Project TENDR: Targeting Environmental Neuro-Developmental Risks
TENDR Recommendations to Eliminate Childhood Lead Poisoning

Scientists agree: there is no safe level of lead exposure for children. Although policies to ban lead from gasoline, paints and other products have been successful in lowering blood lead levels in the American population over the past four decades, lead exposure continues to be a preventable cause of intellectual impairment, ADHD, learning disabilities and behavioral disorders for millions of children.

More than half a million U.S. children between 1-5 years old have blood lead levels greater than 5 μg /dL (≥50 ppb). About 50 percent of U.S. children between 1-5 years old have blood lead levels greater than 1 μg/dL (10 ppb), based on blood lead distribution among children in the most recent National Health and Nutrition Examination Survey (NHANES). [1] While there is no safe level of lead for children, it is currently difficult to detect levels below 1 μg/dL (10 ppb). It is reasonable to expect some residual level of lead exposure below 1 μg/dL (10 ppb), either from trace amounts of lead contamination of products or naturally occurring lead in the environment.

TENDR's Goals to Protect Children from Lead Toxicity are:

- To ensure that no child has a blood lead level >5 μg/dL (>50 ppb) by 2021.
- To eliminate lead exposures to pregnant women and children so that by 2030, no child would have a blood lead level >1 μg /dL (>10 ppb).

To achieve these overarching national goals, we recommend the following actions:

Recommendation 1:

TENDR calls on federal agencies to adopt health-based standards and action levels for lead that rely on the most up-to-date scientific knowledge to prevent and reduce human exposure to lead, and assure prompt implementation of the strongest available measures to protect pregnant women and children from lead toxicity. Our country's current standards for allowable levels of lead in dust, soil, air and drinking water are woefully outdated and fail to protect pregnant women and children.

- The U.S. Environmental Protection Agency (EPA) should promulgate health-based standards for lead in dust, soil, and drinking water that are designed to prevent *all children* from having a blood lead concentration in excess of 1 μg /dL (10 parts per billion).

- EPA should strengthen the National Ambient Air Quality Standard for Lead to reduce ambient air levels to protect children's health.[2]
- CDC should follow through on its commitment to update its definition of what constitutes an elevated blood lead level ("reference") level in 2016, and every four years thereafter. [3]

- The U.S. Department of Housing and Urban Development (HUD) should use the most current CDC reference level as its environmental intervention blood lead level for children who live in public and other federally supported housing.

Recommendation 2:

TENDR calls on federal, state and local governments to protect pregnant women and children from lead by prioritizing efforts to identify and remediate environmental sources of lead exposure (in dust, air, soil, water and consumer products) *before* they are exposed. In addition, the government should continue targeted screening of children to identify those who *already have* elevated blood lead levels for case management, as well as educational and other services.

- HUD should remediate or require remediation of all public and other federally supported housing (e.g., section 8 housing) prior to children moving into federally funded housing units.

- The federal government should permit and encourage the Centers for Medicare and Medicaid Services (CMS) to cover the cost of investigation of lead hazards on housing property *prior* to children moving into a property. Private health insurance companies should also be required to cover the costs of property investigation of lead hazards.

Recommendation 3:

TENDR calls on government to ensure that, even as we eliminate legacy sources of lead, we end the introduction and release of new sources of lead into the environment. Accomplishing this goal requires the federal government to:

- ban or phase out all remaining uses of lead in products (aviation gas, cosmetics, wheel weights, industrial paints, batteries, lubricants, and other sources of lead);
- ban the export of products containing lead; and
- set more protective limits on emissions from battery recyclers and other sources of lead emissions.

Recommendation 4:

To improve the lives of children in communities that are disproportionately exposed to lead and other environmental stressors, TENDR calls on federal, state and local governments to provide a dedicated funding stream to enhance the resources available to identify and eliminate sources of lead exposure, and provide educational, social and clinical services to mitigate the harms of lead toxicity.

Recommendation 5:

TENDR urges Congress to set up an independent expert advisory committee to develop a long-term national strategy to eliminate lead toxicity in pregnant women and children, defined as blood lead levels above 1 μg /dL (10 ppb). At a minimum, this plan should set goals for eliminating legacy sources of our past reliance on lead, including abatement of residential hazards, full service line replacement of lead drinking water pipes, and remediation of lead-contaminated soils from former industrial sites in residential areas**.** We also urge Congress to provide dedicated funding to implement the national strategy.

[1] Jain, B Ram. (2016) Trends and variability in blood lead concentrations among U.S. children and adolescents. Environ Sci Pollut Res. DOI 10.1007/s11356-016-6039-0

[2]CHPAC Letter to EPA Administrator McCarthy (Jan. 8, 2015), https://www.epa.gov/sites/production/files/2015-01/documents/naaqs_for_lead_letter.pdf

[3] See http://www.cdc.gov/nceh/lead/acclpp/blood_lead_levels.htm ("CDC will update the reference value every 4 years using the two most recent NHANES surveys.").

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