PROJECT SUMMARY
Hawaii Childhood Lead Poisoning Prevention Program

Funding Source: Centers for Disease Control and Prevention (CDC) cooperative agreement, $361,956

Period: September 30, 2017 to September 29, 2020

Lead Agency: Hawaii State Department of Health (DOH)
• Children with Special Health Needs Branch (CSHNB)
• Hazard Evaluation and Emergency Response Office (HEER)
• Indoor and Radiological Health Branch (IRHB)/Lead-Based Paint Program
• Public Health Nursing Branch (PHNB)

Problem: 2.9% of Hawaii children under age 6 years who were tested had elevated blood lead levels, 2011-2015

Blood lead data for 2011-2015 show that of 59,532 children under age 6 years who were tested, 3 of every 100 children (2.9%) had elevated blood lead levels. Rates were higher during 2011-2012, and lower during 2013-2015; no definitive reason has been identified to explain the higher or lower rates.

Data for children under age 6 years with elevated blood lead levels by county showed:
• Kauai 4.9%
• Honolulu 2.5%
• Maui 2.4%
• Hawaii 4.9%

Project Purpose:
The project purpose is to reduce lead exposure and lead poisoning, through: (1) strengthening blood lead level testing; (2) strengthening surveillance; (3) strengthening population-based interventions; and (4) strengthening processes to identify lead-exposed children and linkage to services. The project will coordinate with other agencies, partners, and stakeholders serving children to ensure that a comprehensive system of referral, follow up and evaluation is in place for lead-exposed children.

Data from DOH, Hazard Evaluation and Emergency Response Office, 2017. Blood lead levels at or above 5 micrograms per deciliter (mcg/dL) are considered elevated.
Project Strategies and Activities – Year 1:

**STRATEGY 1: Strengthen Blood Lead Level Testing**

Activity 1: Develop and implement a plan for increasing blood lead testing of children under age 6 years (72 months).
- Update blood lead testing guidelines for health care providers, in collaboration with AAP-Hawaii Chapter, Medicaid, and health care providers. Emphasize testing of Medicaid children.
- Develop and implement a plan for providing information and education for health care providers and for state/community programs.

Activity 2: Develop and implement blood lead testing strategies, with special emphasis on achieving universal testing of Medicaid-enrolled children.
- Work with health care providers and others to identify challenges and strategies/activities to address testing Medicaid-enrolled children. Implement activities if feasible.
- Collaborate with community programs that serve a large proportion of Medicaid-enrolled children on identifying strategies to support blood lead testing.

**STRATEGY 2: Strengthen Surveillance**

Activity 1. Develop, implement, and maintain a surveillance system that will collect, compile, and track blood lead data and lead hazards data.
- Implement the Maven lead surveillance system that will collect, compile, and track blood lead data and lead hazards data.

Activity 2. Develop and implement a blood lead data collection, data quality and dissemination plan.
- Develop and implement a blood lead data collection, data quality and dissemination plan that includes ensuring data from all laboratories, timeliness of reports to health care providers, data elements to be reported to HDOH, point of care lead testing, and other areas.

Activity 3. Conduct analyses of surveillance data.
- Analyze lead surveillance data per the surveillance reporting system and dissemination plan (see Activity 4 below). Special analyses are done as needed.
- Identify high risk geographic areas and populations for targeted interventions, by using surveillance data, census data, tax assessor and other data sources, with GIS maps.

Activity 4. Establish and implement surveillance reporting system and dissemination plan.
- Develop/implement the surveillance reporting system and dissemination plan that includes how data will be collected, evaluated, reported, and shared.

**STRATEGY 3: Strengthen Population-Based Interventions**

Activity 1. Develop and implement targeted population-based interventions.
- Collaborate with representatives of targeted geographic areas/populations to identify strategies and approaches that may work the best for targeted group. As needed, develop specific materials for the targeted group.

Activity 2. Educate public, partners, and stakeholders about lead-related issues.
- Develop talking points, fact sheets, mini-presentations, other materials. Update the Childhood Lead Poisoning Prevention Guidelines (information–lead effects, sources, data, prevention, resources). Update website. Translate HDOH lead brochure and risk questionnaire into different languages.
• Conduct education outreach events (exhibits, presentations, trainings, etc.) for health care providers, early childhood providers, home visiting, and community programs. Includes targeted areas/populations.

Activity 3. Develop and conduct trainings for lead workforce, partners, and other stakeholders.
• Develop in-person training or short online training on lead poisoning, lead screening and referrals, in collaboration with key state/community partners.
• Provide lead-based paint hazard awareness training to HI-CLPPP Planning Team, Lead Coalition, PHNs, and others to assist in the identification of possible sources of childhood lead poisoning.

Activity 4. Develop and maintain collaborative relationships with community, local, and state partners and stakeholders to address priority challenges and opportunities.
• Convene quarterly meetings of the Lead Coalition to address childhood lead poisoning priority challenges and opportunities.
• Reach out to partners. Engage them in brainstorming, strategizing, planning, implementing, or evaluating interventions for lead poisoning prevention.

STRATEGY 4: Strengthen Processes to Identify Lead-Exposed Children and Linkage to Services

Activity 1. Provide technical support and subject matter expertise to systems that identify, refer, provide services to, and follow lead-exposed children.
• CSHNB, HEER, IHRB, PHNB, and Project staff will provide technical support and expertise on screening, identification, referral to services, and follow-up on lead-exposed children.

Activity 2. Organize regular meetings with partners, stakeholders, and programs that can provide services to mitigate the effects of high blood lead levels.
• Convene a committee with early childhood programs, early intervention (EI), preschool special education, and other programs to discuss lead exposure issues and actions.

Activity 3. Connect lead-exposed children to services.
• Connect children who are lead-exposed to services, per Hawaii’s system for lead screening and follow-up.
• Develop list of resources/services for families, such as WIC, Medicaid, EI services, preschool special education, and early childhood programs.

Activity 4. Conduct education and outreach to parents and providers of lead-exposed children and those who are considered at-risk.
• Continue current process of outreach to parents and providers, depending on BLL per the Hawaii system. Develop and disseminate guidance document for follow-up care for children with elevated BLL.
• Develop YouTube video for families of children with elevated BLL, on actions for families such as nutrition, cleaning, or need for repeat testing. Translate to other languages.
## LOGIC MODEL

### Childhood Lead Poisoning Prevention
From the Centers for Disease Control and Prevention

<table>
<thead>
<tr>
<th>Strategies and Activities</th>
<th>Short-Term Outcomes</th>
<th>Long-Term Outcomes</th>
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<tbody>
<tr>
<td><strong>Strengthen blood lead level testing</strong></td>
<td>• Increased numbers of children under age 6 years (72 months) tested for blood lead.</td>
<td>• Reduced mean BLL in children under age 6 years</td>
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<td>• Develop and implement plan for blood lead testing of children</td>
<td>• Improved data usage that leads to a greater identification of geographic areas and populations at high-risk for lead exposure.</td>
<td>• Reduction of blood lead in children under age 6 years</td>
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<td><strong>Strengthen Surveillance</strong></td>
<td>• Increased ability to target intervention (e.g., education and outreach) to high-risk geographic areas and populations.</td>
<td>• Reduction in housing with lead hazards</td>
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<td>• Develop, implement, and maintain surveillance system</td>
<td>• Increased knowledge and awareness of public health professionals, lead prevention workforce, partners, and other stakeholders about lead prevention and interventions through lead prevention training programs.</td>
<td>• Improved academic outcomes for lead-exposed children</td>
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<td>• Develop and implement blood lead data collection, data quality, and dissemination plan</td>
<td>• Increased identification of children exposed to lead and linkage to recommended services.</td>
<td>• Reduced disparities in BLL based on race, ethnicity, or socioeconomic status</td>
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<td>• Conduct analysis of surveillance data</td>
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<td>• Reduced societal costs associated with lead-exposures (e.g., healthcare, special education, criminal justice system)</td>
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