High levels of lead poisoning found in hundreds of isle kids

By Sophie Cocke March 5, 2017

About 1,800 infants and toddlers in Hawaii have tested positive for high lead levels in their blood in recent years, according to data compiled by the state Department of Health, indicating that lead exposure, which can cause permanent developmental disabilities, continues to be a problem in Hawaii years after the state set a goal of eliminating all cases of lead poisoning and decades after the country recognized it as a major health problem.

A PROBLEM WITH LEAD

1,765 children under the age of 3 have tested positive for elevated levels of lead in their blood in recent years. Rates have been highest on Kauai and Hawaii island. The numbers from 2011 to 2015:

ISLAND | KEIKI TESTED | POS. RESULTS | PCT.

Oahu | 41,136 | 1,080 | 2.6% Kauai | 3,113 | 155 | 4.9% Hawaii | 7,366 | 380 | 5.1% Maui | 4,123 | 121 | 2.9% Molokai | 280 | 3 | 1.0% Lanai | 21 | 1 | 4.7% Unknown* | 3,656 | 25 | 0.7%

Unknown* | 3,656 | 25 | 0.7% **Total: 59,695 | 1,765 | 2.9**%

• Lab results reflected in the unknown category did not have addresses associated with them.

Source: Hawaii Department of Health

On some islands, lead levels have spiked as high as two to three times the rate for children in Flint, Mich., at the height of that city's lead crisis that sparked community outrage.

The Health Department data, based on lab results of children under 3, also indicates that roughly two-thirds of young children in Hawaii aren't being screened for lead, even though children on Medicaid are supposed to be tested at about 1 and 2 years of age, a requirement that some say should be expanded for all young children.

"If we aren't testing everyone, we don't really have an idea of how many children annually are lead-poisoned," noted Barbara Brooks, state toxicologist with the Department of Health's Hazard Evaluation and Emergency Response Office, who helped compile five years of data on lead exposure in children. For years, Hawaii has lacked statistics on childhood lead exposure rates. The Health Department lost federal funding for its Childhood Lead Poisoning

Prevention Program in 2003 and largely discontinued data collection, education and prevention efforts.

But heightened media attention on the issue of lead exposure following the Flint water crisis prompted health officials to refocus attention on the issue, including spending months reviewing lab reports for thousands of children that it received between 2011 and 2015.

Overall, about 3 percent of young children who were screened in Hawaii between those years tested positive for elevated lead levels, according to the data. That rate is slightly higher than the national average of 2.5 percent, according to the Centers for Disease Control and Prevention.

But more troubling is that the data shows rates on some islands that are significantly higher than the 5 percent exposure rate found in children screened in Flint after the city's community water supply became contaminated with lead. Rates on Kauai, for example, have at times been double or nearly triple that, suggesting that specific geographic data is more important in pinpointing problems than statewide averages.

In 2011, 12 percent of children on Kauai tested positive for elevated lead levels. The following year, that rate jumped to nearly 14 percent.

Dr. Nadine Tenn Salle, a Honolulu pediatrician, said that such high numbers suggested there should be islandwide testing for lead exposure in children.

"If I take your data from Kauai at face value, then the entire island is at risk, not the individual families," she said.

The data is erratic, however. In subsequent years, the rates on Kauai fell to about 2 percent or below.

The numbers show a significant spike in high lead levels across all islands in 2012. During that year, almost 13 percent of children on Hawaii island tested positive for elevated lead levels, similar to the rate on Kauai. On Maui and Oahu, the rate was about 7 percent.

Brooks said she hadn't been able to figure out the reason for the spike.

BIG INCREASE IN 2012

Elevated lead levels in children spiked in all counties in 2012. Health Department officials said they havent been able to figure out the cause. Data for Molokai and Lanai are not included because of the small sample size.

ISLAND | KEIKI TESTED | POS. RESULTS | PCT.

Oahu | 9,215 | 676 | 7.3% Kauai | 743 | 103 | 13.8% Hawaii | 1,947 | 246 | 12.6% Maui | 1,090 | 82 | 7.5% Unknown* | 909 | 7 | 0.8%

Total: 13,904 | 1,114 | 8.0%

* Lab results reflected in the unknown category did not have addresses associated with them.

Source: Hawaii Department of Health

In 2012, the Centers for Disease Control lowered the level that warrants a public health response in young children from 10 micrograms per deciliter to 5 micrograms per deciliter. Brooks said that Hawaii compared favorably to other states when looking at rates above 10 micrograms per deciliter.

"Still, any child with lead poisoning is unacceptable, so we do need to put more resources into education and testing," Brooks said.

Sen. Josh Green, a physician on Hawaii island, said the data was troubling and that the Health Department needed to emphasize statewide that all young children be tested for lead.

He said that by the time a child suffering from lead toxicity is 4 or 5 years old, it's too late.

"They're going to have a high probability of intellectual disability," Green said.

The Centers for Medicare and Medicaid Services requires that all children on Medicaid be tested at about 1 and 2 years of age. Being low-income is considered an automatic risk factor. Physicians are supposed to screen infants on private insurance to determine if they meet any risk factors that would warrant testing. There's been an increased push nationally, however, for mandatory testing of all children, which is currently required in 10 states and Washington, D.C., according to a January report released by Safer Chemicals Healthy Families, a Washington, D.C.-based nonprofit that advocates for stricter controls on toxic chemicals.

David Jacobs, chief scientist at the National Center for Healthy Housing in Maryland and a former director of the U.S. Department of Housing and Urban Development's lead poisoning prevention program, emphasized that in addition to increased screening, states need to focus on eliminating the source of lead poisoning, the biggest being old lead paint, which was commonly used in housing built before 1979.

"There is no reason for children to be poisoned in the first place," Jacobs said. "It is a tragedy that it takes something like Flint to focus the national attention," he added. "But if there is a silver lining to Flint, perhaps this is it."

The state's Hazard Evaluation and Emergency Response Office is already trying to do a better job in tracking lead cases. Health officials are using a new software system this year that will allow it to monitor cases of lead exposure in real time, track whether children are receiving follow-up testing and care, and better coordinate response efforts.

But the office still lacks an epidemiologist who could help track lead cases and study specific communities at risk. The HEER office has unsuccessfully sought funding for the position for several years, including this year.

The Health Department also hasn't had a Lead Poisoning Prevention Program in over a decade, according to Gwen Palmer, of the Health Department's Children with Special Health Needs Branch. She said the state lost its CDC funding for the program in 2003 because its lead poisoning rates weren't high enough compared to other states.

But even then, the state was testing only a fraction of children, which the Health Department noted was of great concern in a 2006 report it issued on childhood lead poisoning.

The state program had funded community surveillance and educational efforts, as well as provided funds to have homes assessed and remediated when a child tested positive for high lead levels. Just an assessment, including soil and water tests, can cost thousands of dollars, said Palmer, a cost that is out of reach for many Hawaii families.

Lawmakers this year proposed bills that would provide the Health Department with \$1 million in funding for lead prevention activities, noting that the loss of CDC funding had "severely limited the department's lead prevention efforts." But neither of the bills received a hearing.

Rep. Della Au Belatti proposed one of the measures, <u>House Bill 249</u>, but then never scheduled a hearing for it in the Health Committee, of which she is chairwoman.

Belatti said she was hoping that the Senate version would move.

The Senate measure, <u>Senate Bill 113</u>, was referred to Sen. Rosalyn Baker's Commerce, Consumer Protection and Health Committee. Baker didn't respond to a request to comment on why she didn't hear the bill.

Belatti said there was a chance that funding for lead prevention could be inserted into the department's budget, which is being debated by the Legislature, but she suggested that it was up to the Health Department to advocate for it.

"I think we need to rely on the Department of Health to raise the alarm," she said.