

Children's lead poisoning drops

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(PhysOrg.com) -- In 2007, 416 children were reported to have elevated blood lead levels in Los Angeles County, a dramatic improvement from 10 years earlier, when fewer children were tested but 1,184 reports of children with elevated levels were made, researchers said.

While cases of childhood [lead](#) poisoning have fallen dramatically in recent decades, some of the poorest and most vulnerable populations in Southern California are disproportionately affected, according to the UCLA Institute of the Environment.

In 2007, 416 children were reported to have elevated blood lead levels in Los Angeles County, a dramatic improvement from 10 years earlier, when far fewer children were tested but 1,184 reports of children with elevated levels were made, said Hilary Godwin, a professor of environmental health sciences at the UCLA School of Public Health, citing county public health department data.

She said recent cases are clustered in areas with larger numbers of babies born to families on Medi-Cal, the state's health insurance program for the poor, and in areas with larger numbers of housing units built before lead-based paint was prohibited.

"New laws, regulations, public health outreach and a strong shift to prevention have helped to significantly reduce exposure of children to lead," said Godwin, a toxicologist and environmental chemist who specializes in lead poisoning and its connection to developmental problems in children. "But we need to do a better job of getting word to

poor families that lead poisoning is totally preventable, because children in low-income and older neighborhoods are far more likely to be exposed."

Godwin's review of data and policies and prevention programs related to lead exposure and poisoning in children was published May 28 in the quarterly UCLA Institute of the Environment Southern California Environmental Report Card. The institute's signature publication, the report card is intended to analyze data in a format useful to the general public and policymakers and to stimulate debate on policies aimed at environmental protection.

Godwin assigned an overall grade of "A-" but gave a "B-" for "persistent impacts on vulnerable populations."

Extensive research has demonstrated a link between elevated blood lead levels in children and neurological problems, anemia, lower IQ scores and shortened attention spans, Godwin said. The Centers for Disease Control and Prevention defines an elevated blood lead level as 10 micrograms per deciliter or higher; that level has dropped significantly since the 1960s as evidence mounted that even very low levels of lead are harmful to children's health.

In the 1970s, it was not uncommon for pediatricians to report cases of children with blood lead levels of 45 micrograms per deciliter, Godwin said. At levels higher than 70 micrograms per deciliter, children can suffer from comas and seizures or even die. Today, childhood deaths from lead poisoning are extremely rare. In Los Angeles County, there are far fewer reported cases of children with elevated blood levels than in the 1970s, and of those cases, there is a far smaller percentage involving blood lead levels above 45 micrograms per deciliter.

Godwin attributes the improvements to the 1978 ban on the use of lead-

based paints in homes, the phase-out of leaded gasoline and an increased focus on reducing children's exposure to lead, in part through extensive public education and outreach programs by public health agencies and community groups. In addition, more frequent screenings for elevated blood lead levels have allowed exposure to be eliminated before it does more damage.

Godwin recommends that owners of homes built before 1978 check for lead with a store-bought kit or hire a licensed inspector. Leaded paint poses a hazard because it is incorporated into household dust and is inhaled and ingested by small children, who tend to put toys in their mouths. She said leaded paint should be removed only by a licensed contractor. To reduce exposure to soil and dust contaminated with lead emitted by cars fueled by leaded gasoline, Godwin recommends wet-mopping floors and removing dust with a wet cloth, instead of sweeping or dry-dusting.

Godwin noted several "new sources" of lead exposure reported in recent years, including contaminated candies (many imported from Mexico), contaminated toys (principally from China) and drinking water in Los Angeles Unified School District schools. Lawmakers and public agencies responded quickly with new laws, product recalls and testing procedures designed to limit exposure.

"While these lead sources are worrisome because they involve products specifically aimed at children, the number of children affected and the magnitude of exposure have been relatively small compared with the second half of the 20th century," Godwin said. "Nevertheless, it is important that we remain vigilant to reduce the exposure of [children](#) to all sources of lead."

Provided by University of California Los Angeles ([news](#) : [web](#))

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