spaces where students and educators spend time at school.

High indoor air quality (IAQ) will reduce absenteeism for both students and educators because they will get sick less frequently from respiratory viruses. This will cascade into increased health protection throughout our communities, especially for families with infants, elderly people, immunocompromised people, and others who are at high risk for severe illness or death from respiratory viruses.

High IAQ is the least expensive way to improve academic outcomes. High IAQ will improve the cognition and learning for our students. Research has shown that decision-making decreases moderately when CO2 levels reach 1,000 parts per million (ppm) (1). Research by Harvard T.H. Chan School of Public Health found that improved IAQ, including lower levels of CO2, resulted in a 100% improvement in cognitive scores (2).

I encourage editing of the bill, to change the notification point for carbon dioxide levels to 800 ppm, rather than the current 1,100 ppm. According to the CDC, a target benchmark for good ventilation is CO2 readings below 800 ppm (3). Most environmental and occupational health scientists involved with research on IAQ and health effects have documented significant increases in IAQ complaints and/or health effects in schools, office buildings and other occupied spaces when CO2 levels rise above 800 ppm (4).

Requiring MERV 13 or higher HVAC air filters (or the highest MERV filter allowable by the HVAC system) should also be added into the bill as an additional mechanism for schools to help clean airborne viruses and other harmful particles from the air. This is a recommendation from the American Society of Heating, Refrigerating and

Air-Conditioning Engineers (ASHRAE) and other IAQ experts (5,6,7). Some Oregon school districts have already upgraded to this level, but we need to make it a requirement, so that all students and educators in Oregon have the cleanest air possible in their schools.

Thank you for helping to keep our kids, educators, and communities healthy.

References:

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