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Researcher faces outcry

Trying to abate lead, he has been accused of exposing kids to it

By Jonathan Bor and David Kohn

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While pursuing a public health degree in the 1980s, Mark R. Farfel visited a clinic at the Kennedy Krieger Institute where scores of lead-poisoned boys and girls spilled into the hallways awaiting treatment.

There, he reached the central epiphany of his career: Youngsters already harmed by deteriorating lead paint were receiving world-class care. But who was "treating" the inner-city rowhouses that were sickening kids in the first place?

"All we were doing was waiting for children to be poisoned," said Farfel, who then spent two decades at Kennedy Krieger and the Johns Hopkins Bloomberg School of Public Health studying ways to reduce the hazard posed by lead in and around homes.



A self-described "shy guy," Farfel now finds himself in a predicament he would never have expected during a career in which he won praise tackling one of the city's most persistent public health problems. For the second time in the past decade, he faces criticism that he exposed poor black children to environmental hazards in the name of science.

The current outcry concerns the spreading of compost on the lawns of nine Baltimore homes in 2000 - a study he said protected children by chemically binding up lead in the soil but that black leaders say may have exposed youngsters to hidden contaminants.

Marvin L. "Doc" Cheatham Sr., president of the Baltimore chapter of the National Association for the Advancement of Colored People, said at a news conference last week: "We don't want to do this kind of work at the expense of turning our children into guinea pigs."

The issue has spilled over into Congress, where Sen. Barbara Boxer, a California Democrat, plans to investigate the experiment as part of a wider look into the health impact of using sludge and compost as fertilizers.

For Farfel, hired three years ago to run New York City's registry of people exposed to environmental fallout from the World Trade Center attacks, the criticism flies in the face of everything he's tried to accomplish.

"I've really dedicated my career to public health, to the health of children," Farfel, 50, said in a phone interview. "I feel very hurt by the things being said, and I certainly never would do anything that would hurt children or

families."

The "things" people are saying started in 2001 when the Maryland Court of Appeals likened an earlier study of Farfel's to Nazi experiments and to the Tuskegee study in which government researchers in Alabama purposely left black syphilis patients untreated to study the disease's progression.

The court sent back for trial a series of lawsuits on behalf of children who lived in houses that had received varying degrees of lead abatement.

Three of those suits were settled confidentially, while at least four others are pending. Now, in the controversy over the compost studies, some black leaders allege that Farfel again subjected children to risks and didn't adequately inform the community beforehand.

"My concern is, how much do we hand to this person to study?" said Michael Johnson, state director of the Black United Fund. "I'd have suspicions of anyone who's been lambasted by the court in reference to his previous work."

The criticism has drawn words of exasperation and support from many lead experts, who consider Farfel's work seminal.

"This researcher has helped reduce lead exposure for hundreds of thousands of children," said Dr. Bruce Lanphear, director of the Environmental Health Center at Cincinnati Children's Hospital Medical Center.

Raised in a family that championed progressive causes, Farfel said his upbringing prepared him to understand the social divides prevalent in Baltimore.

His father, pediatrician Harold S. Farfel, upset the city's racial conventions when he admitted the first black baby to Sinai Hospital while a resident there in the early 1950s. His mother, Mary, was a social worker with the old Baltimore League for Crippled Children.

The family moved from Randallstown to Mount Washington in the 1960s - against the tide of white families fleeing the city for the suburbs. He attended the predominantly black Pimlico Junior High School, where he said he learned what it was like to be in a racial minority, as well as Polytechnic Institute, where he did well enough to skip his senior year.

Later, after graduating from McGill University in Montreal, he decided to pursue a doctorate in public health because "it seemed like a great way to wed science and socially meaningful work." At Hopkins, however, he was struck by the contrast between the wealthy institution and the impoverished neighborhood that surrounded it.

"It's the way I'm wired," he said. "I wanted to bridge that gap."

During his studies there, Farfel forged a bond with Dr. J. Julian Chisolm Jr., a Kennedy Krieger pediatrician who treated thousands of lead-poisoned children. To the severely afflicted, Chisolm administered a drug treatment that prevented further neurologic damage - but only if the youngsters returned to safe homes. And there were tens of thousands of lead-painted homes in Baltimore, many with a film of lead dust from deteriorating windows, floors and doors.

For his dissertation, Farfel studied the methods renovators were using to remove the paint. He was appalled by what he found: torching and sanding of interiors, which raised a toxic cloud.

Later, appointed to Kennedy Krieger and the Hopkins public health faculty, Farfel found safer abatement methods that were eventually adopted by the U.S. Department of Housing and Urban Development.

In 1993, Farfel began a study that eventually drew the harsh critique by the state's highest court. In it, researchers recruited close to 100 families with healthy children to live in homes with varying degrees of lead abatement.

Researchers, according to a Kennedy Krieger statement, found that the levels declined or stayed the same in the vast majority of children "even though in a few cases, they rose."

But several families sued Kennedy Krieger and the researchers, charging that they knowingly exposed children to less than optimal conditions and failed to warn families of the risks. Two of the children ended up with higher lead levels than they had previously, according to parents.

Farfel thought his experiment safeguarded not just the study participants but other children who would benefit from safer homes. But the Court of Appeals, reversing a lower court's dismissal of the case, found otherwise.

"It can be argued that the researchers intended that the children be the canaries in the mines but never clearly told the parents," Judge Dale R. Cathell wrote in the 2001 decision.

Dr. Gary Goldstein, chief executive officer of Kennedy Krieger, said Farfel studied families from inner-city Baltimore because that's where 95 percent of the children coming to the clinic lived.

"His goal was to have a war on lead poisoning, and the war actually worked. Our clinic has almost closed. There are so few children with lead poisoning."

During his tenure as Baltimore health commissioner, Dr. Peter L. Beilenson worked regularly with Farfel on lead issues. He strongly defended Farfel but suggested that the researcher might not have been aware of how his work would appear.

"He's extremely dedicated to reducing the problem of lead poisoning. I'm not sure how savvy he was about how some of his projects might sound," said Beilenson, who is now the Howard County health officer.

Just months before the court's opinion, Farfel turned his attention to the soil surrounding properties in neighborhoods that had severe problems with lead. Though soil was regarded as a secondary problem, it often contained lead residues from demolition, renovation and exhaust.

In the HUD-funded study, researchers used Class A compost, made from a combination of sewage sludge, wood chips and other organic matter. The mixture, heat-cured to kill pathogens, has been sold to homeowners for three decades and is spread on lawns at the White House and Camden Yards.

Previous studies had shown that iron and phosphate contained in the compost can bind to lead in the soil, allowing it to pass safely through the body if consumed. And in the Baltimore experiment, researchers found that applying the compost reduced lead levels in the soil by about 70 percent.

But later, critics pointed to rising concerns that sludge can contain heavy metals and other contaminants, and questioned why researchers again recruited poor African-American families.

Thomas Burke, an epidemiologist at the Johns Hopkins Bloomberg School of Public Health, who chaired a 2002 National Academies of Science report on biosolids, said Farfel's study was safe for all participants. He said critics were misinterpreting the NAS report, which questioned the safety of Class B material, a less sanitary product restricted to agriculture.

Dr. Herbert Needleman, a University of Pittsburgh scientist known for studies that linked learning deficits to low-level lead poisoning, said he's convinced that Farfel is an ethical scientist who might have grown distant

from community sensitivities.

"You begin to think of subjects not as individuals but as data points, and they lose their individuality," Needleman said. "It happens to everybody, even to me. That's what happened to Mark."

jonathan.bor@baltsun.com david.kohn@baltsun.com

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