CHILDREN'S ENVIRONMENT

The Indian Health Service, Division of Environmental Health Services (DEHS) delivers a comprehensive Environmental Health program to more than 2 million American Indian/Alaskan Natives (AI/ANs). The DEHS has responsibilities for ensuring environmental health settings for AI/AN children are safe and ultimately provide a healthy environment in which to learn, play, and grow.

Environmental Health issues associated with children are present in School, Head Start, and Daycare facilities on Tribal lands, and present an ever increasing set of complex challenges to be addressed. A few examples of environmental health related issues of concern are: 1) indoor air quality (IAQ); 2) lead exposure and; 3) infectious disease exposure.

This population and the number of associated facilities continue to increase, yet environmental interventions have had no increase in funding. DEHS funding is used to prevent and control these environmental health risks present in AI/AN children's environment.

This document describes a strategy for addressing and determining the environmental health needs of a national priority. This issue statement is formatted for flexibility and adaptability so that regional and local programs may use it to develop their own systems and strategies, while maintaining uniform methods of determining need and delivering services.

The DEHS activities revolve around the Ten Essential Services of Environmental Health:

SERVICES

Environmental and Health Monitoring and Surveillance
  - ➢ Enhanced Disease Surveillance Capabilities
  - ➢ Enhanced Hazard Monitoring Capabilities

Investigation
  - ➢ Improved Hazard Investigation

Environmental Health Education
  - ➢ Increase Public Awareness and Promote Health Literacy

Mobilization of Partnerships
  - ➢ Develop Partnerships with Other Programs

Public Health Policy Development
  - ➢ Tribal Code Development

Support Public Health Laws & Regulations
  - ➢ Inform Tribes/Partners of Federal Laws & Regulations

Link People to Environmental Health Services
  - ➢ Integrate with Clinical Services

Assure Competent Workforce
  - ➢ Staff Credentialing

Evaluate Environmental Health Services
  - ➢ Program and Project Evaluations
  - ➢ Conduct Customer Satisfaction Assessments

Research New Insights and Innovative Solutions
  - ➢ Community Based Research
  - ➢ Project Funding

STRATEGY	OBJECTIVES	INDICATORS	PERFORMANCE MEASURES
Enhanced Disease Surveillance Capabilities A web-based data system, Notifiable Disease and External Cause of Injury (NDECI), will provide surveillance data and reports for infectious diseases related to children.	➤ Improve the current web-based disease and injury data system. ➤ Provide training	Health Effects Indicator: Childhood Infectious Disease Rates	Data on infectious disease rates in children Determine baseline rates ➤ Decrease infectious disease rate by 10% over 5 years
Enhanced Monitoring Capabilities To improve efficiency and maximize resources, the DEHS needs the capability to monitor critical risk factors identified during on-site surveys so efforts can be focused on reducing or controlling hazards.	➤ Implement an electronic survey capability into our Web-based Environmental Health Reporting System (WebEHRS) ➤ Provide tablet PCs to provide on-the-spot, rapid reporting ➤ Provide training	Intervention Indicator: Child-Occupied Facility Inspections	Number of Child-Occupied Facility (COF) Inspections Determine baseline indicator and frequency ➤ Increase inspection frequency by 5% over 5 years
Improved Hazard Investigation The DEHS needs the capability to provide a comprehensive approach to identifying environmental health issues related to children's environments in communities.	➤ Develop systems to: collect data, analyze trends, communicate results, share data, generate reports and serve as an information repository ➤ Provide training to include: educational sessions, emerging trends, local priorities and developing local/national partnerships ➤ Provide equipment including: sampling devices, specimen storage & transport and PPE	Hazard Indicator: Infection Control Problems and Risk Factors	Interventions to reduce infection control hazards Proportion of COF with infection control problems that are addressed ➤ Increase successful interventions applied by 10% over 5 years
Increase Public Awareness and Promote Health Literacy Develop awareness materials for community and for target audiences.	➤ Develop a standard educational video ➤ Distribute copies of the video to appropriate partners (i.e. community health representatives, EPA grant coordinators, tribal public health departments)	Intervention Indicator: Education	Percentage of population provided awareness-level education children's environmental health issues ➤ Conduct training and provide children's environmental health education to reach 50% of the local population by 2015

STRATEGY	OBJECTIVES	INDICATORS	PERFORMANCE MEASURES
Develop Partnerships with Other Programs Develop partnerships with Tribal/BIA Schools, Head Starts, Daycares, local health jurisdictions, clinicians, county health departments, and other stakeholders.	➢ Sponsor meetings and workshops ➢ Travel to partners' meetings and workshops	Intervention Indicator: Children's Environmental Health Working Groups	Number of meetings/workshops with stakeholder partners attended or coordinated ➢ Attend or coordinate at least one meetings/workshops annually that are focused on children's environmental health issues
Tribal Code Development Code development/enforcement will decrease disease incidence/outbreaks.	➢ Conduct comprehensive assessments of tribal codes/infrastructure ➢ Focus efforts to develop tribe-specific IAQ & infectious disease codes where none exist	Intervention Indicator: Policy Development	Baseline: Percentage of current, disease prevention/control codes ➢ Increase percentage of codes implemented by 5% each year
Inform Tribes/Partners of Federal Laws & Regulations Federal laws regarding lead abatement in schools, daycares, Head Start facilities and other buildings should be communicated to ensure Tribal populations are conducting abatement activities in a safe manner and tribal members are occupying protected environments.	➢ Conduct comprehensive assessment of tribal codes/infrastructure ➢ Focus efforts to develop tribe-specific building, remediation, and disposal codes	Intervention Indicator: Education	Number of Tribal Education Programs who have incorporated the Lead Safety Rules into practice ➢ Ensure 100% of Tribal Education Departments are aware of Federal regulations
Integrate with Clinical Services Communicate disease surveillance and survey findings with Tribes, clinicians and State/County health departments and align practices and protocols with these partners. Ensure the community is linked to environmental health services through clinical services.	➢ Establish systems where clinical services and environmental health services are linked ➢ Ensure that clinicians provide written referrals to the environmental health services department in response to an illness with suspected environmental etiology	Intervention Indicator: Referral Program	Percentage of children presenting to ER with infectious disease referred to environmental health services Determine baseline rate of referrals ➢ Increase referrals by 40% over 5 years
Staff Credentialing To ensure a workforce competent in environmental health issues related to children's environments	➢ DEHS, EPA-certified lead inspectors	Intervention Indicator: Workforce Credentials	Number of DEHS staff EPA-certified lead inspector, number of RS/REHS credentialed staff. ➢ Maintain at least one EPA certified lead inspector serving each IHS area ➢ Maintain RS/REHS credentials for 80% of DEHS staff

STRATEGY	OBJECTIVES	INDICATORS	PERFORMANCE MEASURES
Program and Project Evaluations Conduct evaluations to ensure initiatives are having a positive effect on education, awareness, and hazard reduction.	➢ Analyze epidemiological data, survey/inspection reports, and other strategic initiatives	Intervention Indicator: Program Standards and Best Practices	Analysis of program and strategic performance measures ➢ 100% of Area programs produce tri-annual report demonstrating results
Conduct Customer Satisfaction Assessments Gauge the perception and opinion of the level, type, and quality of environmental health services	➢ Develop local or Area standardized assessment methodology ➢ Complete surveys of stakeholders and residents that measure the satisfaction of stakeholders and residents with the services of the environmental health program	Intervention Indicator: Program Assessment	Assessment results ➢ 100% of Area programs conduct tri-annual assessment ➢ Results improve each three-year cycle by 10%
Community Based Research New insights and innovative solutions to issues related to children's environments might only be recognized through research	➢ Coordinate research activities	Intervention Indicator: Research Best Practices	Number of research project affiliations ➢ Co-author one research project dealing with infectious diseases, elevated blood lead levels, respiratory illness rates with probable environmental etiology or other environmental health issues related to children's environments within a community in 3 years
Project Funding *To ensure tribal entities are competitive in receiving grants*	➢ Assist tribal entities in the grant application process for research or intervention in illnesses or injuries.	Intervention Indicator: Program and Policy Best Practices	Number of grants tribal entity receives based on assistance from environmental health specialist ➢ Assist tribal entity in successful receipt of environmental health focused grant(s) every 5 years

ESTIMATED COST	
Equipment	$2000/tablet PC * 150 personnel = $300,000
	$10,000/Area for epidemiological response kits = $120,000
	$20,000/Area for training on indoor air quality (IAQ) equipment and survey techniques = $240,000
	$20,000/Area for IAQ testing and sampling equipment = $240,000
Training	$100,000/Area for data system training = $1,200,000
	$50,000/Area for training on generating statistical analyses and reports (non-degreed/R.S. personnel) = $600,000
	$20,000/Area (average) to send 75% of their environmental health staff to healthy homes training and certification course = $240,000
	$5,000/Area (average) for sufficient training and materials to ensure all staff receive RS/REHS credential = $60,000
Supplies and Materials	$10/CD-ROM * 15,000 facilities = $150,000
	$10,000/Area to sponsor meetings and workshops (space, travel, materials, supplies) = $120,000
Personnel / Services	$25,000 for NDECI
	$20,000 for WebEHRS
	$50,000 for culturally appropriate video development
	$10,000 to develop an online educational program
	$5000/Area/year for sampling media/laboratory service = $60,000
	$50,000/Area to conduct assessments and coordinate the development of building codes = $600,000
	$10,000/Area to conduct assessments and coordinate the development of a referral system = $120,000
	$5,000/Area to design, conduct, and analyze survey = $60,000.
	$5,000/Area train on grant writing and attend grant writing workshops = $60,000.
Miscellaneous Travel	$5,000/Area/year for travel specific to attendance at partner stakeholders' meetings and events = $60,000
TOTAL	$4,095,000