

Submitter: Rachel Rochester  
On Behalf Of:  
Committee: Senate Committee On Education  
Measure: SB414

I am writing to the committee to share my enthusiastic support of Senate Bill 414, relating to school indoor air quality.

My oldest child is currently in Oregon public school, and her little sister will enter kindergarten next year. My children, like all Oregon children, deserve access to excellent public education. However, until schools invest in high indoor air quality (IAQ), Oregon schools cannot provide a safe and equitable learning environment for all.

Improving IAQ is cost effective, and it comes with an impressive list of benefits. Ventilation helps clear virus particles from the air, while filtration traps those particles, removing them from circulation. Improving IAQ in schools will help keep students, staff, and educators healthy from respiratory illness and in school (1).

While IAQ interventions are crucial for schools worldwide, we in Oregon should move to make improvements even more urgently. The Oregon Department of Environmental Quality notes that although wildfires have always been part of the ecology of local forests, the trend of fire season beginning earlier, ending later, and consuming more acreage is expected to continue (2). Breathing wildfire smoke has significant health consequences (3). Improving filtration systems will also make our schools a haven for students during fire season, rather than a health risk.

A large body of research suggests that exposure to unhealthy levels of particulate matter and carbon dioxide has significant long- and short-term implications for human health, regardless of age or risk factors. Improving air quality, even minimally, is associated with improved cognitive function and less absenteeism, as well as reduced infectious disease transmission, cardiovascular disease, asthma attacks, and premature mortality (4). In other words, improving air quality in schools will help our school community stay healthier in meaningful, enduring ways, and will almost certainly improve student learning outcomes.

To evaluate school air quality, we must measure it. Senate Bill 414 will put carbon dioxide monitors in classrooms to help parents and educators make informed decisions about ventilation and filtration, and to help parents make informed choices about their children's welfare.

As a parent, I have spent months seeking data on CO2 levels in my children's schools. I've learned that educators and administrators are waiting for official state

guidance, and that no improvements will be made without it. Thank you for taking the steps to keep Oregon children safe and ready to learn.

Sincerely,

Dr. Rachel Rochester

1. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/improving-ventilation-home.html>
2. <https://www.oregon.gov/deq/wildfires/Documents/WildfireSmokeTrendsReport.pdf>
3. <https://www.cdc.gov/disasters/wildfires/smoke.html#:~:text=Wildfire%20smoke%20can%20harm%20you,chronic%20heart%20and%20lung%20diseases.>
4. <https://iopscience.iop.org/article/10.1088/1748-9326/ac1bd8>