Hazardous rituals: mercury pollution in the Bronx


For years, elemental mercury or azogue, has been used in the Afro-Caribbean communities for ritualistic purposes. Families practicing Vodun, Santeria, Espiritismo, and other underground religions often use the substance to cleanse their homes of spirits, to put spells on loved ones, even to improve the skin or cure intestinal disorders. "As a girl, I used to watch my aunt cleanse her home with mercury," said Evelyn Cordero of the Bronx, as she left La Division Botanica on Fordham Road. "I remember wondering what made the water glitter as she mopped."

In March, the Rockland County Department of Health added an article to its health code that prohibited keeping mercury in an uncovered container in homes. It also required that all mercury sold in stores must be correctly labeled in English, French and Spanish, and must contain warnings about its danger. In addition, vendors are required to inform buyers of the dire consequences of mercury spills and exposure.

"This was specifically done because of the knowledge that people in the Afro-Caribbean neighborhoods of Rockland were using mercury for ritualistic purposes," said Dr. Arnold Wendroff, the environmentalist and director of the Mercury Poisoning Project, who has been monitoring mercury use in these communities for more than ten years.

Is this a wake-up call for the Bronx?

Given the Bronx's much larger Haitian and Latino community, why has New York City's Department of Health not enacted similar laws banning the use of uncontained elemental mercury? "There is published hard data on mercury sales in the Bronx, and on the influx of mercury into the sewage treatment plants like Ward's Island," said Wendroff. "But no one wants to rock the boat because they know there's a major mercury problem in the Bronx."

Even Rockland County is careful about rocking the boat. Which is why, said Wendroff, the Rockland County Health Code sets its own level for the evacuation of buildings, using a measurement of mercury levels that is 100 times higher than those currently used in the rest of the country. (the national standard for evacuation in mercury spills is 1 microgram per cubic meter of air. For Rockland, it is 100 micrograms.). "And the reason why it's so high," he adds, "is apparently because the Rockland County Department of Health believes there is a problem, but they have no place to put people who would be displaced from their homes during an evacuation."

Carmen Santiago sells religious items at the Guadeloupe Botanica on the Grand Concourse and 183rd Street. "Mercury wards off evil spirits in the home, and has been used for that purpose for quite a while," she said. "I know mercury is bad for you and that the cops will close you down if you sell it. I also know that you can still buy in some botanicas if you know someone. But I don't see it."

Neither does the owner of La Division Botanica, a man who calls himself "Professor" Eliseo, but refuses to reveal his given name. Eliseo, 52, who has owned his botanica for nine years and also teaches Espiritismo for $150 a session, said. "I have been men pour mercury from the jar into..."
$150 a session, said, "I have been men pour mercury from the jar into gelatin capsules to sell it for a couple of dollars. And I used mercury a couple of times myself by placing it in candles." Eliseo said he stopped after hearing about someone who drank mercury to cure his intestinal problems, but damaged his kidneys in the process. "I can tell you that mercury is being sold and used today. But I do not either sell it or use it," he adds. Instead, he employs herbal preparations in the rituals he practices.

Eliseo points out that since 9/11, paranoia has spread throughout the botanica circuit. "I've heard rumors that if you sell mercury, you can be arrested because the government would think you might be making bombs," he said.

There is no truth to the notion that mercury is an ingredient for bombs. It is also not illegal, as long as it is properly contained and labeled. What is true, however, is that mercury is a menace. Sprinkled on floorboards, it evaporates and seeps into the floors and walls for up to 15 years.

Inhabitants of an apartment inhale the invisible and undetectable vapors, which can damage the brain, heart, lungs, and liver. Children and fetuses are especially vulnerable to mercury's effects, which can include insomnia, bronchitis, emotional instability, neurological problems, gingivitis and developmental problems.

"What users don't know is how toxic mercury is long after they've used it," said Wendroff, "and how compromised developmentally they may become if they have been contaminated." Unlike lead or asbestos, he points out, mercury breaks up. "It's a liquid and a gas at the same time. The little droplets on the floor are continuously evaporating. And the vapor is what's toxic. It is inhaled and absorbed into the blood. The exposure is continuous and lasts for years." Which means that families who move into apartments where practitioners once sprinkled mercury are also at risk, although they may not suspect it.

To measure the extent of mercury use in the Bronx, doctors at Montefiore Medical Center conducted a study in 1995 in which an Espiritismo practitioner went to Bronx botanicas to see if she could buy mercury at each. She was able to buy unlabeled mercury at 38 of the 41 botanicas she visited. Thirty-five shops reported sales averaging 930 pounds a year. In addition, more than 29 percent of botanica workers and customers indicated that the primary way they used mercury was to sprinkle it on floors.

Since 1995, said Wendroff, "Somewhere between 8,000 and 50,000 homes per year are being contaminated with enough mercury to warrant evacuation."

Local environmentalists like Marian Feinberg, the environmental health coordinator of the organization "For a Better Bronx," believe that these statistics are alarmist and that putting the blame solely on the Hispanic community is racist. "If mercury is so dangerous, why are dentists still putting it in our mouths?" she said. "most of the mercury in the environment that we're exposed to comes from power plants. The tuna fish that you eat today is more dangerous. It's full of mercury."

Wendroff, who has a Ph.D in medical sociology with a specialty in the traditional medicine and witchcraft of the southeast African country of Malawi, where he served in the Peace Corps, first became aware of the mercury problem in 1991 while teaching science at a Brooklyn junior high school. Pointing to the symbol for mercury, he asked if anyone knew what it was used for, thinking that kids would reply, "Thermometers." However, one boy volunteered that his mother sprinkled mercury on the floor to ward off what is known in Santeria as brujo, or evil spirits. "It suddenly rang a bell," said Wendroff, who also noticed that the child was exhibiting signs of mercury exposure such as anorexia, irritability and forgetfulness.

Wendroff claims that not only are individual homes tainted by mercury use, so is the city's water supply. It becomes compromised when excess mercury is either flushed down toilets or poured down drains after Santeria rituals are completed.

However, mercury in the community has become a taboo subject. Few want to talk about it, and even fewer want to own up to the fact that it is a problem. The New York City Department of Environmental Protection tested New York City's waste water in late 2003 and early 2004 and discovered that there was an enormous excess of levels of mercury in the
Ward’s Island plant, which serves Washington Heights and the South Bronx.

Most politicians, like Congresswoman Nydia Velasquez, Senator Bill Bradley, former Mayor David Dinkins, and former Bronx Borough President, Fernando Ferrer, have paid lip service to the problem, but little more. Wendroff claims to have written to almost every local politician and said that they have either ignored him or voiced their concern with no follow-up. When The Bronx Journal contacted Bronx Borough President Alfonso Carrión and Ferrer for this article, they both refused to comment.

Mercury is a political hot potato, said Wendroff, in part because politicians fear alienating the Hispanic community by placing the blame on ritualistic mercury use, and in part because any real solution is expensive. “Cleaning up mercury spills can cost up to $50,000 per apartment,” he explains. “It can be cleaned up. But first you have to find it, which is also expensive. And embarrassing. Because all these political people know. And so does the media. They’re treating it as a ‘potential health threat’ and not doing the research themselves.” In the end, he believes, the government, because of its past negligence, will be directly responsible for the cleanup.

What both Wendroff and Feinberg agree on is that public health education is crucial. “I don’t think it’s about politicians,” said Feinberg. “It’s about health education. The most affecting change will come when people will start to be more educated in general about the problem.”

Still, Wendroff remains skeptical. He points out that in 2000 the New York City Department of Health created two pamphlets, one for laypersons in English, Spanish, and Creole, and another for health care workers. “But they never adequately distributed them to the public,” he said. “They did a cover-your-ass operation. And that was it. The city is at a fabulous, fabulous legal liability. After all, our officials failed to seriously assess the problem. And they never communicated their concern to the people.”

For now, the Bronx—and the New York City Department of Health—needs to take inspiration from Rockland. As Dr. Joan Facelle, Rockland’s health commissioner, said bluntly, “We don’t know the extent of the problem.”

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