Toxic City
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The Philadelphia Inquirer & Daily News

Supported by grants from USC Center for Health Journalism, the Dennis A. Hunt Fund for Health Journalism, and the Lenfest Institute for Journalism.
Poorest big city + old housing meant more lead poisoning.
Philly’s shame: City ignores thousands of poisoned kids
These twin boys, age 2, were poisoned by lead in their rental home. One boy’s blood lead level was 46! Their landlord? NFL Hall of Famer Marvin Harrison, a millionaire with 80 properties.
Landlords ignored the law. This landlord was ordered in lead court to remove toxic paint. He used a blowtorch and made it worse.
Toxic City: Tainted Soil

Children at risk in their yard

- Philly industrial past still haunts
- No database of toxic soil existed so we dug up the dirt and made one
- 500 samples from 114 locations. Three quarters of properties had hazardous lead
WE DUG A LOT OF DIRT: 500 bags in all
Dirt, Dirt, And More Dirt!! OFF TO THE LAB!
More smelters than any big city

Where We Found Unsafe Levels of Lead

Fourteen smelters in the “river wards” once spewed toxic lead over the Fishtown, Kensington, and Port Richmond neighborhoods. In the first comprehensive analysis, reporters tested the soil for lead in 114 locations, including parks and playgrounds. Three out of four had hazardous levels. One backyard tested nearly 25 times the acceptable limit.

Lead in the soil is measured in parts per million (ppm). Parents are advised to keep children from playing in soil above 400 ppm.

Acceptable limit = (400 ppm)

Former lead-smelting factory
Toxic City: Tainted Soil

Boom in housing stirred up dirt

- Dust samples on playgrounds showed high lead
- Construction workers were not taking basic steps like watering down the dirt
- Permit database can identify hot spots for risk. Violations were few.
We spent a day at a lab learning how to take dust-wipe samples.
Jana’s daughter got lead poisoning from dirt in her backyard. At 18 months, she spoke only two words.
Breakneck construction unearthed a toxic legacy, coating playgrounds, yards and front steps with lead dust. Simple dust-control measures would have prevented that. Mina’s BLL was a 9 at a year old.
Day after day last September, toxic lead-paint chips fluttered from the ceiling of a first-grade classroom and landed on the desk of 6-year-old Dean Pagan.
Children at risk in their classroom

- Most of 200 city public schools built during lead paint and asbestos era
- Schools are awash in flaking paint
- Over 100 schools had ‘high priority’ asbestos damage at last major checkup
Lead paint (right) and mold growth (below)
6-year-old Dean Pagan landed in the hospital with a 46 blood lead level.

He has lost his ability to do simple math, like adding three plus three in his head.
School Checkup

Find detailed reports on hazards inside Philadelphia classrooms.

Select a school to see its report

Search for a school...

MAP: Search by location ›

Search by type (Elementary, Middle, High) ›

Many of Philadelphia's 130,000 public-school students spend their school days inside buildings that can make them sick and miss school and even send them to the hospital. Children are at higher risk from school hazards as lead dust, damaged asbestos and asthma triggers such as mold, mouse feces and urine, and cockroach parts - all found in far too many Philadelphia classrooms.

(Updated April 2018)
Thank you for assisting our research project looking at the potential for asbestos fibers in settled dust. Follow these easy steps to complete this test:

1. Find a place on the floor, a shelf, a desk top, a windowsill, a cubbyhole, or another area that appears to have dust or is located near and deteriorated asbestos and is accessible to small children and teachers. (You’re looking for damaged or chipped floor tiles, pipe insulation, ceiling tile, plaster, spackle.) If you can, take a photo of the area prior to wiping.

2. Put on a pair of disposable gloves. Open the dust wipe sample packet and unfold the wipe.

3. In a square area that is about 4 by 4 inches (or 10 by 10 centimeters), make as many S-like motions as needed to wipe the entire sample area, moving from side to side and top to bottom of the 4 by 4-inch square. Apply firm pressure on the wipe.

4. Fold the wipe in half, keeping the dirty side in, and repeat the wiping procedure. (see below). Flip the wipe and repeat.

5. Now fold the wipe into an even smaller square (roughly the size of the wipe packaging) and repeat again, concentrating on collecting dust from the edges and corners of the sample area.

6. Stuff the wipe into the sample tube. Put the cap tightly on the container. On the label, write the school name, time and date, room number and specific area from which the sample was taken (such as Rm. 101, floor tile, under window ledge).
8.5 million cancer-causing asbestos fibers in settled dust
These are asbestos results from an elementary school in South Philly.

Scary amounts of asbestos fibers:
- 4.5 million
- 1.89 million
- 4.1 million
- 567,000
- 2.8 million
- 3.2 million

OVER 100,000 is DANGER LIMIT
This mom was upset that her 10-year-old daughter, who suffers from developmental delays and autistic spectrum disorder, regularly drank from a water fountain at her school that tested at 44.6 ppb.
We got the crazy idea to test for silica. I’m not kidding. And we did......
By the numbers:

- 5 years worth of internal maintenance records
- 120 interviews with teachers, parents, nurses, students, experts
- 9,000 environmental hazards, dating back to 2015
- 24 teachers tested for lead, asbestos, mold in 19 schools
- 9,800 micrograms per square foot of lead in dust on floor of 2nd grade classroom. The highest lab result for lead. (Federal hazard level is 40 micrograms for residential floors).
- 250 square feet. The amount of peeling paint on ceiling of Dean’s classroom
- 10.7 million asbestos fibers - the highest lab result
- 44 days. The # of school days 9-year-old Ashley Garner missed because of her asthma
Kids got sick
Parents in shock, just pray
They do fix, they mess it up

J. Ham
Lead

TOXIC HELL
And we got a puppy!

Questions?