

INDOOR AIR QUALITY (IAQ) IN SCHOOLS

Adopted by Convention Delegates May 2007

- WHEREAS,** California has a significant number of unsuitable school facility conditions contributing to poor indoor air quality (IAQ) and is in need of funding to improve indoor air quality; and
- WHEREAS,** Many schools have poor IAQ including inadequate ventilation, moisture and mold, dust and contaminants such as formaldehyde and volatile organic compounds from finishes, furnishings, pest control, cleaning and instructional materials; and
- WHEREAS,** Indoor air pollutants can trigger asthma attacks, result in eye, sinus and throat irritation, and lead to “sick building syndrome,” while high and/or prolonged exposures may raise the risk of cancer, heart and lung disease; and
- WHEREAS,** IAQ problems may affect the health of students and staff and contribute to poor academic performance, absenteeism and learning difficulties; and
- WHEREAS,** There are multiple solutions for improving and maintaining good IAQ, and resources are available to implement solutions in school construction, renovation, and maintenance; now therefore be it
- RESOLVED,** That the California State PTA urge its units, councils and districts to inform students, parents, school boards, district and school staff, and the community about the importance of healthy IAQ and its relationship to student and staff health, academic achievement and absenteeism; and be it further
- RESOLVED,** That the California State PTA urge its units, councils and districts to work with local school boards to promote good IAQ when building or renovating facilities or when using portable classrooms, athletic activity rooms and locker rooms by following guidelines that provide for healthy IAQ, including techniques such as reducing the use of toxic construction materials; and be it further
- RESOLVED,** That the California State PTA urge its units, councils and district to work with local school boards to adopt policies and practices that promote healthy IAQ, including but not limited to the use of IAQ management plans, proper maintenance techniques such as adherence to heating, ventilation and air conditioning system standards, protocols to reduce pesticide use, and the use of low-toxic classroom materials and cleaning supplies; and be it further
- RESOLVED,** That the California State PTA, its units, councils and districts support legislative and regulatory efforts to reduce IAQ pollutants in schools, including securing full funding for IAQ-related assessments, construction, maintenance and repair of school facilities, creating IAQ standards and guidelines for schools, and providing incentives for IAQ-friendly school construction and renovation.

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Background Summary

Approximately one in every five Californians, more than six million children as well as hundreds of thousands of teachers, administrators and support staff, spend significant amounts of time each day in K-12 classrooms and other school buildings. Healthy school environments are critical to providing the conditions in which teachers can teach, students can learn and schools can be successful.

However, the quality of school indoor air, an obviously critical component of a good school environment, isn't making the grade. The United States General Accounting Office study showed that California ranked last among the states in terms of unsatisfactory indoor environmental issues (such as ventilation and other indoor air quality problems). A later study showed some improvements in the Western U.S., but the region still lagged behind the rest of the nation. Some of these problems are likely associated with the age of California's schools: 73% are over twenty-five years old, and billions are needed for modernization. However, newer school facilities can have serious indoor air quality problems as well.

A 2004 California Air Resources Board study further underscores the need for Indoor Air Quality (IAQ) improvements in traditional and portable classrooms. Many classrooms have inadequate ventilation, elevated levels of air pollutants like formaldehyde and volatile organic compounds, evidence of metals, pesticides and allergens in floor dust, and signs of moisture and mold problems.

Many of the above mentioned indoor air problems contribute to childhood asthma, which is already an epidemic, resulting in school absence. Studies have shown that improved ventilation leads to fewer asthma symptoms. One study reported that there were more asthmatic students in school classrooms with higher concentrations of formaldehyde or other volatile organic compounds. Moisture and mold has also been associated with increased levels of asthma.

Indoor air pollutants can also be an eye, sinus and throat irritant. Higher levels of exposure and/or prolonged exposures may cause cancer, heart and lung disease. Children can be more susceptible than adults to IAQ problems because they have higher respiration rates than adults, which can increase their exposure to air pollutants per unit of body weight.

These potential health problems related to poor indoor air quality can negatively impact student learning and academic performance, and can increase school absenteeism. According to the U.S. Environmental Protection Agency, poor IAQ in the school environment "can cause acute health symptoms that decrease performance while at school. In addition, recent data suggest that poor IAQ may directly reduce a person's ability to perform specific mental tasks requiring concentration, calculation or memory."

IAQ problems can be both corrected and prevented. Multiple solutions exist for improving and maintaining good IAQ, and resources are available to implement solutions in school construction, renovation and maintenance.