



## SWPA Regional Overview: Environmental Health in Schools (2025)

**Who/Where:** Southwestern Pennsylvania (SWPA)—includes Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, and Westmoreland counties (p.11).

**Sample:** 98 districts in SWPA participated; high response rate of 97% (p.9).

**Demographics:** SWPA's student population averages 77% White, 11% Black, 3% Hispanic, with a 37.75% poverty rate (pp.11-12).

### Key Environmental Health Findings

#### Aging, Polluted Infrastructure

**Buildings:** The average high school in SWPA was built in the early 1960s—20 years older than the national average (p.24). Many are pre-1978 (lead paint ban) and pre-1979 (PCB ban).

**Industrial Legacy & Air Pollution:** Districts such as Clairton are directly impacted by air pollution from the nearby Clairton Coke Works, a major emitter of particulate matter (PM2.5), sulfur dioxide (SO2), and other pollutants (external EPA/source, contextual reference). These emissions worsen the baseline for environmental exposures found inside schools, especially impacting students already experiencing hazards like poor HVAC, mold, and asthma triggers (see HVAC/air quality data, pp.12-16, and asthma, pp.18-21).

**Indoor Air Quality & HVAC:** Upgrades, but Not Enough: 82.7% of SWPA districts reported at least some HVAC system updates (p.15). However, many buildings still lack modern HVAC and/or AC, resulting in dangerous heat and poor air quality on high ozone or PM days (pp.13-14).

**Climate Vulnerability:** Schools are increasingly closing or going remote due to extreme heat, made worse both by outdated infrastructure and regional air pollution alerts (p.14).

**Asthma:** Prevalence Lower, Control Worsening: The reported average asthma prevalence in SWPA dropped, but “rescue” medication doses doubled in many tracked districts—indicating uncontrolled asthma likely due to poor air quality (pp.18-21).

**Disparities:** Higher asthma rates and less remediation are found in districts with more low-income and minority students, overlapping with higher outdoor air pollution burdens (p.6, 20-21; contextual reference: Clairton/Mon Valley).

**Nurse to Student Ratio:** one district in SW PA stretches to 3,846 students per nurse (p.20–21).

## Mold

**Testing Without Action:** 52% of SWPA districts tested for mold, but remediation docs exist for only 1 of the 26 districts advised to remediate (p.22-23). Poor ventilation and historic flooding risk (much of the region is river valley) drive persistent moisture and mold—a major asthma and allergy trigger (p.22).

## Lead & PCBs

**Lead:** 71.4% of SWPA districts tested for lead in water, but only 63.3% tested every building. Even fewer tested for lead in paint or dust, and almost no districts fully remediated despite finding hazards (pp.27-32).

**PCBs:** Only 2% of SWPA districts tested for PCBs, despite most buildings' risk (p.26).

## Radon

**Critical Gaps, High Risk:** Only 15.3% of SWPA districts reported radon testing, despite virtually all being in EPA Zone 1 for elevated risk. Of those tested, two-thirds were over the EPA action level, but only two reported mitigation actions (pp.39-41).

## PFAS and Water Contaminants

**PFAS:** Only 3% of SWPA districts tested for PFAS, typically relying on municipal data—not on-site results. Over 30 PA schools statewide have now reported detectable/excessive PFAS (pp.37-38).

**Other Water Contaminants:** 54% of districts tested for contaminants (like copper, bacteria), 17% exceeded limits (p.35).

## Green Cleaning, Pesticides, and Turf

**Green Cleaning Decline:** Just 10.2% of SWPA schools reported using any 3rd-party certified green cleaning products, and most had no idea what products were used (pp.42-43).

**Pesticide Exposure:** 84.7% use some form of pest management, mostly conventional pesticides—fewer specify an Integrated Pest Management (IPM) contractor (p.46).

**Artificial Turf Explosion:** The number of artificial turf fields jumped from 73 to 168 within SWPA (2019 to 2022), raising concerns about PFAS, microplastics, heat, and local landfill impacts (pp.51-54).

## Anti-Idling

**Diesel Danger Near Schools:** Only about half (53%) of SWPA districts are in compliance with anti-idling sign requirements—critical with high asthma rates and frequent bus idling in areas like Clairton, where outdoor ambient air pollution is already a major issue (pp.48-49).

## Emergency Preparedness

**Limited Planning for Hazards:** Fewer than a third of SWPA districts have prep plans for weather, disaster, or hazardous materials. This is especially concerning in older, potentially structurally compromised buildings—particularly on high-smog or chemical exposure days (pp.57-58).

## Strategic Angles and Local Context for Journalists & Advocates

### 1. “Breathing Double Trouble in Clairton & the Mon Valley”

Children in districts like Clairton face the highest environmental health risks—school buildings with antiquated HVAC and water systems, already set in communities with some of the nation’s worst outdoor air pollution (context: EPA data, local air reports). The asthma rate and risk profile is compounded in schools located near major industrial sources, with no systemic remediation or policy in place (pp.12-16, 18-21, 39-41).

### 2. “Testing ≠ Safety: Hazards Found, Few Fixed”

A clear regional theme is that even when lead, mold, radon, or PCBs are tested for and identified, schools rarely remediate—putting thousands of students in harm’s way (pp.22-28, 39-41).

### 3. “Turf, Trucks, and Toxins—SWPA’s Cumulative Burden”

The rapid rise of artificial turf, high use of pesticides, and lack of green cleaning reinforce an overall chemical environment that stacks risk factors for SWPA kids—especially those already living near industrial pollution (pp.42-46, 51-54).

### 4. “Hot, Moldy, and Vulnerable: Climate and Infrastructure Crisis”

Frequent overheating, water intrusion, and ineffective air conditioning trigger health and absenteeism issues—and lowest-income, high-minority districts rarely have resources for resilient or healthy upgrades (pp.14, 20, 22).

### 5. “Missed Funding, Missed Opportunity”

ARPA/CARES funds were widely available, but many SWPA districts did not prioritize

environmental remediation—failing to leverage once-in-a-generation resources to fix their most urgent health hazards (pp.15, 59).

## Solutions/Action Items

State/Local: Mandate and fund annual testing and public remediation for lead, radon, mold, PCBs, and PFAS in all high-risk districts.

Policy: Require and enforce IAQ, anti-idling, and green cleaning policies; prioritize funding for upgrades in high-burden areas like Clairton.

Community: Involve parents—encourage Right-to-Know Act (RTK) requests about their district’s environment, modeled on the sample advocacy letter (p.61).

Legislation: Expand public funding for water, HVAC, and green infrastructure, especially in schools located near known pollution sources.

Require transparent IAQ and emergency preparedness plans in every district.

Prioritize infrastructure modernization for the oldest facilities, especially in low-income communities.

Expand support for green cleaning, IPM, and safe field/playground practices.

Aggressively publicize and streamline the application process for available state and federal funding.

## For Further Investigation & Accountability

Has your district disclosed air pollution events or coordinated with local air authorities, especially on “code orange” or higher days?

Is there a parent notification protocol if conditions inside the school become unsafe due to external air events (e.g., flaring at Coke Works)?

## Local Success Stories: What’s Working in SWPA

### **Beaver Area School District (HVAC/IAQ Modernization):**

Beginning in 2020, Beaver Area SD overhauled its HVAC by replacing decades-old classroom “Univents” and rooftop units with dedicated outside air systems (DOAS), installed humidistats and CO<sub>2</sub> monitoring, and upgraded digital controls for comfort and air quality—aligning with public health recommendations (p.16).

**Connellsville Area School District (Lead Remediation):**

In 2022, Connellsville tested for lead at its football stadium, found hazards, and completed prompt remediation—showing that action is possible when hazards are identified (p.29).

**Pittsburgh Public Schools (Filter First for Water):**

Starting in 2016, Pittsburgh replaced every non-filtered water fountain across 70 schools (totaling 1,295 fountains) with lead-filtering units, using a “Filter First” approach—a statewide model for proactive lead reduction (p.33).

**Pine-Richland School District (Radon Mitigation Champion):**

After testing found high radon in multiple locations, Pine-Richland installed mitigation systems in three schools as part of WHE’s “1000 Hours a Year” program, and remains a leader in statewide advocacy for stronger school radon laws (p.41).

**North Hills School District (Minimal, Safe Cleaning):**

North Hills reduced its cleaning product inventory to just three (one disinfectant is Green Seal and UL ECOLOGO certified), proving that schools can simplify supplies and still prioritize student health (p.44).

**York County (Not SWPA but PA Example – Mold/Asbestos Grants):**

Four York County school districts (including Red Lion Area SD and York City SD) won state grants totaling \$4 million to remove mold/asbestos, providing a model for future state-supported remediation in SWPA (p.23).

**Otto-Eldred School District (Anti-Idling Policy & Signage):**

Proactively posts anti-idling signs at bus loading zones and parking areas, strengthens anti-idling enforcement in their Transportation Policy Manual, and trains all drivers to understand health risks (p.50).