The State of Environmental Health in Pennsylvania Schools

A summary report by Healthy Schools PA, a program of Women for a Healthy Environment

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Executive Summary

Every child deserves to learn in a healthy school. The global COVID-19 pandemic has shown us how vital schools are to families and communities across the country. The Commonwealth’s K–12 education system serves more than 1.7 million students across 500 public school districts.

The importance of healthy schools cannot be overstated. Environmental hazards in the built environment can affect the healthy development of a child, which in turn can impact their ability to learn and perform well in school. Healthy schools are not just about our buildings, but rather about our commitment to ensuring that every child has the opportunity to succeed. That opportunity includes learning in an environment that is safe, clean, healthy, dry, and pest-free; in an environment that encourages health promoting behaviors, where green space is accessible, and healthy nutritious food is available to all; and where mental, behavioral, and socioemotional services, are accessible to help serve the growing needs of families across the commonwealth. Schools are a reflection of our community values. When we invest in schools we invest in a healthy, safer, cleaner future where all can have the opportunity to thrive and succeed. The research is clear that when we act, we see a difference – improved absenteeism, improved health outcomes, healthy cognitive development, and the ability to achieve academic potential.

Schools have enormous funding priorities, one of which is sustained funding for their building infrastructures. A pattern identified throughout this report is that schools who serve a larger percentage of students from lower-income or economically disadvantaged families, and a larger percentage of special education students, are opting out of taking action on preventing exposure to environmental hazards in their schools. These schools do not necessarily spend less per student than their counterparts who do test; they do however have competing priorities when it comes to how to spend the limited funding they receive from local tax bases and state and federal governments. As of 2016, no state funding has been available for Pennsylvania public schools for infrastructure-related expenses, including new construction and continued maintenance of school buildings.

For far too long, Pennsylvania public schools, like public schools across the nation, have been underinvested in. Unlike schools across the nation, Pennsylvania public schools are uniquely vulnerable to environmental hazards. The global COVID-19 pandemic has taught us, more urgently than ever, that indoor environments matter for students’ health, safety, and academic potential. This report is a call to action. We have an unprecedented opportunity to reinvest in our schools for the long-term—to fund school infrastructure that can positively impact current and future generations of learners across the commonwealth. The challenge ahead of us is to act to ensure a healthy school for every child to grow, learn, and play.
Key Findings

The key findings below reflect data taken from a randomized sample of 65 public school districts (SD) that serve over 175,000 students across the state of Pennsylvania.

**KEY FINDING** Pennsylvania school districts are uniquely vulnerable to environmental health hazards because of aging infrastructure.

The average PA school building was built in 1964. This is almost a decade older than the national average age of public-school buildings, which were built in 1972. Majority of PA public schools were built before federal laws that affect healthy indoor environments were enacted, such as the Lead in Paint Rule (1978) and the Toxic Substances Control Act (1976), increasing the likelihood that certain environmental hazards are present in the built environment.

**KEY FINDING** Environmental hazards testing reveals environmental health risks exist in PA schools.

The most tested environmental hazards are lead in drinking water (89% of SDs in sample) and mold (72%). Testing for other water quality contaminants (48%), radon (20%), lead in dust and paint (9%), and polychlorinated biphenyls (8%) was less common in the statewide sample. Though testing occurred, it was not consistent: some districts tested only a single building, a handful of classrooms or specific outlets; or tested buildings in different years; or a combination of the above.

Despite identifying hazards, not all school districts are taking action to remove or remediate these hazards. Remediation was recommended for majority of SDs testing for environmental hazards. However, not all SDs took action to remove or remediate hazards, putting the health of students and staff at risk. Of public school districts who tested, 91% found lead in drinking water, 78% reported mold in their buildings, 33% reported lead in dust and paint exceedances, 38% reported radon exceedances, and 23% reported other water quality issues. Remediation was noted for only 86% of school districts with mold, 9% of school districts with lead in drinking water, 40% of radon, and 14% of other water quality issues. Remediation was not noted in any of the schools who found lead in dust or paint.
**KEY FINDING** While some healthy schools policies are present, they are not uniformly or consistently enforced.

The presence of an Integrated Pest Management policy (95% of SDs) does not mean that majority of schools are using IPM principles meant to decrease chemical pesticide use. Majority of schools (72%) still contract with a pesticide company to apply chemical pesticides on school grounds. Only 20% of schools address air quality through a formal policy. Despite a state law requiring anti-idling signs for school buildings, only about half (52%) of school districts surveyed had any anti-idling signs.

**KEY FINDING** Majority of public school buildings are located within a half-mile of a point source pollution facility.

According to WHE’s Environmental Hazards and K-12 database, there are almost 10,000 hazardous sites across the state within ½ mile radius of K-12 schools. Title V-permitted facilities, brownfields, landfills, and Toxic Release Inventory sites (TRI) make up the majority of these sites.
KEY FINDING There is greater asthma prevalence for school districts who serve more low-income, non-white, and special education students.

In addition, school districts with a greater student population, a higher student to school nurse ratio, and more school buildings tend to have a greater asthma prevalence within their student populations.

In 2020, this cost is projected to be around $2.6 billion.

In 2010, the state of Pennsylvania spent approximately $1.7 billion in health care costs for asthma and absenteeism alone.

KEY FINDING Schools who serve a greater percentage of low income, and special education students are less likely to test for environmental hazards. When these schools do test, they are less likely to remediate the hazards.
Key Recommendations

1. Create a statewide database for school environmental health data to be collected and reported publicly. Teachers and school staff have a right to know about the occupational hazards present in the workplace environment. Every student deserves to learn in a safe and healthy environment. A state clearinghouse would also provide more information on equitable distribution of state and federal funds for large capital projects to improve the environmental quality of buildings.

2. End the moratorium on PlanCon and fund school infrastructure investments through the General Fund. Funding should include new construction and renovation projects, as well as support the Maintenance Grant Program. Funding should be a shared responsibility between the federal and state government, and local school districts.

3. Work with statewide advocates, scholars, practitioners, educators, contractors to create an equitable funding formula for the disbursement of PlanCon and Maintenance Grant Program awards to prioritize school districts with older buildings, and who are less likely to remediate hazards found in their buildings—those who serve a greater percentage of low-income, special education, and minority students.

4. Advocate for safe siting laws to protect schools and their occupants from harmful, proximal point sources of pollution. No pollution creating facility should be within a mile of a school.

5. Create evidence-based policies that proactively prevent negative health impacts. School environmental health policies should include mandatory reporting for environmental health data, enforcement action, and required communication with the school community.

6. Invest in training and professional development for school facilities staff, collaborating with researcher, building and engineering specialists, and public health professionals, to ensure construction and maintenance best practices are utilized to increase energy efficiency and lifetime use of school facilities.

7. Incorporate resiliency into new construction and renovation standards so that school facilities can continue serving as emergency shelters in times of disaster. Schools should be designed to withstand flood, weather, seismic, and wind events.