Lead Poisoning Prevention in Indian Country

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Purpose of Training

• Educate

• Expand awareness

• Support

• Training overview
American Indian and Alaska Natives in the United States

• Number of Tribes

• States

• Communities

• Tribal Sovereignty/ Treaties

• Native Land Digital
  https://native-land.ca/
Environmental Justice Principles
Social Determinants of Health, Health Disparity & Health Equity

- Health Care and Quality
- Neighborhood and Built Environment
- Social and Community Context
- Economic Stability
- Education Access and Quality
Lead Poisoning and Indian Country
Lead poisoning risks, surveillance practices, and prevention planning
Health Effects of Lead Poisoning

- Neurotoxin
- No safe level of exposure
- Small dose = Poison
- Children & Pregnant People

lead poisoned children are

more likely to become involved in the juvenile justice system

6x

more likely to drop out of school

7x
Childhood Lead Poisoning Prevention

• Federal Childhood Lead Poisoning Prevention Program (CLPPP)

• Aims to reduce childhood lead poisoning

• Primary Prevention

• Secondary Prevention
Lead Screening

• Blood lead testing results
• Number of results per year
• Medicaid screening
Lead Screening

2019 – 2020
Number of children aged <6 years who received blood lead level (BLL) tests by month in 34 U.S. jurisdictions
Lead Poisoning Surveillance

Changes to definitions for interpreting children’s blood lead levels over time

“No safe childhood blood lead level threshold can be identified.”

CDC Advisory Committee on Childhood Lead Poisoning Prevention (2012)
Other Federal Partners Addressing Lead Hazards

- Department of Housing and Urban Development (HUD)
- Environmental Protection Agency (EPA)
- Occupational Safety and Health Administration (OSHA)
- Food & Drug Administration (FDA)
- Consumer Product Safety Commission (CPSC)
Exposure Risk: Housing

• Hazardous and common sources
• Pre 1978 housing
• Lead dust
Exposure Risk: Water

wiped lead joint

scratches on lead
pipes appear shiny

Lead water supply
Exposure Risk: Land & Soil

- Roads
- Mines and tailings
- Ground water
- Wind erosion
Exposure Risk: Air

- Industrial facilities
- Renovation and demolition
- Aviation fuel
Exposure Risk: Occupations & Other

• Occupational exposure

• Shooting ranges
Exposure Risk: Hunting & Fishing

- Ammunition and fishing sinkers
- Wildlife
- Wild game and fish
Exposure Risk: Consumer Goods & Products

- Cosmetics
- Foods
- Spices and herbal remedies
- Plastic jewelry and toys
- Vinyl mini blinds
Challenges in Lead Poisoning Prevention

Key Barriers to acknowledge in strategic planning to address lead poisoning in Indian Country
Overview Risk Factors: Social Determinants

Estimated Lead Exposure Risk by Census Tract
Unique Risk Factors for Indian Country

% in poverty for children under age 18  % in poverty for total population

Hispanic (any race) 8.4% 11.2%
Black 8.1% 11.3%
American Indian/Alaska Native 7.4% 12.4%
All people 5.2% 7.8%
Asian 5.1% 9.5%
Unique Risk Factors for Indian Country

![Graph showing percentage of AI/AN alone households with physical problems compared to Total US.](image-url)
Unique Risk Factors for Indian Country

- Multiple exposure pathways
- Outdoor exposure
Healthcare Funding & Access

- Indian Health Service (IHS)
- Uninsured rate
- Medicaid expansion
Health Disparities for Children and Pregnant People

• Maternal mortality
• Adverse Childhood Experiences (ACEs)
• Limited access to care
Capacity for Lead Hazard Reduction

• Housing repair and environmental services

• Workforce

• Housing programming

• Enrollment
Compliance with Lead Regulations

Regulations designed to reduce lead hazards through housing, air, water, consumer materials, and workplaces are not enforced equitably.

<table>
<thead>
<tr>
<th>Regulation</th>
<th>Purpose</th>
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<tbody>
<tr>
<td>Residential Lead Based Paint Hazard Reduction Act of 1992 (EPA &amp; HUD)</td>
<td>Required disclosure of information on lead-based paint in real estate transactions</td>
</tr>
<tr>
<td>Renovation, Repair and Painting Rule (EPA)</td>
<td>Worker who may disturb lead-based paint must be certified</td>
</tr>
<tr>
<td>Safe Drinking Water Act (EPA)</td>
<td>Drinking Water Systems must monitor lead in public water systems</td>
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## Compliance with Lead Regulations

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<tr>
<th>Regulation</th>
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<tr>
<td>Clean Water Act</td>
<td>EPA prohibits discharging pollutants into water without permit</td>
</tr>
<tr>
<td>Occupational Health and Safety</td>
<td>OSHA enforces lead standards for general industry</td>
</tr>
<tr>
<td>Lead in Food</td>
<td>FDA regulates lead exposure through food products Consumer Product Safety Commission to issue recalls</td>
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## Unregulated Sources of Exposure

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<tr>
<th>Potential Source</th>
<th>Details</th>
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<tr>
<td>Private Wells</td>
<td>13% of households use unregulated private wells for water</td>
</tr>
<tr>
<td>Ammunition and Fishing Lures</td>
<td>Lead is a primary metal used in ammunition and fishing sinkers</td>
</tr>
<tr>
<td>Aviation Fuel (Avgas)</td>
<td>Fleet of 170,000 piston-engine airplanes and helicopters use leaded aviation fuel</td>
</tr>
<tr>
<td>Consumer Products</td>
<td>Certain consumer products imported into the U.S.</td>
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Building Pathways for Lead Poisoning Prevention
Strategic Planning Considerations

CDC recommends:

- Primary and secondary lead poisoning prevention practices
- Risk assessment and intervention practices should reflect community characteristics
Primary Lead Poisoning Prevention

• Lead hazard reduction & Healthy Housing programs

• Home Inspection Programs

• Hazard reduction and abatement

• Renovation, Repair, and Painting Rule

• Residential Lead Based Paint Hazard Reduction Act
Housing Intervention Services & Capacity

• Key Partners:
  • Tribally designated housing entities
  • National Indian Health Board
  • State and local public health agencies
  • Related community-based organizations

• Capacity
Housing Repair/Renovation Worker Messaging

- EPA Renovate Right Program

- Certified for lead work:
  - Repair
  - Inspector/Assessor
  - Workers
  - Supervisor
Community-based Education & Screening

Community Education
• Multi-generational engagement
• Culturally relevant programming

Community Health Workers
• Parents and caregivers
• Identify potential sources
Data Collection, Evaluation, and Strategic Planning

• Key data metrics
• Community Needs Assessments
• Health Impact Assessment
Parent and Caregiver Lead Screening Messaging

• When?

• What?

• Who?

• Questions or concerns?
Parent and Caregiver Poisoning Prevention Messaging

- Guidance
- Remediation resources
- Interim controls
Case Study: Wellness through Traditional Foods

• Traditional Foods Program
• Traditional and sustainable
• Stories
• Community
Support Resources
Ongoing Engagement Opportunities

• Programming

• Recognition and awareness

• Comments and input

• Collaboration
Grant Programs for Lead Poisoning Prevention

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<tr>
<th>HUD</th>
<th>EPA</th>
<th>CDC</th>
<th>Others</th>
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<tr>
<td>Lead Hazard Reduction Grant Program</td>
<td>Environmental Justice Grant Program</td>
<td>Supporting Communities to Reduce Lead Poisoning Program</td>
<td>Closing the Gap with Social Determinants of Health Accelerator Plan Program</td>
</tr>
<tr>
<td>Healthy Homes Production Grant Program</td>
<td>Healthy Communities Grant Program</td>
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Search [https://www.grants.gov/](https://www.grants.gov/) for key terms and eligibility details
Grant Program Resources for Rural Areas

- Rural Partners Network
  - Access
  - Technical Assistance
  - Local capacity
  - https://www.rural.gov/
Education and Engagement Resources

**HUD**
https://www.hud.gov/lead

**EPA**
https://www.epa.gov/lead
- Renovate Right
- Tribal Lead Curriculum

**CDC**
https://www.cdc.gov/nceh/lead/
Upcoming Lead Screening & Prevention Resources

- **Lead Poisoning Prevention in Tribal Country Factsheet**

- **Access to Lead Screening & Hazard Control Factsheet**

- **Lead Poisoning Risk in Tribal Country Infographic**
Take Opportunities to Reduce Lead Risk
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Questions
Your Community is Waiting for You!

- Education
- Community
- Credentials
- Advocacy
- *Journal of Environmental Health*
- Practice Resources
- Discounts

[https://www.neha.org/membership](https://www.neha.org/membership)
For Information About This NEHA Training

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