



00-03

STATEMENT OF POLICY

Childhood Lead Exposure

Policy

The National Association of County and City Health Officials (NACCHO) promotes primary prevention and advocates for the removal of lead sources from the environment prior to exposure, particularly in water and housing, in order to prevent the potential for adverse effects. Over the years, there has been notable progress in decreasing childhood lead exposure in the United States through major policy changes, including the removal of lead from gasoline for automobiles. However, the issue of inequitable access to lead free water, housing, and products persists.¹ Until equitable access to lead-free environments is accomplished, NACCHO supports the use of the Centers for Disease Control and Prevention (CDC) reference level of 3.5 µg/dL to identify and support children with elevated blood lead² via the following:

- Increased federal, state, and local funding to support the implementation of cost-effective, community-specific preventive measures to prevent and mitigate health hazards that potentially cause lead exposure in the home and in other settings, such as schools, childcare centers, recreational facilities, and workplaces that may result in disease and illness in children.
- Active local health department efforts to the development and expansion of community-oriented collaborative coalitions targeting efforts at children and their families who remain at risk for lead exposure and poisoning.
- Aggressive efforts by localities to screen and identify lead-poisoned children, as well as provide timely services for these children and their families.
- Healthcare providers and health plans that provide a targeted blood lead screening approach among children eligible for Medicaid who are generally at higher risk for elevated blood lead levels.³ Additionally, ensuring blood lead screening, diagnostic and treatment services for privately insured children.
- Efforts by local health departments to develop partnerships with local water utilities, schools, childcare centers, and other organizations to provide public education and outreach regarding drinking water quality, including lead content, toward the Healthy People 2030 goal of reducing childhood lead poisoning.⁴
- The continued identification by the Consumer Product Safety Commission (CPSC) of lead containing imported products such as imported candies and toys from countries with lax, not enforced, or non-existent environmental lead regulations.
- Partnerships and program development that provide children and their families with safe alternatives to identified lead sources, including water, housing, and products of cultural significance.

Justification

Lead levels in the environment and exposures among children used to be higher but changes were made several decades ago to eliminate lead in products such as in gasoline and paint which significantly reduced lead exposure.⁵ However, lead exposures continue to be a problem as there is no safe level of lead that is known to be without harmful effects.⁶ The CDC estimates that about half a million U.S. children one to five years of age have high levels of lead in their blood above 3.5µg/dL equaling “the reference level at which CDC recommends public health actions be initiated.”² Children are particularly vulnerable to the effects of lead, which can cause permanent adverse health outcomes, including damage to the brain and nervous systems, slowed growth and development, learning behavior problems, and hearing and speech problems.² In addition, the burden of lead poisoning falls disproportionately on low-income families and families of color, with African-American children more than two times more likely to experience lead poisoning than White children.⁷

Children can be exposed to lead through various sources including paint, gasoline, solder, and consumer products and environmental pathways (e.g., air, dust, food, soil, and water).⁸ The United States Department of Housing and Urban Development estimates that 24 million homes in the U.S. are burdened by peeling or chipping lead-based paints.⁹ According to a 2023 U.S. Environmental Protection Agency (EPA) survey, an estimated 9.2 million lead service lines (LSLs) serve water to communities across the United States.¹⁰ Moving forward, efforts should focus on the need to identify and remove these sources in the community infrastructure prior to an exposure occurring.

Local environmental public health is part of a network of professionals committed to developing effective programs to communicate risks related to quality, including lead content, of drinking water. Partnerships are encouraged that include state and local public health, CDC, EPA, water utility operators and other stakeholders to implement effective public education and outreach about lead in drinking water. This is a shared responsibility. For example, local governments and water systems must continue or enhance effective corrosion control treatment and distribution systems, licensed operators must continue to be informed and vigilant, state and federal drinking water regulators must continue to exercise or enhance responsible oversight and provide useful technical assistance, especially to smaller systems. Local water quality partnerships must continue to provide residents with information they need to reduce the risk of lead exposure.

In addition to lead exposure from water, recent studies have highlighted the impact of child lead exposure from consumer products as well as proximity to small airports. Multiple localities have reported lead containing consumer products as a major contributing factor to childhood lead exposure in recent years, including spices such as turmeric. The growth of immigrant and refugee populations who are at disproportionate risk for this type of exposure, as well as increased frequency of cross-cultural consumption of traditional foods, and interconnectedness of global chain supplies warrants additional approaches to lead prevention.¹¹ Among these approaches, culturally sensitive outreach materials as well as a national repository of consumer product lead surveillance data should be considered. A recent study also provided compelling evidence about the impact of continued use of lead-containing fuels at small airports on

childhood lead exposure.¹²

The management of a lead-exposed child is a complex process, requiring an interdisciplinary, comprehensive response, which includes appropriate medical care, follow-up services and safe alternatives to lead containing sources such as water, housing, and culturally essential products. It is critical that health departments are provided the funding necessary to work towards the Healthy People 2030 goals of eliminating elevated blood lead levels in children by providing primary prevention such as education, case management, and environmental interventions for families at risk, as well as coordinate the mitigation of hazards and treatment of children with healthcare providers.

References

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