

Toxin turns up in school buildings, but officials say there's no danger

BY BILL EGBERT
DAILY NEWS STAFF WRITER

Monday, April 7th 2008, 4:00 AM



Worker wipes down windows at PS 199 on the upper West Side. City health officials said PCBs were found but did not pose a danger.

Window sills and door frames in dozens of city public schools contain a toxin that can lower IQ scores, causes asthma and is linked to cancer, a Daily News investigation has found.

Polychlorinated biphenyls are common in window and door caulking found in 266 [New York City](#) schools built or renovated in the 1960s and 1970s, officials concede.

Random tests, conducted in February and last month for The News, found the PCBs in eight of nine schools. Six of the nine contained levels of PCBs deemed unacceptable.

Last week in response to The News' findings, the [Department of Education](#) performed its own air and wipe tests in the affected schools. In all but one test, the PCBs in the caulking had not leaked into the air or surrounding environment.

At [Public School](#) 199 on the upper West Side, low levels of PCBs were detected in the first-floor cafeteria in both air and wipe samples. [City Health Commissioner Dr. Thomas Frieden](#) said the levels were below those deemed unsafe by the federal government.

"The independent consultant's findings resolve the central question raised by your investigation: Do PCBs pose a health risk in the schools where they're present in intact caulk sample? ... The findings clearly indicate they do not," Frieden said in a letter to the Daily News.

The buildings where PCB caulking at unsafe levels was detected by The News included five elementary schools and one middle school in neighborhoods throughout the city.

Besides PS 199, the other five were: PS 30 in Harlem; PS 86 in [Jamaica, Queens](#); PS 160 and PS 178 in [Baychester](#), the [Bronx](#), and Intermediate School 131 in [Soundview](#), the Bronx.

[Brooklyn](#) has 88 public school buildings built in the 1960s or 1970s; The Bronx has 61, [Manhattan](#) 53, [Queens](#) 39 and [Staten Island](#) 25.

Of the tested schools with unsafe PCB levels, the lowest level found was nearly four times the federal threshold of 50 parts per million.

City Department of Education officials insist the caulking poses no threat as long as it is left alone.

[Spokeswoman Margie Feinberg](#) said state regulations "permit the caulk to remain in place" and that the material is removed only when renovations take place. The department has no plan to remove all the material.

Experts say PCBs left undisturbed can still leach out of the caulking into surrounding material or become airborne.

From the 1950s through most of the 1970s, PCBs were added to caulking to keep it flexible, but that changed in the late 1970s when scientists discovered possible adverse health effects caused by exposure to PCBs.

(Page 2 of 2)

By 1978, the [Environmental Protection Agency](#) listed PCBs as a probable carcinogen and issued standards for removal and disposal of materials like PCB-tainted caulk, now considered a hazardous substance.

Since then, owners of buildings with unacceptable PCB concentrations of 50 parts per million or more in caulking are liable for federal fines of \$3,000 and \$25,000 per day until the material is removed.

Even under its own policy, the Department of Education only removes window caulking during renovations, leaving tainted caulking in place in door frames and masonry joints. For example, the department's policy would have no effect at PS199, where caulking obtained from an outside door frame contained PCB concentrations more than 4,000 times the recommended acceptable threshold.

Over the weekend, after low-level PCBs were detected in air and wipe samples in the cafeteria, activities in the school were canceled and a cleanup crew was sent in.

"I'm concerned about the welfare of my child," said Bill Hawthorn, whose daughter attends kindergarten at PS 199. "If a child plays with this caulking or gets it in their system, what does that do to a 6-year-old? This may be the kind of thing where you don't want to take a chance."

[Daniel Kraft](#), who heads the EPA enforcement and compliance division's toxics section in this area, said, "Wherever we find [PCB contamination] in high concentrations, we usually see it in adjacent materials."

Kraft suggested the education department's policy violates federal law.

"The notion that 'As long as we don't disturb it, we're in compliance with the regulations' is not an adequate interpretation," Kraft said.

Chemical hits children much harder

When the Environmental Protection Agency warns that PCB-tainted window caulking is a potential hazard, they're talking about the effect the toxins could have on grownups.

The ramifications for children, experts say, are even more alarming. Regulations still ignore the harm PCBs can do to growing children as so-called "developmental" toxins — even in low concentrations, they say.

"The picture is becoming clearer that PCBs are potent developmental toxins," said [Robert Herrick](#) of [Harvard's School of Public Health](#).

[David Carpenter](#) of the Institute for Health and the Environment at [SUNY Albany](#) said PCBs interfere with thyroid hormones and testosterone, both important to growth and adolescent development.

Lab tests also show that even low-level exposure inhibits growth of brain cells, and several recent studies led Carpenter to conclude, "The higher the child's exposure to PCBs in early life, the lower the IQ and the more the child exhibits anti-social behavior, depression and attention deficit hyperactivity disorder-type symptoms."

A 2004 German study of children in schools with PCB-laden caulk found the compounds accumulated in students' blood.

Of the 377 pupils tested, 95% had low-level concentrations in their blood. The authors could not link the PCB concentrations to specific adverse health risks.

Japanese researchers have even suggested a link between widespread childhood PCB exposure and the spike in diagnoses of attention deficit disorder and learning disabilities.

Tainted caulking an 'emerging problem'

PCB caulking in public schools sparks special concern, but the problem isn't limited to schools.

Any building built between 1960 and 1977 that has not had all its caulking replaced is most likely still contaminated with PCBs at levels many times the threshold for recognized health dangers.

"The caulking issue is something the agency is looking at as an emerging problem," said Daniel Kraft, head of the Environmental Protection Agency enforcement and compliance division's toxics section in this area.

[Daniel Lefkowitz](#), head of [Westchester](#) County's task force dealing with PCBs in schools, discovered the problem in caulking at his son's suburban school. That inspired the state's new protocol, requiring an aggressive response to remove tainted caulking.

Lefkowitz said contamination also has been found at [Mount Sinai Medical Center](#) and at the sprawling [Co-op City](#) in the Bronx.

wegbert@nydailynews.com