Childhood Lead Exposures

Tribal Lands & Environmental Forum
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Overview

• Vision and Goals – To build a collaborative approach to address childhood lead exposures in Indian country
• Reasons for prioritizing lead
• Introduction to lead, associated risk, health effects and preventable actions
• Why are we focused on lead?
Vision and Goals – Build Collaborative Approach to Address Childhood Lead Exposures

• Work together to address childhood lead exposures in Indian country
• Understand needs, challenges, lessons learned, best practices, and more
• Convene partners to take meaningful action
• Create a action plan
Reasons for Prioritizing Lead Exposures

• Childhood lead exposure disparities are an excessive burden to minority and low-income families and their communities

• Addressing exposures is a national issue

• No single agency can address all aspects of lead in children’s health

• Focus our efforts to align with current federal activities – EPA’s Environmental Justice Strategic Plan and The President’s Task Force on Environmental Health Risks and Safety Risks to Children
What is lead? Where is it found?

- Lead is a naturally occurring element found in small amounts in the earth’s crust. While it has some beneficial uses, it can be toxic to humans and animals causing health effects.

- Lead can be found in all parts of our environment – the air, soil, water, and even inside our homes. Much of our exposure comes from human activities including the use of fossil fuels, past use of leaded gasoline, some types of industrial facilities, and past use of lead-based paint in homes.

- Lead and lead compounds have been used in a wide variety of products found in and around our homes, including paint, ceramics, pipes and plumbing materials, solders, gasoline, batteries, ammunition, and cosmetics.
Who is at risk?

**Children**
- Lead is particularly dangerous to children because their growing bodies absorb more lead than adults and their brains and nervous systems are more sensitive to the damaging effects of lead.
- Babies and young children can also be more highly exposed to lead because they often put their hands and other objects that can have lead from dust or soil on them into their mouths.
- Children may also be exposed to lead by eating and drinking food or water containing lead or from dishes or glasses that contain lead, inhaling lead dust from lead-based paint or lead-contaminated soil or from playing with toys with lead.

**Adults, Including Pregnant Women**
- Adults may be exposed to lead by eating and drinking food or water containing lead or from dishes or glasses that contain lead.
- They may also breath lead dust by spending time in areas where lead-based paint is deteriorating, and during renovation or repair work that disturbs painted surfaces in older homes and buildings.
- Working in a job or engaging in hobbies where lead is used, such as making stained glass, can increase exposure as can certain folk remedies containing lead.
- A pregnant woman’s exposure to lead from these sources is of particular concern because it can result in exposure to her developing baby.
What are the health effects of Lead?

**Children**

Even low levels of lead in the blood of children can result in:

- Behavior and learning problems
- Lower IQ and Hyperactivity
- Slowed growth
- Hearing Problems
- Anemia
- In rare cases, ingestion of lead can cause seizures, coma and even death

**Pregnant Women**

- Lead can accumulate in our bodies over time, where it is stored in bones along with calcium. During pregnancy, lead is released from bones as maternal calcium and is used to help form the bones of the fetus. This is particularly true if a woman does not have enough dietary calcium. Lead can also cross the placental barrier exposing the fetus the lead. This can result in serious effects to the mother and her developing fetus, including:
  - Reduced growth of the fetus
  - Premature birth

**Other Adults**

Lead is also harmful to other adults. Adults exposed to lead can suffer from:

- Cardiovascular effects, increased blood pressure and incidence of hypertension
- Decreased kidney function
- Reproductive problems (in both men and women)
What can be done to prevent exposure to lead?

• Make sure your child does not have access to peeling paint or chewable surfaces painted with lead-based paint
• Regularly wash children’s hands and toys - hands and toys can become contaminated from household dust or exterior soil.
• Regularly wet-mop floors and wet-wipe windows
• Take off shoes when entering the house
• Use only cold water from the tap for drinking, cooking, and making baby formula
• Shower and change clothes after finishing a task that involves working with lead-based products such as stained glass, making bullets, or firing guns
• Remove recalled toys and toy jewelry
• Avoid eating candies imported from Mexico
Reasons for Prioritizing Lead Exposures

- Disparities in childhood lead exposure unduly burden minority families and low-income families and their communities.
- Addressing these exposures is a national matter.
- No single federal agency can address all aspects of children’s health.
- Focus efforts to align with current federal activities – President’s Task Force, EPA Environmental Justice Strategic Plan.
EPA’s Environmental Justice Strategic Plan

Agency aims to take a holistic approach to address:

• Lead in air
• Lead in paint, dust
• Lead in products
• Lead in soil
• Lead in water

• Take action by developing strategies and unique approaches with partners
  • Education and awareness on sources and health effects
  • Increase technical assistance
  • Develop community-based approaches
  • Facilitate data-sharing between health and environmental programs
  • Improve data use, analysis, tools, etc.
President’s Task Force on Environmental Health Risks and Safety Risks to Children

- Established in 1997 under Executive Order 13045 – Protection of Children From Environmental Health Risks and Safety Risks

- Objectives of the Task Force:
  - Identify priority environmental health and safety risks to children to address through research, programmatic collaboration, outreach and education
  - Recommend and implement federal interagency actions
  - Communicate information to federal, state and local decision makers on protecting children from environmental health and safety risks

- Focused on Childhood Lead Exposures
  - Developed a report - Key Federal Programs to Reduce Childhood Lead Exposures and Eliminate Associated Health Impacts which catalogs federal efforts to understand, prevent, and reduce various sources of lead exposure among children.
  - Creating a draft federal strategy
Health Impact Project

• Examining health impacts of childhood lead exposures
• Want to work with us
Where can I go to find out more?

- [www.epa.gov/lead](http://www.epa.gov/lead)
- [www.cdc.gov/nceh/lead](http://www.cdc.gov/nceh/lead)
- [https://hud.gov/lead](https://hud.gov/lead)
- [www.cpsc.gov/lead](http://www.cpsc.gov/lead)
- [www.hhs.gov](http://www.hhs.gov)
- [https://ptfceh.niehs.nih.gov](https://ptfceh.niehs.nih.gov)

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